

# **A SURVEY FOR HERBICIDE RESISTANT ITALIAN RYEGRASS**

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## RESEARCH OBJECTIVES:

The objective was to determine if herbicide-resistant Italian ryegrass biotypes were present in Kentucky and develop a distribution map to document their location. Herbicides evaluated were Hoelon, Osprey, and Roundup WeatherMax.

## METHODS:

Activities to publicize this project included the following:

### Newsletters:

- Wheat Science Newsletter Vol. 8, Feb. 8, 2004
- Sent info. to Todd Barlow for Small Grain Growers Assn. Newsletter. March 31, 2004
- UK Corn and Soybean group Newsletter. Vol. 4, Issue 2. May 2004.

### News Releases:

- UK News Release. April 4, 2004

### Emails:

- Agricultural Extension Agents. April 8, 2004 and June 16, 2004.

### Radio Tape:

- Jack Crowner. March 9, 2004

### Meetings:

- Agribusiness Assn. Of Kentucky (ABAK) Board of Directors - February 19, 2004
- Warren County Extension Meeting -  
January 15, 2004
- Trigg County Extension Meeting –  
January 23, 2004
- Hopkins County Extension Meeting –  
February 9, 2004
- UK Wheat Field Day, Princeton –  
May 18, 2004

## RESULTS:

Growers and other participants collected Italian ryegrass seeds from mature plants and sent them to University of Kentucky. Seeds of ryegrass were from 10 different fields in the following counties: Todd, Logan, Warren, Muhlenberg, Wayne, Christian. Samples were

received in late June, July, and August. Seeds from these accessions were planted and grown in the greenhouse. Ryegrass plants from 2-4 inches in height were treated with Hoelon at 2.66 pt/A or Roundup WeatherMax at 32 oz/A. Each treatment was replicated 4 times and the experiment was repeated. Ryegrass plants from each field were tolerant of Hoelon at 2.66 pt/A while the plants from each field were killed by Roundup WeatherMax at 32 oz/A. Further laboratory experiments are being conducted to confirm ryegrass resistance to Hoelon.

