

GRAIN SORGHUM INSECTICIDE PERFORMANCE RATING, 2017

	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		3				7	7			
Gaucho/Axcess/Senator	NEO	12		3				7	7			
NipsIt Inside/Poncho	NEO	12		7					7			
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
Belt	DM	12			7	7	7					
Besiege	DM+SyP	24	X	7	9	9	9		8	0	8	7
Blackhawk	SP	4			7	8	8	0	0	0		0
Dimethoate	OP	48		5	4		5		8	3	8	5
Karate Z/Silencer/Lambda-Cy	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
Lorsban/Chlorpyrifos/Nufos	OP	24	X	5	6	5	7	7	8	4	6	5
Mustang Maxx/Respect	SyP	12	X	7	5	5	4		8	0	8	7
Prevathon	DM	4			9	9	9					
Prolex/Declare	SyP	24	X	7	5	5	4		8	0	8	7
Sevin	Car	12		7	7	6	7		5		6	5
Sivanto	BU	4								8		

Rating Scale: 0 = no control, 10 = excellent

Shaded boxes indicate products recommended for specific pests in this guide.

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	
Chinch Bug 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.	At Planting Treatments:						
	clothianidin				Apply soil-applied treatments in areas with a history of high populations of chinch bugs.		
	Poncho 600	5.1-6.4 oz/100 lb seed					
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					
	imidacloprid				Cruiser, Gaucho, Axxess, Senator, NipsIt and Poncho will give early season suppression of chinch bugs.		
	Gaucho 5 FS	6.4 oz/100 lb seed					
	Axxess 5 FS	6.4 oz/100 lb seed					
	Senator 5 FS	6.4 oz/100 lb seed					
	thiamethoxam						
	Cruiser 5 FS	5.1-7.6 oz/100 lb seed					
	terbufos			0.9		100	
	Counter 1.5G	7 oz/1,000 ft of row					
	Foliar-Applied Treatments:						
	beta-cyfluthrin (R)			0.019-0.022		Use 20-30 gal of water per acre. Direct sprays toward infested areas.	14
	Baythroid XL 1 EC	2.0-2.8 oz			45.7-98.5		
carbaryl			1.0-2.0			21 (grain)	
Sevin 80 S	1.25-2.5 lb					14 (forage)	
esfenvalerate (R)			0.03-0.05			21	
Asana XL 0.66 EC	5.8-9.6 oz			13-22			
(See Generic Insecticides)							
gamma-cyhalothrin 1.25 CS (R)			0.015			30	
Prolex/Declare	1.54 oz			83			
lambda-cyhalothrin (R)			0.03			30	
Karate Z 2.08 CS	1.92 oz			67			
(See Generic Insecticides)							
zeta-cypermethrin 0.8 EC (R)			0.02-0.025			14 (grain & forage)	
Mustang Maxx/Respect	3.2-4.0 oz			32-40		45 (fodder)	
Sugarcane Aphid	At Planting Treatments:				Seed treatments have been shown to provide early season control of this pest.		
	clothianidin						
	Poncho 600	5.1-6.4 oz/100 lb seed					
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					
	imidacloprid						
	Gaucho 5 FS	6.4 oz/100 lb seed					
	Axxess 5 FS	6.4 oz/100 lb seed					
	Senator 5 FS	6.4 oz/100 lb seed					
	thiamethoxam						
	Cruiser 5 FS	5.1 oz/100 lb seed					
Foliar-Applied Treatments:							
flupyradifurone			0.052-0.09		DO NOT apply more than 28 oz per acre per season.	14 (grain)	
Sivanto 1.67 SL	4.0-7.0 oz			18.3-32		7 (forage)	

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Greenbug, Corn Leaf Aphid, Yellow Sugarcane Aphid	At Planting Treatments:					
	clothianidin				Cruiser, Gaucho, Access, Senator, NipsIt and Poncho will give early-season suppression of chinch bugs and aphids.	
	Poncho 600	5.1-6.4 oz/100 lb seed				
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed				
	imidacloprid					
	Gaucho 5 FS	6.4 oz/100 lb seed				
	Access 5 FS	6.4 oz/100 lb seed				
	Senator 5 FS	6.4 oz/100 lb seed				
	thiamethoxam					
	Cruiser 5 FS	5.1-7.6 oz/100 lb seed				
Foliar-Applied Treatments:						
chlorpyrifos (R)			0.25-0.5		Apply sprays when infestation occurs. Yellow Sugarcane Aphid: Treat for 1 aphid per seedling plant or when damage occurs on larger plants. Aphid feeding causes seedling plants to turn purple, similar to phosphate deficiency.	30
Lorsban 4 EC (See Generic Insecticides)	0.5-1.0 pt			8-16		
dimethoate			0.25-0.5		Greenbug Treatment Levels: Emergence to 6 inches high, treat for visible damage with colonies of greenbugs on plants. Larger plants to pre-boot, treat before any entire leaves are killed. Pre-boot to hard dough, treat when greenbug numbers are sufficient to cause death of more than two normal-sized leaves. DO NOT apply more than 3 times. Other Aphids: Control is seldom justified unless plant growth is inhibited. DO NOT apply more than 3 times.	28
Dimethoate 4 E	0.5-1.0 pt			8-16		
Dimethoate 5 E	6.4-12.8 oz			10-20		
Dimethoate 2.67 E	0.75-1.5 pt			5.3-10.7		
Sorghum Midge	beta-cyfluthrin (R)		0.008-0.01		Apply controls when 25%-30% of the 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
	Baythroid XL 1 EC	1.0-1.3 oz				
	chlorpyrifos (R)		0.25		16	30
	Lorsban 4 EC (See Generic Insecticides)	0.5 pt				
	dimethoate		0.125-0.25			
	Dimethoate 4 E	0.25-0.5 pt			16-32	28
	Dimethoate 5 E	3.2-6.4 oz			20-40	
	Dimethoate 2.67 E	6-12 oz			10.7-21.3	
esfenvalerate (R)		0.015-0.03		22-44	21	
Asana XL 0.66 EC (See Generic Insecticides)	2.9-5.8 oz					
gamma-cyhalothrin 1.25 CS (R)		0.0075-0.01		125-167	30	
Prolex/Declare	0.77-1.02 oz					
spinosad		0.034-0.075			21	
Blackhawk	1.5-3.3 oz					

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Sorghum Midge (cont.)	lambda-cyhalothrin (R) Karate Z 2.08 CS <i>(See Generic Insecticides)</i>	0.96-1.28 oz	0.015-0.02	100-133		30
	methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.6		14
	zeta-cypermethrin 0.8 EC (R) Mustang Maxx/Respect	1.28-4.0 oz	0.008-0.025	32-100		14 (grain & forage) 45 (fodder)
Corn Earworm	Carbamates methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.7	Whorl Stage: Damage seldom occurs, but extremely high populations of 3-6 worms per plant may justify treatment. Use 20-30 gal per acre directed into whorls.	14
	carbaryl Sevin XLR or 4 F	3-4 pt	1.5-2.0	2.0-2.7	Heading: Corn Earworm – Treat when numbers exceed an average of 1 larvae per head, 1/2 inch in size, in maturing sorghum.	21 (grain) 14 (forage)
	Other Chemistry chlorantraniliprole Prevathon	14-20 oz	0.047-0.067	6.4-9.14	Resistance or tolerance to synthetic pyrethroid insecticides is developing in the corn earworm. If less than satisfactory control is achieved after a pyrethroid application, rotate to another chemistry.	14
	flubendiamide Belt 4 SC	2-4 oz	0.0625-0.125	32-64		14
	nucleopolyhedrovirus Heligen	0.7-1.4 oz		91.4-183	Use lower rate for larvae smaller than 0.3 inch. Higher rate for larvae 0.3-0.5 inch. Larvae stop feeding within 1-3 days and die within 3-9 days.	0
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075			21 (grain) 3 (forage)
	Fall Armyworm, Sorghum Webworm	carbaryl Sevin XLR	3-4 pt	1.5-2.0	2.0-2.7	Heading: Fall Armyworm – Treat when numbers exceed an average of 1 larvae per head, 1/2 inch in size, in maturing sorghum.
chlorantraniliprole Prevathon		14-20 oz	0.047-0.067	6.4-9.14	Sorghum Webworm: Treat when an average of 5 small larvae are found per head. Use higher rate for sorghum webworm.	14
flubendiamide Belt 4 SC		2-4 oz	0.0625-0.125	32-64		14
methomyl (R) Lannate 2.4 LV		0.75-1.5 pt	0.22-0.45	5.3-10.7		14
spinosad Blackhawk		1.67-3.3 oz	0.038-0.075			21 (grain) 3 (forage)

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Stink Bugs	beta-cyfluthrin (R) Baythroid XL 1 EC	1.3-2.8 oz	0.01-0.022	45.7-98.5		14
	gamma-cyhalothrin 1.25 CS (R) Prolex/Declare	1.02-1.54 oz	0.01-0.015	83-125		30
	lambda-cyhalothrin (R) Karate Z 2.08 CS (See Generic Insecticides)	1.28-1.92 oz	0.02-0.03	66.7-100		30
	zeta-cypermethrin 0.8 EC (R) Mustang Maxx/Respect	1.28-4.0 oz	0.008-0.025	32-100		14 (grain & forage) 45 (fodder)
Fire Ants	imidacloprid Gaucho 5 FS Access 5 FS Senator 5 FS	6.4 oz/100 lb seed 6.4 oz/100 lb seed 6.4 oz/100 lb seed			Seed treatment	
	thiamethoxam Cruiser 5 FS	5.1-7.6 oz/100 lb seed			Seed treatment	
Multiple Species	lambda-cyhalothrin + chlorantraniliprole (R) Besiege 1.25 SC	5-10 oz	0.05-0.1	12.8-25.6	For control of multiple pests including chinch bugs, sorghum midge, fall armyworm, corn earworm, sorghum webworm and stink bug.	30