

# Greene County Cooperative Extension Service

## Crop Update Newsletter April 2020

### *Rice News*



**DIVISION OF AGRICULTURE  
RESEARCH & EXTENSION**

*University of Arkansas System*

### **Crop Updates from Greene Co. Extension & U A Specialists**

We will continue county crop updates via text messages (using Remind app) this season. You will get field day notices, IPM updates, demo summaries, and newsletters by clicking on bitly links in the texts we send you. Sometimes texts do not work, so we will also send email notices if you are on our email list.



Dr. Jarrod Hardke, U of A Extension Rice Specialist, will continue his weekly *Rice Updates* this year. They contain timely information on rice production and marketing from him and our other U of A experts. To get the update, send an email request to: [rice@uaex.edu](mailto:rice@uaex.edu)

On another note, once your rice fields begin to emerge, make sure to enroll them in the DD50 program. The DD50 report is a one page summary of what to expect on your crop throughout the season. Growth stages, pesticide cut off dates, pest scouting windows, and fertilizer timing are just a few areas listed on the report. You can enroll your fields online by going to this website: <https://dd50.uaex.edu/> \*\*\*

### **Respirator Availability for Farmers**

We all adapt daily as the COVID-19 pandemic plays out. According to Ples Spradley, Pesticide Specialist for the U of A System, Division of Agriculture, farmers may not be able to find respirators they need to spray some pesticides. He said with the critical need for N95 respirators for health care, there are few if any “dust/mist” type respirators available in the marketplace for agriculture and pesticide applications. Some herbicide, fungicide, and insecticide labels require N95 type respirators to protect applicators from exposure.



Spradley also suggested that farmers review the labels of key products they plan to use on the farm this season. For pesticide products that require a respirator, search for an available alternative product (without a respirator requirement) or management method. There may be a product with the same active ingredient, but the formulation type reduces the need for respiratory protection. Of course, any alternatives must be labeled for the crop or the intended use.

Applicators who do not follow the label PPE requirements because of a lack of access to a respirator put themselves at significant risk, potentially add to the need for medical care, and are in violation of the label.

Unfortunately, the only reliable way to query label requirements and/or alternative products is to review their labels. Use the Arkansas Agriculture Departments online label search engine:

<https://aad-web-ser.agri.arkansas.gov/>

***Rice News***

**2019 Barnyardgrass Herbicide Resistance**

Each year barnyardgrass seed samples sent in for screening from Greene Count come back with resistance to two or more of the following active ingrediants - propanil, imazethapyr (Newpath, Preface), cyhalofop (Clincher), and quinclorac (Facet).

Dr. Jason Norsworthy, U of A Weed Scientist, conducted his annual survey during 2019 for barnyardgrass resistance to herbicides labeled for rice. For the 18 barnyardgrass samples screened from Greene County (thanks to Mike Simmons, local crop consultant for submitting most of these samples), 56% showed resistance to propanil, 56 % showed resistance to quinclorac, 44 % were resistant to imazethapyr, and none tested resistant to cyhalofop. All samples checked from Greene County were still susceptible to clomazone (Command).

A reminder that in 2017 we did see barnyardgrass in one Greene County rice field that was resistant to Command and another field with resistance to Clincher. Keep in mind our yearly surveys are weighted, with seed screened from fields that show escaped barnyardgrass.

According to Dr. Tommy Butts, U of A Extension Weed Scientist, keeping resistance in mind, for grass weed control, a weed control program using overlapping residual herbicides to keep fields clean up to flood time works best. Command applied pre, and Bolero or Prowl applied delayed pre, are good options to provide residual control and multiple, effective modes-of-action. In addition, Facet as a PRE/residual still tends to have some activity. Butts adds that if broadleaves like Palmer are a concern, especially in row rice, Sharpen is a great residual option with a different mode-of-action to have (unless the Palmer is PPO-resistant).

Remember if you have escapes this year, the 2019 resistance survey showed several local barnyardgrass samples to be resistant to our standard postemergence options, including propanil, Facet, and Newpath/Preface. Your options become slim when you start developing herbicide resistance to multiple modes of action in your fields. Don't forget barnyardgrass is very competitive and may reduce rice yields up to 70 %. We plan to collect weed seed again for screening this fall, so call us if you have fields you suspect are developing resistance.\*\*\*



*Barnyardgrass seed is collected each August*

## ***Soybean News***

### **Good Soybean Weed Control Requires Residual Herbicides**

U of A Extension Weed Scientist, Dr. Tommy Butts, stresses that pre-emergence residual herbicides are a must for good weed control in Arkansas soybeans. On many fields pigweed is our number one weed that can hammer yield if not properly controlled.



Pigweeds in most fields are resistant to glyphosate. Most fields also have pigweeds that are resistant to the yellow herbicides (Treflan, Prowl) and ALS-inhibiting herbicides (Classic, FirstRate, Scepter). It is also becoming common to see fields with pigweeds resistant to PPO-inhibiting herbicides (Flexstar, Valor, Sharpen) which we relied on heavily when glyphosate started to fail. Preemergence residual PPO-inhibitor (Valor, Sharpen) herbicides may still be viable options to help with pigweed control (providing around 60% control in areas of PPO-inhibitor resistance), but alternative, effective modes-of-action such as the Group 15 herbicides (Dual Magnum, Zidua, Outlook) and/or metribuzin are required for complete early-season control.

According to Butts, once producers have fields with pigweeds showing resistance to multiple herbicide chemistries used in the past, what is left for pigweed management are the Group 4 (dicamba & 2,4-D), Group 5 (metribuzin), Group 10 (glufosinate-Liberty), and Group 15 (Dual, Zidua, etc.) chemistries. Whether you are growing conventional, Enlist E3, Xtend, Roundup Ready, or Liberty Link soybeans, Butts recommends starting out with a clean field at planting and applying a pre-emergence herbicide mix or package that contains metribuzin. Make sure the variety you plant is rated as showing only slight to moderate injury to metribuzin.

You should also have a Group 15 herbicide in the pre-emergence herbicide mix, and apply one as an overlapping residual with your first postemergence herbicide treatment. This overlapping residual herbicide like Dual or Zidua should be applied 14 to 21 days following the preemergence application regardless of the soybean technology you are growing.

If you are growing Liberty Link soybeans, use your 2 Liberty applications in a timely manner to control pigweeds before they get too big; 4 inches tall is ideal. Remember that Liberty is primarily a contact product making it imperative to get good spray coverage.

Those producers growing Enlist E3 or Xtend soybeans should also time their product specific herbicides when weeds are small as listed on the label; again 4 inches tall is ideal. Make sure to closely follow all federal & state regulations for these herbicides, and take the appropriate training required for each chemical.

### **Extension Weed Science Page Great Resource & Weed Text Updates**

Make sure to check out some of the tools at the UA Extension Weed Science page, some including weeds publications, videos, and auxin herbicide info. Here is the link: <https://www.uaex.edu/weeds>

Also new this season is Weed Update texts from our UA Extension Weed Scientists.



## ***Soybean News***

### **Xtend and Enlist Soybean Acres Increasing**

According to Dr. Jeremy Ross, U of A Soybean Specialist, variety selection is one of the most important decisions a producer makes that will affect his bottom line at the end of the year. He advises planting a few top yielding varieties with good disease resistance packages for good risk management.

Growers will also need to determine what herbicide tolerant traits they want on the varieties they plant. The list continues to grow each year with seed available for RR1, RR2, X, LL, E3, and STS. Many varieties may have 2 traits stacked like RR2X and LL/STS. Some even have 3 traits stacked like E3 an RR2X/STS varieties.

The talk is a lot of RR2X (Xtend beans) acres on the east side of the Ridge in Greene County, and several acres of E3 (Enlist beans) on the west side of the Ridge. There will still be several acres of Liberty beans on each side of the Ridge and even a few acres of conventionals (no tech trait). Make sure to use CropCheck to mark your fields.

To help with variety selection, Ross has prepared several tools including:

2019 UA Soybean Variety Update <http://bit.ly/2TVBOM8>

2020 UA Soybean Variety Cross Reference Chart <http://bit.ly/2tPcRxZ>

2019 UA Soybean Variety Metribuzin Tolerance Chart <http://bit.ly/38PjX19>



### **Use CropCheck to Mark Herbicide Technologies in your Fields**

More herbicide tolerance traits become available each year in the seed farmers plant. It can easily get confusing to remember what type of seed you planted where on your farm, not to mention what your neighbors have planted. In addition, to legally apply herbicide-specific products on some traited varieties, you are required to be a set distance from sensitive crops, specialty crops, endangered species, incorporated towns, etc.



According to Dr. Vic Ford, Associate Extension Director for AG & Natural Resources for the U of A, Division of Agriculture, CropCheck is a free registry program for producers to mark the crops they have planted in their fields and the herbicide traits for which they have tolerance. The producer can set up an online account and map all his fields using his smartphone, tablet, or pc. Producers can also upload shape files to mark the borders of their fields.

CropCheck can be used instead of “Flag The Technology” for producers to communicate to their neighbors and the AG community what type of crop they have planted. Several local producers entered their fields last year, many with the help of their crop consultant, AG retailer, or commercial applicator. We would be happy to help our get started—just give us a call. Here is the weblink to CropCheck <https://ar.cropcheck.org/> \*\*\*



***Research & Spotlight Volunteer Farm***

**Spray Water Survey Results Raise Concerns**

Last year our UA Weed Scientists began a survey to evaluate spray water quality (pH and hardness). Dr. Tommy Butts, Weed Scientist for the U of A System, Division of Agriculture, said their main objective was to determine the range of spray water quality throughout the state. The pH and hardness of water can significantly impact effectiveness of some pesticides our farmers use. Here is a weblink for a recent write up by Butts on the 2019 state wide study: <https://bit.ly/2wUZwWj>

In the 2019 study, 10 of the 40 samples checked were collected in Greene County. Considering hardness, all the Greene County samples (except for one with a moderately hard rating-still OK) came back rated as having soft water which puts them in the acceptable category (< 200 ppm) as spray water sources.

However, it was an eye opener, when you looked at the pH levels for the Greene County samples. They ranged from 6.96 to 8.25, with an overall average of 7.73. Butts background research shows that some pesticides are not as effective when the pH becomes alkaline (7.0 or higher). Efficacy will be even more threatened as spray water pH gets in the 8:0 range or higher, which is where more than half the Greene County samples fell.

If losses in weed control have been observed in previous years and water pH is a consideration for the reason why, Butts suggests a couple of things. First of all, have your spray water tested. It's hard to find a solution to a problem if you don't know whether a problem actually exists or not. Second, to mitigate high pH water sources (greater than 8), Butts suggests possibly adding an acidifying adjuvant into the spray mixture. These types of adjuvants help to drive down the spray solution pH in addition to the inherent reduction in pH herbicides typically provide. Be aware, not all adjuvants are created equal, so make sure to ask your chemical provider for specific details about the acidifying potential of their recommended adjuvant.

Give us a call if you would like a sample of your spray water sent in for sampling this year. We will store them at the office and send on to UA Weed Science Lab later this summer.\*\*\*

**Demo Spotlight Farmer - Wells Farms**

Wells Farms (Jeff, Lin, Linwood) SE of Paragould, hosted our 2019 Xtend soybean variety test. We want to thank these guys for helping us evaluate varieties to grow with this type of technology. We also appreciate the participating companies.

In a nutshell, yields were awesome averaging 75 bushels per acre (bpa) for the 18 varieties tested. In addition, yields ranged from 66 to 80 bpa. The field was in a corn rotation, used furrow irrigation, and received a poultry litter application the



***Thanks to our Partners***

**Program Partners Appreciated**

We want to take this opportunity to say thanks to our many other local partners (farmers, AG retailers, consultants, industry reps, and government officials) who help plan and conduct Extension programs in Greene County. We know you are all busy and really appreciate your time, expertise, and support.

Check out those who volunteered the last couple of years by visiting the Greene County Extension programs webpage: <https://www.uaex.edu/counties/greene/programs.aspx> \*\*\*

**New Greene County Extension Staff**

Since this time last year, the Greene County Extension Staff has seen lots of changes. Lance Blythe was promoted to the CEA-Staff Chair position after the retirement of long time CEA, Allen Davis. This opened up the CEA-4-H position which Harlee Haney came on board to fill last September. And finally, Katie West was hired as our new Administrative Specialist III in June. She took Courteney Sisk’s place, who was promoted to CEA-Agriculture for Lawrence County.



Please give our newest staff members a warm welcome next time you see or visit with them.

Wishing you a safe and productive season,

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