

Hornworms on Tomato

By Eric Day

Two species of hornworm damage tomato plants in Virginia, the tobacco hornworm, *Manduca sexta* (Linnaeus) and the tomato hornworm *Manduca quinquemaculata* (Haworth) (Insecta: Lepidoptera: Sphingidae)



Figure 1, **Left:** tomato hornworm, Whitney Cranshaw, Colorado State University, Bugwood.org **Center:** Tobacco hornworm, Sturgis McKeever, Georgia Southern University, Bugwood.org **Right:** Hornworms with cocoons of wasp parasites, Clemson University - USDA Cooperative Extension Slide Series, Bugwood.org

Description: Both species are green with diagonal lines on sides and prominent horn on rear end. They can be up to 4 inches long.

Host Plant(s): Tomato, eggplant, tobacco, and pepper.

Damage: These caterpillars feed on leaves and green fruit. They are typically found on the upper portions of the plant. Since they consume 90% of the foliage just before they pupate they seem to appear “overnight”. This is not actually true; the smaller stages of the caterpillars did limited feeding that was quickly covered by regrowth. They in fact were on the same plant all along.

Distribution: Throughout Virginia and the United States.

Cultural Control: Hand pick worms, but do not destroy caterpillars with cocoons, leave in garden to continue biological control.

Organic/Biological Control: Bt, *Bacillus thuringiensis*, will control the caterpillars but must be applied when they are less than ½ inch long.

Chemical Control: Apply a labeled insecticide, following all instructions and precautions. Insecticides must also be applied when the caterpillars are less than ½ inch long.

References:

University of Florida fact sheet: common name: tobacco hornworm scientific name: *Manduca sexta* (Linnaeus) (Insecta: Lepidoptera: Sphingidae), common name: tomato hornworm scientific name: *Manduca quinquemaculata* (Haworth) (Insecta: Lepidoptera: Sphingidae), <http://entomology.ifas.ufl.edu/creatures/field/hornworm.htm>