

**Wheat Promotion Board  
2005 Preliminary Report**

**TITLE:** Weed Management in Wheat  
**PRIORITY AREA:** Agronomic Research: Weed Control  
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Due to unusually wet conditions in the fall of 2004, only 2 studies were established in the delta evaluating wheat herbicides. These two studies are non-crop mayweed and broadleaf weed control studies located at two on-farm locations in Lonoke and Pulaski counties. Mayweed, garlic, and other winter annual broadleaf weed control with Osprey and Osprey combinations with older broadleaf herbicides is the focus of these trials. Efforts were made to establish 12 other studies at the site in Pulaski County, however these tests were all lost due to flooding and excessive moisture. The Hoelon-resistant site near Willow Beach, Arkansas was never dry enough to plant.

In addition to the broadleaf studies, one study evaluating Hoelon-resistant ryegrass control was established at the research farm in Fayetteville. Recent ratings indicate that Osprey, Axiom, Sencor, and Everest treatments are controlling ryegrass 80-85%. Various sequential treatments of these herbicides are also providing good control.

A total of four ryegrass samples were submitted this year to the herbicide resistant screening program. These four samples were all resistant to Hoelon herbicide. Currently, of the 116 samples that have been submitted to this program, 73% are ACCase-resistant at some level. Studies are underway to screen the ryegrass samples collected thus far for resistance to other herbicide families, including Osprey.

In addition to planned work protocols, a study will be initiated at either Willow Beach or in Pulaski County to evaluate Osprey applications to large tillering ryegrass. This study is being initiated to answer questions currently coming in from around the state regarding late or salvage Osprey applications. These applications are permitted on the current Osprey label up through wheat jointing.

Plans are underway with Syngenta Corporation to test a new wheat herbicide in the fall of 2005 with activity on both ryegrass and ACCase-resistant ryegrass. This new herbicide is called pinoxaden and is a new class of ACCase herbicides.