

Rotate Weed Control Chemistry, Not Just Crops

HAZEN, ARK.

Farmers have known the benefits of crop rotation for centuries, but weed control chemistries should also be rotated to forestall herbicide resistance, according to Bob Scott, weed scientist for the University of Arkansas System Division of Agriculture.

Scott gave an overview of the problem of herbicide resistant weeds, not just in Arkansas, but also in other states, as he addressed a group of more than 90 crop producers at the Prairie County Fairgrounds on Tuesday.

“Fifty-two percent of cotton acres in Georgia are hand-weeded and some is hand-weeded twice due to glyphosate resistant palmer pigweed,” Scott said.

HOW DID THIS HAPPEN?

In his overview, Scott showed a slide with the statement across the top saying: “I think I can get one more year out of Roundup,” reflecting what some growers were thinking – either in hope or in denial – as the problem of herbicide resistance came out of the shadows.

He also described an experiment by Jason Norsworthy, a fellow weed scientist with the U of A System Division of Agriculture. Norsworthy sowed 20,000 pigweed seeds in a Roundup Ready crop.

“In three years, the field became totally infested,” Scott said. “A picker and combine are excellent seeders.

“In three years, the field went from almost no problem to having a total, grown-up mess,” he said. “That’s what got us in this situation.”

About 80 percent of Arkansas’ cotton acreage is infested with resistant pigweed and 61 per-

cent of soybean acres, Scott said.

Herbicide resistant pigweed is a costly pest. Scott said estimating a 5 percent yield loss in Arkansas’ 3.2 million acres of soybeans would translate into a \$105 million loss to the state’s economy – and that figure doesn’t include the cost of extra control applications and hiring crews to control the weeds. That figure is conservative, he said.

“The numbers add up real fast,” Scott said.

FIGHTING THE GOOD FIGHT

There are a few tactics growers should deploy to beat resistant weeds.

- First, be a moving target. “Use a different program next year,” Scott said. “Rotate your chemistry. Don’t just rotate the crops.”

- “Start clean and stay clean,” he said. “We want no weeds at planting.”

- Use residuals. “It’s the first line of defense.”

- Early post-emergence timing.

“If you’re scouting and the pigweeds are 1 inch tall, call it in” for treatment, Scott said. “Don’t wait until 3-4 inches tall, because it’ll be two or three days before they can get in the field or when your crew can move from across the county or across the road from one field to another.

“Once a pigweed gets over 4 inches tall in Roundup Ready beans, we do not have options,” he said, adding growers need to get out of the Roundup Ready mentality where big weeds can be killed.

- Step away from using Liberty programs only. Scott said there is evidence that pigweed is developing resistance to the Liberty chemistry. Δ