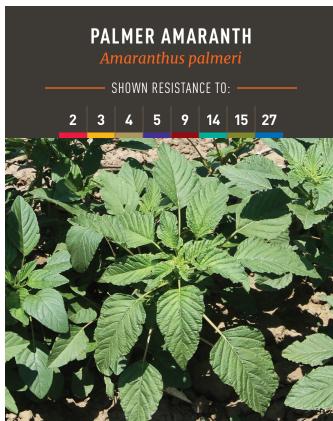
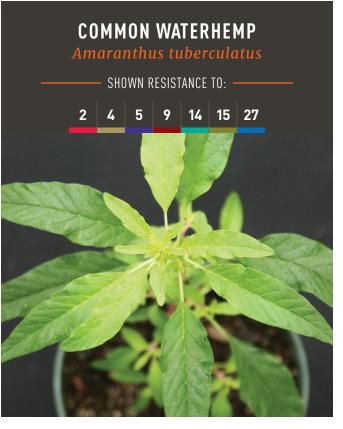
## WEED OUT RESISTANCE

## **KNOW YOUR WEEDS**

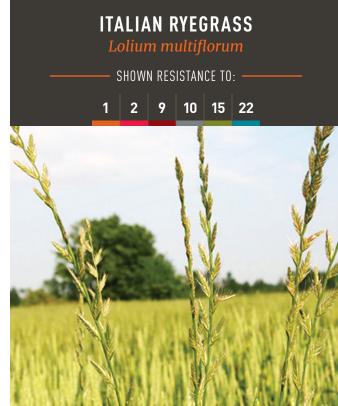
The 11 Biggest Resistance Threats

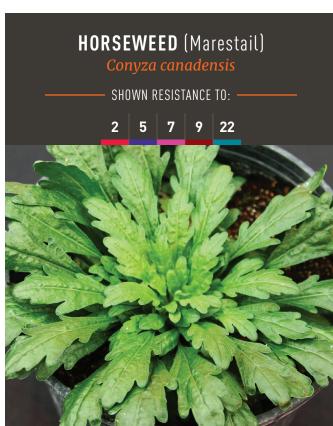




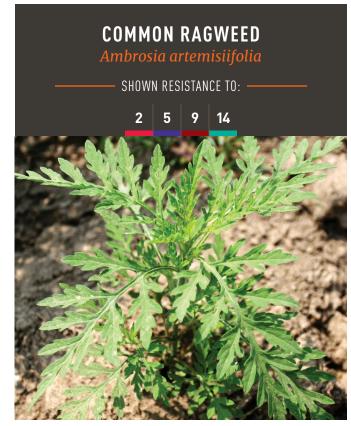


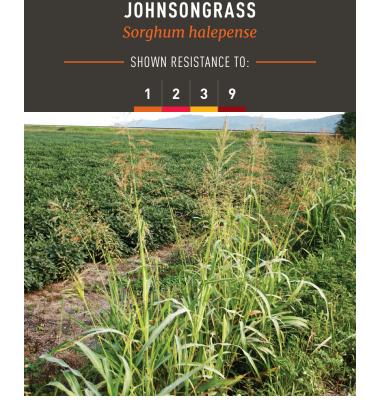


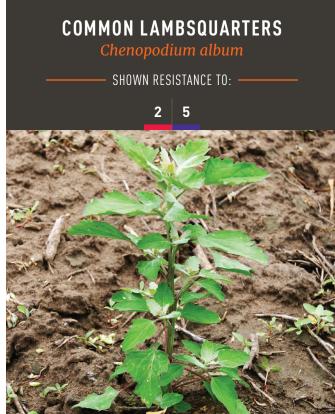


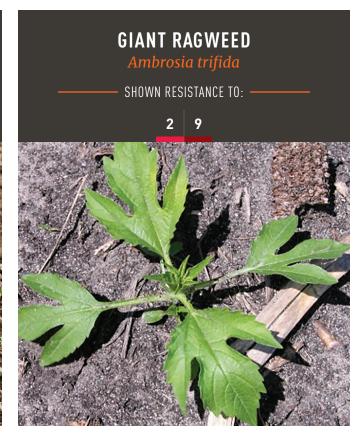












## HERBICIDE GROUPS and Sites of Action

Herbicide Groups provide a simple way of determining a herbicide's site of action. The site of action is the specific protein a herbicide binds to, resulting in disruption of a physiological process (mode of action) and plant death. Weed-management programs that include multiple Herbicide Groups effective against problem weeds are the first step in managing herbicide resistance. Herbicide Group numbers are displayed on most herbicide labels. This poster provides information on the Herbicide Groups most commonly used in soybean production. Also, the most problematic herbicideresistant weeds and the Herbicide Groups they have evolved resistance to are displayed.

| SITE OF ACTION GROUP           | 1                          | 2                     | 3                                    | 4                              | 5                            | 6                        | 7 | 8  | 9                          | 10                                   | 13   | 14                   | 15                                  | 22                                 | 27                    |
|--------------------------------|----------------------------|-----------------------|--------------------------------------|--------------------------------|------------------------------|--------------------------|---|--|----------------------------|--------------------------------------|--|----------------------|-------------------------------------|------------------------------------|-----------------------|
| SITE OF ACTION                 | ACCASE<br>Inhibitors       | ALS<br>Inhibitors     | MICROTUBULE<br>INHIBITORS            | SYNTHETIC<br>AUXINS            | PHOTOSYSTEM II<br>Inhibitors |                          |   | LIPID SYNTHESIS<br>INHIBITOR<br>(not ACCase) | EPSP SYNTHASE<br>INHIBITOR | GLUTAMINE<br>SYNTHETASE<br>INHIBITOR | DITERPENE<br>BIOSYNTHESIS<br>INHIBITOR         | PPO<br>Inhibitors    | LONG-CHAIN FATTY<br>ACID INHIBITORS | PHOTOSYSTEM I<br>Electron diverter | HPPD<br>Inhibitors    |
| PRODUCT EXAMPLES (Trade Name®) | Assure® II,<br>Select Max® | Classic®,<br>Pursuit® | Prowl® H <sub>2</sub> O,<br>Treflan® | 2,4-D, Clarity®,<br>quinclorac |                              | ne, metril<br>gran®, Lil |   | Far-Go®                                      | Roundup®<br>(glyphosate)   | Liberty®                             | Command® 3ME<br>microencapsulated<br>herbicide | Flexstar®,<br>Cobra® | Dual®, Harness®                     | Gramoxone®<br>(paraquat)           | Callisto®,<br>Laudis® |

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

Technical editing for this publication was led by Bob Hartzler, Iowa State University, in partnership with other universities in the soybean-growing areas of the United States. For more information and links to additional resources, visit www.IWillTakeAction.com. Take Action is supported by BASF, Bayer, Corteva, FMC, Syngenta and Valent and corn, cotton, sorghum, soy and wheat organizations. The United Soybean Board and all Take Action partners, including the companies mentioned, neither recommend nor discourage the implementation of any advice contained herein, and are not liable for the use or misuse of the information provided. ©2020 United Soybean Board [59783-1 9/20]

