From: Bradley, Kevin
To: Chism, William; lee.vanwychen@wssa.net; Tindall, Kelly
Subject: Re: Any Update on Dicamba Resistance in Waterhemp or Other Weeds
Date: Thursday, September 3, 2020 10:04:12 PM

That is more than appropriate. And yes you can cite us.

Kevin

From: "Chism, William" <Chism.Bill@epa.gov>
Date: Thursday, September 3, 2020 at 2:11 PM
To: "Bradley, Kevin" <bradleyke@missouri.edu>, Lee VanWychen <lee.vanwychen@wssa.net>, "Tindall, Kelly" <tindall.kelly@epa.gov>
Subject: RE: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

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Hi Kevin

I'm back working on the waterhemp resistance description. Could I say while there are no new populations of dicamba resistant waterhemp there are populations from three states that exhibit reduced sensitivity to dicamba? Or is that going a bit too far? If the sentence seems appropriate can we cite you as our source?

Thanks. Bill

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(571) 242-0254 Cell phone while on telework
chism.bill@epa.gov

From: Bradley, Kevin <bradleyke@missouri.edu>
Sent: Friday, August 28, 2020 9:34 AM
To: Chism, William <Chism.Bill@epa.gov>; lee.vanwychen@wssa.net; hartzler@iastate.edu; hager@illinois.edu; wgj@purdue.edu; Tindall, Kelly <tindall.kelly@epa.gov>
Cc: Bryan Young <BryanYoung@purdue.edu>
Subject: Re: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Bill, the United Soybean Board has funded a project for the past two seasons that involves us screening waterhemp populations from several states. This is just an initial screen to determine the likelihood of resistance in a given population and so we are only using ½ and 1X rates of dicamba on small, 3-4 inch waterhemp plants. We have had a lot of populations to screen the past two seasons and so we haven't yet been able to take the most suspicious populations and subject them further to a true dose-response to determine resistance. Some preliminary results of our screenings are shown in the attached slides. Although no one I know of has come out with an

"official" dicamba-resistant waterhemp population yet, I receive a number of calls each year about not being able to effectively control waterhemp with dicamba already after just 2 or 3 seasons. Obviously there could be many reasons for these failures but based on these calls/visits/etc. coupled with the results we are already seeing from our screening in the attached slides, I'm pretty sure there are already dicamba-resistant waterhemp populations out there, we just haven't confirmed them yet.

Kevin Bradley

From: "Chism, William" <Chism.Bill@epa.gov>
Date: Friday, August 28, 2020 at 8:06 AM
To: Lee VanWychen <lee.vanwychen@wssa.net>, Bob Hartzler <hartzler@iastate.edu>, "hager@illinois.edu" <hager@illinois.edu>, Bill Johnson <wgj@purdue.edu>, "Bradley, Kevin" <bradleyke@missouri.edu>, "Tindall, Kelly" <tindall.kelly@epa.gov>
Subject: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

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Hello Gentlemen

The Office of Pesticide Programs is working on the registration of over-the-top dicamba for cotton and soybeans. We have found some new reports of dicamba resistance in Palmer amaranth but very little discussion of waterhemp. In 2019 there was a short description of dicamba-resistant waterhemp in the Progressive Farmer (below). Is there anything you can share about dicamba-resistant waterhemp? Are there any other weed species that you are aware of where dicamba is showing signs of potential resistance?

Thank you. Bill Chism

https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/08/30/possible-dicamba-resistance-cropping

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