

Message

From: ARNEVIK, CINDY L [AG/1000] [/O=MONSANTO/OU=NA-1000-01/CN=RECIPIENTS/CN=77830]
Sent: 2/1/2010 4:38:57 PM
To: FARMER, DONNA R [AG/1000] [donna.r.farmer@monsanto.com]; SCHNEIDER, RUSSELL P [AG/1920] [russell.p.schneider@monsanto.com]; DOBERT, RAYMOND C [AG/1000] [raymond.c.dobert@monsanto.com]; SOTERES, JOHN K [AG/1000] [john.k.soteres@monsanto.com]; STARKE, MICHELLE OBERMEIER [AG/1000] [michelle.obermeier.starke@monsanto.com]; CAVATO, TRACEY A [AG/1000] [tracey.a.cavato@monsanto.com]; MCCANN, MELINDA C [AG/1000] [melinda.c.mccann@monsanto.com]; SCHNEIDER, RONALD W [AG/1000] [ronald.w.schneider@monsanto.com]; MAGIN, KIMBERLY M [AG/1000] [kimberly.m.magin@monsanto.com]
CC: ROGAN, GLENNON J [AG/1000] [glennon.j.rogan@monsanto.com]; EPPARD, PHILIP J [AG/1000] [philip.j.eppard@monsanto.com]; SACHS, ERIC S [AG/1000] [eric.s.sachs@monsanto.com]
Subject: RE: link to abstracts at upcoming Weed Science Society meeting

Wow;

This is some really great discussion, and one I think that we need a broader stake holder group input on long term, since there are potential commercial impacts to how this is positioned, and I would suggest could benefit from input from the larger team that represents more functions beyond the regulatory team.

We have seen off-label applications made and even recommended by academics on Widestrike cotton, so I am concerned about approvals first and positioning later. We have also tried to be very transparent with the folks on the Dicamba Tolerant Soybean advisory team about the issues and how we want to work to solve them together, and want to make sure that we are consistent in our messaging.

Ron/John/Glen; when do you believe you will have your positioning at a place where you can share with the dicamba tolerant development team? We have a team meeting on the 23rd where we will be reviewing our proposed mitigation steps for endangered species, and if there is an opportunity to share your thinking then and get feedback that would be great.

Cindy

-----Original Message-----

From: FARMER, DONNA R [AG/1000]
Sent: Monday, February 01, 2010 12:38 PM
To: ARNEVIK, CINDY L [AG/1000]
Subject: Fw: link to abstracts at upcoming Weed Science Society meeting

Fyi

----- Original Message -----

From: SCHNEIDER, RUSSELL P [AG/1920]
To: DOBERT, RAYMOND C [AG/1000]; SOTERES, JOHN K [AG/1000]; STARKE, MICHELLE OBERMEIER [AG/1000]; CAVATO, TRACEY A [AG/1000]; MCCANN, MELINDA C [AG/1000]; SCHNEIDER, RONALD W [AG/1000]
Cc: ROGAN, GLENNON J [AG/1000]; EPPARD, PHILIP J [AG/1000]; SACHS, ERIC S [AG/1000]; FARMER, DONNA R [AG/1000]
Sent: Mon Feb 01 11:39:35 2010
Subject: RE: link to abstracts at upcoming Weed Science Society meeting

Regulatory positioning is totally different than actual field use and perceptions of use. Once approved, covering all potential use sites, we can make a determination of whether we want to minimize concern and use.

Russ

Dr. Russell P. Schneider
 Senior Director, Regulatory Affairs and Policy
 Monsanto Company
 1300 I St., NW
 Suite 450 East
 Washington, DC 20005
 202/383-2866

From: DOBERT, RAYMOND C [AG/1000]
Sent: Monday, February 01, 2010 12:30 PM

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MON0427709

To: SCHNEIDER, RUSSELL P [AG/1920]; SOTERES, JOHN K [AG/1000]; STARKE, MICHELLE OBERMEIER [AG/1000]; CAVATO, TRACEY A [AG/1000]; MCCANN, MELINDA C [AG/1000]; SCHNEIDER, RONALD W [AG/1000]
Cc: ROGAN, GLENNON J [AG/1000]; EPPARD, PHILIP J [AG/1000]; SACHS, ERIC S [AG/1000]; FARMER, DONNA R [AG/1000]
Subject: RE: link to abstracts at upcoming Weed Science Society meeting

APHIS has recently been asking us to clarify the geography of intended commercial use of products like SDA and Bt soybean (for breeding/seed increase purposes).

Thus, if we were to make a claim that DT soy will only be sprayed with dicamba in regions/fields where gly. Resistant weeds are observed, we would likely have to provide a pretty extensive discussion of where these weeds exist and predictions on where we think such weeds will be present in the reasonably foreseeable future.

I think the current product concept is that dicamba over top of DT soy could be used anywhere where soybean is currently grown with a use pattern that is consistent with the residue trials and requested label change.

Ray

From: SCHNEIDER, RUSSELL P [AG/1920]
Sent: Monday, February 01, 2010 7:19 AM
To: SOTERES, JOHN K [AG/1000]; DOBERT, RAYMOND C [AG/1000]; STARKE, MICHELLE OBERMEIER [AG/1000]; CAVATO, TRACEY A [AG/1000]; MCCANN, MELINDA C [AG/1000]; SCHNEIDER, RONALD W [AG/1000]
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Subject: RE: link to abstracts at upcoming Weed Science Society meeting

One of the things we may want to consider is that just because the crop is dicamba tolerant does not mean a field needs to be sprayed with dicamba. Maybe the first position could be that the use of dicamba will be as a rescue or spot spray treatment where resistant broadleaves have been observed.

Russ

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From: SOTERES, JOHN K [AG/1000]
Sent: Sunday, January 31, 2010 9:26 PM
To: DOBERT, RAYMOND C [AG/1000]; STARKE, MICHELLE OBERMEIER [AG/1000]; CAVATO, TRACEY A [AG/1000]; MCCANN, MELINDA C [AG/1000]; SCHNEIDER, RONALD W [AG/1000]; SCHNEIDER, RUSSELL P [AG/1920]
Cc: ROGAN, GLENNON J [AG/1000]; EPPARD, PHILIP J [AG/1000]; SACHS, ERIC S [AG/1000]; FARMER, DONNA R [AG/1000]
Subject: RE: link to abstracts at upcoming Weed Science Society meeting

Ron, Glenn and I (with help from Norm Probst) are in the process of pulling together information to make the best arguments we can relative to the issues highlighted below. The concept we are working with is that we will not only need to address these issues with the agencies but also potentially in the courts. In addition to or instead of co-existence and resistance we will be defending dicamba relative to drift and volatilization to nearby crops. As with resistance and co-existence, I am afraid our defense will need to be centered around a strong stewardship program.

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MON0427710

Pltfs-0502.0002

John

From: DOBERT, RAYMOND C [AG/1000]
Sent: Friday, January 29, 2010 5:04 PM
To: STARKE, MICHELLE OBERMEIER [AG/1000]; CAVATO, TRACEY A [AG/1000]; MCCANN, MELINDA C [AG/1000]; SCHNEIDER, RONALD W [AG/1000]; SCHNEIDER, RUSSELL P [AG/1920]
Cc: SOTERES, JOHN K [AG/1000]; ROGAN, GLENNON J [AG/1000]; EPPARD, PHILIP J [AG/1000]
Subject: RE: link to abstracts at upcoming Weed Science Society meeting

Thanks Michelle.

Some of these talks start laying out some of the challenges that will need to be addressed in the USDA petition. The items below seemed particularly "poignant".

Ray

SYM-156

Unintended consequences of stacking herbicide tolerance traits in soybean

David Mortensen, Franklin Egan, Richard Smith, Matthew Ryan
The Pennsylvania State University, United States

Widespread adoption of glyphosate resistant soybeans has increased the number of weedy species resistant to this herbicide. To address this problem, the industry is commercializing soybean that are resistant to glyphosate and to dicamba. Dicamba, a broadleaf herbicide, is highly volatile and extremely active on many broadleaf crop and field edge plants. The high risk of injuring soybean not carrying the dicamba trait will drive adoption of these new cultivars. As a result, it is likely that the amount of herbicide active ingredient used in glyphosate managed soybean systems will increase over current use levels. This practice (supplemental dicamba use), and the use of plant growth regulator herbicides on soybean in general, has a high potential of injuring other broadleaf crops and of significantly reducing floristic biodiversity in field edges and nearby non-crop habitat and the ecosystem services they provide.

SYM-158

Quantifying Vapor Drift from Dicamba Applications on Soybean

J. Franklin Egan, David Mortensen
Pennsylvania State University, United States

Transgenic soybean resistant to the herbicide dicamba may soon be commercialized and could cause a large increase in the amount of dicamba used, including post-emergence applications on soybean. From current usage in corn and pastures, dicamba has been implicated in numerous herbicide drift incidents. In many cases, vapor drift has been suggested as the mode of transport, due to the high volatility of several formulations. However, there is a lack of empirical data assessing the movement of dicamba vapors under field conditions. Therefore, we quantified the concentration and transport distance of dicamba vapors from applications on soybean in the V3 stage. We applied the dimethylamine formulation at the rate of 561 g/ha to 400m² plots in six soybean fields under a range of environmental conditions. Following application, potted soybean plants were positioned along transects radiating from the sprayed plot. These bioassay plants were exposed to dicamba vapors in the field for 24 hours and were then transported to a greenhouse where injury symptoms were scored up to 28 days after exposure. Additional potted soybean plants were also treated with known concentrations of dicamba to develop a dose-response curve that was used to infer exposure dose from scored injury symptoms. Results indicate that dicamba vapors routinely traveled 10-15m outside of the treated plot in concentrations of approximately 5 g/ha. These results suggest that post-emergence applications of dicamba on soybean could result in vapor drift and support the need for expanded research on this issue should dicamba use in soybean increase.

SYM-157

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MON0427711

Pltfs-0502.0003

Response of Pennsylvania Native Plant Species to Dicamba and/or Glyphosate

David Olszyk, Thomas Pflieger, Thomas Griffin, Henry Lee, Milton Plocher
US Environmental Protection Agency, United States

From: STARKE, MICHELLE OBERMEIER [AG/1000]
Sent: Friday, January 29, 2010 3:29 PM
To: CAVATO, TRACEY A [AG/1000]; DOBERT, RAYMOND C [AG/1000]; MCCANN, MELINDA C [AG/1000]; SCHNEIDER, RONALD W [AG/1000]; SCHNEIDER, RUSSELL P [AG/1920]
Cc: SOTERES, JOHN K [AG/1000]
Subject: link to abstracts at upcoming weed science society meeting

All FYI - the attached link is for a symposium at the upcoming WSSA entitled 'Dicamba Resistant Soybean - how does it fit? - I am a bit surprised at the 'tone' of some of these abstracts in regard to DT soy.

https://srm.conference-services.net/programme.asp?conferenceID=1756&action=prog_list&session=7593

Michelle

Michelle Starke

Regulatory Pipeline Manager
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MON0427712

Pltfs-0502.0004