

# WEED OUT RESISTANCE



## KNOW YOUR WEEDS

THE 11 BIGGEST RESISTANCE THREATS

COMMON WATERHEMP  
*Amaranthus rudis*  
SHOWN RESISTANCE TO:

2

4

5

9

14

27

PALMER AMARANTH  
*Amaranthus palmeri*  
SHOWN RESISTANCE TO:

2

3

5

9

27

HORSEWEED (Marestail)  
*Conyza canadensis*  
SHOWN RESISTANCE TO:

2

5

7

9

22

GIANT RAGWEED  
*Ambrosia trifida*  
SHOWN RESISTANCE TO:

2

9

COMMON RAGWEED  
*Ambrosia artemisiifolia*  
SHOWN RESISTANCE TO:

2

5

9

14

COMMON LAMBSQUARTERS  
*Chenopodium album*  
SHOWN RESISTANCE TO:

2

5

KOCHIA  
*Kochia scoparia*  
SHOWN RESISTANCE TO:

2

4

5

9

ITALIAN RYEGRASS  
*Lolium multiflorum*  
SHOWN RESISTANCE TO:

1

2

9

10

15

BARNYARD GRASS  
*Echinochloa crus-galli*  
SHOWN RESISTANCE TO:

1

2

3

4

5

7

8

13

15

JOHNSONGRASS  
*Sorghum halepense*  
SHOWN RESISTANCE TO:

1

2

3

9

GIANT FOXTAIL  
*Setaria faberi*  
SHOWN RESISTANCE TO:

1

2

5

FOR MORE INFORMATION  
TAKEACTIONONWEEDS.COM

### 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 herbicide-resistant weeds and the Herbicide Groups they have evolved resistance to are displayed.

SITE OF ACTION GROUP	SITE OF ACTION														
	1 ACCASE INHIBITORS	2 ALS INHIBITORS	3 MICROTUBULE INHIBITORS	4 TIR1 AUXIN RECEPTORS	5 PHOTOSYSTEM II INHIBITORS	6 PHOTOSYSTEM II INHIBITORS	7 PHOTOSYSTEM II INHIBITORS	8 LIPID SYNTHESIS INHIBITOR (not ACCase)	9 EPSP SYNTHASE INHIBITOR	10 GLUTAMINE SYNTHETASE INHIBITOR	13 DITERPENE BIOSYNTHESIS INHIBITOR	14 PPO INHIBITORS	15 LONG-CHAIN FATTY ACID INHIBITORS	22 PHOTOSYSTEM I ELECTRON DIVERTER	27 HPPD INHIBITORS
PRODUCT EXAMPLES (TRADE NAME®)	Assure II, Select Max	Classic, Pursuit	Prowl H <sub>2</sub> O, Treflan	2,4-D, Clarity, quinclorac	atrazine, metribuzin, Basagran, Linex			Far-Go	Roundup, (glyphosate)	Liberty	Command	Flexstar, Cobra	Dual, Harness	Gramoxone, (paraquat)	Callisto, Laudis