



Team Grains

Trapping Southeast Wisconsin Variant Western Corn Rootworm

Variant western corn rootworms lay eggs in soybeans in anticipation of corn the following year. Wisconsin farmers traditionally rotate corn and soybeans to control rootworms, but this behavioral adaptation makes the rotation ineffective in areas where the variant is present. In southeast Wisconsin, the cost of using insecticide or planting a Bt rootworm corn hybrid without IPM scouting information from the previous season on an estimated half-million first-year corn acres would amount to \$8.6 million annually. Due to variability in pest distribution, not all first year corn fields require treatment, even in the most severely affected pockets. On the other hand, failure to treat in the presence of economic threshold levels of these rootworms can cause substantial economic damage.

Response

In 2003, individual monitoring efforts came together in the UW-Extension Southeast Wisconsin Variant Western Corn Rootworm Trapping Network. The network is determining the geographical range of the variant rootworms and developing educational programs to share results and management recommendations. The network monitors more than 71 sites in eleven southern Wisconsin counties for rootworm damage in first-year corn and for beetle activity in soybeans.

Results

- Monitoring in 2003 and 2004 confirmed variant rootworms in Rock, Walworth, Kenosha and Racine counties. Intensified monitoring in 2005 indicated activity in Dodge County.
- A mail survey of Wisconsin corn growers provided feedback about why more farmers do not use IPM scouting methods for the variant rootworm and how to improve IPM adoption.
- Funding from the Wisconsin Soybean Marketing Board, UW-Madison Center for Integrated Agricultural Systems, and Morgridge Center for Public Service and collaboration with county UW-Extension offices and the Department of Agriculture, Trade and Consumer Protection expanded capacity and leveraged resources.
- Grower commodity-based funding support and participatory research have allowed us to successfully obtain federal funding (USDA) for continued research to meet the needs of our stakeholders, with the goal of increasing adoption of Variant Western Corn Rootworm IPM practices.

Contact: Eileen Cullen, 608-261-1507, cullen@entomology.wisc.edu

April 2006+