



## Pre-Seed and Pre-Emergent Herbicide Options for Pulse Crops

March, 2025

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Herbicide	Herbicide Group	Application Timing*	Primary Target	Recropping (year after)	Peas	Lentils	Faba Beans	Chickpeas	Soybeans	Dry Beans
2,4-D Ester	4	Seven days prior to seeding	Broadleaf weeds	None					X	
Aim® EC/Foremost™/Revenge™ (carfentrazone)	14	Prior to seeding or up to 3 days after seeding prior to emergence (Aim® EC only)	Broadleaf weeds	None	X	X	X	X	X	X
Authority Strike™ (carfentrazone + sulfentrazone)	14	Prior to seeding or up to 3 days after seeding prior to emergence	Broadleaf weeds	Crop restrictions on label	X		X	X	X	
Authority® 480 (sulfentrazone)	14	Prior to seeding or up to 3 days after seeding prior to emergence	Broadleaf weeds	Crop restrictions on label	X		X	X	X	
Authority® Supreme (pyroxasulfone + sulfentrazone)	14 + 15	Prior to seeding or up to 3 days after seeding prior to emergence	Broadleaf and grassy weeds	Crop restrictions on label	X			X	X	
Avadex® MicroActiv (triallate)	15	Spring or fall (refer to product label for specific crop instructions)	Wild oats	Crop restrictions on label	X	X		X		
Avadex® Liquid EC (triallate)	15	Prior to seeding	Wild oats	Crop restrictions on label	X					
Beloukha® (pelargonic acid)	26	Prior to seeding or up to 3 days after seeding prior to emergence	Broadleaf and grassy weeds	None	X	X	X	X	X	X
Bifecta® EZ (flumioxazin + metribuzin)	5 + 14	Fall, prior to seeding, or up to 3 days after seeding prior to emergence	Broadleaf and grassy weeds	None	X	X			X	
BlackHawk® (2,4-D + pyraflufen-ethyl)	4 + 14	Prior to seeding or prior to emergence	Broadleaf weeds	None					X	
Bonanza®/Treflan®/Rival® (trifluralin)	3	Fall or prior to seeding (fall only lentil, refer to label for specific crop instructions)	Broadleaf and grassy weeds	Crop restrictions on label	X	X	X		X	X
Buzzin® 70 WDG/Meteor™/Meter 75 DF/ Metrix® SC/ Sencor® 75 DF/ Sencor® Solupak 75 DF/Squadron® II/TriCor® 75 DF/TriCor® LQ (metribuzin)	5	Prior to seeding	Broadleaf weeds	Crop restrictions on label	X	X	X		X	

Command® 360 ME	13	After seeding, prior to crop emergence	Broadleaf weeds	Crop restrictions on label							X
Dual II Magnum®/Komodo™/ Stallion™ (s-metolachlor)	15	Prior to seeding	Broadleaf and grassy weeds	None						X	X
Edge® MicroActiv (ethalfluralin)	3	Fall or prior to seeding (refer to label for specific crop instructions)	Broadleaf and grassy weeds	Crop restrictions on label	X	X	X	X	X	X	X
Engenia®/Xtendimax® (dicamba)	4 + 9	Prior to seeding or prior to emergence (Roundup Ready 2 Xtend® soybeans only)	Broadleaf and grassy weeds	Crop restrictions on label						X	
Eptam® Liquid EC (EPTC)	15	Prior to seeding	Broadleaf and grassy weeds	None							X
Express® SG*/Involve® 50 WDG (tribenuron)	2	Fall or minimum 24 hours prior to seeding (refer to label for specific crop instructions)	Broadleaf weeds	None	X		X			X	X
Fierce®/Fierce® EZ (flumioxazin + pyroxasulfone)	14 + 15	Fall, prior to seeding, or up to 3 days after seeding prior to emergence (refer to label for specific crop instructions)	Broadleaf and grassy weeds	Crop restrictions on label	X	X		X		X	
Focus® (carfentrazone + pyroxasulfone)	14 + 15	Fall, prior to seeding, or up to 3 days after seeding prior to emergence (refer to label for specific crop instructions)	Broadleaf and grassy weeds	Crop restrictions on label	X	X				X	
Frontier Max® (dimethanamid-P)	15	Prior to seeding or prior to emergence	Grassy weeds	None							X
glyphosate	9	Prior to seeding or prior to emergence	Broadleaf and grassy weeds	None	X	X	X	X	X	X	X
GoldWing® (MCPA Ester + pyraflufen-ethyl)	4 + 14	Prior to seeding or up to 3 days after seeding prior to emergence	Broadleaf weeds	None	X	X	X	X			X
Heat® (saflufenacil)	14	Prior to seeding or prior to emergence	Broadleaf weeds	None	X	X	X	X	X	X	
Heat® Complete (pyroxasulfone + saflufenacil)	14 + 15	Prior to seeding or prior to emergence	Broadleaf and grassy weeds	None	X	X		X		X	
Bifecta® EZ (flumioxazin + metribuzin)	5 + 14	Fall, prior to seeding, or up to 3 days after seeding prior to emergence	Broadleaf and grassy weeds	None	X	X				X	
Permit® (halosulfuron)	2	After seeding prior to soil cracking	Broadleaf weeds	Crop restrictions on label							X
Prospect™ (carfentrazone + halauxifen)	4 + 14	Minimum 7 days prior to seeding (*minimum seeding depth of 4 cm/1.6 inches or injury may occur)	Broadleaf weeds	Crop restrictions on label	X					X	
Roundup Xtend™ (dicamba + glyphosate)	4 + 9	Prior to seeding or prior to emergence (Roundup Ready 2 Xtend® soybeans only)	Broadleaf and grassy	Crop restrictions on label						X	

			weeds							
Tough 600 EC® (pyridate)	6	Prior to seeding or prior to emergence	Broadleaf weeds	None	X			X	X	
Valtera™/Valtera™ EZ (flumioxazin)	14	Fall, prior to seeding, or up to 3 days after seeding prior to emergence (refer to label for specific crop instructions)	Broadleaf weeds	None	X	X		X	X	
Voraxor® Complete (pyoxasulfone + saflufenacil + trifludimoxazin)	14 + 15	Prior to seeding or prior to emergence	Broadleaf and grassy weeds	Crop restrictions on label	X	X	X	X	X	
Voraxor™ (saflufenacil + trifludimoxazin)	14	Prior to seeding or prior to emergence	Broadleaf weeds	Crop restrictions on label	X	X	X	X	X	
Zidua® SC (pyoxasulfone)	15	Prior to seeding or prior to emergence	Broadleaf and grassy weeds	None	X	X	X	X	X	

**Refer to the product label or consult with chemical manufacturer for tank mix options.**

\*There may be restrictions on label for rates, application timing, varieties, or soil types. Consult label or manufacturer for more detail and always read and follow label directions. Applications of some of these products when ground is cracking or crops are beginning to emerge can lead to severe crop injury. This information is only a guide, if label information differs, follow label instructions.

*Last updated April 2025*