



## Soybean Insect Management Recommendations for August and September 2016

### PROTECTING SOYBEAN PODS FROM INSECT DAMAGE

Now is the time we need to be scouting for insects that damage soybean pods. The two primary insects that do pod damage are corn earworm (CEW) and stink bugs.

#### CORN EARWORM THRESHOLDS FOR SOYBEANS

Thresholds using a sweep net are based on 15 sweeps, counting worms 3/8 inch or larger. Waiting until worms are this size can prevent spraying too early before egg hatch, thus avoiding the likelihood of a second spray later.

This example here was calculated using the web-based "CEW Threshold Calculator." Go to web site:

[www.ipm.vt.edu/cew/](http://www.ipm.vt.edu/cew/) to estimate thresholds using your sampling method.

control costs, price of soybean, and row width.

Sampling Method	Sweep Net (7 - 21 inch rows) ▾		
Control Costs (\$) (Product + Application)	12		
Price of Soybean (\$)	10	per bushel	
Row Width	14 inches ▾		
EIL:	<input type="button" value="Update"/>	1.76	caterpillars per 15-sweep sample



#### STINK BUG THRESHOLDS FOR SOYBEANS

See the table below for thresholds for green and brown stink bugs in soybean for grain and seed. When thresholds are met, pyrethroid insecticides are usually effective. *Note: if brown marmorated stink bug is the predominant species, thresholds are 3-5 per 15 sweeps (or 2-minute visual count). For more details, please refer to the Virginia Cooperative Extension publication ENTO168 NP, "[Brown Marmorated Stink Bug Biology and Management in Mid-Atlantic Soybeans](#)."*



	#/row foot		#/15 sweeps	
Row Spacing	7-21" Rows	Above 21"	7-21" Rows	Above 21"
Grain	1-2	1-2	5	5
Seed	0.5	0.5	2.5	2.5

To scout for insects, make 15-sweeps into the soybean plants right-to-left and left-to-right as you walk down the row. The top of the net should pass a few inches below the tops of plants, and should have enough force to dislodge insects and leave a few leaves in the net.



## SOYBEAN DEFOLIATION THRESHOLDS

Separate thresholds into full canopy and small canopy soybeans. Most full-season and some double-cropped soybeans with good growing conditions develop larger canopies which can withstand more defoliation than some double-cropped soybeans.

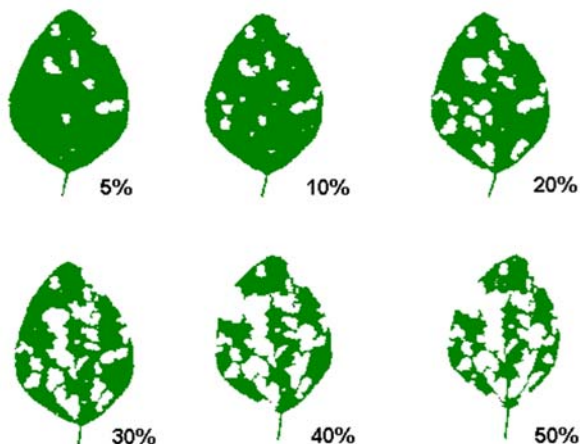
Spray an insecticide when fields reach these defoliation thresholds:

### Full Canopy Soybeans:

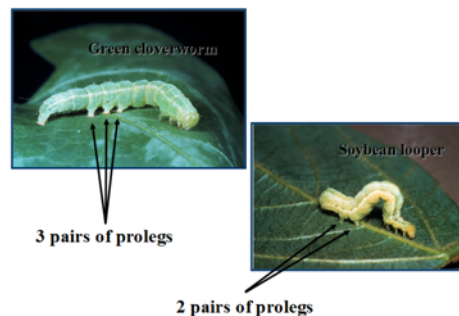
- 40% pre-bloom
- 15% from flowering to pod-fill
- 35% fully developed seeds

### Small Canopy Soybeans:

- 20% pre-bloom
- 10% from flowering to pod-fill
- 15% fully developed seeds



Many worms and insects feed on leaves. These include grasshoppers, bean leaf beetles, armyworms, and green cloverworms. But the most serious threat often comes from soybean looper. This worm looks similar to the green cloverworm and moves in the same looping like fashion. The two best methods to distinguish soybean loopers from green cloverworms are the fact they have only two pairs of prolegs and they do not thrash around when disturbed. Soybean loopers curl up like CEW instead of wiggling vigorously like the green cloverworm.



Soybean loopers often show up late in the season after CEW scouting has ended. CEW sprays can kill beneficials that help hold loopers in check. Loopers can defoliate much faster than other foliage feeding pests. They are also more difficult to control, pyrethroid sprays are not effective. If you see significant numbers of this worm pest, consider an insecticidal spray because they can do a lot of damage quickly.

Prepared by:

M. Watson Lawrence, Jr.  
Senior Extension Agent, Agriculture  
Virginia Cooperative Extension

Ames Herbert and Sean Malone  
Virginia Tech Tidewater Agricultural Research and Extension Center

Virginia Cooperative Extension programs and employment are open to all, regardless of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, genetic information, marital, family, or veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Jewel E. Hairston, Administrator, 1890 Extension Program, Virginia State, Petersburg. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Jewel E. Hairston, Administrator, 1890 Extension Program, Virginia State, Petersburg.

If you are a person with a disability and desire assistance or accommodation, please notify Tidewater AREC at (757) 657-6450 Phone/TDD\*) during business hours of 8:00 a.m. and 4:30 p.m. \*TDD number is (800) 828-1120.