Diversified
Greg Gruben
New cotton technologies offer opportunities, but require management

Two new cotton technologies are exciting for producers, but come with warnings, according to a Texas A&M AgriLife Extension Service specialist.

Dr. Emi Kimura, AgriLife Extension agronomist in Vernon, discussed the new cotton options at the Rolling Plains Summer Field Day recently in Chillicothe.

“We are very excited to have these new technologies available to cotton producers in Texas,” Kimura said. “The pigweed has become an important problem in cotton. It is becoming more and more resistant to the existing herbicides and we needed some new herbicides for producers to take care of tough-to-control weeds such as herbicide-resistant pigweed. It finally happened in 2017.”

She said the two new technologies, XtendFlex cotton – a dicamba-tolerant cotton and Enlist cotton – a 2,4-D choline-tolerant cotton, are being tested in her variety trials to see how they perform in the Rolling Plains.

The important thing to note, and something that has caused more than a few issues in this first year, is the herbicides listed for use on each of these varieties – XtendiMax, a dicamba product, for the XtendFlex cotton varieties, and Enlist Duo, 2,4-D choline herbicide, for Enlist cotton varieties – are very specific in their use and there is no cross-tolerance to each other, Kimura said.

“While they are excited about the technologies, there are things some producers did not understand, including that the two technologies are not cross-tolerant,” she said. “The Enlist Duo has a specific chemical which can be applied to control weeds over Enlist cotton varieties, but if they apply Enlist Duo to the XtendFlex varieties, it will kill them. The same thing with XtendiMax; if the products are applied on the Enlist varieties; it can kill all the cotton.

https://www.youtube.com/watch?v=F4W0jm5ZaGA&feature=youtu.be

“They are not cross-tolerant, but some producers misunderstood that this first year,” Kimura said. “They thought they could be applied both ways and that thinking can and has ended up in disaster here in the Rolling Plains. Some producers didn’t pay attention to the variety they planted and ended up toasting their cotton.”

Most of Rolling Plains cotton producers are using the dicamba-tolerant varieties, she said. However, cotton is more susceptible to the 2,4-D product than dicamba product, unlike soybeans.

“It’s important to note that if your neighbor has the Enlist varieties and sprays 2,4-D choline or grass pasture and sprays a 2,4-D product, then it can be damaging to your crop if there is drift on your dicamba-tolerant cotton,” Kimura said.

Another warning she offered is: “If we don’t take care of these technologies, if we keep using them over and over, we will develop another herbicide-resistant weed in a relatively short time frame.”

She suggested producers make sure they start the season with clean fields and minimize the overuse of these chemicals do not over rely on a single mode of action in their weed management program.

“We always recommend producers rotate chemicals by the mode of action and do a good job before planting using yellow-herbicides and good in-season weed management,” Kimura said.

“These new technologies are not a perfect solution to weed control. If you don’t apply the chemicals when the weed is small enough, you won’t get good control. And, if you apply when the weeds are larger and do not get good kill, it can encourage the development of herbicide resistance.”

There are no new herbicide modes of action in the pipeline at this time, she said, so it is important not to overuse these new technologies in order to maintain their effectiveness for as long as possible.

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