



Corn Earworm Survey—2017

Sally Taylor

Extension Entomologist

Virginia Tech Tidewater AREC

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.

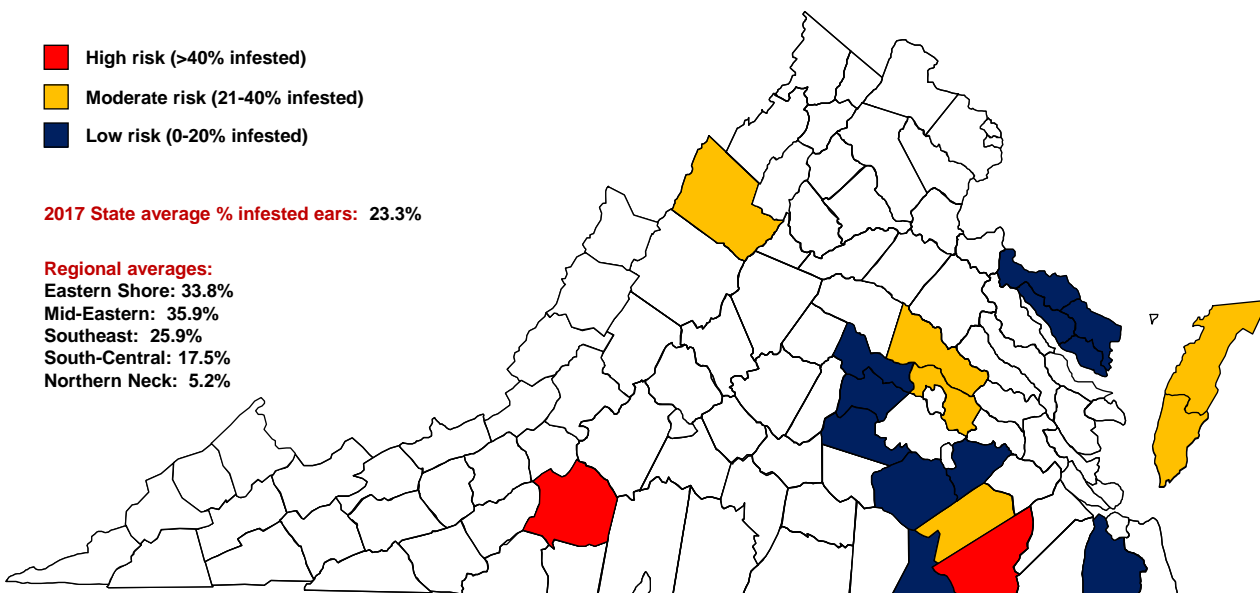
To conduct the survey this year, the number of corn earworm larvae found in 50 ears of corn was recorded in an average of 5 corn fields in each of 19 counties. When fields were known to contain Bt, non-Bt, or “refuge in a bag” (RIB) corn, this was noted. Otherwise, samples were considered to be random 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 Figure. 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 23% of ears were infested with corn earworm. Regional averages for 2017 were 5% infested ears in the Northern Neck, 36% in Mid-Eastern, 17.5% in South-Central, 26% in the Southeast, and 34% 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, 2017

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	29.2	4 Bt, 1 non-Bt	Helene Doughty and Eastern Shore AREC crew
Amelia	18.0	2 Bt, 1 Non-Bt, 2 random sample	Laura Siegle
Chesapeake	18.8	4 Bt, 1 Non-Bt	Watson Lawrence
Dinwiddie	19.2	2 Non-Bt, 3 random sample	Mike Parrish
Franklin	46.4	4 Bt, 3 Non-Bt	Chris Brown, Cynthia Martel, Spencer Irby
Goochland	16.4	2 Bt, 1 Bt RIB, 2 Non-Bt	Charlotte Maxwell
Greensville	18.8	3 Bt	Mike Parrish
Hanover	35.0	4 Bt, 1 Bt RIB, 1 random sample	Laura Maxey-Nay, Caroline Nepomuceno
Henrico	36.8	5 Bt	Ed Olsen, Victoria Houff, Charlie Lively & Stacey Heflin
Lancaster	4.0	5 Bt	Trent Jones & Ellie Daney
Northampton	38.4	5 Bt	Helene Doughty and Eastern Shore AREC crew
Northumberland	6.8	4 Bt, 1 random sample	Trent Jones & Ellie Daney
Powhatan	18.0	5 Bt	Rachel Grosse and Charlotte Maxwell
Prince George	19.6	3 Bt RIB, 1 Bt, 1 random sample	Scott Reiter
Richmond Co.	4.4	3 Bt, 2 random sample	Christine O'Keefe
Rockingham	29.2	5 Bt	Doug Horn
Southampton	53.2	5 Bt	Livvy Preisser, Samantha Dunn
Sussex	25.6	5 random sample	Scott Reiter
Westmoreland	5.6	5 Bt	Stephanie Romelczyk