

Table 1. Common corn herbicides, estimated half-lives, and their potential to injure fall-seeded cover crops.

Herbicide	Common name	Group #	Half life (days)*	Cover crops (OK to Plant)	Cover crops (Concern for)	Other
2,4-D	2,4-D	4	7	All grasses	Wait 30 days before planting sensitive broadleaves	Amine formulations more water soluble and can leach into seed zone
Accent 75DF	nicosulfuron	2	21	Fall cereal grains, ryegrass	Small seeded legumes, mustards, sorghum	More persistent in high pH soils (>7)
Atrazine 4L	atrazine	5	60	Sorghum species	Cereals, ryegrass, legumes, and mustards	More persistent in high pH soils (> 7). Rates < 1 lb/acre can allow more flexibility
Banvel II, Distinct	dicamba	4	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
Broadstrike RC	flumetsulam				Hairy vetch, tillage radish	
Callisto (includes Lumax, Lexar, Halex GT)	mesotrione	27	5-32	All grasses	Small seeded legumes, mustards	Sequential applications (PRE fb POST) increase the potential for injury
Converge XT	isoxaflutole + atrazine	27, 5	50-120	Sorghum species	Cereals, Ryegrass, legumes, and mustards	15 inches of cumulative precipitation required from application to

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						planting rotation crops except soybean, barley, wheat, sorghum, and sunflower
Dual II Mag 7.62E/Cinch	s-metolachlor	15	15-50	Almost anything	Annual ryegrass or other small seeded grasses	Higher rates and later applications more of a potential problem
Fierce	pyroxasulfone + flumioxazin	15, 14		All grasses	Small seeded legumes and mustards	Based on the half-life, all nonfood/feed winter cover crops should be OK
Impact/Armezon	tompramezone	27	14	Wheat, barley, oats, and rye are allowed after 3 mo. Ryegrass should also be OK	Although many broadleaves are restricted, Impact does not have much soil activity	
Lontrel (Hornet, Surestart)	clopyralid	4	40	All grasses	Small seeded legumes, including hairy vetch and crimson clover	Other clovers may be injured
Peak 75WG (Spirit)	prosulfuron	2	9-152	Cereal grains and sorghum are labeled, other grasses	Small seeded legumes, mustards	More persistent in high pH soils
Permit/Sandea 75DF	halosulfuron	2	9-27	Cereal grains and sorghum after 2 mo. and other	Small seeded legumes, mustards	Halosulfuron also an ingredient in Yukon

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				grasses		
Prism	rimsulfuron	2	2-4		None	More persistent in drought conditions
Simazine (Princep 9-T)	simazine	5	60	Sorghum species	Cereals, ryegrass, legumes, and mustards	Soil pH > 7

Table 2. Common soybean herbicides, their half lives, and potential to injure fall-seeded cover crops.

Herbicide	Common name	Group #	Half Life (days)*	Cover Crops (OK to Plant)	Cover Crops (Concern For)	Other
Assure II	quizalofop	1	60	OK to plant most broadleaves	Concern for all grasses if less than 120 days or at high rates	Plant anything after 120 days
Canopy Pro	chlorimuron + metribuzin	2, 5	40		Winter rye, winter wheat and somewhat on oats, small seeded legumes, mustards, sorghum, buckwheat	More persistent in high pH soils (> 7) and with higher soil applied rates
Command	clomazone	13	16-36	Oilseed radish	Winter rye, winter wheat and somewhat on oats	
FirstRate	cloransulam	2	8-33	Wheat, triticale, rye	Small seeded legumes, mustards, sorghum, buckwheat	
Guardian	chlorimuron	2	40	Cereals and ryegrass	Small seeded legumes, mustards, sorghum, buckwheat	More persistent in high pH soils (> 7) and with higher soil applied rates
Pinnacle	thifensulfuron	2	12	No restriction for wheat, barley and oats	None with 45 day waiting interval	
Pursuit	imazethapyr	2	60-90	Wheat, triticale, rye, alfalfa, clover	Oats, sorghum, mustards, buckwheat	Any crop can be planted 40 months after Pursuit application
Reflex	fomesafen	14	100	Cereal grains	Small seeded legumes, mustards, tillage radish,	Since fomesafen is often applied postemergence,

					sorghum	soil activity can surprise users
Select (Arrow)	clethodim	1	3	All broadleaves	None assuming at least 30 days	Plant anything after 30 days
Sencor 75 DF	metribuzin	5	14-60	Cereal grains and ryegrass	Slight risk for small seeded legumes and mustards	Nonfood/feed winter cover crops allowed
Treflan	trifluralin	3	45	Annual ryegrass, oats	buckwheat	
Valtera	flumioxazin	14	12-20	All grasses	Small seeded legumes and mustards	Based on the half-life, all nonfood/feed winter cover crops should be OK

\* Herbicide half-life estimates derived from the WSSA Herbicide Handbook, 2007 or other scientific literature.