Insect Management in Soybeans – 2019

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NOTE: The label is the law. Be sure to read the label before making any pesticide applications and observe all label restrictions including but not limited to days from last application to harvest.

OLF= Other-labeled formulations

Bean Leaf Beetle, Mexican Bean Beetle and Green Cloverworm

Insecticides Labele	d for Control of	Bean Leaf Beetle	e. Mexican Bean E	Beetle, and Green (Cloverworm
	Mode of	Amount active	Amount product	Time limits: days	
Insecticide	Action Group	ingredient per	per acre	before harvest	
(Formulation)		acre	•	(grain/seed only)	Remarks
acephate	1B	0.73 to 0.97 lb.	0.75 to 1.0 lb.	14	GENERAL USE;
(Orthene 97) or					CAUTION
OLF					
beta-cyfluthrin	3	0.013 to 0.022	1.6 to 2.8 fl.	21	RESTICTED USE
(Baythroid XL)		lb.	OZ.		WARNING
			(0.8 - 1.6)		
			GCW)		
126 - 0 - 2 -	0	0.000 (0.40 !!	0.4.10.4.0	40	DESTRICTED
bifenthrin	3	0.033 to 0.10 lb.	2.1 to 6.4 fl. oz.	18	RESTRICTED
(Brigade 2EC) or OLF					USE WARNING
cyfluthrin	3	0.025 to 0.044	1.6 to 2.8 fl. oz.	45	RESTRICTED
(Tombstone) or	S	0.023 10 0.044	(0.8 – 1.6	45	USE
OLF			(0.8 = 1.0 GCW)		DANGER
esfenvalerate	3	0.03 to 0.05 lb.	5.8 to 9.6 fl. oz.	21	RESTRICTED
(Asana XL)	3	0.00 to 0.00 ib.	0.0 10 0.0 11. 02.	21	USE
(Abaria AL)					WARNING
lambda-	3 + 28	0.016 +0.033lb.	5.0 to 8.0 fl. oz.	30	RESTRICTED
cyhalothrin+	0 / 20	to	0.0 10 0.0 02.		USE
chlorantraniliprole		0.026 + 0.052			WARNING
(Besiege)		lb.			
lambda-cyhalothrin	3	0.015 to 0.025	0.96 to 1.60 fl.	30	RESTRICTED
(Warrior II [2.08]) or		lb.	OZ.		USE
OLF					WARNING
methomyl	1A	0.225 to 0.3 lb.	0.75 to 1.0 pt.	14	RESTRICTED
(Lannate LV)			-		USE; DANGER
zeta-cypermethrin	3	0.0175 to 0.025	2.8 to 4.0 fl.	21	RESTRICTED
(Mustang Maxx)		lb.	OZ.		USE; WARNING
Insecticides Labele	d for Green Clo	verworm Only			
chlorantraniliprole	28			1	GENERAL USE;
(Coragen 1.67 SC)	-	0.045 to 0.098	3.5 to 7.5 fl. oz.		CAUTION
(Prevathon)		lb.	14.0 to 20.0 fl.		
		0.047 to 0.067	OZ.		
		lb.			
indoxacarb	22	0.045 to 0.11 lb.	4.6 to 11.3 fl.	21	GENERAL USE;
(Steward EC)			OZ.		CAUTION
methoxyfenozide	18	0.06 to 0.12 lb.	4.0 to 8.0 fl. oz.	14	GENERAL USE;
(Intrepid 2F)	_			_	CAUTION
methoxyfenozide +	5 + 18		4.0 to 6.4	28	GENERAL USE;
spinetoram					CAUTION
(Intrepid Edge)		0.040 += 0.004	2042404	20	OENEDAL LIGE
spinetoram	5	0.016 to 0.031	2.0 to 4.0 fl. oz.	28	GENERAL USE;
(Radiant SC)	5	lb. 0.025 to 0.05 lb.	1.1 to 2.2 oz.	28	CAUTION GENERAL USE;
spinosad	ິນ	บ.บ25 เบ บ.บ5 เป้.	1.1 (0 2.2 02.	20	GENERAL USE;

(Blackhawk)			CAUTION
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Thrips

Thrips rarely require treatment; however, early season injury to drought-stressed plants may occasionally reduce yields. Both nymphs and adults feed on the undersides of the leaves, causing small, silvery streaks and whitish or yellowish discoloration. Treatment may be required when injury appears on drought-stressed plants and more than eight thrips per leaflet are found.

Foliar Insecticides L	Foliar Insecticides Labeled for Control of Thrips							
	Mode of	Amount active	Amount product	Time limits: days				
Insecticide	Action Group	ingredient per	per acre	before harvest				
(Formulation)		acre		(grain/seed only)	Remarks			
acephate (Acephate 97 UP) or OLF	1B	0.24 to 0.49 lb.	0.25 to 0.5 lb.	14	GENERAL USE; CAUTION			
beta-cyfluthrin	3	0.007 to 0.013	0.8 to 1.6 fl. oz.	21	RESTICTED USE;			
(Baythroid XL)		lb.			WARNING			
bifenthrin (Sniper 2EC) or OLF	3	0.033 to 0.10 lb.	2.1 to 6.4 fl. oz.	18	RESTRICTED USE; WARNING			
cyfluthrin (Tombstone) or OLF	3	0.013 to 0.025	0.8 to 1.6 fl. oz.	45	RESTRICTED USE; DANGER			
lambda- cyhalothrin (Warrior II [2.08]) or OLF	3	0.015 to 0.025 lb.	0.96 to 1.60 fl. oz.	30	RESTRICTED USE; WARNING			
methomyl (Lannate LV)	1A	0.225 to 0.3 lb.	0.75 to 1.0 pt.	14	RESTRICTED USE; DANGER			
lambda- cyhalothrin+ thiamethoxam (Endigo ZC)	3 + 4A	0.024 + 0.032 to 0.028 + 0.037	3.5 to 4.0 fl. oz.	30	RESTRICTED USE; WARNING			
zeta-cypermethrin (Mustang Maxx)	3	0.02 to 0.025 lb.	3.2 to 4.0 fl. oz.	21	RESTRICTED USE; WARNING			

Potato Leafhopper

Leafhoppers attack soybeans during late June through July but rarely reach population levels that affect yields. Use a sweep net to take ten sweeps in each of ten locations in the field and count the number of leafhoppers. As a general guideline, a treatment may be needed when injury appears and infestations exceed four leafhoppers per sweep in stressed beans or eight leafhoppers per sweep in normal growing fields.

Insecticides Labeled for Control of Leafhoppers								
	Mode of	Amount active	Amount	Time limits: days				
Insecticide	Action Group	ingredient per	product per	before harvest				
(Formulation)		acre	acre	(grain/seed only)	Remarks			
acephate	1A	0.49 to 0.97 lb.	0.5 to 1.0 lb.	14	GENERAL USE			
(Acephate 97 UP)					CAUTION			
or OLF								
beta-cyfluthrin	3			21	RESTICTED USE			
(Baythroid XL) or		0.007 to 0.013	0.8 to 1.6 fl.		WARNING			
OLF		lb.	OZ.					

bifenthrin	3	0.033 to 0.10	2.1 to 6.4 fl.	18	RESTRICTED
(Brigade 2EC) or		lb.	OZ.		USE
OLF					WARNING
cyfluthrin	3	0.013 to 0.025	0.8 to 1.6 fl.	45	RESTRICTED
(Tombstone)			OZ.		USE
					DANGER
esfenvalerate	3	0.015 to 0.03 lb.	2.9 to 5.8 fl.	21	RESTRICTED
(Asana XL)			OZ.		USE
					WARNING
lambda-cyhalothrin	3	0.015 to 0.025	0.96 to 1.60 fl.	30	RESTRICTED
(Warrior II [2.08])		lb.	OZ.		USE
					WARNING
lambda-cyhalothrin	3 + 4A	0.024 + 0.032 to	3.5 to 4.0 fl.	30	RESTRICTED
+		0.028 + 0.037	OZ.		USE; WARNING
thiamethoxam					
(Endigo ZC)					270
zeta-cypermethrin	3	0.0175 to 0.025	2.8 to 4.0 fl.	21	RESTRICTED
(Mustang Maxx)		lb.	OZ.		USE
,					WARNING

Spider Mites

Mite outbreaks usually are associated with hot, dry weather, which accelerates reproduction and development. During periods of high humidity and field moisture, a fungal disease can reduce populations but high temperatures can nullify these effects.

Check weekly for mites, starting in late June through August, especially during a hot, dry season. Concentrate on the field borders and look for the early signs of white stippling at the bases of the leaves. Determine the extent of the infestation and assess the level of injury by examining 20 to 30 plants in the infested area. If isolated spots of mite activity are confined to the perimeter of the field, spot-treatment using ground equipment is recommended to prevent further spread of mites into the field. If the infestation is distributed throughout the interior of the field, treatment of the entire field is suggested if live mites are numerous and more than 50 percent of the plants show stippling, yellowing, or defoliation over more than one-third of the leaves. If rains come, mite development and survival will decrease but may not drop to economic levels if heavy populations are developing under high temperatures.

	Insecticides Labeled For Mite Control						
Insecticide	Mode of	Amount active	Amount	Time limits:	Remarks		
(Formulation)	Action Group	ingredient per	product per	days before			
		acre	acre	harvest			
abamectin	6	0.0096 to 0.019	1.75 to 3.5 fl.	28	RESTRICTED		
(Agri-Mek 0.7 SC)			OZ.		USE; WARNING		
					NOTE – only labeled		
					formulation- see label for adjuvant		
					requirements for		
					efficacy and to avoid		
					illegal residues		
bifenthrin	3	0.08 to 0.1 lb.	5.12 to 6.4 fl.	18	RESTRICTED		
(Sniper 2EC) or			OZ.		USE		
OLF					WARNING		
etoxazole	10B	0.045 to 0.135	2.0 to 6.0 fl. oz.	Do Not Apply	GENERAL USE;		
(Zeal 2.88 SC)		lb.		after R-5 stage	CAUTION		
				R5 = Beginning seed	NOTE - only		
				- seed is 1/8 inch	labeled		
				long in the pod at	formulation		
				one of the four			
				uppermost nodes			
				on the main stem			

zeta-cypermethrin	3	0.10 lb.	10.3 fl. oz.	21	RESTRICTED
+					USE
bifenthrin					CAUTION
(Hero)					

Corn Earworm

1. Sampling: Outbreaks often follow a midsummer drought, which causes the corn to ripen earlier and become less attractive to the moths. Female moths prefer to lay eggs in open-canopied, late-blooming soybean fields. Drought conditions also delay soybean maturity and prevent normal canopy growth, so peak moth activity is more coincidental with blooming of open-canopied fields.

Sampling for corn earworm should be done on a weekly basis from mid-August through September using a sweep net. Each sample should consist of 15 net sweeps with a 15-inch diameter sweep net done continuously one after the other. Each sweep consists of swinging the net in one direction through the foliage so that the top of the net passes 2 or 3 inches below the tops of plants. Fifteen consecutive sweeps are done from one side to the other while walking down a middle row. Swing the net with enough force to dislodge insects into the net. If some leaves are not broken off and in the net after the sample, the sampler is not using enough force. After each sample, stop and count how many earworms are in the net. Thresholds are based on the number of earworms per sample.

2. Decision Making: As a general guideline, thresholds are presented at the end of this chapter. Visit the website http://soybeans.ces.ncsu.edu/thresholds/ for access to the new threshold calculator.

Insecticides Labeled for Corn Earworm Control							
Insecticide (Formulation)	Mode of Action Group	Amount active ingredient per acre	Amount product per acre	Time limits: days before harvest	Remarks		
methomyl (Lannate LV)	1A	0.12 to 0.225 lb.	0.4 to 0.75 pt.	14	RESTRICTED USE; DANGER		
beta-cyfluthrin (Baythroid XL)	3	0.022 lb.	2.8 fl. oz.	21	RESTRICTED USE WARNING		
bifenthrin (Brigade 2EC) or OLF	3	0.10 lb.	6.4 fl. oz.	18	RESTRICTED USE WARNING		
chlorantraniliprole (Coragen 1.67 SC) (Prevathon)	28	0.045 to 0.098 lb. 0.047 to 0.067 lb.	3.5 to 7.5 fl. oz. 14.0 to 20.0 fl. oz.	1	GENERAL USE CAUTION		
esfenvalerate (Asana XL)	3	0.035 lb.	9.6 fl. oz.	21	RESTRICTED USE WARNING		
indoxacarb (Steward EC)	22	0.045 to 0.11 lb.	4.6 to11.3 fl. oz.	21	GENERAL USE CAUTION		
lambda-cyhalothrin + chlorantraniliprole (Besiege)	3 + 28	0.016 + 0.033 lb. to 0.026 + 0.052 lb.	5.0 to 8.0 fl. oz.	30	RESTRICTED USE WARNING		
lambda-cyhalothrin (Warrior II [2.08]) or OLF	3	0.03lb.	1.92 fl. oz.	30	RESTRICTED USE WARNING		
zeta-cypermethrin + bifenthrin (Hero)	3	0.10 lb.	10.3 fl. oz.	21	RESTRICTED USE CAUTION		

		0.0404.0004	0.01.400	00	OFNEDAL LIGE
spinetoram	5	0.016 to 0.031	2.0 to 4.0 fl. oz.	28	GENERAL USE
(Radiant SC)		lb.			CAUTION
spinosad	5	0.038 to 0.05 lb.	1.7 to 2.2 oz.	28	GENERAL USE
(Blackhawk)					CAUTION
zeta-cypermethrin	3	0.025 lb.	4.0 fl. oz.	21	RESTRICTED
(Mustang Maxx)					USE
					WARNING

Grasshopper

	Insecticides Labeled for Control of Grasshoppers						
msecticides Labeleu II	Mode of	Amount active	Amount	Time limits:			
Insecticide (Formulation)	Action Group	ingredient per acre	product per acre	days before harvest (grain/seed only)	Remarks		
acephate (Acephate 97 UP) or OLF	1B	0.24 to 0.49 lb.	0.25 to 0.5 lb.	14	GENERAL USE CAUTION		
beta-cyfluthrin (Baythroid XL)	3	0.016 to 0.022 lb.	2.0 to 2.8 fl. oz.	21	RESTICTED USE WARNING		
beta-cyfluthrin + imidacloprid (Leverage 360)	3 + 4A	0.02 + 0.04 lb.	2.8 fl. oz.	21	RESTRICTED USE; CAUTION		
bifenthrin (Brigade 2EC) or OLF	3	0.033 to 0.10 lb.	2.1 to 6.4 fl. oz.	18	RESTRICTED USE WARNING		
dimethoate (Dimethoate 400) or OLF	1B	0.5 lb.	1.0 pt.	21	RESTRICTED USE WARNING		
cyfluthrin (Tombstone) or OLF	3	0.031 to 0.044	2.0 to 2.8 fl. oz.	45	RESTRICTED USE DANGER		
esfenvalerate (Asana XL)	3	0.03 to 0.05 lb.	5.8 to 9.6 fl. oz.	21	RESTRICTED USE WARNING		
lambda-cyhalothrin (Warrior II [2.08]) or OLF	3	0.025 to 0.03 lb.	1.60 to 1.92 fl. oz.	30	RESTRICTED USE WARNING		
lambda-cyhalothrin + thiamethoxam (Endigo ZC)	3 + 4A	0.031 + 0.041 lb.	4.0 to 4.5 fl. oz.	30	RESTRICTED USE; WARNING		
zeta-cypermethrin (Mustang Maxx)	3	0.02 to 0.025 lb.	3.2 to 4.0 fl. oz.	21	RESTRICTED USE WARNING		
chlorantraniliprole (Coragen 1.67 SC) (Prevathon)	28	0.026 to 0.065 lb. 0.0027 to 0.067 lb.	2.0 to 5.0 fl. oz. 8.0.0 to 20.0 fl. oz.	1	GENERAL USE; CAUTION		

Beet Armyworm (BAW), Fall Armyworm (FAW), and Yellow Striped Armyworm (YSW)

Insecticides Labeled for FAW and YSW Control						
Insecticide (Formulation)		Amount active ingredient per acre	Amount product per acre	Time limits: days before harvest	Remarks	
acephate (Acephate UP 97) or OLF	1B	0.73 to 0.97 lb.	0.75 to 1.0 lb.	14	GENERAL USE FAW and YSW only	
beta-cyfluthrin (Baythroid XL)	3	0.013 to 0.022 lb.	1.6 to 2.8 fl. oz.	21	RESTRICTED USE first and second instar only	
bifenthrin (Brigade 2EC) or OLF	3	0.033 to 0.10 lb.	2.1 to 6.4 fl. oz.	18	RESTRICTED USE	
lambda-cyhalothrin (Warrior II [2.08]) or OLF	3	0.025 to 0.03 lb.	1.6 to 1.92 fl. oz.	30	RESTRICTED USE	
Insecticides Labeled fo	r BAW, FAW	and YSW Control				
chlorantraniliprole (Coragen 1.67 SC) (Prevathon)	28	0.045 to 0.098 lb. 0.047 to 0.067 lb.	3.5 to 7.5 fl. oz. 14.0 to 20.0 fl. oz.	1	GENERAL USE BAW and FAW only CAUTION	
indoxacarb (Steward EC)	22	0.045 to 0.11 lb.	4.6 to 11.3 fl. oz.	21	GENERAL USE CAUTION	
lambda-cyhalothrin + chlorantraniliprole (Besiege)	3 + 28	0.033 + 0.065 lb.	10.0 fl. oz	30	RESTRICTED USE WARNING	
methoxyfenozide (Intrepid 2F)	18	0.06 to 0.12 lb.	4.0 to 8.0 fl. oz.	14	GENERAL USE CAUTION	
spinetoram (Radiant SC)	5	0.016 to 0.031 lb.	2.0 to 4.0 fl. oz.	28	GENERAL USE CAUTION BAW AND FAW ONLY	
spinosad (Blackhawk)	5	0.038 to 0.05 lb.	1.7 to 2.2 oz.	28	GENERAL USE CAUTION	
methoxyfenozide + spinetoram (Intrepid Edge)	18 + 5		4.0 to 6.4 fl. oz.	28	GENERAL USE; CAUTION	

Stink Bugs

Insecticides Labeled for Stink Bugs								
Insecticide (Formulation)	Mode of Action Group	Amount active ingredient per acre	Amount product per acre	Time limits: days before harvest	Remarks			
acephate (Acephate UP 97)	1B	0.49 to 0.97 lb.	0.5 to 1.0 lb.	14	GENERAL USE CAUTION			
beta-cyfluthrin (Baythroid XL)	3	0.022 lb.	2.8 fl. oz.	21	RESTRICTED USE WARNING			
beta-cyfluthrin + imidacloprid (Leverage 360)	3 + 4A	0.02 + 0.04 lb.	2.8 fl. oz.	21	RESTRICTED USE; CAUTION			
bifenthrin (Brigade 2EC)	3	0.10 lb.	6.4 fl. oz.	18	RESTRICTED USE WARNING			
clothianidin (Belay)	4A	0.05 to 0.1.0 lb.	3.0 to 6.0 fl. oz.	21	GENERAL USE; CAUTION			

lambda-cyhalothrin	3	0.03 lb.	1.92 fl. oz.	30	RESTRICTED USE
(Warrior II [2.08])					CAUTION
or OLF					
lambda-cyhalothrin	3 + 4A	0.031 + 0.041	4.5 fl. oz.	30	RESTRICTED USE;
+		lb.			WARNING
thiamethoxam					
(Endigo ZC)					27
zeta-cypermethrin	3	0.025 lb.	4.0 fl. oz.	21	RESTRICTED USE
(Mustang Maxx)					CAUTION

Soybean Looper

Insecticides Labele	Insecticides Labeled for Soybean Looper							
Insecticide (Formulation)	Mode of Action Group	Amount active ingredient per acre	Amount product per acre	Time limits: days before harvest	Remarks			
chlorantraniliprole (Coragen 1.67 SC) (Prevathon)	28	0.045 to 0.098 lb. 0.047 to 0.067 lb.	3.5 to 7.5 fl. oz. 14.0 to 20.0 fl. oz.	1	GENERAL USE CAUTION			
indoxacarb (Steward EC)	22	0.055 to 0.11 lb.	4.6 to 11.3 fl. oz.	21	GENERAL USE; CAUTION			
lambda-cyhalothrin + chlorantraniliprole (Besiege)	3 + 28	0.033 + 0.065 lb.	10.0 fl. oz	30	RESTRICTED USE WARNING			
methoxyfenozide (Intrepid 2F)	18	0.06 to 0.12 lb.	4.0 to 8.0 fl. oz.	14	GENERAL USE CAUTION			
spinetoram (Radiant SC)	5	0.016 to 0.031 lb.	2.0 to 4.0 fl. oz.	28	GENERAL USE CAUTION			
spinosad (Blackhawk)	5	0.038 to 0.05 lb.	2.2 oz.	28	GENERAL USE CAUTION			
methoxyfenozide + spinetoram	18 + 5		4.0 to 8.0	28	GENERAL USE; CAUTION			

Soybean Aphid

Insecticides Labeled for Soybean Aphids							
Insecticide (Formulation)	Mode of Action Group	Amount active ingredient per acre	Amount product per acre	Time limits: days before harvest	Remarks		
acephate (Acephate UP 97) or OLF	1B	0.73 to 0.97 lb.	0.75 to 1.0 lb.	14	GENERAL USE CAUTION		
beta-cyfluthrin (Baythroid XL)	3	0.016 to .022 lb.	2.0 to 2.8 fl. oz.	21	RESTRICTED USE WARNING		
esfenvalerate (Asana XL)	3	0.03 to 0.05 lb.	5.8 to 9.6 fl. oz.	21	RESTRICTED USE WARNING		
lambda-cyhalothrin (Warrior II [2.08]) or OLF	3	0.015 to 0.025 lb.	0.96 to1.6 fl. oz.	30	RESTRICTED USE WARNING		
lambda-cyhalothrin + thiamethoxam (Endigo ZC)	3 + 4A	0.024 + 0.032 to 0.028 + 0.037	3.5 to 4.0 fl. oz.	30	RESTRICTED USE WARNING		
zeta-cypermethrin	3	0.0175 to 0.025	2.8 to 4.0 fl.	21	RESTRICTED USE		

(Mustang Maxx)		lb.	OZ.		WARNING
afidopyropen (Sefina)	9D	0.0098 lb.	3.0 fl. oz.	7	GENERAL USE; CAUTION
flupyradifurone (Sivanto)	4D	0.09 to 0.137 lb.	7.0 to 14.0 fl. oz.	21	GENERAL USE; CAUTION

Insect Thresholds

Corn Earworm Thres Sampling Tool	Row Width	Rows Sampled	Threshold - # CEW /15
Sweep Net	7"	5	2.5
	14"	3	2.4
	21"	2	3.1
	36"	1	3.1

NOTE - If other defoliating pests are present when pod damage is first evident, then adjustments should be made in the treatment thresholds for earworms. For example, if green cloverworms are actively feeding and have already caused 15 percent defoliation, then insecticide treatment would be justified at lower earworm infestations, about one-half the normal threshold. However, treatment may not be necessary if the majority of worms are infected with the fungus disease. This white to greenish-white fungus can have a significant impact on earworm populations. Access the web (www.ces.ncsu.edu/wp-content/uploads/2017/08/CEW-calculator-v0.006.html) to calculate thresholds based on your estimated cost of control (product cost plus application cost) and today's bushel value.

Other Soybean Insect Pest Thresholds

	# per row-fo	oot	# per 15 sw	eeps	
Pest species	Row Spacing		Row Spacing		Other comments
	7"-21"	above 21"	7"-21"	above 2	<u>I"</u>
Full-season plan	tings				
Mexican bean beetle	4	6	24	36	Pre- Bloom: 30 % defoliation Pod-Fill: 15% defoliation Fully Developed Seeds: 35% defoliation
Spider mite	Dam	age occurring ar	nd live mites p	resent	
Other defoliators ¹					Pre- Bloom: 30 % defoliation Pod-Fill: 15% defoliation Fully Developed Seeds: 35% defoliation
Double-crop plan	tings with po	or growth			
Mexican bean beetle	2	4	12	24	Pre-Bloom:20% defoliation – Pod-Fill: 10% defoliation Fully Developed Seeds: 15% defoliation seeds.
Spider mite	Dan	nage occurring a	nd live mites	present	
Other defoliators1					Pre-Bloom:20% defoliation – Pod-Fill: 10% defoliation Fully Developed Seeds: 15% defoliation seeds

¹Other defoliators include any combinations of green cloverworm, bean leaf beetle, blister beetle, Japanese beetle, soybean looper, yellowstriped armyworm, grasshoppers, or fall armyworm.

Revised Stink Bug Thresholds for Soybean (all stink bug species combined): Apply from R3-4 to R7, double after R7

# per row foot		# per 15 sweeps		
Row spacing	7-21" rows	Above 21"	7-21" rows	Above 21"
Soybeans for Grain	1-2	1-2	5	5
Soybeans for Seed	0.5	0.5	2.5	2.5

Soybean aphid: The current economic threshold for aphids is an average of 250 aphids per plant, on two consecutive field visits spaced about 5-7 days apart. This is because aphid populations can "crash" quickly due to heavy pressure by natural enemies like lady beetles, parasitic wasps, and fungal diseases. When scouting, choose a "Z" or "W" shaped pattern to cover the entire field and sample at least 30 plants per field by examining the entire plant, including stems and upper and lower leaf surfaces. Use the aphid/plant average for determining the need for treatment. The threshold applies to soybeans through the R5 growth stage (3 mm long seed in the pod at one of the four uppermost nodes on the main stem), after which time plants can tolerate 1,000+ aphids per plant.

Other Labeled Formulations of Commonly Used Insecticides Include But Not Restricted To:

Insecticide*	OLF trad	de name
Bifenthrin	Annex LFR (Tenkoz) Bi-Dash 2 E (Sharda USA) Bifen 2AG Gold (Direct AG Source) Bifender FC (Vive Crop Protection) Bifenture 2 EC and LFC (United Phosphorous) Bifenthrin 2 EC (Aceto) Discipline 2 EC (Amvac) Fanfare 2 EC (Adama)	Frenzy Veloz (Real Farm) Ruckus LFR (Helena) Slugbug (Real Farm) Sniper (Loveland) Sniper LFR (Loveland) Tundra 2 EC (Winfield) Xpedient Plus (Amvac)
Lambda- cyhalothrin	Grizzly Too and Grizzly Z (WinField United) Kendo 22.8 CS (Helm Agro US) L-C Insecticide (Drexel) Lambda T (Helena) Lambda-Cy Ag (WinField United) Lambda-Cy EC Insecticide RUP (UPL) LambdaStar (LG Life Sciences) Nufarm Lambda-cyhaolothrin 1EC (Nufarm)	Paradigm (Adama) Paradigm VC (WinField United) Province II (Tenkoz) Ravage (Innvictis Crop Care) Silencer (Adama) (Willowood Lambda-Cy (Willowood)
Acephate	Acephate 97 WDG (Adama) Bracket 97 (WinField United) Tide Acephate 90 WDG (Tide Interntational)	Acephate 90 WDG (Loveland Products) Acephate 97 UP (UPL)
Dimethoate	Dimate 4E (WinField United)	Dimethoate 400 EC (FMC)

*OLFs label rates and resitrictions may differ from those listed in this guide. Consult label carefully before making application.

Insecticidal Seed Treatments Labeled for Soybean

Company	Seed Trt Brand	Category	Active Ingredient	Group
Bayer	Acceleron IX-409	Insecticide	Imidacloprid	I: 4a
Syngenta	Cruiser 5FS	Insecticide	Thiamethoxam	I: 4a
Bayer	Gaucho 600 Flowable	Insecticide Imidacloprid		I: 4a
NuFarm	Senator 600 FS	Insecticide	Imidacloprid	I: 4a
UPL	STartUP	Insecticide	Imidacloprid	I: 4a
Bayer	Acceleron NemaStrike ST	Nematicide	Tioxazafen	
Syngenta	Avicta 500 FS	Insecticide Nematicide	Abamectin	I: 6
BASF	ILeVO	Nematicide	Fluopyram	F: 7
BASF	Poncho/Votivo	Insecticide Biological Nematicide	Clothianidin Bacillus firmus I-1582	I: 4a
Syngenta	Clariva pn	Biological Nematicide	Pasteuria nishizawae – Pn1	
Syngenta	Avicta Complete Beans 500	Insecticide Nematicide Fungicide	Abamectin, Thiamethoxam, Mefenoxam, Fludioxonil	I: 4a, 6 F: 4, 12
Syngenta	Avicta Complete Beans 500 Vibrance	Insecticide Nematicide Fungicide	Abamectin, Thiamethoxam, Mefenoxam, Fludioxonil, Sedaxane	I: 6, 4a F: 4, 12, 7
Syngenta	Clariva Elite Beans	Insecticide Biological Nematicide Fungicide	Thiamethoxam, Mefenoxam, Fludioxonil, Sedaxane, Pasteuria nishizawae-Pn1	I: 4a F: 4, 12, 7
Syngenta	Adage ST	Insecticide, Fungicide	Thiamethoxam, Mefenoxam, Fludioxonil	I: 4a, 6 F: 4, 12
Syngenta	CruiserMaxx	Insecticide Fungicide	Thiamethoxam, Mefenoxam, Fludioxonil	I: 4a F: 4, 12
Syngenta	CruiserMaxx Advanced, CruiserMaxx Plus	Insecticide Fungicide	Thiamethoxam, Mefenoxam, Fludioxonil	I: 4a F: 4, 12
Syngenta	CruiserMaxx EZ	Insecticide Fungicide	Thiamethoxam, Mefenoxam,	l: 4a F: 4, 12

			Fludioxonil	
	CruiserMaxx		Thiamethoxam,	I: 4a
Syngenta	Vibrance	Insecticide Fungicide	Mefenoxam,	F: 4, 12, 7
	Vibrance		Fludioxonil, Sedaxane	
Valent	Inovate Pro Seed	Insecticide Fungicide	Clothianidin,	I: 4a
Vaiciit	Protectant	miscettelae i aligiciae	Ipconazole, Metalaxyl	F: 3, 4
			Clothianidin,	I: 4a
Valent	Intego Suite	Insecticide Fungicide	Ethaboxam,	F: 3, 22, 4
			Ipconazole, Metalaxyl	
			Thiamethoxam,	I: 4a
 Helena	Seed Shield	Incocticido Eungicido	Mefenoxam,	F: 4, 12, 11
пејена	Seed Shield	Insecticide Fungicide	Fludioxonil,	
			Azoxystrobin	
			Imidacloprid,	I: 4a
NuFarm	Spirato IMTM 348	Incontinido Funcicido	Metalaxyl,	F: 4, 1, 12
Nuraiiii	FS	Insecticide Fungicide	Thiophanate-Methyl,	
			Fludioxonil	
			Thiamethoxam,	I: 4a
FMC	Upshot	Insecticide Fungicide	Mefenoxam,	F: 4, 12
			Fludioxonil	
			Thiamethoxam,	I: 4a
Winfield	Warden CX	Insecticide Fungicide	Mefenoxam,	F: 4, 12, 7
			Fludioxonil, Sedaxane	