INVESTIGATION OF DICAMBA CLAIMS

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NEBRASKA
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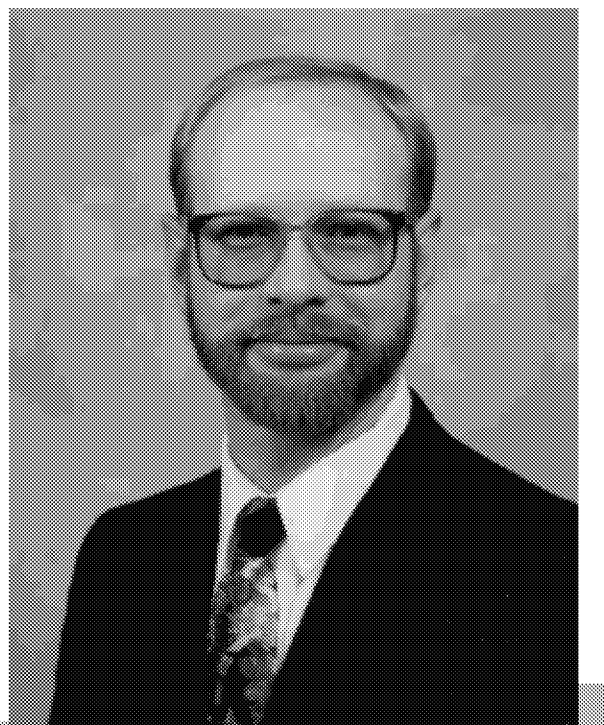
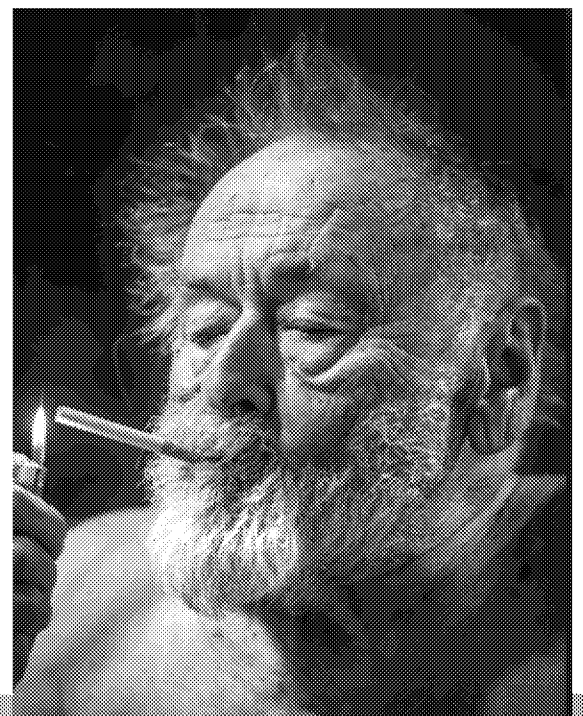
DEPARTMENT OF AGRICULTURE

- Before Dicamba



- Two years later



Why do SLAs Investigate Pesticide Complaints?

- ☆ Administer and enforce state and federal law
- ☆ Determine compliance and inform applicator education
- ☆ Satisfy Cooperative Agreements with EPA
- ☆ Maintain a credible regulatory program

Experiences in 2017-2018

2017:

95 claims, 24 were investigated

NDA staff were quickly overwhelmed by volume of calls

Most claimants after July 10 were told NDA could only take information and would be unable to investigate claim

Cost of investigating dicamba claims exhausted available funding by July 5

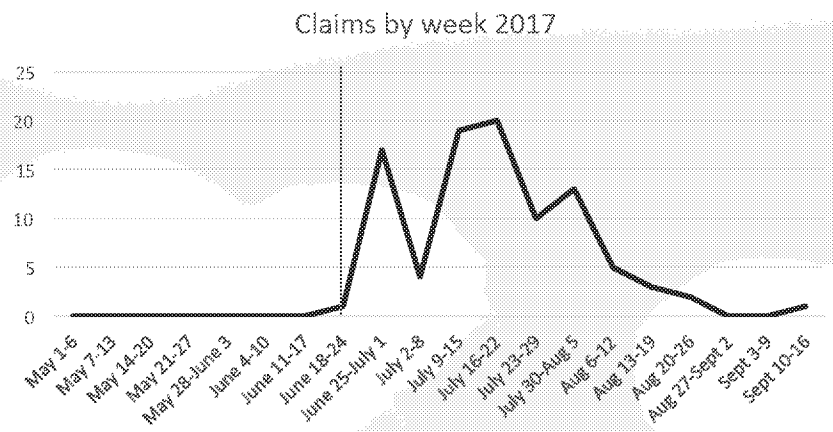
2018:

106 claims, 50 were investigated

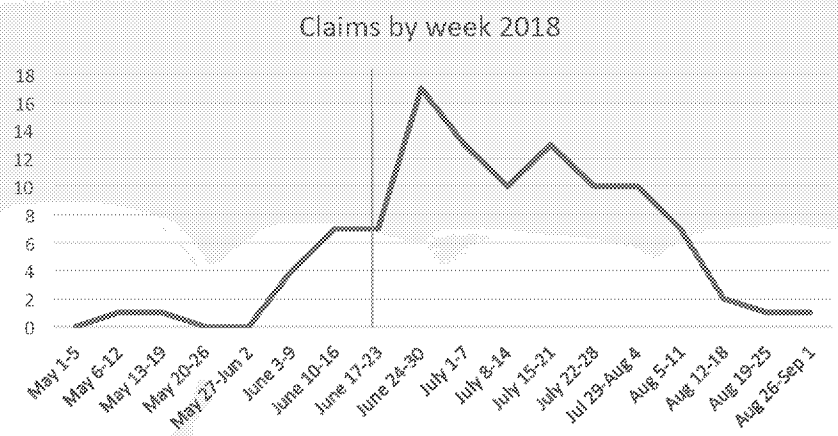
NDA staff were better prepared and were able to inspect or investigate all claims requesting field documentation. Many claimants only wanted to report without NDA field response.

Cost of investigating dicamba claims was still high, and continues to strain resources.

Claim Comparison by Year



Observations: First year with technology (~500K acres of DT beans planted), many growers were unprepared for degree of drift and off-target symptoms. Some delays in planting resulted in overlap of corn dicamba applications and non-DT soybean emergence.



Observations: Better informed growers (~2M acres of DT beans planted), applicators better prepared, few claims in same areas as in 2017. Weather was not as great a factor in planting. Many claims came in later due to rescue treatments applied as late as mid-July.

NDA Claim Response

Dicamba applied, Day 1

Symptoms observed, Day 7-10

NDA receives call, Day 8-12

NDA field inspection, Day 15

Samples to lab, Day 16-20

Report written after lab results, Day 50-75

ANALYTE	FOUND
Dicamba	4.72 ppb
Dicamba Metabolite (DCSA)	ND ppb

Comparison of Case Timing

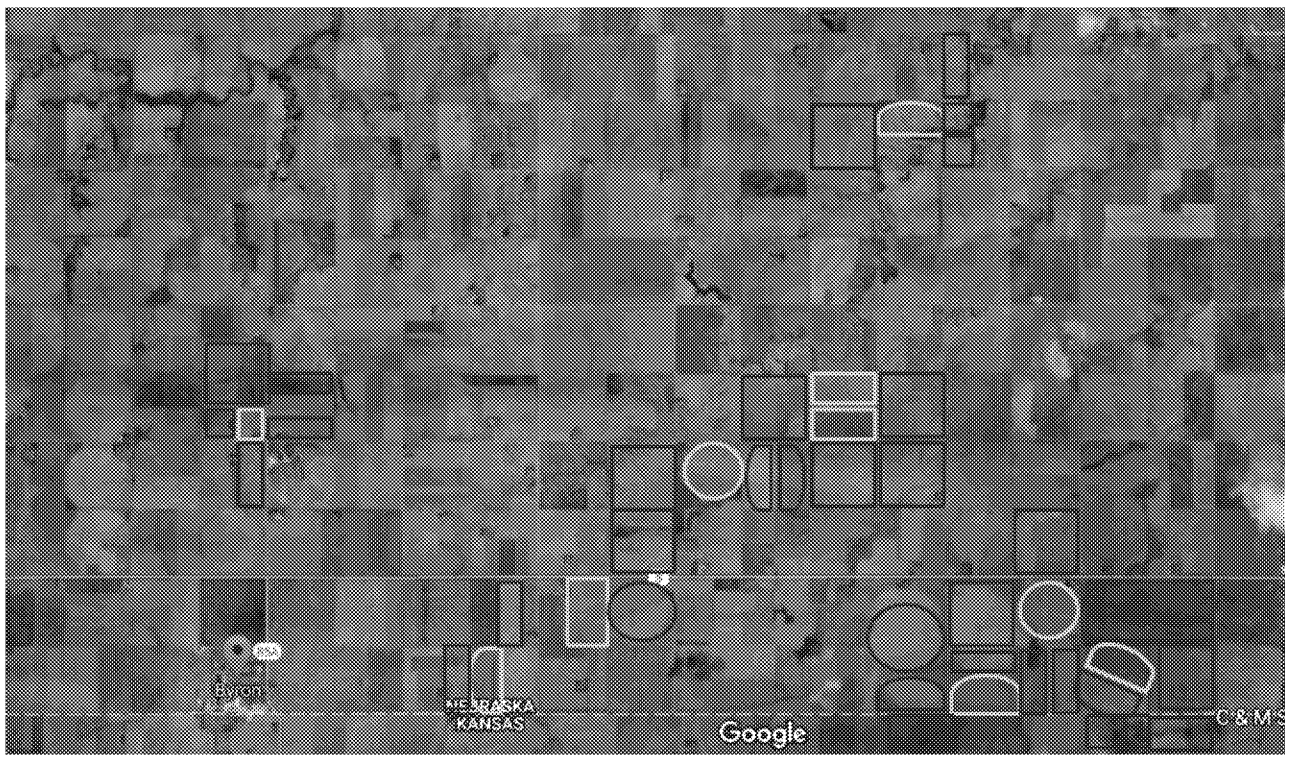
Approved Enforcement Response Policy stipulates the following timeline:

Time to respond to call:	5 days
Time to initiate investigation:	3 days
Inspection report due:	60 days
Pgm Mgr review:	15 days
Case review:	60 days
Enforcement proceedings:	60 days
Total:	203 days

Typical Timeline for Dicamba Claims:

Response to call:	10 days
Initiate investigation:	5 days
Inspection report submitted:	75 days
Pgm Mgr review:	30 days
Case review:	90 days
Enforcement proceedings:	60 days
Total:	270 days

What do SLAs do when off-target claims are part of a “saturation effect”?



= Dicamba damaged soybean fields

= Known dicamba applications

Lab Analysis for 2018

- 56 samples were tested for dicamba
- All but 4 had detections of dicamba (93% detection rate)
- Concentrations ranged from 1.5 ppb to over 5,000 ppb. Anything greater than 750 ppb typically means a direct application was involved (more than just drift residue).
- Unanswered questions:
  - Can labs find dicamba residues from “vapor drift”?
  - If so, what sort of concentration ranges would be represented?
  - Is there a threshold concentration that extrapolates to a given yield loss?

Dicamba Enforcement Response Trends

- First year resulted in only one penalty action, and it was for refusing to submit RUP application records for an atrazine application made as part of a dicamba complaint
- Second year found violations grouped in record keeping (90+% noncompliant) and application standards (boom height, nozzles, tank mixes, buffers, etc. that applicators admitted to). No ability to prove temperature inversion violations.
- When enforcement actions were issued for application standards, a much higher number were successfully challenged by applicator (especially weather conditions measured in the field)
- The only solid enforcement actions are for solid evidence violations like licensure, applicator training and record keeping; none of these involve application performance standards, so we really don't know if the added label restrictions actually reduce off-target harm

Dicamba has forced SLAs to change and adapt

- Revised complaint response policies
  - "triage" calls, somebody doesn't get the service they expect or need
- Inadequate or ineffective enforcement
  - States are scratching our heads about how to enforce something that fails to meet traditional enforcement models
- SLA's can't just "throw in the towel", no matter how enticing that sounds

What Does the Future Hold?

RUP dicamba herbicides were reregistered by EPA with more likely to come

New endangered species restrictions will cause problems for applicators and SLAs

Additional herbicide-tolerant crops coming to market, adding to the complexity of the issue

From a Regulatory Management Perspective:

Credibility of states to regulate pesticides has been eroded

No apparent end in sight, (previous “tough problems” had a point where issues were resolved)

So many resources dedicated to dicamba, what becomes of routine work that provided compliance assurance?

2019: Deja Poo:

- The feeling you've heard all this crap before