

Table 2.4-7. Characteristics of “burndown” herbicides for no-till soybean (continued).

Sharpen 2.85SC (saflufenacil)	1 fl oz	0.022	Sharpen may be applied as a preplant/burndown treatment 14 days early preplant through preemergence timings. Apply 1 oz/A Sharpen in a typical glyphosate or Ignite burndown herbicide program to enhance the speed of burndown and increase weed spectrum including glyphosate-resistant horseweed. Include necessary additives, MSO, or COC plus nitrogen solution or AMS to the spray mixture. Sharpen has limited residual control on broadleaves, so subsequent weed control will likely be necessary. Do not apply during the cracking stage or after emergence as severe crop injury will result. Depending on soil texture and OM, an interval between Sharpen application and soybean planting may be required, especially on course-textured, low-OM soils. Do not apply Sharpen with other group 14 herbicides such as Authority, Valor, Envide products as a tank-mix or sequential application within 30 days or crop injury may result. Do not apply Sharpen with herbicides that contain clomazone (Command). Sharpen can be used in a fall burndown program. Verdict is a premix of Sharpen and Outlook. Verdict can be used in a fall or spring burndown/preherbicide program in no-till soybeans. The use rate of Verdict is 5 to 10 fl oz/A. This is a foundation herbicide, so other herbicides will need to be included in the system.
Valor SX 51WDG (flumioxazin)	1.0–2.5 oz	0.51–1.28 oz	Valor may be included in a typical burndown herbicide program to enhance the speed of burndown and increase weed spectrum. Valor XLT can also be used as a pre/burndown treatment.

1. Lower rates are reduced rates that may require additional postemergence control.
2. Refer to current product label for active ingredient concentration and application rate; various formulations of this herbicide are available (e.g., 1 qt/A glyphosate = 22 fl oz/A WeatherMax).

Table 2.4-8. Relative effectiveness of herbicides on individual weeds.¹

Ratings are based on labeled application rates and weed size or growth stage. Results may differ with variations in weed size, temperature, rainfall, soil moisture, soil type, and soil pH. For ratings on herbicide combinations not listed, see the component parts. Crop injury rating of 1 or less is rarely significant.

Grasses	Barnyard-grass	Crabgrass	Fall Panicum	Foxtails	John-songrass (Seedling)	John-songrass (Rhizome)	Quackgrass	Shattercane	Volunteer Corn	Wirestem Muhly	Yellow Nutsedge	Weed control ratings		Crop tolerance		
												10 = 95–100%	7 = 65–75%	0 = Excellent	1 = Good	
													9 = 85–95%	6 = 55–65%	2 = Fair	3 = Poor
													8 = 75–85%	N = less than 55% or no control		
Soil-Applied ²																
Command ³	8+	8+	9	9	8+	N	7	9	7	N	N					
Dual products/Cinch/Prefix	9	9	8+	9	6	N	N	6	N	N	8					
Lorox	6	6	N	N	6	N	N	6	N	6	6					
Micro-Tech	9	9	8	9	6	N	N	6	N	N	7+					
Outlook	9	9	8+	9	6	N	N	6	N	N	7+					
Prowl	8+	9	9	8+	7	N	N	7	N	N	6					
Pursuit	8	7	7	8	8	6	N	8	6	N	7					
Scepter	6	6	N	6	7+	N	N	7+	7+	N	7					
Sencor	6	6	N	N	6	N	N	6	N	N	6					
Treflan ³	9	9	9	9	8	7	7	8	6	N	N					
Mixtures																
Axiom	9	9	8+	9	6	N	N	6	N	N	6					
Boundary	8+	8+	8	8+	N	N	N	N	N	N	7+					
Canopy	6	6	N	N	8	N	N	8	7	N	8					
Domain	8+	8+	8	8+	N	N	N	N	N	N	6					
Optill	8	7	7	8	8	6	N	8	6	N	7					
Pursuit Plus	8+	9	9	9	8	6	6	8	6	N	7					
Postemergence																
Assure II	9	8	9	9 ⁷	9	9	9	9+	9+	6	N					
Basagran	N	N	N	N	N	N	N	N	N	N	8					
Classic	N	N	N	N	N	N	N	6	6	N	8					
Fusilade DX	9	8	8+	8+	9	9	9	9+	9+	8+	N					
Glyphosate ⁴	9+	9+	9+	9+	9+	9	9	9	9+	9	7					
Ignite ⁵	8	9	7+	9 ⁷	8	6	6	8	9	7	6					
Poast Plus	9+	9	9	9+	8+	8	8	8+	8	7	N					
Pursuit	8	7	8	8 ⁷	9	7	6	9	6	N	7					
Raptor	8	7	8+	8+	8+	7	N	8+	8	N	6					
Select	9	9	9	9+	9	9	8+	9	9	8+	N					
Warrant (+glyphosate) ⁸	9	9	8+	9	7	N	N	6	N	N	7+					
Mixtures																
Extreme	9+	9+	9+	9+	9	9	8+	9	9	9	6					
Flexstar GT	9+	9+	9+	9+	9+	9	9	9	9+	9	7					

(continued)

Table 2.4-8. Relative effectiveness of herbicides on individual weeds (continued).

Grasses	Barnyard-grass	Crabgrass	Fall Panicum	Foxtails	John-songrass (Seedling)	John-songrass (Rhizome)	Quackgrass	Shattercane	Volunteer Corn	Wirestem Muhly	Yellow Nutsedge
	Fusion	9	8+	9	9 ⁷	8	8	8	8	8	6
Synchrony ⁵	N	N	N	N	6	N	N	6	6	N	8

Broadleaves	Eastern Annual Black														
	Burcu-cumber	Cockle-bur	Jimson-weed	Lamb-quarters	TR Lamb-squarters	Morning-glory	Night-shade	Pigweed	TR Pig-weed	Common Ragweed	Giant Ragweed	Prickly Sida	Smart-weed	Soybean Velvetleaf Injury	
Soil-Applied²															
Authority/Spartan	N	6	8+	9	9	8	9	9	9	6	6	7	8	7	1+
Command ³	N	7+	9	9+	9+	N	6	7	7	8	N	8+	8+	10	1
Dual products/Cinch	N	N	N	6	6	N	7+	8	8	6	N	N	N	N	1
FirstRate	N	8+	8	9	9	8	N	9	9	9	8	7	8	8+	1
Lorox	N	7+	7	8+	8+	N	7	8	8	6	N	7+	9	7	2
Micro-Tech	N	N	N	6+	6+	N	7+	8+	8+	6	N	N	6	N	1
Outlook	N	N	N	6	6	N	7+	8	8	6	N	N	6	N	1+
Prowl	N	N	6	9	9	N	N	8	8	N	N	N	8	8+	1+
Pursuit	6	8	8	8	8	7	8	9	9	7+	6	8	9	8	1+
Python	6	8	8	9	9	6	7	9	9	7+	6	8	8+	8+	1
Scepter	6	9	8+	9	9	7	8	9+	9+	7+	8	9	8+	7+	1+
Sencor	6	8	8	9	6	N	N	9	6	7	N	8+	9	8	2
Treflan ³	N	N	N	9	9	N	N	9	9	N	N	N	6	7+	1
Valor	N	6	8	9	9	7+	9	9	9	7	6	8	7	7	1+
Mixtures															
Authority First/Sonic (3 oz)	N	8	8	8+	8+	7+	8+	9	9	8	7	6	7+	8	1+
Axiom	N	N	6	7	N	N	N	7	N	N	N	8	6	N	1+
Boundary	N	7+	7+	8+	6	N	6	8+	8	6	N	9	8+	7	2
Canopy	7	9	9	9	8+	7	6	9+	9	8	8	9	9	9	2+
Envive	7	8+	9	9	9	7+	9	9	9	7+	7	8+	9	9	2
Optill	6	8	8	9	9	7	9	9	9	7+	6	8	9	9	2
Prefix	N	N	8	8+	8+	6	8	8	8	7+	6+	N	8	7	1
Pursuit Plus	6	8+	8+	9+	9+	7	8+	9+	9+	7+	6	8	9	9	1+
Valor XLT	7	8+	9	9	9	7+	9	9	9	7+	7	8+	8+	8+	2
Postemergence															
Basagran	N	9	9	8	8	N	N	6+	6+	8	7	8	9	8+	1+
Blazer	7	8	9	7	7	8	8	9	9	9	8	N	8+	7+	2
Classic	8	9+	9	7	7	7	N	9	9	8	7+	N	8+	8	1+
Cobra	8	8	9	7	7	8	8+	9	9	9	8+	6	7	8+	2+
FirstRate	6	9	8	N	N	8+	N	N	N	9	9	N	8	9	1+
Glyphosate ⁴	8+	9	9	8+	8+	7	8	9	9	8+	8	7	8+	8	1
Harmony SG	7	7+	7	9	9	N	N	9	9	6	N	N	9	8+	2+
Ignite ⁶	8	9	9	9	9	8	8	8	8	9	8+	8	8+	8	1+
Pursuit	6	9	8	7	7	7+	8	9	9	7	6	6	8+	9	1+
Raptor	6	9	8	8+	8+	7	8	9	9	7+	8	6	8	9	1+
Reflex/Flexstar	7	8	9	7	7	8	7+	9	9	9	8	N	8	7+	1+
Resource	6	6	7	7	7	N	8	7+	7+	7+	6	7	6	9+	1+
Scepter	N	9+	N	N	N	N	N	10	10	N	N	N	N	N	1+
Warrant (+ glyphosate)	N	N	N	8	8	N	8+	9	9	7+	N	N	7	6	1
Mixtures															
Extreme	8	9	9	8+	8+	7+	8	9	9	8+	8	7	8+	9	1+
Flexstar GT	8+	9	9	8+	8+	8	8	9	9	9	9	8	7	8+	1+
Storm	6	9	9	7+	7+	7+	7	9	9	8+	8	7	9	8	2
Synchrony ⁵	8+	9+	9	9	9	7	N	9+	9+	8	7+	N	9	9	1

1. 10 = 95–100%, 9 = 85–95%, 8 = 75–85%, 7 = 65–75%, 6 = 55–65%, N = less than 55% or no control. For ratings on herbicide combinations, see the component parts. Above ratings are for average conditions; results may differ with variations in weed size, temperature, rainfall, soil moisture, soil type, and soil pH. See Table 2.4-1 for additional products that contain these active ingredients.

2. Control of large-seeded annual weeds or perennials may improve with incorporation of the herbicide.

3. Command 4E, Treflan and trifluralin require incorporation; Command 3ME may be applied preemergence and not incorporated.

4. For use on Roundup Ready soybean varieties only.

5. For use on STS or non-STS soybean varieties; a lower rate must be used on non-STS varieties.

6. For use on glufosinate-resistant soybean varieties only.

7. Herbicide is less effective on yellow foxtail: Assure II = 7, Fusion = 8, Pursuit = 6, Ignite = 7.

8. Ratings based on residual control of Warrant.