

# CORN INSECTS—ABOVE GROUND

For safe and effective use of insecticides, always identify the problem correctly.



1. European corn borer (early leaf feeding and mature borers)



8. Grasshopper



2. Southwestern corn borer



5. Corn earworm



9. Corn leaf aphid



3. Common stalk borer



6. Armyworm



10. Corn flea beetle and damage



4. Chinch bug



7. Corn rootworm beetles (left to right: Northern, Western and Southern)  
These beetles clip silks causing poor pollination shown at far right.

# Missouri Corn Insects--Above Ground

George W. Thomas, Department of Entomology, College of Agriculture

**1. European corn borer.** Corn is its primary host, although it may attack many other crops and weeds. The full grown larvae overwinter in stalks and stems, and pupate in spring. Moths emerge in May and early June. The moths lay silvery white, fish-scale-like packets of eggs on the underside of corn leaves. Small larvae feed briefly on leaves, then move down into the whorl, and later bore into the stalk. These larvae pupate in June and July and a second generation occurs in late July and August. A third generation also occurs in southeastern counties. Later generations often cause stalk breakage and ear droppage.

**2. Southwestern corn borer.** This pest in southern Missouri overwinters as a full grown larva in the tip of the underground portion of the stalk. The borers pupate in May; adult moths emerge in June and lay eggs singly or in small packets on leaves. The white and black larvae bore into the stalk, feed, pupate, and produce a second generation of larvae in July and August. When full grown, a larva will tunnel down the stalk below ground, then move back up and girdle the stalk just above ground. Girdled plants frequently break off and fall to the ground.

**3. Stalk borer.** These larvae tunnel in the stems of numerous grasses, weeds, vegetables, flowers, and crops including corn. Damage to crops is more common in the marginal rows. The overwintering eggs hatch in late spring and the brown and white striped larvae with a purplish band behind the legs bore into the stems of grasses and weeds. They move to corn in June and tunnel from the whorl into the stalk. Larval growth is completed in July; the larvae pupate in the soil and the moths emerge during early fall and lay eggs.

**4. Chinch bugs.** Adult chinch bugs overwinter in bunch grasses. The adults fly to small grains in early spring to lay eggs, and the young are approaching maturity by the time of grain ripening. These nymphs crawl to nearby corn or sorghums where they suck sap from around the lower portion of stalks while completing their growth and becoming winged adults. A second generation is produced on corn and sorghums and the adults fly to the hibernation grasses in the fall. Heavily infested plants are stunted and wilted; their leaves may be red-streaked and plants may die.

**5. Corn earworm.** Overwinters in southern portion of state as pupae which emerge as moths in May. Moths may also migrate into state earlier. First generation larvae feed in the whorls of corn just before tassels are visible; the second generation feeds in the silks and ear tips just following pollination; and the third generation feeds in the

ears of late planted corn and on the maturing grain. Larval colors vary from green, yellow, pink to brownish-black. The larvae attack several other field crops and garden plants.

**6. Armyworm.** Although some partially grown armyworm larvae will overwinter in Missouri, most of our troubles are believed to come from migrating moths. There are three generations annually, but the first causes most of the damage. The first generation is confined to grasses and small grains, but should a field be stripped before larvae mature, they will move into corn or other crops. The larvae will eat the leaves and down into the stalk. The *fall armyworm* is more of a problem on late planted corn than is the armyworm.

**7. Corn rootworm beetles.** These beetles are present from mid-July through September. The western and southern species may skeletonize small areas on the more tender leaves. All species feed upon silks and pollen from corn, other grain crops, legumes, and weeds. The beetles may keep the silks chewed back to the ear tip during the period of pollination, resulting in poor grain set. The number of beetles on corn during the egg laying period from August into October may serve as an indicator of rootworm problems the following growing season.

**8. Grasshoppers.** The nymphs and adults of several species of grasshoppers feed upon foliage, silks, and ear tips of corn from June through September. Damage is usually more severe during drouth years and is most noticeable along field margins bordering grass and wasteland areas.

**9. Corn leaf aphid.** Winged females migrate from small grains to corn during spring. Numerous generations are produced on corn and sorghums during the summer. The small, greenish-blue aphids may occur in countless numbers down in the whorl, on upper leaves, and on tassels. They are a vector of maize dwarf mosaic virus disease of corn. Heavy numbers occurring in whorls prior to tassel emergence can result in the plants' not producing shoots.

**10. Corn flea beetle.** The tiny, shiny black, jumping beetles move from grassland hibernation areas to seedling corn in early spring. They feed by stripping the upper surface from the leaf tips. Damage is more severe during wet, cold springs. Heavily damaged plants may die from a combination of flea beetles, root diseases, and cold weather. The beetles are a vector of Stewart's disease or bacterial wilt of corn. A second generation, of little or no importance, occurs during July and August.