



## How to Manage Pests

### UC Pest Management Guidelines

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## Tomato Verticillium Wilt

**Pathogen:** *Verticillium dahliae*

(Reviewed 1/07, updated 1/07)

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#### SYMPTOMS AND SIGNS

Older leaves on tomato plants infected with *Verticillium* appear as yellow, V-shaped areas that narrow from the margin. The leaf progressively turns from [yellow](#) to [brown](#) and eventually dies. Older and lower leaves are the most affected. Sun-related fruit damage is increased because of the loss of foliage. A light tan [discoloration](#) develops in the vascular tissue, especially near the base of the plant. The discoloration extends a short distance up the plant and may occur in patches. Symptoms are most noticeable during later stages of plant development when fruit begin to size.

#### COMMENTS ON THE DISEASE

The fungus survives as microsclerotia in the soil. Once established in a field, it persists indefinitely and can cause disease whenever a susceptible host is planted. A large number of crops and weeds serve as hosts. The disease is favored by cool soil and air temperatures. *Verticillium* wilt is difficult to distinguish from [Fusarium wilt](#) and positive identification may require cultivating the fungus in a laboratory. *Verticillium* wilt seldom kills tomato plants but reduces their vigor and yield.

#### MANAGEMENT

Use resistant cultivars effective against Race 1. No source of resistance to Race 2 is commercially available. Sanitation, especially washing equipment to prevent movement of infested soil, may help to slow spread of the Race 2 strain of the pathogen. Rotation to nonsusceptible crops, such as small grains and corn, helps reduce inoculum.

#### PUBLICATION



*UC IPM Pest Management Guidelines: Tomato*

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Diseases

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