Optimizing Rotation To Limit Red Rice Resistance

STUTTGART, ARK.

otating Clearfield rice with Roundup Ready or Liberty Link soybeans can make a significant dent in red rice populations, according to research by the University of Arkansas Division of Agriculture.

Bob Scott, extension weed scientist with the Division of Agriculture, discussed the research during the Aug. 4 Arkansas Rice Expo at the Rice Research and Extension Center in Stuttgart. The plot toured by Rice Expo visitors represented the Year 2 of a three-year study.

Clearfield rice is used in about 60-70 percent of Arkansas' rice acres.

"We have a concern that the overuse or continued use of this technology since its introduction in 2002 may be leading to the development of herbicide resistance in red rice," Scott said. "The objective of this study is to evaluate a number of rotational strategies, everything from continuous clear field rice to leaving fields fallow following a full infestation of red rice."

Scott says researchers have found that continued use of the Clearfield technology has led to a buildup of red rice. However, "by simply de-

laying the planting date in continuous red rice system, we have reduced red rice populations by as much as 60-70 percent," he said.

"We have also shown in this study that by rotating to Roundup Ready or Liberty Link soybeans or by leaving one year fallow, and preventing any red rice from germinating, that we have effectively reduced red rice population by up to 80-90 percent," Scott said.

Researchers intend to plant the plot back to Clearfield rice for the 2012 growing season "so we can determine after three years of various rotation strategies which ones are the most effective at reducing red rice populations, compared to continuous clear field production."

Scott said to initiate the study, the research plot was allowed to go to seed and grow up in red rice. Ironically, "it also had some volunteer Clearfield rice in it."

For more information about the research plots, view Scott's tour video at www.youtube.com/arextension#p/u/5/DJG4-DUmKJY. More videos are available at www.youtube.com/arextension. Δ



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