

Crops - Commercial

Grain Sorghum					
Insect	Insecticide	Amount of Concentrate per Acre	Pounds Active Ingredient per Acre	Acres Treated per Gallon or Pound SP	Economic Threshold When to Treat
Chinch bugs	Soil Insecticides				Preventive: Rates are based on 1,000 row feet.
	chlorpyrifos Lorsban 15G ^{1,2}	8.0 ounces per 1,000 row feet	1.0		
	Seed Treatments				Preventive.
	imidacloprid Gaucho 600	8 fluid ounces per hundredweight seed			
	thiamethoxam Cruiser 5FS	5.1 fluid ounces per hundredweight seed			
	clothianidin Nipsit Inside (5)	5.1-6.4 fluid ounces per hundredweight seed			
	Foliar Sprays				<p>Treat when two or more adults are found on 20% seedling plants.</p> <p>For larger plants, a judgment decision based on bug counts, crop vigor and growing conditions will determine need for treatment.</p>
	cyfluthrin Tombstone (2)	2.0-2.8 ounces	0.038-0.044	64-45.7	
	chlorpyrifos Lorsban	16.0-32.0 ounces	0.5-1.0	8-4	
	gamma-cyhalothrin Declare (1.25)	1.54 ounces	0.015	83.1	
	z-cypermethrin Mustang Max (0.8)	3.2-4.0 ounces	0.02-0.025	40-32	
	lambda-cyhalothrin Karate Z (2.08)	1.92 ounces	0.03	66.7	
	beta-cyfluthrin Baythroid XL (1)	2.0-2.8 ounces	0.02	64-45.7	
a-cypermethrin Fastac (0.83)	3.2-3.9 ounces	0.02-0.025	40-32.8		
Corn earworm, fall armyworm (whorl feeders)	spinosad Blackhawk (0.36)	1.7-3.3 ounces	0.038-0.075	9.4-4.8	Treatment in the whorl stage is rarely needed.
	chlorantraniliprole Prevathon (0.43)	14.0-20.0 ounces	0.047-0.067	9.1-6.4	
	lambda-cyhalothrin, chlorantranilipole Besiege	6.0-10.0 ounces	premix	21.3-12.8	<p>Treat seed heads for one or more worms per head, up until the hard dough stage.</p> <p>Use pyrethroids with caution: Pyrethroid resistance is prevalent in corn earworms in Louisiana.</p> <p>Heligen is only effective on corn earworm.</p>
	spinosad Blackhawk (0.36)	1.7-3.3 ounces	0.038-0.074	4.8-9.4	
Head Worms	chlorantraniliprole Prevathon (0.43)	14.0-20.0 ounces	0.047-0.067	9.1-6.4	
	lambda-cyhalothrin, chlorantranilipole	6.0-10.0 ounces	premix	21.3-12.8	

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	Besiege				
	NPV Heligen	1.0 – 1.6	---	128 - 80	
Aphids except Sugarcane Aphid	dimethoate Dimethoate (4)	8.0-16.0 ounces	0.25-0.5	16-8	Treatments are rarely needed for corn leaf aphid. Infestations of greenbug are rare.
	chlorpyrifos Lorsban (4)	16.0-32.0 ounces	0.5-1.0	8-4	
Sugarcane aphid	Seed Treatments				Insecticide-treated grain sorghum seed may prevent sugarcane aphid colonization for up to 40 days after emergence.
	imidacloprid Gaucho (600)	8 fluid ounces per hundredweight seed	---	---	
	thiamethoxam Cruiser (5)	5.1 fluid ounces per hundredweight seed	---	---	
	clothianidin Nipsit Inside (5)	5.1-6.4 fluid ounces per hundredweight seed	---	---	
	Foliar Sprays				Treat when an average of 50 aphids per leaf is detected on 20% of leaves in a field. Edge treatments may be justified. Pyrethroids for sorghum midge control may flare aphids. Use of defoliant may aid in harvest efficiency.
	sulfoxaflor Transform (50)	0.75 – 1.5 ounce	0.023 – 0.047	16.0 – 10.7	
	flupyradifurone Sivanto (1.67)	4-7 ounces	0.052-0.091	18.3-32	
Resistant/tolerant sorghum varieties					
List of resistant/tolerant varieties available at http://tiny.cc/SorghumHybridsPDF					
Cutworms	chlorpyrifos Lorsban (4)	16.0-32.0 ounces	0.5-1.0	8-4	Treat before injury reduces stand below optimum plant population.
	esfenvalerate Asana XL (0.66)	5.8-9.6 ounces	0.03-0.05	22-13.3	
	z-cypermethrin Mustang Max (0.8)	1.28-4.0 ounces	0.008-0.025	100-32	
	beta-cyfluthrin Baythroid XL (1)	1.0-1.3 ounces	0.008-0.01	128-98.5	
	cyfluthrin Tombstone (2)	1.0-1.3 ounces	0.016-0.020	128-98.5	
	lambda-cyhalothrin Karate Z (2.08)	0.96-1.28 ounces	0.015-0.02	133.3-100	
	gamma-cyhalothrin	0.77-1.02 ounces	0.0075-0.01	166.2-125.5	

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	Declare (1.25)				
	a-cypermethrin Fastac (0.83)	1.3-3.8 ounces	0.008-0.025	98.5-33.7	
Fire ants	thiamethoxam Cruiser (5)	5.1 fluid ounces per hundredweight seed			Preventive treatments.
	imidacloprid Gaucho (480/600)	8/6.4 fluid ounces per hundredweight seed			Soil insecticide rate is based on 1,000 row feet.
	chlorpyrifos Lorsban 15G ^{1,2}	8.0 ounces per 1,000 row feet	1.0 ¹		
	clothianidin Poncho 600	5.1-6.4 fluid ounces per hundredweight seed			
Sorghum midge	chlorpyrifos Lorsban (4)	8.0 ounces	0.25	16	At 25% to 30% bloom, treat for one or more midges per head.
	methomyl Lannate (2.4)	12.0-24.0 ounces	0.225-0.45	10.6-5.3	
	lambda-cyhalothrin Karate Z (2.08)	0.96-1.28 ounces	0.015-0.02	133.3-100	Additional treatments at 5- to 7-day intervals may be needed.
	cyfluthrin Tombstone (2)	1.0-1.3 ounces	0.016-0.02	128-98.5	
	gamma-cyhalothrin Declare (1.25)	0.77-1.02 ounces	0.0075-0.01	166.2-125.5	Plant early and uniformly.
	z-cypermethrin Mustang Max (0.8)	1.28-4.0 ounces	0.008-0.025	100-32	
	esfenvalerate Asana XL (0.66)	2.9-5.8 ounces	0.015-0.030	44.1-22	
	beta-cyfluthrin Baythroid XL (1)	1.0-1.3 ounces	0.008-0.01	128-98.5	
	a-cypermethrin Fastac (0.83)	1.3-3.8 ounces	0.008-0.025	98.5-33.7	
	lambda-cyhalothrin, chlorantranilipole Besiege	5.0-6.0 ounces	premix	21.3-25.6	
Sorghum webworm	spinosad Blackhawk (0.36)	1.7-3.3 ounces	0.038-0.074	4.8-9.4	Treat seed heads for four or more worms per head, up until the hard dough stage.
	methomyl Lannate (2.4)	24.0 ounces	0.45	5.3	
	chlorpyrifos Lorsban (4)	16.0 ounces	0.5	8.0	
	chlorantraniliprole Prevathon (0.43)	14.0-20.0 ounces	0.047-0.067	9.1-6.4	
	lambda-cyhalothrin, chlorantranilipole Besiege	6.0-10.0 ounces	premix	21.3-12.8	
Stalk borers	a-cypermethrin Fastac (0.83)	1.8-3.8 ounces	0.012-0.025	71.1-33.7	Treat before larvae bore into stalk.

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	cyfluthrin Tombstone (2)	1.3-2.8 ounces	0.02- 0.044	98.5-45.7	
	lambda-cyhalothrin Karate Z (2.08)	1.28-1.92 ounces	0.02- 0.03	100-66.7	
	gamma-cyhalothrin Declare (1.25)	1.02-1.54 ounces	0.01- 0.015	125.5-83.1	
	beta-cyfluthrin Baythroid XL (1)	1.3-2.8 ounces	0.01- 0.022	98.5-45.7	
	z-cypermethrin Mustang Max (0.8)	1.76-4.0 ounces	0.011-0.025	72.7-32	
	chlorantraniliprole Prevathon (0.43)	14.0-20.0 ounces	0.047-0.067	9.1-6.4	
	lambda-cyhalothrin, chlorantranilipole Besiege	6.0-10.0 ounces	premix	21.3-12.8	

¹ Refer to label for application instructions/restrictions on application method, i.e. in-furrow, surface band, T-band, etc.

² May cause phytotoxicity if used on light soils.

Grain Sorghum
Insecticide Precautions and Limitations (Refer to insecticide label for complete information.)
Asana XL: Toxic to fish. Do not apply directly to water. Maximum active ingredient per acre per season: 0.15 pound. Preharvest interval: 21 days. REI: 12 hours.
Baythroid: Toxic to fish and aquatic invertebrates. Maximum active ingredient per acre per season: 0.066 pound. Preharvest interval: 14 days. REI: 12 hours.
Besiege: Extremely toxic to fish, aquatic organisms and toxic to wildlife. Maximum active ingredient per acre per season: 0.06 pound lambda-cyhalothrin or 0.2 pound chlorantraniliprole. Preharvest interval: 30 days. REI: 24 hours.
Bifenthrin: Same as Brigade
Blackhawk: Toxic to bees. Toxic to aquatic invertebrates, do not apply directly to water. Maximum active ingredient per acre per season: 0.28 pound. Preharvest interval for grain, straw: 21 days; for forage, fodder, hay: 3 days. REI: 4 hours.
Brigade: Do not apply within 30 days of harvest. Do not graze or cut for feed within 30 days of last application. Toxic to bees, fish and aquatic invertebrates. Maximum active ingredient per acre per season: 0.3 pound. REI: 24 hours.
Counter: Toxic to birds, fish and other wildlife. Keep out of any body of water. REI: 48 hours.
Cruiser: Toxic to wildlife and aquatic invertebrates. Do not apply directly to water and do not allow drift or runoff. REI: 12 hours.
Cyfluthrin: Same as Baythroid, but maximum active ingredient per acre per season: 0.131 pound.
Declare: Same as Karate, but maximum active ingredient per acre per season: 0.04 pound.
Dimethoate: Toxic to wildlife and aquatic organisms. Do not apply after heading. Avoid runoff when spraying. Do not feed or graze within 28 days of the last application. Maximum active ingredient per acre per season: 1 pound. REI: 48 hours.
Force: Highly toxic to fish and other aquatic organisms. Do not apply directly to water or wetlands or within 20 yards of water. Rotate only to corn or soybeans. REI: 0 hours.
Gaucho 600: Highly toxic to birds and aquatic invertebrates. Do not graze or feed livestock on treated seed areas for 45 days after planting. REI: 12 hours.
Intrepid: Drift and runoff may be toxic to sensitive aquatic vertebrates. Do not apply by air within 150 feet or by ground within 25 feet of surface water. REI: 4 hours.

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Insecticide Precautions and Limitations (Refer to insecticide label for complete information.)
Karate Z: Toxic to fish, aquatic organisms and bees. Do not graze livestock on treated areas or harvest for livestock feed. Maximum active ingredient per acre per season: 0.08 pound. Preharvest interval: 30 days. REI: 24 hours.
Lannate: Toxic to fish, birds, bees, other wildlife. Keep out of any body of water. Do not graze or feed to livestock within 14 days of last application. Do not harvest for grain within 14 days of last application. Maximum active ingredient per acre per season: 0.9 pound. REI: 48 hours.
Lorsban: Toxic to bees, birds, fish and other wildlife. Maximum active ingredient per acre per season: 1.5 pounds. Preharvest interval for grain: 30 days; for grazing and silage: 30 days. REI: 12 hours for 15G; 24 hours for 4E.
Mustang Maxx: Toxic to bees, fish and aquatic vertebrates. Maximum active ingredient per acre per season: 0.125 pound. Preharvest interval: 14 days. REI: 12 hours.
Poncho: Do not use treated seed for feed, food or oil. Refer to label for replant restrictions following treated seed planting. Treated seed exposed on soil surface may be hazardous to wildlife.
Prevathon: Maximum active ingredient per acre per season: 0.2 pound. Preharvest interval: 14 days. REI: 4 hours.
Respect: Toxic to bees, fish and aquatic vertebrates. Maximum active ingredient per acre per season: 0.125 pound. Preharvest interval: 14 days. REI: 12 hours.
Sevin: Maximum active ingredient per acre per season: 6 pounds. Preharvest interval for grain/fodder: 21 days; preharvest interval for grazing/silage: 14 days. REI: 12 hours.