

Corn Herbicides and Rotation to Cover Crops

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Trade Name	Common Name	Normal Rate/Acre	Half-life (days) ¹	Fall-established Cover Crops: OK to plant	Fall-established Cover Crops: Concern for	Other
2,4-D 4S	2,4-D	1–2 pt	7	All grasses	Wait 30 days before planting sensitive broadleaves	Amine formulations more water soluble and can leach into seed zone
Accent 75DF/Steadfast75DF	nicosulfuron/ nicosulfuron+ rimsulfuron	0.66 oz/0.75 oz	21	Fall cereal grains, ryegrass	Small-seeded legumes, mustards, sorghum ²	More persistent in high pH soils (> 7)
Armezon/Impact 2.8SC	topramesone	0.75 fl oz	14	Wheat, barley, oats, and rye are allowed after 3 months; ryegrass should also be OK	Although many broadleaves are restricted, Impact does not have much soil activity	We have not seen this herbicide carry over in the Mid-Atlantic region
Atrazine 4L	atrazine	1–2 qt	15–90	Sorghum species	Cereals, ryegrass, legumes, and mustards	More persistent in high pH soils (> 7); rates < 1 lb/acre can allow more flexibility; half-life in Mid-Atlantic probably closer to 30
Balance Pro 4L/Balance Flexx 2L (Prequel also contains isoxaflutole)	isoxaflutole	3 fl oz/6 fl oz	50–120	Fall cereals grains	Cereals, ryegrass, legumes, and mustards	15 inches of cumulative precipitation required from application to planting rotation crops except soybean, barely, wheat, sorghum, and sunflower
Callisto 4L (includes Acuron, Acuron Flexi, Halex GT, Harness Max, Instigate, Lexar, Lumax, Resicore, Revulin, Solstice, Zemax, etc.)	mesotrione	3–6 fl oz	10–50	All grasses	Small-seeded legumes, mustards	Sequential applications (PRE fb POST) increase the potential for injury
Capreno 3.45SC	tembotrione + thienacarbazone	3 fl oz	15	Wheat, triticale, rye	Small-seeded legumes, mustards, sorghum	15 inches of cumulative precipitation required from application to planting rotation crops except wheat
Clarity/Banvel 4S (DiFlexx, Distinct, Engenia, Status, Xtendimax/Fexapan)	dicamba	16–24 fl oz	5–14	All crops	Only at high rates or less than 120 days after application	Anything can be planted after 120 days with 24 fl oz/acre or less
Corvus 2.63SC	isoxaflutole + thienacarbazone	5.6 fl oz	50–120	Wheat, triticale, rye	Small-seeded legumes, mustards, sorghum	15 to 30 inches of cumulative precipitation from application to planting for sensitive crops

Dual II Mag 7.62E/Cinch	metolachlor	1.67 pt	15–50	Almost anything	Annual ryegrass or other small-seeded grasses	Higher rates and later applications more of a potential problem
Glyphosate 4L	glyphosate	0.75–1.25 lb	473	All	None	Glyphosate does not have soil activity at normal use rates
Gramoxone 2S	paraquat	2 pt	10,003	All	None	Paraquat does not have soil activity at normal use rates
Harmony 50WDG	thifensulfuron	1/8 oz	12	No restrictions for wheat, barley, and oats	None with 45-day waiting interval	Harmony Extra also contains tribenuron
Harness 7E (Degree, Surpass, Warrant)	acetochlor	2 pt	10–20	Most crops should be fine	Food or feed residues rather than crop injury may be a concern	Nonfood/feed winter cover crops are allowed after corn harvest
Laudis 3.5SC (DiFlexx Duo)	tembotrione	3 fl oz	14	Cereal grains after 4 months	Unknown; small-seeded legumes, mustards could be a problem	Other crops may be seeded after a successful field bioassay
Liberty 2.34L	glufosinate	22–36 fl oz	73	All	Food or feed residues rather than crop injury may be a concern	Glufosinate does not have soil activity at normal use rates
Metribuzin 75DF (Sencor)	metribuzin	0.33 lb	14–60	Cereal grains and ryegrass	Slight risk for small-seeded legumes and mustards	Nonfood/feed winter cover crops allowed
Outlook 6E (Armezon Pro)	dimethenamid	16 fl oz	20	Most crops should be fine	Food or feed residues rather than crop injury may be a concern	Nonfood/feed winter cover crops should be OK after corn harvest
Peak 57WG (and Spirit)	prosulfuron	1 oz	9–152	Cereal grains and sorghum are labeled, other grasses	Small-seeded legumes, mustards	More persistent in high pH soils (> 7)
Permit/Sandea 75DF	halosulfuron	2/3 oz	9–27	Cereal grains and sorghum after 2 mo. and other grasses	Small-seeded legumes, mustards	Halosulfuron also an ingredient in Yukon
Prowl H2O 3.8CS	pendimethalin	3 pt	44	Cereal grains	Small-seeded legumes and annual ryegrass	We have not seen this herbicide carry over in Mid-Atlantic; nonfood/feed winter cover crops should be OK
Python 80WDG (Hornet and SureStart)	flumetsulam	1 oz	14–120	Cereal grains	Small-seeded legumes, mustards, and annual ryegrass	Cover crops and forage grasses are restricted for 9 months
Resolve 25DF (Resolve Q)	rimsulfuron	2 oz	2–4	Based on the short half-life, most fall cover crops should be OK in Mid-Atlantic	None	More persistent in drought conditions
Sharpen 2.85SC (Verdict)	safinufenacil	3 fl oz	7–35	All	None	This product has been reported more persistent in western Canada

Simazine 4L (Princep)	simazine	1–2 qt	60	Sorghum species	Cereals, ryegrass, legumes, and mustards	Soil pH > 7
Stinger 3S (Homet, Resicore, SureStart)	clopyralid	5 oz	40	All grasses	Small-seeded legumes	
Zidua (Anthem)	pyroxasulfone	0.133	20	Most crops should be fine	Food or feed residues rather than crop injury may be a concern	Nonfood/feed winter cover crops should be OK after corn harvest
1 The herbicide half-life is defined as the time it takes for 50 percent of the herbicide active ingredient to dissipate. See the “Managing Herbicides” section for additional information. Herbicide half-life estimates are derived for the WSSA Herbicide Handbook and other scientific literature.						
2 Common small-seeded legumes include alfalfa, clovers, and hairy vetch.						
3 This herbicide does not have soil residual activity at normal application rates.						