

## Tomato Disease and Insect Problems

Blossom End Rot usually occurs in the spring. It is caused by a calcium deficiency but it does not mean calcium is deficient in your soil. It is actually caused by inconsistent soil moisture. To solve the problem, keep your soil evenly moist. Mulch can help.

Flower drop and a failure to set fruit is usually caused by night temperatures being too high or too low or excessive nitrogen fertilizer. To solve the problem, avoid excessive fertilizer, possibly use hormone sprays or tap on blossoms stems 3 times a week to help fruit set.

Fruit cracks are caused by fast fruit growth because of high temperatures and high soil moisture levels. You cannot do anything about high temperatures but over watering does cause fruit cracks.

Both *Fusarium* and *Verticillium* wilt cause leaf yellowing and discoloration of the water-conducting tissues of the plant. Cut affected plants at the base of stems and examine them in cross section to see the browning of the water-conducting tissue compared to the healthy ivory of uninfected plants. *Verticillium* and *Fusarium* discoloration are extremely difficult to distinguish, although *Fusarium* discoloration tends to be darker. *Fusarium* tends to occur more in warmer soils and *Verticillium* in cooler ones. Management for both requires resistant varieties.

Tomato hornworms are likely to be the largest caterpillars you see in the vegetable garden. Their striping pattern makes them hard to spot despite their size. Note the horn or thorn at the rear end. Large, black or green droppings on the ground beneath tomato plants usually indicate the presence of hornworms. Adult moths have a wingspan up to 5 inches.

Damage by hornworm larvae is usually most common in midsummer, but there may also be a small population peak of larvae in the late summer. Entire leaves and small stems may be consumed. Large pieces from green fruit may also be chewed.

Handpick or snip hornworms with shears. Natural enemies normally keep populations under control. Rototilling after harvest destroys pupae in soil and prevents adults from developing.

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