

# Pest Identification - Tomatoes



## COLORADO POTATO BEETLE

Fingernail-sized adult Colorado potato beetles have striped yellow and black backs, with orange heads showing black dots. The yellow eggs are laid in clusters on the undersides of leaves, hatching to reveal reddish, soft-bodied larvae. The larvae quickly gain size as they feed on new foliage and flowers, in severe cases stripping plants bare.

### Prevention and control:

Adult beetles walk to find host plants, so use a straw mulch to slow them down. Scout early and often for Colorado potato beetles, grabbing and crushing any adults seen in spring. Hand-pick larvae and adults and drop them into a pail of soapy water. Egg clusters can be pinched off the leaf and composted. Sow buckwheat among tomatoes to attract beneficial insects.



## CUTWORMS

Blackish-gray to brown smooth-skinned caterpillars that hide in the soil by day and feed at night. The caterpillars feed on the roots and foliage of young plants, often girdling them at the soil line, which causes the plant to keel over, shrivel up and die.

### Prevention and control:

Cutworm collars – two to three-inch rounds pressed an inch deep into the soil around plants – are usually effective; make them from cardboard or the base of plastic drink cups. Include perches in your garden for insect-eating birds. Frequent shallow cultivation can expose and kill the cutworms.



## GREENHOUSE WHITEFLY

Whiteflies are tiny sucking insects usually appearing in large numbers, especially in warm climates or in greenhouses. When they are resting on plants, whiteflies look like small wedges of white, but disturb them and they will take flight. Whiteflies weaken plants as they feed and excrete honeydew, which attracts ants. Some species transmit plant diseases.

### Prevention and control:

Whiteflies have many natural enemies that usually keep them in check, so grow flowers to attract small wasps and other predators. You can wash down infested plants with a strong spray of water, taking care to reach leaf undersides. For persistent infestations use a small hand-held rechargeable vacuum to remove them every few days.



## CORN EARWORM

The larvae of a nocturnal moth, corn earworms, also known as tomato fruitworms, are usually muddy brown caterpillars, although some may be green, yellow, pink, reddish brown or dark gray. Corn earworms feed on both foliage and fruit, typically making a round hole to feed and exit before moving on to damage more fruits.

### Prevention and control:

Experiment with different varieties and planting dates to escape earworm damage. Companion crops that may repel the moth include marigolds and dill, which will also help to attract the caterpillar's enemies, including types of wasp and flies.



## FLEA BEETLES

Tiny dark brown to black beetles, about a tenth of an inch long, can be seen on leaves. When disturbed, the beetles jump away using their powerful rear legs. Flea beetles chew tiny round holes in the topsides of leaves, with damage most severe in spring. New leaves are usually damaged first, giving them a lacy appearance.

### Prevention and control:

Always rotate crops. Use row covers or cloches to protect young plants for a few weeks after planting out. Manage outbreaks by making your own sticky traps by covering cardboard with a sticky substance such as honey; gently disturb the plants and use the trap to catch the beetles as they jump. Grow plenty of flowers to attract beneficial insects, which prey on flea beetles.



## SLUGS & SNAILS

Slugs and snails move about on moist leaves, mulch and soil, leaving a trail of slime. Species can be as small as a pea or as big as your thumb. Slugs and snails can chew holes into fruits, and small seedlings can be entirely eaten up. Feeding is most intense at night or during rainy periods.

### Prevention and control:

Natural predators include frogs, toads, snakes, turtles, ground beetles, firefly larvae and many birds. Use copper tape barriers on raised beds or planters. Slugs are easily lured into pit traps made by placing an inch of beer into a small open container that's sunk into soil up to its rim. You can hand pick slugs and snails then drown them in a pail of soapy water.

Report any bugs you've seen in your garden to: [BigBugHunt.com](http://BigBugHunt.com)



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## SPIDER MITES

Spider mites are attracted to drought-stressed plants. Under dry conditions above 80°F leaves may become stippled with tiny yellow dots that run together to make the leaves look sun-bleached. Faint webbing is often present on leaf undersides. Spider mites suck plant juices, weakening plants in heavy infestations.

### Prevention and control:

Keep tomatoes watered and encourage beneficial insects such as lady beetles. Clip off and compost heavily infested leaves. Thoroughly spray plants with water, taking care to rinse leaf undersides. If the mites persist, repeat this spraying then cover plants with an old sheet for a couple of days – the shady, moist conditions will set them back.



## TOMATO HORNWORM

Tomato hornworms are green caterpillars the exact shade of tomato leaves, with white diagonal stripes on their sides and a fleshy pointed tip at their tails. The caterpillars can grow to four inches long and weaken plants by removing foliage and, in some cases, chewing holes in fruit. They leave trails of pebbly, dark green excrement.

### Prevention and control:

Check plants for missing leaves from early summer and pick off any caterpillars you find. The pupae overwinter in the soil, so cultivate the ground in fall to kill them. Tomato hornworms with elongated white cocoons attached to their bodies are evidence of braconid wasps – tiny beneficial insects that lay their eggs on hornworms.



## THRIPS

Thrips are tiny sucking insects that look like miniature lobsters when viewed through a magnifying glass. On plants they look like tiny dark slivers. Feeding thrips cause white patches or streaks on plants. More seriously they can transmit viruses such as tomato spotted wilt virus.

### Prevention and control:

Thrips have numerous natural enemies that are attracted by planting lots of flowers. Avoid over-fertilizing, which increases the risk of damage. In warm climates where outbreaks of tomato spotted wilt virus are common, use reflective mulches to help hide your plants from passing thrips, and grow resistant varieties.



## LEAFHOPPERS

Beet leafhoppers spread a viral disease known as curly top virus around the gardens of the West. The tiny, greenish wedge-shaped insects hop quickly when disturbed.

### Prevention and control:

If leafhoppers are a nuisance where you garden consider growing tomatoes under row covers while they are young. Plants can be grown under some shade in very hot weather. These are the opposite conditions to those preferred by leafhoppers.

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