

## Hornworms

Tomato and tobacco hornworms are very large caterpillars that can quickly defoliate plants and/ or damage fruits. They feed on solanaceous plants (nightshade family), such as tomatoes, tobacco, eggplant, peppers, potatoes, and various ornamentals and weeds. Hornworms are a group of caterpillars in the Sphingidae family that have a horn-like tail which gives the group its name.



Tobacco hornworm, *Manduca sexta*, on tomato.

Tomato and tobacco hornworms are often mistaken for each other as they look similar. Both can grow up to four inches long and are yellowish in color when smaller and become greener as they grow larger. Tomato hornworms develop eight white v-shaped markings on each side of the body and have a black horn while tobacco hornworms have diagonal lines along the sides of the body and a reddish horn. Pupation takes place under leaf litter or soil.

Adult tomato hornworms are often called five-spotted hawk moths as they have 5 pairs of orange-yellow markings along the abdomen. Adult tobacco hornworms are called Carolina sphinx moths and have 6 pairs of orange-yellow markings on the abdomen. All moths in the Sphingid family are commonly referred to as hummingbird moths as they fly around flowers where they hover to get nectar. Tomato hornworm adults are nocturnal while tobacco hornworm adults are crepuscular (active at dawn and dusk).



A hawk moth, *Manduca rustica*.

Damage to plants is caused by the larval stage feeding on foliage and fruit. Hand picking caterpillars is an easy way to manage populations in backyard settings. Caterpillars can be tricky to find sometimes as they tend to be well camouflaged.

Hornworm populations can also be affected by biological control. Many other animals use them as food, including wasps, birds, and small mammals. Some wasps, like paper wasps, paralyze hornworms then take them to the nest to feed their young. Other wasps, like parasitoid wasps, deposit eggs inside the hornworm where they develop and eat the hornworm from the inside. Parasitoid wasp pupal cases can be seen protruding from the hornworm's body.



Parasitized tobacco hornworm.

Management of hornworms is a personal decision as some people enjoy having adult hawk moths around for pollination, while others would rather not compete for tomatoes.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at [www.urban-ipm.blogspot.com](http://www.urban-ipm.blogspot.com)

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