

## Relative Response of Cover Crops and Weeds to Burndown Herbicides

HERBICIDE	COVER CROPS									WEEDS																
	Alfalfa	Clover, Red	Clover, White	Fescue, Tall	Orchardgrass	Rye	Ryegrass, Annual	Vetch, Hairy	Wheat	Brome spp.	Corn, Volunteer	Chickweed, Common	Dandelion	Dock, Curly	Fleabane, Annual	Foxtails	Henbit/Deadnettle	Johnsongrass (seedling)	Johnsongrass (rhizome)	Lettuce, Prickly	Marestail (Horseweed)#	Mustard spp.	Pokeweed	Ragweed, Giant	Thistle, Musk	Wild Garlic
Atrazine + Oil	3	5	4	6	3	6	5	6	6	7	0	9	4	4	-	6	8	0	0	8	7	8	2	8	4	-
Dicamba <sup>1</sup> (Clarity, DiFlexx, etc)	8	9	8	0	0	0	0	8	0	0	0	7	8	7	8	0	6	0	0	9	8	7	6	9	7	6
2,4-D Ester	6	8	5	0	0	0	0	8	0	0	0	5	8	4	6	0	4	0	0	8	8	8	5	8	7	6
Expert / Sequence	4	4	3	5	3	6	6	4	7	9	9*	9	5	2	6	9	8	9	7	7	8*	7	5	9	5	-
Express	-	-	-	-	-	0	0	7	0	0	0	9	-	8	-	-	8	0	0	-	-	7	-	-	-	8
Harmony Extra	-	-	-	-	-	0	0	7	0	0	0	9	-	8	-	-	8	0	0	-	5	8	-	-	-	9
Harmony SG	-	-	-	-	-	0	0	7	0	0	0	6	-	8	-	-	6	0	0	-	-	8	-	-	-	8
Glyphosate <sup>2</sup>	6	6	5	7	5	8	7	6	9	9	9*	9	6	4	8	9	8	9	8	8	8*	8	6	9	6	-
Leadoff / Crusher	-	-	-	-	-	0	0	7	0	0	0	9	8	8	-	0	8	0	0	6	7	8	-	-	-	-
Liberty <sup>3</sup>	-	-	-	-	-	-	3	8	5	-	7*	9	6	7	-	8	7	8	3	8	8	8	-	8	-	-
Paraquat (Gramoxone)	3	7	5	5	3	7	6	7	7	7	6	9	4	2	6	9	8	7	3	5	4	6	4	7	3	8
Paraquat (Gramoxone) + Atrazine	4	7	5	8	6	8	7	8	9	8	7	9	7	5	6	9	9	7	3	9	8	9	4	9	5	8
Sharpen	4	6	5	0	0	2	-	6	2	2	0	7	5	5	7	2	6	0	0	8	8	8	-	8	5	-
Verdict	4	6	5	0	0	2	-	6	2	2	0	7	5	5	7	2	6	0	0	8	8	8	-	8	5	-

**GOOD= 8-9      FAIR = 6-7      POOR = 5 or less      - Insufficient Data**

***This table should be used only as a guide.*** Information presented in this table is the relative burndown response of emerged plants to herbicides applied at normal rates for no-till corn. This information generally does not reflect soil residual effects of the herbicides. The relative response values are based on a numerical scale from 0 to 9 and compare effectiveness of herbicides to control a particular cover crop or weed species. A herbicide may perform better or worse than indicated in the table due to weed size, environmental conditions or when tank mixed with other herbicides. If a farmer is achieving satisfactory results under their conditions, they should not necessarily change products as a result of information in this table.

<sup>1</sup> Examples of DICAMBA products labeled for use as a burndown treatment in corn include Clarity, Banvel, Sterling Blue, and Vision.

<sup>2</sup> Examples of GLYPHOSATE products labeled for use as a burndown treatment in corn include: **Abundit Extra, Buccaneer, Credit, Duramax, DurangoDMA, GlyStar Plus, Honcho, Roundup Original, Roundup PowerMAX, Roundup WeatherMAX.** Consult the label for specific use directions including use of additives, if needed. [See page 22 for list of other GLYPHOSATE products]

<sup>3</sup> Environmental stress conditions such as cool temperatures and cloudy weather may limit burndown activity for weed control with LIBERTY

# Glyphosate will not effectively control biotypes of horseweed (marestail) that are tolerant to this herbicide.

\* Volunteer corn plants containing genetic traits with herbicide tolerance (eg. RR-corn hybrids or LL-corn hybrids) will not be effectively controlled.

## Guide to Weed and Crop Response to Soil Applied Herbicides<sup>1</sup>

	Barnyardgrass	Broadleaf Signalgrass	Crabgrass	Fall Panicum	Foxtail	Johnsongrass (seedling)	Johnsongrass (rhizome)	Shattercane (Wild Cane)	Yellow Nutsedge	Black Nightshade	Burcucumber	Cocklebur	Lambsquarters	Marestail (Horseweed)	Morningglory	Palmer Amaranth	Pigweed, Smooth	Prickly Sida (Teaweed)	Ragweed, Common	Ragweed, Giant (Horseweed)	Sicklepod	Smartweed	Velvetleaf	Waterhemp	Crop Response <sup>2</sup>
Acetochlor <sup>3</sup>	8	7	8	8	9	5	0	5	7	8	0	0	7	0	0	8	8	0	6	0	4	5	0	8	1
Acuron (PRE only)	8	7	8	7	9	5	0	5	7	9	6	7	9	8	7	9	9	7	8	7	-	9	9	9	2
Acuron Flexi (PRE only)	8	7	8	7	9	5	0	5	7	9	5	7	9	8	6	9	9	7	8	7	-	9	9	9	2
Anthem ATZ	8	7	8	8	8	5	0	4	-	9	6	7	9	6	7	9	9	9	8	7	7	9	7	9	1
Atrazine	6	4	5	3	6	0	0	0	5	9	7	8	9	7	8	9	9	9	9	8	7	9	8	9	0
Balance Flexx	7	7	6	8	8	6	0	6	2	9	7	3	9	8	4	7	9	7	8	6	4	8	9	8	2
Bicep II Magnum / Cinch ATZ	8	7	8	8	9	5	0	5	7	9	6	8	9	7	7	9	9	9	9	7	6	9	7	9	1
Corvus	8	7	8	8	8	6	0	6	4	9	7	6	9	8	6	7	9	-	8	6	-	8	9	8	2
Degree Xtra/HarnessXtra/FulTime/ Breakfree ATZ / Keystone	8	7	8	8	9	5	0	5	7	9	5	8	9	7	7	9	9	9	9	7	6	9	7	9	1
Dual II Magnum / Cinch	8	7	8	8	9	5	0	5	7	8	0	0	5	0	0	7	7	0	5	0	4	5	0	8	1
Expert	8	7	8	8	9	5	0	5	7	9	6	8	9	8 <sup>#</sup>	7	-	9	9	9	7	6	9	7	9	1
Fierce <sup>4</sup> (PRE only)	8	7	8	8	8	7	2	-	-	8	-	6	8	7	7	8	9	8	8	6	-	7	7	9	2
Guardzman MAX	8	7	8	8	9	5	0	5	7	9	6	8	9	7	7	9	9	9	9	7	6	9	7	9	1
Instigate	8	6	6	7	9	7	0	-	4	8	6	7	8	-	6	8	9	-	8	6	-	7	7	6	2
LeadOff <sup>4</sup> / Crusher <sup>4</sup>	8	-	6	6	8	-	-	2	-	-	-	6	7	-	6	-	8	-	7	3	-	6	6	-	2
Lexar EZ or Lumax EZ (PRE only)	8	7	8	8	9	5	0	5	7	9	6	7	9	8	7	9	9	7	8	7	5	9	9	9	2
Outlook	8	7	8	8	9	5	0	5	7	8	0	0	6	0	0	8	8	0	5	0	4	5	0	8	1
Princep	8	5	7	6	8	2	0	3	2	9	6	7	9	-	7	9	9	9	9	7	7	9	8	9	0
Prowl (PRE only)	8	7	8	8	9	6	2	6	0	0	0	0	8	0	2	7	8	2	0	0	0	6	6	7	2
Resicore	8	7	8	8	9	5	0	5	6	8	-	7	9	-	7	7	9	6	8	7	7	8	7	7	2
Sharpen	2	2	2	2	2	0	0	2	-	8	-	7	8	8	8	8	8	7	8	8	5	8	8	8	1
SureStart <sup>4</sup>	8	7	8	7	9	5	0	5	6	8	3	8	9	-	7	8	9	8	8	6	6	8	7	8	1
Verdict <sup>4</sup>	8	7	8	8	9	5	0	5	7	8	-	7	8	8	8	9	9	7	9	8	5	9	8	9	1
Zemax (PRE only)	8	7	8	8	9	5	0	5	7	9	6	7	9	7	6	9	9	6	7	6	5	9	9	9	2
Zidua	8	7	8	8	9	5	0	6	5	8	-	5	6	5	0	8	8	6	7	3	-	6	7	8	1

GOOD = 8-9      FAIR = 6-7      POOR = 5 or less      - Insufficient Data

<sup>1</sup>This table should be used only as a guide. The relative response value is based on a numerical scale from 0 to 9 comparing the effectiveness of herbicides to a particular weed. Under certain weather or environmental conditions, a herbicide may perform better or worse than indicated in the table. Response may be less in no-tillage than in conventional tillage. If a farmer is getting satisfactory results under their conditions, they should not necessarily change products as a result of the information in the table.

<sup>2</sup>A rating of 3 or less will not result in a crop yield loss under normal conditions. Certain corn hybrids vary in their injury response to a herbicide treatment.

<sup>3</sup>Acetochlor containing products include Breakfree NXT, Confidence, Degree, Harness, Surpass NXT, and Volley.

<sup>4</sup>Crusher, Fierce, Instigate, LeadOff, SureStart, and Verdict are intended for use in a planned preemergence followed by a postemergence program. Ratings indicate early-season effectiveness.

<sup>#</sup> Glyphosate will not effectively control biotypes of horseweed (marestail) that are tolerant to this herbicide.