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Tomato: Tomato hornworm

Use *Integrated Pest Management (IPM)* for successful plant problem management.

Biology

The tomato hornworm is the larva of a sphinx moth. The adult moth has a wingspan of up to 4"-5". Wing color is generally mottled gray. Mature caterpillars may reach up to 5" in length but are typically around 2" long. They are generally pale green with some white markings, although dark purple hornworms are sometimes seen. The mature hornworms are characterized by a short, curved, green to reddish horn on the back end. The larvae feed on the leaves of tomato, potato, and related plants and may cause serious defoliation. Symptoms of feeding include leaves chewed down to the midrib and dark pellets of frass (excrement) on or under plants.

Management Options

Non-Chemical Management

- ~ Hand-pick and kill hornworms. This is usually sufficient control for the home garden.
- ~ Natural enemies including birds, spiders, and parasitic wasps help control caterpillar populations. Avoid use of broad-spectrum insecticides which can kill beneficial insects.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit *Home and Garden Fact Sheets* for more information on using pesticides

Apply Bt when first noticed. Hornworms will soon quit feeding but may remain on plant a few days. If Bt is chosen, be sure to apply when insect is feeding. The best time to apply is when caterpillars are young. Use a spreader-sticker with liquid Bt formulations.

Listed below are examples of pesticides that are legal in Washington. Always read and follow all label directions.

- ~ Bonide Thuricide BT Conc
 - active ingredient: *Bacillus thuringiensis subsp. kurstaki*
 - EPA reg no: 4-226
- ~ Bug Buster-O [Organic]
 - active ingredient: pyrethrins
 - EPA reg no: 1021-1771-54705
- ~ ferti-lome Dipel Dust
 - active ingredient: *Bacillus thuringiensis subsp. kurstaki*
 - EPA reg no: 7401-290
- ~ Safer Brand Caterpillar Killer for Trees, Shrubs & Vegetables Conc II [Organic]
 - active ingredient: *Bacillus thuringiensis subsp. kurstaki*
 - EPA reg no: 70051-106-42697
- ~ Safer Brand Caterpillar Killer/Trees, Shrubs, & Vegetables Conc
 - active ingredient: *Bacillus thuringiensis subsp. kurstaki*
 - EPA reg no: 42697-23
- ~ Safer Brand Garden Dust RTU [Organic]
 - active ingredient: *Bacillus thuringiensis subsp. kurstaki*
 - EPA reg no: 36488-25-42697
- ~ This list may not include all products registered for this use.

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Images



*~ Caption: Tomato hornworm larva
~ Photo by: W. Cranshaw, CSU*



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