



ACPA Newsletter

2020

Volume 44 Number 4

2021 Virtual Arkansas Crop Management Conference

Register at: <https://acpanews.com/register>

The Arkansas Crop Management Conference will kick off Tuesday, January 19, at 1:00 offered virtually through two platforms: a ZOOM meeting and individual sessions on ACPA website. Attendees will register on Arkansas Crop Protection Association

website, <https://acpanews.com>. Registration costs: \$95 per person. Once attendees register online through the ACMC website and pay their fees, they will use their password for the website session. The Arkansas Crop Management Conference will

probably have 25+ sessions available. Once registered and program starts after Jan. 19, you can access on line classes at: <https://acpanews.com/login/> A special edition newsletter will be sent in a few days with detailed meeting information.

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Opening Session Live Online Tuesday Afternoon, January 19, 2021

| Time | Session | Title | Speaker |
|----------------|---------|--------------------------------------|---|
| 1:00 – 1:30 pm | 1.0 | Welcome to 2021 ACMC | Jarrod Hardke, ACPA President; Craig Shelton, ACPA President-Elect & ACMC Program Chair |
| 1:30 – 2:30 pm | 1.1 | Climate Outlook | Eric Snodgrass, Nutrien Ag Solutions |
| 2:30 – 3:30 pm | 1.2 | Data Consolidation & Management | Zach Worden, Agrian |
| 3:30 – 4:30 pm | 1.3 | Variable Rate Planting and Fertility | Aaron Breimer, Veritas |
| 4:30 pm | 1.4 | Closing Comments, Program Discussion | Jarrod Hardke, ACPA President; Craig Shelton, ACPA President-Elect & ACMC Program Chair |

Delta Plastics is Taking a New Approach to Polytube Collections Program

By: Matt Lindsey, Delta Plastics, Director of Irrigation

This year Delta Plastics is taking a new approach to our Polytube Collections program in order to better serve our customers and become more efficient in our recycling efforts. Namely, we've introduced a Call to Collect model that allows our team to better identify or "spot" Delta polytube for collection and plan full truckload routes before we send the big trucks out to collect. This helps us operate more efficiently while still providing the same value-add collections service you rely on from Delta. If you see our trucks passing your used polytube, it's because they no longer have room to pick up the odd roll here and there. You can get your used pipe on the collections list by calling 1.800.277.9172.

There are also big improvements in store for our Pipe Planner

tool just around the corner. We are excited to announce the launch of Pipe Planner 4.0 in 2021. This new and improved Pipe Planner will be more user-friendly, with a variety of enhanced features and optimized for mobile platforms. No more

carving out time to find a mouse and desktop to work up simple irrigation plans. You can simply do it on the go. Pipe Planner 4.0 will be available for Delta Plastics users in early Spring of 2021, so stay tuned!

Notes of Interest

- Arkansas Crop Management Conference Scheduled to begin January 19, 2021
- Delta Plastic offers Pipe Planner 4.0, Contact Matt Lindsey for more information: 800-277-9172
- ACPA needs more sustaining members, call Don Johnson (501-454-9963) if interested, levels of membership are individual, state business and corporate.
- Paraquat comment period ends December 22, 2020.



Adam Whitfield Wins Undergraduate Research Conference Student Competition With Paper Titled “Efficacy of Selected Insecticides for Control of Tarnished Plant Bug, *Lygus lineolaris*, in Arkansas”.

Adam Whitfield stated during presentation that tarnished plant bug (*Lygus lineolaris*) is the number one insect pest in mid-south cotton production. Plant bug feeding causes square loss, deformed flowers, and damaged bolls ultimately resulting in reduced yield. Growers and consultants rely on foliar insecticide applications to control plant bugs, a difficult pest to manage in cotton with growers averaging

4.7 insecticide applications per acre treated. These trials are part of a regional Midsouth study the past four years which are conducted to evaluate the efficacy of insecticides currently labeled for control of this pest. These trials are also used to determine a base level of control to monitor for developing issues of insecticide resistance to individual insecticides, and to serve as a source of data for possible

registration of new insecticides that may become available. Also, these data are used to ensure that current recommendations of these insecticides are still viable. Insecticides evaluated include: Transform (sulfoxaflor), Centric (thiamethoxam), Vydate (oxamyl), Orthene (acephate), Brigade (bifenthrin), Bidrin (dicrotophos), Admire Pro (imidacloprid), Carbine (flonicamid) and Diamond

(novaluron). Treatments were initiated when a threshold of six TPB per ten row feet was found in the test area, and when a majority of the treatments exceeded threshold after the initial application. Results indicated that Diamond and Transform performed consistently better than many of the other insecticides. Many of the insecticides tested failed to provide any consistent level of adequate control.

Comment Period for Proposed Regulations for Paraquat, Ends Dec. 22

By: Dr. Jeremy Ross, Soybean Agronomist and Professor, University of Arkansas

The Environmental Protection Agency (EPA) is proposing new regulations on the use and application of paraquat. The one proposed change in the Federal label for paraquat that would affect soybean producers in Arkansas would be “prohibiting aerial application for all uses and use sites except cotton desiccation.” This

proposed regulation would eliminate any aerial applications for early-season burndown regardless of any cropping system and harvest-aid applications in soybean where paraquat is used. The EPA press release explaining these proposed changes can be found following the first [link](#) below.

Anyone wishing to make a comment about the proposed changes can do so following the second [link](#) below. The closing date for public comments is December 22, 2020. EPA Press Releases on Interim

Paraquat Proposed changes: <https://www.epa.gov/pesticides/epa-proposes-new-safety-measures-paraquat>
Link to EPA site to make public comment (will close December 22, 2021): <https://www.regulations.gov/docket?D=EPA-HQ-OPP->

EPA Proposes New Safety Measures for Paraquat

EPA Proposes New Safety Measures for Paraquat

EPA is taking the next step in its regulatory review of paraquat dichloride (paraquat), a widely-used herbicide.

As outlined in the proposed interim decision for paraquat, the agency is proposing new measures to reduce risks associated with paraquat in order to better protect human health and the environment. These measures include:

- Prohibiting aerial application for all uses and use sites except cotton desiccation;
- Prohibiting pressurized handgun and backpack sprayer application methods on the label;
- Limiting the maximum application rate for alfalfa to one pound of active ingredient per acre;
- Requiring enclosed cabs if

area treated in 24-hour period is more than 80 acres;

- Requiring enclosed cabs or PF10 respirators if area treated in 24-hour period is 80 acres or less;
- Requiring a residential area drift buffer and 7-day restricted entry interval (REI) for cotton desiccation;

- Requiring a 48-hour REI for all crops and uses except cotton desiccation; and Adding mandatory spray drift management label language.

In addition, EPA is proposing to allow truck drivers who are not certified applicators to transport paraquat when certain conditions are met.

The proposed interim decision for paraquat is now available for public comment for 60 days in docket [EPA-HQ-OPP-2011-0855](https://www.regulations.gov) at www.regulations.gov, closing on December 22, 2020

Background

Paraquat is applied annually to control invasive weeds and plants in more than 100 crops—including cotton, corn, and soybeans, and there are presently no direct alternatives to this product. Because all paraquat products are [Restricted Use Products](#), they can only be applied by certified pesticide applicators.

EPA has taken proactive steps, outside of the standard registration review process, to ensure paraquat is used in a manner that is safe and consistent with the label directions. This includes a [safety awareness campaign](#) and [changes to labels and product packaging](#) to stop improper uses, which have led to poisonings and deaths. Additionally, [specialized training for certified applicators who use paraquat](#) was released earlier this year to ensure that the

pesticide is used correctly. EPA is continuing to evaluate the effectiveness of these measures as the agency works to complete the required registration review process.

The proposed interim decision (PID) for paraquat is the third step in EPA’s four-step process for evaluating a pesticide registration application that EPA conducts at least every 15 years. It is not a denial or an approval of the active ingredient.

In the PID, EPA proposes mitigation measures to reduce the human health and ecological risks identified in the agency’s human health and ecological risk assessments (step two). The agency published the draft risk assessments for paraquat in October 2019. The ID is the fourth step in the registration review process. In the ID, EPA finalizes mitigation measures to reduce the human health and ecological risks.



ACPA Virtual Research Conference a Huge Success, Over 200 Registered for Free Virtual Conference, 3 From Foreign Counties

The 2020 Virtual Research Conference had 208 register for the meeting; 141 attended day one and 129 day two. The meeting had registrations from three counties in addition to the US including Lithuanian, Italy, and Nigeria.

Twenty-five students presented talks at the 2020 ACPC virtual Research Conference. Dr. Nick Bateman coordinated the conference with Dr. Tommy Butts serving as student con-

test chair and Dr. Ben Thrash managed the audio visual segment.

In the PhD competition, Carrie Ortel won place first, Lawson Priess second and Justin Chla-pecka third.

For the Masters Division first place winners were Mary Jane Lytle and Mason Castner, second place winners were Rodger Farr and Jacob Fleming followed by third place winners James Beesinger and Trevor Newkirk.

In the undergraduate, first place was Adam Whitfield, second place Kristen Gates and third place was Gage Maris. Congratulations to all 25 student participants. Cash scholarship awards were presented to all winners plus a plaque with letter.

Thanks to our corporate sponsors for supporting the student scholarships including **BASF, Corteva Agrisciences, Gowan USA, Syngenta Crop Protection and Valent USA**



Dr. Nick Bateman, Vice President ACPA and Coordinator of 2020 Virtual Research Conference

Carrie Ortel Wins PhD Student Competition at Virtual Research Conference 2020

The PhD student competition was won by Carrie Ortel with a talk titled "Identifying and Correcting Potassium Hidden Hunger in Arkansas Soybean". The presentation stated that potassium (K) deficiency is not always visually apparent in a soybean (*Glycine max* L. Merr.) crop and may result in significant yield losses if not diag-

nosed and corrected in a timely manner. Soybean which received an equal rate of 120 lb K acre⁻¹ at preplant and split application of 60 lb K acre⁻¹ at preplant and 60 lb K acre⁻¹ at first flower yielded similarly. However, when the second application of the remaining 60 lb K acre⁻¹ was applied only after deficiency symptoms appeared, the yield

was significantly reduced with an average 18% yield loss in 2019. Therefore, in-season applications are effective at maintaining yield if applied during early reproductive growth. However, a delay in application timing may jeopardize yield potential to a degree that is no longer profitable to correct. The late onset of visual K deficiency symptoms in soybean

limits the ability to use this as a method to identify and correct this yield limiting factor in a timely and effective manner. Our dynamic critical tissue-K concentration threshold for soybean allows producers to confidently identify and correct hidden hunger or a K deficient soybean crop in a timely manner to maximize yield and profit.

Mason Castner and Mary Jane Lytle are First Place Student Winners in Masters Talks

M.C. Castner and Mary Jane Lytle won first place talks in masters divisions with a presentation titled "Effectiveness of Potassium Tetraborate Tetrahydrate as a Dicamba Volatility Reduction Agent and Effect on Weed Control". He discussed Engenia and XtendiMax with VaporGrip applied preemergence and postemergence control of broadleaf weeds in XtendFlex cotton and Roundup Ready 2 Xtend soybean. Dicamba applications to cotton and soybean have resulted in a record number of complaints regarding off-target movement of the herbicide since the initial introduction in 2017. To counteract the volatility associated with dicamba, the

University of Arkansas has pursued potassium tetraborate tetrahydrate (potassium borate) as a tank additive. He investigated the impact of this additive on dicamba in small- and large-scale volatility studies. For weed control, two dicamba formulations (XtendiMax and Engenia) plus glyphosate were combined with potassium borate at 0, 0.1, 0.2, and 1.3 lbs boron/A. There was trend for reduction of dicamba volatility as potassium borate rate increased based the three evaluated parameters of maximum soybean injury, average injury, and distance traveled. Air sample data closely aligned with qualitative assessments. Potassium borate did not compromised broadleaf or grass weed control

when added to either formulation of dicamba, although some numerical decreases were observed. Overall, the addition of potassium borate to dicamba has great potential in reducing off-target movement of dicamba without sacrificing efficacy on key weed species.

Mary Jane Lytle placed first in masters division with a presentation titled "Influence of Planting Arrangement on Rice Canopy Formation and Grain Yield". Her discussion involved a novel rice planting arrangement and spacing to improve rice management and yield. Experiments were conducted evaluating the influence of rice planting arrangement on canopy formation and grain yield. The study involved a pureline

cultivar, Diamond, and a hybrid cultivar, RT XP753. Each cultivar was planted at a range of seeding rates which included, 108, 215, 323, 431, and 538 seed m⁻² for Diamond, and 43, 75, 108, 140, and 172 seed m⁻² for RT XP753. Seed was planted using 19-cm row spacing, either in one single pass, or divided over two passes, with the second pass being perpendicular to the first. Canopy coverage images were collected weekly during rice seedling growth stages and canopy coverage analyzed using Turf Analyzer. Grain yield data was collected at harvest. Results were discussed regarding grain yield and canopy formation



Arkansas State Plant Board Update- December 11, 2020

By: Brad Koen, ACPA Arkansas State Plant Board Representative

2020 continues to be a challenging year for all of us. The Arkansas State Plant Board meeting schedule is no exception to this challenge. The board met on Wednesday, December 2. Under the current pandemic situation, we once again met virtually by way of Zoom. As you can imagine the meeting was dominated by the dicamba discussion.

Just to catch everyone up, on October 27, the EPA announced the reregistration of three dicamba products for over-the-top use for cotton and soybeans. The registrations for Xtendimax, Engenia, and Tavium will be a 5-year registration starting in 2021. The registrants were able to answer the concerns that enabled the EPA to reregister the products. With this approval there are some changes to the label that must be followed before it can be used legally:

- Downwind buffer requirements of 240 feet and a buffer of 310 feet where listed species are located.

- An approved pH-buffering agent to be mixed with OTT dicamba to lower volatility.

- A nationwide cutoff date of June 30 for soybeans and July 30 for Cotton.

- Use of hooded sprayer technology to reduce buffer requirements.

- Ability of states to expand use to meet local needs by working with EPA.

The state Arkansas currently has a dicamba cutoff date of May 25, and it is illegal to mix glyphosate in the tank with the labeled dicamba products. With the new approved pH buffering agents, the volatility of the glyphosate/dicamba tank mixes compares to that of the lower volatile formulations of dicamba. At our plant board meeting, we

heard presentations from BASF and from the University of Arkansas that showed promising results from the volatility reducing agents (VRA's). After much discussion there was a motion made to extend the cutoff date to June 15 and to allow the mixture of approved glyphosate and dicamba formulations. The board was split on this vote, so the vote failed. Another motion was made to keep the 2020 restriction in place but to follow the federal restrictions inside the Mississippi River levee (June 30 cutoff on soybeans and July 30 cutoff on cotton) by permit only. This motion passed. Since the motion made changes to our current regulations, we are forced to give the public 30 days for comments. The changes have been passed on to the Secretary of Ag and he will send it on to the Gov-

ernor for approval.

I have also stayed active in the Southern Crop Production Association this year. The pandemic kept us from making our trip to Washington D.C. this year to lobby for our industry. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is critical to our industry's efforts to bring products to market and is sound legislative policy. Using a risk-based approach to evaluate the registration of chemistries is critical to registrants and producers now and in future decisions. The state of Arkansas' stance on dicamba offers up some challenges for our representatives when it comes to defending our industry. These challenges will continue to get tougher as many groups are targeting the removal of all of our pesticides.

In Remembrance of Dr. Terry Siebenmorgen, Dr. Siebenmorgen Spoke at Several Arkansas Crop Management Conferences

Dr. Terry Siebenmorgen, a well-known rice researcher and educator with the University of Arkansas System, recently passed away at age 63 after a battle with cancer. Siebenmorgen's work at the University of Arkansas and for the rice industry was primarily focused on research and education in rice processing. He founded the world-renowned Rice Processing Program at the University in 1994, and he was inducted into the Arkansas Agriculture Hall of Fame in 2019.

Terry was born to Anthony Justin Siebenmorgen and Benita Crescence Wewers Siebenmorgen. He grew up on a dairy farm in Morrison Bluff, AR and was the oldest of eight children. In 1982 he married Patty Carter. They had three sons, Justin, Matthew and Ryan and made their home in Fayetteville, AR

where they raised beef cattle.

Terry was a devoted husband, father and grandfather who never did anything at less than 100% effort. Terry was most happy when he was developing a vision for "building" something – whether it be a program or an actual structure – and he always followed thru to completion, no matter the difficulty.

Terry was preceded in death by his son, Matthew, his father, Anthony and a sister. He is survived by his wife, Patty, son Justin Wayne (Candace) Siebenmorgen of Fayetteville, son Ryan Patrick (Abbey) Siebenmorgen of Fayetteville, four grandchildren, Cooper James, Bailey Rae, Lyla Kate and Blake Matthew, his mother Benita, four brothers, two sisters and many nieces and nephews.

He earned his undergraduate degree from the UA, a M.S. de-

gree from Purdue and a PhD from the University of Nebraska, all in agricultural engineering. He began his faculty career at the UA in 1984 as a food engineer, working in several areas of food processing. He soon focused extensively on rice processing in response to the strong need for research from the food industry. He founded the world-renowned Rice Processing Program in 1994. His rice processing program is an industry-interactive, multidisciplinary effort focusing on rice processing operations and has sponsors from across the United States, South America, Europe and Japan. He built excellent relationships and trust with industry members to run this successful Rice Processing Program for more than 25 years. Terry was appointed to the Distinguished Professor rank in

2015 and was inducted into the Arkansas Agriculture Hall of Fame in 2019. He was also inducted as a Fellow of the American Society of Agricultural Engineers in 2005 and of the American Association of Cereal Chemists International in 2014. Among his many industry awards are being selected as Riceland Foods' Friend of the Farmer in 2012 and receiving the Distinguished Service Award from the Rice Technical Working Group in 2016 and 2018. He also received the ASABE Distinguished Food Engineer Award in 2007. He was twice selected for the Texas Instruments Outstanding Research Award. He earned the Spitz Land Grant University Faculty Award for Excellence and John W. White Team Award at UA Division of Agriculture.