Message

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Sent:

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To:

CAREY, BOYD J [AG/1000] [boyd.j.carey@monsanto.com]

Subject:

summary

Attachments: aug 31, 2016 meeting.docx

Boyd,

Here you go....I'm concerned that Bradley is going to influence the MO Dept of AG in adopting more restrictive laws around dicamba.

He was very negative at this meeting almost as bad as Norsworthy.

Hey, also, if there is an opportunity with MON in the future as trainer/investigator im not tied to West Central.......Just a reminder...

Have fun on Saturday...Big challenge but should be great game...

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BADER FARMS ET AL V. MONSANTO ET AL.

EXHIBIT PLTF-154



[HYPERLINK "http://www.missourinet.com/2016/08/26/missouri-house-select-committee-on-agriculture-to-hold-wednesday-hearing-on-pesticide-complaints/"]

Yesterday I attended a hearing conducted by the Missouri House of Representatives Select Committee on Agriculture at the U of Missouri SE Research facility at Portageville, MO.

The subject of the meeting was dicamba and the offsite issues associated with illegal applications to XTend Soy and Cotton.

There were 13 representatives in attendance including the speaker of the House - The Honorable Todd Richardson. Following are the folks that testified at the hearing;

- Duane Simpson State Government Affairs Lead MONSANTO
- Judy Grundler Missouri Department of Agriculture
- Dr. Kevin Bradley U of Missouri Weed Scientist/Extension
- Bill Bader Farmer (peaches, corn, soy, wheat)
- Joe ??- Farmer (soy/cotton/corn)
- Eddie Bowman Farmer (cotton/soy)
- Gary ??? Missouri Soybean Association
- Joe Wolverton Farmer (soy/cotton)

MONSANTO - Duane Simpson

Simpson started off by making it very clear to the committee that MON DID NOT manufacture or sell any dicamba product in 2016. He then gave a history of weed resistance in the U.S. and covered not only glyphosate but other Al's. He explained that in early 2000's that weeds were developing resistance to glyphosate just a few years after the launch of Roundup Ready Technology. He talked about the XTend project and how it began as early as 2005 with the trait development. Next he discussed M1691 (dga dicamba - no vaporgrip) and how MON submitted for registration in April of 2010. A committee member asked how long does it NORMALLY take to get a registration? The response was 18 months (that is correct and typical of most new registrations). So obviously dicamba has taken much much longer and is under a significantly higher level of scrutiny by EPA. Simpson then went into the different ways dicamba can move off target (drift, volatility, tank contamination). He then covered the proposed application requirements (TTI nozzle, 63 psi max, 10 gpa min, 15 mph max ground speed, wind speed between 3-10 mph, boom height no higher than 24", no inversions, buffer of 110' to sensitive areas). He talked about Banvel being orders of magnitude higher in volatility vs Xtendimax with Vaporgrip. He emphasized that Academics have in fact tested Xtendimax for efficacy and crop safety but NOT volatility. Part of the reason for this is MON was continually innovating and they did NOT have their IP filed so could not allow certain types of testing to be conducted. He indicated that MON was going to be holding an Academic Symposium this October. He said MON expects to have registration late summer early fall of M1691 and then Xtendimax/Xtend to follow. They should have registration for 2017 season.

Finally he discussed training plans. He said they did in fact train growers and applicators the last few years but have slowed the effort until they get the final label with all the application requirements. He said we need this label in the next month or so to give time to train applicators this fall/winter prior to 2017 use season.

Judy Grundler - MO Department of Agriculture (DOA)

Grundler gave a summary of the drift complaints that have been filed in primarily a 4 county area in the bootheel. However there have been a few complaints filed in Carrol county (NW Missouri) as well. 120 complaints have been filed to date. Most of the complaints have been on soybeans (40K) which happens to be the most sensitive crop. Other crops include cotton, peaches, tomatoes, watermelon, peas, peanuts, alfalfa. It has cost the state in excess of 150K to move investigators to the area and plant tissue samples. She made it clear that investigations are still on-going even though the first complaints came in mid-June. The reason is that tissue samples have not come back yet from lab they use in lowa. Missouri does not have a qualified lab to test for dicamba residues. AS a result, DOA cannot release any information until the case is "closed". Likely another month or more. SIDE NOTE: at break I spoke to an individual with many, many years of experience with dicamba. He said the affected acres of soy are more like 1M vs 40K. And he said that the # of acres that will see sig yield loss is very very small. Some of the group 3 beans may have yield loss as they were flowering at the time the drift/volatility etc occurred. Yes they plant group 3's early in the bootheel. Harvest starts next week. Most of the group 4/5's are likely going to be fine according to this rep. He also said the alleged peach damage is "BS" in his opinion. The symptomology does not appear to be auxin like. He thinks the grower is looking for a payout and really the problem is disease or insect...One other interesting tidbit from this gentleman was that fines (150 microns or less) exiting a nozzle will move upwards very quickly and get suspended. He also said under warm/dry conditions (recall that in Mid-June in the bootheel they had unseasonably warm/dry conditions) those small drops dry very quickly and become a suspended crystal that can move with the wind or in an inversion. They can then be deposited on a leaf surface and become "re-wetted" with dew. Another thing to keep in mind with this chemistry is that it can attach to soil particles and move with "dust" and move with runoff.

Dr. Kevin Bradley - U of Missouri Weed Scientist

Bradley has been state extension weed scientist for 13 years. Has worked with XTend soybeans since 2006. Has "lots" of data on efficacy and crop safety but indicated he has not been allowed to do VOLATILITY testing with Xtendimax. He said "we don't have freedom to operate" with testing new chemistry. He did say this is the case with all manufacturers. Nevertheless, HE along with his academic friends to the SOUTH (U of Arkansas/U of Tennesse) harbor ill feelings towards Manufactures and especially MONSANTO for not letting them do all types of testing. He said the offsite issues in MO, AR, TN, etc was not a surprise at all to academics. Bradley says the application requirements, new formulations etc will HELP but not convinced they will solve the offsite issues. He said "we just witnessed a very large field experiment this year."

He thinks most of the offsite issues will be solved "farmer to farmer" for row crops. He's more concerned about "specialty/high value crops."...Producers are likely to plant xtend crops to protect themselves from neighbors that are spraying dicamba/2,4-d. They don't necessarily want xtend crops but will be forced to protect themselves. He then shared information on inversions in the state. Due to topography/weather conditions, the bootheel is more prone to inversions. During the time when the illegal apps were made, the bootheel was experiencing inversions almost every day/evening. Bradley thinks that many apps were made after dark so "my neighbor wouldn't see me illegally spraying dicamba.". So, they were likely spraying during an inversion. Bradley did say he is in discussion with the DOA around "potential" higher levels of restriction for dicamba apps in Missouri. As I said earlier, he talks to Arkansas and Tennessee academics on regular basis. My belief is that Bradley will push the DOA to adopt similar measures that Arkansas is considering (cutoff date of April 15 for ALL DGA formulations until MON lets them test for volatility, perimeter borders, etc). The Arkansas Plant board will vote on increased restrictions at the September 30 meeting.

Bill Bader - Peach, corn, soy, wheat farmer

Bader is the largest peach grower in Missouri with 1K acres. He proceeded to give a very "rambling" account of drift/volatility events that have damaged his orchard the last 2 years. It was very difficult to follow him but basically he had the USDA test his peaches for glyphosate, dicamba and 2,4-D. The results came back negative for 2,4-D and dicamba. He said they wouldn't give him the glyphosate results ???? He claims that he will lose 40% of his peach crop this year due to dicamba even though it was not detected in the samples. HUH?? The symptoms that he described in the STL Post Dispatch article a couple of weeks ago did not correlate with growth regulator chemistry. He described "shot holes" through the leaves. AS I said earlier the Missouri Extension rep thinks Mr Bader may be looking at this as an "opportunity" to cash in on a problem that has existed in his peach orchard that is not related to auxin chemistry. Will be interesting to see where this one goes. All I know, is a decent lawyer will have a field day with Mr Bader if he gives a similar testimony as he gave yesterday.

Farmers

A young corn/soy/wheat farmer (didn't catch name) got up and basically said we don't need new technology like dicamba. He said his current program is working fine (I think this includes "chopping" crews several times/season at \$100-150/a). He also cited the U of Arkansas preliminary greenhouse work that shows you can select for dicamba resistance in 3 generations of palmer pigweed. Another farmer Eddie Bowman, who said he is about done farming (ready to retire) said we NEED DICAMBA and NEW TECHNOLGIES. He cited the fact that he personally had to CHOP palmer pigweed 3X's this season. He said the offsite issues in this entire area is due to about 40 farmers that are ruining this technology for 400 farmers. He said "they are arrogant and it's all about greed."

Joe Wolverton soy/cotton grower thinks the DOA needs to "take care of the problem." Every one of his acres has seen dicamba injury. He planted 3K acres of Xtend cotton and did not spray one drop of dicamba this year. He said he was spending \$2500/week to hire "choppers." He was generally supportive of the technology.

Gary ??? Missouri Soybean Association

Gary said "we have to have this technology but need stiffer penalties to violators." He also said "we can do this in Missouri. Let's not let Washington dictate how to use this technology."

No proposals were made at this meeting. There is another meeting at the end of September where in my opinion it is likely that proposals will be made for stiffer regulation around this technology. I also think other states are watching closely and could adopt similar measures. We shall see....

One last comment. Of the 13 representative on this agriculture select committee, I think (haven't checked everyone yet) about ½ were from city/suburban areas and likely have very little agriculture background.