Cabbage looper
(Order: Lepidoptera, Family: Noctuidae, *Trichoplusia ni* (Hubner))

Description:


Cabbage looper larva.

Adult: Forewings of the cabbage looper adult are grayish to dark brown with a silvery spot near the center; hindwings are pale brown. The wingspan is 33-38 mm.
Immature stages: Eggs are a flattened round shape (0.6 mm wide by 0.4 mm high) with fine ridges from top to bottom. Larvae are light to dark green with a light longitudinal stripe on either side of the body and two pair of abdominal prolegs. The body is thick, tapers toward the head and the larvae crawl in a looping fashion, arching the middle portion of the body. Larvae may reach a length of 35 mm, which makes it one of the larger larvae found on vegetable crops.

Biology:


Cabbage looper damage to tomato leaves.

Life cycle: Eggs are laid singly on the undersides of leaves. Larvae feed for two to three weeks and then pupate. The lower development temperature threshold is 10-12^{o} C, so reproduction slows dramatically in cold winter months. In the summer, high temperature (40^{o}C) is fatal to some stages so reproduction may also be stifled when temperatures are too high. Cabbage loopers overwinter in the pupal stage in southern states.
Seasonal distribution: Cabbage loopers are known to have 5 generations per year in North Carolina and likely have 6-7 in south Georgia, with reproduction occurring throughout the year but slower in the winter months. Annual immigrations arise from southern areas in early spring, but year-round reproduction can occur in south Georgia.

Damage to Crop: Cabbage loopers feed on a wide variety of host plants and are considered a secondary pest of tomato in Georgia. Larval feeding on foliage is usually initiated on mature leaves and can occasionally occur on the surface of mature fruit. Older larvae consume large irregular areas of leaves, characteristically leaving the larger leaf veins. About 90 percent of total defoliation occurs during the last two larval instars. Economic damage is rare in tomato, but presence can signal infestations of other Lepidoptera larvae.

Management: Scout weekly to determine if a 5% defoliation threshold has been reached and, if so, treat with an effective insecticide spray. Inspect for beneficial natural enemies of cabbage looper including nuclear polyhedrosis virus that causes the larvae to collapse, Trichogramma parasitized eggs, and various wasps parasitoids. Use insecticides soft on beneficials early in the season to increase beneficial activity and reduce selection for insecticide resistance.