Vegetable weevil
(Order: Coleoptera, Family: Curculionidae, *Listroderes difficilis* (Germar))

Vegetable weevil adult.

Description:
Adult: Adults are grayish-brown, although there is usually a light-colored 'V' on the elytra. The body is covered with tan or gray scales and scattered hairs. The snout is short and stout. Adults are about 8 mm in length.
Immature stages: Eggs are tiny (about 0.6 mm), slightly elliptical, and turn from white to black as they mature. Larvae are legless, slightly curved grubs. Larvae are initially creamy-white with a black head. As foliage is consumed, larvae develop a yellowish or green color and reach a length of about 14 mm. In larger larvae, the head is yellowish-brown with dark spots. Larvae have lateral pyramidal protrusions (as seen from above) which they use for locomotion.

Vegetable weevil larva feeding on tobacco leaf.

Biology:
Life cycle: There is a single generation per year with adults aestivating during the summer months. Only females are known and reproduce without mating. Adults become active in late summer and eggs are produced from fall through spring. Eggs are deposited near the crown of the plant, but sometimes on leaf petioles or on the soil adjacent to the plant. Eggs generally hatch in 15-20 days. Larvae develop through four instars in 23-45 days and drop to the ground to pupate. Although the pupal stage can be completed in 14-16 days, pupation occurs throughout winter and spring with adult emergence in late spring.
Seasonal distribution: Adults are present throughout the year, but aestivate through the summer months.

Damage to Crop: Both adults and larvae feed upon foliage and roots and can inflict serious damage. The principal damage is reported to occur when larvae feed on the developing tissue of plants, stunting plant development. Large larvae will feed on mature foliage, consuming everything except the large veins. Initially, larval feeding produces small round holes, but larger larvae produce large irregular holes. In root crops, larvae may move to roots to feed where they tunnel through the tissue. Adults will feed on stem tissue, sometimes cutting off stems of young plants at or just above the soil surface, producing damage similar to cutworms.

Management: Although having well developed wings, vegetable weevils rarely fly. Thus, distribution in fields is usually clumped along field margins closest to overwintering or aestivation sites, and these areas should be examined where a history of problems exists. Although this pest was formerly considered an important pest, foliar insecticides applied for other pests generally keep it in check.