

Crop, Situation, and Active Chemical Per Broadcast Acre	Weeds Controlled	Formulated Material Per Broadcast Acre	Time of Application	Method of Application and Precautions
WHEAT				
chlorsulfuron/metsulfuron @ 0.023 lb/A	Mustards, henbit, chickweed, mayweed, buttercup, coreopsis, primrose, dock, and suppression of ryegrass, Hoelon resistant ryegrass, cheat, and garlic.	Finesse 75 DF 0.5 oz/A.	Immediately after planting. Add glyphosate or paraquat if emerged vegetation present.	Note: May only be followed with STS soybean in spring if pH is 7.5 or less. Carryover will injure non-STs soybean varieties.
chlorsulfuron/flucarbazone @ 0.034 to 0.04 lb/A	Same as above.	Finesse Grass and Broadleaf 70 DF 0.75 to 0.9 oz/A. Add nonionic surfactant.	2-leaf wheat – prior to joint. Apply when ryegrass has 2-3 leaves.	Same as above.
flufenacet/metribuzin @ 0.55 to 0.92 lb/A	Annual bluegrass and broadleaf weeds. Ryegrass suppression.	Axiom 68 DF 6 to 10 oz/A. See label for soil type restrictions.	Spike to 2-leaf wheat.	Apply early. Some varieties may be injured by metribuzin (see Sencor). Will suppress ryegrass, but must follow with post application of Axial XL, Osprey or PowerFlex.
penoxaden @ 0.053 lb/A	Ryegrass.	Axial XL 0.42 EC 16.4 oz/A.	Apply to 1-leaf to 2-tiller ryegrass. Apply from 2-leaf wheat to pre-boot. 60 day PHI.	Do not use on oats. Do not tank mix with 2 4-D.
diclofop @ 0.5 to 1.0 lb/A	Ryegrass. In wheat only.	Hoelon 3 EC 2 to 2 2/3 pt/A preemergence (at planting). 1 1/3 pt/A on 1- to 4-leaf ryegrass. 2 pt/A on 4- to 5-leaf ryegrass. 2 2/3 pt/A on early tillering ryegrass. (No adjuvants required.)	Pre and early postemergence. Either at planting or when ryegrass is in 1- to 4-leaf stage.	Expect slow results. Larger weeds require higher dosage rates. Do not tank mix with 2,4-D, Harmony Extra or Express or loss of Hoelon activity will occur. Do not tank mix with liquid nitrogen. Hoelon will kill oats. Hoelon has a 77 day PHI.
mesosulfuron-methyl @ 0.013 lb/A	Ryegrass, wild oat, annual bluegrass and Hoelon-resistant ryegrass.	Osprey 4.5 WDG 4.75 oz/A. Follow label recommendation for adjuvant and fertilizer carrier.	Apply to winter wheat only from emergence up to joint stage. Do not apply more than 4.75 oz/A on one wheat crop.	Apply to small actively growing ryegrass in the 4-leaf to 2-tiller growth stage. Osprey will control larger ryegrass under good conditions as a salvage treatment, but significant yield loss from ryegrass competition will occur if it is not controlled early. Rainfast in 4 hours. Cold weather following an application may reduce effectiveness. For spring applications, avoid simultaneous activation of topdress nitrogen and Osprey.
FOR SEVERE RYEGRASS INFESTATIONS/ALS/HOELON-RESISTANT RYEGRASS				
Where ryegrass populations are most severe, especially resistant ryegrass, it may be necessary to take a program approach. This may include (1) a full tillage program following the first “flush” of ryegrass followed by a post applied ryegrass herbicide or (2) a preemerge application of Finesse in the fall followed by a post ryegrass herbicide or (3) a sequential program of either Axial or Osprey in the fall, followed by a spring application of either Axial or Osprey (each herbicide can only be used once per season), or (4) a sequential program of Axiom followed by Axial XL (best option for ALS/Hoelon-resistant ryegrass).				
pendimethalin @ 1.0 lb/A	Residual only. Suppression of ryegrass. Good control of small-seeded winter annual weeds.	Prowl H₂O 3.8 CS 2.1 pt/A.	After wheat has 1 leaf, until 4 tillers. Prior to weed germination.	Emerged weeds will not be controlled. University testing has shown good crop safety both pre and delayed pre (in cases of poor stand) as long as seed is covered by at least 0.5 inch of soil. Prowl H ₂ O can be tank mixed with Axial, Hoelon, PowerFlex or Osprey to provide around 30 days of residual ryegrass control.

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pyroxsulam @ 0.016 lb/A	Ryegrass, henbit, vetch, chickweed, curly dock and others.	PowerFlex 7.5 DG 3.5 oz/A. Add 0.5% nonionic surfactant or 0.8% crop oil concentrate.	Apply from 3-leaf to joint, after ryegrass has emerged.	Do not apply more than 3.5 oz/A per year. Do not use on oats. Do not harvest within 60 days. See label for nitrogen restrictions.
metribuzin @ 0.094 to 0.141 lb/A	Cheat, bluegrass, and little barley.	Metribuzin 75 DF 2 to 3 oz/A.	After wheat plants have 2 leaves and 1 inch secondary roots.	Do not use on oats. Best cheat control with fall application. Soft Red Winter Wheat Reaction to Sencor. Some wheat varieties are tolerant to Sencor and some will be injured. For a list of Sencor-tolerant wheat varieties, go to www.uaex.edu . Avoid use on sandy soils.
2,4-D amine or LV esters @ 0.5 to 0.75 lb/A	Mustard, thistles, buttercup, dock seedlings, horseweed seedlings, vetch and winter peas.	2,4-D amine or LV esters 1 to 1.5 pt/A of 4 lb/gal 2,4-D.	In spring after the wheat plants have tillered and are 4 to 8 inches tall to the time the joint begins to elongate. (Growth stages 3 to 5.)	Apply when temperature is above 60°F and when no rain is expected for 12 hrs. Do not graze lactating dairy animals until 7 days after application. AVOID DRIFT.
2,4-D LV esters @ 0.75 to 1 lb/A	Wild onion or garlic.	2,4-D LV esters 1 1/2 to 2 pt/A of 4 lb/gal formulation. Add a surfactant. Use 2 pt rate only if severe infestations and if some injury can be tolerated. See right column for addition of Banvel .	In spring after the wheat plants have tillered and are 4 to 8 inches tall to the time the joint begins to elongate. (Growth stages 3 to 5.) The LV esters can be applied in liquid N if the optimum timing for the 2 applications coincide.	Prevents seed and aerial bulblets but will not completely control. Do not graze lactating dairy animals until 14 days after application. AVOID DRIFT. Banvel can be added at the rate of 4 oz/A of 4 lb/gal or 8 oz/A of 2 lb/gal Banvel. This may increase garlic suppression. It is less selective and should not be used unless some injury can be tolerated. Do not add Banvel if any joint movement has occurred in wheat.
thifensulfuron/tribenuron @ 0.023 to 0.028 lb/A	Wild garlic, buttercup, mayweed, dock, chickweed, primrose, and suppression of vetch.	Harmony Extra 75 SG 0.75 to 0.9 oz/A. Surfactant required for both water and liquid N carriers.	In early to mid-March when wild garlic is 6" to 12" tall.	Apply to actively growing weeds. May be tank mixed with liquid N if slurried in water first. Thorough spray coverage is necessary; coarse spray is not recommended. May be used on oats after 3-leaf but prior to jointing. Do not use on Ogle Premier or Porter oat varieties.
thifensulfuron/tribenuron + 2,4-D @ 0.023 to 0.75 lb/A	Horseweed.	Harmony Extra 75 SG + 2,4-D LV ester 0.75 oz/A + 1.5 pt/A of 4 lb/gal formulations. Add surfactant.	See 2,4-D above.	For severe horseweed infestations, add 4 oz of Clarity. Effective treatment when intentions are to plant soybeans after harvest.

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tribenuron @ 0.008 to 0.016 lb/A	Buttercup, mayweed, chickweed. Suppression of vetch and curly dock.	Express 75 DF 0.17 to 0.33 oz/A. Surfactant required for both water and liquid N carriers.	Apply before flag leaf emergence.	Same as above.
prosulfuron @ 0.009 to 0.018 lb/A	Wild garlic, vetch, chickweed, henbit.	Peak 57 WG 0.25 to 0.5 oz/A. Add a surfactant.	After wheat plants have developed 3 leaves and before second node is detectable.	Expect slow results. Use high rate for garlic. (10 month minimum plant back interval for soybeans.)
Preharvest				
glyphosate @ 1 lb/A	Annual broadleaf and grass weeds and johnsongrass.	Glyphosate (4 lb/gal formulations) 2 pt/A.	Timing after hard dough stage (30% or less moisture) and at least 7 days prior to harvest.	Apply in spray volume of 3 to 10 GPA. Not recommended for use on wheat grown for seed because reduction in germination and vigor can occur.
carfentrazone @ 0.0312 lb/A	Morningglory desiccation.	Aim 2 EC 2.0 oz/A. Add 1% crop oil concentrate.	7 days prior to harvest.	Good coverage is critical to Aim activity. 10 gpa is recommended.
Clearfield Wheat				
imazamox @ 0.032 to 0.047 lb/a	Ryegrass, cheat, and winter annual weeds.	Beyond 1 AS 4 to 6 oz/A. Surfactant and liquid nitrogen or ammonium sulfate required as adjuvants.	Apply from 2- to 4-leaf ryegrass.	Apply on Clearfield wheat hybrids only.