Field Scouting for Corn Rootworm: An Integrated Pest Management (IPM) practice

Scouting for corn rootworm (CRW) beetles can help determine the need for rootworm control in continuous corn. **If beetle numbers are below thresholds, no field treatment for CRW is needed. (See the back of this card.)**

Bt CRW hybrids is known to occur in areas of the Midwest and is suspected in areas of Wisconsin. Collecting field scouting information can fine-tune management strategies to reduce reliance on Bt CRW hybrids and adopt an IPM program for corn production.

A well balanced IPM program includes scouting for CRW beetles, crop rotations, use of soil applied insecticides on conventional hybrids, seed treatments (low to moderate CRW populations only), and Bt CRW Hybrids.

**What is a corn rootworm’s life cycle?**

Northern and Western corn rootworms have similar life cycles. They overwinter as eggs laid in the upper soil profile and hatch in early June. First instar larvae feed on the smaller branching corn roots. Second and third instars feed on larger roots at the base of the corn plant.

Adult beetles emerge late June through August and lay eggs almost exclusively in corn fields from early August through early September. There is one complete generation/year. In the southeast part of Wisconsin, Western corn rootworm adults may lay eggs in soybean fields.

Western corn rootworm resistance to Lodged corn is not a good indicator of CRW presence.

Using accurate field information can help delay CRW resistance to the Bt CRW hybrids by matching appropriate corn rootworm management practices with actual beetle populations.

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Scan the QR code to see a video: How to scout for corn rootworm beetles

This card and video produced by Integrated Pest Management (IPM) program University of Wisconsin-Madison

**Lodged corn is not a good indicator of CRW presence.**
**How to scout:** Count the number of CRW beetles on 50 corn plants. **Visit 5 random areas of the field and count beetles on 10 plants in each area.** Do not pick plants directly adjacent to each other. Count the beetles found on the tassel, silk, top and bottom of leaves, and feeding on the ear tip.

First, trap beetles in the silk by firmly grabbing the silk end of the ear. Count beetles on the rest of the plant before slowly opening your hand to count beetles feeding on the silk and ear tip.

**For pollination protection,** scout fields before 70% of the field has silked.

**For root protection,** scout fields during the egg-laying period from early August to early September. Repeat this scouting procedure on 7-10 day intervals one or two more times during the egg-laying period.

**Pollination Protection:** Treat corn fields if silks are clipped to 1/2-inch or less from the ear and pollination is less than 50% complete. This usually requires approximately 5 beetles per plant.

**Root Protection following corn:** Treat if scouting counts from the previous year’s egg-laying period reached a field average of 0.75 beetles per plant.

**Root Protection following soybean:** Treat corn if yellow sticky trap catches average more than 5 Western corn rootworm beetles/trap/day during the egg-laying period from early August to early September.