

## **Emerging Corn Pest in Northern NY Prompts Farmer-Driven Research; Western Bean Cutworm Field Trial Results Available, Work Continues**

Western Bean Cutworm, an emerging pest of field and sweet corn in the Eastern U.S, prompted the farmer-driven Northern New York Agricultural Development Program to fund field research in 2016. The results of those trials are now posted at [www.nnyagdev.org](http://www.nnyagdev.org) as the work continues in cornfields this summer.

In 2016, Northern New York farms had the highest trap counts for Western Bean Cutworm (WBC), according to scouting reports by Cornell Cooperative Extension field crops specialists and the statewide NYS Integrated Pest Management (IPM) WBC monitoring network. Nine of the top 10 highest trap count sites for WBC moths in 2016 were in St. Lawrence, Jefferson, Franklin, and Lewis counties.

While no economically-significant infestations have yet been recorded, corn growers are concerned that kernel feeding damage by the WBC larvae present an opportunity for mold and pathogen growth that would impact feed quality, animal health, and milk production.

The 2016 field research on working farms in Northern New York evaluated the effectiveness of corn seed modified to include a Bt trait developed to manage WBC. The research was prompted by reports that some Bt corn was not adequately managing WBC.

“The 2016 research trials evaluating Bt corn with the Cry1F and Vip3A traits side-by-side showed failure of the Cry1F trait to adequately control Western Bean Cutworm. The Vip3A trait has worked well in Northern New York,” said Cornell University Cooperative Extension North Country Regional Agriculture Team Field Crops Specialist Michael Hunter.

Hunter and Cornell University Cooperative Extension North Country Regional Agriculture Team Field Crops and Soils Specialist Kitty O’Neil conducted the 2016 field trials in cooperation with Cornell University entomology, plant pathology, and IPM specialists.

The WBC research continues with new funding from the farmer-driven Northern New York Agricultural Development Program in 2017. As of late July, two cornfields in Jefferson County were found to have enough WBC egg masses and newly-hatched larva to require an insecticide treatment.

Female WBC moths look for pre-tassel corn to lay eggs. The eggs hatch and growing larvae eat tassels and make their way down the plant to the ear where they eat silks and, eventually, developing kernels underneath the husks. Peak population numbers occur in late July and early August.

“This year, because the corn tasseling is later than normal, Western Bean Cutworm damage may be partly avoided. The larva do not eat corn leaves so if there is no tassel for the larva to feed on, they will starve to death,” O’Neil explained.

The farmer-driven Northern New York Agricultural Development Program provides research and technical assistance to farmers in Clinton, Essex, Franklin, Jefferson, Lewis and St. Lawrence counties. Funding for the Northern New York Agricultural Development Program is supported by the New York State Senate and administered by the New York State Department of Agriculture and Markets.

*By Kara Dunn, Publicist, Northern New York Regional Ag Program*

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