

Tomato Diseases  
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Release: Week of July 4

Tomato plants are reaching the size when we begin to see symptoms of foliar diseases. While some diseases can be managed at this time of year, diseases like wilts and viruses cannot be controlled.

Before using a control method or applying a pesticide, identify what disease or issue is affecting a plant. As mentioned, some diseases cannot be controlled once a plant is infected. There are also bacterial diseases fungicides are not effective against. Applying a pesticide for these pathogens would be a waste of money and an unnecessary use of a pesticide.

Common tomato diseases that can be managed are early blight and Septoria leaf spot. Both begin as leaf spots on leaves near the base of the plant. As the disease progresses, leaves turn yellow and brown from the bottom of the plant upwards.

Early blight begins as one-fourth to one-half inch brown circular spots with concentric rings in their centers. Septoria begins as smaller, water soaked circular spots with dark brown margins and gray or tan centers that enlarge to about one-fourth inch.

If a tomato variety is highly susceptible and/or environmental conditions are conducive to infection, both diseases can lead to severe defoliation. This will affect fruit production and quality.

When leaf spots are first noticed, the use of fungicides labeled for use on vegetables, such as chlorothalonil or Mancozeb, will help prevent new infections. If a gardener chooses not to use a pesticide, remove any leaves with leaf spots as soon as they are noticed, mulch around the base of the plant, and avoid overhead irrigation to help slow disease progression.

In future years, select disease resistant varieties, avoid overcrowded plants to allow air circulation, and avoid overhead irrigation. Fungal diseases need moisture on leaves to infect them. Mulching soil at the base of plants reduces infections by preventing soil splashing onto lower leaves.

Bacterial spot and bacterial speck diseases also begin as leaf spots. Bacterial spot lesions are small and brown while bacterial speck lesions are black and slightly raised. Both typically have a yellow halo which helps distinguish them from fungal leaf spots. This is important since fungicides will not control bacterial diseases.

Symptoms of these two diseases are often noticed on green fruit first. Bacterial spot fruit lesions are brown, scabby and slightly sunken. With bacterial speck, fruit spots are blackish and slightly raised. The fruit can still be eaten.

Again, fungicides are not effective against bacterial diseases. Use crop rotation and good fall sanitation. Use mulch near the base of plants and avoid overcrowded plants and overhead irrigation.

Tobacco mosaic virus is easily spread by humans, especially smokers. When infected, leaves become mottled with light and dark green and may be distorted. This virus can be confused with herbicide injury. Plants will become stunted and are not vigorous.

Viruses cannot be controlled and infected plants should be removed and destroyed as soon as possible. Key management is planting resistant tomato varieties. This is also true for wilt diseases.

Fusarium and verticillium are two wilts that infect tomatoes through the roots. Once infected, the fungus grows within the plant blocking movement of water and nutrients. Infected leaves turn yellow and die and this is the first sign of infection. The sooner infected plants are removed and destroyed, the better. Crop rotation is a must for wilt diseases.