

FIELD CORN INSECTICIDE PERFORMANCE RATING, 2018

	Chemistry	Restricted Entry Interval (hours)	Restricted Use (R)	Chinch Bug	Fall Armyworm	Corn Rootworm	Cutworm	European Corn Borer	Flea Beetle	Grasshopper	Seed Corn Maggot	Southwestern Corn Borer	Green and Southern Green Stink Bug	Brown Stink Bug	Wireworm	Fire Ant
Access/Senator/Concur	NEO	12		7		6					8				5	5
Cruiser	NEO	12		7		6					8				5	5
Poncho	NEO		X	7		6					8				5	5
Ambush	SyP	12	X	7	5		8	6		7		5	6			
Asana XL/Adjourn	SyP	12	X	7	5		8	6		7		6	8	4		
Aztec/Defcon	SyP + OP	48	X	6		6	4				8					
Baythroid XL	SyP	12	X	7	5		8	6	6	8		6	8	4		
Belt*	DM	12			8			8				8				
Besiege	DM + SyP	24	X	7	9		8	9	6	8		9	8			
Blackhawk	SP	4		0	7		7	5		1		5				
Cobalt Advanced	SyP + OP	24	X	7	5		8	7	6	8		7	8	5		
Counter	OP	48	X	6		6	0		6		8				6	
Bifenthrin/Discipline/Fanfare/Brigade	SyP	12	X	7	5		8	7	6	8		7	8	7		
Force/Force EVO	SyP	0	X	3		6	5				5					
Hero	SyP	12	X	7	5			7	6	8		7	8	7		
Intrepid/Troubadour/Invertid/Turnstyle	IGR	4						8				8				
Intrepid Edge	IGR + SP	4			7			9				9				
Lambda Cy/Silencer/Warrior	SyP	24	X	7	5		8	6	6	8		6	8	4		
Lannate	Car	48	X	3	8		5	1		4		1				
Lorsban/Chlorpyrifos/Nufos	OP	24	X	7	4	6	7	5		6	8	5				8
Mustang Maxx/Respect	SyP	12	X	7	5		8	6	6	8		6	8	4		
Pounce/Perm-UP	SyP	12	X	7	5		8	6	6	8		6	6			
Prevathon	DM	4			9			9				9				
Proaxis/Declare	SyP	24	X	7	4		8	6	6	8		6	8	4		
Sevin/Carbaryl	Car	12	X	3	6		5	2	8	5		2				
Thimet/Phorate	OP	48	X			5	0				1					

Rating Scale: 0 = no control, 10 = excellent

*No longer labeled. Use of existing supplies is allowed.

The performance ratings in the chart are for comparison purposes only and are not necessarily a measure of percent control. Shaded boxes indicate products recommended for specific pests in this guide.

QUICK VIEW THRESHOLD GUIDE

Insect	Threshold	Scouting Procedure
Fall armyworm/Corn earworm	3-6 larvae per whorl	Examine 25-50 plants
Chinch bugs	when stand is threatened	
European corn borer	50% of plants showing damage	
Southwestern corn borer	Pheromone Traps: First generation – 50 per week; Second generation – 100 per week. Field Scouting: 10% of plants showing damage	
Stink bugs	10% of plants infested (< 2 feet tall) 25% of plants during early ear formation	Examine 25-50 plants (stink bugs tend to infest field borders first)

When planting into a cover crop, consider using a high seed treatment rate of 500 or above.

FIELD CORN INSECT CONTROL

Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Fall Armyworm Apply insecticide when 1 larva per whorl from emergence to V4. After V4, treat when 3-6 larvae are found per whorl. Use a high volume of water (15-20 gpa).	carbaryl Sevin 80 S	2 1/2 lb	2			48 (grain)
	Sevin XLR	2 qt		2		14 (forage)
	chlorantraniliprole Prevathon 0.43 SC	14-20 oz	0.047-0.067	6.4-9.1	DO NOT apply at intervals closer than 7 days apart.	14
	flubendiamide Belt 4 SC	2-3 oz	0.063-0.094	42.7-64	DO NOT apply Belt more than 4 times per season.	28 (grain) 1 (forage)
	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	6-10 oz	0.06-0.097	12.8-21		21
	methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.7		21 (ears and fodder) 3 (forage)
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075		DO NOT apply more than 8.3 oz of Blackhawk per year.	28 (grain) 7 (forage)
Cutworm Cutworm pressure is higher when planting into a cover crop. Consider increasing seed treatment rates when planting directly into a cover crop.	beta-cyfluthrin (R) Baythroid XL 1 EC	0.8-1.6 oz	0.007-0.013	80-160		21
	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	chlorpyrifos (R) Lorsban Adv. 3.755 E <i>(See Generic Insecticides)</i> Lorsban 15 G	1-2 pt 8 oz/1,000 ft of row	0.5-1.0	4-8	Apply at planting in a 6- to 7-inch band. Direct sprays to base of plant. On 6-inch or smaller plants, band sprays over top.	21
	chlorpyrifos + lambda-cyhalothrin (R) Cobalt Advanced	11-26 oz	0.23-0.52	4.9-11.6		21
	cyfluthrin (R) Tombstone 2 EC	0.8-1.6 oz	0.013-0.025	80-160		21
	esfenvalerate (R) Asana XL 0.66 EC <i>(See Generic Insecticides)</i>	3.2-9.6 oz	0.016-0.05	13-40	Direct spray to lower portion of plants and to soil around base of plant.	21
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	1.92-3.20 oz 0.77-1.28 oz	0.0075-0.0125	40-66.7 100-166		21
	lambda-cyhalothrin (R) Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	0.96-1.6 oz	0.015-0.025	80-133		21
	permethrin (R) Ambush 2 EC (Pounce/Perm-UP) 3.2 EC	6.4-12.8 oz 4-8 oz	0.1-0.2	10-20 16-32		prior to brown silk
	zeta-cypermethrin 0.8 EC (R) (Mustang Maxx, Respect)	1.28-3.2 oz	0.008-0.02	40-100		30

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Corn Rootworm	chlorpyrifos (R) Lorsban 15 G	8 oz/1,000 ft of row	1		Apply in 7-inch band or in furrow.	21
	clothianidin Poncho 600	0.25-1.25 mg ai/seed			Seed treatment – commercially available.	
	cyfluthrin + phostebupirim (R) Aztec or Defcon 2.1 G	6.7 oz/1,000 ft of row	0.12		Apply Aztec/Defcon in 7-inch band or in furrow.	30
	imidacloprid Senator/Axcess 5 FS Concur	1.34 mg ai/kernel 1.5 oz/42 lb seed			Seed treatment	
	phorate (R) Thimet/Phorate 20 G	6 oz/1,000 ft of row	1		Apply in 7-inch band behind the planter shoe directly in front of the press wheel. DO NOT apply Thimet or Phorate directly in furrow.	30
	tefluthrin (R) Force 3 G Force EVO	4-5 oz/1,000 ft of row 0.46-0.57 fl oz/1,000 ft	0.1-0.24		Apply in 7-inch band or in furrow. Apply in 7-inch T-band and incorporate or in furrow.	
	terbufos (R) Counter 15 G	8 oz/1,000 ft of row	1		Apply in furrow or in 7-inch band behind planter shoe in front of the press wheel.	
	thiamethoxam Cruiser 5 FS	1.25 mg ai/kernel			Seed treatment.	
Chinch Bug Treat when seedlings are dying to the point of reducing stand below an acceptable level and chinch bugs are found.	beta-cyfluthrin (R) Baythroid XL 1 EC	1.6-2.8 oz	0.013-0.022	45.7-80		21
	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	carbaryl Sevin 80 S	2 1/2 lb	2		Direct spray to base of plant. Use a minimum of 20 gal final spray volume per acre.	48
	chlorpyrifos (R) Lorsban Adv. 3.755 EC <i>(See Generic Insecticides)</i>	1-2 pt	0.5-1.0	4-8		21
	chlorpyrifos + lambda-cyhalothrin (R) Cobalt Advanced	16-38 oz	0.33-0.76	3.4-8.0		21
	esfenvalerate (R) Asana XL 0.66 EC <i>(See Generic Insecticides)</i>	5.8-9.6 oz	0.03-0.05	13-22		21
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	3.84 oz 1.54 oz	0.015	33 83		21

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Chinch Bug (cont.) Treat when seedlings are dying to the point of reducing stand below an acceptable level and chinch bugs are found.	lambda-cyhalothrin (R) Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	1.92 oz	0.03	66.7		21
	terbufos (R) Counter 15 G	8 oz/1,000 ft of row	Do not exceed 1.3 lb		DO NOT use more than 8.7 lb of Counter per acre. Counter only controls early season, light to moderate populations of chinch bugs.	
	zeta-cypermethrin + bifenthrin (R) Hero 1.24 EC	4-10.3 oz	0.04-0.1	12.4-32		30
Flea Beetle Spray young plants when beetles become abundant. Treat only if infestation is heavy.	beta-cyfluthrin (R) Baythroid XL 1 EC	1.6-2.8 oz	0.013-0.022	45.7-80		21
	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	carbaryl Sevin 80 S Sevin XLR	1 1/4-2 1/2 lb 1-2 qt	1-2	2-4		48
	terbufos (R) Counter 15 G	6-8 oz/1,000 ft of row	Do not exceed 1.3 lb		DO NOT use more than 8.7 lb of Counter per acre per season.	
	zeta-cypermethrin 0.8 EC (R) (Mustang Maxx, Respect)	2.72-4.0 oz	0.017-0.025	32-47		30
Grasshopper	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	chlorantraniliprole Prevathon 0.43 SC	8-20 oz	0.027-0.067	6.4-16	DO NOT apply at intervals closer than 7 days apart. Add MSO at 1% v/v for best results.	14
	chlorpyrifos (R) Lorsban Adv. 3.755 EC <i>(See Generic Insecticides)</i>	1 pt	0.5	8		21
	chlorpyrifos + lambda-cyhalothrin (R) Cobalt Advanced	6-13 oz	0.12-0.26	9.8-21.3		21
	esfenvalerate (R) Asana XL 0.66 EC <i>(See Generic Insecticides)</i>	5.8-9.6 oz	0.03-0.05	13-22		21
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125.5		21

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest	
Grasshopper	lambda-cyhalothrin (R) Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	1.28-1.92 oz	0.02-0.03	66.7-100		21	
	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	6-10 oz	0.06-0.098	12.8-21.3		21	
	zeta-cypermethrin 0.8 EC (R) (Mustang Maxx, Respect)	2.72-4.0 oz	0.017-0.025	32-47		30	
Seed Corn Maggot	Maggot damage can be reduced by early spring plowing that reduces plant residue prior to planting.						
	chlorpyrifos (R) Lorsban 15 G	8 oz/1,000 ft of row	1.0		Apply directly behind planter shoe into the seed furrow.	21	
	clothianidin Poncho 600	0.25-0.5 mg ai/kernel			Seed treatment – commercially available.		
	cyfluthrin + phostebupirim (R) Aztec or Defcon 2.1 G	6.7 oz/1,000 ft of row	0.12		Apply in 7-inch band or in furrow at planting.		
	imidacloprid Senator/Axcess 5 FS Concur	0.16-0.6 mg/ai kernel 1.5 oz/42 lb seed			Seed treatment.		
	terbufos (R) Counter 15 G	8 oz/1,000 ft of row	1.0		Apply in furrow in front of the press wheel.		
	tefluthrin (R) Force 3 G	4-5 oz/1,000 ft of row	0.1-0.16		Apply in 7-inch band or in furrow at planting.	30	
	thiamethoxam Cruiser 5 FS	0.25-0.8 mg ai/kernel			Seed treatment.		
European Corn Borer	<i>Bt</i> corn hybrids						
	beta-cyfluthrin (R) Baythroid XL 1 EC	1.6-2.8 oz	0.013-0.022	45.7-80	Field corn expressing the Bt toxin has proven to be very effective.	21	
	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30	
	chlorantraniliprole Prevathon 0.43 SC	14-20 oz	0.047-0.067	6.4-9.1		DO NOT apply at intervals closer than 7 days apart.	14
	chlorpyrifos + lambda-cyhalothrin (R) Cobalt Advanced	16-38 oz	0.33-0.76	3.4-8		21	
	chlorpyrifos (R) Lorsban Adv. 3.755 EC <i>(See Generic Insecticides)</i>	1-2 pt	0.5-1.0	4-8		21	
Early planting will help avoid problems with this insect. Treat in late whorl stage when 50% of plants have feeding damage (shotholes).							

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
European Corn Borer (cont.) Early planting will help avoid problems with this insect. Treat in late whorl stage when 50% of plants have feeding damage (shotholes).	esfenvalerate (R) Asana XL 0.66 EC <i>(See Generic Insecticides)</i>	7.8-9.6 oz	0.04-0.05	13-16		21
	flubendiamide Belt 4 SC	2.0-3.0 oz	0.063-0.094	42.7-64	DO NOT apply Belt more than 4 times per season.	28 (grain) 1 (forage)
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125.5	Use of insecticides applied to foliage for management of second-generation corn borers in early July has reduced stalk tunneling and lodging. However, yield increases have not been common with early-planted field corn.	21
	lambda-cyhalothrin (R) Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	1.28-1.92 oz	0.02-0.03	66.7-100		21
	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	6-10 oz	0.06-0.098	12.8-21.3		21
	methoxyfenozide Intrepid 2 F	4.0-16 oz	0.06-0.12	8-32		21
	methoxyfenozide + spinetoram Intrepid Edge	4-12 oz	0.09-0.28	10.7-32		28
	permethrin (R) Ambush 2 EC (Pounce/Perm-UP) 3.2 EC Pounce 1.5 G	6.4-12.8 oz 4-8 oz 6.7-13.3 lb	0.1-0.2	10-20 16-32	Apply Ambush and Pounce prior to ear formation. Granules are best for first-generation larvae. Use foliar sprays on second-generation larvae. Apply granules by aircraft or by ground equipment directing granules into whorls.	prior to brown silk
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075		DO NOT apply more than 8.3 oz of Blackhawk per year.	28 (grain) 7 (forage)
	zeta-cypermethrin 0.8 EC (R) (Mustang Maxx, Respect)	2.72-4.0 oz	0.017-0.025	32-47		30
	zeta-cypermethrin + bifenthrin (R) Hero 1.24 EC	4-10.3 oz	0.04-0.1	12.4-32		30
	Southwestern Corn Borer Apply when 10% of plants show shothole feeding in whorl. If using pheromone traps, make treatment at the following levels: 1st generation borers – 50 moths per week, 2nd generation borers – 100 moths per week. Plant early to avoid damage.	<i>Bt</i> corn hybrids				Field corn expressing the Bt toxin has proven to be very effective.
	beta-cyfluthrin (R) Baythroid XL 1 EC	1.6-2.8 oz	0.013-0.022	45.7-80		21
	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	carbaryl Sevin 80 S Sevin XLR	2.5 lb 2 qt	2	2	Apply high-volume coarse spray so that spray will run into whorls.	48

FIELD CORN INSECT CONTROL

Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Southwestern Corn Borer	chlorantraniliprole Prevathon 0.43 SC	14-20 oz	0.047-0.067	6.4-9.1	DO NOT apply at intervals closer than 7 days apart.	14
	chlorpyrifos + lambda-cyhalothrin (R) Cobalt Advanced	16-38 oz	0.33-0.76	3.4-8		21
	esfenvalerate (R) Asana XL 0.66 EC (See Generic Insecticides)	5.8-9.6 oz	0.03-0.05	13-22		21
	flubendiamide Belt 4 SC	2.0-3.0 oz	0.063-0.094	42.7-64	DO NOT apply Belt more than 4 times per season.	28 (grain) 1 (forage)
	gamma-cyhalothrin (R) Proaxis 0.5 CS Declare 1.25 CS	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125.5	Use of insecticides applied to foliage for management of second-generation corn borers in early July has reduced stalk tunneling and lodging. However, yield increases have not been consistent with early-planted field corn.	21
	lambda-cyhalothrin (R) Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 oz	0.02-0.03	66.7-100		21
	lambda-cyhalothrin + chlorantraniliprole (R) Besiege	6-10 oz	0.06-0.098	12.8-21.3		21
	methoxyfenozide Intrepid 2 F	4-16 oz	0.06-0.012	8-32		21
	methoxyfenozide + spinetoram Intrepid Edge	4-12 oz	0.09-0.28	10.7-32		28
	permethrin (R) Ambush 2 EC (Pounce/Perm-UP) 3.2 EC Pounce 1.5 G	6.4-12.8 oz 4-8 oz 6.7-13.3 lb	0.1-0.2	10-20 16-32	Apply Ambush and Pounce prior to ear formation. Apply granules for first-generation larvae by aircraft or by ground equipment directing granules into whorls. Sprays should be used for second-generation larvae.	prior to brown silk
	spinosad Blackhawk	2.2-3.3 oz	0.05-0.075		DO NOT apply more than 8.3 oz of Blackhawk per year.	28 (grain) 7 (forage)
	zeta-cypermethrin 0.8 EC (R) (Mustang Maxx, Respect)	2.7-4.0 oz	0.017-0.025	32-47		30
	zeta-cypermethrin + bifenthrin (R) Hero 1.24 EC	4-10.3 oz	0.04-0.1	12.4-32		30

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Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
Green and Southern Stink Bug Treat when 10% of plants are infested and plants are less than 2 ft tall. During early ear formation, treat when 25% of plants are infested. Consider using a higher seed treatment rate when planting into a cover crop to reduce potential stink bug damage.	beta-cyfluthrin (R) Baythroid XL 1 EC	1.6-2.8 oz	0.013-0.022	45.7-80		21
	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	gamma-cyhalothrin (R) Declare 1.25 CS Proaxis 0.5 CS	1.02-1.54 oz 2.56-3.84 oz	0.01-0.015	83-125.5 33-50		21
	lambda-cyhalothrin (R) Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	1.28-1.92 oz	0.02-0.03	66.7-100		21
	zeta-cypermethrin 0.8 EC (R) (Mustang Maxx, Respect)	2.7-4.0 oz	0.017-0.025	32-47		30
Brown Stink Bug Treat when 10% of plants are infested and plants are less than 2 ft tall. During early ear formation, treat when 25% of plants are infested.	bifenthrin (R) Brigade 2 EC <i>(See Generic Insecticides)</i>	2.1-6.4 oz	0.033-0.1	20-61		30
	zeta-cypermethrin + bifenthrin (R) Hero 1.25 EC	4-10.3 oz	0.04-0.1	12.4-32		30
Wireworm	terbufos (R) Counter 15 G	8 oz/1,000 ft of row	1.0		Apply in a 7-inch band and incorporate lightly or place in seed furrow. Tends to be a problem on sandy soils.	
	thiamethoxam Cruiser 5 FS	0.25-0.8 mg ai/kernel			Seed treatment.	
	clothianidin Poncho 600	0.25-0.5 mg ai/kernel			Seed treatment – commercially available.	
	imidacloprid (Axxess/Senator) 5 FS Concur	0.16-0.72 mg ai/kernel 1.8 oz/50 lb seed			Seed treatment.	
Fire Ant	chlorpyrifos (R) Lorsban 15 G	8 oz/1,000 ft of row			Apply in a “T” band application for best results.	21