

SMALL GRAINS WEED MANAGEMENT

	annual bluegrass	annual ryegrass	canarygrass	little barley	wild garlic	wild onion	henbit	curly dock	swinecress	vetch	buttercup	Shepherd's-purse	bittercress	cutleaf eveningprimrose	chickweed
PREPLANT:															
Finesse	9	7	-	3	5	5	9	8	9	3	9	9	9	9	9
Sharpen	1	1	-	-	-	-	8	8	8	8	8	8	8	8	8
PREEMERGENCE:															
Finesse	9	7	-	3	5	5	9	8	9	3	9	9	9	9	9
POSTEMERGENCE:															
Anthem Flex	8	8	-	-	-	-	8	-	8	0	7	7	-	-	8
Zidua WG/Zidua SC	8	8	-	-	-	-	8	-	8	0	7	7	-	-	8
2,4-D	0	0	0	0	6	8	7	9	8	9	9	9	9	9	8
dicamba plus 2,4-D	0	0	0	0	8	9	8	9	9	9	9	9	9	9	9
Harmony Extra	0	0	0	0	9	7	8	9	8	8	9	9	9	8	9
Hoelon	0	9 ³	8	5	0	0	0	0	0	0	0	0	0	0	0
metribuzin	9	7 ⁴	6	7	0	0	9	7	8	3	9	9	9	8	9
Osprey	9	9 ⁵	8	5	5	5	9	7	8	3	9	9	6	6	7
Axial	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0
Powerflex HL	8 ⁶	9 ⁵	9	3	5	5	9	9	9	9 ⁷	9	9	9	9	9
Prowl H ₂ O ²	9	7	8	3	0	0	9	3	-	0	-	-	-	3	-
Finesse	9	7 ⁵	-	0	6	6	9	8	8	3	8	9	9	8	9

¹ Not all small-grain herbicides are listed. Not all the herbicides or their use pattern is labeled or safe on all small grains. Following is a summary of which crop/use pattern labeled on small grains grown in Louisiana: **Wheat:** All herbicides listed are labeled. **Barely:** Do not use Osprey or Powerflex at any time or Finesse preplant or preemergence. **Oats:** Only 2, 4-D and Harmony Extra are labeled. **Rye:** Only 2, 4-D is labeled.

²Prowl H₂O will not control emerged weeds. Apply after wheat emerges but before weeds emerge. Use as a residual component with postemergence herbicides.

³Will not control ACCase resistant ryegrass.

⁴This rating is based on fall applications made to wheat with 2-3 leaves before ryegrass emerges. Later applications are not effective.

⁵Will not control ALS-resistant ryegrass.

⁶Not listed on the label, but fall applications have controlled small bluegrass in Louisiana. Spring applications do not consistently control bluegrass.

⁷Expect regrowth 4-6 weeks after application; follow up applications of 2,4-D or Harmony are usually required.

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Table 2. Control strategies for selected weeds.¹

Weed Problem	Suggested Management Strategies
General weed control	The best weed control and wheat yields are observed when weeds are managed in the fall. Fields should be treated with glyphosate or paraquat prior to or at planting to ensure wheat emerges before weeds.
Ryegrass	Two applications are usually required to manage ryegrass. The first application should be applied in the fall, and the second application should be applied in the winter (January or February). Metribuzin, Finesse, Osprey, Powerflex, Anthem Flex and Zidua are good choices for managing ryegrass in the fall. Metribuzin must be applied at the 2- to 3-leaf wheat stage before ryegrass emerges. To control ryegrass, Finesse should be applied preplant or preemergence before wheat and ryegrass emerge. When using Finesse, fields must be fallowed or planted to STS soybeans. Powerflex and Osprey should be applied postemergence when ryegrass reaches the 2- to 3-leaf stage. Finesse, Powerflex and Osprey will not control ALS resistant ryegrass. Anthem Flex and Zidua have to be applied as a delay-PRE following 80% wheat emergence. Hoelon and Axial XL are the best choices for managing ryegrass in January or February. Hoelon will not control ACCase-resistant ryegrass or ryegrass that has tillered. Axial has been the most consistent herbicide for managing ryegrass in February.
vetch	Two applications are often required to manage severe infestations. Powerflex and Harmony Extra can be used in the fall for control. In most situations, Powerflex in the fall followed by Harmony Extra in January or February is the best control strategy. 2,4-D can also be used after wheat has finished tillering and before jointing.
little barley	Start clean and apply metribuzin as soon as wheat reaches the 2- to 3-leaf stage. A second application may be required after wheat begins to tiller. Osprey, Powerflex and Axial may provide some suppression but will not control little barley.

¹See next section for more information regarding specific herbicides. Labels and recommendations may change. Always consult the label before using suggested herbicides.

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Active Ingredient and Rate	Formulated Product and Rate	Weeds Controlled	Remarks and Precautions
PREPLANT/PREEMERGENCE:			
chlorsulfuron @ 0.0078-0.0195 lb/A + metsulfuron @ 0.0016-0.0039 lb/A	Finesse Cereal and Fallow 75 DF @ 0.2-0.5 oz/A	Most common broadleaf weeds and annual bluegrass. Suppresses ryegrass.	Wheat only: Do not apply to soils with a pH above 7.9. Apply before planting. Drill wheat at least 1 inch deep or injury may occur. Do not use if wheat will be broadcast-seeded. Can be mixed with glyphosate to control emerged weeds. Extremely long rotation interval for most crops grown in Louisiana. STS soybeans can be grown 6 months after application; all other crops can be grown 18 months after application. Do not use an organophosphate insecticide within 60 days of application. Can be applied in a liquid nitrogen solution. No grazing restrictions.
POSTEMERGENCE:			
pyroxasulfone @ 0.06-0.131 lb/A + carfentrazone @ 0.004-0.009 lb/A	Anthem Flex @ 2-4.5 oz/A	Annual bluegrass, ryegrass, other small-seeded broadleaf weeds	DELAYED PREEMERGENCE TO EARLY POSTEMERGENCE ONLY. Do not apply until 80% of the wheat has germinated and the shoot is at least 1/2 inch tall up to the 4 th tiller stage. Do not apply seed wheat deeper than 1.5 inches, but seed at least 1 inch deep. Excessive rainfall or poor environmental conditions after application can lead to injury. Do not apply to broadcast seeded wheat.
pyroxasulfone @ 0.05-0.08 lb/A	Zidua WG @ 1-1.5 oz/A Zidua SC @ 1.75-4 oz/A	Annual bluegrass, ryegrass, other small-seeded broadleaf weeds	DELAYED PREEMERGENCE TO EARLY POSTEMERGENCE ONLY. Do not apply until 80% of the wheat has germinated and the shoot is at least 1/2 inch tall up to the 4 th tiller stage. Do not apply seed wheat deeper than 1.5 inches, but seed at least 1 inch deep. Excessive rainfall after application or poor environmental conditions can lead to injury. Do not apply to broadcast seeded wheat.
2,4-D amine @ 0.5 - 1.0 lb/A 2,4-D ester @ 0.21 – 0.5 lb/A 2,4-D acid @ 0.21 – 0.7 lb/A	Various formulations. See product label for specific rates.	Dock, plantain, mustard and other broadleaf weeds, plus winter peas and vetch Wild onion or wild garlic. Use highest labeled rate. Control will not be complete, but aerial bulblet formation will be reduced. Less effective on wild garlic than on wild onion.	Application timing and grazing restrictions may vary; always refer to the label. Most labels allow applications after the onset of tillering. Applications are safest after 2-3 tillers have formed. Do not apply at panicle initiation, panicle differentiation, boot or heading stages. Panicle initiation and differentiation occur around the time the first internode is 0.5 inches long. Choose sunny days for making the application. LVE formulation is more compatible with nitrogen solutions. Do not graze or feed forage from treated fields within 2 weeks after treatment. Do not exceed these rates, or severe injury may occur. If used on oats or rye, make

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POSTEMERGENCE continued:			
dicamba @ 0.125 lb/A + 2,4-D amine @ 1 lb/A	4 lb/gal dicamba formulation @ 4 oz/A + Various 2,4-D formulations. See product label for specific rates.	Most broadleaf weeds, winter peas, vetch. More effective on wild onion and wild garlic than 2,4-D alone	Wheat, Barley: Do not use unless potential injury is acceptable. Application timing same as for 2,4-D, except that this combination may not be used after jointing.
diclofop @ 0.80–1.5 lb/A	Hoelon @ 2.0–3.33 pt/A	Annual ryegrass. Does not control annual bluegrass.	Wheat, Barley: Apply 2.0-2.66 pts/A to ryegrass from emergence until the 2-leaf stage. Use 2.66 to 3.33 pt/A from the 3-leaf stage to tillering. Do not mix with other herbicides.
metribuzin @ 0.094-0.14 lb/A	75 DF formulation @ 2-3 oz/A 4 lb/gal formulation @ 3-4.5 oz/A	Annual bluegrass, henbit, chickweed	Wheat, Barley: Apply between the 2-leaf and 2-tiller crop stage before weeds emerge. Injury may occur when applications are made to waterlogged soils. Some varieties may be sensitive to metribuzin. Do not use if wheat has been broadcast-seeded.
mesosulfuron-methyl 0.013 lb/A	Osprey @ 4.75 oz/A Add MSO @ 1.3-1.5 pt/A	Annual bluegrass, limited broadleaf weed control Good control of non-ALS resistant ryegrass.	Wheat only: Apply when ryegrass is in the 1-leaf to 2-tiller stage. Can be applied from wheat emergence to jointing. Best results are obtained if applications are made before ryegrass tillers. Some transient leaf burn may occur if applied with nitrogen fertilizers. Can be tank-mixed with some broadleaf herbicides, insecticides and fungicides; consult label. See label for rotation intervals.
pendimethalin @ 0.7 to 1.4 lbs ai/A	Prowl H ₂ O @ 1-3 pt/A Rate depends upon soil type. See label.	Residual/preemergence control of many broadleaf weeds and annual grasses. Suppresses ryegrass.	Wheat only. Apply after wheat reaches the 1-leaf stage until flag leaf emergence. Wheat should be planted 0.5- to 1-inch deep. Must be applied before weeds emerge. May be applied with any herbicide labeled for wheat. Applications before wheat emerges may result in severe stand reductions. Do not harvest hay or forage within 28 or 11 days of application, respectively. Do not apply within 60 days of harvest.
pinoxaden @ 0.054	Axial XL @ 16.4 oz/A	Ryegrass – Will not kill Hoelon resistant ryegrass. Does not control annual bluegrass.	Wheat and Barley: Apply between the 2-leaf and preboot stage. For optimum control, apply prior to the 3-tiller stage of ryegrass. Can be tank-mixed with some broadleaf herbicides, insecticides and fungicides. Consult label for approved pesticides. Do not graze within 30 days of application or harvest within 60 days of application. Straw can be fed to livestock 60 days after application. Rotation restrictions: 0 days – wheat

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			and Barley; 30 days – leafy and root crops; 120 days – all other crops.
POSTEMERGENCE continued:			
pyroxsulam @ 0.002 lb ai/A	Powerflex HL @ 2 oz/A Add 0.25-0.5% v/v NIS + plus 1 to 2 qt/A UAN or 1.5 to 3 lb/A AMS; 1 to 1.25 % v/v COC; or 1% v/v MSO.	Most common broadleaf weeds, including vetch. Good annual bluegrass control when applied in the fall. Excellent control of non-ALS resistant ryegrass.	Wheat only. Apply anytime between the 3-leaf stage and jointing. Best results obtained when applied in the fall to actively growing weeds. COC or MSO may be required with spring applications, large weeds or under poor growing conditions. COC and MSO increase the risk of injury. Do not apply liquid fertilizer within 7 days of an application. Do not graze within 7 days or cut hay within 28 days of an application. Do not apply organophosphate insecticides within 5 days of an application. Cotton, soybean, grain sorghum and sunflowers can be planted 3 months after application. Corn can be planted 9 months after application. The rotation interval for rice and sweet potatoes is 12 months.
thifensulfuron @ 0.009- 0.018 lb/A + tribenuron @ 0.0.0045 - 0.009 lb/A oz/A	Harmony Extra SG @ 0.45–0.9 oz/A Apply with NIS @ 1-2 pt/100 gal	Wild garlic and many broadleaf weeds. Use 0.75 to 0.9 oz/A for wild garlic. Does not control wild onion.	Wheat, Barley, Oats: Apply after the 2-leaf stage but before the flag leaf emerges. Do not use with nitrogen.
PREHARVEST DESSICANTS:			
carfentrazone @ 0.016-0.032 lb/A	Aim @ 1-2 oz/A Add 0.25% v/v NIS	Broadleaf weeds	Wheat only. Do not apply until grain contains less than 30% moisture. Preharvest interval is 3 days. Allow up to 10 days for optimum desiccation effect.
saflufenacil @ 0.02-0.04 lb/A	Sharpen @ 1-2 oz/A Add 1% MSO + AMS	Broadleaf weeds	Wheat and Barley: Do not apply until grain contains less than 30% moisture. Preharvest interval is 3 days. Allow up to 10 days for optimum desiccation effect.

¹ Not all small grain herbicides are listed. Not all the herbicides or their use patterns are labeled for or safe on all small grains. Following is a summary of which crop/use pattern labeled on small grains grown in Louisiana. **Wheat:** all herbicides listed are labeled. **Barley:** do not use Osprey or Powerflex at anytime or Finesse preplant or preemergence. **Oats:** only 2, 4-D and Harmony Extra are labeled. **Rye:** only 2, 4-D is labeled.