



LSU AgCenter scientist Dr. Bill Williams talks about his weed control research during a field day last summer at the AgCenter's Northeast Research Station. Williams' work in 2007 is focused on emerging weed problems and whether those are resulting from species shifts or herbicide resistance.

Keeping Weeds Under Control in Feed Grains, Wheat

Louisiana feed grain and wheat producers have to deal with continually shifting weed populations and post-harvest weed control.

Emerging weed problems, whether because of herbicide resistance or a species shift, is a major thrust of research in 2007, according to LSU AgCenter experts.

Feed grain and wheat weed control research conducted at the AgCenter's Northeast Research Station during 2006 focused on evaluation of burndown programs for corn and grain sorghum; evaluation of weed control programs for corn, grain sorghum and wheat; and evaluation of new herbicides for weed control in corn and wheat.

Despite excellent weed control from the herbicide glyphosate, several producers are reporting increased problems with annual grasses and teaweed, said LSU AgCenter weed scientist Dr. Bill Williams.

"The cause of these problems has not been documented but may be due to the increased use of glyphosate and decreased use of residual herbicides," Williams said. "Or the problem may be associated with the increased use of shorter-season varieties that allow more time for weeds to mature and set seed following harvest."

Research for controlling teaweed after corn harvest will continue through 2007, Williams said.

In studies so far, the herbicides Permit and Yukon applied alone prevented new teaweed emergence but resulted in less than 50 percent control of existing teaweed, Williams said. Atrazine herbicide also prevented new teaweed emergence but was ineffective at controlling existing teaweed populations, he said, adding, however, that herbicide combinations of Yukon plus Unison resulted in best teaweed control.

The LSU AgCenter weed scientist said other research in 2006 confirmed the 2005 results that effective weed control before planting is required to maximize corn yields.

Additional research projects being planned or under way will evaluate experimental and/or new herbicides for ryegrass control in wheat, perennial weed management, morningglory control and johnsongrass management. Wheat response to herbicides also will be evaluated, and efforts to determine wheat varietal tolerance to the herbicide Sencor will be expanded, Williams said.

The LSU AgCenter researcher also said possible weed resistance to glyphosate will be carefully scrutinized.

"We collected samples of ryegrass from a producer's field that were suspected of glyphosate resistance," Williams said. "In the initial screening, the suspect ryegrass tolerated a four-times rate of glyphosate."

Williams said, however, that the ryegrass in question was very large, so scientists cannot be certain if resistance to glyphosate was the issue or whether the results were due to size or other factors.

"This is an area we will spend quite a bit of time with," he said.

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