

**SMALL GRAIN INSECTICIDE PERFORMANCE RATING, 2024**  
(Barley, Wheat, Oats and Rye)

Insecticide	Chemistry	Restricted Entry Interval (hours)	Restricted Use (R)	Armyworm	Greenbug/Aphid	Grasshopper	Hessian Fly	Cereal Leaf Beetle
Cruiser	NEO	12			8		7	
Gaucho/Axcess/Senator	NEO	12			8		7	
NipsIt Inside/Poncho	NEO	12			8		7	
Dimethoate	OP	48			7	6		
Baythroid XL	SyP	12	X	8	8	7		7
Lannate	Car	48	X	7	7	3		8
Malathion/Fyfanon	OP	12		3	6	6		8
Mustang Maxx/Respect	SyP	12	X	8	8	7		7
Proaxis/Declare	SyP	24	X	8	8	7		7
Sevin	Car	12		6	0			7
Blackhawk	SP	4		7	0	2		
Karate/Silencer/Lambda-Cy/Warrior	SyP	24	X	8	8	7		7
Transform	SX	24			9			

**Rating Scale:** 0 = no control, 10 = excellent

The performance ratings in the chart are for comparison purposes only and are not necessarily a measure of percent control.

**QUICK VIEW THRESHOLD GUIDE**

Insect	Threshold	Scouting Procedure
Armyworm, Army Cutworm	Fall infestation: 6 larvae per square foot. Spring infestation: Head cutting and larvae present.	Inspect area at base of plants under leaves and debris in 4 spots in the field.
Cereal Leaf Beetle	1 beetle per stem.	Examine 25 plants in 4 spots (100/field)
Grasshopper	When substantial damage is occurring.	Examine plants in 4 spots in field.
Greenbug	Plants up to 6 inches – 50 per row foot. 6 to 10 inches – 200 per row foot. 10 to 20 inches – 300 per row foot. 30+ inches – 800 per row foot.	Examine plants in 4 spots in field.

**SMALL GRAIN INSECT CONTROL**  
(Barley, Wheat, Oats and Rye)

Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest (PHI)	Restricted Entry Interval (REI) Hours	
<b>Armyworm</b> <b>Army Cutworm</b> For fall infestation, treat when populations reach 6 larvae per square foot. Apply when larvae are present and head cutting is occurring after wheat has reached milk/soft dough stage. Consider application in heading wheat prior to milk stage if most leaves are destroyed and larvae are observed in the panicles (>20 larvae/sq ft.).	beta-cyfluthrin (R)		0.008-0.014			30 (grain)		
	Baythroid XL 1 EC	1.0-1.8 oz		71-128		3 (grazing)	12	
	carbaryl		1-2			48 (grain)	12	
	Sevin XLR or 4F	1-2 qt		2-4		14 (grazing)	12	
	gamma-cyhalothrin (R)		0.01-0.015					
	Proaxis 0.5 CS	2.56-3.84 oz		33.3-50	Labeled on wheat only.	14	24	
	Declare 1.25 CS	1.02-1.54 oz		83-125	Labeled on wheat only.	14	24	
	lambda-cyhalothrin (R)		0.015-0.025					
	Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 oz		67-100		14	24	
	spinosad		0.038-0.075			21 (grain)		
Blackhawk	1.7-3.3 oz				0 (grazing)	4		
zeta-cypermethrin (R)		0.011-0.025						
Mustang Maxx 0.8 EC (See Generic Insecticides)	1.76-4.0 oz		32-73		14	12		
<b>Greenbug and Other Aphids</b>	<b>Barley Yellow Dwarf Virus (BYD):</b>				<b>Greenbug Treatment Level:</b>			
	The most effective method of preventing BYD is to avoid planting early, which increases the risk of developing fall BYD infections. If planting early, using an insecticide seed treatment or foliar application in late fall or early spring may reduce incidence of BYD.				Plant Height	Number per Linear Foot of Drill		
					4-6 inches	50		
					6-10 inches	200		
					10-20 inches	300		
					30+ inches	800		
	dimethoate		0.375				35 (grain)	48
	Dimethoate 4 E	0.75 pt		10.6	Labeled on wheat only.		14 (grazing)	
	malathion						7	12
	Fyfanon 5 lb	1.5 pt	1	5.3				
	beta-cyfluthrin (R)		0.014-0.019				30 (grain)	12
	Baythroid XL 1 EC	1.8-2.4 oz		53-71			3 (grazing)	
	gamma-cyhalothrin (R)		0.01-0.015					
	Proaxis 0.5 CS	2.56-3.84 oz		33.3-50			14	24
	Declare 1.25 CS	1.02-1.54 oz		83-125.5			14	24
lambda-cyhalothrin (R)		0.015-0.025						
Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 oz		67-100			14	24	
sulfaxaflor		0.023-0.047		Do not make more than 2 applications per crop.		14 (grain)	24	
Transform 50 WG	0.75-1.5 oz					7 (grazing)		
zeta-cypermethrin (R)		0.02-0.025						
Mustang Maxx 0.8 EC (See Generic Insecticides)	3.2-4.0 oz		32-40			14	12	

**SMALL GRAIN INSECT CONTROL**  
(Barley, Wheat, Oats and Rye)

<b>Insect</b>	<b>Insecticide</b>	<b>Formulation/Acre</b>	<b>Lb ai/Acre</b>	<b>Acres/Gallon</b>	<b>Application/Comments</b>	<b>Minimum Days From Last Application to Harvest (PHI)</b>	<b>Restricted Entry Interval (REI) Hours</b>		
<b>Grasshopper</b>  Treat when damage is occurring.	beta-cyfluthrin (R) Baythroid XL 1 EC	1.8-2.4 oz	0.014-0.019	53-71		30 (grain) 3 (grazing)	12		
	dimethoate Dimethoate 4 E	0.75 pt	0.375	10.6	Labeled on wheat only.	35 (grain) 14 (grazing)	48		
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125	Labeled on wheat only. Labeled on wheat only.	14 14	24 24		
	lambda-cyhalothrin (R) Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 fl oz	0.015-0.025	67-100		14	24		
	malathion Fyfanon 5 EC (See Generic Insecticides)	1.5 pt	1	5.3		7	12		
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC (See Generic Insecticides)	3.2-4.0 oz	0.02-0.025	32-40		14	12		
	<b>Hessian Fly (Wheat)</b>					Preventative treatment for Hessian fly is not typically recommended in Arkansas. Hessian fly can be controlled by cultural methods: <b>a.</b> Burn wheat stubble and disc under. <b>b.</b> Destroy volunteer wheat. <b>c.</b> Plant late in fall, mid October or early November. <b>d.</b> Plant resistant varieties. <b>e.</b> Consider a seed treatment if wheat is planted early.  Foliar treatments should only be used on early planted wheat if an insecticide seed treatment was not used. Target adults and/or eggs shortly after plants emerge (2-3 leaf stage).			
	<b>At planting treatments:</b>								
clothianidin NipsIt Inside 5 FS Poncho 600	1.79 oz/100 lb seed 1.79 oz/100 lb seed								12
imidacloprid Gaucho 600 F Access 5 F Senator 5 FS	1.2-2.4 oz/100 lb seed 1.2-2.4 oz/100 lb seed 1.2-2.4 oz/100 lb seed								12 12 12
thiamethoxam Cruiser 5 FS	0.75-1.33 oz/100 lb								12
<b>Foliar Applied Treatments:</b>									
lambda-cyhalothrin (R) Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 oz	0.015-0.03	66.7-100		14				24
gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33.3-50 83-125.5		14				24
<b>Cereal Leaf Beetle</b>  Treat when an average of 1 beetle per stem is found.	beta-cyfluthrin (R) Baythroid XL 1 EC	1.0-1.8 oz	0.008-0.014	71-128		30 (grain) 3 (grazing)	12		
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125	Labeled on wheat only. Labeled on wheat only.	14 14	24 24		
	lambda-cyhalothrin (R) Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 fl oz	0.015-0.025	67-100		14	24		
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC (See Generic Insecticides)	1.76-4.0 oz	0.011-0.025	32-73		14	12		