Data Evaluation Report on the Acute Toxicity of Dicamba (BAPMA salt) to Terrestrial Vascular Plants: Seedling Emergence

PMRA Submission Number {.....} **EPA MRID Number 48718014**

Data Requirement:

PMRA Data Code:	9.8.4 (TGAI) or 9.8.6 (EP)
EPA DP Barcode:	402518
OECD Data Point:	IIA 8.12 (TGAI) and IIIA 10.8.1.1 (EP)
EPA Guideline:	850.4100

Test material: Dicamba (BAPMA salt) **Purity:** 47.86% w/w

Common name

Chemical name: IUPAC

CAS name

CAS No. 1918-00-9

Synonyms

Primary Reviewer: Joan Gaidos **Signature:**
Senior Scientist, CDM Smith **Date:** 2/13/13

Secondary Reviewer: Teri S. Myers **Signature:**
Senior Scientist, CDM Smith **Date:** 2/28/13

Primary Reviewer: Elizabeth Donovan, Biologist **Date:** 9/7/2016
EPA/EFED/ERB 6

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Company Code	{.....}	[For PMRA]
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EPA PC Code	100094	

Date Evaluation Completed: 11-3-2016

CITATION: Porch, J.R., H.O. Krueger, and K.H. Martin. 2011. BAPMA formulation: A Toxicity Test to Determine the Effects on (Tier II) Seedling Emergence of Ten Species of Plants. Unpublished study performed by Wildlife International, Ltd., Easton, Maryland. Study Project Number: 147-251. Study sponsored by BASF Corporation, Agricultural Products Division, Research Triangle Park, North Carolina. Study completed November 30, 2011.

DISCLAIMER: This document provides guidance for EPA and PMRA reviewers on how to complete a data evaluation record after reviewing a scientific study concerning the acute toxicity of a pesticide to terrestrial vascular plants. It is not intended to prescribe conditions to any external party for conducting this study nor to establish absolute criteria regarding the assessment of whether the study is scientifically sound and whether the study satisfies any applicable data requirements. Reviewers are expected to review and to determine for each study, on a case-by-case basis, whether it is scientifically sound and provides sufficient information to satisfy applicable data requirements. Studies that fail to meet any of the conditions may be accepted, if appropriate; similarly, studies that meet all of the conditions may be rejected, if appropriate. In sum, the reviewer is to take into account the totality of factors related to the test methodology and results in determining the acceptability of the study.

Data Evaluation Report on the Acute Toxicity of Dicamba (BAPMA salt) to Terrestrial Vascular Plants: Seedling Emergence

PMRA Submission Number {.....} **EPA MRID Number 48718014**

EXECUTIVE SUMMARY:

The effect of **Dicamba (BAPMA salt)** on the seedling emergence of monocot (corn, *Zea mays*; onion, *Allium cepa*; ryegrass, *Lolium perenne*; and wheat, *Triticum aestivum*) and dicot (cabbage, *Brassica oleracea*; carrot, *Daucus carota*; lettuce, *Lactuca sativa*; oilseed rape, *Brassica napus*; soybean, *Glycine max*; and tomato, *Lycopersicon esculentum*) crops was studied at nominal concentrations of 0 (negative and solvent), 0.025, 0.074, 0.22, 0.67 and 2.0 lbs ai/A (corn and wheat); 0.0082, 0.025, 0.074, 0.22, 0.67 and 2.0 lb ai/A (Onion, cabbage, oilseed rape, carrot and tomato); and 0.0027, 0.0082, 0.025, 0.074, 0.22, 0.67 and 2.0 lb ai/A (Ryegrass, lettuce and soybean). Measured test concentrations were <0.000036 (negative and solvent control), 0.0219, 0.0642, 0.1974, 0.5975, and 1.8067 lbs ai/A (corn and wheat); <0.000036 (negative and solvent control), 0.008, 0.0234, 0.0698, 0.2061, 0.6356 and 1.9455 lbs ai/A (Onion, cabbage oilseed rape, and tomato); <0.000036 (negative and solvent control), 0.0082, 0.024, 0.0721, 0.1636, 0.6474 and 1.9669 lbs ai/A (Carrot); <0.000036 (negative and solvent control), 0.0024, 0.0071, 0.0219, 0.0642, 0.1971, 0.5975 and 1.8067 lbs ai/A (ryegrass, lettuce, and soybean).

The growth medium used in the seedling emergence test was artificial soil (sandy loam, pH 6.2, organic matter 1.2%). On day 21 the surviving plants per pot were recorded and cut at soil level for measuring the plant height and dry weight.

Emergence in the negative control ranged from 50 to 100%; emergence in the solvent control ranged from 60 to 100%. Ryegrass and oilseed rape were variable and ranged from 13% promotion to 23% reduction and 5% promotion to 30% reduction, respectively, with no real pattern. All other species showed a general trend towards inhibition at higher test concentrations, with maximum inhibitions in emergence of 37, 11, 23, 76, 55, 47, and 26% for corn, wheat, cabbage, carrot, lettuce, soybean, and tomato, respectively.

Survival in the negative control ranged from 52.5-98%; Survival in the solvent control ranged from 40-97.5%. Inhibition in survival for corn was a maximum of 8%. Inhibition for onion, ryegrass, wheat, lettuce, and oilseed rape exhibited maxima of 51.6, 40, 32.4, 67, and 31.3%, respectively. Inhibitions in carrot, soybean and tomato had maxima of 92.3, 100, and 97.1%, respectively.

Inhibitions in height were a maximum of 6% for corn. Maximum inhibition in height ranged from 16 to 25% for onion, ryegrass, wheat, and cabbage. Maximum inhibition was 83, 51, 40, 64 and 69% for carrot, lettuce, oilseed rape, soybean and tomato, respectively. Inhibitions in dry weight were a maximum of 12% in corn. Maxima dry weight inhibitions were 26, 40, 33, 69, 47, 62, 76, 53, and 87% for onion, ryegrass, wheat, cabbage, carrot, lettuce, oilseed rape, soybean and tomato, respectively. Inhibitions in dry weight could not be determined at the two highest concentrations in carrot or the highest concentration for lettuce because there were no surviving seedlings. There was only one surviving seedling at the highest concentration in tomato.

The most sensitive monocot species was wheat based on biomass, with NOAEC and EC_{25} values of 0.0642 and 0.344 lb ai/A, respectively. The most sensitive dicot species was oilseed rape based on biomass, with a NOAEC and EC_{25} values of 0.234 and 0.0357 lb ai/A, respectively.

Phytotoxic effects included leaf curl, chlorosis, necrosis, and stem curl. Slight, infrequent signs were noted in corn. For all other species, phytotoxicity appeared dose-responsive, increasing in severity and prevalence with an increase in treatment rate

Maximum Labeled Rate: Not reported

Results Synopsis

Monocot

EC_{50}/IC_{50}: 18.7 lbs ai/A	95% C.I.: 0.905 - 386 lb ai/A
EC_{25}/IC_{25}: 0.344 lbs ai/A	95% C.I.: 0.117 - 0.896 lb ai/A
EC_{05}/IC_{05}: 0.0.0011 lbs ai/A	95% C.I.: NA-0.0311 lb ai/A

NOAEC: 0.0642 lbs ai/A
Slope: NA 95% C.I.: NA
Most sensitive monocot: wheat
Most sensitive parameter: Biomass

Dicot
EC_{50}/IC_{50}: 0.194 lbs ai/A 95% C.I.: 0.106-0.356
EC_{25}/IC_{25}: 0.0357 lbs ai/A 95% C.I.: 0.0109-0.087
EC_{05}/IC_{05}: 0.00314 lbs ai/A 95% C.I.: NA-0.239
NOAEC: 0.0234 lbs ai/A
Slope: NA 95% C.I.: NA
Most sensitive dicot: Oilseed rape
Most sensitive parameter: Biomass

This toxicity study is classified as **acceptable** and satisfies the guideline requirement for a Tier II Seedling emergence (OCSPP 850.4100, formerly 850.4225) toxicity study. Note that results for ryegrass can be used for characterization purposes only and may require submission of a new study to address uncertainties in the results for this species.

Table 1 (Tier II studies). Summary of most sensitive parameters by species (lbs ai/A).

Species	Endpoint	NOEC	EC_{05}	EC_{25}	EC_{50}
Corn	Biomass	1.8067	0.0132	13.1	1580
Onion	Survival	0.2061	0.117	0.554	1.63
Ryegrass [a]	Biomass	0.0219	<0.000036	0.00313	4.0
Wheat	Biomass	0.0642	0.0011	0.344	18.7
Cabbage	Biomass	0.2061	0.0565	0.266	0.78
Carrot	Survival	0.0721	0.0458	0.105	0.186
Lettuce	Biomass	0.0642	0.0318	0.126	0.329
Oilseed Rape	Biomass	0.0234	0.00314	0.0357	0.194
Soybean	Height	0.1971	0.0172	0.154	0.709
Tomato	Survival	0.0698	0.187	0.366	0.582

[a] Results should be interpreted with caution since the observed effects were not dose responsive and fluctuated between inhibition and promotion.

I. MATERIALS AND METHODS

GUIDELINE FOLLOWED: The methods used in conducting this study were based on procedures specified in the U.S. EPA Series 850 – Ecological Effects Test Guidelines OPPTS Number 850.4225. Deviations from OPPTS 850.4225 were noted:

1. The cation exchange capacity and % moisture of the soil were not reported.

2. The % relative humidity ranged from 20.6 to 95.1% for all species; OPPTS guidelines suggest that relative humidity range from 70 ± 5% during light periods and 90 ± 5% during dark periods. While the study authors did not report when the humidity readings were taken, the lower values exceed light and dark recommendations.

3. Temperatures ranged from 17.02 to 38.97°C for all species; OPPTS guidelines suggest day temperatures of 25 ± 3°C and night temperatures of 20 ± 3°C. The study authors did

not differentiate between day and night temperatures; however, the highest temperatures reported are higher than either the day or night recommendations.

These deviations do not impact the acceptability of this study.

COMPLIANCE: Signed and dated GLP, Quality Assurance and Data Confidentiality statements were provided. This study was conducted in compliance with the Good Laboratory Practice Standards as published by the U.S. Environmental Protection Agency, 40 CFR Part 160 (1989); OECD Principles of GLP (ENV/MC/CHEM (98) 17); and Japan MAFF (11 NohSan, Notification No. 6283, Agricultural Production Bureau, 1999), with the following exception:

- Periodic analyses of well water and soil for potential contaminants were not performed in accordance with GLP standards, but were performed using a certified laboratory and standard U.S. EPA analytical methods.

A. MATERIALS:

1. Test Material **BAPMA (Dicamba)**

Description: Liquid

Lot No./Batch No. : 1736-90

Purity: 47.86% w/w

Stability of compound under test conditions: Analytical verification was performed by analyzing spray mixtures from the highest application rates, with recoveries of 86-100%.

(OECD recommends chemical stability in water and light)

Storage conditions of test chemicals: The test material was stored under ambient conditions.

Table 2. Physical/chemical properties of Dicamba.

Parameter	Values	Comments
Water solubility at 20EC	Not reported	
Vapor pressure	Not reported	
UV absorption	Not reported	
pKa	Not reported	
Kow	Not reported	

2. Test organism:
Monocotyledonous species: Corn (*Zea mays*, Poaceae; Jarvis Golden Prolific), Onion (*Allium cepa*, Liliaceae; Yellow Granex Hybrid 33), Ryegrass (*Lolium perenne*, Poaceae; Gator 3 Perennial), and Wheat (*Triticum aestivum*, Poaceae; Glenn Hard Red Spring); *EPA recommends four monocots in two families, including corn.*
Dicotyledonous species: Carrot (*Daucus carota*, Apiaceae; Scarlet Nantes), Cabbage (*Brassica oleracea*, Brassicaceae; Late Flat Dutch), Lettuce (*Lactuca sativa*, Asteraceae; Summertime), Oilseed Rape (*Brassica napus*, Brassicaceae; Dwarf Essex), Soybean (*Glycine max*, Fabaceae; Maverick), and Tomato (*Lycopersicon esculentum*, Solanaceae; Rutgers); *EPA recommends six dicots in four families, including soybean and a root crop.*

OECD recommends a minimum of three species selected for testing, at least one from each of the following categories: Category 1: ryegrass, rice, oat, wheat, and sorghum; Category 2: mustard, rape, radish, turnip, and Chinese cabbage; Category 3: vetch, mung bean, red clover, fenugreek, lettuce, and cress.

Seed source: Wheat obtained from Johnny's Selected Seeds, Winslow, ME; onion obtained from Park Seed Co., Greenwood, SC; ryegrass, carrot, cabbage, and tomato obtained from The Meyer Seed Co., Baltimore, MD; lettuce obtained from Territorial Seed Co., Cottage Grove, OR; corn obtained from New Hope Seed Co., Bon Aqua, TN; Oilseed rape obtained from Seedland Inc., Wellborn, FL; and soybean obtained from Missouri Foundation Seeds, Columbia, MO.
Prior seed treatment/sterilization: Seeds were not treated with fungicides, insecticides, or repellents prior to test initiation.
Historical % germination of seed: Corn, 100%; onion, 98%; ryegrass, 90%; wheat, 94%; carrot, 80%; cabbage, 85%; lettuce, 98%; oilseed rape, 85%; soybean, 92%, and tomato, 85%.
Seed storage, if any: None reported

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B. STUDY DESIGN:

1. Experimental Conditions

a. Limit test: N/A- Conducted as a Tier II test.

b. Range-finding study No range-finding studies were reported.

c. Definitive Study

Table 3: Experimental Parameters - Seedling Emergence.

Parameters	Seedling Emergence	
	Details	**Remarks** *Criteria*
Duration of the test	21days	*Recommended test duration is 14-21 days.* *OECD recommends that the test be terminated no sooner than 14 days after 50 percent of the control seedlings have emerged*
Number of seeds/plants/species/ replicate	10 seeds per replicate	*Ten seeds per replicate should be used.* *OECD recommends a minimum of five seeds planted in each replicate within 24 hours of incorporation of the test substance. All seeds of each species for each test should be of the same size class. The seed should not be imbibed.*
Number of replicates Control: Adjuvant control: Treated:	 4 4 4	*Four replicates per dose should be used.* *OECD recommends a minimum of four replicates per treatment*

Parameters	Seedling Emergence	
	Details	**Remarks** *Criteria*
Test concentrations Nominal:	Corn and wheat: 0 (negative control), 0 (solvent control), 0.025, 0.074, 0.22, 0.67, and 2.0 lbs ai/A Onion, cabbage, oilseed rape, carrot and tomato: 0 (negative control), 0 (solvent control), 0.0082, 0.025, 0.074, 0.22, 0.67 and 2.0 lbs ai/A Ryegrass, lettuce and soybean: 0 (negative control), 0 (solvent control), 0.0027, 0.0082, 0.025, 0.074, 0.22, 0.67 and 2.0 lbs ai/A	Only the lowest and highest test concentration was verified. *Five test concentrations should be used with a dose range of 2X or 3X progression* *OECD recommends three concentrations, preferably with application rates equivalent to 0.0 (control), 1.0, 10.0 and 100 mg substance per kg of oven-dried soil.*
Measured:	Corn and wheat: <0.000036 (negative control), 0.0219, 0.0642, 0.1974, 0.5975, and 1.8067 lbs ai/A Onion, cabbage, oilseed rape, and tomato: <0.000036 (negative control), 0.008, 0.0234, 0.0698, 0.2061, 0.6356 and 1.9455 lbs ai/A Carrot: <0.000036 (negative control), 0.0082, 0.024, 0.0721, 0.1636, 0.6474 and 1.9669 lbs ai/A Ryegrass, lettuce, and soybean: <0.000036 (negative control), 0.0024, 0.0071, 0.0219, 0.0642, 0.1971, 0.5975 and 1.8067 lbs ai/A.	
Method and interval of analytical verification LOQ: LOD:	Calibration standards were analyzed using HPLC with UV detection (235 nm) 0.200 mg ai/L (0.000036 lb ai/A) Set at the lowest analytical standard analyzed	

Parameters	Seedling Emergence	
	Details	**Remarks** *Criteria*
Adjuvant (type, percentage, if used)	Diammonium sulfate and ammonium sulfate.	
Test container (pot) Size/Volume Material: (glass/polystyrene)	16 cm diameter; 12 cm depth Plastic	*Non-porous containers should be used.* *OECD recommends that non-porous plastic or glazed pot be used.*
Growth facility	Greenhouse	
Method/depth of seeding	A template was used to indent the soil surface. Once the seeds were placed in each hole, they were covered by depressing the soil surface. Corn, wheat, and soybean were planted at a depth of 20 mm, while all other species were planted at a depth of 10 mm.	
Test material application Application time including the plant growth stage Number of application Application interval Method of application	Test material was applied on the soil surface after the seeds were planted. 1 N/A; single application Applied using an overhead tracksprayer equipped with a moveable spray nozzle suspended 41 cm above the soil surface.	
Details of soil used Geographic location Depth of soil collection Soil texture % sand	N/A; artificial soil N/A Sandy loam 85	Soil was a mixture of kaolinite clay, industrial quartz sand, and peat with limestone added. Organic matter: 1.2%

Parameters	Seedling Emergence	
	Details	**Remarks**
		Criteria
% silt % clay pH: % organic carbon CEC Moisture at 1/3 atm (%)	6 9 6.2 0.71% Not reported Not reported	*Soil mixes containing sandy loam, loam, or clay loam soil with no greater than 2% organic matter are preferable. Glass beads, rock wool, and 100% acid washed sand are not preferred.* *OECD prefers the soil to be sieved (0.5 cm) to remove coarse fragments. Carbon content should not exceed 1.5% (3% organic matter). Fine particles (under 20um) makeup should be between 10 and 20%. The recommended pH is between 5.0 and 7.5.*
Details of nutrient medium, if used	Not reported.	
Watering regime and schedules Water source/type: Volume applied: Interval of application: Method of application:	Well water from greenhouse. Not reported. Every 1 to 9 days. The plants were bottom-watered using subirrigation trays.	*EPA prefers that bottom watering be utilized for seedling emergence studies so that the chemical is not leached out of the soil during the test.*
Any pest control method/fertilization, if used	None reported	
Test conditions Temperature: Photoperiod: Light intensity and quality: Relative humidity:	17.02-38.97°C 16L:8D Artificial lighting used to supplement natural sunlight. 5.9-22.3 PAR 20.60-95.10%	*EPA prefers that the cold vs warm loving plants be tested in two separate groups to optimize plant growth.* *OECD prefers that the temperature, humidity and light conditions be suitable for maintaining normal growth of each species for the test period.*
Reference chemical (if used) Name: Concentrations:	N/A	
Other parameters, if any	None	

2. Observations:

Table 4: Observation Parameters - Seedling Emergence.

Parameters	Seedling Emergence	
	Details	**Remarks**
Parameters measured (e.g., number of germinated seeds, emerged seedlings, plant height, dry weight or other endpoints)	- Emergence - Survival - Phytotoxicity - Dry weight - Height	
Measurement technique for each parameter	Emergence, survival, and phytotoxicity were determined visually. Height was measured from the soil surface to the tip of the tallest leaf and shoots dried to determine dry weight.	
Observation intervals	Emergence was measured weekly. Survival, phytotoxicity, height, and dry weight were determined at study termination.	
Other observations, if any	None	
Were raw data included?	Yes	
Phytotoxicity rating system, if used	0- No effect; 10-30- Slight effect; 40-60- Moderate effect; 70-90- Severe effect; 100- Complete effect	Frans, Robert E. and Ronald E. Talbert. 1977. Design of Field Experiments and the Measurement and Analysis of Plant Responses. Pages 15-23 in B. Truelove, ed. *Research Methods in Weed Science*. Southern Weed Science Society, Auburn University, Alabama.

II. RESULTS and DISCUSSION:

A. INHIBITORY EFFECTS:

1. Seedling Emergence:

Emergence in the negative control ranged from 50 to 100%; emergence in the solvent control ranged from 60 to 100%. Ryegrass and oilseed rape were variable and ranged from 13% promotion to 23% reduction and 5% promotion to 30% reduction, respectively, with no real pattern. All other species showed a general trend towards inhibition at higher test concentrations, with inhibitions in emergence at maximums of 37, 11, 23, 76, 55, 47, and 26% for corn, wheat, cabbage, carrot, lettuce, soybean, and tomato, respectively.

The study author calculated % survival based on % emerged. The reviewer calculated % survival based on % planted. Therefore the reviewer's results are reported. Survival in the negative control ranged from 52.5-98%; Survival in the solvent control ranged from 40-97.5%. Inhibition in survival for corn was a maximum of 8%. Inhibition for onion, ryegrass, wheat, lettuce, and oilseed rape were maximums of 51.6, 40, 32.4, 67, and 31.3%, respectively. Inhibitions in carrot, soybean and tomato were maximums of 92.3, 100, and 97.1%, respectively.

Inhibitions in height were a maximum of 6% for corn. Inhibitions in dry weight ranged from maximums of 16 to 25% for onion, ryegrass, wheat, and cabbage. Inhibitions were maximums of 83, 51, 40, 64 and 69% for carrot, lettuce, oilseed rape, soybean and tomato, respectively. Inhibitions in dry weight were a maximum of 12% in corn. Inhibitions were maximums of 26, 40, 33, 69, 47, 62, 76, 53, and 87% for onion, ryegrass, wheat, cabbage, carrot, lettuce, oilseed rape, soybean and tomato, respectively. Inhibitions in dry weight could not be determined at the two highest concentrations in carrot or the highest concentration for lettuce because there were no surviving seedlings. There was only one surviving seedling at the highest concentration in tomato.

Based on the study authors' results, the most sensitive monocot species was onion based on emergence, with NOAEC and EC_{25} values of 0.22 and 0.795 lb ai/A, respectively (ryegrass dry weight had an EC_{25} of 0.168 lb ai/A, however the value was extrapolated and the fit of the regression model was poor due to lack of dose response). The most sensitive dicot species was oilseed rape based on dry weight, with a NOAEC and EC_{25} values of 0.025 and 0.0609 lb ai/A, respectively. The study authors used nominal test concentrations for calculations of toxicity values.

Phytotoxic effects included leaf curl, chlorosis, necrosis, and stem curl. Slight, infrequent signs were noted in corn. For all other species, phytotoxicity appeared dose-responsive and increased in severity and prevalence with an increase in treatment rate.

B. REPORTED STATISTICS:

Emergence, survival, dry weight per replicate, and height data were analyzed. The LOAEC and NOAEC values were determined using Dunnett's one-tailed t-test. All statistical determinations were made with 95% certainty. Estimates of the ECx values and their confidence limits were determined using the non-linear regression analysis of Bruce and Versteeg when reductions in endpoints among one or more treatment groups were 25% or more relative to the control means. These analyses were conducted using SAS, version 8. Nominal concentrations were used for all analyses.

Table 5: Reported effect of BAPMA salt on Seedling Emergence

Species	Results summary for biomass (lbs ai/A)									
	Weight (mg)	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	Std err
Corn	1140-1310	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Onion	8.2-12.7	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Ryegrass	7.2-12.0	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Wheat	116-172	0.22	NC	NC	0.898	NC	>2.0	NC	NC	NC
Cabbage	65-247	0.22	NC	NC	0.271	NC	0.796	NC	NC	NC
Carrot	10.2-19.2	0.074	NC	NC	0.0641	NC	>0.22	NC	NC	NC
Lettuce	32.5-99.2	0.074	NC	NC	0.134	NC	0.356	NC	NC	NC
Oilseed Rape	121-609	0.025	NC	NC	0.0609	NC	0.280	NC	NC	NC
Soybean	333-761	0.22	NC	NC	0.276	NC	1.38	NC	NC	NC
Tomato	20-191	0.22	NC	NC	0.395	NC	0.721	NC	NC	NC

Table 5a: Reported effect of BAPMA salt on Seedling Emergence.

Species	Results summary for height (lbs ai/A)									
	Height (cm)	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	Std err
Corn	71.5-76.8	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Onion	10.2-14.2	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Ryegrass	8.4-13.7	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Wheat	32.8-42.9	0.67	NC	NC	2.0	NC	>2.0	NC	NC	NC
Cabbage	11.4-13.7	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Carrot	1.5-9.1	0.22	NC	NC	0.260	NC	0.386	NC	NC	NC
Lettuce	5.4-12.1	0.22	NC	NC	0.217	NC	0.620	NC	NC	NC
Oilseed Rape	14.6-24.4	0.22	NC	NC	0.507	NC	>2.0	NC	NC	NC
Soybean	12.5-36.3	0.074	NC	NC	0.169	NC	0.797	NC	NC	NC
Tomato	9.4-13.9	0.22	NC	NC	0.607	NC	1.20	NC	NC	NC

Table 5b: Reported effect of BAPMA salt on Seedling Emergence.

Species	Results summary for survival (lbs ai/A); % survived by % of emerged									
	%	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	Std err
Corn	95-100	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Onion	71.3-100.0	0.67	NC	NC	1.82	NC	>2.0	NC	NC	NC
Ryegrass	75.4-100	0.67	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Wheat	78.7-100	0.22	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Cabbage	60.4-97.2	0.67	NC	NC	1.31	NC	>2.0	NC	NC	NC
Carrot	0-85.4	0.22	NC	NC	0.223	NC	0.351	NC	NC	NC
Lettuce	0-97.2	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Oilseed Rape	84.5-100.0	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Soybean	14.2-100.0	0.67	NC	NC	0.646	NC	1.01	NC	NC	NC
Tomato	3.6-98.6	0.22	NC	NC	0.493	NC	0.725	NC	NC	NC

Table 5c: Reported effect of BAPMA salt on Seedling Emergence.

Species	Results summary for emergence (lbs ai/A)									
	%	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	Std err
Corn	92.5-100	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Onion	52.5-83.8	0.22	NC	NC	0.795	NC	>2.0	NC	NC	NC
Ryegrass	57.5-90.0	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Wheat	80.0-97.5	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Cabbage	57.5-82.5	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Carrot	15.0-62.5	0.22	NC	NC	0.242	NC	0.718	NC	NC	NC
Lettuce	37.5-85.0	0.67	NC	NC	1.22	NC	1.91	NC	NC	NC
Oilseed Rape	55.0-82.5	2.0	NC	NC	>2.0	NC	>2.0	NC	NC	NC
Soybean	52.5-98.8	0.22	NC	NC	1.06	NC	2.25	NC	NC	NC
Tomato	67.5-91.3	0.22	NC	NC	>2.0	NC	>2.0	NC	NC	NC

Mid-study emergence											
Control	Corn	Onion	Ryegrass	Wheat	Cabbage	Carrot	Lettuce	Oilseed Rape	Soybean	Tomato	Adjuvant control
50-100	90.0-100	52.5-80.0	52.5-75.0	80-97.5	57.5-82.5	15.0-62.5	37.5-85.0	55.0-80.0	52.5-97.5	67.5-90.0	50-100

Plant Injury Index											
Control	Corn	Onion	Ryegrass	Wheat	Cabbage	Carrot	Lettuce	Oilseed Rape	Soybean	Tomato	Adjuvant control
0-30	0-22	0-80	0-55	0-44	0-82	0-100	0-100	0-88	0-100	0-100	0-51

0- No effect; 10-30- Slight effect; 40-60- Moderate effect; 70-90- Severe effect; 100- Complete effect

C. VERIFICATION OF STATISTICAL RESULTS BY THE REVIEWER:

Statistical Method(s): All analyses were conducted using the negative control only. Analysis was conducted using CETIS (version 1.8.7.4, using the backend setting created on 1/30/13). All endpoints for which replicate data were provided were examined graphically using graphs to determine if they exhibited a dose-dependent response, which was ultimately used to select the multiple comparison tests to detect the NOAEC. Data for each endpoint were tested to determine if their distributions were normal and if their variances were homogeneous using Shapiro-Wilk's and Levene's tests, respectively. Data that satisfied these assumptions were subjected to Dunnett's and William's tests and data that did not satisfy these assumptions were subjected to the non-parametric MannWhitney-U and Jonckheere's tests.

All analyses were conducted using the mean measured application rates of lbs Dicamba per acre (lbs ai/A).

Table 6: Effect of BAPMA salt on Seedling Emergence

Species	**Results summary for biomass (lbs ai/A)**									
	Weight (mg)	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	95%CI
Corn	1140-1310	1.8067	0.0132	NA-0.896	13.1	NA-2820	1580	NA	NA	NA
Onion	8.2-12.7	1.9455	0.359	NA-3.95	3.56	NA-114	17.5	NA	NA	NA
Ryegrass [a]	7.2-12.0	0.0219	0.0000001	NA-0.015	0.00313	0.0000019-0.408	4	0.0144-1110	NA	NA
Wheat	116-172	0.0642	0.0011	NA-0.0311	0.344	0.117-0.896	18.7	0.905-386	NA	NA
Cabbage	65-247	0.2061	0.0565	NA-0.166	0.266	0.0931-0.539	0.78	0.485-1.25	NA	NA
Carrot	10.2-19.2	0.072	0.0802	NA-0.153	0.134	NA-0.201	0.19	0.138-1.46	NA	NA
Lettuce	32.5-99.2	0.0642	0.0318	NA-0.0946	0.126	0.0331-0.272	0.329	0.194-0.558	NA	NA
Oilseed Rape	121-609	0.0234	0.00314	NA-0.239	0.0357	0.0109-0.087	0.194	0.106-0.356	NA	NA
Soybean	333-761	0.1971	0.0295	NA-0.102	0.262	0.108-0.526	1.2	0.581-2.46	NA	NA
Tomato	20-191	0.6356	0.162	NA-0.318	0.386	0.16-0.634	0.708	0.481-1.04	NA	NA

[a] Results should be interpreted with caution since the observed effects were not dose responsive and fluctuated between inhibition and promotion.

Table 6a: Effect of BAPMA salt on Seedling Emergence.

Species	Results summary for height (lbs ai/A)									
	Height (cm)	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	95%CI
Corn	71.5-76.8	1.8067	0.982	0.0274-3.89	58.7	NA-5310000	1010	NA	NA	NA
Onion	10.2-14.2	1.9455	0.00482	NA-0.722	5.42	0.0000174-622	715	NA	NA	NA
Ryegrass [a]	8.4-13.7	0.0219	0.0000099	NA-0.0175	0.125	0.011-0.989	87.7	0.03-257000	NA	NA
Wheat	32.8-42.9	0.5975	0.379	NA-0.819	2.25	1.21-3.73	7.79	1.41-43.1	NA	NA
Cabbage	11.4-13.7	0.2061	0.0117	NA-0.177	4.63	0.16-51.9	296	0.00884-9900000	NA	NA
Carrot	1.5-9.1	0.0721	0.104	NA-0.148	0.207	0.141-0.273	0.333	0.267-0.415	NA	NA
Lettuce	5.4-12.1	0.1971	0.0475	NA-0.121	0.206	0.0955-0.361	0.569	0.347-0.932	NA	NA
Oilseed Rape	14.6-24.4	0.0234	0.00609	NA-0.0475	0.294	0.117-0.652	4.36	1.03-18.5	NA	NA
Soybean	12.5-36.3	0.1971	0.0172	NA-0.0468	0.154	0.0814-0.264	0.709	0.469-1.07	NA	NA
Tomato	9.4-13.9	0.2061	0.226	NA-0.385	0.595	0.381-0.835	1.17	0.85-1.6	NA	NA

[a] Results should be interpreted with caution since the observed effects were not dose responsive and fluctuated between inhibition and promotion.

Table 6b: Effect of BAPMA salt on Seedling Emergence.

Species	Results summary for survival (lbs ai/A); % survived of % planted									
	%	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	95%CI
Corn	90-97.5	1.8067	NC	NC	>1.8	NC	>1.8	NC	1640000	1580000-1700000
Onion	37.5-82.5	0.2061	0.117	0.00001-0.372	0.554	0.018-1.07	1.63	0.772-9.4	1.44	0.291-2.58
Ryegrass [a]	45.0-90.0	0.5975	0.0000838	NA-0.00659	0.186	0.0000869-8.06	39.6	1.93-1000000000	0.29	0.0399-0.54
Wheat	62.5-92.5	0.1971	0.352	NA-0.787	1.36	0.027-22.6	3.5	1.84-10000000000	1.65	0.0255-3.27
Cabbage	35-80	0.6356	0.17	NA-0.505	0.702	0.00163-1.34	1.88	0.897-63.8	1.58	0.161-2.99
Carrot	0-52.5	0.0721	0.0458	0.0046-0.0989	0.105	0.0255-0.182	0.186	0.0773-0.3	2.71	1.25-4.16
Lettuce	25.0-82.5	0.1971	0.126	0.00231-0.238	0.265	0.04-0.39	0.444	0.231-0.694	3.01	0.764-5.25
Oilseed Rape	55.0-80.0	1.9455	0.198	NA	3.13	NA	21.4	NA	0.809	-1.27-2.89
Soybean	7.5-100.0	0.5975	0.0714	0.00733-0.161	0.237	0.0758-0.406	0.546	0.299-0.989	1.86	0.906-2.82
Tomato	2.5-92.5	0.0698	0.187	0.0613-0.303	0.366	0.189-0.505	0.582	0.392-0.76	3.34	1.91-4.77

[a] Results should be interpreted with caution since the observed effects were not dose responsive and fluctuated between inhibition and promotion.

Table 6c: Effect of BAPMA salt on Seedling Emergence.

Species	Results summary for emergence (lbs ai/A)									
	%	NOEC	EC_{05}	95%CI	EC_{25}	95%CI	EC_{50}	95%CI	slope	95%CI
Corn	92.5-100	1.8067	NA	NA	>1.8067	NA	>1.8067	NA	NA	NA
Onion	52.5-83.8	0.2061	0.133	NA	1.02	NA	4.19	NA	1.1	-0.226-2.42
Ryegrass [a]	57.5-90.0	0.5975	0.0000002	NA	3.07	NA	256000	NA	0.137	-0.0965-0.373
Wheat	80.0-97.5	0.5975	1.03	NA	3.16	NA	6.88	NA	1.99	-3.66-7.65
Cabbage	57.5-82.5	0.6356	0.197	NA	2.23	NA	12.1	NA	0.92	-0.787-2.63
Carrot	15.0-62.5	0.0721	0.0367	0.000021-0.16	0.202	0.00448-0.496	0.661	0.138-1.46	1.31	0.408-2.21
Lettuce	37.5-85.0	0.5975	0.597	NA	1.12	NA	1.73	NA	3.56	-0.163-7.28
Oilseed Rape	55.0-82.5	1.9455	NA	NA	>1.9	NA	>1.9	NA	0.749	-2.05-3.55
Soybean	52.5-98.8	0.1971	0.36	0.0536-0.619	0.986	0.536-1.41	1.98	1.39-4.76	2.22	0.896-3.54
Tomato	67.5-91.3	0.0698	0.00135	NA	1.87	NA	285	NA	0.309	-0.00571-0.623

[a] Results should be interpreted with caution since the observed effects were not dose responsive and fluctuated between inhibition and promotion.

Mid-study emergence											
Control	Corn	Onion	Ryegrass	Wheat	Cabbage	Carrot	Lettuce	Oilseed Rape	Soybean	Tomato	Adjuvant control
50-100	90.0-100	52.5-80.0	52.5-75.0	80-97.5	57.5-82.5	15.0-62.5	37.5-85.0	55.0-80.0	52.5-97.5	67.5-90.0	50-100

Plant Injury Index											
Control	Corn	Onion	Ryegrass	Wheat	Cabbage	Carrot	Lettuce	Oilseed Rape	Soybean	Tomato	Adjuvant control
0-30	0-22	0-80	0-55	0-44	0-82	0-100	0-100	0-88	0-100	0-100	0-51

0- No effect; 10-30- Slight effect; 40-60- Moderate effect; 70-90- Severe effect; 100- Complete effect

Monocot

EC_{50}/IC_{50}: 18.7 lbs ai/A 95% C.I.: 0.905 - 386 lb ai/A
EC_{25}/IC_{25}: 0.344 lbs ai/A 95% C.I.: 0.117 - 0.896 lb ai/A
EC_{05}/IC_{05}: 0.0.0011 lbs ai/A 95% C.I.: NA-0.0311 lb ai/A
NOAEC: 0.0642 lbs ai/A
Slope: NA 95% C.I.: NA
Most sensitive monocot: wheat
Most sensitive parameter: Biomass

Dicot

EC_{50}/IC_{50}: 0.194 lbs ai/A 95% C.I.: 0.106-0.356
EC_{25}/IC_{25}: 0.0357 lbs ai/A 95% C.I.: 0.0109-0.087
EC_{05}/IC_{05}: 0.00314 lbs ai/A 95% C.I.: NA-0.239
NOAEC: 0.0234 lbs ai/A
Slope: NA 95% C.I.: NA
Most sensitive dicot: Oilseed rape
Most sensitive parameter: Biomass

D. STUDY DEFICIENCIES:

There were no study deficiencies.

E. REVIEWER'S COMMENTS:

The reviewer's and the study authors' results for the most sensitive dicot were the same. However, the study author reported the most sensitive monocot species was onion based on emergence, with NOAEC and EC_{25} values of 0.22 and 0.795 lb ai/A, respectively, while the reviewer determined the most sensitive monocot species was wheat based on biomass, with NOAEC and EC_{25} values of 0.0642 and 0.344 lb ai/A, respectively. The reviewer agreed with the study authors' conclusions that the endpoints associated with ryegrass were not reliable given the lack of dose response. The reviewer obtained 95% confidence limits for most species and endpoints, and used measured test concentrations for statistical analysis, therefore the reviewer's results are

presented in the Executive Summary and Conclusions sections of this DER.

The cation exchange capacity and moisture of the soil were not reported.

The % relative humidity ranged from 20.6 to 95.1% for all species; OPPTS guidelines suggest that relative humidity range from 70 ± 5% during light periods and 90 ± 5% % during dark periods. While the study authors did not report when the humidity readings were taken, the lower values exceed light and dark recommendations.

Temperatures ranged from 17.02 to 38.97°C for all species; OPPTS guidelines suggest day temperatures of 25 ± 3°C and night temperatures of 20 ± 3°C. The study authors did not differentiate between day and night temperatures; however, the highest temperatures reported are higher than either the day or night recommendations.

There were no effects of the adjuvant application on any species and the adjuvant was not significantly different compared to the negative controls, with the exception of ryegrass height, emergence and survival, which were all significantly lower in the adjuvant compared to the negative control ($p<0.05$).

The in-life portion of the test with corn, ryegrass, wheat, lettuce and soybean was conducted from July 14 to August 4, 2011. The test with onion, cabbage, oilseed rape and tomato was conducted from July 19 to August 9, 2011. The test with carrot was conducted from September 2 to 23, 2011.

F. CONCLUSIONS:

This study is **acceptable**. The most sensitive monocot species was wheat, based on biomass, with NOAEC and EC_{25} values of 0.0624 and 0.344 lbs ai/A, respectively. The most sensitive dicot was oilseed rape, based on biomass, with NOAEC and EC_{25} values of 0.0234 and 0.0357 lbs ai/A, respectively.

Most sensitive monocot and EC_{25}: Wheat (biomass; 0.344 lbs ai/A)
Most sensitive dicot and EC_{25}: Oilseed rape (biomass; 0.0357 lbs ai/A)

III. REFERENCES:

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2. Frans, Robert E. and Ronald E. Talbert. 1977. Design of Field Experiments and the Measurement and Analysis of Plant Responses. Pages 15-23 *in* B. Truelove, ed. Research Methods in Weed Science. Southern Weed Science Society, Auburn University, Alabama.

3. SAS Institute, Inc. 1999. SAS Proprietary Software Version 8, Cary, NC, SAS Institute, Inc.

4. Bruce, Robert D. and Donald J. Versteeg. 1992. A Statistical Procedure for Modeling Continuous Toxicity Data. *Environmental Toxicology and Chemistry*. 11: 1485-1494.

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
01-8558-0352	Mean Height	1.9455	>1.9455	NA	21.3%		Dunnett Multiple Comparison Test
02-8963-4199	Mean Height	1.9455	>1.9455	NA	21.3%		Dunnett Multiple Comparison Test
12-8996-1726	Mean Height	1.9455	>1.9455	NA	21.3%		Dunnett Multiple Comparison Test
14-9728-7172	Mean Height	1.9455	>1.9455	NA	21.3%		Dunnett Multiple Comparison Test
04-6198-8828	Mean Height	0.2061	0.6356	0.3619	16.1%		Williams Multiple Comparison Test
12-9093-7958	Mean Height	0.2061	0.6356	0.3619	16.1%		Williams Multiple Comparison Test
14-6799-0307	Mean Height	0.2061	0.6356	0.3619	16.1%		Williams Multiple Comparison Test
19-2031-9936	Mean Height	0.2061	0.6356	0.3619	16.1%		Williams Multiple Comparison Test
04-1317-9089	Mean Weight	0.6356	1.9455	1.112	42.6%		Dunnett Multiple Comparison Test
05-5135-0222	Mean Weight	0.6356	1.9455	1.112	42.6%		Dunnett Multiple Comparison Test
08-4175-9202	Mean Weight	0.6356	1.9455	1.112	42.6%		Dunnett Multiple Comparison Test
11-1783-1832	Mean Weight	0.6356	1.9455	1.112	42.6%		Dunnett Multiple Comparison Test
09-8790-8667	Mean Weight	0.2061	0.6356	0.3619	32.3%		Williams Multiple Comparison Test
13-0402-2145	Mean Weight	0.2061	0.6356	0.3619	32.3%		Williams Multiple Comparison Test
15-3730-5687	Mean Weight	0.2061	0.6356	0.3619	32.3%		Williams Multiple Comparison Test
15-8403-6974	Mean Weight	0.2061	0.6356	0.3619	32.3%		Williams Multiple Comparison Test
04-1830-3023	Percent Emerged	0.6356	1.9455	1.112	25.6%		Dunnett Multiple Comparison Test
05-3605-7689	Percent Emerged	0.6356	1.9455	1.112	25.6%		Dunnett Multiple Comparison Test
04-2856-2822	Percent Emerged	0.6356	1.9455	1.112	19.4%		Williams Multiple Comparison Test
11-8654-1953	Percent Emerged	0.6356	1.9455	1.112	19.4%		Williams Multiple Comparison Test
00-1332-7616	Percent Survived	0.6356	1.9455	1.112	33.6%		Dunnett Multiple Comparison Test
08-3407-5917	Percent Survived	0.6356	1.9455	1.112	33.6%		Dunnett Multiple Comparison Test
12-7598-6275	Percent Survived	0.6356	1.9455	1.112	25.4%		Williams Multiple Comparison Test
16-8300-5721	Percent Survived	0.6356	1.9455	1.112	25.4%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
00-0047-1015	Mean Height	IC5	0.0117	N/A	0.177		Nonlinear Regression
		IC10	0.11	0.00737	0.601		
		IC25	4.63	0.16	51.9		
		IC50	296	0.00884	9900000		
02-5535-9134	Mean Height	IC5	0.0117	N/A	0.177		Nonlinear Regression
		IC10	0.11	0.00737	0.601		
		IC25	4.63	0.16	51.9		
		IC50	296	0.00884	9900000		
05-7594-4559	Mean Height	IC5	0.0117	N/A	0.177		Nonlinear Regression
		IC10	0.11	0.00737	0.601		
		IC25	4.63	0.16	51.9		
		IC50	296	0.00884	9900000		
18-1003-2969	Mean Height	IC5	0.0117	N/A	0.177		Nonlinear Regression
		IC10	0.11	0.00737	0.601		
		IC25	4.63	0.16	51.9		
		IC50	296	0.00884	9900000		
08-3447-9764	Mean Weight	IC5	0.0565	N/A	0.166		Nonlinear Regression
		IC10	0.101	N/A	0.247		
		IC25	0.266	0.0931	0.539		
		IC50	0.78	0.485	1.25		
14-6714-5634	Mean Weight	IC5	0.0565	N/A	0.166		Nonlinear Regression
		IC10	0.101	N/A	0.247		
		IC25	0.266	0.0931	0.539		
		IC50	0.78	0.485	1.25		
16-2058-6335	Mean Weight	IC5	0.0565	N/A	0.166		Nonlinear Regression
		IC10	0.101	N/A	0.247		
		IC25	0.266	0.0931	0.539		
		IC50	0.78	0.485	1.25		
17-3747-6695	Mean Weight	IC5	0.0565	N/A	0.166		Nonlinear Regression
		IC10	0.101	N/A	0.247		
		IC25	0.266	0.0931	0.539		
		IC50	0.78	0.485	1.25		
05-4859-7007	Percent Emerged	EC5	0.197	N/A	N/A		Linear Regression (MLE)
		EC10	0.488	N/A	N/A		
		EC25	2.23	N/A	N/A		
		EC50	12.1	N/A	N/A		
06-0564-5049	Percent Emerged	EC5	0.197	N/A	N/A		Linear Regression (MLE)
		EC10	0.488	N/A	N/A		
		EC25	2.23	N/A	N/A		
		EC50	12.1	N/A	N/A		
09-4904-7789	Percent Survived	EC5	0.17	N/A	0.505		Linear Regression (MLE)
		EC10	0.289	3.32E-07	0.694		
		EC25	0.702	0.00163	1.34		
		EC50	1.88	0.897	63.8		
20-8119-6042	Percent Survived	EC5	0.17	N/A	0.505		Linear Regression (MLE)
		EC10	0.289	3.32E-07	0.694		
		EC25	0.702	0.00163	1.34		
		EC50	1.88	0.897	63.8		
07-6994-0786	Percent Survived	EC50	1.77	1.1	2.87		Trimmed Spearman-Kärber
10-2648-6243	Percent Survived	EC50	1.77	1.1	2.87		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	13.1	11.7	14.6	12	13.9	0.45	0.9	6.85%	0.0%
0	Negative Control	4	14.1	12.9	15.3	13.3	15.1	0.372	0.744	5.28%	-7.43%
0.008		4	13.3	11	15.7	12	15.4	0.723	1.45	10.8%	-1.71%
0.0234		4	13.3	10.6	15.9	10.8	14.3	0.829	1.66	12.5%	-1.14%
0.0698		4	13.7	12.3	15.2	13.1	15	0.448	0.896	6.53%	-4.57%
0.2061		4	12	8.16	15.7	9.2	14.6	1.19	2.38	19.9%	8.95%
0.6356		4	11.4	7.33	15.5	8.5	14.4	1.29	2.57	22.5%	13.0%
1.9455		4	11.5	8.95	14.1	10	13.8	0.808	1.62	14.0%	12.2%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	223	176	270	180	246	14.7	29.4	13.2%	0.0%
0	Negative Control	4	196	148	243	163	230	14.9	29.8	15.3%	12.4%
0.008		4	214	111	317	143	284	32.3	64.6	30.2%	4.26%
0.0234		4	207	155	258	163	234	16.3	32.6	15.8%	7.5%
0.0698		4	247	172	322	193	306	23.6	47.2	19.1%	-10.6%
0.2061		4	152	57.9	246	70	206	29.6	59.1	38.9%	31.9%
0.6356		4	113	10.3	215	60	206	32.1	64.2	57.1%	49.6%
1.9455		4	65	41.1	88.9	50	82	7.52	15	23.1%	70.9%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.725	0.486	0.964	0.6	0.9	0.075	0.15	20.7%	0.0%
0	Negative Control	4	0.775	0.575	0.975	0.6	0.9	0.0629	0.126	16.2%	-6.9%
0.008		4	0.725	0.525	0.925	0.6	0.9	0.0629	0.126	17.4%	0.0%
0.0234		4	0.825	0.673	0.977	0.7	0.9	0.0479	0.0957	11.6%	-13.8%
0.0698		4	0.75	0.545	0.955	0.6	0.9	0.0645	0.129	17.2%	-3.45%
0.2061		4	0.675	0.523	0.827	0.6	0.8	0.0479	0.0957	14.2%	6.9%
0.6356		4	0.725	0.525	0.925	0.6	0.9	0.0629	0.126	17.4%	0.0%
1.9455		4	0.575	0.423	0.727	0.5	0.7	0.0479	0.0957	16.7%	20.7%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.65	0.374	0.926	0.5	0.8	0.0866	0.173	26.6%	0.0%
0	Negative Control	4	0.725	0.453	0.997	0.5	0.9	0.0854	0.171	23.6%	-11.5%
0.008		4	0.7	0.57	0.83	0.6	0.8	0.0408	0.0816	11.7%	-7.69%
0.0234		4	0.8	0.67	0.93	0.7	0.9	0.0408	0.0816	10.2%	-23.1%
0.0698		4	0.725	0.453	0.997	0.5	0.9	0.0854	0.171	23.6%	-11.5%
0.2061		4	0.65	0.445	0.855	0.5	0.8	0.0645	0.129	19.9%	0.0%
0.6356		4	0.6	0.309	0.891	0.4	0.8	0.0913	0.183	30.4%	7.69%
1.9455		4	0.35	0.145	0.555	0.2	0.5	0.0645	0.129	36.9%	46.2%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	13.9	12	12.8	13.8
0	Negative Control	13.3	14	15.1	14
0.008		13	13	15.4	12
0.0234		13.9	14.3	14.1	10.8
0.0698		13.1	13.7	13.1	15
0.2061		9.2	13.1	10.9	14.6
0.6356		8.5	10.3	12.5	14.4
1.9455		11	11.3	13.8	10

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	233	180	234	246
0	Negative Control	163	180	209	230
0.008		143	250	284	178
0.0234		234	200	229	163
0.0698		193	256	233	306
0.2061		70	181	151	206
0.6356		60	96	88	206
1.9455		50	55	82	73

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.6	0.9	0.6
0	Negative Control	0.8	0.8	0.9	0.6
0.008		0.7	0.9	0.7	0.6
0.0234		0.8	0.9	0.7	0.9
0.0698		0.8	0.9	0.7	0.6
0.2061		0.6	0.7	0.8	0.6
0.6356		0.7	0.7	0.9	0.6
1.9455		0.5	0.5	0.7	0.6

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.5	0.8	0.5
0	Negative Control	0.8	0.7	0.9	0.5
0.008		0.7	0.8	0.7	0.6
0.0234		0.8	0.9	0.7	0.8
0.0698		0.8	0.9	0.7	0.5
0.2061		0.6	0.7	0.8	0.5
0.6356		0.4	0.7	0.8	0.5
1.9455		0.2	0.4	0.5	0.3

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-9728-7172	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.3%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	2.45	3	6	0.6324	CDF	Non-Significant Effect
		0.0234	0.672	2.45	3	6	0.6049	CDF	Non-Significant Effect
		0.0698	0.306	2.45	3	6	0.7586	CDF	Non-Significant Effect
		0.2061	1.75	2.45	3	6	0.1717	CDF	Non-Significant Effect
		0.6356	2.18	2.45	3	6	0.0830	CDF	Non-Significant Effect
		1.9455	2.1	2.45	3	6	0.0961	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

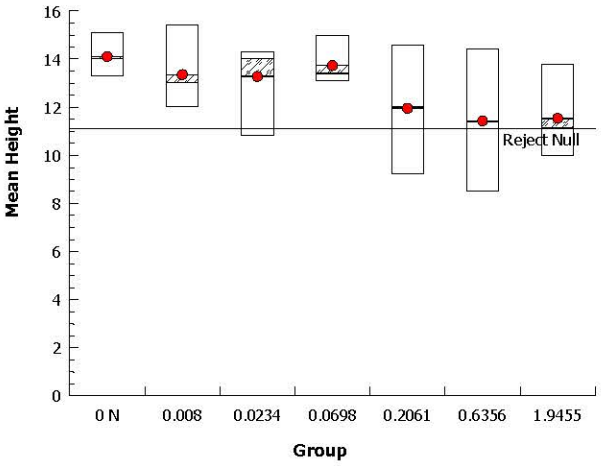
Mean Height Summary

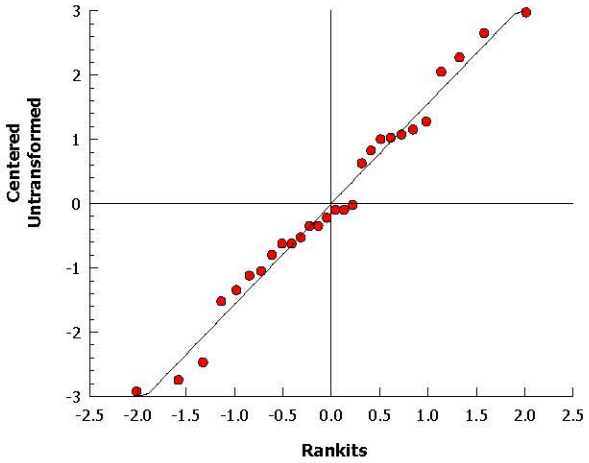
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-9728-7172	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-6799-0307	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:45	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.1%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	1.72	2.11	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.672	1.8	2.21	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.53	1.83	2.24	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.75	1.84	2.26	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.18	1.85	2.27	6	<0.05	CDF	Significant Effect
		1.9455*	2.14	1.86	2.28	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

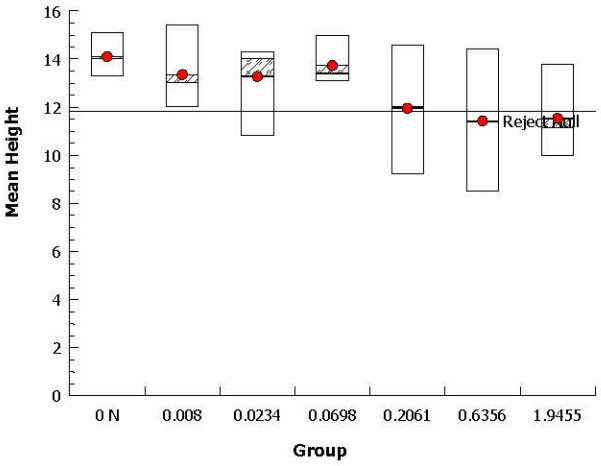
Mean Height Summary

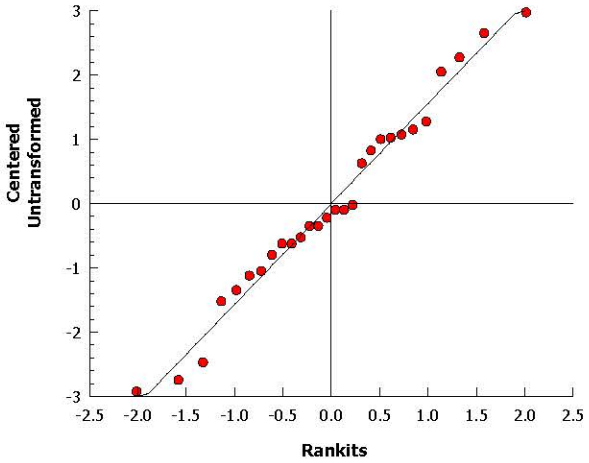
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-6799-0307	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:45	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-8963-4199	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.3%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	2.45	3	6	0.6324	CDF	Non-Significant Effect
		0.0234	0.672	2.45	3	6	0.6049	CDF	Non-Significant Effect
		0.0698	0.306	2.45	3	6	0.7586	CDF	Non-Significant Effect
		0.2061	1.75	2.45	3	6	0.1717	CDF	Non-Significant Effect
		0.6356	2.18	2.45	3	6	0.0830	CDF	Non-Significant Effect
		1.9455	2.1	2.45	3	6	0.0961	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

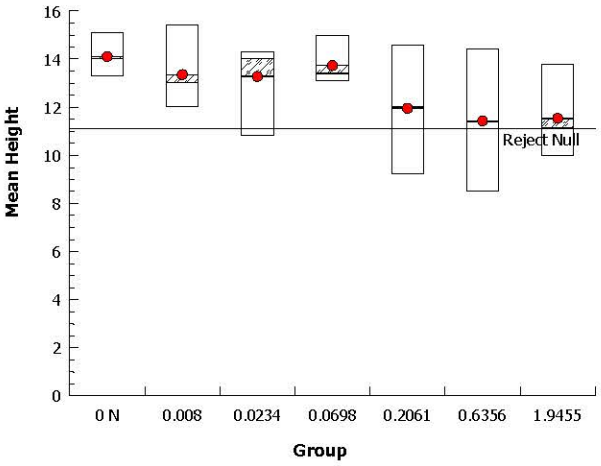
Mean Height Summary

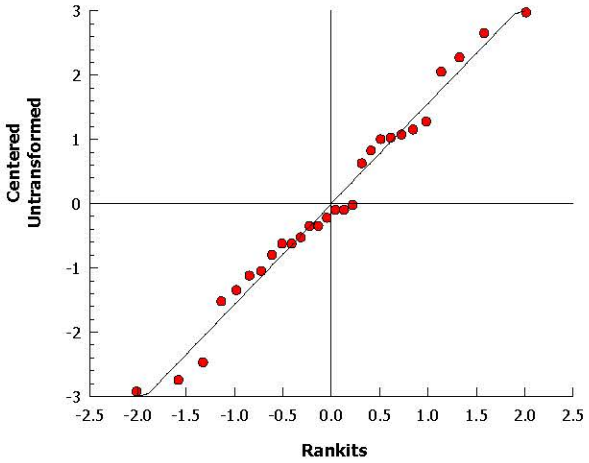
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-8963-4199	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-9093-7958	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:54	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.1%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	1.72	2.11	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.672	1.8	2.21	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.53	1.83	2.24	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.75	1.84	2.26	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.18	1.85	2.27	6	<0.05	CDF	Significant Effect
		1.9455*	2.14	1.86	2.28	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

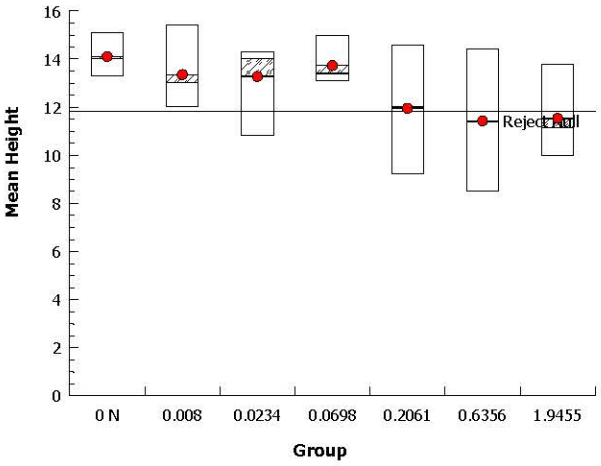
Mean Height Summary

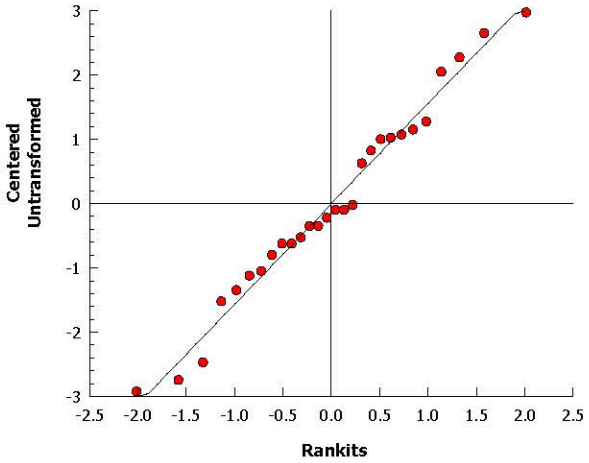
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	12-9093-7958	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:54	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-8558-0352	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.3%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	2.45	3	6	0.6324	CDF	Non-Significant Effect
		0.0234	0.672	2.45	3	6	0.6049	CDF	Non-Significant Effect
		0.0698	0.306	2.45	3	6	0.7586	CDF	Non-Significant Effect
		0.2061	1.75	2.45	3	6	0.1717	CDF	Non-Significant Effect
		0.6356	2.18	2.45	3	6	0.0830	CDF	Non-Significant Effect
		1.9455	2.1	2.45	3	6	0.0961	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

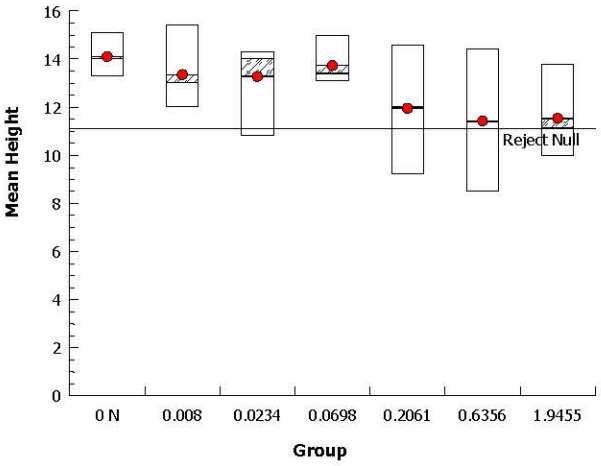
Mean Height Summary

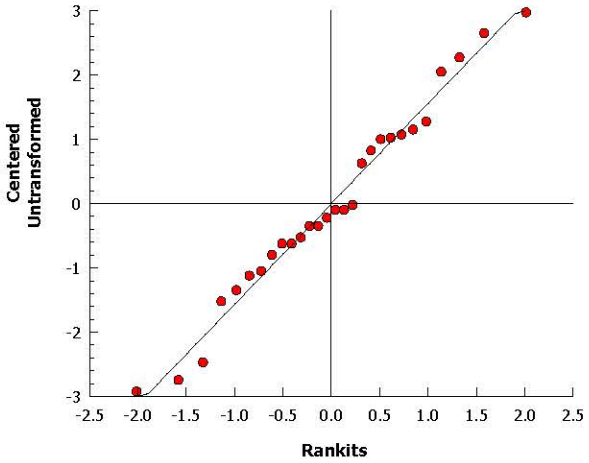
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	01-8558-0352	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-6198-8828	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:18	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.1%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	1.72	2.11	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.672	1.8	2.21	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.53	1.83	2.24	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.75	1.84	2.26	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.18	1.85	2.27	6	<0.05	CDF	Significant Effect
		1.9455*	2.14	1.86	2.28	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

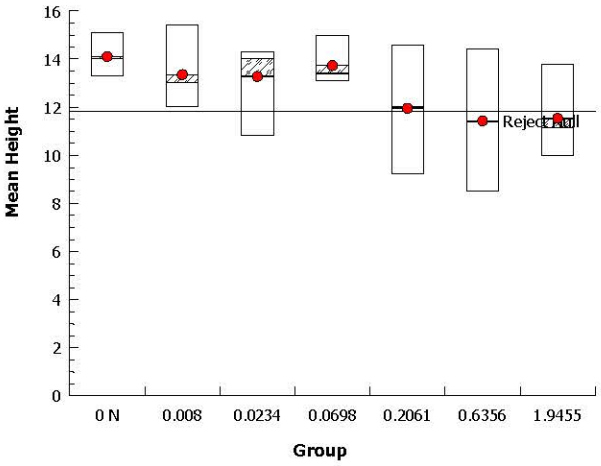
Mean Height Summary

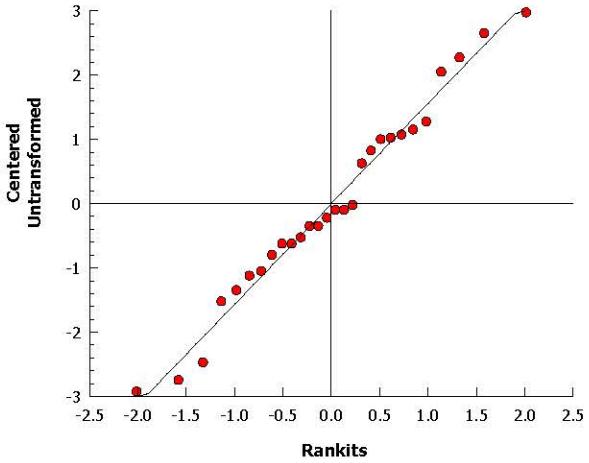
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-6198-8828	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:18	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-8996-1726	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.3%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	2.45	3	6	0.6324	CDF	Non-Significant Effect
		0.0234	0.672	2.45	3	6	0.6049	CDF	Non-Significant Effect
		0.0698	0.306	2.45	3	6	0.7586	CDF	Non-Significant Effect
		0.2061	1.75	2.45	3	6	0.1717	CDF	Non-Significant Effect
		0.6356	2.18	2.45	3	6	0.0830	CDF	Non-Significant Effect
		1.9455	2.1	2.45	3	6	0.0961	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

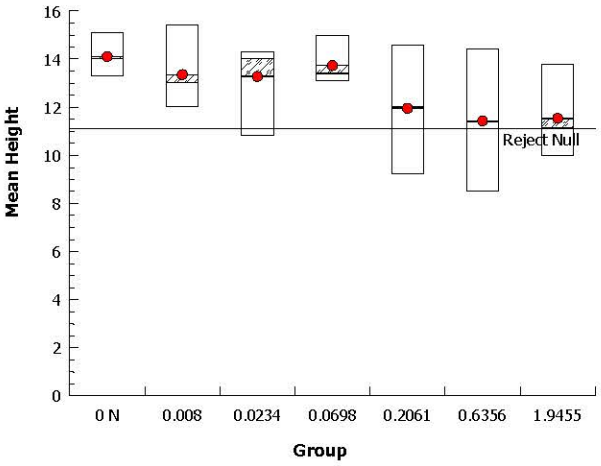
Mean Height Summary

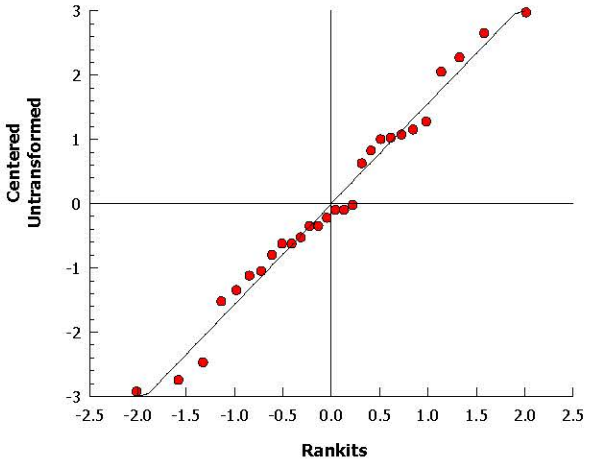
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	12-8996-1726	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-2031-9936	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.1%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.611	1.72	2.11	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.672	1.8	2.21	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.53	1.83	2.24	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.75	1.84	2.26	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.18	1.85	2.27	6	<0.05	CDF	Significant Effect
		1.9455*	2.14	1.86	2.28	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	29.21429	4.869048	6	1.62	0.1919	Non-Significant Effect
Error	63.25	3.011905	21			
Total	92.46429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.85	16.8	0.4399	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.976	0.897	0.7342	Normal Distribution

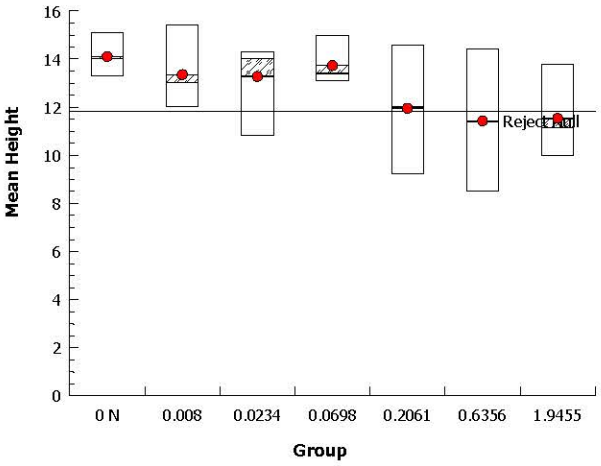
Mean Height Summary

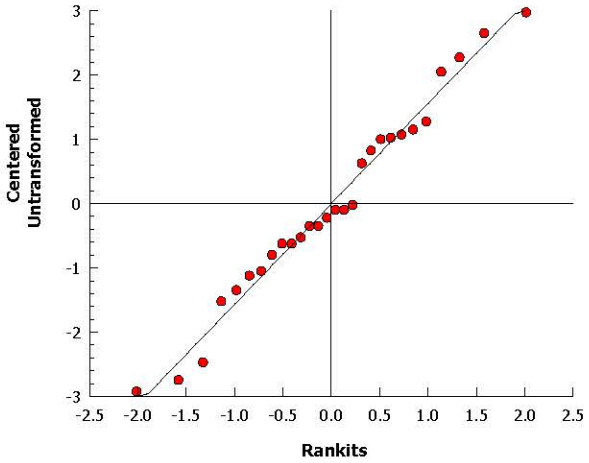
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.1	12.9	15.3	14	13.3	15.1	0.372	5.28%	0.0%
0.008		4	13.3	11	15.7	13	12	15.4	0.723	10.8%	5.32%
0.0234		4	13.3	10.6	15.9	14	10.8	14.3	0.829	12.5%	5.85%
0.0698		4	13.7	12.3	15.2	13.4	13.1	15	0.448	6.53%	2.66%
0.2061		4	12	8.16	15.7	12	9.2	14.6	1.19	19.9%	15.2%
0.6356		4	11.4	7.33	15.5	11.4	8.5	14.4	1.29	22.5%	19.0%
1.9455		4	11.5	8.95	14.1	11.1	10	13.8	0.808	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-2031-9936	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-5135-0222	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	42.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	2.45	83.3	6	0.9558	CDF	Non-Significant Effect
		0.0234	-0.323	2.45	83.3	6	0.9269	CDF	Non-Significant Effect
		0.0698	-1.51	2.45	83.3	6	0.9974	CDF	Non-Significant Effect
		0.2061	1.28	2.45	83.3	6	0.3327	CDF	Non-Significant Effect
		0.6356	2.44	2.45	83.3	6	0.0508	CDF	Non-Significant Effect
		1.9455*	3.84	2.45	83.3	6	0.0024	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

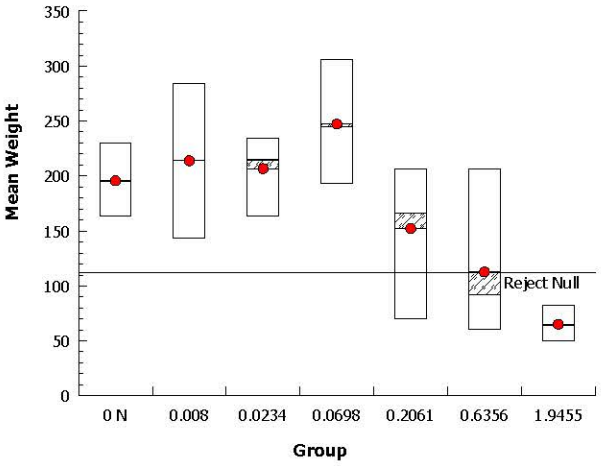
Mean Weight Summary

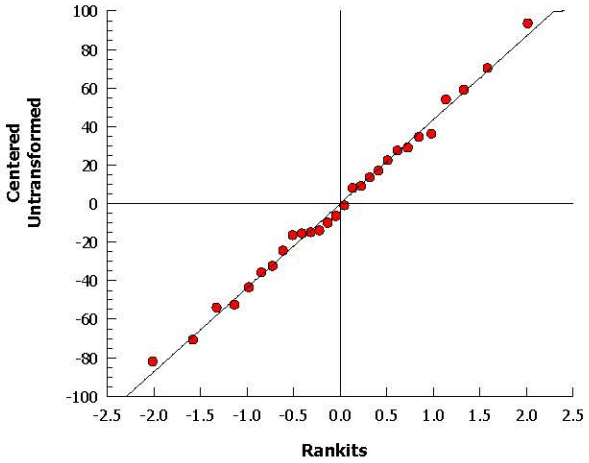
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	05-5135-0222	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-8790-8667	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:45	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	32.3%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	1.72	58.5	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.323	1.8	61.3	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.791	1.83	62.2	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.28	1.84	62.7	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.44	1.85	62.9	6	<0.05	CDF	Significant Effect
		1.9455*	3.84	1.86	63.1	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

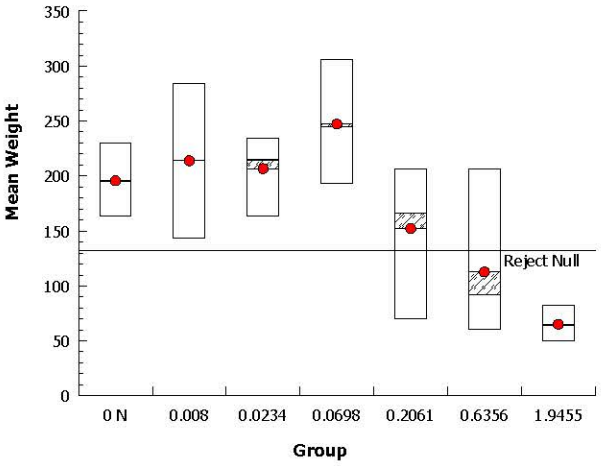
Mean Weight Summary

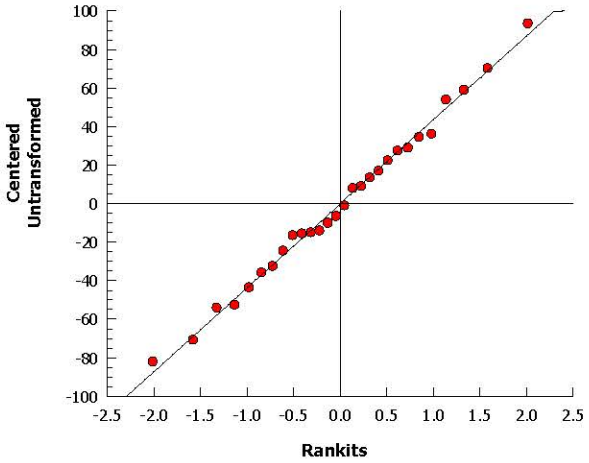
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-8790-8667	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:45	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-4175-9202	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	42.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	2.45	83.3	6	0.9558	CDF	Non-Significant Effect
		0.0234	-0.323	2.45	83.3	6	0.9269	CDF	Non-Significant Effect
		0.0698	-1.51	2.45	83.3	6	0.9974	CDF	Non-Significant Effect
		0.2061	1.28	2.45	83.3	6	0.3327	CDF	Non-Significant Effect
		0.6356	2.44	2.45	83.3	6	0.0508	CDF	Non-Significant Effect
		1.9455*	3.84	2.45	83.3	6	0.0024	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

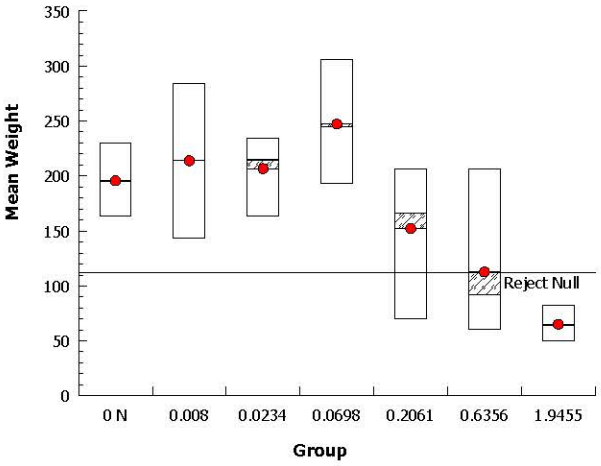
Mean Weight Summary

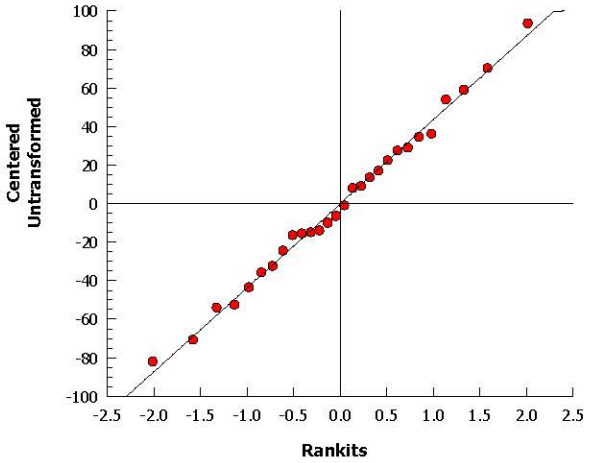
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	08-4175-9202	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-0402-2145	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:54	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	32.3%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	1.72	58.5	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.323	1.8	61.3	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.791	1.83	62.2	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.28	1.84	62.7	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.44	1.85	62.9	6	<0.05	CDF	Significant Effect
		1.9455*	3.84	1.86	63.1	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

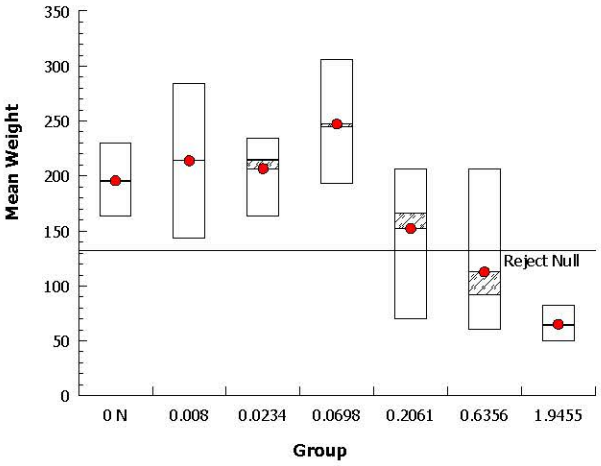
Mean Weight Summary

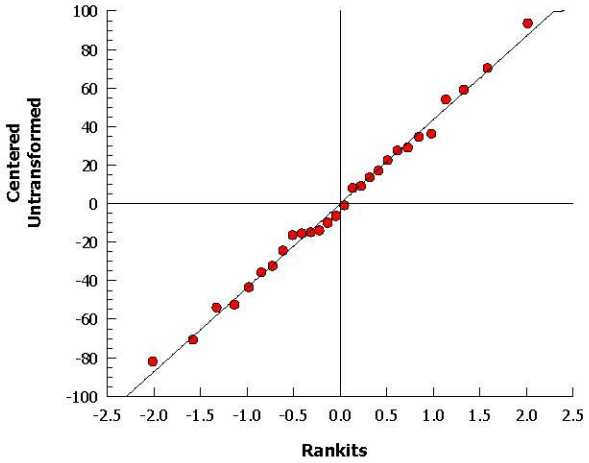
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-0402-2145	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:54	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-1317-9089	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	42.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	2.45	83.3	6	0.9558	CDF	Non-Significant Effect
		0.0234	-0.323	2.45	83.3	6	0.9269	CDF	Non-Significant Effect
		0.0698	-1.51	2.45	83.3	6	0.9974	CDF	Non-Significant Effect
		0.2061	1.28	2.45	83.3	6	0.3327	CDF	Non-Significant Effect
		0.6356	2.44	2.45	83.3	6	0.0508	CDF	Non-Significant Effect
		1.9455*	3.84	2.45	83.3	6	0.0024	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

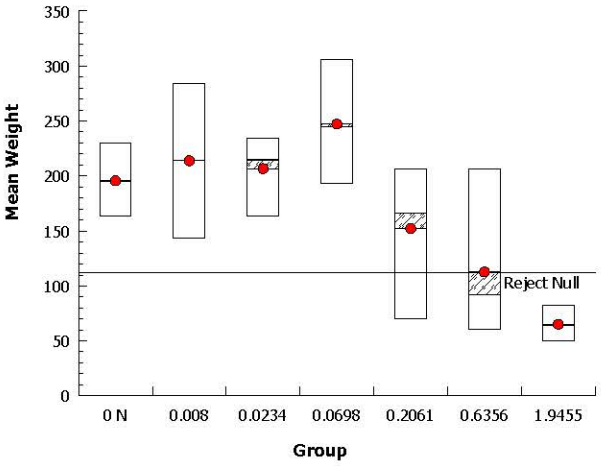
Mean Weight Summary

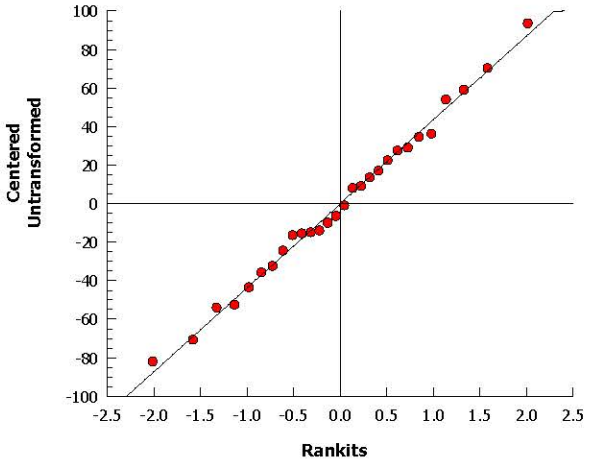
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-1317-9089	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-8403-6974	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:18	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	32.3%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	1.72	58.5	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.323	1.8	61.3	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.791	1.83	62.2	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.28	1.84	62.7	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.44	1.85	62.9	6	<0.05	CDF	Significant Effect
		1.9455*	3.84	1.86	63.1	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

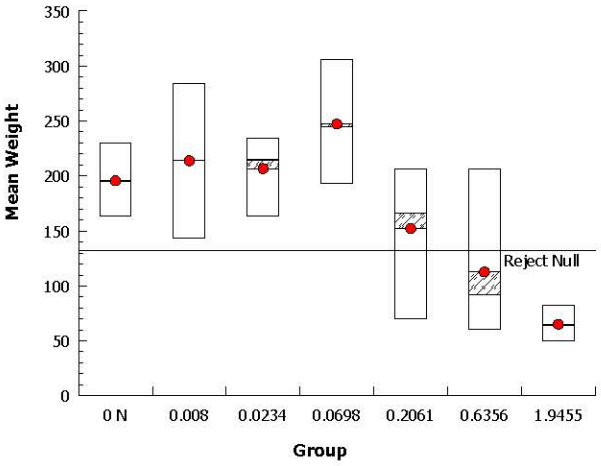
Mean Weight Summary

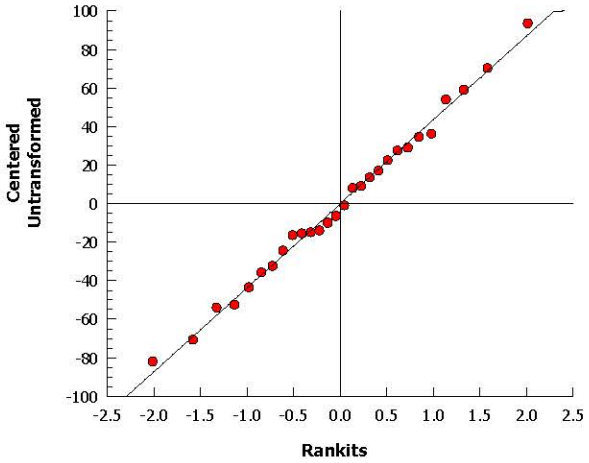
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-8403-6974	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:18	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-1783-1832	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	42.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	2.45	83.3	6	0.9558	CDF	Non-Significant Effect
		0.0234	-0.323	2.45	83.3	6	0.9269	CDF	Non-Significant Effect
		0.0698	-1.51	2.45	83.3	6	0.9974	CDF	Non-Significant Effect
		0.2061	1.28	2.45	83.3	6	0.3327	CDF	Non-Significant Effect
		0.6356	2.44	2.45	83.3	6	0.0508	CDF	Non-Significant Effect
		1.9455*	3.84	2.45	83.3	6	0.0024	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

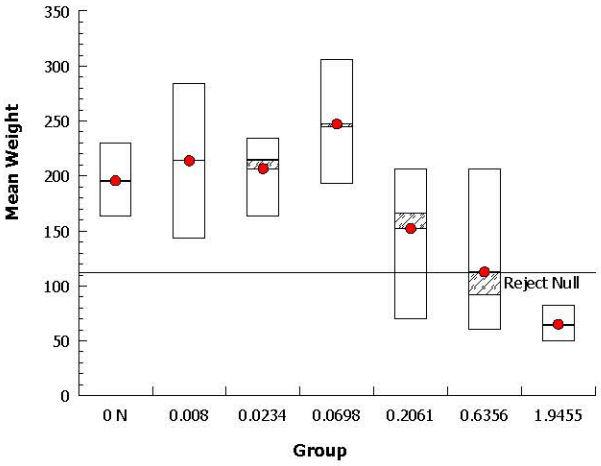
Mean Weight Summary

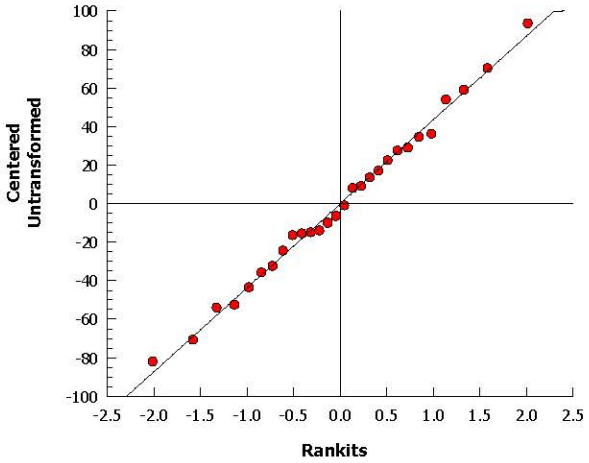
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	11-1783-1832	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-3730-5687	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	32.3%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.536	1.72	58.5	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.323	1.8	61.3	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.791	1.83	62.2	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.28	1.84	62.7	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.44	1.85	62.9	6	<0.05	CDF	Significant Effect
		1.9455*	3.84	1.86	63.1	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.2	2.88	0.6085	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	97920.36	16320.06	6	7.05	0.0003	Significant Effect
Error	48603.75	2314.464	21			
Total	146524.1		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.7	16.8	0.3493	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.992	0.897	0.9982	Normal Distribution

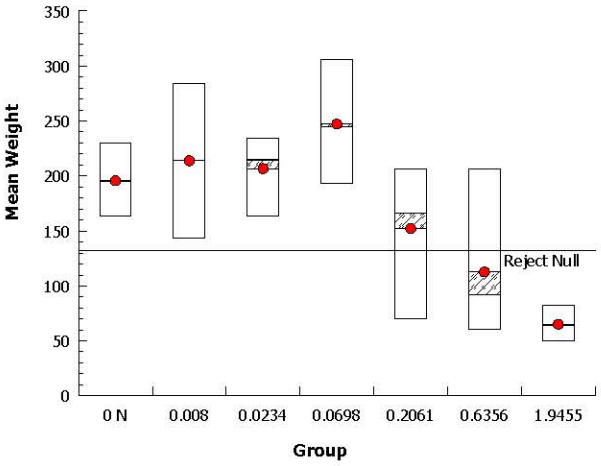
Mean Weight Summary

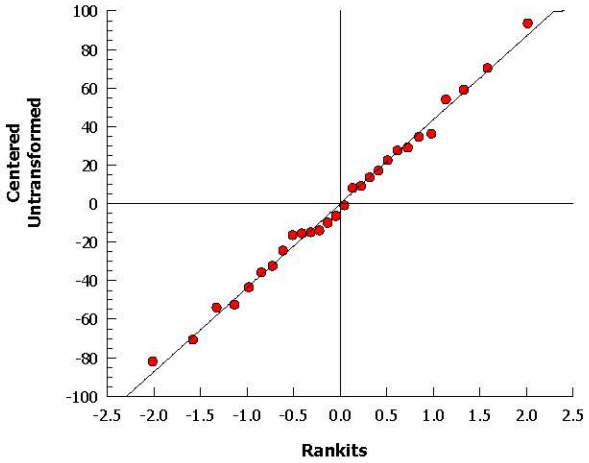
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	196	148	243	195	163	230	14.9	15.3%	0.0%
0.008		4	214	111	317	214	143	284	32.3	30.2%	-9.34%
0.0234		4	207	155	258	215	163	234	16.3	15.8%	-5.63%
0.0698		4	247	172	322	245	193	306	23.6	19.1%	-26.3%
0.2061		4	152	57.9	246	166	70	206	29.6	38.9%	22.3%
0.6356		4	113	10.3	215	92	60	206	32.1	57.1%	42.5%
1.9455		4	65	41.1	88.9	64	50	82	7.52	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-3730-5687	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-3605-7689	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.618	2.45	0.198	6	0.6294	CDF	Non-Significant Effect
		0.0234	-0.618	2.45	0.198	6	0.9639	CDF	Non-Significant Effect
		0.0698	0.309	2.45	0.198	6	0.7573	CDF	Non-Significant Effect
		0.2061	1.24	2.45	0.198	6	0.3503	CDF	Non-Significant Effect
		0.6356	0.618	2.45	0.198	6	0.6294	CDF	Non-Significant Effect
		1.9455*	2.47	2.45	0.198	6	0.0477	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.73	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.1521429	0.02535714	6	1.94	0.1217	Non-Significant Effect
Error	0.275	0.01309524	21			
Total	0.4271429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.69	16.8	0.9947	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.897	0.3033	Normal Distribution

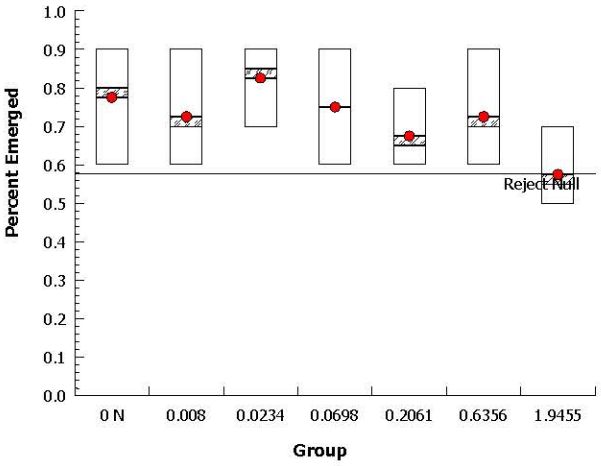
Percent Emerged Summary

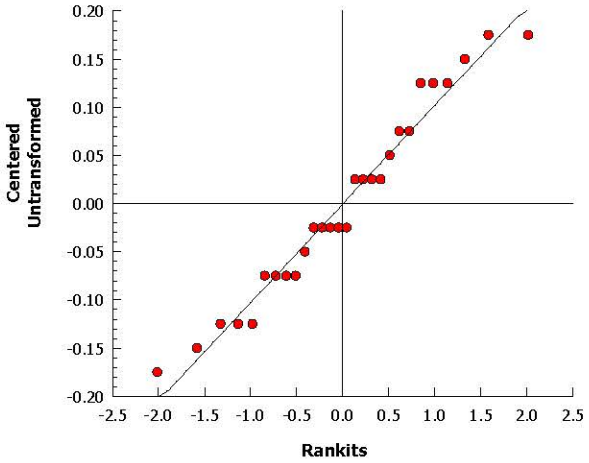
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	0.0%
0.008		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
0.0234		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	-6.45%
0.0698		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	3.23%
0.2061		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	12.9%
0.6356		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
1.9455		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	25.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	05-3605-7689	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-8654-1953	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:18	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	19.4%	0.6356	1.9455	1.112	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.618	1.72	0.139	6	>0.05	CDF	Non-Significant Effect
		0.0234	0	1.8	0.146	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.309	1.83	0.148	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.24	1.84	0.149	6	>0.05	CDF	Non-Significant Effect
		0.6356	0.927	1.85	0.15	6	>0.05	CDF	Non-Significant Effect
		1.9455*	2.47	1.86	0.15	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.73	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.1521429	0.02535714	6	1.94	0.1217	Non-Significant Effect
Error	0.275	0.01309524	21			
Total	0.4271429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.69	16.8	0.9947	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.897	0.3033	Normal Distribution

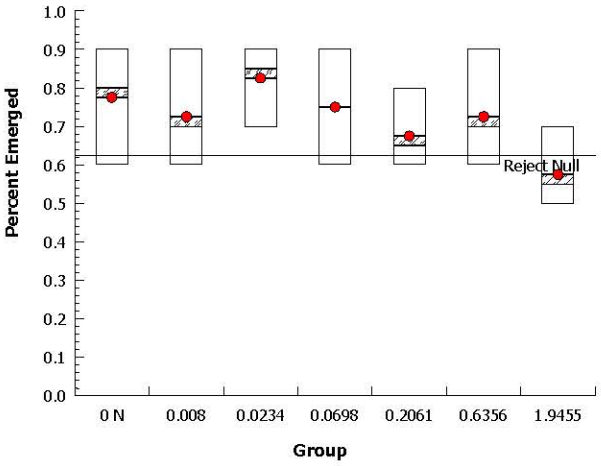
Percent Emerged Summary

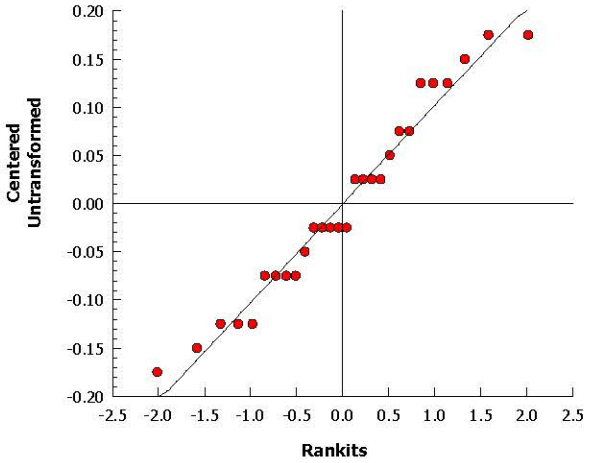
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	0.0%
0.008		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
0.0234		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	-6.45%
0.0698		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	3.23%
0.2061		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	12.9%
0.6356		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
1.9455		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	25.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	11-8654-1953	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:18	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-1830-3023	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.618	2.45	0.198	6	0.6294	CDF	Non-Significant Effect
		0.0234	-0.618	2.45	0.198	6	0.9639	CDF	Non-Significant Effect
		0.0698	0.309	2.45	0.198	6	0.7573	CDF	Non-Significant Effect
		0.2061	1.24	2.45	0.198	6	0.3503	CDF	Non-Significant Effect
		0.6356	0.618	2.45	0.198	6	0.6294	CDF	Non-Significant Effect
		1.9455*	2.47	2.45	0.198	6	0.0477	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.73	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.1521429	0.02535714	6	1.94	0.1217	Non-Significant Effect
Error	0.275	0.01309524	21			
Total	0.4271429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.69	16.8	0.9947	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.897	0.3033	Normal Distribution

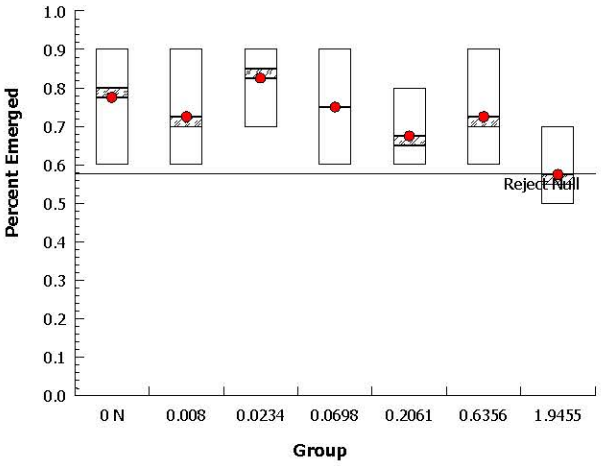
Percent Emerged Summary

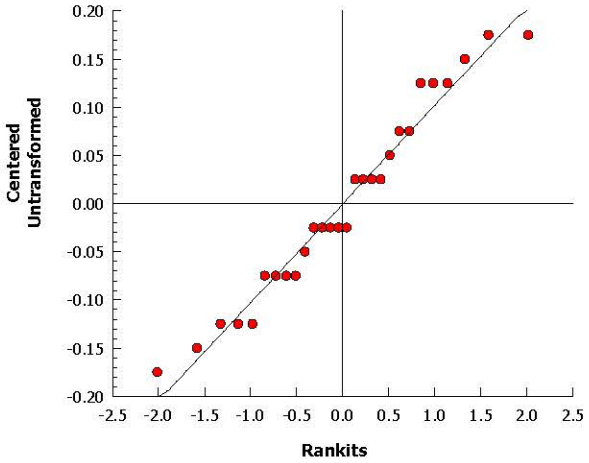
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	0.0%
0.008		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
0.0234		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	-6.45%
0.0698		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	3.23%
0.2061		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	12.9%
0.6356		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
1.9455		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	25.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-1830-3023	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-2856-2822	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	19.4%	0.6356	1.9455	1.112	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.618	1.72	0.139	6	>0.05	CDF	Non-Significant Effect
		0.0234	0	1.8	0.146	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.309	1.83	0.148	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.24	1.84	0.149	6	>0.05	CDF	Non-Significant Effect
		0.6356	0.927	1.85	0.15	6	>0.05	CDF	Non-Significant Effect
		1.9455*	2.47	1.86	0.15	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.73	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.1521429	0.02535714	6	1.94	0.1217	Non-Significant Effect
Error	0.275	0.01309524	21			
Total	0.4271429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.69	16.8	0.9947	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.897	0.3033	Normal Distribution

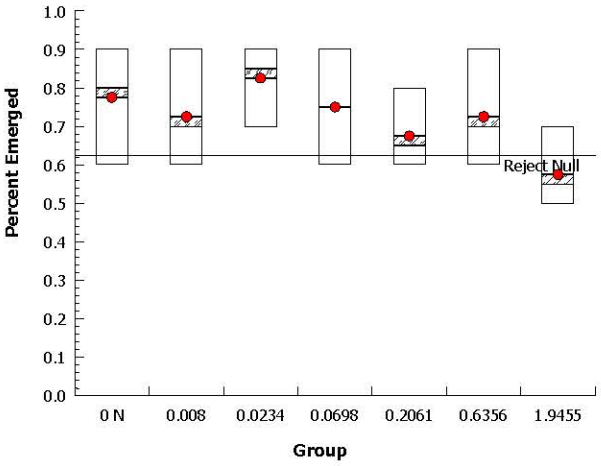
Percent Emerged Summary

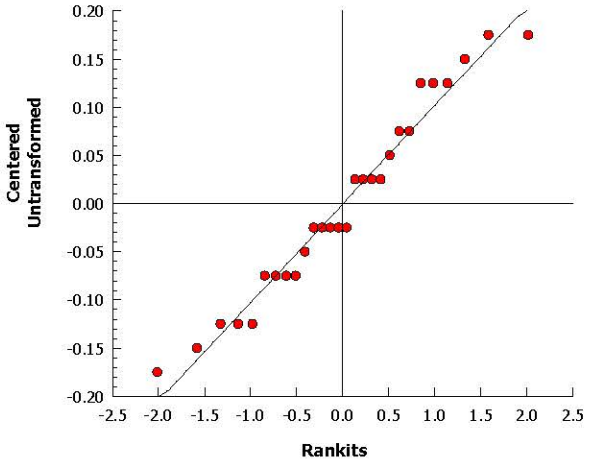
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	0.0%
0.008		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
0.0234		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	-6.45%
0.0698		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	3.23%
0.2061		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	12.9%
0.6356		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	6.45%
1.9455		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	25.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-2856-2822	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-1332-7616	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control	0.008	0.252	2.45	0.243	6	0.7783	CDF	Non-Significant Effect
	0.0234	-0.755	2.45	0.243	6	0.9748	CDF	Non-Significant Effect
	0.0698	0	2.45	0.243	6	0.8571	CDF	Non-Significant Effect
	0.2061	0.755	2.45	0.243	6	0.5672	CDF	Non-Significant Effect
	0.6356	1.26	2.45	0.243	6	0.3414	CDF	Non-Significant Effect
	1.9455*	3.77	2.45	0.243	6	0.0028	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.81	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.515	0.08583333	6	4.34	0.0053	Significant Effect
Error	0.415	0.01976191	21			
Total	0.9299999		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.23	16.8	0.7797	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3535	Normal Distribution

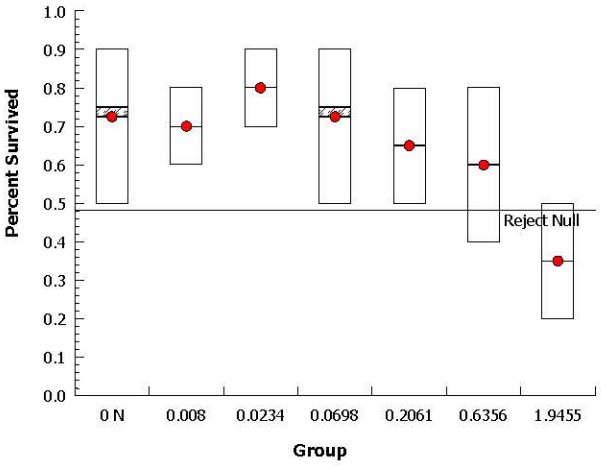
Percent Survived Summary

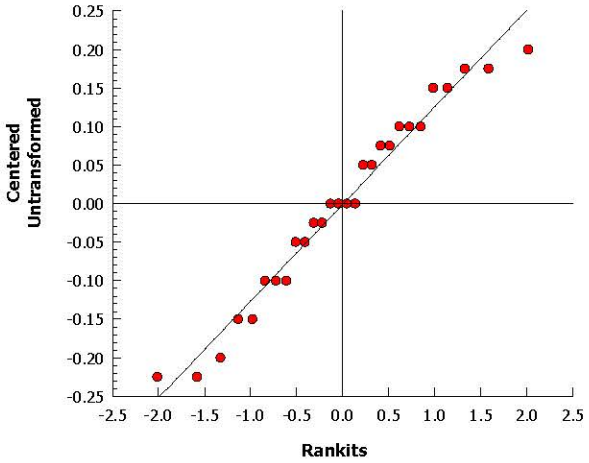
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.008		4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	3.45%
0.0234		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	-10.3%
0.0698		4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.2061		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	10.3%
0.6356		4	0.6	0.309	0.891	0.6	0.4	0.8	0.0913	30.4%	17.2%
1.9455		4	0.35	0.145	0.555	0.35	0.2	0.5	0.0645	36.9%	51.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-1332-7616	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-8300-5721	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.4%	0.6356	1.9455	1.112	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.252	1.72	0.171	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.252	1.8	0.179	6	>0.05	CDF	Non-Significant Effect
		0.0698	0	1.83	0.182	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.755	1.84	0.183	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.26	1.85	0.184	6	>0.05	CDF	Non-Significant Effect
		1.9455*	3.77	1.86	0.184	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.81	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.515	0.08583333	6	4.34	0.0053	Significant Effect
Error	0.415	0.01976191	21			
Total	0.9299999		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.23	16.8	0.7797	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3535	Normal Distribution

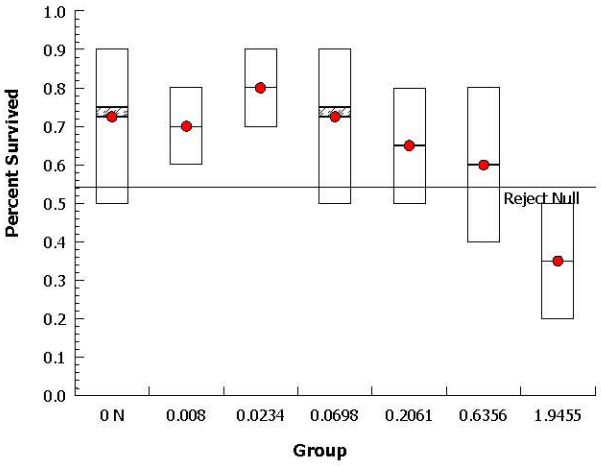
Percent Survived Summary

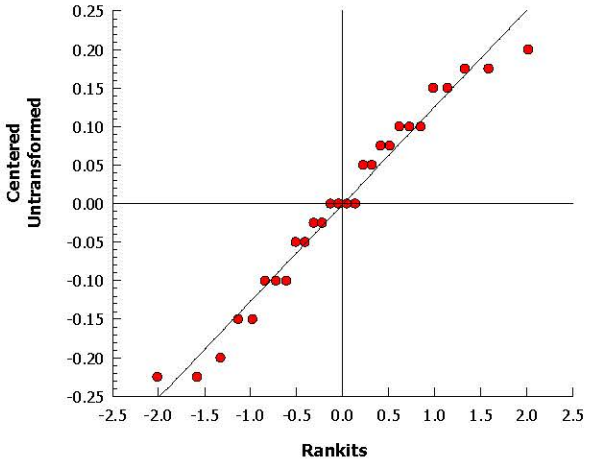
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.008		4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	3.45%
0.0234		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	-10.3%
0.0698		4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.2061		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	10.3%
0.6356		4	0.6	0.309	0.891	0.6	0.4	0.8	0.0913	30.4%	17.2%
1.9455		4	0.35	0.145	0.555	0.35	0.2	0.5	0.0645	36.9%	51.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-8300-5721	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-3407-5917	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.6%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.252	2.45	0.243	6	0.7783	CDF	Non-Significant Effect
		0.0234	-0.755	2.45	0.243	6	0.9748	CDF	Non-Significant Effect
		0.0698	0	2.45	0.243	6	0.8571	CDF	Non-Significant Effect
		0.2061	0.755	2.45	0.243	6	0.5672	CDF	Non-Significant Effect
		0.6356	1.26	2.45	0.243	6	0.3414	CDF	Non-Significant Effect
		1.9455*	3.77	2.45	0.243	6	0.0028	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.81	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.515	0.08583333	6	4.34	0.0053	Significant Effect
Error	0.415	0.01976191	21			
Total	0.9299999		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.23	16.8	0.7797	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3535	Normal Distribution

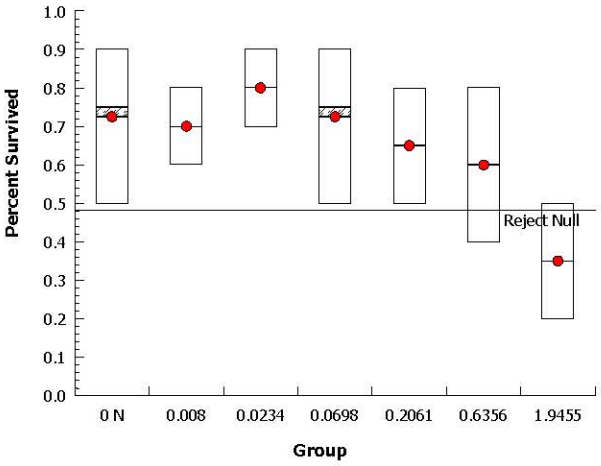
Percent Survived Summary

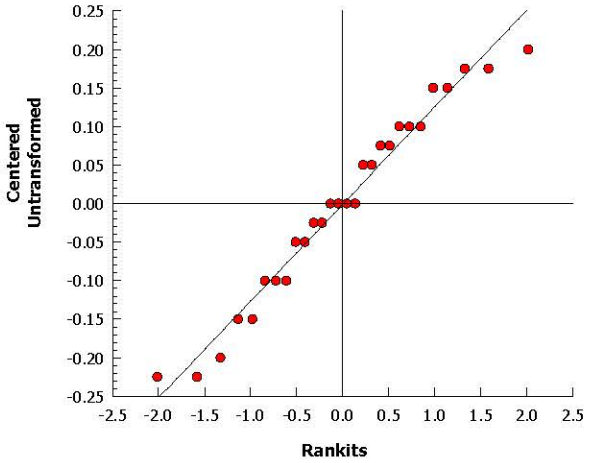
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.008		4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	3.45%
0.0234		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	-10.3%
0.0698		4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.2061		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	10.3%
0.6356		4	0.6	0.309	0.891	0.6	0.4	0.8	0.0913	30.4%	17.2%
1.9455		4	0.35	0.145	0.555	0.35	0.2	0.5	0.0645	36.9%	51.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	08-3407-5917	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-7598-6275	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.4%	0.6356	1.9455	1.112	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.252	1.72	0.171	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.252	1.8	0.179	6	>0.05	CDF	Non-Significant Effect
		0.0698	0	1.83	0.182	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.755	1.84	0.183	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.26	1.85	0.184	6	>0.05	CDF	Non-Significant Effect
		1.9455*	3.77	1.86	0.184	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.81	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.515	0.08583333	6	4.34	0.0053	Significant Effect
Error	0.415	0.01976191	21			
Total	0.9299999		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.23	16.8	0.7797	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3535	Normal Distribution

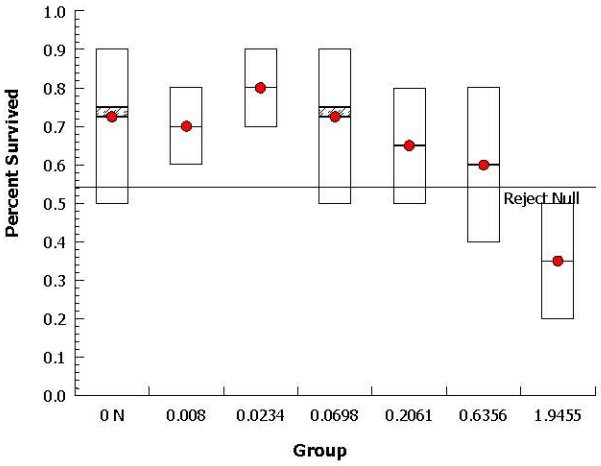
Percent Survived Summary

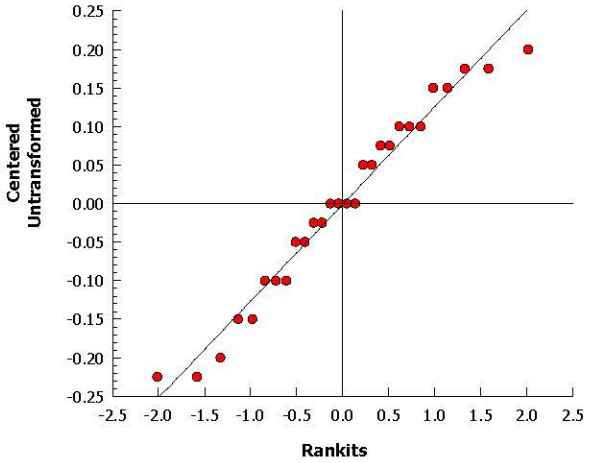
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.008		4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	3.45%
0.0234		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	-10.3%
0.0698		4	0.725	0.453	0.997	0.75	0.5	0.9	0.0854	23.6%	0.0%
0.2061		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	10.3%
0.6356		4	0.6	0.309	0.891	0.6	0.4	0.8	0.0913	30.4%	17.2%
1.9455		4	0.35	0.145	0.555	0.35	0.2	0.5	0.0645	36.9%	51.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	12-7598-6275	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:19	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-0564-5049	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.225	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
7	-163	333	336	1.08	1.09	0.159	0.766	2.84	0.5590	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.197	N/A	N/A
EC10	0.488	N/A	N/A
EC25	2.23	N/A	N/A
EC50	12.1	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.231	0.0429	0.147	0.315	5.38	<0.0001	Significant Parameter
Slope	0.92	0.871	-0.787	2.63	1.06	0.3008	Non-Significant Parameter
Intercept	-0.995	0.347	-1.68	-0.314	-2.86	0.0084	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	4.706956	4.706956	1	7.11	0.0132	Significant
Lack of Fit	2.107955	0.526989	4	0.766	0.5590	Non-Significant
Pure Error	14.43921	0.687582	21			
Residual	16.54717	0.661887	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	16.5	37.7	0.8976	Non-Significant Heterogenity
	Likelihood Ratio GOF	17.4	37.7	0.8657	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.93	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	0.981	12.6	0.9863	Equal Variances
	Mod Levene Equality of Variance	0.093	2.57	0.9964	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.926	0.2762	Normal Distribution
	Anderson-Darling A2 Normality	0.477	2.49	0.2422	Normal Distribution

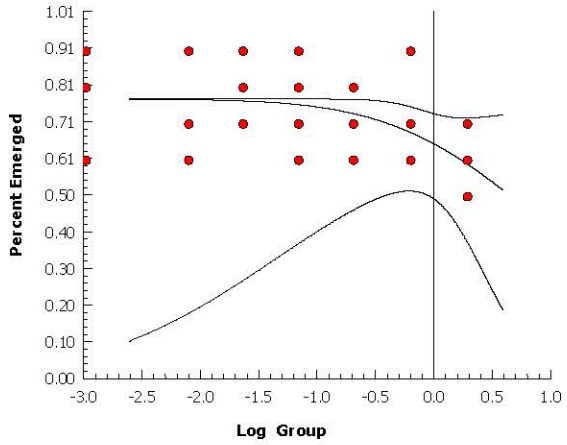
Percent Emerged Summary

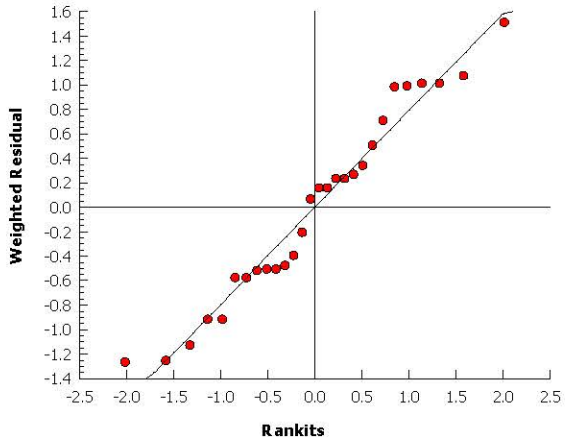
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.775	0.6	0.9	0.0629	0.126	16.2%	0.0%	31	40
0.008		4	0.725	0.6	0.9	0.0629	0.126	17.4%	6.45%	29	40
0.0234		4	0.825	0.7	0.9	0.0479	0.0957	11.6%	-6.45%	33	40
0.0698		4	0.75	0.6	0.9	0.0645	0.129	17.2%	3.23%	30	40
0.2061		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	12.9%	27	40
0.6356		4	0.725	0.6	0.9	0.0629	0.126	17.4%	6.45%	29	40
1.9455		4	0.575	0.5	0.7	0.0479	0.0957	16.7%	25.8%	23	40

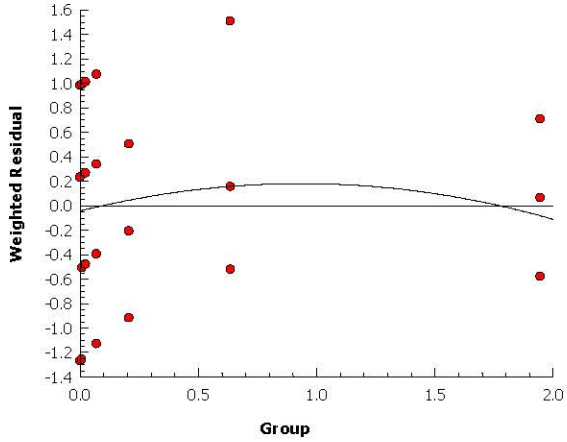
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

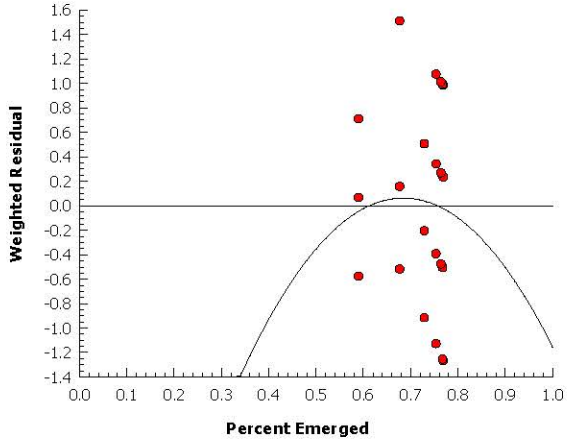
Analysis ID:	06-0564-5049	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-4859-7007	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.225	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
7	-163	333	336	1.08	1.09	0.159	0.766	2.84	0.5590	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.197	N/A	N/A
EC10	0.488	N/A	N/A
EC25	2.23	N/A	N/A
EC50	12.1	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.231	0.0429	0.147	0.315	5.38	<0.0001	Significant Parameter
Slope	0.92	0.871	-0.787	2.63	1.06	0.3008	Non-Significant Parameter
Intercept	-0.995	0.347	-1.68	-0.314	-2.86	0.0084	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	4.706956	4.706956	1	7.11	0.0132	Significant
Lack of Fit	2.107955	0.526989	4	0.766	0.5590	Non-Significant
Pure Error	14.43921	0.687582	21			
Residual	16.54717	0.661887	25			

Residual Analysis

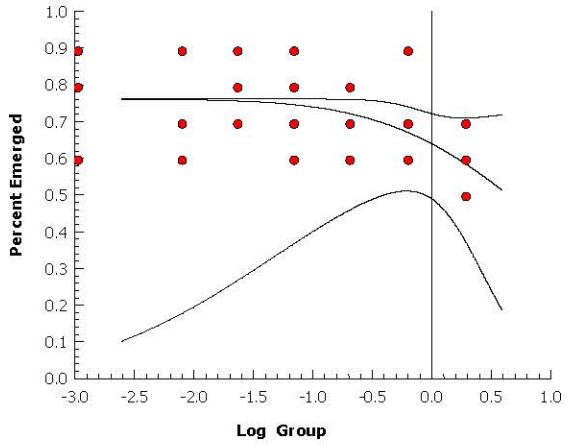
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	16.5	37.7	0.8976	Non-Significant Heterogenity
	Likelihood Ratio GOF	17.4	37.7	0.8657	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.93	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	0.981	12.6	0.9863	Equal Variances
	Mod Levene Equality of Variance	0.093	2.57	0.9964	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.926	0.2762	Normal Distribution
	Anderson-Darling A2 Normality	0.477	2.49	0.2422	Normal Distribution

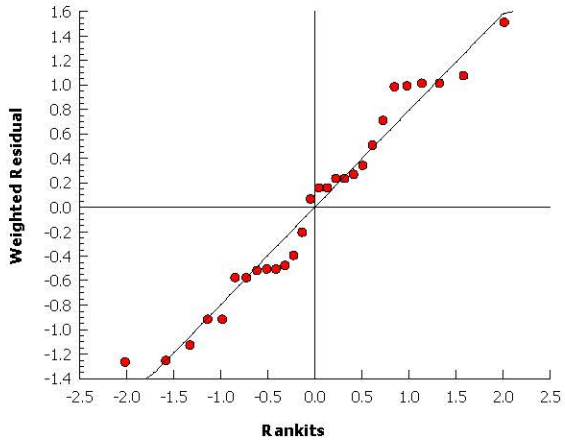
Percent Emerged Summary

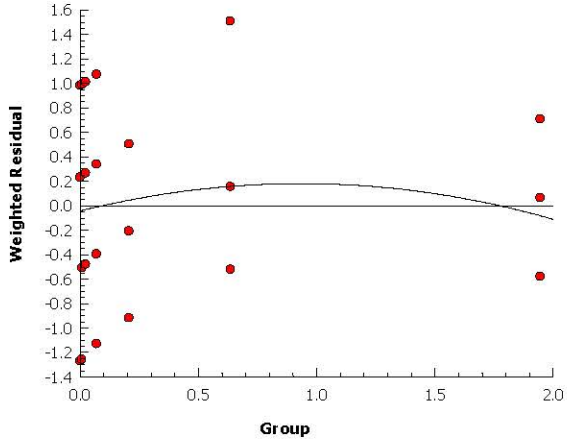
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.775	0.6	0.9	0.0629	0.126	16.2%	0.0%	31	40
0.008		4	0.725	0.6	0.9	0.0629	0.126	17.4%	6.45%	29	40
0.0234		4	0.825	0.7	0.9	0.0479	0.0957	11.6%	-6.45%	33	40
0.0698		4	0.75	0.6	0.9	0.0645	0.129	17.2%	3.23%	30	40
0.2061		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	12.9%	27	40
0.6356		4	0.725	0.6	0.9	0.0629	0.126	17.4%	6.45%	29	40
1.9455		4	0.575	0.5	0.7	0.0479	0.0957	16.7%	25.8%	23	40

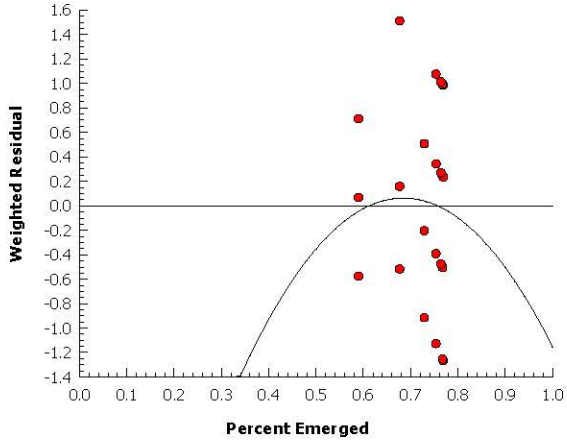
Analysis ID:	05-4859-7007	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-8119-6042	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.275	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
8	-171	349	352	0.274	0.635	0.441	0.433	2.84	0.7830	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.17	N/A	0.505
EC10	0.289	3.32E-07	0.694
EC25	0.702	0.00163	1.34
EC50	1.88	0.897	63.8

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.264	0.0374	0.191	0.338	7.06	<0.0001	Significant Parameter
Slope	1.58	0.722	0.161	2.99	2.18	0.0387	Significant Parameter
Intercept	-0.432	0.234	-0.891	0.0273	-1.84	0.0771	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	19.72378	19.72378	1	23.3	<0.0001	Significant
Lack of Fit	1.613258	0.403314	4	0.433	0.7829	Non-Significant
Pure Error	19.54208	0.930575	21			
Residual	21.15534	0.846214	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	21.2	37.7	0.6839	Non-Significant Heterogenity
	Likelihood Ratio GOF	21.6	37.7	0.6563	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.91	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	2.98	12.6	0.8118	Equal Variances
	Mod Levene Equality of Variance	1.02	2.57	0.4397	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.926	0.4424	Normal Distribution
	Anderson-Darling A2 Normality	0.36	2.49	0.4537	Normal Distribution

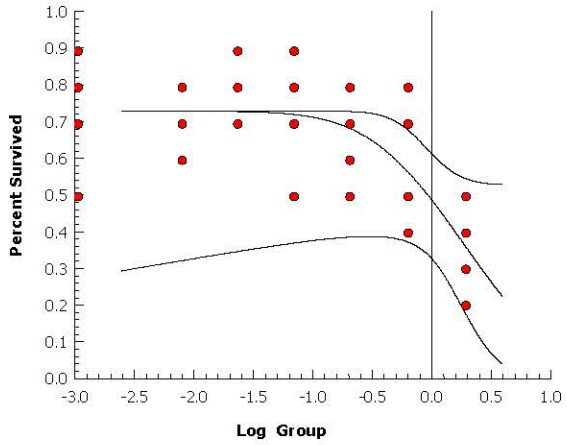
Percent Survived Summary

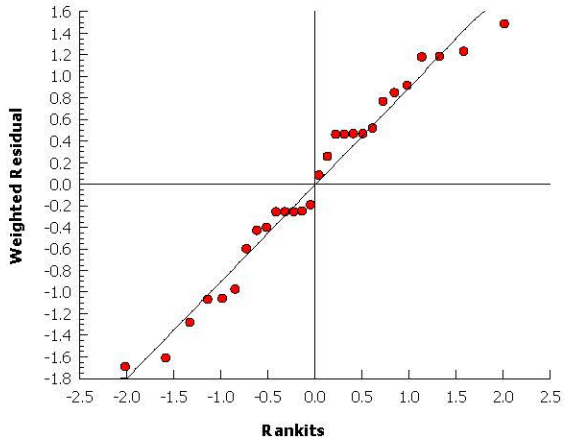
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.008		4	0.7	0.6	0.8	0.0408	0.0816	11.7%	3.45%	28	40
0.0234		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	-10.3%	32	40
0.0698		4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.2061		4	0.65	0.5	0.8	0.0645	0.129	19.9%	10.3%	26	40
0.6356		4	0.6	0.4	0.8	0.0913	0.183	30.4%	17.2%	24	40
1.9455		4	0.35	0.2	0.5	0.0645	0.129	36.9%	51.7%	14	40

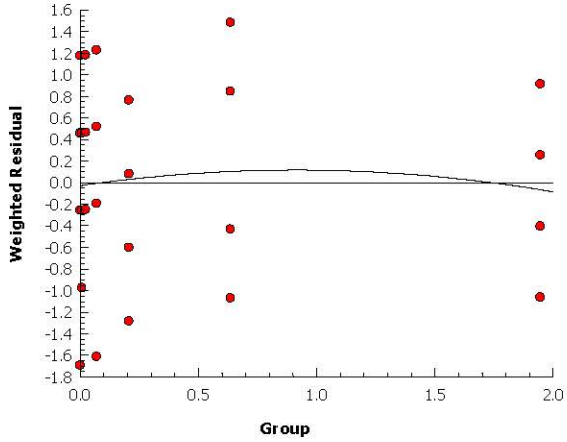
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

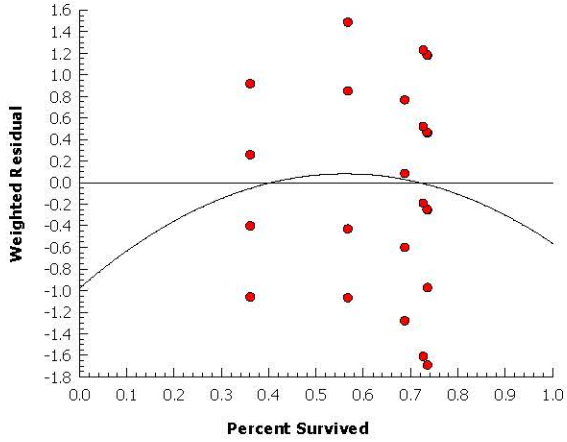
Analysis ID:	20-8119-6042	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-4904-7789	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.275	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
8	-171	349	352	0.274	0.635	0.441	0.433	2.84	0.7830	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.17	N/A	0.505
EC10	0.289	3.32E-07	0.694
EC25	0.702	0.00163	1.34
EC50	1.88	0.897	63.8

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.264	0.0374	0.191	0.338	7.06	<0.0001	Significant Parameter
Slope	1.58	0.722	0.161	2.99	2.18	0.0387	Significant Parameter
Intercept	-0.432	0.234	-0.891	0.0273	-1.84	0.0771	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	19.72378	19.72378	1	23.3	<0.0001	Significant
Lack of Fit	1.613258	0.403314	4	0.433	0.7829	Non-Significant
Pure Error	19.54208	0.930575	21			
Residual	21.15534	0.846214	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	21.2	37.7	0.6839	Non-Significant Heterogenity
	Likelihood Ratio GOF	21.6	37.7	0.6563	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.91	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	2.98	12.6	0.8118	Equal Variances
	Mod Levene Equality of Variance	1.02	2.57	0.4397	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.926	0.4424	Normal Distribution
	Anderson-Darling A2 Normality	0.36	2.49	0.4537	Normal Distribution

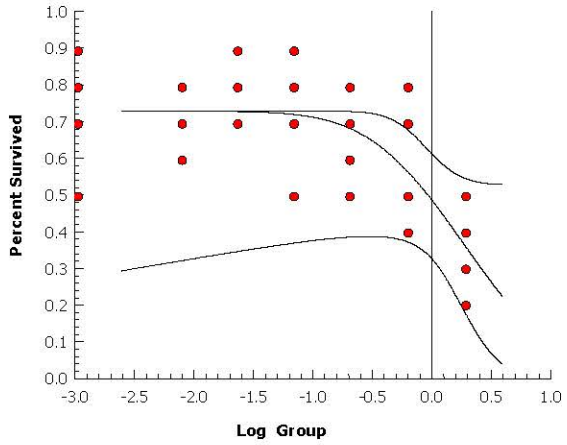
Percent Survived Summary

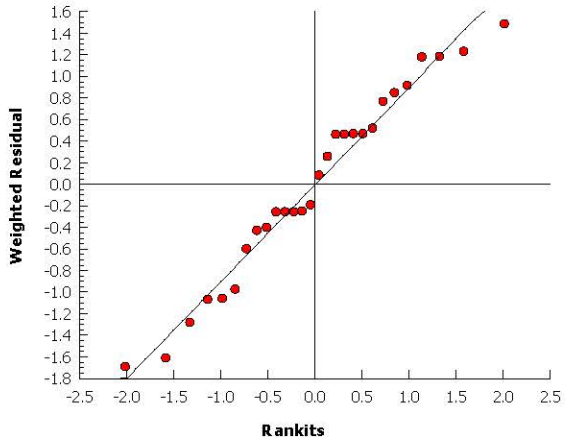
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.008		4	0.7	0.6	0.8	0.0408	0.0816	11.7%	3.45%	28	40
0.0234		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	-10.3%	32	40
0.0698		4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.2061		4	0.65	0.5	0.8	0.0645	0.129	19.9%	10.3%	26	40
0.6356		4	0.6	0.4	0.8	0.0913	0.183	30.4%	17.2%	24	40
1.9455		4	0.35	0.2	0.5	0.0645	0.129	36.9%	51.7%	14	40

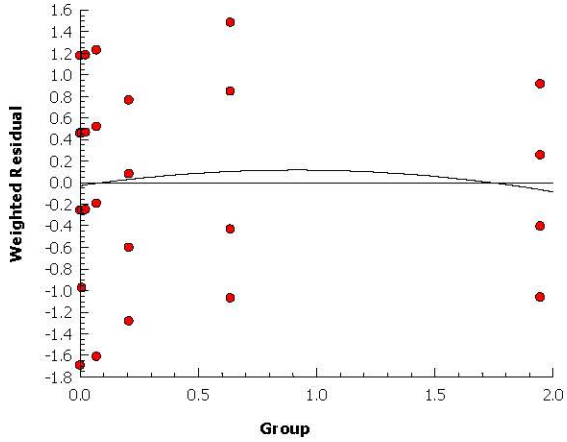
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

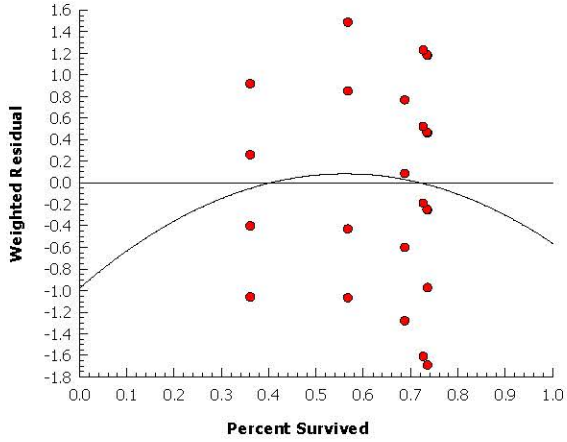
Analysis ID:	09-4904-7789	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-1003-2969	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	554	-1100	-1100	0.1751	Yes	0.312	2.84	0.8665	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0117	N/A	0.177
IC10	0.11	0.00737	0.601
IC25	4.63	0.16	51.9
IC50	296	0.00884	9900000

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	14.1	0.859	12.5	15.8	16.5	<0.0001	Significant Parameter
C	6.16	3.9	-1.48	13.8	1.58	0.1267	Non-Significant Parameter
D	296	1010	-1670	2270	0.294	0.7709	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.711171	1.711171	1	7.73	0.0102	Significant
Lack of Fit	0.310675	0.077669	4	0.312	0.8665	Non-Significant
Pure Error	5.222139	0.248673	21			
Residual	5.532814	0.221313	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	5.53	37.7	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	5.66	37.7	1.0000	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.17	2.88	0.6767	No Outliers Detected
Variances	Bartlett Equality of Variance	6.42	12.6	0.3775	Equal Variances
	Mod Levene Equality of Variance	1.47	2.57	0.2369	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.926	0.5844	Normal Distribution
	Anderson-Darling A2 Normality	0.308	2.49	0.5886	Normal Distribution

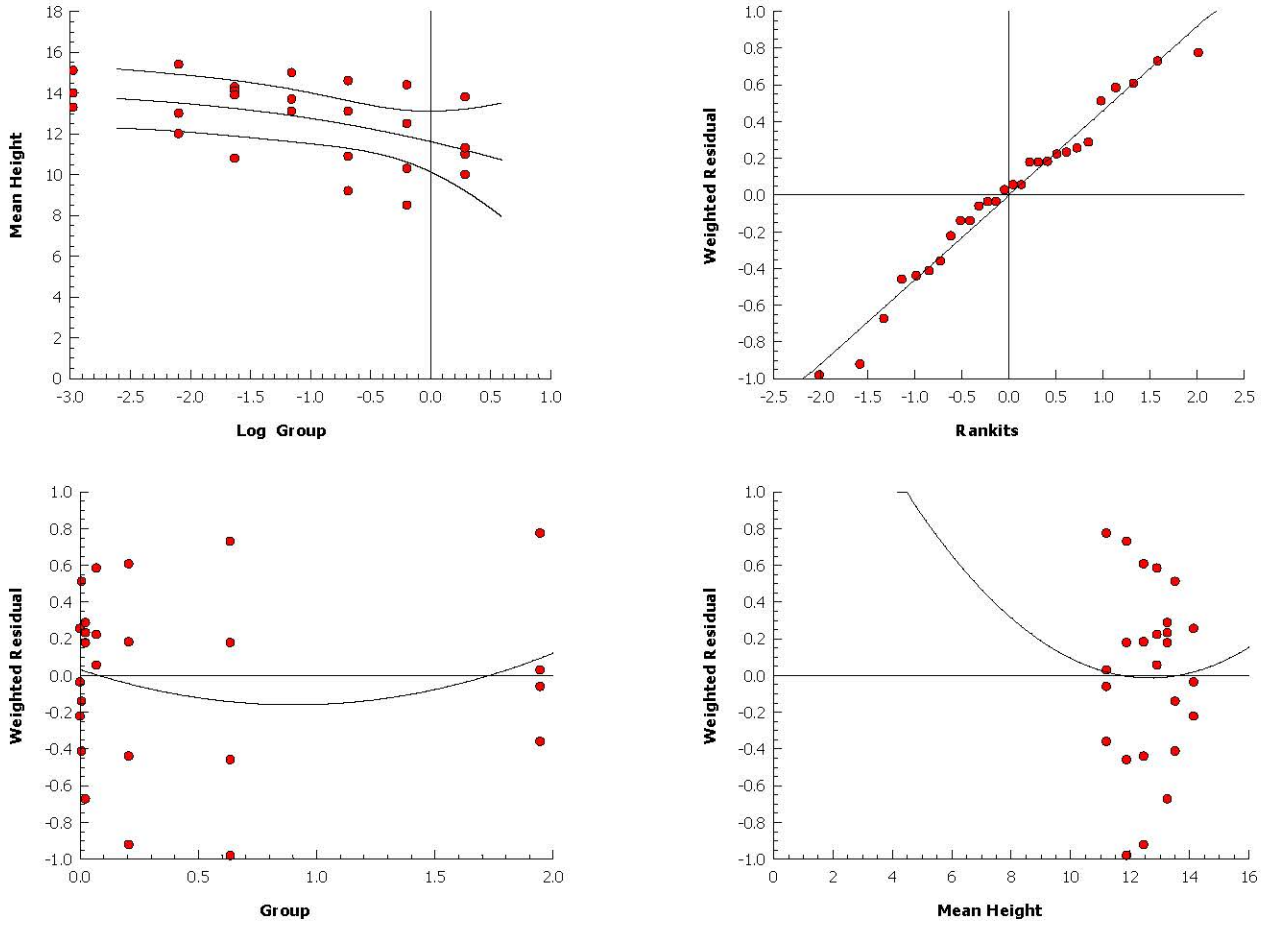
Mean Height Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	14.1	13.3	15.1	0.372	0.744	5.28%	0.0%
0.008		4	13.3	12	15.4	0.723	1.45	10.8%	5.32%
0.0234		4	13.3	10.8	14.3	0.829	1.66	12.5%	5.85%
0.0698		4	13.7	13.1	15	0.448	0.896	6.53%	2.66%
0.2061		4	12	9.2	14.6	1.19	2.38	19.9%	15.2%
0.6356		4	11.4	8.5	14.4	1.29	2.57	22.5%	19.0%
1.9455		4	11.5	10	13.8	0.808	1.62	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-1003-2969	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-5535-9134	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	554	-1100	-1100	0.1751	Yes	0.312	2.84	0.8665	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0117	N/A	0.177
IC10	0.11	0.00737	0.601
IC25	4.63	0.16	51.9
IC50	296	0.00884	9900000

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	14.1	0.859	12.5	15.8	16.5	<0.0001	Significant Parameter
C	6.16	3.9	-1.48	13.8	1.58	0.1267	Non-Significant Parameter
D	296	1010	-1670	2270	0.294	0.7709	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.711171	1.711171	1	7.73	0.0102	Significant
Lack of Fit	0.310675	0.077669	4	0.312	0.8665	Non-Significant
Pure Error	5.222139	0.248673	21			
Residual	5.532814	0.221313	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	5.53	37.7	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	5.66	37.7	1.0000	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.17	2.88	0.6767	No Outliers Detected
Variances	Bartlett Equality of Variance	6.42	12.6	0.3775	Equal Variances
	Mod Levene Equality of Variance	1.47	2.57	0.2369	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.926	0.5844	Normal Distribution
	Anderson-Darling A2 Normality	0.308	2.49	0.5886	Normal Distribution

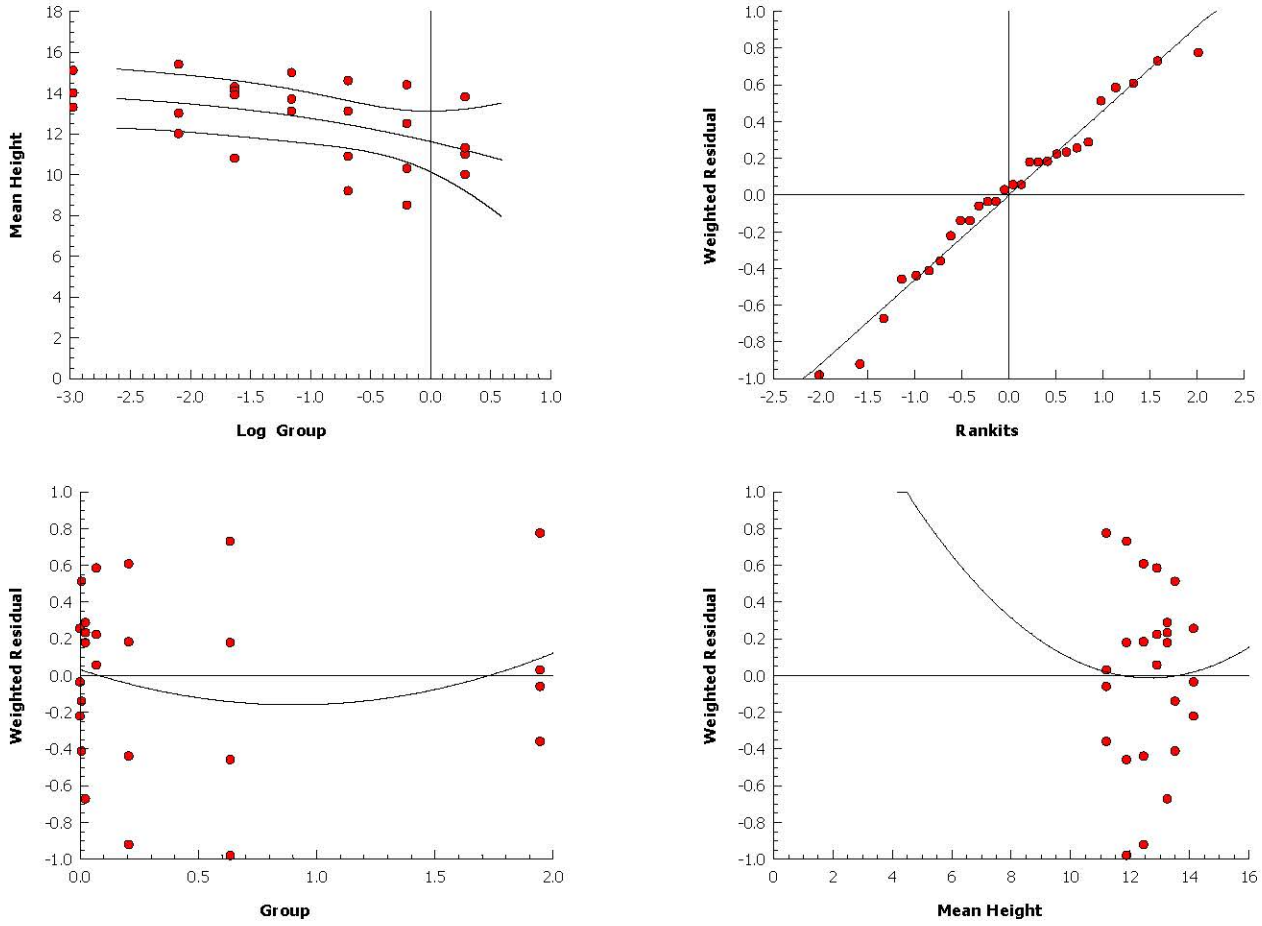
Mean Height Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	14.1	13.3	15.1	0.372	0.744	5.28%	0.0%
0.008		4	13.3	12	15.4	0.723	1.45	10.8%	5.32%
0.0234		4	13.3	10.8	14.3	0.829	1.66	12.5%	5.85%
0.0698		4	13.7	13.1	15	0.448	0.896	6.53%	2.66%
0.2061		4	12	9.2	14.6	1.19	2.38	19.9%	15.2%
0.6356		4	11.4	8.5	14.4	1.29	2.57	22.5%	19.0%
1.9455		4	11.5	10	13.8	0.808	1.62	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-5535-9134	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-7594-4559	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	554	-1100	-1100	0.1751	Yes	0.312	2.84	0.8665	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0117	N/A	0.177
IC10	0.11	0.00737	0.601
IC25	4.63	0.16	51.9
IC50	296	0.00884	9900000

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	14.1	0.859	12.5	15.8	16.5	<0.0001	Significant Parameter
C	6.16	3.9	-1.48	13.8	1.58	0.1267	Non-Significant Parameter
D	296	1010	-1670	2270	0.294	0.7709	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.711171	1.711171	1	7.73	0.0102	Significant
Lack of Fit	0.310675	0.077669	4	0.312	0.8665	Non-Significant
Pure Error	5.222139	0.248673	21			
Residual	5.532814	0.221313	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	5.53	37.7	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	5.66	37.7	1.0000	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.17	2.88	0.6767	No Outliers Detected
Variances	Bartlett Equality of Variance	6.42	12.6	0.3775	Equal Variances
	Mod Levene Equality of Variance	1.47	2.57	0.2369	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.926	0.5844	Normal Distribution
	Anderson-Darling A2 Normality	0.308	2.49	0.5886	Normal Distribution

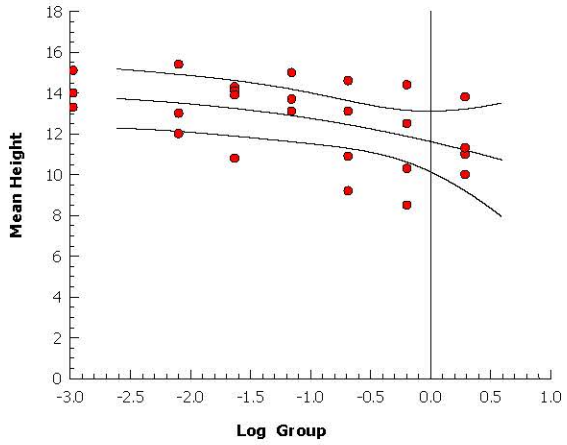
Mean Height Summary

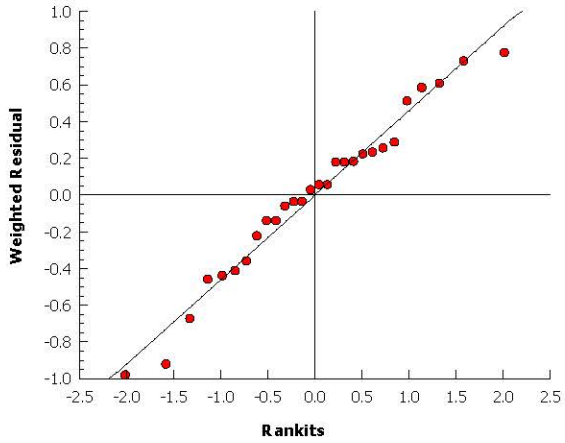
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	14.1	13.3	15.1	0.372	0.744	5.28%	0.0%
0.008		4	13.3	12	15.4	0.723	1.45	10.8%	5.32%
0.0234		4	13.3	10.8	14.3	0.829	1.66	12.5%	5.85%
0.0698		4	13.7	13.1	15	0.448	0.896	6.53%	2.66%
0.2061		4	12	9.2	14.6	1.19	2.38	19.9%	15.2%
0.6356		4	11.4	8.5	14.4	1.29	2.57	22.5%	19.0%
1.9455		4	11.5	10	13.8	0.808	1.62	14.0%	18.3%

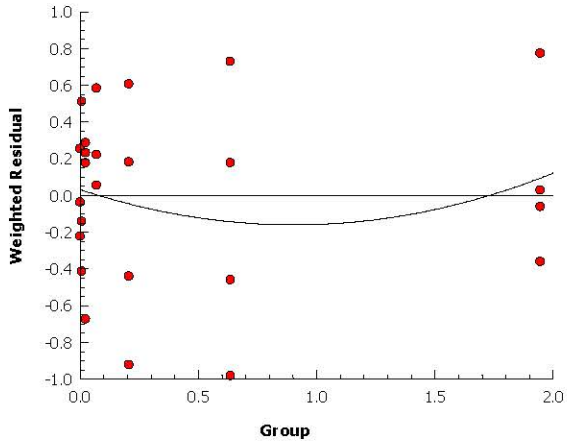
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

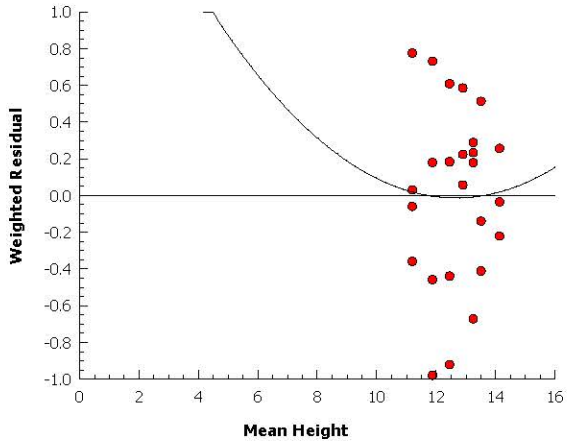
Analysis ID:	05-7594-4559	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-0047-1015	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	554	-1100	-1100	0.1751	Yes	0.312	2.84	0.8665	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0117	N/A	0.177
IC10	0.11	0.00737	0.601
IC25	4.63	0.16	51.9
IC50	296	0.00884	9900000

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	14.1	0.859	12.5	15.8	16.5	<0.0001	Significant Parameter
C	6.16	3.9	-1.48	13.8	1.58	0.1267	Non-Significant Parameter
D	296	1010	-1670	2270	0.294	0.7709	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.711171	1.711171	1	7.73	0.0102	Significant
Lack of Fit	0.310675	0.077669	4	0.312	0.8665	Non-Significant
Pure Error	5.222139	0.248673	21			
Residual	5.532814	0.221313	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	5.53	37.7	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	5.66	37.7	1.0000	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.17	2.88	0.6767	No Outliers Detected
Variances	Bartlett Equality of Variance	6.42	12.6	0.3775	Equal Variances
	Mod Levene Equality of Variance	1.47	2.57	0.2369	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.926	0.5844	Normal Distribution
	Anderson-Darling A2 Normality	0.308	2.49	0.5886	Normal Distribution

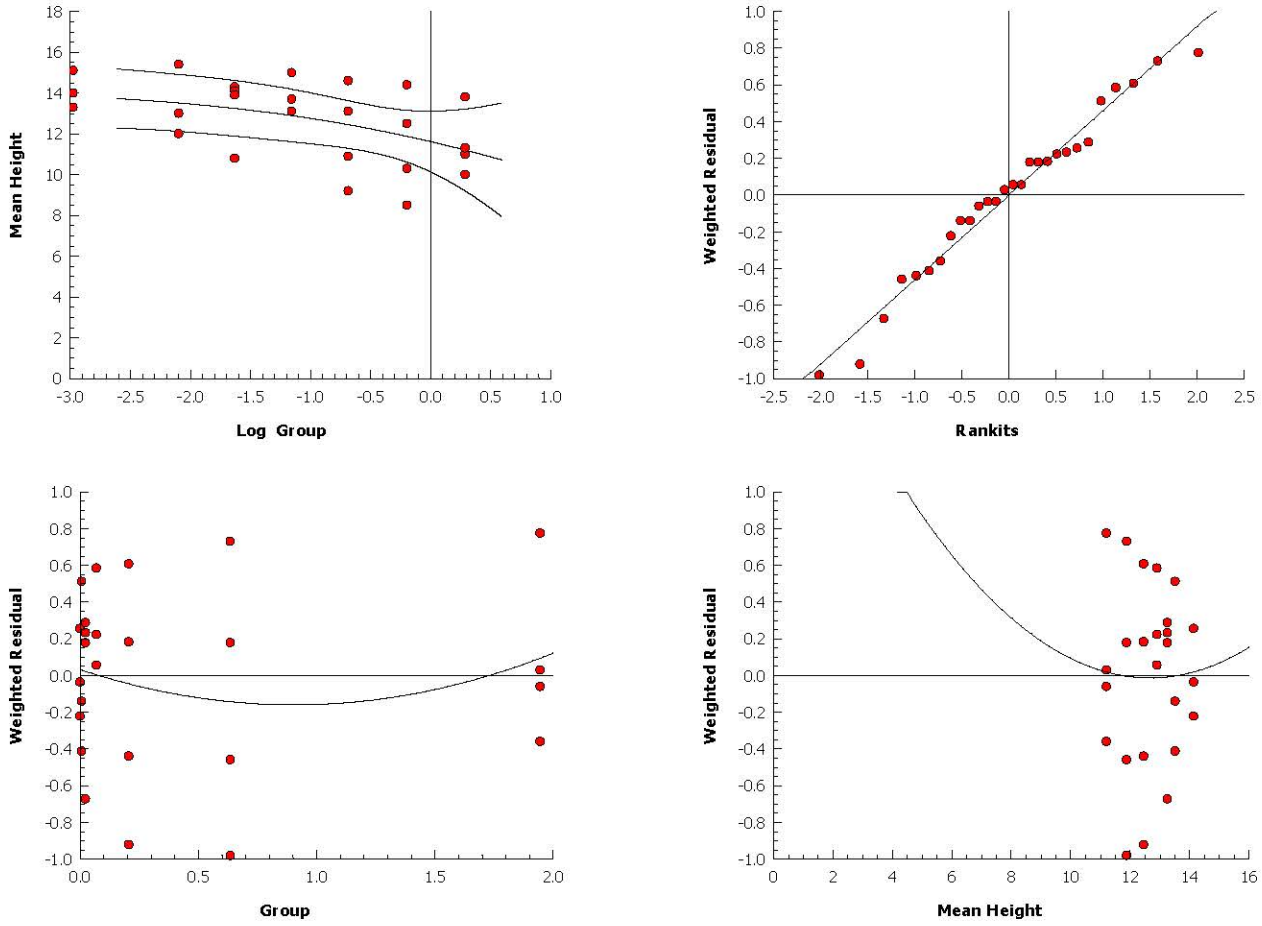
Mean Height Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	14.1	13.3	15.1	0.372	0.744	5.28%	0.0%
0.008		4	13.3	12	15.4	0.723	1.45	10.8%	5.32%
0.0234		4	13.3	10.8	14.3	0.829	1.66	12.5%	5.85%
0.0698		4	13.7	13.1	15	0.448	0.896	6.53%	2.66%
0.2061		4	12	9.2	14.6	1.19	2.38	19.9%	15.2%
0.6356		4	11.4	8.5	14.4	1.29	2.57	22.5%	19.0%
1.9455		4	11.5	10	13.8	0.808	1.62	14.0%	18.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-0047-1015	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-6714-5634	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
22	-278	562	565	0.5517	Yes	0.915	2.84	0.4737	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0565	N/A	0.166
IC10	0.101	N/A	0.247
IC25	0.266	0.0931	0.539
IC50	0.78	0.485	1.25

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	215	16.6	182	247	12.9	<0.0001	Significant Parameter
C	1.6	0.488	0.639	2.55	3.27	0.0031	Significant Parameter
D	0.78	0.244	0.303	1.26	3.2	0.0037	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	503.1501	503.1501	1	35.2	<0.0001	Significant
Lack of Fit	52.9871	13.24678	4	0.915	0.4737	Non-Significant
Pure Error	304.1427	14.48299	21			
Residual	357.1299	14.28519	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	357	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	363	37.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.22	2.88	0.5870	No Outliers Detected
Variances	Bartlett Equality of Variance	5.94	12.6	0.4296	Equal Variances
	Mod Levene Equality of Variance	0.596	2.57	0.7304	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.985	0.926	0.9532	Normal Distribution
	Anderson-Darling A2 Normality	0.199	2.49	0.9315	Normal Distribution

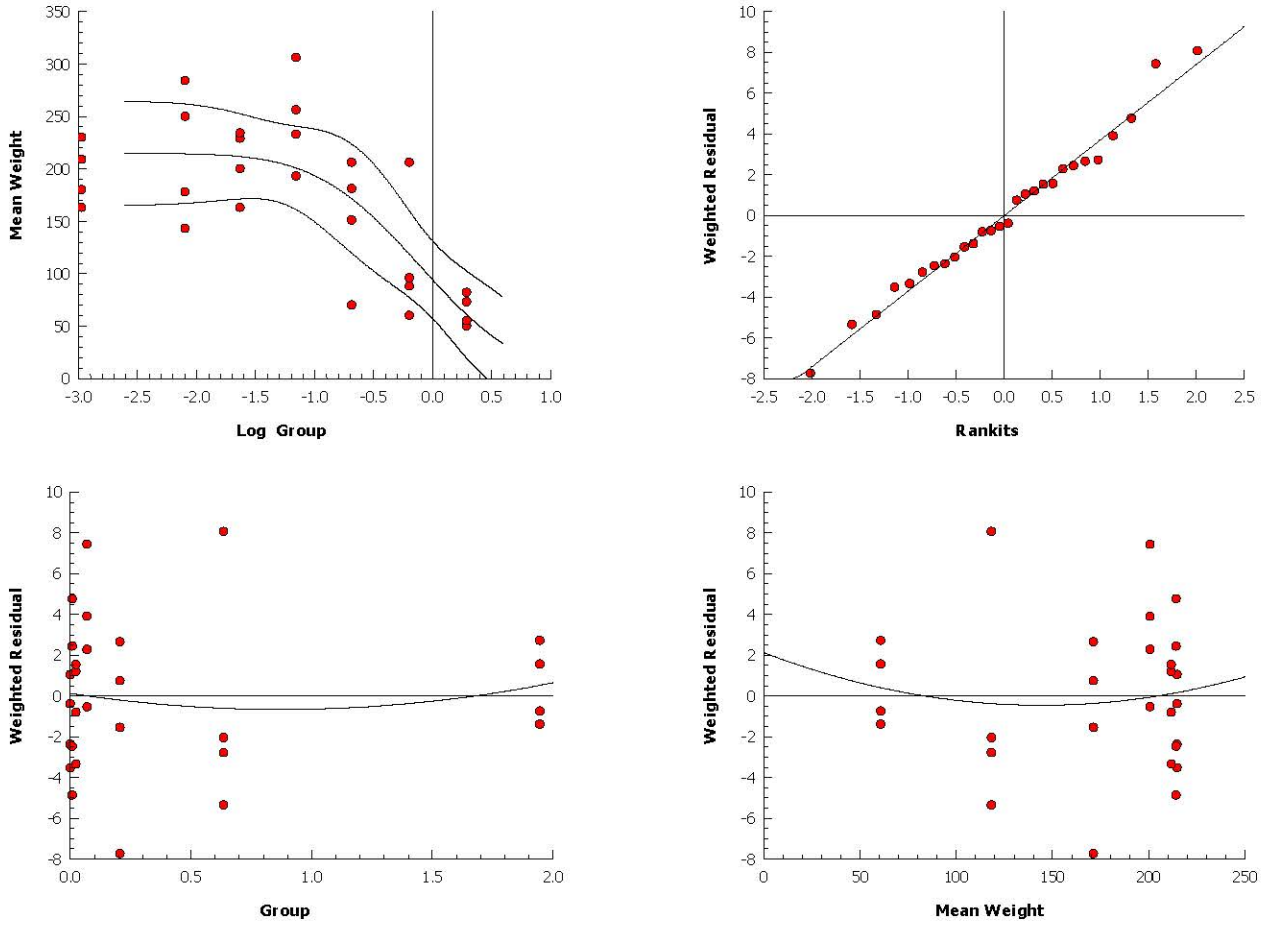
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	196	163	230	14.9	29.8	15.3%	0.0%
0.008		4	214	143	284	32.3	64.6	30.2%	-9.34%
0.0234		4	207	163	234	16.3	32.6	15.8%	-5.63%
0.0698		4	247	193	306	23.6	47.2	19.1%	-26.3%
0.2061		4	152	70	206	29.6	59.1	38.9%	22.3%
0.6356		4	113	60	206	32.1	64.2	57.1%	42.5%
1.9455		4	65	50	82	7.52	15	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-6714-5634	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:44	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-3747-6695	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
22	-278	562	565	0.5517	Yes	0.915	2.84	0.4737	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0565	N/A	0.166
IC10	0.101	N/A	0.247
IC25	0.266	0.0931	0.539
IC50	0.78	0.485	1.25

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	215	16.6	182	247	12.9	<0.0001	Significant Parameter
C	1.6	0.488	0.639	2.55	3.27	0.0031	Significant Parameter
D	0.78	0.244	0.303	1.26	3.2	0.0037	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	503.1501	503.1501	1	35.2	<0.0001	Significant
Lack of Fit	52.9871	13.24678	4	0.915	0.4737	Non-Significant
Pure Error	304.1427	14.48299	21			
Residual	357.1299	14.28519	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	357	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	363	37.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.22	2.88	0.5870	No Outliers Detected
Variances	Bartlett Equality of Variance	5.94	12.6	0.4296	Equal Variances
	Mod Levene Equality of Variance	0.596	2.57	0.7304	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.985	0.926	0.9532	Normal Distribution
	Anderson-Darling A2 Normality	0.199	2.49	0.9315	Normal Distribution

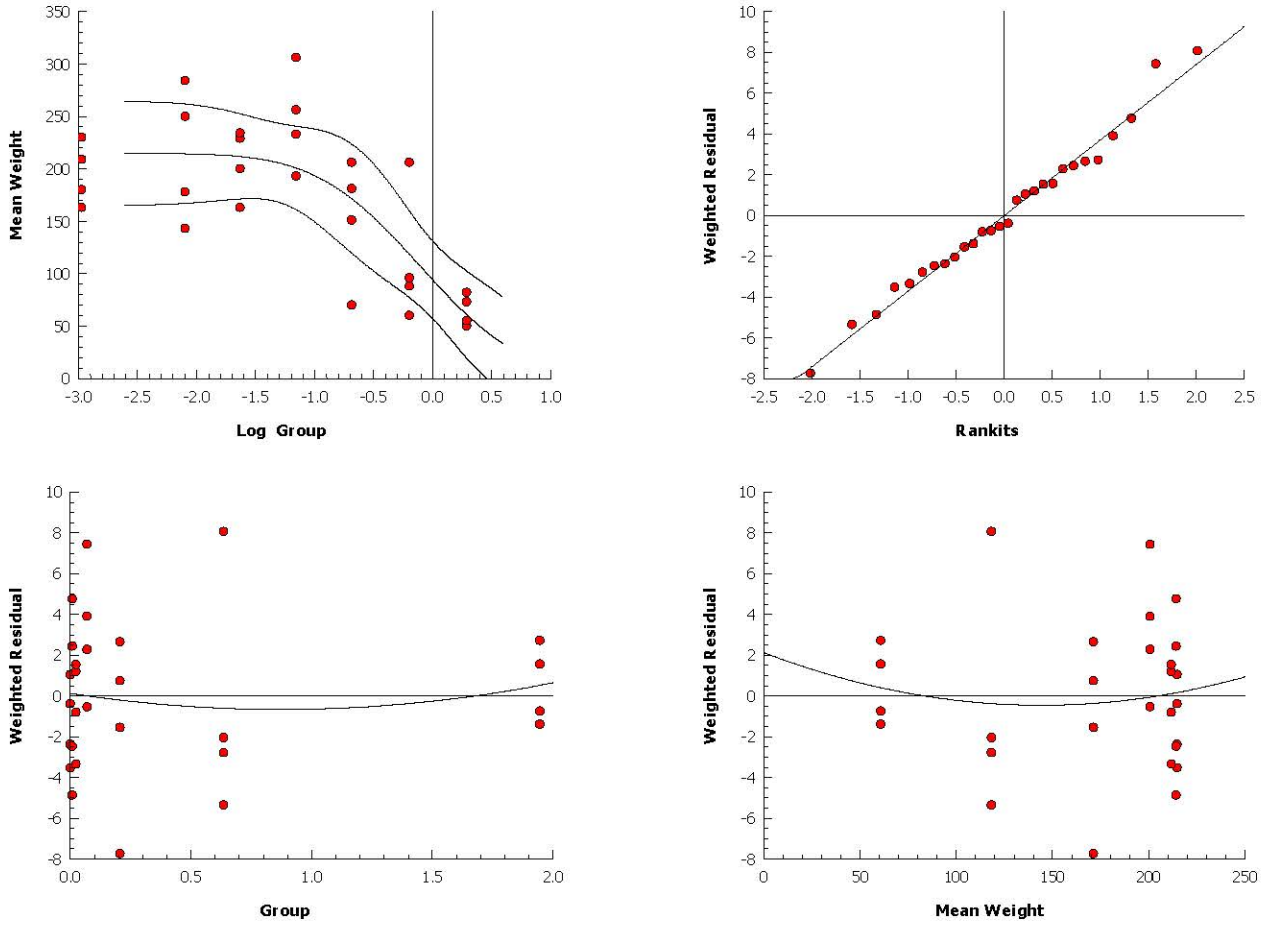
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	196	163	230	14.9	29.8	15.3%	0.0%
0.008		4	214	143	284	32.3	64.6	30.2%	-9.34%
0.0234		4	207	163	234	16.3	32.6	15.8%	-5.63%
0.0698		4	247	193	306	23.6	47.2	19.1%	-26.3%
0.2061		4	152	70	206	29.6	59.1	38.9%	22.3%
0.6356		4	113	60	206	32.1	64.2	57.1%	42.5%
1.9455		4	65	50	82	7.52	15	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	17-3747-6695	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	31 Jan-13 14:53	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-3447-9764	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
22	-278	562	565	0.5517	Yes	0.915	2.84	0.4737	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0565	N/A	0.166
IC10	0.101	N/A	0.247
IC25	0.266	0.0931	0.539
IC50	0.78	0.485	1.25

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	215	16.6	182	247	12.9	<0.0001	Significant Parameter
C	1.6	0.488	0.639	2.55	3.27	0.0031	Significant Parameter
D	0.78	0.244	0.303	1.26	3.2	0.0037	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	503.1501	503.1501	1	35.2	<0.0001	Significant
Lack of Fit	52.9871	13.24678	4	0.915	0.4737	Non-Significant
Pure Error	304.1427	14.48299	21			
Residual	357.1299	14.28519	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	357	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	363	37.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.22	2.88	0.5870	No Outliers Detected
Variances	Bartlett Equality of Variance	5.94	12.6	0.4296	Equal Variances
	Mod Levene Equality of Variance	0.596	2.57	0.7304	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.985	0.926	0.9532	Normal Distribution
	Anderson-Darling A2 Normality	0.199	2.49	0.9315	Normal Distribution

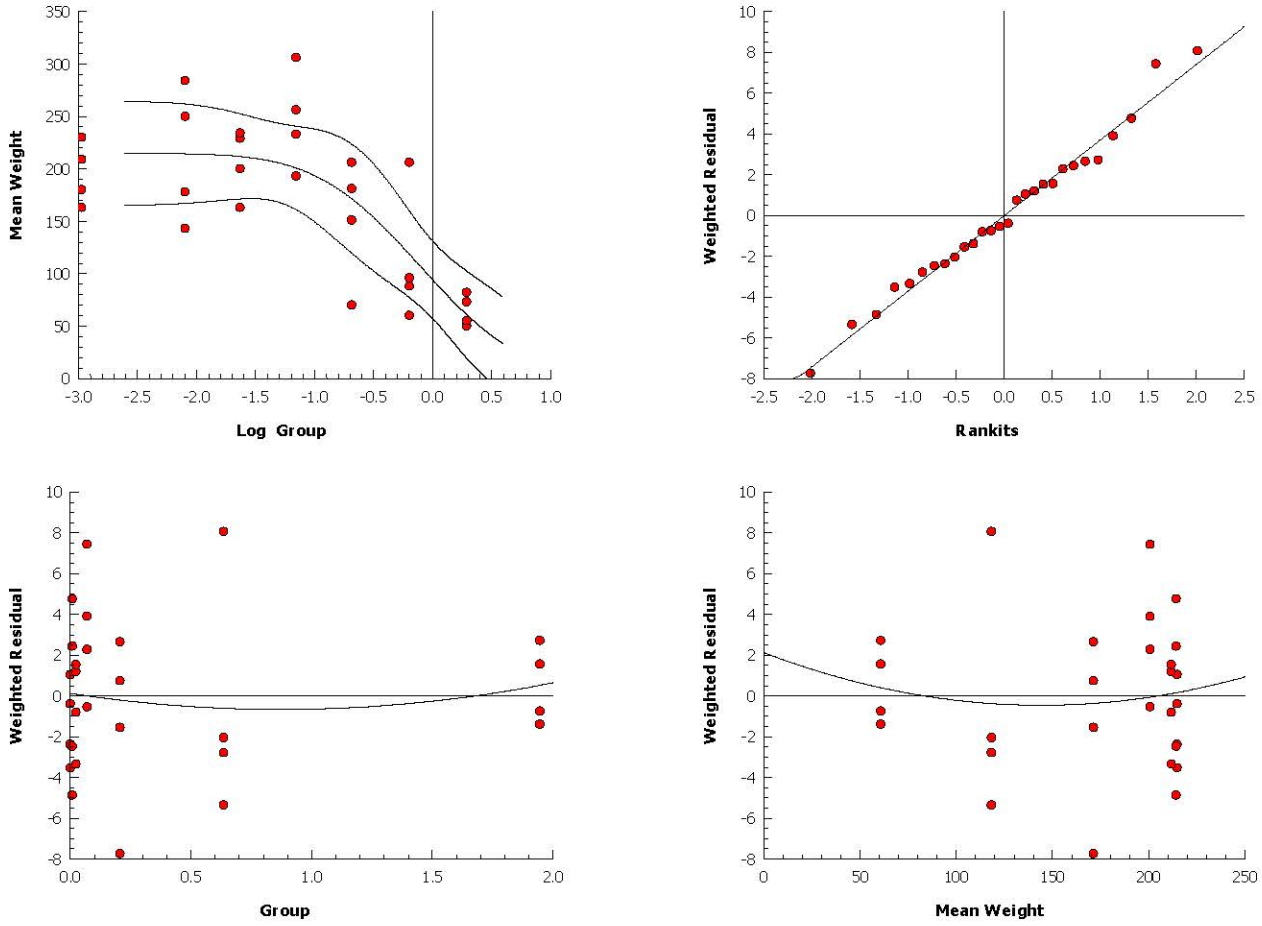
Mean Weight Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	196	163	230	14.9	29.8	15.3%	0.0%
0.008		4	214	143	284	32.3	64.6	30.2%	-9.34%
0.0234		4	207	163	234	16.3	32.6	15.8%	-5.63%
0.0698		4	247	193	306	23.6	47.2	19.1%	-26.3%
0.2061		4	152	70	206	29.6	59.1	38.9%	22.3%
0.6356		4	113	60	206	32.1	64.2	57.1%	42.5%
1.9455		4	65	50	82	7.52	15	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	08-3447-9764	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-2058-6335	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
22	-278	562	565	0.5517	Yes	0.915	2.84	0.4737	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0565	N/A	0.166
IC10	0.101	N/A	0.247
IC25	0.266	0.0931	0.539
IC50	0.78	0.485	1.25

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	215	16.6	182	247	12.9	<0.0001	Significant Parameter
C	1.6	0.488	0.639	2.55	3.27	0.0031	Significant Parameter
D	0.78	0.244	0.303	1.26	3.2	0.0037	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	503.1501	503.1501	1	35.2	<0.0001	Significant
Lack of Fit	52.9871	13.24678	4	0.915	0.4737	Non-Significant
Pure Error	304.1427	14.48299	21			
Residual	357.1299	14.28519	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	357	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	363	37.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.22	2.88	0.5870	No Outliers Detected
Variances	Bartlett Equality of Variance	5.94	12.6	0.4296	Equal Variances
	Mod Levene Equality of Variance	0.596	2.57	0.7304	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.985	0.926	0.9532	Normal Distribution
	Anderson-Darling A2 Normality	0.199	2.49	0.9315	Normal Distribution

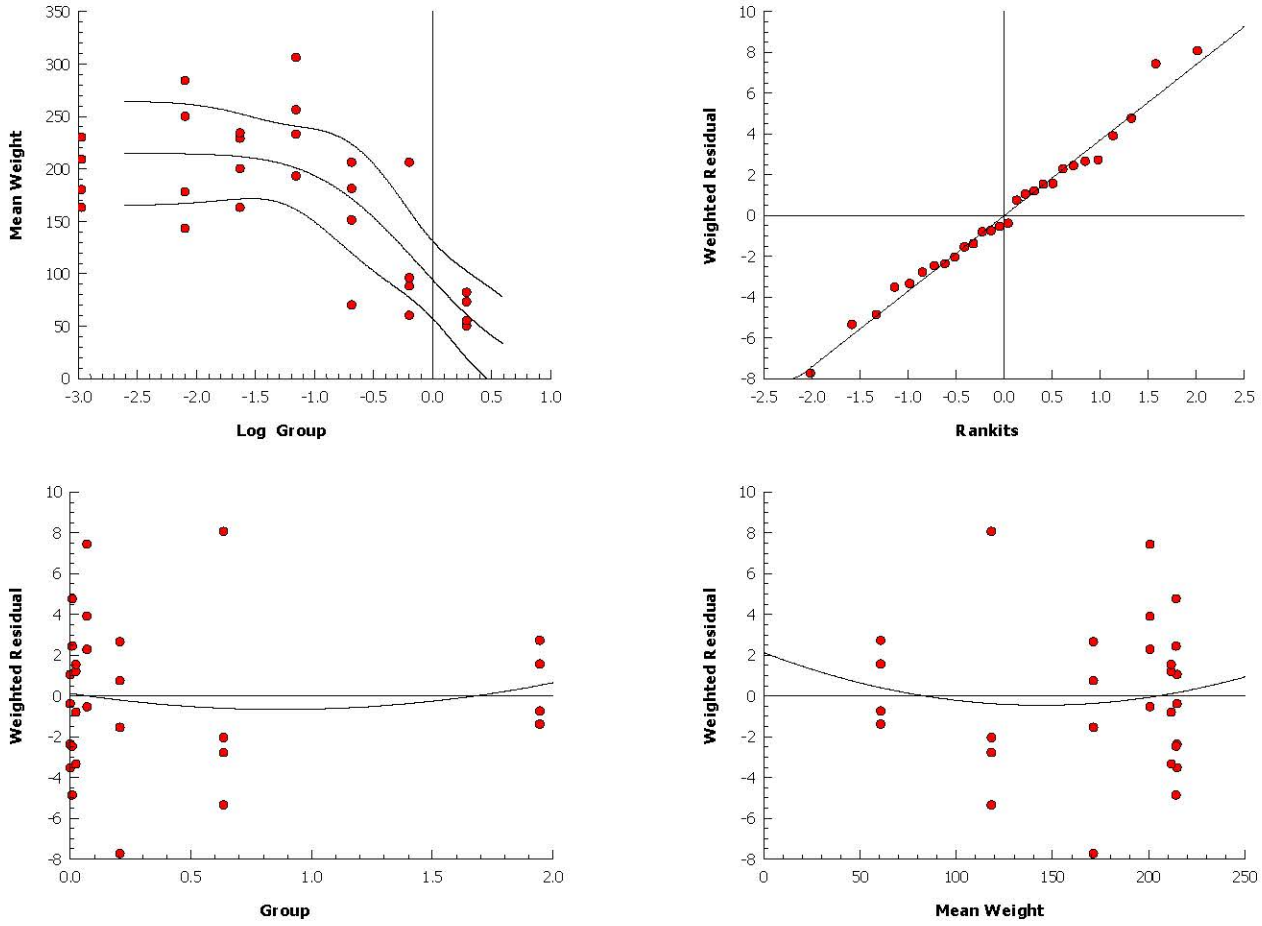
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	196	163	230	14.9	29.8	15.3%	0.0%
0.008		4	214	143	284	32.3	64.6	30.2%	-9.34%
0.0234		4	207	163	234	16.3	32.6	15.8%	-5.63%
0.0698		4	247	193	306	23.6	47.2	19.1%	-26.3%
0.2061		4	152	70	206	29.6	59.1	38.9%	22.3%
0.6356		4	113	60	206	32.1	64.2	57.1%	42.5%
1.9455		4	65	50	82	7.52	15	23.1%	66.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-2058-6335	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



CETIS Analytical Report

Test Code: 48718014 Cabbag | 03-7682-8726

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-2648-6243	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 10:17	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.275	47.19%	0.249	0.105	1.77	1.1	2.87

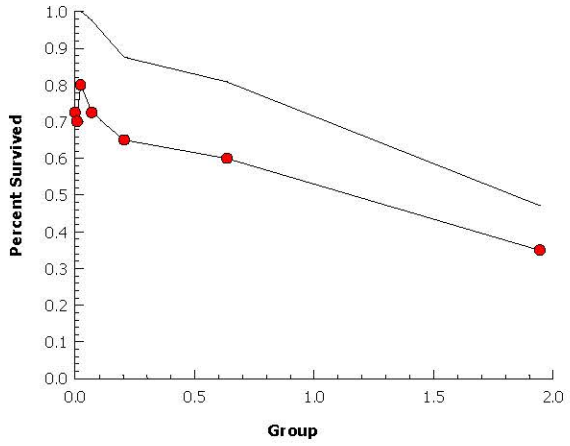
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.8	2.88	1.0000	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.008		4	0.7	0.6	0.8	0.0408	0.0816	11.7%	3.45%	28	40
0.0234		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	-10.3%	32	40
0.0698		4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.2061		4	0.65	0.5	0.8	0.0645	0.129	19.9%	10.3%	26	40
0.6356		4	0.6	0.4	0.8	0.0913	0.183	30.4%	17.2%	24	40
1.9455		4	0.35	0.2	0.5	0.0645	0.129	36.9%	51.7%	14	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-6994-0786	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:18	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	09-4062-8497	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:45	**Species:**	Brassica oleracea	**Brine:**	
Duration:	560d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-3454-8181	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:45	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.275	47.19%	0.249	0.105	1.77	1.1	2.87

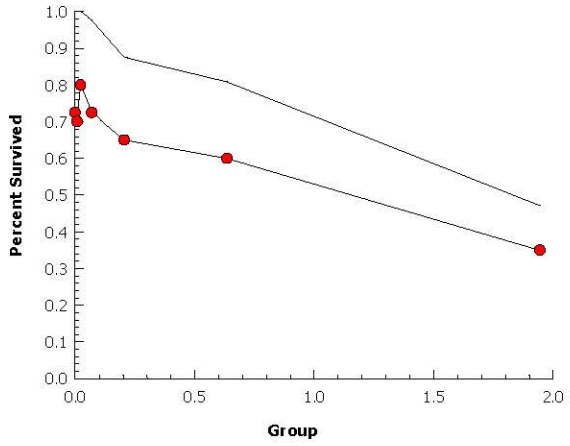
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.8	2.88	1.0000	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.008		4	0.7	0.6	0.8	0.0408	0.0816	11.7%	3.45%	28	40
0.0234		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	-10.3%	32	40
0.0698		4	0.725	0.5	0.9	0.0854	0.171	23.6%	0.0%	29	40
0.2061		4	0.65	0.5	0.8	0.0645	0.129	19.9%	10.3%	26	40
0.6356		4	0.6	0.4	0.8	0.0913	0.183	30.4%	17.2%	24	40
1.9455		4	0.35	0.2	0.5	0.0645	0.129	36.9%	51.7%	14	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
02-1313-0754	Mean Height	0.1636	0.6474	0.3254	25.1%		Dunnett Multiple Comparison Test
18-9195-1195	Mean Height	0.1636	0.6474	0.3254	25.1%		Dunnett Multiple Comparison Test
02-8829-9000	Mean Height	0.0721	0.1636	0.1086	19.1%		Williams Multiple Comparison Test
16-5854-9569	Mean Height	0.0721	0.1636	0.1086	19.1%		Williams Multiple Comparison Test
00-9204-9778	Mean Weight	0.0721	0.1636	0.1086	35.3%		Dunnett Multiple Comparison Test
03-4782-5624	Mean Weight	0.0721	0.1636	0.1086	35.3%		Dunnett Multiple Comparison Test
08-5950-3955	Mean Weight	0.0721	0.1636	0.1086	28.2%		Williams Multiple Comparison Test
12-0860-0449	Mean Weight	0.0721	0.1636	0.1086	28.2%		Williams Multiple Comparison Test
05-7232-5935	Percent Emerged	0.1636	0.6474	0.3254	45.2%		Dunnett Multiple Comparison Test
05-9177-4933	Percent Emerged	0.1636	0.6474	0.3254	45.2%		Dunnett Multiple Comparison Test
07-9841-7504	Percent Emerged	0.0721	0.1636	0.1086	34.3%		Williams Multiple Comparison Test
15-9489-7987	Percent Emerged	0.0721	0.1636	0.1086	34.3%		Williams Multiple Comparison Test
02-6868-2126	Percent Survived	0.0721	0.1636	0.1086	NA		Jonckheere-Terpstra Step-Down Test
13-9985-6826	Percent Survived	0.0721	0.1636	0.1086	NA		Jonckheere-Terpstra Step-Down Test
01-3254-4311	Percent Survived	0.0721	0.1636	0.1086	41.3%		Mann-Whitney U Two-Sample Test
14-8567-0240	Percent Survived	0.0721	0.1636	0.1086	41.3%		Mann-Whitney U Two-Sample Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
04-6840-4411	Mean Height	IC5	0.104	N/A	0.148		Nonlinear Regression
		IC10	0.135	N/A	0.185		
		IC25	0.207	0.141	0.273		
		IC50	0.333	0.267	0.415		
14-5490-9633	Mean Height	IC5	0.104	N/A	0.148		Nonlinear Regression
		IC10	0.135	N/A	0.185		
		IC25	0.207	0.141	0.273		
		IC50	0.333	0.267	0.415		
04-3546-3585	Mean Weight	IC5	0.0802	N/A	0.153		Nonlinear Regression
		IC10	0.097	N/A	0.183		
		IC25	0.134	N/A	0.201		
		IC50	0.19	0.113	0.322		
19-4296-2312	Mean Weight	IC5	0.0802	N/A	0.153		Nonlinear Regression
		IC10	0.097	N/A	0.183		
		IC25	0.134	N/A	0.201		
		IC50	0.19	0.113	0.322		
16-3766-1359	Percent Emerged	EC5	0.0367	0.000021	0.16		Linear Regression (MLE)
		EC10	0.0695	0.000159	0.241		
		EC25	0.202	0.00448	0.496		
		EC50	0.661	0.138	1.46		
17-0639-9037	Percent Emerged	EC5	0.0367	0.000021	0.16		Linear Regression (MLE)
		EC10	0.0695	0.000159	0.241		
		EC25	0.202	0.00448	0.496		
		EC50	0.661	0.138	1.46		
05-1718-7418	Percent Emerged	EC50	0.51	0.314	0.829		Trimmed Spearman-Kärber
15-8432-2455	Percent Emerged	EC50	0.51	0.314	0.829		Trimmed Spearman-Kärber
00-6662-5139	Percent Survived	EC5	0.0458	0.0046	0.0989		Linear Regression (MLE)
		EC10	0.0624	0.0088	0.123		
		EC25	0.105	0.0255	0.182		
		EC50	0.186	0.0773	0.3		
12-4556-4924	Percent Survived	EC5	0.0258	0.00125	0.0685		Linear Regression (MLE)
		EC10	0.038	0.00285	0.0896		
		EC25	0.0723	0.0111	0.143		
		EC50	0.148	0.0467	0.259		
17-6126-2588	Percent Survived	EC5	0.0458	0.0046	0.0989		Linear Regression (MLE)
		EC10	0.0624	0.0088	0.123		
		EC25	0.105	0.0255	0.182		
		EC50	0.186	0.0773	0.3		
01-6088-6270	Percent Survived	EC50	0.157	0.124	0.198		Trimmed Spearman-Kärber
04-6010-7336	Percent Survived	EC50	0.157	0.124	0.198		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	8.85	5.93	11.8	6.3	10.5	0.919	1.84	20.8%	0.0%
0	Negative Control	4	8.85	8.04	9.66	8.4	9.5	0.253	0.507	5.72%	0.0%
0.0082		4	9.13	8.4	9.85	8.6	9.7	0.229	0.457	5.01%	-3.11%
0.024		4	7.55	5.15	9.95	6.4	9.7	0.756	1.51	20.0%	14.7%
0.0721		4	8.78	7.62	9.93	8.1	9.7	0.364	0.727	8.29%	0.85%
0.1636		4	7.17	4.7	9.65	5	8.7	0.778	1.56	21.7%	18.9%
0.6474		2	1.5	-4.85	7.85	1	2	0.5	0.707	47.1%	83.1%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	20.4	0.692	40.2	7	36.5	6.2	12.4	60.7%	0.0%
0	Negative Control	4	18	13.5	22.5	14.2	20.5	1.42	2.83	15.7%	11.8%
0.0082		4	17.7	12.1	23.3	13	21.2	1.75	3.5	19.8%	13.3%
0.024		4	14.4	5.85	22.9	7.7	20.3	2.68	5.36	37.3%	29.6%
0.0721		4	16.2	10.1	22.3	11.7	21.1	1.92	3.85	23.8%	20.8%
0.1636		4	10.3	5.45	15	6	13	1.51	3.01	29.4%	49.8%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.6	0.6	0.6	0.6	0.6	0	0	0.0%	0.0%
0	Negative Control	4	0.65	0.445	0.855	0.5	0.8	0.0645	0.129	19.9%	-8.33%
0.0082		4	0.525	0.373	0.677	0.4	0.6	0.0479	0.0957	18.2%	12.5%
0.024		4	0.625	0.227	1	0.3	0.9	0.125	0.25	40.0%	-4.17%
0.0721		4	0.6	0.132	1	0.3	0.9	0.147	0.294	49.1%	0.0%
0.1636		4	0.4	0.27	0.53	0.3	0.5	0.0408	0.0816	20.4%	33.3%
0.6474		4	0.35	0.258	0.442	0.3	0.4	0.0289	0.0577	16.5%	41.7%
1.9669		4	0.15	0	0.355	0	0.3	0.0645	0.129	86.1%	75.0%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.4	0.175	0.625	0.2	0.5	0.0707	0.141	35.4%	0.0%
0	Negative Control	4	0.525	0.373	0.677	0.4	0.6	0.0479	0.0957	18.2%	-31.2%
0.0082		4	0.45	0.291	0.609	0.3	0.5	0.05	0.1	22.2%	-12.5%
0.024		4	0.425	0.124	0.726	0.3	0.7	0.0946	0.189	44.5%	-6.25%
0.0721		4	0.525	0	1	0.2	0.9	0.165	0.33	62.9%	-31.2%
0.1636		4	0.2	0.0701	0.33	0.1	0.3	0.0408	0.0816	40.8%	50.0%
0.6474		4	0.05	0	0.142	0	0.1	0.0289	0.0577	115.0%	87.5%
1.9669		4	0	0	0	0	0	0	0		100.0%

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	6.3	9.8	8.8	10.5
0	Negative Control	8.4	9	8.5	9.5
0.0082		9.7	9.2	9	8.6
0.024		9.7	6.6	7.5	6.4
0.0721		9.7	8.3	8.1	9
0.1636		7.5	5	8.7	7.5
0.6474		2			1
1.9669					

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	7	22.2	16	36.5
0	Negative Control	17.6	19.8	14.2	20.5
0.0082		13	21.2	17.4	19.2
0.024		20.3	7.7	16.5	13
0.0721		21.1	11.7	15.9	16
0.1636		11.5	6	13	10.5
0.6474					
1.9669					

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.6	0.6	0.6	0.6
0	Negative Control	0.6	0.7	0.8	0.5
0.0082		0.4	0.6	0.6	0.5
0.024		0.3	0.9	0.6	0.7
0.0721		0.9	0.4	0.8	0.3
0.1636		0.4	0.5	0.3	0.4
0.6474		0.4	0.4	0.3	0.3
1.9669		0.3	0.2	0.1	0

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.4	0.5	0.5	0.2
0	Negative Control	0.5	0.6	0.6	0.4
0.0082		0.3	0.5	0.5	0.5
0.024		0.3	0.7	0.4	0.3
0.0721		0.9	0.3	0.7	0.2
0.1636		0.2	0.1	0.3	0.2
0.6474		0.1	0	0	0.1
1.9669		0	0	0	0

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-9195-1195	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.1%	0.1636	0.6474	0.3254	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	-0.371	2.44	1.81	6	0.9279	CDF	Non-Significant Effect
		0.024	1.75	2.44	1.81	6	0.1634	CDF	Non-Significant Effect
		0.0721	0.101	2.44	1.81	6	0.8152	CDF	Non-Significant Effect
		0.1636	2.26	2.44	1.81	6	0.0702	CDF	Non-Significant Effect
		0.6474*	8.09	2.44	2.22	4	<0.0001	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.38	2.76	0.2435	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	96.09614	19.21923	5	17.5	<0.0001	Significant Effect
Error	17.6025	1.100156	16			
Total	113.6986		21			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.62	15.1	0.2503	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.876	0.8073	Normal Distribution

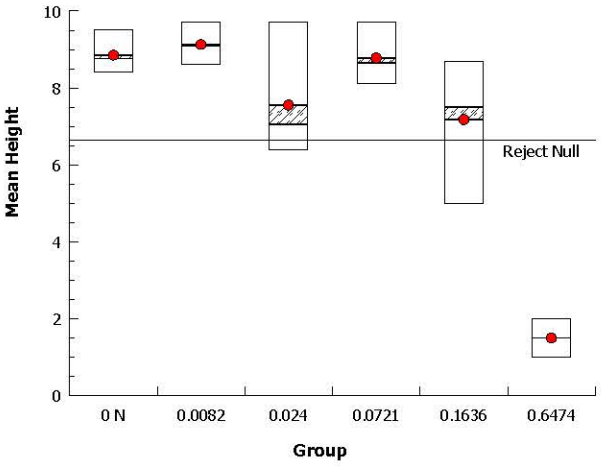
Mean Height Summary

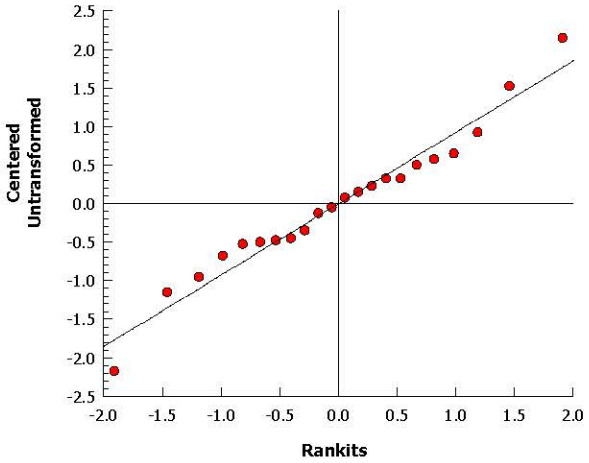
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	8.85	8.04	9.66	8.75	8.4	9.5	0.253	5.72%	0.0%
0.0082		4	9.13	8.4	9.85	9.1	8.6	9.7	0.229	5.01%	-3.11%
0.024		4	7.55	5.15	9.95	7.05	6.4	9.7	0.756	20.0%	14.7%
0.0721		4	8.78	7.62	9.93	8.65	8.1	9.7	0.364	8.29%	0.85%
0.1636		4	7.17	4.7	9.65	7.5	5	8.7	0.778	21.7%	18.9%
0.6474		2	1.5	-4.85	7.85	1.5	1	2	0.5	47.1%	83.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-9195-1195	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-8829-9000	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	19.1%	0.0721	0.1636	0.1086	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	-0.371	1.75	1.29	6	>0.05	CDF	Non-Significant Effect
		0.024	1.75	1.83	1.36	6	>0.05	CDF	Non-Significant Effect
		0.0721	0.927	1.86	1.38	6	>0.05	CDF	Non-Significant Effect
		0.1636*	2.26	1.87	1.39	6	<0.05	CDF	Significant Effect
		0.6474*	8.09	1.86	1.69	4	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.38	2.76	0.2435	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	96.09614	19.21923	5	17.5	<0.0001	Significant Effect
Error	17.6025	1.100156	16			
Total	113.6986		21			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.62	15.1	0.2503	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.876	0.8073	Normal Distribution

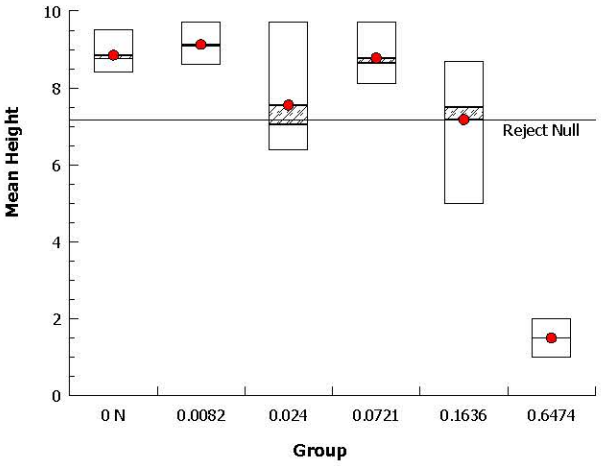
Mean Height Summary

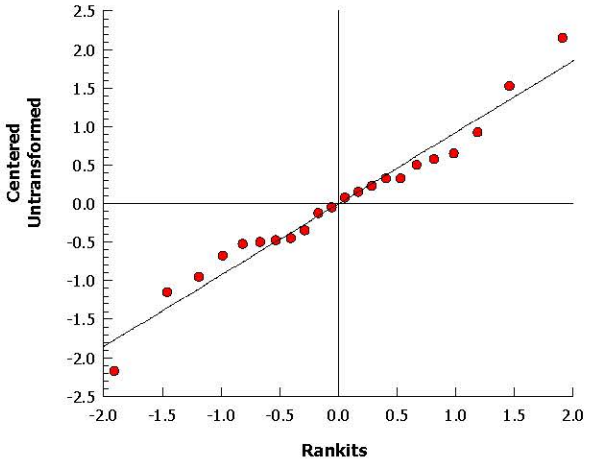
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	8.85	8.04	9.66	8.75	8.4	9.5	0.253	5.72%	0.0%
0.0082		4	9.13	8.4	9.85	9.1	8.6	9.7	0.229	5.01%	-3.11%
0.024		4	7.55	5.15	9.95	7.05	6.4	9.7	0.756	20.0%	14.7%
0.0721		4	8.78	7.62	9.93	8.65	8.1	9.7	0.364	8.29%	0.85%
0.1636		4	7.17	4.7	9.65	7.5	5	8.7	0.778	21.7%	18.9%
0.6474		2	1.5	-4.85	7.85	1.5	1	2	0.5	47.1%	83.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-8829-9000	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-1313-0754	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.1%	0.1636	0.6474	0.3254	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	-0.371	2.44	1.81	6	0.9279	CDF	Non-Significant Effect
		0.024	1.75	2.44	1.81	6	0.1634	CDF	Non-Significant Effect
		0.0721	0.101	2.44	1.81	6	0.8152	CDF	Non-Significant Effect
		0.1636	2.26	2.44	1.81	6	0.0702	CDF	Non-Significant Effect
		0.6474*	8.09	2.44	2.22	4	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	96.09614	19.21923	5	17.5	<0.0001	Significant Effect
Error	17.6025	1.100156	16			
Total	113.6986		21			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.62	15.1	0.2503	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.876	0.8073	Normal Distribution

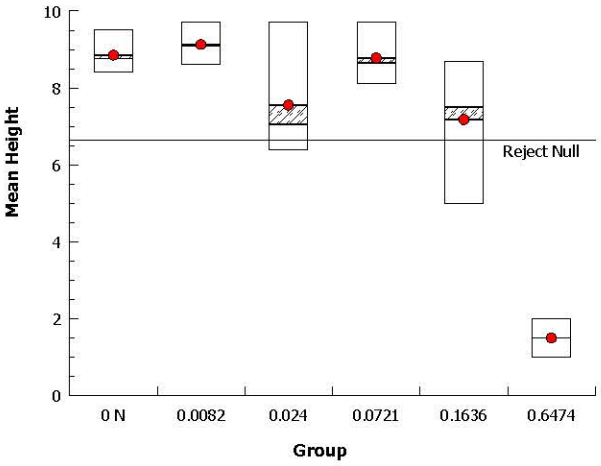
Mean Height Summary

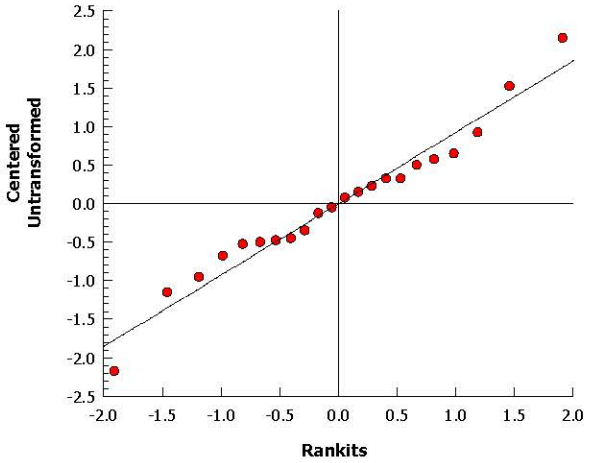
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	8.85	8.04	9.66	8.75	8.4	9.5	0.253	5.72%	0.0%
0.0082		4	9.13	8.4	9.85	9.1	8.6	9.7	0.229	5.01%	-3.11%
0.024		4	7.55	5.15	9.95	7.05	6.4	9.7	0.756	20.0%	14.7%
0.0721		4	8.78	7.62	9.93	8.65	8.1	9.7	0.364	8.29%	0.85%
0.1636		4	7.17	4.7	9.65	7.5	5	8.7	0.778	21.7%	18.9%
0.6474		2	1.5	-4.85	7.85	1.5	1	2	0.5	47.1%	83.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-1313-0754	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-5854-9569	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	19.1%	0.0721	0.1636	0.1086	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	-0.371	1.75	1.29	6	>0.05	CDF	Non-Significant Effect
		0.024	1.75	1.83	1.36	6	>0.05	CDF	Non-Significant Effect
		0.0721	0.927	1.86	1.38	6	>0.05	CDF	Non-Significant Effect
		0.1636*	2.26	1.87	1.39	6	<0.05	CDF	Significant Effect
		0.6474*	8.09	1.86	1.69	4	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	96.09614	19.21923	5	17.5	<0.0001	Significant Effect
Error	17.6025	1.100156	16			
Total	113.6986		21			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.62	15.1	0.2503	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.876	0.8073	Normal Distribution

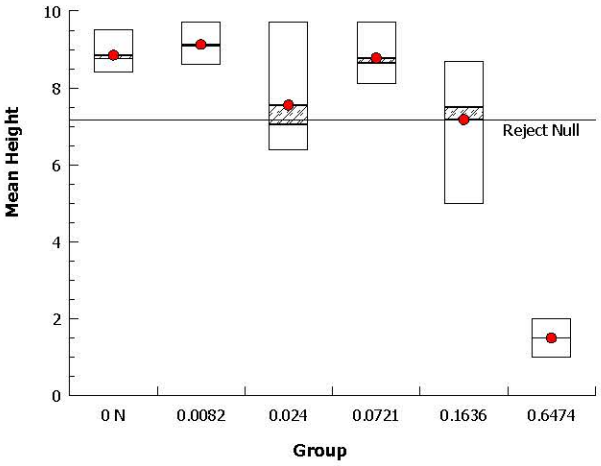
Mean Height Summary

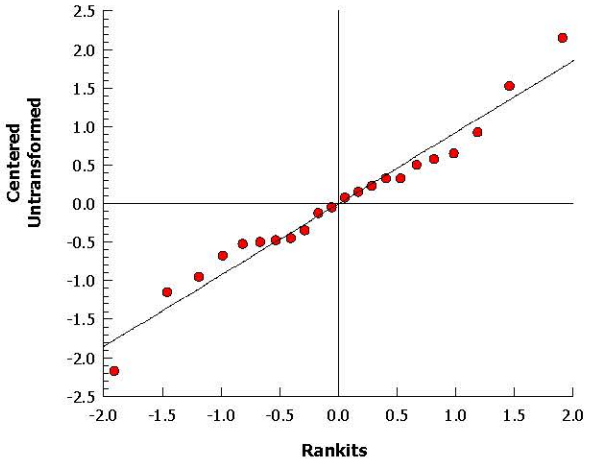
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	8.85	8.04	9.66	8.75	8.4	9.5	0.253	5.72%	0.0%
0.0082		4	9.13	8.4	9.85	9.1	8.6	9.7	0.229	5.01%	-3.11%
0.024		4	7.55	5.15	9.95	7.05	6.4	9.7	0.756	20.0%	14.7%
0.0721		4	8.78	7.62	9.93	8.65	8.1	9.7	0.364	8.29%	0.85%
0.1636		4	7.17	4.7	9.65	7.5	5	8.7	0.778	21.7%	18.9%
0.6474		2	1.5	-4.85	7.85	1.5	1	2	0.5	47.1%	83.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-5854-9569	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	03-4782-5624	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	35.3%	0.0721	0.1636	0.1086	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	0.12	2.36	6.36	6	0.7588	CDF	Non-Significant Effect
		0.024	1.35	2.36	6.36	6	0.2496	CDF	Non-Significant Effect
		0.0721	0.686	2.36	6.36	6	0.5214	CDF	Non-Significant Effect
		0.1636*	2.88	2.36	6.36	6	0.0186	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.97	2.71	0.7928	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	161.237	40.30925	4	2.77	0.0663	Non-Significant Effect
Error	218.4725	14.56483	15			
Total	379.7095		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	1.45	13.3	0.8349	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.866	0.6207	Normal Distribution

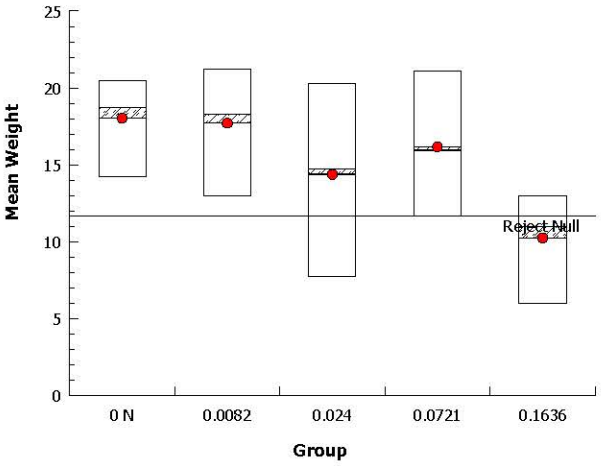
Mean Weight Summary

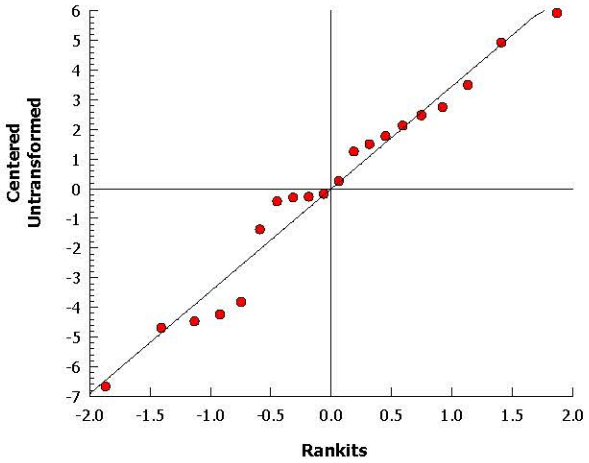
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	18	13.5	22.5	18.7	14.2	20.5	1.42	15.7%	0.0%
0.0082		4	17.7	12.1	23.3	18.3	13	21.2	1.75	19.8%	1.8%
0.024		4	14.4	5.85	22.9	14.8	7.7	20.3	2.68	37.3%	20.2%
0.0721		4	16.2	10.1	22.3	15.9	11.7	21.1	1.92	23.8%	10.3%
0.1636		4	10.3	5.45	15	11	6	13	1.51	29.4%	43.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	03-4782-5624	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-0860-0449	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	28.2%	0.0721	0.1636	0.1086	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	0.12	1.75	4.73	6	>0.05	CDF	Non-Significant Effect
		0.024	1.35	1.84	4.97	6	>0.05	CDF	Non-Significant Effect
		0.0721	1.02	1.87	5.04	6	>0.05	CDF	Non-Significant Effect
		0.1636*	2.88	1.88	5.08	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.97	2.71	0.7928	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	161.237	40.30925	4	2.77	0.0663	Non-Significant Effect
Error	218.4725	14.56483	15			
Total	379.7095		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	1.45	13.3	0.8349	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.866	0.6207	Normal Distribution

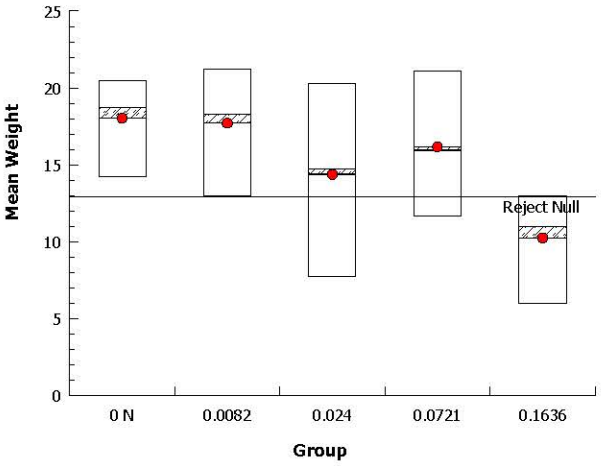
Mean Weight Summary

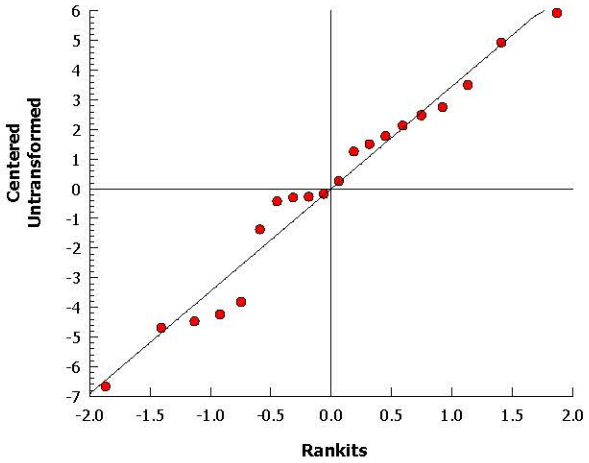
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	18	13.5	22.5	18.7	14.2	20.5	1.42	15.7%	0.0%
0.0082		4	17.7	12.1	23.3	18.3	13	21.2	1.75	19.8%	1.8%
0.024		4	14.4	5.85	22.9	14.8	7.7	20.3	2.68	37.3%	20.2%
0.0721		4	16.2	10.1	22.3	15.9	11.7	21.1	1.92	23.8%	10.3%
0.1636		4	10.3	5.45	15	11	6	13	1.51	29.4%	43.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	12-0860-0449	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-9204-9778	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	35.3%	0.0721	0.1636	0.1086	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	0.12	2.36	6.36	6	0.7588	CDF	Non-Significant Effect
		0.024	1.35	2.36	6.36	6	0.2496	CDF	Non-Significant Effect
		0.0721	0.686	2.36	6.36	6	0.5214	CDF	Non-Significant Effect
		0.1636*	2.88	2.36	6.36	6	0.0186	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	161.237	40.30925	4	2.77	0.0663	Non-Significant Effect
Error	218.4725	14.56483	15			
Total	379.7095		19			

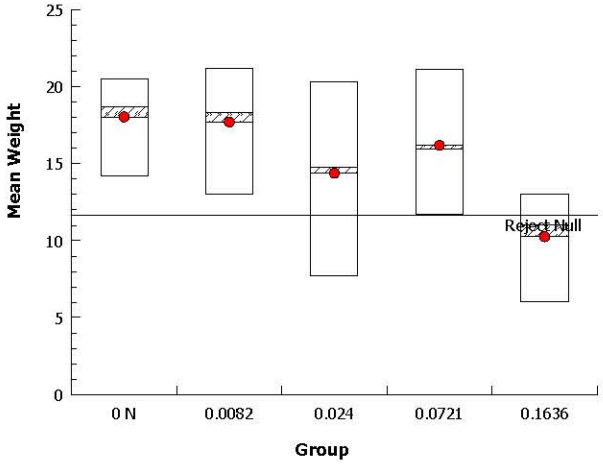
Distributional Tests

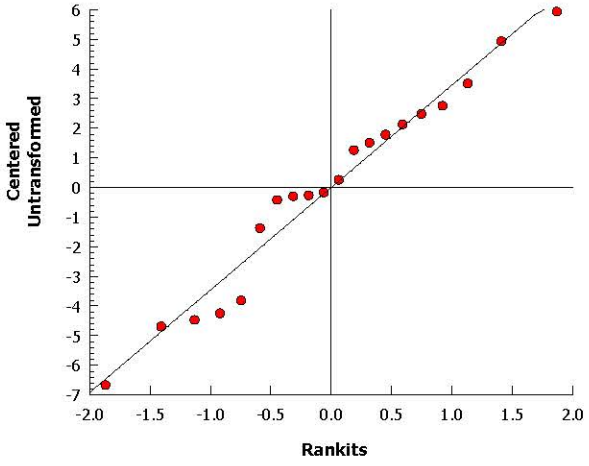
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	1.45	13.3	0.8349	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.866	0.6207	Normal Distribution

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	18	13.5	22.5	18.7	14.2	20.5	1.42	15.7%	0.0%
0.0082		4	17.7	12.1	23.3	18.3	13	21.2	1.75	19.8%	1.8%
0.024		4	14.4	5.85	22.9	14.8	7.7	20.3	2.68	37.3%	20.2%
0.0721		4	16.2	10.1	22.3	15.9	11.7	21.1	1.92	23.8%	10.3%
0.1636		4	10.3	5.45	15	11	6	13	1.51	29.4%	43.1%

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-5950-3955	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	28.2%	0.0721	0.1636	0.1086	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	0.12	1.75	4.73	6	>0.05	CDF	Non-Significant Effect
		0.024	1.35	1.84	4.97	6	>0.05	CDF	Non-Significant Effect
		0.0721	1.02	1.87	5.04	6	>0.05	CDF	Non-Significant Effect
		0.1636*	2.88	1.88	5.08	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	161.237	40.30925	4	2.77	0.0663	Non-Significant Effect
Error	218.4725	14.56483	15			
Total	379.7095		19			

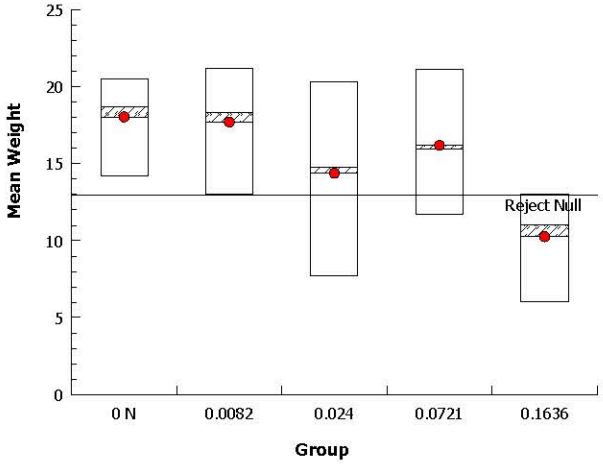
Distributional Tests

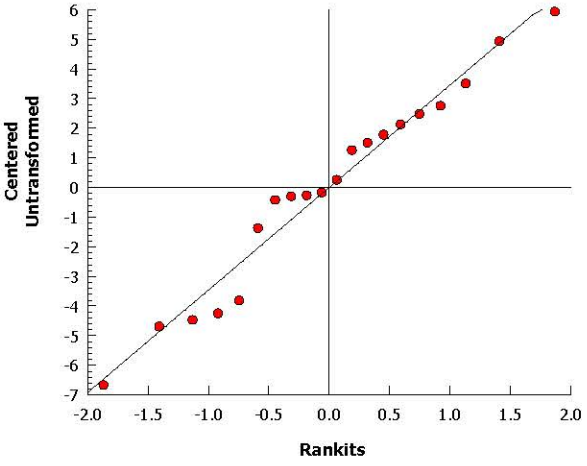
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	1.45	13.3	0.8349	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.866	0.6207	Normal Distribution

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	18	13.5	22.5	18.7	14.2	20.5	1.42	15.7%	0.0%
0.0082		4	17.7	12.1	23.3	18.3	13	21.2	1.75	19.8%	1.8%
0.024		4	14.4	5.85	22.9	14.8	7.7	20.3	2.68	37.3%	20.2%
0.0721		4	16.2	10.1	22.3	15.9	11.7	21.1	1.92	23.8%	10.3%
0.1636		4	10.3	5.45	15	11	6	13	1.51	29.4%	43.1%

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-9177-4933	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	45.2%	0.1636	0.6474	0.3254	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	1.04	2.45	0.294	6	0.4350	CDF	Non-Significant Effect
		0.024	0.208	2.45	0.294	6	0.7934	CDF	Non-Significant Effect
		0.0721	0.417	2.45	0.294	6	0.7154	CDF	Non-Significant Effect
		0.1636	2.08	2.45	0.294	6	0.0988	CDF	Non-Significant Effect
		0.6474*	2.5	2.45	0.294	6	0.0452	CDF	Significant Effect
		1.9669*	4.17	2.45	0.294	6	0.0011	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.17	2.88	0.6715	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7921429	0.1320238	6	4.58	0.0040	Significant Effect
Error	0.605	0.02880952	21			
Total	1.397143		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.6	16.8	0.1013	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.978	0.897	0.8084	Normal Distribution

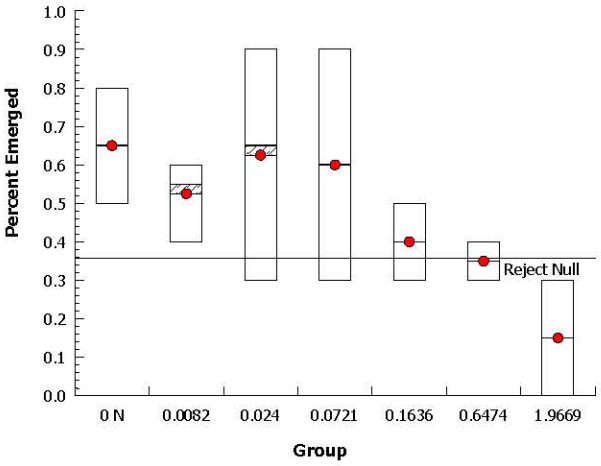
Percent Emerged Summary

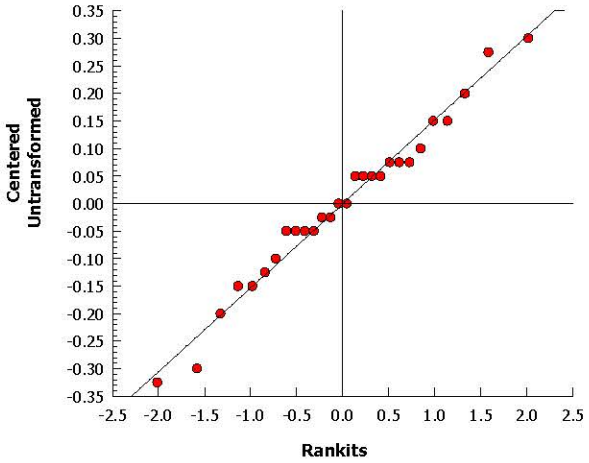
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	0.0%
0.0082		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	19.2%
0.024		4	0.625	0.227	1	0.65	0.3	0.9	0.125	40.0%	3.85%
0.0721		4	0.6	0.132	1	0.6	0.3	0.9	0.147	49.1%	7.69%
0.1636		4	0.4	0.27	0.53	0.4	0.3	0.5	0.0408	20.4%	38.5%
0.6474		4	0.35	0.258	0.442	0.35	0.3	0.4	0.0289	16.5%	46.2%
1.9669		4	0.15	0	0.355	0.15	0	0.3	0.0645	86.1%	76.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-9177-4933	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-9489-7987	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	34.3%	0.0721	0.1636	0.1086	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	1.04	1.72	0.207	6	>0.05	CDF	Non-Significant Effect
		0.024	0.625	1.8	0.216	6	>0.05	CDF	Non-Significant Effect
		0.0721	0.555	1.83	0.22	6	>0.05	CDF	Non-Significant Effect
		0.1636*	2.08	1.84	0.221	6	<0.05	CDF	Significant Effect
		0.6474*	2.5	1.85	0.222	6	<0.05	CDF	Significant Effect
		1.9669*	4.17	1.86	0.223	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.17	2.88	0.6715	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7921429	0.1320238	6	4.58	0.0040	Significant Effect
Error	0.605	0.02880952	21			
Total	1.397143		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.6	16.8	0.1013	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.978	0.897	0.8084	Normal Distribution

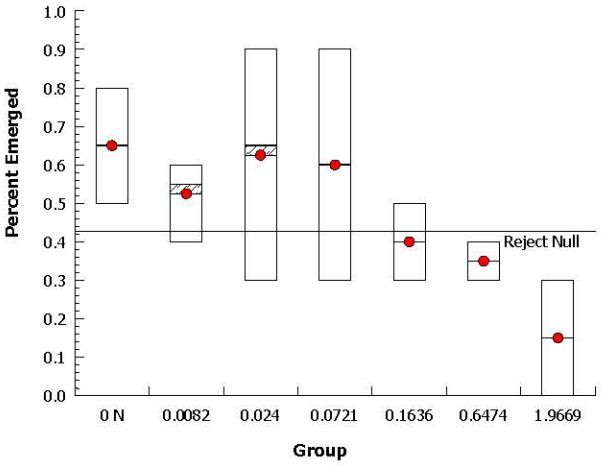
Percent Emerged Summary

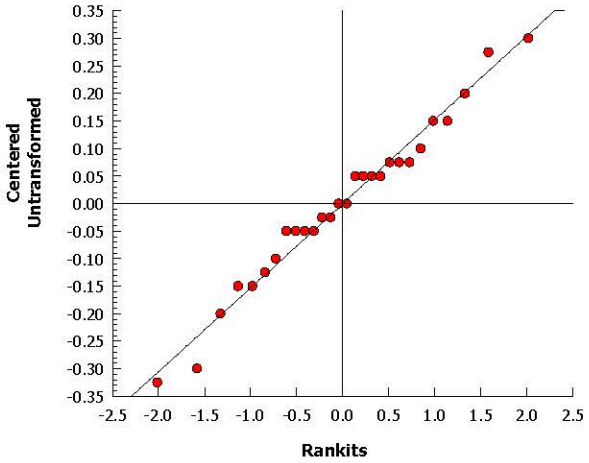
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	0.0%
0.0082		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	19.2%
0.024		4	0.625	0.227	1	0.65	0.3	0.9	0.125	40.0%	3.85%
0.0721		4	0.6	0.132	1	0.6	0.3	0.9	0.147	49.1%	7.69%
0.1636		4	0.4	0.27	0.53	0.4	0.3	0.5	0.0408	20.4%	38.5%
0.6474		4	0.35	0.258	0.442	0.35	0.3	0.4	0.0289	16.5%	46.2%
1.9669		4	0.15	0	0.355	0.15	0	0.3	0.0645	86.1%	76.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-9489-7987	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-7232-5935	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	45.2%	0.1636	0.6474	0.3254	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	1.04	2.45	0.294	6	0.4350	CDF	Non-Significant Effect
		0.024	0.208	2.45	0.294	6	0.7934	CDF	Non-Significant Effect
		0.0721	0.417	2.45	0.294	6	0.7154	CDF	Non-Significant Effect
		0.1636	2.08	2.45	0.294	6	0.0988	CDF	Non-Significant Effect
		0.6474*	2.5	2.45	0.294	6	0.0452	CDF	Significant Effect
		1.9669*	4.17	2.45	0.294	6	0.0011	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7921429	0.1320238	6	4.58	0.0040	Significant Effect
Error	0.605	0.02880952	21			
Total	1.397143		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.6	16.8	0.1013	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.978	0.897	0.8084	Normal Distribution

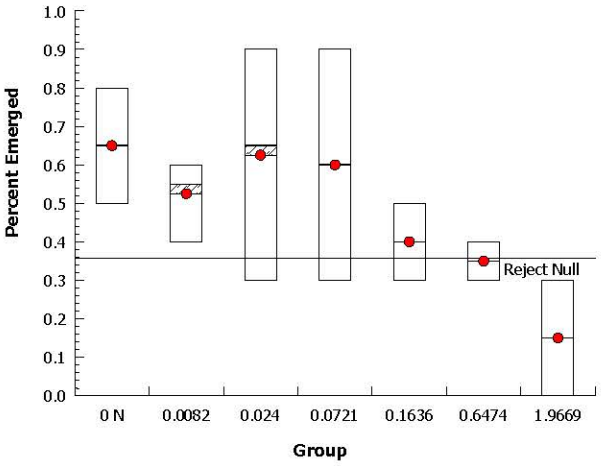
Percent Emerged Summary

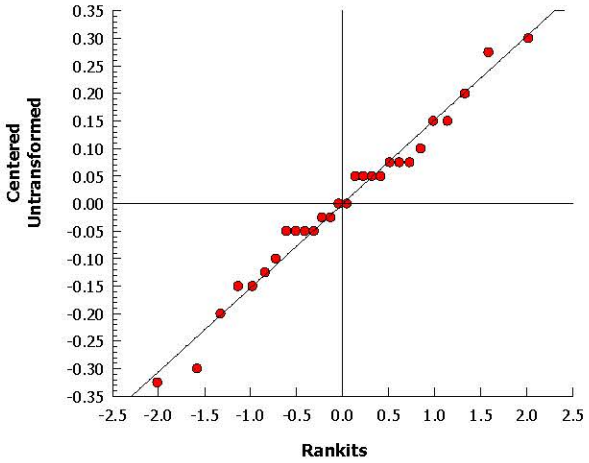
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	0.0%
0.0082		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	19.2%
0.024		4	0.625	0.227	1	0.65	0.3	0.9	0.125	40.0%	3.85%
0.0721		4	0.6	0.132	1	0.6	0.3	0.9	0.147	49.1%	7.69%
0.1636		4	0.4	0.27	0.53	0.4	0.3	0.5	0.0408	20.4%	38.5%
0.6474		4	0.35	0.258	0.442	0.35	0.3	0.4	0.0289	16.5%	46.2%
1.9669		4	0.15	0	0.355	0.15	0	0.3	0.0645	86.1%	76.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-7232-5935	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-9841-7504	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	34.3%	0.0721	0.1636	0.1086	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	1.04	1.72	0.207	6	>0.05	CDF	Non-Significant Effect
		0.024	0.625	1.8	0.216	6	>0.05	CDF	Non-Significant Effect
		0.0721	0.555	1.83	0.22	6	>0.05	CDF	Non-Significant Effect
		0.1636*	2.08	1.84	0.221	6	<0.05	CDF	Significant Effect
		0.6474*	2.5	1.85	0.222	6	<0.05	CDF	Significant Effect
		1.9669*	4.17	1.86	0.223	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7921429	0.1320238	6	4.58	0.0040	Significant Effect
Error	0.605	0.02880952	21			
Total	1.397143		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.6	16.8	0.1013	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.978	0.897	0.8084	Normal Distribution

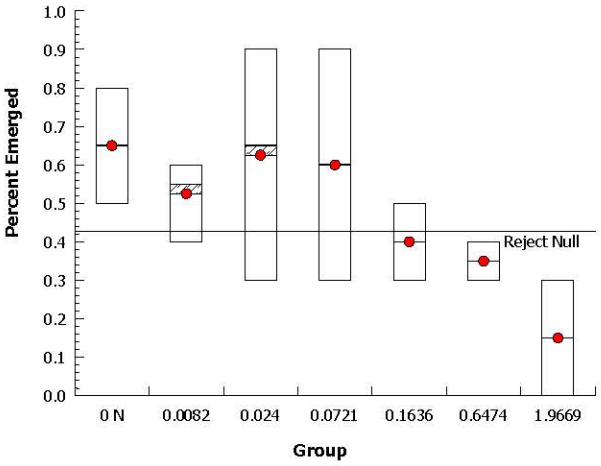
Percent Emerged Summary

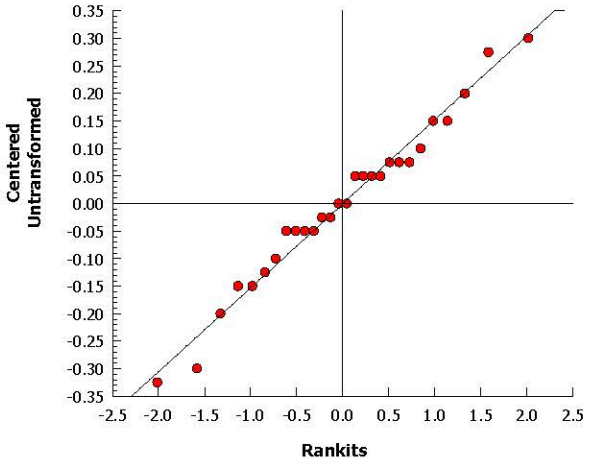
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	0.0%
0.0082		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	19.2%
0.024		4	0.625	0.227	1	0.65	0.3	0.9	0.125	40.0%	3.85%
0.0721		4	0.6	0.132	1	0.6	0.3	0.9	0.147	49.1%	7.69%
0.1636		4	0.4	0.27	0.53	0.4	0.3	0.5	0.0408	20.4%	38.5%
0.6474		4	0.35	0.258	0.442	0.35	0.3	0.4	0.0289	16.5%	46.2%
1.9669		4	0.15	0	0.355	0.15	0	0.3	0.0645	86.1%	76.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-9841-7504	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-8567-0240	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	41.3%	0.0721	0.1636	0.1086	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	11.5	NA	1	6	0.1429	Exact	Non-Significant Effect
		0.024	11.5	NA	1	6	0.1857	Exact	Non-Significant Effect
		0.0721	8	NA	0	6	0.5143	Exact	Non-Significant Effect
		0.1636*	16	NA	0	6	0.0143	Exact	Significant Effect
		0.6474*	16	NA	0	6	0.0143	Exact	Significant Effect
		1.9669*	16	NA	0	6	0.0143	Exact	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.7	2.88	0.1079	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.204286	0.2007143	6	8.07	0.0001	Significant Effect
Error	0.5225	0.02488095	21			
Total	1.726786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	4.77	3.81	0.0032	Unequal Variances
Variances	Levene Equality of Variance	8.48	3.81	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.946	0.897	0.1616	Normal Distribution

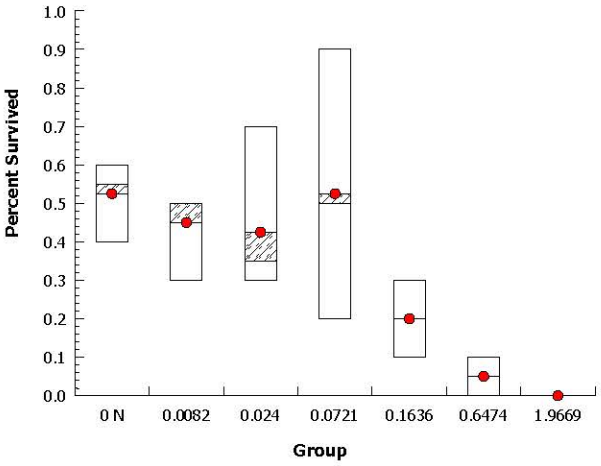
Percent Survived Summary

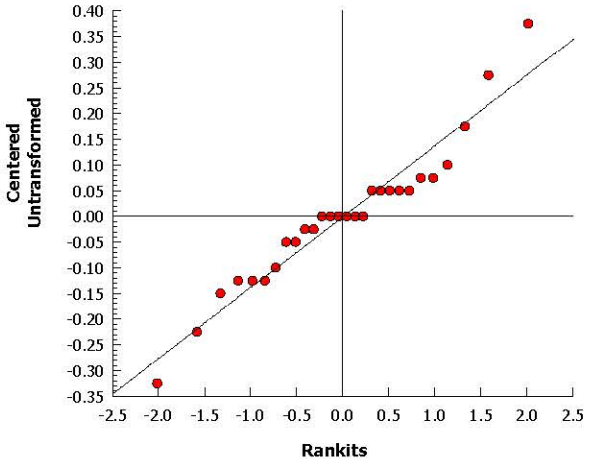
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	0.0%
0.0082		4	0.45	0.291	0.609	0.5	0.3	0.5	0.05	22.2%	14.3%
0.024		4	0.425	0.124	0.726	0.35	0.3	0.7	0.0946	44.5%	19.0%
0.0721		4	0.525	0	1	0.5	0.2	0.9	0.165	62.9%	0.0%
0.1636		4	0.2	0.0701	0.33	0.2	0.1	0.3	0.0408	40.8%	61.9%
0.6474		4	0.05	0	0.142	0.05	0	0.1	0.0289	115.0%	90.5%
1.9669		4	0	0	0	0	0	0	0		100.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-8567-0240	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-6868-2126	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.0721	0.1636	0.1086	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	1.12	1.64	1	-2	0.2224	Asymp	Non-Significant Effect
		0.024	1.37	1.64	4	-2	0.2224	Asymp	Non-Significant Effect
		0.0721	0.764	1.64	5	-2	0.2224	Asymp	Non-Significant Effect
		0.1636*	2.43	1.64	6	-2	0.0075	Asymp	Significant Effect
		0.6474*	3.83	1.64	8	-2	<0.0001	Asymp	Significant Effect
		1.9669*	4.82	1.64	8	-2	<0.0001	Asymp	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.7	2.88	0.1079	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.204286	0.2007143	6	8.07	0.0001	Significant Effect
Error	0.5225	0.02488095	21			
Total	1.726786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	4.77	3.81	0.0032	Unequal Variances
Variances	Levene Equality of Variance	8.48	3.81	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.946	0.897	0.1616	Normal Distribution

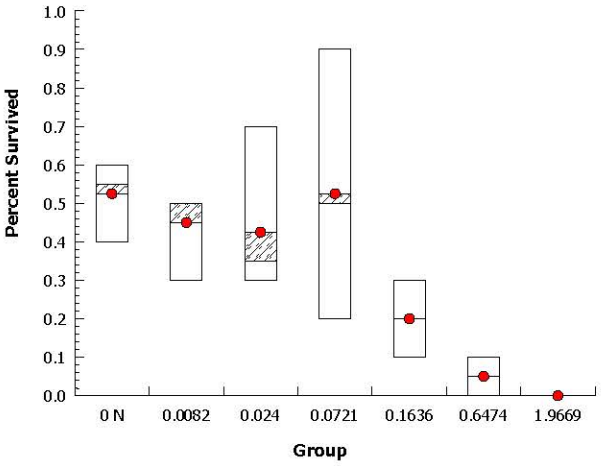
Percent Survived Summary

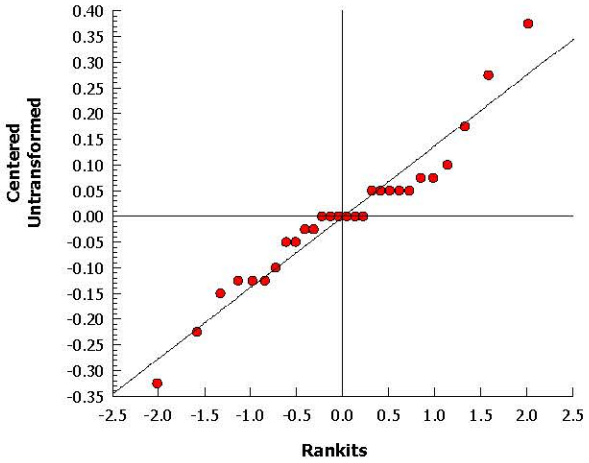
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	0.0%
0.0082		4	0.45	0.291	0.609	0.5	0.3	0.5	0.05	22.2%	14.3%
0.024		4	0.425	0.124	0.726	0.35	0.3	0.7	0.0946	44.5%	19.0%
0.0721		4	0.525	0	1	0.5	0.2	0.9	0.165	62.9%	0.0%
0.1636		4	0.2	0.0701	0.33	0.2	0.1	0.3	0.0408	40.8%	61.9%
0.6474		4	0.05	0	0.142	0.05	0	0.1	0.0289	115.0%	90.5%
1.9669		4	0	0	0	0	0	0	0		100.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-6868-2126	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:29	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-3254-4311	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	41.3%	0.0721	0.1636	0.1086	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	11.5	NA	1	6	0.1429	Exact	Non-Significant Effect
		0.024	11.5	NA	1	6	0.1857	Exact	Non-Significant Effect
		0.0721	8	NA	0	6	0.5143	Exact	Non-Significant Effect
		0.1636*	16	NA	0	6	0.0143	Exact	Significant Effect
		0.6474*	16	NA	0	6	0.0143	Exact	Significant Effect
		1.9669*	16	NA	0	6	0.0143	Exact	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.204286	0.2007143	6	8.07	0.0001	Significant Effect
Error	0.5225	0.02488095	21			
Total	1.726786		27			

Distributional Tests

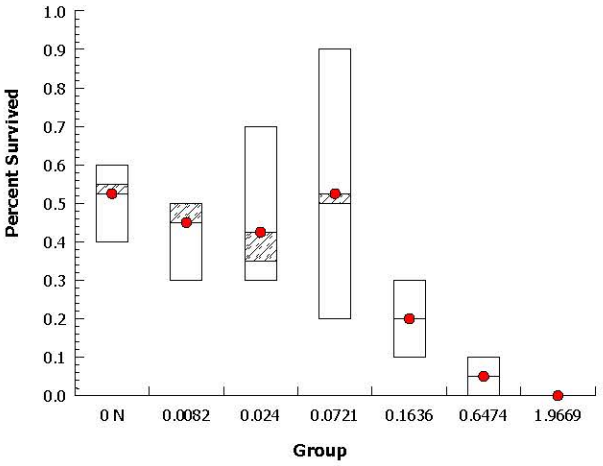
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	4.77	3.81	0.0032	Unequal Variances
Variances	Levene Equality of Variance	8.48	3.81	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.946	0.897	0.1616	Normal Distribution

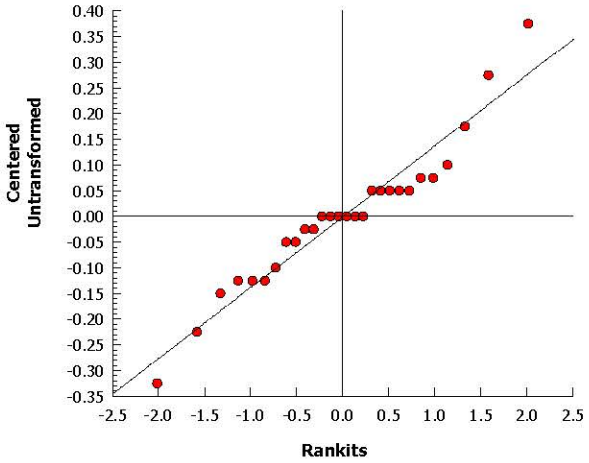
Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	0.0%
0.0082		4	0.45	0.291	0.609	0.5	0.3	0.5	0.05	22.2%	14.3%
0.024		4	0.425	0.124	0.726	0.35	0.3	0.7	0.0946	44.5%	19.0%
0.0721		4	0.525	0	1	0.5	0.2	0.9	0.165	62.9%	0.0%
0.1636		4	0.2	0.0701	0.33	0.2	0.1	0.3	0.0408	40.8%	61.9%
0.6474		4	0.05	0	0.142	0.05	0	0.1	0.0289	115.0%	90.5%
1.9669		4	0	0	0	0	0	0	0		100.0%

Analysis ID:	01-3254-4311	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-9985-6826	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.0721	0.1636	0.1086	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0082	1.12	1.64	1	-2	0.2224	Asymp	Non-Significant Effect
		0.024	1.37	1.64	4	-2	0.2224	Asymp	Non-Significant Effect
		0.0721	0.764	1.64	5	-2	0.2224	Asymp	Non-Significant Effect
		0.1636*	2.43	1.64	6	-2	0.0075	Asymp	Significant Effect
		0.6474*	3.83	1.64	8	-2	<0.0001	Asymp	Significant Effect
		1.9669*	4.82	1.64	8	-2	<0.0001	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.204286	0.2007143	6	8.07	0.0001	Significant Effect
Error	0.5225	0.02488095	21			
Total	1.726786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	4.77	3.81	0.0032	Unequal Variances
Variances	Levene Equality of Variance	8.48	3.81	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.946	0.897	0.1616	Normal Distribution

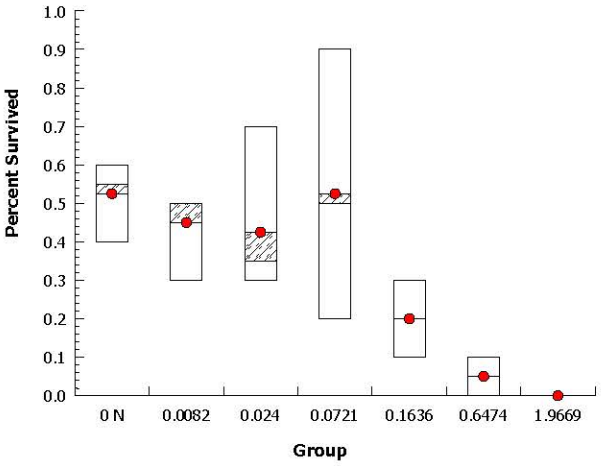
Percent Survived Summary

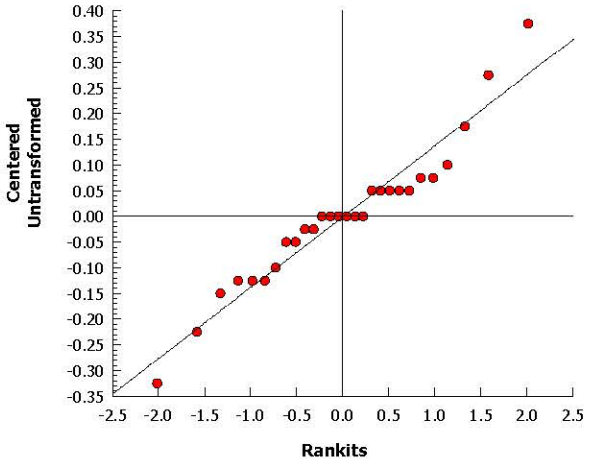
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	0.0%
0.0082		4	0.45	0.291	0.609	0.5	0.3	0.5	0.05	22.2%	14.3%
0.024		4	0.425	0.124	0.726	0.35	0.3	0.7	0.0946	44.5%	19.0%
0.0721		4	0.525	0	1	0.5	0.2	0.9	0.165	62.9%	0.0%
0.1636		4	0.2	0.0701	0.33	0.2	0.1	0.3	0.0408	40.8%	61.9%
0.6474		4	0.05	0	0.142	0.05	0	0.1	0.0289	115.0%	90.5%
1.9669		4	0	0	0	0	0	0	0		100.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-9985-6826	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:30	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-3766-1359	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.35	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
7	-178	364	367	-0.18	0.763	0.425	0.484	2.84	0.7470	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0367	0.000021	0.16
EC10	0.0695	0.000159	0.241
EC25	0.202	0.00448	0.496
EC50	0.661	0.138	1.46

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.391	0.0519	0.289	0.493	7.53	<0.0001	Significant Parameter
Slope	1.31	0.46	0.408	2.21	2.85	0.0087	Significant Parameter
Intercept	0.236	0.248	-0.25	0.721	0.951	0.3506	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	26.22137	26.22137	1	22	<0.0001	Significant
Lack of Fit	2.519072	0.629768	4	0.484	0.7473	Non-Significant
Pure Error	27.32835	1.30135	21			
Residual	29.84743	1.193897	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	29.8	37.7	0.2301	Non-Significant Heterogenity
	Likelihood Ratio GOF	33.3	37.7	0.1234	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.14	2.88	0.7367	No Outliers Detected
Variances	Bartlett Equality of Variance	9.84	12.6	0.1315	Equal Variances
	Mod Levene Equality of Variance	3.56	2.57	0.0137	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.977	0.926	0.7711	Normal Distribution
	Anderson-Darling A2 Normality	0.259	2.49	0.7408	Normal Distribution

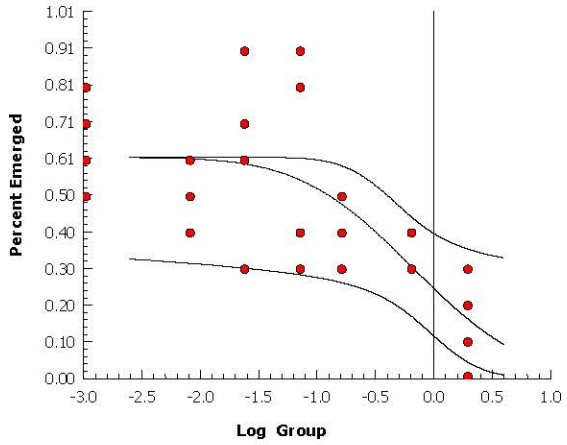
Percent Emerged Summary

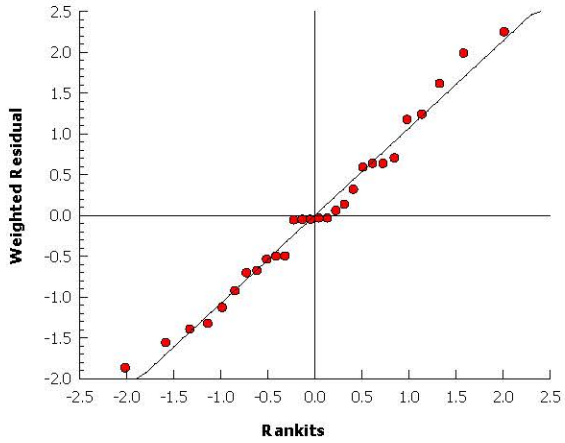
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.65	0.5	0.8	0.0645	0.129	19.9%	0.0%	26	40
0.0082		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	19.2%	21	40
0.024		4	0.625	0.3	0.9	0.125	0.25	40.0%	3.85%	25	40
0.0721		4	0.6	0.3	0.9	0.147	0.294	49.1%	7.69%	24	40
0.1636		4	0.4	0.3	0.5	0.0408	0.0816	20.4%	38.5%	16	40
0.6474		4	0.35	0.3	0.4	0.0289	0.0577	16.5%	46.2%	14	40
1.9669		4	0.15	0	0.3	0.0645	0.129	86.1%	76.9%	6	40

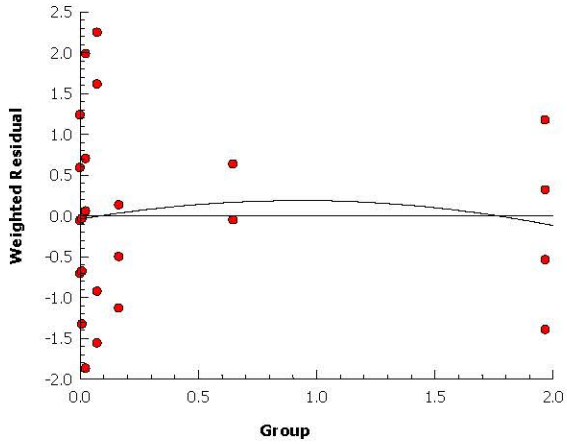
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

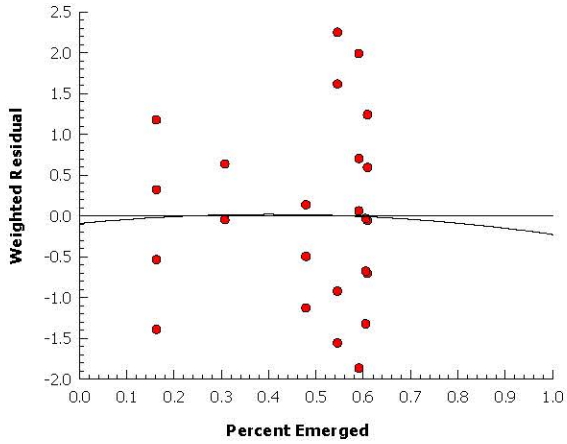
Analysis ID:	16-3766-1359	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-0639-9037	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.35	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
7	-178	364	367	-0.18	0.763	0.425	0.484	2.84	0.7470	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0367	0.000021	0.16
EC10	0.0695	0.000159	0.241
EC25	0.202	0.00448	0.496
EC50	0.661	0.138	1.46

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.391	0.0519	0.289	0.493	7.53	<0.0001	Significant Parameter
Slope	1.31	0.46	0.408	2.21	2.85	0.0087	Significant Parameter
Intercept	0.236	0.248	-0.25	0.721	0.951	0.3506	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	26.22137	26.22137	1	22	<0.0001	Significant
Lack of Fit	2.519072	0.629768	4	0.484	0.7473	Non-Significant
Pure Error	27.32835	1.30135	21			
Residual	29.84743	1.193897	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	29.8	37.7	0.2301	Non-Significant Heterogenity
	Likelihood Ratio GOF	33.3	37.7	0.1234	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	9.84	12.6	0.1315	Equal Variances
	Mod Levene Equality of Variance	3.56	2.57	0.0137	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.977	0.926	0.7711	Normal Distribution
	Anderson-Darling A2 Normality	0.259	2.49	0.7408	Normal Distribution

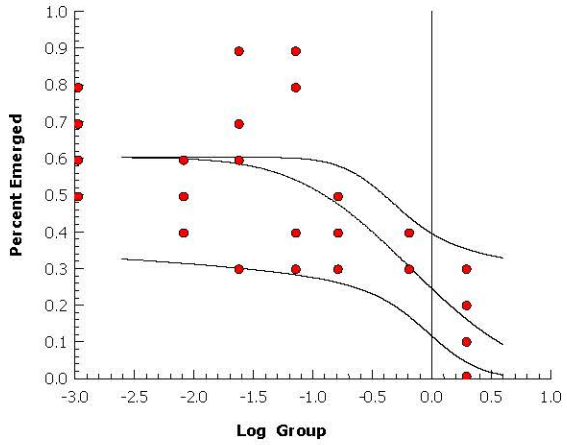
Percent Emerged Summary

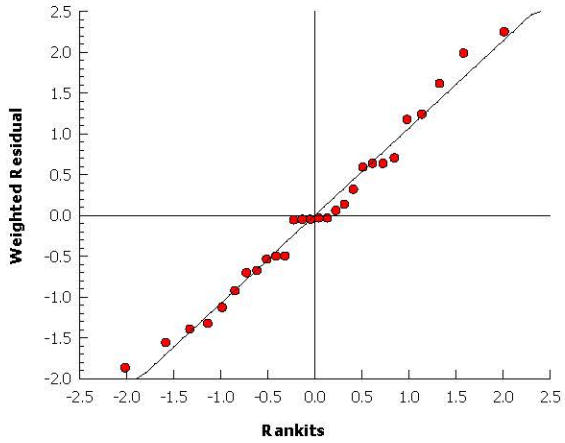
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.65	0.5	0.8	0.0645	0.129	19.9%	0.0%	26	40
0.0082		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	19.2%	21	40
0.024		4	0.625	0.3	0.9	0.125	0.25	40.0%	3.85%	25	40
0.0721		4	0.6	0.3	0.9	0.147	0.294	49.1%	7.69%	24	40
0.1636		4	0.4	0.3	0.5	0.0408	0.0816	20.4%	38.5%	16	40
0.6474		4	0.35	0.3	0.4	0.0289	0.0577	16.5%	46.2%	14	40
1.9669		4	0.15	0	0.3	0.0645	0.129	86.1%	76.9%	6	40

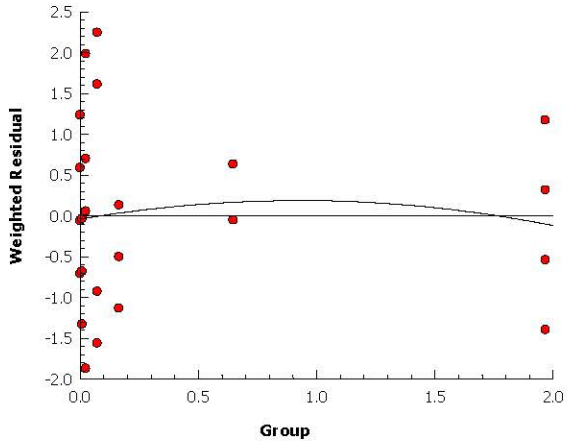
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

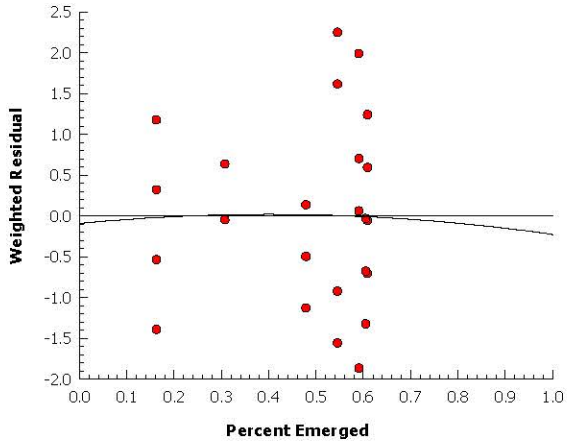
Analysis ID:	17-0639-9037	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-4556-4924	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.475	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-131	270	272	-0.83	0.461	0.711	0.574	2.87	0.6850	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0258	0.00125	0.0685
EC10	0.038	0.00285	0.0896
EC25	0.0723	0.0111	0.143
EC50	0.148	0.0467	0.259

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.521	0.0509	0.421	0.621	10.2	<0.0001	Significant Parameter
Slope	2.17	0.6	0.992	3.34	3.61	0.0014	Significant Parameter
Intercept	1.8	0.457	0.903	2.69	3.94	0.0006	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	48.79825	48.79825	1	66.1	<0.0001	Significant
Lack of Fit	1.825741	0.456435	4	0.574	0.6846	Non-Significant
Pure Error	15.90245	0.795123	20			
Residual	17.72819	0.738675	24			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	17.7	36.4	0.8160	Non-Significant Heterogenity
	Likelihood Ratio GOF	18.3	36.4	0.7905	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	2.1	2.63	0.1010	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.93	0.924	0.0705	Normal Distribution
	Anderson-Darling A2 Normality	0.663	2.49	0.0836	Normal Distribution

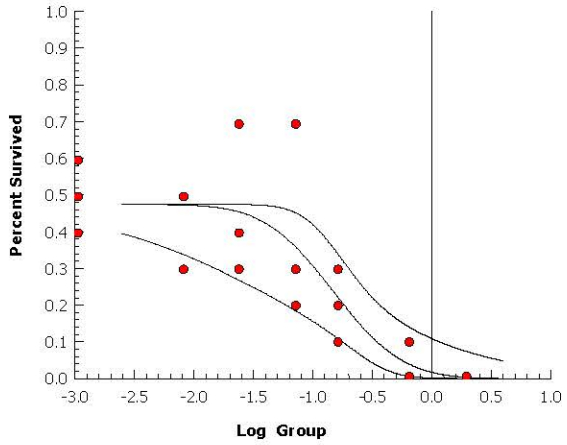
Percent Survived Summary

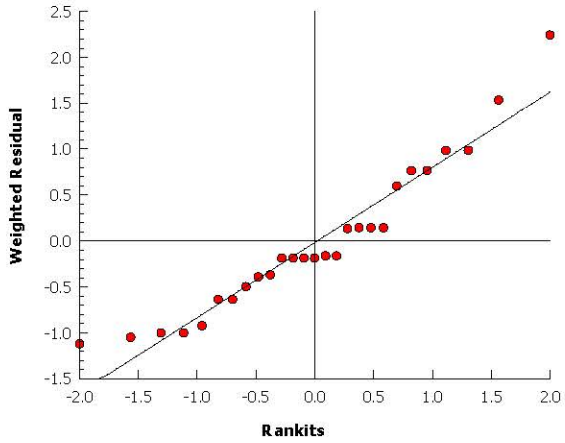
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.525	0.4	0.6	0.0479	0.0957	18.2%	0.0%	21	40
0.0082		4	0.45	0.3	0.5	0.05	0.1	22.2%	14.3%	18	40
0.024		4	0.425	0.3	0.7	0.0946	0.189	44.5%	19.0%	17	40
0.0721		3	0.4	0.2	0.7	0.153	0.265	66.1%	23.8%	12	30
0.1636		4	0.2	0.1	0.3	0.0408	0.0816	40.8%	61.9%	8	40
0.6474		4	0.05	0	0.1	0.0289	0.0577	115.0%	90.5%	2	40
1.9669		4	0	0	0	0	0		100.0%	0	40

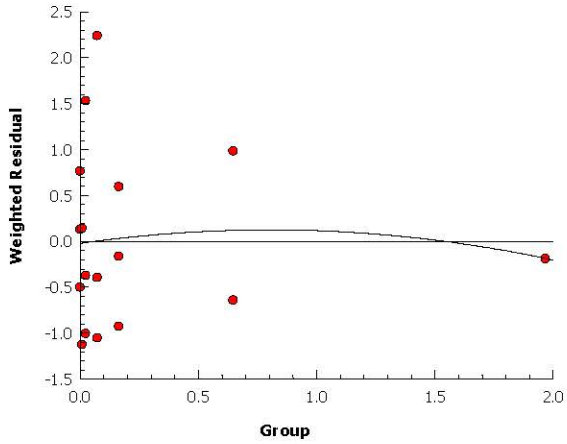
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

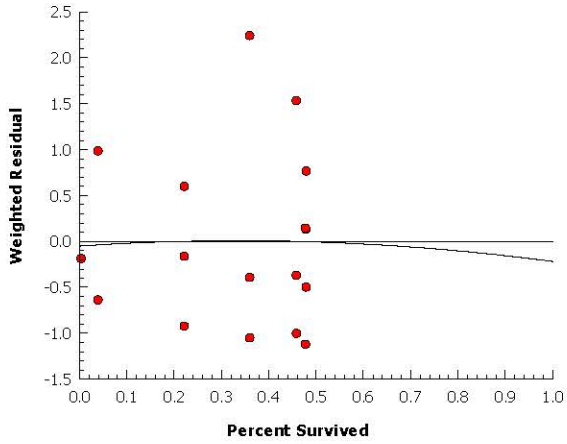
Analysis ID:	12-4556-4924	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-6126-2588	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.475	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
11	-140	287	290	-0.731	0.37	0.622	1.13	2.84	0.3700	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0458	0.0046	0.0989
EC10	0.0624	0.0088	0.123
EC25	0.105	0.0255	0.182
EC50	0.186	0.0773	0.3

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.515	0.046	0.425	0.605	11.2	<0.0001	Significant Parameter
Slope	2.71	0.741	1.25	4.16	3.65	0.0012	Significant Parameter
Intercept	1.98	0.523	0.954	3	3.79	0.0009	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	52.44241	52.44241	1	46.5	<0.0001	Significant
Lack of Fit	4.982162	1.24554	4	1.13	0.3705	Non-Significant
Pure Error	23.20195	1.104855	21			
Residual	28.18411	1.127365	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	28.2	37.7	0.2994	Non-Significant Heterogenity
	Likelihood Ratio GOF	29.6	37.7	0.2414	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	3.01	2.88	0.0270	Outlier Detected
Variances	Mod Levene Equality of Variance	4.68	2.57	0.0036	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.916	0.926	0.0275	Non-normal Distribution
	Anderson-Darling A2 Normality	0.798	2.49	0.0385	Non-normal Distribution

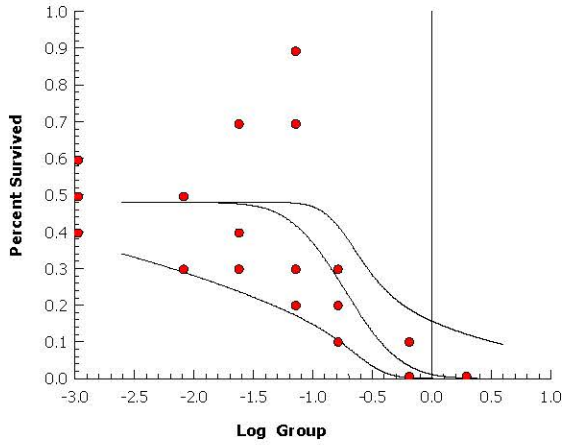
Percent Survived Summary

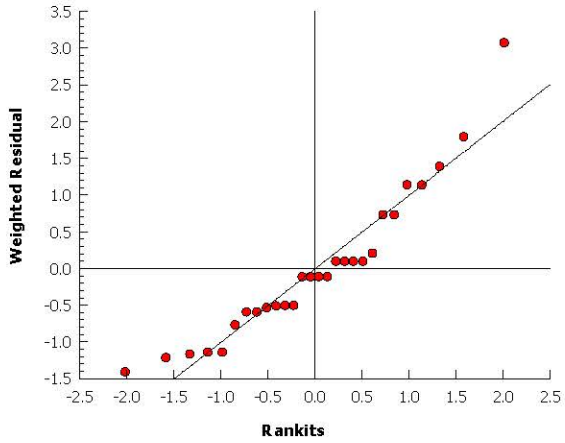
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.525	0.4	0.6	0.0479	0.0957	18.2%	0.0%	21	40
0.0082		4	0.45	0.3	0.5	0.05	0.1	22.2%	14.3%	18	40
0.024		4	0.425	0.3	0.7	0.0946	0.189	44.5%	19.0%	17	40
0.0721		4	0.525	0.2	0.9	0.165	0.33	62.9%	0.0%	21	40
0.1636		4	0.2	0.1	0.3	0.0408	0.0816	40.8%	61.9%	8	40
0.6474		4	0.05	0	0.1	0.0289	0.0577	115.0%	90.5%	2	40
1.9669		4	0	0	0	0	0		100.0%	0	40

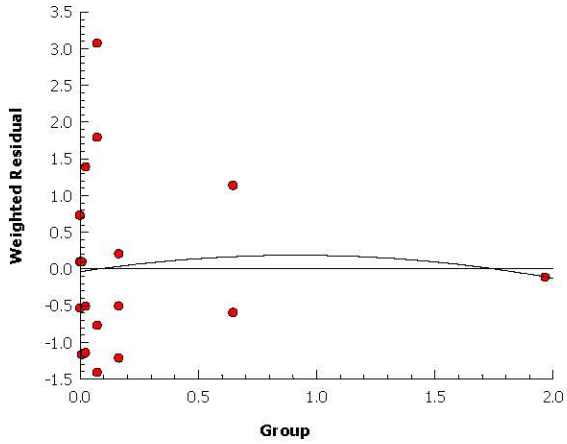
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

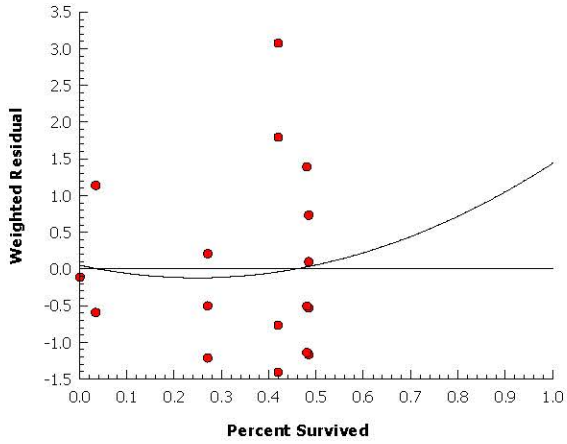
Analysis ID:	17-6126-2588	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-6662-5139	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.475	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
11	-140	287	290	-0.731	0.37	0.622	1.13	2.84	0.3700	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0458	0.0046	0.0989
EC10	0.0624	0.0088	0.123
EC25	0.105	0.0255	0.182
EC50	0.186	0.0773	0.3

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.515	0.046	0.425	0.605	11.2	<0.0001	Significant Parameter
Slope	2.71	0.741	1.25	4.16	3.65	0.0012	Significant Parameter
Intercept	1.98	0.523	0.954	3	3.79	0.0009	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	52.44241	52.44241	1	46.5	<0.0001	Significant
Lack of Fit	4.982162	1.24554	4	1.13	0.3705	Non-Significant
Pure Error	23.20195	1.104855	21			
Residual	28.18411	1.127365	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	28.2	37.7	0.2994	Non-Significant Heterogenity
	Likelihood Ratio GOF	29.6	37.7	0.2414	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	4.68	2.57	0.0036	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.916	0.926	0.0275	Non-normal Distribution
	Anderson-Darling A2 Normality	0.798	2.49	0.0385	Non-normal Distribution

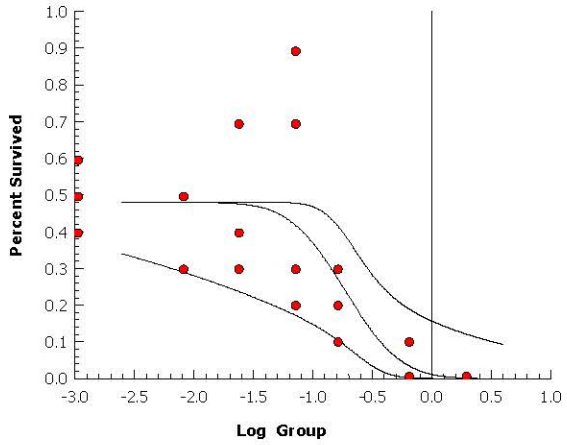
Percent Survived Summary

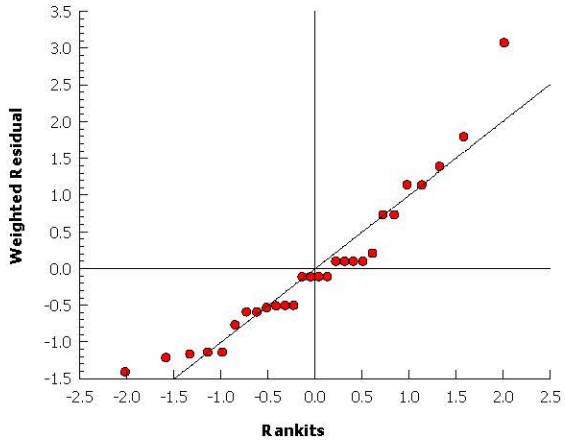
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.525	0.4	0.6	0.0479	0.0957	18.2%	0.0%	21	40
0.0082		4	0.45	0.3	0.5	0.05	0.1	22.2%	14.3%	18	40
0.024		4	0.425	0.3	0.7	0.0946	0.189	44.5%	19.0%	17	40
0.0721		4	0.525	0.2	0.9	0.165	0.33	62.9%	0.0%	21	40
0.1636		4	0.2	0.1	0.3	0.0408	0.0816	40.8%	61.9%	8	40
0.6474		4	0.05	0	0.1	0.0289	0.0577	115.0%	90.5%	2	40
1.9669		4	0	0	0	0	0		100.0%	0	40

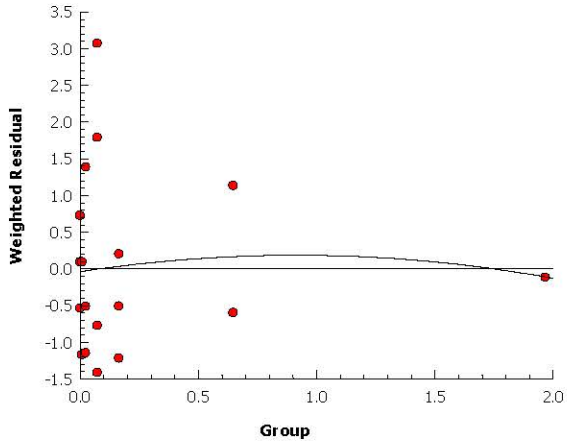
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

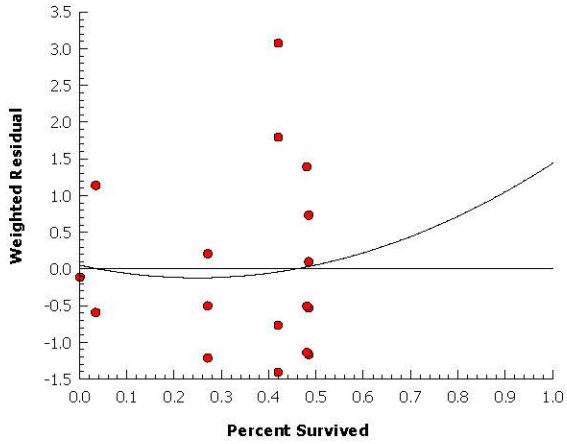
Analysis ID:	00-6662-5139	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-6840-4411	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	184	-360	-358	0.7609	Yes	1.26	3.24	0.3205	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.104	N/A	0.148
IC10	0.135	N/A	0.185
IC25	0.207	0.141	0.273
IC50	0.333	0.267	0.415

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	8.59	0.318	7.97	9.22	27	<0.0001	Significant Parameter
C	0.707	0.121	0.471	0.944	5.86	<0.0001	Significant Parameter
D	0.333	0.041	0.253	0.413	8.12	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	11.60624	11.60624	1	68.8	<0.0001	Significant
Lack of Fit	0.613338	0.204446	3	1.26	0.3205	Non-Significant
Pure Error	2.590194	0.161887	16			
Residual	3.203532	0.168607	19			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	3.2	30.1	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	3.35	30.1	1.0000	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.13	2.76	0.5529	No Outliers Detected
Variances	Bartlett Equality of Variance	7.3	11.1	0.1996	Equal Variances
	Mod Levene Equality of Variance	0.813	2.85	0.5575	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.915	0.911	0.0607	Normal Distribution
	Anderson-Darling A2 Normality	0.762	2.49	0.0471	Non-normal Distribution

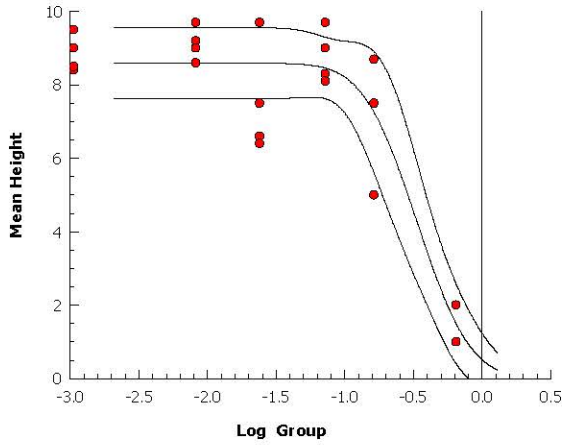
Mean Height Summary

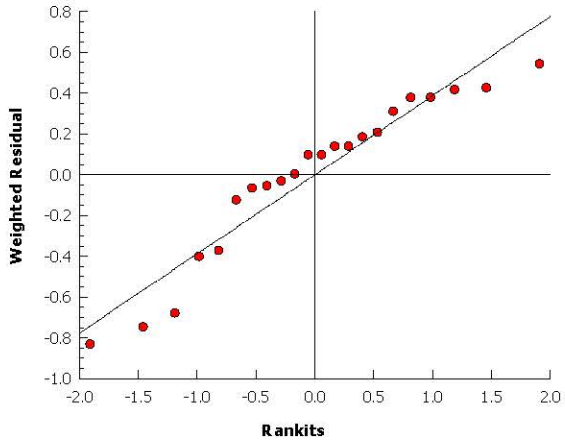
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	8.85	8.4	9.5	0.253	0.507	5.72%	0.0%
0.0082		4	9.13	8.6	9.7	0.229	0.457	5.01%	-3.11%
0.024		4	7.55	6.4	9.7	0.756	1.51	20.0%	14.7%
0.0721		4	8.78	8.1	9.7	0.364	0.727	8.29%	0.85%
0.1636		4	7.17	5	8.7	0.778	1.56	21.7%	18.9%
0.6474		2	1.5	1	2	0.5	0.707	47.1%	83.1%

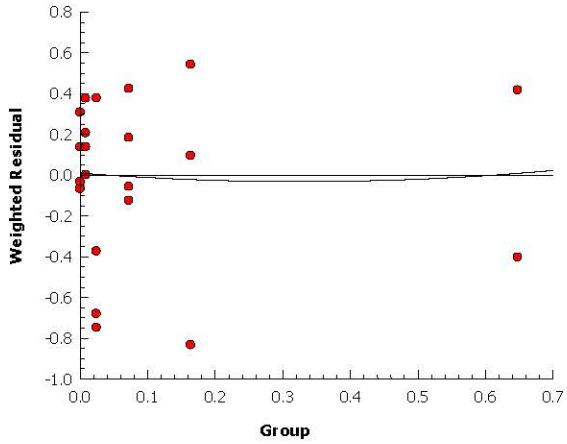
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

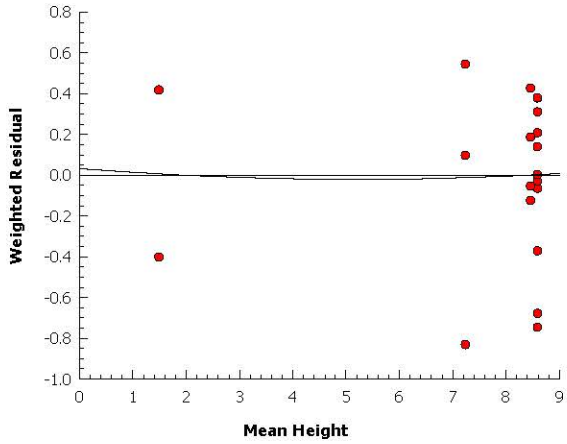
Analysis ID:	04-6840-4411	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-5490-9633	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	184	-360	-358	0.7609	Yes	1.26	3.24	0.3205	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.104	N/A	0.148
IC10	0.135	N/A	0.185
IC25	0.207	0.141	0.273
IC50	0.333	0.267	0.415

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	8.59	0.318	7.97	9.22	27	<0.0001	Significant Parameter
C	0.707	0.121	0.471	0.944	5.86	<0.0001	Significant Parameter
D	0.333	0.041	0.253	0.413	8.12	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	11.60624	11.60624	1	68.8	<0.0001	Significant
Lack of Fit	0.613338	0.204446	3	1.26	0.3205	Non-Significant
Pure Error	2.590194	0.161887	16			
Residual	3.203532	0.168607	19			

Residual Analysis

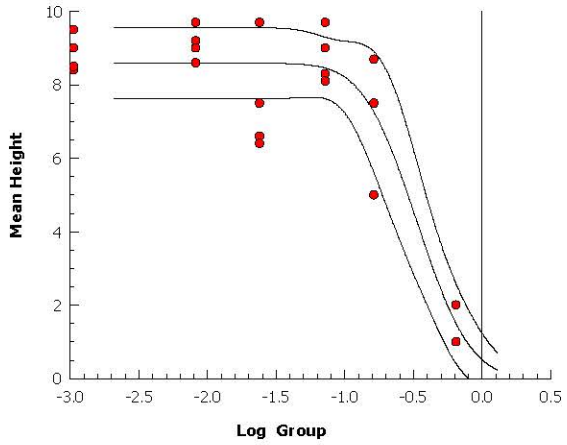
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	3.2	30.1	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	3.35	30.1	1.0000	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	7.3	11.1	0.1996	Equal Variances
	Mod Levene Equality of Variance	0.813	2.85	0.5575	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.915	0.911	0.0607	Normal Distribution
	Anderson-Darling A2 Normality	0.762	2.49	0.0471	Non-normal Distribution

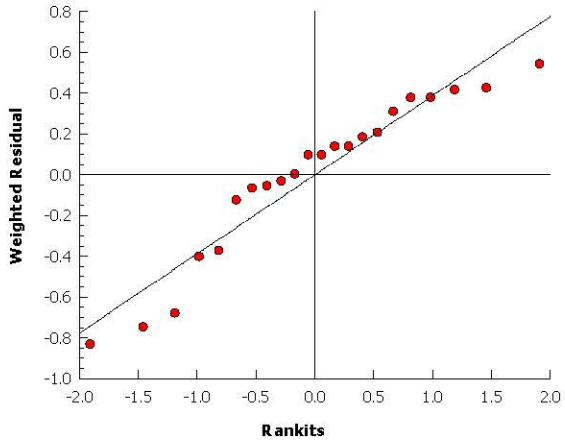
Mean Height Summary

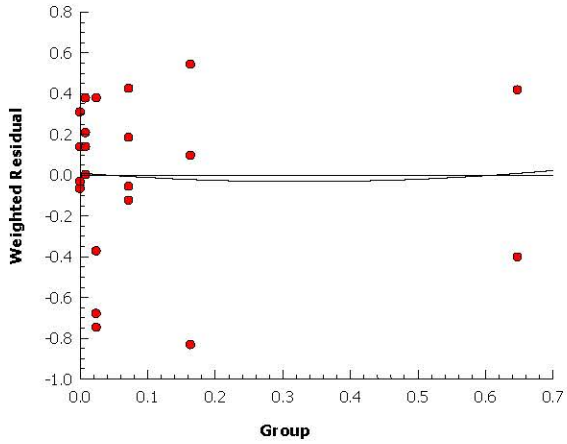
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	8.85	8.4	9.5	0.253	0.507	5.72%	0.0%
0.0082		4	9.13	8.6	9.7	0.229	0.457	5.01%	-3.11%
0.024		4	7.55	6.4	9.7	0.756	1.51	20.0%	14.7%
0.0721		4	8.78	8.1	9.7	0.364	0.727	8.29%	0.85%
0.1636		4	7.17	5	8.7	0.778	1.56	21.7%	18.9%
0.6474		2	1.5	1	2	0.5	0.707	47.1%	83.1%

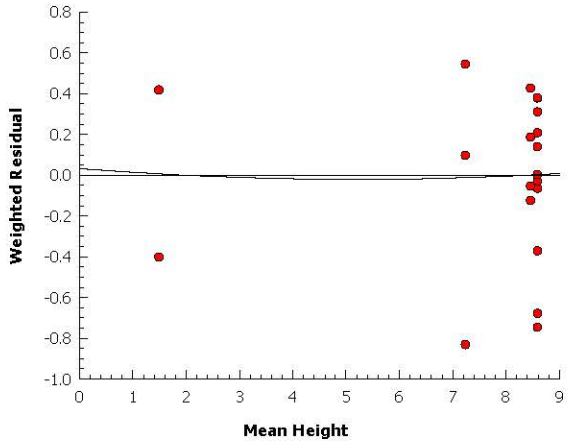
Analysis ID:	14-5490-9633	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-3546-3585	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
13	534	-1060	-1060	0.2725	Yes	0.684	3.68	0.5195	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0802	N/A	0.153
IC10	0.097	N/A	0.183
IC25	0.134	N/A	0.201
IC50	0.19	0.113	0.322

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	16.7	1.15	14.4	19	14.5	<0.0001	Significant Parameter
C	0.526	0.617	-0.683	1.74	0.853	0.4056	Non-Significant Parameter
D	0.19	0.042	0.108	0.273	4.54	0.0003	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	8.660656	8.660656	1	9.12	0.0077	Significant
Lack of Fit	1.350151	0.675076	2	0.684	0.5195	Non-Significant
Pure Error	14.7987	0.98658	15			
Residual	16.14885	0.949932	17			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	16.1	27.6	0.5133	Non-Significant Heterogenity
	Likelihood Ratio GOF	17.5	27.6	0.4194	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.39	2.71	0.1968	No Outliers Detected
Variances	Bartlett Equality of Variance	1.16	9.49	0.8851	Equal Variances
	Mod Levene Equality of Variance	0.381	3.06	0.8184	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.938	0.904	0.2174	Normal Distribution
	Anderson-Darling A2 Normality	0.502	2.49	0.2104	Normal Distribution

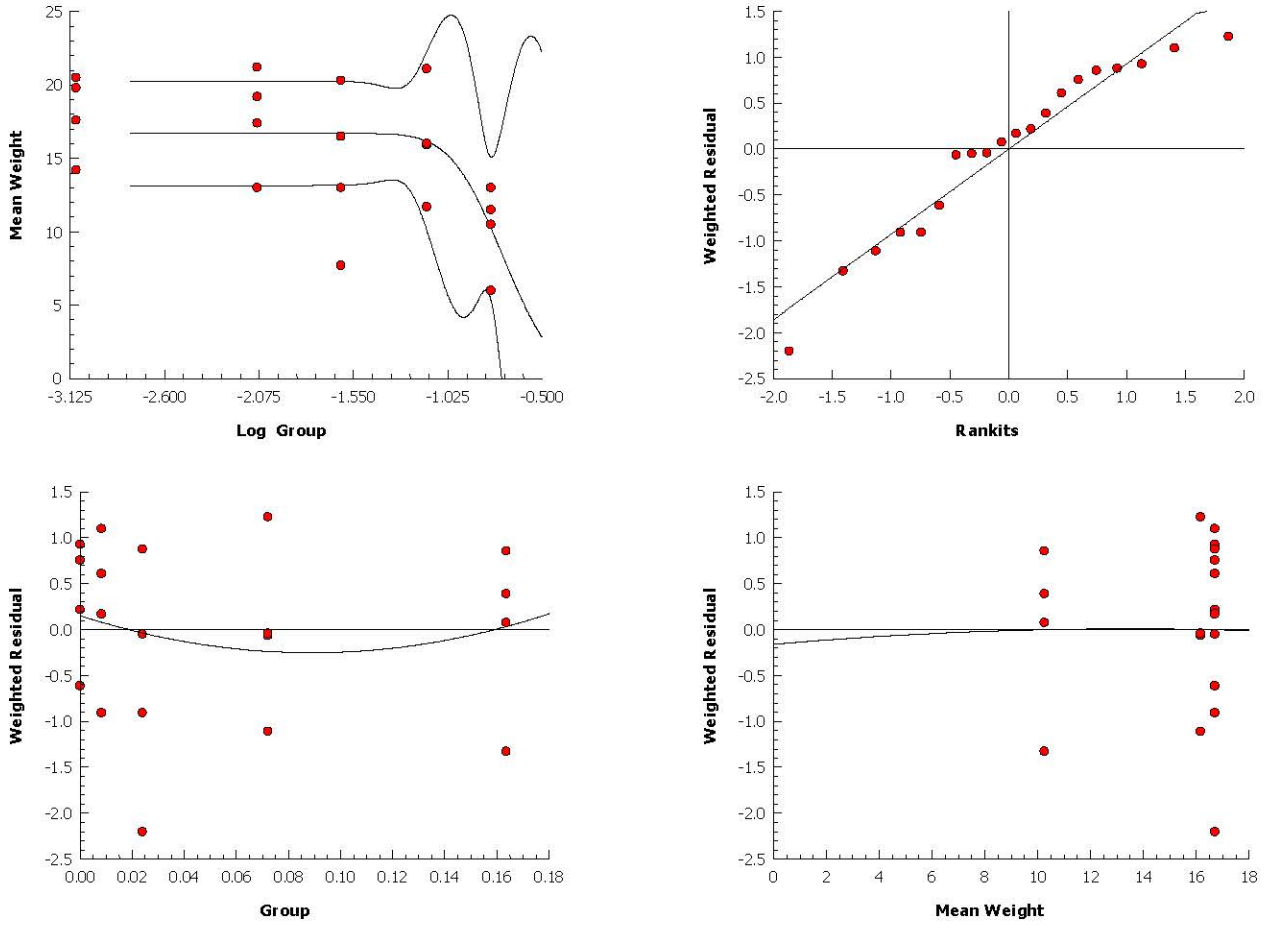
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	18	14.2	20.5	1.42	2.83	15.7%	0.0%
0.0082		4	17.7	13	21.2	1.75	3.5	19.8%	1.8%
0.024		4	14.4	7.7	20.3	2.68	5.36	37.3%	20.2%
0.0721		4	16.2	11.7	21.1	1.92	3.85	23.8%	10.3%
0.1636		4	10.3	6	13	1.51	3.01	29.4%	43.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-3546-3585	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-4296-2312	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
13	534	-1060	-1060	0.2725	Yes	0.684	3.68	0.5195	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0802	N/A	0.153
IC10	0.097	N/A	0.183
IC25	0.134	N/A	0.201
IC50	0.19	0.113	0.322

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	16.7	1.15	14.4	19	14.5	<0.0001	Significant Parameter
C	0.526	0.617	-0.683	1.74	0.853	0.4056	Non-Significant Parameter
D	0.19	0.042	0.108	0.273	4.54	0.0003	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	8.660656	8.660656	1	9.12	0.0077	Significant
Lack of Fit	1.350151	0.675076	2	0.684	0.5195	Non-Significant
Pure Error	14.7987	0.98658	15			
Residual	16.14885	0.949932	17			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	16.1	27.6	0.5133	Non-Significant Heterogenity
	Likelihood Ratio GOF	17.5	27.6	0.4194	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	1.16	9.49	0.8851	Equal Variances
	Mod Levene Equality of Variance	0.381	3.06	0.8184	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.938	0.904	0.2174	Normal Distribution
	Anderson-Darling A2 Normality	0.502	2.49	0.2104	Normal Distribution

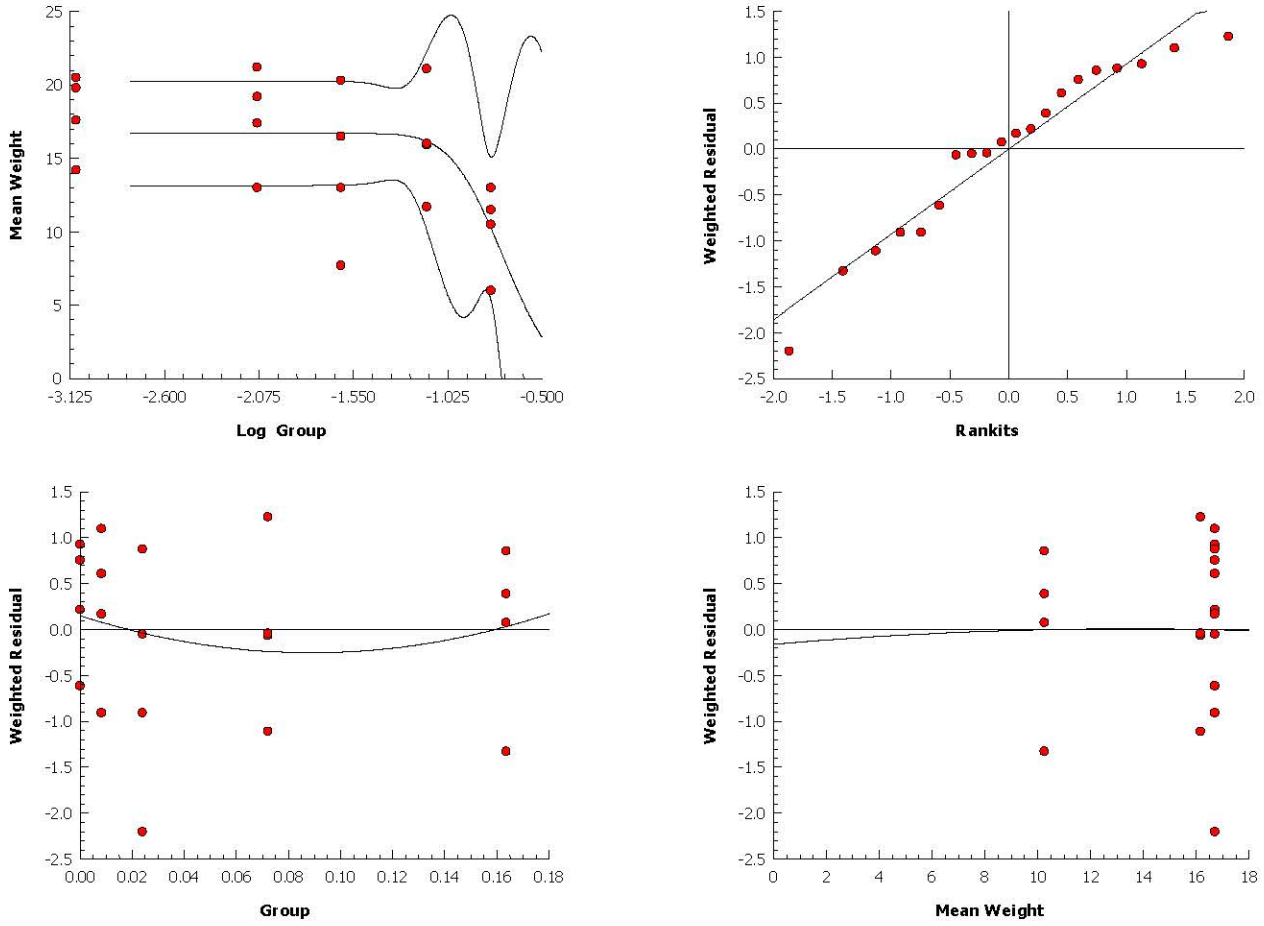
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	18	14.2	20.5	1.42	2.83	15.7%	0.0%
0.0082		4	17.7	13	21.2	1.75	3.5	19.8%	1.8%
0.024		4	14.4	7.7	20.3	2.68	5.36	37.3%	20.2%
0.0721		4	16.2	11.7	21.1	1.92	3.85	23.8%	10.3%
0.1636		4	10.3	6	13	1.51	3.01	29.4%	43.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-4296-2312	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



CETIS Analytical Report

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-1718-7418	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.35	23.08%	-0.292	0.105	0.51	0.314	0.829

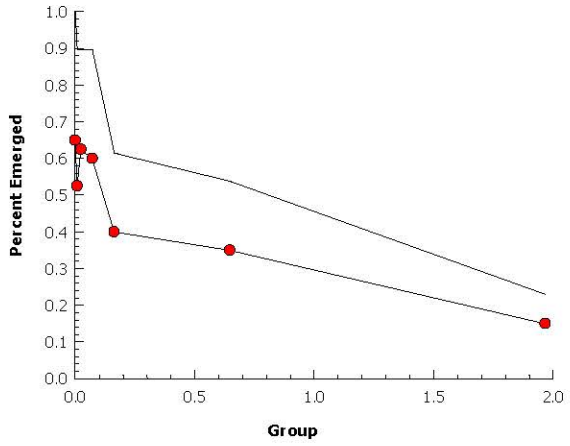
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.07	2.88	0.9100	No Outliers Detected

Percent Emerged Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.65	0.5	0.8	0.0645	0.129	19.9%	0.0%	26	40
0.0082		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	19.2%	21	40
0.024		4	0.625	0.3	0.9	0.125	0.25	40.0%	3.85%	25	40
0.0721		4	0.6	0.3	0.9	0.147	0.294	49.1%	7.69%	24	40
0.1636		4	0.4	0.3	0.5	0.0408	0.0816	20.4%	38.5%	16	40
0.6474		4	0.35	0.3	0.4	0.0289	0.0577	16.5%	46.2%	14	40
1.9669		4	0.15	0	0.3	0.0645	0.129	86.1%	76.9%	6	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-8432-2455	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

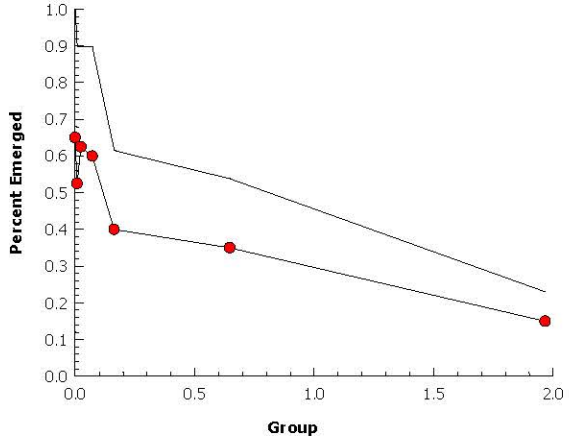
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.35	23.08%	-0.292	0.105	0.51	0.314	0.829

Percent Emerged Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.65	0.5	0.8	0.0645	0.129	19.9%	0.0%	26	40
0.0082		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	19.2%	21	40
0.024		4	0.625	0.3	0.9	0.125	0.25	40.0%	3.85%	25	40
0.0721		4	0.6	0.3	0.9	0.147	0.294	49.1%	7.69%	24	40
0.1636		4	0.4	0.3	0.5	0.0408	0.0816	20.4%	38.5%	16	40
0.6474		4	0.35	0.3	0.4	0.0289	0.0577	16.5%	46.2%	14	40
1.9669		4	0.15	0	0.3	0.0645	0.129	86.1%	76.9%	6	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-6010-7336	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:27	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.475	11.11%	-0.805	0.0509	0.157	0.124	0.198

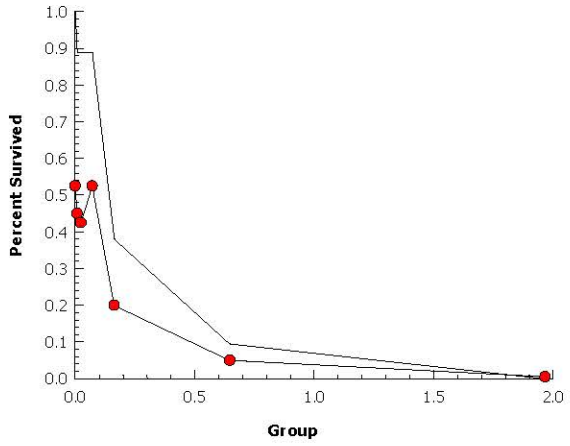
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.8	2.88	0.0699	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.525	0.4	0.6	0.0479	0.0957	18.2%	0.0%	21	40
0.0082		4	0.45	0.3	0.5	0.05	0.1	22.2%	14.3%	18	40
0.024		4	0.425	0.3	0.7	0.0946	0.189	44.5%	19.0%	17	40
0.0721		4	0.525	0.2	0.9	0.165	0.33	62.9%	0.0%	21	40
0.1636		4	0.2	0.1	0.3	0.0408	0.0816	40.8%	61.9%	8	40
0.6474		4	0.05	0	0.1	0.0289	0.0577	115.0%	90.5%	2	40
1.9669		4	0	0	0	0	0		100.0%	0	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-6088-6270	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:29	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	19-8384-2393	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	02 Sep-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 10:37	**Species:**	Daucus carota	**Brine:**	
Duration:	516d 11h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	04-1688-6572	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	02 Sep-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 10:37	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

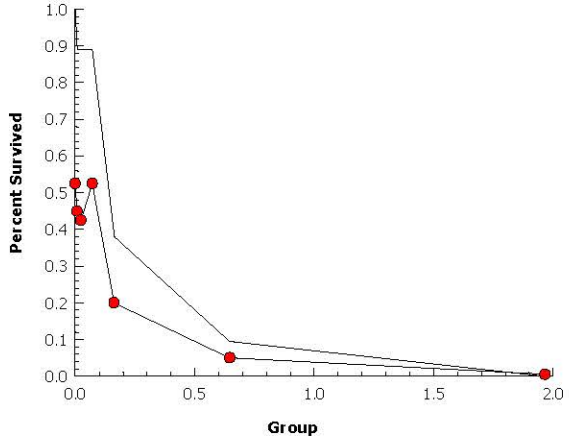
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.475	11.11%	-0.805	0.0509	0.157	0.124	0.198

Percent Survived Summary

										Calculated Variate(A/B)	
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.525	0.4	0.6	0.0479	0.0957	18.2%	0.0%	21	40
0.0082		4	0.45	0.3	0.5	0.05	0.1	22.2%	14.3%	18	40
0.024		4	0.425	0.3	0.7	0.0946	0.189	44.5%	19.0%	17	40
0.0721		4	0.525	0.2	0.9	0.165	0.33	62.9%	0.0%	21	40
0.1636		4	0.2	0.1	0.3	0.0408	0.0816	40.8%	61.9%	8	40
0.6474		4	0.05	0	0.1	0.0289	0.0577	115.0%	90.5%	2	40
1.9669		4	0	0	0	0	0		100.0%	0	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
08-0447-1010	Mean Height	1.8067	>1.8067	NA	12.8%		Dunnett Multiple Comparison Test
13-9588-7114	Mean Height	1.8067	>1.8067	NA	12.8%		Dunnett Multiple Comparison Test
10-8698-9026	Mean Height	1.8067	>1.8067	NA	9.95%		Williams Multiple Comparison Test
20-1047-1568	Mean Height	1.8067	>1.8067	NA	9.95%		Williams Multiple Comparison Test
17-2831-4905	Mean Weight	1.8067	>1.8067	NA	26.6%		Dunnett Multiple Comparison Test
19-4497-6077	Mean Weight	1.8067	>1.8067	NA	26.6%		Dunnett Multiple Comparison Test
04-0330-9035	Mean Weight	1.8067	>1.8067	NA	20.6%		Williams Multiple Comparison Test
19-2798-8725	Mean Weight	1.8067	>1.8067	NA	20.6%		Williams Multiple Comparison Test
06-4445-5207	Percent Emerged	1.8067	>1.8067	NA	NA		Jonckheere-Terpstra Step-Down Test
14-2454-3743	Percent Emerged	1.8067	>1.8067	NA	NA		Jonckheere-Terpstra Step-Down Test
16-6875-3784	Percent Emerged	1.8067	>1.8067	NA	NA		Jonckheere-Terpstra Step-Down Test
00-7187-8166	Percent Emerged	1.8067	>1.8067	NA	10.6%		Mann-Whitney U Two-Sample Test
08-2486-9506	Percent Emerged	1.8067	>1.8067	NA	10.6%		Mann-Whitney U Two-Sample Test
04-7457-2099	Percent Survived	1.8067	>1.8067	NA	16.5%		Dunnett Multiple Comparison Test
13-7853-7753	Percent Survived	1.8067	>1.8067	NA	16.5%		Dunnett Multiple Comparison Test
08-1780-1502	Percent Survived	1.8067	>1.8067	NA	12.8%		Williams Multiple Comparison Test
11-5948-8273	Percent Survived	1.8067	>1.8067	NA	12.8%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
05-9110-9523	Mean Height	IC5	0.982	0.0274	3.89		Nonlinear Regression
		IC10	4.54	N/A	61.4		
		IC25	58.7	N/A	5310000		
		IC50	1010	N/A	N/A		
16-3044-2051	Mean Height	IC5	0.982	0.0274	3.89		Nonlinear Regression
		IC10	4.54	N/A	61.4		
		IC25	58.7	N/A	5310000		
		IC50	1010	N/A	N/A		
11-5758-2449	Mean Weight	IC5	0.0132	N/A	0.896		Nonlinear Regression
		IC10	0.175	0.00198	1.9		
		IC25	13.1	N/A	2820		
		IC50	1580	N/A	N/A		
13-3254-9519	Mean Weight	IC5	0.0132	N/A	0.896		Nonlinear Regression
		IC10	0.175	0.00198	1.9		
		IC25	13.1	N/A	2820		
		IC50	1580	N/A	N/A		

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	75.8	71.5	80	73.8	79.7	1.33	2.66	3.51%	0.0%
0	Negative Control	4	76.8	65.8	87.8	68.8	85.6	3.45	6.89	8.97%	-1.35%
0.0219		4	76.8	72	81.7	72.8	80.1	1.53	3.05	3.97%	-1.39%
0.0642		4	73.9	61.6	86.1	63.4	81.9	3.85	7.71	10.4%	2.54%
0.1971		4	76.5	70.4	82.7	73.6	82.1	1.94	3.88	5.07%	-0.99%
0.5975		4	73.4	63.2	83.5	64.3	78.9	3.18	6.37	8.68%	3.2%
1.8067		4	71.5	62.9	80.1	66.3	79.1	2.71	5.42	7.58%	5.67%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	1240	975	1500	1030	1380	82.5	165	13.3%	0.0%
0	Negative Control	4	1360	958	1760	1160	1730	126	253	18.6%	-9.9%
0.0219		4	1310	952	1670	1110	1620	113	226	17.3%	-6.06%
0.0642		4	1200	796	1600	830	1370	127	254	21.1%	3.03%
0.1971		4	1270	1150	1390	1180	1360	37.3	74.6	5.86%	-2.83%
0.5975		4	1150	890	1400	930	1280	80.8	162	14.1%	7.27%
1.8067		4	1140	751	1530	930	1480	122	245	21.5%	7.88%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0	Negative Control	4	0.9	0.675	1	0.7	1	0.0707	0.141	15.7%	7.69%
0.0219		4	1	1	1	1	1	0	0	0.0%	-2.56%
0.0642		4	0.925	0.845	1	0.9	1	0.025	0.05	5.41%	5.13%
0.1971		4	1	1	1	1	1	0	0	0.0%	-2.56%
0.5975		4	1	1	1	1	1	0	0	0.0%	-2.56%
1.8067		4	0.9	0.77	1	0.8	1	0.0408	0.0816	9.07%	7.69%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0	Negative Control	4	0.9	0.675	1	0.7	1	0.0707	0.141	15.7%	7.69%
0.0219		4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	2.56%
0.0642		4	0.925	0.845	1	0.9	1	0.025	0.05	5.41%	5.13%
0.1971		4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	2.56%
0.5975		4	0.95	0.791	1	0.8	1	0.05	0.1	10.5%	2.56%
1.8067		4	0.9	0.77	1	0.8	1	0.0408	0.0816	9.07%	7.69%

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	73.8	74.7	74.9	79.7
0	Negative Control	77	75.8	85.6	68.8
0.0219		72.8	76.6	80.1	77.8
0.0642		74.2	81.9	75.9	63.4
0.1971		82.1	74.2	73.6	76.2
0.5975		76.3	78.9	73.9	64.3
1.8067		79.1	70.4	66.3	70.1

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	1380	1180	1030	1360
0	Negative Control	1290	1260	1730	1160
0.0219		1340	1110	1620	1180
0.0642		1370	1360	1240	830
0.1971		1360	1180	1260	1290
0.5975		1280	1260	1120	930
1.8067		1480	1150	1000	930

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	1	1	1	0.9
0	Negative Control	1	1	0.7	0.9
0.0219		1	1	1	1
0.0642		0.9	1	0.9	0.9
0.1971		1	1	1	1
0.5975		1	1	1	1
1.8067		0.8	0.9	0.9	1

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	1	1	1	0.9
0	Negative Control	1	1	0.7	0.9
0.0219		0.9	1	0.9	1
0.0642		0.9	1	0.9	0.9
0.1971		0.9	0.9	1	1
0.5975		0.8	1	1	1
1.8067		0.8	0.9	0.9	1

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-9588-7114	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	12.8%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.00611	2.41	9.86	6	0.8351	CDF	Non-Significant Effect
		0.0642	0.72	2.41	9.86	6	0.5487	CDF	Non-Significant Effect
		0.1971	0.0672	2.41	9.86	6	0.8128	CDF	Non-Significant Effect
		0.5975	0.843	2.41	9.86	6	0.4928	CDF	Non-Significant Effect
		1.8067	1.3	2.41	9.86	6	0.2978	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.04	2.8	0.8127	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	100.547	20.10941	5	0.6	0.7008	Non-Significant Effect
Error	603.5623	33.53124	18			
Total	704.1094		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.94	15.1	0.7098	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.969	0.884	0.6483	Normal Distribution

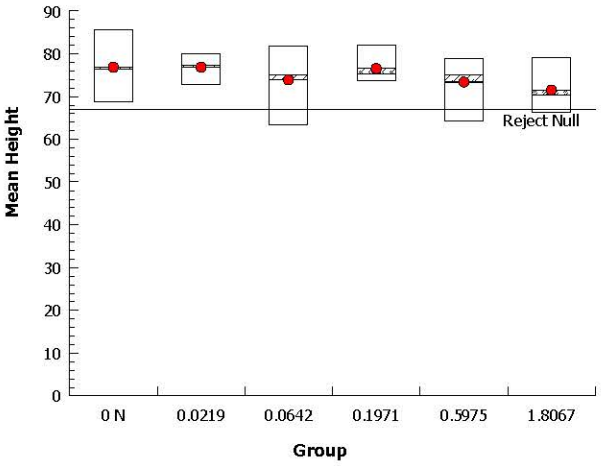
Mean Height Summary

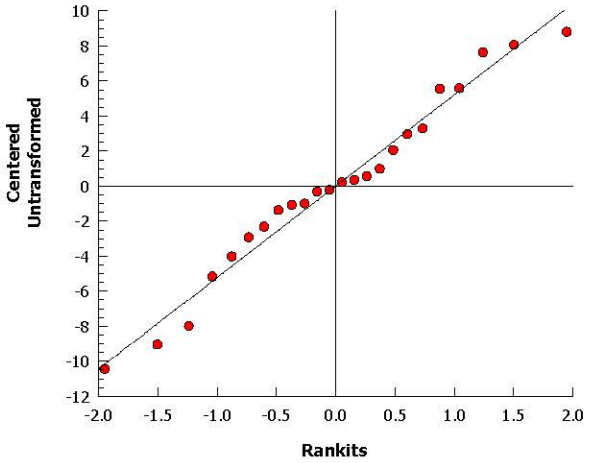
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	76.8	65.8	87.8	76.4	68.8	85.6	3.45	8.97%	0.0%
0.0219		4	76.8	72	81.7	77.2	72.8	80.1	1.53	3.97%	-0.03%
0.0642		4	73.9	61.6	86.1	75.1	63.4	81.9	3.85	10.4%	3.84%
0.1971		4	76.5	70.4	82.7	75.2	73.6	82.1	1.94	5.07%	0.36%
0.5975		4	73.4	63.2	83.5	75.1	64.3	78.9	3.18	8.68%	4.49%
1.8067		4	71.5	62.9	80.1	70.3	66.3	79.1	2.71	7.58%	6.93%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-9588-7114	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-1047-1568	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	9.95%	1.8067	>1.8067	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.00611	1.73	7.1	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.72	1.82	7.44	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.394	1.85	7.55	6	>0.05	CDF	Non-Significant Effect
		0.5975	0.843	1.86	7.61	6	>0.05	CDF	Non-Significant Effect
		1.8067	1.3	1.87	7.64	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.04	2.8	0.8127	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	100.547	20.10941	5	0.6	0.7008	Non-Significant Effect
Error	603.5623	33.53124	18			
Total	704.1094		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.94	15.1	0.7098	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.969	0.884	0.6483	Normal Distribution

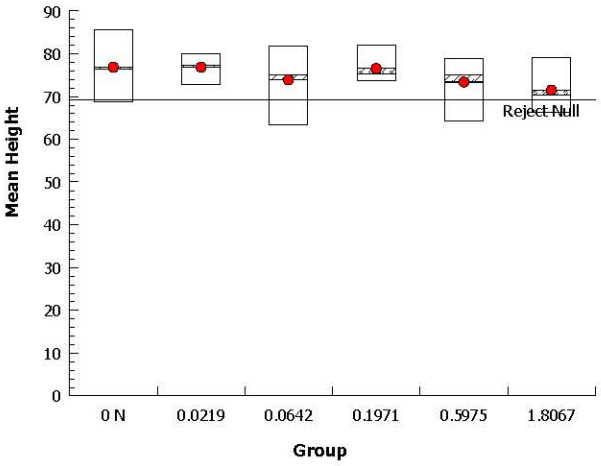
Mean Height Summary

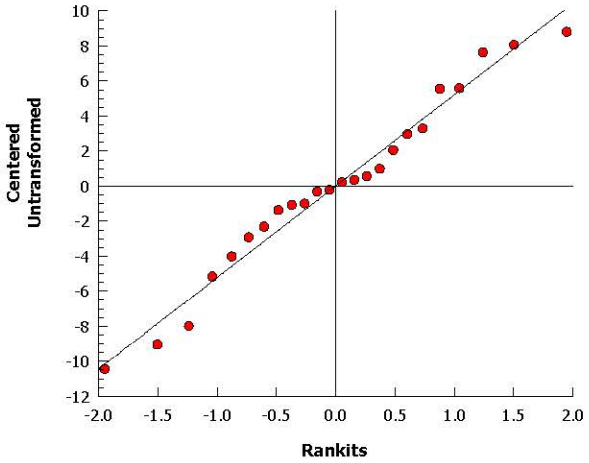
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	76.8	65.8	87.8	76.4	68.8	85.6	3.45	8.97%	0.0%
0.0219		4	76.8	72	81.7	77.2	72.8	80.1	1.53	3.97%	-0.03%
0.0642		4	73.9	61.6	86.1	75.1	63.4	81.9	3.85	10.4%	3.84%
0.1971		4	76.5	70.4	82.7	75.2	73.6	82.1	1.94	5.07%	0.36%
0.5975		4	73.4	63.2	83.5	75.1	64.3	78.9	3.18	8.68%	4.49%
1.8067		4	71.5	62.9	80.1	70.3	66.3	79.1	2.71	7.58%	6.93%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-1047-1568	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-0447-1010	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	12.8%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.00611	2.41	9.86	6	0.8351	CDF	Non-Significant Effect
		0.0642	0.72	2.41	9.86	6	0.5487	CDF	Non-Significant Effect
		0.1971	0.0672	2.41	9.86	6	0.8128	CDF	Non-Significant Effect
		0.5975	0.843	2.41	9.86	6	0.4928	CDF	Non-Significant Effect
		1.8067	1.3	2.41	9.86	6	0.2978	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	100.547	20.10941	5	0.6	0.7008	Non-Significant Effect
Error	603.5623	33.53124	18			
Total	704.1094		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.94	15.1	0.7098	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.969	0.884	0.6483	Normal Distribution

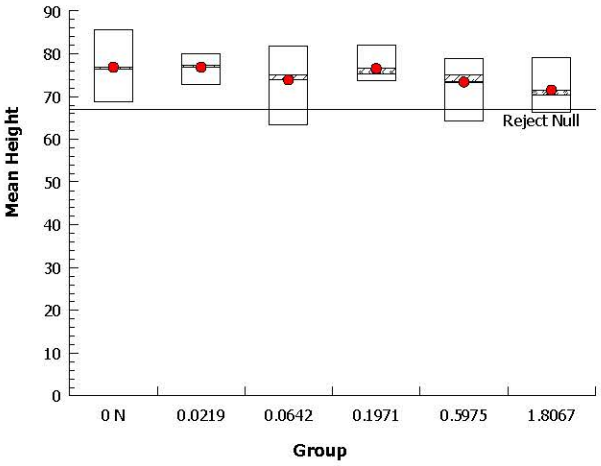
Mean Height Summary

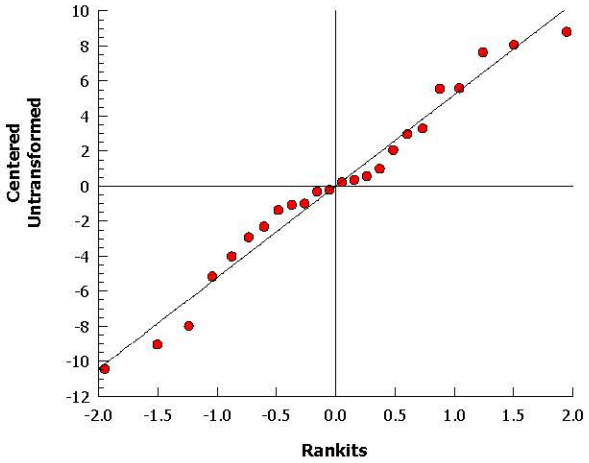
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	76.8	65.8	87.8	76.4	68.8	85.6	3.45	8.97%	0.0%
0.0219		4	76.8	72	81.7	77.2	72.8	80.1	1.53	3.97%	-0.03%
0.0642		4	73.9	61.6	86.1	75.1	63.4	81.9	3.85	10.4%	3.84%
0.1971		4	76.5	70.4	82.7	75.2	73.6	82.1	1.94	5.07%	0.36%
0.5975		4	73.4	63.2	83.5	75.1	64.3	78.9	3.18	8.68%	4.49%
1.8067		4	71.5	62.9	80.1	70.3	66.3	79.1	2.71	7.58%	6.93%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	08-0447-1010	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-8698-9026	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	9.95%	1.8067	>1.8067	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.00611	1.73	7.1	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.72	1.82	7.44	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.394	1.85	7.55	6	>0.05	CDF	Non-Significant Effect
		0.5975	0.843	1.86	7.61	6	>0.05	CDF	Non-Significant Effect
		1.8067	1.3	1.87	7.64	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	100.547	20.10941	5	0.6	0.7008	Non-Significant Effect
Error	603.5623	33.53124	18			
Total	704.1094		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.94	15.1	0.7098	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.969	0.884	0.6483	Normal Distribution

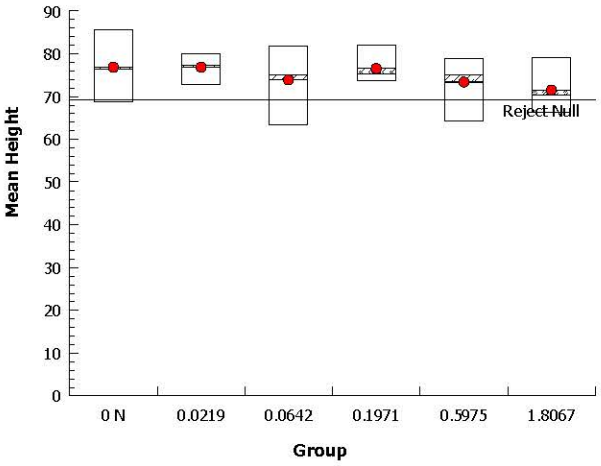
Mean Height Summary

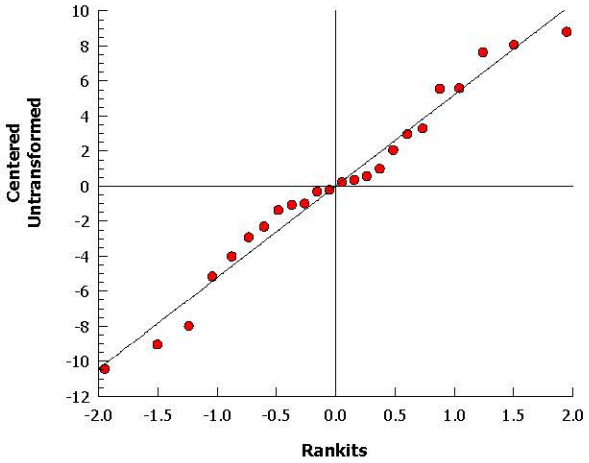
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	76.8	65.8	87.8	76.4	68.8	85.6	3.45	8.97%	0.0%
0.0219		4	76.8	72	81.7	77.2	72.8	80.1	1.53	3.97%	-0.03%
0.0642		4	73.9	61.6	86.1	75.1	63.4	81.9	3.85	10.4%	3.84%
0.1971		4	76.5	70.4	82.7	75.2	73.6	82.1	1.94	5.07%	0.36%
0.5975		4	73.4	63.2	83.5	75.1	64.3	78.9	3.18	8.68%	4.49%
1.8067		4	71.5	62.9	80.1	70.3	66.3	79.1	2.71	7.58%	6.93%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-8698-9026	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-4497-6077	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	26.6%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	0.316	2.41	362	6	0.7240	CDF	Non-Significant Effect
		0.0642	1.06	2.41	362	6	0.3936	CDF	Non-Significant Effect
		0.1971	0.582	2.41	362	6	0.6113	CDF	Non-Significant Effect
		0.5975	1.41	2.41	362	6	0.2567	CDF	Non-Significant Effect
		1.8067	1.46	2.41	362	6	0.2397	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.97	2.8	0.9951	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	163437.5	32687.5	5	0.724	0.6144	Non-Significant Effect
Error	813025	45168.05	18			
Total	976462.5		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.08	15.1	0.5385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.884	0.7680	Normal Distribution

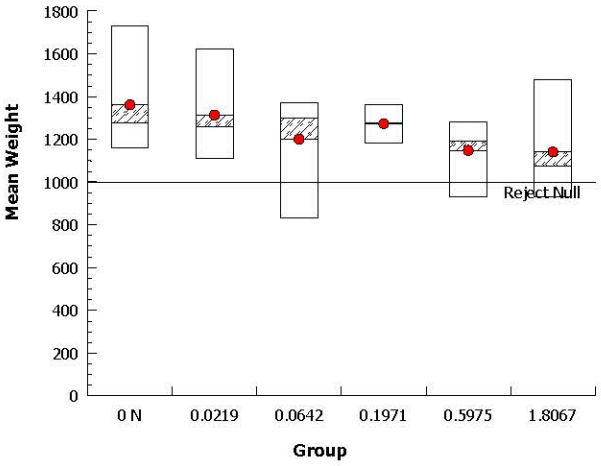
Mean Weight Summary

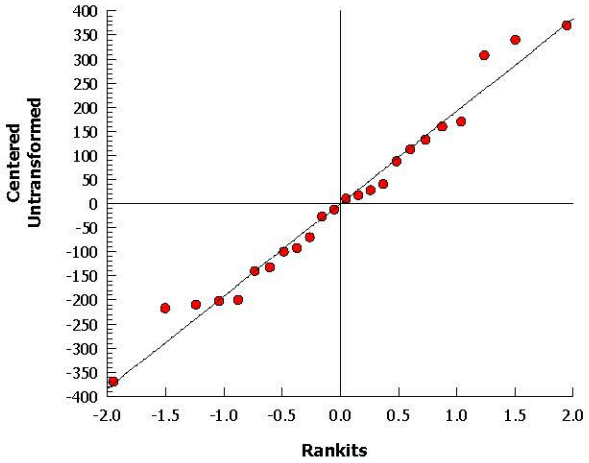
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1360	958	1760	1280	1160	1730	126	18.6%	0.0%
0.0219		4	1310	952	1670	1260	1110	1620	113	17.3%	3.49%
0.0642		4	1200	796	1600	1300	830	1370	127	21.1%	11.8%
0.1971		4	1270	1150	1390	1280	1180	1360	37.3	5.86%	6.43%
0.5975		4	1150	890	1400	1190	930	1280	80.8	14.1%	15.6%
1.8067		4	1140	751	1530	1080	930	1480	122	21.5%	16.2%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-4497-6077	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-2798-8725	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	20.6%	1.8067	>1.8067	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	0.316	1.73	261	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.06	1.82	273	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.823	1.85	277	6	>0.05	CDF	Non-Significant Effect
		0.5975	1.41	1.86	279	6	>0.05	CDF	Non-Significant Effect
		1.8067	1.46	1.87	281	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.97	2.8	0.9951	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	163437.5	32687.5	5	0.724	0.6144	Non-Significant Effect
Error	813025	45168.05	18			
Total	976462.5		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.08	15.1	0.5385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.884	0.7680	Normal Distribution

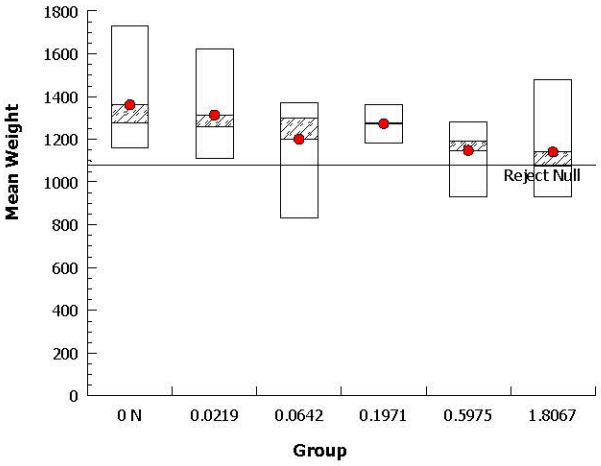
Mean Weight Summary

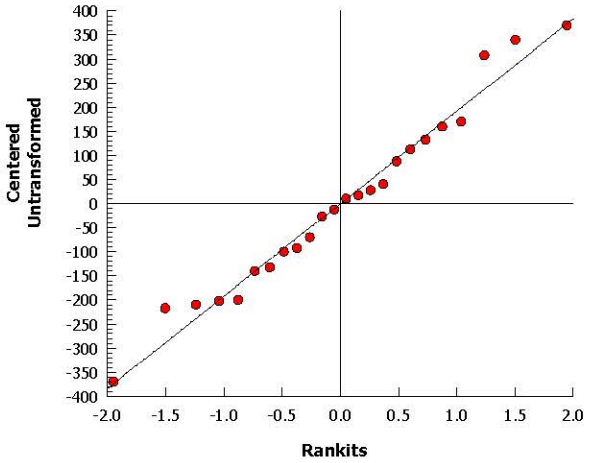
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1360	958	1760	1280	1160	1730	126	18.6%	0.0%
0.0219		4	1310	952	1670	1260	1110	1620	113	17.3%	3.49%
0.0642		4	1200	796	1600	1300	830	1370	127	21.1%	11.8%
0.1971		4	1270	1150	1390	1280	1180	1360	37.3	5.86%	6.43%
0.5975		4	1150	890	1400	1190	930	1280	80.8	14.1%	15.6%
1.8067		4	1140	751	1530	1080	930	1480	122	21.5%	16.2%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-2798-8725	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-2831-4905	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	26.6%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	0.316	2.41	362	6	0.7240	CDF	Non-Significant Effect
		0.0642	1.06	2.41	362	6	0.3936	CDF	Non-Significant Effect
		0.1971	0.582	2.41	362	6	0.6113	CDF	Non-Significant Effect
		0.5975	1.41	2.41	362	6	0.2567	CDF	Non-Significant Effect
		1.8067	1.46	2.41	362	6	0.2397	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	163437.5	32687.5	5	0.724	0.6144	Non-Significant Effect
Error	813025	45168.05	18			
Total	976462.5		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.08	15.1	0.5385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.884	0.7680	Normal Distribution

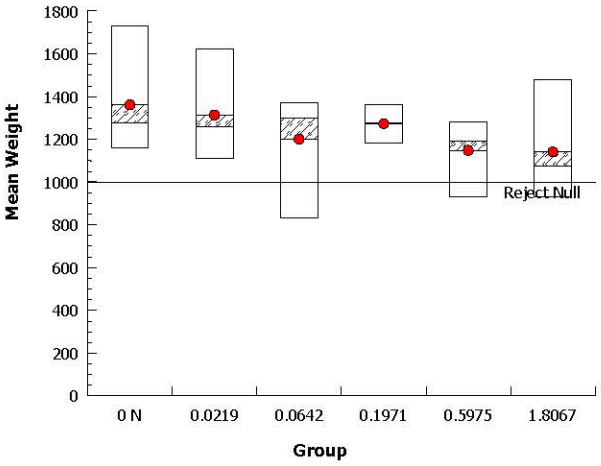
Mean Weight Summary

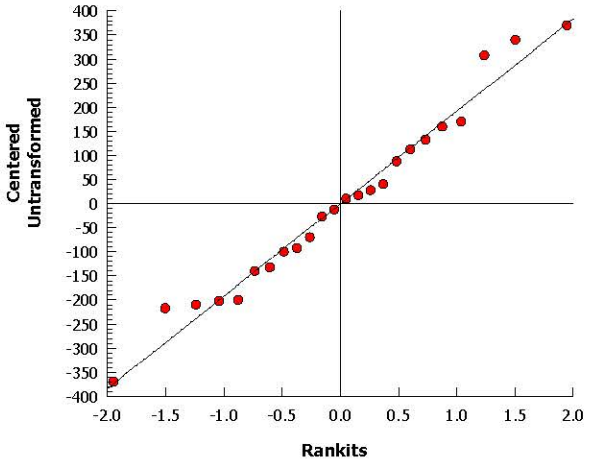
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1360	958	1760	1280	1160	1730	126	18.6%	0.0%
0.0219		4	1310	952	1670	1260	1110	1620	113	17.3%	3.49%
0.0642		4	1200	796	1600	1300	830	1370	127	21.1%	11.8%
0.1971		4	1270	1150	1390	1280	1180	1360	37.3	5.86%	6.43%
0.5975		4	1150	890	1400	1190	930	1280	80.8	14.1%	15.6%
1.8067		4	1140	751	1530	1080	930	1480	122	21.5%	16.2%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	17-2831-4905	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-0330-9035	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	20.6%	1.8067	>1.8067	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	0.316	1.73	261	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.06	1.82	273	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.823	1.85	277	6	>0.05	CDF	Non-Significant Effect
		0.5975	1.41	1.86	279	6	>0.05	CDF	Non-Significant Effect
		1.8067	1.46	1.87	281	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	163437.5	32687.5	5	0.724	0.6144	Non-Significant Effect
Error	813025	45168.05	18			
Total	976462.5		23			

Distributional Tests

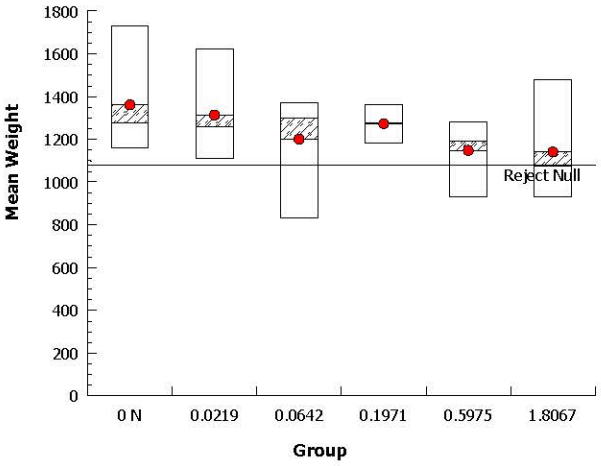
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.08	15.1	0.5385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.884	0.7680	Normal Distribution

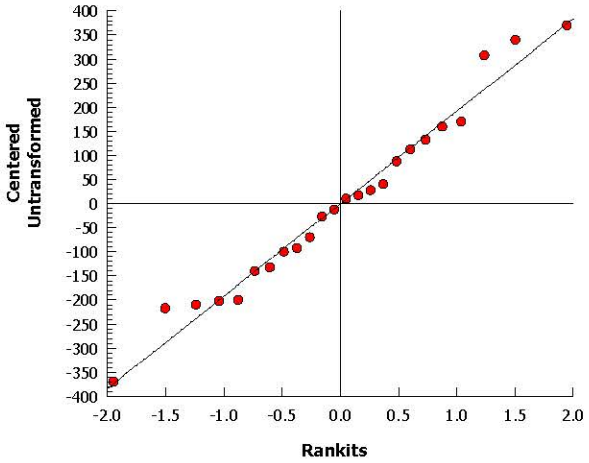
Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1360	958	1760	1280	1160	1730	126	18.6%	0.0%
0.0219		4	1310	952	1670	1260	1110	1620	113	17.3%	3.49%
0.0642		4	1200	796	1600	1300	830	1370	127	21.1%	11.8%
0.1971		4	1270	1150	1390	1280	1180	1360	37.3	5.86%	6.43%
0.5975		4	1150	890	1400	1190	930	1280	80.8	14.1%	15.6%
1.8067		4	1140	751	1530	1080	930	1480	122	21.5%	16.2%

Analysis ID:	04-0330-9035	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-7187-8166	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	10.6%	1.8067	>1.8067	NA	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	4	NA	2	6	1.0000	Exact	Non-Significant Effect
		0.0642	8.5	NA	3	6	0.5000	Exact	Non-Significant Effect
		0.1971	4	NA	2	6	1.0000	Exact	Non-Significant Effect
		0.5975	4	NA	2	6	1.0000	Exact	Non-Significant Effect
		1.8067	9	NA	3	6	0.5000	Exact	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.24	2.8	0.0045	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.05208333	0.01041667	5	2.14	0.1067	Non-Significant Effect
Error	0.0875	0.004861111	18			
Total	0.1395833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.43	4.25	0.0750	Equal Variances
Variances	Levene Equality of Variance	3.64	4.25	0.0190	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.741	0.884	<0.0001	Non-normal Distribution

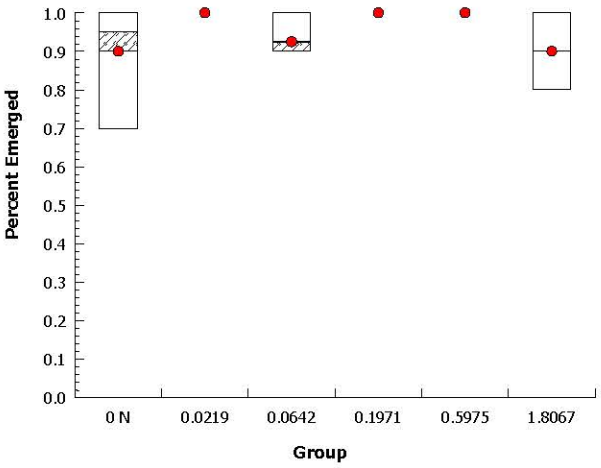
Percent Emerged Summary

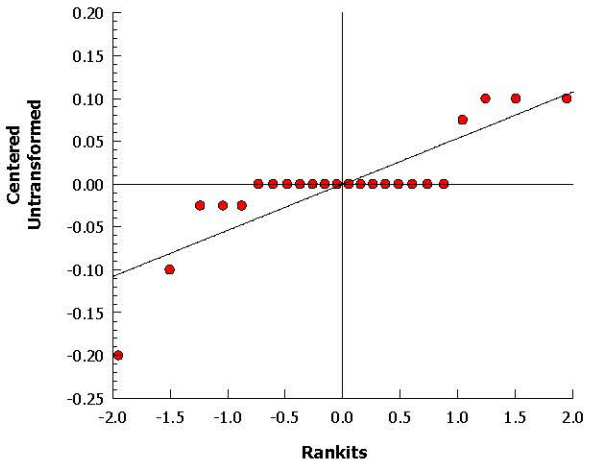
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.5975		4	1	1	1	1	1	1	0	0.0%	-11.1%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-7187-8166	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-2454-3743	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	1.8067	>1.8067	NA	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-2.06	1.64	1	-2	0.9801	Asymp	Non-Significant Effect
		0.0642	1.36	1.64	2	-2	0.8410	Asymp	Non-Significant Effect
		0.1971	-0.209	1.64	2	-2	0.8410	Asymp	Non-Significant Effect
		0.5975	-0.999	1.64	2	-2	0.8410	Asymp	Non-Significant Effect
		1.8067	0.884	1.64	2	-2	0.1884	Asymp	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.03800725	0.007601449	5	3.78	0.0174	Significant Effect
Error	0.03416667	0.002009804	17			
Total	0.07217392		22			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.45	4.44	0.2588	Equal Variances
Variances	Levene Equality of Variance	3.07	4.34	0.0373	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.818	0.88	0.0007	Non-normal Distribution

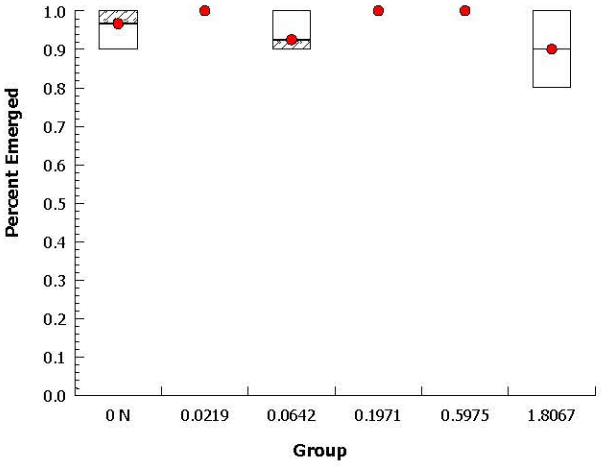
Percent Emerged Summary

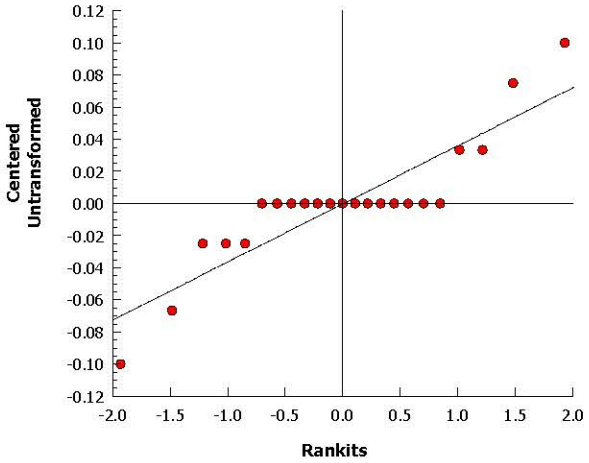
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	3	0.967	0.823	1	1	0.9	1	0.0333	5.97%	0.0%
0.0219		4	1	1	1	1	1	1	0	0.0%	-3.45%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	4.31%
0.1971		4	1	1	1	1	1	1	0	0.0%	-3.45%
0.5975		4	1	1	1	1	1	1	0	0.0%	-3.45%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	6.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-2454-3743	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-6875-3784	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	1.8067	>1.8067	NA	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-1.8	1.64	1	-2	0.9640	Asymp	Non-Significant Effect
		0.0642	0.432	1.64	2	-2	0.9431	Asymp	Non-Significant Effect
		0.1971	-0.888	1.64	2	-2	0.9431	Asymp	Non-Significant Effect
		0.5975	-1.58	1.64	2	-2	0.9431	Asymp	Non-Significant Effect
		1.8067	0.185	1.64	2	-2	0.4266	Asymp	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.24	2.8	0.0045	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.05208333	0.01041667	5	2.14	0.1067	Non-Significant Effect
Error	0.0875	0.004861111	18			
Total	0.1395833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.43	4.25	0.0750	Equal Variances
Variances	Levene Equality of Variance	3.64	4.25	0.0190	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.741	0.884	<0.0001	Non-normal Distribution

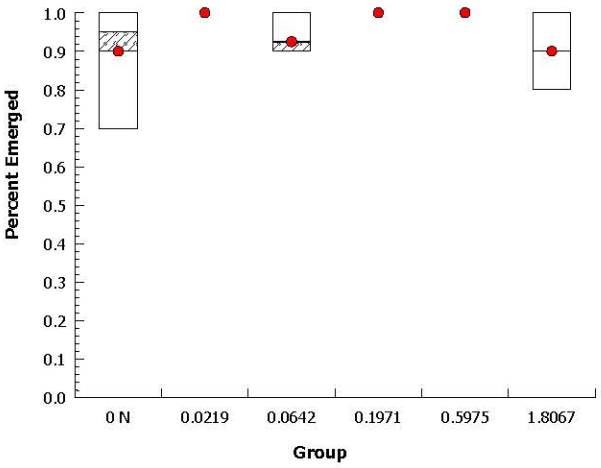
Percent Emerged Summary

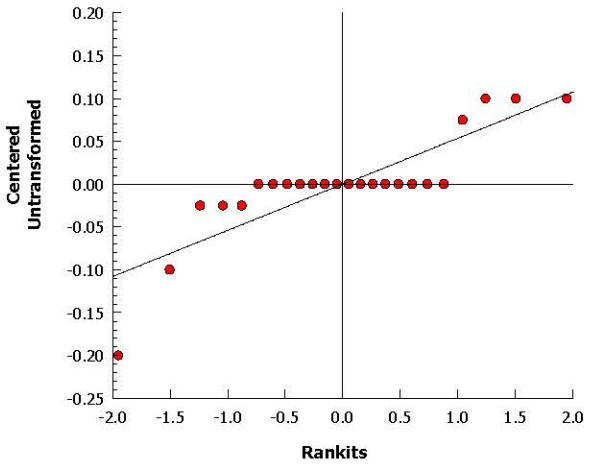
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.5975		4	1	1	1	1	1	1	0	0.0%	-11.1%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-6875-3784	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-2486-9506	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	10.6%	1.8067	>1.8067	NA	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	4	NA	2	6	1.0000	Exact	Non-Significant Effect
		0.0642	8.5	NA	3	6	0.5000	Exact	Non-Significant Effect
		0.1971	4	NA	2	6	1.0000	Exact	Non-Significant Effect
		0.5975	4	NA	2	6	1.0000	Exact	Non-Significant Effect
		1.8067	9	NA	3	6	0.5000	Exact	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.05208333	0.01041667	5	2.14	0.1067	Non-Significant Effect
Error	0.0875	0.004861111	18			
Total	0.1395833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.43	4.25	0.0750	Equal Variances
Variances	Levene Equality of Variance	3.64	4.25	0.0190	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.741	0.884	<0.0001	Non-normal Distribution

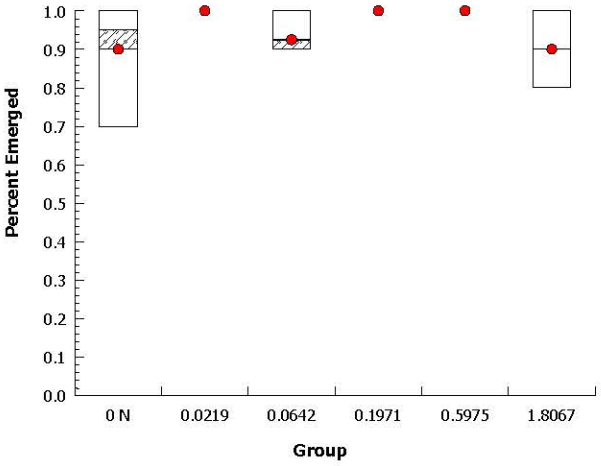
Percent Emerged Summary

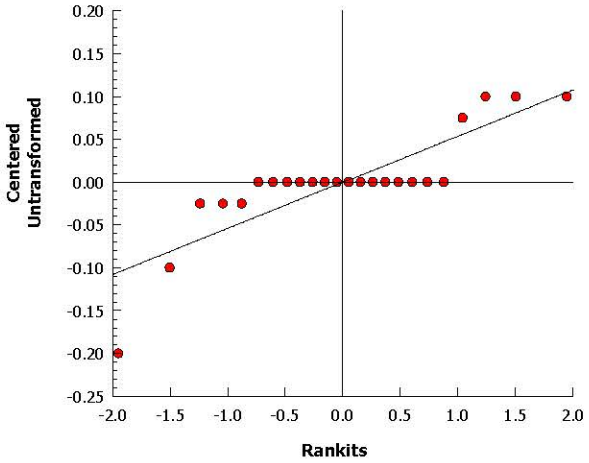
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.5975		4	1	1	1	1	1	1	0	0.0%	-11.1%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-2486-9506	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-4445-5207	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	1.8067	>1.8067	NA	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-1.8	1.64	1	-2	0.9640	Asymp	Non-Significant Effect
		0.0642	0.432	1.64	2	-2	0.9431	Asymp	Non-Significant Effect
		0.1971	-0.888	1.64	2	-2	0.9431	Asymp	Non-Significant Effect
		0.5975	-1.58	1.64	2	-2	0.9431	Asymp	Non-Significant Effect
		1.8067	0.185	1.64	2	-2	0.4266	Asymp	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.05208333	0.01041667	5	2.14	0.1067	Non-Significant Effect
Error	0.0875	0.004861111	18			
Total	0.1395833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.43	4.25	0.0750	Equal Variances
Variances	Levene Equality of Variance	3.64	4.25	0.0190	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.741	0.884	<0.0001	Non-normal Distribution

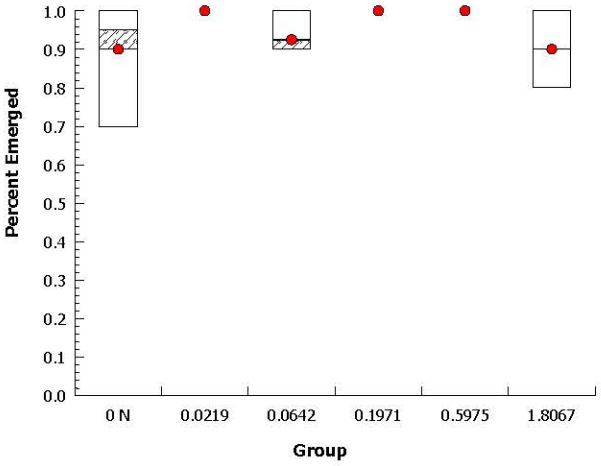
Percent Emerged Summary

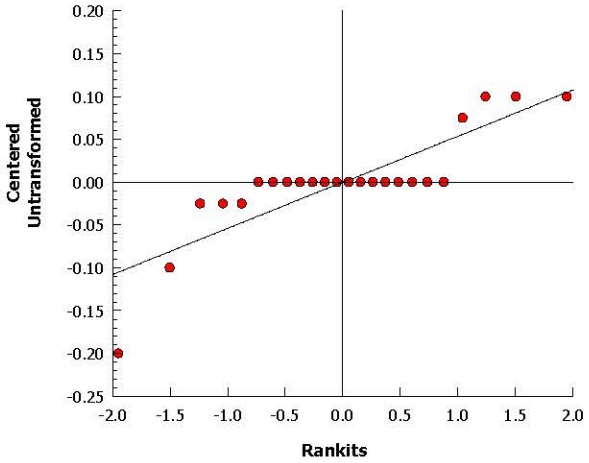
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	1	1	1	1	1	1	0	0.0%	-11.1%
0.5975		4	1	1	1	1	1	1	0	0.0%	-11.1%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	06-4445-5207	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-7853-7753	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.5%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.809	2.41	0.149	6	0.9715	CDF	Non-Significant Effect
		0.0642	-0.405	2.41	0.149	6	0.9252	CDF	Non-Significant Effect
		0.1971	-0.809	2.41	0.149	6	0.9715	CDF	Non-Significant Effect
		0.5975	-0.809	2.41	0.149	6	0.9715	CDF	Non-Significant Effect
		1.8067	0	2.41	0.149	6	0.8333	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.59	2.8	0.1264	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01208333	0.002416667	5	0.316	0.8966	Non-Significant Effect
Error	0.1375	0.007638889	18			
Total	0.1495833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.46	15.1	0.4851	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.915	0.884	0.0463	Normal Distribution

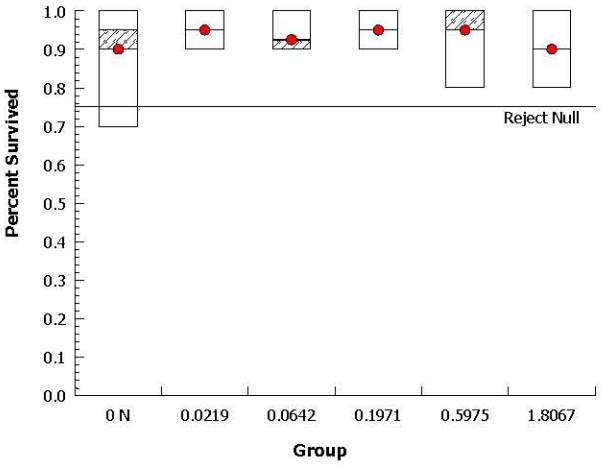
Percent Survived Summary

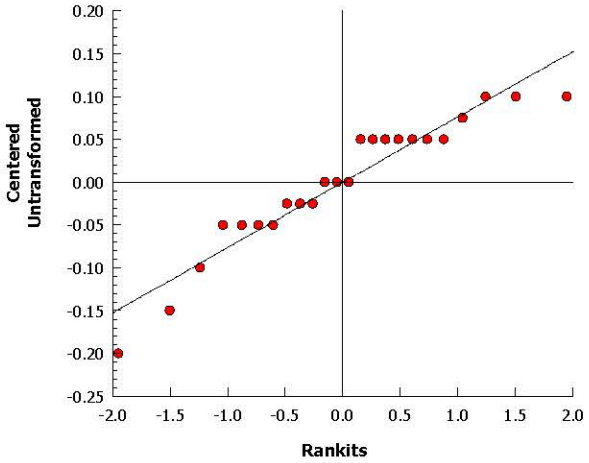
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.5975		4	0.95	0.791	1	1	0.8	1	0.05	10.5%	-5.56%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-7853-7753	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-1780-1502	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	12.8%	1.8067	>1.8067	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.809	1.73	0.107	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.405	1.82	0.112	6	>0.05	CDF	Non-Significant Effect
		0.1971	-0.607	1.85	0.114	6	>0.05	CDF	Non-Significant Effect
		0.5975	-0.674	1.86	0.115	6	>0.05	CDF	Non-Significant Effect
		1.8067	0	1.87	0.115	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.59	2.8	0.1264	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01208333	0.002416667	5	0.316	0.8966	Non-Significant Effect
Error	0.1375	0.007638889	18			
Total	0.1495833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.46	15.1	0.4851	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.915	0.884	0.0463	Normal Distribution

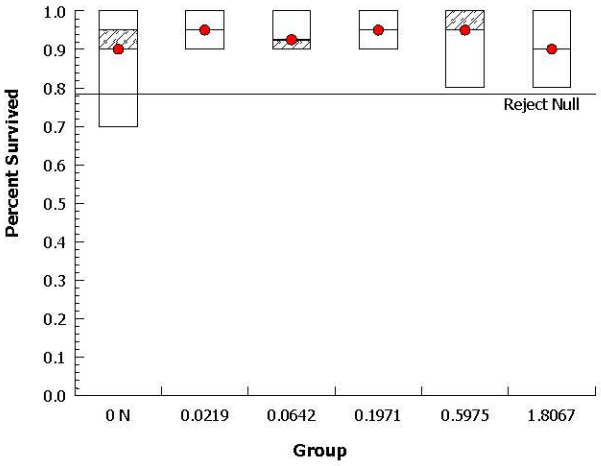
Percent Survived Summary

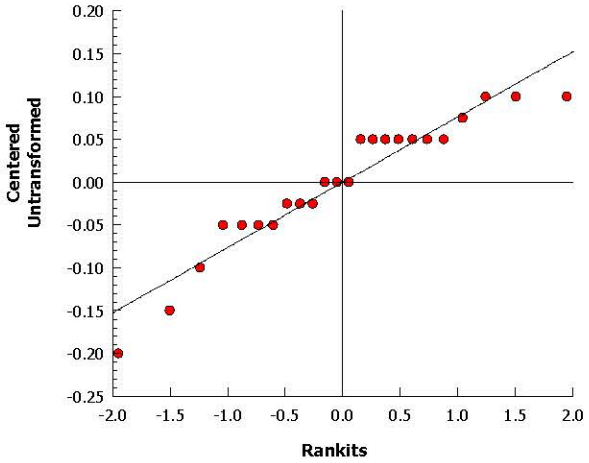
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.5975		4	0.95	0.791	1	1	0.8	1	0.05	10.5%	-5.56%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	08-1780-1502	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-7457-2099	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.5%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.809	2.41	0.149	6	0.9715	CDF	Non-Significant Effect
		0.0642	-0.405	2.41	0.149	6	0.9252	CDF	Non-Significant Effect
		0.1971	-0.809	2.41	0.149	6	0.9715	CDF	Non-Significant Effect
		0.5975	-0.809	2.41	0.149	6	0.9715	CDF	Non-Significant Effect
		1.8067	0	2.41	0.149	6	0.8333	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01208333	0.002416667	5	0.316	0.8966	Non-Significant Effect
Error	0.1375	0.007638889	18			
Total	0.1495833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.46	15.1	0.4851	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.915	0.884	0.0463	Normal Distribution

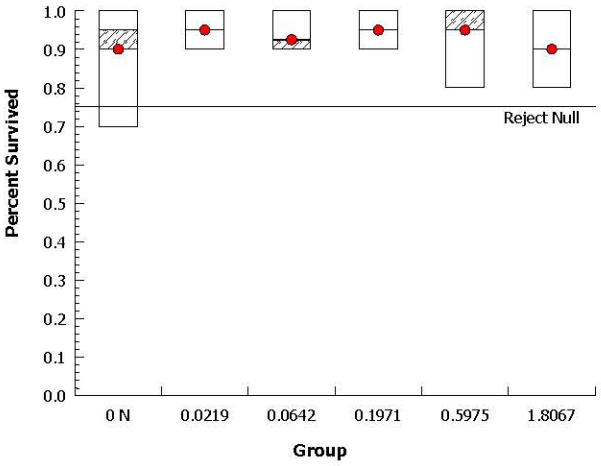
Percent Survived Summary

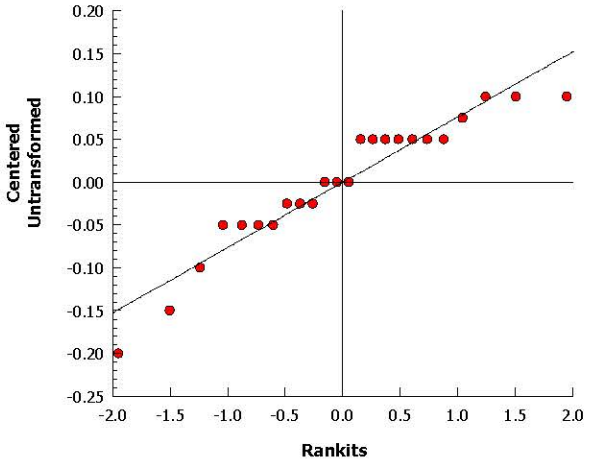
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.5975		4	0.95	0.791	1	1	0.8	1	0.05	10.5%	-5.56%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-7457-2099	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-5948-8273	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	12.8%	1.8067	>1.8067	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-0.809	1.73	0.107	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.405	1.82	0.112	6	>0.05	CDF	Non-Significant Effect
		0.1971	-0.607	1.85	0.114	6	>0.05	CDF	Non-Significant Effect
		0.5975	-0.674	1.86	0.115	6	>0.05	CDF	Non-Significant Effect
		1.8067	0	1.87	0.115	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01208333	0.002416667	5	0.316	0.8966	Non-Significant Effect
Error	0.1375	0.007638889	18			
Total	0.1495833		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.46	15.1	0.4851	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.915	0.884	0.0463	Normal Distribution

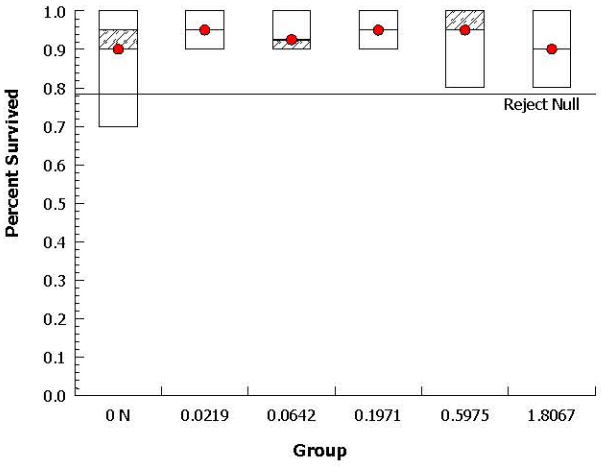
Percent Survived Summary

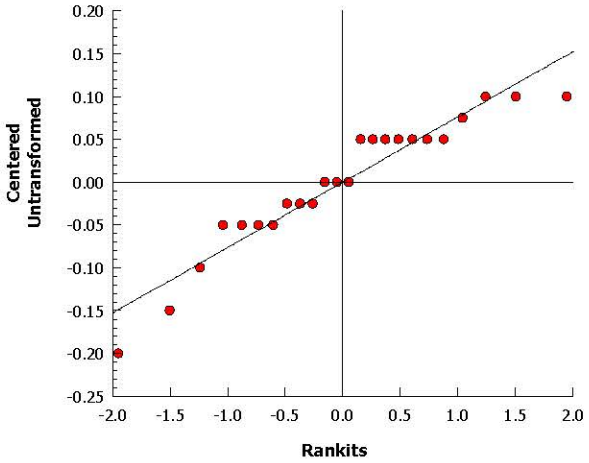
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	0.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.0642		4	0.925	0.845	1	0.9	0.9	1	0.025	5.41%	-2.78%
0.1971		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	-5.56%
0.5975		4	0.95	0.791	1	1	0.8	1	0.05	10.5%	-5.56%
1.8067		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	11-5948-8273	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-3044-2051	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
65	5950	-11900	-11900	0.0211	Yes	0.221	3.16	0.8803	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.982	0.0274	3.89
IC10	4.54	N/A	61.4
IC25	58.7	N/A	5310000
IC50	1010	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	76.6	2.45	71.8	81.4	31.3	<0.0001	Significant Parameter
C	4.21	5.73	-7.03	15.5	0.735	0.4705	Non-Significant Parameter
D	1010	8600	-15800	17900	0.117	0.9079	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	0.999853	0.999853	1	2.5	0.1291	Non-Significant
Lack of Fit	0.299343	0.099781	3	0.221	0.8803	Non-Significant
Pure Error	8.113507	0.450750	18			
Residual	8.412849	0.400612	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	8.41	32.7	0.9931	Non-Significant Heterogenity
	Likelihood Ratio GOF	8.52	32.7	0.9925	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.35	2.8	0.3007	No Outliers Detected
Variances	Bartlett Equality of Variance	2.92	11.1	0.7123	Equal Variances
	Mod Levene Equality of Variance	0.317	2.77	0.8964	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.917	0.4039	Normal Distribution
	Anderson-Darling A2 Normality	0.487	2.49	0.2282	Normal Distribution

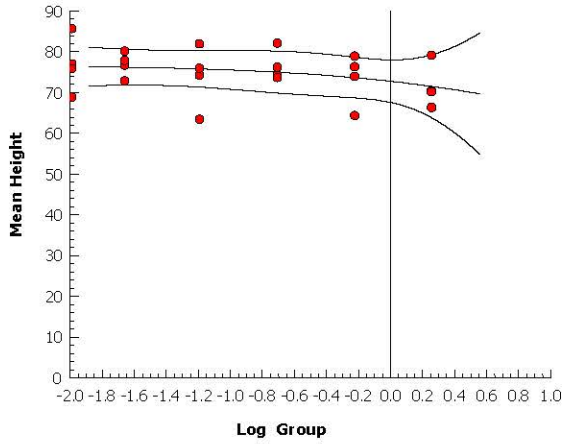
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

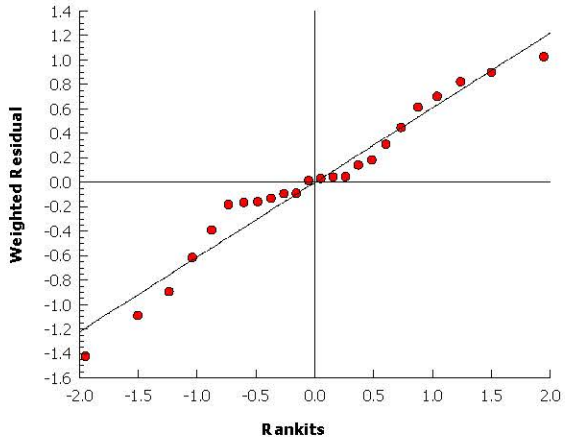
Analysis ID:	16-3044-2051	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

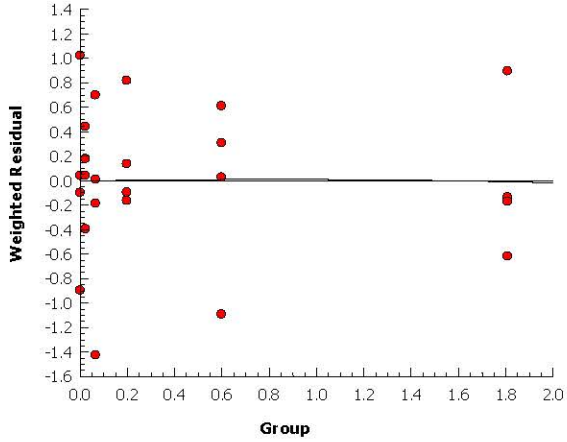
Mean Height Summary

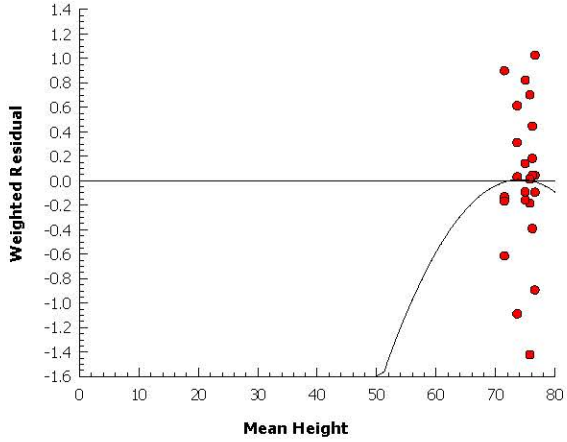
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	76.8	68.8	85.6	3.45	6.89	8.97%	0.0%
0.0219		4	76.8	72.8	80.1	1.53	3.05	3.97%	-0.03%
0.0642		4	73.9	63.4	81.9	3.85	7.71	10.4%	3.84%
0.1971		4	76.5	73.6	82.1	1.94	3.88	5.07%	0.36%
0.5975		4	73.4	64.3	78.9	3.18	6.37	8.68%	4.49%
1.8067		4	71.5	66.3	79.1	2.71	5.42	7.58%	6.93%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-9110-9523	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
65	5950	-11900	-11900	0.0211	Yes	0.221	3.16	0.8803	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.982	0.0274	3.89
IC10	4.54	N/A	61.4
IC25	58.7	N/A	5310000
IC50	1010	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	76.6	2.45	71.8	81.4	31.3	<0.0001	Significant Parameter
C	4.21	5.73	-7.03	15.5	0.735	0.4705	Non-Significant Parameter
D	1010	8600	-15800	17900	0.117	0.9079	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	0.999853	0.999853	1	2.5	0.1291	Non-Significant
Lack of Fit	0.299343	0.099781	3	0.221	0.8803	Non-Significant
Pure Error	8.113507	0.450750	18			
Residual	8.412849	0.400612	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	8.41	32.7	0.9931	Non-Significant Heterogenity
	Likelihood Ratio GOF	8.52	32.7	0.9925	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	2.92	11.1	0.7123	Equal Variances
	Mod Levene Equality of Variance	0.317	2.77	0.8964	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.917	0.4039	Normal Distribution
	Anderson-Darling A2 Normality	0.487	2.49	0.2282	Normal Distribution

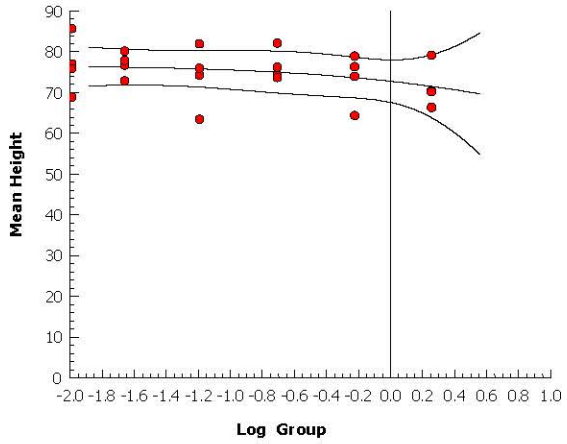
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

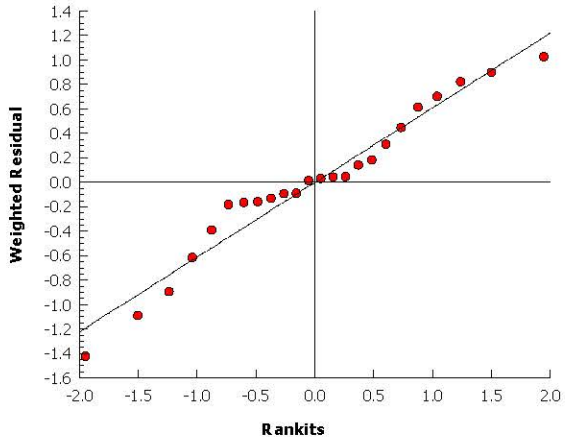
Analysis ID:	05-9110-9523	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

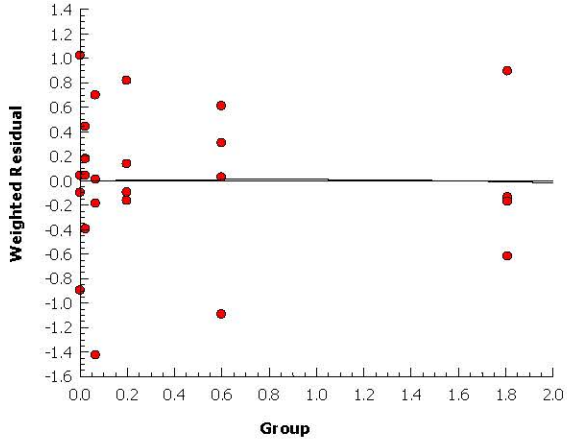
Mean Height Summary

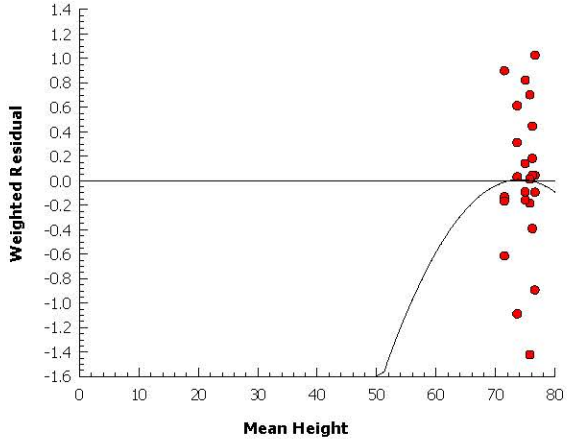
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	76.8	68.8	85.6	3.45	6.89	8.97%	0.0%
0.0219		4	76.8	72.8	80.1	1.53	3.05	3.97%	-0.03%
0.0642		4	73.9	63.4	81.9	3.85	7.71	10.4%	3.84%
0.1971		4	76.5	73.6	82.1	1.94	3.88	5.07%	0.36%
0.5975		4	73.4	64.3	78.9	3.18	6.37	8.68%	4.49%
1.8067		4	71.5	66.3	79.1	2.71	5.42	7.58%	6.93%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-3254-9519	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	-449	904	907	0.0575	Yes	0.187	3.16	0.9037	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0132	N/A	0.896
IC10	0.175	0.00198	1.9
IC25	13.1	N/A	2820
IC50	1580	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	1360	104	1160	1570	13.1	<0.0001	Significant Parameter
C	7.11	7.29	-7.19	21.4	0.974	0.3409	Non-Significant Parameter
D	1580	11800	-21500	24700	0.134	0.8946	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	109.9485	109.9485	1	3.4	0.0792	Non-Significant
Lack of Fit	20.52896	6.842987	3	0.187	0.9037	Non-Significant
Pure Error	657.7869	36.54372	18			
Residual	678.3159	32.30075	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	678	32.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	682	32.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.22	2.8	0.4784	No Outliers Detected
Variances	Bartlett Equality of Variance	3.97	11.1	0.5536	Equal Variances
	Mod Levene Equality of Variance	0.385	2.77	0.8525	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.917	0.6628	Normal Distribution
	Anderson-Darling A2 Normality	0.323	2.49	0.5474	Normal Distribution

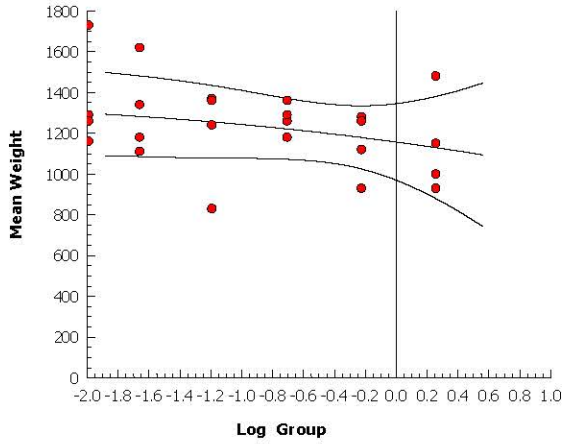
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

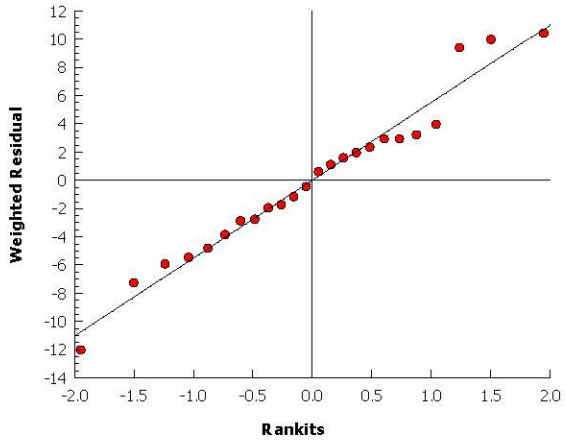
Analysis ID:	13-3254-9519	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

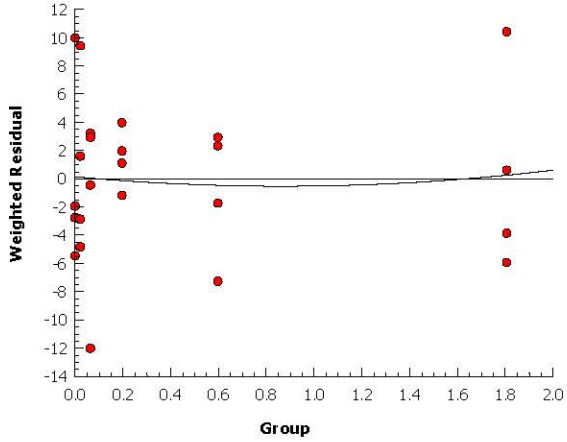
Mean Weight Summary

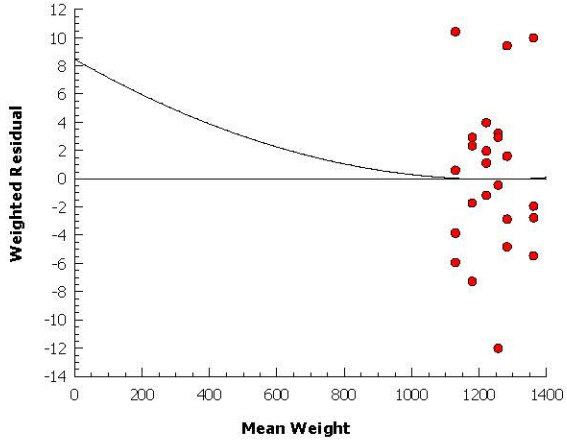
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	1360	1160	1730	126	253	18.6%	0.0%
0.0219		4	1310	1110	1620	113	226	17.3%	3.49%
0.0642		4	1200	830	1370	127	254	21.1%	11.8%
0.1971		4	1270	1180	1360	37.3	74.6	5.86%	6.43%
0.5975		4	1150	930	1280	80.8	162	14.1%	15.6%
1.8067		4	1140	930	1480	122	245	21.5%	16.2%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-5758-2449	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	-449	904	907	0.0575	Yes	0.187	3.16	0.9037	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0132	N/A	0.896
IC10	0.175	0.00198	1.9
IC25	13.1	N/A	2820
IC50	1580	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	1360	104	1160	1570	13.1	<0.0001	Significant Parameter
C	7.11	7.29	-7.19	21.4	0.974	0.3409	Non-Significant Parameter
D	1580	11800	-21500	24700	0.134	0.8946	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	109.9485	109.9485	1	3.4	0.0792	Non-Significant
Lack of Fit	20.52896	6.842987	3	0.187	0.9037	Non-Significant
Pure Error	657.7869	36.54372	18			
Residual	678.3159	32.30075	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	678	32.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	682	32.7	<0.0001	Significant Heterogenity
Variances	Bartlett Equality of Variance	3.97	11.1	0.5536	Equal Variances
	Mod Levene Equality of Variance	0.385	2.77	0.8525	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.917	0.6628	Normal Distribution
	Anderson-Darling A2 Normality	0.323	2.49	0.5474	Normal Distribution

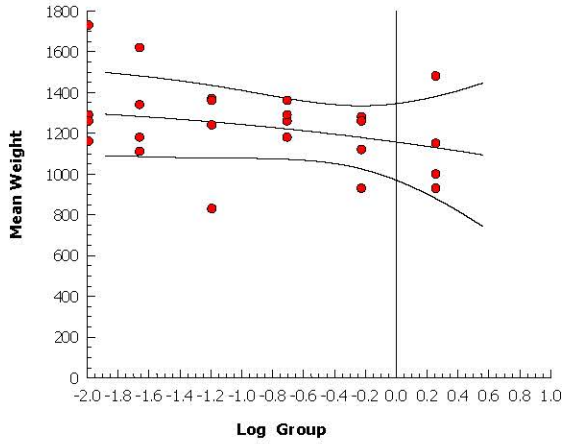
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

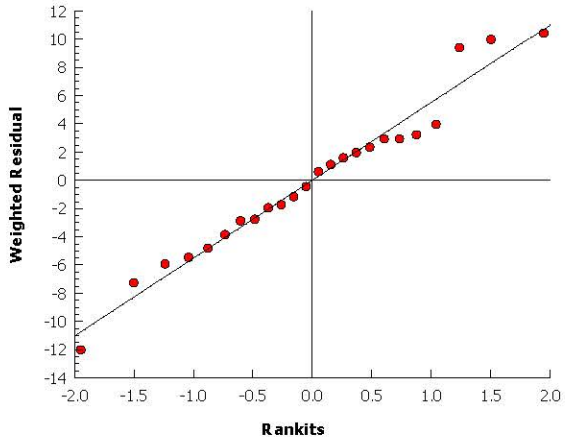
Analysis ID:	11-5758-2449	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

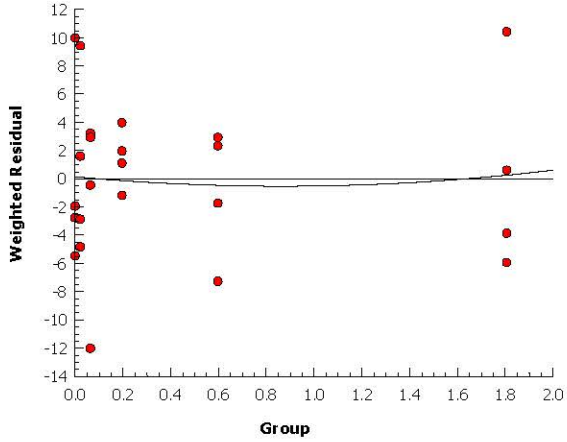
Mean Weight Summary

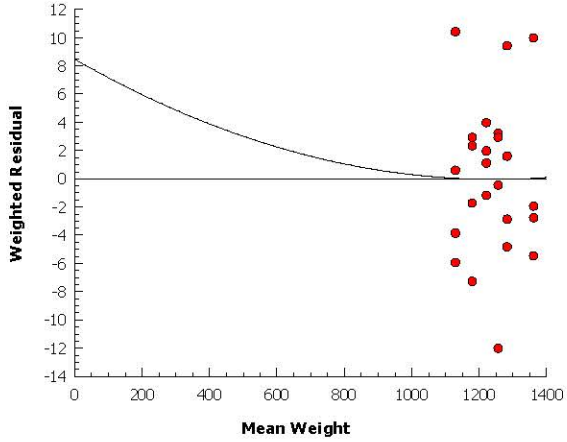
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	1360	1160	1730	126	253	18.6%	0.0%
0.0219		4	1310	1110	1620	113	226	17.3%	3.49%
0.0642		4	1200	830	1370	127	254	21.1%	11.8%
0.1971		4	1270	1180	1360	37.3	74.6	5.86%	6.43%
0.5975		4	1150	930	1280	80.8	162	14.1%	15.6%
1.8067		4	1140	930	1480	122	245	21.5%	16.2%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-8958-0077	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.1	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
200	-61.4	130	132	0.257	2.98E-07	0.0416	-0.178	3.16		Lack of Fit Not Tested

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.08	0.0333	0.0148	0.145	2.4	0.0255	Significant Parameter
Slope	3350000	30700	3290000	3410000	109	<0.0001	Significant Parameter
Intercept	-861000	7890	-876000	-845000	-109	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	2.838843	2.838843	1	3	0.0981	Non-Significant
Lack of Fit	-0.60762	-0.20254	3	-0.178		
Pure Error	20.49629	1.138682	18			
Residual	19.88867	0.94708	21			

Residual Analysis

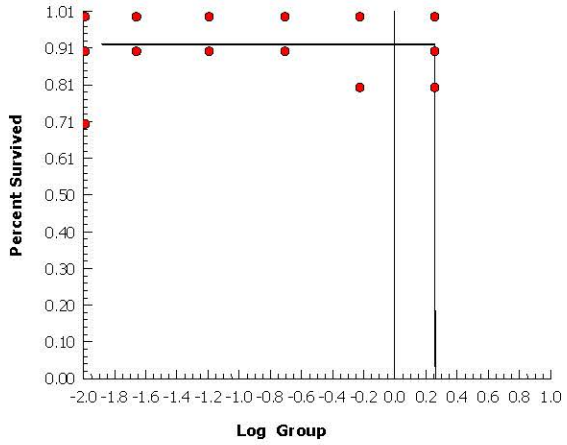
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	19.9	32.7	0.5284	Non-Significant Heterogenity
	Likelihood Ratio GOF	25.6	32.7	0.2218	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.19	2.8	0.5127	No Outliers Detected
Variances	Mod Levene Equality of Variance	0.658	2.77	0.6597	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.931	0.917	0.1041	Normal Distribution
	Anderson-Darling A2 Normality	0.782	2.49	0.0422	Non-normal Distribution

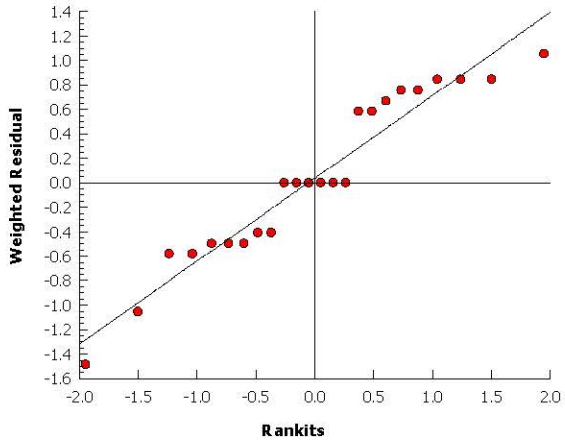
Percent Survived Summary

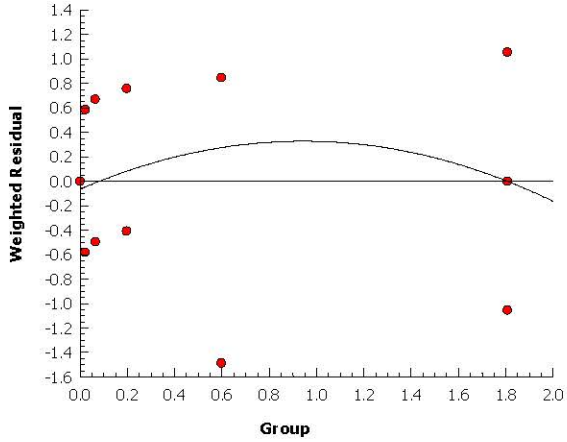
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.9	0.7	1	0.0707	0.141	15.7%	0.0%	36	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	-5.56%	38	40
0.0642		4	0.925	0.9	1	0.025	0.05	5.41%	-2.78%	37	40
0.1971		4	0.95	0.9	1	0.0289	0.0577	6.08%	-5.56%	38	40
0.5975		4	0.95	0.8	1	0.05	0.1	10.5%	-5.56%	38	40
1.8067		4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40

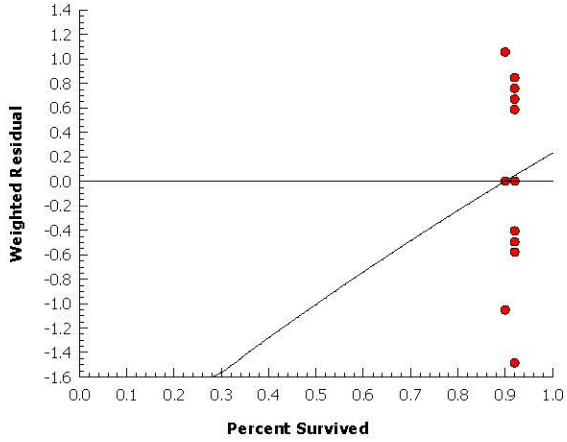
Analysis ID:	20-8958-0077	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:49	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-0813-3707	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-7563-4306	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	L. Eisenhauer
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:		**Species:**	Lolium perenne	**Brine:**	
Duration:	NA	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	09-3182-3452	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:		**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Batch Note: Dicamba (BAPMA Formulation, 47.86%), 100094
Sample Note: Dicamba (BAPMA Formulation, 47.86%), 100094

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.1	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
100	-61.4	130	132	0.257	6.09E-07	0.0416	-0.178	3.16		Lack of Fit Not Tested

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.08	0.0333	0.0148	0.145	2.4	0.0255	Significant Parameter
Slope	1640000	30700	1580000	1700000	53.5	<0.0001	Significant Parameter
Intercept	-422000	7890	-437000	-406000	-53.5	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	2.83884	2.83884	1	3	0.0981	Non-Significant
Lack of Fit	-0.60761	-0.20254	3	-0.178		
Pure Error	20.49629	1.138682	18			
Residual	19.88867	0.94708	21			

Residual Analysis

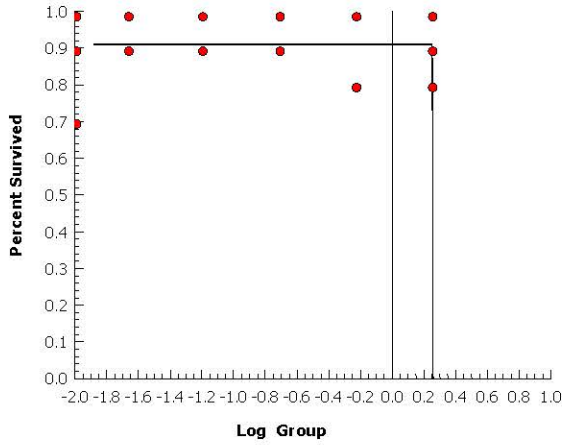
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	19.9	32.7	0.5283	Non-Significant Heterogenity
	Likelihood Ratio GOF	25.6	32.7	0.2218	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	0.658	2.77	0.6597	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.931	0.917	0.1041	Normal Distribution
	Anderson-Darling A2 Normality	0.782	2.49	0.0422	Non-normal Distribution

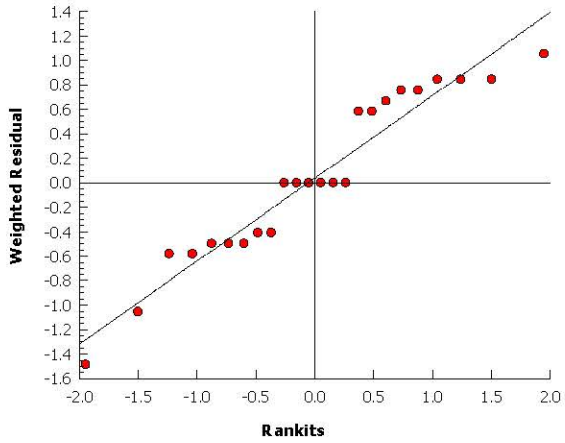
Percent Survived Summary

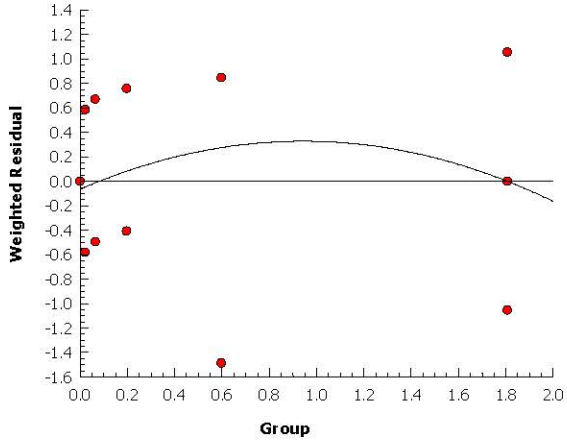
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.9	0.7	1	0.0707	0.141	15.7%	0.0%	36	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	-5.56%	38	40
0.0642		4	0.925	0.9	1	0.025	0.05	5.41%	-2.78%	37	40
0.1971		4	0.95	0.9	1	0.0289	0.0577	6.08%	-5.56%	38	40
0.5975		4	0.95	0.8	1	0.05	0.1	10.5%	-5.56%	38	40
1.8067		4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40

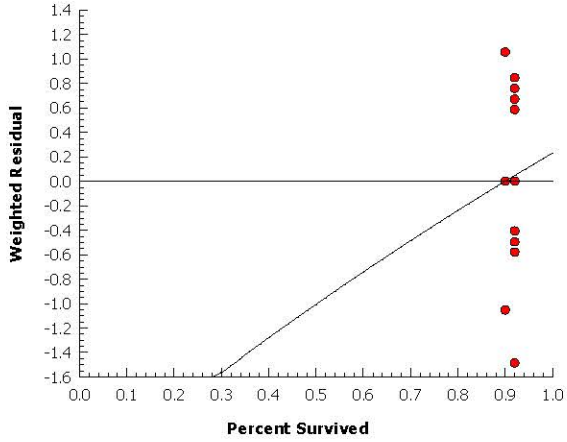
Analysis ID:	06-0813-3707	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:34	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
01-0403-9875	Mean Height	0.1971	0.5975	0.3432	30.7%		Dunnett Multiple Comparison Test
07-9347-2620	Mean Height	0.1971	0.5975	0.3432	30.7%		Dunnett Multiple Comparison Test
14-4987-8123	Mean Height	0.1971	0.5975	0.3432	24.9%		Dunnett Multiple Comparison Test
08-2394-4518	Mean Height	0.1971	0.5975	0.3432	18.7%		Williams Multiple Comparison Test
15-7318-7882	Mean Height	0.1971	0.5975	0.3432	23.3%		Williams Multiple Comparison Test
21-2786-2553	Mean Height	0.1971	0.5975	0.3432	23.3%		Williams Multiple Comparison Test
04-0007-2161	Mean Weight	0.1971	0.5975	0.3432	47.3%		Dunnett Multiple Comparison Test
16-1285-9294	Mean Weight	0.1971	0.5975	0.3432	47.3%		Dunnett Multiple Comparison Test
01-3665-6523	Mean Weight	0.0642	0.1971	0.1125	35.9%		Williams Multiple Comparison Test
19-5078-6856	Mean Weight	0.0642	0.1971	0.1125	35.9%		Williams Multiple Comparison Test
16-4310-8739	Percent Emerged	0.5975	1.8067	1.039	30.5%		Dunnett Multiple Comparison Test
19-4303-3962	Percent Emerged	0.5975	1.8067	1.039	30.5%		Dunnett Multiple Comparison Test
02-9968-2219	Percent Emerged	0.5975	1.8067	1.039	22.7%		Williams Multiple Comparison Test
19-6593-7441	Percent Emerged	0.5975	1.8067	1.039	22.7%		Williams Multiple Comparison Test
00-4792-5674	Percent Survived	0.1971	0.5975	0.3432	30.9%		Dunnett Multiple Comparison Test
20-6894-1309	Percent Survived	0.1971	0.5975	0.3432	30.9%		Dunnett Multiple Comparison Test
14-7976-9063	Percent Survived	0.1971	0.5975	0.3432	23.4%		Williams Multiple Comparison Test
20-2972-5275	Percent Survived	0.1971	0.5975	0.3432	23.4%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
01-2846-0899	Mean Height	IC5	0.0706	N/A	0.12		Nonlinear Regression
		IC10	0.104	0.0149	0.164		
		IC25	0.196	0.126	0.276		
		IC50	0.399	0.317	0.504		
14-7769-2475	Mean Height	IC5	0.0475	N/A	0.121		Nonlinear Regression
		IC10	0.0822	N/A	0.186		
		IC25	0.206	0.0955	0.361		
		IC50	0.569	0.347	0.932		
14-8398-5370	Mean Height	IC5	0.0475	N/A	0.121		Nonlinear Regression
		IC10	0.0822	N/A	0.186		
		IC25	0.206	0.0955	0.361		
		IC50	0.569	0.347	0.932		
02-2844-1064	Mean Weight	IC5	0.0318	N/A	0.0946		Nonlinear Regression
		IC10	0.0532	N/A	0.139		
		IC25	0.126	0.0331	0.272		
		IC50	0.329	0.194	0.558		
14-4993-8257	Mean Weight	IC5	0.0318	N/A	0.0946		Nonlinear Regression
		IC10	0.0532	N/A	0.139		
		IC25	0.126	0.0331	0.272		
		IC50	0.329	0.194	0.558		
15-5893-4183	Mean Weight	IC5	0.0445	N/A	0.0857		Nonlinear Regression
		IC10	0.0647	N/A	0.114		
		IC25	0.121	0.0608	0.192		
		IC50	0.242	0.174	0.337		
03-3496-9979	Percent Emerged	EC5	0.597	N/A	N/A		Linear Regression (MLE)
		EC10	0.755	N/A	N/A		
		EC25	1.12	N/A	N/A		
		EC50	1.73	N/A	N/A		
17-3029-5206	Percent Emerged	EC5	0.597	N/A	N/A		Linear Regression (MLE)
		EC10	0.755	N/A	N/A		
		EC25	1.12	N/A	N/A		
		EC50	1.73	N/A	N/A		
10-9543-9391	Percent Emerged	EC50	1.62	1.14	2.29		Trimmed Spearman-Kärber
21-1358-3006	Percent Emerged	EC50	1.62	1.14	2.29		Trimmed Spearman-Kärber
15-3156-4028	Percent Survived	EC5	0.126	0.00231	0.238		Linear Regression (MLE)
		EC10	0.166	0.00679	0.283		
		EC25	0.265	0.04	0.39		
		EC50	0.444	0.231	0.694		
19-7257-1811	Percent Survived	EC5	0.126	0.00231	0.238		Linear Regression (MLE)
		EC10	0.166	0.00679	0.283		
		EC25	0.265	0.04	0.39		
		EC50	0.444	0.231	0.694		
04-6337-1449	Percent Survived	EC50	0.413	0.326	0.523		Trimmed Spearman-Kärber
15-6393-8166	Percent Survived	EC50	0.413	0.326	0.523		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	11.8	10.9	12.7	11.3	12.6	0.287	0.574	4.85%	0.0%
0	Negative Control	4	10.1	7.31	12.9	7.5	11.2	0.877	1.75	17.4%	14.6%
0.0024		4	11	9.62	12.5	9.8	11.7	0.448	0.896	8.11%	6.55%
0.0071		4	11.9	10.5	13.3	11	12.8	0.442	0.883	7.42%	-0.63%
0.0219		4	12.1	9.93	14.3	10.5	13.7	0.691	1.38	11.4%	-2.54%
0.0642		4	9.57	6.89	12.3	8.2	12	0.845	1.69	17.6%	19.0%
0.1971		4	8.73	7.37	10.1	7.5	9.3	0.425	0.85	9.74%	26.2%
0.5975		4	5.43	-0.174	11	2.7	10.3	1.76	3.52	64.9%	54.1%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	96.1	49.3	143	67.1	133	14.7	29.4	30.6%	0.0%
0	Negative Control	4	77.1	50.7	104	58.8	98.3	8.29	16.6	21.5%	19.8%
0.0024		4	86.5	65.4	108	71.1	102	6.63	13.3	15.3%	10.1%
0.0071		4	90.1	64	116	70	110	8.18	16.4	18.2%	6.34%
0.0219		4	99.2	52.8	146	63.8	123	14.6	29.2	29.4%	-3.15%
0.0642		4	82	56.5	107	58.3	92.9	7.99	16	19.5%	14.7%
0.1971		4	48.7	18	79.3	21.7	67.5	9.64	19.3	39.6%	49.4%
0.5975		4	32.5	-15.6	80.6	10	76.7	15.1	30.2	93.0%	66.2%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.825	0.625	1	0.7	1	0.0629	0.126	15.3%	0.0%
0	Negative Control	4	0.825	0.553	1	0.6	1	0.0854	0.171	20.7%	0.0%
0.0024		4	0.75	0.474	1	0.6	0.9	0.0866	0.173	23.1%	9.09%
0.0071		4	0.85	0.758	0.942	0.8	0.9	0.0289	0.0577	6.79%	-3.03%
0.0219		4	0.75	0.591	0.909	0.6	0.8	0.05	0.1	13.3%	9.09%
0.0642		4	0.725	0.573	0.877	0.6	0.8	0.0479	0.0957	13.2%	12.1%
0.1971		4	0.85	0.645	1	0.7	1	0.0645	0.129	15.2%	-3.03%
0.5975		4	0.75	0.545	0.955	0.6	0.9	0.0645	0.129	17.2%	9.09%
1.8067		4	0.375	0.0222	0.728	0.1	0.6	0.111	0.222	59.1%	54.5%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.75	0.545	0.955	0.6	0.9	0.0645	0.129	17.2%	0.0%
0	Negative Control	4	0.7	0.57	0.83	0.6	0.8	0.0408	0.0816	11.7%	6.67%
0.0024		4	0.725	0.397	1	0.5	0.9	0.103	0.206	28.4%	3.33%
0.0071		4	0.825	0.745	0.905	0.8	0.9	0.025	0.05	6.06%	-10.0%
0.0219		4	0.675	0.523	0.827	0.6	0.8	0.0479	0.0957	14.2%	10.0%
0.0642		4	0.675	0.523	0.827	0.6	0.8	0.0479	0.0957	14.2%	10.0%
0.1971		4	0.625	0.353	0.897	0.4	0.8	0.0854	0.171	27.3%	16.7%
0.5975		4	0.25	0.0909	0.409	0.1	0.3	0.05	0.1	40.0%	66.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	11.3	11.5	12.6	11.9
0	Negative Control	11.1	7.5	10.6	11.2
0.0024		11.7	11.7	11	9.8
0.0071		12.8	11.3	11	12.5
0.0219		12.7	10.5	13.7	11.6
0.0642		8.7	12	8.2	9.4
0.1971		9.3	8.8	9.3	7.5
0.5975		5.7	3	10.3	2.7
1.8067					

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	67.1	78.3	133	107
0	Negative Control	80	58.8	71.4	98.3
0.0024		102	81.1	92	71.1
0.0071		88.9	110	70	91.3
0.0219		123	86.7	123	63.8
0.0642		86.7	90	58.3	92.9
0.1971		52.5	67.5	52.9	21.7
0.5975		26.7	10	76.7	16.7
1.8067					

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.7	0.8	1
0	Negative Control	0.9	0.8	1	0.6
0.0024		0.6	0.9	0.6	0.9
0.0071		0.9	0.8	0.9	0.8
0.0219		0.6	0.8	0.8	0.8
0.0642		0.6	0.8	0.8	0.7
0.1971		1	0.7	0.8	0.9
0.5975		0.6	0.9	0.8	0.7
1.8067		0.5	0.1	0.6	0.3

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.7	0.6	0.8	0.9
0	Negative Control	0.7	0.8	0.7	0.6
0.0024		0.6	0.9	0.5	0.9
0.0071		0.9	0.8	0.8	0.8
0.0219		0.6	0.6	0.7	0.8
0.0642		0.6	0.8	0.6	0.7
0.1971		0.8	0.4	0.7	0.6
0.5975		0.3	0.1	0.3	0.3
1.8067					

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-4987-8123	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	24.9%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-1	2.46	2.33	6	0.9882	CDF	Non-Significant Effect
		0.0071	-1.9	2.46	2.33	6	0.9993	CDF	Non-Significant Effect
		0.0219	-2.14	2.46	2.33	6	0.9997	CDF	Non-Significant Effect
		0.0642	0.554	2.46	2.33	6	0.6631	CDF	Non-Significant Effect
		0.1971	1.45	2.46	2.33	6	0.2700	CDF	Non-Significant Effect
		0.5975*	6.16	2.46	2.52	5	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	158.6794	26.44656	6	14.7	<0.0001	Significant Effect
Error	35.8925	1.794625	20			
Total	194.5719		26			

Distributional Tests

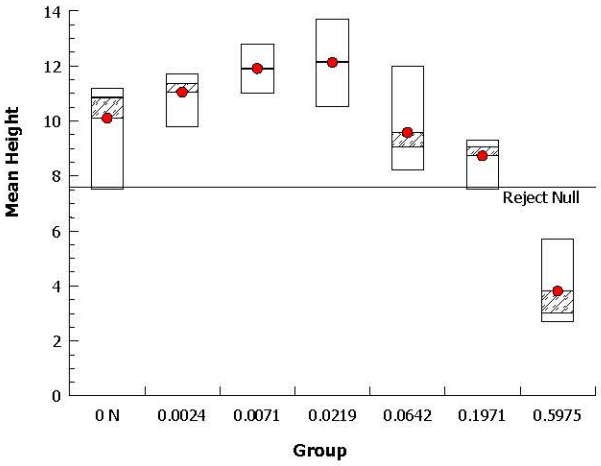
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.18	16.8	0.7864	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.979	0.894	0.8359	Normal Distribution

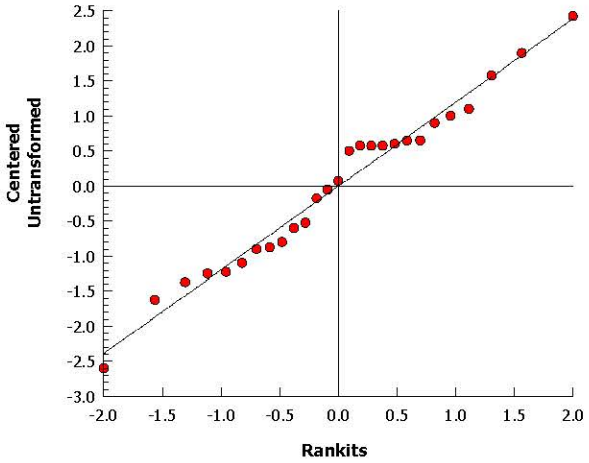
Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.1	7.31	12.9	10.9	7.5	11.2	0.877	17.4%	0.0%
0.0024		4	11	9.62	12.5	11.4	9.8	11.7	0.448	8.11%	-9.41%
0.0071		4	11.9	10.5	13.3	11.9	11	12.8	0.442	7.42%	-17.8%
0.0219		4	12.1	9.93	14.3	12.1	10.5	13.7	0.691	11.4%	-20.0%
0.0642		4	9.57	6.89	12.3	9.05	8.2	12	0.845	17.6%	5.2%
0.1971		4	8.73	7.37	10.1	9.05	7.5	9.3	0.425	9.74%	13.6%
0.5975		3	3.8	-0.304	7.9	3	2.7	5.7	0.954	43.5%	62.4%

Analysis ID:	14-4987-8123	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-0403-9875	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.7%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.749	2.45	3.11	6	0.9744	CDF	Non-Significant Effect
		0.0071	-1.42	2.45	3.11	6	0.9964	CDF	Non-Significant Effect
		0.0219	-1.6	2.45	3.11	6	0.9980	CDF	Non-Significant Effect
		0.0642	0.414	2.45	3.11	6	0.7165	CDF	Non-Significant Effect
		0.1971	1.08	2.45	3.11	6	0.4159	CDF	Non-Significant Effect
		0.5975*	3.69	2.45	3.11	6	0.0035	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.08	2.88	0.0187	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	127.2086	21.20143	6	6.59	0.0005	Significant Effect
Error	67.58	3.218095	21			
Total	194.7886		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.69	16.8	0.1385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.934	0.897	0.0792	Normal Distribution

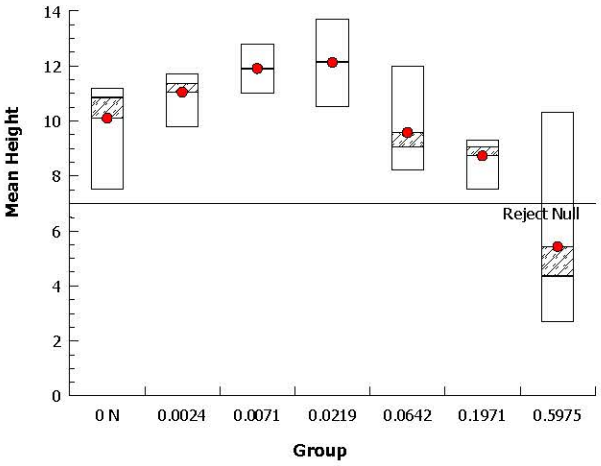
Mean Height Summary

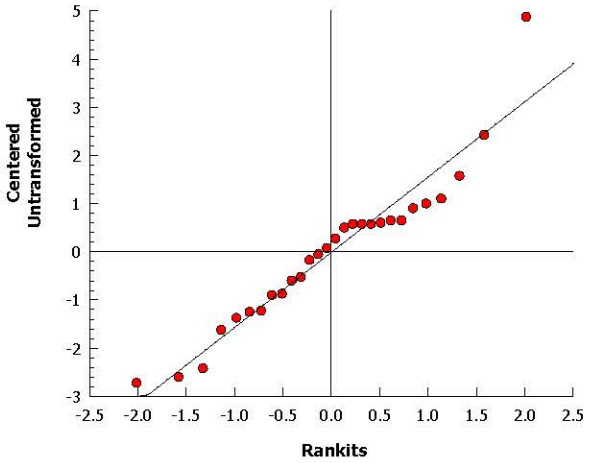
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.1	7.31	12.9	10.9	7.5	11.2	0.877	17.4%	0.0%
0.0024		4	11	9.62	12.5	11.4	9.8	11.7	0.448	8.11%	-9.41%
0.0071		4	11.9	10.5	13.3	11.9	11	12.8	0.442	7.42%	-17.8%
0.0219		4	12.1	9.93	14.3	12.1	10.5	13.7	0.691	11.4%	-20.0%
0.0642		4	9.57	6.89	12.3	9.05	8.2	12	0.845	17.6%	5.2%
0.1971		4	8.73	7.37	10.1	9.05	7.5	9.3	0.425	9.74%	13.6%
0.5975		4	5.43	-0.174	11	4.35	2.7	10.3	1.76	64.9%	46.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	01-0403-9875	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-2394-4518	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	18.7%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-1	1.73	1.63	6	>0.05	CDF	Non-Significant Effect
		0.0071	-1.45	1.81	1.71	6	>0.05	CDF	Non-Significant Effect
		0.0219	-1.68	1.83	1.74	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.554	1.85	1.75	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.45	1.86	1.76	6	>0.05	CDF	Non-Significant Effect
		0.5975*	6.16	1.85	1.89	5	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	158.6794	26.44656	6	14.7	<0.0001	Significant Effect
Error	35.8925	1.794625	20			
Total	194.5719		26			

Distributional Tests

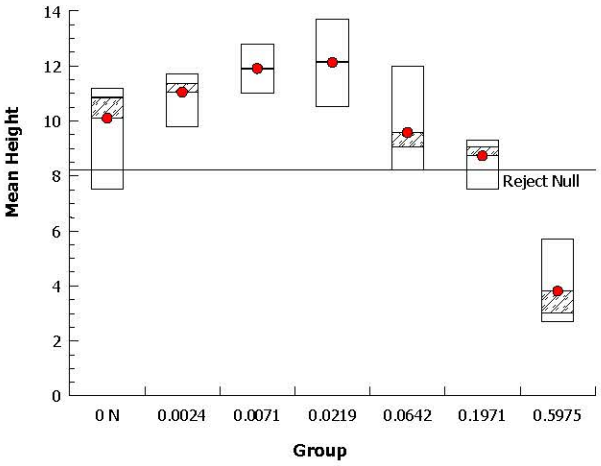
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.18	16.8	0.7864	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.979	0.894	0.8359	Normal Distribution

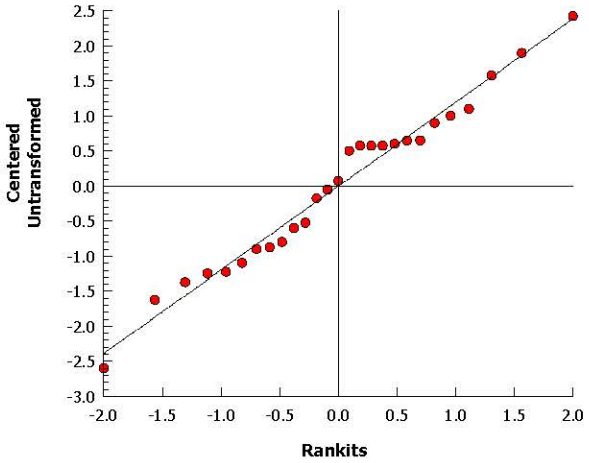
Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.1	7.31	12.9	10.9	7.5	11.2	0.877	17.4%	0.0%
0.0024		4	11	9.62	12.5	11.4	9.8	11.7	0.448	8.11%	-9.41%
0.0071		4	11.9	10.5	13.3	11.9	11	12.8	0.442	7.42%	-17.8%
0.0219		4	12.1	9.93	14.3	12.1	10.5	13.7	0.691	11.4%	-20.0%
0.0642		4	9.57	6.89	12.3	9.05	8.2	12	0.845	17.6%	5.2%
0.1971		4	8.73	7.37	10.1	9.05	7.5	9.3	0.425	9.74%	13.6%
0.5975		3	3.8	-0.304	7.9	3	2.7	5.7	0.954	43.5%	62.4%

Analysis ID:	08-2394-4518	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	21-2786-2553	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.3%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.749	1.72	2.18	6	>0.05	CDF	Non-Significant Effect
		0.0071	-1.08	1.8	2.29	6	>0.05	CDF	Non-Significant Effect
		0.0219	-1.25	1.83	2.32	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.414	1.84	2.34	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.08	1.85	2.35	6	>0.05	CDF	Non-Significant Effect
		0.5975*	3.69	1.86	2.35	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.08	2.88	0.0187	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	127.2086	21.20143	6	6.59	0.0005	Significant Effect
Error	67.58	3.218095	21			
Total	194.7886		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.69	16.8	0.1385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.934	0.897	0.0792	Normal Distribution

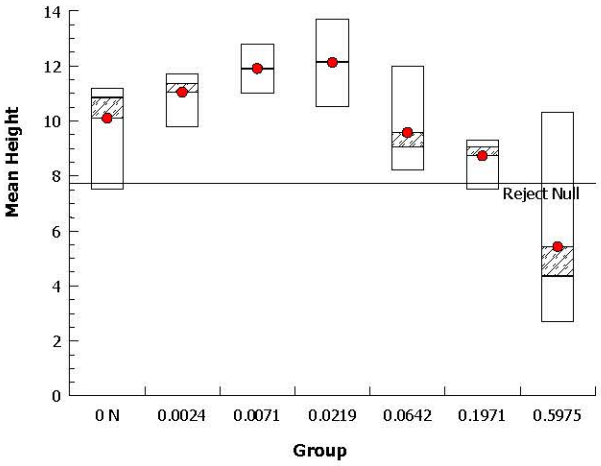
Mean Height Summary

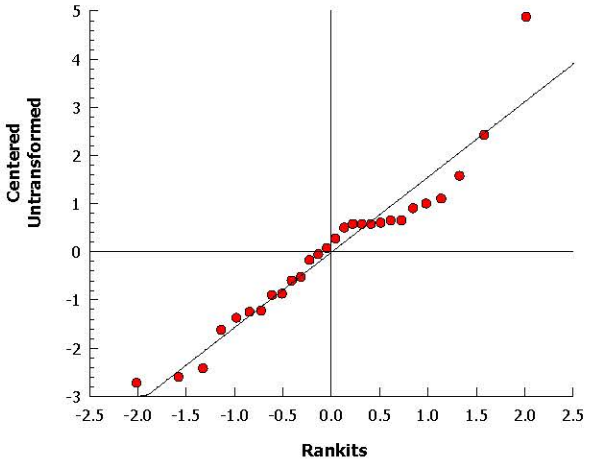
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.1	7.31	12.9	10.9	7.5	11.2	0.877	17.4%	0.0%
0.0024		4	11	9.62	12.5	11.4	9.8	11.7	0.448	8.11%	-9.41%
0.0071		4	11.9	10.5	13.3	11.9	11	12.8	0.442	7.42%	-17.8%
0.0219		4	12.1	9.93	14.3	12.1	10.5	13.7	0.691	11.4%	-20.0%
0.0642		4	9.57	6.89	12.3	9.05	8.2	12	0.845	17.6%	5.2%
0.1971		4	8.73	7.37	10.1	9.05	7.5	9.3	0.425	9.74%	13.6%
0.5975		4	5.43	-0.174	11	4.35	2.7	10.3	1.76	64.9%	46.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	21-2786-2553	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-9347-2620	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.7%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.749	2.45	3.11	6	0.9744	CDF	Non-Significant Effect
		0.0071	-1.42	2.45	3.11	6	0.9964	CDF	Non-Significant Effect
		0.0219	-1.6	2.45	3.11	6	0.9980	CDF	Non-Significant Effect
		0.0642	0.414	2.45	3.11	6	0.7165	CDF	Non-Significant Effect
		0.1971	1.08	2.45	3.11	6	0.4159	CDF	Non-Significant Effect
		0.5975*	3.69	2.45	3.11	6	0.0035	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	127.2086	21.20143	6	6.59	0.0005	Significant Effect
Error	67.58	3.218095	21			
Total	194.7886		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.69	16.8	0.1385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.934	0.897	0.0792	Normal Distribution

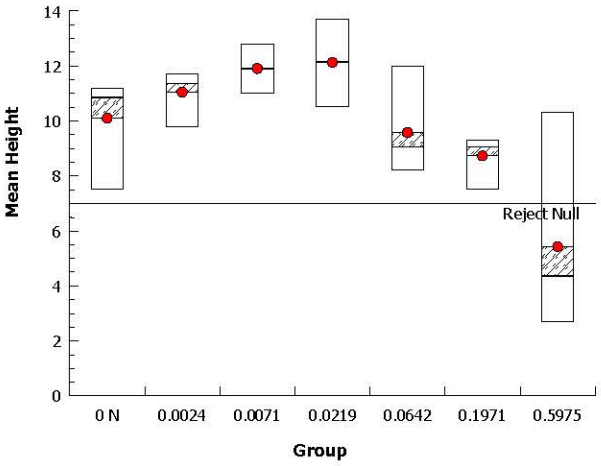
Mean Height Summary

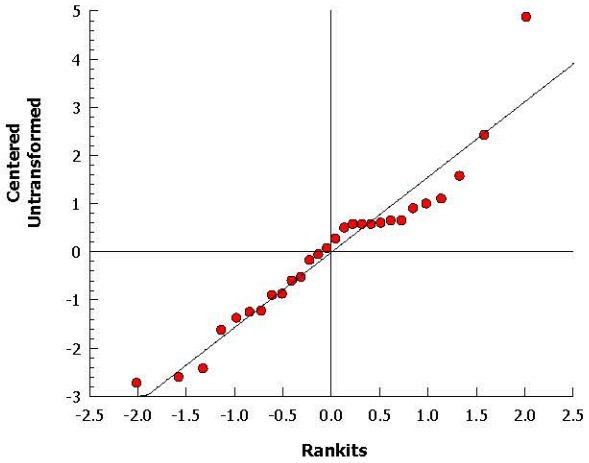
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.1	7.31	12.9	10.9	7.5	11.2	0.877	17.4%	0.0%
0.0024		4	11	9.62	12.5	11.4	9.8	11.7	0.448	8.11%	-9.41%
0.0071		4	11.9	10.5	13.3	11.9	11	12.8	0.442	7.42%	-17.8%
0.0219		4	12.1	9.93	14.3	12.1	10.5	13.7	0.691	11.4%	-20.0%
0.0642		4	9.57	6.89	12.3	9.05	8.2	12	0.845	17.6%	5.2%
0.1971		4	8.73	7.37	10.1	9.05	7.5	9.3	0.425	9.74%	13.6%
0.5975		4	5.43	-0.174	11	4.35	2.7	10.3	1.76	64.9%	46.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	07-9347-2620	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-7318-7882	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.3%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.749	1.72	2.18	6	>0.05	CDF	Non-Significant Effect
		0.0071	-1.08	1.8	2.29	6	>0.05	CDF	Non-Significant Effect
		0.0219	-1.25	1.83	2.32	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.414	1.84	2.34	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.08	1.85	2.35	6	>0.05	CDF	Non-Significant Effect
		0.5975*	3.69	1.86	2.35	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	127.2086	21.20143	6	6.59	0.0005	Significant Effect
Error	67.58	3.218095	21			
Total	194.7886		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.69	16.8	0.1385	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.934	0.897	0.0792	Normal Distribution

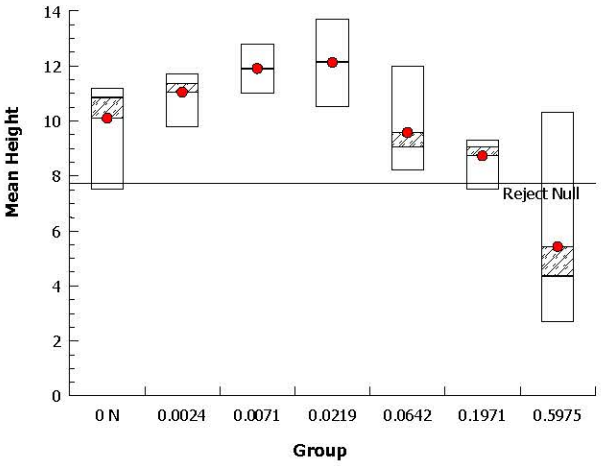
Mean Height Summary

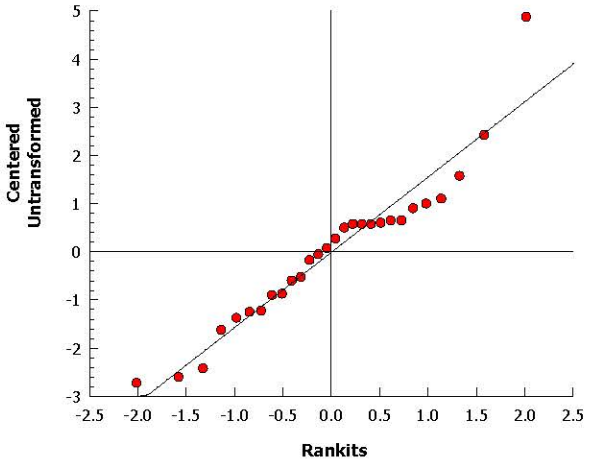
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.1	7.31	12.9	10.9	7.5	11.2	0.877	17.4%	0.0%
0.0024		4	11	9.62	12.5	11.4	9.8	11.7	0.448	8.11%	-9.41%
0.0071		4	11.9	10.5	13.3	11.9	11	12.8	0.442	7.42%	-17.8%
0.0219		4	12.1	9.93	14.3	12.1	10.5	13.7	0.691	11.4%	-20.0%
0.0642		4	9.57	6.89	12.3	9.05	8.2	12	0.845	17.6%	5.2%
0.1971		4	8.73	7.37	10.1	9.05	7.5	9.3	0.425	9.74%	13.6%
0.5975		4	5.43	-0.174	11	4.35	2.7	10.3	1.76	64.9%	46.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-7318-7882	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-0007-2161	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	47.3%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.627	2.45	36.5	6	0.9648	CDF	Non-Significant Effect
		0.0071	-0.867	2.45	36.5	6	0.9814	CDF	Non-Significant Effect
		0.0219	-1.48	2.45	36.5	6	0.9970	CDF	Non-Significant Effect
		0.0642	-0.325	2.45	36.5	6	0.9272	CDF	Non-Significant Effect
		0.1971	1.91	2.45	36.5	6	0.1329	CDF	Non-Significant Effect
		0.5975*	2.99	2.45	36.5	6	0.0163	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.38	2.88	0.3503	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	13930.35	2321.725	6	5.22	0.0020	Significant Effect
Error	9331.897	444.3761	21			
Total	23262.25		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.39	16.8	0.7580	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.982	0.897	0.9006	Normal Distribution

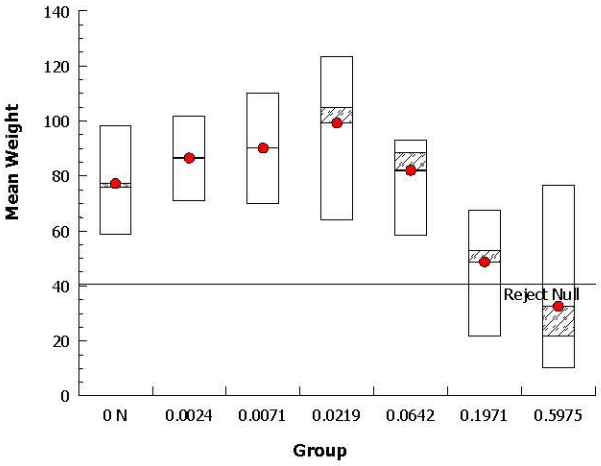
Mean Weight Summary

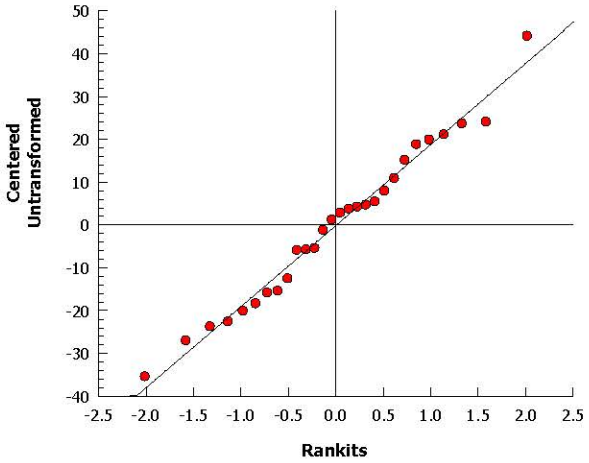
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	77.1	50.7	104	75.7	58.8	98.3	8.29	21.5%	0.0%
0.0024		4	86.5	65.4	108	86.6	71.1	102	6.63	15.3%	-12.1%
0.0071		4	90.1	64	116	90.1	70	110	8.18	18.2%	-16.8%
0.0219		4	99.2	52.8	146	105	63.8	123	14.6	29.4%	-28.6%
0.0642		4	82	56.5	107	88.3	58.3	92.9	7.99	19.5%	-6.29%
0.1971		4	48.7	18	79.3	52.7	21.7	67.5	9.64	39.6%	36.9%
0.5975		4	32.5	-15.6	80.6	21.7	10	76.7	15.1	93.0%	57.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-0007-2161	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-3665-6523	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	35.9%	0.0642	0.1971	0.1125	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.627	1.72	25.7	6	>0.05	CDF	Non-Significant Effect
		0.0071	-0.747	1.8	26.9	6	>0.05	CDF	Non-Significant Effect
		0.0219	-0.991	1.83	27.3	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.325	1.84	27.5	6	>0.05	CDF	Non-Significant Effect
		0.1971*	1.91	1.85	27.6	6	<0.05	CDF	Significant Effect
		0.5975*	2.99	1.86	27.7	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.38	2.88	0.3503	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	13930.35	2321.725	6	5.22	0.0020	Significant Effect
Error	9331.897	444.3761	21			
Total	23262.25		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.39	16.8	0.7580	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.982	0.897	0.9006	Normal Distribution

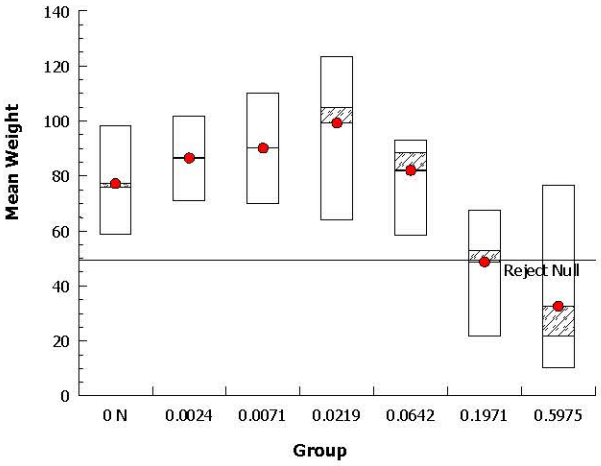
Mean Weight Summary

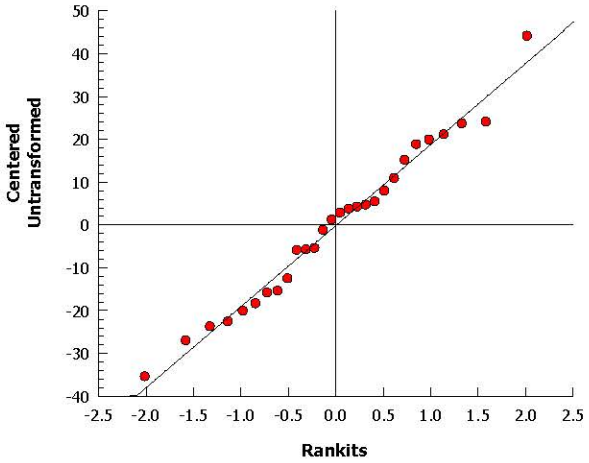
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	77.1	50.7	104	75.7	58.8	98.3	8.29	21.5%	0.0%
0.0024		4	86.5	65.4	108	86.6	71.1	102	6.63	15.3%	-12.1%
0.0071		4	90.1	64	116	90.1	70	110	8.18	18.2%	-16.8%
0.0219		4	99.2	52.8	146	105	63.8	123	14.6	29.4%	-28.6%
0.0642		4	82	56.5	107	88.3	58.3	92.9	7.99	19.5%	-6.29%
0.1971		4	48.7	18	79.3	52.7	21.7	67.5	9.64	39.6%	36.9%
0.5975		4	32.5	-15.6	80.6	21.7	10	76.7	15.1	93.0%	57.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	01-3665-6523	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-1285-9294	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	47.3%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.627	2.45	36.5	6	0.9648	CDF	Non-Significant Effect
		0.0071	-0.867	2.45	36.5	6	0.9814	CDF	Non-Significant Effect
		0.0219	-1.48	2.45	36.5	6	0.9970	CDF	Non-Significant Effect
		0.0642	-0.325	2.45	36.5	6	0.9272	CDF	Non-Significant Effect
		0.1971	1.91	2.45	36.5	6	0.1329	CDF	Non-Significant Effect
		0.5975*	2.99	2.45	36.5	6	0.0163	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	13930.35	2321.725	6	5.22	0.0020	Significant Effect
Error	9331.897	444.3761	21			
Total	23262.25		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.39	16.8	0.7580	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.982	0.897	0.9006	Normal Distribution

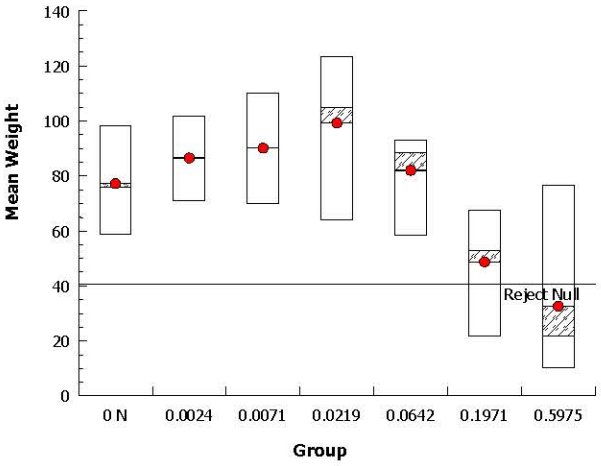
Mean Weight Summary

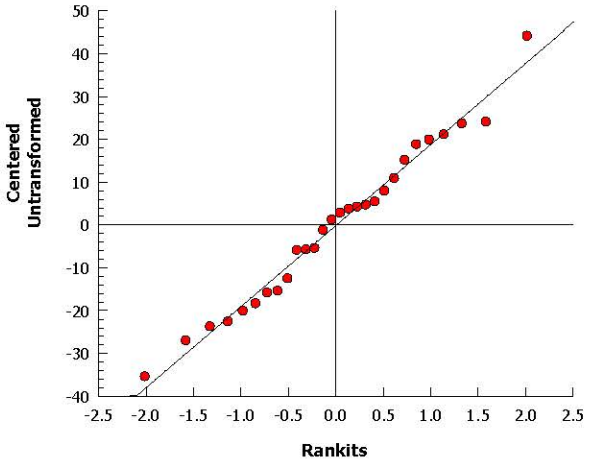
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	77.1	50.7	104	75.7	58.8	98.3	8.29	21.5%	0.0%
0.0024		4	86.5	65.4	108	86.6	71.1	102	6.63	15.3%	-12.1%
0.0071		4	90.1	64	116	90.1	70	110	8.18	18.2%	-16.8%
0.0219		4	99.2	52.8	146	105	63.8	123	14.6	29.4%	-28.6%
0.0642		4	82	56.5	107	88.3	58.3	92.9	7.99	19.5%	-6.29%
0.1971		4	48.7	18	79.3	52.7	21.7	67.5	9.64	39.6%	36.9%
0.5975		4	32.5	-15.6	80.6	21.7	10	76.7	15.1	93.0%	57.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-1285-9294	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-5078-6856	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	35.9%	0.0642	0.1971	0.1125	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.627	1.72	25.7	6	>0.05	CDF	Non-Significant Effect
		0.0071	-0.747	1.8	26.9	6	>0.05	CDF	Non-Significant Effect
		0.0219	-0.991	1.83	27.3	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.325	1.84	27.5	6	>0.05	CDF	Non-Significant Effect
		0.1971*	1.91	1.85	27.6	6	<0.05	CDF	Significant Effect
		0.5975*	2.99	1.86	27.7	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	13930.35	2321.725	6	5.22	0.0020	Significant Effect
Error	9331.897	444.3761	21			
Total	23262.25		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	3.39	16.8	0.7580	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.982	0.897	0.9006	Normal Distribution

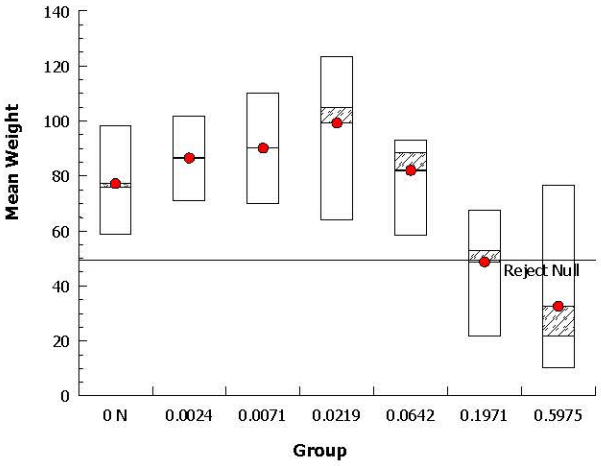
Mean Weight Summary

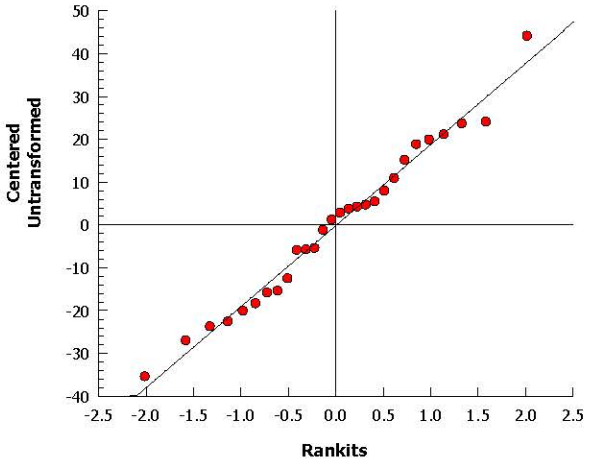
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	77.1	50.7	104	75.7	58.8	98.3	8.29	21.5%	0.0%
0.0024		4	86.5	65.4	108	86.6	71.1	102	6.63	15.3%	-12.1%
0.0071		4	90.1	64	116	90.1	70	110	8.18	18.2%	-16.8%
0.0219		4	99.2	52.8	146	105	63.8	123	14.6	29.4%	-28.6%
0.0642		4	82	56.5	107	88.3	58.3	92.9	7.99	19.5%	-6.29%
0.1971		4	48.7	18	79.3	52.7	21.7	67.5	9.64	39.6%	36.9%
0.5975		4	32.5	-15.6	80.6	21.7	10	76.7	15.1	93.0%	57.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-5078-6856	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-4310-8739	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.5%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.74	2.48	0.251	6	0.6019	CDF	Non-Significant Effect
		0.0071	-0.247	2.48	0.251	6	0.9262	CDF	Non-Significant Effect
		0.0219	0.74	2.48	0.251	6	0.6019	CDF	Non-Significant Effect
		0.0642	0.987	2.48	0.251	6	0.4868	CDF	Non-Significant Effect
		0.1971	-0.247	2.48	0.251	6	0.9262	CDF	Non-Significant Effect
		0.5975	0.74	2.48	0.251	6	0.6019	CDF	Non-Significant Effect
		1.8067*	4.44	2.48	0.251	6	0.0005	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.18	2.94	0.7687	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6596875	0.09424107	7	4.59	0.0022	Significant Effect
Error	0.4925	0.02052083	24			
Total	1.152188		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.74	18.5	0.5702	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.908	0.2279	Normal Distribution

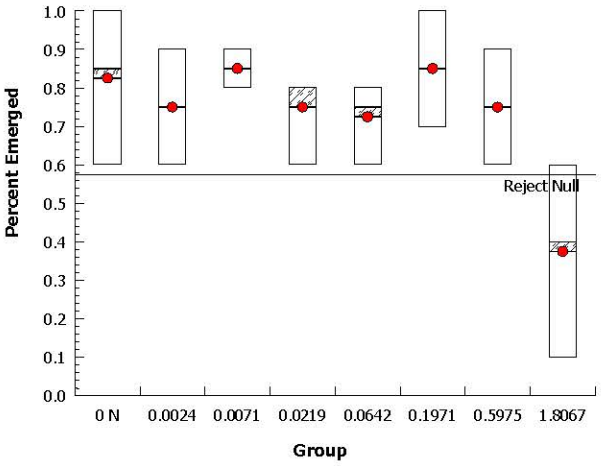
Percent Emerged Summary

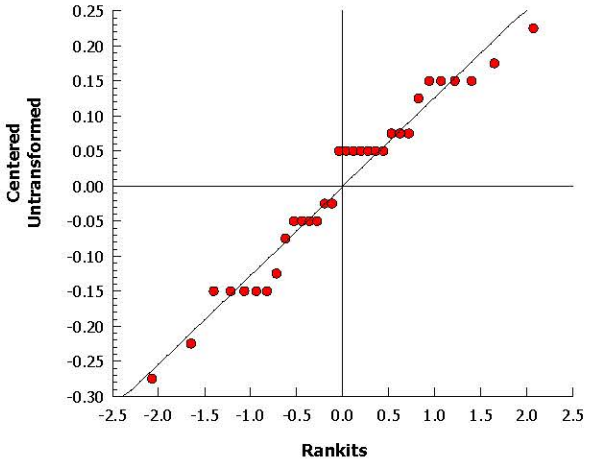
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.553	1	0.85	0.6	1	0.0854	20.7%	0.0%
0.0024		4	0.75	0.474	1	0.75	0.6	0.9	0.0866	23.1%	9.09%
0.0071		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	-3.03%
0.0219		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	9.09%
0.0642		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	12.1%
0.1971		4	0.85	0.645	1	0.85	0.7	1	0.0645	15.2%	-3.03%
0.5975		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	9.09%
1.8067		4	0.375	0.0222	0.728	0.4	0.1	0.6	0.111	59.1%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-4310-8739	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-6593-7441	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.7%	0.5975	1.8067	1.039	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.74	1.71	0.173	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.247	1.79	0.181	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.74	1.82	0.184	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.987	1.83	0.185	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.494	1.84	0.186	6	>0.05	CDF	Non-Significant Effect
		0.5975	0.74	1.84	0.187	6	>0.05	CDF	Non-Significant Effect
		1.8067*	4.44	1.85	0.187	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.18	2.94	0.7687	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6596875	0.09424107	7	4.59	0.0022	Significant Effect
Error	0.4925	0.02052083	24			
Total	1.152188		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.74	18.5	0.5702	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.908	0.2279	Normal Distribution

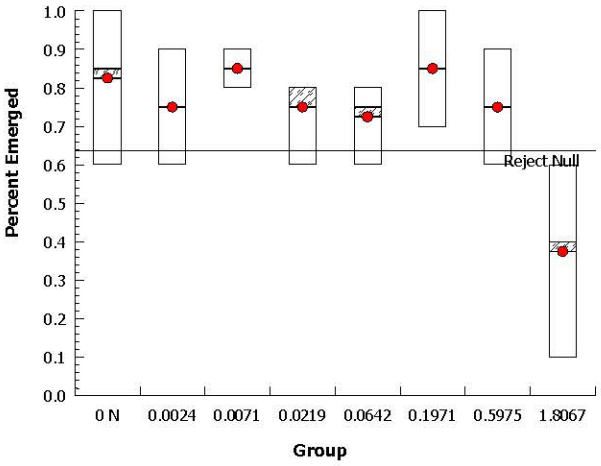
Percent Emerged Summary

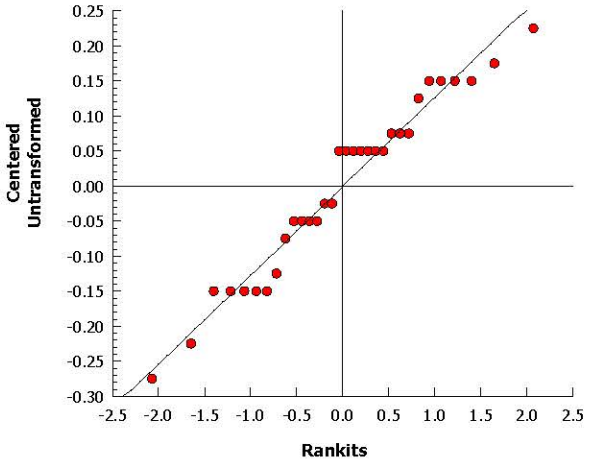
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.553	1	0.85	0.6	1	0.0854	20.7%	0.0%
0.0024		4	0.75	0.474	1	0.75	0.6	0.9	0.0866	23.1%	9.09%
0.0071		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	-3.03%
0.0219		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	9.09%
0.0642		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	12.1%
0.1971		4	0.85	0.645	1	0.85	0.7	1	0.0645	15.2%	-3.03%
0.5975		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	9.09%
1.8067		4	0.375	0.0222	0.728	0.4	0.1	0.6	0.111	59.1%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-6593-7441	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-4303-3962	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.5%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.74	2.48	0.251	6	0.6019	CDF	Non-Significant Effect
		0.0071	-0.247	2.48	0.251	6	0.9262	CDF	Non-Significant Effect
		0.0219	0.74	2.48	0.251	6	0.6019	CDF	Non-Significant Effect
		0.0642	0.987	2.48	0.251	6	0.4868	CDF	Non-Significant Effect
		0.1971	-0.247	2.48	0.251	6	0.9262	CDF	Non-Significant Effect
		0.5975	0.74	2.48	0.251	6	0.6019	CDF	Non-Significant Effect
		1.8067*	4.44	2.48	0.251	6	0.0005	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6596875	0.09424107	7	4.59	0.0022	Significant Effect
Error	0.4925	0.02052083	24			
Total	1.152188		31			

Distributional Tests

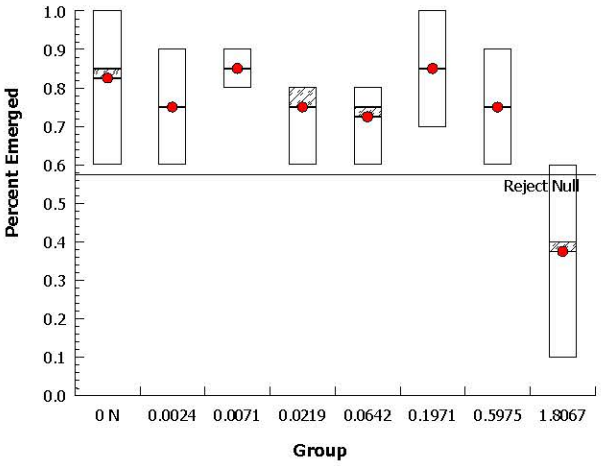
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.74	18.5	0.5702	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.908	0.2279	Normal Distribution

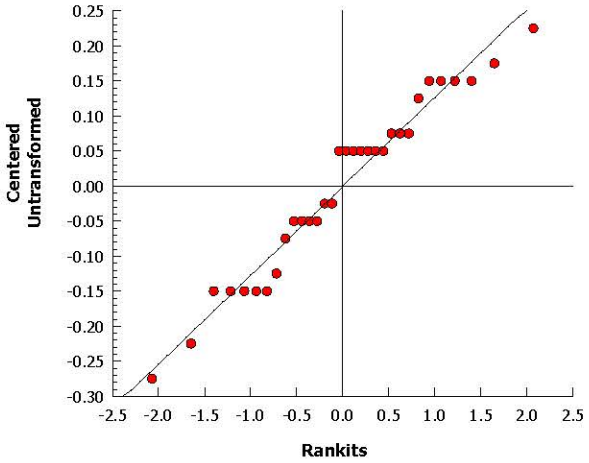
Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.553	1	0.85	0.6	1	0.0854	20.7%	0.0%
0.0024		4	0.75	0.474	1	0.75	0.6	0.9	0.0866	23.1%	9.09%
0.0071		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	-3.03%
0.0219		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	9.09%
0.0642		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	12.1%
0.1971		4	0.85	0.645	1	0.85	0.7	1	0.0645	15.2%	-3.03%
0.5975		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	9.09%
1.8067		4	0.375	0.0222	0.728	0.4	0.1	0.6	0.111	59.1%	54.5%

Analysis ID:	19-4303-3962	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-9968-2219	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.7%	0.5975	1.8067	1.039	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.74	1.71	0.173	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.247	1.79	0.181	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.74	1.82	0.184	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.987	1.83	0.185	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.494	1.84	0.186	6	>0.05	CDF	Non-Significant Effect
		0.5975	0.74	1.84	0.187	6	>0.05	CDF	Non-Significant Effect
		1.8067*	4.44	1.85	0.187	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6596875	0.09424107	7	4.59	0.0022	Significant Effect
Error	0.4925	0.02052083	24			
Total	1.152188		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.74	18.5	0.5702	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.957	0.908	0.2279	Normal Distribution

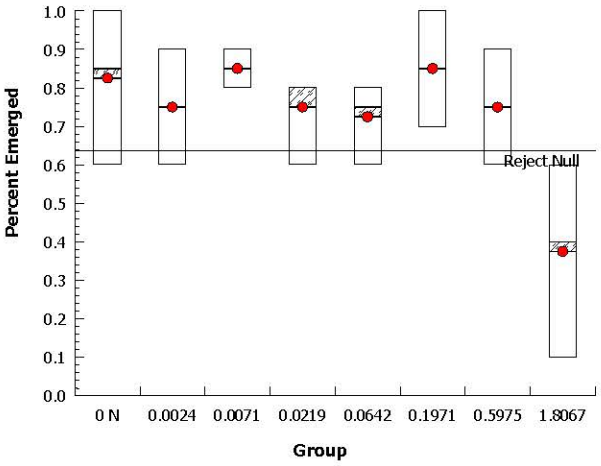
Percent Emerged Summary

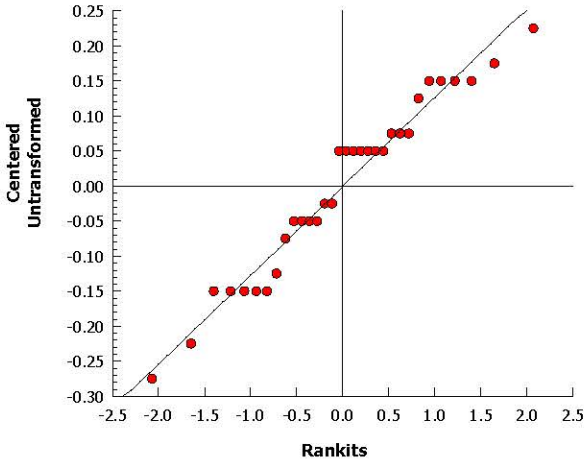
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.553	1	0.85	0.6	1	0.0854	20.7%	0.0%
0.0024		4	0.75	0.474	1	0.75	0.6	0.9	0.0866	23.1%	9.09%
0.0071		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	-3.03%
0.0219		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	9.09%
0.0642		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	12.1%
0.1971		4	0.85	0.645	1	0.85	0.7	1	0.0645	15.2%	-3.03%
0.5975		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	9.09%
1.8067		4	0.375	0.0222	0.728	0.4	0.1	0.6	0.111	59.1%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-9968-2219	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-4792-5674	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.9%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.283	2.45	0.216	6	0.9200	CDF	Non-Significant Effect
		0.0071	-1.42	2.45	0.216	6	0.9964	CDF	Non-Significant Effect
		0.0219	0.283	2.45	0.216	6	0.7669	CDF	Non-Significant Effect
		0.0642	0.283	2.45	0.216	6	0.7669	CDF	Non-Significant Effect
		0.1971	0.849	2.45	0.216	6	0.5233	CDF	Non-Significant Effect
		0.5975*	5.1	2.45	0.216	6	0.0001	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.04	2.88	0.9730	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7992857	0.1332143	6	8.54	<0.0001	Significant Effect
Error	0.3275	0.01559524	21			
Total	1.126786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.81	16.8	0.3386	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.967	0.897	0.4977	Normal Distribution

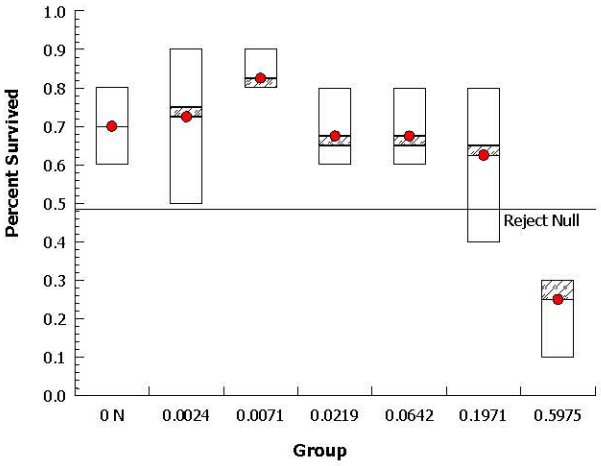
Percent Survived Summary

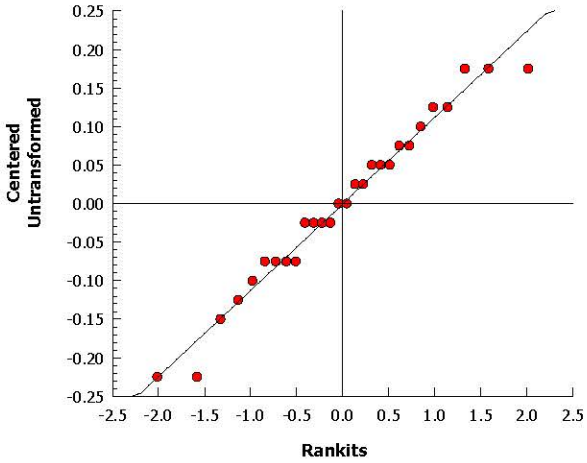
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	0.0%
0.0024		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	-3.57%
0.0071		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-17.9%
0.0219		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.0642		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.1971		4	0.625	0.353	0.897	0.65	0.4	0.8	0.0854	27.3%	10.7%
0.5975		4	0.25	0.0909	0.409	0.3	0.1	0.3	0.05	40.0%	64.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-4792-5674	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-2972-5275	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.4%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.283	1.72	0.152	6	>0.05	CDF	Non-Significant Effect
		0.0071	-0.849	1.8	0.159	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.283	1.83	0.162	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.283	1.84	0.163	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.849	1.85	0.163	6	>0.05	CDF	Non-Significant Effect
		0.5975*	5.1	1.86	0.164	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.04	2.88	0.9730	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7992857	0.1332143	6	8.54	<0.0001	Significant Effect
Error	0.3275	0.01559524	21			
Total	1.126786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.81	16.8	0.3386	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.967	0.897	0.4977	Normal Distribution

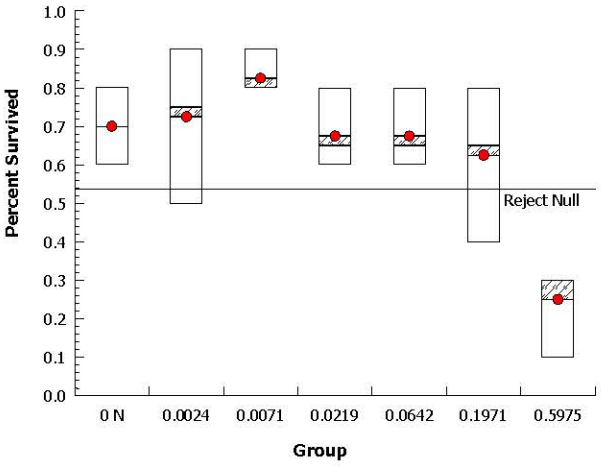
Percent Survived Summary

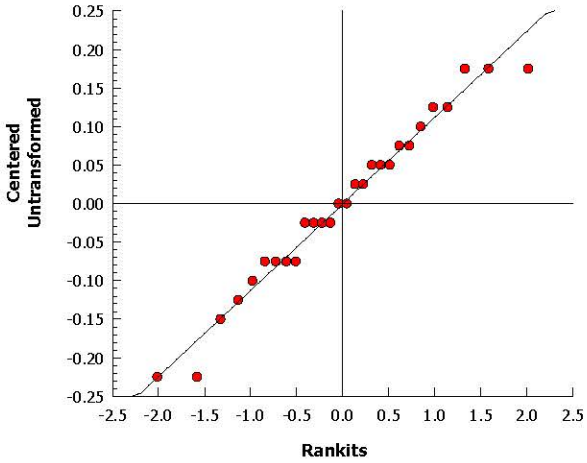
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	0.0%
0.0024		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	-3.57%
0.0071		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-17.9%
0.0219		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.0642		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.1971		4	0.625	0.353	0.897	0.65	0.4	0.8	0.0854	27.3%	10.7%
0.5975		4	0.25	0.0909	0.409	0.3	0.1	0.3	0.05	40.0%	64.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-2972-5275	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-6894-1309	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.9%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.283	2.45	0.216	6	0.9200	CDF	Non-Significant Effect
		0.0071	-1.42	2.45	0.216	6	0.9964	CDF	Non-Significant Effect
		0.0219	0.283	2.45	0.216	6	0.7669	CDF	Non-Significant Effect
		0.0642	0.283	2.45	0.216	6	0.7669	CDF	Non-Significant Effect
		0.1971	0.849	2.45	0.216	6	0.5233	CDF	Non-Significant Effect
		0.5975*	5.1	2.45	0.216	6	0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7992857	0.1332143	6	8.54	<0.0001	Significant Effect
Error	0.3275	0.01559524	21			
Total	1.126786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.81	16.8	0.3386	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.967	0.897	0.4977	Normal Distribution

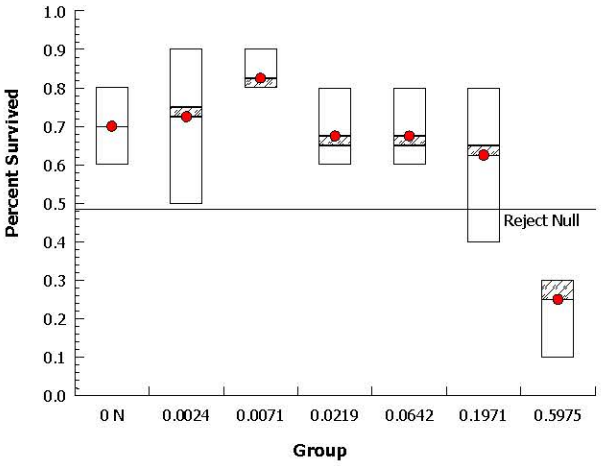
Percent Survived Summary

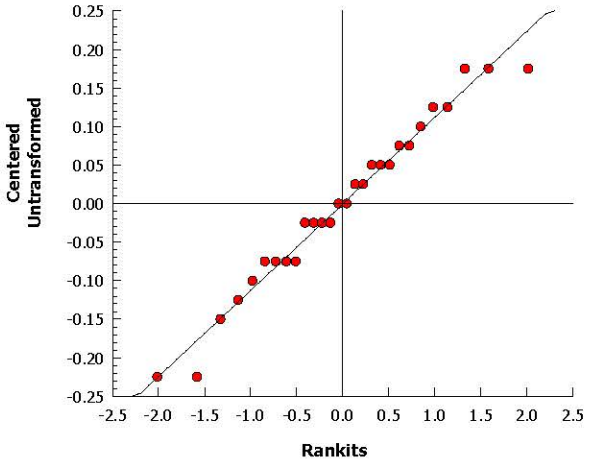
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	0.0%
0.0024		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	-3.57%
0.0071		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-17.9%
0.0219		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.0642		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.1971		4	0.625	0.353	0.897	0.65	0.4	0.8	0.0854	27.3%	10.7%
0.5975		4	0.25	0.0909	0.409	0.3	0.1	0.3	0.05	40.0%	64.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-6894-1309	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-7976-9063	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.4%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.283	1.72	0.152	6	>0.05	CDF	Non-Significant Effect
		0.0071	-0.849	1.8	0.159	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.283	1.83	0.162	6	>0.05	CDF	Non-Significant Effect
		0.0642	0.283	1.84	0.163	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.849	1.85	0.163	6	>0.05	CDF	Non-Significant Effect
		0.5975*	5.1	1.86	0.164	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.7992857	0.1332143	6	8.54	<0.0001	Significant Effect
Error	0.3275	0.01559524	21			
Total	1.126786		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	6.81	16.8	0.3386	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.967	0.897	0.4977	Normal Distribution

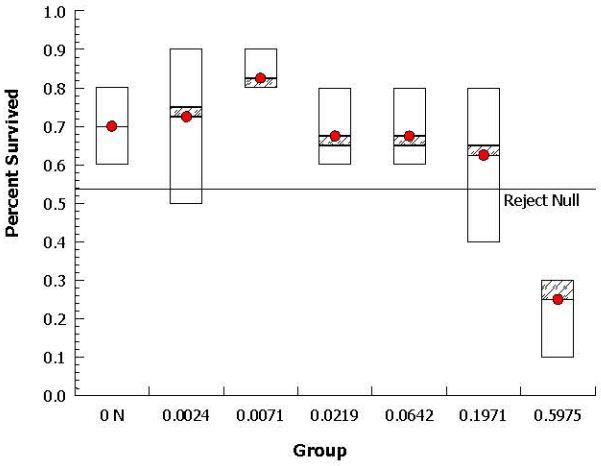
Percent Survived Summary

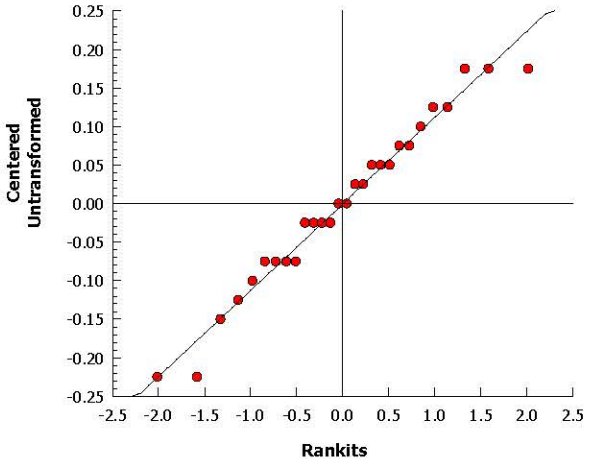
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.7	0.57	0.83	0.7	0.6	0.8	0.0408	11.7%	0.0%
0.0024		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	-3.57%
0.0071		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-17.9%
0.0219		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.0642		4	0.675	0.523	0.827	0.65	0.6	0.8	0.0479	14.2%	3.57%
0.1971		4	0.625	0.353	0.897	0.65	0.4	0.8	0.0854	27.3%	10.7%
0.5975		4	0.25	0.0909	0.409	0.3	0.1	0.3	0.05	40.0%	64.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-7976-9063	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	03-3496-9979	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.175	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-172	350	354	0.238	0.281	0.445	0.556	2.62	0.7320	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.597	N/A	N/A
EC10	0.755	N/A	N/A
EC25	1.12	N/A	N/A
EC50	1.73	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.209	0.0263	0.157	0.26	7.92	<0.0001	Significant Parameter
Slope	3.56	1.9	-0.163	7.28	1.87	0.0710	Non-Significant Parameter
Intercept	-0.848	0.481	-1.79	0.0958	-1.76	0.0888	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	28.37455	28.37455	1	26.8	<0.0001	Significant
Lack of Fit	3.185481	0.637096	5	0.556	0.7325	Non-Significant
Pure Error	27.5058	1.146075	24			
Residual	30.69128	1.05832	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	30.7	42.6	0.3801	Non-Significant Heterogenity
	Likelihood Ratio GOF	34.5	42.6	0.2211	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.8	2.94	1.0000	No Outliers Detected
Variances	Mod Levene Equality of Variance	1.46	2.42	0.2292	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.929	0.934	0.0371	Non-normal Distribution
	Anderson-Darling A2 Normality	0.948	2.49	0.0166	Non-normal Distribution

Percent Emerged Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.825	0.6	1	0.0854	0.171	20.7%	0.0%	33	40
0.0024		4	0.75	0.6	0.9	0.0866	0.173	23.1%	9.09%	30	40
0.0071		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	-3.03%	34	40
0.0219		4	0.75	0.6	0.8	0.05	0.1	13.3%	9.09%	30	40
0.0642		4	0.725	0.6	0.8	0.0479	0.0957	13.2%	12.1%	29	40
0.1971		4	0.85	0.7	1	0.0645	0.129	15.2%	-3.03%	34	40
0.5975		4	0.75	0.6	0.9	0.0645	0.129	17.2%	9.09%	30	40
1.8067		4	0.375	0.1	0.6	0.111	0.222	59.1%	54.5%	15	40

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	03-3496-9979	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

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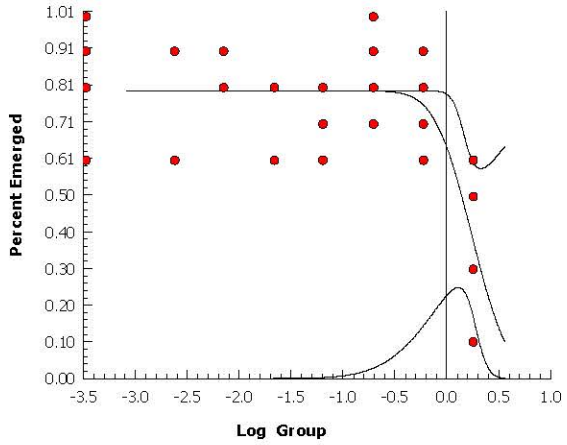
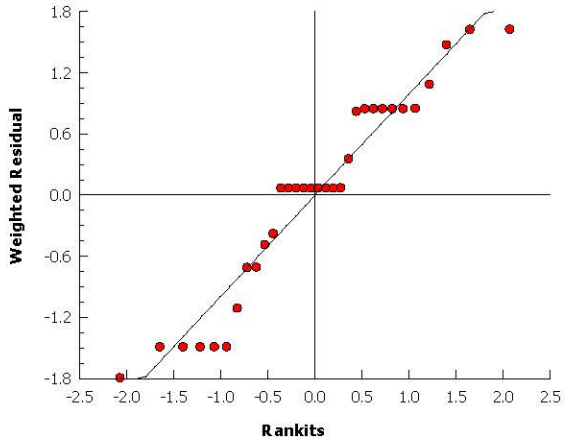
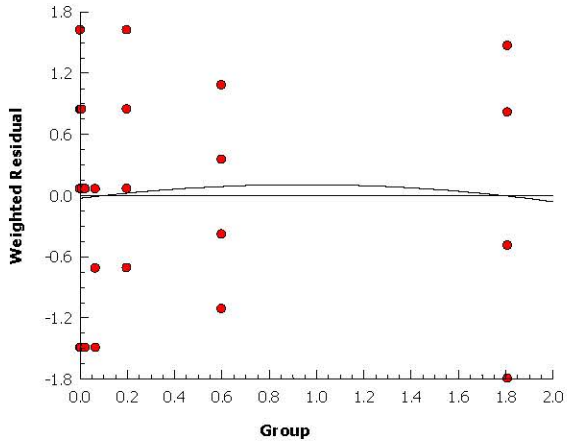
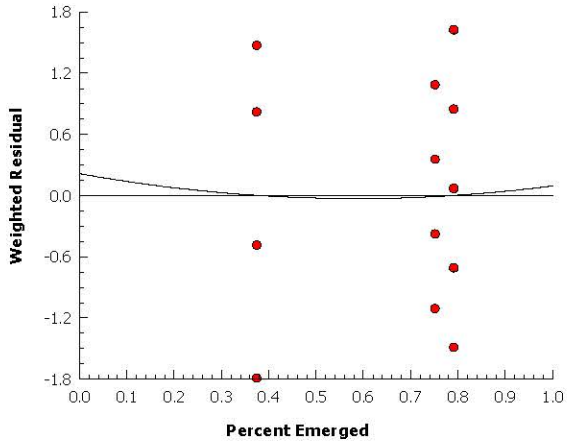








OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-3029-5206	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.175	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-172	350	354	0.238	0.281	0.445	0.556	2.62	0.7320	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.597	N/A	N/A
EC10	0.755	N/A	N/A
EC25	1.12	N/A	N/A
EC50	1.73	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.209	0.0263	0.157	0.26	7.92	<0.0001	Significant Parameter
Slope	3.56	1.9	-0.163	7.28	1.87	0.0710	Non-Significant Parameter
Intercept	-0.848	0.481	-1.79	0.0958	-1.76	0.0888	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	28.37455	28.37455	1	26.8	<0.0001	Significant
Lack of Fit	3.185481	0.637096	5	0.556	0.7325	Non-Significant
Pure Error	27.5058	1.146075	24			
Residual	30.69128	1.05832	29			

Residual Analysis

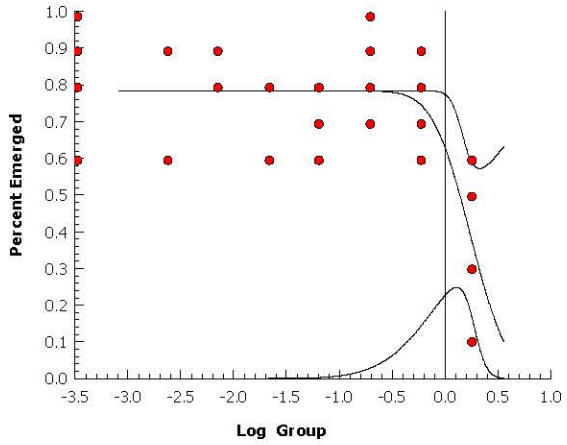
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	30.7	42.6	0.3801	Non-Significant Heterogenity
	Likelihood Ratio GOF	34.5	42.6	0.2211	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.46	2.42	0.2292	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.929	0.934	0.0371	Non-normal Distribution
	Anderson-Darling A2 Normality	0.948	2.49	0.0166	Non-normal Distribution

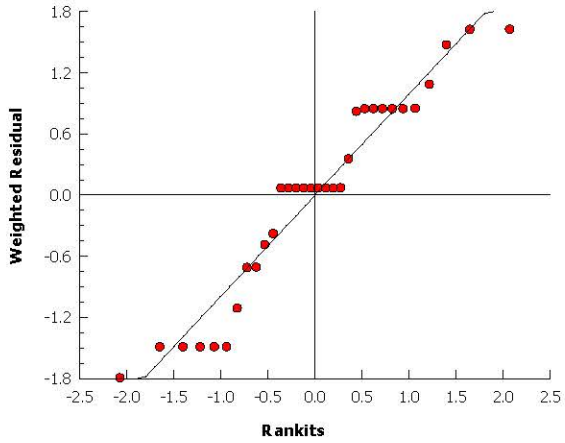
Percent Emerged Summary

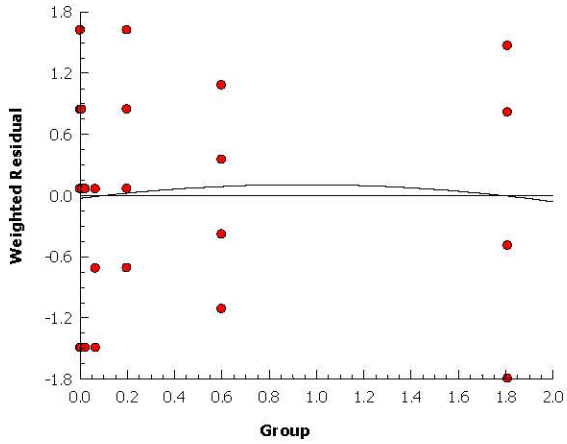
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.825	0.6	1	0.0854	0.171	20.7%	0.0%	33	40
0.0024		4	0.75	0.6	0.9	0.0866	0.173	23.1%	9.09%	30	40
0.0071		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	-3.03%	34	40
0.0219		4	0.75	0.6	0.8	0.05	0.1	13.3%	9.09%	30	40
0.0642		4	0.725	0.6	0.8	0.0479	0.0957	13.2%	12.1%	29	40
0.1971		4	0.85	0.7	1	0.0645	0.129	15.2%	-3.03%	34	40
0.5975		4	0.75	0.6	0.9	0.0645	0.129	17.2%	9.09%	30	40
1.8067		4	0.375	0.1	0.6	0.111	0.222	59.1%	54.5%	15	40

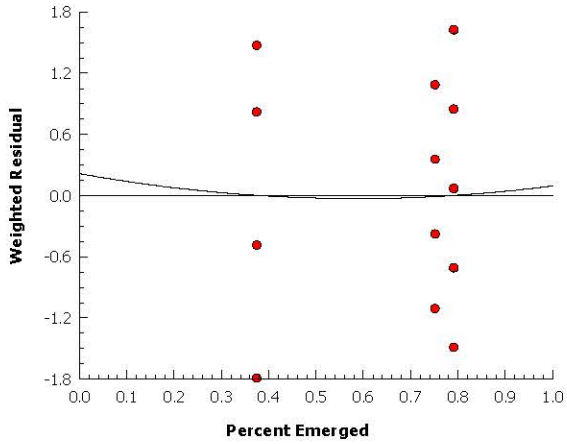
Analysis ID:	17-3029-5206	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-7257-1811	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.3	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
13	-168	342	345	-0.353	0.332	0.585	1.02	2.84	0.4180	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.126	0.00231	0.238
EC10	0.166	0.00679	0.283
EC25	0.265	0.04	0.39
EC50	0.444	0.231	0.694

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.278	0.0325	0.214	0.342	8.56	<0.0001	Significant Parameter
Slope	3.01	1.15	0.764	5.25	2.63	0.0145	Significant Parameter
Intercept	1.06	0.453	0.174	1.95	2.35	0.0272	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	30.09461	30.09461	1	40.1	<0.0001	Significant
Lack of Fit	3.061411	0.765353	4	1.02	0.4182	Non-Significant
Pure Error	15.7073	0.747967	21			
Residual	18.76871	0.750749	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	18.8	37.7	0.8081	Non-Significant Heterogenity
	Likelihood Ratio GOF	19.7	37.7	0.7631	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.88	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	6.44	12.6	0.3758	Equal Variances
	Mod Levene Equality of Variance	2.21	2.57	0.0826	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.929	0.926	0.0589	Normal Distribution
	Anderson-Darling A2 Normality	0.875	2.49	0.0249	Non-normal Distribution

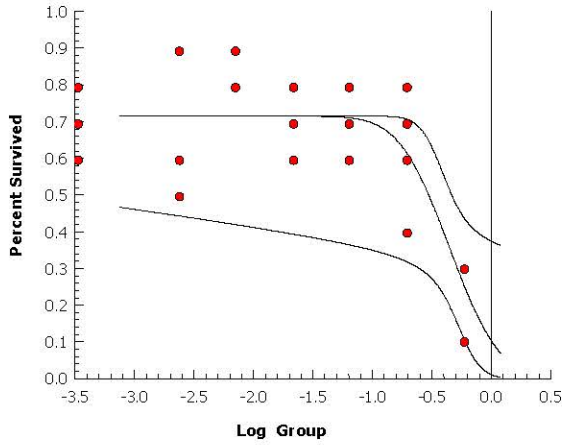
Percent Survived Summary

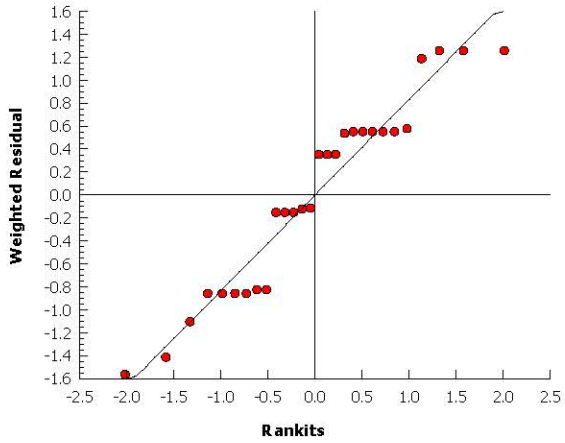
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.7	0.6	0.8	0.0408	0.0816	11.7%	0.0%	28	40
0.0024		4	0.725	0.5	0.9	0.103	0.206	28.4%	-3.57%	29	40
0.0071		4	0.825	0.8	0.9	0.025	0.05	6.06%	-17.9%	33	40
0.0219		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.0642		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.1971		4	0.625	0.4	0.8	0.0854	0.171	27.3%	10.7%	25	40
0.5975		4	0.25	0.1	0.3	0.05	0.1	40.0%	64.3%	10	40

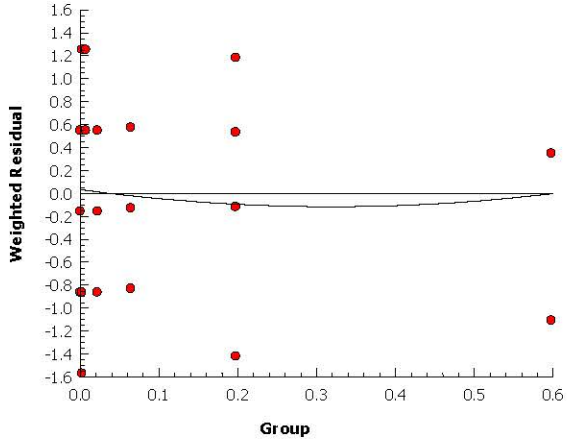
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

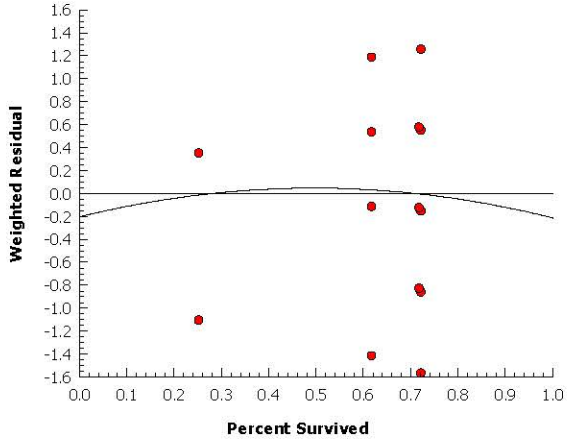
Analysis ID:	19-7257-1811	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-3156-4028	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.3	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
13	-168	342	345	-0.353	0.332	0.585	1.02	2.84	0.4180	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.126	0.00231	0.238
EC10	0.166	0.00679	0.283
EC25	0.265	0.04	0.39
EC50	0.444	0.231	0.694

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.278	0.0325	0.214	0.342	8.56	<0.0001	Significant Parameter
Slope	3.01	1.15	0.764	5.25	2.63	0.0145	Significant Parameter
Intercept	1.06	0.453	0.174	1.95	2.35	0.0272	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	30.09461	30.09461	1	40.1	<0.0001	Significant
Lack of Fit	3.061411	0.765353	4	1.02	0.4182	Non-Significant
Pure Error	15.7073	0.747967	21			
Residual	18.76871	0.750749	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	18.8	37.7	0.8081	Non-Significant Heterogenity
	Likelihood Ratio GOF	19.7	37.7	0.7631	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	6.44	12.6	0.3758	Equal Variances
	Mod Levene Equality of Variance	2.21	2.57	0.0826	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.929	0.926	0.0589	Normal Distribution
	Anderson-Darling A2 Normality	0.875	2.49	0.0249	Non-normal Distribution

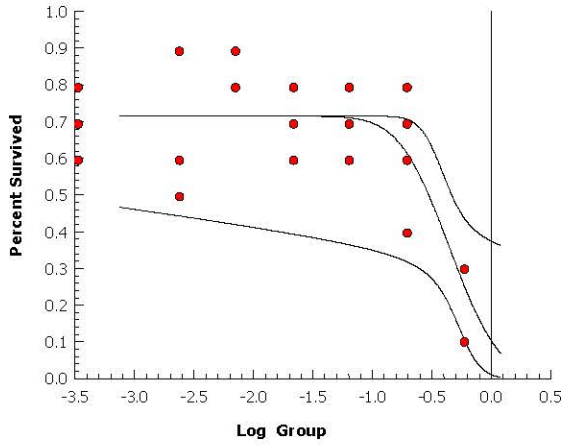
Percent Survived Summary

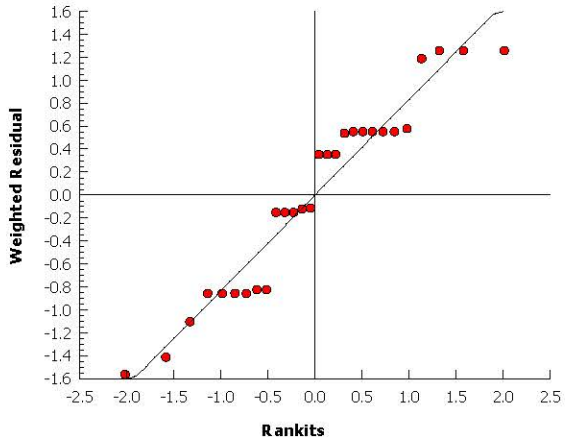
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.7	0.6	0.8	0.0408	0.0816	11.7%	0.0%	28	40
0.0024		4	0.725	0.5	0.9	0.103	0.206	28.4%	-3.57%	29	40
0.0071		4	0.825	0.8	0.9	0.025	0.05	6.06%	-17.9%	33	40
0.0219		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.0642		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.1971		4	0.625	0.4	0.8	0.0854	0.171	27.3%	10.7%	25	40
0.5975		4	0.25	0.1	0.3	0.05	0.1	40.0%	64.3%	10	40

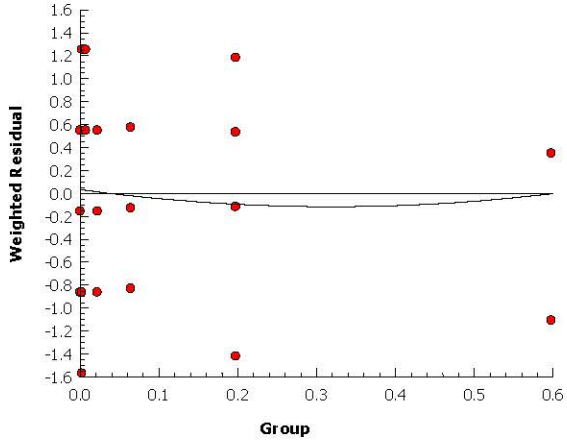
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

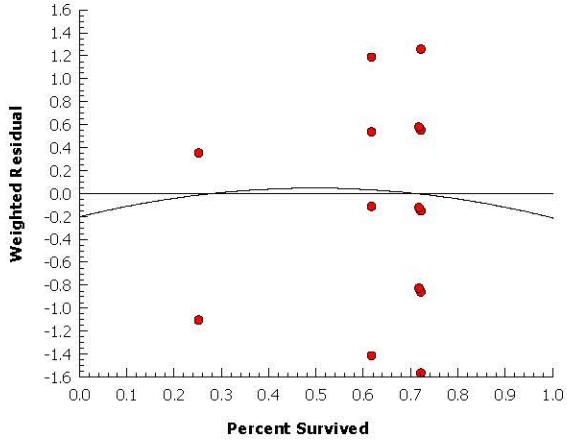
Analysis ID:	15-3156-4028	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-2846-0899	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
9	350	-693	-690	0.6855	Yes	1.56	2.87	0.2229	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0706	N/A	0.12
IC10	0.104	0.0149	0.164
IC25	0.196	0.126	0.276
IC50	0.399	0.317	0.504

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	11.1	0.399	10.3	11.9	27.8	<0.0001	Significant Parameter
C	1.05	0.232	0.598	1.51	4.53	0.0001	Significant Parameter
D	0.399	0.0528	0.296	0.503	7.57	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	14.05327	14.05327	1	58.7	<0.0001	Significant
Lack of Fit	1.368592	0.342148	4	1.56	0.2229	Non-Significant
Pure Error	4.380025	0.219001	20			
Residual	5.748617	0.239526	24			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	5.75	36.4	1.0000	Non-Significant Heterogenity
	Likelihood Ratio GOF	5.86	36.4	0.9999	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	5.23	12.6	0.5144	Equal Variances
	Mod Levene Equality of Variance	0.79	2.63	0.5891	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.987	0.924	0.9766	Normal Distribution
	Anderson-Darling A2 Normality	0.193	2.49	0.9451	Normal Distribution

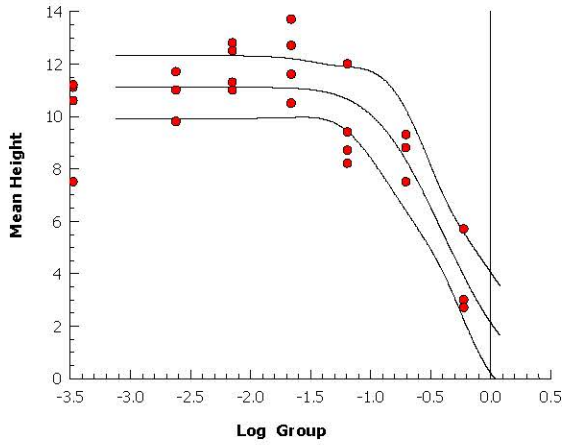
Mean Height Summary

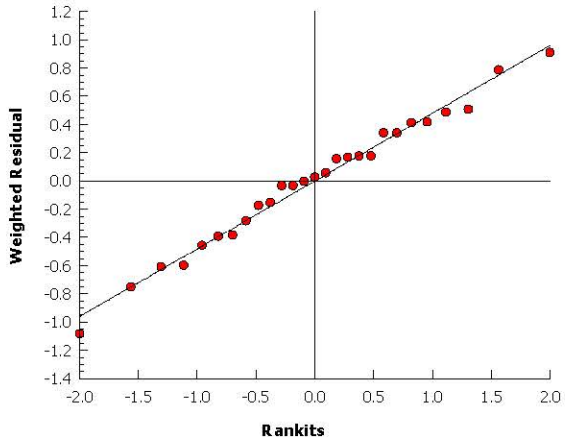
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	10.1	7.5	11.2	0.877	1.75	17.4%	0.0%
0.0024		4	11	9.8	11.7	0.448	0.896	8.11%	-9.41%
0.0071		4	11.9	11	12.8	0.442	0.883	7.42%	-17.8%
0.0219		4	12.1	10.5	13.7	0.691	1.38	11.4%	-20.0%
0.0642		4	9.57	8.2	12	0.845	1.69	17.6%	5.2%
0.1971		4	8.73	7.5	9.3	0.425	0.85	9.74%	13.6%
0.5975		3	3.8	2.7	5.7	0.954	1.65	43.5%	62.4%

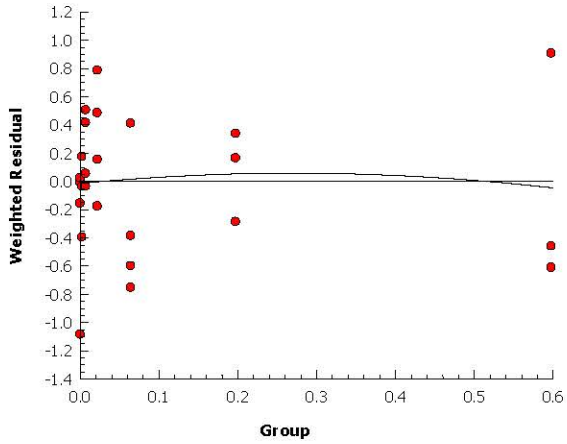
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

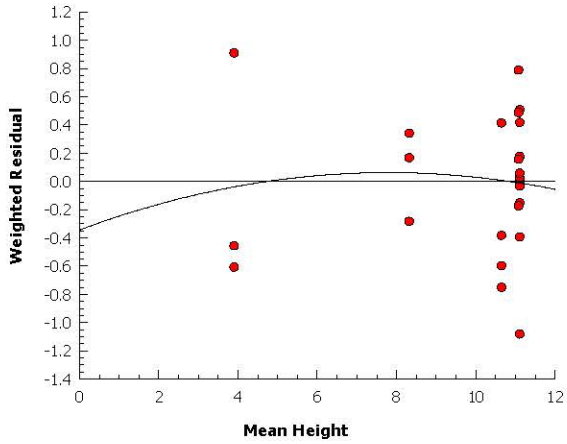
Analysis ID:	01-2846-0899	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-8398-5370	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
11	361	-715	-712	0.4000	Yes	0.646	2.84	0.6361	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0475	N/A	0.121
IC10	0.0822	N/A	0.186
IC25	0.206	0.0955	0.361
IC50	0.569	0.347	0.932

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	11.2	0.596	10	12.4	18.8	<0.0001	Significant Parameter
C	1.51	0.572	0.389	2.63	2.64	0.0141	Significant Parameter
D	0.569	0.149	0.277	0.861	3.82	0.0008	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	8.795279	8.795279	1	20	0.0001	Significant
Lack of Fit	1.203913	0.300978	4	0.646	0.6361	Non-Significant
Pure Error	9.790648	0.466221	21			
Residual	10.99456	0.439783	25			

Residual Analysis

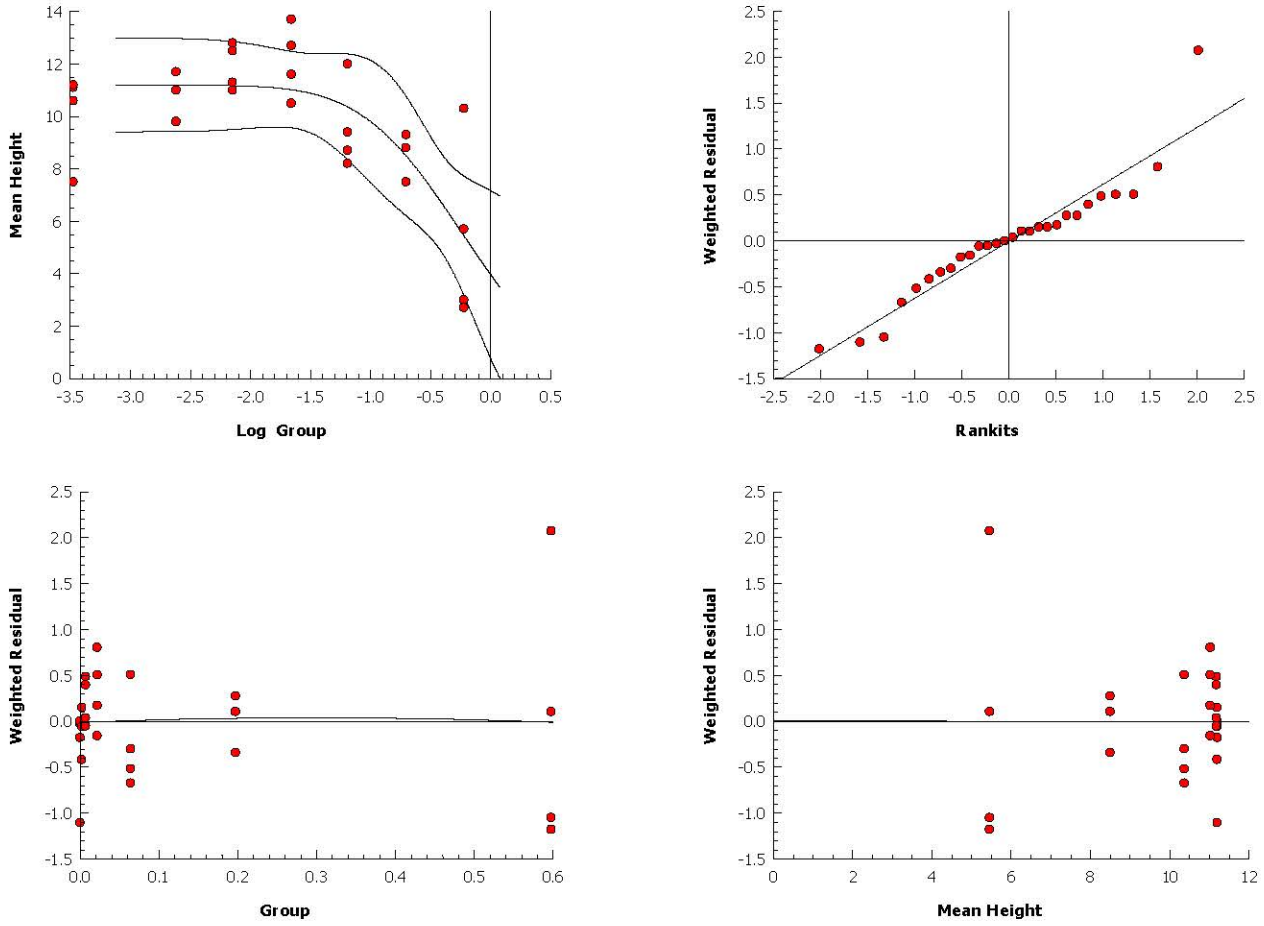
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	11	37.7	0.9930	Non-Significant Heterogenity
	Likelihood Ratio GOF	10.8	37.7	0.9940	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	3.25	2.88	0.0074	Outlier Detected
Variances	Mod Levene Equality of Variance	2.06	2.57	0.1017	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.913	0.926	0.0238	Non-normal Distribution
	Anderson-Darling A2 Normality	0.788	2.49	0.0407	Non-normal Distribution

Mean Height Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	10.1	7.5	11.2	0.877	1.75	17.4%	0.0%
0.0024		4	11	9.8	11.7	0.448	0.896	8.11%	-9.41%
0.0071		4	11.9	11	12.8	0.442	0.883	7.42%	-17.8%
0.0219		4	12.1	10.5	13.7	0.691	1.38	11.4%	-20.0%
0.0642		4	9.57	8.2	12	0.845	1.69	17.6%	5.2%
0.1971		4	8.73	7.5	9.3	0.425	0.85	9.74%	13.6%
0.5975		4	5.43	2.7	10.3	1.76	3.52	64.9%	46.3%

Analysis ID:	14-8398-5370	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-7769-2475	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
11	361	-715	-712	0.4000	Yes	0.646	2.84	0.6361	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0475	N/A	0.121
IC10	0.0822	N/A	0.186
IC25	0.206	0.0955	0.361
IC50	0.569	0.347	0.932

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	11.2	0.596	10	12.4	18.8	<0.0001	Significant Parameter
C	1.51	0.572	0.389	2.63	2.64	0.0141	Significant Parameter
D	0.569	0.149	0.277	0.861	3.82	0.0008	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	8.795279	8.795279	1	20	0.0001	Significant
Lack of Fit	1.203913	0.300978	4	0.646	0.6361	Non-Significant
Pure Error	9.790648	0.466221	21			
Residual	10.99456	0.439783	25			

Residual Analysis

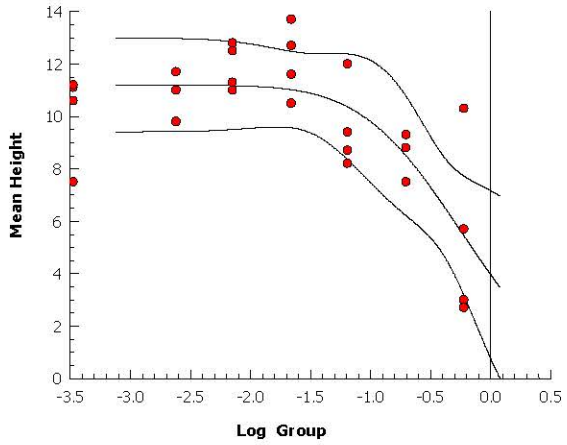
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	11	37.7	0.9930	Non-Significant Heterogenity
	Likelihood Ratio GOF	10.8	37.7	0.9940	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	2.06	2.57	0.1017	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.913	0.926	0.0238	Non-normal Distribution
	Anderson-Darling A2 Normality	0.788	2.49	0.0407	Non-normal Distribution

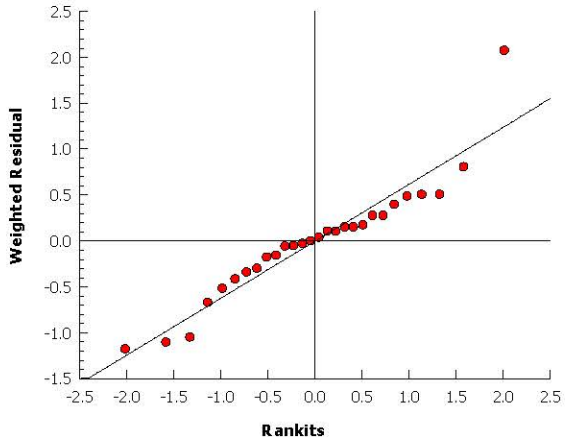
Mean Height Summary

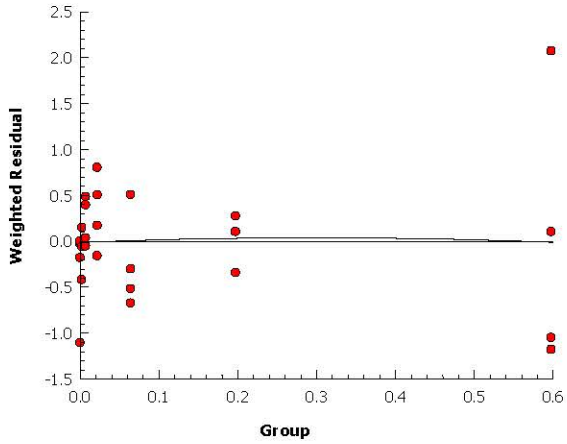
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	10.1	7.5	11.2	0.877	1.75	17.4%	0.0%
0.0024		4	11	9.8	11.7	0.448	0.896	8.11%	-9.41%
0.0071		4	11.9	11	12.8	0.442	0.883	7.42%	-17.8%
0.0219		4	12.1	10.5	13.7	0.691	1.38	11.4%	-20.0%
0.0642		4	9.57	8.2	12	0.845	1.69	17.6%	5.2%
0.1971		4	8.73	7.5	9.3	0.425	0.85	9.74%	13.6%
0.5975		4	5.43	2.7	10.3	1.76	3.52	64.9%	46.3%

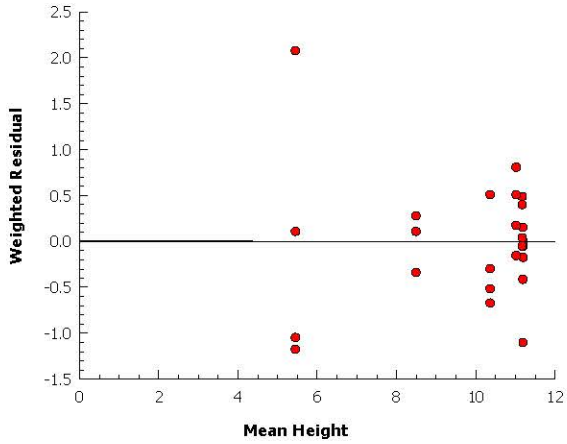
Analysis ID:	14-7769-2475	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-5893-4183	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
12	6690	-13400	-13400	0.6352	Yes	0.804	2.87	0.5368	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0445	N/A	0.0857
IC10	0.0647	N/A	0.114
IC25	0.121	0.0608	0.192
IC50	0.242	0.174	0.337

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	88.5	5.02	78.7	98.3	17.6	<0.0001	Significant Parameter
C	1.03	0.248	0.544	1.52	4.15	0.0004	Significant Parameter
D	0.242	0.0466	0.151	0.334	5.19	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	209.5496	209.5496	1	47.3	<0.0001	Significant
Lack of Fit	14.74292	3.685731	4	0.804	0.5368	Non-Significant
Pure Error	91.64472	4.582236	20			
Residual	106.3876	4.432819	24			

Residual Analysis

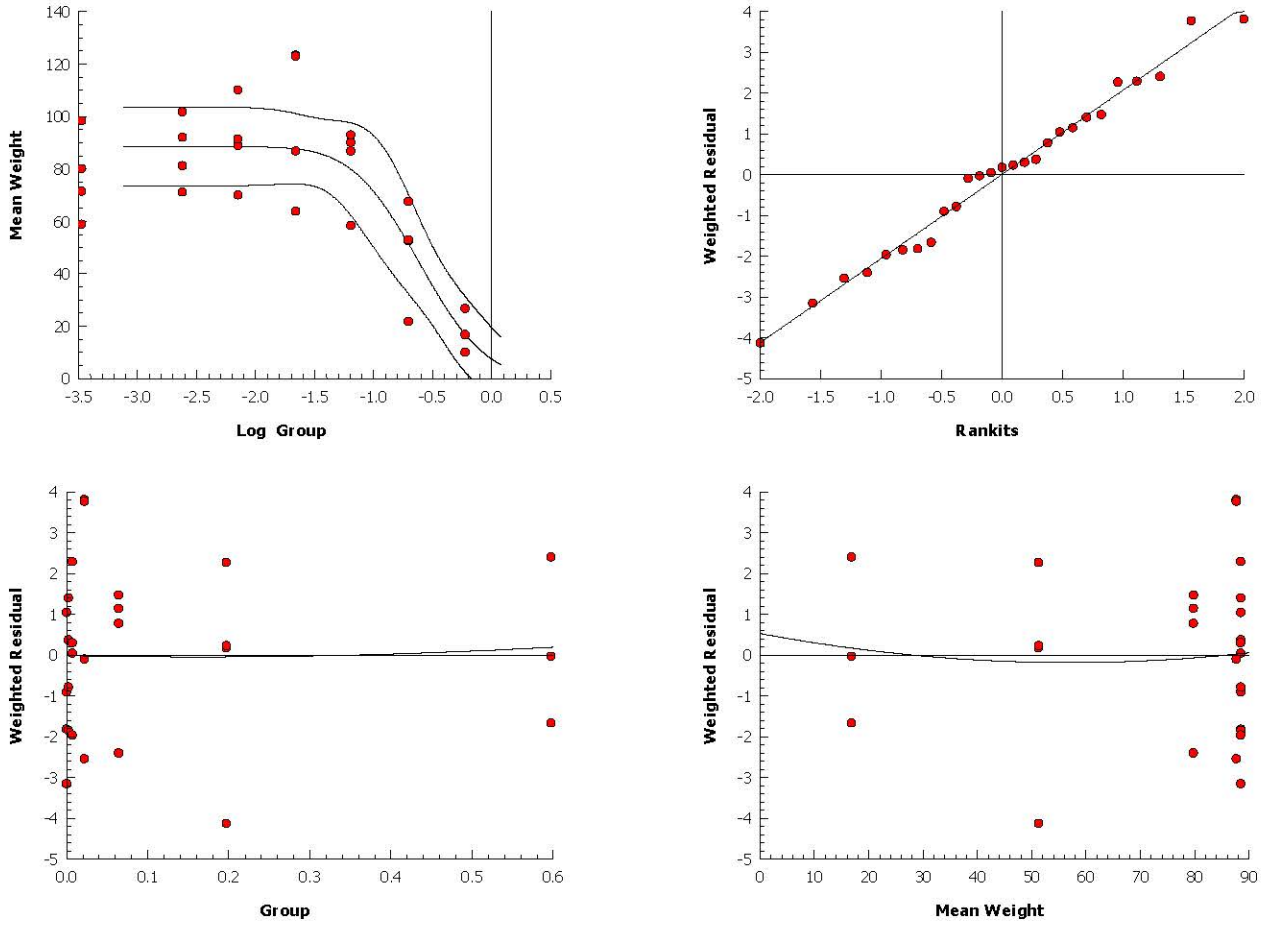
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	106	36.4	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	110	36.4	<0.0001	Significant Heterogenity
Variances	Bartlett Equality of Variance	2.54	12.6	0.8644	Equal Variances
	Mod Levene Equality of Variance	0.705	2.63	0.6491	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.924	0.8822	Normal Distribution
	Anderson-Darling A2 Normality	0.232	2.49	0.8322	Normal Distribution

Mean Weight Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	77.1	58.8	98.3	8.29	16.6	21.5%	0.0%
0.0024		4	86.5	71.1	102	6.63	13.3	15.3%	-12.1%
0.0071		4	90.1	70	110	8.18	16.4	18.2%	-16.8%
0.0219		4	99.2	63.8	123	14.6	29.2	29.4%	-28.6%
0.0642		4	82	58.3	92.9	7.99	16	19.5%	-6.29%
0.1971		4	48.7	21.7	67.5	9.64	19.3	39.6%	36.9%
0.5975		3	17.8	10	26.7	4.85	8.4	47.2%	76.9%

Analysis ID:	15-5893-4183	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-4993-8257	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
41	6910	-13800	-13800	0.3292	Yes	0.874	2.84	0.4961	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0318	N/A	0.0946
IC10	0.0532	N/A	0.139
IC25	0.126	0.0331	0.272
IC50	0.329	0.194	0.558

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	88.6	7.24	74.4	103	12.2	<0.0001	Significant Parameter
C	1.42	0.568	0.308	2.54	2.5	0.0192	Significant Parameter
D	0.329	0.105	0.123	0.536	3.13	0.0045	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	119.5675	119.5675	1	15.2	0.0006	Significant
Lack of Fit	27.97187	6.992968	4	0.874	0.4961	Non-Significant
Pure Error	168.049	8.002335	21			
Residual	196.0209	7.840837	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	196	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	185	37.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	3.17	2.88	0.0114	Outlier Detected
Variances	Bartlett Equality of Variance	8.37	12.6	0.2126	Equal Variances
	Mod Levene Equality of Variance	0.83	2.57	0.5602	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.935	0.926	0.0830	Normal Distribution
	Anderson-Darling A2 Normality	0.514	2.49	0.1967	Normal Distribution

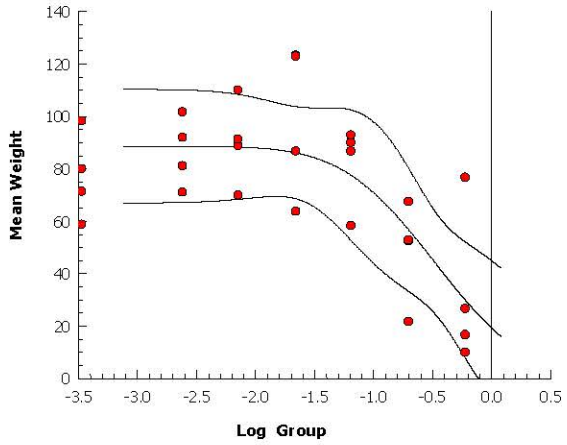
Mean Weight Summary

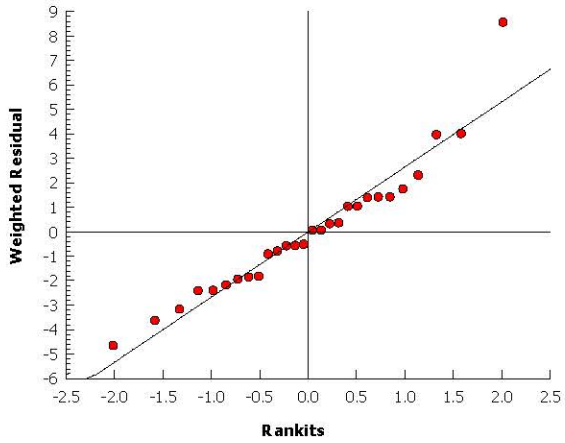
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	77.1	58.8	98.3	8.29	16.6	21.5%	0.0%
0.0024		4	86.5	71.1	102	6.63	13.3	15.3%	-12.1%
0.0071		4	90.1	70	110	8.18	16.4	18.2%	-16.8%
0.0219		4	99.2	63.8	123	14.6	29.2	29.4%	-28.6%
0.0642		4	82	58.3	92.9	7.99	16	19.5%	-6.29%
0.1971		4	48.7	21.7	67.5	9.64	19.3	39.6%	36.9%
0.5975		4	32.5	10	76.7	15.1	30.2	93.0%	57.8%

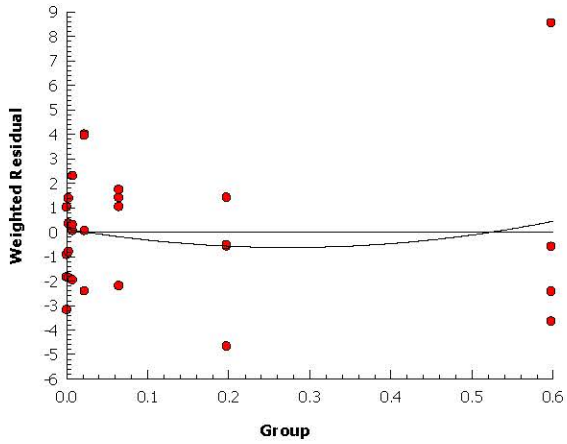
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

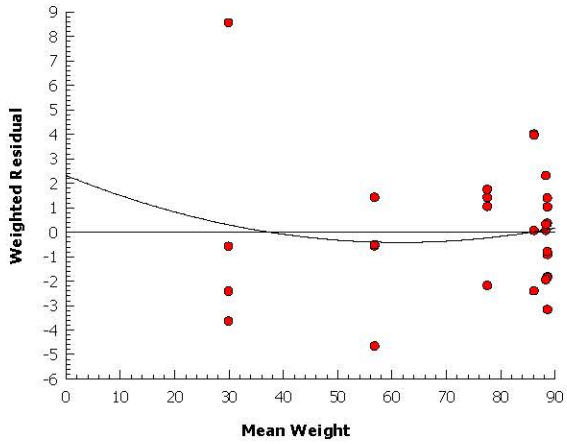
Analysis ID:	14-4993-8257	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-2844-1064	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
41	6910	-13800	-13800	0.3292	Yes	0.874	2.84	0.4961	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0318	N/A	0.0946
IC10	0.0532	N/A	0.139
IC25	0.126	0.0331	0.272
IC50	0.329	0.194	0.558

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	88.6	7.24	74.4	103	12.2	<0.0001	Significant Parameter
C	1.42	0.568	0.308	2.54	2.5	0.0192	Significant Parameter
D	0.329	0.105	0.123	0.536	3.13	0.0045	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	119.5675	119.5675	1	15.2	0.0006	Significant
Lack of Fit	27.97187	6.992968	4	0.874	0.4961	Non-Significant
Pure Error	168.049	8.002335	21			
Residual	196.0209	7.840837	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	196	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	185	37.7	<0.0001	Significant Heterogenity
Variances	Bartlett Equality of Variance	8.37	12.6	0.2126	Equal Variances
	Mod Levene Equality of Variance	0.83	2.57	0.5602	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.935	0.926	0.0830	Normal Distribution
	Anderson-Darling A2 Normality	0.514	2.49	0.1967	Normal Distribution

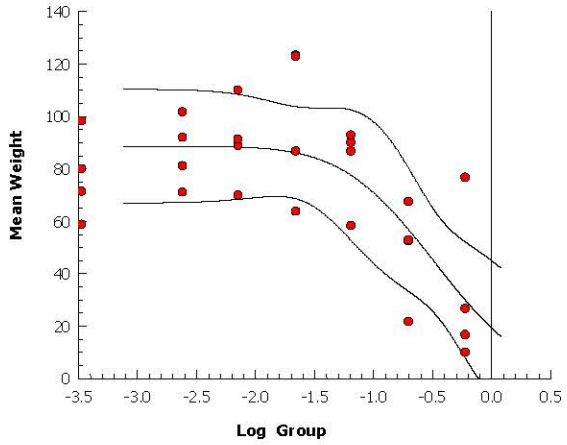
Mean Weight Summary

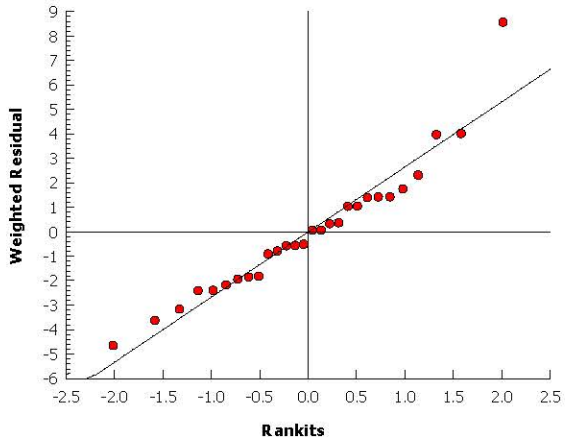
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	77.1	58.8	98.3	8.29	16.6	21.5%	0.0%
0.0024		4	86.5	71.1	102	6.63	13.3	15.3%	-12.1%
0.0071		4	90.1	70	110	8.18	16.4	18.2%	-16.8%
0.0219		4	99.2	63.8	123	14.6	29.2	29.4%	-28.6%
0.0642		4	82	58.3	92.9	7.99	16	19.5%	-6.29%
0.1971		4	48.7	21.7	67.5	9.64	19.3	39.6%	36.9%
0.5975		4	32.5	10	76.7	15.1	30.2	93.0%	57.8%

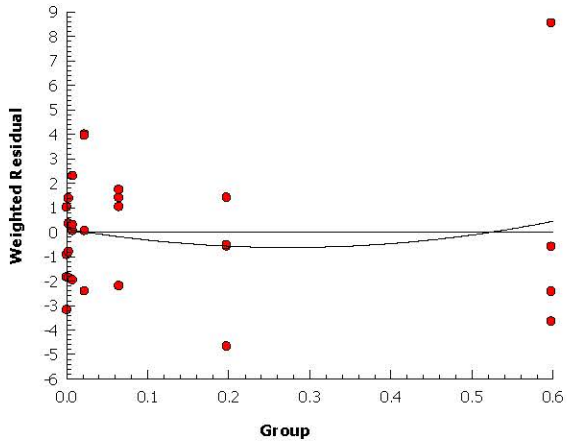
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

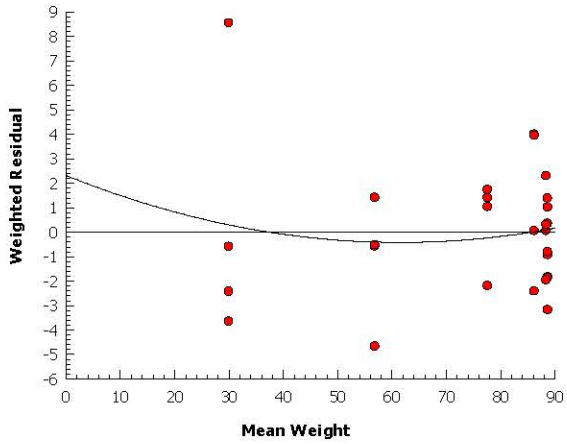
Analysis ID:	02-2844-1064	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









CETIS Analytical Report

Report Date:	05 Feb-13 15:44 (p 1 of 4)
Test Code:	48718014 Lettuc | 03-9498-1402

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	21-1358-3006	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.175	45.45%	0.209	0.0751	1.62	1.14	2.29

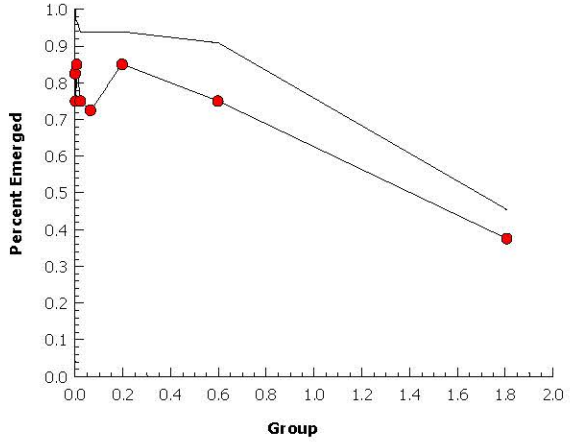
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.09	2.94	0.9883	No Outliers Detected

Percent Emerged Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.825	0.6	1	0.0854	0.171	20.7%	0.0%	33	40
0.0024		4	0.75	0.6	0.9	0.0866	0.173	23.1%	9.09%	30	40
0.0071		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	-3.03%	34	40
0.0219		4	0.75	0.6	0.8	0.05	0.1	13.3%	9.09%	30	40
0.0642		4	0.725	0.6	0.8	0.0479	0.0957	13.2%	12.1%	29	40
0.1971		4	0.85	0.7	1	0.0645	0.129	15.2%	-3.03%	34	40
0.5975		4	0.75	0.6	0.9	0.0645	0.129	17.2%	9.09%	30	40
1.8067		4	0.375	0.1	0.6	0.111	0.222	59.1%	54.5%	15	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-9543-9391	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

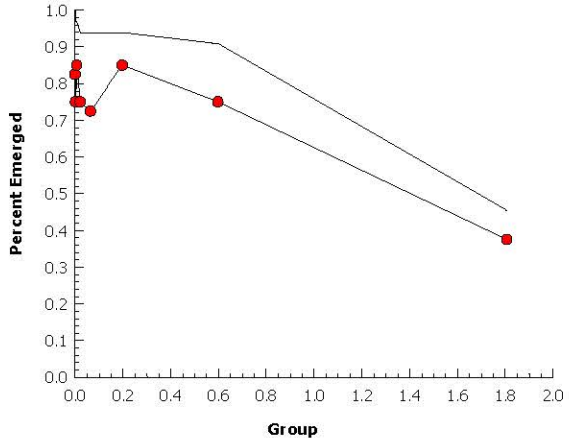
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.175	45.45%	0.209	0.0751	1.62	1.14	2.29

Percent Emerged Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.825	0.6	1	0.0854	0.171	20.7%	0.0%	33	40
0.0024		4	0.75	0.6	0.9	0.0866	0.173	23.1%	9.09%	30	40
0.0071		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	-3.03%	34	40
0.0219		4	0.75	0.6	0.8	0.05	0.1	13.3%	9.09%	30	40
0.0642		4	0.725	0.6	0.8	0.0479	0.0957	13.2%	12.1%	29	40
0.1971		4	0.85	0.7	1	0.0645	0.129	15.2%	-3.03%	34	40
0.5975		4	0.75	0.6	0.9	0.0645	0.129	17.2%	9.09%	30	40
1.8067		4	0.375	0.1	0.6	0.111	0.222	59.1%	54.5%	15	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-6337-1449	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:48	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.3	33.33%	-0.384	0.0515	0.413	0.326	0.523

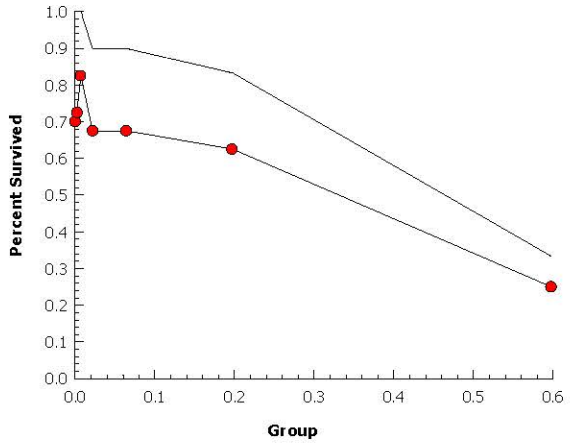
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.04	2.88	0.9814	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.7	0.6	0.8	0.0408	0.0816	11.7%	0.0%	28	40
0.0024		4	0.725	0.5	0.9	0.103	0.206	28.4%	-3.57%	29	40
0.0071		4	0.825	0.8	0.9	0.025	0.05	6.06%	-17.9%	33	40
0.0219		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.0642		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.1971		4	0.625	0.4	0.8	0.0854	0.171	27.3%	10.7%	25	40
0.5975		4	0.25	0.1	0.3	0.05	0.1	40.0%	64.3%	10	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-6393-8166	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:41	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	01-9286-5662	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 12:43	**Species:**	Lactuca sativa	**Brine:**	
Duration:	566d 13h	**Source:**	Territorial Seed Co., OR	**Age:**	

Sample ID:	11-6289-1813	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 12:43	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

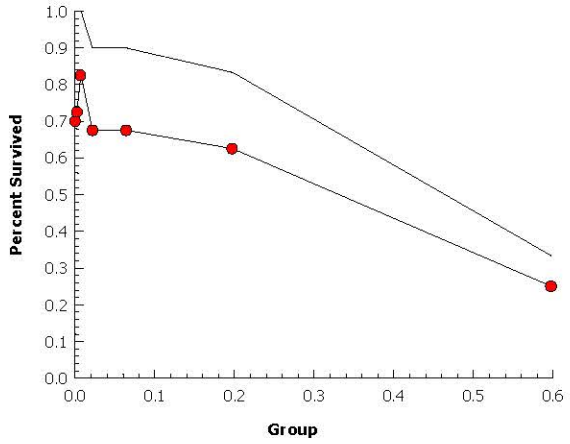
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.3	33.33%	-0.384	0.0515	0.413	0.326	0.523

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.7	0.6	0.8	0.0408	0.0816	11.7%	0.0%	28	40
0.0024		4	0.725	0.5	0.9	0.103	0.206	28.4%	-3.57%	29	40
0.0071		4	0.825	0.8	0.9	0.025	0.05	6.06%	-17.9%	33	40
0.0219		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.0642		4	0.675	0.6	0.8	0.0479	0.0957	14.2%	3.57%	27	40
0.1971		4	0.625	0.4	0.8	0.0854	0.171	27.3%	10.7%	25	40
0.5975		4	0.25	0.1	0.3	0.05	0.1	40.0%	64.3%	10	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
10-5022-1292	Mean Height	1.9455	>1.9455	NA	35.0%		Dunnett Multiple Comparison Test
11-1735-0604	Mean Height	1.9455	>1.9455	NA	35.0%		Dunnett Multiple Comparison Test
00-4460-9473	Mean Height	1.9455	>1.9455	NA	26.5%		Williams Multiple Comparison Test
20-5457-5197	Mean Height	1.9455	>1.9455	NA	26.5%		Williams Multiple Comparison Test
05-4571-8760	Mean Weight	1.9455	>1.9455	NA	50.8%		Dunnett Multiple Comparison Test
09-3644-1535	Mean Weight	1.9455	>1.9455	NA	50.8%		Dunnett Multiple Comparison Test
10-1386-3955	Mean Weight	1.9455	>1.9455	NA	38.5%		Williams Multiple Comparison Test
16-5800-7695	Mean Weight	1.9455	>1.9455	NA	38.5%		Williams Multiple Comparison Test
06-8785-4040	Percent Emerged	0.6356	1.9455	1.112	33.4%		Dunnett Multiple Comparison Test
11-3622-1570	Percent Emerged	0.6356	1.9455	1.112	33.4%		Dunnett Multiple Comparison Test
09-8579-8937	Percent Emerged	0.2061	0.6356	0.3619	25.3%		Williams Multiple Comparison Test
18-5441-5199	Percent Emerged	0.2061	0.6356	0.3619	25.3%		Williams Multiple Comparison Test
03-9076-6775	Percent Survived	0.2061	0.6356	0.3619	31.6%		Dunnett Multiple Comparison Test
17-8106-8323	Percent Survived	0.2061	0.6356	0.3619	31.6%		Dunnett Multiple Comparison Test
04-0897-9414	Percent Survived	0.2061	0.6356	0.3619	24.0%		Williams Multiple Comparison Test
09-7949-5951	Percent Survived	0.2061	0.6356	0.3619	24.0%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
09-0344-9347	Mean Height	IC5	0.00482	N/A	0.722		Nonlinear Regression
		IC10	0.0669	N/A	1.65		
		IC25	5.42	1.74E-05	622		
		IC50	715	N/A	N/A		
20-9274-5983	Mean Height	IC5	0.00482	N/A	0.722		Nonlinear Regression
		IC10	0.0669	N/A	1.65		
		IC25	5.42	1.74E-05	622		
		IC50	715	N/A	N/A		
21-3899-7204	Mean Weight	IC5	0.359	N/A	3.95		Nonlinear Regression
		IC10	0.847	N/A	5.22		
		IC25	3.56	N/A	114		
		IC50	17.5	N/A	N/A		
21-4699-1374	Mean Weight	IC5	0.359	N/A	3.95		Nonlinear Regression
		IC10	0.847	N/A	5.22		
		IC25	3.56	N/A	114		
		IC50	17.5	N/A	N/A		
01-2497-9955	Percent Emerged	EC5	0.133	N/A	N/A		Linear Regression (MLE)
		EC10	0.285	N/A	N/A		
		EC25	1.02	N/A	N/A		
		EC50	4.19	N/A	N/A		
17-4172-8362	Percent Emerged	EC5	0.133	N/A	N/A		Linear Regression (MLE)
		EC10	0.285	N/A	N/A		
		EC25	1.02	N/A	N/A		
		EC50	4.19	N/A	N/A		
07-6415-6484	Percent Survived	EC5	0.117	1.03E-05	0.372		Linear Regression (MLE)
		EC10	0.21	0.000174	0.532		
		EC25	0.554	0.018	1.07		
		EC50	1.63	0.772	9.4		
13-5844-8401	Percent Survived	EC5	0.117	1.03E-05	0.372		Linear Regression (MLE)
		EC10	0.21	0.000174	0.532		
		EC25	0.554	0.018	1.07		
		EC50	1.63	0.772	9.4		
04-4156-6482	Percent Survived	EC50	1.28	0.444	3.68		Trimmed Spearman-Kärber
19-6807-4287	Percent Survived	EC50	1.28	0.444	3.68		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	13.6	7.58	19.6	9.8	17.6	1.89	3.78	27.8%	0.0%
0	Negative Control	4	13.5	12.1	14.9	12.5	14.6	0.434	0.868	6.43%	0.74%
0.008		4	11.3	5.18	17.4	6.9	16.1	1.91	3.83	34.0%	17.1%
0.0234		4	12.3	8.88	15.7	9.9	15	1.07	2.13	17.4%	9.74%
0.0698		4	14.3	10.2	18.3	11.6	16.8	1.27	2.54	17.8%	-4.78%
0.2061		4	11.1	4.5	17.7	5.9	15.9	2.07	4.13	37.3%	18.6%
0.6356		4	10.2	8.72	11.7	9.3	11	0.464	0.927	9.09%	25.0%
1.9455		4	10.9	6.43	15.4	7	13.6	1.41	2.81	25.8%	19.9%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	12	4.48	19.6	7.9	16.8	2.37	4.74	39.4%	0.0%
0	Negative Control	4	10.2	8.87	11.5	9	10.9	0.409	0.818	8.04%	15.4%
0.008		4	8.2	3.19	13.2	4.4	12.1	1.57	3.15	38.4%	31.8%
0.0234		4	11	5.11	16.9	7.6	16.3	1.86	3.72	33.7%	8.32%
0.0698		4	12.7	8.59	16.8	9.3	15.4	1.28	2.57	20.2%	-5.41%
0.2061		4	10.2	5.12	15.3	6.6	13.4	1.61	3.21	31.4%	15.0%
0.6356		4	8.25	5.72	10.8	6.7	10.4	0.796	1.59	19.3%	31.4%
1.9455		4	8.98	2.11	15.8	3	12.8	2.16	4.31	48.0%	25.4%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.85	0.758	0.942	0.8	0.9	0.0289	0.0577	6.79%	0.0%
0	Negative Control	4	0.825	0.673	0.977	0.7	0.9	0.0479	0.0957	11.6%	2.94%
0.008		4	0.675	0.436	0.914	0.5	0.8	0.075	0.15	22.2%	20.6%
0.0234		4	0.75	0.419	1	0.5	1	0.104	0.208	27.8%	11.8%
0.0698		4	0.8	0.67	0.93	0.7	0.9	0.0408	0.0816	10.2%	5.88%
0.2061		4	0.75	0.371	1	0.5	1	0.119	0.238	31.7%	11.8%
0.6356		4	0.55	0.274	0.826	0.3	0.7	0.0866	0.173	31.5%	35.3%
1.9455		4	0.525	0.373	0.677	0.4	0.6	0.0479	0.0957	18.2%	38.2%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.775	0.575	0.975	0.6	0.9	0.0629	0.126	16.2%	0.0%
0	Negative Control	4	0.825	0.673	0.977	0.7	0.9	0.0479	0.0957	11.6%	-6.45%
0.008		4	0.65	0.445	0.855	0.5	0.8	0.0645	0.129	19.9%	16.1%
0.0234		4	0.75	0.419	1	0.5	1	0.104	0.208	27.8%	3.23%
0.0698		4	0.775	0.623	0.927	0.7	0.9	0.0479	0.0957	12.4%	0.0%
0.2061		4	0.725	0.397	1	0.5	0.9	0.103	0.206	28.4%	6.45%
0.6356		4	0.475	0.203	0.747	0.3	0.7	0.0854	0.171	36.0%	38.7%
1.9455		4	0.375	0.223	0.527	0.3	0.5	0.0479	0.0957	25.5%	51.6%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	11	9.8	16	17.6
0	Negative Control	14.6	13.6	12.5	13.3
0.008		6.9	11.9	16.1	10.2
0.0234		11.6	9.9	12.6	15
0.0698		12.6	16.8	16	11.6
0.2061		15.9	12	5.9	10.5
0.6356		9.3	9.5	11	11
1.9455		7	13.6	12	11

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	8	7.9	16.8	15.4
0	Negative Control	10.9	10.4	9	10.4
0.008		4.4	8	12.1	8.3
0.0234		9.8	7.6	10.4	16.3
0.0698		12.4	15.4	13.6	9.3
0.2061		13.4	12.4	6.6	8.5
0.6356		6.7	7.5	8.4	10.4
1.9455		3	12.8	8.8	11.3

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.9	0.9	0.8	0.8
0	Negative Control	0.9	0.7	0.8	0.9
0.008		0.5	0.8	0.8	0.6
0.0234		1	0.7	0.5	0.8
0.0698		0.7	0.9	0.8	0.8
0.2061		0.9	1	0.5	0.6
0.6356		0.3	0.6	0.6	0.7
1.9455		0.5	0.6	0.6	0.4

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.6	0.9	0.8	0.8
0	Negative Control	0.9	0.7	0.8	0.9
0.008		0.5	0.7	0.8	0.6
0.0234		1	0.7	0.5	0.8
0.0698		0.7	0.9	0.8	0.7
0.2061		0.9	0.9	0.5	0.6
0.6356		0.3	0.4	0.5	0.7
1.9455		0.3	0.5	0.4	0.3

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-5022-1292	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	35.0%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.15	2.45	4.73	6	0.3861	CDF	Non-Significant Effect
		0.0234	0.634	2.45	4.73	6	0.6221	CDF	Non-Significant Effect
		0.0698	-0.388	2.45	4.73	6	0.9369	CDF	Non-Significant Effect
		0.2061	1.26	2.45	4.73	6	0.3422	CDF	Non-Significant Effect
		0.6356	1.71	2.45	4.73	6	0.1837	CDF	Non-Significant Effect
		1.9455	1.35	2.45	4.73	6	0.3059	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.15	2.88	0.7193	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	52.72	8.786667	6	1.18	0.3555	Non-Significant Effect
Error	156.7125	7.4625	21			
Total	209.4325		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.42	16.8	0.1515	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.897	0.6797	Normal Distribution

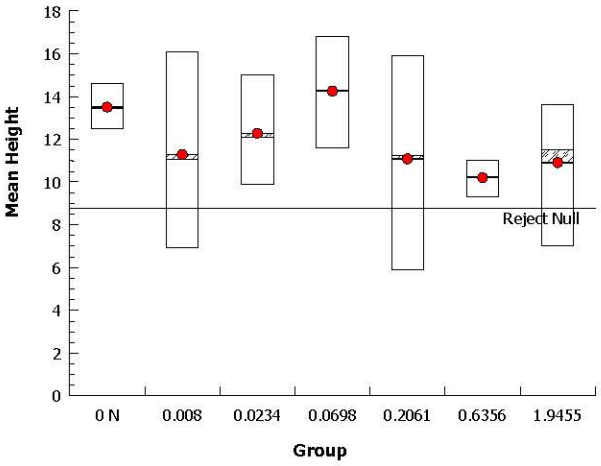
Mean Height Summary

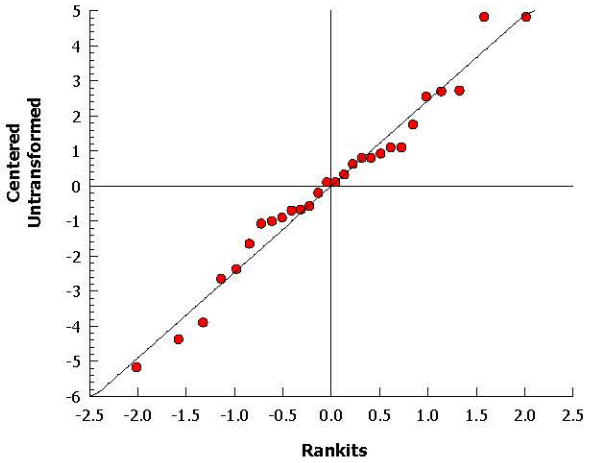
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.5	12.1	14.9	13.5	12.5	14.6	0.434	6.43%	0.0%
0.008		4	11.3	5.18	17.4	11	6.9	16.1	1.91	34.0%	16.5%
0.0234		4	12.3	8.88	15.7	12.1	9.9	15	1.07	17.4%	9.07%
0.0698		4	14.3	10.2	18.3	14.3	11.6	16.8	1.27	17.8%	-5.56%
0.2061		4	11.1	4.5	17.7	11.3	5.9	15.9	2.07	37.3%	18.0%
0.6356		4	10.2	8.72	11.7	10.3	9.3	11	0.464	9.09%	24.4%
1.9455		4	10.9	6.43	15.4	11.5	7	13.6	1.41	25.8%	19.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-5022-1292	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-4460-9473	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	26.5%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.15	1.72	3.32	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.893	1.8	3.48	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.466	1.83	3.53	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.26	1.84	3.56	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.71	1.85	3.57	6	>0.05	CDF	Non-Significant Effect
		1.9455	1.53	1.86	3.58	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.15	2.88	0.7193	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	52.72	8.786667	6	1.18	0.3555	Non-Significant Effect
Error	156.7125	7.4625	21			
Total	209.4325		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.42	16.8	0.1515	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.897	0.6797	Normal Distribution

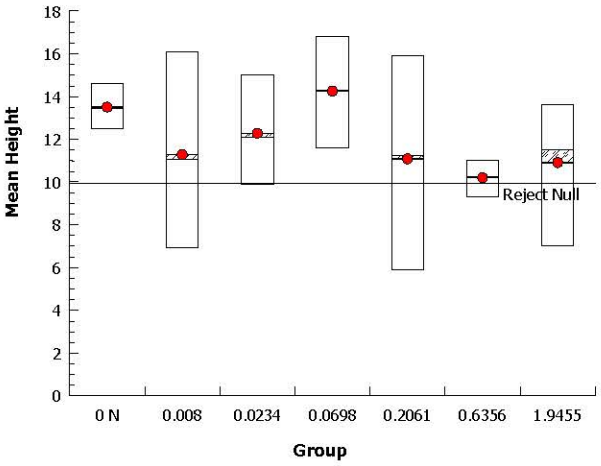
Mean Height Summary

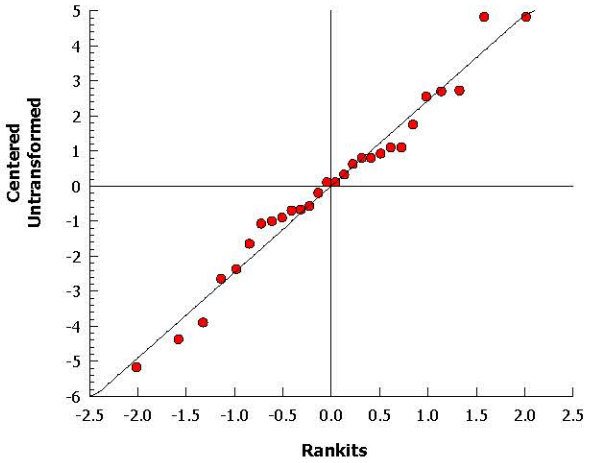
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.5	12.1	14.9	13.5	12.5	14.6	0.434	6.43%	0.0%
0.008		4	11.3	5.18	17.4	11	6.9	16.1	1.91	34.0%	16.5%
0.0234		4	12.3	8.88	15.7	12.1	9.9	15	1.07	17.4%	9.07%
0.0698		4	14.3	10.2	18.3	14.3	11.6	16.8	1.27	17.8%	-5.56%
0.2061		4	11.1	4.5	17.7	11.3	5.9	15.9	2.07	37.3%	18.0%
0.6356		4	10.2	8.72	11.7	10.3	9.3	11	0.464	9.09%	24.4%
1.9455		4	10.9	6.43	15.4	11.5	7	13.6	1.41	25.8%	19.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-4460-9473	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-1735-0604	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	35.0%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.15	2.45	4.73	6	0.3861	CDF	Non-Significant Effect
		0.0234	0.634	2.45	4.73	6	0.6221	CDF	Non-Significant Effect
		0.0698	-0.388	2.45	4.73	6	0.9369	CDF	Non-Significant Effect
		0.2061	1.26	2.45	4.73	6	0.3422	CDF	Non-Significant Effect
		0.6356	1.71	2.45	4.73	6	0.1837	CDF	Non-Significant Effect
		1.9455	1.35	2.45	4.73	6	0.3059	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	52.72	8.786667	6	1.18	0.3555	Non-Significant Effect
Error	156.7125	7.4625	21			
Total	209.4325		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.42	16.8	0.1515	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.897	0.6797	Normal Distribution

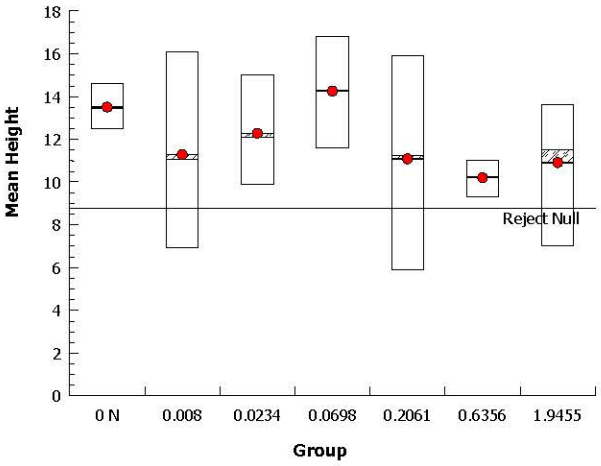
Mean Height Summary

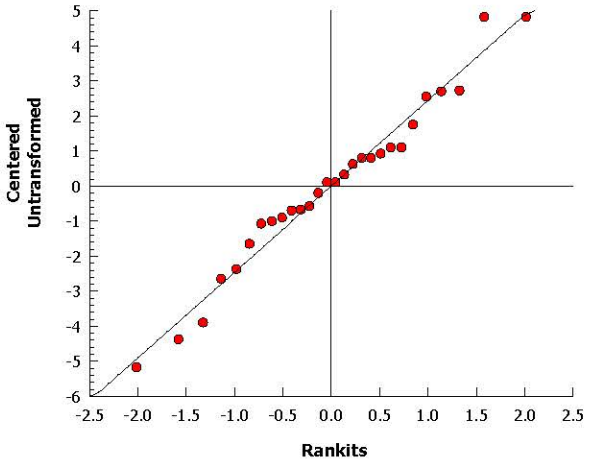
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.5	12.1	14.9	13.5	12.5	14.6	0.434	6.43%	0.0%
0.008		4	11.3	5.18	17.4	11	6.9	16.1	1.91	34.0%	16.5%
0.0234		4	12.3	8.88	15.7	12.1	9.9	15	1.07	17.4%	9.07%
0.0698		4	14.3	10.2	18.3	14.3	11.6	16.8	1.27	17.8%	-5.56%
0.2061		4	11.1	4.5	17.7	11.3	5.9	15.9	2.07	37.3%	18.0%
0.6356		4	10.2	8.72	11.7	10.3	9.3	11	0.464	9.09%	24.4%
1.9455		4	10.9	6.43	15.4	11.5	7	13.6	1.41	25.8%	19.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	11-1735-0604	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-5457-5197	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:46	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	26.5%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.15	1.72	3.32	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.893	1.8	3.48	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.466	1.83	3.53	6	>0.05	CDF	Non-Significant Effect
		0.2061	1.26	1.84	3.56	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.71	1.85	3.57	6	>0.05	CDF	Non-Significant Effect
		1.9455	1.53	1.86	3.58	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	52.72	8.786667	6	1.18	0.3555	Non-Significant Effect
Error	156.7125	7.4625	21			
Total	209.4325		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.42	16.8	0.1515	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.974	0.897	0.6797	Normal Distribution

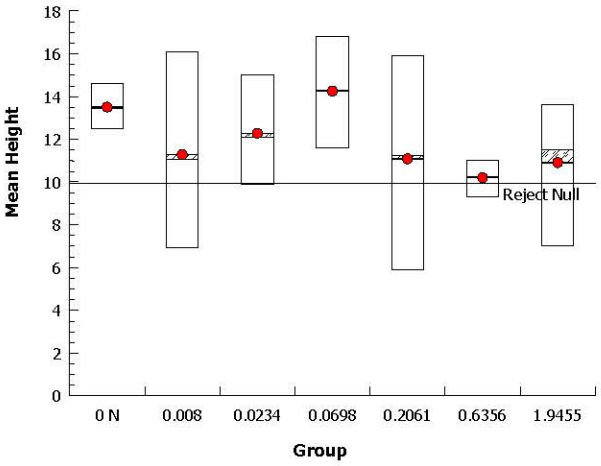
Mean Height Summary

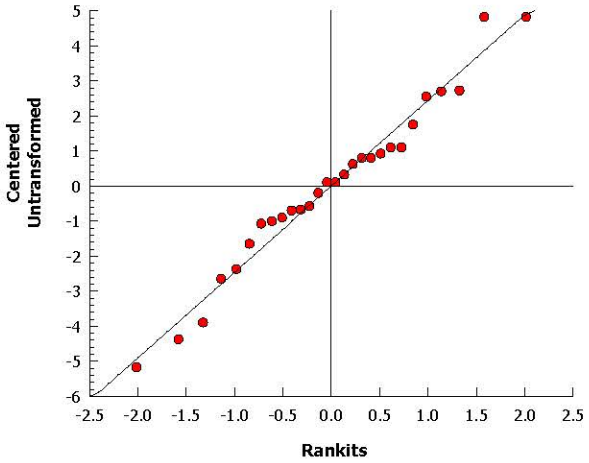
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.5	12.1	14.9	13.5	12.5	14.6	0.434	6.43%	0.0%
0.008		4	11.3	5.18	17.4	11	6.9	16.1	1.91	34.0%	16.5%
0.0234		4	12.3	8.88	15.7	12.1	9.9	15	1.07	17.4%	9.07%
0.0698		4	14.3	10.2	18.3	14.3	11.6	16.8	1.27	17.8%	-5.56%
0.2061		4	11.1	4.5	17.7	11.3	5.9	15.9	2.07	37.3%	18.0%
0.6356		4	10.2	8.72	11.7	10.3	9.3	11	0.464	9.09%	24.4%
1.9455		4	10.9	6.43	15.4	11.5	7	13.6	1.41	25.8%	19.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-5457-5197	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:46	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-4571-8760	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	50.8%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.935	2.45	5.17	6	0.4834	CDF	Non-Significant Effect
		0.0234	-0.403	2.45	5.17	6	0.9390	CDF	Non-Significant Effect
		0.0698	-1.18	2.45	5.17	6	0.9926	CDF	Non-Significant Effect
		0.2061	-0.0237	2.45	5.17	6	0.8634	CDF	Non-Significant Effect
		0.6356	0.912	2.45	5.17	6	0.4944	CDF	Non-Significant Effect
		1.9455	0.568	2.45	5.17	6	0.6513	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.27	2.88	0.4966	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	62.43357	10.40559	6	1.17	0.3605	Non-Significant Effect
Error	187.2075	8.914642	21			
Total	249.6411		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.26	16.8	0.2977	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.897	0.8650	Normal Distribution

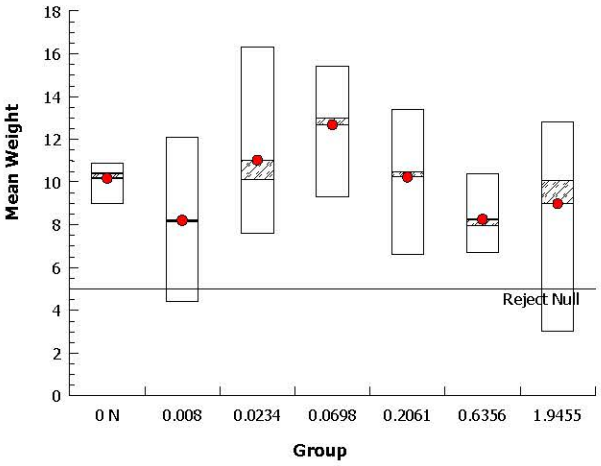
Mean Weight Summary

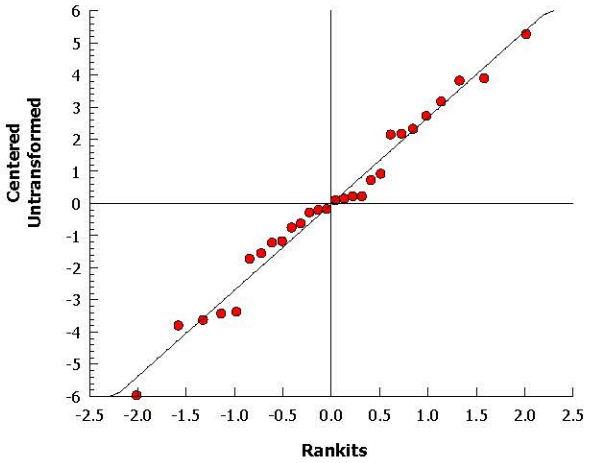
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.2	8.87	11.5	10.4	9	10.9	0.409	8.04%	0.0%
0.008		4	8.2	3.19	13.2	8.15	4.4	12.1	1.57	38.4%	19.4%
0.0234		4	11	5.11	16.9	10.1	7.6	16.3	1.86	33.7%	-8.35%
0.0698		4	12.7	8.59	16.8	13	9.3	15.4	1.28	20.2%	-24.6%
0.2061		4	10.2	5.12	15.3	10.4	6.6	13.4	1.61	31.4%	-0.49%
0.6356		4	8.25	5.72	10.8	7.95	6.7	10.4	0.796	19.3%	18.9%
1.9455		4	8.98	2.11	15.8	10.1	3	12.8	2.16	48.0%	11.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	05-4571-8760	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-5800-7695	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	38.5%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.935	1.72	3.63	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.266	1.8	3.81	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.217	1.83	3.86	6	>0.05	CDF	Non-Significant Effect
		0.2061	-0.0237	1.84	3.89	6	>0.05	CDF	Non-Significant Effect
		0.6356	0.912	1.85	3.91	6	>0.05	CDF	Non-Significant Effect
		1.9455	0.74	1.86	3.92	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.27	2.88	0.4966	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	62.43357	10.40559	6	1.17	0.3605	Non-Significant Effect
Error	187.2075	8.914642	21			
Total	249.6411		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.26	16.8	0.2977	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.897	0.8650	Normal Distribution

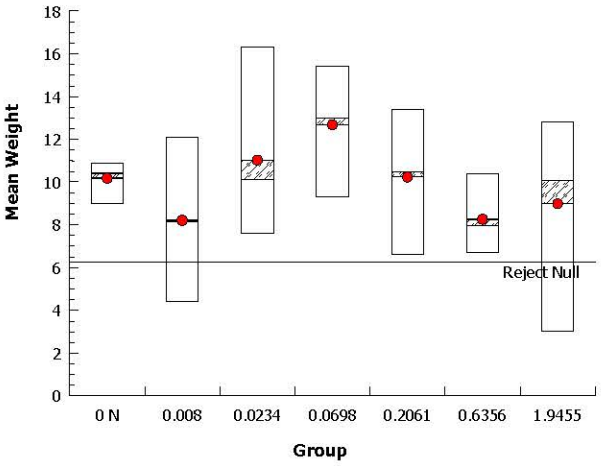
Mean Weight Summary

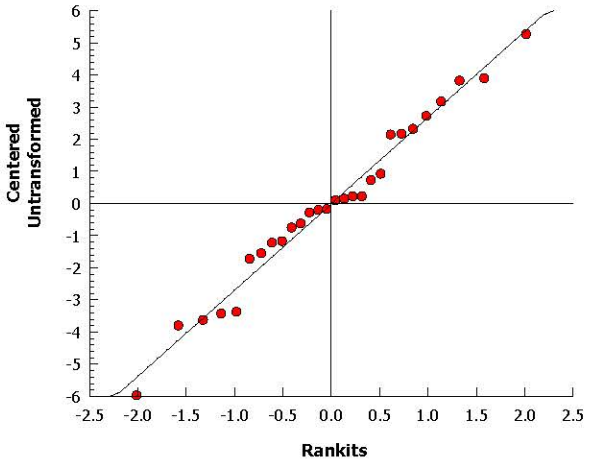
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.2	8.87	11.5	10.4	9	10.9	0.409	8.04%	0.0%
0.008		4	8.2	3.19	13.2	8.15	4.4	12.1	1.57	38.4%	19.4%
0.0234		4	11	5.11	16.9	10.1	7.6	16.3	1.86	33.7%	-8.35%
0.0698		4	12.7	8.59	16.8	13	9.3	15.4	1.28	20.2%	-24.6%
0.2061		4	10.2	5.12	15.3	10.4	6.6	13.4	1.61	31.4%	-0.49%
0.6356		4	8.25	5.72	10.8	7.95	6.7	10.4	0.796	19.3%	18.9%
1.9455		4	8.98	2.11	15.8	10.1	3	12.8	2.16	48.0%	11.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-5800-7695	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-3644-1535	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	50.8%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.935	2.45	5.17	6	0.4834	CDF	Non-Significant Effect
		0.0234	-0.403	2.45	5.17	6	0.9390	CDF	Non-Significant Effect
		0.0698	-1.18	2.45	5.17	6	0.9926	CDF	Non-Significant Effect
		0.2061	-0.0237	2.45	5.17	6	0.8634	CDF	Non-Significant Effect
		0.6356	0.912	2.45	5.17	6	0.4944	CDF	Non-Significant Effect
		1.9455	0.568	2.45	5.17	6	0.6513	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	62.43357	10.40559	6	1.17	0.3605	Non-Significant Effect
Error	187.2075	8.914642	21			
Total	249.6411		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.26	16.8	0.2977	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.897	0.8650	Normal Distribution

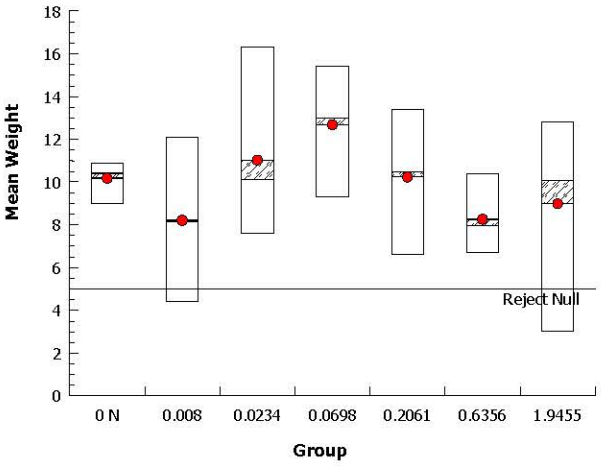
Mean Weight Summary

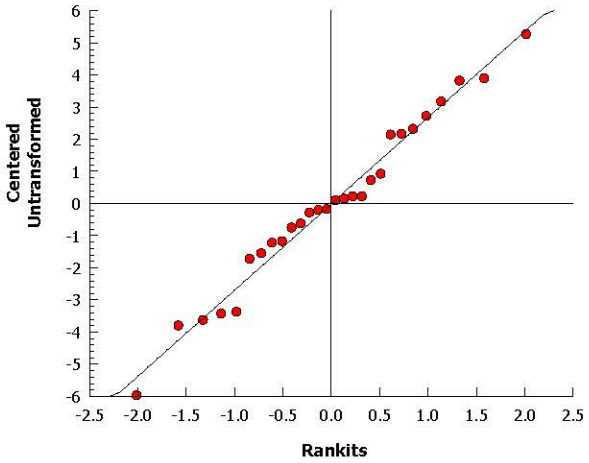
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.2	8.87	11.5	10.4	9	10.9	0.409	8.04%	0.0%
0.008		4	8.2	3.19	13.2	8.15	4.4	12.1	1.57	38.4%	19.4%
0.0234		4	11	5.11	16.9	10.1	7.6	16.3	1.86	33.7%	-8.35%
0.0698		4	12.7	8.59	16.8	13	9.3	15.4	1.28	20.2%	-24.6%
0.2061		4	10.2	5.12	15.3	10.4	6.6	13.4	1.61	31.4%	-0.49%
0.6356		4	8.25	5.72	10.8	7.95	6.7	10.4	0.796	19.3%	18.9%
1.9455		4	8.98	2.11	15.8	10.1	3	12.8	2.16	48.0%	11.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-3644-1535	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-1386-3955	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:46	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	38.5%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.935	1.72	3.63	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.266	1.8	3.81	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.217	1.83	3.86	6	>0.05	CDF	Non-Significant Effect
		0.2061	-0.0237	1.84	3.89	6	>0.05	CDF	Non-Significant Effect
		0.6356	0.912	1.85	3.91	6	>0.05	CDF	Non-Significant Effect
		1.9455	0.74	1.86	3.92	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	62.43357	10.40559	6	1.17	0.3605	Non-Significant Effect
Error	187.2075	8.914642	21			
Total	249.6411		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.26	16.8	0.2977	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.897	0.8650	Normal Distribution

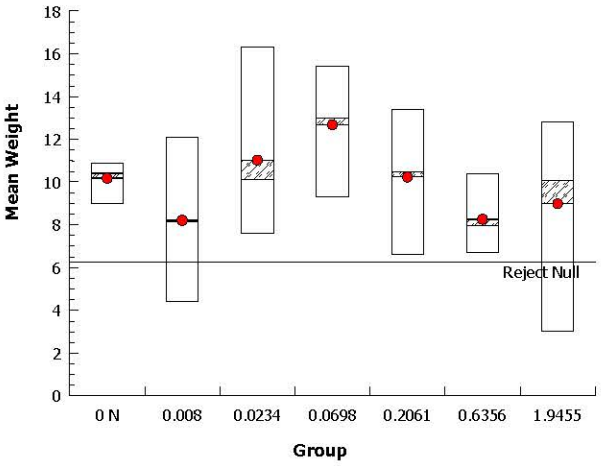
Mean Weight Summary

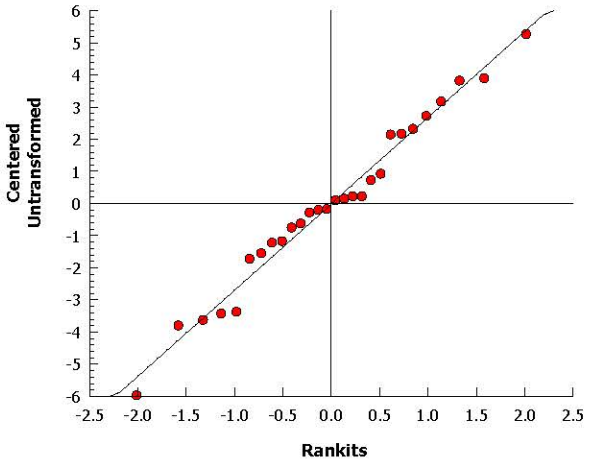
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	10.2	8.87	11.5	10.4	9	10.9	0.409	8.04%	0.0%
0.008		4	8.2	3.19	13.2	8.15	4.4	12.1	1.57	38.4%	19.4%
0.0234		4	11	5.11	16.9	10.1	7.6	16.3	1.86	33.7%	-8.35%
0.0698		4	12.7	8.59	16.8	13	9.3	15.4	1.28	20.2%	-24.6%
0.2061		4	10.2	5.12	15.3	10.4	6.6	13.4	1.61	31.4%	-0.49%
0.6356		4	8.25	5.72	10.8	7.95	6.7	10.4	0.796	19.3%	18.9%
1.9455		4	8.98	2.11	15.8	10.1	3	12.8	2.16	48.0%	11.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-1386-3955	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:46	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-8785-4040	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.4%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.33	2.45	0.276	6	0.3113	CDF	Non-Significant Effect
		0.0234	0.666	2.45	0.276	6	0.6077	CDF	Non-Significant Effect
		0.0698	0.222	2.45	0.276	6	0.7887	CDF	Non-Significant Effect
		0.2061	0.666	2.45	0.276	6	0.6077	CDF	Non-Significant Effect
		0.6356	2.44	2.45	0.276	6	0.0505	CDF	Non-Significant Effect
		1.9455*	2.66	2.45	0.276	6	0.0324	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.78	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3371429	0.05619048	6	2.22	0.0820	Non-Significant Effect
Error	0.5325	0.02535714	21			
Total	0.8696429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.28	16.8	0.5088	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3462	Normal Distribution

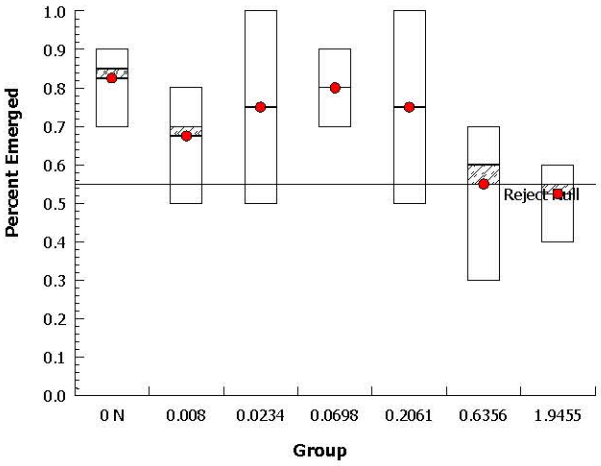
Percent Emerged Summary

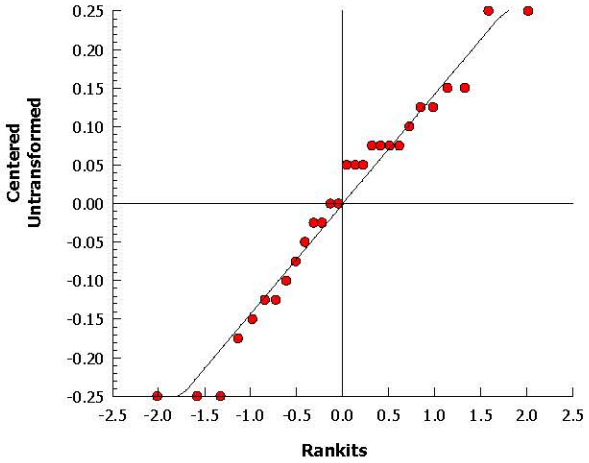
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.675	0.436	0.914	0.7	0.5	0.8	0.075	22.2%	18.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	3.03%
0.2061		4	0.75	0.371	1	0.75	0.5	1	0.119	31.7%	9.09%
0.6356		4	0.55	0.274	0.826	0.6	0.3	0.7	0.0866	31.5%	33.3%
1.9455		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	36.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	06-8785-4040	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-5441-5199	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.3%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.33	1.72	0.194	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.999	1.8	0.203	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.74	1.83	0.206	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.722	1.84	0.207	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.44	1.85	0.208	6	<0.05	CDF	Significant Effect
		1.9455*	2.66	1.86	0.209	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.78	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3371429	0.05619048	6	2.22	0.0820	Non-Significant Effect
Error	0.5325	0.02535714	21			
Total	0.8696429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.28	16.8	0.5088	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3462	Normal Distribution

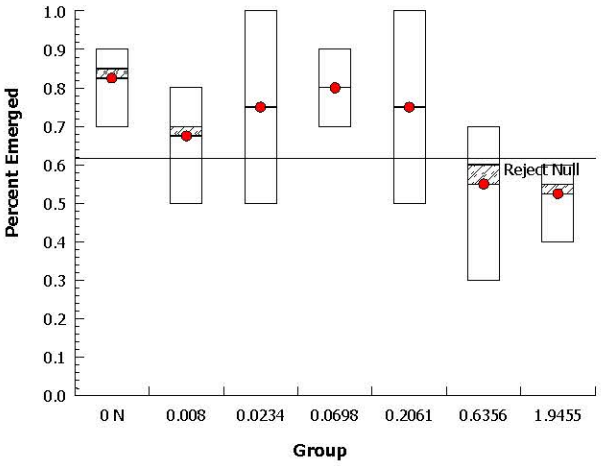
Percent Emerged Summary

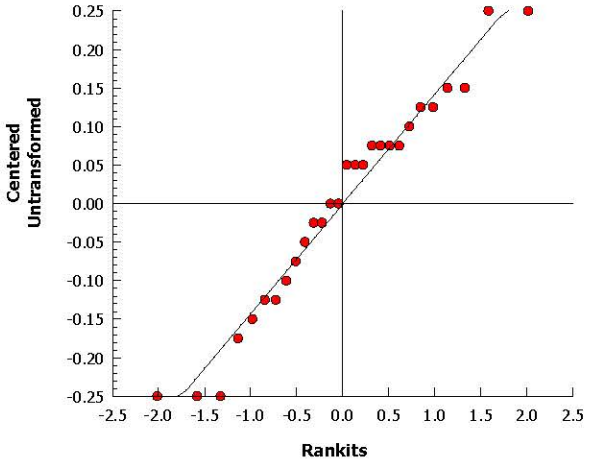
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.675	0.436	0.914	0.7	0.5	0.8	0.075	22.2%	18.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	3.03%
0.2061		4	0.75	0.371	1	0.75	0.5	1	0.119	31.7%	9.09%
0.6356		4	0.55	0.274	0.826	0.6	0.3	0.7	0.0866	31.5%	33.3%
1.9455		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	36.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-5441-5199	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-3622-1570	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.4%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.33	2.45	0.276	6	0.3113	CDF	Non-Significant Effect
		0.0234	0.666	2.45	0.276	6	0.6077	CDF	Non-Significant Effect
		0.0698	0.222	2.45	0.276	6	0.7887	CDF	Non-Significant Effect
		0.2061	0.666	2.45	0.276	6	0.6077	CDF	Non-Significant Effect
		0.6356	2.44	2.45	0.276	6	0.0505	CDF	Non-Significant Effect
		1.9455*	2.66	2.45	0.276	6	0.0324	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3371429	0.05619048	6	2.22	0.0820	Non-Significant Effect
Error	0.5325	0.02535714	21			
Total	0.8696429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.28	16.8	0.5088	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3462	Normal Distribution

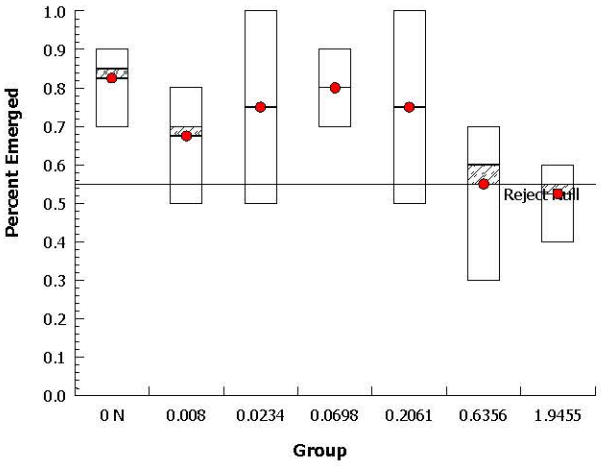
Percent Emerged Summary

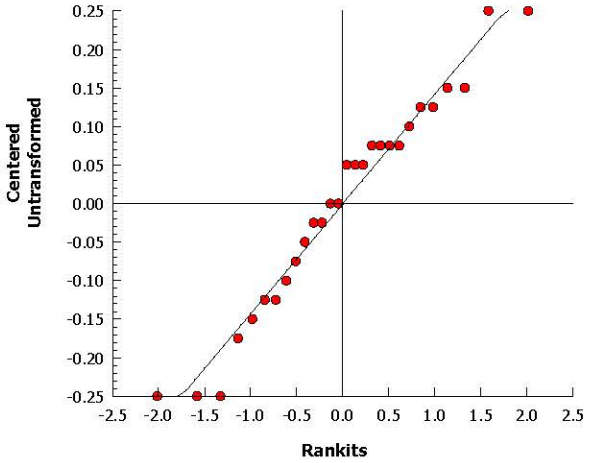
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.675	0.436	0.914	0.7	0.5	0.8	0.075	22.2%	18.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	3.03%
0.2061		4	0.75	0.371	1	0.75	0.5	1	0.119	31.7%	9.09%
0.6356		4	0.55	0.274	0.826	0.6	0.3	0.7	0.0866	31.5%	33.3%
1.9455		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	36.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	11-3622-1570	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-8579-8937	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:46	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.3%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.33	1.72	0.194	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.999	1.8	0.203	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.74	1.83	0.206	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.722	1.84	0.207	6	>0.05	CDF	Non-Significant Effect
		0.6356*	2.44	1.85	0.208	6	<0.05	CDF	Significant Effect
		1.9455*	2.66	1.86	0.209	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3371429	0.05619048	6	2.22	0.0820	Non-Significant Effect
Error	0.5325	0.02535714	21			
Total	0.8696429		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	5.28	16.8	0.5088	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.897	0.3462	Normal Distribution

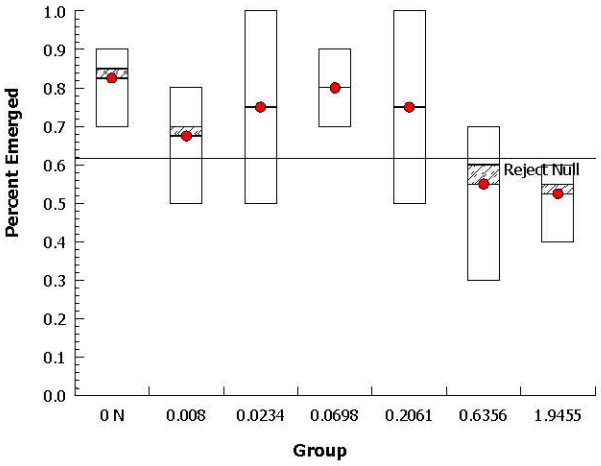
Percent Emerged Summary

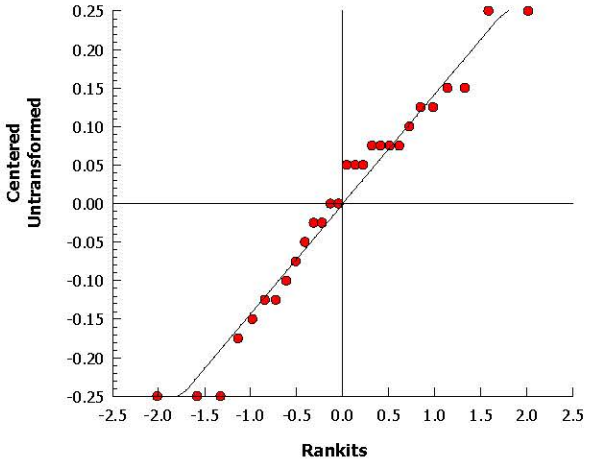
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.675	0.436	0.914	0.7	0.5	0.8	0.075	22.2%	18.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	3.03%
0.2061		4	0.75	0.371	1	0.75	0.5	1	0.119	31.7%	9.09%
0.6356		4	0.55	0.274	0.826	0.6	0.3	0.7	0.0866	31.5%	33.3%
1.9455		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	36.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-8579-8937	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:46	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-8106-8323	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	31.6%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.64	2.45	0.261	6	0.2033	CDF	Non-Significant Effect
		0.0234	0.703	2.45	0.261	6	0.5907	CDF	Non-Significant Effect
		0.0698	0.469	2.45	0.261	6	0.6939	CDF	Non-Significant Effect
		0.2061	0.938	2.45	0.261	6	0.4823	CDF	Non-Significant Effect
		0.6356*	3.28	2.45	0.261	6	0.0086	CDF	Significant Effect
		1.9455*	4.22	2.45	0.261	6	0.0010	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.88	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6721429	0.1120238	6	4.93	0.0027	Significant Effect
Error	0.4775	0.0227381	21			
Total	1.149643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.04	16.8	0.6716	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.977	0.897	0.7613	Normal Distribution

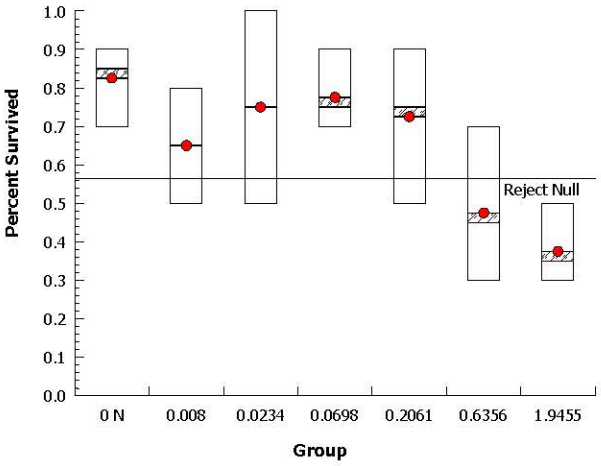
Percent Survived Summary

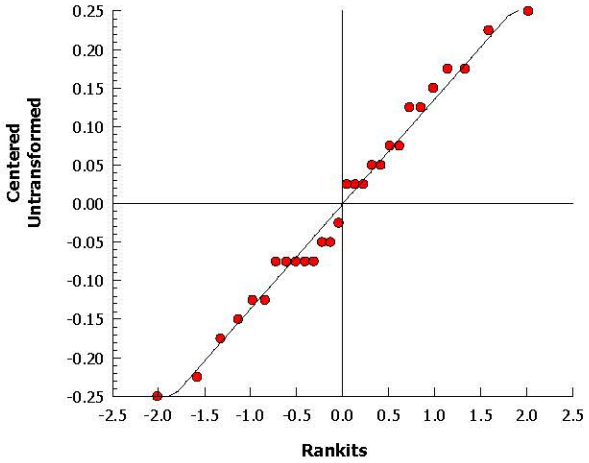
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	21.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	6.06%
0.2061		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	12.1%
0.6356		4	0.475	0.203	0.747	0.45	0.3	0.7	0.0854	36.0%	42.4%
1.9455		4	0.375	0.223	0.527	0.35	0.3	0.5	0.0479	25.5%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	17-8106-8323	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-7949-5951	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	24.0%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.64	1.72	0.183	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.17	1.8	0.192	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.938	1.83	0.195	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.938	1.84	0.196	6	>0.05	CDF	Non-Significant Effect
		0.6356*	3.28	1.85	0.197	6	<0.05	CDF	Significant Effect
		1.9455*	4.22	1.86	0.198	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.88	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6721429	0.1120238	6	4.93	0.0027	Significant Effect
Error	0.4775	0.0227381	21			
Total	1.149643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.04	16.8	0.6716	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.977	0.897	0.7613	Normal Distribution

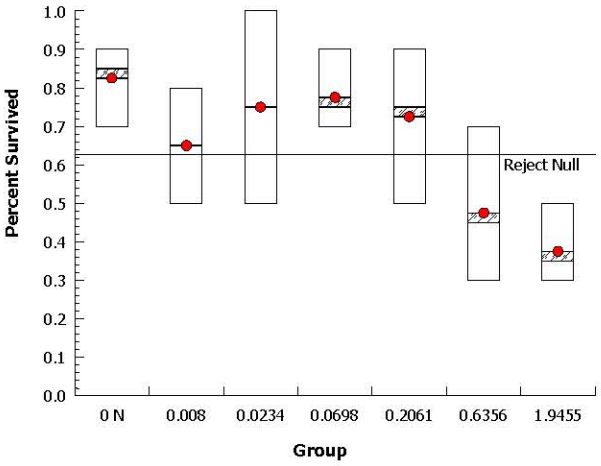
Percent Survived Summary

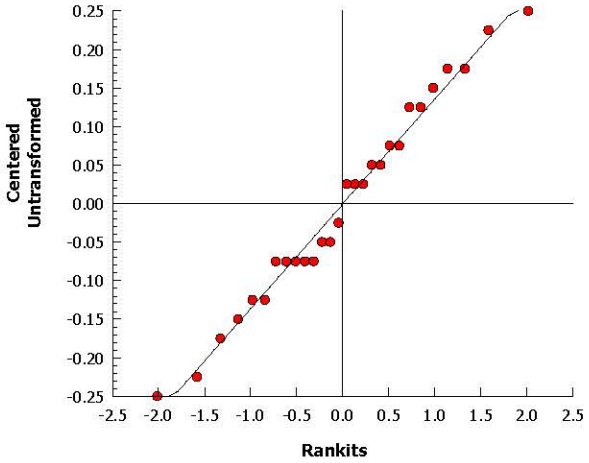
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	21.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	6.06%
0.2061		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	12.1%
0.6356		4	0.475	0.203	0.747	0.45	0.3	0.7	0.0854	36.0%	42.4%
1.9455		4	0.375	0.223	0.527	0.35	0.3	0.5	0.0479	25.5%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-7949-5951	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:42	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	03-9076-6775	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	31.6%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.64	2.45	0.261	6	0.2033	CDF	Non-Significant Effect
		0.0234	0.703	2.45	0.261	6	0.5907	CDF	Non-Significant Effect
		0.0698	0.469	2.45	0.261	6	0.6939	CDF	Non-Significant Effect
		0.2061	0.938	2.45	0.261	6	0.4823	CDF	Non-Significant Effect
		0.6356*	3.28	2.45	0.261	6	0.0086	CDF	Significant Effect
		1.9455*	4.22	2.45	0.261	6	0.0010	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6721429	0.1120238	6	4.93	0.0027	Significant Effect
Error	0.4775	0.0227381	21			
Total	1.149643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.04	16.8	0.6716	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.977	0.897	0.7613	Normal Distribution

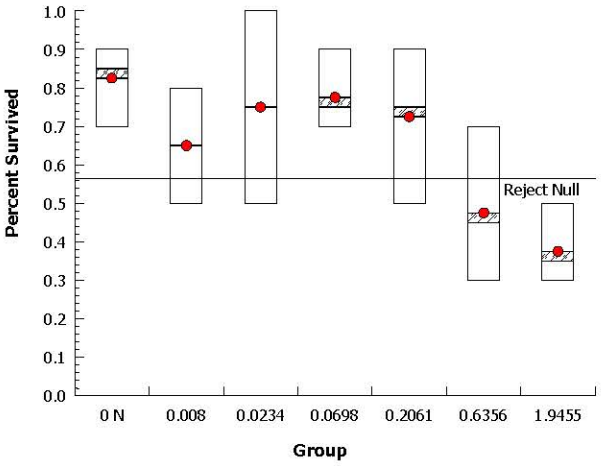
Percent Survived Summary

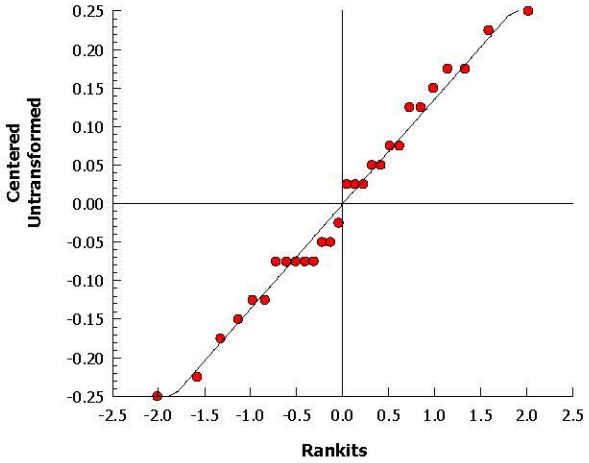
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	21.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	6.06%
0.2061		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	12.1%
0.6356		4	0.475	0.203	0.747	0.45	0.3	0.7	0.0854	36.0%	42.4%
1.9455		4	0.375	0.223	0.527	0.35	0.3	0.5	0.0479	25.5%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	03-9076-6775	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-0897-9414	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	24.0%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.64	1.72	0.183	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.17	1.8	0.192	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.938	1.83	0.195	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.938	1.84	0.196	6	>0.05	CDF	Non-Significant Effect
		0.6356*	3.28	1.85	0.197	6	<0.05	CDF	Significant Effect
		1.9455*	4.22	1.86	0.198	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6721429	0.1120238	6	4.93	0.0027	Significant Effect
Error	0.4775	0.0227381	21			
Total	1.149643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.04	16.8	0.6716	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.977	0.897	0.7613	Normal Distribution

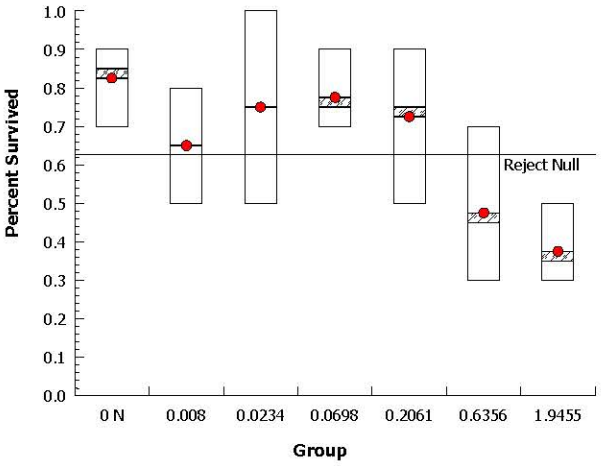
Percent Survived Summary

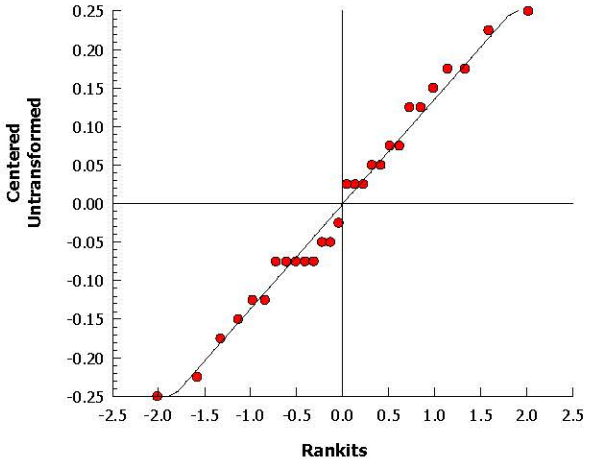
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	0.0%
0.008		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	21.2%
0.0234		4	0.75	0.419	1	0.75	0.5	1	0.104	27.8%	9.09%
0.0698		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	6.06%
0.2061		4	0.725	0.397	1	0.75	0.5	0.9	0.103	28.4%	12.1%
0.6356		4	0.475	0.203	0.747	0.45	0.3	0.7	0.0854	36.0%	42.4%
1.9455		4	0.375	0.223	0.527	0.35	0.3	0.5	0.0479	25.5%	54.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-0897-9414	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-2497-9955	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.175	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
17	-166	340	343	0.623	0.911	0.174	0.872	2.84	0.4970	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.133	N/A	N/A
EC10	0.285	N/A	N/A
EC25	1.02	N/A	N/A
EC50	4.19	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.232	0.0412	0.151	0.313	5.64	<0.0001	Significant Parameter
Slope	1.1	0.676	-0.226	2.42	1.63	0.1166	Non-Significant Parameter
Intercept	-0.684	0.264	-1.2	-0.166	-2.59	0.0158	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	9.684192	9.684192	1	7.7	0.0103	Significant
Lack of Fit	4.479241	1.11981	4	0.872	0.4972	Non-Significant
Pure Error	26.97081	1.284324	21			
Residual	31.45005	1.258002	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	31.5	37.7	0.1745	Non-Significant Heterogenity
	Likelihood Ratio GOF	35.7	37.7	0.0755	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.98	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	5.43	12.6	0.4896	Equal Variances
	Mod Levene Equality of Variance	1.7	2.57	0.1700	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.968	0.926	0.5256	Normal Distribution
	Anderson-Darling A2 Normality	0.366	2.49	0.4387	Normal Distribution

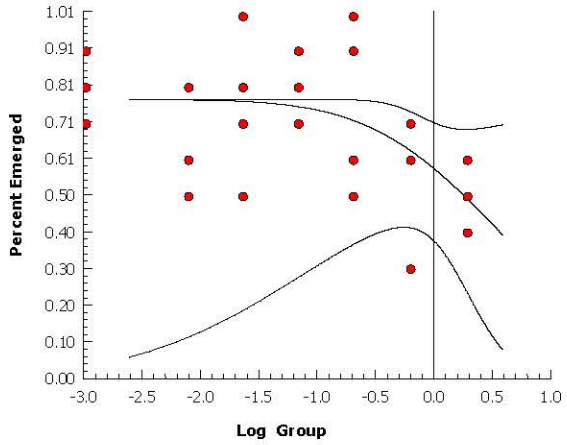
Percent Emerged Summary

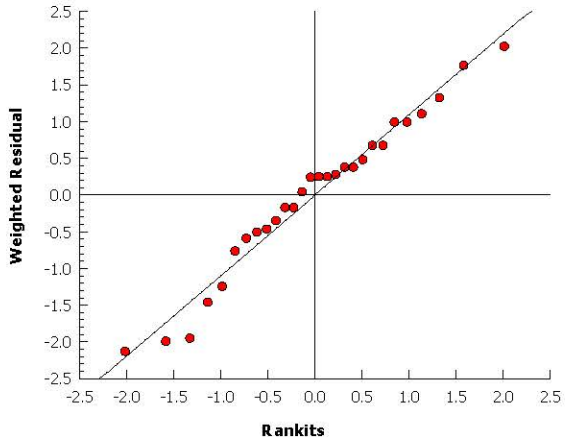
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.825	0.7	0.9	0.0479	0.0957	11.6%	0.0%	33	40
0.008		4	0.675	0.5	0.8	0.075	0.15	22.2%	18.2%	27	40
0.0234		4	0.75	0.5	1	0.104	0.208	27.8%	9.09%	30	40
0.0698		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	3.03%	32	40
0.2061		4	0.75	0.5	1	0.119	0.238	31.7%	9.09%	30	40
0.6356		4	0.55	0.3	0.7	0.0866	0.173	31.5%	33.3%	22	40
1.9455		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	36.4%	21	40

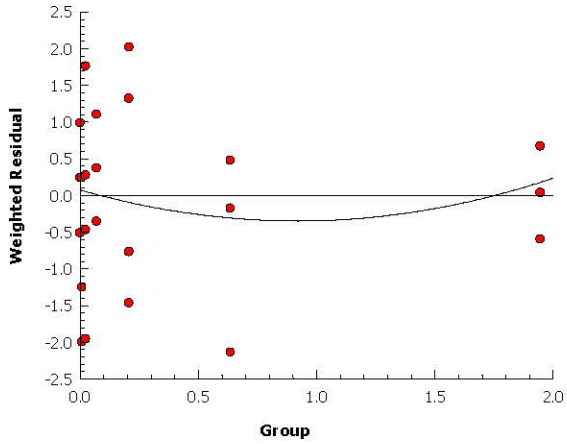
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

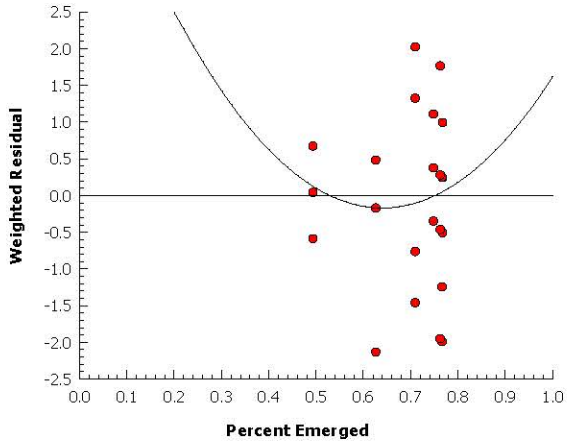
Analysis ID:	01-2497-9955	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-4172-8362	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.175	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
17	-166	340	343	0.623	0.911	0.174	0.872	2.84	0.4970	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.133	N/A	N/A
EC10	0.285	N/A	N/A
EC25	1.02	N/A	N/A
EC50	4.19	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.232	0.0412	0.151	0.313	5.64	<0.0001	Significant Parameter
Slope	1.1	0.676	-0.226	2.42	1.63	0.1166	Non-Significant Parameter
Intercept	-0.684	0.264	-1.2	-0.166	-2.59	0.0158	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	9.684192	9.684192	1	7.7	0.0103	Significant
Lack of Fit	4.479241	1.11981	4	0.872	0.4972	Non-Significant
Pure Error	26.97081	1.284324	21			
Residual	31.45005	1.258002	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	31.5	37.7	0.1745	Non-Significant Heterogenity
	Likelihood Ratio GOF	35.7	37.7	0.0755	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	5.43	12.6	0.4896	Equal Variances
	Mod Levene Equality of Variance	1.7	2.57	0.1700	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.968	0.926	0.5256	Normal Distribution
	Anderson-Darling A2 Normality	0.366	2.49	0.4387	Normal Distribution

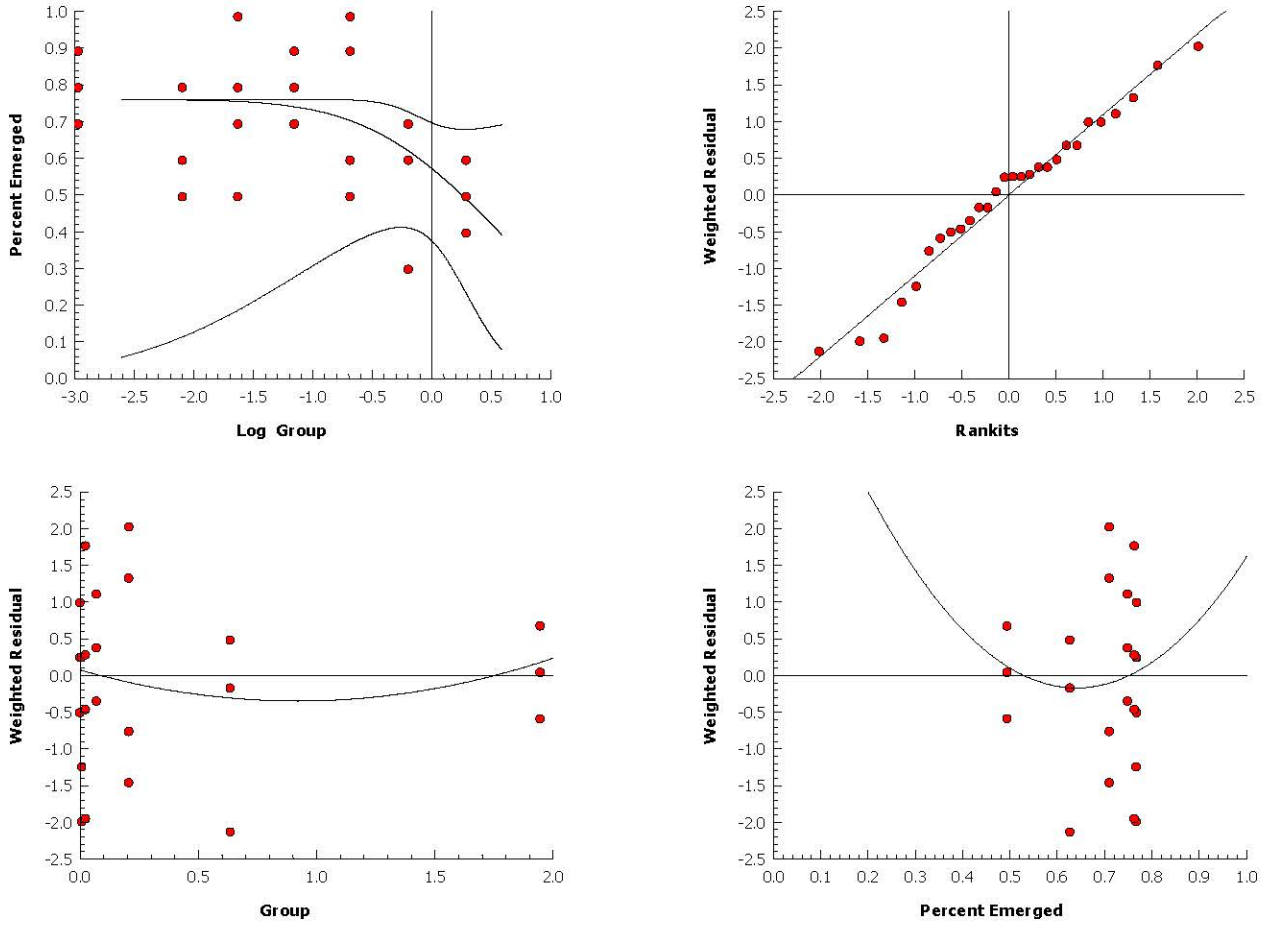
Percent Emerged Summary

			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.825	0.7	0.9	0.0479	0.0957	11.6%	0.0%	33	40
0.008		4	0.675	0.5	0.8	0.075	0.15	22.2%	18.2%	27	40
0.0234		4	0.75	0.5	1	0.104	0.208	27.8%	9.09%	30	40
0.0698		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	3.03%	32	40
0.2061		4	0.75	0.5	1	0.119	0.238	31.7%	9.09%	30	40
0.6356		4	0.55	0.3	0.7	0.0866	0.173	31.5%	33.3%	22	40
1.9455		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	36.4%	21	40

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	17-4172-8362	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-6415-6484	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.175	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
18	-168	344	347	0.213	0.696	0.398	1.02	2.84	0.4180	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.117	1.03E-05	0.372
EC10	0.21	0.000174	0.532
EC25	0.554	0.018	1.07
EC50	1.63	0.772	9.4

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.244	0.0387	0.168	0.32	6.29	<0.0001	Significant Parameter
Slope	1.44	0.585	0.291	2.58	2.46	0.0212	Significant Parameter
Intercept	-0.306	0.215	-0.727	0.114	-1.43	0.1658	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	22.4701	22.4701	1	19.8	0.0002	Significant
Lack of Fit	4.615578	1.153895	4	1.02	0.4184	Non-Significant
Pure Error	23.69005	1.128098	21			
Residual	28.30563	1.132225	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	28.3	37.7	0.2940	Non-Significant Heterogenity
	Likelihood Ratio GOF	31.2	37.7	0.1834	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.84	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	3.94	12.6	0.6854	Equal Variances
	Mod Levene Equality of Variance	1.22	2.57	0.3351	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.961	0.926	0.3689	Normal Distribution
	Anderson-Darling A2 Normality	0.447	2.49	0.2853	Normal Distribution

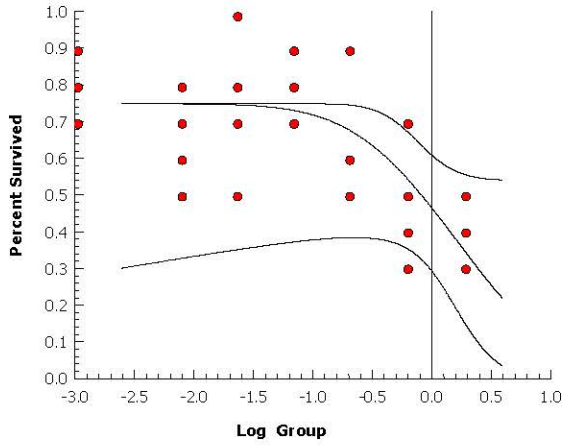
Percent Survived Summary

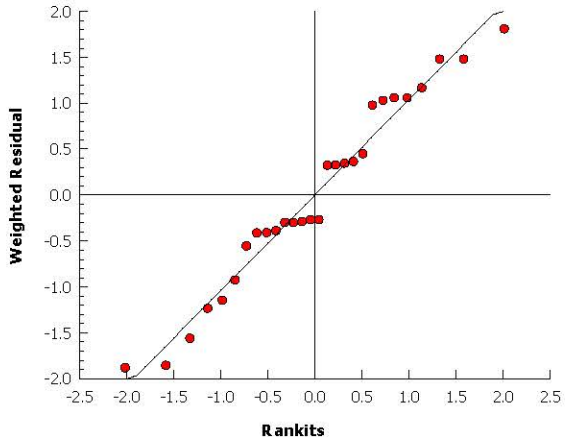
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.825	0.7	0.9	0.0479	0.0957	11.6%	0.0%	33	40
0.008		4	0.65	0.5	0.8	0.0645	0.129	19.9%	21.2%	26	40
0.0234		4	0.75	0.5	1	0.104	0.208	27.8%	9.09%	30	40
0.0698		4	0.775	0.7	0.9	0.0479	0.0957	12.4%	6.06%	31	40
0.2061		4	0.725	0.5	0.9	0.103	0.206	28.4%	12.1%	29	40
0.6356		4	0.475	0.3	0.7	0.0854	0.171	36.0%	42.4%	19	40
1.9455		4	0.375	0.3	0.5	0.0479	0.0957	25.5%	54.5%	15	40

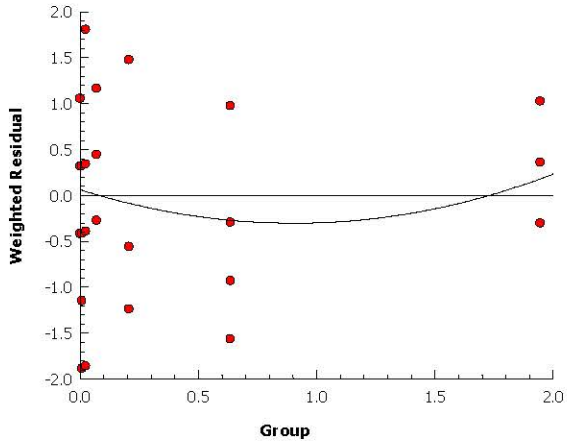
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

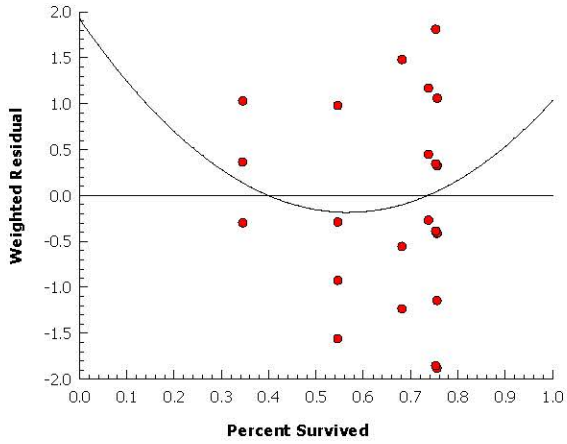
Analysis ID:	07-6415-6484	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-5844-8401	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.175	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
18	-168	344	347	0.213	0.696	0.398	1.02	2.84	0.4180	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.117	1.03E-05	0.372
EC10	0.21	0.000174	0.532
EC25	0.554	0.018	1.07
EC50	1.63	0.772	9.4

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.244	0.0387	0.168	0.32	6.29	<0.0001	Significant Parameter
Slope	1.44	0.585	0.291	2.58	2.46	0.0212	Significant Parameter
Intercept	-0.306	0.215	-0.727	0.114	-1.43	0.1658	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	22.4701	22.4701	1	19.8	0.0002	Significant
Lack of Fit	4.615578	1.153895	4	1.02	0.4184	Non-Significant
Pure Error	23.69005	1.128098	21			
Residual	28.30563	1.132225	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	28.3	37.7	0.2940	Non-Significant Heterogenity
	Likelihood Ratio GOF	31.2	37.7	0.1834	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	3.94	12.6	0.6854	Equal Variances
	Mod Levene Equality of Variance	1.22	2.57	0.3351	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.961	0.926	0.3689	Normal Distribution
	Anderson-Darling A2 Normality	0.447	2.49	0.2853	Normal Distribution

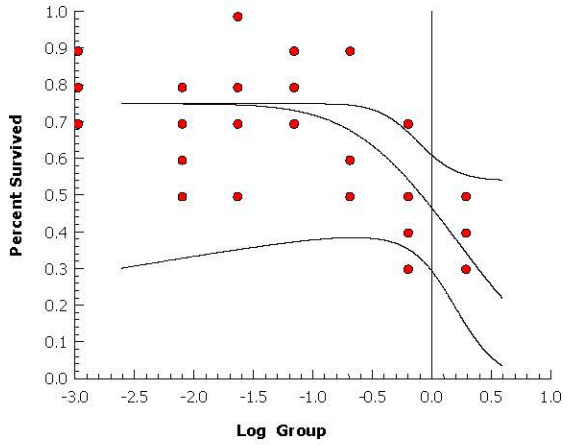
Percent Survived Summary

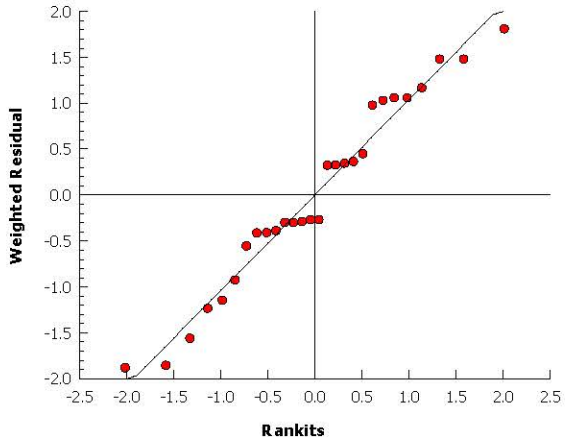
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.825	0.7	0.9	0.0479	0.0957	11.6%	0.0%	33	40
0.008		4	0.65	0.5	0.8	0.0645	0.129	19.9%	21.2%	26	40
0.0234		4	0.75	0.5	1	0.104	0.208	27.8%	9.09%	30	40
0.0698		4	0.775	0.7	0.9	0.0479	0.0957	12.4%	6.06%	31	40
0.2061		4	0.725	0.5	0.9	0.103	0.206	28.4%	12.1%	29	40
0.6356		4	0.475	0.3	0.7	0.0854	0.171	36.0%	42.4%	19	40
1.9455		4	0.375	0.3	0.5	0.0479	0.0957	25.5%	54.5%	15	40

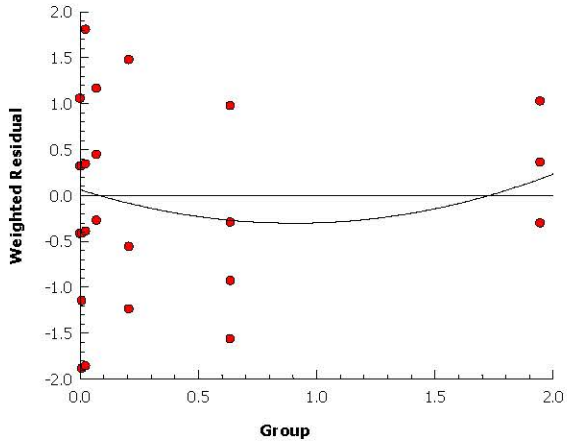
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

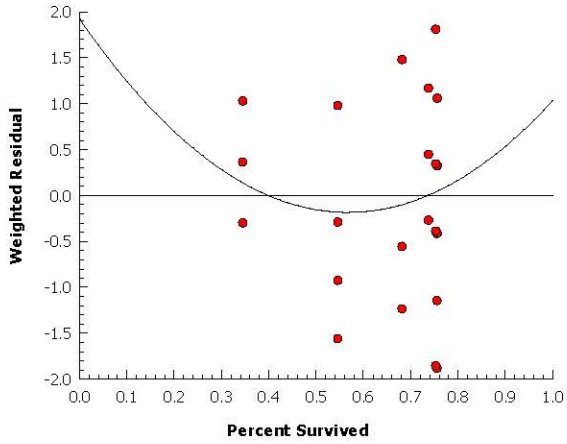
Analysis ID:	13-5844-8401	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









CETIS Analytical Report

Report Date:	05 Feb-13 15:50 (p 1 of 2)
Test Code:	48718014 Onion | 13-7560-6236

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-4156-6482	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.175	45.45%	0.107	0.23	1.28	0.444	3.68

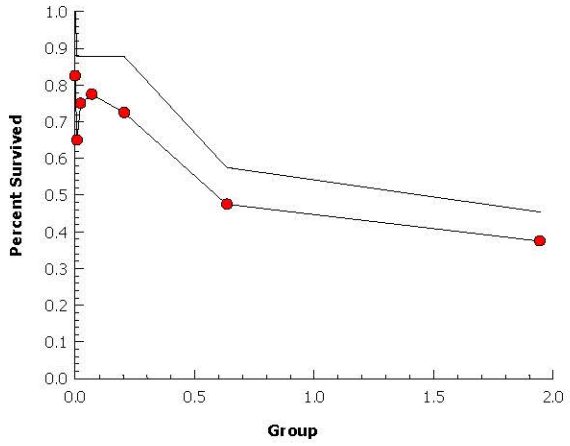
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.18	2.88	0.6623	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.825	0.7	0.9	0.0479	0.0957	11.6%	0.0%	33	40
0.008		4	0.65	0.5	0.8	0.0645	0.129	19.9%	21.2%	26	40
0.0234		4	0.75	0.5	1	0.104	0.208	27.8%	9.09%	30	40
0.0698		4	0.775	0.7	0.9	0.0479	0.0957	12.4%	6.06%	31	40
0.2061		4	0.725	0.5	0.9	0.103	0.206	28.4%	12.1%	29	40
0.6356		4	0.475	0.3	0.7	0.0854	0.171	36.0%	42.4%	19	40
1.9455		4	0.375	0.3	0.5	0.0479	0.0957	25.5%	54.5%	15	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-6807-4287	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

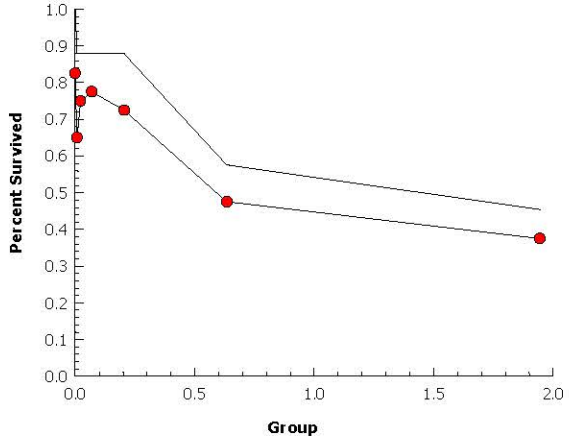
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.175	45.45%	0.107	0.23	1.28	0.444	3.68

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.825	0.7	0.9	0.0479	0.0957	11.6%	0.0%	33	40
0.008		4	0.65	0.5	0.8	0.0645	0.129	19.9%	21.2%	26	40
0.0234		4	0.75	0.5	1	0.104	0.208	27.8%	9.09%	30	40
0.0698		4	0.775	0.7	0.9	0.0479	0.0957	12.4%	6.06%	31	40
0.2061		4	0.725	0.5	0.9	0.103	0.206	28.4%	12.1%	29	40
0.6356		4	0.475	0.3	0.7	0.0854	0.171	36.0%	42.4%	19	40
1.9455		4	0.375	0.3	0.5	0.0479	0.0957	25.5%	54.5%	15	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-0344-9347	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
16	495	-982	-979	0.0178	Yes	0.921	2.84	0.4702	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.00482	N/A	0.722
IC10	0.0669	N/A	1.65
IC25	5.42	1.74E-05	622
IC50	715	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	13.3	1.44	10.5	16.2	9.27	<0.0001	Significant Parameter
C	7.24	8.01	-8.45	22.9	0.904	0.3745	Non-Significant Parameter
D	715	5080	-9240	10700	0.141	0.8892	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.589712	1.589712	1	2.49	0.1273	Non-Significant
Lack of Fit	2.384125	0.596031	4	0.921	0.4702	Non-Significant
Pure Error	13.58864	0.647078	21			
Residual	15.97276	0.638911	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	16	37.7	0.9156	Non-Significant Heterogenity
	Likelihood Ratio GOF	16.6	37.7	0.8943	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.18	2.88	0.6631	No Outliers Detected
Variances	Bartlett Equality of Variance	9.57	12.6	0.1441	Equal Variances
	Mod Levene Equality of Variance	1.3	2.57	0.3003	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.963	0.926	0.4117	Normal Distribution
	Anderson-Darling A2 Normality	0.45	2.49	0.2802	Normal Distribution

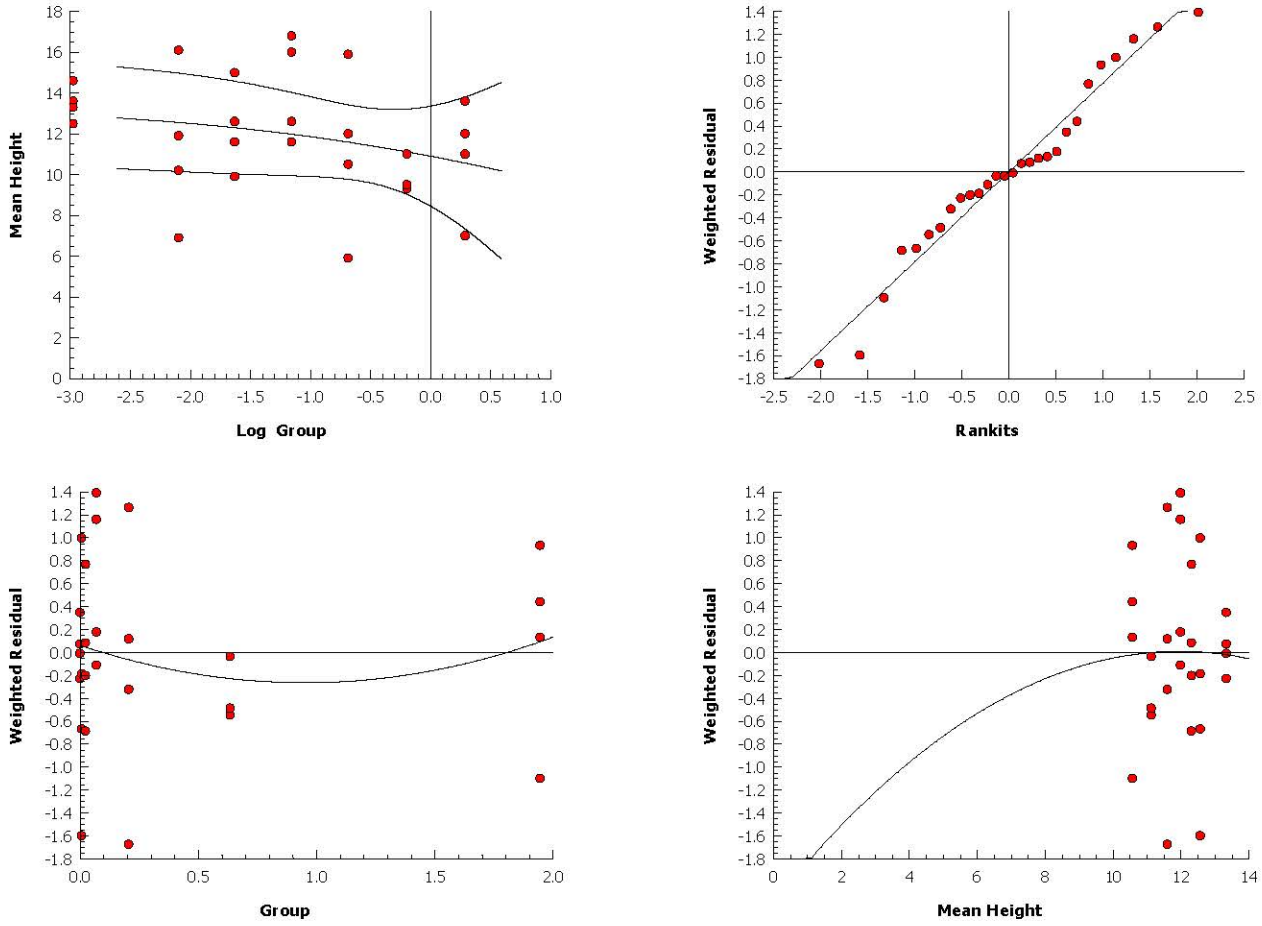
Mean Height Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	13.5	12.5	14.6	0.434	0.868	6.43%	0.0%
0.008		4	11.3	6.9	16.1	1.91	3.83	34.0%	16.5%
0.0234		4	12.3	9.9	15	1.07	2.13	17.4%	9.07%
0.0698		4	14.3	11.6	16.8	1.27	2.54	17.8%	-5.56%
0.2061		4	11.1	5.9	15.9	2.07	4.13	37.3%	18.0%
0.6356		4	10.2	9.3	11	0.464	0.927	9.09%	24.4%
1.9455		4	10.9	7	13.6	1.41	2.81	25.8%	19.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-0344-9347	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-9274-5983	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
16	495	-982	-979	0.0178	Yes	0.921	2.84	0.4702	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.00482	N/A	0.722
IC10	0.0669	N/A	1.65
IC25	5.42	1.74E-05	622
IC50	715	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	13.3	1.44	10.5	16.2	9.27	<0.0001	Significant Parameter
C	7.24	8.01	-8.45	22.9	0.904	0.3745	Non-Significant Parameter
D	715	5080	-9240	10700	0.141	0.8892	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.589712	1.589712	1	2.49	0.1273	Non-Significant
Lack of Fit	2.384125	0.596031	4	0.921	0.4702	Non-Significant
Pure Error	13.58864	0.647078	21			
Residual	15.97276	0.638911	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	16	37.7	0.9156	Non-Significant Heterogenity
	Likelihood Ratio GOF	16.6	37.7	0.8943	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	9.57	12.6	0.1441	Equal Variances
	Mod Levene Equality of Variance	1.3	2.57	0.3003	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.963	0.926	0.4117	Normal Distribution
	Anderson-Darling A2 Normality	0.45	2.49	0.2802	Normal Distribution

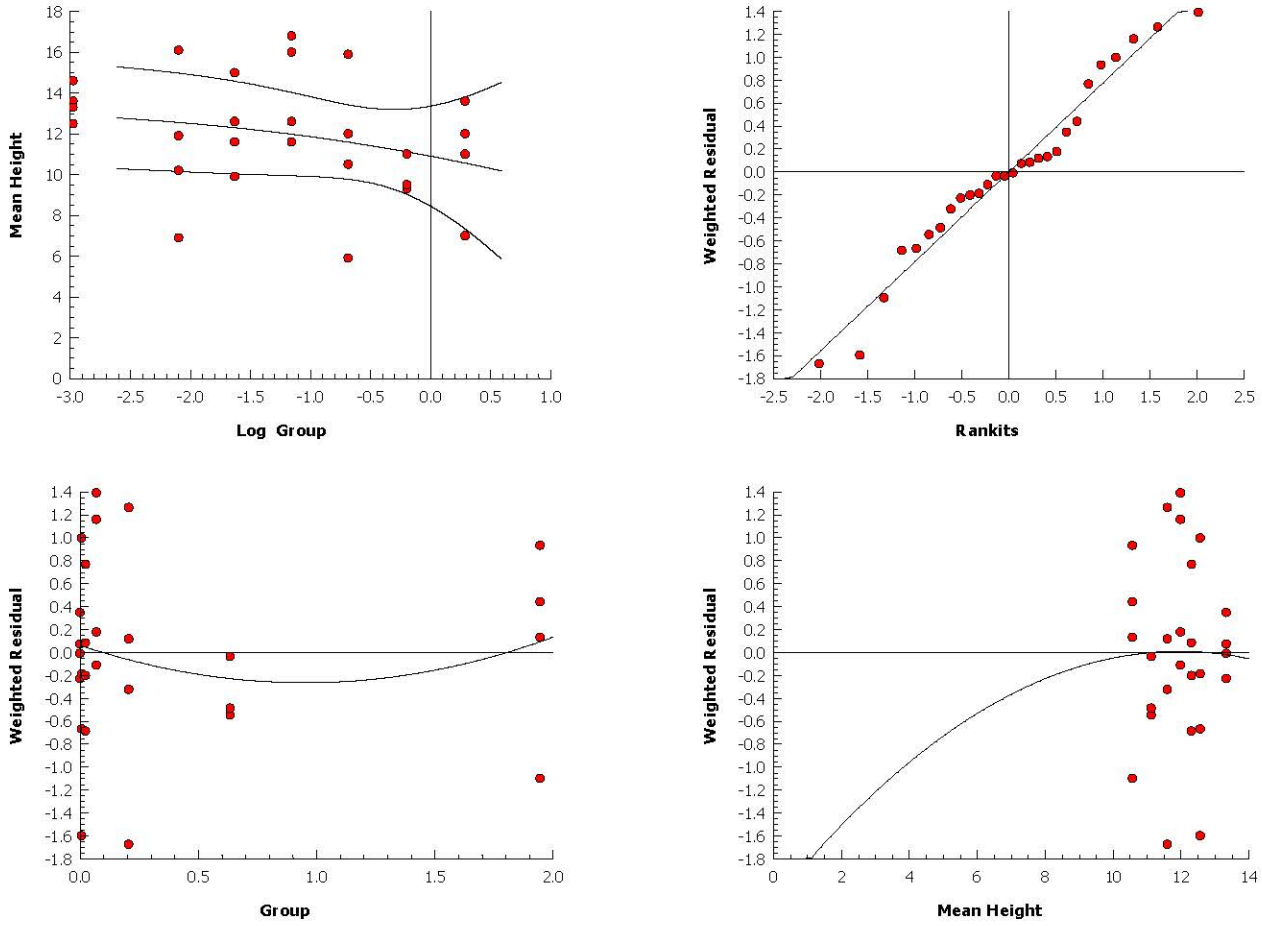
Mean Height Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	13.5	12.5	14.6	0.434	0.868	6.43%	0.0%
0.008		4	11.3	6.9	16.1	1.91	3.83	34.0%	16.5%
0.0234		4	12.3	9.9	15	1.07	2.13	17.4%	9.07%
0.0698		4	14.3	11.6	16.8	1.27	2.54	17.8%	-5.56%
0.2061		4	11.1	5.9	15.9	2.07	4.13	37.3%	18.0%
0.6356		4	10.2	9.3	11	0.464	0.927	9.09%	24.4%
1.9455		4	10.9	7	13.6	1.41	2.81	25.8%	19.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-9274-5983	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	21-3899-7204	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
23	361	-715	-712		Yes	1.4	2.84	0.2698	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.359	N/A	3.95
IC10	0.847	N/A	5.22
IC25	3.56	N/A	114
IC50	17.5	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	10.4	0.937	8.54	12.2	11.1	<0.0001	Significant Parameter
C	2.36	4.77	-6.99	11.7	0.495	0.6246	Non-Significant Parameter
D	17.5	83.9	-147	182	0.209	0.8364	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	0.708884	0.708884	1	0.726	0.4024	Non-Significant
Lack of Fit	5.128365	1.282091	4	1.4	0.2698	Non-Significant
Pure Error	19.29741	0.918925	21			
Residual	24.42578	0.977031	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	24.4	37.7	0.4949	Non-Significant Heterogenity
	Likelihood Ratio GOF	25.6	37.7	0.4308	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.99	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	7.73	12.6	0.2582	Equal Variances
	Mod Levene Equality of Variance	0.993	2.57	0.4555	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.926	0.8709	Normal Distribution
	Anderson-Darling A2 Normality	0.205	2.49	0.9140	Normal Distribution

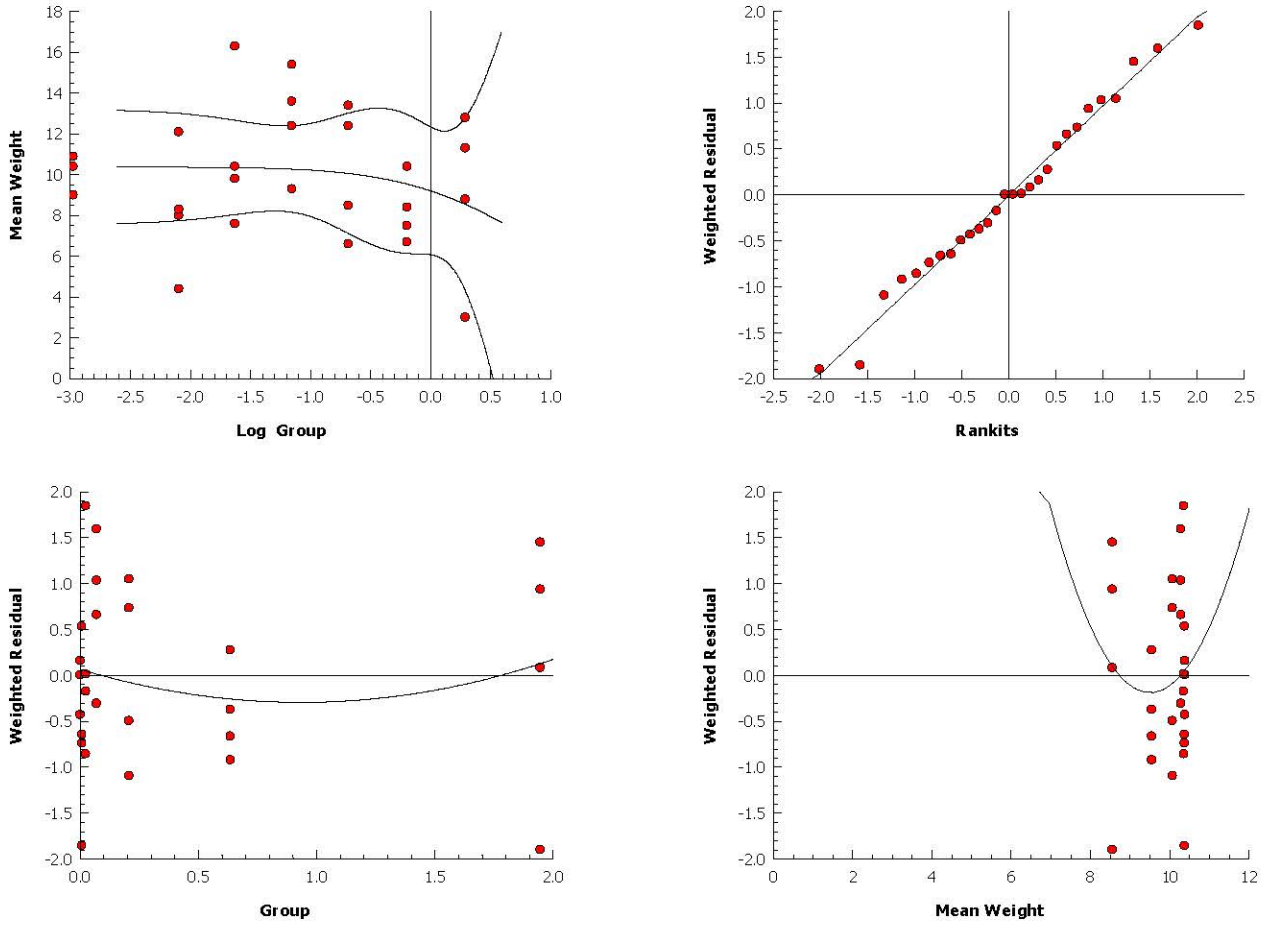
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	10.2	9	10.9	0.409	0.818	8.04%	0.0%
0.008		4	8.2	4.4	12.1	1.57	3.15	38.4%	19.4%
0.0234		4	11	7.6	16.3	1.86	3.72	33.7%	-8.35%
0.0698		4	12.7	9.3	15.4	1.28	2.57	20.2%	-24.6%
0.2061		4	10.2	6.6	13.4	1.61	3.21	31.4%	-0.49%
0.6356		4	8.25	6.7	10.4	0.796	1.59	19.3%	18.9%
1.9455		4	8.98	3	12.8	2.16	4.31	48.0%	11.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	21-3899-7204	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:41	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	21-4699-1374	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	08-5892-1255	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 14:55	**Species:**	Allium cepa	**Brine:**	
Duration:	560d 15h	**Source:**	Park Seed Co.	**Age:**	

Sample ID:	16-9946-1256	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 14:55	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
23	361	-715	-712		Yes	1.4	2.84	0.2698	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.359	N/A	3.95
IC10	0.847	N/A	5.22
IC25	3.56	N/A	114
IC50	17.5	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	10.4	0.937	8.54	12.2	11.1	<0.0001	Significant Parameter
C	2.36	4.77	-6.99	11.7	0.495	0.6246	Non-Significant Parameter
D	17.5	83.9	-147	182	0.209	0.8364	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	0.708884	0.708884	1	0.726	0.4024	Non-Significant
Lack of Fit	5.128365	1.282091	4	1.4	0.2698	Non-Significant
Pure Error	19.29741	0.918925	21			
Residual	24.42578	0.977031	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	24.4	37.7	0.4949	Non-Significant Heterogenity
	Likelihood Ratio GOF	25.6	37.7	0.4308	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	7.73	12.6	0.2582	Equal Variances
	Mod Levene Equality of Variance	0.993	2.57	0.4555	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.981	0.926	0.8709	Normal Distribution
	Anderson-Darling A2 Normality	0.205	2.49	0.9140	Normal Distribution

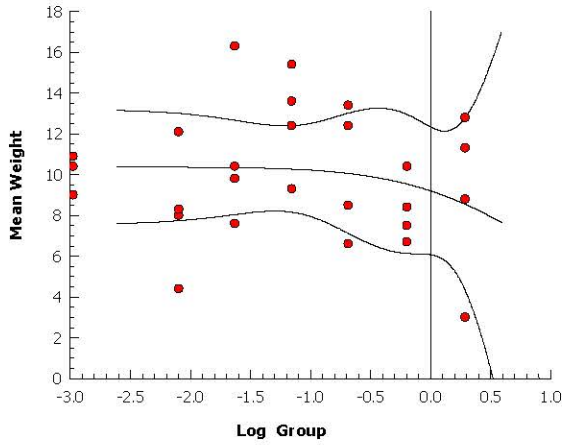
Mean Weight Summary

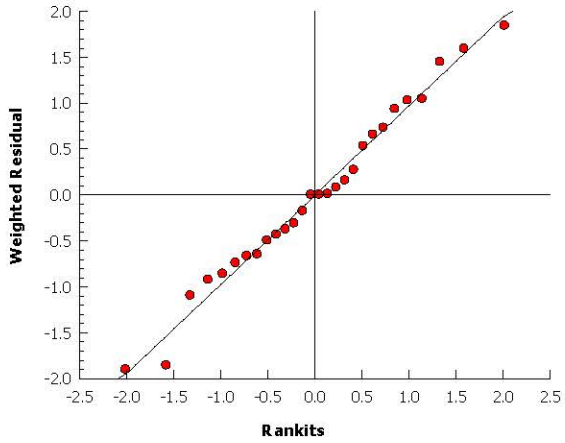
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	10.2	9	10.9	0.409	0.818	8.04%	0.0%
0.008		4	8.2	4.4	12.1	1.57	3.15	38.4%	19.4%
0.0234		4	11	7.6	16.3	1.86	3.72	33.7%	-8.35%
0.0698		4	12.7	9.3	15.4	1.28	2.57	20.2%	-24.6%
0.2061		4	10.2	6.6	13.4	1.61	3.21	31.4%	-0.49%
0.6356		4	8.25	6.7	10.4	0.796	1.59	19.3%	18.9%
1.9455		4	8.98	3	12.8	2.16	4.31	48.0%	11.8%

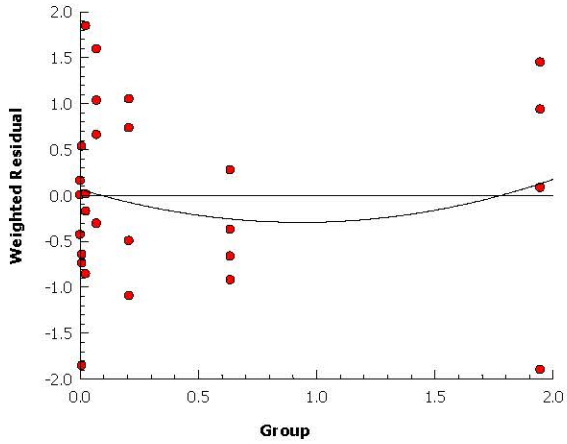
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

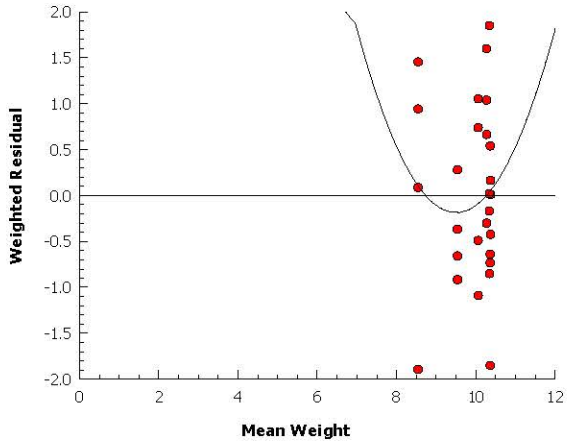
Analysis ID:	21-4699-1374	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:45	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
04-7982-9739	Mean Height	0.2061	0.6356	0.3619	24.7%		Dunnett Multiple Comparison Test
18-1117-0450	Mean Height	0.2061	0.6356	0.3619	24.7%		Dunnett Multiple Comparison Test
18-5338-1653	Mean Height	0.6356	1.9455	1.112	17.5%		Dunnett Multiple Comparison Test
02-1361-1961	Mean Height	0.0234	0.0698	0.04041	13.2%		Williams Multiple Comparison Test
03-9877-1786	Mean Height	0.0234	0.0698	0.04041	18.7%		Williams Multiple Comparison Test
18-3494-0931	Mean Height	0.0234	0.0698	0.04041	18.7%		Williams Multiple Comparison Test
06-7912-1562	Mean Weight	0.0234	0.0698	0.04041	30.4%		Dunnett Multiple Comparison Test
20-8525-7377	Mean Weight	0.0234	0.0698	0.04041	30.4%		Dunnett Multiple Comparison Test
10-5069-4047	Mean Weight	0.0234	0.0698	0.04041	23.1%		Williams Multiple Comparison Test
15-9937-7140	Mean Weight	0.0234	0.0698	0.04041	23.1%		Williams Multiple Comparison Test
01-6084-2627	Percent Emerged	1.9455	>1.9455	NA	28.3%		Dunnett Multiple Comparison Test
17-6133-4275	Percent Emerged	1.9455	>1.9455	NA	28.3%		Dunnett Multiple Comparison Test
06-2350-6382	Percent Emerged	1.9455	>1.9455	NA	21.4%		Williams Multiple Comparison Test
16-7609-3073	Percent Emerged	1.9455	>1.9455	NA	21.4%		Williams Multiple Comparison Test
14-0777-8209	Percent Survived	1.9455	>1.9455	NA	33.6%		Dunnett Multiple Comparison Test
16-8193-2124	Percent Survived	1.9455	>1.9455	NA	33.6%		Dunnett Multiple Comparison Test
04-2301-7554	Percent Survived	1.9455	>1.9455	NA	25.4%		Williams Multiple Comparison Test
05-0019-1762	Percent Survived	1.9455	>1.9455	NA	25.4%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
02-2005-3065	Mean Height	IC5	0.0117	N/A	0.0561		Nonlinear Regression
		IC10	0.0475	0.00772	0.144		
		IC25	0.491	0.239	0.928		
		IC50	6.57	1.62	26.7		
04-5223-0120	Mean Height	IC5	0.00609	N/A	0.0475		Nonlinear Regression
		IC10	0.026	0.00151	0.107		
		IC25	0.294	0.117	0.652		
		IC50	4.36	1.03	18.5		
09-9793-1807	Mean Height	IC5	0.00609	N/A	0.0475		Nonlinear Regression
		IC10	0.026	0.00151	0.107		
		IC25	0.294	0.117	0.652		
		IC50	4.36	1.03	18.5		
00-4192-3159	Mean Weight	IC5	0.00314	N/A	0.0239		Nonlinear Regression
		IC10	0.00781	N/A	0.0304		
		IC25	0.0357	0.0109	0.087		
		IC50	0.194	0.106	0.356		
17-2167-5405	Mean Weight	IC5	0.00314	N/A	0.0239		Nonlinear Regression
		IC10	0.00781	N/A	0.0304		
		IC25	0.0357	0.0109	0.087		
		IC50	0.194	0.106	0.356		
02-6248-7659	Percent Survived	EC5	0.198	N/A	N/A		Linear Regression (MLE)
		EC10	0.557	N/A	N/A		
		EC25	3.13	N/A	N/A		
		EC50	21.4	N/A	N/A		
20-1479-2008	Percent Survived	EC5	0.198	N/A	N/A		Linear Regression (MLE)
		EC10	0.557	N/A	N/A		
		EC25	3.13	N/A	N/A		
		EC50	21.4	N/A	N/A		

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	23	18.5	27.5	20.2	26.3	1.42	2.85	12.4%	0.0%
0	Negative Control	4	25.8	20.7	30.8	22.8	30.3	1.6	3.2	12.4%	-12.0%
0.008		4	23.7	22.2	25.2	22.4	24.5	0.477	0.954	4.03%	-2.93%
0.0234		4	23.5	17.6	29.5	18.6	27.2	1.88	3.75	15.9%	-2.28%
0.0698		4	20.5	18.7	22.4	18.9	21.5	0.591	1.18	5.75%	10.7%
0.2061		4	20.9	19	22.8	19.2	21.9	0.605	1.21	5.78%	9.02%
0.6356		4	17.6	5.91	29.2	7	23.5	3.66	7.31	41.7%	23.7%
1.9455		4	14.6	8.92	20.2	11.5	19.3	1.78	3.56	24.4%	36.6%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	451	324	578	370	561	40	80.1	17.8%	0.0%
0	Negative Control	4	549	395	703	412	627	48.5	97	17.7%	-21.7%
0.008		4	468	312	624	363	600	49	98	20.9%	-3.82%
0.0234		4	608	354	862	423	802	79.8	160	26.3%	-34.9%
0.0698		4	335	304	366	314	360	9.68	19.4	5.78%	25.7%
0.2061		4	226	153	298	180	277	22.8	45.7	20.2%	50.0%
0.6356		4	179	3.75	355	30	268	55.1	110	61.5%	60.3%
1.9455		4	121	-2.52	245	55	226	38.9	77.8	64.2%	73.1%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.825	0.745	0.905	0.8	0.9	0.025	0.05	6.06%	0.0%
0	Negative Control	4	0.75	0.445	1	0.6	1	0.0957	0.191	25.5%	9.09%
0.008		4	0.75	0.591	0.909	0.6	0.8	0.05	0.1	13.3%	9.09%
0.0234		4	0.575	0.423	0.727	0.5	0.7	0.0479	0.0957	16.7%	30.3%
0.0698		4	0.825	0.745	0.905	0.8	0.9	0.025	0.05	6.06%	0.0%
0.2061		4	0.8	0.616	0.984	0.7	0.9	0.0577	0.115	14.4%	3.03%
0.6356		4	0.55	0.345	0.755	0.4	0.7	0.0645	0.129	23.5%	33.3%
1.9455		4	0.65	0.445	0.855	0.5	0.8	0.0645	0.129	19.9%	21.2%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.8	0.67	0.93	0.7	0.9	0.0408	0.0816	10.2%	0.0%
0	Negative Control	4	0.675	0.436	0.914	0.6	0.9	0.075	0.15	22.2%	15.6%
0.008		4	0.75	0.591	0.909	0.6	0.8	0.05	0.1	13.3%	6.25%
0.0234		4	0.55	0.345	0.755	0.4	0.7	0.0645	0.129	23.5%	31.3%
0.0698		4	0.775	0.575	0.975	0.6	0.9	0.0629	0.126	16.2%	3.13%
0.2061		4	0.675	0.475	0.875	0.5	0.8	0.0629	0.126	18.6%	15.6%
0.6356		4	0.55	0.345	0.755	0.4	0.7	0.0645	0.129	23.5%	31.3%
1.9455		4	0.575	0.336	0.814	0.4	0.7	0.075	0.15	26.1%	28.1%

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	24.4	21.1	20.2	26.3
0	Negative Control	25.2	24.7	22.8	30.3
0.008		23.5	24.3	24.5	22.4
0.0234		22.8	27.2	25.5	18.6
0.0698		21.3	20.5	21.5	18.9
0.2061		21.6	21	19.2	21.9
0.6356		7	18.6	23.5	21.1
1.9455		11.5	12.2	19.3	15.3

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	428	445	370	561
0	Negative Control	412	627	550	607
0.008		363	456	600	454
0.0234		556	652	802	423
0.0698		360	338	314	328
0.2061		250	195	180	277
0.6356		30	162	268	257
1.9455		55	70	226	134

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.8	0.9	0.8
0	Negative Control	1	0.6	0.6	0.8
0.008		0.8	0.8	0.6	0.8
0.0234		0.5	0.6	0.5	0.7
0.0698		0.8	0.8	0.8	0.9
0.2061		0.9	0.9	0.7	0.7
0.6356		0.6	0.5	0.4	0.7
1.9455		0.5	0.6	0.7	0.8

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.8	0.9	0.7
0	Negative Control	0.9	0.6	0.6	0.6
0.008		0.8	0.8	0.6	0.8
0.0234		0.5	0.6	0.4	0.7
0.0698		0.6	0.8	0.8	0.9
0.2061		0.7	0.8	0.5	0.7
0.6356		0.6	0.5	0.4	0.7
1.9455		0.4	0.5	0.7	0.7

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-5338-1653	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	17.5%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.13	2.46	4.51	6	0.3992	CDF	Non-Significant Effect
		0.0234	1.21	2.46	4.51	6	0.3637	CDF	Non-Significant Effect
		0.0698*	2.84	2.46	4.51	6	0.0234	CDF	Significant Effect
		0.2061*	2.63	2.46	4.51	6	0.0356	CDF	Significant Effect
		0.6356	2.37	2.46	4.87	5	0.0600	CDF	Non-Significant Effect
		1.9455*	6.1	2.46	4.51	6	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	304.8307	50.80513	6	7.57	0.0002	Significant Effect
Error	134.2567	6.712833	20			
Total	439.0874		26			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	8.9	16.8	0.1795	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.973	0.894	0.6870	Normal Distribution

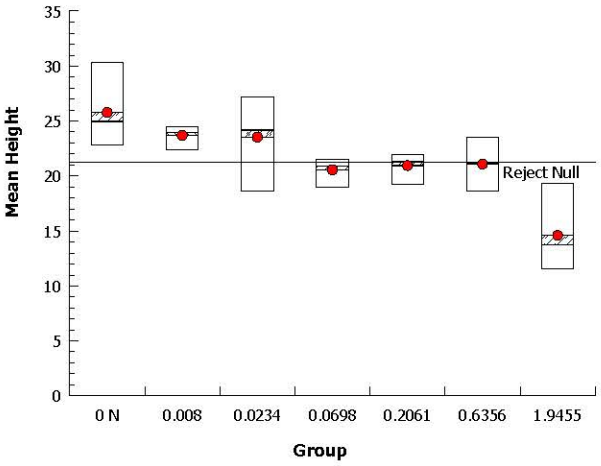
Mean Height Summary

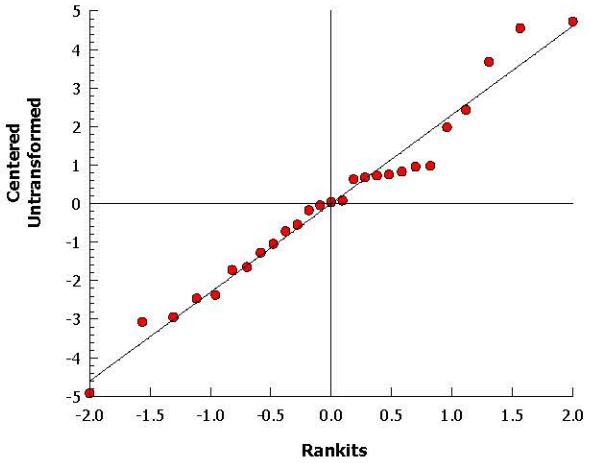
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	25.8	20.7	30.8	25	22.8	30.3	1.6	12.4%	0.0%
0.008		4	23.7	22.2	25.2	23.9	22.4	24.5	0.477	4.03%	8.06%
0.0234		4	23.5	17.6	29.5	24.1	18.6	27.2	1.87	15.9%	8.64%
0.0698		4	20.5	18.7	22.4	20.9	18.9	21.5	0.591	5.75%	20.2%
0.2061		4	20.9	19	22.8	21.3	19.2	21.9	0.605	5.78%	18.7%
0.6356		3	21.1	15	27.2	21.1	18.6	23.5	1.41	11.6%	18.2%
1.9455		4	14.6	8.92	20.2	13.8	11.5	19.3	1.78	24.4%	43.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-5338-1653	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-7982-9739	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	24.7%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.8	2.45	6.35	6	0.5463	CDF	Non-Significant Effect
		0.0234	0.858	2.45	6.35	6	0.5195	CDF	Non-Significant Effect
		0.0698	2	2.45	6.35	6	0.1133	CDF	Non-Significant Effect
		0.2061	1.86	2.45	6.35	6	0.1444	CDF	Non-Significant Effect
		0.6356*	3.16	2.45	6.35	6	0.0113	CDF	Significant Effect
		1.9455*	4.31	2.45	6.35	6	0.0008	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.26	2.88	0.0071	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	357.8243	59.63738	6	4.43	0.0048	Significant Effect
Error	282.66	13.46	21			
Total	640.4843		27			

Distributional Tests

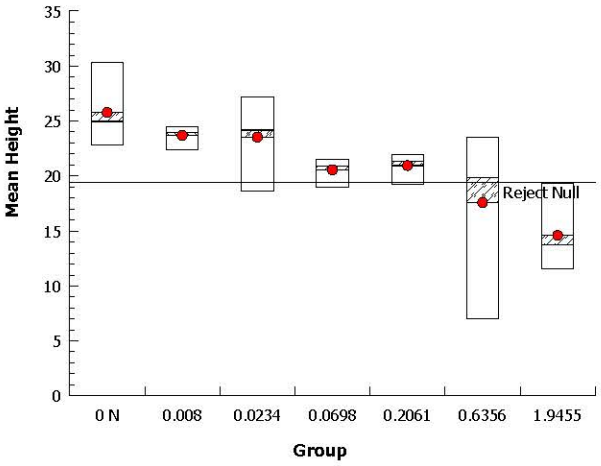
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	16.2	16.8	0.0127	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.919	0.897	0.0332	Normal Distribution

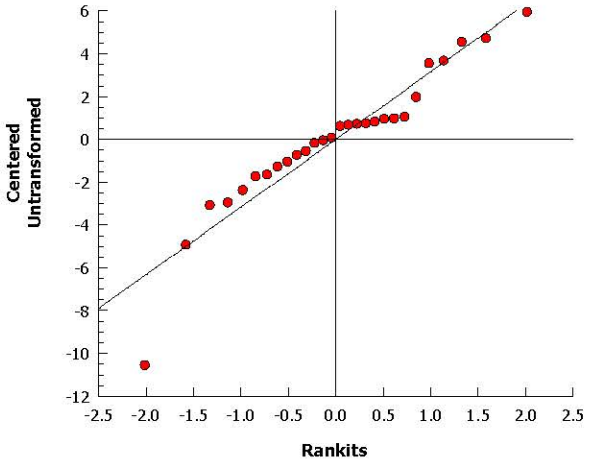
Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	25.8	20.7	30.8	25	22.8	30.3	1.6	12.4%	0.0%
0.008		4	23.7	22.2	25.2	23.9	22.4	24.5	0.477	4.03%	8.06%
0.0234		4	23.5	17.6	29.5	24.1	18.6	27.2	1.87	15.9%	8.64%
0.0698		4	20.5	18.7	22.4	20.9	18.9	21.5	0.591	5.75%	20.2%
0.2061		4	20.9	19	22.8	21.3	19.2	21.9	0.605	5.78%	18.7%
0.6356		4	17.6	5.91	29.2	19.9	7	23.5	3.66	41.7%	31.8%
1.9455		4	14.6	8.92	20.2	13.8	11.5	19.3	1.78	24.4%	43.4%

Analysis ID:	04-7982-9739	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-1361-1961	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	13.2%	0.0234	0.0698	0.04041	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.13	1.73	3.16	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.21	1.81	3.31	6	>0.05	CDF	Non-Significant Effect
		0.0698*	2.84	1.83	3.36	6	<0.05	CDF	Significant Effect
		0.2061*	2.74	1.85	3.38	6	<0.05	CDF	Significant Effect
		0.6356*	2.49	1.84	3.65	5	<0.05	CDF	Significant Effect
		1.9455*	6.1	1.86	3.41	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	304.8307	50.80513	6	7.57	0.0002	Significant Effect
Error	134.2567	6.712833	20			
Total	439.0874		26			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	8.9	16.8	0.1795	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.973	0.894	0.6870	Normal Distribution

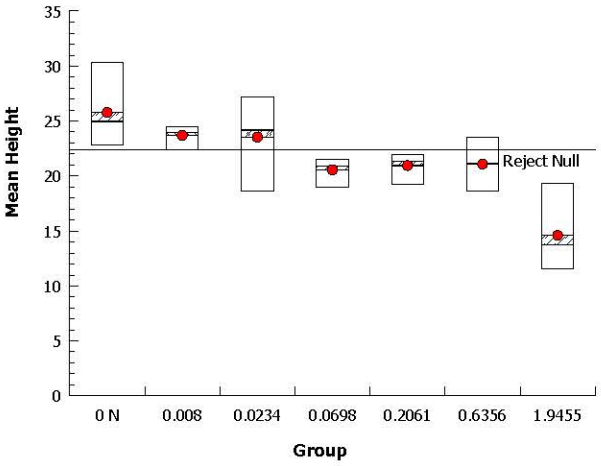
Mean Height Summary

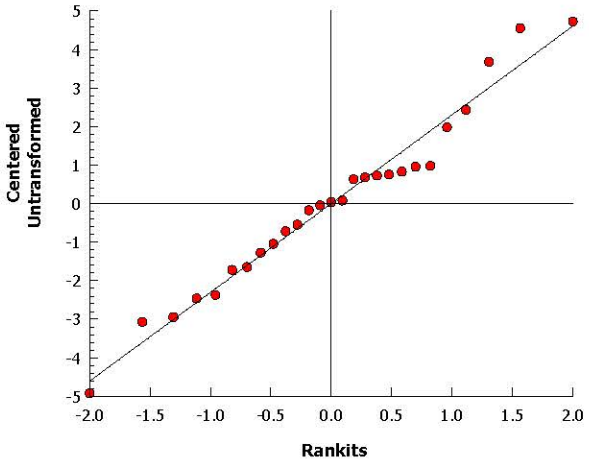
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	25.8	20.7	30.8	25	22.8	30.3	1.6	12.4%	0.0%
0.008		4	23.7	22.2	25.2	23.9	22.4	24.5	0.477	4.03%	8.06%
0.0234		4	23.5	17.6	29.5	24.1	18.6	27.2	1.87	15.9%	8.64%
0.0698		4	20.5	18.7	22.4	20.9	18.9	21.5	0.591	5.75%	20.2%
0.2061		4	20.9	19	22.8	21.3	19.2	21.9	0.605	5.78%	18.7%
0.6356		3	21.1	15	27.2	21.1	18.6	23.5	1.41	11.6%	18.2%
1.9455		4	14.6	8.92	20.2	13.8	11.5	19.3	1.78	24.4%	43.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-1361-1961	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	03-9877-1786	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	18.7%	0.0234	0.0698	0.04041	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.8	1.72	4.46	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.858	1.8	4.68	6	>0.05	CDF	Non-Significant Effect
		0.0698*	2	1.83	4.75	6	<0.05	CDF	Significant Effect
		0.2061*	1.93	1.84	4.78	6	<0.05	CDF	Significant Effect
		0.6356*	3.16	1.85	4.8	6	<0.05	CDF	Significant Effect
		1.9455*	4.31	1.86	4.81	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.26	2.88	0.0071	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	357.8243	59.63738	6	4.43	0.0048	Significant Effect
Error	282.66	13.46	21			
Total	640.4843		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	16.2	16.8	0.0127	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.919	0.897	0.0332	Normal Distribution

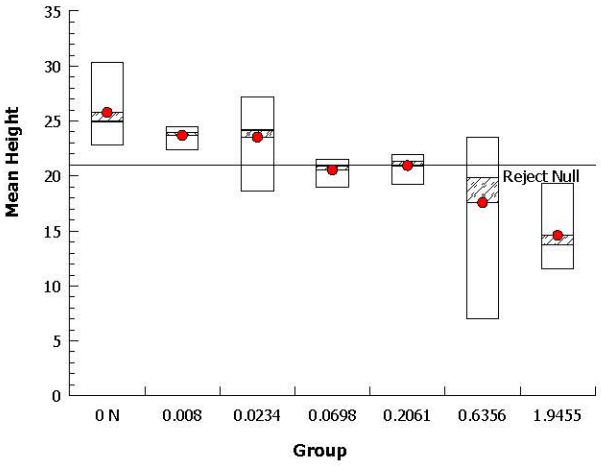
Mean Height Summary

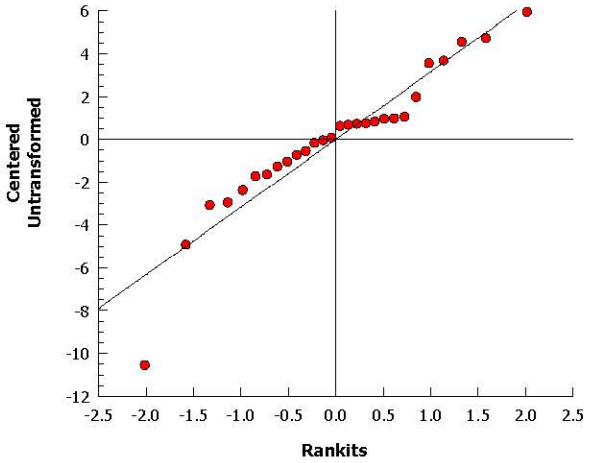
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	25.8	20.7	30.8	25	22.8	30.3	1.6	12.4%	0.0%
0.008		4	23.7	22.2	25.2	23.9	22.4	24.5	0.477	4.03%	8.06%
0.0234		4	23.5	17.6	29.5	24.1	18.6	27.2	1.87	15.9%	8.64%
0.0698		4	20.5	18.7	22.4	20.9	18.9	21.5	0.591	5.75%	20.2%
0.2061		4	20.9	19	22.8	21.3	19.2	21.9	0.605	5.78%	18.7%
0.6356		4	17.6	5.91	29.2	19.9	7	23.5	3.66	41.7%	31.8%
1.9455		4	14.6	8.92	20.2	13.8	11.5	19.3	1.78	24.4%	43.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	03-9877-1786	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-1117-0450	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	24.7%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.8	2.45	6.35	6	0.5463	CDF	Non-Significant Effect
		0.0234	0.858	2.45	6.35	6	0.5195	CDF	Non-Significant Effect
		0.0698	2	2.45	6.35	6	0.1133	CDF	Non-Significant Effect
		0.2061	1.86	2.45	6.35	6	0.1444	CDF	Non-Significant Effect
		0.6356*	3.16	2.45	6.35	6	0.0113	CDF	Significant Effect
		1.9455*	4.31	2.45	6.35	6	0.0008	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	357.8243	59.63738	6	4.43	0.0048	Significant Effect
Error	282.66	13.46	21			
Total	640.4843		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	16.2	16.8	0.0127	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.919	0.897	0.0332	Normal Distribution

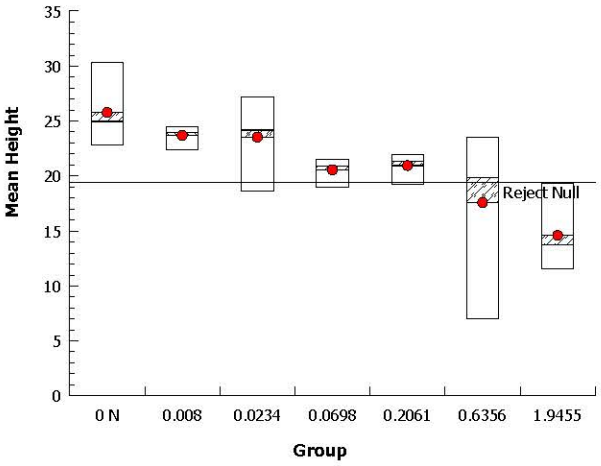
Mean Height Summary

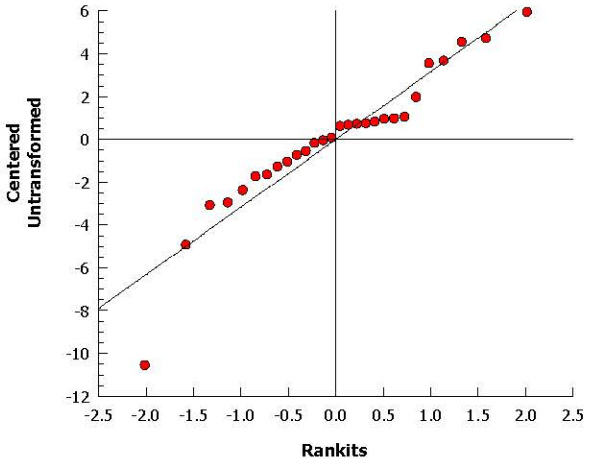
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	25.8	20.7	30.8	25	22.8	30.3	1.6	12.4%	0.0%
0.008		4	23.7	22.2	25.2	23.9	22.4	24.5	0.477	4.03%	8.06%
0.0234		4	23.5	17.6	29.5	24.1	18.6	27.2	1.87	15.9%	8.64%
0.0698		4	20.5	18.7	22.4	20.9	18.9	21.5	0.591	5.75%	20.2%
0.2061		4	20.9	19	22.8	21.3	19.2	21.9	0.605	5.78%	18.7%
0.6356		4	17.6	5.91	29.2	19.9	7	23.5	3.66	41.7%	31.8%
1.9455		4	14.6	8.92	20.2	13.8	11.5	19.3	1.78	24.4%	43.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-1117-0450	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-3494-0931	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	18.7%	0.0234	0.0698	0.04041	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0.8	1.72	4.46	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.858	1.8	4.68	6	>0.05	CDF	Non-Significant Effect
		0.0698*	2	1.83	4.75	6	<0.05	CDF	Significant Effect
		0.2061*	1.93	1.84	4.78	6	<0.05	CDF	Significant Effect
		0.6356*	3.16	1.85	4.8	6	<0.05	CDF	Significant Effect
		1.9455*	4.31	1.86	4.81	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	357.8243	59.63738	6	4.43	0.0048	Significant Effect
Error	282.66	13.46	21			
Total	640.4843		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	16.2	16.8	0.0127	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.919	0.897	0.0332	Normal Distribution

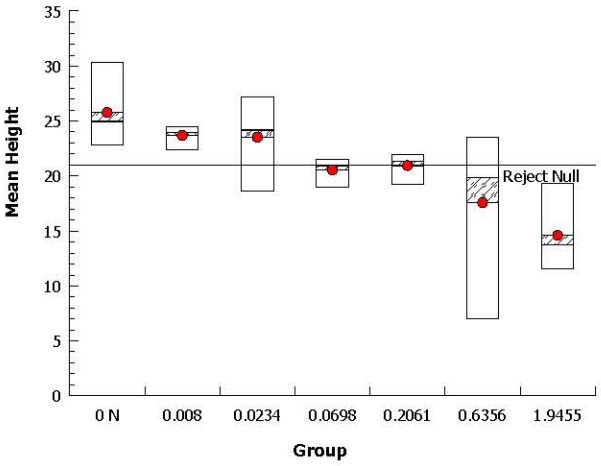
Mean Height Summary

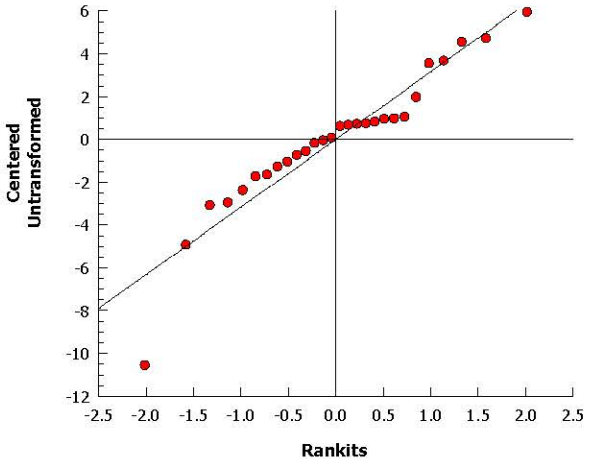
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	25.8	20.7	30.8	25	22.8	30.3	1.6	12.4%	0.0%
0.008		4	23.7	22.2	25.2	23.9	22.4	24.5	0.477	4.03%	8.06%
0.0234		4	23.5	17.6	29.5	24.1	18.6	27.2	1.87	15.9%	8.64%
0.0698		4	20.5	18.7	22.4	20.9	18.9	21.5	0.591	5.75%	20.2%
0.2061		4	20.9	19	22.8	21.3	19.2	21.9	0.605	5.78%	18.7%
0.6356		4	17.6	5.91	29.2	19.9	7	23.5	3.66	41.7%	31.8%
1.9455		4	14.6	8.92	20.2	13.8	11.5	19.3	1.78	24.4%	43.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-3494-0931	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-8525-7377	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.4%	0.0234	0.0698	0.04041	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.18	2.45	167	6	0.3725	CDF	Non-Significant Effect
		0.0234	-0.868	2.45	167	6	0.9815	CDF	Non-Significant Effect
		0.0698*	3.14	2.45	167	6	0.0119	CDF	Significant Effect
		0.2061*	4.74	2.45	167	6	0.0003	CDF	Significant Effect
		0.6356*	5.42	2.45	167	6	<0.0001	CDF	Significant Effect
		1.9455*	6.27	2.45	167	6	<0.0001	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.28	2.88	0.4847	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	869176.7	144862.8	6	15.6	<0.0001	Significant Effect
Error	195530	9310.952	21			
Total	1064707		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.2	16.8	0.1171	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.987	0.897	0.9703	Normal Distribution

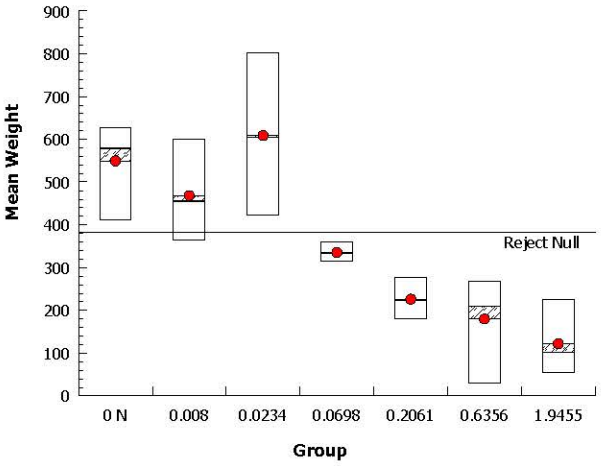
Mean Weight Summary

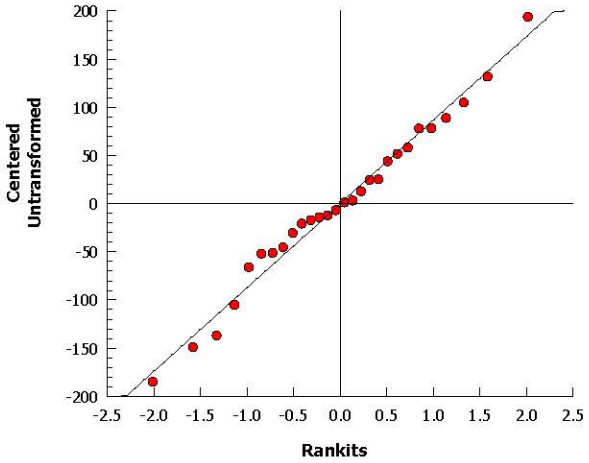
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	549	395	703	579	412	627	48.5	17.7%	0.0%
0.008		4	468	312	624	455	363	600	49	20.9%	14.7%
0.0234		4	608	354	862	604	423	802	79.8	26.3%	-10.8%
0.0698		4	335	304	366	333	314	360	9.68	5.78%	39.0%
0.2061		4	226	153	298	223	180	277	22.8	20.2%	58.9%
0.6356		4	179	3.75	355	210	30	268	55.1	61.5%	67.3%
1.9455		4	121	-2.52	245	102	55	226	38.9	64.2%	77.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-8525-7377	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-5069-4047	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.1%	0.0234	0.0698	0.04041	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.18	1.72	117	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.158	1.8	123	6	>0.05	CDF	Non-Significant Effect
		0.0698*	3.14	1.83	125	6	<0.05	CDF	Significant Effect
		0.2061*	4.74	1.84	126	6	<0.05	CDF	Significant Effect
		0.6356*	5.42	1.85	126	6	<0.05	CDF	Significant Effect
		1.9455*	6.27	1.86	127	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.28	2.88	0.4847	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	869176.7	144862.8	6	15.6	<0.0001	Significant Effect
Error	195530	9310.952	21			
Total	1064707		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.2	16.8	0.1171	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.987	0.897	0.9703	Normal Distribution

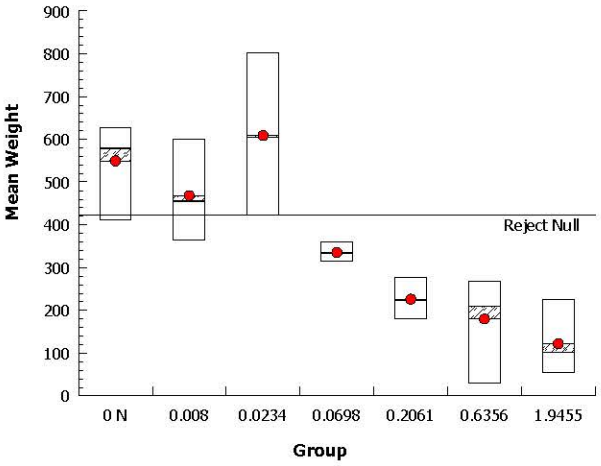
Mean Weight Summary

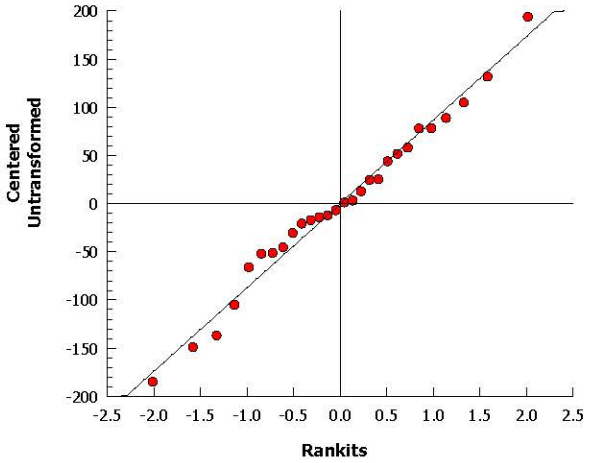
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	549	395	703	579	412	627	48.5	17.7%	0.0%
0.008		4	468	312	624	455	363	600	49	20.9%	14.7%
0.0234		4	608	354	862	604	423	802	79.8	26.3%	-10.8%
0.0698		4	335	304	366	333	314	360	9.68	5.78%	39.0%
0.2061		4	226	153	298	223	180	277	22.8	20.2%	58.9%
0.6356		4	179	3.75	355	210	30	268	55.1	61.5%	67.3%
1.9455		4	121	-2.52	245	102	55	226	38.9	64.2%	77.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-5069-4047	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-7912-1562	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.4%	0.0234	0.0698	0.04041	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.18	2.45	167	6	0.3725	CDF	Non-Significant Effect
		0.0234	-0.868	2.45	167	6	0.9815	CDF	Non-Significant Effect
		0.0698*	3.14	2.45	167	6	0.0119	CDF	Significant Effect
		0.2061*	4.74	2.45	167	6	0.0003	CDF	Significant Effect
		0.6356*	5.42	2.45	167	6	<0.0001	CDF	Significant Effect
		1.9455*	6.27	2.45	167	6	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	869176.7	144862.8	6	15.6	<0.0001	Significant Effect
Error	195530	9310.952	21			
Total	1064707		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.2	16.8	0.1171	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.987	0.897	0.9703	Normal Distribution

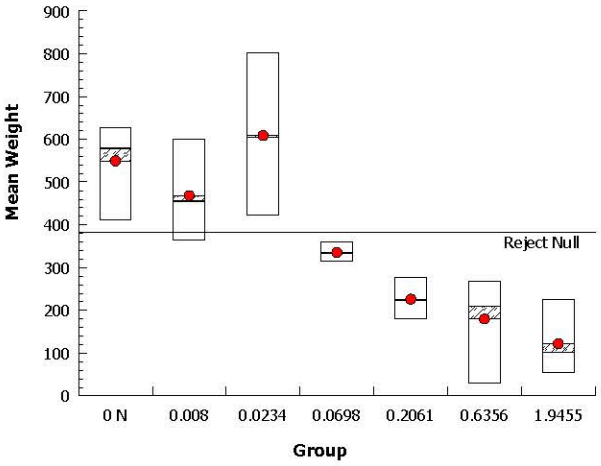
Mean Weight Summary

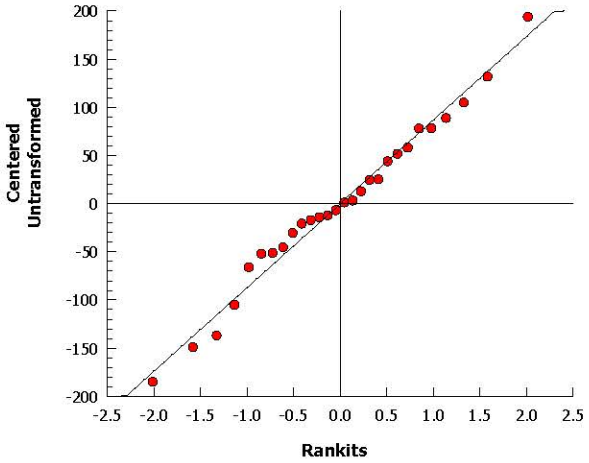
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	549	395	703	579	412	627	48.5	17.7%	0.0%
0.008		4	468	312	624	455	363	600	49	20.9%	14.7%
0.0234		4	608	354	862	604	423	802	79.8	26.3%	-10.8%
0.0698		4	335	304	366	333	314	360	9.68	5.78%	39.0%
0.2061		4	226	153	298	223	180	277	22.8	20.2%	58.9%
0.6356		4	179	3.75	355	210	30	268	55.1	61.5%	67.3%
1.9455		4	121	-2.52	245	102	55	226	38.9	64.2%	77.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	06-7912-1562	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-9937-7140	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.1%	0.0234	0.0698	0.04041	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	1.18	1.72	117	6	>0.05	CDF	Non-Significant Effect
		0.0234	0.158	1.8	123	6	>0.05	CDF	Non-Significant Effect
		0.0698*	3.14	1.83	125	6	<0.05	CDF	Significant Effect
		0.2061*	4.74	1.84	126	6	<0.05	CDF	Significant Effect
		0.6356*	5.42	1.85	126	6	<0.05	CDF	Significant Effect
		1.9455*	6.27	1.86	127	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	869176.7	144862.8	6	15.6	<0.0001	Significant Effect
Error	195530	9310.952	21			
Total	1064707		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	10.2	16.8	0.1171	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.987	0.897	0.9703	Normal Distribution

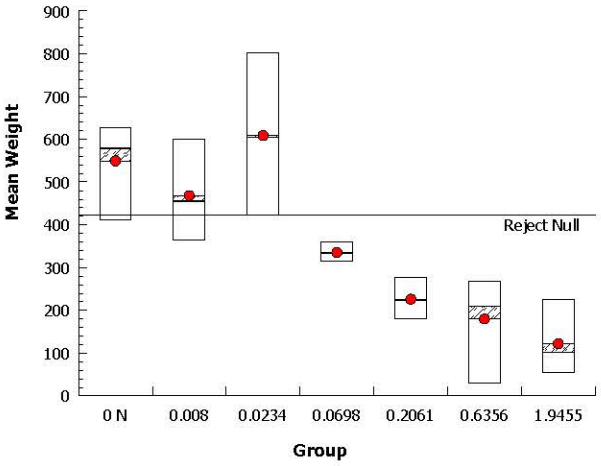
Mean Weight Summary

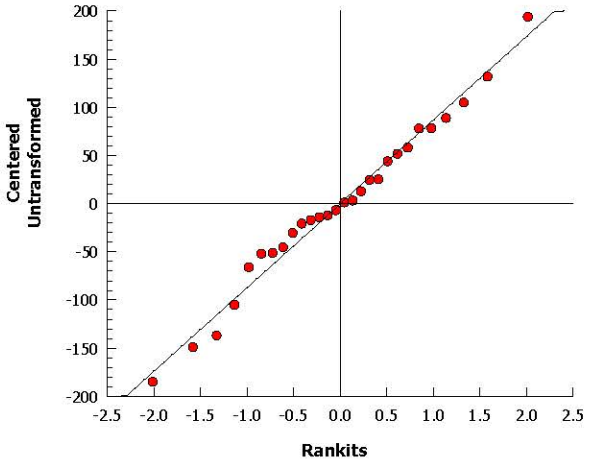
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	549	395	703	579	412	627	48.5	17.7%	0.0%
0.008		4	468	312	624	455	363	600	49	20.9%	14.7%
0.0234		4	608	354	862	604	423	802	79.8	26.3%	-10.8%
0.0698		4	335	304	366	333	314	360	9.68	5.78%	39.0%
0.2061		4	226	153	298	223	180	277	22.8	20.2%	58.9%
0.6356		4	179	3.75	355	210	30	268	55.1	61.5%	67.3%
1.9455		4	121	-2.52	245	102	55	226	38.9	64.2%	77.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-9937-7140	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-6084-2627	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	28.3%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0	2.45	0.212	6	0.8571	CDF	Non-Significant Effect
		0.0234	2.02	2.45	0.212	6	0.1102	CDF	Non-Significant Effect
		0.0698	-0.866	2.45	0.212	6	0.9814	CDF	Non-Significant Effect
		0.2061	-0.577	2.45	0.212	6	0.9600	CDF	Non-Significant Effect
		0.6356	2.31	2.45	0.212	6	0.0653	CDF	Non-Significant Effect
		1.9455	1.15	2.45	0.212	6	0.3848	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.31	2.88	0.4293	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.285	0.0475	6	3.17	0.0226	Significant Effect
Error	0.315	0.015	21			
Total	0.6		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.53	16.8	0.6049	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1663	Normal Distribution

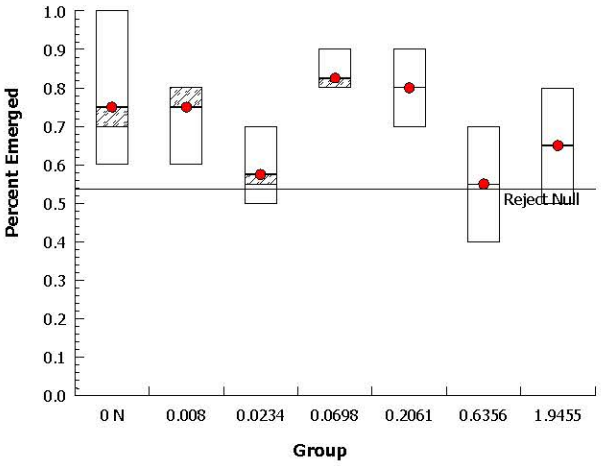
Percent Emerged Summary

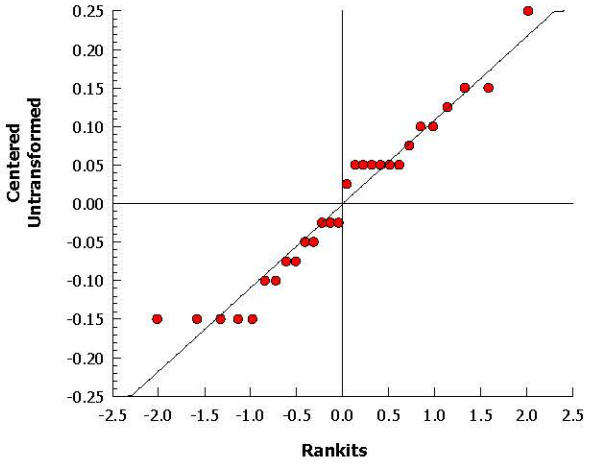
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.75	0.445	1	0.7	0.6	1	0.0957	25.5%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	0.0%
0.0234		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	23.3%
0.0698		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-10.0%
0.2061		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	-6.67%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	26.7%
1.9455		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	13.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	01-6084-2627	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-2350-6382	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.4%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0	1.72	0.149	6	>0.05	CDF	Non-Significant Effect
		0.0234	2.02	1.8	0.156	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.577	1.83	0.158	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.192	1.84	0.16	6	>0.05	CDF	Non-Significant Effect
		0.6356	2.31	1.85	0.16	6	>0.05	CDF	Non-Significant Effect
		1.9455	1.73	1.86	0.161	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.31	2.88	0.4293	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.285	0.0475	6	3.17	0.0226	Significant Effect
Error	0.315	0.015	21			
Total	0.6		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.53	16.8	0.6049	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1663	Normal Distribution

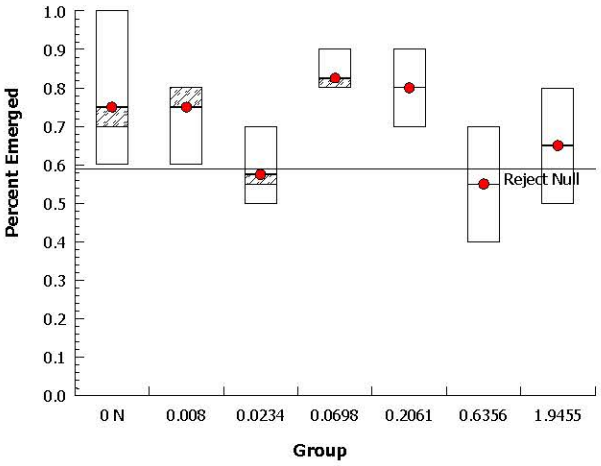
Percent Emerged Summary

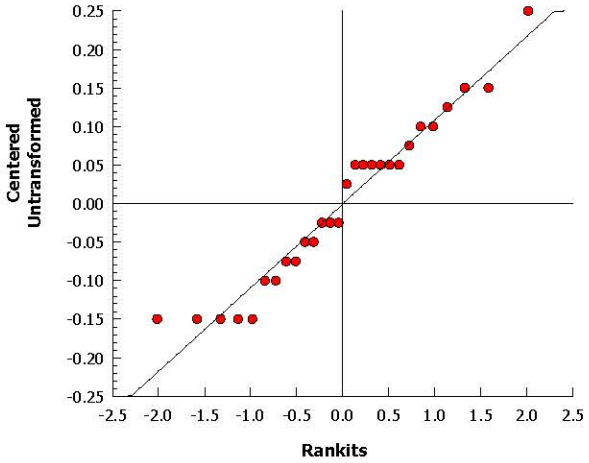
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.75	0.445	1	0.7	0.6	1	0.0957	25.5%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	0.0%
0.0234		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	23.3%
0.0698		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-10.0%
0.2061		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	-6.67%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	26.7%
1.9455		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	13.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	06-2350-6382	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-6133-4275	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	28.3%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0	2.45	0.212	6	0.8571	CDF	Non-Significant Effect
		0.0234	2.02	2.45	0.212	6	0.1102	CDF	Non-Significant Effect
		0.0698	-0.866	2.45	0.212	6	0.9814	CDF	Non-Significant Effect
		0.2061	-0.577	2.45	0.212	6	0.9600	CDF	Non-Significant Effect
		0.6356	2.31	2.45	0.212	6	0.0653	CDF	Non-Significant Effect
		1.9455	1.15	2.45	0.212	6	0.3848	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.285	0.0475	6	3.17	0.0226	Significant Effect
Error	0.315	0.015	21			
Total	0.6		27			

Distributional Tests

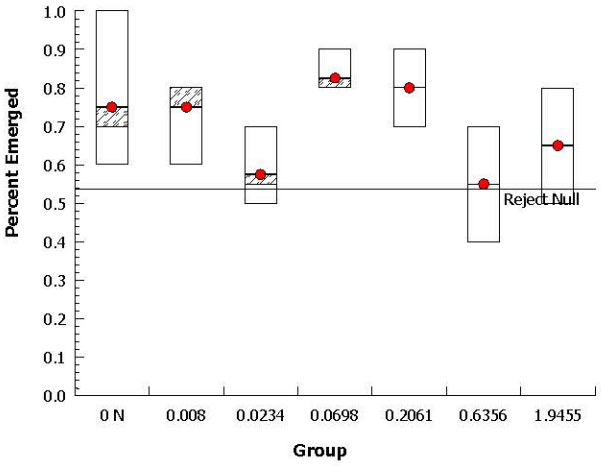
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.53	16.8	0.6049	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1663	Normal Distribution

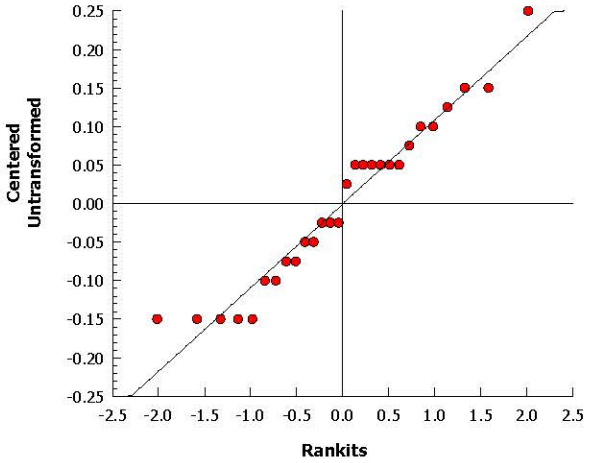
Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.75	0.445	1	0.7	0.6	1	0.0957	25.5%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	0.0%
0.0234		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	23.3%
0.0698		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-10.0%
0.2061		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	-6.67%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	26.7%
1.9455		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	13.3%

Analysis ID:	17-6133-4275	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-7609-3073	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.4%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	0	1.72	0.149	6	>0.05	CDF	Non-Significant Effect
		0.0234	2.02	1.8	0.156	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.577	1.83	0.158	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.192	1.84	0.16	6	>0.05	CDF	Non-Significant Effect
		0.6356	2.31	1.85	0.16	6	>0.05	CDF	Non-Significant Effect
		1.9455	1.73	1.86	0.161	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.285	0.0475	6	3.17	0.0226	Significant Effect
Error	0.315	0.015	21			
Total	0.6		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.53	16.8	0.6049	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1663	Normal Distribution

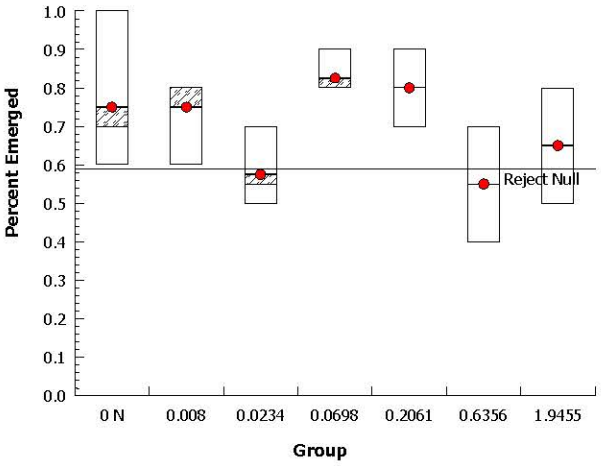
Percent Emerged Summary

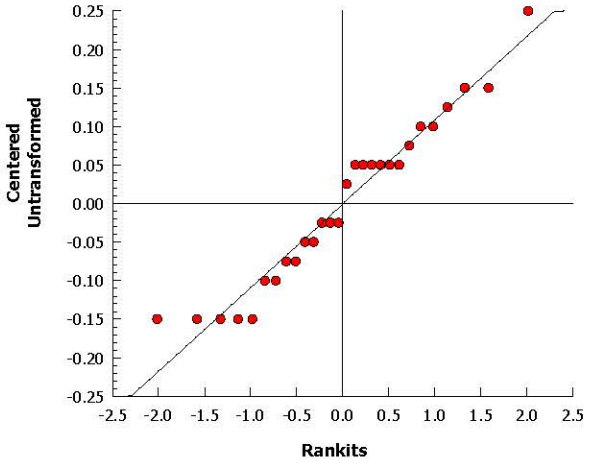
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.75	0.445	1	0.7	0.6	1	0.0957	25.5%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	0.0%
0.0234		4	0.575	0.423	0.727	0.55	0.5	0.7	0.0479	16.7%	23.3%
0.0698		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	-10.0%
0.2061		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	-6.67%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	26.7%
1.9455		4	0.65	0.445	0.855	0.65	0.5	0.8	0.0645	19.9%	13.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-7609-3073	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-8193-2124	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.6%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.81	2.45	0.227	6	0.9783	CDF	Non-Significant Effect
		0.0234	1.35	2.45	0.227	6	0.3043	CDF	Non-Significant Effect
		0.0698	-1.08	2.45	0.227	6	0.9899	CDF	Non-Significant Effect
		0.2061	0	2.45	0.227	6	0.8571	CDF	Non-Significant Effect
		0.6356	1.35	2.45	0.227	6	0.3043	CDF	Non-Significant Effect
		1.9455	1.08	2.45	0.227	6	0.4177	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.95	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.21	0.035	6	2.04	0.1048	Non-Significant Effect
Error	0.36	0.01714286	21			
Total	0.57		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.56	16.8	0.9970	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.938	0.897	0.0961	Normal Distribution

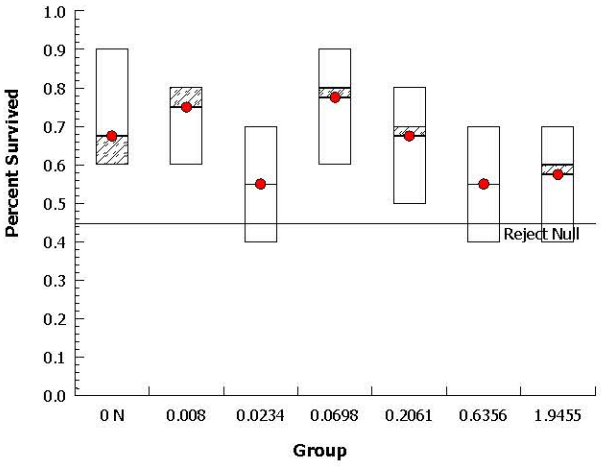
Percent Survived Summary

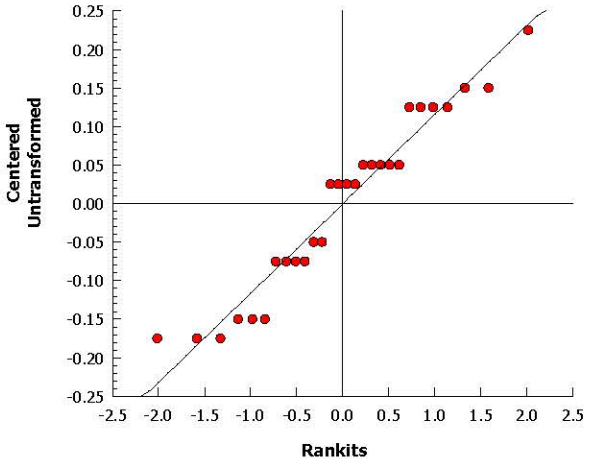
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.675	0.436	0.914	0.6	0.6	0.9	0.075	22.2%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	-11.1%
0.0234		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
0.0698		4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	-14.8%
0.2061		4	0.675	0.475	0.875	0.7	0.5	0.8	0.0629	18.6%	0.0%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
1.9455		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	14.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-8193-2124	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-0019-1762	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.4%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.81	1.72	0.159	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.35	1.8	0.167	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.135	1.83	0.169	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.09	1.84	0.171	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.35	1.85	0.171	6	>0.05	CDF	Non-Significant Effect
		1.9455	1.22	1.86	0.172	6	>0.05	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.95	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.21	0.035	6	2.04	0.1048	Non-Significant Effect
Error	0.36	0.01714286	21			
Total	0.57		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.56	16.8	0.9970	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.938	0.897	0.0961	Normal Distribution

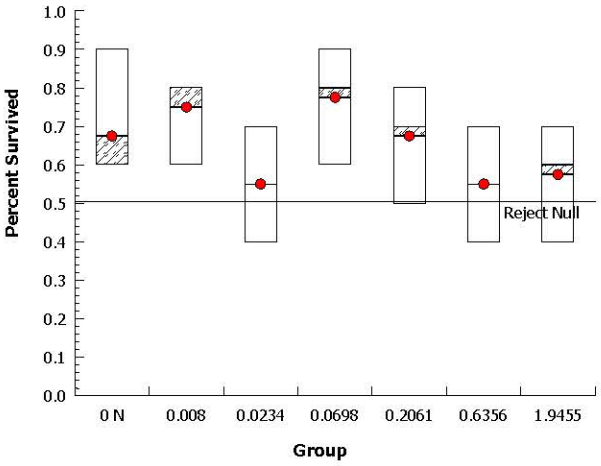
Percent Survived Summary

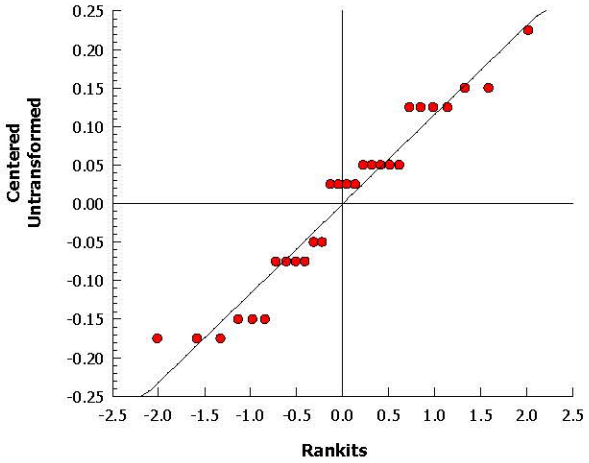
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.675	0.436	0.914	0.6	0.6	0.9	0.075	22.2%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	-11.1%
0.0234		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
0.0698		4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	-14.8%
0.2061		4	0.675	0.475	0.875	0.7	0.5	0.8	0.0629	18.6%	0.0%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
1.9455		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	14.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	05-0019-1762	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:47	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-0777-8209	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.6%	1.9455	>1.9455	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.81	2.45	0.227	6	0.9783	CDF	Non-Significant Effect
		0.0234	1.35	2.45	0.227	6	0.3043	CDF	Non-Significant Effect
		0.0698	-1.08	2.45	0.227	6	0.9899	CDF	Non-Significant Effect
		0.2061	0	2.45	0.227	6	0.8571	CDF	Non-Significant Effect
		0.6356	1.35	2.45	0.227	6	0.3043	CDF	Non-Significant Effect
		1.9455	1.08	2.45	0.227	6	0.4177	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.21	0.035	6	2.04	0.1048	Non-Significant Effect
Error	0.36	0.01714286	21			
Total	0.57		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.56	16.8	0.9970	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.938	0.897	0.0961	Normal Distribution

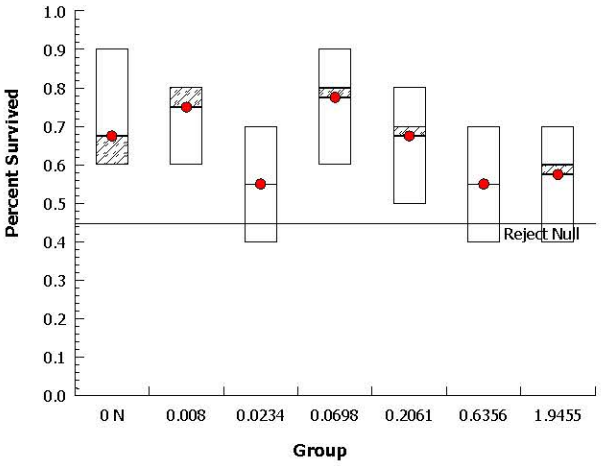
Percent Survived Summary

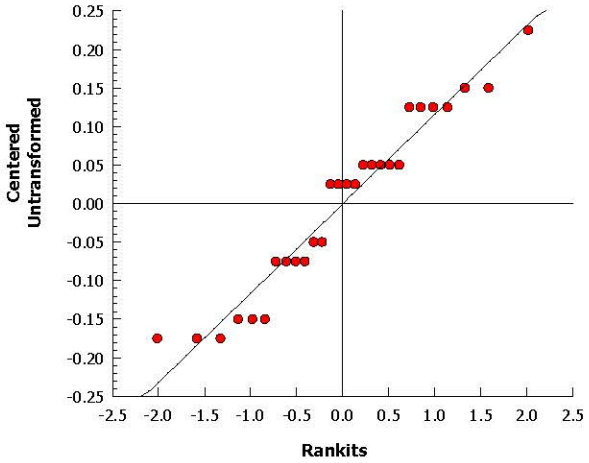
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.675	0.436	0.914	0.6	0.6	0.9	0.075	22.2%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	-11.1%
0.0234		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
0.0698		4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	-14.8%
0.2061		4	0.675	0.475	0.875	0.7	0.5	0.8	0.0629	18.6%	0.0%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
1.9455		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	14.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-0777-8209	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-2301-7554	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.4%	1.9455	>1.9455	NA	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.81	1.72	0.159	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.35	1.8	0.167	6	>0.05	CDF	Non-Significant Effect
		0.0698	0.135	1.83	0.169	6	>0.05	CDF	Non-Significant Effect
		0.2061	0.09	1.84	0.171	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.35	1.85	0.171	6	>0.05	CDF	Non-Significant Effect
		1.9455	1.22	1.86	0.172	6	>0.05	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.21	0.035	6	2.04	0.1048	Non-Significant Effect
Error	0.36	0.01714286	21			
Total	0.57		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	0.56	16.8	0.9970	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.938	0.897	0.0961	Normal Distribution

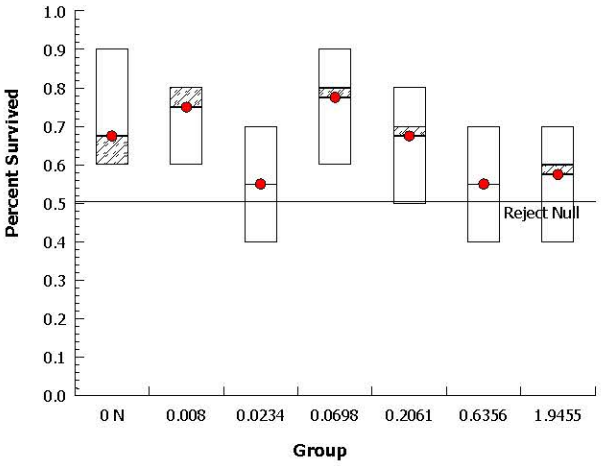
Percent Survived Summary

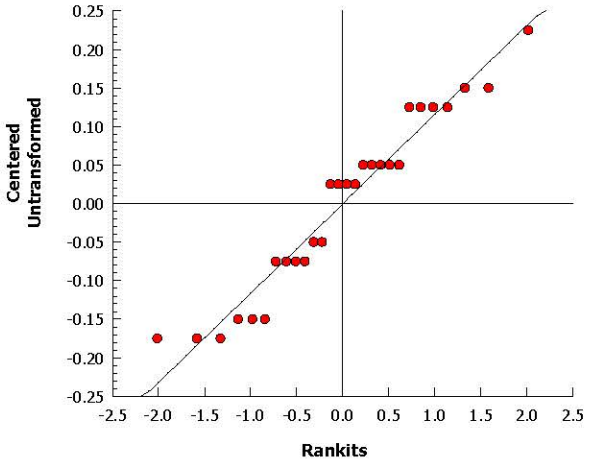
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.675	0.436	0.914	0.6	0.6	0.9	0.075	22.2%	0.0%
0.008		4	0.75	0.591	0.909	0.8	0.6	0.8	0.05	13.3%	-11.1%
0.0234		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
0.0698		4	0.775	0.575	0.975	0.8	0.6	0.9	0.0629	16.2%	-14.8%
0.2061		4	0.675	0.475	0.875	0.7	0.5	0.8	0.0629	18.6%	0.0%
0.6356		4	0.55	0.345	0.755	0.55	0.4	0.7	0.0645	23.5%	18.5%
1.9455		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	14.8%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-2301-7554	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-4053-5617	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.25	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
200	-170	347	350	1.32	1.05		3.63	2.84	0.0213	Significant Lack of Fit

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.273	0.0489	0.177	0.368	5.58	<0.0001	Significant Parameter
Slope	0.952	1.09	-1.19	3.1	0.87	0.3928	Non-Significant Parameter
Intercept	-1.26	0.491	-2.22	-0.299	-2.57	0.0166	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.804295	1.804295	1	1.69	0.2061	Non-Significant
Lack of Fit	10.93766	2.734416	4	3.63	0.0213	Significant
Pure Error	15.82947	0.753784	21			
Residual	26.76713	1.070685	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	26.9	37.7	0.3627	Non-Significant Heterogenity
	Likelihood Ratio GOF	29.7	37.7	0.2376	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.13	2.88	0.7622	No Outliers Detected
Variances	Mod Levene Equality of Variance	1.95	2.57	0.1189	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.941	0.926	0.1143	Normal Distribution
	Anderson-Darling A2 Normality	0.658	2.49	0.0863	Normal Distribution

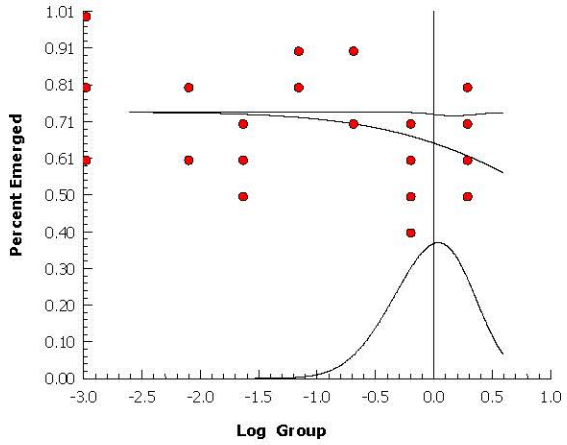
Percent Emerged Summary

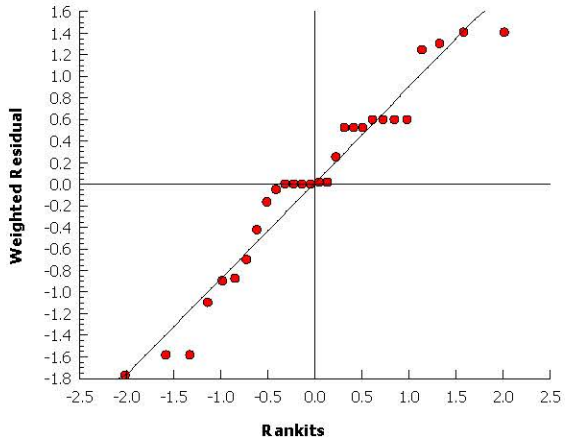
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.75	0.6	1	0.0957	0.191	25.5%	0.0%	30	40
0.008		4	0.75	0.6	0.8	0.05	0.1	13.3%	0.0%	30	40
0.0234		4	0.575	0.5	0.7	0.0479	0.0957	16.7%	23.3%	23	40
0.0698		4	0.825	0.8	0.9	0.025	0.05	6.06%	-10.0%	33	40
0.2061		4	0.8	0.7	0.9	0.0577	0.115	14.4%	-6.67%	32	40
0.6356		4	0.55	0.4	0.7	0.0645	0.129	23.5%	26.7%	22	40
1.9455		4	0.65	0.5	0.8	0.0645	0.129	19.9%	13.3%	26	40

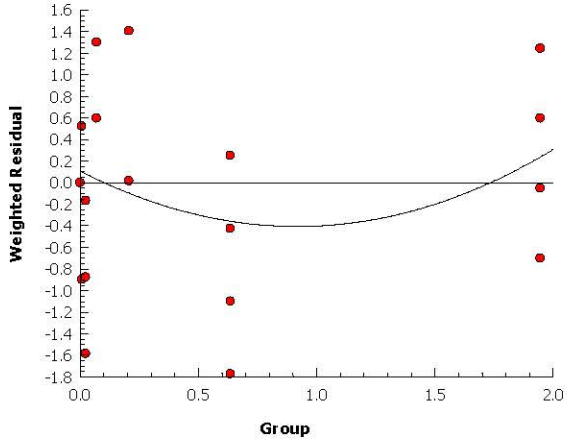
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

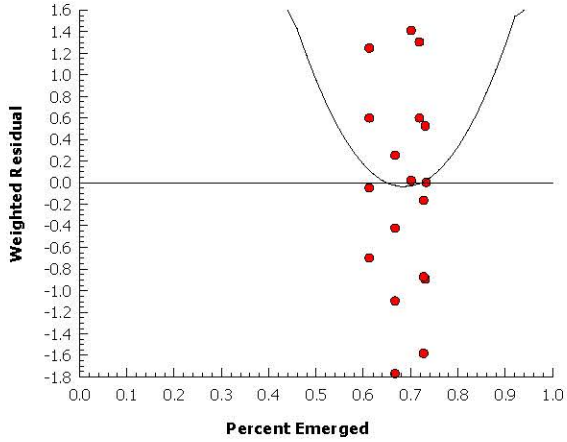
Analysis ID:	01-4053-5617	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-7766-5240	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.25	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
100	-170	347	350	1.59	1.33		3.64	2.84	0.0210	Significant Lack of Fit

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.267	0.0424	0.184	0.35	6.3	<0.0001	Significant Parameter
Slope	0.749	1.43	-2.05	3.55	0.525	0.6041	Non-Significant Parameter
Intercept	-1.19	0.494	-2.16	-0.226	-2.42	0.0233	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	1.761502	1.761502	1	1.64	0.2117	Non-Significant
Lack of Fit	10.98046	2.745114	4	3.64	0.0210	Significant
Pure Error	15.82947	0.753784	21			
Residual	26.80993	1.072397	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	26.7	37.7	0.3702	Non-Significant Heterogenity
	Likelihood Ratio GOF	29.7	37.7	0.2371	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.97	2.57	0.1155	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.945	0.926	0.1477	Normal Distribution
	Anderson-Darling A2 Normality	0.621	2.49	0.1065	Normal Distribution

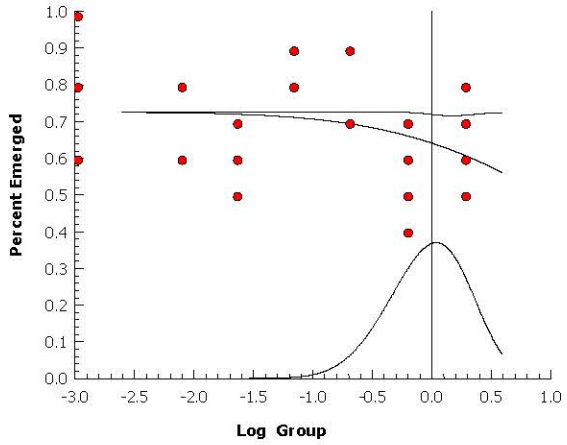
Percent Emerged Summary

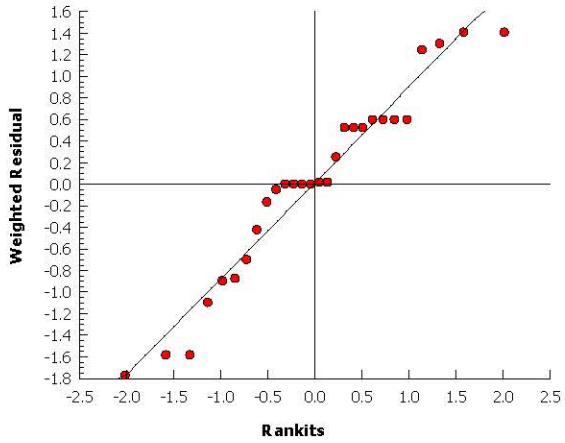
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.75	0.6	1	0.0957	0.191	25.5%	0.0%	30	40
0.008		4	0.75	0.6	0.8	0.05	0.1	13.3%	0.0%	30	40
0.0234		4	0.575	0.5	0.7	0.0479	0.0957	16.7%	23.3%	23	40
0.0698		4	0.825	0.8	0.9	0.025	0.05	6.06%	-10.0%	33	40
0.2061		4	0.8	0.7	0.9	0.0577	0.115	14.4%	-6.67%	32	40
0.6356		4	0.55	0.4	0.7	0.0645	0.129	23.5%	26.7%	22	40
1.9455		4	0.65	0.5	0.8	0.0645	0.129	19.9%	13.3%	26	40

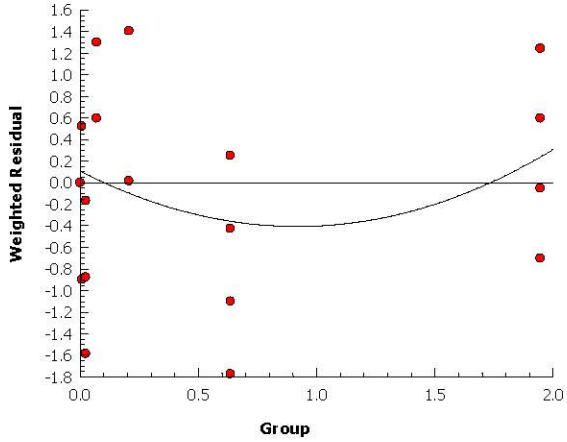
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

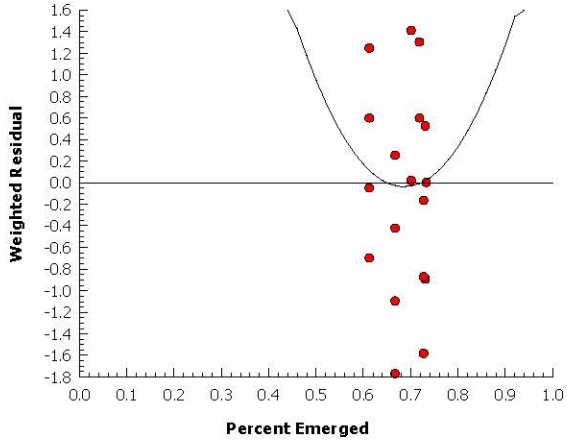
Analysis ID:	08-7766-5240	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-6248-7659	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.325	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
25	-180	367	370	1.33	1.24	0.0199	2.04	2.84	0.1250	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.198	N/A	N/A
EC10	0.557	N/A	N/A
EC25	3.13	N/A	N/A
EC50	21.4	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.311	0.0502	0.213	0.41	6.2	<0.0001	Significant Parameter
Slope	0.809	1.06	-1.27	2.89	0.762	0.4532	Non-Significant Parameter
Intercept	-1.08	0.461	-1.98	-0.172	-2.33	0.0280	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	2.318715	2.318715	1	2.55	0.1229	Non-Significant
Lack of Fit	6.367498	1.591875	4	2.04	0.1251	Non-Significant
Pure Error	16.36873	0.779463	21			
Residual	22.73623	0.909449	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	22.7	37.7	0.5930	Non-Significant Heterogenity
	Likelihood Ratio GOF	23.5	37.7	0.5468	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.1	2.88	0.8385	No Outliers Detected
Variances	Bartlett Equality of Variance	0.496	12.6	0.9979	Equal Variances
	Mod Levene Equality of Variance	0.229	2.57	0.9626	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.953	0.926	0.2304	Normal Distribution
	Anderson-Darling A2 Normality	0.662	2.49	0.0843	Normal Distribution

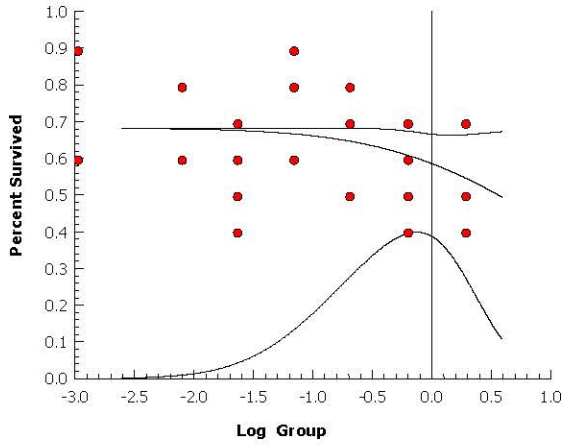
Percent Survived Summary

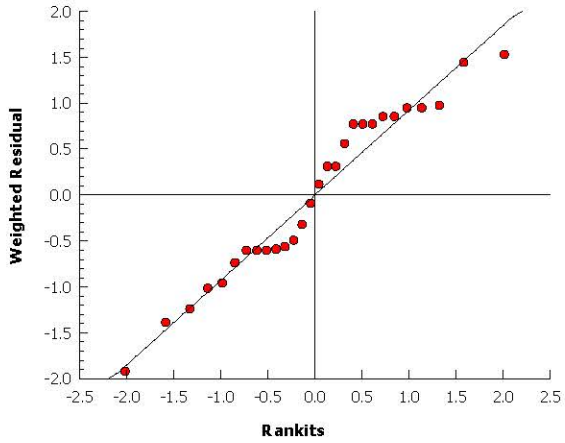
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.675	0.6	0.9	0.075	0.15	22.2%	0.0%	27	40
0.008		4	0.75	0.6	0.8	0.05	0.1	13.3%	-11.1%	30	40
0.0234		4	0.55	0.4	0.7	0.0645	0.129	23.5%	18.5%	22	40
0.0698		4	0.775	0.6	0.9	0.0629	0.126	16.2%	-14.8%	31	40
0.2061		4	0.675	0.5	0.8	0.0629	0.126	18.6%	0.0%	27	40
0.6356		4	0.55	0.4	0.7	0.0645	0.129	23.5%	18.5%	22	40
1.9455		4	0.575	0.4	0.7	0.075	0.15	26.1%	14.8%	23	40

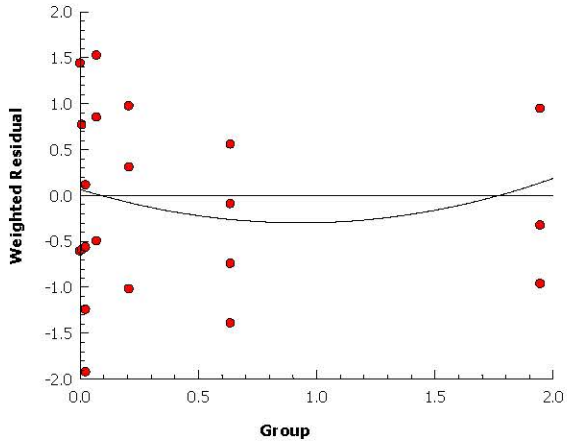
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

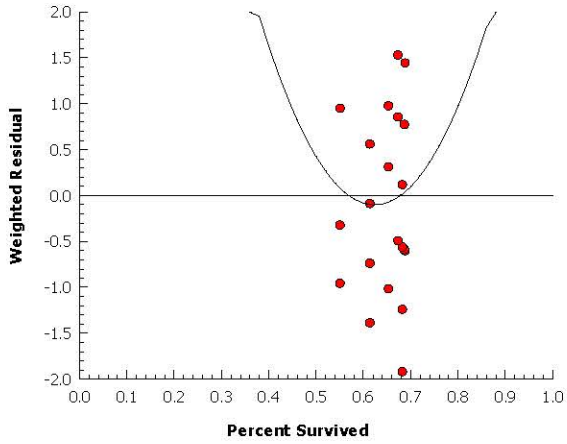
Analysis ID:	02-6248-7659	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-1479-2008	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.325	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
25	-180	367	370	1.33	1.24	0.0199	2.04	2.84	0.1250	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.198	N/A	N/A
EC10	0.557	N/A	N/A
EC25	3.13	N/A	N/A
EC50	21.4	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.311	0.0502	0.213	0.41	6.2	<0.0001	Significant Parameter
Slope	0.809	1.06	-1.27	2.89	0.762	0.4532	Non-Significant Parameter
Intercept	-1.08	0.461	-1.98	-0.172	-2.33	0.0280	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	2.318715	2.318715	1	2.55	0.1229	Non-Significant
Lack of Fit	6.367498	1.591875	4	2.04	0.1251	Non-Significant
Pure Error	16.36873	0.779463	21			
Residual	22.73623	0.909449	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	22.7	37.7	0.5930	Non-Significant Heterogenity
	Likelihood Ratio GOF	23.5	37.7	0.5468	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	0.496	12.6	0.9979	Equal Variances
	Mod Levene Equality of Variance	0.229	2.57	0.9626	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.953	0.926	0.2304	Normal Distribution
	Anderson-Darling A2 Normality	0.662	2.49	0.0843	Normal Distribution

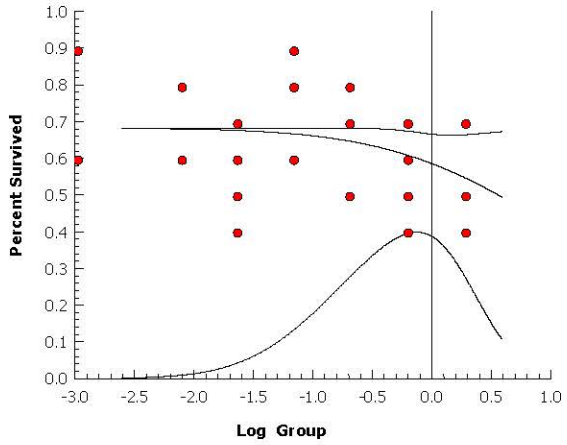
Percent Survived Summary

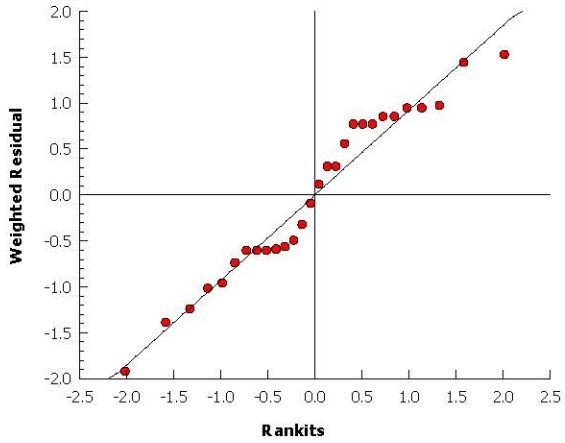
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.675	0.6	0.9	0.075	0.15	22.2%	0.0%	27	40
0.008		4	0.75	0.6	0.8	0.05	0.1	13.3%	-11.1%	30	40
0.0234		4	0.55	0.4	0.7	0.0645	0.129	23.5%	18.5%	22	40
0.0698		4	0.775	0.6	0.9	0.0629	0.126	16.2%	-14.8%	31	40
0.2061		4	0.675	0.5	0.8	0.0629	0.126	18.6%	0.0%	27	40
0.6356		4	0.55	0.4	0.7	0.0645	0.129	23.5%	18.5%	22	40
1.9455		4	0.575	0.4	0.7	0.075	0.15	26.1%	14.8%	23	40

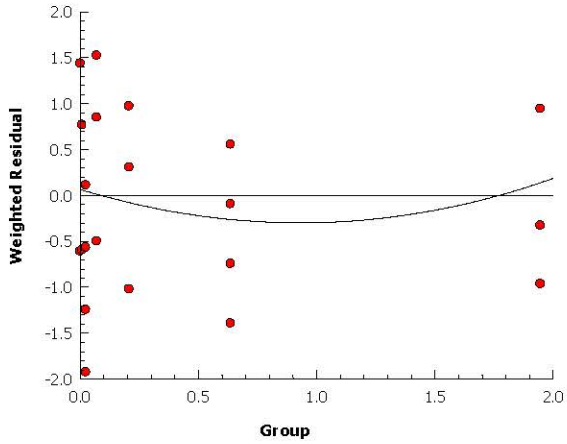
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

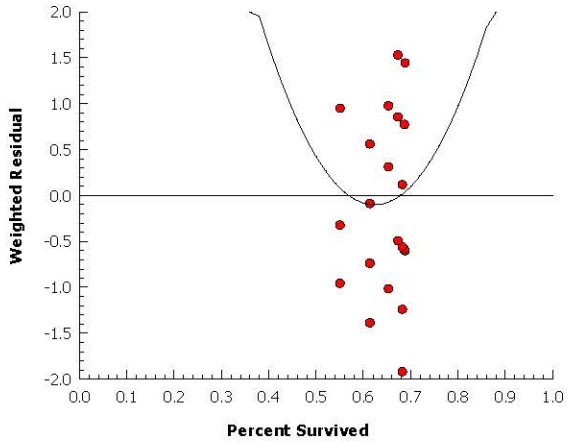
Analysis ID:	20-1479-2008	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-2005-3065	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
14	1200	-2400	-2400	0.5353	Yes	1.56	2.87	0.2236	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0117	N/A	0.0561
IC10	0.0475	0.00772	0.144
IC25	0.491	0.239	0.928
IC50	6.57	1.62	26.7

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	25.2	1.38	22.5	27.9	18.2	<0.0001	Significant Parameter
C	3.85	1.24	1.41	6.29	3.09	0.0050	Significant Parameter
D	6.57	4.28	-1.83	15	1.53	0.1383	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	11.68881	11.68881	1	32	<0.0001	Significant
Lack of Fit	2.087575	0.521894	4	1.56	0.2236	Non-Significant
Pure Error	6.692124	0.334606	20			
Residual	8.779699	0.365821	24			

Residual Analysis

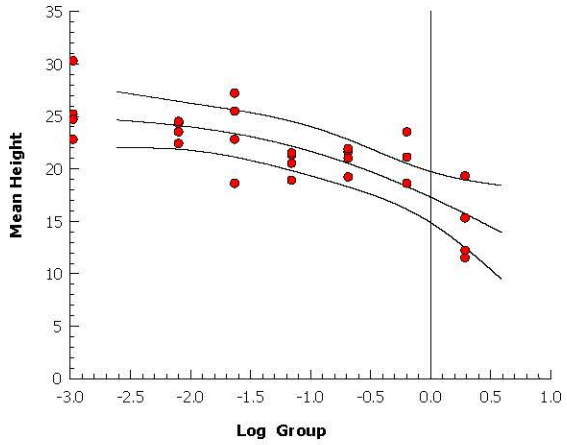
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	8.78	36.4	0.9980	Non-Significant Heterogenity
	Likelihood Ratio GOF	8.77	36.4	0.9980	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	9.71	12.6	0.1375	Equal Variances
	Mod Levene Equality of Variance	1.72	2.63	0.1699	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.968	0.924	0.5414	Normal Distribution
	Anderson-Darling A2 Normality	0.416	2.49	0.3363	Normal Distribution

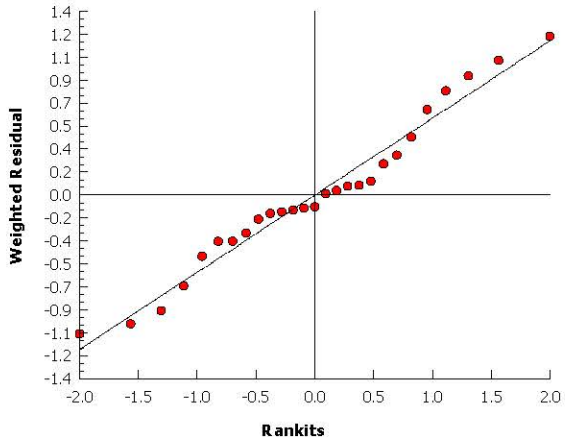
Mean Height Summary

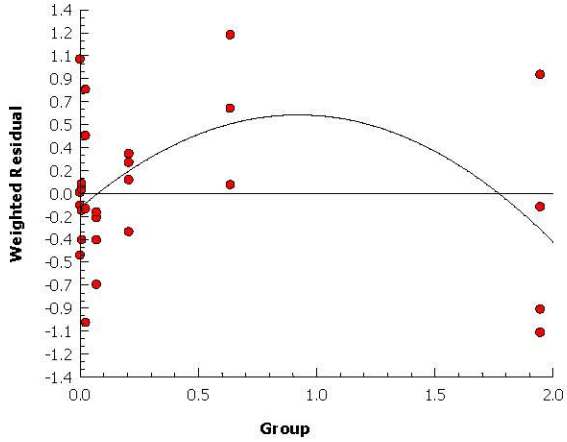
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	25.8	22.8	30.3	1.6	3.2	12.4%	0.0%
0.008		4	23.7	22.4	24.5	0.477	0.954	4.03%	8.06%
0.0234		4	23.5	18.6	27.2	1.87	3.75	15.9%	8.64%
0.0698		4	20.5	18.9	21.5	0.591	1.18	5.75%	20.2%
0.2061		4	20.9	19.2	21.9	0.605	1.21	5.78%	18.7%
0.6356		3	21.1	18.6	23.5	1.41	2.45	11.6%	18.2%
1.9455		4	14.6	11.5	19.3	1.78	3.56	24.4%	43.4%

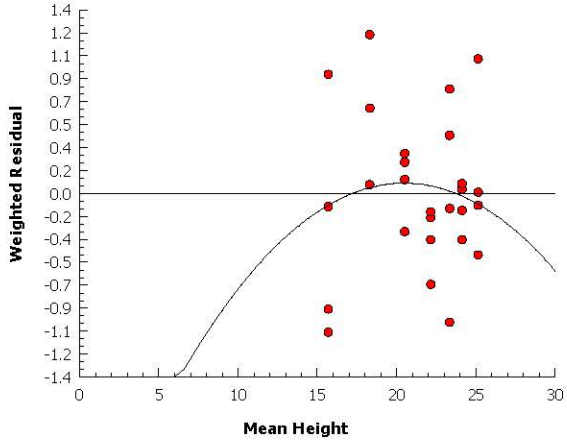
Analysis ID:	02-2005-3065	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-9793-1807	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	1210	-2400	-2400	0.4406	Yes	0.201	2.84	0.9351	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.00609	N/A	0.0475
IC10	0.026	0.00151	0.107
IC25	0.294	0.117	0.652
IC50	4.36	1.03	18.5

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	25.5	1.88	21.9	29.2	13.6	<0.0001	Significant Parameter
C	4	1.45	1.15	6.85	2.75	0.0109	Significant Parameter
D	4.36	3.09	-1.7	10.4	1.41	0.1706	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	14.74674	14.74674	1	23.3	<0.0001	Significant
Lack of Fit	0.583803	0.145951	4	0.201	0.9351	Non-Significant
Pure Error	15.26236	0.726779	21			
Residual	15.84616	0.633847	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	15.8	37.7	0.9193	Non-Significant Heterogenity
	Likelihood Ratio GOF	17.4	37.7	0.8659	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	3.27	2.88	0.0065	Outlier Detected
Variances	Bartlett Equality of Variance	18.2	12.6	0.0056	Unequal Variances
	Mod Levene Equality of Variance	1.49	2.57	0.2293	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.926	0.0526	Normal Distribution
	Anderson-Darling A2 Normality	0.612	2.49	0.1126	Normal Distribution

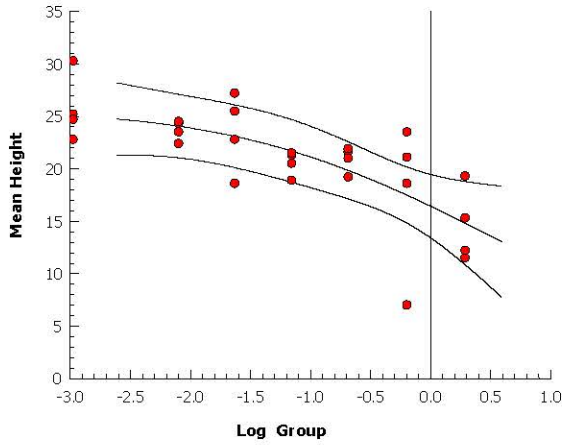
Mean Height Summary

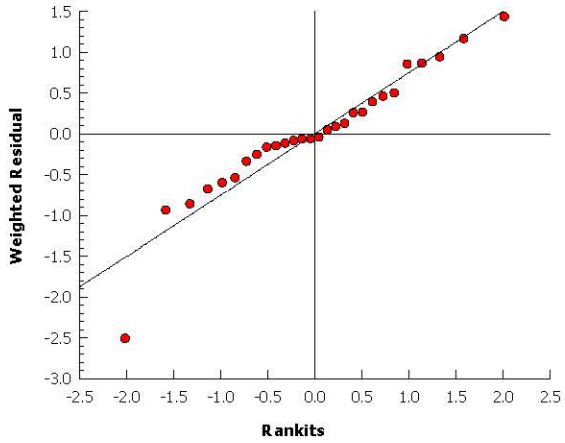
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	25.8	22.8	30.3	1.6	3.2	12.4%	0.0%
0.008		4	23.7	22.4	24.5	0.477	0.954	4.03%	8.06%
0.0234		4	23.5	18.6	27.2	1.87	3.75	15.9%	8.64%
0.0698		4	20.5	18.9	21.5	0.591	1.18	5.75%	20.2%
0.2061		4	20.9	19.2	21.9	0.605	1.21	5.78%	18.7%
0.6356		4	17.6	7	23.5	3.66	7.31	41.7%	31.8%
1.9455		4	14.6	11.5	19.3	1.78	3.56	24.4%	43.4%

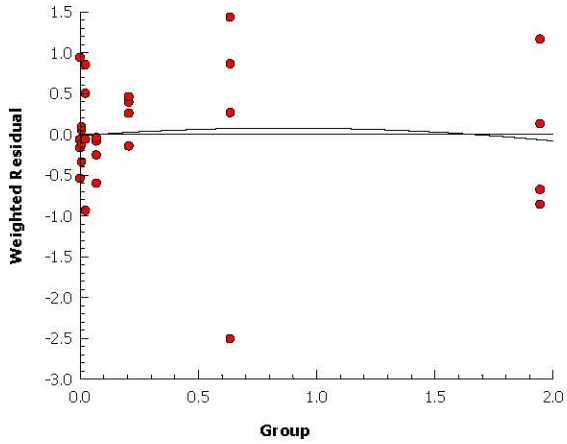
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

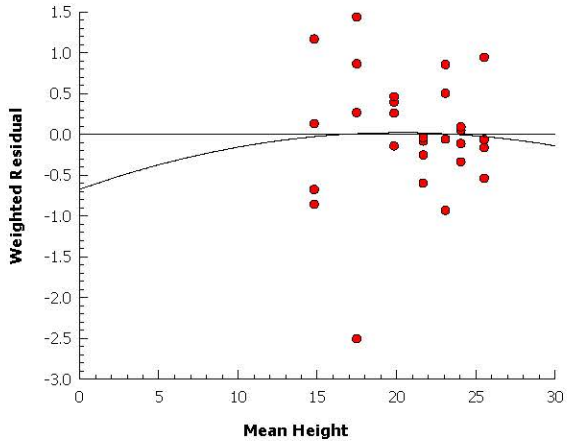
Analysis ID:	09-9793-1807	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-5223-0120	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	1210	-2400	-2400	0.4406	Yes	0.201	2.84	0.9351	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.00609	N/A	0.0475
IC10	0.026	0.00151	0.107
IC25	0.294	0.117	0.652
IC50	4.36	1.03	18.5

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	25.5	1.88	21.9	29.2	13.6	<0.0001	Significant Parameter
C	4	1.45	1.15	6.85	2.75	0.0109	Significant Parameter
D	4.36	3.09	-1.7	10.4	1.41	0.1706	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	14.74674	14.74674	1	23.3	<0.0001	Significant
Lack of Fit	0.583803	0.145951	4	0.201	0.9351	Non-Significant
Pure Error	15.26236	0.726779	21			
Residual	15.84616	0.633847	25			

Residual Analysis

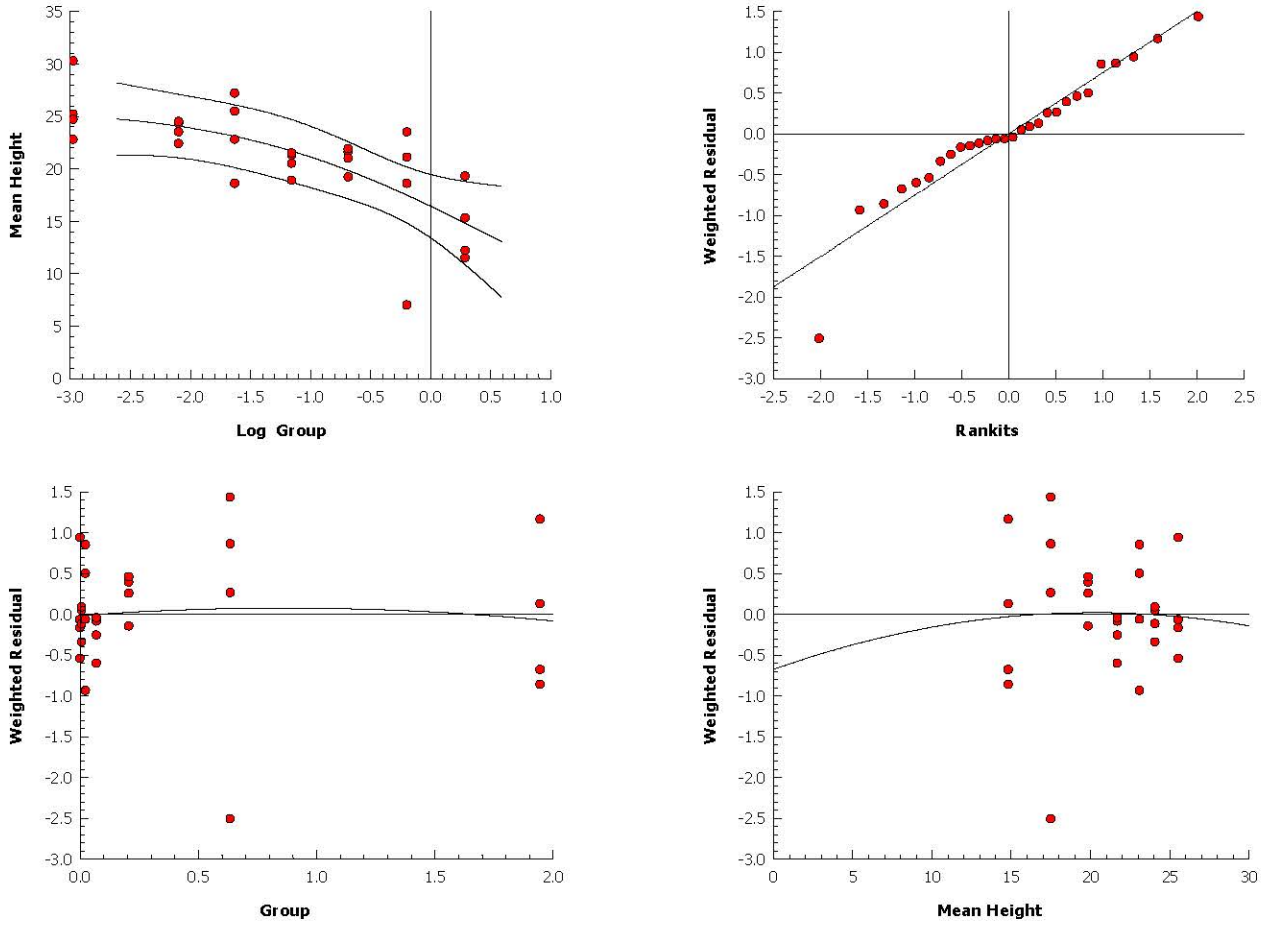
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	15.8	37.7	0.9193	Non-Significant Heterogenity
	Likelihood Ratio GOF	17.4	37.7	0.8659	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	18.2	12.6	0.0056	Unequal Variances
	Mod Levene Equality of Variance	1.49	2.57	0.2293	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.926	0.0526	Normal Distribution
	Anderson-Darling A2 Normality	0.612	2.49	0.1126	Normal Distribution

Mean Height Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	25.8	22.8	30.3	1.6	3.2	12.4%	0.0%
0.008		4	23.7	22.4	24.5	0.477	0.954	4.03%	8.06%
0.0234		4	23.5	18.6	27.2	1.87	3.75	15.9%	8.64%
0.0698		4	20.5	18.9	21.5	0.591	1.18	5.75%	20.2%
0.2061		4	20.9	19.2	21.9	0.605	1.21	5.78%	18.7%
0.6356		4	17.6	7	23.5	3.66	7.31	41.7%	31.8%
1.9455		4	14.6	11.5	19.3	1.78	3.56	24.4%	43.4%

Analysis ID:	04-5223-0120	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-2167-5405	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
11	-583	1170	1180	0.6511	Yes	2.91	2.84	0.0463	Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.00314	N/A	0.0239
IC10	0.00781	N/A	0.0304
IC25	0.0357	0.0109	0.087
IC50	0.194	0.106	0.356

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	572	67.7	440	705	8.46	<0.0001	Significant Parameter
C	2.51	0.595	1.34	3.67	4.21	0.0003	Significant Parameter
D	0.194	0.106	-0.0149	0.402	1.82	0.0808	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	2029.044	2029.044	1	52.4	<0.0001	Significant
Lack of Fit	345.2896	86.32239	4	2.91	0.0463	Significant
Pure Error	623.0309	29.66814	21			
Residual	968.3205	38.73282	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	968	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	955	37.7	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.68	2.88	0.1145	No Outliers Detected
Variances	Bartlett Equality of Variance	11.4	12.6	0.0776	Equal Variances
	Mod Levene Equality of Variance	1.67	2.57	0.1785	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.945	0.926	0.1484	Normal Distribution
	Anderson-Darling A2 Normality	0.712	2.49	0.0630	Normal Distribution

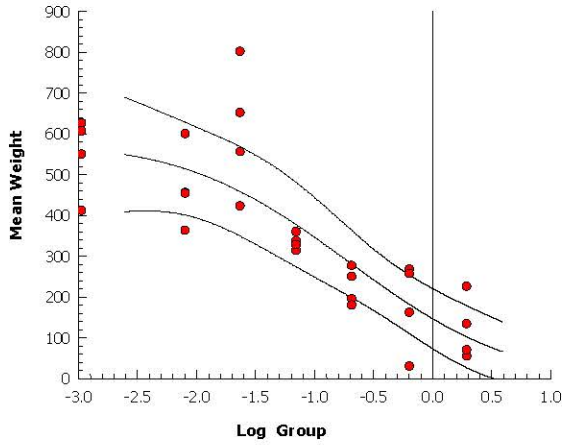
Mean Weight Summary

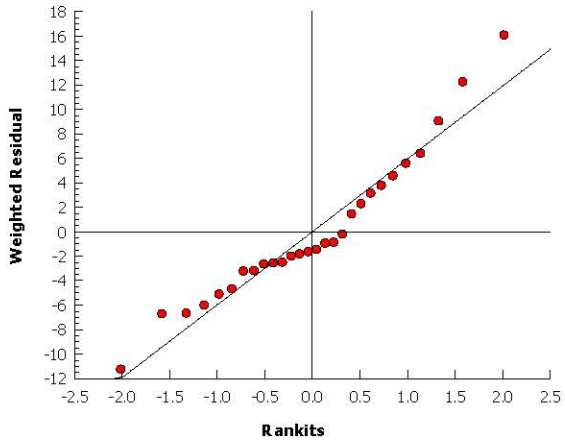
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	549	412	627	48.5	97	17.7%	0.0%
0.008		4	468	363	600	49	98	20.9%	14.7%
0.0234		4	608	423	802	79.8	160	26.3%	-10.8%
0.0698		4	335	314	360	9.68	19.4	5.78%	39.0%
0.2061		4	226	180	277	22.8	45.7	20.2%	58.9%
0.6356		4	179	30	268	55.1	110	61.5%	67.3%
1.9455		4	121	55	226	38.9	77.8	64.2%	77.9%

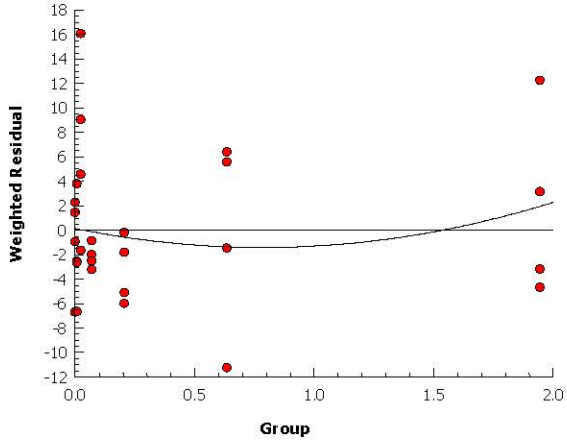
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

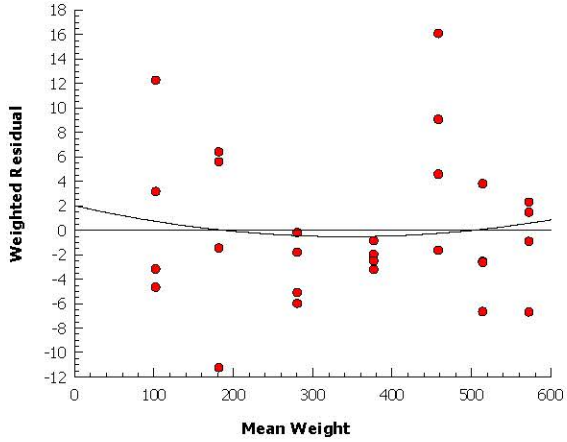
Analysis ID:	17-2167-5405	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:46	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-4192-3159	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	18-3160-0364	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:00	**Species:**	Brassica napus	**Brine:**	
Duration:	561d 13h	**Source:**	Seedland Inc.	**Age:**	

Sample ID:	15-8296-0797	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:00	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
11	-583	1170	1180	0.6511	Yes	2.91	2.84	0.0463	Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.00314	N/A	0.0239
IC10	0.00781	N/A	0.0304
IC25	0.0357	0.0109	0.087
IC50	0.194	0.106	0.356

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	572	67.7	440	705	8.46	<0.0001	Significant Parameter
C	2.51	0.595	1.34	3.67	4.21	0.0003	Significant Parameter
D	0.194	0.106	-0.0149	0.402	1.82	0.0808	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	2029.044	2029.044	1	52.4	<0.0001	Significant
Lack of Fit	345.2896	86.32239	4	2.91	0.0463	Significant
Pure Error	623.0309	29.66814	21			
Residual	968.3205	38.73282	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	968	37.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	955	37.7	<0.0001	Significant Heterogenity
Variances	Bartlett Equality of Variance	11.4	12.6	0.0776	Equal Variances
	Mod Levene Equality of Variance	1.67	2.57	0.1785	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.945	0.926	0.1484	Normal Distribution
	Anderson-Darling A2 Normality	0.712	2.49	0.0630	Normal Distribution

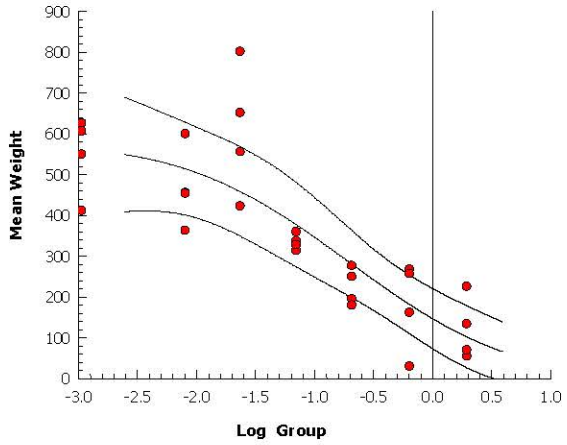
Mean Weight Summary

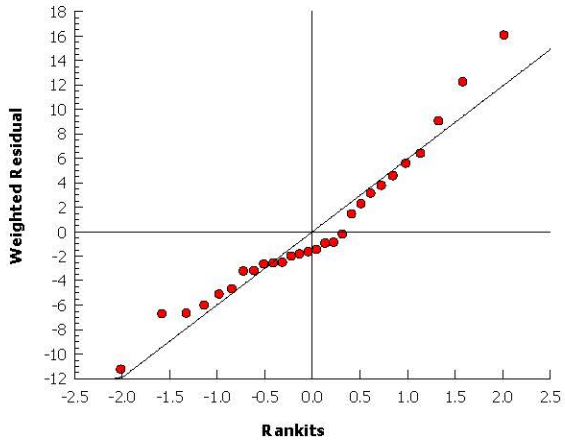
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	549	412	627	48.5	97	17.7%	0.0%
0.008		4	468	363	600	49	98	20.9%	14.7%
0.0234		4	608	423	802	79.8	160	26.3%	-10.8%
0.0698		4	335	314	360	9.68	19.4	5.78%	39.0%
0.2061		4	226	180	277	22.8	45.7	20.2%	58.9%
0.6356		4	179	30	268	55.1	110	61.5%	67.3%
1.9455		4	121	55	226	38.9	77.8	64.2%	77.9%

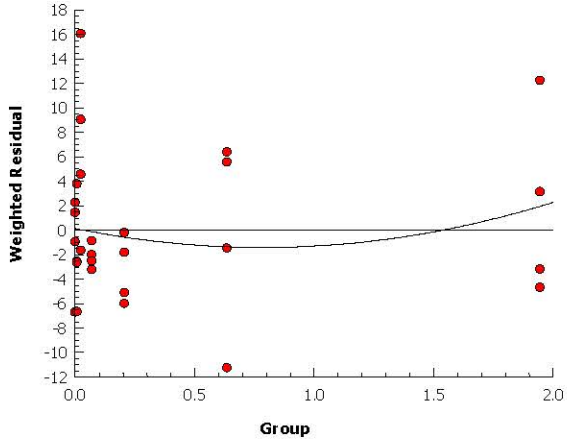
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

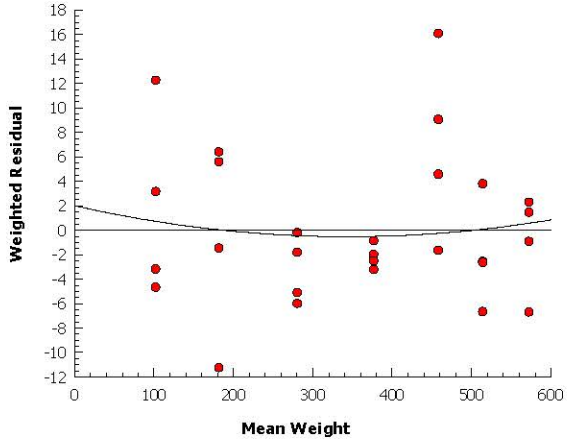
Analysis ID:	00-4192-3159	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:51	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
00-5460-2669	Mean Height	0.5975	1.8067	1.039	33.7%		Dunnett Multiple Comparison Test
07-5452-5014	Mean Height	0.5975	1.8067	1.039	33.7%		Dunnett Multiple Comparison Test
06-9023-5664	Mean Height	0.0219	0.0642	0.0375	25.1%		Williams Multiple Comparison Test
15-7705-4391	Mean Height	0.0219	0.0642	0.0375	25.1%		Williams Multiple Comparison Test
09-2091-2479	Mean Weight	1.8067	>1.8067	NA	49.5%		Dunnett Multiple Comparison Test
17-7812-5477	Mean Weight	0.0219	0.0642	0.0375	49.5%		Dunnett Multiple Comparison Test
16-0187-3489	Mean Weight	0.0219	0.0642	0.0375	36.8%		Williams Multiple Comparison Test
19-7642-3602	Mean Weight	0.0219	0.0642	0.0375	36.8%		Williams Multiple Comparison Test
00-6941-4238	Percent Emerged	0.5975	1.8067	1.039	NA		Jonckheere-Terpstra Step-Down Test
10-0021-2673	Percent Emerged	0.5975	1.8067	1.039	NA		Jonckheere-Terpstra Step-Down Test
16-1011-3128	Percent Emerged	0.5975	1.8067	1.039	21.3%		Mann-Whitney U Two-Sample Test
16-9781-3202	Percent Emerged	0.0024	0.0071	0.004128	21.3%		Mann-Whitney U Two-Sample Test
07-2258-0721	Percent Survived	0.5975	1.8067	1.039	29.7%		Dunnett Multiple Comparison Test
15-4893-7226	Percent Survived	0.5975	1.8067	1.039	29.7%		Dunnett Multiple Comparison Test
01-5297-2390	Percent Survived	0.5975	1.8067	1.039	22.1%		Williams Multiple Comparison Test
19-4459-0887	Percent Survived	0.5975	1.8067	1.039	22.1%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
06-0662-6399	Mean Height	IC5	0.0000099	N/A	0.0175		Nonlinear Regression
		IC10	0.000341	N/A	0.0631		
		IC25	0.125	0.011	0.989		
		IC50	87.7	0.03	257000		
15-6377-2559	Mean Height	IC5	0.0000099	N/A	0.0175		Nonlinear Regression
		IC10	0.000341	N/A	0.0631		
		IC25	0.125	0.011	0.989		
		IC50	87.7	0.03	257000		
06-8407-8448	Mean Weight	IC5	0.0000001	N/A	0.015		Nonlinear Regression
		IC10	0.0000049	N/A	0.0569		
		IC25	0.00313	1.94E-06	0.408		
		IC50	4	0.0144	1110		
20-7440-6609	Mean Weight	IC5	0.0000001	N/A	0.015		Nonlinear Regression
		IC10	0.0000049	N/A	0.0569		
		IC25	0.00313	1.94E-06	0.408		
		IC50	4	0.0144	1110		
02-8527-9500	Percent Emerged	EC5	0.0000002	N/A	N/A		Linear Regression (MLE)
		EC10	0.000115	N/A	N/A		
		EC25	3.07	N/A	N/A		
		EC50	256000	N/A	N/A		
10-5600-9788	Percent Emerged	EC5	0.0000002	N/A	N/A		Linear Regression (MLE)
		EC10	0.000115	N/A	N/A		
		EC25	3.07	N/A	N/A		
		EC50	256000	N/A	N/A		
09-3888-1245	Percent Survived	EC5	0.0000838	N/A	0.00659		Linear Regression (MLE)
		EC10	0.0015	N/A	0.0397		
		EC25	0.186	8.69E-05	8.06		
		EC50	39.6	1.93	1E+10		
10-8994-7611	Percent Survived	EC5	0.0000838	N/A	0.00659		Linear Regression (MLE)
		EC10	0.0015	N/A	0.0397		
		EC25	0.186	8.69E-05	8.06		
		EC50	39.6	1.93	1E+10		
04-0612-4710	Percent Survived	EC50	1.81	N/A	N/A		Trimmed Spearman-Kärber
09-2509-7527	Percent Survived	EC50	1.81	N/A	N/A		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	11.2	9.39	13	10	12.7	0.56	1.12	10.0%	0.0%
0	Negative Control	4	13.8	12	15.5	12.4	14.7	0.552	1.1	8.02%	-23.0%
0.0024		4	10.5	8.11	13	9.4	12.8	0.768	1.54	14.6%	5.59%
0.0071		4	11.8	6.8	16.8	7.3	14.4	1.57	3.14	26.6%	-5.59%
0.0219		4	12.3	9.08	15.6	9.6	14.5	1.02	2.04	16.6%	-10.3%
0.0642		4	9.67	5.36	14	7	12.3	1.36	2.71	28.0%	13.4%
0.1971		4	10.1	4.4	15.7	5.4	13.9	1.78	3.56	35.4%	9.84%
0.5975		4	10.1	5.67	14.5	8	14	1.39	2.78	27.6%	9.62%
1.8067		4	8.45	3.3	13.6	5.5	11.4	1.62	3.24	38.3%	24.4%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	9.6	7.03	12.2	8	11.4	0.807	1.61	16.8%	0.0%
0	Negative Control	4	14.4	6.9	21.9	10.4	20.4	2.35	4.7	32.7%	-49.7%
0.0024		4	9.98	5.41	14.5	6.2	13.1	1.44	2.87	28.8%	-3.91%
0.0071		4	11.7	4.16	19.2	5.8	15.6	2.36	4.72	40.5%	-21.6%
0.0219		4	10.9	4.1	17.7	6.1	16.2	2.14	4.29	39.2%	-13.8%
0.0642		4	7.23	0.771	13.7	3.4	11.9	2.03	4.06	56.1%	24.7%
0.1971		4	9.02	2.7	15.3	4	12.5	1.99	3.97	44.0%	5.99%
0.5975		4	9.05	5.31	12.8	6.9	12.4	1.18	2.35	26.0%	5.73%
1.8067		4	7.28	-0.311	14.9	3	11.6	2.38	4.77	65.5%	24.2%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.75	0.658	0.842	0.7	0.8	0.0289	0.0577	7.7%	0.0%
0	Negative Control	4	0.9	0.77	1	0.8	1	0.0408	0.0816	9.07%	-20.0%
0.0024		4	0.775	0.474	1	0.5	0.9	0.0946	0.189	24.4%	-3.33%
0.0071		4	0.675	0.374	0.976	0.4	0.8	0.0946	0.189	28.0%	10.0%
0.0219		4	0.85	0.545	1	0.6	1	0.0957	0.191	22.5%	-13.3%
0.0642		4	0.675	0.595	0.755	0.6	0.7	0.025	0.05	7.41%	10.0%
0.1971		4	0.775	0.695	0.855	0.7	0.8	0.025	0.05	6.45%	-3.33%
0.5975		4	0.8	0.616	0.984	0.7	0.9	0.0577	0.115	14.4%	-6.67%
1.8067		4	0.575	0.336	0.814	0.4	0.7	0.075	0.15	26.1%	23.3%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.75	0.658	0.842	0.7	0.8	0.0289	0.0577	7.7%	0.0%
0	Negative Control	4	0.9	0.77	1	0.8	1	0.0408	0.0816	9.07%	-20.0%
0.0024		4	0.775	0.474	1	0.5	0.9	0.0946	0.189	24.4%	-3.33%
0.0071		4	0.675	0.374	0.976	0.4	0.8	0.0946	0.189	28.0%	10.0%
0.0219		4	0.825	0.497	1	0.6	1	0.103	0.206	25.0%	-10.0%
0.0642		4	0.675	0.595	0.755	0.6	0.7	0.025	0.05	7.41%	10.0%
0.1971		4	0.75	0.658	0.842	0.7	0.8	0.0289	0.0577	7.7%	0.0%
0.5975		4	0.725	0.525	0.925	0.6	0.9	0.0629	0.126	17.4%	3.33%
1.8067		4	0.45	0.119	0.781	0.2	0.7	0.104	0.208	46.3%	40.0%

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	11	10	11	12.7
0	Negative Control	13.3	14.7	12.4	14.6
0.0024		9.4	12.8	10.2	9.8
0.0071		12.1	13.4	7.3	14.4
0.0219		12.3	12.9	14.5	9.6
0.0642		7.7	11.7	12.3	7
0.1971		9.7	13.9	5.4	11.3
0.5975		14	8.2	8	10.2
1.8067		11.4	5.5	5.8	11.1

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	10.5	8.5	11.4	8
0	Negative Control	10.9	20.4	15.8	10.4
0.0024		6.2	13.1	10.8	9.8
0.0071		9.9	15.4	5.8	15.6
0.0219		9.3	12.1	16.2	6.1
0.0642		4.3	9.3	11.9	3.4
0.1971		7.7	11.9	4	12.5
0.5975		12.4	8.5	6.9	8.4
1.8067		11.2	3	3.3	11.6

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.8	0.7	0.7
0	Negative Control	1	0.9	0.8	0.9
0.0024		0.9	0.8	0.9	0.5
0.0071		0.7	0.8	0.4	0.8
0.0219		1	0.8	0.6	1
0.0642		0.6	0.7	0.7	0.7
0.1971		0.7	0.8	0.8	0.8
0.5975		0.9	0.7	0.7	0.9
1.8067		0.7	0.4	0.5	0.7

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.8	0.7	0.7
0	Negative Control	1	0.9	0.8	0.9
0.0024		0.9	0.8	0.9	0.5
0.0071		0.7	0.8	0.4	0.8
0.0219		1	0.7	0.6	1
0.0642		0.6	0.7	0.7	0.7
0.1971		0.7	0.8	0.7	0.8
0.5975		0.7	0.6	0.7	0.9
1.8067		0.5	0.2	0.4	0.7

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-5460-2669	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.7%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.71	2.48	4.64	6	0.1972	CDF	Non-Significant Effect
		0.0071	1.04	2.48	4.64	6	0.4609	CDF	Non-Significant Effect
		0.0219	0.762	2.48	4.64	6	0.5918	CDF	Non-Significant Effect
		0.0642	2.18	2.48	4.64	6	0.0894	CDF	Non-Significant Effect
		0.1971	1.97	2.48	4.64	6	0.1307	CDF	Non-Significant Effect
		0.5975	1.95	2.48	4.64	6	0.1337	CDF	Non-Significant Effect
		1.8067*	2.84	2.48	4.64	6	0.0239	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.01	2.94	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	79.52469	11.36067	7	1.63	0.1762	Non-Significant Effect
Error	167.7325	6.988854	24			
Total	247.2572		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.93	18.5	0.6681	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.971	0.908	0.5331	Normal Distribution

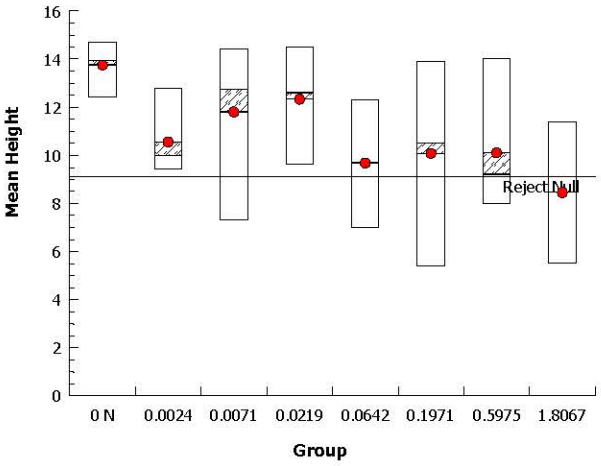
Mean Height Summary

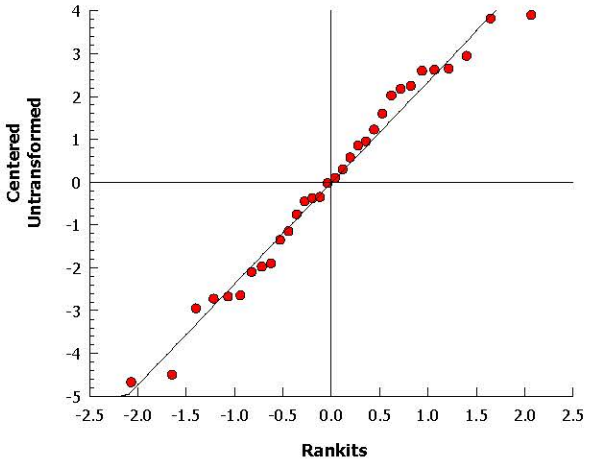
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.8	12	15.5	14	12.4	14.7	0.552	8.02%	0.0%
0.0024		4	10.5	8.11	13	10	9.4	12.8	0.768	14.6%	23.3%
0.0071		4	11.8	6.8	16.8	12.8	7.3	14.4	1.57	26.6%	14.2%
0.0219		4	12.3	9.08	15.6	12.6	9.6	14.5	1.02	16.6%	10.4%
0.0642		4	9.67	5.36	14	9.7	7	12.3	1.36	28.0%	29.6%
0.1971		4	10.1	4.4	15.7	10.5	5.4	13.9	1.78	35.4%	26.7%
0.5975		4	10.1	5.67	14.5	9.2	8	14	1.39	27.6%	26.5%
1.8067		4	8.45	3.3	13.6	8.45	5.5	11.4	1.62	38.3%	38.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-5460-2669	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-9023-5664	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.1%	0.0219	0.0642	0.0375	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.71	1.71	3.2	6	>0.05	CDF	Non-Significant Effect
		0.0071	1.38	1.79	3.35	6	>0.05	CDF	Non-Significant Effect
		0.0219	1.17	1.82	3.4	6	>0.05	CDF	Non-Significant Effect
		0.0642*	2.18	1.83	3.42	6	<0.05	CDF	Significant Effect
		0.1971*	2.07	1.84	3.44	6	<0.05	CDF	Significant Effect
		0.5975*	2.03	1.84	3.45	6	<0.05	CDF	Significant Effect
		1.8067*	2.84	1.85	3.45	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.01	2.94	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	79.52469	11.36067	7	1.63	0.1762	Non-Significant Effect
Error	167.7325	6.988854	24			
Total	247.2572		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.93	18.5	0.6681	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.971	0.908	0.5331	Normal Distribution

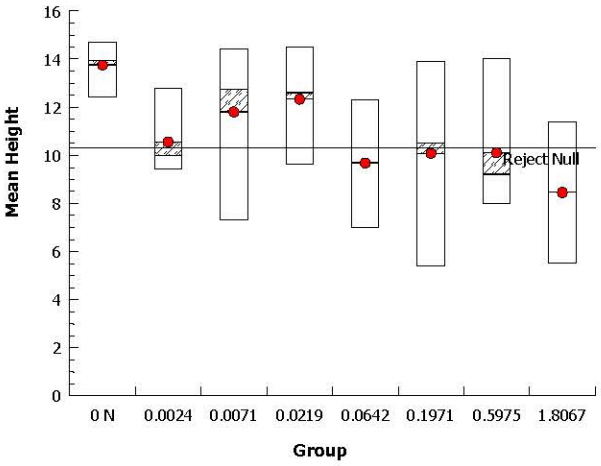
Mean Height Summary

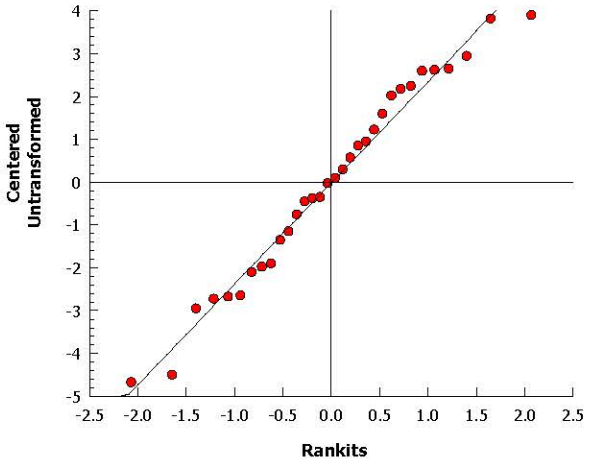
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.8	12	15.5	14	12.4	14.7	0.552	8.02%	0.0%
0.0024		4	10.5	8.11	13	10	9.4	12.8	0.768	14.6%	23.3%
0.0071		4	11.8	6.8	16.8	12.8	7.3	14.4	1.57	26.6%	14.2%
0.0219		4	12.3	9.08	15.6	12.6	9.6	14.5	1.02	16.6%	10.4%
0.0642		4	9.67	5.36	14	9.7	7	12.3	1.36	28.0%	29.6%
0.1971		4	10.1	4.4	15.7	10.5	5.4	13.9	1.78	35.4%	26.7%
0.5975		4	10.1	5.67	14.5	9.2	8	14	1.39	27.6%	26.5%
1.8067		4	8.45	3.3	13.6	8.45	5.5	11.4	1.62	38.3%	38.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	06-9023-5664	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-5452-5014	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.7%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.71	2.48	4.64	6	0.1972	CDF	Non-Significant Effect
		0.0071	1.04	2.48	4.64	6	0.4609	CDF	Non-Significant Effect
		0.0219	0.762	2.48	4.64	6	0.5918	CDF	Non-Significant Effect
		0.0642	2.18	2.48	4.64	6	0.0894	CDF	Non-Significant Effect
		0.1971	1.97	2.48	4.64	6	0.1307	CDF	Non-Significant Effect
		0.5975	1.95	2.48	4.64	6	0.1337	CDF	Non-Significant Effect
		1.8067*	2.84	2.48	4.64	6	0.0239	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	79.52469	11.36067	7	1.63	0.1762	Non-Significant Effect
Error	167.7325	6.988854	24			
Total	247.2572		31			

Distributional Tests

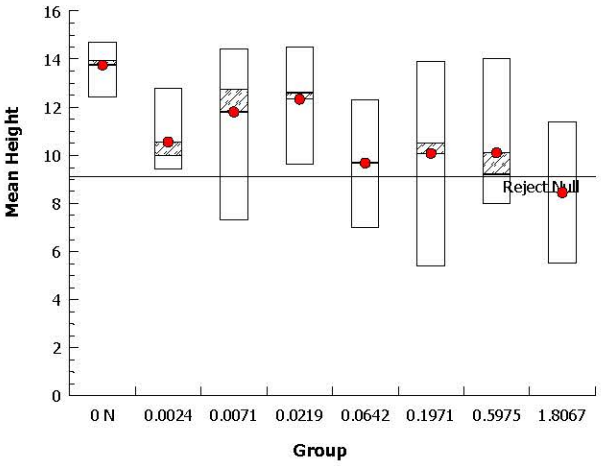
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.93	18.5	0.6681	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.971	0.908	0.5331	Normal Distribution

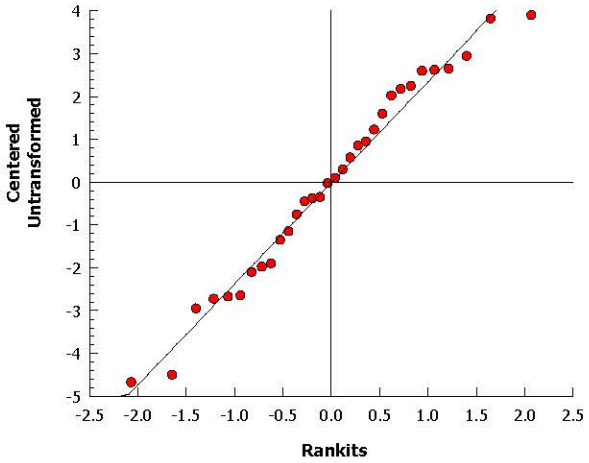
Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.8	12	15.5	14	12.4	14.7	0.552	8.02%	0.0%
0.0024		4	10.5	8.11	13	10	9.4	12.8	0.768	14.6%	23.3%
0.0071		4	11.8	6.8	16.8	12.8	7.3	14.4	1.57	26.6%	14.2%
0.0219		4	12.3	9.08	15.6	12.6	9.6	14.5	1.02	16.6%	10.4%
0.0642		4	9.67	5.36	14	9.7	7	12.3	1.36	28.0%	29.6%
0.1971		4	10.1	4.4	15.7	10.5	5.4	13.9	1.78	35.4%	26.7%
0.5975		4	10.1	5.67	14.5	9.2	8	14	1.39	27.6%	26.5%
1.8067		4	8.45	3.3	13.6	8.45	5.5	11.4	1.62	38.3%	38.5%

Analysis ID:	07-5452-5014	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-7705-4391	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	25.1%	0.0219	0.0642	0.0375	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.71	1.71	3.2	6	>0.05	CDF	Non-Significant Effect
		0.0071	1.38	1.79	3.35	6	>0.05	CDF	Non-Significant Effect
		0.0219	1.17	1.82	3.4	6	>0.05	CDF	Non-Significant Effect
		0.0642*	2.18	1.83	3.42	6	<0.05	CDF	Significant Effect
		0.1971*	2.07	1.84	3.44	6	<0.05	CDF	Significant Effect
		0.5975*	2.03	1.84	3.45	6	<0.05	CDF	Significant Effect
		1.8067*	2.84	1.85	3.45	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	79.52469	11.36067	7	1.63	0.1762	Non-Significant Effect
Error	167.7325	6.988854	24			
Total	247.2572		31			

Distributional Tests

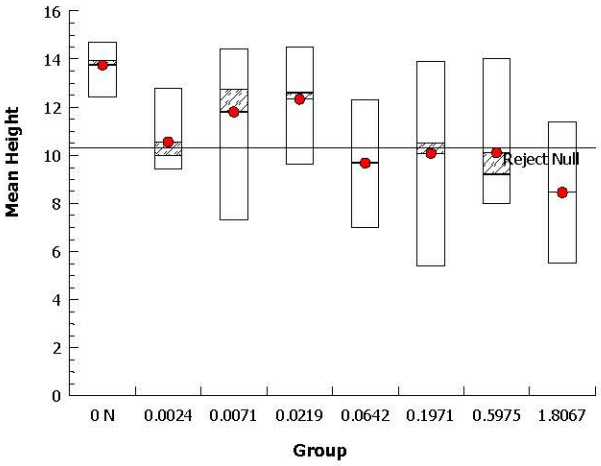
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.93	18.5	0.6681	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.971	0.908	0.5331	Normal Distribution

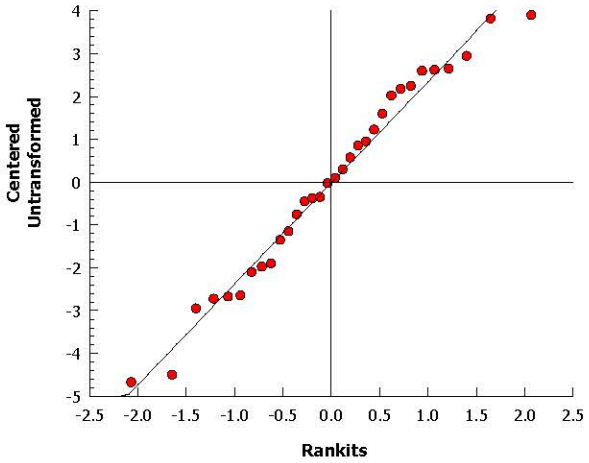
Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	13.8	12	15.5	14	12.4	14.7	0.552	8.02%	0.0%
0.0024		4	10.5	8.11	13	10	9.4	12.8	0.768	14.6%	23.3%
0.0071		4	11.8	6.8	16.8	12.8	7.3	14.4	1.57	26.6%	14.2%
0.0219		4	12.3	9.08	15.6	12.6	9.6	14.5	1.02	16.6%	10.4%
0.0642		4	9.67	5.36	14	9.7	7	12.3	1.36	28.0%	29.6%
0.1971		4	10.1	4.4	15.7	10.5	5.4	13.9	1.78	35.4%	26.7%
0.5975		4	10.1	5.67	14.5	9.2	8	14	1.39	27.6%	26.5%
1.8067		4	8.45	3.3	13.6	8.45	5.5	11.4	1.62	38.3%	38.5%

Analysis ID:	15-7705-4391	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-2091-2479	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	49.5%	1.8067	>1.8067	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.53	2.48	7.11	6	0.2554	CDF	Non-Significant Effect
		0.0071	0.942	2.48	7.11	6	0.5080	CDF	Non-Significant Effect
		0.0219	1.2	2.48	7.11	6	0.3883	CDF	Non-Significant Effect
		0.0642*	2.49	2.48	7.11	6	0.0488	CDF	Significant Effect
		0.1971	1.87	2.48	7.11	6	0.1544	CDF	Non-Significant Effect
		0.5975	1.86	2.48	7.11	6	0.1566	CDF	Non-Significant Effect
		1.8067	2.48	2.48	7.11	6	0.0505	CDF	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.69	2.94	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	159.0147	22.71638	7	1.38	0.2579	Non-Significant Effect
Error	394.4625	16.43594	24			
Total	553.4772		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.09	18.5	0.9546	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.936	0.908	0.0580	Normal Distribution

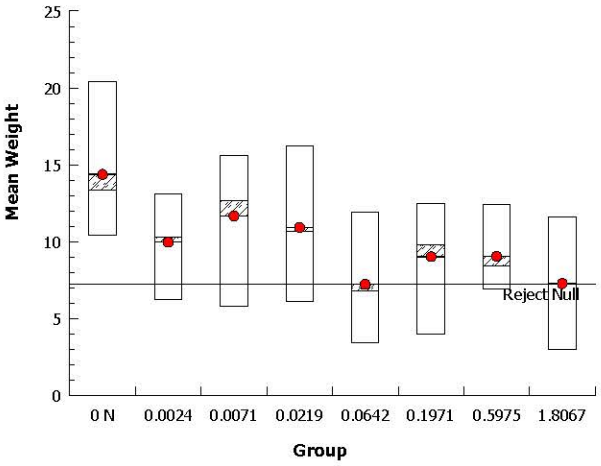
Mean Weight Summary

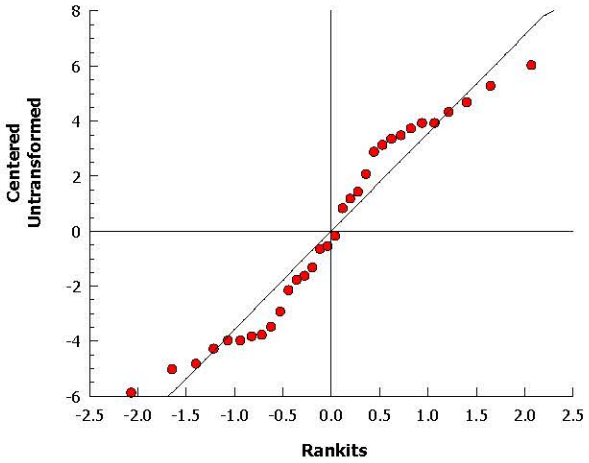
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.4	6.9	21.9	13.4	10.4	20.4	2.35	32.7%	0.0%
0.0024		4	9.98	5.41	14.5	10.3	6.2	13.1	1.44	28.8%	30.6%
0.0071		4	11.7	4.16	19.2	12.6	5.8	15.6	2.36	40.5%	18.8%
0.0219		4	10.9	4.1	17.7	10.7	6.1	16.2	2.14	39.2%	24.0%
0.0642		4	7.23	0.771	13.7	6.8	3.4	11.9	2.03	56.1%	49.7%
0.1971		4	9.02	2.7	15.3	9.8	4	12.5	1.99	44.0%	37.2%
0.5975		4	9.05	5.31	12.8	8.45	6.9	12.4	1.18	26.0%	37.0%
1.8067		4	7.28	-0.311	14.9	7.25	3	11.6	2.38	65.5%	49.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-2091-2479	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-0187-3489	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	36.8%	0.0219	0.0642	0.0375	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.53	1.71	4.9	6	>0.05	CDF	Non-Significant Effect
		0.0071	1.24	1.79	5.13	6	>0.05	CDF	Non-Significant Effect
		0.0219	1.23	1.82	5.21	6	>0.05	CDF	Non-Significant Effect
		0.0642*	2.49	1.83	5.25	6	<0.05	CDF	Significant Effect
		0.1971*	2.18	1.84	5.27	6	<0.05	CDF	Significant Effect
		0.5975*	2.07	1.84	5.28	6	<0.05	CDF	Significant Effect
		1.8067*	2.48	1.85	5.29	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.69	2.94	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	159.0147	22.71638	7	1.38	0.2579	Non-Significant Effect
Error	394.4625	16.43594	24			
Total	553.4772		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.09	18.5	0.9546	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.936	0.908	0.0580	Normal Distribution

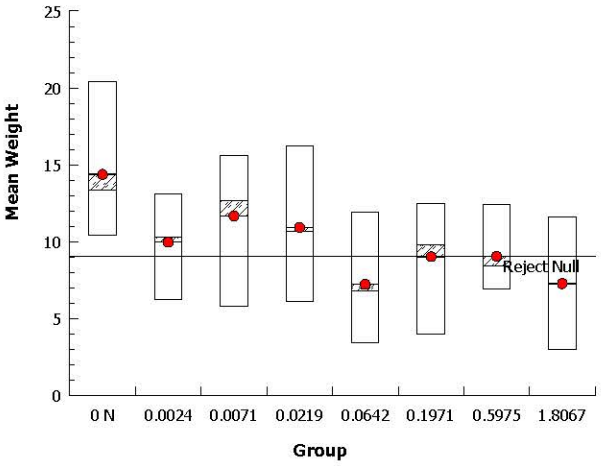
Mean Weight Summary

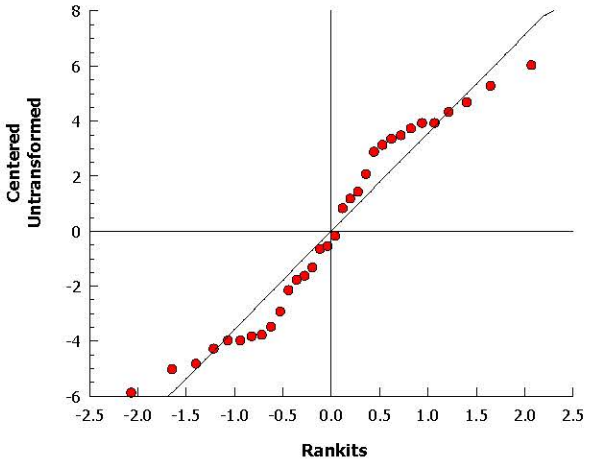
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.4	6.9	21.9	13.4	10.4	20.4	2.35	32.7%	0.0%
0.0024		4	9.98	5.41	14.5	10.3	6.2	13.1	1.44	28.8%	30.6%
0.0071		4	11.7	4.16	19.2	12.6	5.8	15.6	2.36	40.5%	18.8%
0.0219		4	10.9	4.1	17.7	10.7	6.1	16.2	2.14	39.2%	24.0%
0.0642		4	7.23	0.771	13.7	6.8	3.4	11.9	2.03	56.1%	49.7%
0.1971		4	9.02	2.7	15.3	9.8	4	12.5	1.99	44.0%	37.2%
0.5975		4	9.05	5.31	12.8	8.45	6.9	12.4	1.18	26.0%	37.0%
1.8067		4	7.28	-0.311	14.9	7.25	3	11.6	2.38	65.5%	49.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-0187-3489	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-7812-5477	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	49.5%	0.0219	0.0642	0.0375	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.53	2.48	7.11	6	0.2554	CDF	Non-Significant Effect
		0.0071	0.942	2.48	7.11	6	0.5080	CDF	Non-Significant Effect
		0.0219	1.2	2.48	7.11	6	0.3883	CDF	Non-Significant Effect
		0.0642*	2.49	2.48	7.11	6	0.0488	CDF	Significant Effect
		0.1971	1.87	2.48	7.11	6	0.1544	CDF	Non-Significant Effect
		0.5975	1.86	2.48	7.11	6	0.1566	CDF	Non-Significant Effect
		1.8067	2.48	2.48	7.11	6	0.0505	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	159.0147	22.71638	7	1.38	0.2579	Non-Significant Effect
Error	394.4625	16.43594	24			
Total	553.4772		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.09	18.5	0.9546	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.936	0.908	0.0580	Normal Distribution

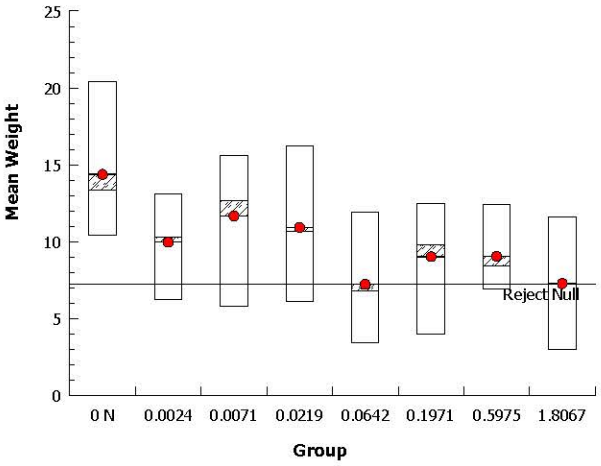
Mean Weight Summary

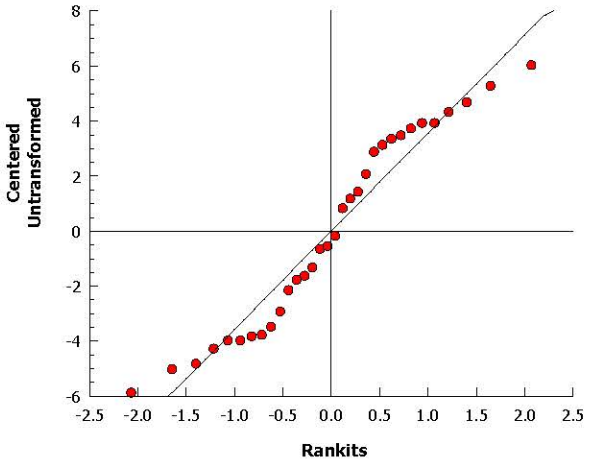
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.4	6.9	21.9	13.4	10.4	20.4	2.35	32.7%	0.0%
0.0024		4	9.98	5.41	14.5	10.3	6.2	13.1	1.44	28.8%	30.6%
0.0071		4	11.7	4.16	19.2	12.6	5.8	15.6	2.36	40.5%	18.8%
0.0219		4	10.9	4.1	17.7	10.7	6.1	16.2	2.14	39.2%	24.0%
0.0642		4	7.23	0.771	13.7	6.8	3.4	11.9	2.03	56.1%	49.7%
0.1971		4	9.02	2.7	15.3	9.8	4	12.5	1.99	44.0%	37.2%
0.5975		4	9.05	5.31	12.8	8.45	6.9	12.4	1.18	26.0%	37.0%
1.8067		4	7.28	-0.311	14.9	7.25	3	11.6	2.38	65.5%	49.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-7812-5477	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-7642-3602	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	36.8%	0.0219	0.0642	0.0375	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.53	1.71	4.9	6	>0.05	CDF	Non-Significant Effect
		0.0071	1.24	1.79	5.13	6	>0.05	CDF	Non-Significant Effect
		0.0219	1.23	1.82	5.21	6	>0.05	CDF	Non-Significant Effect
		0.0642*	2.49	1.83	5.25	6	<0.05	CDF	Significant Effect
		0.1971*	2.18	1.84	5.27	6	<0.05	CDF	Significant Effect
		0.5975*	2.07	1.84	5.28	6	<0.05	CDF	Significant Effect
		1.8067*	2.48	1.85	5.29	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	159.0147	22.71638	7	1.38	0.2579	Non-Significant Effect
Error	394.4625	16.43594	24			
Total	553.4772		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	2.09	18.5	0.9546	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.936	0.908	0.0580	Normal Distribution

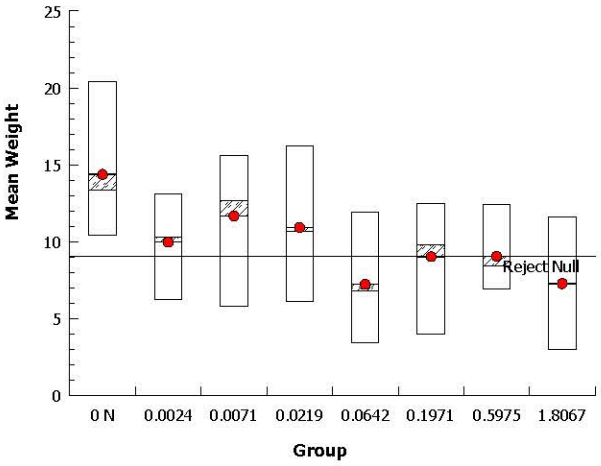
Mean Weight Summary

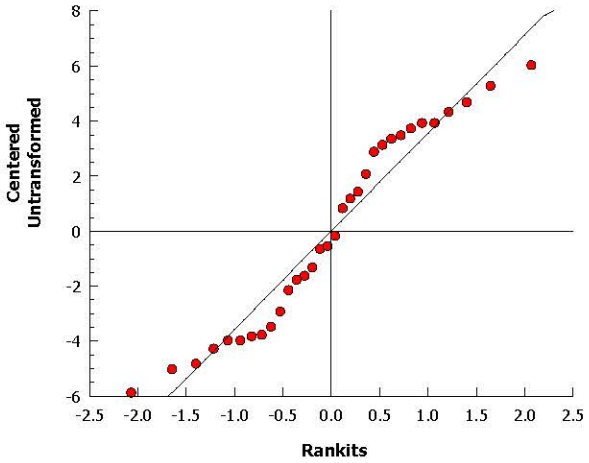
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	14.4	6.9	21.9	13.4	10.4	20.4	2.35	32.7%	0.0%
0.0024		4	9.98	5.41	14.5	10.3	6.2	13.1	1.44	28.8%	30.6%
0.0071		4	11.7	4.16	19.2	12.6	5.8	15.6	2.36	40.5%	18.8%
0.0219		4	10.9	4.1	17.7	10.7	6.1	16.2	2.14	39.2%	24.0%
0.0642		4	7.23	0.771	13.7	6.8	3.4	11.9	2.03	56.1%	49.7%
0.1971		4	9.02	2.7	15.3	9.8	4	12.5	1.99	44.0%	37.2%
0.5975		4	9.05	5.31	12.8	8.45	6.9	12.4	1.18	26.0%	37.0%
1.8067		4	7.28	-0.311	14.9	7.25	3	11.6	2.38	65.5%	49.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-7642-3602	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-1011-3128	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.3%	0.5975	1.8067	1.039	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	11.5	NA	2	6	0.2429	Exact	Non-Significant Effect
		0.0071*	15	NA	1	6	0.0429	Exact	Significant Effect
		0.0219	8.5	NA	2	6	0.5000	Exact	Non-Significant Effect
		0.0642*	16	NA	0	6	0.0143	Exact	Significant Effect
		0.1971	14.5	NA	1	6	0.0571	Exact	Non-Significant Effect
		0.5975	12	NA	1	6	0.1571	Exact	Non-Significant Effect
		1.8067*	16	NA	0	6	0.0143	Exact	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.24	2.94	0.6474	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3121875	0.04459821	7	2.29	0.0616	Non-Significant Effect
Error	0.4675	0.01947917	24			
Total	0.7796875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.5	18.5	0.2189	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.895	0.908	0.0045	Non-normal Distribution

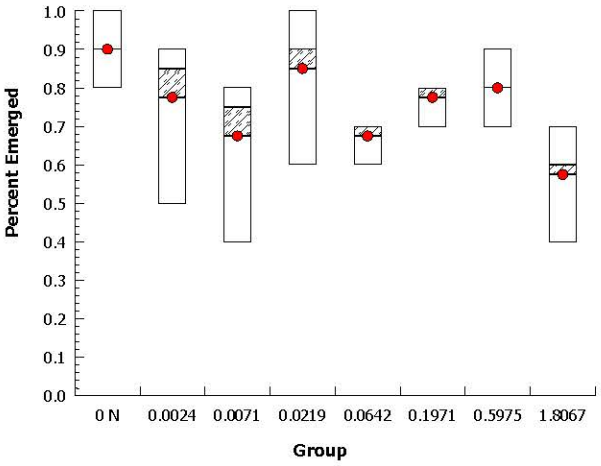
Percent Emerged Summary

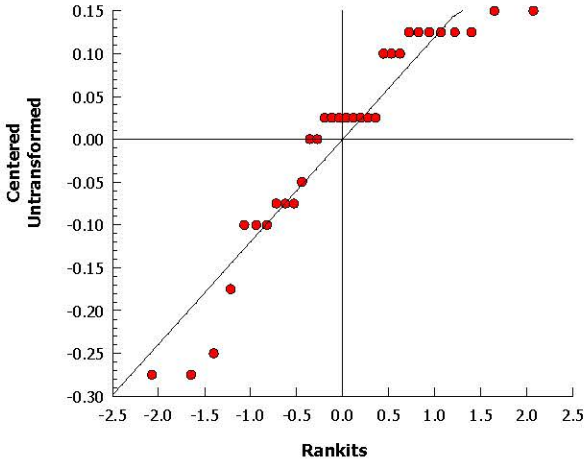
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.85	0.545	1	0.9	0.6	1	0.0957	22.5%	5.56%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.775	0.695	0.855	0.8	0.7	0.8	0.025	6.45%	13.9%
0.5975		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	11.1%
1.8067		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	36.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-1011-3128	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-6941-4238	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.5975	1.8067	1.039	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.13	1.64	2	-2	0.2061	Asymp	Non-Significant Effect
		0.0071	2.23	1.64	2	-2	0.2061	Asymp	Non-Significant Effect
		0.0219	0.82	1.64	3	-2	0.2061	Asymp	Non-Significant Effect
		0.0642	1.87	1.64	5	-2	0.1331	Asymp	Non-Significant Effect
		0.1971	1.56	1.64	5	-2	0.1331	Asymp	Non-Significant Effect
		0.5975	1.11	1.64	5	-2	0.1331	Asymp	Non-Significant Effect
		1.8067*	2.22	1.64	7	-2	0.0133	Asymp	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.24	2.94	0.6474	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3121875	0.04459821	7	2.29	0.0616	Non-Significant Effect
Error	0.4675	0.01947917	24			
Total	0.7796875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.5	18.5	0.2189	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.895	0.908	0.0045	Non-normal Distribution

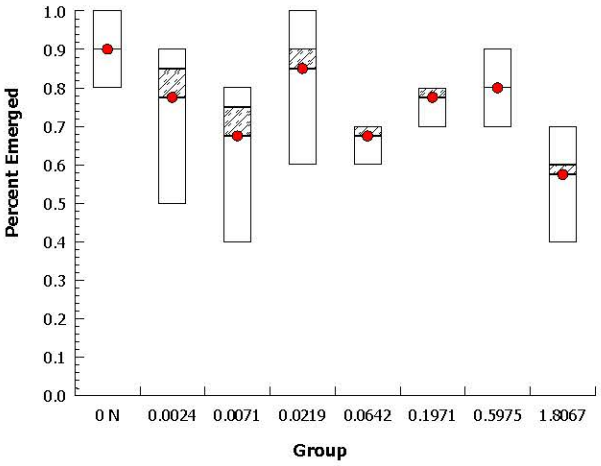
Percent Emerged Summary

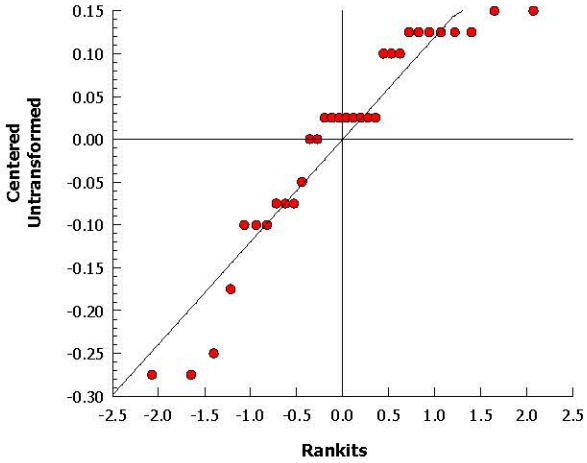
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.85	0.545	1	0.9	0.6	1	0.0957	22.5%	5.56%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.775	0.695	0.855	0.8	0.7	0.8	0.025	6.45%	13.9%
0.5975		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	11.1%
1.8067		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	36.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-6941-4238	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-9781-3202	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.3%	0.0024	0.0071	0.004128	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	11.5	NA	2	6	0.2429	Exact	Non-Significant Effect
		0.0071*	15	NA	1	6	0.0429	Exact	Significant Effect
		0.0219	8.5	NA	2	6	0.5000	Exact	Non-Significant Effect
		0.0642*	16	NA	0	6	0.0143	Exact	Significant Effect
		0.1971	14.5	NA	1	6	0.0571	Exact	Non-Significant Effect
		0.5975	12	NA	1	6	0.1571	Exact	Non-Significant Effect
		1.8067*	16	NA	0	6	0.0143	Exact	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3121875	0.04459821	7	2.29	0.0616	Non-Significant Effect
Error	0.4675	0.01947917	24			
Total	0.7796875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.5	18.5	0.2189	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.895	0.908	0.0045	Non-normal Distribution

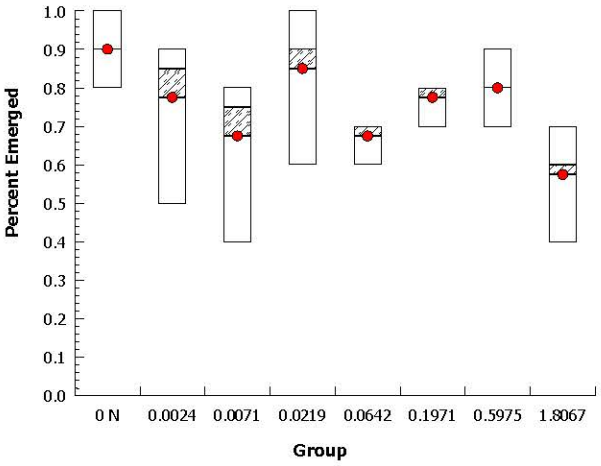
Percent Emerged Summary

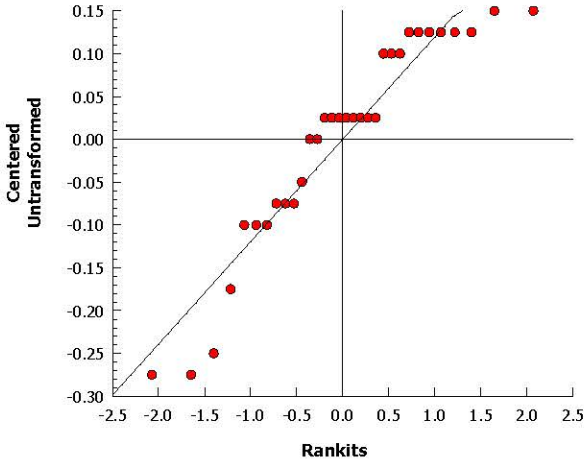
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.85	0.545	1	0.9	0.6	1	0.0957	22.5%	5.56%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.775	0.695	0.855	0.8	0.7	0.8	0.025	6.45%	13.9%
0.5975		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	11.1%
1.8067		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	36.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-9781-3202	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-0021-2673	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.5975	1.8067	1.039	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.13	1.64	2	-2	0.2061	Asymp	Non-Significant Effect
		0.0071	2.23	1.64	2	-2	0.2061	Asymp	Non-Significant Effect
		0.0219	0.82	1.64	3	-2	0.2061	Asymp	Non-Significant Effect
		0.0642	1.87	1.64	5	-2	0.1331	Asymp	Non-Significant Effect
		0.1971	1.56	1.64	5	-2	0.1331	Asymp	Non-Significant Effect
		0.5975	1.11	1.64	5	-2	0.1331	Asymp	Non-Significant Effect
		1.8067*	2.22	1.64	7	-2	0.0133	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.3121875	0.04459821	7	2.29	0.0616	Non-Significant Effect
Error	0.4675	0.01947917	24			
Total	0.7796875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.5	18.5	0.2189	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.895	0.908	0.0045	Non-normal Distribution

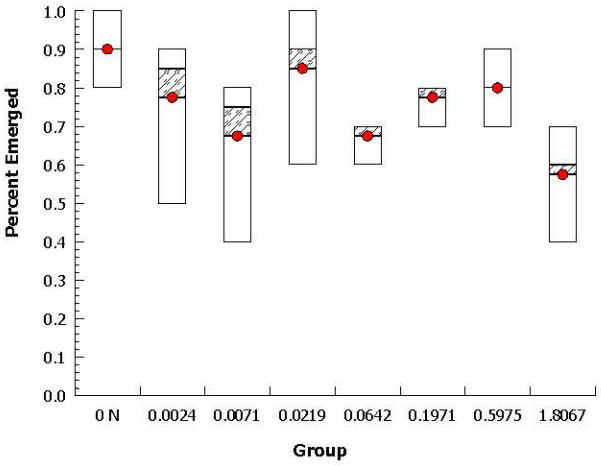
Percent Emerged Summary

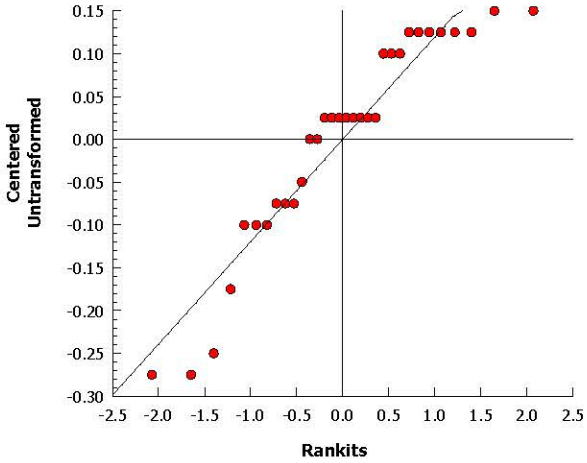
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.85	0.545	1	0.9	0.6	1	0.0957	22.5%	5.56%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.775	0.695	0.855	0.8	0.7	0.8	0.025	6.45%	13.9%
0.5975		4	0.8	0.616	0.984	0.8	0.7	0.9	0.0577	14.4%	11.1%
1.8067		4	0.575	0.336	0.814	0.6	0.4	0.7	0.075	26.1%	36.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-0021-2673	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-2258-0721	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	29.7%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.16	2.48	0.267	6	0.4077	CDF	Non-Significant Effect
		0.0071	2.09	2.48	0.267	6	0.1057	CDF	Non-Significant Effect
		0.0219	0.696	2.48	0.267	6	0.6222	CDF	Non-Significant Effect
		0.0642	2.09	2.48	0.267	6	0.1057	CDF	Non-Significant Effect
		0.1971	1.39	2.48	0.267	6	0.3093	CDF	Non-Significant Effect
		0.5975	1.62	2.48	0.267	6	0.2249	CDF	Non-Significant Effect
		1.8067*	4.18	2.48	0.267	6	0.0010	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.05	2.94	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.4971875	0.07102679	7	3.06	0.0190	Significant Effect
Error	0.5575	0.02322917	24			
Total	1.054688		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.89	18.5	0.1951	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.908	0.2087	Normal Distribution

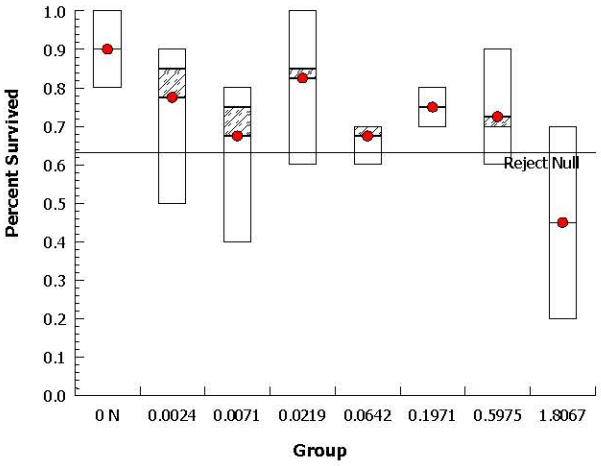
Percent Survived Summary

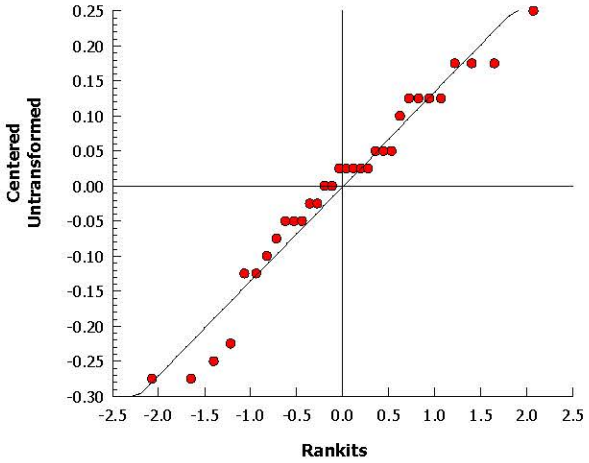
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.825	0.497	1	0.85	0.6	1	0.103	25.0%	8.33%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	16.7%
0.5975		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	19.4%
1.8067		4	0.45	0.119	0.781	0.45	0.2	0.7	0.104	46.3%	50.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	07-2258-0721	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-4459-0887	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.1%	0.5975	1.8067	1.039	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.16	1.71	0.184	6	>0.05	CDF	Non-Significant Effect
		0.0071	2.09	1.79	0.193	6	>0.05	CDF	Non-Significant Effect
		0.0219	1.39	1.82	0.196	6	>0.05	CDF	Non-Significant Effect
		0.0642	2.09	1.83	0.197	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.74	1.84	0.198	6	>0.05	CDF	Non-Significant Effect
		0.5975	1.7	1.84	0.199	6	>0.05	CDF	Non-Significant Effect
		1.8067*	4.18	1.85	0.199	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.05	2.94	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.4971875	0.07102679	7	3.06	0.0190	Significant Effect
Error	0.5575	0.02322917	24			
Total	1.054688		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.89	18.5	0.1951	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.908	0.2087	Normal Distribution

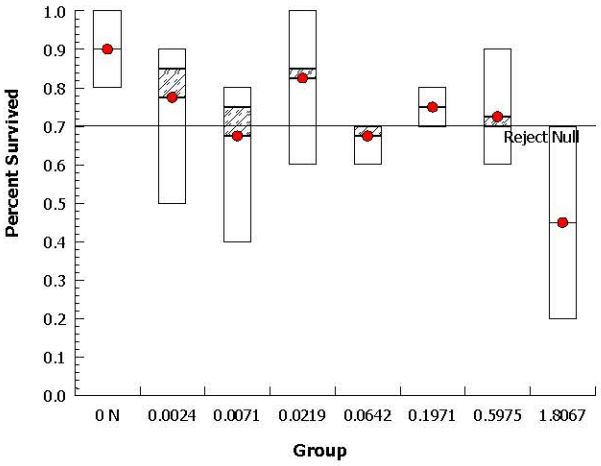
Percent Survived Summary

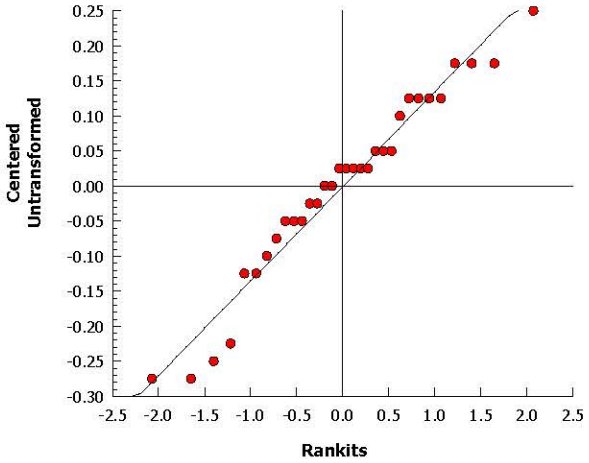
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.825	0.497	1	0.85	0.6	1	0.103	25.0%	8.33%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	16.7%
0.5975		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	19.4%
1.8067		4	0.45	0.119	0.781	0.45	0.2	0.7	0.104	46.3%	50.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-4459-0887	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-4893-7226	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	29.7%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.16	2.48	0.267	6	0.4077	CDF	Non-Significant Effect
		0.0071	2.09	2.48	0.267	6	0.1057	CDF	Non-Significant Effect
		0.0219	0.696	2.48	0.267	6	0.6222	CDF	Non-Significant Effect
		0.0642	2.09	2.48	0.267	6	0.1057	CDF	Non-Significant Effect
		0.1971	1.39	2.48	0.267	6	0.3093	CDF	Non-Significant Effect
		0.5975	1.62	2.48	0.267	6	0.2249	CDF	Non-Significant Effect
		1.8067*	4.18	2.48	0.267	6	0.0010	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.4971875	0.07102679	7	3.06	0.0190	Significant Effect
Error	0.5575	0.02322917	24			
Total	1.054688		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.89	18.5	0.1951	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.908	0.2087	Normal Distribution

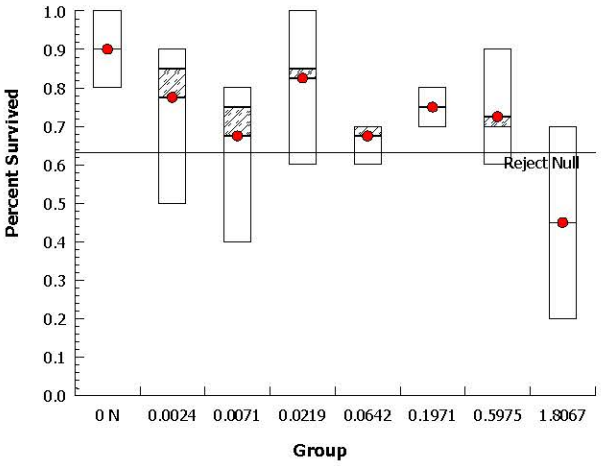
Percent Survived Summary

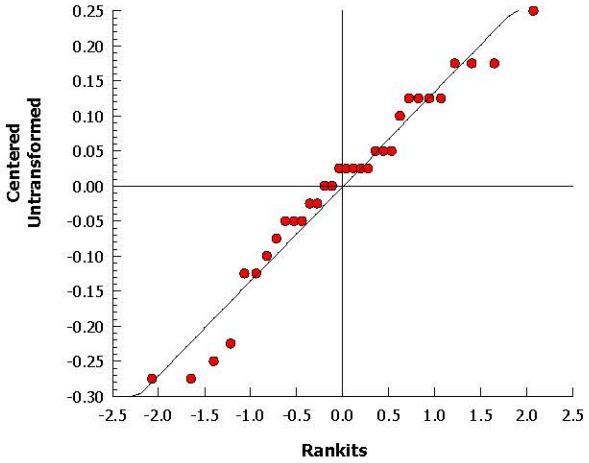
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.825	0.497	1	0.85	0.6	1	0.103	25.0%	8.33%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	16.7%
0.5975		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	19.4%
1.8067		4	0.45	0.119	0.781	0.45	0.2	0.7	0.104	46.3%	50.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-4893-7226	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-5297-2390	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.1%	0.5975	1.8067	1.039	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	1.16	1.71	0.184	6	>0.05	CDF	Non-Significant Effect
		0.0071	2.09	1.79	0.193	6	>0.05	CDF	Non-Significant Effect
		0.0219	1.39	1.82	0.196	6	>0.05	CDF	Non-Significant Effect
		0.0642	2.09	1.83	0.197	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.74	1.84	0.198	6	>0.05	CDF	Non-Significant Effect
		0.5975	1.7	1.84	0.199	6	>0.05	CDF	Non-Significant Effect
		1.8067*	4.18	1.85	0.199	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.4971875	0.07102679	7	3.06	0.0190	Significant Effect
Error	0.5575	0.02322917	24			
Total	1.054688		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.89	18.5	0.1951	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.908	0.2087	Normal Distribution

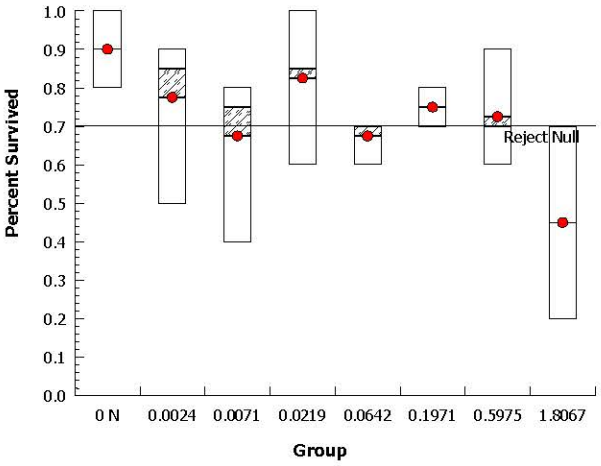
Percent Survived Summary

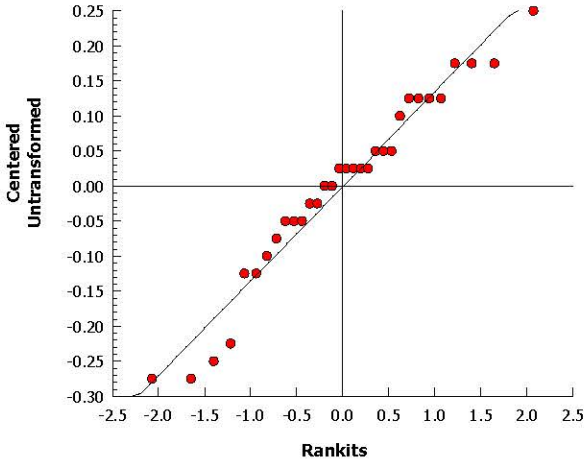
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	0.0%
0.0024		4	0.775	0.474	1	0.85	0.5	0.9	0.0946	24.4%	13.9%
0.0071		4	0.675	0.374	0.976	0.75	0.4	0.8	0.0946	28.0%	25.0%
0.0219		4	0.825	0.497	1	0.85	0.6	1	0.103	25.0%	8.33%
0.0642		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	25.0%
0.1971		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	16.7%
0.5975		4	0.725	0.525	0.925	0.7	0.6	0.9	0.0629	17.4%	19.4%
1.8067		4	0.45	0.119	0.781	0.45	0.2	0.7	0.104	46.3%	50.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	01-5297-2390	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-8527-9500	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.1	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
7	-175	357	361	5.41	7.29	0.103	1.24	2.62	0.3200	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0000002	N/A	N/A
EC10	0.000115	N/A	N/A
EC25	3.07	N/A	N/A
EC50	256000	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.101	0.0477	0.00783	0.195	2.12	0.0423	Significant Parameter
Slope	0.137	0.12	-0.0985	0.373	1.14	0.2634	Non-Significant Parameter
Intercept	-0.741	0.232	-1.2	-0.286	-3.19	0.0034	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	6.745419	6.745419	1	5.56	0.0253	Significant
Lack of Fit	7.240588	1.448118	5	1.24	0.3201	Non-Significant
Pure Error	27.94897	1.16454	24			
Residual	35.18956	1.213433	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	35.2	42.6	0.1984	Non-Significant Heterogenity
	Likelihood Ratio GOF	39.8	42.6	0.0865	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.54	2.94	0.2387	No Outliers Detected
Variances	Bartlett Equality of Variance	9.37	14.1	0.2269	Equal Variances
	Mod Levene Equality of Variance	1.08	2.42	0.4050	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.934	0.2114	Normal Distribution
	Anderson-Darling A2 Normality	0.571	2.49	0.1424	Normal Distribution

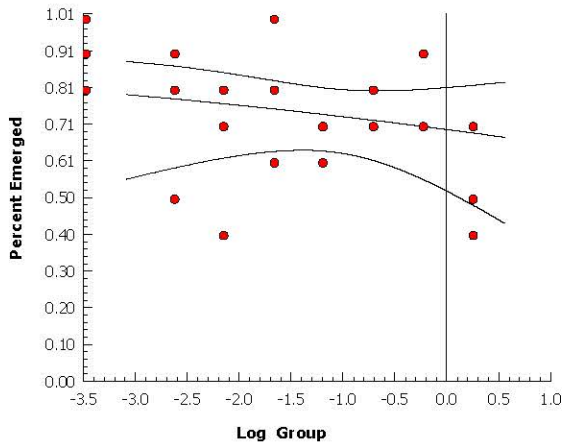
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

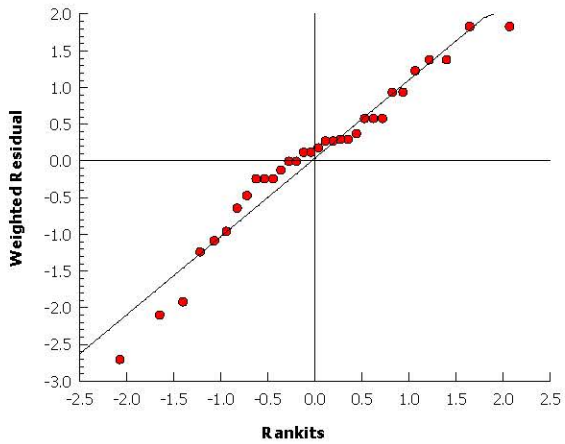
Analysis ID:	02-8527-9500	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

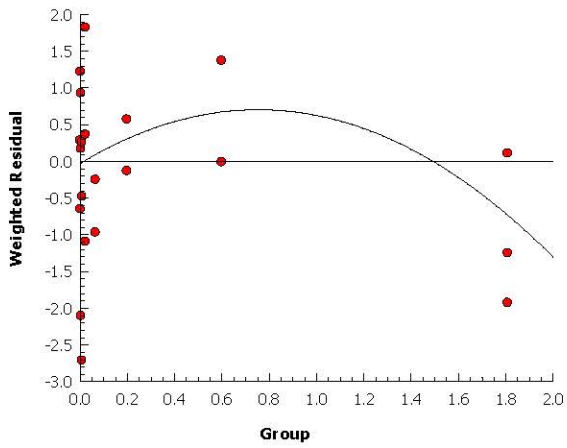
Percent Emerged Summary

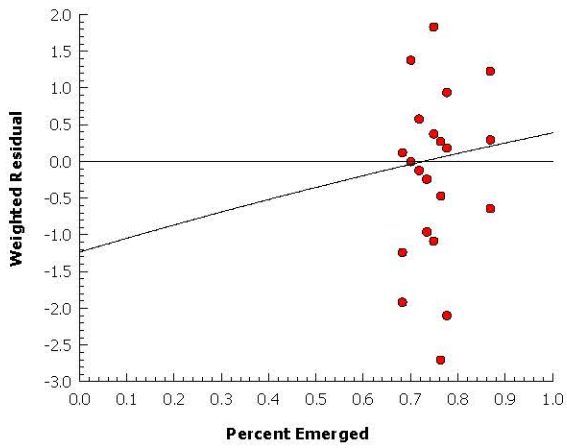
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40
0.0024		4	0.775	0.5	0.9	0.0946	0.189	24.4%	13.9%	31	40
0.0071		4	0.675	0.4	0.8	0.0946	0.189	28.0%	25.0%	27	40
0.0219		4	0.85	0.6	1	0.0957	0.191	22.5%	5.56%	34	40
0.0642		4	0.675	0.6	0.7	0.025	0.05	7.41%	25.0%	27	40
0.1971		4	0.775	0.7	0.8	0.025	0.05	6.45%	13.9%	31	40
0.5975		4	0.8	0.7	0.9	0.0577	0.115	14.4%	11.1%	32	40
1.8067		4	0.575	0.4	0.7	0.075	0.15	26.1%	36.1%	23	40

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-5600-9788	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.1	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
7	-175	357	361	5.41	7.29	0.103	1.24	2.62	0.3200	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0000002	N/A	N/A
EC10	0.000115	N/A	N/A
EC25	3.07	N/A	N/A
EC50	256000	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.101	0.0477	0.00783	0.195	2.12	0.0423	Significant Parameter
Slope	0.137	0.12	-0.0985	0.373	1.14	0.2634	Non-Significant Parameter
Intercept	-0.741	0.232	-1.2	-0.286	-3.19	0.0034	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	6.745419	6.745419	1	5.56	0.0253	Significant
Lack of Fit	7.240588	1.448118	5	1.24	0.3201	Non-Significant
Pure Error	27.94897	1.16454	24			
Residual	35.18956	1.213433	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	35.2	42.6	0.1984	Non-Significant Heterogenity
	Likelihood Ratio GOF	39.8	42.6	0.0865	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	9.37	14.1	0.2269	Equal Variances
	Mod Levene Equality of Variance	1.08	2.42	0.4050	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.956	0.934	0.2114	Normal Distribution
	Anderson-Darling A2 Normality	0.571	2.49	0.1424	Normal Distribution

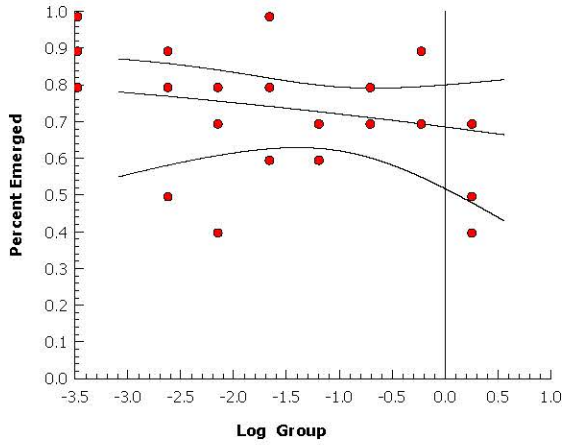
Percent Emerged Summary

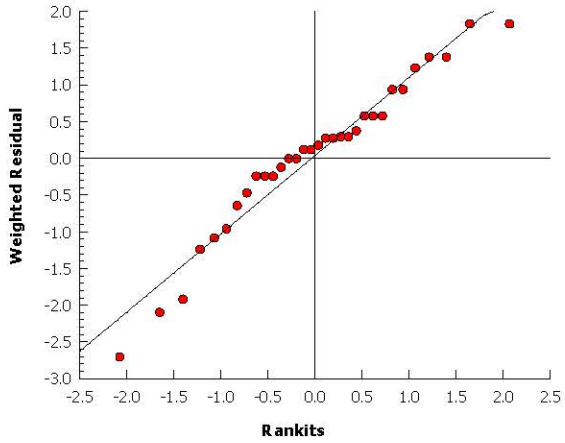
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40
0.0024		4	0.775	0.5	0.9	0.0946	0.189	24.4%	13.9%	31	40
0.0071		4	0.675	0.4	0.8	0.0946	0.189	28.0%	25.0%	27	40
0.0219		4	0.85	0.6	1	0.0957	0.191	22.5%	5.56%	34	40
0.0642		4	0.675	0.6	0.7	0.025	0.05	7.41%	25.0%	27	40
0.1971		4	0.775	0.7	0.8	0.025	0.05	6.45%	13.9%	31	40
0.5975		4	0.8	0.7	0.9	0.0577	0.115	14.4%	11.1%	32	40
1.8067		4	0.575	0.4	0.7	0.075	0.15	26.1%	36.1%	23	40

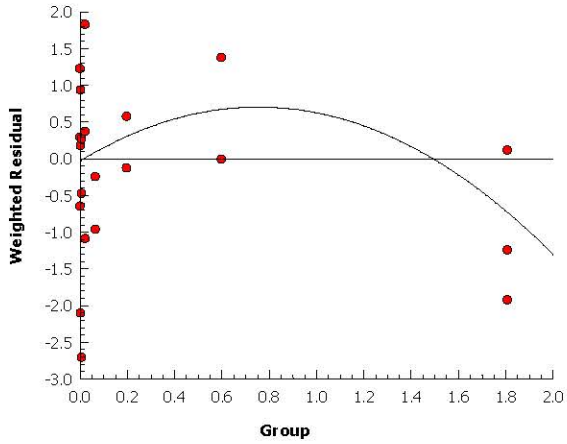
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

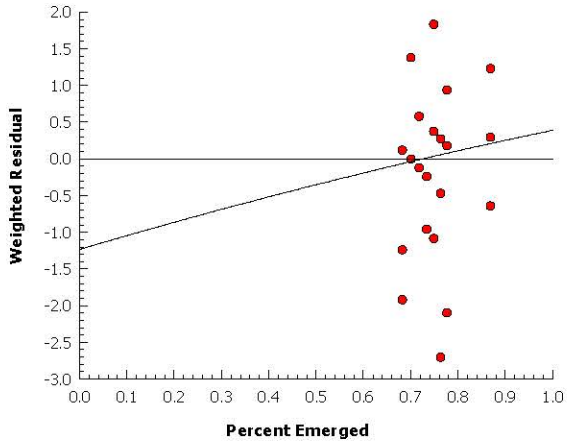
Analysis ID:	10-5600-9788	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-8994-7611	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.1	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-182	370	374	1.6	3.45	0.206	1.31	2.62	0.2920	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0000838	N/A	0.00659
EC10	0.0015	N/A	0.0397
EC25	0.186	8.69E-05	8.06
EC50	39.6	1.93	1E+10

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.107	0.0488	0.0119	0.203	2.2	0.0356	Significant Parameter
Slope	0.29	0.128	0.0399	0.54	2.27	0.0306	Significant Parameter
Intercept	-0.463	0.214	-0.883	-0.0431	-2.16	0.0391	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	13.52326	13.52326	1	10.1	0.0036	Significant
Lack of Fit	8.37974	1.675948	5	1.31	0.2918	Non-Significant
Pure Error	30.62873	1.276197	24			
Residual	39.00848	1.34512	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	39	42.6	0.1015	Non-Significant Heterogenity
	Likelihood Ratio GOF	43.6	42.6	0.0399	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.46	2.94	0.3135	No Outliers Detected
Variances	Bartlett Equality of Variance	9.53	14.1	0.2170	Equal Variances
	Mod Levene Equality of Variance	1.1	2.42	0.3929	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.939	0.934	0.0721	Normal Distribution
	Anderson-Darling A2 Normality	0.737	2.49	0.0546	Normal Distribution

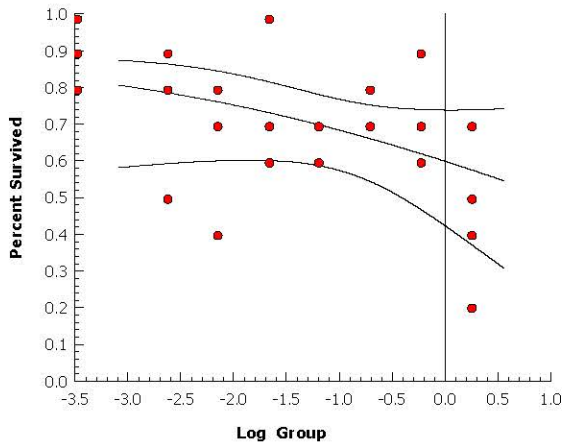
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

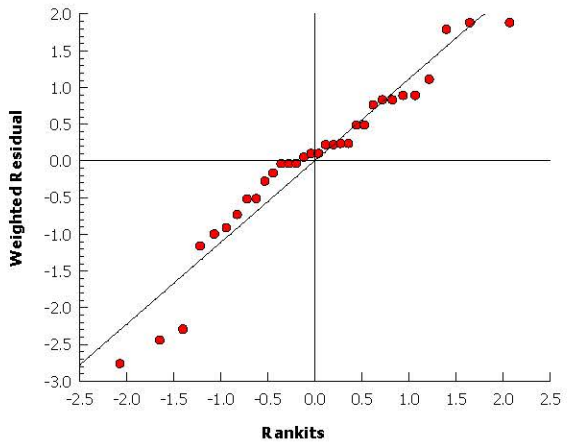
Analysis ID:	10-8994-7611	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

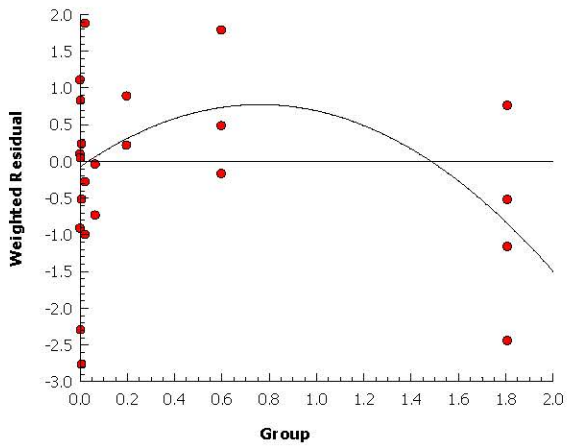
Percent Survived Summary

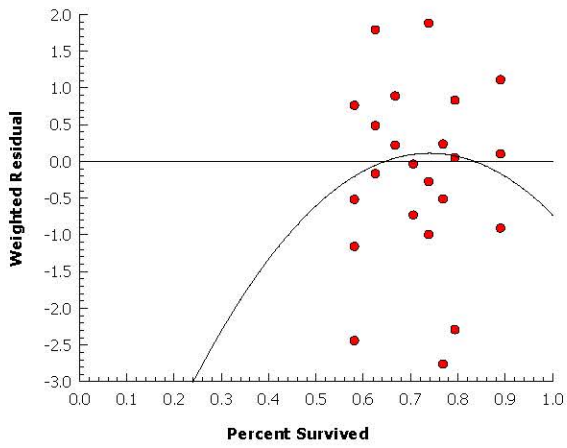
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40
0.0024		4	0.775	0.5	0.9	0.0946	0.189	24.4%	13.9%	31	40
0.0071		4	0.675	0.4	0.8	0.0946	0.189	28.0%	25.0%	27	40
0.0219		4	0.825	0.6	1	0.103	0.206	25.0%	8.33%	33	40
0.0642		4	0.675	0.6	0.7	0.025	0.05	7.41%	25.0%	27	40
0.1971		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	16.7%	30	40
0.5975		4	0.725	0.6	0.9	0.0629	0.126	17.4%	19.4%	29	40
1.8067		4	0.45	0.2	0.7	0.104	0.208	46.3%	50.0%	18	40

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-3888-1245	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.1	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-182	370	374	1.6	3.45	0.206	1.31	2.62	0.2920	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0000838	N/A	0.00659
EC10	0.0015	N/A	0.0397
EC25	0.186	8.69E-05	8.06
EC50	39.6	1.93	1E+10

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.107	0.0488	0.0119	0.203	2.2	0.0356	Significant Parameter
Slope	0.29	0.128	0.0399	0.54	2.27	0.0306	Significant Parameter
Intercept	-0.463	0.214	-0.883	-0.0431	-2.16	0.0391	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	13.52326	13.52326	1	10.1	0.0036	Significant
Lack of Fit	8.37974	1.675948	5	1.31	0.2918	Non-Significant
Pure Error	30.62873	1.276197	24			
Residual	39.00848	1.34512	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	39	42.6	0.1015	Non-Significant Heterogenity
	Likelihood Ratio GOF	43.6	42.6	0.0399	Significant Heterogenity
Variances	Bartlett Equality of Variance	9.53	14.1	0.2170	Equal Variances
	Mod Levene Equality of Variance	1.1	2.42	0.3929	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.939	0.934	0.0721	Normal Distribution
	Anderson-Darling A2 Normality	0.737	2.49	0.0546	Normal Distribution

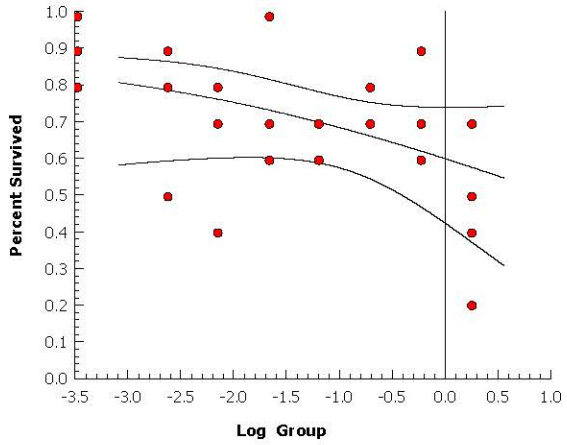
Percent Survived Summary

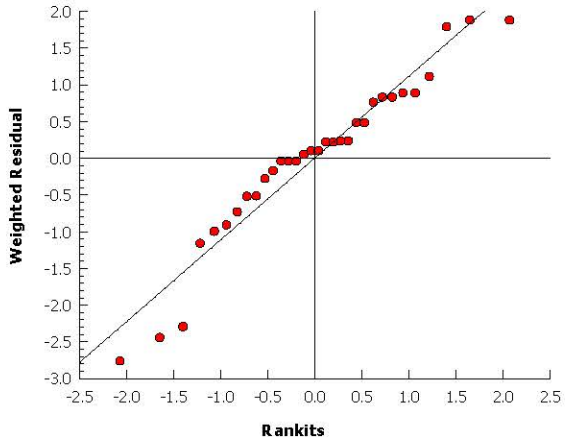
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40
0.0024		4	0.775	0.5	0.9	0.0946	0.189	24.4%	13.9%	31	40
0.0071		4	0.675	0.4	0.8	0.0946	0.189	28.0%	25.0%	27	40
0.0219		4	0.825	0.6	1	0.103	0.206	25.0%	8.33%	33	40
0.0642		4	0.675	0.6	0.7	0.025	0.05	7.41%	25.0%	27	40
0.1971		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	16.7%	30	40
0.5975		4	0.725	0.6	0.9	0.0629	0.126	17.4%	19.4%	29	40
1.8067		4	0.45	0.2	0.7	0.104	0.208	46.3%	50.0%	18	40

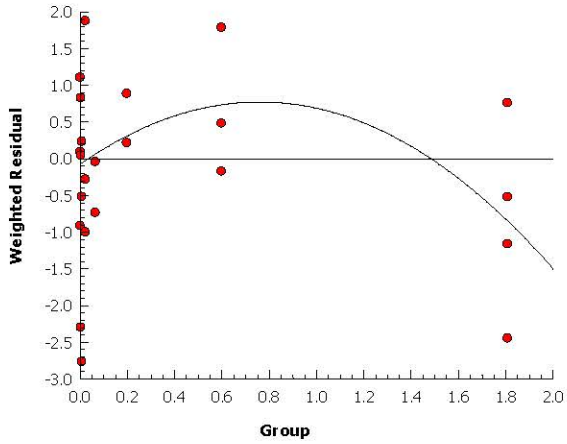
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

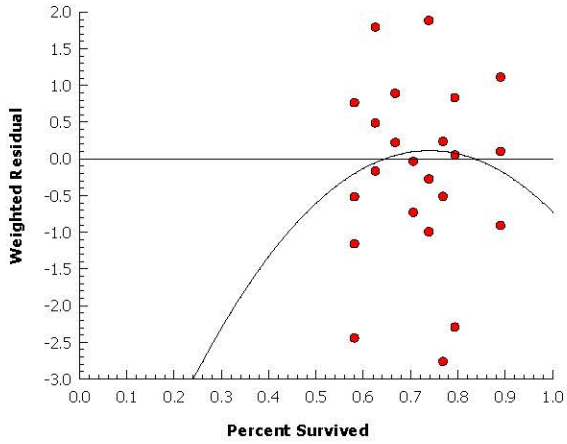
Analysis ID:	09-3888-1245	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-0662-6399	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
9	483	-958	-955	0.1454	Yes	0.489	2.62	0.7812	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0000099	N/A	0.0175
IC10	0.000341	N/A	0.0631
IC25	0.125	0.011	0.989
IC50	87.7	0.03	257000

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	13.6	1.46	10.8	16.5	9.36	<0.0001	Significant Parameter
C	9.72	6.02	-2.07	21.5	1.62	0.1170	Non-Significant Parameter
D	87.7	318	-536	711	0.276	0.7848	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	4.574394	4.574394	1	7.28	0.0115	Significant
Lack of Fit	1.685592	0.337118	5	0.489	0.7812	Non-Significant
Pure Error	16.5484	0.689517	24			
Residual	18.23399	0.628758	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	18.2	42.6	0.9394	Non-Significant Heterogenity
	Likelihood Ratio GOF	18.8	42.6	0.9260	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.91	2.94	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	6.11	14.1	0.5274	Equal Variances
	Mod Levene Equality of Variance	1.24	2.42	0.3210	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.972	0.934	0.5653	Normal Distribution
	Anderson-Darling A2 Normality	0.377	2.49	0.4154	Normal Distribution

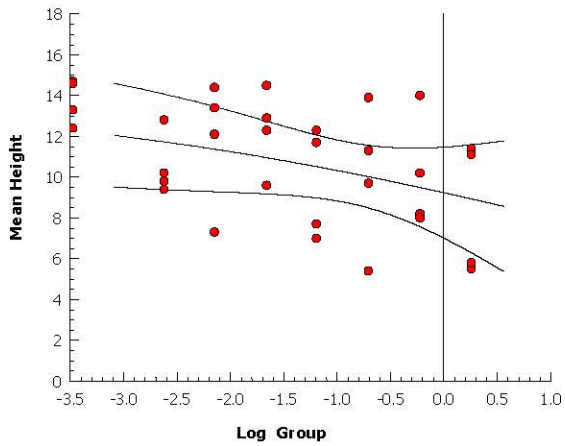
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

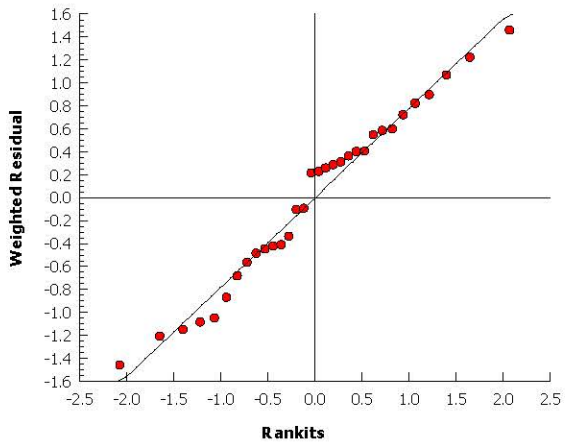
Analysis ID:	06-0662-6399	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

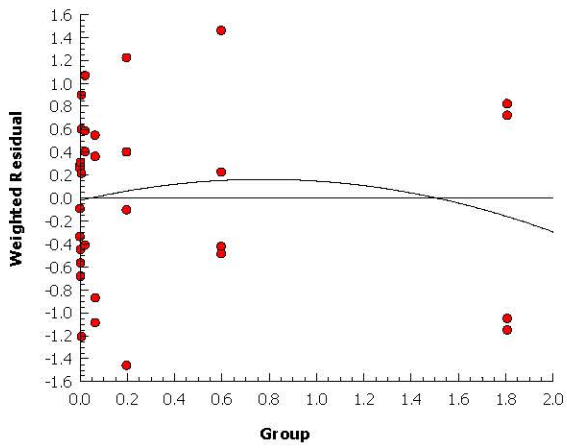
Mean Height Summary

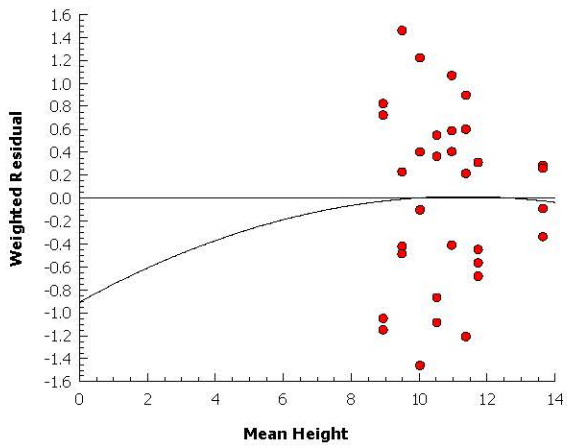
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	13.8	12.4	14.7	0.552	1.1	8.02%	0.0%
0.0024		4	10.5	9.4	12.8	0.768	1.54	14.6%	23.3%
0.0071		4	11.8	7.3	14.4	1.57	3.14	26.6%	14.2%
0.0219		4	12.3	9.6	14.5	1.02	2.04	16.6%	10.4%
0.0642		4	9.67	7	12.3	1.36	2.71	28.0%	29.6%
0.1971		4	10.1	5.4	13.9	1.78	3.56	35.4%	26.7%
0.5975		4	10.1	8	14	1.39	2.78	27.6%	26.5%
1.8067		4	8.45	5.5	11.4	1.62	3.24	38.3%	38.5%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-6377-2559	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
9	483	-958	-955	0.1454	Yes	0.489	2.62	0.7812	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0000099	N/A	0.0175
IC10	0.000341	N/A	0.0631
IC25	0.125	0.011	0.989
IC50	87.7	0.03	257000

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	13.6	1.46	10.8	16.5	9.36	<0.0001	Significant Parameter
C	9.72	6.02	-2.07	21.5	1.62	0.1170	Non-Significant Parameter
D	87.7	318	-536	711	0.276	0.7848	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	4.574394	4.574394	1	7.28	0.0115	Significant
Lack of Fit	1.685592	0.337118	5	0.489	0.7812	Non-Significant
Pure Error	16.5484	0.689517	24			
Residual	18.23399	0.628758	29			

Residual Analysis

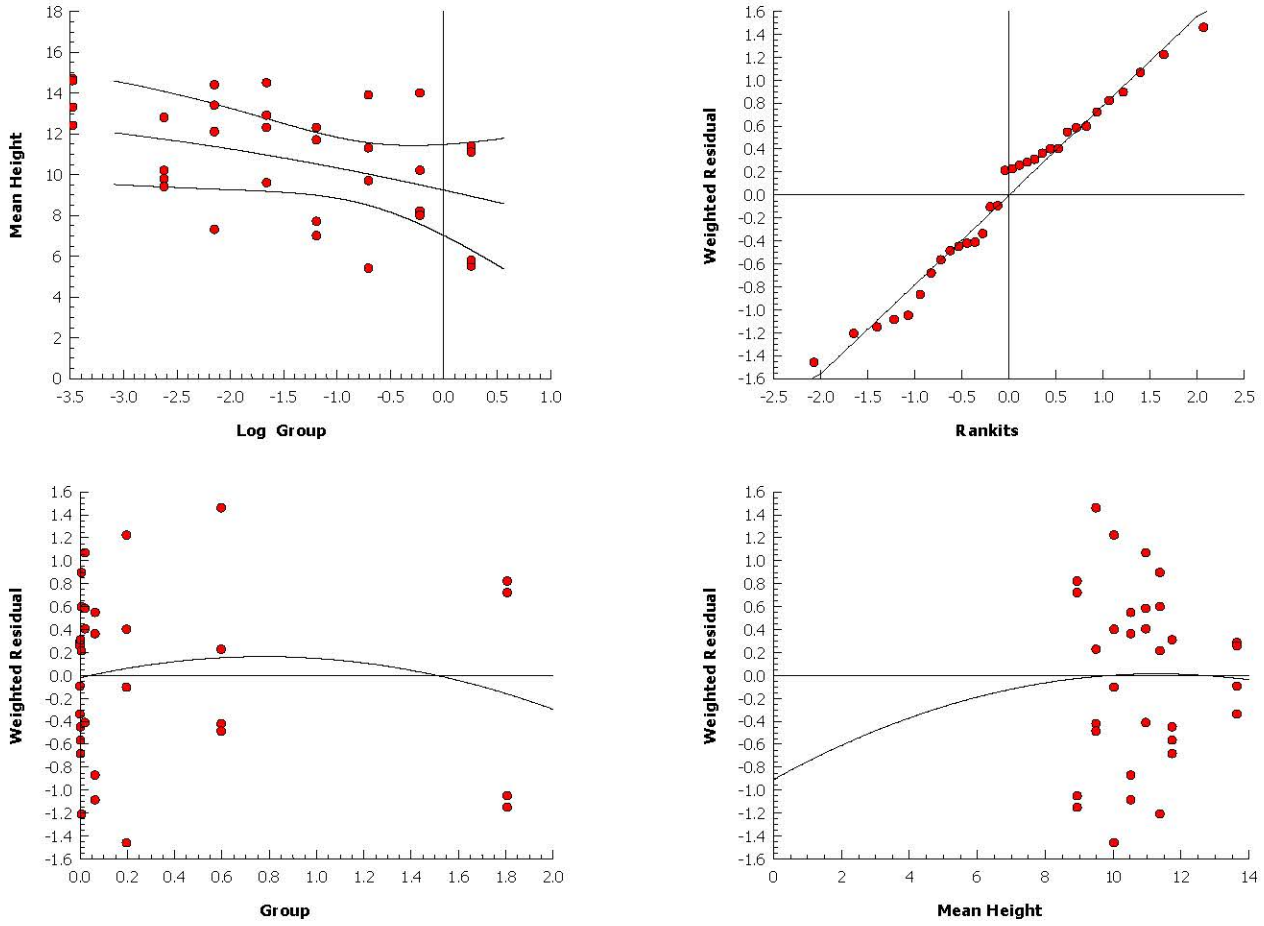
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	18.2	42.6	0.9394	Non-Significant Heterogenity
	Likelihood Ratio GOF	18.8	42.6	0.9260	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	6.11	14.1	0.5274	Equal Variances
	Mod Levene Equality of Variance	1.24	2.42	0.3210	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.972	0.934	0.5653	Normal Distribution
	Anderson-Darling A2 Normality	0.377	2.49	0.4154	Normal Distribution

Mean Height Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	13.8	12.4	14.7	0.552	1.1	8.02%	0.0%
0.0024		4	10.5	9.4	12.8	0.768	1.54	14.6%	23.3%
0.0071		4	11.8	7.3	14.4	1.57	3.14	26.6%	14.2%
0.0219		4	12.3	9.6	14.5	1.02	2.04	16.6%	10.4%
0.0642		4	9.67	7	12.3	1.36	2.71	28.0%	29.6%
0.1971		4	10.1	5.4	13.9	1.78	3.56	35.4%	26.7%
0.5975		4	10.1	8	14	1.39	2.78	27.6%	26.5%
1.8067		4	8.45	5.5	11.4	1.62	3.24	38.3%	38.5%

Analysis ID:	15-6377-2559	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-8407-8448	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	418	-830	-826	0.1504	Yes	0.363	2.62	0.8689	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0000001	N/A	0.015
IC10	0.0000049	N/A	0.0569
IC25	0.00313	1.94E-06	0.408
IC50	4	0.0144	1110

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	14.4	2.34	9.79	18.9	6.15	<0.0001	Significant Parameter
C	10.6	7.63	-4.34	25.6	1.39	0.1748	Non-Significant Parameter
D	4	13.5	-22.6	30.6	0.295	0.7700	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	11.42429	11.42429	1	7.49	0.0105	Significant
Lack of Fit	3.108922	0.621784	5	0.363	0.8689	Non-Significant
Pure Error	41.1451	1.714379	24			
Residual	44.25402	1.526001	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	44.3	42.6	0.0347	Significant Heterogenity
	Likelihood Ratio GOF	46.8	42.6	0.0197	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.68	2.94	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	2.16	14.1	0.9505	Equal Variances
	Mod Levene Equality of Variance	1.35	2.42	0.2703	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.939	0.934	0.0702	Normal Distribution
	Anderson-Darling A2 Normality	0.647	2.49	0.0917	Normal Distribution

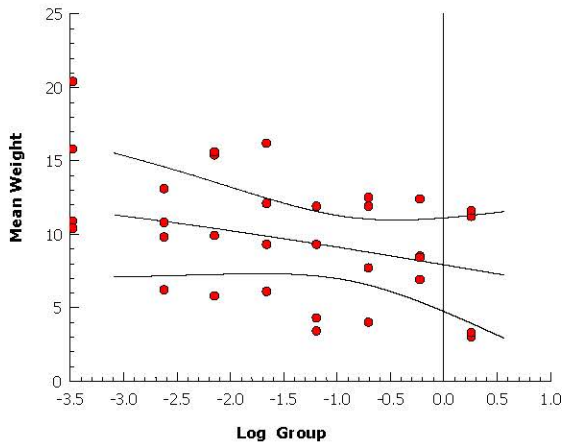
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

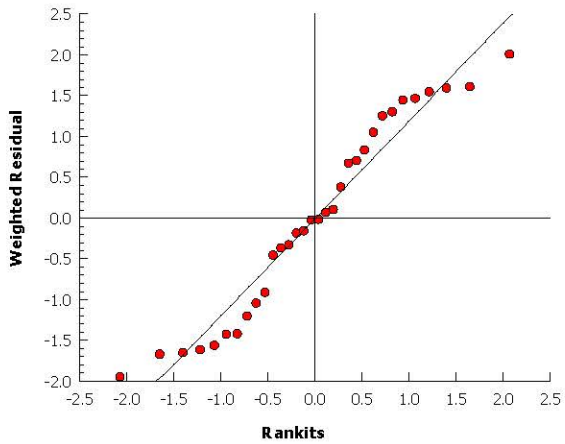
Analysis ID:	06-8407-8448	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

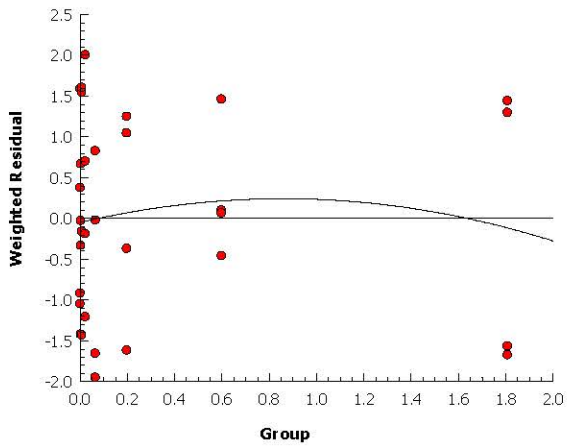
Mean Weight Summary

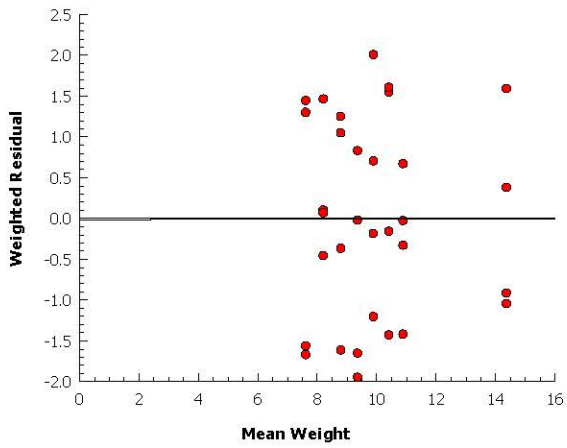
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	14.4	10.4	20.4	2.35	4.7	32.7%	0.0%
0.0024		4	9.98	6.2	13.1	1.44	2.87	28.8%	30.6%
0.0071		4	11.7	5.8	15.6	2.36	4.72	40.5%	18.8%
0.0219		4	10.9	6.1	16.2	2.14	4.29	39.2%	24.0%
0.0642		4	7.23	3.4	11.9	2.03	4.06	56.1%	49.7%
0.1971		4	9.02	4	12.5	1.99	3.97	44.0%	37.2%
0.5975		4	9.05	6.9	12.4	1.18	2.35	26.0%	37.0%
1.8067		4	7.28	3	11.6	2.38	4.77	65.5%	49.4%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-7440-6609	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	418	-830	-826	0.1504	Yes	0.363	2.62	0.8689	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0000001	N/A	0.015
IC10	0.0000049	N/A	0.0569
IC25	0.00313	1.94E-06	0.408
IC50	4	0.0144	1110

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	14.4	2.34	9.79	18.9	6.15	<0.0001	Significant Parameter
C	10.6	7.63	-4.34	25.6	1.39	0.1748	Non-Significant Parameter
D	4	13.5	-22.6	30.6	0.295	0.7700	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	11.42429	11.42429	1	7.49	0.0105	Significant
Lack of Fit	3.108922	0.621784	5	0.363	0.8689	Non-Significant
Pure Error	41.1451	1.714379	24			
Residual	44.25402	1.526001	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	44.3	42.6	0.0347	Significant Heterogenity
	Likelihood Ratio GOF	46.8	42.6	0.0197	Significant Heterogenity
Variances	Bartlett Equality of Variance	2.16	14.1	0.9505	Equal Variances
	Mod Levene Equality of Variance	1.35	2.42	0.2703	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.939	0.934	0.0702	Normal Distribution
	Anderson-Darling A2 Normality	0.647	2.49	0.0917	Normal Distribution

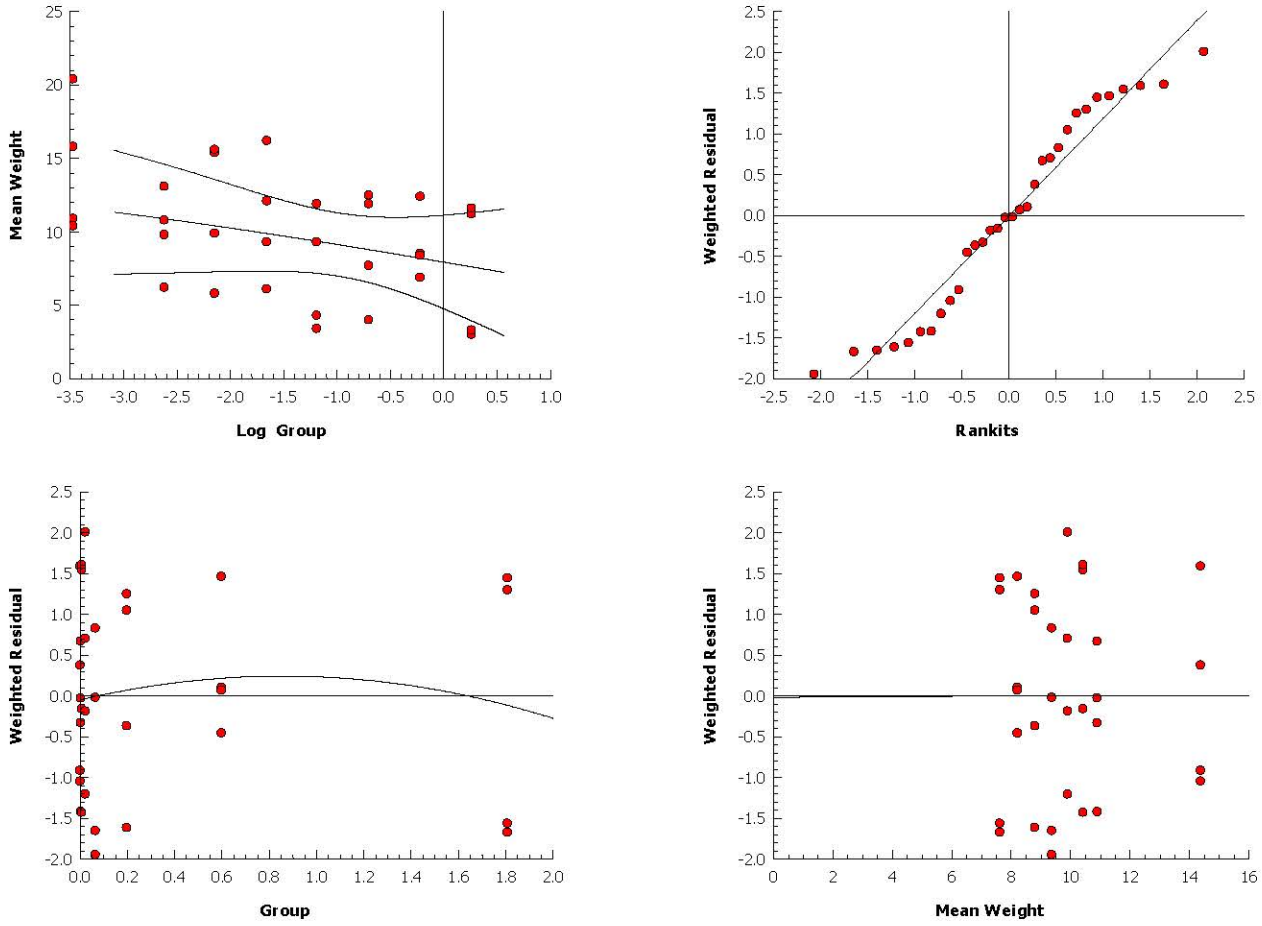
Mean Weight Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	14.4	10.4	20.4	2.35	4.7	32.7%	0.0%
0.0024		4	9.98	6.2	13.1	1.44	2.87	28.8%	30.6%
0.0071		4	11.7	5.8	15.6	2.36	4.72	40.5%	18.8%
0.0219		4	10.9	6.1	16.2	2.14	4.29	39.2%	24.0%
0.0642		4	7.23	3.4	11.9	2.03	4.06	56.1%	49.7%
0.1971		4	9.02	4	12.5	1.99	3.97	44.0%	37.2%
0.5975		4	9.05	6.9	12.4	1.18	2.35	26.0%	37.0%
1.8067		4	7.28	3	11.6	2.38	4.77	65.5%	49.4%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	20-7440-6609	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



CETIS Analytical Report

Report Date:	05 Feb-13 15:57 (p 1 of 2)
Test Code:	48718014 Rye | 10-3570-5081

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-2509-7527	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:55	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.1	50.00%	0.257	0	1.81	N/A	N/A

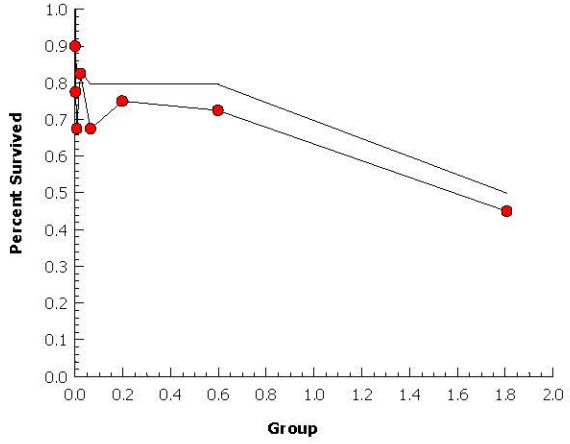
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.97	2.94	1.0000	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40
0.0024		4	0.775	0.5	0.9	0.0946	0.189	24.4%	13.9%	31	40
0.0071		4	0.675	0.4	0.8	0.0946	0.189	28.0%	25.0%	27	40
0.0219		4	0.825	0.6	1	0.103	0.206	25.0%	8.33%	33	40
0.0642		4	0.675	0.6	0.7	0.025	0.05	7.41%	25.0%	27	40
0.1971		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	16.7%	30	40
0.5975		4	0.725	0.6	0.9	0.0629	0.126	17.4%	19.4%	29	40
1.8067		4	0.45	0.2	0.7	0.104	0.208	46.3%	50.0%	18	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-0612-4710	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:55	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	04-7982-2709	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 17:25	**Species:**	Lolium perenne	**Brine:**	
Duration:	565d 17h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	13-6907-2545	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 17:25	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

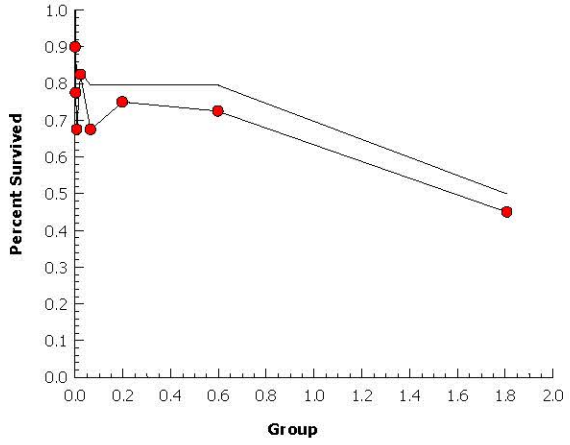
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.1	50.00%	0.257	0	1.81	N/A	N/A

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.9	0.8	1	0.0408	0.0816	9.07%	0.0%	36	40
0.0024		4	0.775	0.5	0.9	0.0946	0.189	24.4%	13.9%	31	40
0.0071		4	0.675	0.4	0.8	0.0946	0.189	28.0%	25.0%	27	40
0.0219		4	0.825	0.6	1	0.103	0.206	25.0%	8.33%	33	40
0.0642		4	0.675	0.6	0.7	0.025	0.05	7.41%	25.0%	27	40
0.1971		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	16.7%	30	40
0.5975		4	0.725	0.6	0.9	0.0629	0.126	17.4%	19.4%	29	40
1.8067		4	0.45	0.2	0.7	0.104	0.208	46.3%	50.0%	18	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
10-5789-7871	Mean Height	0.1971	0.5975	0.3432	23.9%		Dunnett Multiple Comparison Test
13-4052-3805	Mean Height	0.0642	0.1971	0.1125	30.7%		Dunnett Multiple Comparison Test
13-7035-4716	Mean Height	0.0642	0.1971	0.1125	30.7%		Dunnett Multiple Comparison Test
02-4518-3057	Mean Height	0.0642	0.1971	0.1125	22.4%		Williams Multiple Comparison Test
02-7309-4014	Mean Height	0.0642	0.1971	0.1125	22.4%		Williams Multiple Comparison Test
17-7626-2806	Mean Height	0.1971	0.5975	0.3432	17.3%		Williams Multiple Comparison Test
03-3788-9541	Mean Weight	0.5975	1.8067	1.039	44.8%		Dunnett Multiple Comparison Test
09-8084-1004	Mean Weight	0.5975	1.8067	1.039	44.8%		Dunnett Multiple Comparison Test
00-1422-7499	Mean Weight	0.1971	0.5975	0.3432	32.6%		Williams Multiple Comparison Test
20-1041-0020	Mean Weight	0.1971	0.5975	0.3432	32.6%		Williams Multiple Comparison Test
07-1893-3783	Percent Emerged	0.1971	0.5975	0.3432	13.3%		Dunnett Multiple Comparison Test
09-2734-9970	Percent Emerged	0.1971	0.5975	0.3432	13.3%		Dunnett Multiple Comparison Test
12-9600-1283	Percent Emerged	0.1971	0.5975	0.3432	9.88%		Williams Multiple Comparison Test
14-7721-0627	Percent Emerged	0.1971	0.5975	0.3432	9.88%		Williams Multiple Comparison Test
06-4154-6677	Percent Survived	<0.0024	0.0024	NA	NA		Jonckheere-Terpstra Step-Down Test
10-0461-1623	Percent Survived	0.1971	0.5975	0.3432	NA		Jonckheere-Terpstra Step-Down Test
10-2744-6319	Percent Survived	<0.0024	0.0024	NA	NA		Jonckheere-Terpstra Step-Down Test
05-3144-5836	Percent Survived	0.5975	1.8067	1.039	17.9%		Mann-Whitney U Two-Sample Test
08-0772-5992	Percent Survived	0.5975	1.8067	1.039	26.8%		Mann-Whitney U Two-Sample Test
10-2107-3641	Percent Survived	0.5975	1.8067	1.039	26.8%		Mann-Whitney U Two-Sample Test

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
05-5829-7149	Mean Height	IC5	0.0336	N/A	0.0719		Nonlinear Regression
		IC10	0.0678	0.0227	0.125		
		IC25	0.219	0.133	0.336		
		IC50	0.809	0.592	1.11		
17-9339-3542	Mean Height	IC5	0.0172	N/A	0.0468		Nonlinear Regression
		IC10	0.0392	0.00891	0.0847		
		IC25	0.154	0.0814	0.264		
		IC50	0.709	0.469	1.07		
19-7944-3395	Mean Height	IC5	0.0172	N/A	0.0468		Nonlinear Regression
		IC10	0.0392	0.00891	0.0847		
		IC25	0.154	0.0814	0.264		
		IC50	0.709	0.469	1.07		
09-8617-1661	Mean Weight	IC5	0.0295	N/A	0.102		Nonlinear Regression
		IC10	0.0668	N/A	0.185		
		IC25	0.262	0.108	0.526		
		IC50	1.2	0.581	2.46		
21-1006-1741	Mean Weight	IC5	0.0295	N/A	0.102		Nonlinear Regression
		IC10	0.0668	N/A	0.185		
		IC25	0.262	0.108	0.526		
		IC50	1.2	0.581	2.46		
05-9577-1461	Percent Emerged	EC5	0.36	0.0536	0.619		Linear Regression (MLE)
		EC10	0.525	0.132	0.808		
		EC25	0.986	0.536	1.41		
		EC50	1.98	1.39	4.76		
08-8178-1147	Percent Emerged	EC5	0.36	0.0536	0.619		Linear Regression (MLE)
		EC10	0.525	0.132	0.808		
		EC25	0.986	0.536	1.41		
		EC50	1.98	1.39	4.76		
10-2160-1001	Percent Emerged	EC5	0.348	0.0626	0.591		Linear Regression (MLE)
		EC10	0.509	0.147	0.778		
		EC25	0.964	0.549	1.37		
		EC50	1.96	1.38	4.44		
11-4958-5432	Percent Survived	EC5	0.0714	0.00733	0.161		Linear Regression (MLE)
		EC10	0.112	0.0179	0.224		
		EC25	0.237	0.0758	0.406		
		EC50	0.546	0.299	0.989		
17-4356-1869	Percent Survived	EC5	0.0714	0.00733	0.161		Linear Regression (MLE)
		EC10	0.112	0.0179	0.224		
		EC25	0.237	0.0758	0.406		
		EC50	0.546	0.299	0.989		
20-0808-3221	Percent Survived	EC5	0.274	0.0825	0.428		Linear Regression (MLE)
		EC10	0.343	0.127	0.505		
		EC25	0.5	0.257	0.678		
		EC50	0.758	0.52	1.01		
08-6075-9108	Percent Survived	EC50	0.69	0.533	0.894		Trimmed Spearman-Kärber
13-9666-4327	Percent Survived	EC50	0.528	0.392	0.711		Trimmed Spearman-Kärber
17-0614-9537	Percent Survived	EC50	0.528	0.392	0.711		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	35.6	31.7	39.5	33.1	38.2	1.23	2.46	6.91%	0.0%
0	Negative Control	4	34.7	28.6	40.8	30	38.7	1.92	3.84	11.1%	2.39%
0.0024		4	36.3	24.8	47.8	26.9	43.5	3.62	7.23	19.9%	-2.11%
0.0071		4	31.3	28.9	33.7	29.2	32.7	0.749	1.5	4.79%	12.1%
0.0219		4	36.1	32.8	39.5	34.2	39.1	1.06	2.12	5.86%	-1.55%
0.0642		4	29.4	22.4	36.3	23.8	34.1	2.18	4.36	14.9%	17.4%
0.1971		4	25.1	11.1	39.1	12	30.9	4.4	8.8	35.1%	29.4%
0.5975		4	18.1	13.9	22.3	15	21.2	1.31	2.62	14.5%	49.1%
1.8067		2	12.5	6.15	18.9	12	13	0.5	0.707	5.66%	64.9%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	743	491	995	611	933	79.2	158	21.3%	0.0%
0	Negative Control	4	661	497	824	546	795	51.5	103	15.6%	11.1%
0.0024		4	761	454	1070	496	940	96.4	193	25.3%	-2.42%
0.0071		4	648	569	727	587	690	24.8	49.7	7.67%	12.8%
0.0219		4	751	620	881	669	863	41.1	82.1	10.9%	-1.01%
0.0642		4	667	329	1000	392	890	106	212	31.8%	10.3%
0.1971		4	540	301	779	320	658	75.1	150	27.8%	27.3%
0.5975		4	421	261	580	307	550	50.2	100	23.9%	43.4%
1.8067		2	333	-271	936	285	380	47.5	67.2	20.2%	55.2%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0	Negative Control	4	1	1	1	1	1	0	0	0.0%	-2.56%
0.0024		4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0.0071		4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	2.56%
0.0219		4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	2.56%
0.0642		4	0.925	0.773	1	0.8	1	0.0479	0.0957	10.4%	5.13%
0.1971		4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0.5975		4	0.825	0.625	1	0.7	1	0.0629	0.126	15.3%	15.4%
1.8067		4	0.525	0.373	0.677	0.4	0.6	0.0479	0.0957	18.2%	46.2%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0	Negative Control	4	1	1	1	1	1	0	0	0.0%	-2.56%
0.0024		4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	0.0%
0.0071		4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	2.56%
0.0219		4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	2.56%
0.0642		4	0.9	0.675	1	0.7	1	0.0707	0.141	15.7%	7.69%
0.1971		4	0.725	0.0452	1	0.1	1	0.214	0.427	58.9%	25.6%
0.5975		4	0.625	0.168	1	0.3	1	0.144	0.287	46.0%	35.9%
1.8067		4	0.075	0	0.227	0	0.2	0.0479	0.0957	128.0%	92.3%

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	37.1	38.2	33.9	33.1
0	Negative Control	38.7	33.4	36.8	30
0.0024		40.1	43.5	34.8	26.9
0.0071		32.7	31.9	29.2	31.3
0.0219		39.1	34.2	36	35.2
0.0642		31.1	34.1	28.5	23.8
0.1971		12	29.2	28.3	30.9
0.5975		17.3	15	21.2	19
1.8067			13		12

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	933	814	611	614
0	Negative Control	795	636	665	546
0.0024		857	940	751	496
0.0071		690	628	587	687
0.0219		863	750	720	669
0.0642		758	890	627	392
0.1971		320	582	658	600
0.5975		397	307	550	428
1.8067			285		380

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	1	1	0.9	1
0	Negative Control	1	1	1	1
0.0024		1	1	0.9	1
0.0071		1	0.9	1	0.9
0.0219		0.9	0.9	1	1
0.0642		0.9	0.8	1	1
0.1971		1	1	0.9	1
0.5975		0.8	0.7	0.8	1
1.8067		0.6	0.5	0.4	0.6

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	1	1	0.9	1
0	Negative Control	1	1	1	1
0.0024		1	1	0.9	1
0.0071		1	0.9	1	0.9
0.0219		0.9	0.9	1	1
0.0642		0.9	0.7	1	1
0.1971		0.1	1	0.8	1
0.5975		0.6	0.3	0.6	1
1.8067		0	0.2	0	0.1

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-5789-7871	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	23.9%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.596	2.52	6.77	6	0.9740	CDF	Non-Significant Effect
		0.0071	1.28	2.52	6.77	6	0.3671	CDF	Non-Significant Effect
		0.0219	-0.521	2.52	6.77	6	0.9681	CDF	Non-Significant Effect
		0.0642	1.99	2.52	6.77	6	0.1320	CDF	Non-Significant Effect
		0.1971	1.81	2.52	7.31	5	0.1769	CDF	Non-Significant Effect
		0.5975*	6.18	2.52	6.77	6	<0.0001	CDF	Significant Effect
		1.8067*	6.76	2.52	8.29	4	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1579.219	225.6027	7	15.6	<0.0001	Significant Effect
Error	303.0316	14.43008	21			
Total	1882.25		28			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	12.1	18.5	0.0957	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.966	0.9	0.4483	Normal Distribution

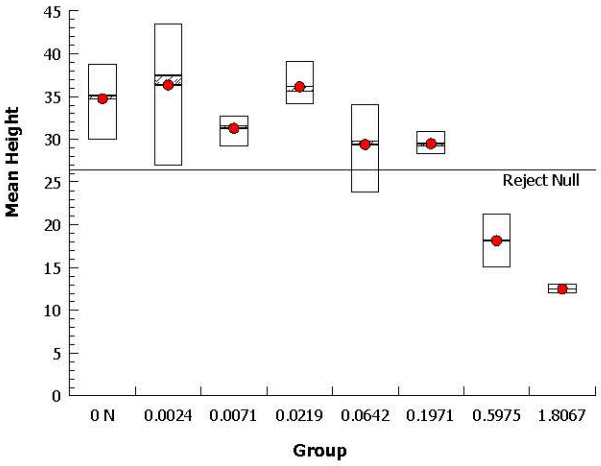
Mean Height Summary

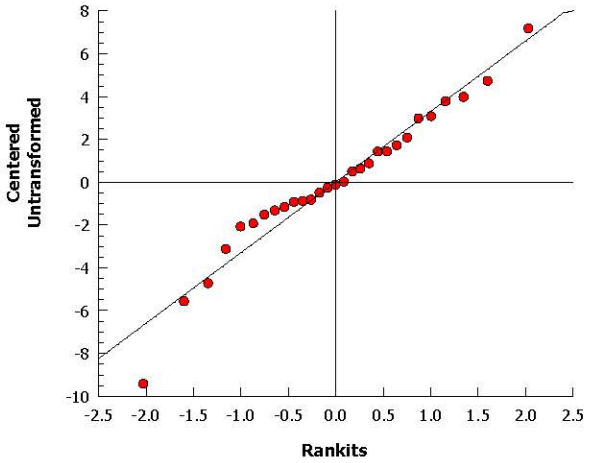
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	34.7	28.6	40.8	35.1	30	38.7	1.92	11.1%	0.0%
0.0024		4	36.3	24.8	47.8	37.4	26.9	43.5	3.62	19.9%	-4.61%
0.0071		4	31.3	28.9	33.7	31.6	29.2	32.7	0.749	4.79%	9.94%
0.0219		4	36.1	32.8	39.5	35.6	34.2	39.1	1.06	5.86%	-4.03%
0.0642		4	29.4	22.4	36.3	29.8	23.8	34.1	2.18	14.9%	15.4%
0.1971		3	29.5	26.2	32.7	29.2	28.3	30.9	0.762	4.48%	15.1%
0.5975		4	18.1	13.9	22.3	18.1	15	21.2	1.31	14.5%	47.8%
1.8067		2	12.5	6.15	18.9	12.5	12	13	0.5	5.66%	64.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-5789-7871	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-7035-4716	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.7%	0.0642	0.1971	0.1125	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.46	2.51	8.72	6	0.9607	CDF	Non-Significant Effect
		0.0071	0.992	2.51	8.72	6	0.4962	CDF	Non-Significant Effect
		0.0219	-0.403	2.51	8.72	6	0.9544	CDF	Non-Significant Effect
		0.0642	1.54	2.51	8.72	6	0.2617	CDF	Non-Significant Effect
		0.1971*	2.77	2.51	8.72	6	0.0293	CDF	Significant Effect
		0.5975*	4.77	2.51	8.72	6	0.0003	CDF	Significant Effect
		1.8067*	5.22	2.51	10.7	4	<0.0001	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.06	2.91	0.0248	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1648.434	235.4905	7	9.74	<0.0001	Significant Effect
Error	531.845	24.17477	22			
Total	2180.279		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	14	18.5	0.0506	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.903	0.0398	Normal Distribution

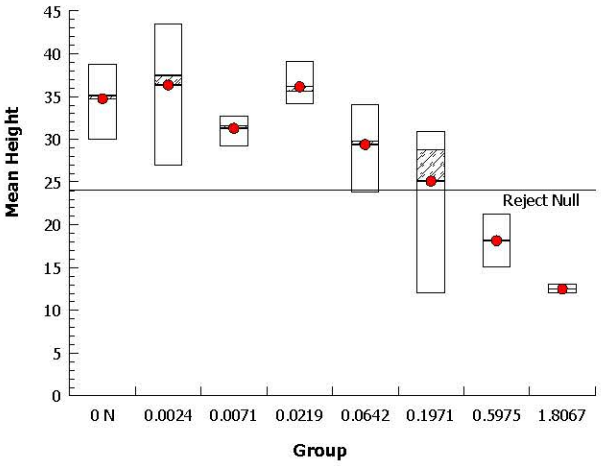
Mean Height Summary

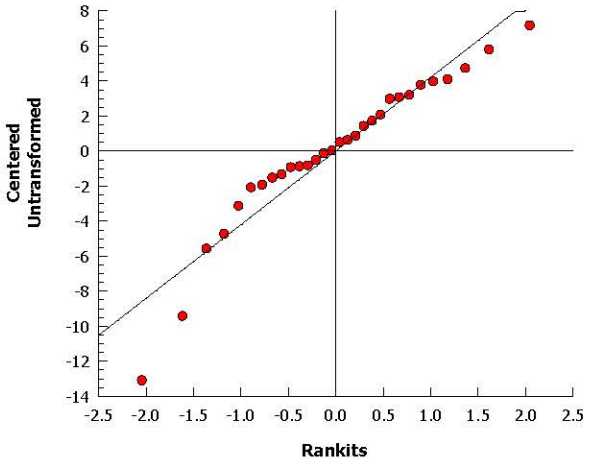
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	34.7	28.6	40.8	35.1	30	38.7	1.92	11.1%	0.0%
0.0024		4	36.3	24.8	47.8	37.4	26.9	43.5	3.62	19.9%	-4.61%
0.0071		4	31.3	28.9	33.7	31.6	29.2	32.7	0.749	4.79%	9.94%
0.0219		4	36.1	32.8	39.5	35.6	34.2	39.1	1.06	5.86%	-4.03%
0.0642		4	29.4	22.4	36.3	29.8	23.8	34.1	2.18	14.9%	15.4%
0.1971		4	25.1	11.1	39.1	28.8	12	30.9	4.4	35.1%	27.7%
0.5975		4	18.1	13.9	22.3	18.1	15	21.2	1.31	14.5%	47.8%
1.8067		2	12.5	6.15	18.9	12.5	12	13	0.5	5.66%	64.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-7035-4716	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-7626-2806	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	17.3%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.596	1.72	4.62	6	>0.05	CDF	Non-Significant Effect
		0.0071	1.28	1.8	4.84	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.382	1.83	4.91	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.99	1.84	4.95	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.83	1.84	5.33	5	>0.05	CDF	Non-Significant Effect
		0.5975*	6.18	1.86	4.98	6	<0.05	CDF	Significant Effect
		1.8067*	6.76	1.83	6.01	4	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1579.219	225.6027	7	15.6	<0.0001	Significant Effect
Error	303.0316	14.43008	21			
Total	1882.25		28			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	12.1	18.5	0.0957	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.966	0.9	0.4483	Normal Distribution

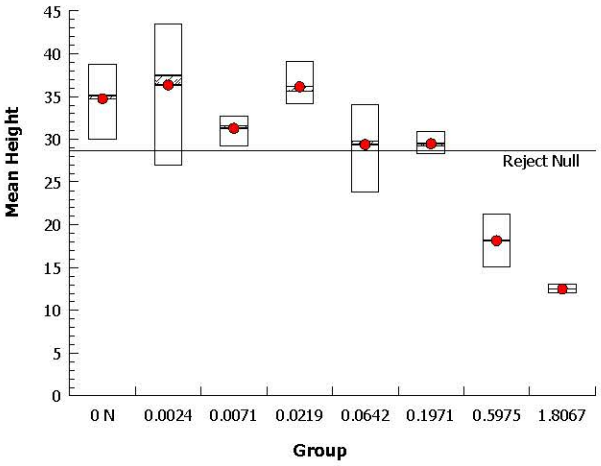
Mean Height Summary

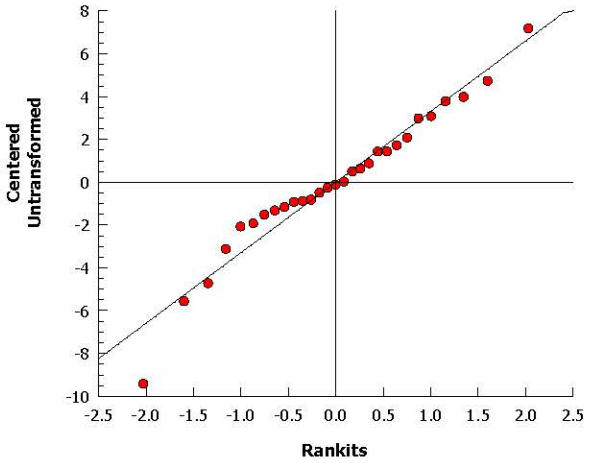
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	34.7	28.6	40.8	35.1	30	38.7	1.92	11.1%	0.0%
0.0024		4	36.3	24.8	47.8	37.4	26.9	43.5	3.62	19.9%	-4.61%
0.0071		4	31.3	28.9	33.7	31.6	29.2	32.7	0.749	4.79%	9.94%
0.0219		4	36.1	32.8	39.5	35.6	34.2	39.1	1.06	5.86%	-4.03%
0.0642		4	29.4	22.4	36.3	29.8	23.8	34.1	2.18	14.9%	15.4%
0.1971		3	29.5	26.2	32.7	29.2	28.3	30.9	0.762	4.48%	15.1%
0.5975		4	18.1	13.9	22.3	18.1	15	21.2	1.31	14.5%	47.8%
1.8067		2	12.5	6.15	18.9	12.5	12	13	0.5	5.66%	64.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	17-7626-2806	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-7309-4014	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.4%	0.0642	0.1971	0.1125	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.46	1.72	5.97	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.992	1.8	6.25	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.295	1.83	6.34	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.54	1.84	6.39	6	>0.05	CDF	Non-Significant Effect
		0.1971*	2.77	1.85	6.42	6	<0.05	CDF	Significant Effect
		0.5975*	4.77	1.85	6.44	6	<0.05	CDF	Significant Effect
		1.8067*	5.22	1.82	7.77	4	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.06	2.91	0.0248	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1648.434	235.4905	7	9.74	<0.0001	Significant Effect
Error	531.845	24.17477	22			
Total	2180.279		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	14	18.5	0.0506	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.903	0.0398	Normal Distribution

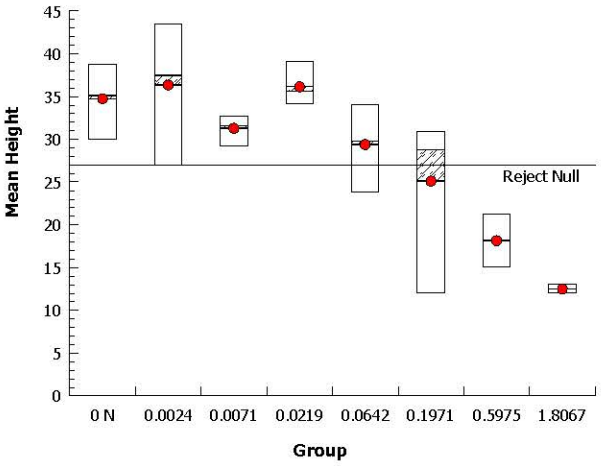
Mean Height Summary

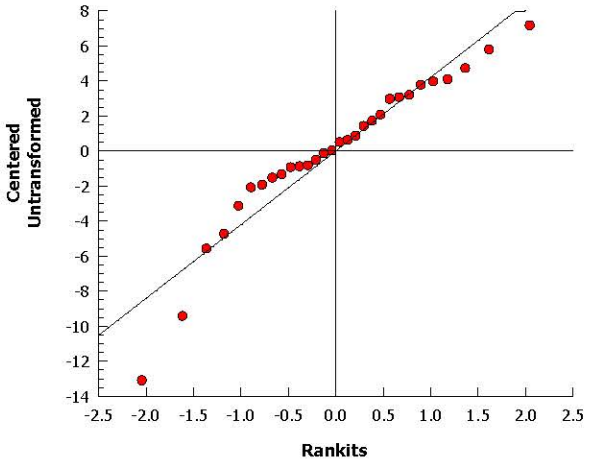
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	34.7	28.6	40.8	35.1	30	38.7	1.92	11.1%	0.0%
0.0024		4	36.3	24.8	47.8	37.4	26.9	43.5	3.62	19.9%	-4.61%
0.0071		4	31.3	28.9	33.7	31.6	29.2	32.7	0.749	4.79%	9.94%
0.0219		4	36.1	32.8	39.5	35.6	34.2	39.1	1.06	5.86%	-4.03%
0.0642		4	29.4	22.4	36.3	29.8	23.8	34.1	2.18	14.9%	15.4%
0.1971		4	25.1	11.1	39.1	28.8	12	30.9	4.4	35.1%	27.7%
0.5975		4	18.1	13.9	22.3	18.1	15	21.2	1.31	14.5%	47.8%
1.8067		2	12.5	6.15	18.9	12.5	12	13	0.5	5.66%	64.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-7309-4014	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-4052-3805	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	30.7%	0.0642	0.1971	0.1125	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.46	2.51	8.72	6	0.9607	CDF	Non-Significant Effect
		0.0071	0.992	2.51	8.72	6	0.4962	CDF	Non-Significant Effect
		0.0219	-0.403	2.51	8.72	6	0.9544	CDF	Non-Significant Effect
		0.0642	1.54	2.51	8.72	6	0.2617	CDF	Non-Significant Effect
		0.1971*	2.77	2.51	8.72	6	0.0293	CDF	Significant Effect
		0.5975*	4.77	2.51	8.72	6	0.0003	CDF	Significant Effect
		1.8067*	5.22	2.51	10.7	4	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1648.434	235.4905	7	9.74	<0.0001	Significant Effect
Error	531.845	24.17477	22			
Total	2180.279		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	14	18.5	0.0506	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.903	0.0398	Normal Distribution

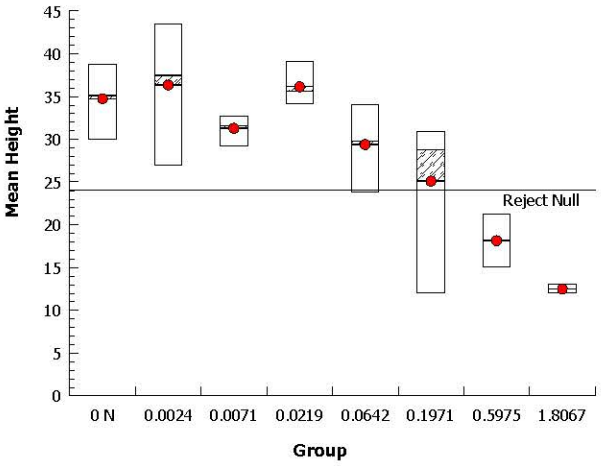
Mean Height Summary

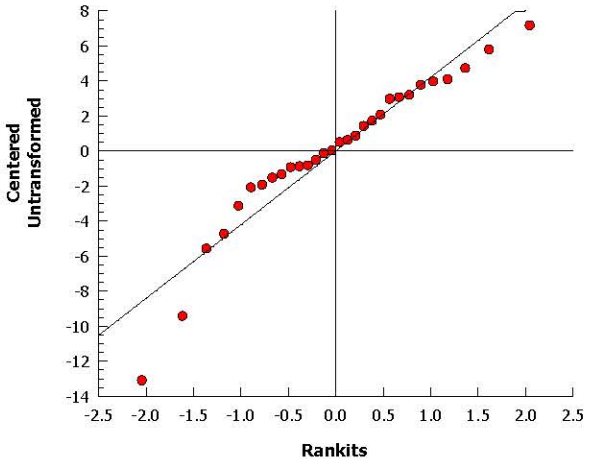
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	34.7	28.6	40.8	35.1	30	38.7	1.92	11.1%	0.0%
0.0024		4	36.3	24.8	47.8	37.4	26.9	43.5	3.62	19.9%	-4.61%
0.0071		4	31.3	28.9	33.7	31.6	29.2	32.7	0.749	4.79%	9.94%
0.0219		4	36.1	32.8	39.5	35.6	34.2	39.1	1.06	5.86%	-4.03%
0.0642		4	29.4	22.4	36.3	29.8	23.8	34.1	2.18	14.9%	15.4%
0.1971		4	25.1	11.1	39.1	28.8	12	30.9	4.4	35.1%	27.7%
0.5975		4	18.1	13.9	22.3	18.1	15	21.2	1.31	14.5%	47.8%
1.8067		2	12.5	6.15	18.9	12.5	12	13	0.5	5.66%	64.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-4052-3805	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-4518-3057	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.4%	0.0642	0.1971	0.1125	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-0.46	1.72	5.97	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.992	1.8	6.25	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.295	1.83	6.34	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.54	1.84	6.39	6	>0.05	CDF	Non-Significant Effect
		0.1971*	2.77	1.85	6.42	6	<0.05	CDF	Significant Effect
		0.5975*	4.77	1.85	6.44	6	<0.05	CDF	Significant Effect
		1.8067*	5.22	1.82	7.77	4	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1648.434	235.4905	7	9.74	<0.0001	Significant Effect
Error	531.845	24.17477	22			
Total	2180.279		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	14	18.5	0.0506	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.903	0.0398	Normal Distribution

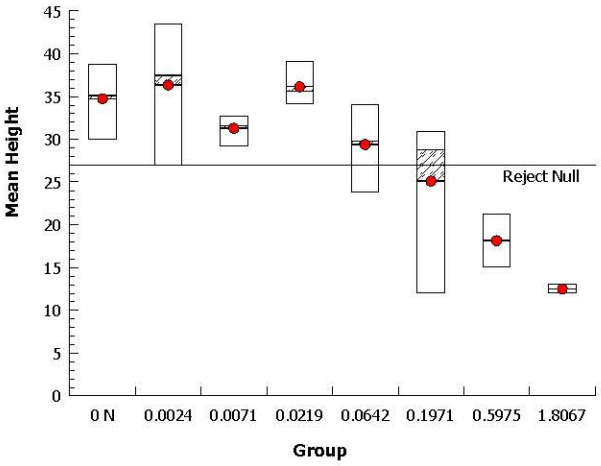
Mean Height Summary

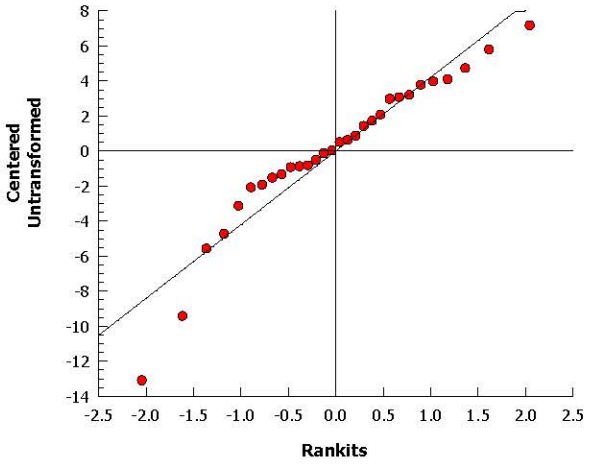
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	34.7	28.6	40.8	35.1	30	38.7	1.92	11.1%	0.0%
0.0024		4	36.3	24.8	47.8	37.4	26.9	43.5	3.62	19.9%	-4.61%
0.0071		4	31.3	28.9	33.7	31.6	29.2	32.7	0.749	4.79%	9.94%
0.0219		4	36.1	32.8	39.5	35.6	34.2	39.1	1.06	5.86%	-4.03%
0.0642		4	29.4	22.4	36.3	29.8	23.8	34.1	2.18	14.9%	15.4%
0.1971		4	25.1	11.1	39.1	28.8	12	30.9	4.4	35.1%	27.7%
0.5975		4	18.1	13.9	22.3	18.1	15	21.2	1.31	14.5%	47.8%
1.8067		2	12.5	6.15	18.9	12.5	12	13	0.5	5.66%	64.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-4518-3057	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	03-3788-9541	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	44.8%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-1.04	2.51	242	6	0.9927	CDF	Non-Significant Effect
		0.0071	0.13	2.51	242	6	0.8504	CDF	Non-Significant Effect
		0.0219	-0.934	2.51	242	6	0.9898	CDF	Non-Significant Effect
		0.0642	-0.0648	2.51	242	6	0.8992	CDF	Non-Significant Effect
		0.1971	1.25	2.51	242	6	0.3780	CDF	Non-Significant Effect
		0.5975	2.49	2.51	242	6	0.0517	CDF	Non-Significant Effect
		1.8067*	2.78	2.51	296	4	0.0287	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.31	2.91	0.4717	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	515487.2	73641.03	7	3.96	0.0060	Significant Effect
Error	408734.3	18578.83	22			
Total	924221.5		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.52	18.5	0.3766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.903	0.2707	Normal Distribution

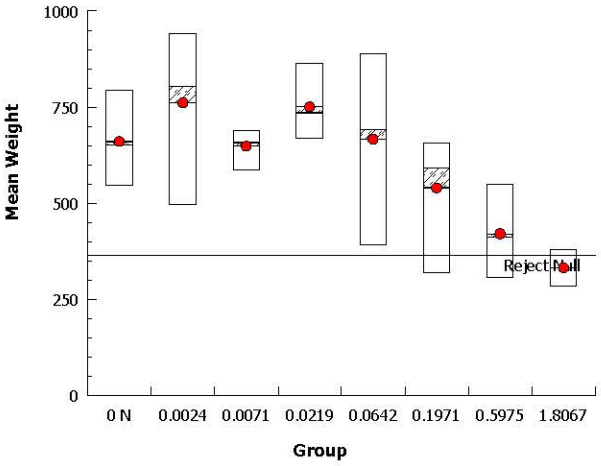
Mean Weight Summary

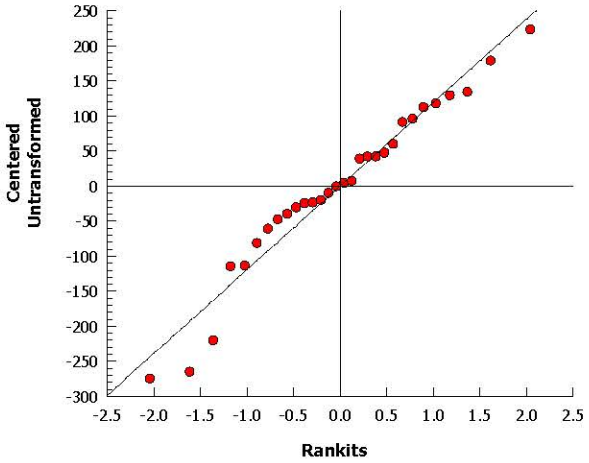
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	661	497	824	651	546	795	51.5	15.6%	0.0%
0.0024		4	761	454	1070	804	496	940	96.4	25.3%	-15.2%
0.0071		4	648	569	727	658	587	690	24.8	7.67%	1.89%
0.0219		4	751	620	881	735	669	863	41.1	10.9%	-13.6%
0.0642		4	667	329	1000	693	392	890	106	31.8%	-0.95%
0.1971		4	540	301	779	591	320	658	75.1	27.8%	18.2%
0.5975		4	421	261	580	413	307	550	50.2	23.9%	36.3%
1.8067		2	333	-271	936	333	285	380	47.5	20.2%	49.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	03-3788-9541	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-1422-7499	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	32.6%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-1.04	1.72	165	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.13	1.8	173	6	>0.05	CDF	Non-Significant Effect
		0.0219	-0.402	1.83	176	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.0648	1.84	177	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.25	1.85	178	6	>0.05	CDF	Non-Significant Effect
		0.5975*	2.49	1.85	178	6	<0.05	CDF	Significant Effect
		1.8067*	2.78	1.82	215	4	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.31	2.91	0.4717	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	515487.2	73641.03	7	3.96	0.0060	Significant Effect
Error	408734.3	18578.83	22			
Total	924221.5		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.52	18.5	0.3766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.903	0.2707	Normal Distribution

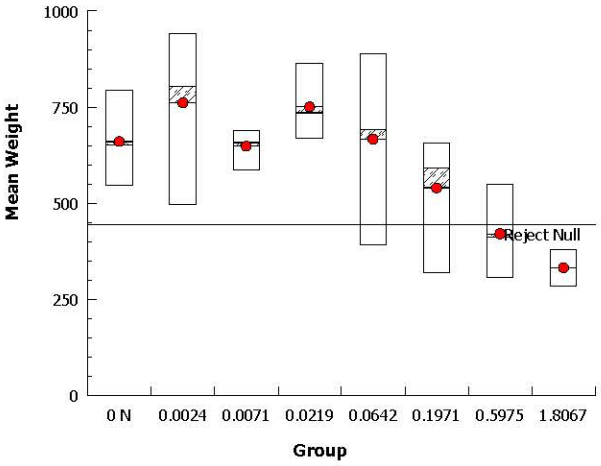
Mean Weight Summary

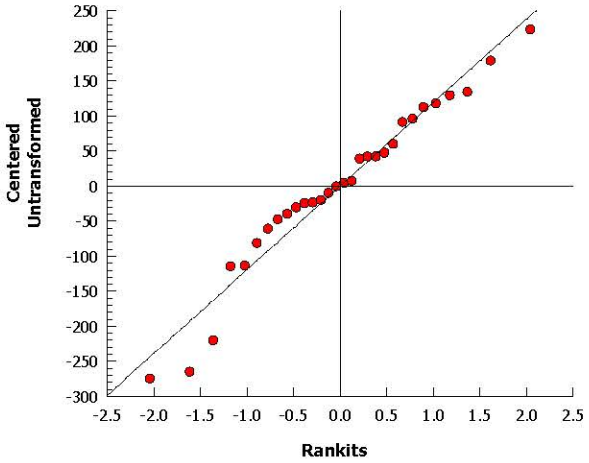
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	661	497	824	651	546	795	51.5	15.6%	0.0%
0.0024		4	761	454	1070	804	496	940	96.4	25.3%	-15.2%
0.0071		4	648	569	727	658	587	690	24.8	7.67%	1.89%
0.0219		4	751	620	881	735	669	863	41.1	10.9%	-13.6%
0.0642		4	667	329	1000	693	392	890	106	31.8%	-0.95%
0.1971		4	540	301	779	591	320	658	75.1	27.8%	18.2%
0.5975		4	421	261	580	413	307	550	50.2	23.9%	36.3%
1.8067		2	333	-271	936	333	285	380	47.5	20.2%	49.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-1422-7499	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-8084-1004	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	44.8%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-1.04	2.51	242	6	0.9927	CDF	Non-Significant Effect
		0.0071	0.13	2.51	242	6	0.8504	CDF	Non-Significant Effect
		0.0219	-0.934	2.51	242	6	0.9898	CDF	Non-Significant Effect
		0.0642	-0.0648	2.51	242	6	0.8992	CDF	Non-Significant Effect
		0.1971	1.25	2.51	242	6	0.3780	CDF	Non-Significant Effect
		0.5975	2.49	2.51	242	6	0.0517	CDF	Non-Significant Effect
		1.8067*	2.78	2.51	296	4	0.0287	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	515487.2	73641.03	7	3.96	0.0060	Significant Effect
Error	408734.3	18578.83	22			
Total	924221.5		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.52	18.5	0.3766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.903	0.2707	Normal Distribution

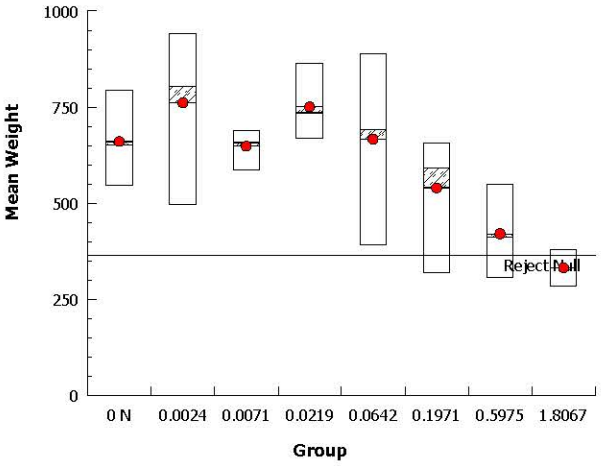
Mean Weight Summary

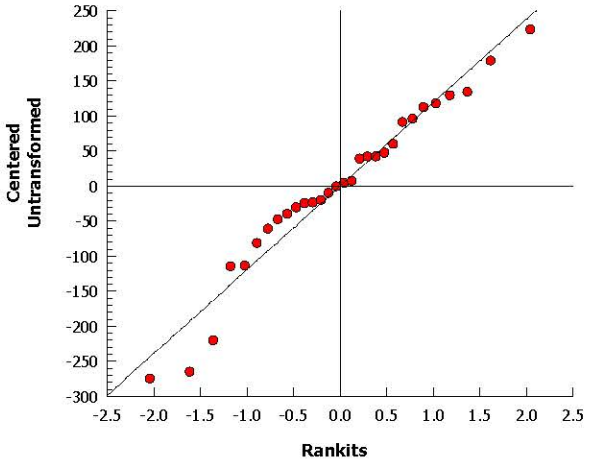
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	661	497	824	651	546	795	51.5	15.6%	0.0%
0.0024		4	761	454	1070	804	496	940	96.4	25.3%	-15.2%
0.0071		4	648	569	727	658	587	690	24.8	7.67%	1.89%
0.0219		4	751	620	881	735	669	863	41.1	10.9%	-13.6%
0.0642		4	667	329	1000	693	392	890	106	31.8%	-0.95%
0.1971		4	540	301	779	591	320	658	75.1	27.8%	18.2%
0.5975		4	421	261	580	413	307	550	50.2	23.9%	36.3%
1.8067		2	333	-271	936	333	285	380	47.5	20.2%	49.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-8084-1004	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-1041-0020	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	32.6%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	-1.04	1.72	165	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.13	1.8	173	6	>0.05	CDF	Non-Significant Effect
		0.0219	-0.402	1.83	176	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.0648	1.84	177	6	>0.05	CDF	Non-Significant Effect
		0.1971	1.25	1.85	178	6	>0.05	CDF	Non-Significant Effect
		0.5975*	2.49	1.85	178	6	<0.05	CDF	Significant Effect
		1.8067*	2.78	1.82	215	4	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	515487.2	73641.03	7	3.96	0.0060	Significant Effect
Error	408734.3	18578.83	22			
Total	924221.5		29			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	7.52	18.5	0.3766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.903	0.2707	Normal Distribution

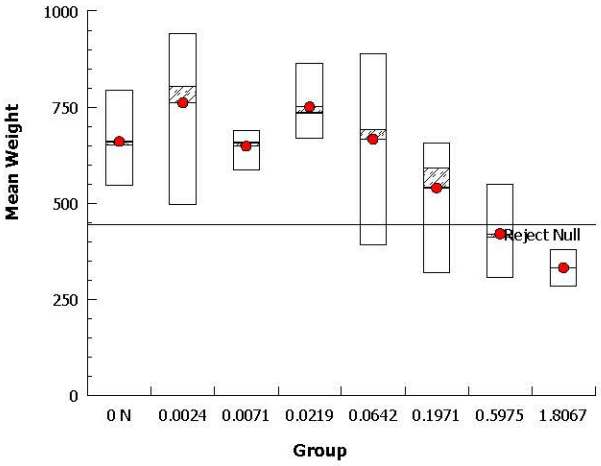
Mean Weight Summary

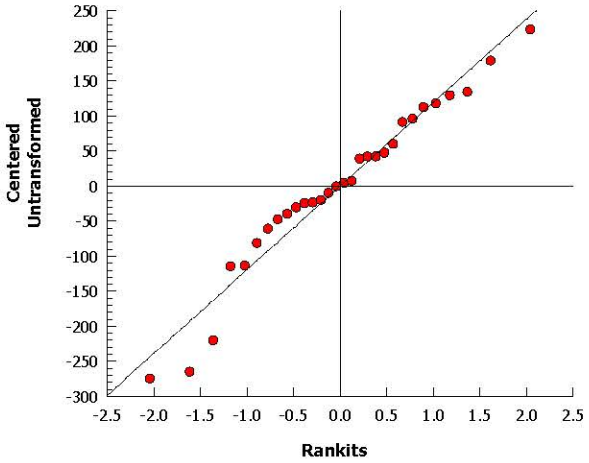
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	661	497	824	651	546	795	51.5	15.6%	0.0%
0.0024		4	761	454	1070	804	496	940	96.4	25.3%	-15.2%
0.0071		4	648	569	727	658	587	690	24.8	7.67%	1.89%
0.0219		4	751	620	881	735	669	863	41.1	10.9%	-13.6%
0.0642		4	667	329	1000	693	392	890	106	31.8%	-0.95%
0.1971		4	540	301	779	591	320	658	75.1	27.8%	18.2%
0.5975		4	421	261	580	413	307	550	50.2	23.9%	36.3%
1.8067		2	333	-271	936	333	285	380	47.5	20.2%	49.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-1041-0020	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-2734-9970	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	13.3%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.467	2.48	0.133	6	0.7209	CDF	Non-Significant Effect
		0.0071	0.934	2.48	0.133	6	0.5116	CDF	Non-Significant Effect
		0.0219	0.934	2.48	0.133	6	0.5116	CDF	Non-Significant Effect
		0.0642	1.4	2.48	0.133	6	0.3055	CDF	Non-Significant Effect
		0.1971	0.467	2.48	0.133	6	0.7209	CDF	Non-Significant Effect
		0.5975*	3.27	2.48	0.133	6	0.0090	CDF	Significant Effect
		1.8067*	8.87	2.48	0.133	6	<0.0001	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.63	2.94	0.1756	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6896875	0.09852678	7	17.2	<0.0001	Significant Effect
Error	0.1375	0.005729167	24			
Total	0.8271875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.32	3.5	0.2825	Equal Variances
Variances	Levene Equality of Variance	2.44	3.5	0.0486	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.959	0.908	0.2604	Normal Distribution

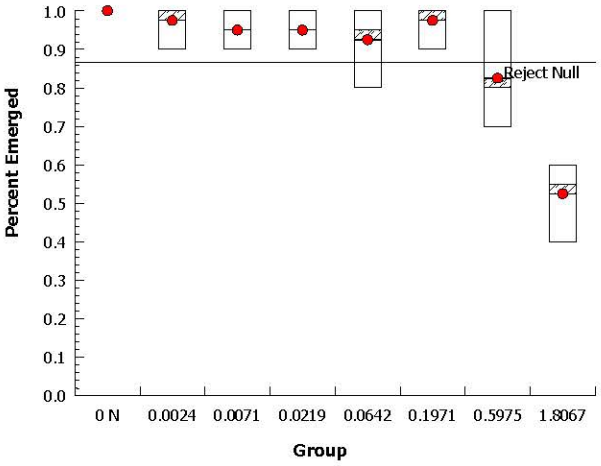
Percent Emerged Summary

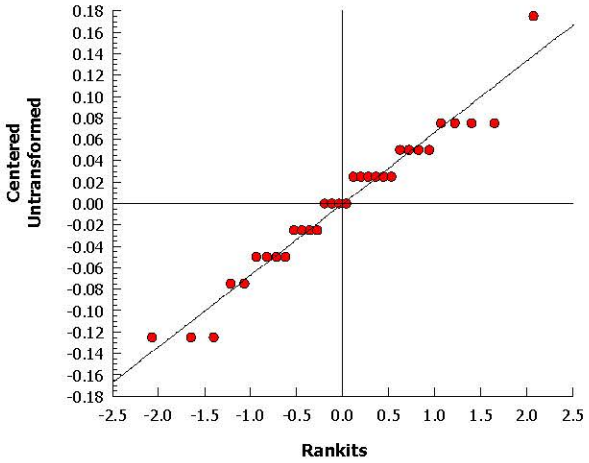
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	7.5%
0.1971		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.5975		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	17.5%
1.8067		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	47.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-2734-9970	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-7721-0627	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	9.88%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.467	1.71	0.092	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.934	1.79	0.096	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.934	1.82	0.097	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.4	1.83	0.098	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.934	1.84	0.098	6	>0.05	CDF	Non-Significant Effect
		0.5975*	3.27	1.84	0.099	6	<0.05	CDF	Significant Effect
		1.8067*	8.87	1.85	0.099	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.63	2.94	0.1756	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6896875	0.09852678	7	17.2	<0.0001	Significant Effect
Error	0.1375	0.005729167	24			
Total	0.8271875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.32	3.5	0.2825	Equal Variances
Variances	Levene Equality of Variance	2.44	3.5	0.0486	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.959	0.908	0.2604	Normal Distribution

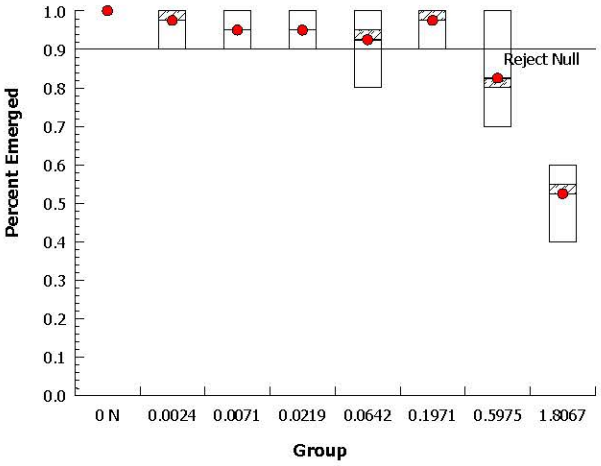
Percent Emerged Summary

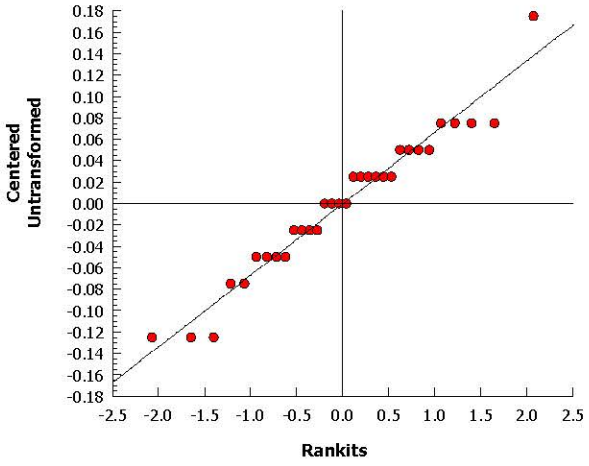
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	7.5%
0.1971		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.5975		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	17.5%
1.8067		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	47.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-7721-0627	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-1893-3783	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	13.3%	0.1971	0.5975	0.3432	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.467	2.48	0.133	6	0.7209	CDF	Non-Significant Effect
		0.0071	0.934	2.48	0.133	6	0.5116	CDF	Non-Significant Effect
		0.0219	0.934	2.48	0.133	6	0.5116	CDF	Non-Significant Effect
		0.0642	1.4	2.48	0.133	6	0.3055	CDF	Non-Significant Effect
		0.1971	0.467	2.48	0.133	6	0.7209	CDF	Non-Significant Effect
		0.5975*	3.27	2.48	0.133	6	0.0090	CDF	Significant Effect
		1.8067*	8.87	2.48	0.133	6	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6896875	0.09852678	7	17.2	<0.0001	Significant Effect
Error	0.1375	0.005729167	24			
Total	0.8271875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.32	3.5	0.2825	Equal Variances
Variances	Levene Equality of Variance	2.44	3.5	0.0486	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.959	0.908	0.2604	Normal Distribution

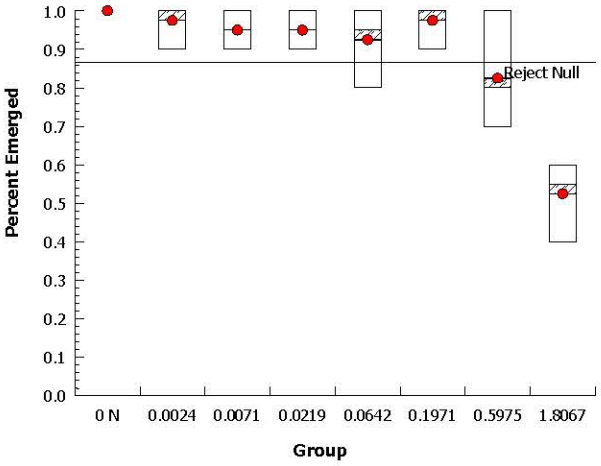
Percent Emerged Summary

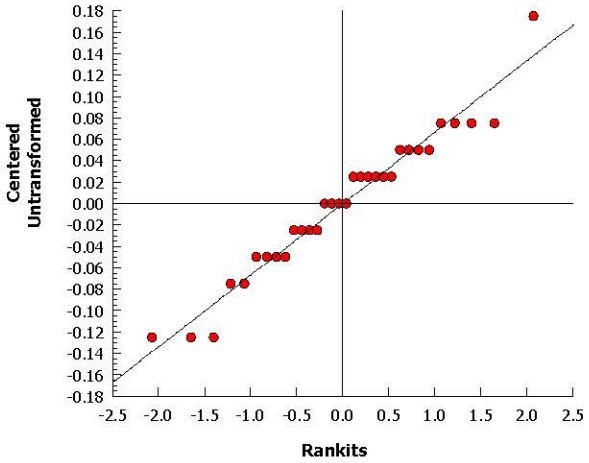
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	7.5%
0.1971		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.5975		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	17.5%
1.8067		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	47.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	07-1893-3783	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-9600-1283	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	9.88%	0.1971	0.5975	0.3432	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	0.467	1.71	0.092	6	>0.05	CDF	Non-Significant Effect
		0.0071	0.934	1.79	0.096	6	>0.05	CDF	Non-Significant Effect
		0.0219	0.934	1.82	0.097	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.4	1.83	0.098	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.934	1.84	0.098	6	>0.05	CDF	Non-Significant Effect
		0.5975*	3.27	1.84	0.099	6	<0.05	CDF	Significant Effect
		1.8067*	8.87	1.85	0.099	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.6896875	0.09852678	7	17.2	<0.0001	Significant Effect
Error	0.1375	0.005729167	24			
Total	0.8271875		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.32	3.5	0.2825	Equal Variances
Variances	Levene Equality of Variance	2.44	3.5	0.0486	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.959	0.908	0.2604	Normal Distribution

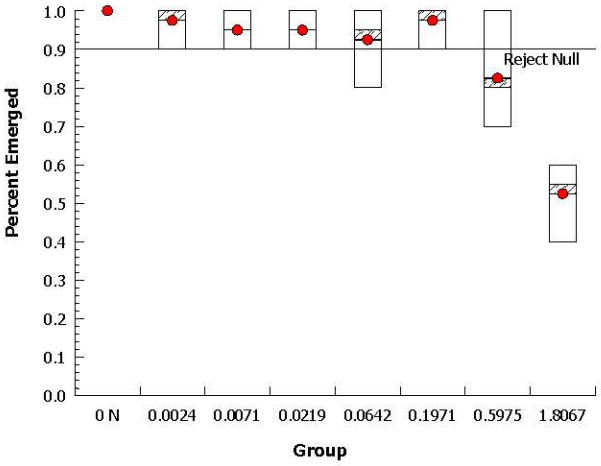
Percent Emerged Summary

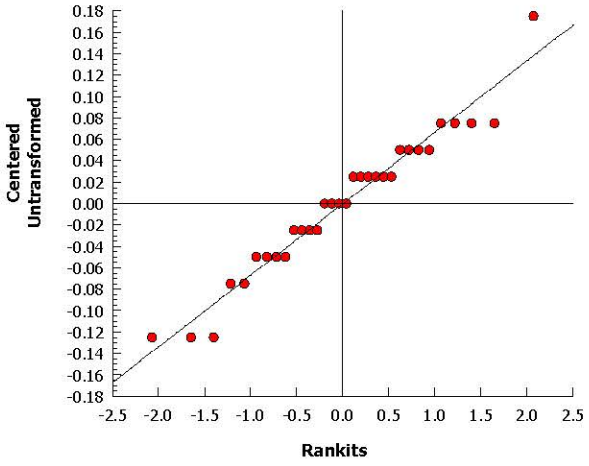
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	7.5%
0.1971		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.5975		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	17.5%
1.8067		4	0.525	0.373	0.677	0.55	0.4	0.6	0.0479	18.2%	47.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	12-9600-1283	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-3144-5836	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	17.9%	0.5975	1.8067	1.039	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	10	NA	1	6	0.5000	Exact	Non-Significant Effect
		0.0071	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.0219	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.0642	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.1971*	8	NA	1	5	<0.0001	Exact	Significant Effect
		0.5975	14	NA	1	6	0.0714	Exact	Non-Significant Effect
		1.8067*	16	NA	0	6	0.0143	Exact	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.780511	0.3972158	7	23.5	<0.0001	Significant Effect
Error	0.3891667	0.01692029	23			
Total	3.169677		30			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.31	3.59	0.2900	Equal Variances
Variances	Levene Equality of Variance	2.08	3.54	0.0870	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.886	0.906	0.0034	Non-normal Distribution

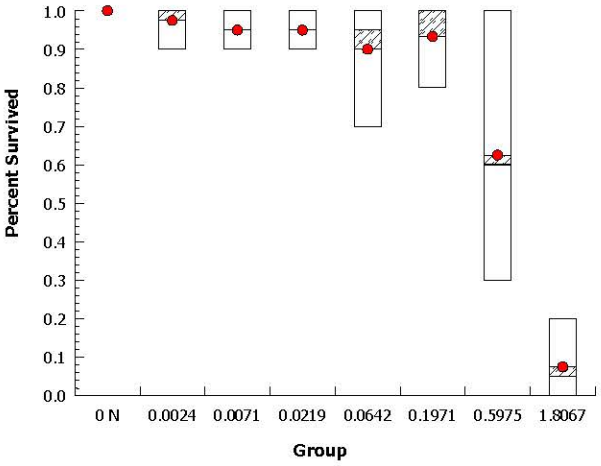
Percent Survived Summary

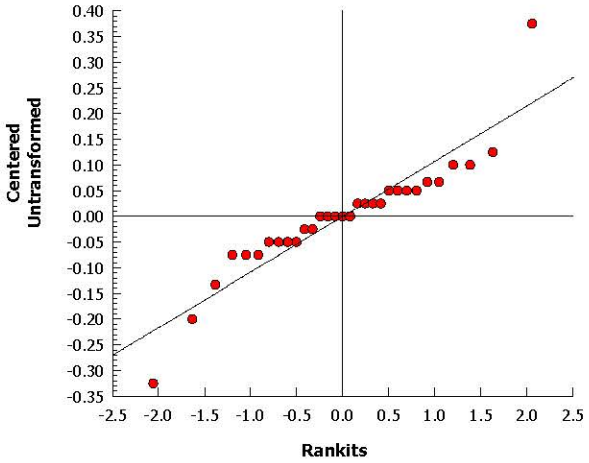
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	10.0%
0.1971		3	0.933	0.646	1	1	0.8	1	0.0667	12.4%	6.67%
0.5975		4	0.625	0.168	1	0.6	0.3	1	0.144	46.0%	37.5%
1.8067		4	0.075	0	0.227	0.05	0	0.2	0.0479	128.0%	92.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	05-3144-5836	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-0772-5992	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	26.8%	0.5975	1.8067	1.039	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	10	NA	1	6	0.5000	Exact	Non-Significant Effect
		0.0071	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.0219	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.0642	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.1971	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.5975	14	NA	1	6	0.0714	Exact	Non-Significant Effect
		1.8067*	16	NA	0	6	0.0143	Exact	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.65	2.94	0.0010	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.73	0.39	7	10.3	<0.0001	Significant Effect
Error	0.91	0.03791667	24			
Total	3.64		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.45	3.5	0.2312	Equal Variances
Variances	Levene Equality of Variance	3.41	3.5	0.0113	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.837	0.908	0.0002	Non-normal Distribution

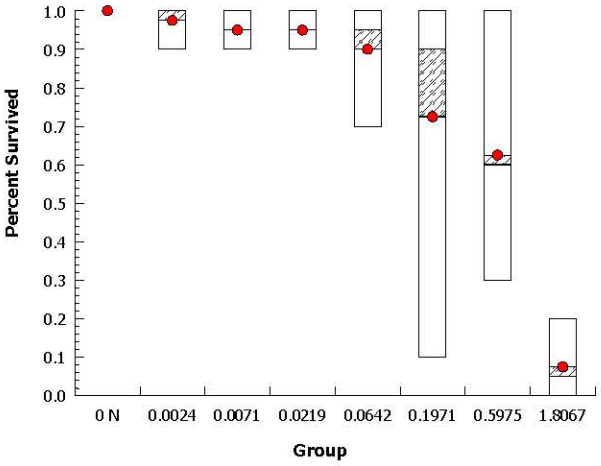
Percent Survived Summary

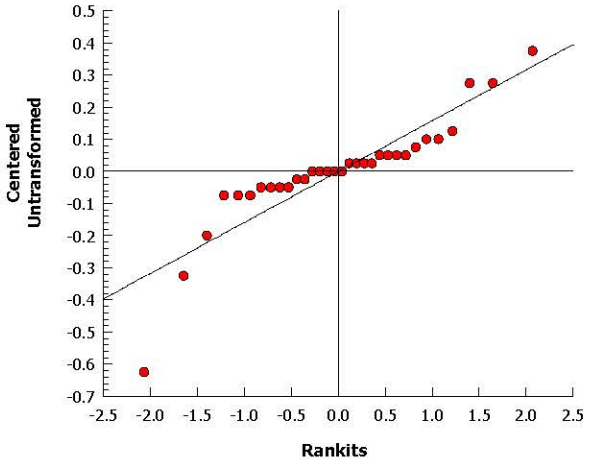
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	10.0%
0.1971		4	0.725	0.0452	1	0.9	0.1	1	0.214	58.9%	27.5%
0.5975		4	0.625	0.168	1	0.6	0.3	1	0.144	46.0%	37.5%
1.8067		4	0.075	0	0.227	0.05	0	0.2	0.0479	128.0%	92.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	08-0772-5992	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-0461-1623	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.1971	0.5975	0.3432	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	2.04	1.64	1	-2	0.0560	Asymp	Non-Significant Effect
		0.0071	1.68	1.64	2	-2	0.0560	Asymp	Non-Significant Effect
		0.0219	1.68	1.64	2	-2	0.0560	Asymp	Non-Significant Effect
		0.0642	1.82	1.64	2	-2	0.0560	Asymp	Non-Significant Effect
		0.1971	1.59	1.64	2	-2	0.0560	Asymp	Non-Significant Effect
		0.5975*	2.65	1.64	3	-2	0.0040	Asymp	Significant Effect
		1.8067*	4.07	1.64	4	-2	<0.0001	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.780511	0.3972158	7	23.5	<0.0001	Significant Effect
Error	0.3891667	0.01692029	23			
Total	3.169677		30			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.31	3.59	0.2900	Equal Variances
Variances	Levene Equality of Variance	2.08	3.54	0.0870	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.886	0.906	0.0034	Non-normal Distribution

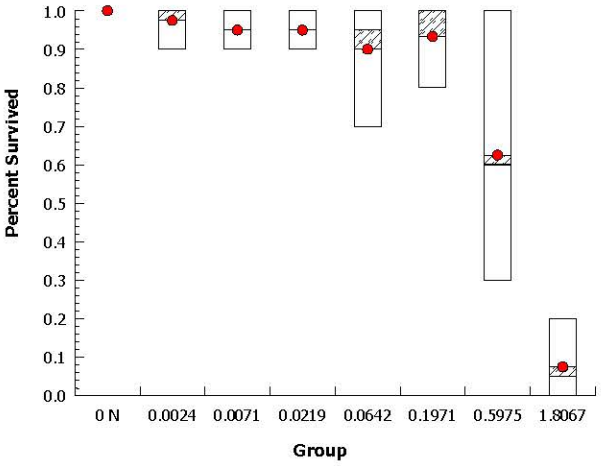
Percent Survived Summary

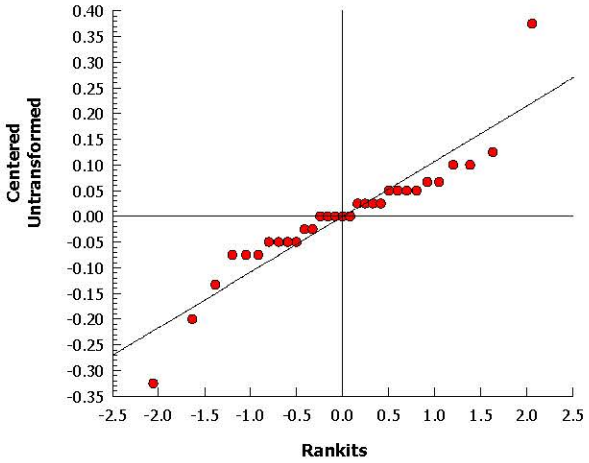
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	10.0%
0.1971		3	0.933	0.646	1	1	0.8	1	0.0667	12.4%	6.67%
0.5975		4	0.625	0.168	1	0.6	0.3	1	0.144	46.0%	37.5%
1.8067		4	0.075	0	0.227	0.05	0	0.2	0.0479	128.0%	92.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-0461-1623	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-2744-6319	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	<0.0024	0.0024	NA	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024*	2.04	1.64	1	-2	0.0206	Asymp	Significant Effect
		0.0071*	1.68	1.64	2	-2	0.0469	Asymp	Significant Effect
		0.0219*	1.68	1.64	2	-2	0.0463	Asymp	Significant Effect
		0.0642*	1.82	1.64	2	-2	0.0342	Asymp	Significant Effect
		0.1971*	2.05	1.64	2	-2	0.0204	Asymp	Significant Effect
		0.5975*	2.83	1.64	3	-2	0.0023	Asymp	Significant Effect
		1.8067*	4.15	1.64	5	-2	<0.0001	Asymp	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.65	2.94	0.0010	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.73	0.39	7	10.3	<0.0001	Significant Effect
Error	0.91	0.03791667	24			
Total	3.64		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.45	3.5	0.2312	Equal Variances
Variances	Levene Equality of Variance	3.41	3.5	0.0113	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.837	0.908	0.0002	Non-normal Distribution

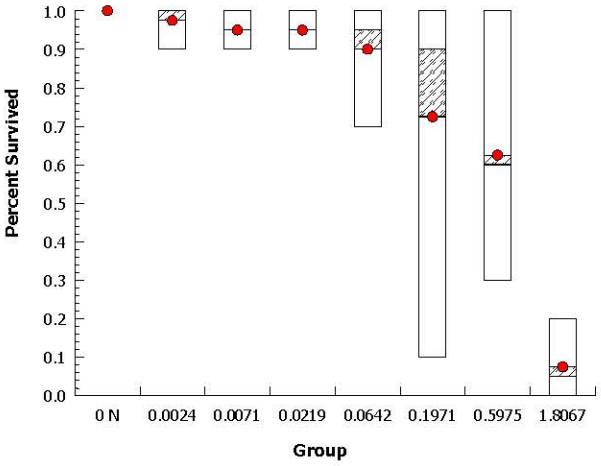
Percent Survived Summary

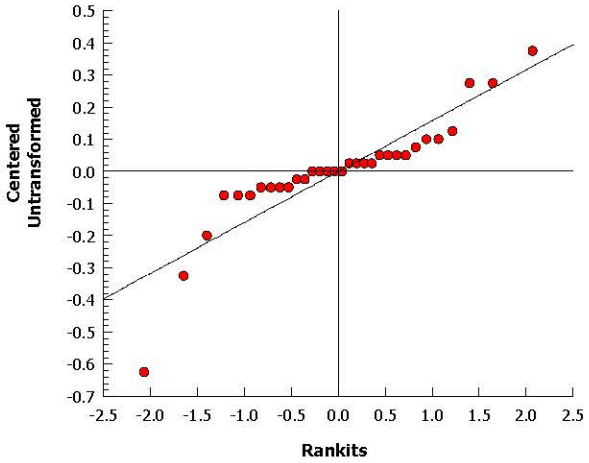
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	10.0%
0.1971		4	0.725	0.0452	1	0.9	0.1	1	0.214	58.9%	27.5%
0.5975		4	0.625	0.168	1	0.6	0.3	1	0.144	46.0%	37.5%
1.8067		4	0.075	0	0.227	0.05	0	0.2	0.0479	128.0%	92.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-2744-6319	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-2107-3641	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	26.8%	0.5975	1.8067	1.039	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024	10	NA	1	6	0.5000	Exact	Non-Significant Effect
		0.0071	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.0219	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.0642	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.1971	12	NA	1	6	0.2143	Exact	Non-Significant Effect
		0.5975	14	NA	1	6	0.0714	Exact	Non-Significant Effect
		1.8067*	16	NA	0	6	0.0143	Exact	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.73	0.39	7	10.3	<0.0001	Significant Effect
Error	0.91	0.03791667	24			
Total	3.64		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.45	3.5	0.2312	Equal Variances
Variances	Levene Equality of Variance	3.41	3.5	0.0113	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.837	0.908	0.0002	Non-normal Distribution

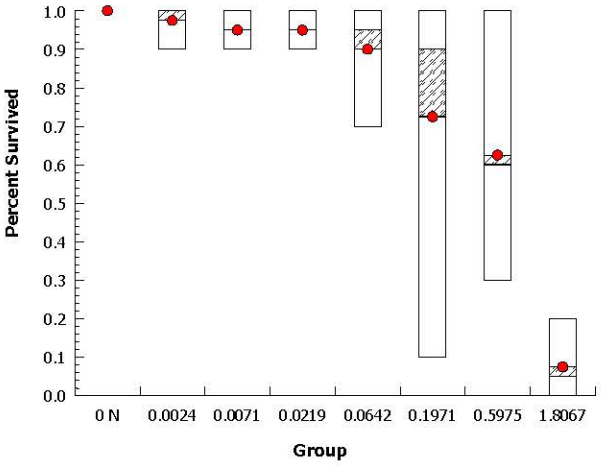
Percent Survived Summary

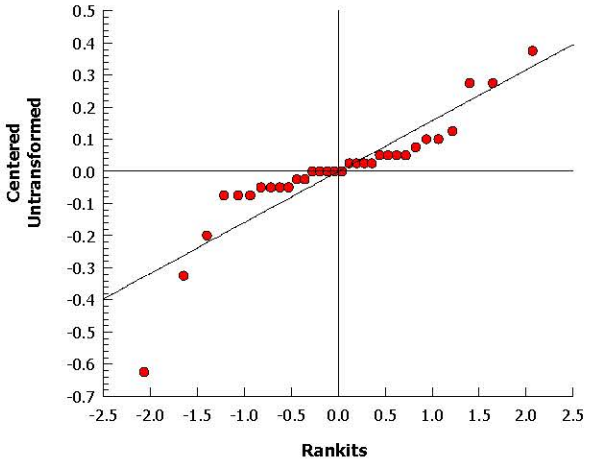
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	10.0%
0.1971		4	0.725	0.0452	1	0.9	0.1	1	0.214	58.9%	27.5%
0.5975		4	0.625	0.168	1	0.6	0.3	1	0.144	46.0%	37.5%
1.8067		4	0.075	0	0.227	0.05	0	0.2	0.0479	128.0%	92.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-2107-3641	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	06-4154-6677	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	<0.0024	0.0024	NA	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0024*	2.04	1.64	1	-2	0.0206	Asymp	Significant Effect
		0.0071*	1.68	1.64	2	-2	0.0469	Asymp	Significant Effect
		0.0219*	1.68	1.64	2	-2	0.0463	Asymp	Significant Effect
		0.0642*	1.82	1.64	2	-2	0.0342	Asymp	Significant Effect
		0.1971*	2.05	1.64	2	-2	0.0204	Asymp	Significant Effect
		0.5975*	2.83	1.64	3	-2	0.0023	Asymp	Significant Effect
		1.8067*	4.15	1.64	5	-2	<0.0001	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.73	0.39	7	10.3	<0.0001	Significant Effect
Error	0.91	0.03791667	24			
Total	3.64		31			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.45	3.5	0.2312	Equal Variances
Variances	Levene Equality of Variance	3.41	3.5	0.0113	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.837	0.908	0.0002	Non-normal Distribution

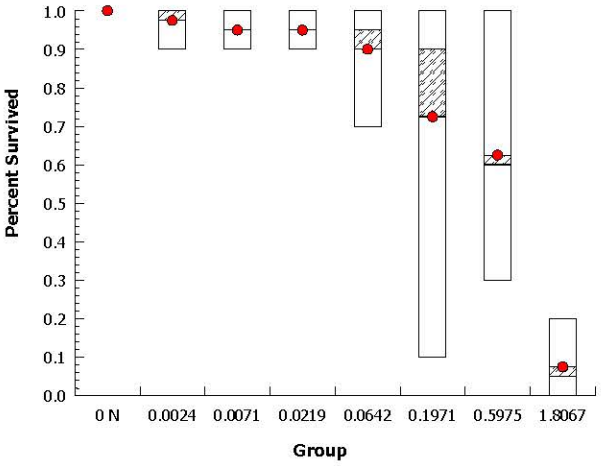
Percent Survived Summary

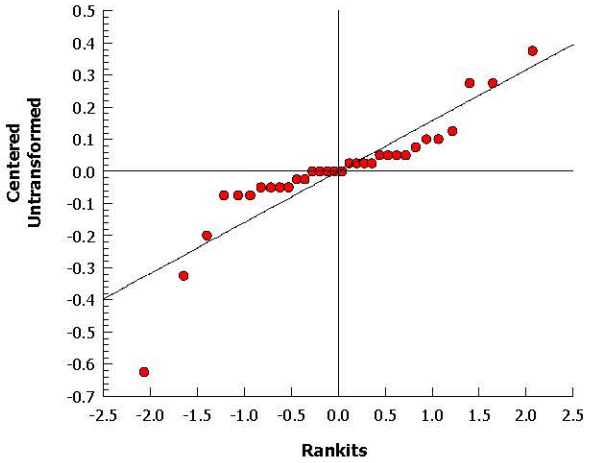
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
0.0024		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	2.5%
0.0071		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0219		4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	5.0%
0.0642		4	0.9	0.675	1	0.95	0.7	1	0.0707	15.7%	10.0%
0.1971		4	0.725	0.0452	1	0.9	0.1	1	0.214	58.9%	27.5%
0.5975		4	0.625	0.168	1	0.6	0.3	1	0.144	46.0%	37.5%
1.8067		4	0.075	0	0.227	0.05	0	0.2	0.0479	128.0%	92.5%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	06-4154-6677	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-2160-1001	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	1E-07	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
25	-77.8	163	166	0.292	0.457	0.735	1.23	2.64	0.3290	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.348	0.0626	0.591
EC10	0.509	0.147	0.778
EC25	0.964	0.549	1.37
EC50	1.96	1.38	4.44

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0295	0.012	0.00589	0.0531	2.45	0.0209	Significant Parameter
Slope	2.19	0.635	0.946	3.43	3.45	0.0018	Significant Parameter
Intercept	-0.64	0.172	-0.977	-0.303	-3.72	0.0009	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	64.75822	64.75822	1	85.1	<0.0001	Significant
Lack of Fit	4.487179	0.897436	5	1.23	0.3286	Non-Significant
Pure Error	16.82614	0.731571	23			
Residual	21.31332	0.76119	28			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	21.3	41.3	0.8120	Non-Significant Heterogenity
	Likelihood Ratio GOF	23.6	41.3	0.7009	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.05	2.46	0.4256	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.774	0.932	<0.0001	Non-normal Distribution
	Anderson-Darling A2 Normality	3.73	2.49	<0.0001	Non-normal Distribution

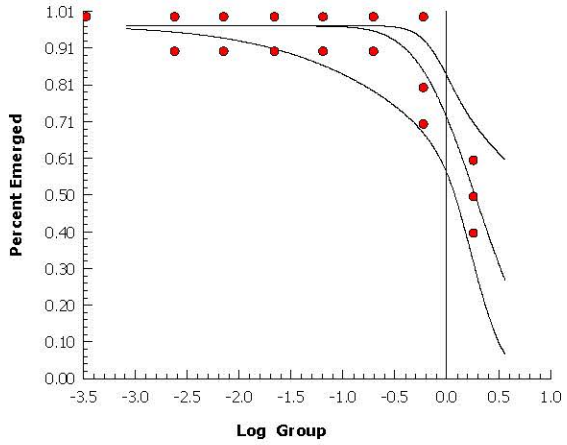
Percent Emerged Summary

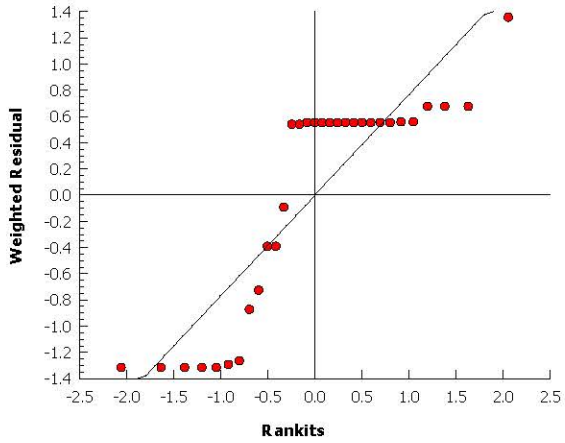
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		3	0.967	0.9	1	0.0333	0.0577	5.97%	3.33%	29	30
0.1971		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.5975		4	0.825	0.7	1	0.0629	0.126	15.3%	17.5%	33	40
1.8067		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	47.5%	21	40

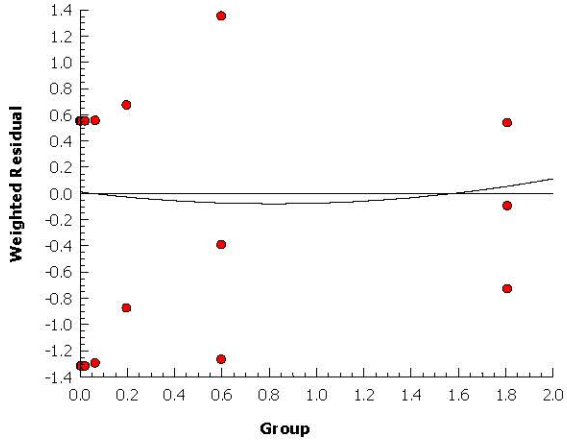
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

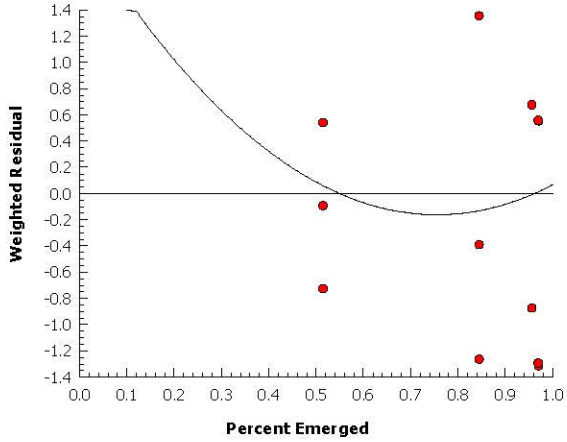
Analysis ID:	10-2160-1001	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-9577-1461	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	1E-07	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
30	-84.9	177	180	0.298	0.451	0.673	1.86	2.62	0.1400	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.36	0.0536	0.619
EC10	0.525	0.132	0.808
EC25	0.986	0.536	1.41
EC50	1.98	1.39	4.76

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0369	0.013	0.0114	0.0625	2.83	0.0083	Significant Parameter
Slope	2.22	0.675	0.896	3.54	3.29	0.0027	Significant Parameter
Intercept	-0.661	0.179	-1.01	-0.31	-3.69	0.0009	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	58.95719	58.95719	1	65.9	<0.0001	Significant
Lack of Fit	7.237968	1.447594	5	1.86	0.1399	Non-Significant
Pure Error	18.72114	0.780047	24			
Residual	25.9591	0.895142	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	26	42.6	0.6277	Non-Significant Heterogenity
	Likelihood Ratio GOF	27.7	42.6	0.5323	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.96	2.94	0.0449	Outlier Detected
Variances	Mod Levene Equality of Variance	1.68	2.42	0.1612	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.812	0.934	<0.0001	Non-normal Distribution
	Anderson-Darling A2 Normality	3.07	2.49	<0.0001	Non-normal Distribution

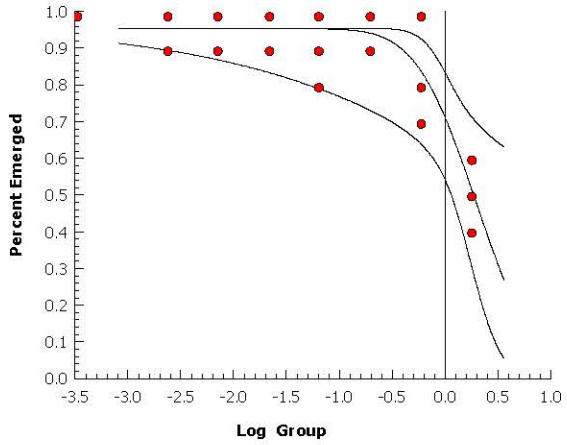
Percent Emerged Summary

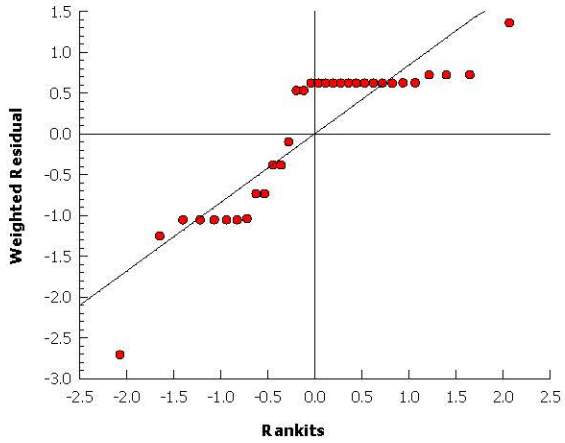
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.925	0.8	1	0.0479	0.0957	10.4%	7.5%	37	40
0.1971		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.5975		4	0.825	0.7	1	0.0629	0.126	15.3%	17.5%	33	40
1.8067		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	47.5%	21	40

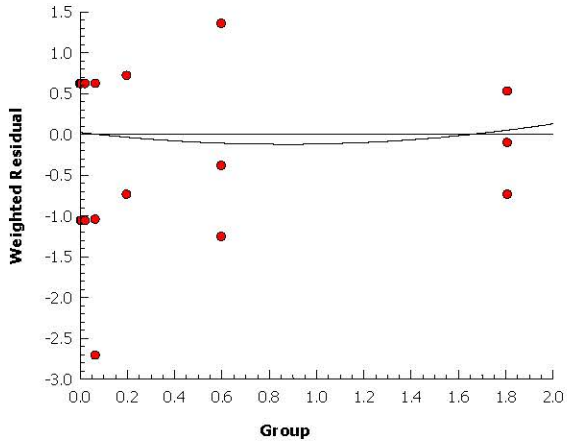
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

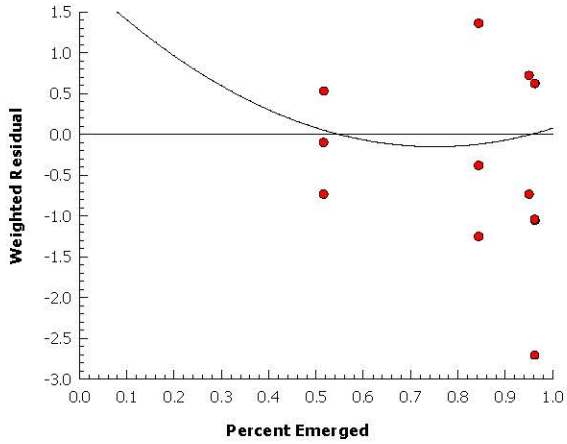
Analysis ID:	05-9577-1461	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-8178-1147	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	1E-07	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
30	-84.9	177	180	0.298	0.451	0.673	1.86	2.62	0.1400	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.36	0.0536	0.619
EC10	0.525	0.132	0.808
EC25	0.986	0.536	1.41
EC50	1.98	1.39	4.76

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0369	0.013	0.0114	0.0625	2.83	0.0083	Significant Parameter
Slope	2.22	0.675	0.896	3.54	3.29	0.0027	Significant Parameter
Intercept	-0.661	0.179	-1.01	-0.31	-3.69	0.0009	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	58.95719	58.95719	1	65.9	<0.0001	Significant
Lack of Fit	7.237968	1.447594	5	1.86	0.1399	Non-Significant
Pure Error	18.72114	0.780047	24			
Residual	25.9591	0.895142	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	26	42.6	0.6277	Non-Significant Heterogenity
	Likelihood Ratio GOF	27.7	42.6	0.5323	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.68	2.42	0.1612	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.812	0.934	<0.0001	Non-normal Distribution
	Anderson-Darling A2 Normality	3.07	2.49	<0.0001	Non-normal Distribution

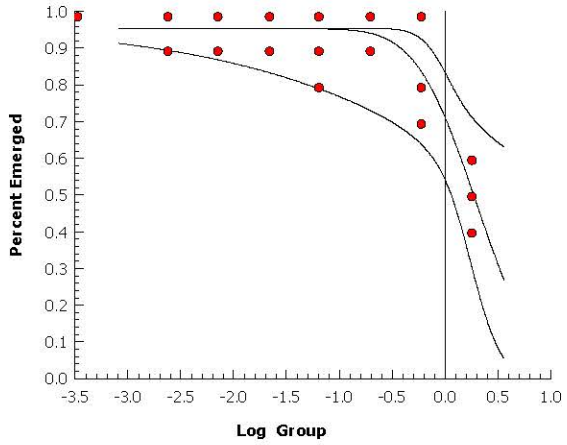
Percent Emerged Summary

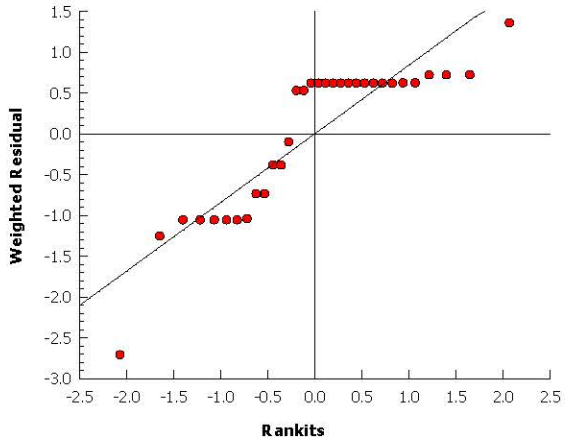
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.925	0.8	1	0.0479	0.0957	10.4%	7.5%	37	40
0.1971		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.5975		4	0.825	0.7	1	0.0629	0.126	15.3%	17.5%	33	40
1.8067		4	0.525	0.4	0.6	0.0479	0.0957	18.2%	47.5%	21	40

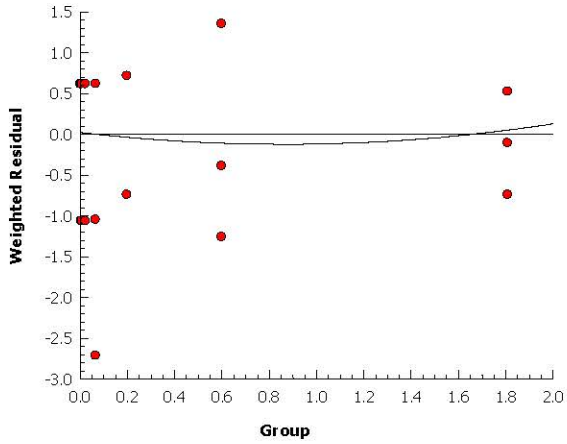
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

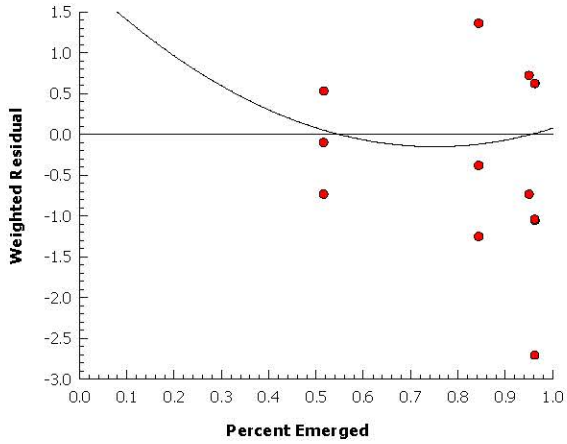
Analysis ID:	08-8178-1147	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-0808-3221	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	1E-07	Yes	No	Yes	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
16	-81.2	169	173	-0.12	0.269	0.758	1.62	2.64	0.1960	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.274	0.0825	0.428
EC10	0.343	0.127	0.505
EC25	0.5	0.257	0.678
EC50	0.758	0.52	1.01

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0457	0.0179	0.00899	0.0824	2.55	0.0165	Significant Parameter
Slope	3.72	0.901	1.87	5.56	4.13	0.0003	Significant Parameter
Intercept	0.447	0.229	-0.0223	0.915	1.95	0.0611	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	151.4808	151.4808	1	95.8	<0.0001	Significant
Lack of Fit	11.50502	2.301004	5	1.62	0.1958	Non-Significant
Pure Error	32.76379	1.424513	23			
Residual	44.26881	1.581029	28			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	44.3	41.3	0.0261	Significant Heterogenity
	Likelihood Ratio GOF	45.5	41.3	0.0197	Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.08	2.46	0.4104	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.862	0.932	0.0009	Non-normal Distribution
	Anderson-Darling A2 Normality	2.1	2.49	<0.0001	Non-normal Distribution

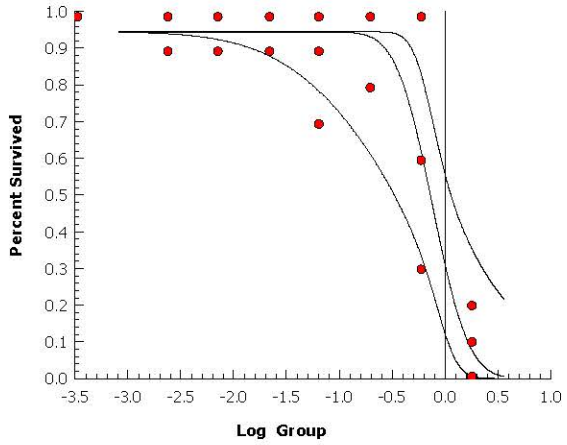
Percent Survived Summary

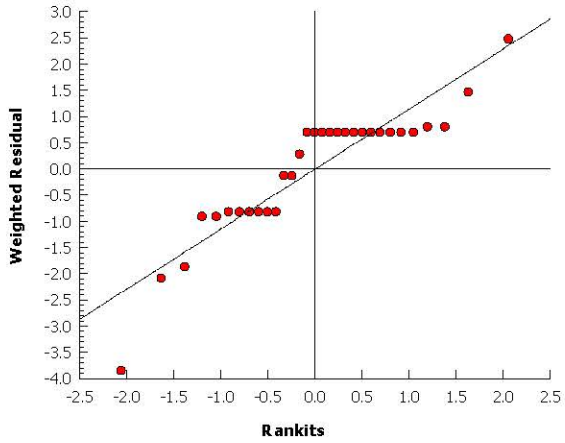
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.9	0.7	1	0.0707	0.141	15.7%	10.0%	36	40
0.1971		3	0.933	0.8	1	0.0667	0.115	12.4%	6.67%	28	30
0.5975		4	0.625	0.3	1	0.144	0.287	46.0%	37.5%	25	40
1.8067		4	0.075	0	0.2	0.0479	0.0957	128.0%	92.5%	3	40

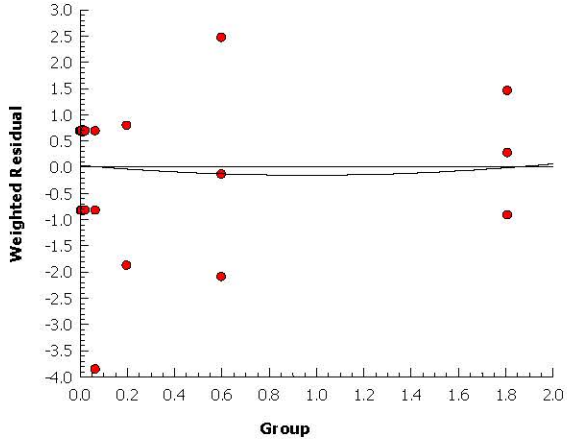
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

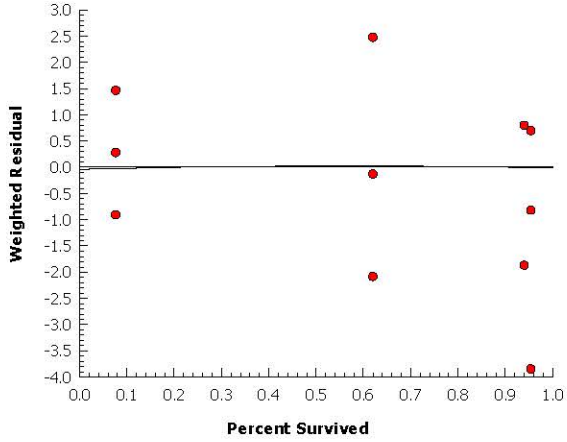
Analysis ID:	20-0808-3221	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-4958-5432	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	1E-07	Yes	No	Yes	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
23	-99.9	207	210	-0.263	0.537	0.643	1.18	2.62	0.3460	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0714	0.00733	0.161
EC10	0.112	0.0179	0.224
EC25	0.237	0.0758	0.406
EC50	0.546	0.299	0.989

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0325	0.0225	-0.0134	0.0785	1.45	0.1582	Non-Significant Parameter
Slope	1.86	0.467	0.906	2.82	3.98	0.0004	Significant Parameter
Intercept	0.489	0.246	-0.0134	0.991	1.99	0.0560	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	138.9974	138.9974	1	57.8	<0.0001	Significant
Lack of Fit	13.80924	2.761847	5	1.18	0.3458	Non-Significant
Pure Error	55.9389	2.330787	24			
Residual	69.74813	2.405108	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	69.7	42.6	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	76.3	42.6	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	3.35	2.94	0.0065	Outlier Detected
Variances	Mod Levene Equality of Variance	1.07	2.42	0.4136	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.881	0.934	0.0021	Non-normal Distribution
	Anderson-Darling A2 Normality	1.67	2.49	<0.0001	Non-normal Distribution

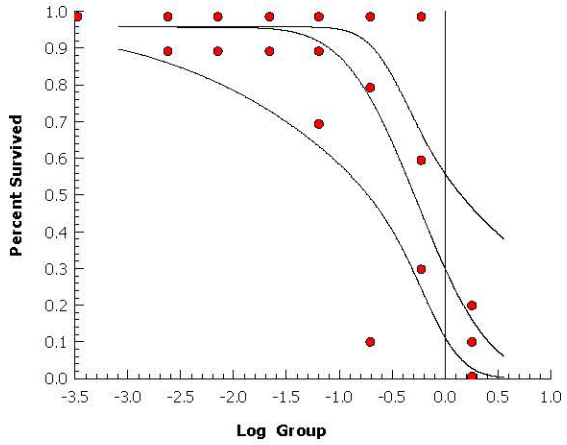
Percent Survived Summary

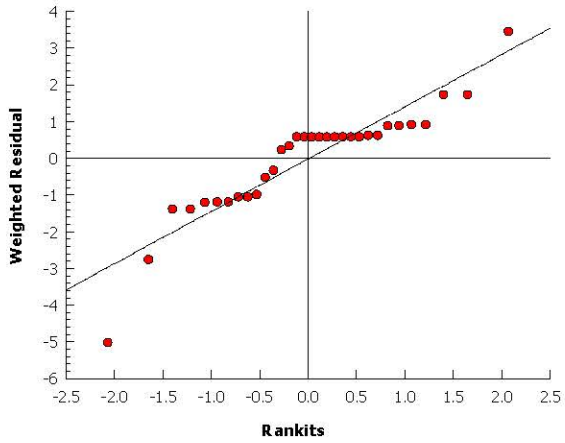
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.9	0.7	1	0.0707	0.141	15.7%	10.0%	36	40
0.1971		4	0.725	0.1	1	0.214	0.427	58.9%	27.5%	29	40
0.5975		4	0.625	0.3	1	0.144	0.287	46.0%	37.5%	25	40
1.8067		4	0.075	0	0.2	0.0479	0.0957	128.0%	92.5%	3	40

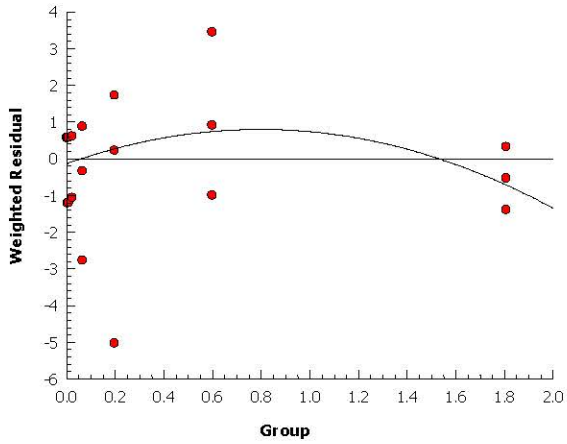
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

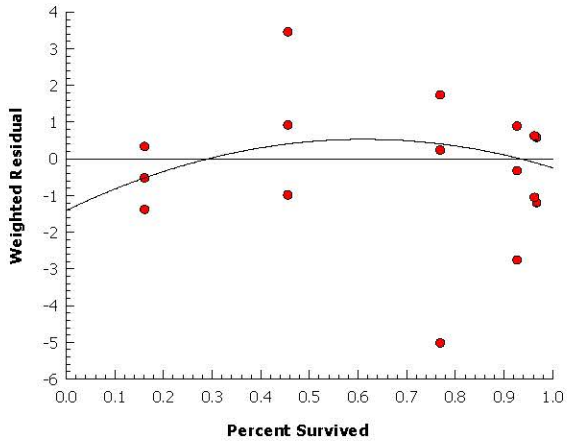
Analysis ID:	11-4958-5432	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-4356-1869	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	1E-07	Yes	No	Yes	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
23	-99.9	207	210	-0.263	0.537	0.643	1.18	2.62	0.3460	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.0714	0.00733	0.161
EC10	0.112	0.0179	0.224
EC25	0.237	0.0758	0.406
EC50	0.546	0.299	0.989

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0325	0.0225	-0.0134	0.0785	1.45	0.1582	Non-Significant Parameter
Slope	1.86	0.467	0.906	2.82	3.98	0.0004	Significant Parameter
Intercept	0.489	0.246	-0.0134	0.991	1.99	0.0560	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	138.9974	138.9974	1	57.8	<0.0001	Significant
Lack of Fit	13.80924	2.761847	5	1.18	0.3458	Non-Significant
Pure Error	55.9389	2.330787	24			
Residual	69.74813	2.405108	29			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	69.7	42.6	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	76.3	42.6	<0.0001	Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.07	2.42	0.4136	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.881	0.934	0.0021	Non-normal Distribution
	Anderson-Darling A2 Normality	1.67	2.49	<0.0001	Non-normal Distribution

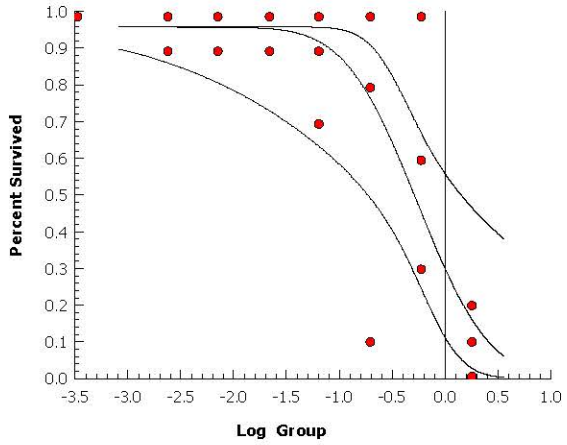
Percent Survived Summary

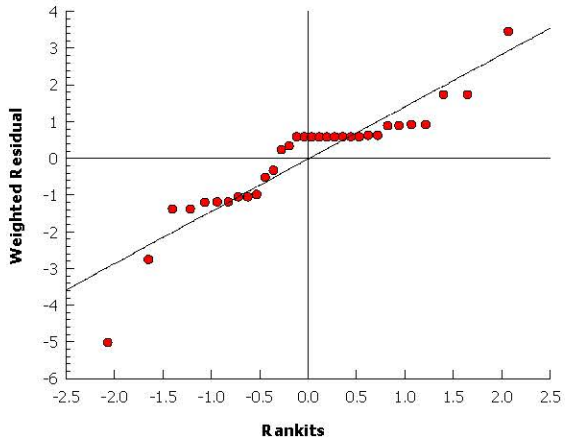
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.9	0.7	1	0.0707	0.141	15.7%	10.0%	36	40
0.1971		4	0.725	0.1	1	0.214	0.427	58.9%	27.5%	29	40
0.5975		4	0.625	0.3	1	0.144	0.287	46.0%	37.5%	25	40
1.8067		4	0.075	0	0.2	0.0479	0.0957	128.0%	92.5%	3	40

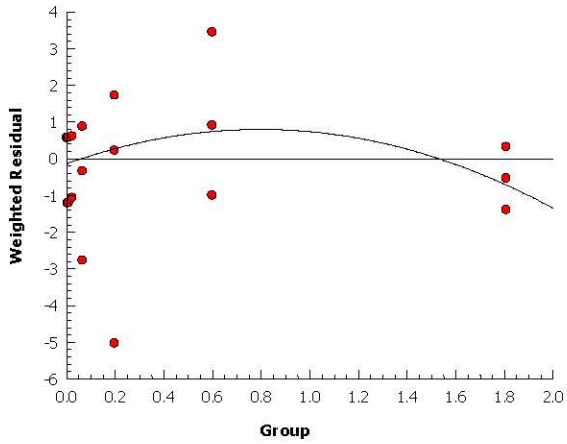
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

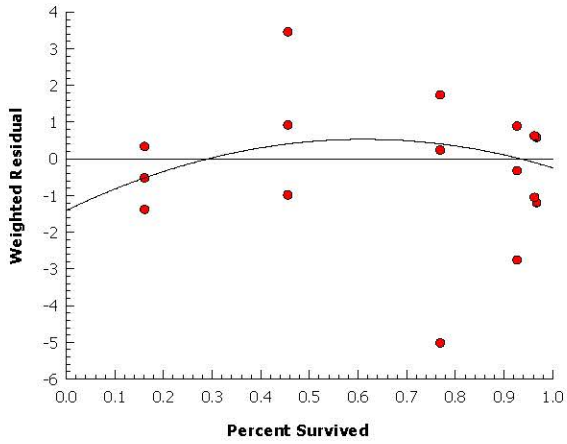
Analysis ID:	17-4356-1869	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-5829-7149	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
5	2070	-4140	-4140	0.7701	Yes	1.86	2.68	0.1445	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0336	N/A	0.0719
IC10	0.0678	0.0227	0.125
IC25	0.219	0.133	0.336
IC50	0.809	0.592	1.11

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	34.7	1.21	32.3	37.1	28.7	<0.0001	Significant Parameter
C	1.94	0.356	1.24	2.63	5.43	<0.0001	Significant Parameter
D	0.809	0.149	0.516	1.1	5.42	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	50.08235	50.08235	1	95.8	<0.0001	Significant
Lack of Fit	4.173859	0.834772	5	1.86	0.1445	Non-Significant
Pure Error	9.422345	0.448683	21			
Residual	13.5962	0.522931	26			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	13.6	38.9	0.9779	Non-Significant Heterogenity
	Likelihood Ratio GOF	13.8	38.9	0.9758	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	10.3	14.1	0.1700	Equal Variances
	Mod Levene Equality of Variance	1.97	2.51	0.1111	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.982	0.928	0.8810	Normal Distribution
	Anderson-Darling A2 Normality	0.239	2.49	0.8081	Normal Distribution

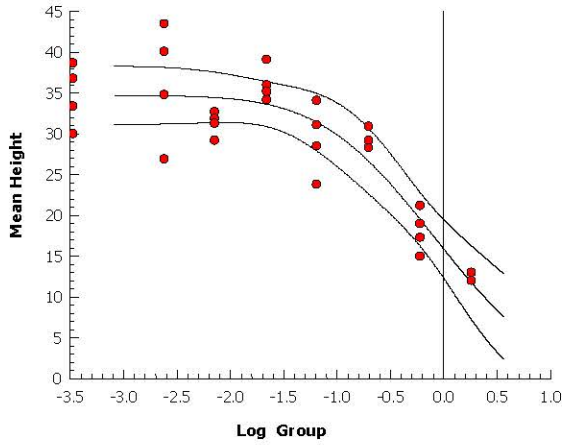
Mean Height Summary

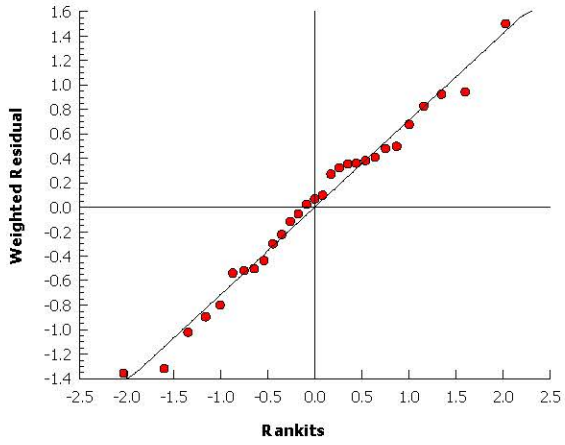
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	34.7	30	38.7	1.92	3.84	11.1%	0.0%
0.0024		4	36.3	26.9	43.5	3.62	7.23	19.9%	-4.61%
0.0071		4	31.3	29.2	32.7	0.749	1.5	4.79%	9.94%
0.0219		4	36.1	34.2	39.1	1.06	2.12	5.86%	-4.03%
0.0642		4	29.4	23.8	34.1	2.18	4.36	14.9%	15.4%
0.1971		3	29.5	28.3	30.9	0.762	1.32	4.48%	15.1%
0.5975		4	18.1	15	21.2	1.31	2.62	14.5%	47.8%
1.8067		2	12.5	12	13	0.5	0.707	5.66%	64.0%

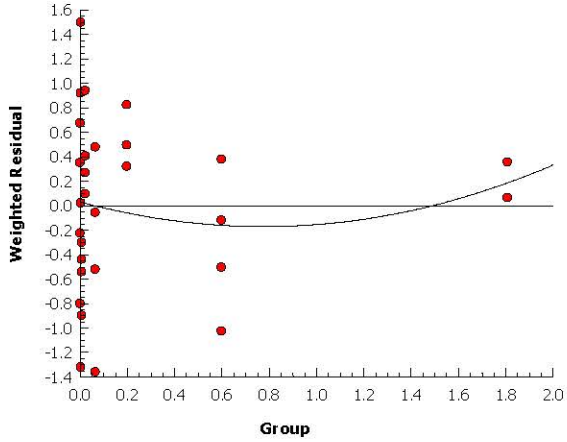
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

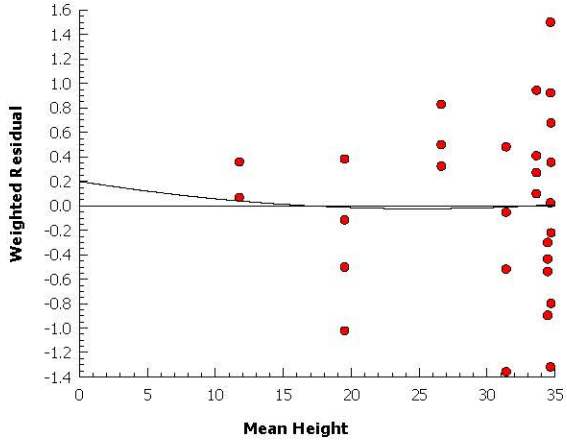
Analysis ID:	05-5829-7149	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-9339-3542	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	2090	-4170	-4160	0.6943	Yes	0.678	2.66	0.6445	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0172	N/A	0.0468
IC10	0.0392	0.00891	0.0847
IC25	0.154	0.0814	0.264
IC50	0.709	0.469	1.07

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	35.2	1.69	31.8	38.5	20.8	<0.0001	Significant Parameter
C	2.26	0.491	1.3	3.22	4.6	<0.0001	Significant Parameter
D	0.709	0.181	0.354	1.06	3.91	0.0006	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	53.8311	53.8311	1	67.9	<0.0001	Significant
Lack of Fit	2.861118	0.572224	5	0.678	0.6445	Non-Significant
Pure Error	18.559	0.843591	22			
Residual	21.42012	0.793338	27			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	21.4	40.1	0.7662	Non-Significant Heterogenity
	Likelihood Ratio GOF	23	40.1	0.6831	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	3.04	2.91	0.0266	Outlier Detected
Variances	Bartlett Equality of Variance	13.9	14.1	0.0526	Equal Variances
	Mod Levene Equality of Variance	0.824	2.46	0.5780	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.953	0.93	0.1999	Normal Distribution
	Anderson-Darling A2 Normality	0.389	2.49	0.3886	Normal Distribution

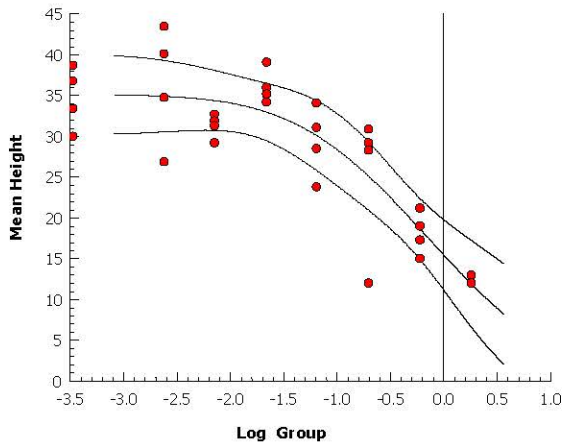
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

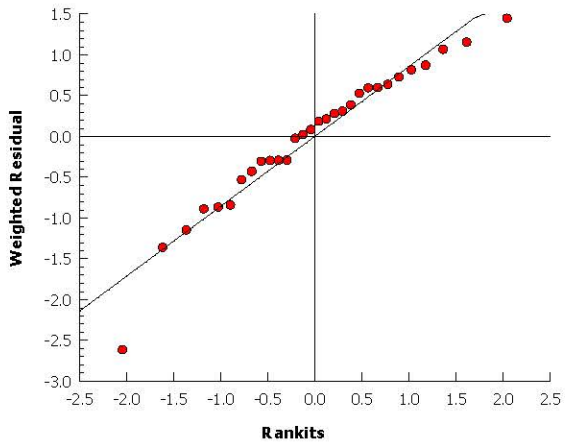
Analysis ID:	17-9339-3542	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

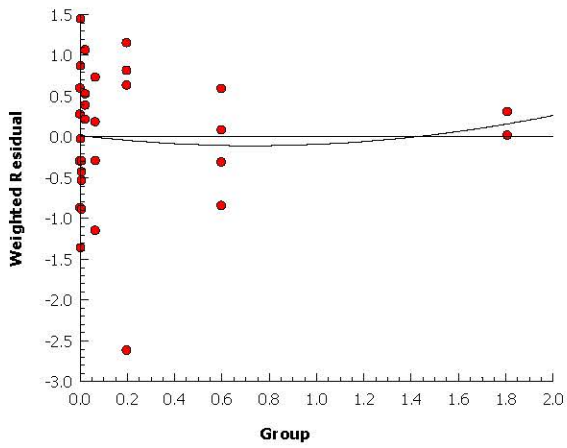
Mean Height Summary

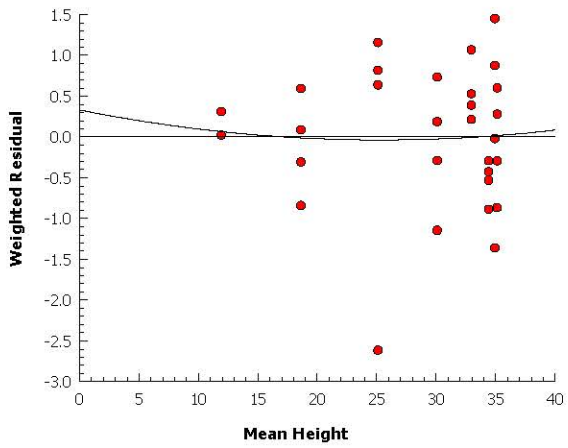
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	34.7	30	38.7	1.92	3.84	11.1%	0.0%
0.0024		4	36.3	26.9	43.5	3.62	7.23	19.9%	-4.61%
0.0071		4	31.3	29.2	32.7	0.749	1.5	4.79%	9.94%
0.0219		4	36.1	34.2	39.1	1.06	2.12	5.86%	-4.03%
0.0642		4	29.4	23.8	34.1	2.18	4.36	14.9%	15.4%
0.1971		4	25.1	12	30.9	4.4	8.8	35.1%	27.7%
0.5975		4	18.1	15	21.2	1.31	2.62	14.5%	47.8%
1.8067		2	12.5	12	13	0.5	0.707	5.66%	64.0%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-7944-3395	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	2090	-4170	-4160	0.6943	Yes	0.678	2.66	0.6445	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0172	N/A	0.0468
IC10	0.0392	0.00891	0.0847
IC25	0.154	0.0814	0.264
IC50	0.709	0.469	1.07

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	35.2	1.69	31.8	38.5	20.8	<0.0001	Significant Parameter
C	2.26	0.491	1.3	3.22	4.6	<0.0001	Significant Parameter
D	0.709	0.181	0.354	1.06	3.91	0.0006	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	53.8311	53.8311	1	67.9	<0.0001	Significant
Lack of Fit	2.861118	0.572224	5	0.678	0.6445	Non-Significant
Pure Error	18.559	0.843591	22			
Residual	21.42012	0.793338	27			

Residual Analysis

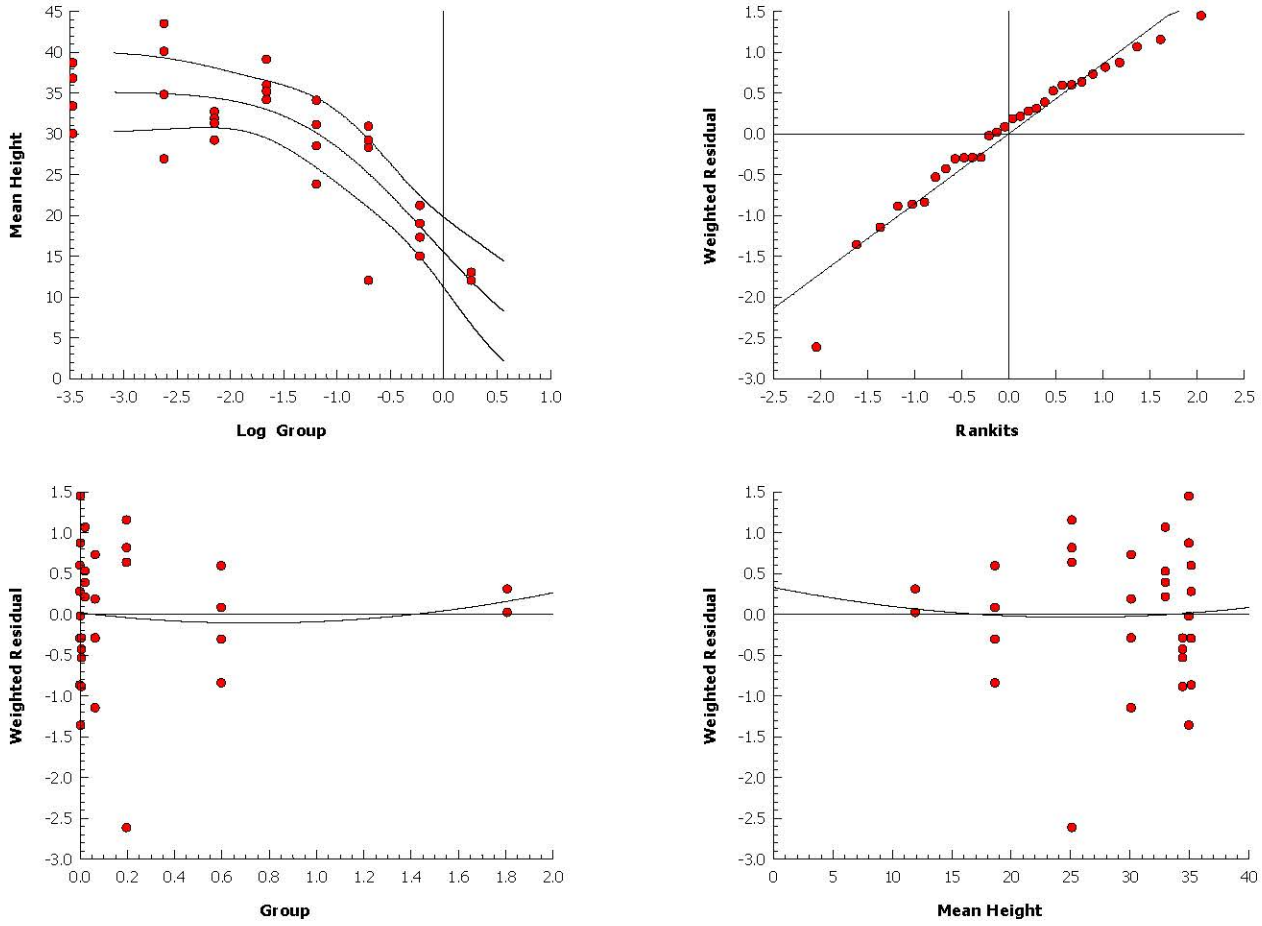
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	21.4	40.1	0.7662	Non-Significant Heterogenity
	Likelihood Ratio GOF	23	40.1	0.6831	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	13.9	14.1	0.0526	Equal Variances
	Mod Levene Equality of Variance	0.824	2.46	0.5780	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.953	0.93	0.1999	Normal Distribution
	Anderson-Darling A2 Normality	0.389	2.49	0.3886	Normal Distribution

Mean Height Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	34.7	30	38.7	1.92	3.84	11.1%	0.0%
0.0024		4	36.3	26.9	43.5	3.62	7.23	19.9%	-4.61%
0.0071		4	31.3	29.2	32.7	0.749	1.5	4.79%	9.94%
0.0219		4	36.1	34.2	39.1	1.06	2.12	5.86%	-4.03%
0.0642		4	29.4	23.8	34.1	2.18	4.36	14.9%	15.4%
0.1971		4	25.1	12	30.9	4.4	8.8	35.1%	27.7%
0.5975		4	18.1	15	21.2	1.31	2.62	14.5%	47.8%
1.8067		2	12.5	12	13	0.5	0.707	5.66%	64.0%

Analysis ID:	19-7944-3395	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-8617-1661	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
14	-508	1020	1030	0.4681	Yes	0.661	2.66	0.6569	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0295	N/A	0.102
IC10	0.0668	N/A	0.185
IC25	0.262	0.108	0.526
IC50	1.2	0.581	2.46

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	713	42.3	630	795	16.9	<0.0001	Significant Parameter
C	2.25	0.778	0.727	3.78	2.9	0.0074	Significant Parameter
D	1.2	0.46	0.295	2.1	2.6	0.0149	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	758.4422	758.4422	1	27.5	<0.0001	Significant
Lack of Fit	97.13482	19.42696	5	0.661	0.6569	Non-Significant
Pure Error	646.8964	29.40438	22			
Residual	744.0312	27.55671	27			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	744	40.1	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	769	40.1	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.01	2.91	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	7.07	14.1	0.4212	Equal Variances
	Mod Levene Equality of Variance	0.812	2.46	0.5866	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.979	0.93	0.8036	Normal Distribution
	Anderson-Darling A2 Normality	0.241	2.49	0.8003	Normal Distribution

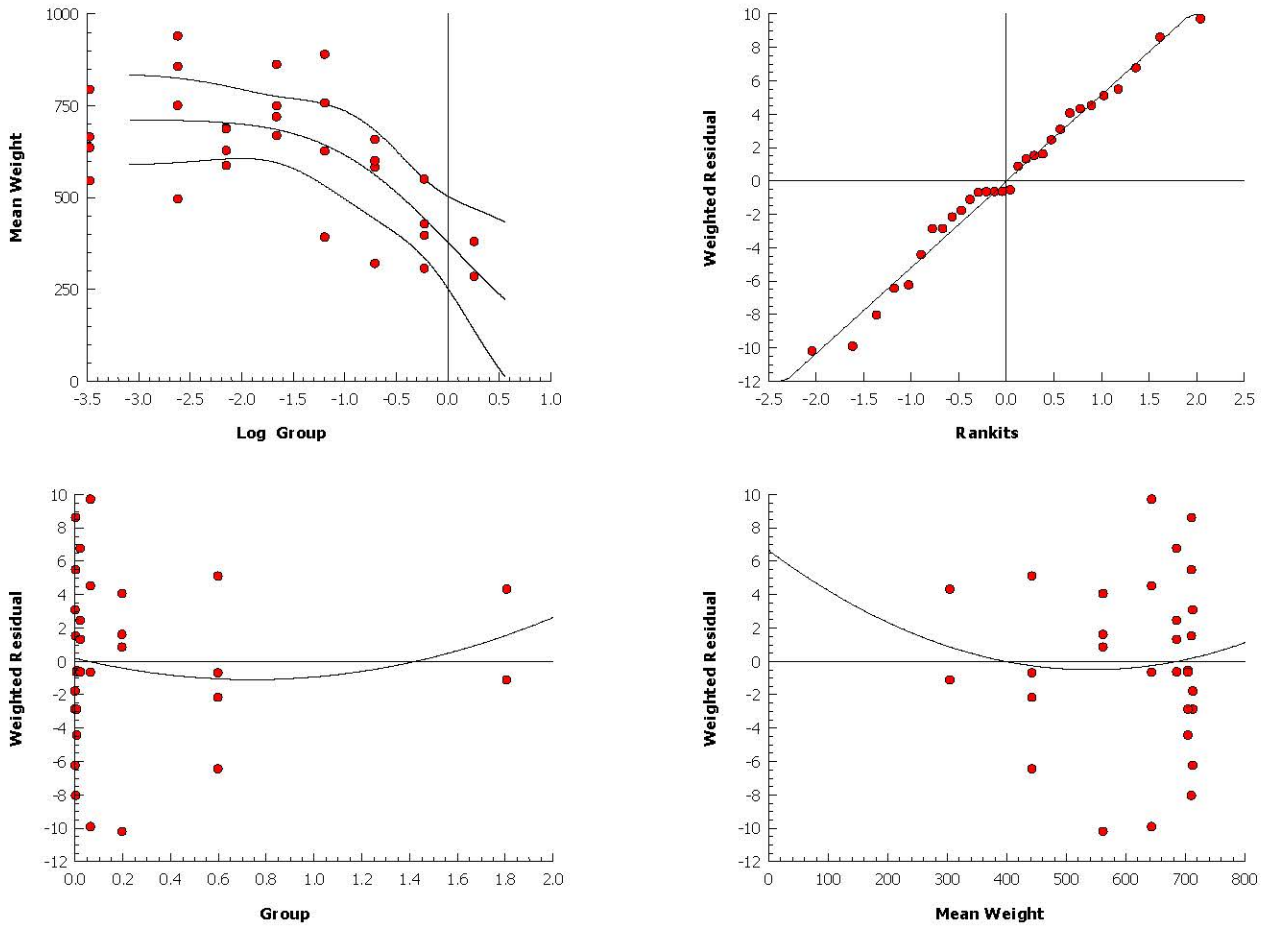
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-8617-1661	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:52	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	661	546	795	51.5	103	15.6%	0.0%
0.0024		4	761	496	940	96.4	193	25.3%	-15.2%
0.0071		4	648	587	690	24.8	49.7	7.67%	1.89%
0.0219		4	751	669	863	41.1	82.1	10.9%	-13.6%
0.0642		4	667	392	890	106	212	31.8%	-0.95%
0.1971		4	540	320	658	75.1	150	27.8%	18.2%
0.5975		4	421	307	550	50.2	100	23.9%	36.3%
1.8067		2	333	285	380	47.5	67.2	20.2%	49.7%

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	21-1006-1741	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
14	-508	1020	1030	0.4681	Yes	0.661	2.66	0.6569	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0295	N/A	0.102
IC10	0.0668	N/A	0.185
IC25	0.262	0.108	0.526
IC50	1.2	0.581	2.46

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	713	42.3	630	795	16.9	<0.0001	Significant Parameter
C	2.25	0.778	0.727	3.78	2.9	0.0074	Significant Parameter
D	1.2	0.46	0.295	2.1	2.6	0.0149	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	758.4422	758.4422	1	27.5	<0.0001	Significant
Lack of Fit	97.13482	19.42696	5	0.661	0.6569	Non-Significant
Pure Error	646.8964	29.40438	22			
Residual	744.0312	27.55671	27			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	744	40.1	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	769	40.1	<0.0001	Significant Heterogenity
Variances	Bartlett Equality of Variance	7.07	14.1	0.4212	Equal Variances
	Mod Levene Equality of Variance	0.812	2.46	0.5866	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.979	0.93	0.8036	Normal Distribution
	Anderson-Darling A2 Normality	0.241	2.49	0.8003	Normal Distribution

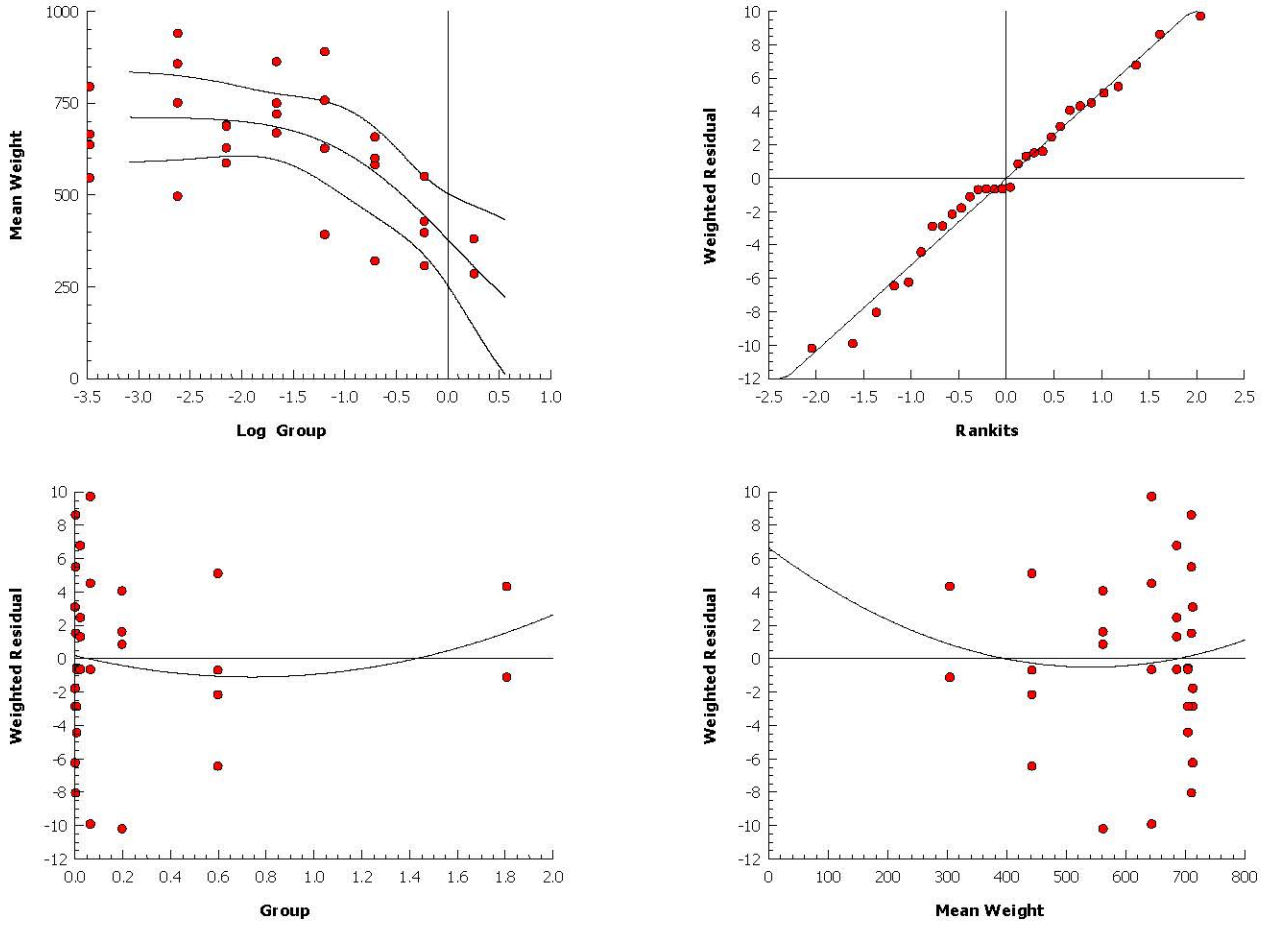
Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	661	546	795	51.5	103	15.6%	0.0%
0.0024		4	761	496	940	96.4	193	25.3%	-15.2%
0.0071		4	648	587	690	24.8	49.7	7.67%	1.89%
0.0219		4	751	669	863	41.1	82.1	10.9%	-13.6%
0.0642		4	667	392	890	106	212	31.8%	-0.95%
0.1971		4	540	320	658	75.1	150	27.8%	18.2%
0.5975		4	421	307	550	50.2	100	23.9%	36.3%
1.8067		2	333	285	380	47.5	67.2	20.2%	49.7%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	21-1006-1741	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



CETIS Analytical Report

Test Code: 48718014 Soybea | 10-1058-7161

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-6075-9108	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

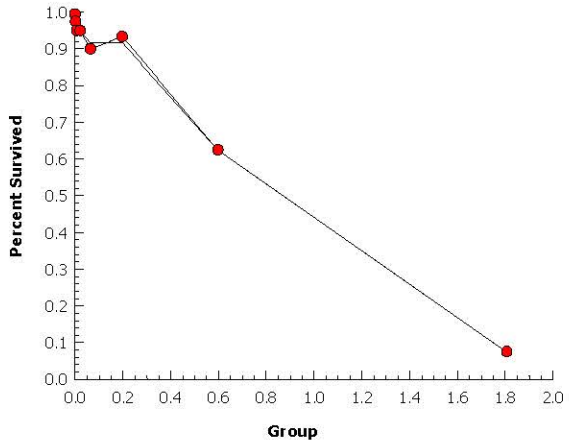
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0	7.50%	-0.161	0.0562	0.69	0.533	0.894

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.9	0.7	1	0.0707	0.141	15.7%	10.0%	36	40
0.1971		3	0.933	0.8	1	0.0667	0.115	12.4%	6.67%	28	30
0.5975		4	0.625	0.3	1	0.144	0.287	46.0%	37.5%	25	40
1.8067		4	0.075	0	0.2	0.0479	0.0957	128.0%	92.5%	3	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-9666-4327	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:51	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0	7.50%	-0.278	0.0647	0.528	0.392	0.711

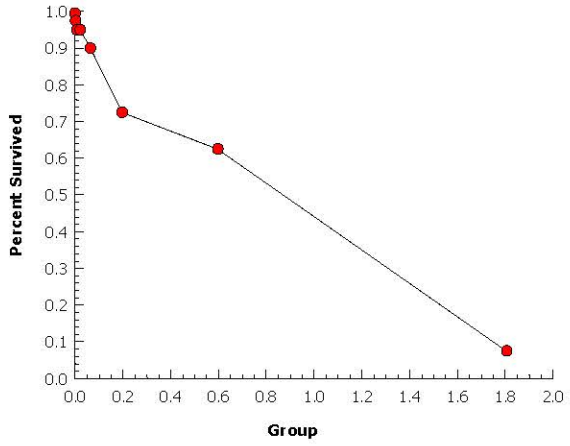
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	3.48	2.94	0.0031	Outlier Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.9	0.7	1	0.0707	0.141	15.7%	10.0%	36	40
0.1971		4	0.725	0.1	1	0.214	0.427	58.9%	27.5%	29	40
0.5975		4	0.625	0.3	1	0.144	0.287	46.0%	37.5%	25	40
1.8067		4	0.075	0	0.2	0.0479	0.0957	128.0%	92.5%	3	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	17-0614-9537	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 15:59	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	20-4038-2801	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 13:42	**Species:**	Glycine max	**Brine:**	
Duration:	566d 14h	**Source:**	Missouri Foundation Seeds, MO	**Age:**	

Sample ID:	08-0221-4372	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 13:42	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

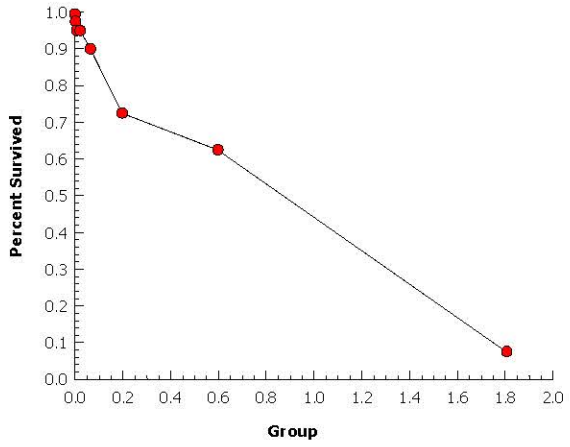
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0	7.50%	-0.278	0.0647	0.528	0.392	0.711

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	1	1	1	0	0	0.0%	0.0%	40	40
0.0024		4	0.975	0.9	1	0.025	0.05	5.13%	2.5%	39	40
0.0071		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0219		4	0.95	0.9	1	0.0289	0.0577	6.08%	5.0%	38	40
0.0642		4	0.9	0.7	1	0.0707	0.141	15.7%	10.0%	36	40
0.1971		4	0.725	0.1	1	0.214	0.427	58.9%	27.5%	29	40
0.5975		4	0.625	0.3	1	0.144	0.287	46.0%	37.5%	25	40
1.8067		4	0.075	0	0.2	0.0479	0.0957	128.0%	92.5%	3	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
03-3209-2667	Mean Height	0.6356	1.9455	1.112	46.4%		Dunnett Multiple Comparison Test
13-0454-0807	Mean Height	0.6356	1.9455	1.112	46.4%		Dunnett Multiple Comparison Test
04-1871-3561	Mean Height	0.2061	0.6356	0.3619	33.9%		Williams Multiple Comparison Test
18-3284-6272	Mean Height	0.2061	0.6356	0.3619	33.9%		Williams Multiple Comparison Test
02-8411-1423	Mean Weight	0.6356	1.9455	1.112	83.2%		Dunnett Multiple Comparison Test
10-5922-0838	Mean Weight	0.6356	1.9455	1.112	83.2%		Dunnett Multiple Comparison Test
00-3110-0209	Mean Weight	0.6356	1.9455	1.112	60.8%		Williams Multiple Comparison Test
09-6052-8591	Mean Weight	0.6356	1.9455	1.112	60.8%		Williams Multiple Comparison Test
09-2675-6856	Percent Emerged	<0.008	0.008	NA	14.2%		Dunnett Multiple Comparison Test
13-0022-1448	Percent Emerged	0.2061	0.6356	0.3619	14.2%		Dunnett Multiple Comparison Test
02-5869-6241	Percent Emerged	0.0698	0.2061	0.1199	10.8%		Williams Multiple Comparison Test
15-5639-6300	Percent Emerged	0.0698	0.2061	0.1199	10.8%		Williams Multiple Comparison Test
16-8392-0092	Percent Survived	0.0698	0.2061	0.1199	17.5%		Dunnett Multiple Comparison Test
16-9680-9878	Percent Survived	0.2061	0.6356	0.3619	22.1%		Dunnett Multiple Comparison Test
18-2184-6973	Percent Survived	0.2061	0.6356	0.3619	22.1%		Dunnett Multiple Comparison Test
05-8975-9163	Percent Survived	0.0698	0.2061	0.1199	16.7%		Williams Multiple Comparison Test
11-2883-7817	Percent Survived	0.0698	0.2061	0.1199	13.2%		Williams Multiple Comparison Test
13-9172-8496	Percent Survived	0.0698	0.2061	0.1199	16.7%		Williams Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
09-9057-0423	Mean Height	IC5	0.226	N/A	0.385		Nonlinear Regression
		IC10	0.325	N/A	0.513		
		IC25	0.595	0.381	0.835		
		IC50	1.17	0.85	1.6		
14-1840-2335	Mean Height	IC5	0.226	N/A	0.385		Nonlinear Regression
		IC10	0.325	N/A	0.513		
		IC25	0.595	0.381	0.835		
		IC50	1.17	0.85	1.6		
14-1107-7516	Mean Weight	IC5	0.162	N/A	0.318		Nonlinear Regression
		IC10	0.224	N/A	0.41		
		IC25	0.386	0.16	0.634		
		IC50	0.708	0.481	1.04		
20-1870-8956	Mean Weight	IC5	0.162	N/A	0.318		Nonlinear Regression
		IC10	0.224	N/A	0.41		
		IC25	0.386	0.16	0.634		
		IC50	0.708	0.481	1.04		
02-3631-8109	Percent Emerged	EC5	0.00135	N/A	N/A		Linear Regression (MLE)
		EC10	0.0202	N/A	N/A		
		EC25	1.87	N/A	N/A		
		EC50	285	N/A	N/A		
10-6316-5631	Percent Emerged	EC5	0.00135	N/A	N/A		Linear Regression (MLE)
		EC10	0.0202	N/A	N/A		
		EC25	1.87	N/A	N/A		
		EC50	285	N/A	N/A		
12-3863-6083	Percent Survived	EC5	0.187	0.0613	0.303		Linear Regression (MLE)
		EC10	0.241	0.0939	0.365		
		EC25	0.366	0.189	0.505		
		EC50	0.582	0.392	0.76		
19-1962-4816	Percent Survived	EC5	0.187	0.0613	0.303		Linear Regression (MLE)
		EC10	0.241	0.0939	0.365		
		EC25	0.366	0.189	0.505		
		EC50	0.582	0.392	0.76		
08-5872-5514	Percent Survived	EC50	0.494	0.365	0.669		Trimmed Spearman-Kärber
13-7560-1136	Percent Survived	EC50	0.494	0.365	0.669		Trimmed Spearman-Kärber

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	13.7	11.4	15.9	12.3	15.3	0.699	1.4	10.2%	0.0%
0	Negative Control	4	12.1	8.13	16.1	9.8	14.5	1.25	2.49	20.6%	11.4%
0.008		4	13.3	11	15.6	11.4	14.5	0.715	1.43	10.8%	2.56%
0.0234		4	12.5	9.04	16	9.4	14.5	1.1	2.19	17.5%	8.24%
0.0698		4	13.9	11.2	16.5	12	15.8	0.834	1.67	12.0%	-1.65%
0.2061		4	12.5	9.49	15.5	10.4	14.8	0.939	1.88	15.1%	8.61%
0.6356		4	9.38	5.87	12.9	6.2	11.3	1.1	2.2	23.5%	31.3%
1.9455		1	4			4	4	0	0	0.0%	70.7%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	171	112	231	142	224	18.7	37.3	21.8%	0.0%
0	Negative Control	4	127	77.3	177	82	154	15.7	31.4	24.7%	25.7%
0.008		4	153	86.2	220	96	196	21.1	42.1	27.5%	10.5%
0.0234		4	162	89.1	235	111	209	23	46	28.3%	5.26%
0.0698		4	191	129	253	150	238	19.5	39	20.4%	-11.5%
0.2061		4	137	91.7	182	96	159	14.2	28.5	20.8%	20.0%
0.6356		4	87.3	27.3	147	45	120	18.8	37.7	43.2%	49.1%
1.9455		1	20			20	20	0	0	0.0%	88.3%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.875	0.795	0.955	0.8	0.9	0.025	0.05	5.71%	0.0%
0	Negative Control	4	0.95	0.858	1	0.9	1	0.0289	0.0577	6.08%	-8.57%
0.008		4	0.775	0.623	0.927	0.7	0.9	0.0479	0.0957	12.4%	11.4%
0.0234		4	0.9	0.9	0.9	0.9	0.9	0	0	0.0%	-2.86%
0.0698		4	0.875	0.723	1	0.8	1	0.0479	0.0957	10.9%	0.0%
0.2061		4	0.825	0.673	0.977	0.7	0.9	0.0479	0.0957	11.6%	5.71%
0.6356		4	0.725	0.573	0.877	0.6	0.8	0.0479	0.0957	13.2%	17.1%
1.9455		4	0.675	0.595	0.755	0.6	0.7	0.025	0.05	7.41%	22.9%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.875	0.795	0.955	0.8	0.9	0.025	0.05	5.71%	0.0%
0	Negative Control	4	0.925	0.773	1	0.8	1	0.0479	0.0957	10.4%	-5.71%
0.008		4	0.75	0.658	0.842	0.7	0.8	0.0289	0.0577	7.7%	14.3%
0.0234		4	0.85	0.758	0.942	0.8	0.9	0.0289	0.0577	6.79%	2.86%
0.0698		4	0.825	0.625	1	0.7	1	0.0629	0.126	15.3%	5.71%
0.2061		4	0.75	0.545	0.955	0.6	0.9	0.0645	0.129	17.2%	14.3%
0.6356		4	0.4	0.0563	0.744	0.1	0.6	0.108	0.216	54.0%	54.3%
1.9455		4	0.025	0	0.105	0	0.1	0.025	0.05	200.0%	97.1%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	15.3	12.3	14.3	12.7
0	Negative Control	9.8	14	14.5	10.1
0.008		11.4	14.5	14.3	13
0.0234		14.5	13.3	9.4	12.9
0.0698		12	15.8	13.1	14.6
0.2061		10.4	14.8	13	11.7
0.6356		10	11.3	6.2	10
1.9455			4		

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	171	142	224	148
0	Negative Control	82	140	154	133
0.008		96	153	196	168
0.0234		209	137	111	192
0.0698		150	238	170	206
0.2061		96	159	140	153
0.6356		66	118	45	120
1.9455			20		

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.9	0.9	0.9
0	Negative Control	1	0.9	1	0.9
0.008		0.7	0.9	0.7	0.8
0.0234		0.9	0.9	0.9	0.9
0.0698		0.9	0.8	1	0.8
0.2061		0.8	0.9	0.9	0.7
0.6356		0.8	0.8	0.7	0.6
1.9455		0.7	0.7	0.6	0.7

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.8	0.9	0.9	0.9
0	Negative Control	1	0.9	1	0.8
0.008		0.7	0.8	0.7	0.8
0.0234		0.8	0.9	0.8	0.9
0.0698		0.8	0.8	1	0.7
0.2061		0.7	0.8	0.9	0.6
0.6356		0.5	0.4	0.6	0.1
1.9455		0	0.1	0	0

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-0454-0807	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	46.4%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.844	2.5	3.55	6	0.9859	CDF	Non-Significant Effect
		0.0234	-0.299	2.5	3.55	6	0.9382	CDF	Non-Significant Effect
		0.0698	-1.25	2.5	3.55	6	0.9960	CDF	Non-Significant Effect
		0.2061	-0.264	2.5	3.55	6	0.9327	CDF	Non-Significant Effect
		0.6356	1.92	2.5	3.55	6	0.1412	CDF	Non-Significant Effect
		1.9455*	3.6	2.5	5.62	3	0.0052	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.82	2.82	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	114.3516	19.0586	6	4.72	0.0047	Significant Effect
Error	72.71001	4.039445	18			
Total	187.0616		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.988	4.01	0.4622	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.888	0.0740	Normal Distribution

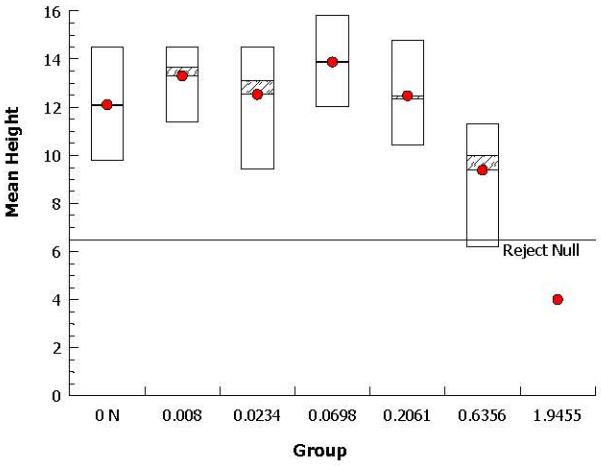
Mean Height Summary

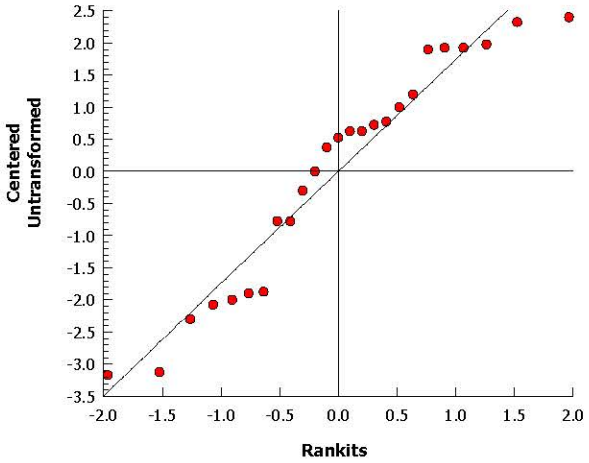
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	12.1	8.13	16.1	12.1	9.8	14.5	1.25	20.6%	0.0%
0.008		4	13.3	11	15.6	13.6	11.4	14.5	0.715	10.8%	-9.92%
0.0234		4	12.5	9.04	16	13.1	9.4	14.5	1.1	17.5%	-3.51%
0.0698		4	13.9	11.2	16.5	13.9	12	15.8	0.834	12.0%	-14.7%
0.2061		4	12.5	9.49	15.5	12.4	10.4	14.8	0.939	15.1%	-3.1%
0.6356		4	9.38	5.87	12.9	10	6.2	11.3	1.1	23.5%	22.5%
1.9455		1	4			4	4	4	0	0.0%	66.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-0454-0807	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-1871-3561	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.9%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.844	1.73	2.46	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.299	1.82	2.58	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.774	1.85	2.62	6	>0.05	CDF	Non-Significant Effect
		0.2061	-0.264	1.86	2.64	6	>0.05	CDF	Non-Significant Effect
		0.6356*	1.92	1.87	2.65	6	<0.05	CDF	Significant Effect
		1.9455*	3.6	1.83	4.11	3	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.82	2.82	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	114.3516	19.0586	6	4.72	0.0047	Significant Effect
Error	72.71001	4.039445	18			
Total	187.0616		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.988	4.01	0.4622	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.888	0.0740	Normal Distribution

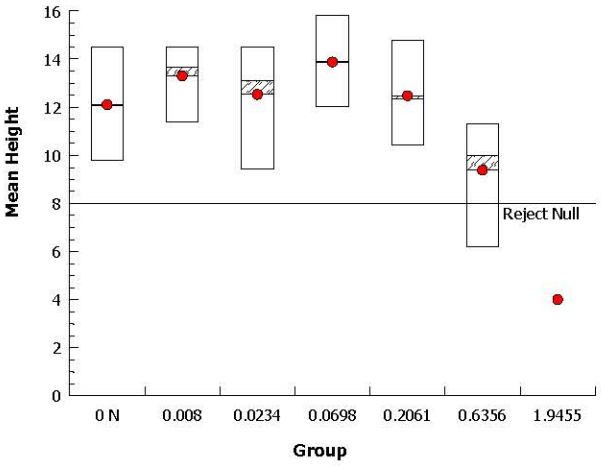
Mean Height Summary

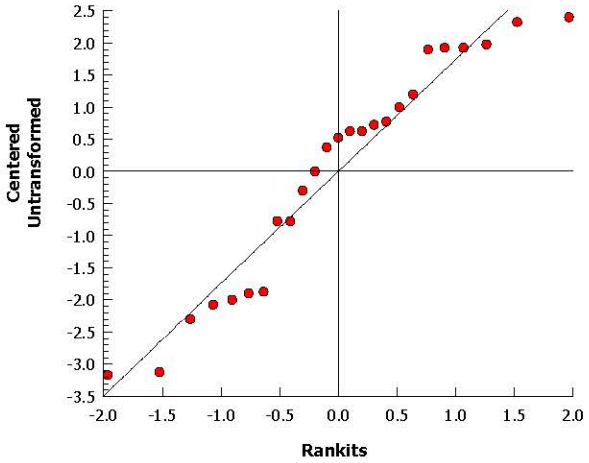
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	12.1	8.13	16.1	12.1	9.8	14.5	1.25	20.6%	0.0%
0.008		4	13.3	11	15.6	13.6	11.4	14.5	0.715	10.8%	-9.92%
0.0234		4	12.5	9.04	16	13.1	9.4	14.5	1.1	17.5%	-3.51%
0.0698		4	13.9	11.2	16.5	13.9	12	15.8	0.834	12.0%	-14.7%
0.2061		4	12.5	9.49	15.5	12.4	10.4	14.8	0.939	15.1%	-3.1%
0.6356		4	9.38	5.87	12.9	10	6.2	11.3	1.1	23.5%	22.5%
1.9455		1	4			4	4	4	0	0.0%	66.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-1871-3561	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	03-3209-2667	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	46.4%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.844	2.5	3.55	6	0.9859	CDF	Non-Significant Effect
		0.0234	-0.299	2.5	3.55	6	0.9382	CDF	Non-Significant Effect
		0.0698	-1.25	2.5	3.55	6	0.9960	CDF	Non-Significant Effect
		0.2061	-0.264	2.5	3.55	6	0.9327	CDF	Non-Significant Effect
		0.6356	1.92	2.5	3.55	6	0.1412	CDF	Non-Significant Effect
		1.9455*	3.6	2.5	5.62	3	0.0052	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	114.3516	19.0586	6	4.72	0.0047	Significant Effect
Error	72.71001	4.039445	18			
Total	187.0616		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.988	4.01	0.4622	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.888	0.0740	Normal Distribution

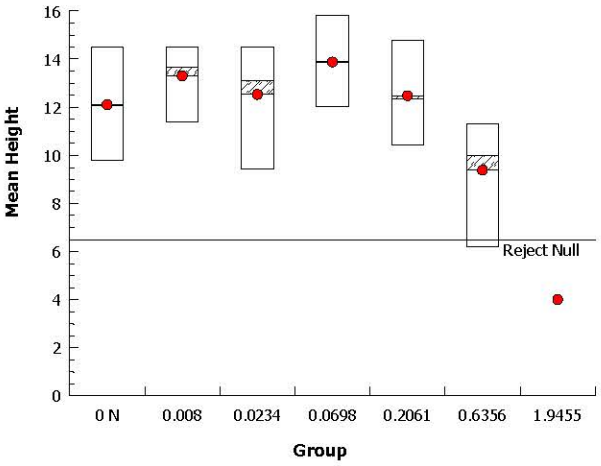
Mean Height Summary

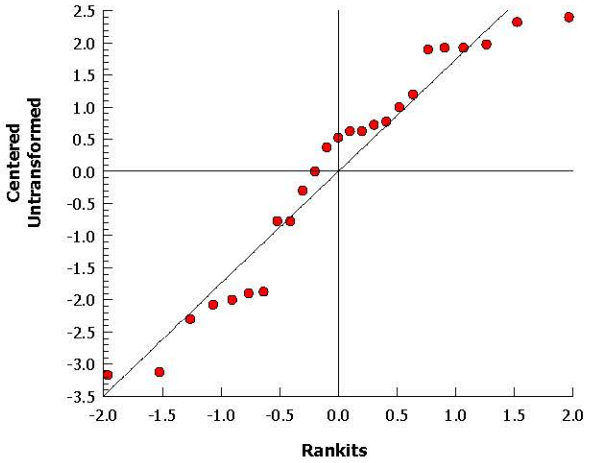
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	12.1	8.13	16.1	12.1	9.8	14.5	1.25	20.6%	0.0%
0.008		4	13.3	11	15.6	13.6	11.4	14.5	0.715	10.8%	-9.92%
0.0234		4	12.5	9.04	16	13.1	9.4	14.5	1.1	17.5%	-3.51%
0.0698		4	13.9	11.2	16.5	13.9	12	15.8	0.834	12.0%	-14.7%
0.2061		4	12.5	9.49	15.5	12.4	10.4	14.8	0.939	15.1%	-3.1%
0.6356		4	9.38	5.87	12.9	10	6.2	11.3	1.1	23.5%	22.5%
1.9455		1	4			4	4	4	0	0.0%	66.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	03-3209-2667	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-3284-6272	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	33.9%	0.2061	0.6356	0.3619	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.844	1.73	2.46	6	>0.05	CDF	Non-Significant Effect
		0.0234	-0.299	1.82	2.58	6	>0.05	CDF	Non-Significant Effect
		0.0698	-0.774	1.85	2.62	6	>0.05	CDF	Non-Significant Effect
		0.2061	-0.264	1.86	2.64	6	>0.05	CDF	Non-Significant Effect
		0.6356*	1.92	1.87	2.65	6	<0.05	CDF	Significant Effect
		1.9455*	3.6	1.83	4.11	3	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	114.3516	19.0586	6	4.72	0.0047	Significant Effect
Error	72.71001	4.039445	18			
Total	187.0616		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.988	4.01	0.4622	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.888	0.0740	Normal Distribution

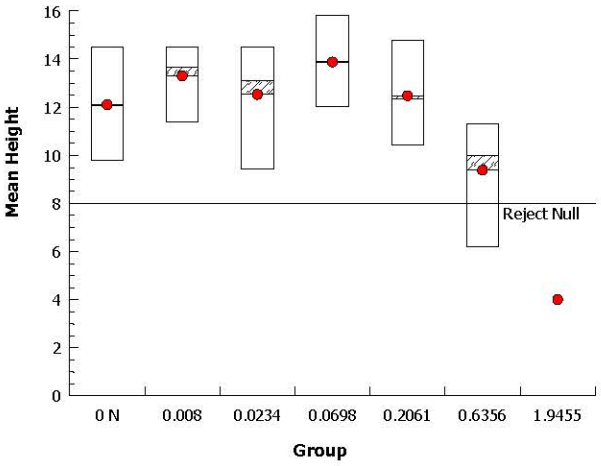
Mean Height Summary

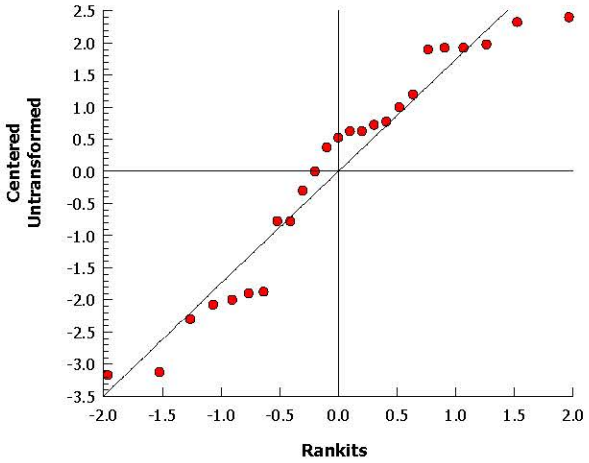
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	12.1	8.13	16.1	12.1	9.8	14.5	1.25	20.6%	0.0%
0.008		4	13.3	11	15.6	13.6	11.4	14.5	0.715	10.8%	-9.92%
0.0234		4	12.5	9.04	16	13.1	9.4	14.5	1.1	17.5%	-3.51%
0.0698		4	13.9	11.2	16.5	13.9	12	15.8	0.834	12.0%	-14.7%
0.2061		4	12.5	9.49	15.5	12.4	10.4	14.8	0.939	15.1%	-3.1%
0.6356		4	9.38	5.87	12.9	10	6.2	11.3	1.1	23.5%	22.5%
1.9455		1	4			4	4	4	0	0.0%	66.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	18-3284-6272	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-8411-1423	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	83.2%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.97	2.5	67	6	0.9904	CDF	Non-Significant Effect
		0.0234	-1.31	2.5	67	6	0.9967	CDF	Non-Significant Effect
		0.0698	-2.38	2.5	67	6	0.9999	CDF	Non-Significant Effect
		0.2061	-0.364	2.5	67	6	0.9473	CDF	Non-Significant Effect
		0.6356	1.49	2.5	67	6	0.2676	CDF	Non-Significant Effect
		1.9455*	2.53	2.5	106	3	0.0470	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.74	2.82	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	39210.84	6535.14	6	4.55	0.0056	Significant Effect
Error	25857	1436.5	18			
Total	65067.84		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.964	4.01	0.4766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.93	0.888	0.0854	Normal Distribution

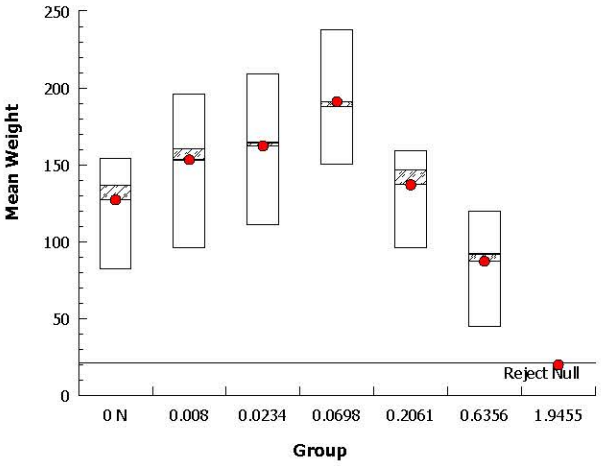
Mean Weight Summary

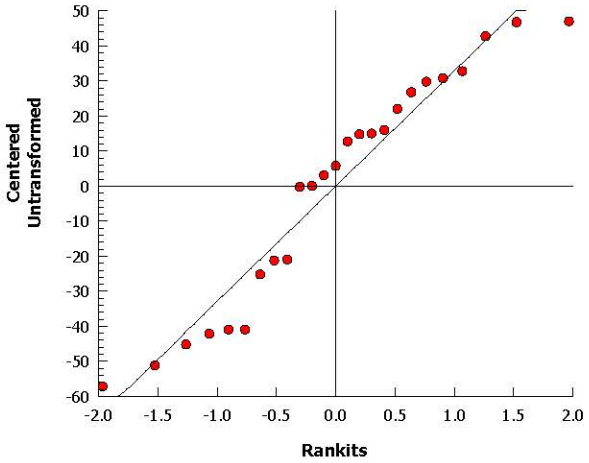
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	127	77.3	177	137	82	154	15.7	24.7%	0.0%
0.008		4	153	86.2	220	161	96	196	21.1	27.5%	-20.4%
0.0234		4	162	89.1	235	165	111	209	23	28.3%	-27.5%
0.0698		4	191	129	253	188	150	238	19.5	20.4%	-50.1%
0.2061		4	137	91.7	182	147	96	159	14.2	20.8%	-7.66%
0.6356		4	87.3	27.3	147	92	45	120	18.8	43.2%	31.4%
1.9455		1	20			20	20	20	0	0.0%	84.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-8411-1423	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	00-3110-0209	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	60.8%	0.6356	1.9455	1.112	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.97	1.73	46.5	6	>0.05	CDF	Non-Significant Effect
		0.0234	-1.14	1.82	48.7	6	>0.05	CDF	Non-Significant Effect
		0.0698	-1.55	1.85	49.4	6	>0.05	CDF	Non-Significant Effect
		0.2061	-0.364	1.86	49.8	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.49	1.87	50	6	>0.05	CDF	Non-Significant Effect
		1.9455*	2.53	1.83	77.4	3	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.74	2.82	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	39210.84	6535.14	6	4.55	0.0056	Significant Effect
Error	25857	1436.5	18			
Total	65067.84		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.964	4.01	0.4766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.93	0.888	0.0854	Normal Distribution

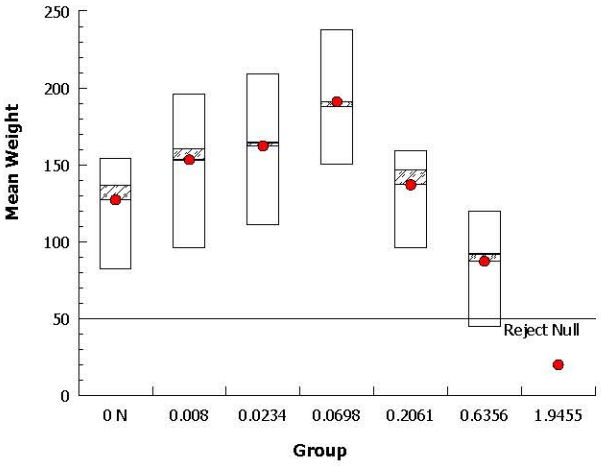
Mean Weight Summary

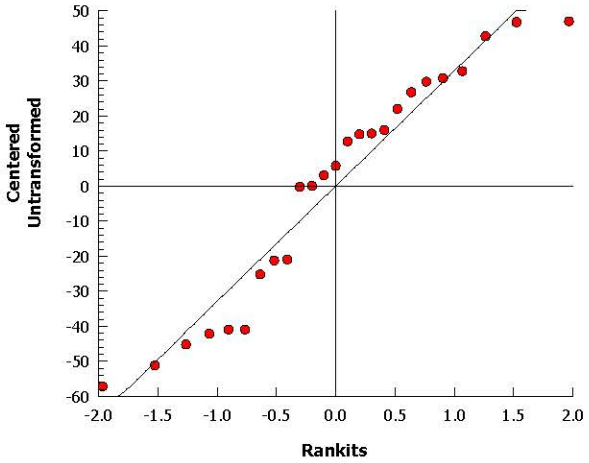
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	127	77.3	177	137	82	154	15.7	24.7%	0.0%
0.008		4	153	86.2	220	161	96	196	21.1	27.5%	-20.4%
0.0234		4	162	89.1	235	165	111	209	23	28.3%	-27.5%
0.0698		4	191	129	253	188	150	238	19.5	20.4%	-50.1%
0.2061		4	137	91.7	182	147	96	159	14.2	20.8%	-7.66%
0.6356		4	87.3	27.3	147	92	45	120	18.8	43.2%	31.4%
1.9455		1	20			20	20	20	0	0.0%	84.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	00-3110-0209	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-5922-0838	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	83.2%	0.6356	1.9455	1.112	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.97	2.5	67	6	0.9904	CDF	Non-Significant Effect
		0.0234	-1.31	2.5	67	6	0.9967	CDF	Non-Significant Effect
		0.0698	-2.38	2.5	67	6	0.9999	CDF	Non-Significant Effect
		0.2061	-0.364	2.5	67	6	0.9473	CDF	Non-Significant Effect
		0.6356	1.49	2.5	67	6	0.2676	CDF	Non-Significant Effect
		1.9455*	2.53	2.5	106	3	0.0470	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	39210.84	6535.14	6	4.55	0.0056	Significant Effect
Error	25857	1436.5	18			
Total	65067.84		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.964	4.01	0.4766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.93	0.888	0.0854	Normal Distribution

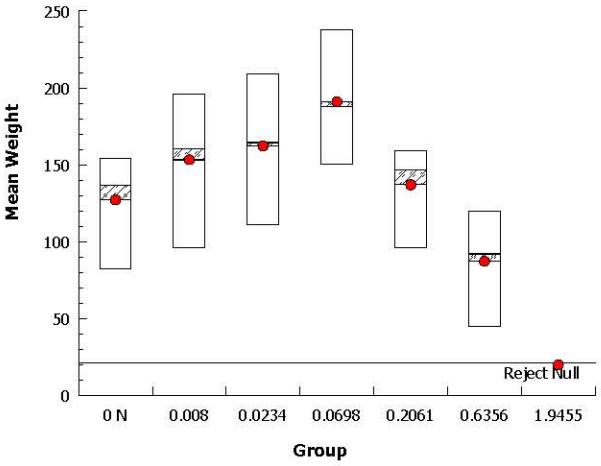
Mean Weight Summary

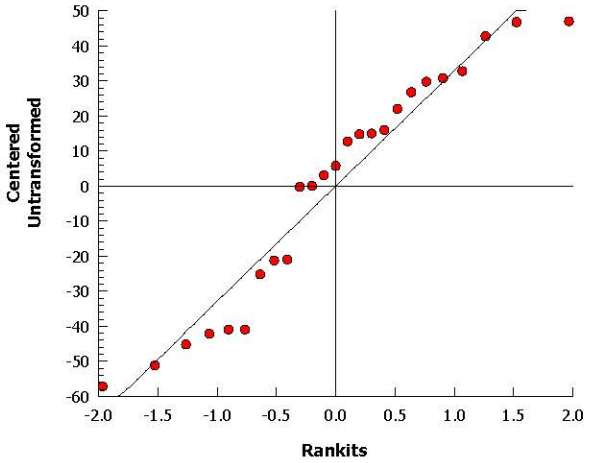
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	127	77.3	177	137	82	154	15.7	24.7%	0.0%
0.008		4	153	86.2	220	161	96	196	21.1	27.5%	-20.4%
0.0234		4	162	89.1	235	165	111	209	23	28.3%	-27.5%
0.0698		4	191	129	253	188	150	238	19.5	20.4%	-50.1%
0.2061		4	137	91.7	182	147	96	159	14.2	20.8%	-7.66%
0.6356		4	87.3	27.3	147	92	45	120	18.8	43.2%	31.4%
1.9455		1	20			20	20	20	0	0.0%	84.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	10-5922-0838	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-6052-8591	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	60.8%	0.6356	1.9455	1.112	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	-0.97	1.73	46.5	6	>0.05	CDF	Non-Significant Effect
		0.0234	-1.14	1.82	48.7	6	>0.05	CDF	Non-Significant Effect
		0.0698	-1.55	1.85	49.4	6	>0.05	CDF	Non-Significant Effect
		0.2061	-0.364	1.86	49.8	6	>0.05	CDF	Non-Significant Effect
		0.6356	1.49	1.87	50	6	>0.05	CDF	Non-Significant Effect
		1.9455*	2.53	1.83	77.4	3	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	39210.84	6535.14	6	4.55	0.0056	Significant Effect
Error	25857	1436.5	18			
Total	65067.84		24			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance	0.964	4.01	0.4766	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.93	0.888	0.0854	Normal Distribution

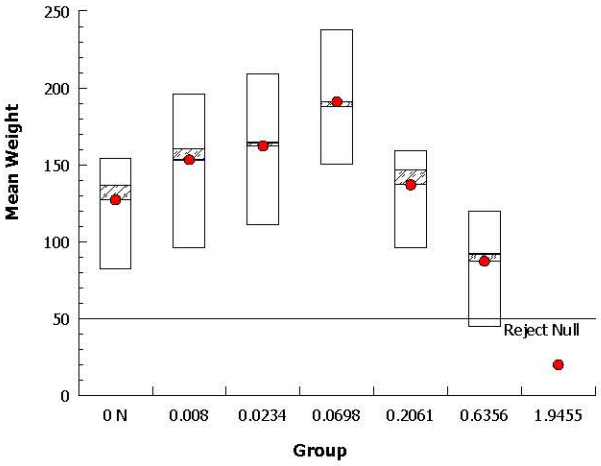
Mean Weight Summary

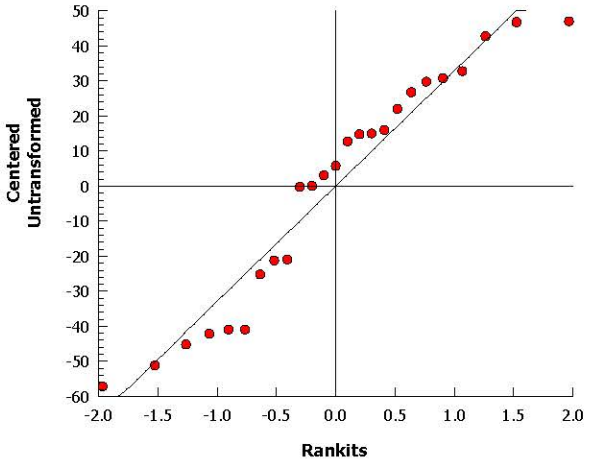
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	127	77.3	177	137	82	154	15.7	24.7%	0.0%
0.008		4	153	86.2	220	161	96	196	21.1	27.5%	-20.4%
0.0234		4	162	89.1	235	165	111	209	23	28.3%	-27.5%
0.0698		4	191	129	253	188	150	238	19.5	20.4%	-50.1%
0.2061		4	137	91.7	182	147	96	159	14.2	20.8%	-7.66%
0.6356		4	87.3	27.3	147	92	45	120	18.8	43.2%	31.4%
1.9455		1	20			20	20	20	0	0.0%	84.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-6052-8591	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-0022-1448	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	14.2%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control	0.008*	3.18	2.45	0.135	6	0.0109	CDF	Significant Effect
	0.0234	0.907	2.45	0.135	6	0.4964	CDF	Non-Significant Effect
	0.0698	1.36	2.45	0.135	6	0.3000	CDF	Non-Significant Effect
	0.2061	2.27	2.45	0.135	6	0.0704	CDF	Non-Significant Effect
	0.6356*	4.08	2.45	0.135	6	0.0014	CDF	Significant Effect
	1.9455*	4.99	2.45	0.135	6	0.0002	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.82	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.2335714	0.03892857	6	6.41	0.0006	Significant Effect
Error	0.1275	0.006071429	21			
Total	0.3610714		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.07	3.81	0.1012	Equal Variances
Variances	Levene Equality of Variance	3.17	3.81	0.0225	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.961	0.897	0.3610	Normal Distribution

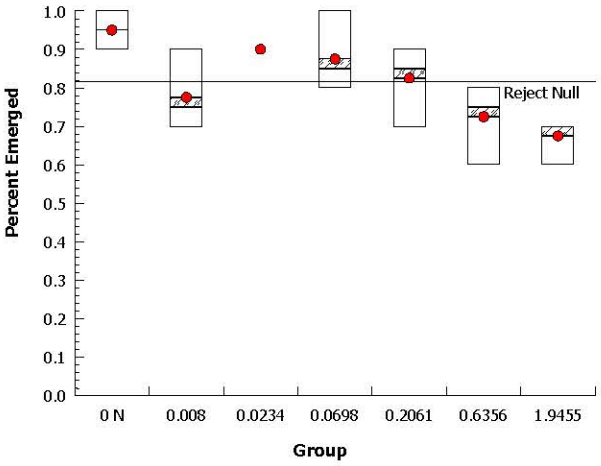
Percent Emerged Summary

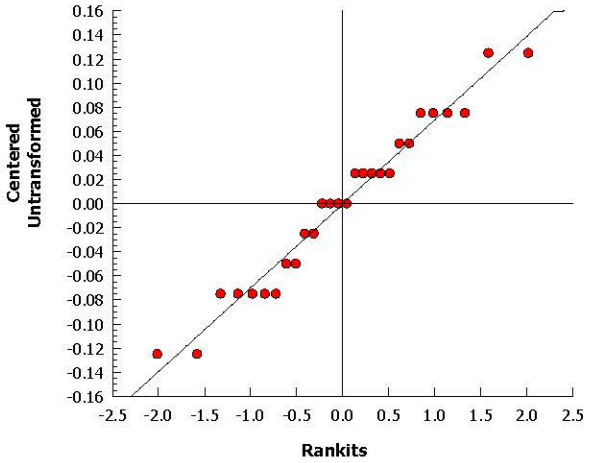
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	0.0%
0.008		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	18.4%
0.0234		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	5.26%
0.0698		4	0.875	0.723	1	0.85	0.8	1	0.0479	10.9%	7.89%
0.2061		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	13.2%
0.6356		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	23.7%
1.9455		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	28.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-0022-1448	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-5639-6300	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	10.8%	0.0698	0.2061	0.1199	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	3.18	1.72	0.095	6	>0.05	CDF	Non-Significant Effect
		0.0234	2.04	1.8	0.099	6	>0.05	CDF	Non-Significant Effect
		0.0698	1.81	1.83	0.101	6	>0.05	CDF	Non-Significant Effect
		0.2061*	2.27	1.84	0.102	6	<0.05	CDF	Significant Effect
		0.6356*	4.08	1.85	0.102	6	<0.05	CDF	Significant Effect
		1.9455*	4.99	1.86	0.102	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	1.82	2.88	1.0000	No Outliers Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.2335714	0.03892857	6	6.41	0.0006	Significant Effect
Error	0.1275	0.006071429	21			
Total	0.3610714		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.07	3.81	0.1012	Equal Variances
Variances	Levene Equality of Variance	3.17	3.81	0.0225	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.961	0.897	0.3610	Normal Distribution

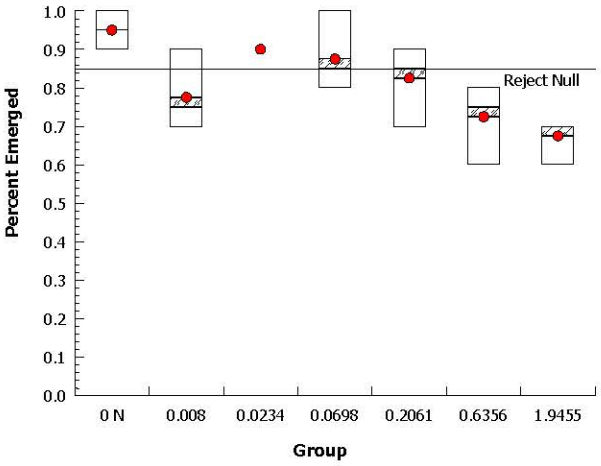
Percent Emerged Summary

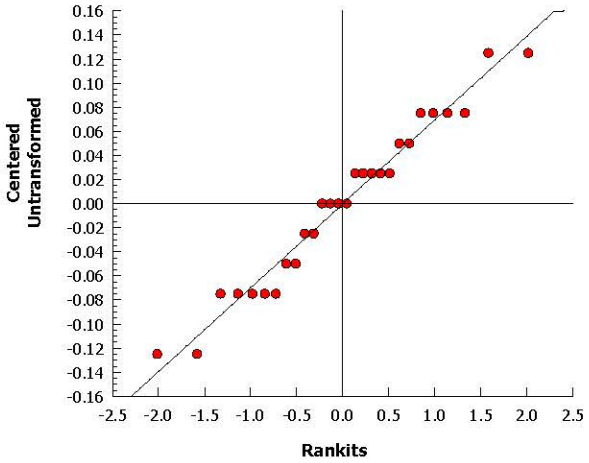
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	0.0%
0.008		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	18.4%
0.0234		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	5.26%
0.0698		4	0.875	0.723	1	0.85	0.8	1	0.0479	10.9%	7.89%
0.2061		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	13.2%
0.6356		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	23.7%
1.9455		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	28.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-5639-6300	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-2675-6856	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	14.2%	<0.008	0.008	NA	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008*	3.18	2.45	0.135	6	0.0109	CDF	Significant Effect
		0.0234	0.907	2.45	0.135	6	0.4964	CDF	Non-Significant Effect
		0.0698	1.36	2.45	0.135	6	0.3000	CDF	Non-Significant Effect
		0.2061	2.27	2.45	0.135	6	0.0704	CDF	Non-Significant Effect
		0.6356*	4.08	2.45	0.135	6	0.0014	CDF	Significant Effect
		1.9455*	4.99	2.45	0.135	6	0.0002	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.2335714	0.03892857	6	6.41	0.0006	Significant Effect
Error	0.1275	0.006071429	21			
Total	0.3610714		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.07	3.81	0.1012	Equal Variances
Variances	Levene Equality of Variance	3.17	3.81	0.0225	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.961	0.897	0.3610	Normal Distribution

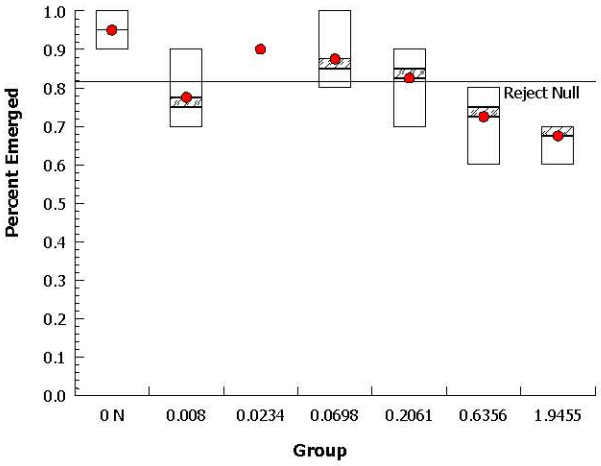
Percent Emerged Summary

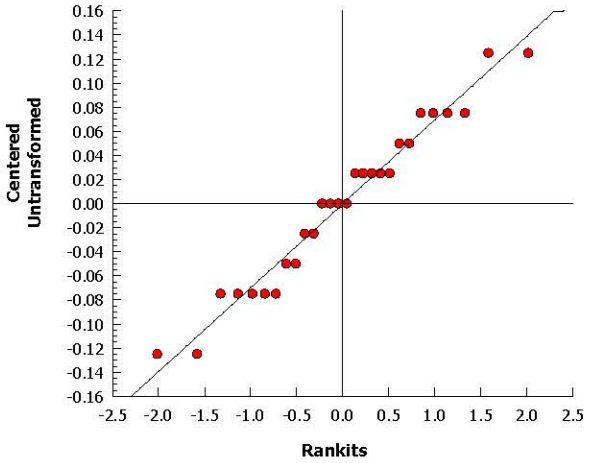
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	0.0%
0.008		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	18.4%
0.0234		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	5.26%
0.0698		4	0.875	0.723	1	0.85	0.8	1	0.0479	10.9%	7.89%
0.2061		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	13.2%
0.6356		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	23.7%
1.9455		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	28.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-2675-6856	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-5869-6241	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	10.8%	0.0698	0.2061	0.1199	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	3.18	1.72	0.095	6	>0.05	CDF	Non-Significant Effect
		0.0234	2.04	1.8	0.099	6	>0.05	CDF	Non-Significant Effect
		0.0698	1.81	1.83	0.101	6	>0.05	CDF	Non-Significant Effect
		0.2061*	2.27	1.84	0.102	6	<0.05	CDF	Significant Effect
		0.6356*	4.08	1.85	0.102	6	<0.05	CDF	Significant Effect
		1.9455*	4.99	1.86	0.102	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.2335714	0.03892857	6	6.41	0.0006	Significant Effect
Error	0.1275	0.006071429	21			
Total	0.3610714		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	2.07	3.81	0.1012	Equal Variances
Variances	Levene Equality of Variance	3.17	3.81	0.0225	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.961	0.897	0.3610	Normal Distribution

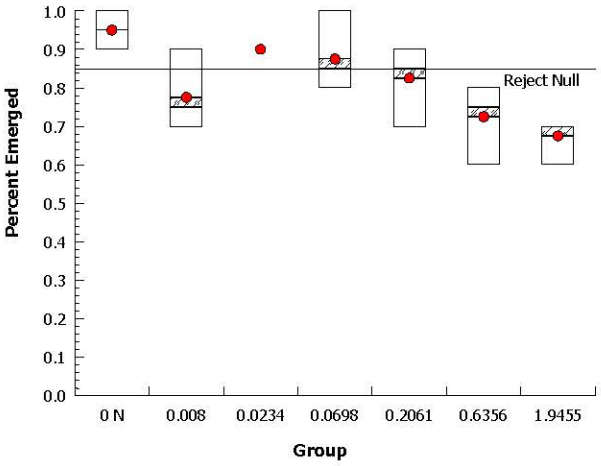
Percent Emerged Summary

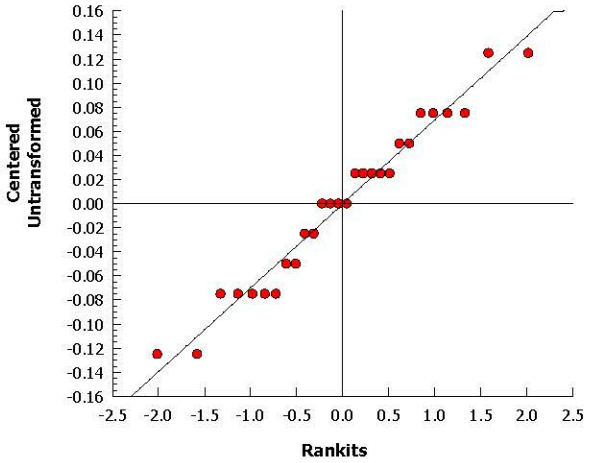
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.95	0.858	1	0.95	0.9	1	0.0289	6.08%	0.0%
0.008		4	0.775	0.623	0.927	0.75	0.7	0.9	0.0479	12.4%	18.4%
0.0234		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	5.26%
0.0698		4	0.875	0.723	1	0.85	0.8	1	0.0479	10.9%	7.89%
0.2061		4	0.825	0.673	0.977	0.85	0.7	0.9	0.0479	11.6%	13.2%
0.6356		4	0.725	0.573	0.877	0.75	0.6	0.8	0.0479	13.2%	23.7%
1.9455		4	0.675	0.595	0.755	0.7	0.6	0.7	0.025	7.41%	28.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	02-5869-6241	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-8392-0092	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	17.5%	0.0698	0.2061	0.1199	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008*	2.66	2.46	0.162	6	0.0334	CDF	Significant Effect
		0.0234	1.14	2.46	0.162	6	0.3950	CDF	Non-Significant Effect
		0.0698	1.52	2.46	0.162	6	0.2448	CDF	Non-Significant Effect
		0.2061*	2.66	2.46	0.162	6	0.0334	CDF	Significant Effect
		0.6356*	5.99	2.46	0.175	5	<0.0001	CDF	Significant Effect
		1.9455*	13.7	2.46	0.162	6	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.2875	0.38125	6	44.2	<0.0001	Significant Effect
Error	0.1725	0.008625	20			
Total	2.46		26			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.53	16.8	0.6059	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.894	0.3620	Normal Distribution

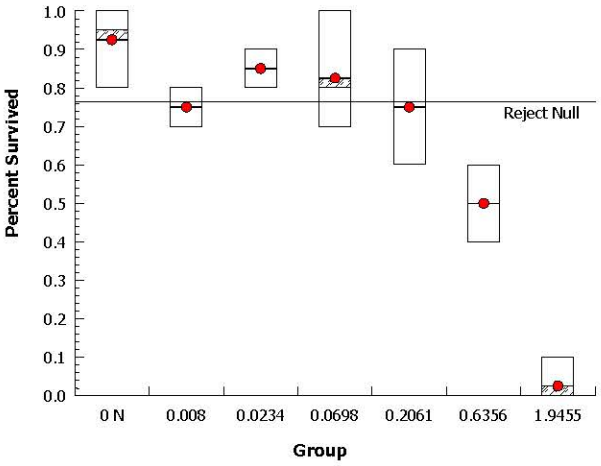
Percent Survived Summary

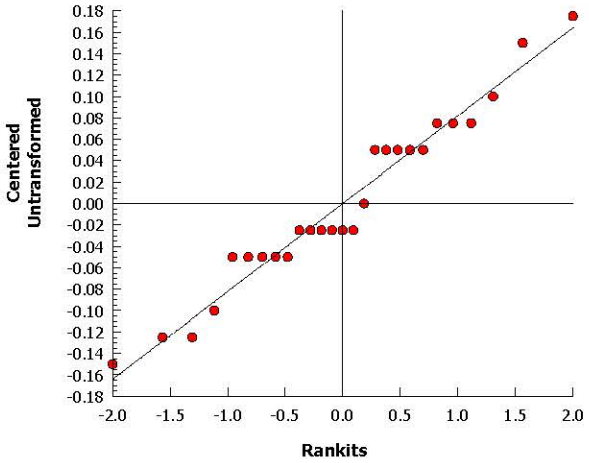
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	0.0%
0.008		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	18.9%
0.0234		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	8.11%
0.0698		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	10.8%
0.2061		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	18.9%
0.6356		3	0.5	0.252	0.748	0.5	0.4	0.6	0.0577	20.0%	45.9%
1.9455		4	0.025	0	0.105	0	0	0.1	0.025	200.0%	97.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-8392-0092	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-9680-9878	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.1%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	2.1	2.45	0.204	6	0.0963	CDF	Non-Significant Effect
		0.0234	0.899	2.45	0.204	6	0.5004	CDF	Non-Significant Effect
		0.0698	1.2	2.45	0.204	6	0.3661	CDF	Non-Significant Effect
		0.2061	2.1	2.45	0.204	6	0.0963	CDF	Non-Significant Effect
		0.6356*	6.29	2.45	0.204	6	<0.0001	CDF	Significant Effect
		1.9455*	10.8	2.45	0.204	6	<0.0001	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.88	2.88	0.0486	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.477143	0.4128571	6	29.6	<0.0001	Significant Effect
Error	0.2925	0.01392857	21			
Total	2.769643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.26	16.8	0.1594	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1706	Normal Distribution

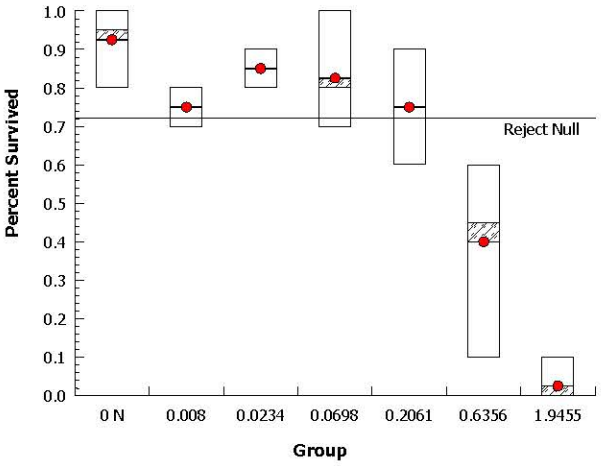
Percent Survived Summary

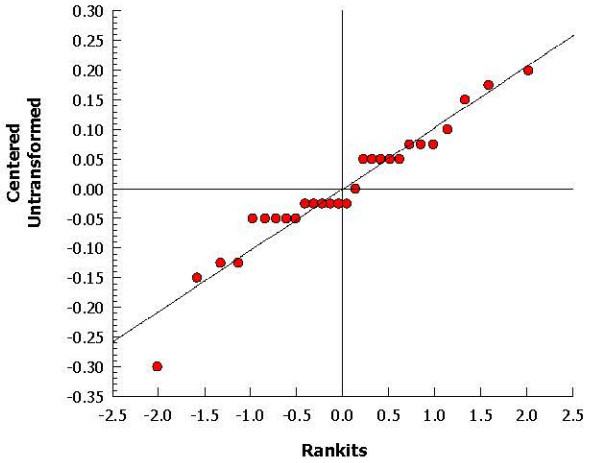
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	0.0%
0.008		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	18.9%
0.0234		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	8.11%
0.0698		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	10.8%
0.2061		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	18.9%
0.6356		4	0.4	0.0563	0.744	0.45	0.1	0.6	0.108	54.0%	56.8%
1.9455		4	0.025	0	0.105	0	0	0.1	0.025	200.0%	97.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	16-9680-9878	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	11-2883-7817	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	13.2%	0.0698	0.2061	0.1199	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	2.66	1.73	0.113	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.9	1.81	0.119	6	>0.05	CDF	Non-Significant Effect
		0.0698	1.78	1.83	0.12	6	>0.05	CDF	Non-Significant Effect
		0.2061*	2.66	1.85	0.121	6	<0.05	CDF	Significant Effect
		0.6356*	5.99	1.84	0.131	5	<0.05	CDF	Significant Effect
		1.9455*	13.7	1.86	0.122	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.2875	0.38125	6	44.2	<0.0001	Significant Effect
Error	0.1725	0.008625	20			
Total	2.46		26			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	4.53	16.8	0.6059	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.96	0.894	0.3620	Normal Distribution

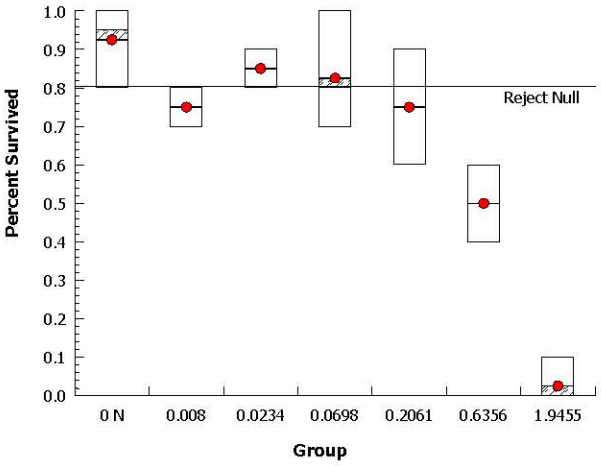
Percent Survived Summary

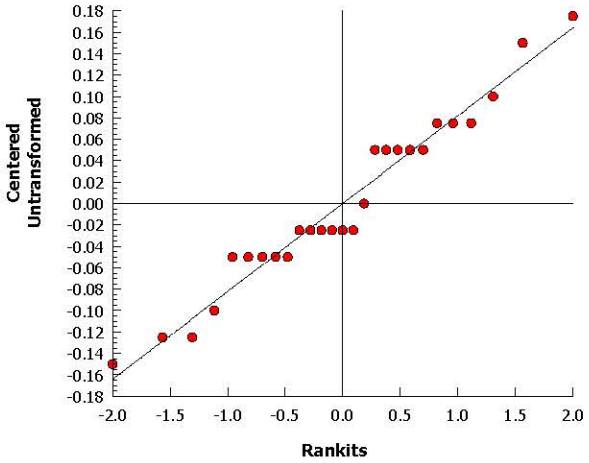
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	0.0%
0.008		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	18.9%
0.0234		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	8.11%
0.0698		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	10.8%
0.2061		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	18.9%
0.6356		3	0.5	0.252	0.748	0.5	0.4	0.6	0.0577	20.0%	45.9%
1.9455		4	0.025	0	0.105	0	0	0.1	0.025	200.0%	97.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	11-2883-7817	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-9172-8496	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.7%	0.0698	0.2061	0.1199	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	2.1	1.72	0.144	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.5	1.8	0.15	6	>0.05	CDF	Non-Significant Effect
		0.0698	1.4	1.83	0.153	6	>0.05	CDF	Non-Significant Effect
		0.2061*	2.1	1.84	0.154	6	<0.05	CDF	Significant Effect
		0.6356*	6.29	1.85	0.154	6	<0.05	CDF	Significant Effect
		1.9455*	10.8	1.86	0.155	6	<0.05	CDF	Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.88	2.88	0.0486	Outlier Detected

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.477143	0.4128571	6	29.6	<0.0001	Significant Effect
Error	0.2925	0.01392857	21			
Total	2.769643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.26	16.8	0.1594	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1706	Normal Distribution

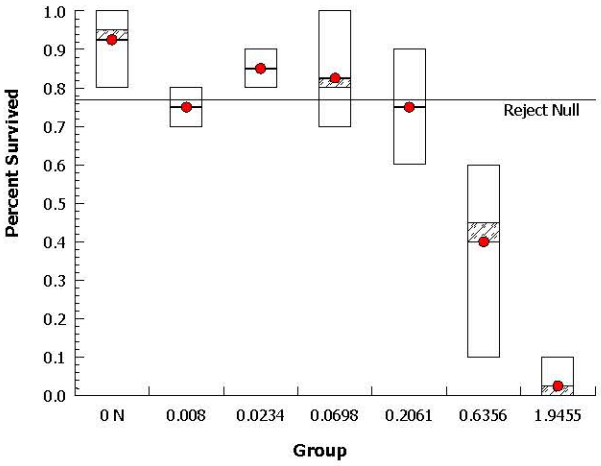
Percent Survived Summary

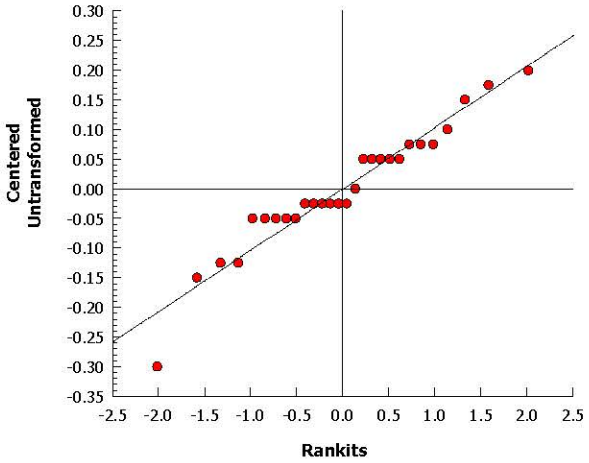
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	0.0%
0.008		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	18.9%
0.0234		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	8.11%
0.0698		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	10.8%
0.2061		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	18.9%
0.6356		4	0.4	0.0563	0.744	0.45	0.1	0.6	0.108	54.0%	56.8%
1.9455		4	0.025	0	0.105	0	0	0.1	0.025	200.0%	97.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	13-9172-8496	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-2184-6973	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	22.1%	0.2061	0.6356	0.3619	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	2.1	2.45	0.204	6	0.0963	CDF	Non-Significant Effect
		0.0234	0.899	2.45	0.204	6	0.5004	CDF	Non-Significant Effect
		0.0698	1.2	2.45	0.204	6	0.3661	CDF	Non-Significant Effect
		0.2061	2.1	2.45	0.204	6	0.0963	CDF	Non-Significant Effect
		0.6356*	6.29	2.45	0.204	6	<0.0001	CDF	Significant Effect
		1.9455*	10.8	2.45	0.204	6	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.477143	0.4128571	6	29.6	<0.0001	Significant Effect
Error	0.2925	0.01392857	21			
Total	2.769643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.26	16.8	0.1594	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1706	Normal Distribution

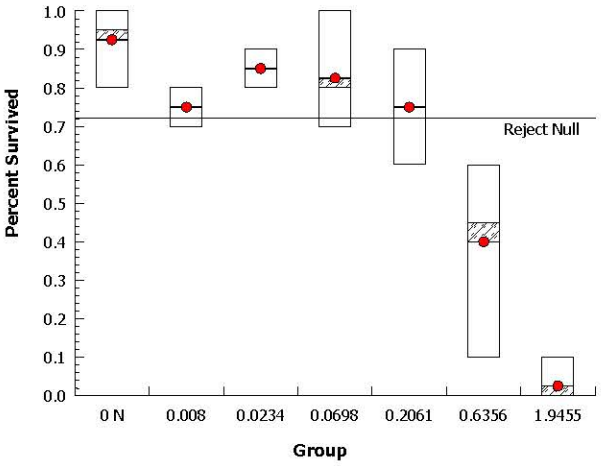
Percent Survived Summary

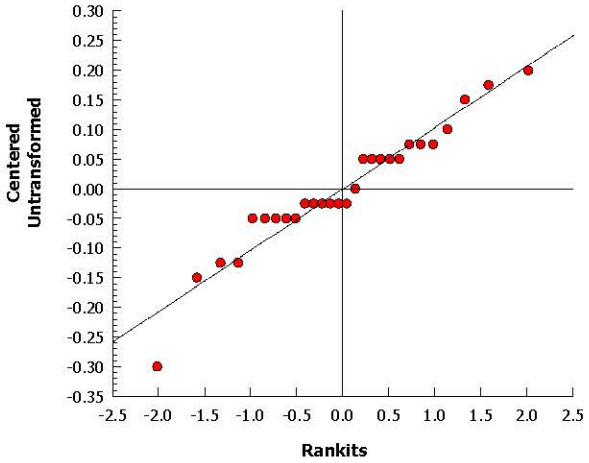
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	0.0%
0.008		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	18.9%
0.0234		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	8.11%
0.0698		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	10.8%
0.2061		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	18.9%
0.6356		4	0.4	0.0563	0.744	0.45	0.1	0.6	0.108	54.0%	56.8%
1.9455		4	0.025	0	0.105	0	0	0.1	0.025	200.0%	97.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	18-2184-6973	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	05-8975-9163	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.7%	0.0698	0.2061	0.1199	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.008	2.1	1.72	0.144	6	>0.05	CDF	Non-Significant Effect
		0.0234	1.5	1.8	0.15	6	>0.05	CDF	Non-Significant Effect
		0.0698	1.4	1.83	0.153	6	>0.05	CDF	Non-Significant Effect
		0.2061*	2.1	1.84	0.154	6	<0.05	CDF	Significant Effect
		0.6356*	6.29	1.85	0.154	6	<0.05	CDF	Significant Effect
		1.9455*	10.8	1.86	0.155	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.477143	0.4128571	6	29.6	<0.0001	Significant Effect
Error	0.2925	0.01392857	21			
Total	2.769643		27			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.26	16.8	0.1594	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.947	0.897	0.1706	Normal Distribution

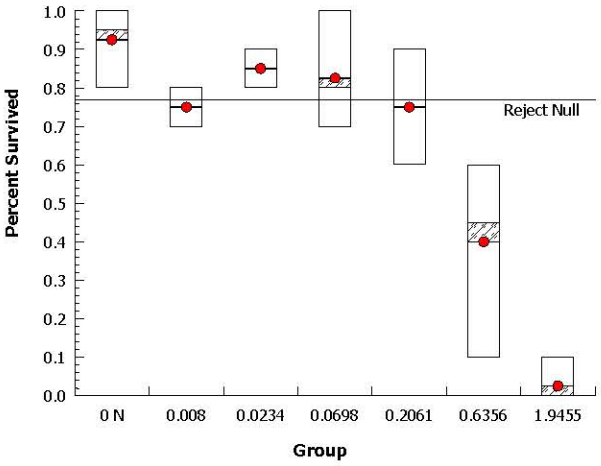
Percent Survived Summary

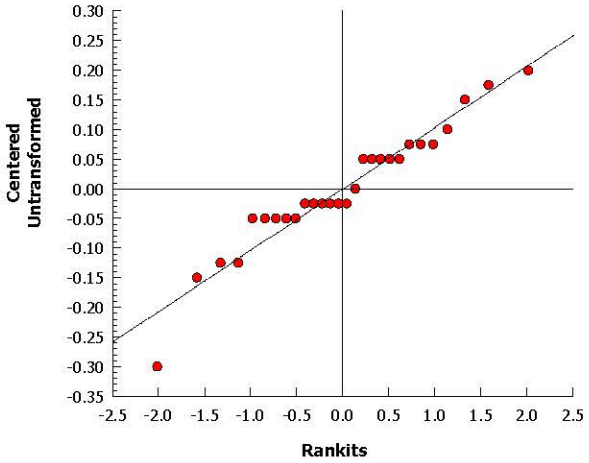
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.925	0.773	1	0.95	0.8	1	0.0479	10.4%	0.0%
0.008		4	0.75	0.658	0.842	0.75	0.7	0.8	0.0289	7.7%	18.9%
0.0234		4	0.85	0.758	0.942	0.85	0.8	0.9	0.0289	6.79%	8.11%
0.0698		4	0.825	0.625	1	0.8	0.7	1	0.0629	15.3%	10.8%
0.2061		4	0.75	0.545	0.955	0.75	0.6	0.9	0.0645	17.2%	18.9%
0.6356		4	0.4	0.0563	0.744	0.45	0.1	0.6	0.108	54.0%	56.8%
1.9455		4	0.025	0	0.105	0	0	0.1	0.025	200.0%	97.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	05-8975-9163	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	02-3631-8109	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.05	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-127	262	265	2.46	3.24	0.325	2.85	2.84	0.0497	Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.00135	N/A	N/A
EC10	0.0202	N/A	N/A
EC25	1.87	N/A	N/A
EC50	285	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0554	0.0361	-0.0153	0.126	1.54	0.1371	Non-Significant Parameter
Slope	0.309	0.16	-0.00571	0.623	1.92	0.0658	Non-Significant Parameter
Intercept	-0.758	0.209	-1.17	-0.349	-3.63	0.0013	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	9.092565	9.092565	1	15	0.0007	Significant
Lack of Fit	5.323249	1.330812	4	2.85	0.0497	Significant
Pure Error	9.822562	0.467741	21			
Residual	15.14581	0.605833	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	15.1	37.7	0.9379	Non-Significant Heterogenity
	Likelihood Ratio GOF	17	37.7	0.8818	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.12	2.88	0.7857	No Outliers Detected
Variances	Mod Levene Equality of Variance	2.65	2.57	0.0449	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.926	0.4299	Normal Distribution
	Anderson-Darling A2 Normality	0.437	2.49	0.3003	Normal Distribution

Percent Emerged Summary

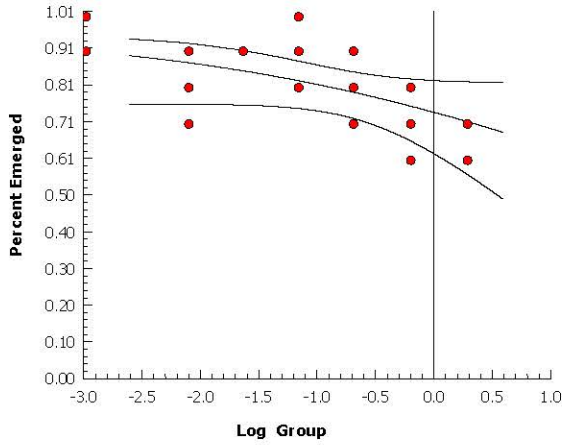
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.95	0.9	1	0.0289	0.0577	6.08%	0.0%	38	40
0.008		4	0.775	0.7	0.9	0.0479	0.0957	12.4%	18.4%	31	40
0.0234		4	0.9	0.9	0.9	0	0	0.0%	5.26%	36	40
0.0698		4	0.875	0.8	1	0.0479	0.0957	10.9%	7.89%	35	40
0.2061		4	0.825	0.7	0.9	0.0479	0.0957	11.6%	13.2%	33	40
0.6356		4	0.725	0.6	0.8	0.0479	0.0957	13.2%	23.7%	29	40
1.9455		4	0.675	0.6	0.7	0.025	0.05	7.41%	28.9%	27	40

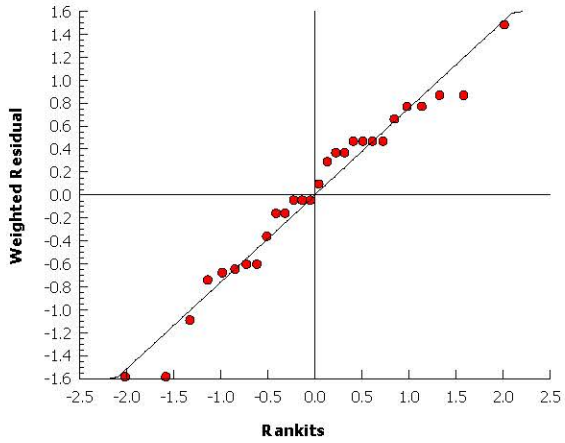
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

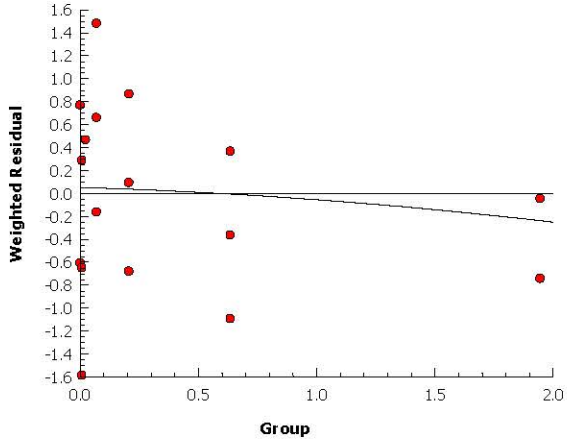
Analysis ID:	02-3631-8109	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

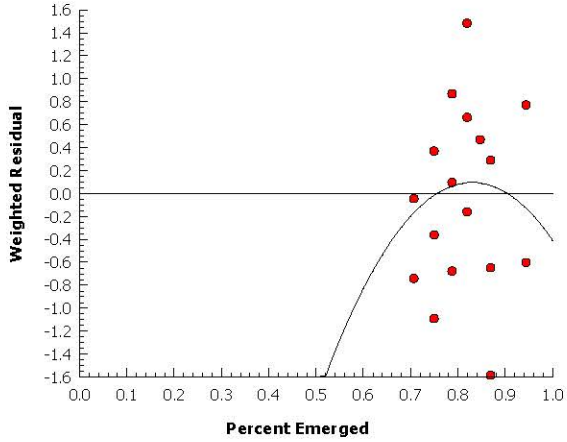
Graphics

Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	10-6316-5631	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.05	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
10	-127	262	265	2.46	3.24	0.325	2.85	2.84	0.0497	Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.00135	N/A	N/A
EC10	0.0202	N/A	N/A
EC25	1.87	N/A	N/A
EC50	285	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0554	0.0361	-0.0153	0.126	1.54	0.1371	Non-Significant Parameter
Slope	0.309	0.16	-0.00571	0.623	1.92	0.0658	Non-Significant Parameter
Intercept	-0.758	0.209	-1.17	-0.349	-3.63	0.0013	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	9.092565	9.092565	1	15	0.0007	Significant
Lack of Fit	5.323249	1.330812	4	2.85	0.0497	Significant
Pure Error	9.822562	0.467741	21			
Residual	15.14581	0.605833	25			

Residual Analysis

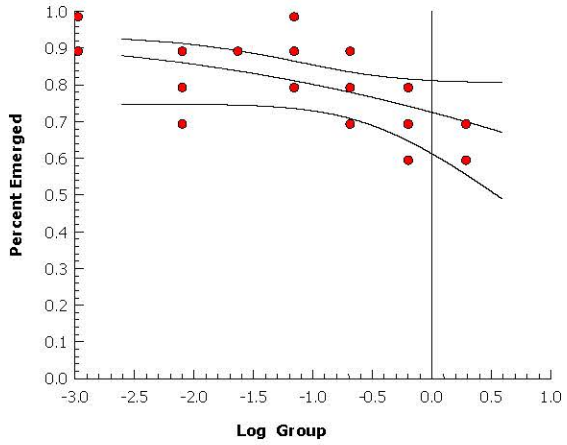
Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	15.1	37.7	0.9379	Non-Significant Heterogenity
	Likelihood Ratio GOF	17	37.7	0.8818	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	2.65	2.57	0.0449	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.964	0.926	0.4299	Normal Distribution
	Anderson-Darling A2 Normality	0.437	2.49	0.3003	Normal Distribution

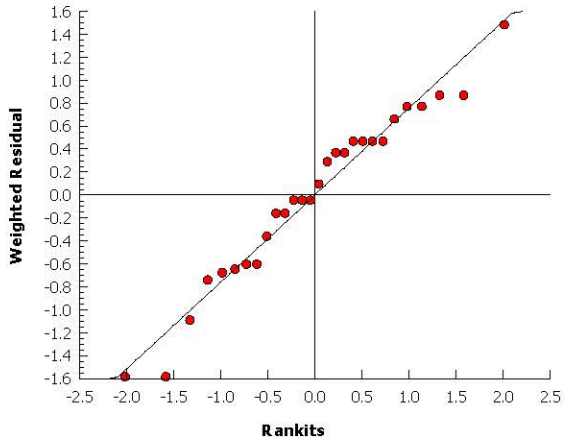
Percent Emerged Summary

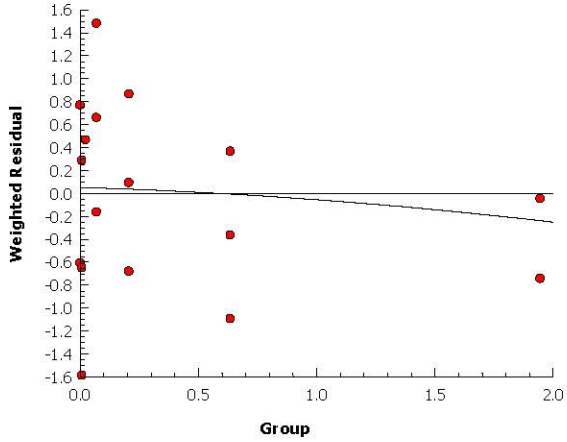
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.95	0.9	1	0.0289	0.0577	6.08%	0.0%	38	40
0.008		4	0.775	0.7	0.9	0.0479	0.0957	12.4%	18.4%	31	40
0.0234		4	0.9	0.9	0.9	0	0	0.0%	5.26%	36	40
0.0698		4	0.875	0.8	1	0.0479	0.0957	10.9%	7.89%	35	40
0.2061		4	0.825	0.7	0.9	0.0479	0.0957	11.6%	13.2%	33	40
0.6356		4	0.725	0.6	0.8	0.0479	0.0957	13.2%	23.7%	29	40
1.9455		4	0.675	0.6	0.7	0.025	0.05	7.41%	28.9%	27	40

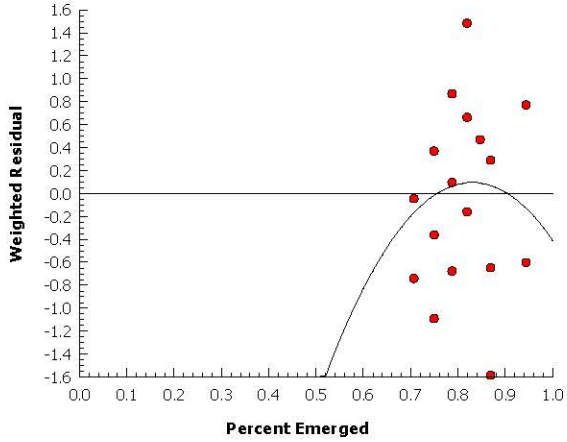
Analysis ID:	10-6316-5631	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	12-3863-6083	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.075	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
13	-125	258	261	-0.235	0.299	0.795	0.733	2.84	0.5790	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.187	0.0613	0.303
EC10	0.241	0.0939	0.365
EC25	0.366	0.189	0.505
EC50	0.582	0.392	0.76

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.166	0.0289	0.11	0.223	5.75	<0.0001	Significant Parameter
Slope	3.34	0.73	1.91	4.77	4.58	0.0001	Significant Parameter
Intercept	0.786	0.22	0.355	1.22	3.57	0.0015	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	98.21532	98.21532	1	107	<0.0001	Significant
Lack of Fit	2.814745	0.703686	4	0.733	0.5794	Non-Significant
Pure Error	20.14858	0.959456	21			
Residual	22.96332	0.918533	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	23	37.7	0.5797	Non-Significant Heterogenity
	Likelihood Ratio GOF	28.4	37.7	0.2894	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	1.94	2.88	1.0000	No Outliers Detected
Variances	Bartlett Equality of Variance	4.45	12.6	0.6160	Equal Variances
	Mod Levene Equality of Variance	0.453	2.57	0.8350	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.946	0.926	0.1604	Normal Distribution
	Anderson-Darling A2 Normality	0.634	2.49	0.0991	Normal Distribution

Percent Survived Summary

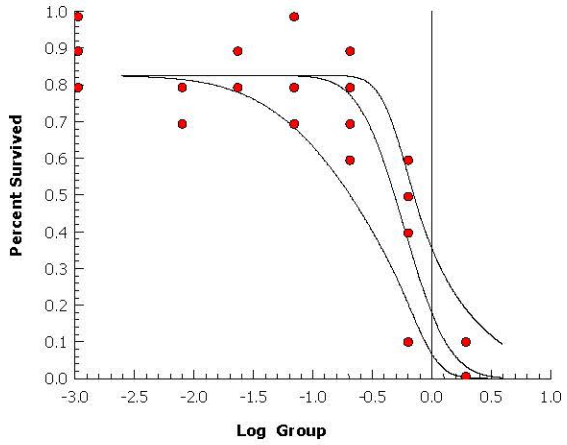
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.925	0.8	1	0.0479	0.0957	10.4%	0.0%	37	40
0.008		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	18.9%	30	40
0.0234		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	8.11%	34	40
0.0698		4	0.825	0.7	1	0.0629	0.126	15.3%	10.8%	33	40
0.2061		4	0.75	0.6	0.9	0.0645	0.129	17.2%	18.9%	30	40
0.6356		4	0.4	0.1	0.6	0.108	0.216	54.0%	56.8%	16	40
1.9455		4	0.025	0	0.1	0.025	0.05	200.0%	97.3%	1	40

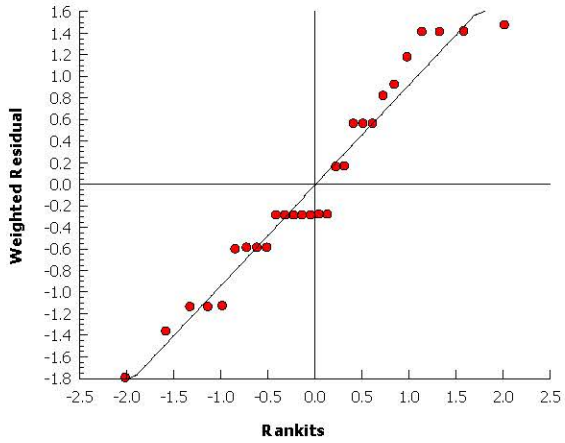
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

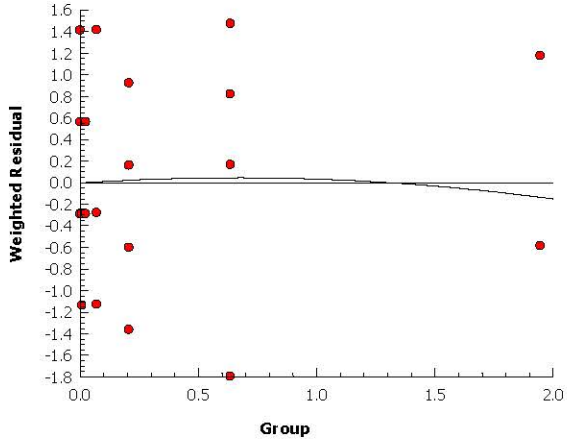
Analysis ID:	12-3863-6083	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

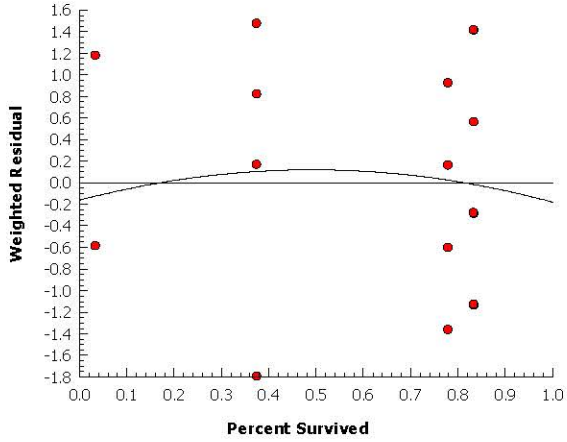
Graphics

Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-1962-4816	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.075	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
13	-125	258	261	-0.235	0.299	0.795	0.733	2.84	0.5790	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.187	0.0613	0.303
EC10	0.241	0.0939	0.365
EC25	0.366	0.189	0.505
EC50	0.582	0.392	0.76

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.166	0.0289	0.11	0.223	5.75	<0.0001	Significant Parameter
Slope	3.34	0.73	1.91	4.77	4.58	0.0001	Significant Parameter
Intercept	0.786	0.22	0.355	1.22	3.57	0.0015	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	98.21532	98.21532	1	107	<0.0001	Significant
Lack of Fit	2.814745	0.703686	4	0.733	0.5794	Non-Significant
Pure Error	20.14858	0.959456	21			
Residual	22.96332	0.918533	25			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	23	37.7	0.5797	Non-Significant Heterogenity
	Likelihood Ratio GOF	28.4	37.7	0.2894	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	4.45	12.6	0.6160	Equal Variances
	Mod Levene Equality of Variance	0.453	2.57	0.8350	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.946	0.926	0.1604	Normal Distribution
	Anderson-Darling A2 Normality	0.634	2.49	0.0991	Normal Distribution

Percent Survived Summary

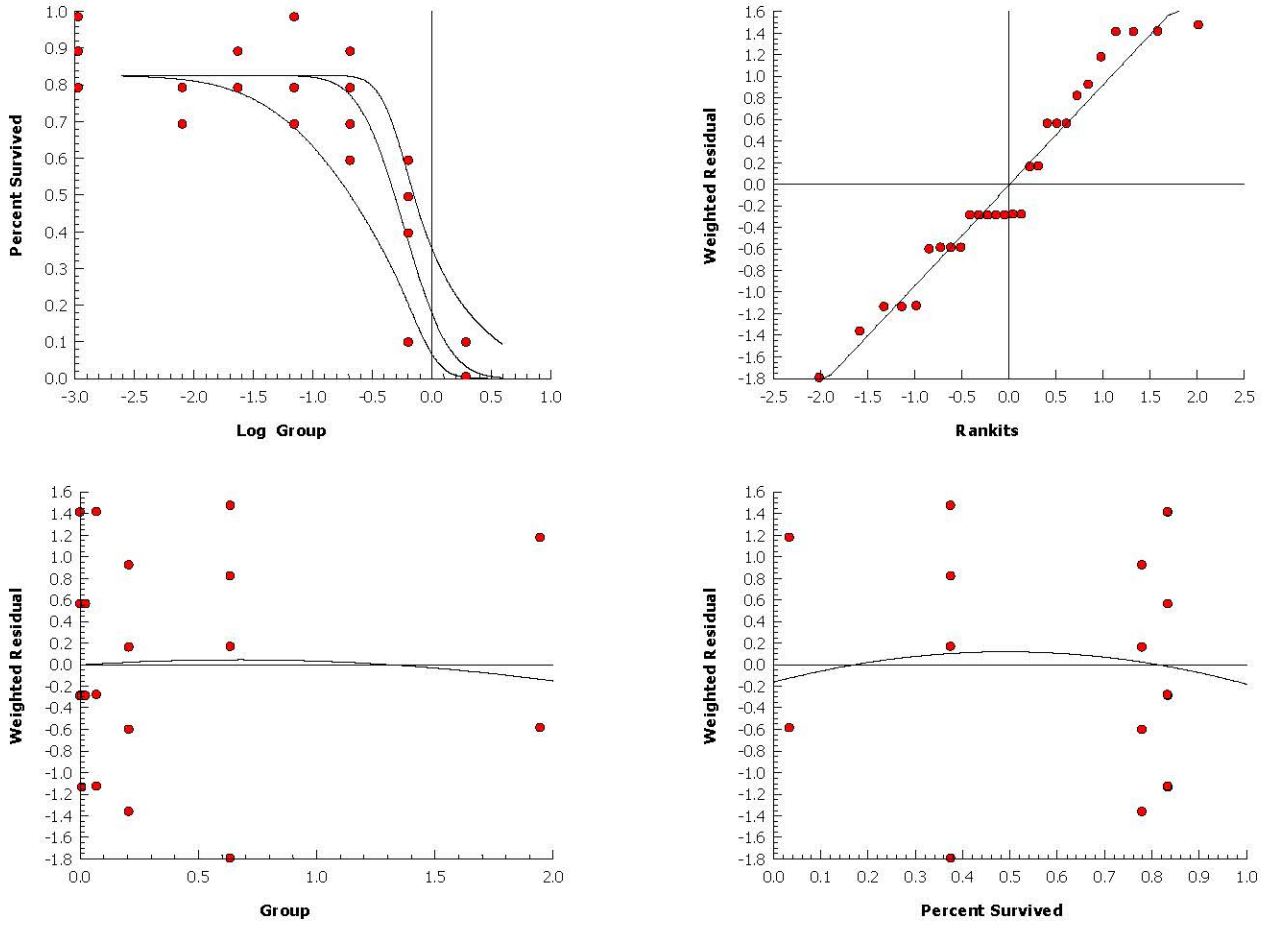
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.925	0.8	1	0.0479	0.0957	10.4%	0.0%	37	40
0.008		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	18.9%	30	40
0.0234		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	8.11%	34	40
0.0698		4	0.825	0.7	1	0.0629	0.126	15.3%	10.8%	33	40
0.2061		4	0.75	0.6	0.9	0.0645	0.129	17.2%	18.9%	30	40
0.6356		4	0.4	0.1	0.6	0.108	0.216	54.0%	56.8%	16	40
1.9455		4	0.025	0	0.1	0.025	0.05	200.0%	97.3%	1	40

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-1962-4816	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics

Log-Normal [NED=A+B*log(X)]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-9057-0423	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	447	-888	-885	0.5354	Yes	0.373	2.93	0.8245	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.226	N/A	0.385
IC10	0.325	N/A	0.513
IC25	0.595	0.381	0.835
IC50	1.17	0.85	1.6

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	13	0.483	12	13.9	26.9	<0.0001	Significant Parameter
C	0.997	0.261	0.485	1.51	3.82	0.0009	Significant Parameter
D	1.17	0.196	0.783	1.55	5.96	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	8.992162	8.992162	1	29.7	<0.0001	Significant
Lack of Fit	0.511105	0.127776	4	0.373	0.8245	Non-Significant
Pure Error	6.158288	0.342127	18			
Residual	6.669393	0.303154	22			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	6.67	33.9	0.9993	Non-Significant Heterogenity
	Likelihood Ratio GOF	6.95	33.9	0.9990	Non-Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2	2.82	0.9549	No Outliers Detected
Distribution	Shapiro-Wilk W Normality	0.931	0.92	0.0936	Normal Distribution
	Anderson-Darling A2 Normality	0.715	2.49	0.0621	Normal Distribution

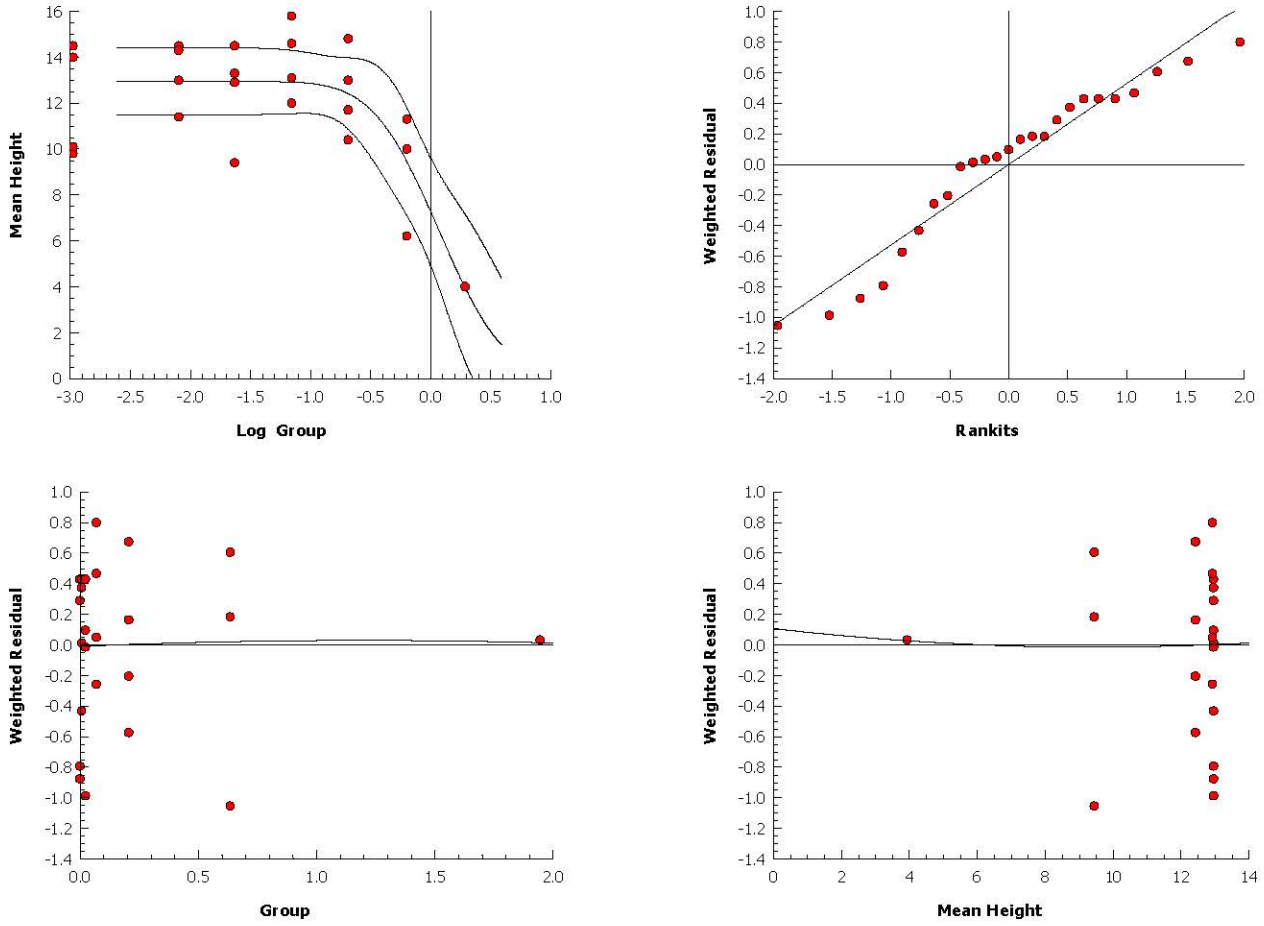
Mean Height Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	12.1	9.8	14.5	1.25	2.49	20.6%	0.0%
0.008		4	13.3	11.4	14.5	0.715	1.43	10.8%	-9.92%
0.0234		4	12.5	9.4	14.5	1.1	2.19	17.5%	-3.51%
0.0698		4	13.9	12	15.8	0.834	1.67	12.0%	-14.7%
0.2061		4	12.5	10.4	14.8	0.939	1.88	15.1%	-3.1%
0.6356		4	9.38	6.2	11.3	1.1	2.2	23.5%	22.5%
1.9455		1	4	4	4	0	0	0.0%	66.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-9057-0423	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-1840-2335	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	447	-888	-885	0.5354	Yes	0.373	2.93	0.8245	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.226	N/A	0.385
IC10	0.325	N/A	0.513
IC25	0.595	0.381	0.835
IC50	1.17	0.85	1.6

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	13	0.483	12	13.9	26.9	<0.0001	Significant Parameter
C	0.997	0.261	0.485	1.51	3.82	0.0009	Significant Parameter
D	1.17	0.196	0.783	1.55	5.96	<0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	8.992162	8.992162	1	29.7	<0.0001	Significant
Lack of Fit	0.511105	0.127776	4	0.373	0.8245	Non-Significant
Pure Error	6.158288	0.342127	18			
Residual	6.669393	0.303154	22			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	6.67	33.9	0.9993	Non-Significant Heterogenity
	Likelihood Ratio GOF	6.95	33.9	0.9990	Non-Significant Heterogenity
Distribution	Shapiro-Wilk W Normality	0.931	0.92	0.0936	Normal Distribution
	Anderson-Darling A2 Normality	0.715	2.49	0.0621	Normal Distribution

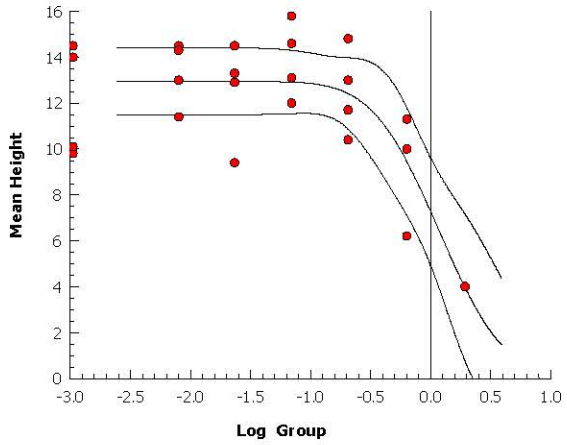
Mean Height Summary

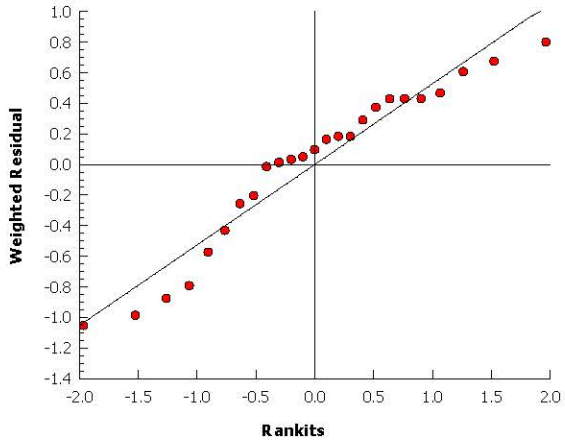
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	12.1	9.8	14.5	1.25	2.49	20.6%	0.0%
0.008		4	13.3	11.4	14.5	0.715	1.43	10.8%	-9.92%
0.0234		4	12.5	9.4	14.5	1.1	2.19	17.5%	-3.51%
0.0698		4	13.9	12	15.8	0.834	1.67	12.0%	-14.7%
0.2061		4	12.5	10.4	14.8	0.939	1.88	15.1%	-3.1%
0.6356		4	9.38	6.2	11.3	1.1	2.2	23.5%	22.5%
1.9455		1	4	4	4	0	0	0.0%	66.9%

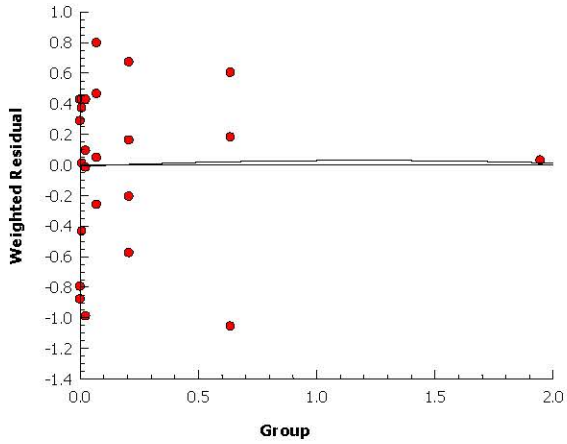
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

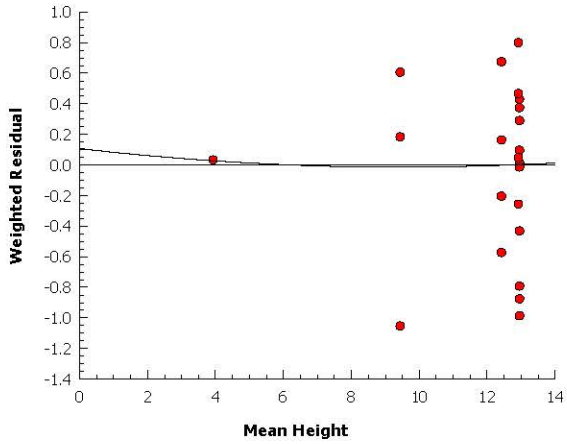
Analysis ID:	14-1840-2335	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	20-1870-8956	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
9	-209	425	428	0.4345	Yes	1.37	2.93	0.2847	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.162	N/A	0.318
IC10	0.224	N/A	0.41
IC25	0.386	0.16	0.634
IC50	0.708	0.481	1.04

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	157	10.4	137	178	15.1	<0.0001	Significant Parameter
C	0.898	0.313	0.285	1.51	2.87	0.0089	Significant Parameter
D	0.708	0.151	0.411	1	4.67	0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	226.9528	226.9528	1	20.4	0.0002	Significant
Lack of Fit	56.89736	14.22434	4	1.37	0.2847	Non-Significant
Pure Error	187.3828	10.41015	18			
Residual	244.2801	11.10364	22			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	244	33.9	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	252	33.9	<0.0001	Significant Heterogenity
Extreme Value	Grubbs Extreme Value	2.04	2.82	0.8428	No Outliers Detected
Distribution	Shapiro-Wilk W Normality	0.979	0.92	0.8713	Normal Distribution
	Anderson-Darling A2 Normality	0.242	2.49	0.7988	Normal Distribution

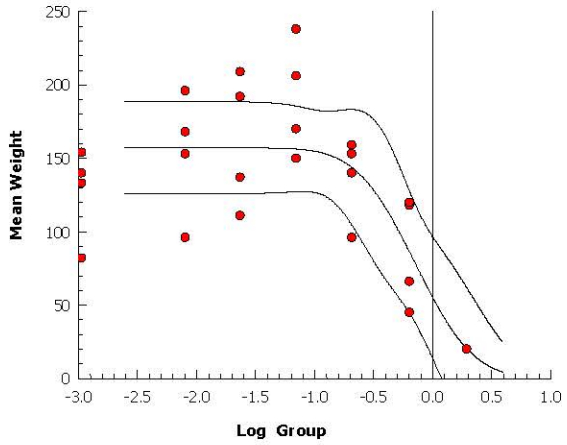
Mean Weight Summary

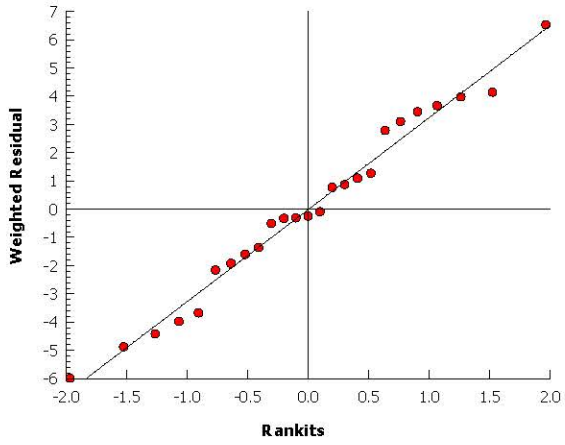
			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	127	82	154	15.7	31.4	24.7%	0.0%
0.008		4	153	96	196	21.1	42.1	27.5%	-20.4%
0.0234		4	162	111	209	23	46	28.3%	-27.5%
0.0698		4	191	150	238	19.5	39	20.4%	-50.1%
0.2061		4	137	96	159	14.2	28.5	20.8%	-7.66%
0.6356		4	87.3	45	120	18.8	37.7	43.2%	31.4%
1.9455		1	20	20	20	0	0	0.0%	84.3%

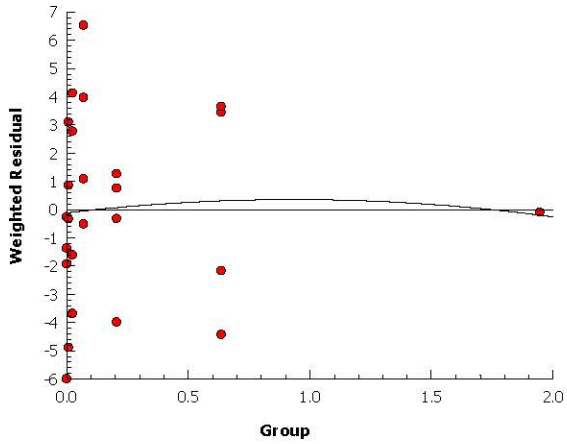
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

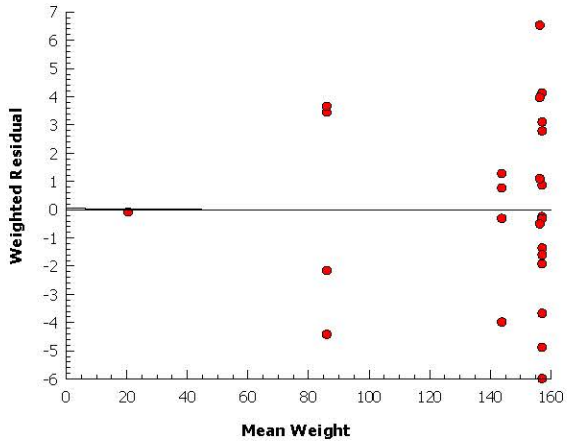
Analysis ID:	20-1870-8956	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:40	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-1107-7516	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
9	-209	425	428	0.4345	Yes	1.37	2.93	0.2847	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.162	N/A	0.318
IC10	0.224	N/A	0.41
IC25	0.386	0.16	0.634
IC50	0.708	0.481	1.04

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	157	10.4	137	178	15.1	<0.0001	Significant Parameter
C	0.898	0.313	0.285	1.51	2.87	0.0089	Significant Parameter
D	0.708	0.151	0.411	1	4.67	0.0001	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	226.9528	226.9528	1	20.4	0.0002	Significant
Lack of Fit	56.89736	14.22434	4	1.37	0.2847	Non-Significant
Pure Error	187.3828	10.41015	18			
Residual	244.2801	11.10364	22			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	244	33.9	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	252	33.9	<0.0001	Significant Heterogenity
Distribution	Shapiro-Wilk W Normality	0.979	0.92	0.8713	Normal Distribution
	Anderson-Darling A2 Normality	0.242	2.49	0.7988	Normal Distribution

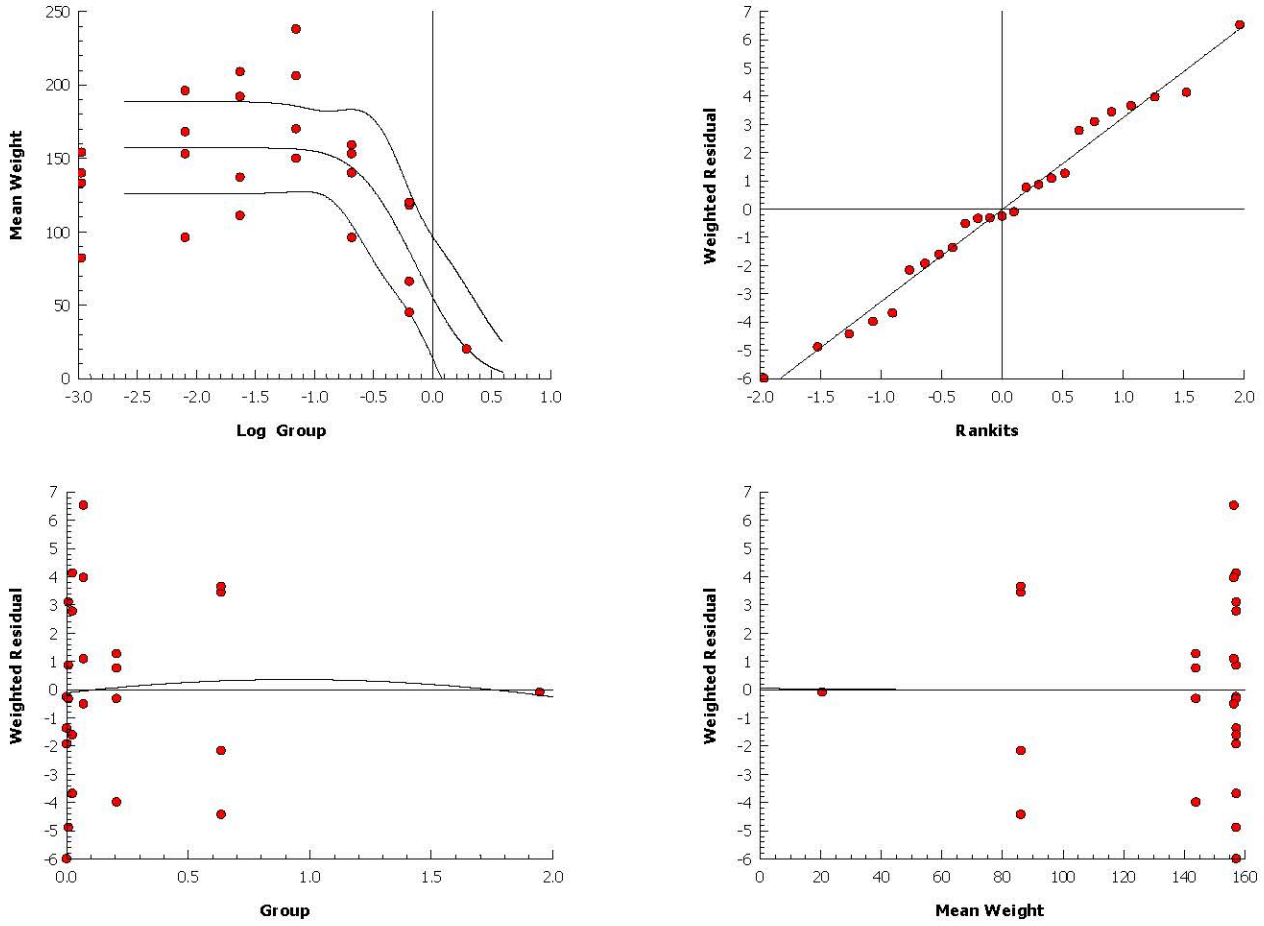
Mean Weight Summary

			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	127	82	154	15.7	31.4	24.7%	0.0%
0.008		4	153	96	196	21.1	42.1	27.5%	-20.4%
0.0234		4	162	111	209	23	46	28.3%	-27.5%
0.0698		4	191	150	238	19.5	39	20.4%	-50.1%
0.2061		4	137	96	159	14.2	28.5	20.8%	-7.66%
0.6356		4	87.3	45	120	18.8	37.7	43.2%	31.4%
1.9455		1	20	20	20	0	0	0.0%	84.3%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-1107-7516	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]



CETIS Analytical Report

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-5872-5514	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	30 Jan-13 14:39	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.075	12.61%	-0.306	0.0658	0.494	0.365	0.669

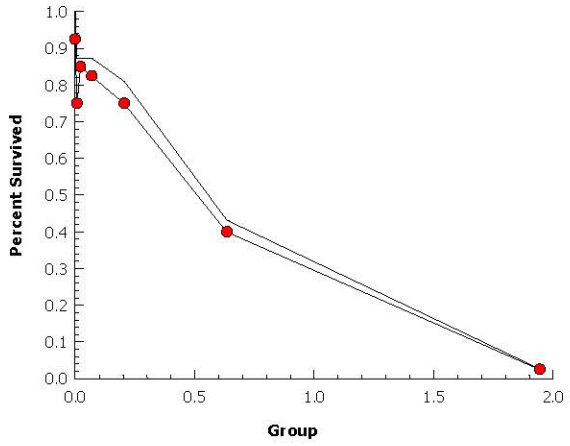
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Extreme Value	Grubbs Extreme Value	2.64	2.88	0.1373	No Outliers Detected

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.925	0.8	1	0.0479	0.0957	10.4%	0.0%	37	40
0.008		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	18.9%	30	40
0.0234		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	8.11%	34	40
0.0698		4	0.825	0.7	1	0.0629	0.126	15.3%	10.8%	33	40
0.2061		4	0.75	0.6	0.9	0.0645	0.129	17.2%	18.9%	30	40
0.6356		4	0.4	0.1	0.6	0.108	0.216	54.0%	56.8%	16	40
1.9455		4	0.025	0	0.1	0.025	0.05	200.0%	97.3%	1	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	13-7560-1136	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:02	**Analysis:**	Trimmed Spearman-Kärber	**Official Results:**	Yes

Batch ID:	12-2310-3220	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	19 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	30 Jan-13 14:07	**Species:**	Lycopersicon esculentum	**Brine:**	
Duration:	561d 14h	**Source:**	Meyer Seed Co., Baltimore, MD	**Age:**	

Sample ID:	00-5923-4334	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	19 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	30 Jan-13 14:07	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

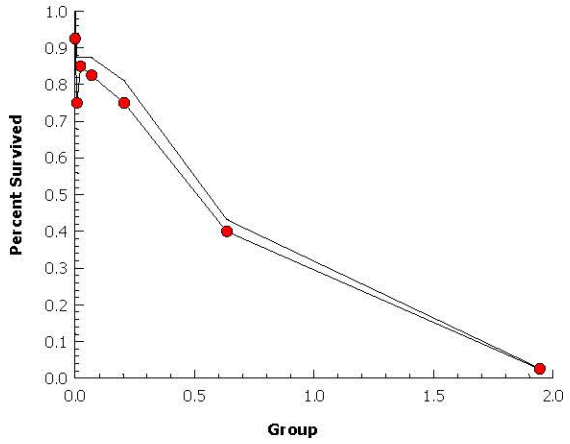
Trimmed Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.075	12.61%	-0.306	0.0658	0.494	0.365	0.669

Percent Survived Summary

			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.925	0.8	1	0.0479	0.0957	10.4%	0.0%	37	40
0.008		4	0.75	0.7	0.8	0.0289	0.0577	7.7%	18.9%	30	40
0.0234		4	0.85	0.8	0.9	0.0289	0.0577	6.79%	8.11%	34	40
0.0698		4	0.825	0.7	1	0.0629	0.126	15.3%	10.8%	33	40
0.2061		4	0.75	0.6	0.9	0.0645	0.129	17.2%	18.9%	30	40
0.6356		4	0.4	0.1	0.6	0.108	0.216	54.0%	56.8%	16	40
1.9455		4	0.025	0	0.1	0.025	0.05	200.0%	97.3%	1	40

Graphics



OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
08-7276-5578	Mean Height	0.5975	1.8067	1.039	14.1%		Dunnett Multiple Comparison Test
14-6831-2452	Mean Height	0.5975	1.8067	1.039	10.9%		Williams Multiple Comparison Test
09-1137-2323	Mean Weight	0.0642	0.1971	0.1125	21.4%		Dunnett Multiple Comparison Test
19-1003-9493	Mean Weight	0.0642	0.1971	0.1125	16.6%		Williams Multiple Comparison Test
15-5381-7407	Percent Emerged	0.5975	1.8067	1.039	NA		Jonckheere-Terpstra Step-Down Test
01-9719-3596	Percent Emerged	1.8067	>1.8067	NA	11.4%		Mann-Whitney U Two-Sample Test
14-4670-8030	Percent Survived	0.1971	0.5975	0.3432	NA		Jonckheere-Terpstra Step-Down Test
14-0031-9944	Percent Survived	0.5975	1.8067	1.039	9.79%		Mann-Whitney U Two-Sample Test

Point Estimate Summary

Analysis ID	Endpoint	Level		95% LCL	95% UCL	TU	Method
07-3359-3819	Mean Height	IC5	0.379	N/A	0.819		Nonlinear Regression
		IC10	0.738	0.294	1.28		
		IC25	2.25	1.21	3.73		
		IC50	7.79	1.41	43.1		
04-6807-8019	Mean Weight	IC5	0.0011	N/A	0.0311		Nonlinear Regression
		IC10	0.00944	4.67E-05	0.093		
		IC25	0.344	0.117	0.896		
		IC50	18.7	0.905	386		
16-6508-4571	Percent Emerged	EC5	1.03	N/A	N/A		Linear Regression (MLE)
		EC10	1.57	N/A	N/A		
		EC25	3.16	N/A	N/A		
		EC50	6.88	N/A	N/A		
19-1112-4371	Percent Survived	EC5	0.352	N/A	0.787		Linear Regression (MLE)
		EC10	0.584	N/A	1.09		
		EC25	1.36	0.027	22.6		
		EC50	3.5	1.84	1E+10		

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Mean Height Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	41	35.7	46.4	37.7	44.8	1.69	3.38	8.23%	0.0%
0	Negative Control	4	40.5	33.1	47.8	35	45.5	2.31	4.62	11.4%	1.34%
0.0219		4	42.9	40.6	45.1	40.8	43.8	0.711	1.42	3.32%	-4.51%
0.0642		4	42.1	39.3	44.8	40.1	44.3	0.863	1.73	4.1%	-2.56%
0.1971		4	40.3	38.1	42.5	39.2	42.3	0.69	1.38	3.42%	1.83%
0.5975		4	38.5	33.6	43.5	35	42.5	1.56	3.13	8.11%	6.09%
1.8067		4	32.8	24.2	41.4	25.7	38.7	2.71	5.41	16.5%	20.0%

Mean Weight Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	160	127	193	135	184	10.4	20.8	13.0%	0.0%
0	Negative Control	4	184	115	252	134	226	21.6	43.2	23.5%	-14.7%
0.0219		4	149	134	164	143	163	4.77	9.54	6.41%	7.18%
0.0642		4	163	140	185	147	180	7.12	14.2	8.77%	-1.4%
0.1971		4	140	109	170	118	160	9.5	19	13.6%	12.9%
0.5975		4	136	122	150	124	144	4.4	8.81	6.46%	15.0%
1.8067		4	116	76.8	155	88	146	12.3	24.5	21.2%	27.8%

Percent Emerged Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.925	0.845	1	0.9	1	0.025	0.05	5.41%	0.0%
0	Negative Control	4	0.875	0.675	1	0.7	1	0.0629	0.126	14.4%	5.41%
0.0219		4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	-5.41%
0.0642		4	0.9	0.9	0.9	0.9	0.9	0	0	0.0%	2.7%
0.1971		4	0.9	0.9	0.9	0.9	0.9	0	0	0.0%	2.7%
0.5975		4	0.9	0.77	1	0.8	1	0.0408	0.0816	9.07%	2.7%
1.8067		4	0.8	0.67	0.93	0.7	0.9	0.0408	0.0816	10.2%	13.5%

Percent Survived Summary

Group	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Solvent Blank	4	0.925	0.845	1	0.9	1	0.025	0.05	5.41%	0.0%
0	Negative Control	4	0.875	0.675	1	0.7	1	0.0629	0.126	14.4%	5.41%
0.0219		4	0.975	0.895	1	0.9	1	0.025	0.05	5.13%	-5.41%
0.0642		4	0.9	0.9	0.9	0.9	0.9	0	0	0.0%	2.7%
0.1971		4	0.9	0.9	0.9	0.9	0.9	0	0	0.0%	2.7%
0.5975		4	0.825	0.745	0.905	0.8	0.9	0.025	0.05	6.06%	10.8%
1.8067		4	0.625	0.545	0.705	0.6	0.7	0.025	0.05	8.0%	32.4%

Mean Height Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	44.8	37.7	42.9	38.7
0	Negative Control	38.6	42.8	45.5	35
0.0219		40.8	43.1	43.8	43.8
0.0642		41.8	40.1	44.3	42.1
0.1971		39.8	39.2	42.3	39.8
0.5975		37.6	42.5	35	39
1.8067		25.7	32.5	34.4	38.7

Mean Weight Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	168	135	184	154
0	Negative Control	213	226	162	134
0.0219		163	144	143	145
0.0642		147	180	156	167
0.1971		118	130	150	160
0.5975		144	141	124	136
1.8067		88	107	146	122

Percent Emerged Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.9	1	0.9	0.9
0	Negative Control	0.7	0.9	1	0.9
0.0219		0.9	1	1	1
0.0642		0.9	0.9	0.9	0.9
0.1971		0.9	0.9	0.9	0.9
0.5975		0.9	0.8	1	0.9
1.8067		0.7	0.8	0.8	0.9

Percent Survived Detail

Group	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Solvent Blank	0.9	1	0.9	0.9
0	Negative Control	0.7	0.9	1	0.9
0.0219		0.9	1	1	1
0.0642		0.9	0.9	0.9	0.9
0.1971		0.9	0.9	0.9	0.9
0.5975		0.8	0.8	0.9	0.8
1.8067		0.6	0.6	0.7	0.6

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-7276-5578	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	14.1%	0.5975	1.8067	1.039	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-1.01	2.41	5.7	6	0.9833	CDF	Non-Significant Effect
		0.0642	-0.675	2.41	5.7	6	0.9601	CDF	Non-Significant Effect
		0.1971	0.0844	2.41	5.7	6	0.8073	CDF	Non-Significant Effect
		0.5975	0.823	2.41	5.7	6	0.5016	CDF	Non-Significant Effect
		1.8067*	3.23	2.41	5.7	6	0.0095	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	260.3132	52.06265	5	4.64	0.0068	Significant Effect
Error	202.025	11.22361	18			
Total	462.3383		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	8.9	15.1	0.1131	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.884	0.6760	Normal Distribution

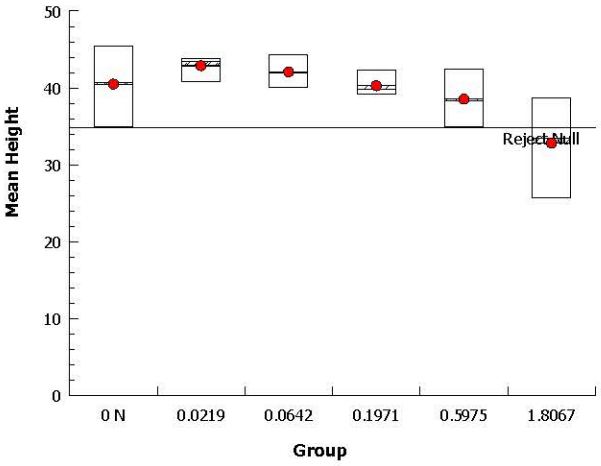
Mean Height Summary

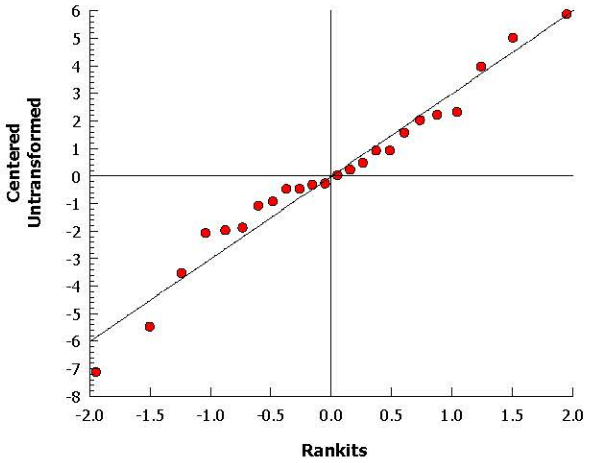
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	40.5	33.1	47.8	40.7	35	45.5	2.31	11.4%	0.0%
0.0219		4	42.9	40.6	45.1	43.4	40.8	43.8	0.711	3.32%	-5.93%
0.0642		4	42.1	39.3	44.8	41.9	40.1	44.3	0.863	4.1%	-3.95%
0.1971		4	40.3	38.1	42.5	39.8	39.2	42.3	0.69	3.42%	0.49%
0.5975		4	38.5	33.6	43.5	38.3	35	42.5	1.56	8.11%	4.82%
1.8067		4	32.8	24.2	41.4	33.5	25.7	38.7	2.71	16.5%	18.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	08-7276-5578	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-6831-2452	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:15	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	10.9%	0.5975	1.8067	1.039	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-1.01	1.73	4.11	6	>0.05	CDF	Non-Significant Effect
		0.0642	-0.675	1.82	4.31	6	>0.05	CDF	Non-Significant Effect
		0.1971	0.0844	1.85	4.37	6	>0.05	CDF	Non-Significant Effect
		0.5975	0.823	1.86	4.4	6	>0.05	CDF	Non-Significant Effect
		1.8067*	3.23	1.87	4.42	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	260.3132	52.06265	5	4.64	0.0068	Significant Effect
Error	202.025	11.22361	18			
Total	462.3383		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	8.9	15.1	0.1131	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.97	0.884	0.6760	Normal Distribution

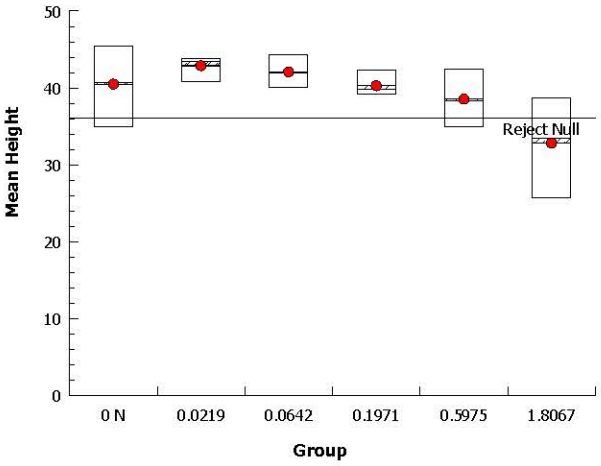
Mean Height Summary

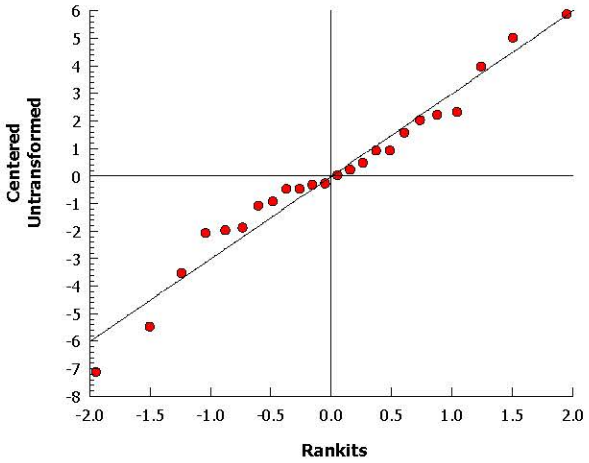
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	40.5	33.1	47.8	40.7	35	45.5	2.31	11.4%	0.0%
0.0219		4	42.9	40.6	45.1	43.4	40.8	43.8	0.711	3.32%	-5.93%
0.0642		4	42.1	39.3	44.8	41.9	40.1	44.3	0.863	4.1%	-3.95%
0.1971		4	40.3	38.1	42.5	39.8	39.2	42.3	0.69	3.42%	0.49%
0.5975		4	38.5	33.6	43.5	38.3	35	42.5	1.56	8.11%	4.82%
1.8067		4	32.8	24.2	41.4	33.5	25.7	38.7	2.71	16.5%	18.9%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-6831-2452	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:15	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	09-1137-2323	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	21.4%	0.0642	0.1971	0.1125	

Dunnett Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	2.14	2.41	39.3	6	0.0810	CDF	Non-Significant Effect
		0.0642	1.3	2.41	39.3	6	0.2972	CDF	Non-Significant Effect
		0.1971*	2.71	2.41	39.3	6	0.0276	CDF	Significant Effect
		0.5975*	2.91	2.41	39.3	6	0.0185	CDF	Significant Effect
		1.8067*	4.17	2.41	39.3	6	0.0013	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	10955.5	2191.1	5	4.11	0.0115	Significant Effect
Error	9587	532.6111	18			
Total	20542.5		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.76	15.1	0.0822	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.988	0.884	0.9876	Normal Distribution

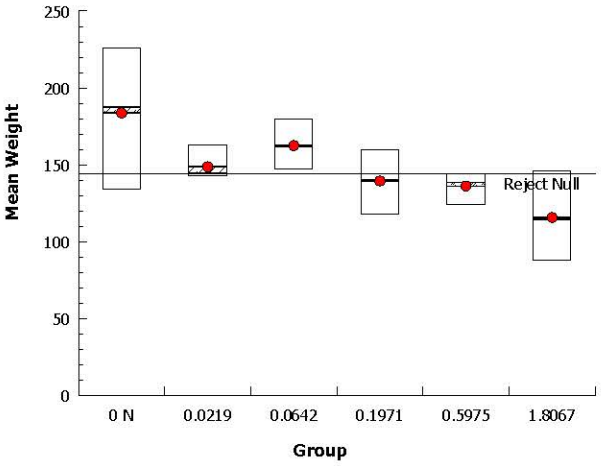
Mean Weight Summary

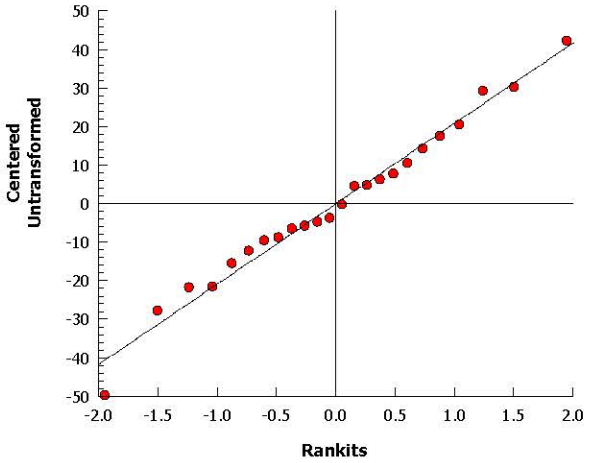
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	184	115	252	188	134	226	21.6	23.5%	0.0%
0.0219		4	149	134	164	145	143	163	4.77	6.41%	19.0%
0.0642		4	163	140	185	162	147	180	7.12	8.77%	11.6%
0.1971		4	140	109	170	140	118	160	9.5	13.6%	24.1%
0.5975		4	136	122	150	139	124	144	4.4	6.46%	25.9%
1.8067		4	116	76.8	155	115	88	146	12.3	21.2%	37.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	09-1137-2323	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Parametric-Control vs Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-1003-9493	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	16.6%	0.0642	0.1971	0.1125	

Williams Multiple Comparison Test

Control	vs	Group	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	2.14	1.73	28.3	6	>0.05	CDF	Non-Significant Effect
		0.0642	1.72	1.82	29.7	6	>0.05	CDF	Non-Significant Effect
		0.1971*	2.71	1.85	30.1	6	<0.05	CDF	Significant Effect
		0.5975*	2.91	1.86	30.3	6	<0.05	CDF	Significant Effect
		1.8067*	4.17	1.87	30.5	6	<0.05	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	10955.5	2191.1	5	4.11	0.0115	Significant Effect
Error	9587	532.6111	18			
Total	20542.5		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance	9.76	15.1	0.0822	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.988	0.884	0.9876	Normal Distribution

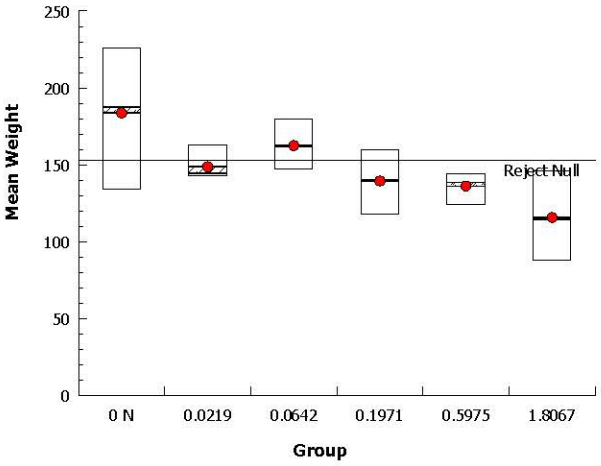
Mean Weight Summary

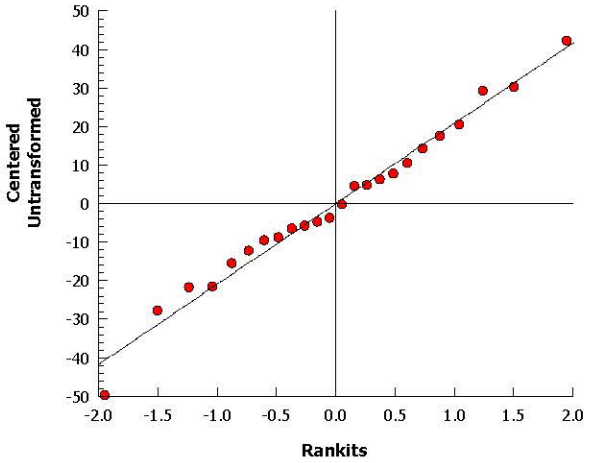
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	184	115	252	188	134	226	21.6	23.5%	0.0%
0.0219		4	149	134	164	145	143	163	4.77	6.41%	19.0%
0.0642		4	163	140	185	162	147	180	7.12	8.77%	11.6%
0.1971		4	140	109	170	140	118	160	9.5	13.6%	24.1%
0.5975		4	136	122	150	139	124	144	4.4	6.46%	25.9%
1.8067		4	116	76.8	155	115	88	146	12.3	21.2%	37.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	19-1003-9493	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Parametric-Control vs Ord.Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	01-9719-3596	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	11.4%	1.8067	>1.8067	NA	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	3.5	NA	2	6	0.9857	Exact	Non-Significant Effect
		0.0642	8	NA	1	6	0.7143	Exact	Non-Significant Effect
		0.1971	8	NA	1	6	0.7143	Exact	Non-Significant Effect
		0.5975	7.5	NA	2	6	0.6857	Exact	Non-Significant Effect
		1.8067	11.5	NA	2	6	0.2143	Exact	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.06333333	0.01266667	5	2.4	0.0780	Non-Significant Effect
Error	0.095	0.005277778	18			
Total	0.1583333		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.2	4.25	0.3485	Equal Variances
Variances	Levene Equality of Variance	2.09	4.25	0.1139	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.844	0.884	0.0017	Non-normal Distribution

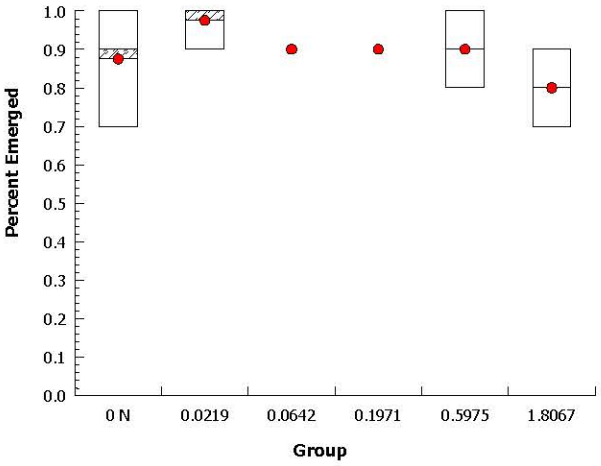
Percent Emerged Summary

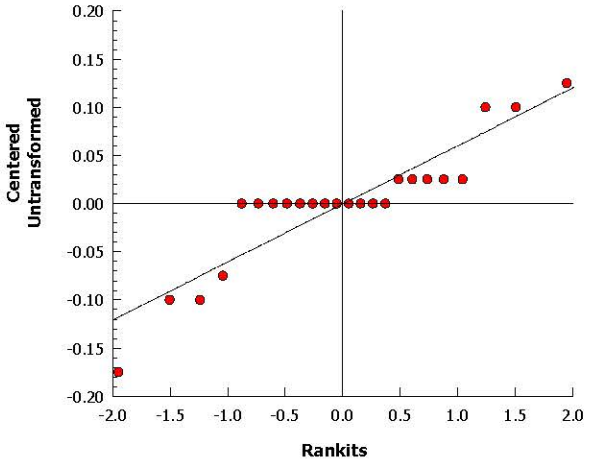
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.875	0.675	1	0.9	0.7	1	0.0629	14.4%	0.0%
0.0219		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	-11.4%
0.0642		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.1971		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.5975		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	-2.86%
1.8067		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	8.57%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	01-9719-3596	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	15-5381-7407	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.5975	1.8067	1.039	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-1.51	1.64	2	-2	0.9339	Asymp	Non-Significant Effect
		0.0642	0.259	1.64	2	-2	0.3977	Asymp	Non-Significant Effect
		0.1971	0.888	1.64	2	-2	0.1872	Asymp	Non-Significant Effect
		0.5975	0.923	1.64	2	-2	0.1781	Asymp	Non-Significant Effect
		1.8067*	2.26	1.64	4	-2	0.0118	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.06333333	0.01266667	5	2.4	0.0780	Non-Significant Effect
Error	0.095	0.005277778	18			
Total	0.1583333		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.2	4.25	0.3485	Equal Variances
Variances	Levene Equality of Variance	2.09	4.25	0.1139	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.844	0.884	0.0017	Non-normal Distribution

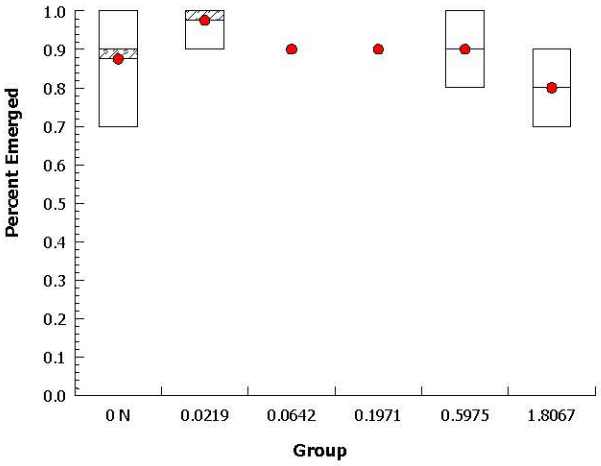
Percent Emerged Summary

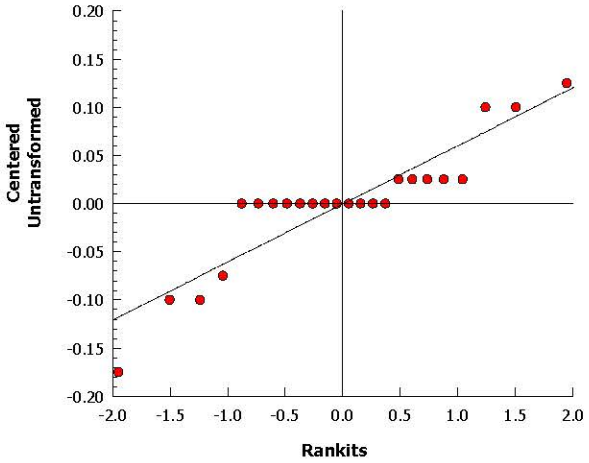
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.875	0.675	1	0.9	0.7	1	0.0629	14.4%	0.0%
0.0219		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	-11.4%
0.0642		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.1971		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.5975		4	0.9	0.77	1	0.9	0.8	1	0.0408	9.07%	-2.86%
1.8067		4	0.8	0.67	0.93	0.8	0.7	0.9	0.0408	10.2%	8.57%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	15-5381-7407	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-0031-9944	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	9.79%	0.5975	1.8067	1.039	

Mann-Whitney U Two-Sample Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	3.5	NA	2	6	0.9857	Exact	Non-Significant Effect
		0.0642	8	NA	1	6	0.7143	Exact	Non-Significant Effect
		0.1971	8	NA	1	6	0.7143	Exact	Non-Significant Effect
		0.5975	11	NA	1	6	0.2286	Exact	Non-Significant Effect
		1.8067*	15.5	NA	1	6	0.0286	Exact	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.29	0.058	5	14.9	<0.0001	Significant Effect
Error	0.07	0.003888889	18			
Total	0.36		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.08	4.25	0.4043	Equal Variances
Variances	Levene Equality of Variance	3.33	4.25	0.0264	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.859	0.884	0.0032	Non-normal Distribution

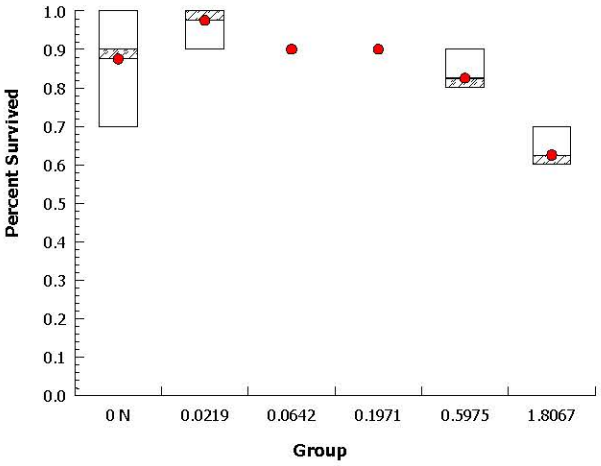
Percent Survived Summary

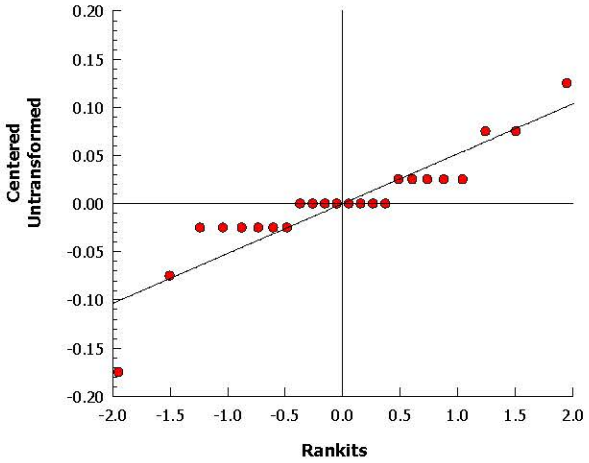
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.875	0.675	1	0.9	0.7	1	0.0629	14.4%	0.0%
0.0219		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	-11.4%
0.0642		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.1971		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.5975		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	5.71%
1.8067		4	0.625	0.545	0.705	0.6	0.6	0.7	0.025	8.0%	28.6%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-0031-9944	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	14-4670-8030	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Data Transform	Zeta	Alt Hyp	Trials	Seed	NOEL	LOEL	TOEL	TU
Untransformed	NA	C > T	NA	NA	0.1971	0.5975	0.3432	

Jonckheere-Terpstra Step-Down Test

Control	vs	Group	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Negative Control		0.0219	-1.51	1.64	2	-2	0.9339	Asymp	Non-Significant Effect
		0.0642	0.259	1.64	2	-2	0.3977	Asymp	Non-Significant Effect
		0.1971	0.888	1.64	2	-2	0.1872	Asymp	Non-Significant Effect
		0.5975*	2.3	1.64	3	-2	0.0108	Asymp	Significant Effect
		1.8067*	3.79	1.64	5	-2	<0.0001	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.29	0.058	5	14.9	<0.0001	Significant Effect
Error	0.07	0.003888889	18			
Total	0.36		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	1.08	4.25	0.4043	Equal Variances
Variances	Levene Equality of Variance	3.33	4.25	0.0264	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.859	0.884	0.0032	Non-normal Distribution

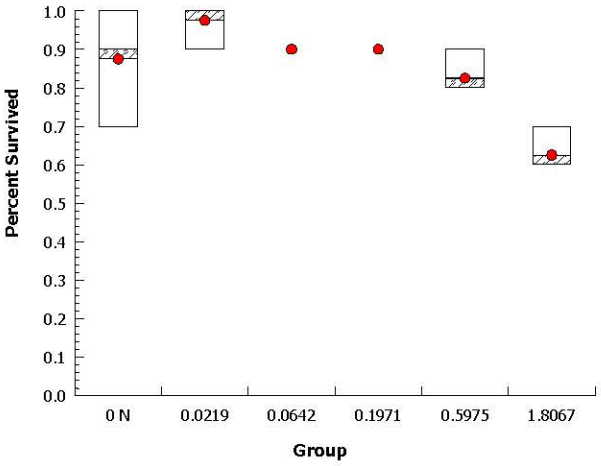
Percent Survived Summary

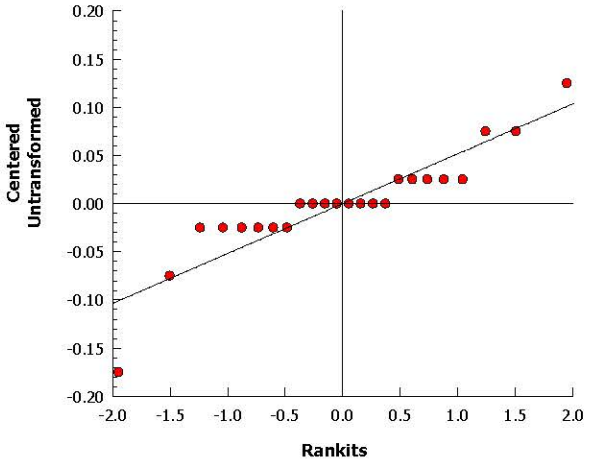
Group	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.875	0.675	1	0.9	0.7	1	0.0629	14.4%	0.0%
0.0219		4	0.975	0.895	1	1	0.9	1	0.025	5.13%	-11.4%
0.0642		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.1971		4	0.9	0.9	0.9	0.9	0.9	0.9	0	0.0%	-2.86%
0.5975		4	0.825	0.745	0.905	0.8	0.8	0.9	0.025	6.06%	5.71%
1.8067		4	0.625	0.545	0.705	0.6	0.6	0.7	0.025	8.0%	28.6%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	14-4670-8030	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonparametric-Control vs Ord. Treatments	**Official Results:**	Yes

Graphics





OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	16-6508-4571	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.125	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
15	-80.5	168	171	0.838	0.502	0.118	1.27	3.16	0.3140	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	1.03	N/A	N/A
EC10	1.57	N/A	N/A
EC25	3.16	N/A	N/A
EC50	6.88	N/A	N/A

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0868	0.0232	0.0413	0.132	3.74	0.0012	Significant Parameter
Slope	1.99	2.89	-3.66	7.65	0.691	0.4973	Non-Significant Parameter
Intercept	-1.67	0.736	-3.11	-0.228	-2.27	0.0339	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	3.191321	3.191321	1	5.08	0.0351	Significant
Lack of Fit	2.307762	0.769254	3	1.27	0.3142	Non-Significant
Pure Error	10.892	0.605111	18			
Residual	13.19976	0.628560	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	13.2	32.7	0.9015	Non-Significant Heterogenity
	Likelihood Ratio GOF	15.5	32.7	0.7972	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.23	2.77	0.3361	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.809	0.917	0.0004	Non-normal Distribution
	Anderson-Darling A2 Normality	2.13	2.49	<0.0001	Non-normal Distribution

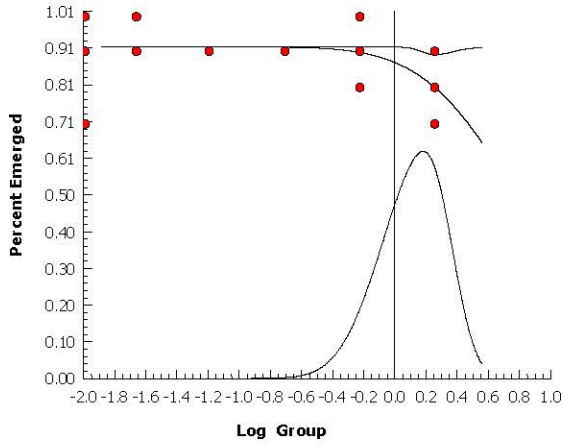
Percent Emerged Summary

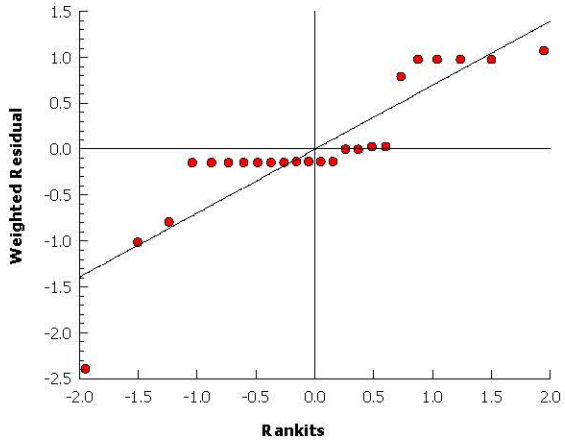
			Calculated Variate(A/B)								
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**	**A**	**B**
0	Negative Control	4	0.875	0.7	1	0.0629	0.126	14.4%	0.0%	35	40
0.0219		4	0.975	0.9	1	0.025	0.05	5.13%	-11.4%	39	40
0.0642		4	0.9	0.9	0.9	0	0	0.0%	-2.86%	36	40
0.1971		4	0.9	0.9	0.9	0	0	0.0%	-2.86%	36	40
0.5975		4	0.9	0.8	1	0.0408	0.0816	9.07%	-2.86%	36	40
1.8067		4	0.8	0.7	0.9	0.0408	0.0816	10.2%	8.57%	32	40

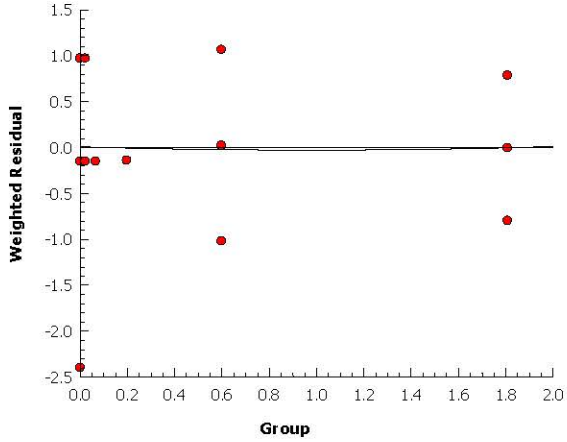
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

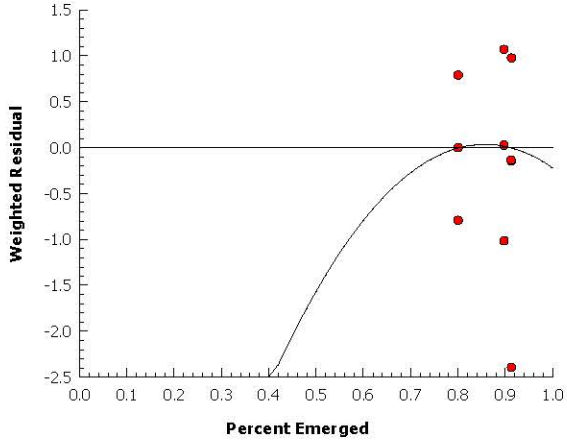
Analysis ID:	16-6508-4571	**Endpoint:**	Percent Emerged	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	19-1112-4371	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Linear Regression Options

Model Function	Threshold Option	Threshold	Optimized	Pooled	Het Corr	Weighted
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.125	Yes	No	No	Yes

Regression Summary

Iters	LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α:5%)
6	-92.4	192	194	0.544	0.607	0.575	1.96	3.16	0.1560	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
EC5	0.352	N/A	0.787
EC10	0.584	N/A	1.09
EC25	1.36	0.027	22.6
EC50	3.5	1.84	1E+10

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
Threshold	0.0823	0.0255	0.0323	0.132	3.23	0.0040	Significant Parameter
Slope	1.65	0.828	0.0255	3.27	1.99	0.0597	Non-Significant Parameter
Intercept	-0.897	0.229	-1.35	-0.447	-3.91	0.0008	Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	17.27414	17.27414	1	33.1	<0.0001	Significant
Lack of Fit	2.701896	0.900632	3	1.96	0.1557	Non-Significant
Pure Error	8.259261	0.458848	18			
Residual	10.96116	0.52196	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	11	32.7	0.9635	Non-Significant Heterogenity
	Likelihood Ratio GOF	12	32.7	0.9399	Non-Significant Heterogenity
Variances	Mod Levene Equality of Variance	1.35	2.77	0.2900	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.698	0.917	<0.0001	Non-normal Distribution
	Anderson-Darling A2 Normality	2.97	2.49	<0.0001	Non-normal Distribution

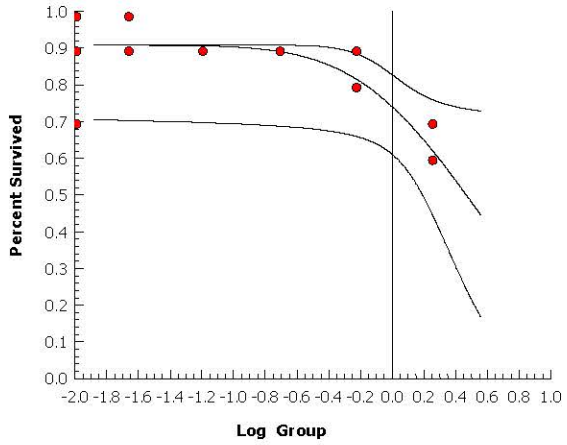
Percent Survived Summary

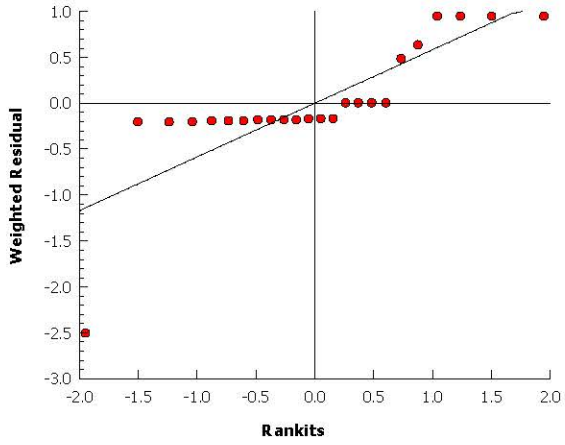
			Calculated Variate(A/B)								
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Negative Control	4	0.875	0.7	1	0.0629	0.126	14.4%	0.0%	35	40
0.0219		4	0.975	0.9	1	0.025	0.05	5.13%	-11.4%	39	40
0.0642		4	0.9	0.9	0.9	0	0	0.0%	-2.86%	36	40
0.1971		4	0.9	0.9	0.9	0	0	0.0%	-2.86%	36	40
0.5975		4	0.825	0.8	0.9	0.025	0.05	6.06%	5.71%	33	40
1.8067		4	0.625	0.6	0.7	0.025	0.05	8.0%	28.6%	25	40

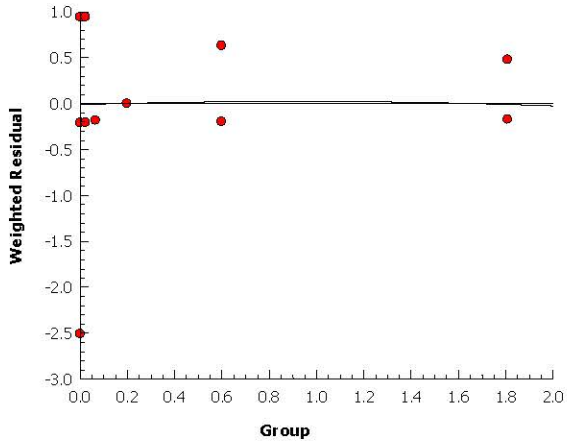
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

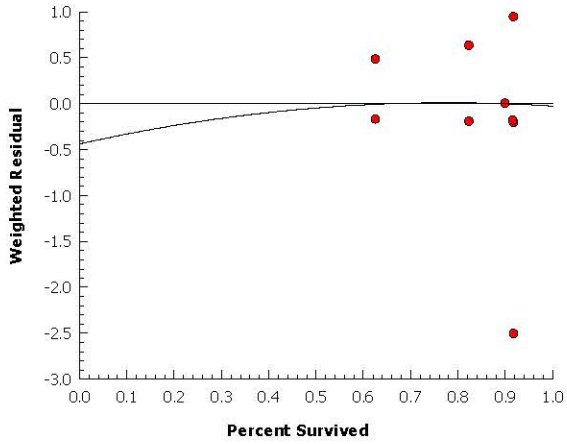
Analysis ID:	19-1112-4371	**Endpoint:**	Percent Survived	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Linear Regression (MLE)	**Official Results:**	Yes

Graphics Log-Normal [NED=A+B*log(X)]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	07-3359-3819	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
7	2540	-5080	-5070	0.4558	Yes	0.323	3.16	0.8090	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.379	N/A	0.819
IC10	0.738	0.294	1.28
IC25	2.25	1.21	3.73
IC50	7.79	1.41	43.1

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	41.8	1.06	39.7	43.8	39.5	<0.0001	Significant Parameter
C	1.84	0.849	0.173	3.5	2.16	0.0421	Significant Parameter
D	7.79	5.75	-3.48	19.1	1.35	0.1901	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	5.887768	5.887768	1	21.3	0.0002	Significant
Lack of Fit	0.296665	0.098888	3	0.323	0.8090	Non-Significant
Pure Error	5.517864	0.306548	18			
Residual	5.814528	0.276882	21			

Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	5.81	32.7	0.9996	Non-Significant Heterogenity
	Likelihood Ratio GOF	5.93	32.7	0.9995	Non-Significant Heterogenity
Variances	Bartlett Equality of Variance	9.93	11.1	0.0771	Equal Variances
	Mod Levene Equality of Variance	2.07	2.77	0.1167	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.958	0.917	0.3999	Normal Distribution
	Anderson-Darling A2 Normality	0.483	2.49	0.2341	Normal Distribution

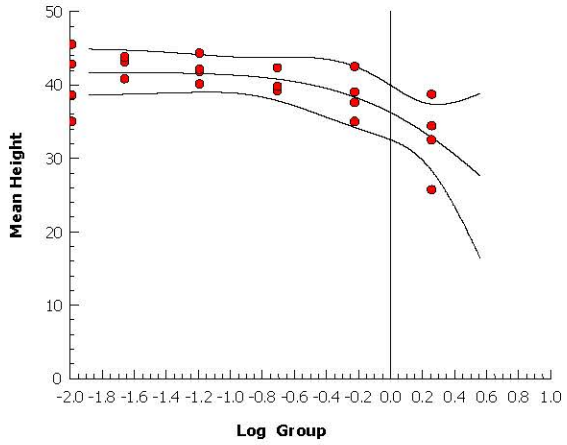
Mean Height Summary

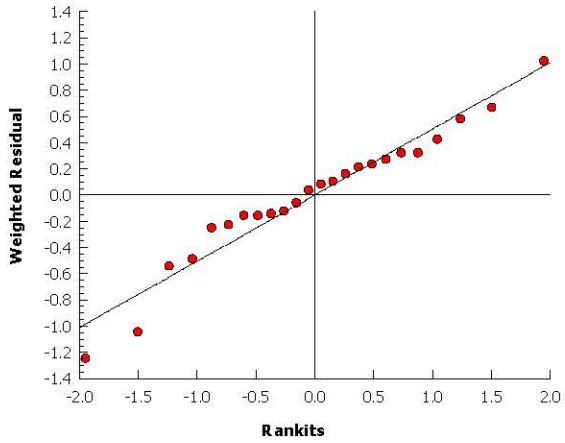
			Calculated Variate						
Group	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	40.5	35	45.5	2.31	4.62	11.4%	0.0%
0.0219		4	42.9	40.8	43.8	0.711	1.42	3.32%	-5.93%
0.0642		4	42.1	40.1	44.3	0.863	1.73	4.1%	-3.95%
0.1971		4	40.3	39.2	42.3	0.69	1.38	3.42%	0.49%
0.5975		4	38.5	35	42.5	1.56	3.13	8.11%	4.82%
1.8067		4	32.8	25.7	38.7	2.71	5.41	16.5%	18.9%

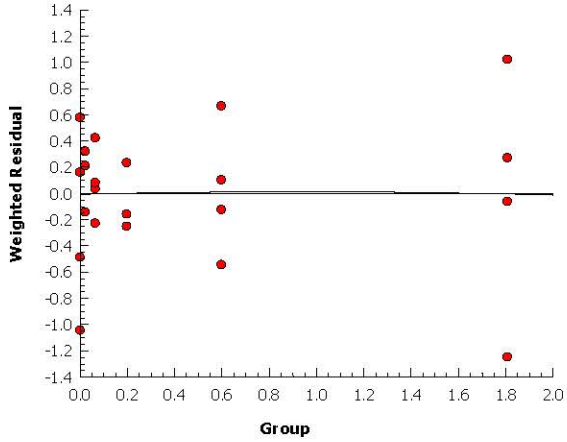
OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

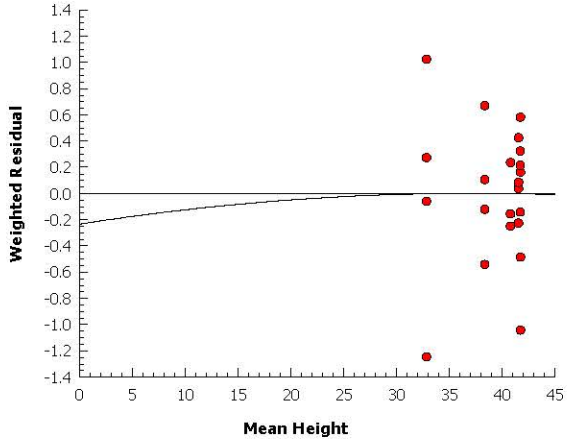
Analysis ID:	07-3359-3819	**Endpoint:**	Mean Height	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]









OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) — **Wildlife International**

Analysis ID:	04-6807-8019	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Batch ID:	13-7739-2639	**Test Type:**	Seedling Emergence Tier II	**Analyst:**	
Start Date:	14 Jul-11	**Protocol:**	OCSPP 850.4100 Plant Seedling Emergen	**Diluent:**	
Ending Date:	29 Jan-13 16:20	**Species:**	Triticum aestivum	**Brine:**	
Duration:	565d 16h	**Source:**	Johnny's Selected Seeds, ME	**Age:**	

Sample ID:	02-2455-8946	**Code:**	48718014	**Client:**	CDMSmith
Sample Date:	14 Jul-11	**Material:**	Dicamba (#1918-00-9)	**Project:**	
Receive Date:	29 Jan-13 16:20	**Source:**	BASF Corporation		
Sample Age:	NA	**Station:**			

Non-Linear Regression Options

Model Function	X Transform	Y Transform	Weighting Function	PTBS Function
3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]	None	None	Poisson [W=1/Y]	Off [Y*=Y]

Regression Summary

Iters	Log LL	AICc	BIC	Adj R2	Optimize	F Stat	Critical	P-Value	Decision(α:5%)
9	-116	240	242	0.4636	Yes	0.695	3.16	0.5672	Non-Significant Lack of Fit

Point Estimates

Level		95% LCL	95% UCL
IC5	0.0011	N/A	0.0311
IC10	0.00944	4.67E-05	0.093
IC25	0.344	0.117	0.896
IC50	18.7	0.905	386

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision(α:5%)
A	183	12.1	159	206	15.1	<0.0001	Significant Parameter
C	5.92	2.41	1.21	10.6	2.46	0.0226	Significant Parameter
D	18.7	27.3	-34.9	72.3	0.683	0.5019	Non-Significant Parameter

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Model	70.94468	70.94468	1	21.9	0.0001	Significant
Lack of Fit	7.065647	2.355216	3	0.695	0.5672	Non-Significant
Pure Error	61.0252	3.390289	18			
Residual	68.09085	3.242422	21			

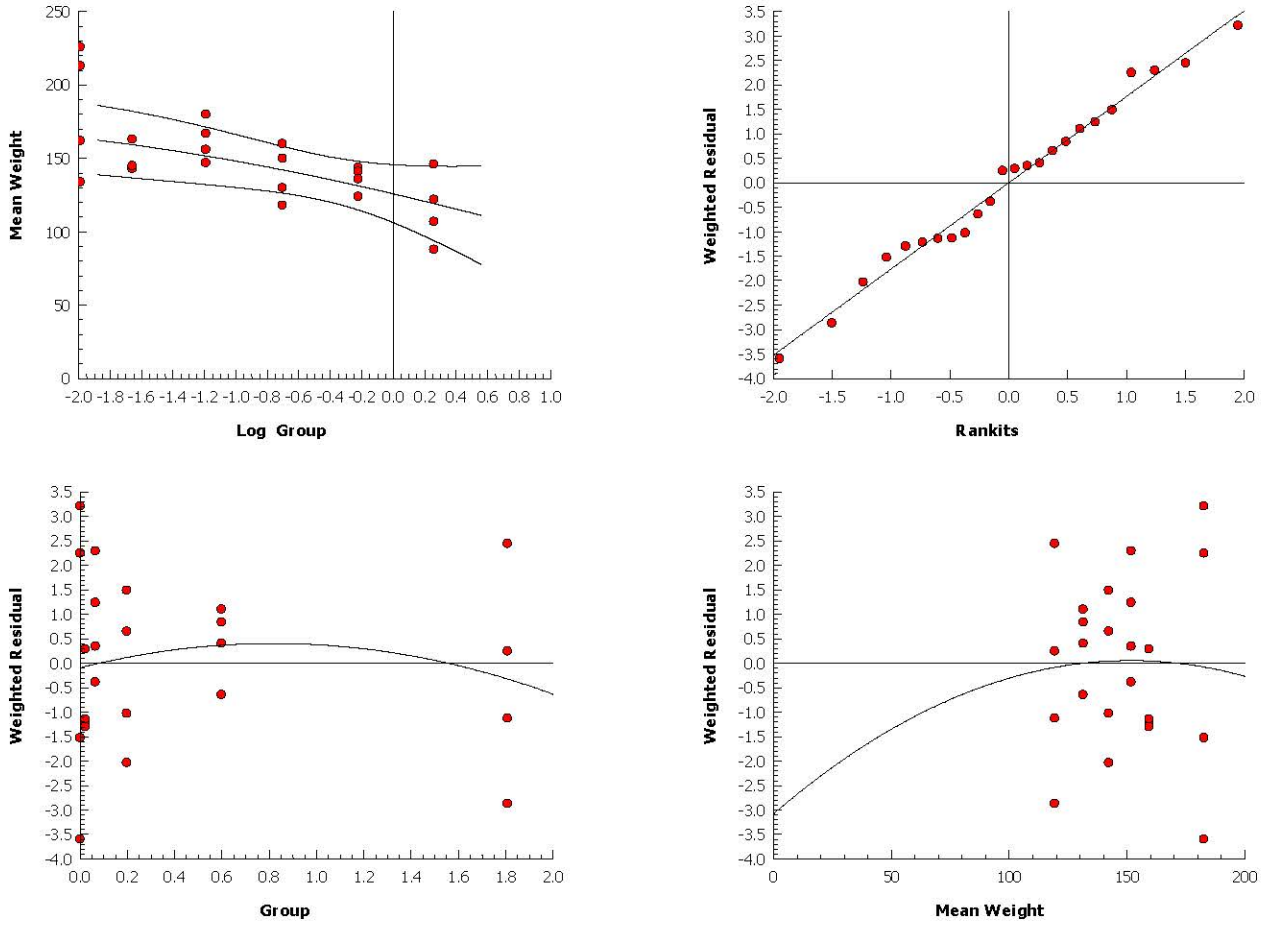
Residual Analysis

Attribute	Method	Test Stat	Critical	P-Value	Decision(α:5%)
Goodness-of-Fit	Pearson Chi-Sq GOF	68.1	32.7	<0.0001	Significant Heterogenity
	Likelihood Ratio GOF	68.9	32.7	<0.0001	Significant Heterogenity
Variances	Bartlett Equality of Variance	8.58	11.1	0.1269	Equal Variances
	Mod Levene Equality of Variance	4.59	2.77	0.0071	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.983	0.917	0.9380	Normal Distribution
	Anderson-Darling A2 Normality	0.218	2.49	0.8764	Normal Distribution

Mean Weight Summary

			Calculated Variate						
Group	**Control Type**	**Count**	**Mean**	**Min**	**Max**	**Std Err**	**Std Dev**	**CV%**	**%Effect**
0	Negative Control	4	184	134	226	21.6	43.2	23.5%	0.0%
0.0219		4	149	143	163	4.77	9.54	6.41%	19.0%
0.0642		4	163	147	180	7.12	14.2	8.77%	11.6%
0.1971		4	140	118	160	9.5	19	13.6%	24.1%
0.5975		4	136	124	144	4.4	8.81	6.46%	25.9%
1.8067		4	116	88	146	12.3	24.5	21.2%	37.0%

OCSPP 850.4100 Terrestrial Plant Tier II (Seedling Emergence) **Wildlife International**

Analysis ID:	04-6807-8019	**Endpoint:**	Mean Weight	**CETIS Version:**	CETISv1.8.7
Analyzed:	05 Feb-13 16:14	**Analysis:**	Nonlinear Regression	**Official Results:**	Yes

Graphics 3P Cumulative Log-Normal EV [Y=A*(1- Φ(log(X/D)/C))]