

Scouting for European Corn Borer in Corn

Scouting can be an effective way to determine whether there is European corn borer (ECB) pressure in a corn field. Fields planted with both Bt (*Bacillus thuringiensis*) and non-Bt corn should be scouted. The discovery of ECB damage, in Bt fields in particular, should be followed up by collecting larvae for resistance testing and employing further mitigation measures to reduce the spread of potentially resistant populations.

Examine at least five sets of 20 plants from various parts of the field. Avoid the field edge as infestations tend to be higher in that area and, therefore, not representative of insect levels across the field.

Early to Mid-Season Scouting (When plants have passed the V6 stage):

- Look for signs of leaf feeding, including shot-holes (Figure 1) and window panning
- Pull out and examine the whorl of damaged plants to look for small larvae
- Examine the three leaves above and below the ear
- Look for egg masses on the underside of leaves near the mid-rib (Figure 2)



Figure 1. "Shot hole" feeding damage.
Photo credit: Canadian Corn Pest Coalition (cornpest.ca).

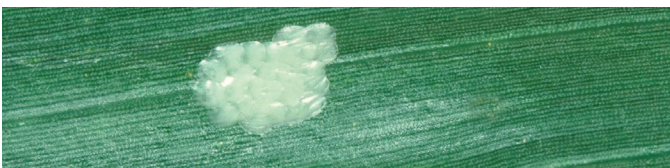


Figure 2. ECB egg mass.
Photo credit: Canadian Corn Pest Coalition (cornpest.ca).

Late-Season Scouting (late August – mid-September)

- Look for bent tassels or stalks (Figure 3)
- Look for "sawdust" (frass) where the leaf meets the stalk (Figure 4)
- Examine the stalks and shanks of the cobs for entry tunnels (Figure 5)



Figure 3. Stalks may be bent over at the point where ECB tunneled into them. Photo credit: Caitlin Congdon, Perennia



Figure 4. "Sawdust" or frass is a sign of ECB tunnelling. Photo credit: Caitlin Congdon, Perennia.



Figure 5. ECB entry hole in the stalk. Photo credit: Caitlin Congdon, Perennia.

If you find signs of ECB damage in your corn field, please contact Perennia's Field Crops Specialist or your Nova Scotia Department of Agriculture Representative, and your corn seed supplier.

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