



Corn Earworm Survey—2018
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Annually, we conduct a survey to estimate *Helicoverpa zea* (corn earworm/bollworm) infestation levels in field corn in mid- to late July. Corn is considered a nursery crop for corn earworm, allowing the pest to complete a lifecycle and then move on to other crops such as soybean, cotton, and peanut in August. Over 30 years of data show that there is a linear correlation between the infestation level in corn and the amount of soybean acreage that gets treated with insecticide for this pest.

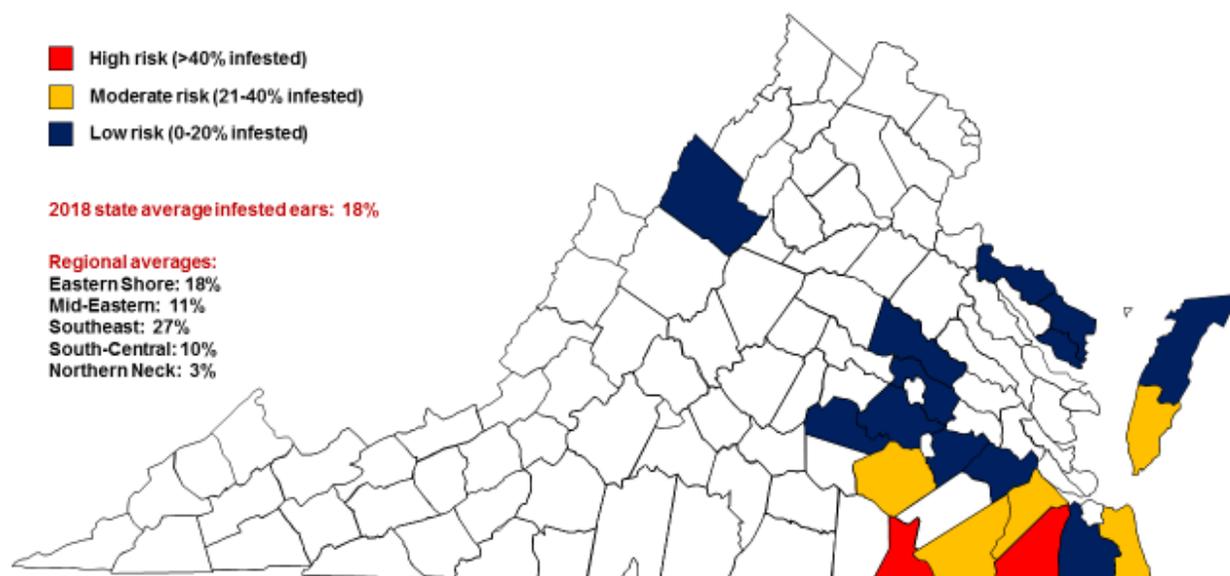
To conduct the survey this year, the number of corn earworm larvae found in 50 ears of corn was recorded in an average of 5 corn fields in each county. When fields were known to contain Bt or non-Bt corn, this was noted. Otherwise, samples were considered random and assumed to be representative of the actual Bt/non-Bt composition in each county. Age of corn earworms, or if they had already exited the ears, was also recorded (data not shown). We greatly appreciate the help of Virginia Cooperative Extension Agriculture and Natural Resource (ANR) Agents, Virginia Tech faculty and staff, summer agricultural assistants, interns, and others in this effort. These cooperators are acknowledged in the attached table. We also would like to thank the many growers who allowed us to inspect their fields for corn earworm larvae.

Results of the survey are provided in the Figure. Statewide, approximately 18% of ears were infested with corn earworm. Regional averages for 2018 were 3% infested ears in the Northern Neck, 11% in Mid-Eastern, 10% in South-Central, 27% in the Southeast, and 18% on the Eastern Shore.

This survey is intended to be a representative sample, not a complete picture. We always recommend scouting individual fields to determine exactly what is happening in terms of corn earworm as well as other pests and crop problems. Also, please check the black light trap reports on the [Virginia Ag Pest and Crop Advisory](#) and other reports posted weekly to keep up-to-date on the insect pest situation.

Annual Corn Earworm Field Corn Survey, 2018

Percent of ears infested with corn earworm in July (county and regional averages), and risk to soybean



County	% infested ears	Type of corn field sampled	Acknowledgments
Accomack	4.0	5 random samples	Eastern Shore AREC entomology
Amelia	9.6	5 Bt	Laura Siegle
Chesapeake	8.8	3 Bt, 2 non-Bt	Watson Lawrence
Dinwiddie	25.6	4 Bt, 1 non-Bt	Mike Parrish
Greensville	48.8	4 Bt, 1 random sample	Sara Rutherford, Alexis Smith
Hanover	13.2	5 random samples	Laura Maxey-Nay, Savannah Morgan
Henrico	9.2	5 Bt	Ed Olsen, Charlie Lively, Alice Cox
Isle of Wight	31.6	5 Bt	Livvy Preisser
Lancaster	5.2	5 random samples	Trent Jones
Northampton	31.2	5 random samples	Eastern Shore AREC entomology
Northumberland	0.8	1 Bt, 4 random samples	Trent Jones
Prince George	14.8	3 Bt, 2 random samples	Scott Reiter
Richmond Co.	0.0	2 Bt	Christine O'Keefe, Makenzie Hall
Rockingham	5.6	5 Bt	Doug Horn
Southampton	34.8	2 Bt, 1 non-Bt, 2 random samples	Neil Clark
Suffolk	52.0	4 Bt, 1 non-Bt	Tidewater AREC entomology
Surry	3.6	4 Bt, 1 random sample	Dwayne Sanders
Virginia Beach	25.2	4 Bt, 1 non-Bt	Roy Flanagan and sons
Westmoreland	3.2	5 Bt	Stephanie Romelczyk