

Louisiana Recommendations for Control on Cotton Insects

Insect Control Recommendations for Pre-Bloom Cotton

Insect	Insecticide	Amount of Concentrate per Acre	lb Active Ingredient per Acre	Acres Treated per Gallon or Pound SP	Treatment Threshold
Cutworms	Asana XL (0.66)	5.8 oz.	0.03	22	Treat when loss of satisfactory stand is threatened, or in minimum tillage situations.
	Baythroid XL (1)	0.8 oz.	0.0065	160	
	bifenthrin (2)	2.5 oz.	0.04 - 0.1	20 - 50	
	cyfluthrin (2)	0.8 oz.	0.013	154	
	cypermethrin (2.5)	1.3 - 1.7 oz.	0.025 - 0.033	75 - 100	
	Karate Z (2.08)	0.9 - 1.3 oz.	0.015 - 0.02	142 - 98	
	lambda-cyhalothrin (1)	0.96 - 1.28	0.015 - 0.02	67 - 50	
	Lorsban (4)	32 oz.	1	4	
	Mustang Max (0.8)	1.3 - 2.8 oz.	0.01- 0.017	80 - 47	
Prolex (1.25)	0.77 - 1.02 oz.	0.0075 - 0.01	166 - 125		
Thrips					
Seed Treatment	acephate (90S)	8 oz./100 wt			
	Cruiser (5FS)	0.34 mg AI/seed			
	Gaucho Grande	0.375 mg AI/seed			
At planting in furrow	acephate (90)	0.5 - 1.0 lb	0.45 - 0.9		At planting in furrow.
	Orthene (97)	0.5 - 1.0 lb	0.5 - 0.97		
	Temik (15)	3.3 lb.	0.5		
Foliar Sprays	acephate (90)	3.2 oz.	0.18	5	Treat when immature thrips first appear on seedling cotton before 4 th true leaf. Do not apply acephate, Monitor, or Orthene if spider mites are present.
	acephate (97)	3.0 oz.	0.18	5.3	
	Bidrin (8)	3.2 oz.	0.2	40	
	Dimethoate (4)	6.4 oz.	0.2	20	
	Monitor (4)	6.4 oz.	0.2	20	

NOTE: The Cruiser 5FS label prohibits the use of a neonicotinoid insecticide (e.g. Centric 40WG, Intruder WSP, Trimax PRO, and imidacloprid 4) for 45 days after planting (about 1st square). This recommendation is for resistance management and should also be practiced with Gaucho Grande treated seed. See Cruiser 5FS label for detailed restrictions.

Insect	Insecticide	Amount of Concentrate Per Acre	lb Active Ingredient Per Acre	Acres Treated Per Gallon or Pound SP	Treatment Threshold	
Cotton Aphid	Carbine (50)	1.4 - 2.8 oz.	0.044 - 0.089	11.4 - 5.7	Treat when honeydew, leaf crinkling, and stunting begin to occur uniformly. Note: If Neonicotinoid insecticides fail to provide effective control switch to Carbine 50WP.	
	Centric (40)	2.0 oz.	0.05	8		
	imidacloprid (4)	2.0 oz.	0.0625	64		
	Intruder WSP	0.8 - 1.1 oz	0.035 - 0.05	20 - 14.5		
	Trimax Pro (4.44)	1.8 oz.	0.062	71		
Plant Bug	Carbine (50)	2.3-2.8 oz.	0.072-0.089	7 - 8	Treat when 10 to 25 of these pests per 100 sweeps are found. Adjust pre-bloom treatment levels to maintain between 70% and 85% first position square retention.	
	Cotton Fleahopper	Centric (40)	2.0 oz.	0.05		8
	Clouded	imidacloprid (4)	2.0 oz.	0.0625		64
	Tarnished	Intruder WSP	1.1 oz.	0.05		14.5
		Trimax Pro (4.44)	1.8 oz	0.062		71
Control of cotton fleahoppers can usually be obtained with lower rates than the rates used to control other plant bug pests.						
Multiply clouded plant bug number by 1.5 when determining densities for treatment decision.						
Spider Mite	abamectin (0.15)	4 - 6 oz.	0.0047 - 0.007	32 - 21.33	Treat when mite infestations cause approximately 30% of the plants to have discolored leaves. Spot treat when needed.	
	Fujimite (5)	16 oz.	0.625	8		
	Zeal (72)	1 oz.	0.045	16		
	Zephyr (0.15)	4 - 6 oz.	0.0047 - 0.007	32 - 21.33		
NOTE: Only 1.0 oz./acre of Zeal can be applied per cropping season.						
Bollworm/Tobacco Budworm	Curacron (8)	16 oz.	1	8	Bollgard, Bollgard II or Widestrike: treat when 2%-3% live larvae found in fruiting forms or when 10% of plant terminals are infested with live larvae.	
	Denim (0.16)	8 - 12 oz.	0.01 - 0.015	10.6 - 16		
	Endigo ZC	5.5	1	36.6 - 25.6		
	Steward (1.25)	11.3 oz.	0.11	11.5		
	Tracer (4)	2.1 - 2.85 oz.	0.067 - 0.089	60 - 45		

Insect	Insecticide	Amount of Concentrate Per Acre	lb Active Ingredient Per Acre	Acres Treated Per Gallon or Pound SP	Treatment Threshold
					Non-Transgenic: Start applications when squares are at least one-third grown and 5 live worms per 100 plants plus eggs are present. Apply on an as-needed basis. Shorten the application interval and add an ovicide when tobacco budworm moths are laying eggs.

Insect Control Recommendations for Bloom to Harvest

Insect	Insecticide	Amount of Concentrate Per Acre	lb Active Ingredient Per Acre	Acres Treated Per Gallon or Pound SP	Treatment Threshold
Plant Bug	acephate (90)	0.5 - 0.8 lb.	0.45 - 0.72	2 - 1.25	After first flower, treat at 2 - 3 tarnished plant bugs per 5 ft black drop cloth, 10 tarnished plant bugs per 100 sweep net samples, or 10% dirty squares.
Cotton Fleahopper	acephate (97)	0.5 - 0.8 lb.	0.49 - 0.078	2 - 1.25	
Clouded	Bidrin (8)	6 - 8 oz.	0.33 - 0.5	24 - 16	
Tarnished	Diamond (0.83)*	6 - 12 oz.	0.039 - 0.078	21.3 - 10.67	
	Vydate C-LV	13.6 - 17 oz.	0.4 - 0.5	9.4 - 7.5	

NOTE: Diamond will not control adults. For adult control, tank mix with an adulticide. Repeat applications at 7 - 14 day intervals as needed to maintain control.

Control of cotton fleahoppers can usually be obtained with lower rates than the rates used to control other plant bug pests.

Multiply clouded plant bug number by 1.5 when determining densities for treatment decision.

Insect	Insecticide	Amount of Concentrate Per Acre	lb Active Ingredient Per Acre	Acres Treated Per Gallon or Pound SP	Treatment Threshold
Bollworm	ammo (2.5)	5 oz.	0.1	25	Bollgard, Bollgard II or Widestrike: treat when 2-3% live larvae found in fruiting forms or when 10% of plant terminals are infested with live larvae. Non-Transgenic: Start applications when 5 worms per 100 plants plus eggs are present. Apply on an as-needed basis. Shorten the application interval and add an ovicide when tobacco budworm moths are laying eggs.
	Asana XL (0.66)	5.8 - 9.7 oz.	0.03 - 0.05	22 - 13.2	
	Baythroid XL (1)	1.9 - 2.6 oz.	0.015 - 0.0205	67 - 50	
	bifenthrin (2)	3.2 - 6.4 oz.	0.05 - 0.1	40 - 20	
	Curacron (8)	16 oz.	1	8	
	cyfluthrin (2)	1.6 - 2.6	0.025 - 0.041	80 - 50	
	Denim (0.16)	8 - 12 oz.	0.01 - 0.015	10.6 - 16	
	Double Threat CP	3.2 - 5.12	-----	40 -25	
	Endigo ZC	3.5 - 5.5	1	36.6 - 25.6	
	Karate Z (2.08)	1.5 - 2.4	0.25 - 0.04	85 -53	
	lambda-cyhalothrin (1)	1.6 - 2.56	0.025 - 0.04	80 - 50	
	Leverage (2.7)	3.75	-----	34.1	
	Mustang Max (0.8)	2.64 - 3.6	0.017 - 0.022	47 - 36	
	Prolex (1.25)	1.28 - 2.05	0.0125 - 0.02	100 - 62.5	
	Steward (1.25)	11.3 oz.	0.11	11.5	
Tracer (4)	2.1 - 2.85 oz.	0.067 - 0.089	60 - 45		
Tobacco Budworm	Curacron (8)	16 oz.	1	8	See bollworm threshold.
	Denim (0.16)	8 - 12 oz.	0.01 - 0.015	10.6 - 16	
	Double Threat CP	3.2 - 5.12	-----	40 -25	
	Steward (1.25)	11.3 oz.	0.11	11.5	
	Tracer (4)	2.1 - 2.85 oz.	0.067 - 0.089	60 - 45	
Ovicide	Lannate LV (2.4)	12.8 oz.	0.25	9.6	Use in combination with larvicides during periods of heavy egg lay or when tobacco budworm appear.
	Larvin (3.2)	10 oz.	0.25	12.8	
	Tracer (4)	1.4 - 2.8 oz.	0.044 - 0.089	90 - 45	
Loopers	Denim (0.16)	6 - 12 oz.	0.01 - 0.015	10.6 - 16	Before cutout treat when loopers cause 30% defoliation. After cutout treat at 45% defoliation.
	Intrepid (2)	6 - 10 oz.	0.09 - 0.16	21 - 12.5	
	Larvin (3.2)	24 - 36 oz.	0.6 - 0.9	5.3 - 3.5	
	Steward (1.25)	9.2 oz.	0.09	14	
	Tracer (4)	2.1 - 2.8 oz.	0.067 - 0.089	60 - 45	

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Spider Mites	abamectin (0.15)	8 - 16 oz.	0.009 - 0.0187	16 - 8	Treat when mite infestations cause areas where plants have discolored leaves. Anticipate repeating application in 5 days.
	bifenthrin (2)	6.4 oz.	0.01	20	
	Comite (6.55)	24 oz.	1.23	5.3	
	Denim (0.16)	12 oz.	0.015	10.6	
	Fujimite (5)	32 oz.	1.25	4	
	Oberon (4)	4 - 8 oz.	0.125 - 0.25	32 - 16	
	Zeal (72)	1 oz.	0.045	16	
	Zephyr (0.15)	8 - 16 oz.	0.009 - 0.0187	16 - 8	
Whitefly	acephate (90)	0.83-1.0 lb.	0.75-0.9	1.2-1	Apply when 50% of plant terminals have clustering whiteflies. Control may require 3 to 4 applications on 5 day intervals.
	Centric (40)	2 oz.	0.05	8	
	imidacloprid (4)	2.0 oz.	0.0625	64	
	Endigo ZC	5.5	1	23.3	
	Monitor (4)	16 oz.	0.5	8	
	Orthene (97)	0.8-1.0 lb	0.75-0.97	1.3-1	
	Trimax Pro (4.44)	1.8 oz.	0.0062	71	
Fall Armyworms	Baythroid XL (1)	3.2 oz.	0.025	40	Treat when egg masses or small larvae appear.
	Diamond (0.83)*	6 - 12 oz.	0.039 - 0.077	21.3 - 10.6	
	cyfluthrin (2)	2.6	0.041	50	
	Endigo ZC	3.5 – 5.5	1	36.6 – 25.6	
	Intrepid (2)	6-10 oz.	0.09-0.16	21-12.5	
	Karate Z (2.08)	2.56 oz.	0.04	50	
	lambda-cyhalothrin	2.56	0.04	50	
	Larvin (3.2)	36 oz.	0.9	3.5	
	Mustang Max (0.8)	4.0 oz.	0.025	32	
	Prolex (1.25)	2.05 oz.	0.02	62.5	
	Tracer (4)	2.8 oz.	0.089	45	

* Note: Diamond should be tank mixed with another recommended insecticide.

Insect	Insecticide	Amount of Concentrate Per Acre	lb Active Ingredient Per Acre	Acres Treated Per Gallon or Pound SP	Treatment Threshold
Beet Armyworms	Denim (0.16)	8 oz.	0.01	16	Treat when larvae are small and 5 to 6 hatch out spots (hits) are observed per 300 row feet.
	Intrepid (2)	6-10 oz.	0.09-0.16	21-12.5	
	Steward (1.25)	11.3 oz.	0.11	11.5	
	Tracer (4)	2.8 oz.	0.089	45	
Green Stink Bugs	acephate (90)	0.8 lb.	0.72	1.25	Treat stink bugs when 1 adult/nymph are found per 6 row feet, 5% adults/nymphs are found in sweep nets or 15 - 20% of 12 to 16 day old bolls have internal injury. Stink bug populations are normally very clumped in fields, thus numerous samples may be required to assess infestation.
	Baythroid XL (1)	1.6-2.6 oz.	0.0125 - 0.02	80-50	
	Bidrin (8)	4-8 oz.	0.25-0.5	32-16	
	bifenthrin (2)	2.6-6.4 oz.	0.04-0.1	50-20	
	cyfluthrin (2)	1.6 - 2.6	0.025 - 0.041	80 - 50	
	Endigo ZC	5.5	1	36.6 – 25.6	
	Karate Z (2.08)	1.6-2.56 oz.	0.025-0.04	80-50	
	lambda-cyhalothrin	1.6 - 2.56	0.025 - 0.04	80 - 50	
	Methyl Parathion (4)	16-32 oz.	0.5-1.0	4-Aug	
	Mustang Max (0.8)	2.6-3.6 oz.	0.017-0.022	47-36	
	Prolex (1.25)	1.28-2.05 oz.	0.0125-0.02	100-62.5	
	Orthene (97)	0.75 lb.	0.72	1.29	
Vydate C-LV (3.77) ¹	11.2-17 oz.	0.33-0.5	11.4-7.5		
Brown Stink Bugs	acephate (90)	0.8 lb.	0.72	1.25	See Green Stink Bug Thresholds
	Bidrin (8) ¹	6-8 oz.	0.33-0.5	24-16	
	bifenthrin (2)	4.8-6.4 oz.	0.075-0.1	20-26	
	cyfluthrin (2)	1.6 - 2.6	0.025 - 0.041	80 - 50	
	Endigo ZC	5.5	1	23.3	
	Karate Z (2.08)	2.56 oz.	0.04	52	
	lambda-cyhalothrin	1.6 – 2.56	0.025 - 0.04	80 - 50	
	Methyl Parathion1(4)	32 oz.	1.0	4	
	Mustang Max (0.8)	3.6 oz.	0.022	36	
	Orthene (97)	0.75 lb.	0.72	1.29	
Vydate C-LV (3.77) ¹	11.2-17 oz.	0.33-0.5	11.4-7.5		