

Table 2.2-8. Relative effectiveness of corn herbicides on grasses, grasslike species, and broadleaf weeds.¹

This table compares the relative effectiveness of herbicides on individual weeds. 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.

Weed control rating

10 = 95–100%

9 = 85–95%

8 = 75–85%

7 = 65–75%

6 = 55–65%

N = Less than 55% or no control

Crop tolerance

E = excellent: almost never any crop injury observed

VG = very good: on rare occasion is crop injury observed

G = good: seldom is crop injury observed as long as proper management practices are followed (e.g., seedling depth, seed slit closure, herbicide rate and application timing, adjuvants)

F–G = fair to good: occasionally crop injury is observed even with proper management practices; injury often due to herbicide interactions with environmental conditions

F = fair: some crop injury is commonly observed

Grasses	Barnyard-grass	Crabgrass	Fall Panicum	Foxtail spp.	Johnsongrass (Seedling)	Johnsongrass (Rhizome)	Quackgrass	Shattercane	Wirestem Muhly	Yellow Nutsedge
Soil-Applied²										
Atrazine	7	7	6	6+	N	N	7+	6	6	6
Balance ¹⁰ /Balance Flexx	8	7	8	8 ⁶	7+	6	N	7+	N	N
Dual products, Cinch	9	9	8+	9	6	N	N	6	N	8
Eradicane ³	9	9	9	9	8+	8	7	8	8	9
Harness, Degree ⁸ , Surpass, or TopNotch	9	9	8+	9	7	N	N	6	N	7+
Micro-Tech/Partner	9	9	8	9	6	N	N	6	N	7+
Outlook	9	9	8+	9	6	N	N	6	N	7+
Princep	8+	8	8+	8	6	N	7	6	8	6
Prowl	8+	9	8	8	7	N	N	7	N	6
Pursuit ⁴	8	7	7	8	8	6	N	8	N	7
Mixtures										
Atrazine + Princep	8+	8+	8+	8+	6	N	8+	6	8	8+
Axiom/Define	9	9	8+	9	6	N	N	6	N	6
Bicep, Bullet, Cinch ATZ, or Guardsman	9	9	9	9	6	N	6	6	6	8+
Camix	9	9	9	9	6	N	N	6	N	8+
Corvus	8	8	8+	8+	7+	7	N	7+	N	7
Harness Xtra, Degree Xtra, FulTime, or Keystone	9	9	9	9	7	N	6	6	6	8+
Hornet	N	N	N	N	N	N	N	N	N	N
Lumax/Lexar	9	9	9	9	6	N	6	6	6	8+
Prequel	8	7	8	8	7	6	N	7	N	N
Prowl + Atrazine	8	9	9	8	7	N	6	7	N	7+
Radius + Atrazine	9	9	8+	9	7+	6	N	7+	N	6
SureStart/TripleFLEX	8	8	8	8	6	N	N	6	N	6
Verdict	8	8	8	8	N	N	N	N	N	
Postemergence										
Accent Q	8+	7	9	9	9	8+	8+	9	7	6
Atrazine	8	6	6	7+	N	N	7	6	6	7
Basagran	N	N	N	N	N	N	N	N	N	8
Beacon	6	6	8	7	9	8	8+	9	6	7
Callisto	N	8 ¹¹	N	N	N	N	N	N	N	8
Glyphosate ^{7, 12}	9+	9+	9+	9+	9+	9	9	9	9	7
Ignite ⁵	8	8	7+	9 ⁶	8	6	6	8	7	6
Impact	7	8	8	8+	N	N	N	7	6	7
Laudis	8	8	N	8+	6	N	N	7+	6	7
Option	9	7	8+	9 ⁶	9	8+	8+	9	7	7+
Permit	N	N	N	N	N	N	N	N	N	9+
Pursuit ⁴	8	7	8	8+ ⁶	9	7	6	9	N	7
Warrant (+glyphosate) ¹³	9	9	8+	9	7	N	N	6	N	7+

(continued)

Table 2.2-8. Relative effectiveness of corn herbicides on grasses, grasslike species, and broadleaf weeds (continued).

Grasses	Barnyard-	Fall Crabgrass	Panicum	Foxtail spp.	Johnsongrass	Johnsongrass	Quackgrass	Shattercane	Wirestem Muhly	Yellow Nutsedge
	grass				(Seedling)	(Rhizome)				
Mixtures										
Basis/Resolve/Resolve Q	8	6	8+	8+	8+	7	7+	8+	6	6
Capreno	8	8	8	8+	8	7	6	8	6	7
Celebrity Plus	8+	7	9	9	9	8+	9	9	6+	6
Equip	9	7	8+	8 ⁶	8	7+	7	8	6	7
Laddok	N	N	N	N	N	N	6	N	N	8+
Halex GT	9+	9+	9+	9+	9+	9	9	9	9	8
Ignite ⁵ + atrazine	8	8	8	9 ⁶	8	N	6	8	7	6+
Lightning ⁴	8	8	8	9 ⁶	9	7	6	9	N	7
Spirit	N	N	N	N	8+	7+	7	8+	N	6
Steadfast Q	8+	7	9	9	9	8	9	9	6+	6
Steadfast ATZ	8+	7+	9	9	9	8	9	9	6+	6+
Stout	8+	7	9	9	9	8+	8+	9	7	6
Yukon	N	N	N	N	N	N	N	N	N	9+

- See Table 2.2-1 for additional products that contain these active ingredients.
- Control of certain large-seeded annual weeds or perennials may improve with incorporation of the herbicide.
- Eradicane requires mechanical incorporation.
- For use on IMI or Clearfield (CL) corn varieties only.
- For use on glufosinate-resistant corn varieties only.
- Herbicide is less effective on yellow foxtail: Balance-6, Basis Gold-8, Ignite-7, Lightning-8, Pursuit-6, Option and Equip-7+.
- For use on Roundup Ready corn varieties only.
- Degree and Degree Xtra may be less consistent on TR Lambsquarters control compared to other acetochlor products.
- May experience reduced control compared to Roundup alone in certain situations.
- Performance ratings based on full labeled rates.
- Large crabgrass only.
- Glyphosate-containing products include Roundup, Touch-down, Durango, and many others; see Table 2.2-1a.
- Ratings based on residual control of Warrant.

BROADLEAVES	Burcu- cumber	Cockle- bur	Jimson- weed	Lambs- quarters	TR	Annual	Eastern	Pig- weed	TR Pig-	Giant		Prickly Sida	Smart- weed	Vel- vetleaf	Corn Safety
					Lambs- quarters	Morning Glory	Black Night- shade		weed	Common Ragweed	Rag- weed				
Soil-Applied²															
Atrazine	6	8+	9	9+	N	8+	9	9+	N	9	8	9	9+	8	E
Balance/Balance Flexx	7	N	8	9	9	N	9	8	8	8	7	7	7+	9	F-G ¹⁰
Banvel	N	7+	7+	8+	8+	6	6	9	9	8	N	N	8+	7	F-G
Dual Products, Cinch	N	N	N	6	6	N	7+	8	8	6	N	N	N	N	G
Eradicane ³	N	6	6	7	7	N	N	8	8	6	N	N	6	7	VG
Harness, Degree ⁸ , Surpass, or TopNotch	N	N	N	7	7	N	8+	9	9	7+	N	N	7	6	G
Lorox	N	7+	7	8+	8+	N	6	8	8	7	N	N	9	7	F-G
Micro-Tech	N	N	N	6+	6+	N	7+	8+	8+	6	N	N	6	N	G
Outlook	N	N	N	6	6	N	7+	8	8	6	N	N	6	N	G
Princep	6	8	9	9	N	9	9	9+	N	9+	7	9	9	8	E
Prowl	N	N	6	9	9	N	N	8	8	N	N	N	8	8	G ¹⁰
Python	6	8	8	8+	8+	N	7	9	9	7+	6	8	8+	8	F-G ¹⁰
Mixtures															
Atrazine + Princep	7	9	9+	10	N	9	9	10	N	9	8+	9	9	8+	E
Axiom	N	N	6	7	N	N	N	7	N	N	N	6+	6	N	G
Basis/Resolve	N	6	6	8+	8+	N	N	9	9	N	N	N	6	6	F-G
Bicep, Bullet, Cinch ATZ, or Guardsman	6	8+	9	9	7	8+	9	9	8+	8+	8	9	9	8+	G
Camix	N	6	8	9	9	6	8+	8+	8+	7	7	N	8+	9	G
Corvus	7	8	8	9	9	7	9	9	9	8+	7+	7	8+	9	G
Harness Xtra, Degree Xtra ⁸ , Fulltime or Keystone	6	8+	9	9	7+	8+	9	9	9	8+	8	9	9	8+	G
Hornet	N	8+	8	8+	8+	6	8	9	9	8+	8	7+	8+	9	F-G ¹⁰
Lexar	7	9	9	9	9	9	9	9	8+	8+	8+	9	9	9	G
Lumax	6	8+	9	9	9	8+	9	9	8+	9	8	7+	9	9	G
Marksman	6+	8	8+	9	8+	8+	9	9+	9	8+	8	8	9	8	F-G
Prequel	7	6	8	9	9	N	8	9	9	8	7	7	7	9	F-G
Prowl + Atrazine	6	8+	9	9+	9	8+	9	9+	9	8+	8	9	9+	9+	G ¹⁰

(continued)

Table 2.2-8. Relative effectiveness of corn herbicides on grasses, grasslike species, and broadleaf weeds (continued).

	Bur cucum- ber	Cockle- bur	Jimson- weed	Lambs- quarters	TR Lambs- quarters	Annual Morning Glory	Eastern Black Night- shade	Pig- weed	TR Pig- weed	Common Ragweed	Giant Rag- weed	Prickly Sida	Smart- weed	Velvet- leaf	Corn Safety
BROADLEAVES															
Radius + Atrazine	7	8+	9	9	9	8+	9	9	8	9	8	9	9	9	F–G ¹⁰
SureStart/TripleFLEX	N	7	7	8	8	6	8	8+	8+	8	7+	7	8	8	G
Verdict	6	8	8	9	9	8	9	9	9	8	8	7	9	8	G
Postemergence															
2,4-D	6	9	8	9	9	9	7	9	9	9	9	9	7	8	F ¹⁰
Accent Q	7	7	7	6	6	7	N	9	9	6	N	N	8	7	F–G
Aim/Cadet	N	N	N	9	9	8+	9	9	9	N	N	7	N	9+	G
Atrazine	8	9	9	9+	N	9	9	9+	N	9	8	8+	10	8	VG
Basagran	N	9	9	8	8	N	N	6+	6+	8	7	8	9	8+	G
Beacon	8	8+	9	7	7	6	7	9	9	9	9	7	8	8	F–G
Buctril	8	9	9	9	9	8	9	7	7	7+	8	N	9	8+	F–G ¹⁰
Callisto	7+	8+	9	9	9	7+	9	8+	8+	8	8	6	9	9	G
Clarity/Banvel	7	9	9	9	9	9	8	9	9	9	9	8	10	8	F–G ¹⁰
Glyphosate ^{7,9}	8+	9	9	8+	8+	7	8	9	9	8+	8	7	8+	8	E
Harmony SG	7	7+	7	9	9	N	N	9	9	6	N	N	9	8+	G
Ignite ⁵	8	9	9	8+	8+	8	8	8	8	9	8+	8	8+	8	E
Impact	7+	8+	9	9	9	7+	9	8+	8+	8	8	6	9	9	VG
Laudis	7	8+	9	9	9	7	9	8+	8+	8	8	N	9	9	VG
Option	7	7+	7+	8	8	6	9	8+	8+	8	6	N	N	8	F–G
Permit	6	9	N	N	N	6	6	9	9	9	8	7	8	9	G
Resource	7	6	7	7	7	N	8	7+	7+	8	6	7	6	9+	G
Stinger	N	9	8	6	6	N	7	6	6	9+	9	7	7	6	VG
Warrant (+glyphosate)	N	N	N	8	8	N	8+	9	9	7+	N	N	7	6	G
Mixtures															
Accent + Clarity	7+	8+	8	8+	8+	9	8	9	9	8	8	7	8+	7+	F–G
Basis	N	7	7	8+	8+	6	N	9	9	7	N	N	9	9	F–G
Buctril + Atrazine	8+	9	10	9	9	9	9+	9	7	9	9	8	10	9	F–G
Capreno	7	8+	9	9	9	7	9	9	9	8	8	6	9	9	G
Curtail	6	9	8	9	9	9	7	9	9	9	9+	9	7	8	F
Celebrity Plus	7+	9	9	9	9	9	9	9	9	9	9	8	10	9	F–G
Distinct	7	9	9	9	9	9	9	9	9	9	9	8	10	9	F–G
Equip	7	8+	8	8+	8+	7	9	9	9	8+	7+	N	9	8+	F–G
Halex GT	8+	9	9	9+	9+	7+	9+	9	9	8+	8	7	9	9	G
Hornet	N	8+	8	7	7	7	6	8	8	8+	8	7	8	8+	G
Ignite + atrazine	8	9	9	9	8+	9	9	9	8	9	8+	8+	9	8	E
Laddok	7	9	10	9	8	8+	9	9	6+	9	8+	8+	10	9	G
Lightning ⁴	6	9	8	8	8	8	8+	9+	9+	7	6	8	8+	8+	F–G
Marksman	8	9	10	9	9	9	9	10	9	9+	9	9	10	9	F–G
Northstar	8+	9	9	9	9	9	8	9	9	9+	9	8	9	8+	F–G
Resolve Q	N	7	7	8+	8+	6	N	9	9	7	N	N	9	9	G
Spirit	8+	8	9	7+	7+	7	7+	8+	8+	9	8	7	9	8	F–G
Status	7	9	9	9	9	9	9	9	9	9	9	8	10	9	G
Steadfast Q	7	7	7	6	6	7	N	9	9	6	N	N	8	8+	F–G
Steadfast ATZ	7+	8	8	8	6	7+	8	9	9	8	7	7	9	9	F–G
Stout	7	7	7	9	9	7	N	9	9	6	N	N	8+	8	F–G
Yukon	6	9	9	9	9	9	8	9	9	9	8	8	9+	9	F–G

1. See Table 2.2-1 for additional products that contain these active ingredients.

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

3. Eradicane requires mechanical incorporation.

4. For use on IMI or Clearfield (CL) corn varieties only.

5. For use on glufosinate-resistant corn varieties only.

6. Herbicide is less effective on yellow foxtail: Balance = 6, Liberty = 7, Lightning = 8, Pursuit = 6, Option and Equip = 7+.

7. For use on Roundup Ready corn varieties only.

8. Degree and Degree Xtra may be less consistent on TR lambsquarters control compared to other acetochlor products.

9. Glyphosate-containing products include Roundup, Touchdown, Durango, and many others; see Table 2.2-1a.

10. See remarks in Table 2.2-10 and the herbicide label for specific management guidelines to maximize crop safety.