COTTON INSECTICIDE PERFORMANCE RATING, 2026

Rating Scale 0 = No control 10 = Excellent	**Chemistry**	**Restricted Entry Interval (hours)**	**Restricted Use (R)**	**Thrips**	**Western Flower Thrips**	**Plant Bugs**	**Bollworm**	**Tobacco Budworm**	**Aphids****	**Spider Mites****	**Cutworm**	**Beet Armyworm**	**Fall Armyworm**	**Cabbage Looper**	**Soybean Looper**	**Saltmarsh Caterpillar**	**Green and Southern Green Stink Bug**	**Brown Stink Bug**	**Whitefly**	**Grasshopper**
Aeris			X	8	6						5									
Gaucho	NEO	12		6	4						0									0
Admire/Alias/Imidacloprid	NEO	12		7	1	3	0	0	3	0	0	0	0	0	0	0	2	2	0	2
AgLogic	Car	48	X	9	9															
Asana XL/Adjourn	SyP	12	X	4	3	2	4	2	0	0	8	2	5	7	2	5	8	4	2	6
Bacillus thuringiensis	B	4		0	0	0	4	5	0	0	0	1	1	6	6	2	0	0	0	0
Baythroid XL	SyP	12	X	4	2	2	5	2		0	8	2	5	7	2	5	8	4	4	7
Belay	NEO					4														
Besiege	DM+SyP	24	X	4	2	2	8	9	0	0	9		9	9	5		8	4	2	7
Bidrin/Dicromax	OP	72	X	7	5	7	0	0	5	3	0	0	0	0	0	1	9	9	3	7
Bidrin XP II	OP+SyP	72	X	6	5	8	5	2	6	7	8	2	5	7	2	5	9	9	3	7
Blackhawk	SP	4		1	1	0	7	9	0	0	7	9	7	9	9	3	0	0	0	2
Brigadier	NEO+SyP	12	X	6	5	7	5	2	6	7	8	2	5	7	2	5	8	7	6	7
Brigade/Discipline/Fanfare	SyP	12	X	4	2	3	5	2		7	6	2	5	7	2	5	8	7	6	8
Carbine	FL	12		5	1	4	0	0	8	0	0	0	0	0	0	0	2	2	0	2
Centric	NEO	12		4	4	4	0	0	5	0	0	0	0	0	0	0	7	6	8	2
Comite	PRO	144		0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
Confirm	IGR	4		0	0	0	4	4	0	0	2	8	8	7	7	8	0	0	0	0
Denim	AV	12	X	1	1	0	7	9	0	5	7	9	8	9	9	3	0	0	0	2
Diamond	IGR	12		1	1	8	4	4			1		8				4*	4*		
Dimethoate/Dimate	OP	48		3	2	5	0	0	5	3	0	0	0	0	0	1	5	4	3	6
Elevest	SyP + DM	12	X	4	2	3	8	9	0	7	9		9	9	5		8	7	6	7
Endigo	NEO+SyP	24	X	5	4	6	5	2	8	0	8	2	5	7	2	5	8	7	8	7
Holster	SyP	12	X	6	3	2	4	1	0	0	8	1	5	6	1	5	8	4	1	6
Intrepid	IGR	4		0	0	0	6	6	0	0	5	9	7	9	4	9	0	0	0	0
Intrepid Edge	IGR+SP	4		8	7		7	7					8	9	9	9				
Intruder/Strafer	NEO	12		6		5	0	0	8	0	0	0	0	0	0	0	1	1	9	0
Karate/Silencer/Lambda-Cy	SyP	24	X	4	2	2	5	2	0	0	8	2	5	7	2	5	8	4	2	7
Lannate	Car	72	X	1	0	3	4	4	5	0	5	4	7	7	7	4	5	3	0	6
Leverage 360	NEO+SyP	12	X	6	2	6	5	2	5	0	8	2	5	7	2	5	8	6	5	7
Mustang Maxx	SyP	12	X	4	3	2	5	2	0	0	8	3	5	7	2	5	8	7	2	7
Oberon	TET	12								9										
Orthene/Acephate	OP	24		5	5	8	5	5	4	0	6	3	4	7	4	3	9	7	5	8
Portal	METI	12								9										
PQZ	PAD	12							7											
Prevathon/Vantacor/Shenzi	DM	4				2	8	9					9	9	5		9	9	5	
Prolex/Declare	SyP	24	X	4	2	2	3	2	0	0	8	2	5	7	2	5	8	4	2	7
Radiant	SP	4		8	7															
Sefina	Pyr	12							6											
Sivanto	BU	4							6											
Steward	OX	12		0	0	4	7	9	0	0	5	9	8	9	8	5	3	3		0
Transform	sx					9			8											
Vydate C-LV	Car	48	X	3	1	5	0	0	1	0	0	0	0	0	0	0	8	7	0	6
Zeal, Stifle	ET	12								9										
Zoro/Abba/Agri-Mek/Epi-Mek	AV	12	X	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0

*Effective on nymphs only.
**Cotton aphids and spider mites can be flared by use of broad spectrum insecticides such as synthetic pyrethroids.

QUICK VIEW THRESHOLD GUIDE

Insect	Threshold	Scouting Procedure
Tarnished plant bug (TPB)	3 TPB per 5 row feet or 2 TPB per 5 row feet (problem fields) or 8-12 per 100 sweeps from early squaring through cutout. After cutout (NAWF = 5), treat for 6 plant bugs per 5 row feet.	At least 2 drop cloth samples per area.
Tarnished plant bug (TPB) on ThryvOn cotton	6 TPB nymphs per 5 row feet or treat for 3 nymphs if small square set is below 85%. Treat for 8-12 TPB adults per 100 sweeps.	At least 2 drop cloth samples per area.
Bollworm (BW) and Tobacco budworm (TBW)	Non-Bt cotton: 1 BW or 1 TBW (< 0.25 inch) per 2 row feet Bollgard II/WideStrike/Twinlink: 25% eggs or 5% damaged fruit or 2-3 large (>0.25 inch) larva per 14 row feet. WideStrike III/Bollgard III/TwinLink Plus: 5% damaged fruit or 2-3 large (>0.25 inch) per larva 14 row feet.	At least 3.5 row feet whole-plant samples per area.
Thrips	2-5 thrips per plant and damage present. Thrips may be found on ThryvOn cotton, but do not cause economic damage.	At least 5 plants per area sampled with a cup or box.
Aphids	50% of plants infested with actively growing colonies present, if no predators are present	General visual observation, noting predator populations. See comments in aphid section.
Fall armyworm (FAW)	10-20 FAW per 100 plants	Examine as with BW and TBW, supplementing with drop cloth observations and counts in blooms.
Spider mites	50% of plants infested with actively growing colonies present	General visual observation, noting symptoms of feeding injury to leaves.
Stink bugs	1 stink bug per 6 row feet or 20% boll damage	At least 2 drop cloth samples per area or sample at least 25 quarter-sized bolls per area.

CAUTION: Do not allow acephate applications to drift onto adjacent rice fields. Acephate/Orthene is not labelled on rice.

INSECTICIDE TERMINATION GUIDE

Determine Date of Cutout using the earlier of Date of NAWF = 5 or Weather-restricted date (North AR: Aug. 8, Central AR: Aug. 14, South AR: Aug. 21)
Record daily heat units (DD60s) from Date of Cutout. (DD60s are calculated by subtracting 60 from the average daily temperature.)

Insect	Termination Rules
Tarnished plant bug	Cutout + 250 DD60s
Bollworm and Tobacco budworm	Cutout + 350 DD60s
Stink bugs	Cutout + 450 DD60s
Fall armyworm	Cutout + 500 DD60s

Crop termination recommendations are based on long-standing and ongoing COTMAN research conducted by University of Arkansas System Division of Agriculture scientists. Date of Cutout is the flowering date of the last economically significant boll population. If a field reaches physiological cutout [average number of nodes above white flower = 5 (NAWF = 5)] in late July or early August in Arkansas, then heat units are accumulated from the NAWF = 5 date. Otherwise, heat units are accumulated from a seasonal cutout date based on historical weather for that production region. Typically, a boll needs 850 DD60s to mature with acceptable size and quality.

The weather-restricted, seasonal cutout date is the calendar date on which there is a 50% probability that the crop will have the benefit of late season temperatures sufficient to develop a mature boll. Seasonal cutout dates range across the state from Aug. 8 in northernmost parts of Arkansas (Clay County) to Aug. 21 in the most southern portions of the state (Ashley County).

COTTON 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
Thrips	ThryvOn Cotton				Cotton varieties with the ThryvOn trait are very effective at controlling thrips.		
Treat with foliar sprays when 1st or 2nd true leaf emerges with noticeable damage from thrips. On larger seedlings, treat for an average of 5 thrips per plant and damage that may cause delayed growth or stunting of plants.	**In Furrow**						
	acephate		0.75-1.0		Orthene-treated seed may require one or more foliar treatments for thrips control. Resistance to acephate has been detected in Arkansas. Consider rotating chemistry.		
	Acephate 90S IFS	0.83-1.1 lb				21	24
	Orthene 97 IFS	0.77-1.03 lb				21	24
	Orthene 90S IFS	0.83-1.1 lb				21	24
	aldicarb		0.5-0.75		DO NOT feed forage to livestock.		
	AgLogic 15G	3.5-5 lb				90	48
	imidacloprid				Seed treatment.		
	Gaucho 600	0.375 mg ai/seed					
	imidacloprid + thiodicarb (**R**)				Seed treatment.		
	Aeris	0.75 mg ai/seed					

Insect	Insecticide	Formulation/ Acre	Lb ai/Acre	Acres/ Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Thrips (cont.)	Avicta Elite Cotton	See label.			Seed treatment.		
Treat with foliar sprays when 1st or 2nd true leaf emerges with noticeable damage from thrips. On larger seedlings, treat for an average of 5 thrips per plant and damage that may cause delayed growth or stunting of plants.	**Foliar Sprays**						
	acephate		0.5		Avoid tank-mixing organophosphate insecticides (acephate,		
	Acephate 90 S	0.56 lb			Bidrin, dimethoate) with certain herbicides (Staple, Warrant,	21	24
	Orthene 97	0.52 lb			Dual, Liberty) as foliar burn may occur.	21	24
	(See Generic Insecticides)				Reduced control with acephate has been observed in recent years.		
	dicrotophos (**R**)		0.2		DO NOT apply more than 3.2 oz pre-bloom.		
	Bidrin/Dicromax 8 EC	3.2 oz		40		30	72
	methoxyfenozide + spinetoram		0.07-0.14		Intrepid Edge will also control cutworm. DO NOT use without		
	Intrepid Edge 3F	3-6 oz		21.3-42.7	an adjuvant.	28	4
	spinetoram		0.0117-0.0234		DO NOT use without an adjuvant.		
	Radiant 1 SC	1.5-3.0 oz		42.7-85.3		28	4
Western Flower Thrips	acephate		0.5		Avoid tank-mixing organophosphate insecticides with c		
	Acephate 90 S	0.56 lb			ertain herbicides (Staple, Warrant, Dual, Liberty) as foliar burn	21	24
	Orthene 97	0.52 lb			may occur.	21	24
Treat with foliar sprays when 1st or 2nd true leaf emerges with noticable damage from thrips. On larger seedlings, treat for an average of 5 thrips per plant and damage that may cause delayed growth or stunting of plants.	*(See Generic Insecticides)*						
	methoxyfenozide + spinetoram		0.07-0.14		Intrepid Edge will also control cutworm. DO NOT use without		
	Intrepid Edge 3F	3-6 oz		21.3-42.7	an adjuvant.	28	4
	spinetoram		0.012-0.023		DO NOT use without an adjuvant.		
	Radiant 1 SC	1.5-3.0 oz		42.7-85.3		28	4
Tarnished Plant Bug/Fleahopper	ThryvOn Cotton				Cotton varieties with the ThryvOn trait are effective at reducing damage from tarnished plant bug.		
Treat for 3 plant bugs per 5 row feet on normal fruiting fields. If small square set is less than 75%, treat for 2 plant bugs per 5 row feet. After last week of June in north Arkansas and the first week of July in south Arkansas, if small square set is less than 85%, treat for 2 plant bugs on 5 row feet. Treat for 8-12 per 100 sweeps when sampling with a sweep net. After cutout (NAWF=5), treat when 6 plant bugs per 5 row feet are found.	acephate		0.5-0.75		First two weeks of squaring, treat for plant bugs if square set		
	Acephate 90 S	0.56-0.83 lb			is 75% or less and plant bugs are present.	21	24
	Orthene 97	0.57-0.77 lb					
	(See Generic Insecticides)						
	acetamiprid		0.13-0.15		DO NOT make more than 2 applications/season.		
	Strafer 70 WSP	3.0-3.5 oz				28	12
	dicrotophos (**R**)		0.5		DO NOT apply more than 3.2 oz pre-bloom.		
	Bidrin/Dicromax 8 EC	8.0 oz		16		30	72
	dimethoate		0.25				
	Dimethoate 4 E	8 oz		16		14	48
	imidacloprid						
	(See Generic Insecticides)						
	Admire Pro 4.6 SC	1.7 oz	0.062	75		14	12
	Imidacloprid 4 F	2 oz	0.062	64		14	12
	Alias/Couraze 4 F	2 oz	0.062	64		14	12
	Couraze 2 F	4 oz	0.0625	32		14	12
	Couraze 1.6 F	5 oz	0.0625	25.6		14	12

Insect	Insecticide	Formulation/ Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Tarnished Plant Bug/Fleahopper (cont.)	oxamyl (**R**)		0.31-0.5		DO NOT graze or feed plants to livestock.		
	Vydate 3.77 CLV	10.5-17 oz		7.5-12.2		14	48
	thiamethoxam		0.044-0.0625				
	Centric 40 WG	1.75-2.5 oz				21	12
	sulfoxaflor		0.047-0.071		Follow pollinator warnings on label.		
	Transform 50 WG	1.5-2.25 oz				14	24
	<u>Tank Mix Insecticide</u>						
	novaluron		0.039-0.058				
	Diamond 0.83 EC	6-9 oz		14.2-21.3		30	12
Treat for 3 plant bugs per 5 row feet on normal fruiting fields. If small square set is less than 75%, treat for 2 plant bugs per 5 row feet. After last week of June in north Arkansas and the first week of July in south Arkansas, if small square set is less than 85%, treat for 2 plant bugs on 5 row feet. Treat for 8-12 per 100 sweeps when sampling with a sweep net. After cutout (NAWF=5), treat when 6 plant bugs per 5 row feet are found.							
Cotton Jassid (Two-Spot Cotton Leafhopper)	acephate		0.5-1.0				
	Orthene 97 S	0.57-1.03 lbs				21	24
Treat for 1-2 leafhoppers per leaf.	afidopyropen		0.016-0.046		Do not make more than 2 consecutive applications.		
	Sefina 0.42 DC	5-14 oz		25.6-9.14		7	12
	bifenthrin + acetamiprid		0.18				
	Argyle OD	9 oz		14.2		28	12
	buprofezin		0.35				
	Courier 3.6 SC	12.5 oz		10.24		14	12
	dicrotophos		0.375-0.5		Do not apply more than 3.2 oz prebloom.		
	Bidrin/Dicromax 8 E	6-8 oz		21.3-16		30	72
	dinotefuran		0.044-0.14				
	Venom 70 SG	1-3 oz				14	12
	flonicamid		0.05-0.078				
	Carbine 50 WG	1.7-2.5 oz				30	12
	flupyradifurone		0.09-0.14				
	Sivanto 1.67 L	7-10.5 oz		18.3-12.2		14	4
	sulfoxaflor		0.047-0.0625		Follow pollinator warning on label.		
	Transform 50 WG	1.5-2 oz				14	24
	thiamethoxam		0.05-0.0625				
	Centric 40 WG	2-2.5 oz				21	12

Insect	Insecticide	Formulation/ Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Bollworm Non-Bt cotton: 1 BW or 1 TBW (< 0.25 inch) per 2 row feet. Bollgard II/ WideStrike/Twinlink: 25% eggs or 5% damaged fruit or 2-3 large (>0.25 inch) larva per 14 row feet. WideStrike III/Bollgard III/TwinLink Plus: 5% damaged fruit or 2-3 large (>0.25 inch) larvae per 14 row feet.	**Pyrethroids (tank mix only)**						
	beta-cyfluthrin (**R**) Baythroid XL 1 EC	 1.6-2.6 oz	0.012-0.013	 49-80	In recent years, pyrethroids have shown reduced efficacy and can be expected to provide poor control. Pyrethroids should be tank-mixed with another chemistry.	0	12
	bifenthrin (**R**) Brigade 2 EC *(See Generic Insecticides)*	 2.56-6.4 oz	0.04-0.1	 20-50		14	12
	cyfluthrin (**R**) Tombstone 2 EC *(See Generic Insecticides)*	 1.6-2.6 oz	0.025-0.041	 49-80		0	12
	cypermethrin (**R**) Holster 2.5 EC	 2-5 fl oz	0.04-0.1	 25-62.5		14	12
	esfenvalerate (**R**) Asana XL 0.66 EC *(See Generic Insecticides)*	 5.8-9.6 oz	0.03-0.05	 13-22		21	12
	gamma-cyhalothrin (**R**) Proaxis 0.5 CS Declare 1.25 CS	 3.2-5.12 oz 1.28-2.05 oz	0.0125-0.02	 25-40 62.5-100		21	24
	lambda-cyhalothrin (**R**) Warrior II 2.08 CS *(See Generic Insecticides)*	 1.6-2.56 oz	0.025-0.04	 50-80		21	24
	zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC *(See Generic Insecticides)*	 2.64-4.0 oz	0.0165-0.025	 32-48		14	12
	Carbamates						
	methomyl (**R**) Lannate 2.4 LV Lannate 90 SP	 1.5-2.25 pt 0.5-0.75 lb	0.45-0.675	 3.6-5.3	Lannate may redden cotton. If excessive, stop use or alternate with other insecticides. Use Lannate as an occasional spray in regular schedule but not more than every 10 days.	15	48
	Other Classes of Insecticides						
	chlorantraniliprole Prevathon 0.43 SC Vantacor/Coragen eVo 5 SC Shenzi/Exceliprole 400 SC	 14-27 oz 1.2-2.5 oz 1.7-3.8 oz	0.045-0.098	 4.1-9.7 107-51 75.3-33.7	Use higher rates with heavy infestations.	21	4
	chlorantraniliprole + bifenthrin (**R**) Elevest 2.22 SC	 5.6-9.6 oz	0.084-0.167	 13.3-23		21	12
	chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege 1.25 SC	 6.5-12.5 oz	0.417-0.835	 10-20	Use higher rates with heavy infestations.	21	24
	emamectin benzoate Denim 0.16 EC	 8-12 oz	0.01-0.015	 10.7-16		21	12
	indoxacarb Steward 1.25 SC	 9.2-11.3 fl oz	0.09-0.11	 11-14		14	12
	methoxyfenozide + spinetoram Intrepid Edge 3 F	 6-8 oz	0.14-0.188	 16-21.3	DO NOT apply at closer than 4-day intervals.	28	4
	spinosad Blackhawk	 2.4-3.2 oz	0.054-0.07		DO NOT apply more than 20 oz per year.	28	4

Insect	Insecticide	Formulation/ Acre	Lb ai/Acre	Acres/ Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Tobacco Budworm Time insecticide application to egg hatch. Under heavy pressure, do not reduce rates. Treat for 7,000 (1 per 2 row ft) small larvae (less than 1/4-inch) per acre. If larger larvae begin to develop in fields, treat for 3,500 (1 per 4 row ft) larvae per acre. Terminate sprays after NAWF=5 + 350 heat units or 350 heat units past the last effective boll date for your area.	***Bt* Cotton** Bollgard II, WideStrike, WideStrike III, TwinLink, Bollgard III, TwinLink Plus				Cotton varieties expressing the *Bt* (*Bacillus thuringiensis*) protein are very effective against the tobacco budworm.		
	Carbamates						
	methomyl (**R**)		0.45-0.675		Lannate may redden cotton. If excessive, stop use or alternate with other insecticides. Use Lannate as an occasional spray in regular schedule but not more than every 10 days.	15	48
	Lannate 2.4 LV	1.5-2.25 pt		3.6-5.3			
	Lannate 90 SP	0.5-0.75 lb					
	Other Classes of Insecticides						
	bifenthrin + chlorantraniliprole (**R**)		0.084-0.167			21	12
	Elevest 2.22 SC	5.6-9.6 oz		13.3-23			
	chlorantraniliprole		0.045-0.098		Use higher rates with heavy infestations.		
	Prevathon 0.43 SC	14-27 oz		4.7-9.1		21	4
	Vantacor/Coragen eVo 5 SC	1.2-2.5 oz		107-51			
	Shenzi/Exceliprole 400 SC	1.7-3.8 oz		75.3-33.7			
	emamectin benzoate		0.01-0.015				
	Denim 0.16 EC	8-12 oz		10.7-16		21	12
	indoxacarb		0.09-0.11		Use higher rates with heavy infestations.		
	Steward 1.25 SC	9.2-11.3 oz		11-14		14	12
	lambda-cyhalothrin + chlorantraniliprole (**R**)		0.417-0.835			21	24
	Besiege 1.25 SC	6.5-12.5 oz		10-20			
	methoxyfenozide + spinetoram		0.14-0.188		DO NOT apply at closer than 4-day intervals.		
	Intrepid Edge 3 F	6-8 oz		16-21.3		28	4
	spinosad		0.054-0.07		DO NOT apply more than 20 oz per year.		
	Blackhawk	2.4-3.2 oz				28	4
Aphid	**Aphid Management and Control** Treatment for aphids alone seldom results in a yield increase. 1. Resistance to neonicotinoid insecticides (imidacloprid, Intruder, Centric) has developed. Avoid unnecessary/automatic applications of these insecticides when aphids are present. 2. Threshold: When populations are building and aphid colonies are present on approximately 50% of the plants: a. If there are less than 0.3 lady beetle adults AND less than 0.2 lady beetle larvae (per row-ft), treat. b. If there are at least 0.3 lady beetle adults OR 0.2 lady beetle larvae (per row-ft), do not treat, but resample within 7 days. i. If aphid population is still increasing after 7 days, treat, otherwise continue normal sampling interval. 3. The aphid fungus is very effective in reducing aphid populations in early to mid-July. Fields should be checked for fungus before treatments are applied. If confident the fungus is present in 15% of the aphid population, do not treat.						
	acetamiprid		0.035-0.05				
	Intruder/Strafer 70 WP	0.8-1.1 oz				28	12
	afidopyropen		0.01		Do not make more than 2 consecutive applications.		
	Sefina 0.42 DC	3 oz		42.7		7	12
	flonicamid		0.044-0.063				
	Carbine 50 WG	1.41-2.02 oz				30	12
	pyrifluquinazon		0.035-0.047		Do not make more than 2 applications per year.		
	PQZ 1.87 SC	2.4-3.2 oz		53-40		7	12
	sulfoxaflor		0.023-0.041		Follow pollinator warning on label. Do not make more than 4 applications of Transform per year.		
	Transform 50 WG	0.75-1.0 oz				14	24

COTTON 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
Spider Mites Treat when 50% of plants are infested. Early-season spot treatments may be beneficial in preventing spread of mites across the field.	abamectin (**R**) Agri-Mek 0.7 SC *(See Generic Insecticides)*	 1.75 - 3.5 fl oz	0.0096-0.019	 49-98	If populations are not reduced by initial application, switch to another chemistry. Use lower rates early season when cotton is small. DO NOT apply more than 7 oz per season. Must be applied with a non-ionic surfactant in minimum of 5 gallons per acre. DO NOT graze.	 20	 12
	fenpyroximate Portal XLO 0.4EC	 0.75-2 pt	0.0375-0.1	 4-10.7	DO NOT apply more than 2 pints per season.	 14	 12
	bifenthrin (**R**) Brigade 2 EC *(See Generic Insecticides)*	 3.8-6.4 oz	0.06-0.1	 20-33	Avoid unnecessary use of pyrethroid insecticides as they can flare spider mite populations.	28	12
	etoxazole Zeal WDG Zeal 2.88 SC *(See Generic Insecticides)*	 0.66-1.0 oz 1.33-2 oz	0.03-0.045	 64-96		 28 28	 12 12
	propargite Comite 6.55	 1.5-2 pt	1.23-1.64	 4-5.3		 50	 144
	spiromesifan Oberon 2 SC	 8-16 oz	0.125-0.25	 8-16		 30	 12
Cutworm Treat when stand is reduced below 2-3 plants per row ft. Stale seedbed/no-till fields with cover crops and/ or heavy spring weed pressure should be considered high-risk fields. Consider preventative pyrethroid applications for cutworm in these situations if a burn down herbicide is not applied at least 3 weeks prior to planting.	acephate Acephate 90 S Orthene 97 *(See Generic Insecticides)*	 1.0 lb 0.93 lb	0.9		Maintain 2-3 plants per row ft. Cutworm control is most effective when ground applications are made and sprays are directed (banded) to the base and lower portion of the plant.	21	24
	beta-cyfluthrin (**R**) Baythroid XL 1 EC	 0.8-1.6 oz	0.007-0.013	 80-160	Stale seedbed/no-till fields, fields with cover crops and/or heavy spring weed pressure or fields with a history of cutworm problems should be considered high-risk fields. Consider preventative pyrethroid applications for cutworm in these situations utilizing a 1/3 band applicator behind the planter.	0	12
	bifenthrin (**R**) Brigade 2 EC *(See Generic Insecticides)*	 2.56-6.4 oz	0.04-0.1	 20-50		14	12
	cyantraniliprole Fortenza 5 FS	0.1 - 0.4 mg ai/ seed			Seed treatment.		12
	cyfluthrin (**R**) Tombstone 2 EC *(See Generic Insecticides)*	 0.8-1.6 oz	0.013-0.025	 80-160		0	12
	cypermethrin (**R**) Holster 2.5 EC	 1.3-5.0 oz	0.025-0.1	 25-100		14	12
	esfenvalerate (**R**) Asana XL 0.66 EC *(See Generic Insecticides)*	 5.8-9.6 oz	0.03-0.05	 13-22		21	12
	gamma-cyhalothrin (**R**) Proaxis 0.5 CS Declare 1.25 CS	 1.92-2.56 0.77-1.02 oz	0.0675-0.01	 25-40 125-166		21	24
	lambda-cyhalothrin (**R**) Warrior II 2.08 CS *(See Generic Insecticides)*	 0.96-1.28 oz	0.015-0.02	 100-133		21	24
	zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC *(See Generic Insecticides)*	 1.28-1.92 oz	0.008-0.012	 67-100		14	12

COTTON 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
Beet Armyworm Apply treatment when 3-5 or more "hits" of small larvae occur per 100 ft of row.	bifenthrin + chlorantraniliprole (**R**) Elevest 2.22 SC	5.6-9.6 oz	0.084-0.167	13.3-23		21	12
	chlorantraniliprole Prevathon 0.43 SC Vantacor/Coragen eVo 5 SC Shenzi/Exceliprole 400 SC	14-27 oz 1.2-2.5 oz 1.7-3.8 oz	0.045-0.098	4.1-9.7 107-51 75.3-33.7		21	4
	emamectin benzoate Denim 0.16 EC	6-8 oz	0.0075-0.01	4.7-9.1		21	12
	indoxacarb Steward 1.25 SC	9.2-11.3 fl oz	0.09-0.11	11-14		14	12
	lambda-cyhalothrin + chlorantraniliprole (**R**) Besiege 1.25 SC	6.5-12.5 oz	0.417-0.835	10-20		21	24
	methoxyfenozide Intrepid 2 F *(See Generic Insecticides)*	4-10 oz	0.06-0.16	12.8-32		14	4
	methoxyfenozide + spinetoram Intrepid Edge 3 F	6-8 oz	0.14-0.188	16-21.3	DO NOT apply at closer than 4-day intervals.	28	4
	spinosad Blackhawk	2.4-3.2 oz	0.054-0.07		DO NOT apply more than 20 oz of Blackhawk per year.	28	4
Fall Armyworm Treat for 10-20 fall armyworms per 100 plants. Terminate sprays after NAWF=5 + 500 heat units or 500 heat units past the last effective boll date for your area.	bifenthrin + chlorantraniliprole (**R**) Elevest 2.22 SC	5.6-9.6 oz	0.084-0.167	13.3-23		21	12
	chlorantraniliprole Prevathon 0.43 SC Vantacor/Coragen eVo 5 SC Shenzi/Exceliprole 400 SC	14-27 oz 1.2-2.5 oz 1.7-3.8 oz	0.045-0.098	4.7-9.1 107-51 75.3-33.7		21	4
	emamectin benzoate Denim 0.16 EC	8-12 oz	0.01-0.015	10.7-16		21	12
	indoxacarb Steward 1.25 SC	9.2-11.3 oz	0.09-0.11	11-14		14	12
	lambda-cyhalothrin + chlorantraniliprole (**R**) Besiege 1.25 SC	6.5-12.5 oz	0.417-0.835	10-20		21	24
	methomyl (**R**) Lannate 2.4 LV Lannate 90 SP	1.5-2.25 pt 0.5-0.75 lb	0.45-0.675	3.6-5.3	Lannate may redden cotton. If excessive, stop use or alternate with other insecticides. Use Lannate as an occasional spray in regular schedule but not more than every 10 days.	15	48
	methoxyfenozide Intrepid 2 F *(See Generic Insecticides)*	4-10 oz	0.06-0.16	12.8-32		14	4
	methoxyfenozide + spinetoram Intrepid Edge 3 F	6-8 oz	0.14-0.188	16-21.3	DO NOT apply at closer than 4-day intervals.	28	4
	novaluron Diamond 0.83 EC	6-12 oz	0.039-0.078	10.7-21.3		30	12
	spinosad Blackhawk	2.4-3.2 oz	0.054-0.07		DO NOT apply more than 20 oz of Blackhawk per year.	28	4

COTTON 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
Cabbage Looper Soybean Looper Economic damage seldom occurs; treat when 25% defoliation occurs and bolls are still being developed.	*Bacillus thuringiensis*	Check label.				0	4
	bifenthrin + chlorantraniliprole (**R**) Elevest 2.22 SC	5.6-9.6 oz	0.084-0.167	13.3-23		21	12
	chlorantraniliprole Prevathon 0.43 SC Vantacor/Coragen eVo 5 SC Shenzi/Exceliprole 400 SC	 20-29 oz 1.7-2.5 oz 2.5-3.8 oz	0.067-0.097	 4.4-6.4 75-51 51.2-33.7		 21	 4
	emamectin benzoate Denim 0.16 EC	8-12 oz	0.01-0.015	10.7-16		21	12
	indoxacarb Steward 1.25 SC	6.7-9.2 fl oz	0.065-0.09	14-19		14	12
	lambda-cyhalothrin + chlorantraniliprole (**R**) Besiege 1.25 SC	10.5-12.5 oz	0.1-0.12	10-12		21	24
	methoxyfenozide Intrepid 2 F *(See Generic Insecticides)*	4-10 oz	0.06-0.16	12.8-32		14	4
	methoxyfenozide + spinetoram Intrepid Edge 3 F	4-8 oz	0.094-0.188	16-32	DO NOT apply at closer than 4-day intervals.	28	4
	spinosad Blackhawk	2.4-3.2 oz	0.054-0.07		DO NOT apply more than 20 oz per year.	28	4
Stink Bugs (Green and Southern Green) Treat when stink bugs exceed 1 bug per 5 row feet or when 20% of medium bolls display internal signs of feeding and stink bugs are observed.	acephate Acephate 90 Orthene 97 *(See Generic Insecticides)*	 0.83 lb 0.77 lb	0.75			21	24
	beta-cyfluthrin (**R**) Baythroid XL 1 EC	1.6-2.6 oz	0.013-0.021	48-80		0	12
	bifenthrin (**R**) Brigade 2 EC *(See Generic Insecticides)*	3.8-6.4 oz	0.06-0.1	20-33		14	12
	cyfluthrin (**R**) Tombstone 2 EC *(See Generic Insecticides)*	1.6-2.6 oz	0.025-0.041	49-80		0	12
	dicrotophos (**R**) Bidrin/Dicromax 8 EC	4.8-8.0 oz	0.3-0.5	16-26.7	DO NOT apply more than 3.2 oz pre-bloom. DO NOT apply more than 16 oz after first bloom.	30	72
	esfenvalerate (**R**) Asana XL 0.66 EC *(See Generic Insecticides)*	5.8-9.6 oz	0.03-0.05	13-22		21	12
	lambda-cyhalothrin (**R**) Warrior II 2.08 CS *(See Generic Insecticides)*	1.6-2.56 oz	0.025-0.04	50-80		21	24

Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Stink Bugs (Green and Southern Green) (cont.) Terminate sprays after NAWF=5 + 450 heat units or 450 heat units past the last effective boll date for your area.	oxamyl (**R**) Vydate 3.77 CLV	13.6 oz	0.4	9.4	DO NOT graze or feed plants to livestock.	14	48
	zeta-cypemethrin (**R**) Mustang Maxx 0.8 EC *(See Generic Insecticides)*	2.64-3.6 oz	0.016-0.022	35.6-48.5		14	12
Brown Stink Bug Treat when stink bugs exceed 1 bug per 5 row feet or when 20% of medium bolls display internal signs of feeding and stink bugs are observed. Check at least 25-50 bolls per 40 acres.	acephate Acephate 90 S Orthene 97 *(See Generic Insecticides)*	0.83 lb 0.77 lb	0.75			21	24
	bifenthrin (**R**) Brigade 2 EC *(See Generic Insecticides)*	3.8-6.4 oz	0.06-0.1	20-33		14	12
	dicrotophos (**R**) Bidrin/Dicromax 8 EC	8 oz	0.5	16	DO NOT apply more than 3.2 oz pre-bloom. DO NOT apply more than 16 oz after first bloom.	30	72
	oxamyl (**R**) Vydate 3.77 CLV	13.6 oz	0.04	9.4	DO NOT graze or feed plants to livestock.	14	48
Whitefly Treat infested areas when 50% of the plants are infested.	acephate Acephate 90 S Orthene 97 *(See Generic Insecticides)*	0.56-1.1 lb 0.52-1.031 lb	0.5-1.0			21	24
	acetamiprid Intruder/Strafer 70 WP	1.7-2.3 oz	0.75-0.1			28	12
	bifenthrin (**R**) Brigade 2 EC *(See Generic Insecticides)*	3.8-6.4 oz	0.06-0.1	20-33		14	12
	flupyradifurone Sivanto 1.67 SL	10.5-14 oz	0.14-0.18	9.14-12.2	Do not apply more than 28 oz of Sivanto per acre per year.	14	4
	thiamethoxam Centric 40 WG *(See Generic Insecticides)*	2 oz	0.05			21	12

Insect	Insecticide	Formulation/ Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest	Restricted Entry Interval (REI) Hours
Multiple Pests For control of multiple pests exceeding thresholds..	acephate + bifenthrin (**R**) Acenthrin 80 S	 6-21 oz	0.3-1.05		Plant bugs, Bollworm, Stink Bugs, Whitefly.	21	24
	bifenthrin (**R**) + avermectin Athena 0.87 E	 10-17 oz	0.068-0.116	 7.5-12.8	Bollworm, Stink Bugs, Spider Mites.	20	12
	bifenthrin (**R**) + acetameprid Argyle 1.52 OD Savoy 1.8 EC	 5-9 oz 3.6-12.9 oz	0.06-0.11	 14-25.6 9.9-35.6	Aphids, Plant bugs, Bollworm, Stink Bugs, Whitefly.	28	12
	bifenthrin + chlorantraniliprole (**R**) Elevest 2.22 SC	 4.8-9.6 oz	0.084-0.167	 26.7-13.3	Cutworms, Grasshoppers, Bollworm, Tobacco Budworm, Loopers, Beet Armyworm, Fall Armyworm, Stink Bugs.	21	12
	chloryrifos + lambda-cyhalothrin (**R**) Lambdafos 2.69 EC	 16-42 oz	0.33-0.76	 3.05-8	Plant bugs, Bollworm, Stink Bugs, Whitefly.	21	24
	cyantraniliprole + abamectin Minecto Pro	 6-10 oz	0.064-0.11	 12.8-21.3	Bollworm, Armyworms, Saltmarsh Caterpillar, Spider Mites.	20	12
	dicrotophos (**R**) + bifenthrin Bidrin XP II	 8-12.8 oz	0.31-0.5	 10-16	Plant bugs, Bollworm, Stink Bugs, Whitefly.	30	72
	gamma-cyhalothrin + spinosad (**R**) Consero 5.25 SC	 2.8-4 oz	0.054-0.083	 32-45	Bollworm, Tobacco Budworm, Green Stink Bugs, Armyworms, Loopers.	28	24
	imidacloprid/beta-cyfluthrin (**R**) Leverage 360 SC	 2.8-3.2 oz	0.067-0.075	 40-45.7	Plant bugs, Bollworm, Stink Bugs, Whitefly.	14	12
	imidacloprid/bifenthrin (**R**) Brigadier 2 SC Swagger 1 SC Avenger 1 SC	 3.8-7.7 oz 7.6-15.4 oz 7.6-15.4 oz	0.06-0.12	 16.6-33.7 8.3-16.8 8.3-16.8	Plant bugs, Bollworm, Stink Bugs, Whitefly.	14	12
	lambda-cyhalothrin + chlorantraniliprole (**R**) Besiege 1.25 SC	 6.5-12.5 oz	0.417-0.835	 10.24-19.7	Bollworm, Tobacco Budworm, Green Stink Bugs.	21	24
	lambda-cyhalothrin + thiamethoxam (**R**) Endigo 2.7 ZCX	 4.5-5.5 oz	0.08-0.09	 28.4-36.6	Plant bugs, Bollworm, Stink Bugs, Whitefly.	21	24
	novaluron + acetameprid Cormoran 1.51 DC	 6-12 oz	0.06-0.12	 10.7-21.3	Plant bugs, Fall Armyworm, Stink Bugs, Whitefly, Aphids.	30	12
	zeta-cypermethrin + bifenthrin + imidacloprid (**R**) Triple Crown 2.25	 4.5-6.4 oz	0.079-0.112	 20-28.4	Plant bugs, Bollworm, Stink Bugs, Whitefly.	14	12