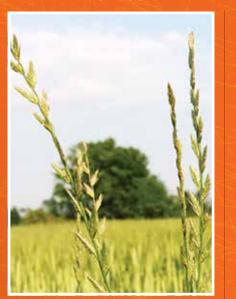
## SCOUT MY FIELDS. I will walk my rows, and I will stand my ground. I will take action against herbicide-resistant weeds. I will scout my fields and field borders, ditches and waterways. I will scout them early and often. I'll be here when weeds emerge. And I'll be back after I spray. I will track down escapees and late emergers. I will take action before weeds take over. Take Now is the time to take action against herbicide-resistant weeds. Visit www.TakeActionOnWeeds.com to learn how you can prevent herbicide-resistant weeds from spreading

# The Big Three Oklahoma's Major Threats



## ITALIAN RYEGRASS



### KOCHIA



## HORSEWEED



Name: Lolium multiflorum Growth: Winter annual

## THREATS:

- Resistance has developed to many of the commonly used herbicides
- Can move via contaminated wheat and cover crop seed

#### **WEAKNESSES:**

Poor winter hardiness

Seed normally persist on the plant without falling to the ground

Name: Kochia scoparia
Growth: Shallow germination;
early-season and extended
germination

#### THREATS:

- High seed producer; tumbleweed seed dispersal
- Drought tolerant; salt tolerant

Name: Conyza canadensis

AKA: Marestail, Canada Fleabane

**Growth:** Emerges from late March through June and from late summer through late fall

THREATS:

- Up to 200,000 seeds per weed
- Approximately 80 percent of seeds will germinate right off the plant
- Windblown seeds disperse easily across great distances

#### **WEAKNESSES:**

- Poor competitor in wet, humid environments
- Short seed life

#### **WEAKNESSES:**

- Doesn't tolerate soil disturbance, such as deep tillage
- Doesn't tolerate shading from crop canopy

## The Big Three: Oklahoma's Major Threats

#### 1. What should Oklahoma farmers be doing to manage herbicide-resistant weeds?

Farmers should diversify their farm. Some examples include alternating crops and the types of weed-control practices they use. Using both chemical and nonchemical weed controls, such as timely tillage, starting clean, maintaining appropriate pH and fertilizer, can give crops the competitive edge against those weeds.



Angela Post, Ph.D. | extension weed specialist, Oklahoma State University

#### 2. When should farmers scout fields?

The early part of the season is most important for weed control. Farmers need to be out scouting fields between burndown and planting. Also, after herbicide applications, farmers should be scouting at a time when that herbicide should have been effective. This will allow farmers to determine if any weeds survived the application, which will give them a good indicator on if they missed something because the equipment wasn't set up properly or the herbicide was not effective.



Pictured is a soybean field heavily infested with glyphosate-resistant marestail.

### 3. Is it too late for farmers to get started on a prevention plan?

It's never too late to start implementing. If farmers don't have a plan, it's important for them to talk with their state specialist and county extension educators, who have access to additional information that can help farmers implement their plans.

#### What will herbicide-resistant weeds cost farmers?

Herbicide-resistant weeds will cost farmers their yields, and eventually, some pieces of property won't be farmable.

#### For more information and links to additional resources, visit www.TakeActionOnWeeds.com.

Technical editing for this insert was led by Angela Post, Ph. D., Oklahoma State University, in partnership with other universities in the soybean-growing regions of the United States.

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**OKLAHOMA SOYBEAN** 



