## UNIVERSITY OF CALIFORNIA STATEWIDE INTEGRATED PEST MANAGEMENT PROGRAM

# UC Pest Management Guidelines

**AVOCADO BACTERIAL CANKER** 

Pathogen: Xanthomonas campestris (Reviewed: 7/01, updated: 7/01)

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## SYMPTOMS

The first visual symptoms of bacterial canker on the bark are slightly sunken dark areas with a watery necrotic pocket under the surface. As the canker develops, the bark splits, usually at one side of the canker, and the watery fluid oozes out and dries, leaving a white powdery residue around and sometimes over the lesion. Typical cankers range from 2 to 10 cm in diameter. Usually cankers appear at the base of the tree first and often spread upward in a straight line on one side of the trunk or branch. Necrotic streaks extend in the wood from the necrotic areas underneath the cankers both above and below the lesions. Necrotic streaks between the cankers are usually in the xylem, sometimes toward the center of branches or trunks.

Severely affected trees may have unthrifty thin foliage on one branch or on the entire tree. Sometimes newly planted trees become stunted with many lesions; new branches grow from buds below the affected part. Affected trees often have symptoms of boron deficiency on the leaves.

#### COMMENTS ON THE DISEASE

Bacterial canker is a disease that is widespread but relatively unimportant. Normal incidence in a grove is a few affected trees. In some groves however, the disease may be severe and affect well over 60% of the trees. The disease is believed to be spread through nursery practices because cankerous lesions occur on newly planted trees.

## COMMENTS ON CONTROL

Normally the disease is a minor problem with no control necessary. Use disease-free nursery stock and keep trees healthy to prevent development of this disease. If the disease is severe and yield is affected, the tree should be removed.

## PUBLICATION



UC IPM Pest Management Guidelines: Avocado REVIEWED UC ANR Publication 3436

Diseases B. A. Faber, UC Cooperative Extension, Santa Barbara/Ventura counties L. J. Marais, Plant Pathology, UC Riverside