Crittenden County Producers,

We are off to a wet start this year, so some may see us as being late on planting. However, we are still keeping up with the overall state averages at this point. I am contacting all of you today because there are a couple topics that needed to be addressed.

The first topic is Stripe rust (*Puccinia striiformis f. sp. tritici*) in wheat. We are getting reports from around the area and in the county that Stripe rust is here. It has the capability of reducing the overall yields by 7 percent as seen in 2000, and untreated fields from 2000 had a yield reduction of 50 percent or more. In 2000 there was fungicide applied to at least 350,000 acres to control the fast moving epidemic, so Stripe rust has become the most important foliar disease of Arkansas wheat.

The symptoms seen in stripe rust are sometimes called yellow rust in parts of the world. It is distinguished from other rusts because of the dusty yellow urediniospores produced on the lesions that grow systematically in the leaves. Due to the overwintering period, the first symptoms occur on the leaves that are closest to the ground and cover the entire width of the leaves rather than being a stripe. The infection spreads to nearby leaves and plants to create “hot spots” in the field that can be very distinguishable during the heading phase of plant growth. When the symptoms emerge on the upper leaves, the leaf veins restrict the fungus causing the striping that gives the rust its name.

Dr. Gene Milus, Professor of Plant Pathology – Wheat, has been studying the development of Stripe rust in the crop across Arkansas. Dr. Milus stated,

“Based on observations from plots at the Rohwer Experiment Station in Desha County, Beretta, Ricochet and Progeny 185 were the most susceptible varieties to stripe rust and had hot spots with numerous infected leaves. Scattered leaves with stripe rust were found on 26R20, Arcadia, Coker 9553, Harrison, Progeny 308, and Terral 8861.

In previous years, Progeny 185 and Arcadia remained susceptible throughout the season, but Beretta, Coker 9553 and Ricochet became resistant as the season progressed. The other varieties lack a long enough track record to say much. All of the varieties with resistance to stripe rust likely have race specific adult-plant resistance that may eventually be overcome by new races of the stripe rust fungus.

Two of 11 commercial fields in eastern Arkansas that were surveyed for diseases had multiple hot spots of stripe rust and the others had no detectable stripe rust. Growers should scout now for stripe rust, especially if they have any of the most susceptible varieties. Fields with hot spots should be sprayed with a fungicide sooner rather than later.”
If you have any questions about Strip rust in wheat, please contact us at the Crittenden County Cooperative Extension office. We would be glad to work with you on scouting and treatment options.

With planting season underway, our second topic comes to mind, herbicide options. The herbicide, Zidua, received a label for Arkansas in corn and soybean from the company BASF. Zidua is preemergence herbicide that is used to control annual grasses, sedges, and annual broadleaf weeds. Dry weather after application of Zidua does reduce its effectiveness, so Zidua must be applied and be activated by at least ½ inch of rainfall or irrigation before there is weed germination and emergence. If Zidua is not activated and weeds emerge, a labeled postemergence herbicide or shallow cultivation may be needed to control weed escapes.

The Zidua label contains all information pertinent to this product. However, I will highlight a few items deemed important. Zidua does control redroot, smooth, and tumble pigweed. Extension Weed Scientist, Dr. Bob Scott, discussed the importance of this product. Dr. Scott stated, “Zidua has the same mode of action as Dual. However, Zidua does have a longer residual, and it is a great product to control pigweed. There is one area of concern, and it is that there is a 10 month plant back to rice after using Zidua.”

Zidua may be applied preplant surface, preplant incorporated, preemergence, early postemergence, or in the fall. A detailed list of the requirements for Application Timings can be found on the Zidua label. Please read carefully and thoroughly before applying the herbicide. Zidua can only be applied by ground application. DO NOT apply by aerial equipment or through any type of irrigation system.

With Zidua in our arsenal to combat pigweed, we have an herbicide with capabilities to help our resistance issues. However, always note the mode of action being applied, so there is no “doubling up” of modes of action on the same weeds year after year. In addition, FMC has a registration for their version of Zidua, Athem (Zidua + Firstrate) and Athem ATZ (Athem + Atrazine) for corn, but remember there are rotational restrictions with rice. Please read all labels carefully.

On the other hand, Fierce, a labeled herbicide from Valent, is 33.5% Valor and 42.5% Zidua. The one limiting factor with Fierce is that there is an 18 month plant back for rice. All restrictions and information concerning Fierce can be found on its label. Adhering to the label will help prevent non-compliant applications of the product in production situations. Fierce is broad-spectrum herbicide that has the best results for controlling pigweed, but again it does have an 18 month plant back for rice.

For rice, FMC released a new premix of Facet and Command called Obey herbicide. It provided excellent broadleaf and grass control with preemerge through early POST timings. By reading the labels carefully, you can increase the yearly amount of clomazone allowed per acre and still apply full rates on medium soil types. This management practice should help with
herbicide resistant barnyard grass if applied early. There are aerial application changes for these products. Contact the plant board or FMC for more information.

Lastly, the Arkansas State Plant Board has made an announcement that they intend to ease the restrictions on 2,4-D applications in the 10 Northeast Arkansas counties where it is currently banned after April 15th. This will allow for small sprayers to apply 2,4-D to levees only for the control of pigweed. Please contact the State Plant Board for more information, and note that all other restrictions involving 2,4-D still apply!!!

Please contact Jason Osborn or me with any questions. We would be glad to work with you. Feel free to call the Extension Office at 870-739-3239 with any questions or concerns.

Sincerely,

R. Bryan Stobaugh

CEA-Agriculture

Crittenden County