



How to Manage Pests

UC Pest Management Guidelines

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Tomato

Tomato Spotted Wilt

Pathogen: *Tomato spotted wilt virus* in the tospovirus group

(Reviewed 1/08, updated 6/10)

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SYMPTOMS AND SIGNS

Plants infected with *Tomato spotted wilt virus* exhibit bronzing of the upper sides of young leaves, which later develop distinct, [necrotic spots](#). Leaves may be cupped downward. Some tip dieback may occur. On ripe fruit chlorotic spots and blotches appear, often with concentric rings. [Green fruit](#) show slightly raised areas with faint, concentric zones.

COMMENTS ON THE DISEASE

Tomato spotted wilt virus is transmitted by various species of thrips, including the [western flower thrips](#), *Frankliniella occidentalis*, the onion thrips, *Thrips tabaci*, and the chili thrips, *Scirtothrips dorsalis*. *Tomato spotted wilt virus* also infects the thrips vector. Nymphs that acquire the virus by feeding on infected plants will retain the ability to transmit it for the remainder of their lives. *Tomato spotted wilt virus* cannot be passed from infected females through the eggs. It has an extremely wide host range, including many weeds and ornamentals as well as crop hosts. It is one of the few plant viruses with a host range that includes dicots and monocots (e.g., tomatoes and onions). Recent outbreaks have occurred in isolated areas of the San Joaquin Valley where they are believed to be associated with nearby infested crops.

MANAGEMENT

Management of tomato spotted wilt is generally not practiced in California, but in areas where it is known to occur, control of western flower thrips and onion thrips on tomato plants is justified to reduce spread of the virus. An IPM strategy has been developed as discussed in this [educational brochure](#) (1.0 MB, PDF) available to print.

IMPORTANT LINKS

- [Tomato Spotted Wilt brochure](#) (1.0 MB, PDF)

PUBLICATION



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Diseases

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