

# Field Crops

Department of Entomology

## CORN INSECT CONTROL RECOMMENDATIONS

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**Read and Follow ALL Label Rate, Application, and Use Directions**

*This publication is intended to aid pest managers in treating pest infestations in corn during the growing season and in situations where replanting is needed. Consequently, many current preventative pest management decisions that are made pre-planting (e.g., Bt traited hybrids) are not included in this list.*

Pest	Active Ingredient(s)	Trade Name(s)	Pre-Harvest Interval (days)	MoA <sup>1</sup>	Treatment Guideline
Armyworm species	alpha-cypermethrin*	Fastac	30	3	Seedling feeding: Greater than 50% of the plants show fresh feeding and the larvae are less than 1-1/4" long.
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	cyfluthrin*	Tombstone	21	3	
	deltamethrin*	Delta Gold, generics	21	3	Whorl feeding: more than 75% of plants show whorl feeding, plants are stressed, and larvae less than 1-1/4" long.
	esfenvalerate*	Asana, generics	21	3	
	gamma-cyhalothrin*	Declare, Proaxis	21	3	
	indoxacarb	Steward	1	22A	
	lambda-cyhalothrin*	Warrior II, generics	21	3	
	methoxyfenozide	Intrepid, generics	21	18	
	permethrin*	Pounce, generics	30	3A	
	spinetoram	Radiant	28	5	
	spinosad	Entrust, generics	28	5	
	zeta-cypermethrin*	Mustang Max	7	3	
<b>Pre-Mixes</b>					
	lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28	
Cutworms (Black, Dingy, Variegated, Clay-backed)	alpha-cypermethrin*	Fastac	30	3	Post emergence: 3-5% of the plants show damage, 2 or more larvae are found per 100 plants and larvae are 1/2 to 1-1/2" long.
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	cyfluthrin*	Tombstone	21	3	

Pest	Active Ingredient(s)	Trade Name(s)	Pre-Harvest Interval (days)	MoA <sup>1</sup>	Treatment Guideline
Cutworms (Black, Dingy, Variegated, Clay-backed) (con't.)	deltamethrin*	Delta Gold	21	3	
	esfenvalerate*	Asana, generics	21	3	
	gamma-cyhalothrin*	Declare, Proaxis	21	3	
	lambda-cyhalothrin*	Warrior II, generics	21	3	
	methoxyfenozide	Intrepid, generics	21	18	
	permethrin*	Pounce, generics	30	3A	
	zeta-cypermethrin*	Mustang Max, Respect	7	3	
	<b>Pre-Mixes</b>				
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Brown Stink Bug	alpha-cypermethrin*	Fastac	30	3	Control may be needed if seedling plants are emerging from poorly closed seed slots and being damaged and/or killed.
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	cyfluthrin*	Tombstone	21	3	
	deltamethrin*	Delta Gold, generics	21	3	
	esfenvalerate*	Asana, generics	21	3	
	gamma-cyhalothrin*	Declare, Proaxis	21	3	
	lambda-cyhalothrin*	Warrior II, generics	21	3	
	zeta-cypermethrin*	Mustang Max, Respect	7	3	
	<b>Pre-Mixes</b>				
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Corn Earworm	alpha-cypermethrin*	Fastac	30	3	Control is only economically justified on seed, sweet, or popcorn. Treat if 10 or more moths for several consecutive nights are captured in an earworm pheromone trap just before or during silking.
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	chlorantraniliprole	Coragen	14	28	
	cyfluthrin*	Tombstone	21	3	
	deltamethrin*	Delta Gold, generics	21	3	
	esfenvalerate*	Asana, generics	21	3	
	gamma-cyhalothrin*	Declare, Proaxis	21	3	
	indoxacarb	Steward	1	22A	
	lambda-cyhalothrin*	Warrior II, generics	21	3	
	spinosad	Entrust, generics	28	5	
	zeta-cypermethrin*	Mustang Max, Respect	7	3	
	<b>Pre-Mixes</b>				
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Corn Flea Beetle	alpha-cypermethrin*	Fastac	30	3	5 or more beetles per plant, 50% of seedlings are severely damaged, and plants are under additional stress(es).
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	carbaryl	Sevin, Carbaryl, generics	48	1A	

Pest	Active Ingredient(s)	Trade Name(s)	Pre-Harvest Interval (days)	MoA <sup>1</sup>	Treatment Guideline	
Corn Flea Beetle (Con't.)	cyfluthrin*	Tombstone	21	3		
	deltamethrin*	Delta Gold, generics	21	3		
	esfenvalerate*	Asana, generics	21	3		
	gamma-cyhalothrin*	Declare, Proaxis	21	3		
	lambda-cyhalothrin*	Warrior II, generics	21	3		
	permethrin*	Pounce, generics	30	3A		
	zeta-cypermethrin*	Mustang Max, Respect	7	3		
	<b>Pre-Mixes</b>					
	lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Corn Leaf Aphid	dimethoate	Dimethoate, Dimate	28	1B	Pre-tassel: 15 aphids/plant whorl 3 weeks before tasseling and plants under moisture stress. Post-tassel: 50% of tassels covered prior to 50% pollination and plants under moisture stress.	
	<b>Pre-Mixes</b>					
	lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Corn Rootworm Beetles	alpha-cypermethrin*	Fastac	30	3	When tassels are shedding pollen and green silk is continuously clipped back to 1/2 inch or less before 50% pollination has taken place and beetles are present.	
	beta-cyfluthrin*	Baythroid	21	3		
	bifenthrin*	Capture, generics	30	3		
	cyfluthrin*	Tombstone	21	3		
	deltamethrin*	Delta Gold, generics	21	3		
	esfenvalerate*	Asana, generics	21	3		
	gamma-cyhalothrin*	Declare, Proaxis	21	3		
	indoxacarb	Steward	1	22A		
	lambda-cyhalothrin*	Warrior II, generics	21	3		
	permethrin*	Pounce, generics	30	3A		
	zeta-cypermethrin*	Mustang Max, Respect	7	3		
	<b>Pre-Mixes</b>					
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28			
Corn Borer: European and Southwestern	alpha-cypermethrin*	Fastac	30	3	European corn borer: base controls on anticipated yield, level of infestation, number of larvae per plant, corn growth stage, expected level of control, and cost of product and application. Refer to Field Crops IPM website < <a href="https://extension.entm.purdue.edu/fieldcropsipm/">https://extension.entm.purdue.edu/fieldcropsipm/</a> >.  Southwestern corn borer: First generation - at or just before 35% of the plants show fresh whorl feeding and live larvae are present. Second generation - controls are less effective and generally not economical for field corn.	
	<i>Bacillus thuringiensis</i>	Dipel, Agree, generics	0	11A		
	beta-cyfluthrin*	Baythroid	21	3		
	bifenthrin*	Capture, generics	30	3		
	carbaryl	Sevin, Carbaryl, generics	48	1A		
	chlorantraniliprole	Coragen	14	28		
	cyfluthrin*	Tombstone	21	3		
	deltamethrin*	Delta Gold, generics	21	3		
	esfenvalerate*	Asana, generics	21	3		
	gamma-cyhalothrin*	Declare, Proaxis	21	3		

Pest	Active Ingredient(s)	Trade Name(s)	Pre-Harvest Interval (days)	MoA <sup>1</sup>	Treatment Guideline	
Corn Borer: European and South- western (Con't.)	indoxacarb	Steward	1	22A		
	lambda-cyhalothrin*	Warrior II, generics	21	3		
	methoxyfenozide	Intrepid, generics	21	18		
	permethrin*	Pounce, generics	30	3A		
	spinetoram	Radiant	28	5		
	spinosad	Entrust, generics	28	5		
	zeta-cypermethrin*	Mustang Max, Respect	7	3		
	<b>Pre-Mixes</b>					
	lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Grasshop- per	alpha-cypermethrin*	Fastac	30	3	Treat field borders if about 8 or more adults or 15 or more nymphs/square yard are estimated. Treat field if 3 or more adults or nymphs/yard are estimated.	
	beta-cyfluthrin*	Baythroid	21	3		
	bifenthrin*	Capture, generics	30	3		
	carbaryl	Sevin, Carbaryl, generics	48	1A		
	cyfluthrin*	Tombstone	21	3		
	deltamethrin*	Delta Gold, generics	21	3		
	esfenvalerate*	Asana, generics	21	3		
	gamma-cyhalothrin*	Declare, Proaxis	21	3		
	indoxacarb	Steward	1	22A		
	lambda-cyhalothrin*	Warrior II, generics	21	3		
	zeta-cypermethrin*	Mustang Max, Respect	7	3		
	<b>Pre-Mixes</b>					
	lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Japanese Beetle	alpha-cypermethrin*	Fastac	30	3	When tassels are shedding pollen and green silk is continuously clipped back to 1/2 inch or less before 50% pollination has taken place and beetles are present. Beetles usually concentrated along borders.	
	beta-cyfluthrin*	Baythroid	21	3		
	bifenthrin*	Capture, generics	30	3		
	carbaryl	Sevin, Carbaryl, generics	48	1A		
	cyfluthrin*	Tombstone	21	3		
	deltamethrin*	Delta Gold	21	3		
	esfenvalerate*	Asana, generics	7	3		
	gamma-cyhalothrin*	Declare, Proaxis	21	3		
	lambda-cyhalothrin*	Warrior II, generics	21	3		
	zeta-cypermethrin*	Mustang Max, Respect	7	3		
	<b>Pre-Mixes</b>					
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28			
Slugs	metaldehyde	Deadline, others	-		Spread bait evenly across damaged area if leaves are significantly defoliated and stand is threatened. Use high rate for severe infestations.	
	iron phosphate	Ferroxx	-			

Pest	Active Ingredient(s)	Trade Name(s)	Pre-Harvest Interval (days)	MoA <sup>1</sup>	Treatment Guideline
Spider Mites	dimethoate	Dimethoate, Dimate	28	1B	If infested fields still have significant yield potential (150+ bu/a), spider mite colonies have established on the lower leaves (discolored), and spreading to the ear leaf or above, then treating before the dent stage may be justified.
	etoxazole	Zeal	21	10B	
	hexythiazox	Onager	30	10A	
	propargite*	Comite, generics	30	12C	
	spiromesifen	Oberon	30	23	
Stalk Borer	alpha-cypermethrin*	Fastac	30	3	Treatment protects only un-infested plants. When crop stands are threatened, control should be applied to prevent additional plant damage and/or death. Spot spraying infested area(s) of the field is often effective.
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	cyfluthrin*	Tombstone	21	3	
	deltamethrin*	Delta Gold, generics	21	3	
	esfenvalerate*	Asana, generics	21	3	
	gamma-cyhalothrin*	Declare, Proaxis	21	3	
	lambda-cyhalothrin*	Warrior II, generics	21	3	
	permethrin*	Pounce, generics	30	3A	
	zeta-cypermethrin*	Mustang Max, Respect	7	3	
	<b>Pre-Mixes</b>				
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		
Western Bean Cutworm	alpha-cypermethrin*	Fastac	30	3	Treatment may be needed if 5% of pre-tasseled plants have an egg mass and/or young larvae in the whorl.
	beta-cyfluthrin*	Baythroid	21	3	
	bifenthrin*	Capture, generics	30	3	
	chlorantraniliprole	Coragen	14	28	
	cyfluthrin*	Tombstone	21	3	
	esfenvalerate*	Asana, generics	21	3	
	gamma-cyhalothrin*	Declare, Proaxis	21	3	
	indoxacarb	Steward	1	22A	
	lambda-cyhalothrin*	Warrior II, generics	21	3	
	methoxyfenozide	Intrepid, generics	21	18	
	permethrin*	Pounce, generics	30	3A	
	spinetoram	Radiant	28	5	
	spinosad	Entrust, generics	28	5	
	zeta-cypermethrin*	Mustang Max, Respect	7	3	
<b>Pre-Mixes</b>					
lambda-cyhalothrin; chlorantraniliprole*	Besiege	21	3;28		

Pest	Active Ingredient(s)	Trade Name(s)	Pre-Harvest Interval (days)	MoA <sup>1</sup>	Treatment Guideline	
White Grubs	clothianidin	Poncho, generics	0 day plant-back	4A	No rescue treatments are available. Apply treatments if replanting into damaged field areas and grubs are still present.	
	terbufos*	Counter	-	1B		
	tefluthrin*	Force	-	3		
	thiamethoxam	Cruiser, CruiserMaxx	-	4A		
	<b>Pre-Mixes</b>					
	bifenthrin; chlorethoxyfos*	SmartChoice	-	3;1B		
	cyfluthrin; tebupirimphos*	Aztec, generics	-	3;1A		
Wireworms	clothianidin	Poncho, generics	0 day plant-back	4A	No rescue treatments are available. Apply treatments if replanting into damaged field areas and wireworms are still present.	
	terbufos*	Counter	-	1B		
	tefluthrin*	Force	-	3		
	thiamethoxam	Cruiser, CruiserMaxx	-	4A		
	<b>Pre-Mixes</b>					
	bifenthrin; chlorethoxyfos*	SmartChoice	-	3;1B		
	cyfluthrin; tebupirimphos*	Aztec, generics	-	3;1A		

\*Restricted Use Product.

<sup>1</sup>Mode of Action: Insecticides are classified based on their target site. Using different, and combined, modes of action may delay insect resistance to insecticide groups. More specific information can be found at IRAC: <[www.irac-online.org](http://www.irac-online.org)>.

READ AND FOLLOW ALL LABEL INSTRUCTIONS. THIS INCLUDES DIRECTIONS FOR USE, PRECAUTIONARY STATEMENTS (HAZARDS TO HUMANS, DOMESTIC ANIMALS, AND ENDANGERED SPECIES), ENVIRONMENTAL HAZARDS, RATES OF APPLICATION, NUMBER OF APPLICATIONS, REENTRY INTERVALS, HARVEST RESTRICTIONS, STORAGE AND DISPOSAL, AND ANY SPECIFIC WARNINGS AND/OR PRECAUTIONS FOR SAFE HANDLING OF THE PESTICIDE.

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