Sweet Corn Insect Pests
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SWEET CORN INSECT PESTS

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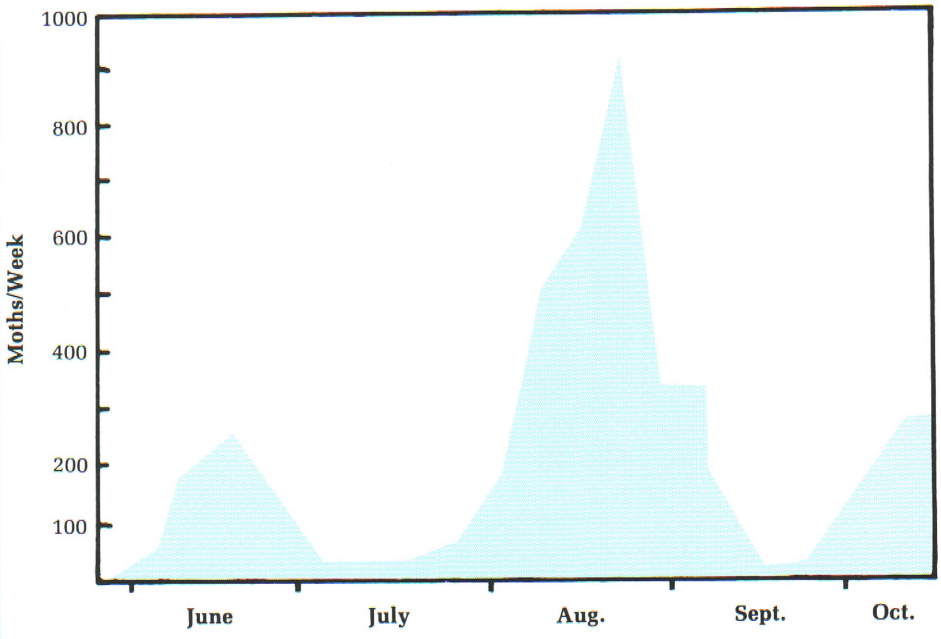
Seed corn maggots overwinter as small, brown pupae in the soil. Adult flies (Fig. 1) (¼ inch long, dusty brown) emerge in mid- to late May. They are attracted to soils that are high in decomposing organic matter, such as plowed-down winter cover crops or animal manure. The eggs are laid on or just under the soil surface and hatch in a few days. The maggots begin to feed on the decomposing organic matter in the soil. Seeds planted in such soils are often attacked before they sprout or shortly thereafter (Fig. 2), which may cause substantial loss in stand. There are 3 or more generations per year. The generations emerging after late June are less important because most plants are well established by this time.

European corn borers overwinter as larvae in cornstalks. Adult moths (Fig. 3) emerge in late May and begin laying eggs. Eggs (Fig. 4) hatch in about 4 days, and larvae (Fig. 5) begin to feed on the leaves. Within a few days, they bore into the stalk. This may result in some tassels breaking over (Fig. 6). If ears are formed, the larvae may bore out from the stalk and enter the ear from the butt end. Sometimes the larvae may go from the leaves directly to the ears, where they begin to bore (Fig. 7). There are three generations per year. Adult activity of the first generation usually peaks in mid-to late June; the second generation usually peaks in mid- to late August. A partial third generation also occurs. (See graph at right). However, a few adults may be flying and laying eggs throughout the season.

Corn earworm does not overwinter in Michigan. The moths (Fig. 8) migrate in from the south, arriving as early as July. The adults are attracted to green silks for egg laying. Eggs (Fig. 9, arrow) are laid singly on the silks and hatch in 4 to 5 days. The larvae (Fig. 10) enter the tip of the ear.



European corn borer adult flight, 1973 — Lenawee Co., MI.

For this reason, corn earworm damage is usually at the tip of the ear. Corn earworms may be present in Michigan from July until frost.

Corn leaf aphids (Fig. 11) (1/16 inch long and bluish-green) are generally found in the whorl or tassel area. They produce large quantities of honeydew that is high in sugars, and sooty mold develops on this honeydew. The aphids are generally not important, but the honeydew and sooty mold may make the corn unsalable for fresh market. The honeydew may also attract adult corn earworms for egg laying. Corn leaf aphids first appear in mid-June, and 10 to 12 generations may occur during the summer.

Sap beetles (Fig. 12) (¼ inch long, black with 4 cream-colored spots on the back) are sometimes a problem in sweet corn. These beetles are attracted to all kinds of ripening or rotting fruits or fermenting plant sap and gather in great numbers whenever a plant has been injured by a primary pest, such as European corn borer, corn earworm or even birds. Sap beetles are secondary invaders that can be kept to a minimum by keeping the fields free from damage from the primary pests.

For chemical control recommendations, homeowners should consult Extension Bulletin E-760(b), "Home Vegetable Garden Disease, Insect and Weed Control," available from your county Cooperative Extension Office. Commercial growers should consult Extension Bulletin E-312, "Control of Insects, Diseases and Nematodes on Commercial Vegetables."

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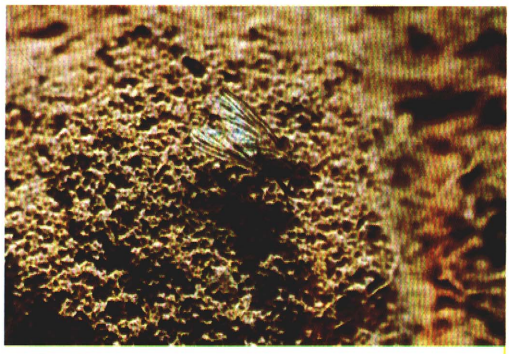
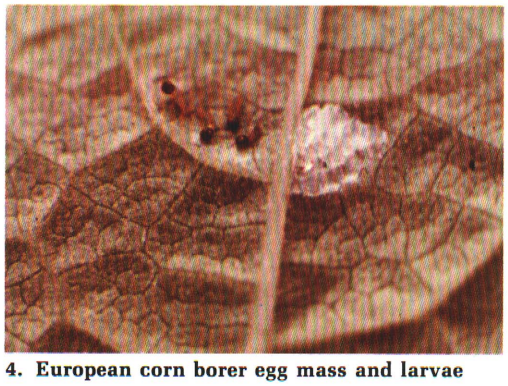


1. Seed corn maggot adult

2. Seed corn maggot in corn seed

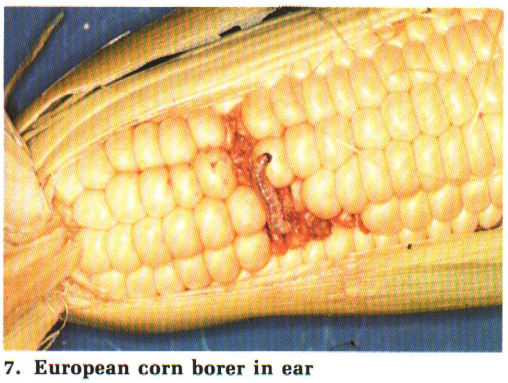
3. European corn borer adults



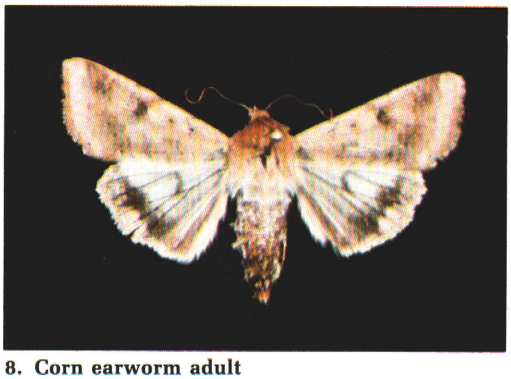
4. European corn borer egg mass and larvae

5. European corn borer larva (arrow) and damage to corn leaf

6. Broken tassel due to European corn borer



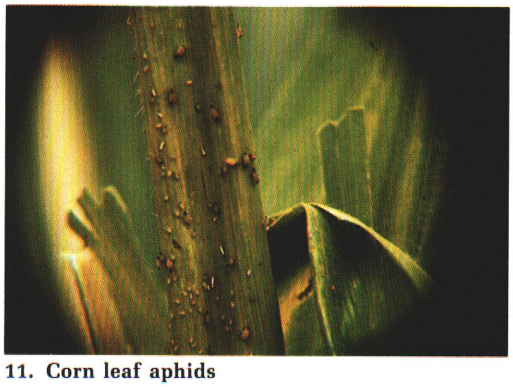
7. European corn borer in ear



8. Corn earworm adult

9. Corn earworm egg (arrow)

10. Corn earworm larva



11. Corn leaf aphids

12. Sap beetle