



ACPA Newsletter

2016

Volume 40 Number 2

2016 Arkansas Soybean College

By: Dr Jeremy Ross, Soybean Agronomist, University of Arkansas

The University of Arkansas System Division of Agriculture in partnership with the Arkansas Crop Protection Association will be hosting the 2016 Soybean College on August 18, 2016 at the Newport Research Station at Newport, AR starting at 8:00 a.m. and running through 5:00 p.m. Crop consultants, industry personnel, and producers will see current research on many of the production challenges Arkansas soybean producers are experiencing today. Participants will hear presentations from University of Arkansas System Division of Agriculture and industry personnel and have the opportunity to take part in hands-on demonstrations. Registration for the 2016 Soybean College will be

\$75 per person. Only on-line registrations will be accepted, and no walkup registrations will be accepted the day of the Soybean College. On-line registration can be found at the following web site by visiting links on page 4. Total participants in the 2016 Soybean College will be capped at 200 participants to keep breakout groups small. Paid participants will receive a complementary sweep net, hand lens, and other items. Registration fees will not be refunded due to inclement weather. Lunch will be provided, and CEU will be available. Please refer all questions about the 2016 Soybean College to Jeremy Ross at jross@uaex.edu or (501)944-0621.

Tentative Agenda:

- ◆ New Herbicide Technologies/ Resistant Pigweed Control
- ◆ Herbicide Symptomology
- ◆ Post Harvest Weed Control
- ◆ Soybean Growth Staging
- ◆ Insect Scouting Demo
- ◆ Chloride Toxicity Demo
- ◆ Cover Crops and Soybean Production
- ◆ Resistant Frogeye Demo
- ◆ Soybean Seed Treatment Demo
- ◆ New Irrigation Technologies

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Arkansas Crop Management Conference Program Committee Meets August 30.

The ACMC program committee will meet on August 30 to plan the ACMC program for 2017. Chairman Kyle Colwell is laying out plans for an excellent program. Issues encountered in 2016 will be a prime factor in determining the program. Dicamba drift this year will be reviewed in detail and all new herbicide technology discussed.

Participants will include Arkansas Crop Protection Association, Arkansas Plant Food Association, Arkansas Agricultural Consultants Association, Arkansas Certified Crop Advisors and University of Arkansas Division of Agriculture. If you have suggestions contact any representative of the mentioned or Chairman Kyle Colwell.



Kyle Colwell, Program Chairman, Dow Agrosiences

Arkansas State CCA Board Changing



Sterling Clifton will serve as CCA contact for Arkansas replacing Charles Denver.

Arkansas State CCA Board is changing their contact person. Sterling Clifton has been selected by the board to assume the contact position. Charles Denver has chosen to stop being the contact person. Charles has given the board a number of years of service in this position. He will still be working to continue the support for the board, but without the day to day operation duties.

Charles says, I have enjoyed the time I have served the board, and look forward to continuing a support relationship with the board. Thanks to everyone who has helped me as I have worked in this position. I hope you will give Sterling your support and help as he works in the position.

Calendar Notes:

- Arkansas Crop Management program committee meets August 30.
- University of Arkansas Soybean College August 18.
- Arkansas Crop Protection Association Research Conference, November 29-30, 2016.
- Arkansas Crop Management Conference, January 17-19, 2017.



Educating the Newest Generation of Producers

By: John Schultz, BASF



John Schultz, ACPA Board Member, BASF

It is not a surprise to any of us anymore to hear about arising issues with the off target movement of blatantly illegal applications of dicamba to Xtend crops that we have been dealing with in the state of Arkansas, and even in the whole Mid-South for pretty much the entire summer. Our family farm in Tennessee happened to be a victim of this negligence as well. One thing has become apparent to me in this whole ordeal: we have a lot of young farmers out here that have never experienced trouble with their crops mainly due to

being "Roundup Babies." I had a young farmer friend call me and said "I got a dicamba drift on my beans and the flowers are dying." That sounds pretty harsh, and he was truly worried about it. After further investigation, I found that the beans really looked quite phenomenal. In fact, no flowers were dying; simply the pods began to form causing the natural process of the flower senescence as the pods begin to elongate. The beans had gotten a whiff of dicamba, no doubt, but the new trifoliolates looked great and pods

were coming on like rednecks to a Nascar race! We have a lot of young growers that are going to need our help learning about not just soybean anatomy, but anatomy of all crops. With the world we live in today as agriculturists, these younger people are faced with a broad spectrum of skills they need to master to succeed. As an industry, we must do our part to ensure these young producers succeed by providing them with all the knowledge that we can in helping them learn more each year and pushing them to produce a better crop.

Update on Xtend Technology and Dicamba Drift.

By Dr. Tom Barber and Dr. Bob Scott, University of Arkansas Extension Weed Scientists

Roundup Ready Xtend technology, which enables crop tolerance to dicamba herbicide was available to plant in both cotton and soybean crops this season. According to Extension Cotton Specialist Bill Robertson, over half of the cotton acreage was planted to cultivars containing the Xtend technology. That would mean there is as much as 150,000 acres of Xtend cotton planted in the state. On the soybean side, the seed was much more limited due to lacking approval in the European Union, therefore acreage planted to an Xtend soybean was limited to approximately 80,000 in Arkansas. Recently the European Union approved the importation of soybeans containing the Xtend trait. This is great news because growers will no longer have to separate and shop around to sale and deliver the fields planted to soybean containing Xtend technology.

The bad news surrounding this technology is the widespread off-target movement onto neighboring fields of soybean, peanuts, watermelons and other sensitive crops. It is apparent that many growers do not care what herbi-

cide labels are and made illegal applications of dicamba to their fields' at-planting, early postemergence, and in some cases all the way through mid-post. In many cases dicamba was sprayed 2 -3 times over the top of tolerant cotton. As everyone is well aware of now, soybean is very sensitive to dicamba, as much so as cotton is to 2,4-D. There are various ways dicamba can move off-target including physical drift, volatility and tank contamination and all of these have been a problem this year. Physical drift has been the number 1 and volatility a close second in terms of off-target movement observations in the field. Most off-label dicamba applications were made in late May through June when temperatures and humidity were high. These conditions are perfect for some formulations, especially the cheaper ones (Banvel, dicamba acid) to volatilize or gas off and move to neighboring fields. Even products containing DGA salts of dicamba such as Clarity can volatilize when conditions are right. Currently approximately 30 complaints in Arkansas as well as 45 in Tennessee and over

100 in Missouri have been made, which encompasses well over 200,000 acres. Unfortunately the extent of the damage is such that State Regulators, EPA and USDA have all gotten involved. There are still no current dicamba formulations labeled for use in Xtend crops and frankly due to the few growers that have applied dicamba illegally, we feel like it will be more difficult to get a product registered through the EPA for future use. Time will tell what regulations will come to pass because of the blatant off-label use of dicamba this year. Currently the Arkansas State Plant Board Pesticide committee is considering a ban on all DMA salts of dicamba and dicamba acid formulations; this would include products such as Banvel. In addition, there is some talk of a cutoff date where applications of current DGA salts such as Clarity or M1691 (not yet labeled) must be stopped during the growing season. This would mean that using dicamba as a tool for weed control in Xtend technology will not be possible until improved formulations of dicamba such as Engenia or Vaporgrip are registered.



Dicamba injury in leaves



Leaf damage on soybean by dicamba



Leaf cupping caused by dicamba drift.



A New Disease of Soybean, Taproot Decline

Dr. Terry Spurlock, Extension and Research Plant Pathologist

A new disease of soybean has been observed in fields in south-east Arkansas as well as the Delta in Mississippi and Louisiana. The disease, recently named Taproot decline (TRD), has been determined to be caused by a fungus after tests at the University of Arkansas, LSU, and Mississippi State confirmed the pathogen. Taproot decline produces a foliar symptom that is visible in the soybean canopy. Plants are stunted, with yellow chlorotic foliage that turns necrotic brown as the disease progresses (Fig 1.). The leaves have a distinct yellowing that is different from the foliar necrosis caused by Sudden Death Syndrome (Fig 2.). However, and as the name indicates, the part of the plant that is most affected is the roots. In most instances of plants found with TRD, when the yellow plant is pulled from

the bed, the taproot is not recovered with the plant. If it is recovered, it is rotted, necrotic, and black fungal growth can be seen on the outside of the roots and nodules (Fig 3.). Taproot decline is sometimes responsible for killing soybeans during the vegetative growth stages. These dead plants have been frequently found adjacent to the yellow stunted plants with TRD and have similar symptoms on the roots. In Mississippi and Louisiana, the disease appears to be more severe with substantial disease incidence occurring in some fields. However, few fields in Arkansas (to this point in time) have been severe. Based on the distribution of disease in fields, it is likely soilborne, resident, and will be best controlled by planting resistant varieties and using fungicide seed treatments when they are identified.



Fig 1. Yellow soybean plants affected by TRD.



Fig 2. Foliar symptoms of SDS.



Fig 3. Black fungal growth on the soybean plant associated with TRD.

My Perspective on Dicamba Tolerant Crops

Presented at Arkansas State Plant Board Meeting

Dr. Ford Baldwin, Professor Emeritus, University of Arkansas and Partner, Practical Weed Consultants, LLC

This year's off-target issues with dicamba were very predictable when the Roundup Ready Xtend crops were allowed to be planted without the registration of improved formulations of dicamba and without the intensive training of growers and applicators. The primary response I have seen to date has been to throw the farmers that sprayed dicamba on these crops under the bus. We have known from the beginning soybean is as sensitive to dicamba as cotton is to 2-4-D or tomato to quinclorac. The dicamba applications to Xtend crops were off-label but the currently available formulations would have behaved the same had a label been approved. Regardless, the applications provided a real world look at what will happen if the technology goes forward as it currently exists. Compared to spring applications, the DMA and DGA salts of dicamba behave much differ-

ently applied when temperatures are higher and susceptible crops and other vegetation have emerged. With current EU approval, if the program for 2017 is the same as this year's, it is entirely predictable the row crop area of Arkansas could look like the Missouri boot heel and the technology may not survive (Missouri had extensive dicamba drift damage this year). Companies simply must assume more ownership in the herbicide side of the seed. Weed control and the ability to manage the herbicide will ultimately drive choice of seed. This year has shown RR/Xtend as it currently exists is an all or nothing technology meaning all of the soybean acres will have to be planted with it; or none of the acres can be planted with it without risk of off-target injury. While I have had considerable experience with dicamba throughout my career, this year

has provided an excellent refresher course. We have known that dicamba is an average pigweed herbicide, and that has been obvious this year. At currently labeled rates, Palmer amaranth control from dicamba alone has been disappointing in the research plots observed. In fairness, I have also observed it in some program approach plots where the weed control was very good. I struggle to see how DMA and DGA salt formulations of dicamba can be allowed for use after soybean emergence. In fact I question why the DMA salt should be allowed to be sold, period. The current dicamba formulations being considered by the EPA is MI691 which is a DGA salt. The proposed label leaves much to be desired in terms of sound resistance management principles. If it and only it receives a label for next year; I fail to see how it offers any improvement in the ability to keep



"Company and Regulatory agencies must step up penalties".

dicamba on target. Obviously there are multiple options for registration that could occur at EPA between now and next season. If new formulations prove effective, the technology must be tied to these formulations and the option to use current dicamba formulations eliminated. Otherwise, the new formulations do not have a chance nor does the technology. Both the regulatory agencies and the company must step up to make the penalties for illegal applications of any type such that nobody will consider them.

We're on the web:
acpanews.com



2016 Soybean College

Location: Newport Extension Center

649 Jackson Road 917, Newport, AR 72112

Date: August 18, 2016

Time: 8:00 a.m.-5:00 p.m.

Highlights:

- Crop consultants, industry personnel, and producers will see current research on many of the production challenges Arkansas soybean producers are experiencing today.
- Presentations from University of Arkansas System Division of Agriculture and industry personnel and have the opportunity to take part in hands-on demonstrations.
- Paid participants will receive a complementary sweep net, hand lens, and other items.
- Lunch provided
- CEU's available

Registration fee is \$75*, must be registered before the event.

For more information contact Jeremy Ross at 501-944-0621 or jross@uaex.edu

*Limited to 200 participants

“The University of Arkansas Soybean College is a unique training event. The College offers on hand experience by University faculty in the field. Excellent opportunity to ask questions. Limited attendance so enroll quickly.”

Register at UA website:

<http://www.uaex.edu/>

Or

Register at ACPA website:

<http://acpanews.com/>