

GRAIN SORGHUM INSECTICIDE PERFORMANCE RATING, 2023

	Chemistry	Restricted Entry Interval (hours)	Restricted Use (R)	Chinch Bug	Sorghum Webworm	Corn Earworm	Fall Armyworm	Fire Ants	Greenbug/Yellow Sugarcane Aphid/ Corn Leaf Aphid	Sugarcane Aphid	Sorghum Midge	Stink Bug
Cruiser	NEO	12		8				7	7	8		
Gaucho/Axcess/Senator	NEO	12		8				7	7	8		
NipsIt Inside/Poncho	NEO	12		7					7	8		
Asana XL/Adjourn	SyP	12	X	7	5	4	4		8	0	8	7
Baythroid XL	SyP	12	X	7	5	5	4		8	0	8	7
Besiege	DM+SyP	24	X	7	9	9	9		8	0	8	7
Blackhawk	SP	4			7	8	8	0	0	0	7	0
Dimethoate	OP	48		5	4		5		8	3	8	5
Karate Z/Silencer/Lambda-Cy/Warrior	SyP	24	X	7	5	5	4		8	0	8	7
Heligen	Misc	4				7						
Lannate	Car	48	X	5	8	8	8		7	3	6	5
Mustang Maxx/Respect	SyP	12	X	7	5	5	4		8	0	8	7
Prevathon/Vantacor	DM	4			9	9	9					
Proaxis/Declare	SyP	24	X	7	5	5	4		8	0	8	7
Sefina	Misc.	12	X							7		
Sevin/Carbaryl	Car	12		7	7	6	7		5		6	5
Sivanto	BU	4								9		
Transform	SX	24							9	8		

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
Sugarcane Aphid	25% infestation with at least 50 aphids per leaf	Scout field edges first – watch closely for expanding infestations
Whorl Feeders	3-6 larvae per whorl	Examine 25 plants in 4 spots (100/field)
Chinch Bug	When stand is threatened	Watch for yellowing/reddening and/or twisting of leaves Check under leaf sheath near soil line for chinch bugs
Greenbug	Plants up to 6 inches – visible damage with colonies present 6 inches to preboot – treat before entire leaves die Preboot to hard dough – treat when 2 or more entire leaves die	Examine 25 plants in 4 spots (100/field)
Yellow Sugarcane Aphid	1 aphid per seedling	Examine 25 plants in 4 spots (100/field)
Sorghum Midge	1 adult midge per head when 25%-30% of plants are flowering	
Corn Earworm/Fall Armyworm	1 larvae 1/2-inch long or longer per head	
Sorghum Webworm	5 larvae per head	
Stink Bug	5 per head from flowering to soft dough 16 per head during hard dough	

GRAIN SORGHUM INSECT CONTROL

Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/ Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Soil Pests	clothianidin						
Seed Corn Maggot, White Grubs, Wireworms, Southern Corn Rootworm	Poncho 600	5.1-6.4 oz/100 lb seed					12
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					12
	imidacloprid				Do not graze or feed to livestock within 45 days of planting.		
	Gaicho 5 FS	6.4 oz/100 lb seed				12	
	Access 5 FS	6.4 oz/100 lb seed				12	
Senator 5 FS	6.4 oz/100 lb seed				12		
	thiamethoxam						
	Cruiser 5 FS	5.1-7.6 oz/100 lb seed					12
Chinch Bug	At Planting Treatments:						
On seedling grain sorghum (6" or less), apply foliar sprays when stand is threatened. On taller plants, apply controls when immature and adult bugs infest 75% of the plants.	clothianidin						
	Poncho 600	5.1-6.4 oz/100 lb seed					12
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					12
	imidacloprid				Do not graze or feed to livestock within 45 days of planting.		
	Gaicho 5 FS	6.4 oz/100 lb seed				12	
Access 5 FS	6.4 oz/100 lb seed			12			
Senator 5 FS	6.4 oz/100 lb seed				12		
	thiamethoxam						
	Cruiser 5 FS	5.1-7.6 oz/100 lb seed					12
Use 20-30 gal of water per acre for foliar treatments. Direct sprays toward infested areas.	Foliar-Applied Treatments:						
	beta-cyfluthrin (R)		0.019-0.022			14	12
	Baythroid XL 1 EC	2.0-2.8 oz		45.7-98.5			
	carbaryl		1.0-2.0			21 (grain)	
	Sevin 4L	1-2 qt		4-2		14 (forage)	12
	esfenvalerate (R)		0.03-0.05				
	Asana XL 0.66 EC (See Generic Insecticides)	5.8-9.6 oz		13-22		21	12
	gamma-cyhalothrin 1.25 CS (R)		0.015				
	Prolex 0.5 CS	3.84 oz		33		30	24
	Declare 1.25 CS	1.54 oz		83		30	24
lambda-cyhalothrin (R)		0.03					
Warrior II 2.08 CS (See Generic Insecticides)	1.92 oz		67		30	24	
zeta-cypermethrin (R)		0.02-0.025					
Mustang Maxx 0.8 EC (See Generic Insecticides)	3.2-4.0 oz		32-40		14 (grain & forage) 45 (fodder)	12	
Sugarcane Aphid	At Planting Treatments:						
	clothianidin						
	Poncho 600	5.1-6.4 oz/100 lb seed					12
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					12
	imidacloprid				Do not graze or feed to livestock within 45 days of planting.		
	Gaicho 5 FS	6.4 oz/100 lb seed				12	
Access 5 FS	6.4 oz/100 lb seed			12			
Senator 5 FS	6.4 oz/100 lb seed				12		
	thiamethoxam						
	Cruiser 5 FS	5.1 oz/100 lb seed					12

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours	
Sugarcane Aphid (cont.)	Foliar-Applied Treatments:							
	flupyradifurone Sivanto 1.67 SL	4.0-7.0 oz	0.052-0.09	18.3-32	DO NOT apply more than 28 oz per acre per season. DO NOT use on sweet sorghum.	14 (grain) 7 (forage)	4	
	sulfoxaflor Transform 50 WG	0.75-1.5 oz	0.023-0.047		DO NOT use on sweet sorghum. Do not apply at intervals closer than 14 days apart. Do not apply 3 days before bloom or until after seed set.	14 (grain) 7 (forage)	24	
	afidopyropen Sefina 0.42 DC	6oz	0.02	21.3	May be used on sweet sorghum.	14 (grain) 7 (forage)	12	
Greenbug, Corn Leaf Aphid, Yellow Sugarcane Aphid	At Planting Treatments:				Cruiser, Gaucho, Axxess, Senator, NipsIt and Poncho will give early-season suppression of chinch bugs and aphids.			
	Poncho 600	5.1-6.4 oz/100 lb seed					12	
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					12	
	imidacloprid				Do not graze or feed to livestock within 45 days of planting.			
	Gaucho 5 FS	6.4 oz/100 lb seed					12	
	Axxess 5 FS	6.4 oz/100 lb seed					12	
	Senator 5 FS	6.4 oz/100 lb seed					12	
	thiamethoxam Cruiser 5 FS	5.1-7.6 oz/100 lb seed					12	
	Foliar-Applied Treatments:							
	dimethoate			0.25-0.5				
Dimethoate 4 E	0.5-1.0 pt			8-16		28	48	
Dimethoate 2.67 E	0.75-1.5 pt			5.3-10.7		28	48	
sulfoxaflor Transform 50 WG	0.75-1.5 oz		0.23-0.47		DO NOT use on sweet sorghum. Do not apply at intervals closer than 14 days apart. Do not apply 3 days before bloom or until after seed set.	14 (grain) 7 (forage)	24	
Sorghum Midge Apply controls when 25%-30% of heads have begun to flower (yellow anthers) and the number of midge adults found averages one per head. If adults are found in similar number in 3-5 days after treatment and sorghum is still blooming, treat again.	beta-cyfluthrin (R)							
	Baythroid XL 1 EC	1.0-1.3 oz	0.008-0.01	45.7-80	Apply controls when 25%-30% of heads have begun to flower (yellow anthers) and the number of midge adults found averages one per head. If adults are found in similar number in 3-5 days after treatment and sorghum is still blooming, treat again.	14	12	
	dimethoate							
	Dimethoate 4 E	0.25-0.5 pt	0.125-0.25				28	48
	Dimethoate 2.67 E	6-12 oz		16-32 10.7-21.3			28	48
	esfenvalerate (R)							
Asana XL 0.66 EC <i>(See Generic Insecticides)</i>	2.9-5.8 oz	0.015-0.03		22-44		21	12	
gamma-cyhalothrin 1.25 CS (R)								
Proaxis 0.5 CS	1.92-2.56 oz	0.0075-0.01		50-66.7		21	24	
Declare 1.25 CS	0.77-1.02 oz			125-167		21	24	
lambda-cyhalothrin (R)								
Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	0.96-1.28 oz	0.015-0.02		100-133		30	24	

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Sorghum Midge (cont.)	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	5-6 oz	0.05-0.06	21-25.6		21	24
	methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.6		14	48
	spinosad Blackhawk (See Generic Insecticides)	1.5-3.3 oz	0.034-0.075			21	4
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC (See Generic Insecticides)	1.28-4.0 oz	0.008-0.025	32-100		14 (grain & forage) 45 (fodder)	12
Corn Earworm	Carbamates methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.6		14	48
Whorl Stage: treat when 3-6 worms per plant.	carbaryl Sevin XLR	1-2 qt	1-2			21 (grain) 14 (forage)	12 12
Heading: 1 worm per head, 1/2 inch in size.	Other Chemistry chlorantraniliprole Prevathon Vantacor 5 SC	14-20 oz 1.2-2.5 oz	0.047-0.067	6.4-9.14 107-51		14	4
	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	6-10 oz	0.06-0.097	12.8-21		21	24
	nucleopolyhedrovirus Heligen	0.7-1.4 oz		91.4-183	Apply before reaching economic threshold targeting small larvae. Applications on large larvae often result in poor control. Larvae stop feeding within 1-3 days and die within 3-9 days. See publication AG1306 for more information.	0	4
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075			21	4
Fall Armyworm, Sorghum Webworm	carbaryl Sevin XLR	1-2 qt	1-2	2-4	Heading: Fall Armyworm – Treat when numbers exceed an average of 1 larvae per head, 1/2 inch in size, in maturing sorghum.	21 (grain) 14 (forage)	12 12
Whorl Stage: treat when 3-6 worms per plant.	chlorantraniliprole Prevathon Vantacor 5 SC	14-20 oz 1.2-2.5 oz	0.047-0.067	6.4-9.14 107-51		14	4
Heading: 1 fall armyworm per head, 1/2-inch or larger in size. 5 sorghum webworms per head	methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.022-0.45	5.3-10.7	Sorghum Webworm: Treat when an average of 5 small larvae are found per head. Use higher rate for sorghum webworm.	14	48
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075			21	4

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Stink Bugs Treat when 5 bugs per head from flowering to soft dough are found, or when 16 per head at hard dough are found.	beta-cyfluthrin (R) Baythroid XL 1 EC	1.3-2.8 oz	0.01-0.022	45.7-98.5		14	12
	gamma-cyhalothrin 1.25 CS (R) Proaxis 0.5 CS	2.56-3.84 oz	0.01-0.015	33-50		21	24
	Declare 1.25 CS	1.02-1.54 oz		83-125		21	24
	lambda-cyhalothrin (R) Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 oz	0.02-0.03	66.7-100		21	24
	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	6-10 oz	0.06-0.097	12.8-21		21	24
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC (See Generic Insecticides)	1.76-4.0 oz	0.008-0.025	32-73		14 (grain & forage) 45 (fodder)	12
Fire Ants	imidacloprid Gaucho 5 FS	6.4 oz/100 lb seed			Do not graze or feed to livestock within 45 days of planting.		12
	Axcess 5 FS	6.4 oz/100 lb seed				12	
	Senator 5 FS	6.4 oz/100 lb seed				12	
	thiamethoxam Cruiser 5 FS	5.1-7.6 oz/100 lb seed			Seed treatment.	12	