

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

Combine with residual preemergence herbicide treatment for complete no-till weed-control program. See specific product label to determine correct rate for the soil type and weed species found in individual fields.

Herbicide	Product/A	lb ai/A	Remarks
2,4-D LVE 4E or 2,4-D amine 4S	0.75–2.0 pt	0.375–1.0	Apply 2,4-D ester (LVE) at 1 pt or less at least 7 days ahead of planting or up to 2 pt at least 30 days before planting. 2,4-D amine may be applied at 1 pt or less at least 15 days ahead of planting or up to 2 pt 30 days before planting. Do not apply 2,4-D prior to planting soybeans if you are not prepared to accept the results of soybean injury, including possible loss of stand and yield. Do not apply when weather conditions favor drift.
Canopy EX 29.5WDG (chlorimuron + tribenuron)	1.1–3.3 oz	0.02–0.06	Canopy EX can be used for burndown control of weeds from fall through early spring up to 7–14 days prior to soybean planting. Include proper adjuvants in the spray mixture. For best results, tank-mix with 2,4-D. Be cautious of soil pH and crop rotation restrictions. See label for more details
Canopy 75DF (metribuzin + chlorimuron) ¹	4–8 oz	0.19–0.375	See comments about Canopy in Table 2.4-10. Canopy may be used in a fall burndown program.
Extreme 2.17L (imazethapyr + glyphosate)	3 pt/A	0.81	Extreme may be used for burndown weed control. Use only on Roundup Ready varieties if soybeans are emerged. Include necessary adjuvants in the spray solution (Table 2.4-14). Extreme may be used in a fall burndown program. (<i>Water quality advisory</i>)
Glyphosate ²	See Table 2.4-1a		Fall applications of glyphosate are better than spring applications for control of orchardgrass sods and quackgrass. Spring applications of either product may be used to control annual weeds. Using low-volume sprays may allow for a reduced rate. For control of small annual weeds or volunteer small grains, glyphosate may be used at reduced rates when applied in 3–10 gal/A. For control of most annual weeds, apply 0.75–1.13 lb ae/acre. Glyphosate may be applied in clear liquid nitrogen fertilizers and clear liquid complete-analysis fertilizers. Do not use glyphosate with suspension-type liquid fertilizers.
Glyphosate	See Table 2.4-1a		See comments under glyphosate and 2,4-D. Adding 2,4-D improves control of certain annual and perennial broadleaf weeds and alfalfa.
+ 2,4-D LVE 4E	+ 0.5–1 pt	+ 0.25–0.5	
Glyphosate	See Table 2.4-1a		See comments under glyphosate. Adding 2–4 oz Sencor may improve control of certain large annual broadleaf weeds. Use higher Sencor rate for residue control.
+ Sencor 75DF (metribuzin)	+ 2–4 oz	+ 0.09–0.19	
Gramoxone Inteon 2S (paraquat)	2–4 pt	0.5–1.0	Apply in 20–60 gal/A for control of emerged annual weeds. Add 16–32 oz nonionic spreader per 100 gal spray solution. Phosphate-containing liquid fertilizers diminish paraquat activity. Use appropriate precautions when handling paraquat to minimize exposure to the herbicide. (<i>Restricted-use pesticide</i>)
Gramoxone Inteon 2S (paraquat)	2–4 pt	0.5–1.0	See comments under Gramoxone and 2,4-D. Adding 2,4-D improves control of large annual broadleaf weeds and alfalfa. (<i>Gramoxone is a restricted-use pesticide.</i>)
+ 2,4-D LVE 4E	+ 1 pt	+ 0.5	
Gramoxone Inteon 2S (paraquat)	2–4 pt	0.5–1.0	Adding Canopy to Gramoxone improves control of horseweed. Canopy also provides preemergence control of broadleaf weeds. (<i>Gramoxone is a restricted-use pesticide, and Canopy has a water quality advisory.</i>)
+ Canopy 75DF (metribuzin + chlorimuron) ¹	+ 4–8 oz	+ 0.19–0.375	
Gramoxone Inteon 2S (paraquat)	2–4 pt	0.5–1.0	See comments under Gramoxone. Adding 2–4 oz Sencor may improve control of certain large annual broadleaf weeds. Use higher Sencor rate for residual control. (<i>Gramoxone is a restricted-use pesticide.</i>)
+ Sencor 75DF (metribuzin)	+ 2–4 oz	+ 0.09–0.19	
Harmony Extra SG 50DF (thifensulfuron + tribenuron)	0.45–0.9 oz	0.014–0.028	Adding Harmony Extra to glyphosate or 2,4-D can improve control of certain winter annual broadleaves and perennials. Must be applied in fall or early spring up to 7 days before soybean planting. Harmony Extra may be used in a fall burndown program.
Pursuit 2S or 70DG (imazethapyr)	4.0 fl oz or 1.44 oz	1 oz	See comments about Pursuit in following tables.
Scepter 1.5S or 70DG (imazaquin)	0.66 pt or 2.8 oz	0.125	See comments about Scepter in following tables.
Valor 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).