UC Pest Management Guidelines

AVOCADO VERTICILLIUM WILT

Pathogen: Verticillium albo-

atrum

(Reviewed: 7/01, updated: 6/99)



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SYMPTOMS

On trees with Verticillium wilt, the leaves suddenly wilt on one part of the tree or on the entire tree, then turn brown and die, remaining attached to the branches for several months. Brown to gray-brown streaks are seen in the wood of the branches or roots when the bark is peeled. Often trees infected with the Verticillium wilt pathogen send out new, vigorous shoots within a few months after the initial collapse of the tree, and the tree may recover completely.

COMMENTS ON THE DISEASE

The fungus that causes Verticillium wilt enters the roots and invades the water-conducting system, retarding or preventing water movement to the foliage from the roots. This disease is not as serious or as common in California as is Phytophthora root rot.

COMMENTS ON CONTROL

Often no treatment is necessary as trees recover completely. Dead branches should be removed after dieback ceases and new growth begins. In case of

severe and recurring disease, fumigate the area. There are also several disease prevention strategies that will reduce the potential for damage by this disease. These include using Mexican rather than Guatemalan rootstocks; the former appear to be more resistant to this disease. Do not plant avocados on land that has been used for other crops susceptible to Verticillum wilt such as tomato, eggplant, pepper, many berries, apricot, potato, and a number of flower crops. Do not plant susceptible crops in an established avocado grove. Do not use trees that are or have been affected with Verticillium wilt as sources of budwood or seeds.

TREATMENT:

Pesticide

(commercial

Amount/Acre

name)

A. METHYL BROMIDE*

350-450 lb/acre

...or...

1 lb/100 sq ft

COMMENTS: Use low rate on sandy loam and high rate on heavier soils with high clay content. Inject 7-8 inches, 12-18 inches apart, and tarp immediately. Do not plant for at least 1 month.

* Permit required from county agricultural commissioner for purchase or use.

PRECAUTIONS

PUBLICATION



UC UC IPM Pest Management Guidelines:

Avocado

UC ANR Publication 3436

Diseases

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