

ITALIAN RYEGRASS CONTROL IN WINTER WHEAT. Dallas E. Peterson, Scott Gordon, Gary L. Kilgore, and Kenneth W. Kelley, Professor, Montgomery County Extension Agent, Professor, and Associate Professor, Kansas State University, Manhattan, KS 66506.

A field experiment was conducted in southeast Kansas to evaluate fall and spring postemergence herbicide treatments for Italian ryegrass control in '2174' hard red winter wheat seeded on October 27, 2003. Fall postemergence treatments were applied to 2-leaf wheat and 1- to 2-leaf Italian ryegrass on November 21. Spring postemergence treatments were applied to tillered wheat and Italian ryegrass on March 19, 2004. The experiment was a randomized complete block design with three replications. Wheat injury and ryegrass control were evaluated through the season and wheat was harvested for grain yield. Fall and spring treatments with mesosulfuron or mesosulfuron plus propoxycarbazone, and fall applications of chlorsulfuron plus metsulfuron or diclofop gave near complete control of Italian ryegrass. Italian ryegrass control was better with fall than spring treatments of chlorsulfuron plus metsulfuron, diclofop, tralkoxydim, sulfosulfuron, and propoxycarbazone. Several treatments caused minor wheat stunting, which diminished over time. Wheat yields and foreign matter content generally corresponded to Italian ryegrass control. Wheat yield was increased by as much as 40% by controlling Italian ryegrass in the fall.