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Message

From: Thostenson, Andrew [andrew.thostenson@ndsu.edu]

Sent: 6/25/2018 4:06:21 PM

To: Baris, Reuben [Baris.Reuben@epa.gov]

Subject: Dicamba issues

Attachments: Baldwin-OpenLetter-WSSA-6-25-2018.pdf

Things have gotten more serious of late.

If you have not seen the 6/15 Bradley survey, here is a link to it.

https://ipm.missouri.edu/IPCM/2018/6/dicambalnjuryUpdate/

Also attached is letter from Ford Baldwin, WSSA Fellow, regarding his concerns, especially from AR.

I had several credible reports of problems in ND but it is way too soon to know how this will play out here. However, weed scientists are on record as reporting major problems in the I States as well as in the Mid and even Deep South. Trees are especially impacted this year.

All the best,

Α

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Quotation from Abraham Lincoln

[&]quot;...with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in..."

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Open Letter to the WSSA Board of Directors and Other Interested Parties

R.E. Auxin Herbicides

As a WSSA Fellow, I must ask my Society "where are we going, and what are we thinking?" Are we truly a body of scientists that make ourselves available and contribute science in decision making processes; or are we the Herbicide Science Society of America, the Chemical Company Society of America; or are we trying to be a lobby group? From the beginning, there has been plenty of published science and plenty of experience among our members to know dicamba could not be sprayed on large acreages in summer temperatures without a train wreck. However, science aside, we have gone down the road of vigorously supporting the dicamba-tolerant technology and even lobbying for the technology. Quite frankly I am embarrassed.

I am an applied weed scientist in the heart of Palmer amaranth country and fully understand the need for new herbicides and technologies. I am also fully aware that dicamba will kill a pigweed that is resistant to other herbicides. However, as weed scientists we have an environmental responsibility to be good stewards. Once again in 2018, large acreages of non-dicamba-tolerant soybeans in eastern Arkansas are affected by this herbicide as well as many vegetables. In addition, most trees in the countryside and towns are cupping and even dying following multiple years of exposure. Gardens are being destroyed and commercial vegetable producers are fearful that their crop may be condemned because of no tolerances for dicamba residues. Reports from bordering states are similar to those in Arkansas. In all likelihood, this widespread damage will move north as the season progresses. All the while there are those acting like everything is fine and in some cases attempting to shield people of influence from coming to see things for themselves. I am appalled when key influencers who view from afar make flippant statements such as "the benefits of this technology clearly outweigh the risks" with no environmental impact data to back up the statements. Those are similar to farmer's statements like "we have to kill our weeds and whatever happens as a result just happens."

As a Board of Directors, I challenge you to tour the areas and people most impacted by this technology. Visit a farmer who would like to grow an alternative soybean technology for diversity or a price premium. Visit a peach grower who has gone from 900 acres to 500 acres because half the trees have been killed over the past 4 seasons and is on the verge of being out of business. Visit a person whose stand of 200-year old oak trees has been affected. Visit an elderly lady who is crying because her garden in the middle of town has been destroyed. Visit a truck crop grower who has been put out of business or an organic farmer who cannot sell his crop. Visit a large- scale bee farmer and honey producer whose production in high dicamba use areas is half what it is in other areas. Are we environmental stewards or is it all about weed control regardless of the costs and environmental impact? Protective buffers are an ineffective tool as vegetation is often damaged a mile or more from the nearest sprayed field. Some will say this cannot be right as the number of complaints do not reflect it. Most by nature do not complain. A vegetable producer won't complain because the crop will be condemned and can't be sold. An organic farmer who complains could lose their certification. Soybean growers have grown weary of complaining as nothing ever seems to come from it. If anything it will be a token fine. In many cases, the state regulatory agencies can't work complaints in a timely manner due to the sheer number of fields with damage. Likewise, reports are often not finished until a year later. Most home owners do not even know who to complain to.

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I began my weed science career as a graduate student in 1969. I have been in some way a part of every major herbicide development since that time and even those developed earlier were in major use during my career. Every game changing herbicide or technology sold itself. While the dicamba-tolerant crops have been touted by some as the next revolutionary technology, the current use of dicamba has been the most divisive issue in my career- both within and outside of agriculture. It has taken extensive lobbying and in some cases even lawsuits to get it registered and available for use. Weed scientists in some states have been muzzled by their administrators or have had their jobs threatened just for standing on sound science or trying to report the true situations in their states. Others are fearful of losing grant funds needed to support their programs. The price for that is we are losing our integrity and our industry. How as a Society can we possibly condone the use of a herbicide that cannot be kept on target and can be so damaging when it moves off target. This will absolutely destroy the credibility of agriculture in the eyes of the public and it has tarnished the integrity of WSSA as a science-based society because of a lack of vocal leadership. In fact, the damage done to the credibility of an entire agricultural industry could exceed the real monetary damages.

I have no monetary reason to question the use of this technology. I have simply known from the beginning that a volatile auxin could not be kept on target. Everyone has their own opinions on the exact reasons for the huge off target issues. In the big picture it doesn't really matter what the causes are. Dicamba has a chemistry problem that likely cannot be fixed, or at least no evidence has been provided that it can be successfully applied. If it can, it will only be through advances in chemistry. As the technology currently exists, renewing the cotton and soybean registrations will leave the industry no choice but to plant 100% of the soybean acreage to this technology. This defies historical lessons and everything we stand for on resistance management. Will we have "Take Action" only within the confines of this one technology? No other trait or technology for soybean can be grown in areas where dicamba is extensively used, preventing diversity in weed control options. Furthermore, contamination of air with an auxin herbicide defies environmental stewardship responsibilities. Dicamba floating in the air is inflicting sub-lethal damage to all sorts of dicot plants in agricultural ecosystems, natural ecosystems, parks, gardens, wildlife refuges, timber stands, home sites, and etc. People outside agriculture, who are already distrustful of agricultural chemicals, can now see visual evidence to confirm this distrust. In short, ignoring the significant scientific data regarding the off target movement of dicamba will be the biggest environmental disaster agriculture has ever seen, and much of that responsibility is square on the backs of agriculture- including WSSA. This travesty will affect the development and registration of new technologies for many years to come.

As the leaders of our Society, I challenge each of you to get the Society back on the course of making sound recommendations to the EPA rather than responding to lobbyist and other monetary influences.

Respectfully Submitted

Ford Baldwin, Ph.D. WSSA Fellow, 1996

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