

## UC Pest Management Guidelines

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### AVOCADO ANTHRACNOSE

Pathogen: *Colletotrichum gloeosporioides*  
(Reviewed: 7/01, updated: 7/01)



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#### SYMPTOMS

Anthraco­nose often becomes apparent in avocados when trees begin to lose many of their leaves. These fallen leaves and those left on the trees may have large brown dead areas appearing in the center and on their margins that are caused by the fungus, *Colletotrichum gloeosporioides*. This fungus is a natural inhabitant of California avocado and citrus groves, where it grows on dead twigs and leaves and is normally of little importance. With extended periods of wet conditions and mild winter temperatures, a buildup occurs of the fungus growing on the dead twigs and leaves. This abundance of spores falls not only upon more leaves, where they repeat the cycle, but many also fall on fruit.

After being deposited on the undamaged green fruit surfaces, the spores germinate and penetrate the fruit, causing small brown to black spots surrounding the lenticels. There is no further development until the fruit starts to ripen after harvest. During ripening, the fungus resumes growth, producing typical visible anthracnose symptoms. The fungus also enters the fruit via wounds caused by other agents such as insects and other pathogens. In time, these spots enlarge, often covering most of the fruit, and become covered with the pink spores of the anthracnose fungus. When the fruit is cut in half through one of the spots, rot extending into the flesh in a hemispherical pattern can be seen.

#### COMMENTS ON THE DISEASE

Anthraco­nose is not normally a problem in California avocados but occasionally becomes serious during periods of extended rainfall. During these periods, the disease can cause severe loss of foliage and fruit infections that can be extensive but do not become apparent until fruit begins to ripen after harvest.

When anthracnose occurs, the development of fruit infections usually persists until the end of the harvest season because the fungus can infect fruit at all stages of development and remain dormant until the fruit ripens. Temperature is critical to anthracnose development. Once fruit starts to

ripen, temperatures of 75°F and above will accelerate development of anthracnose, while temperatures below 59°F will retard development. As far as the foliage infections are concerned, anthracnose is not as disastrous as fruit infections because after a period of dry weather the trees recover. If another wet period occurs, however, foliage symptoms may develop again.

### **COMMENTS ON CONTROL**

There are no chemical controls registered in California, and postharvest handling controls are of limited use. Fruit should be cooled to 41°F as soon as possible after harvest. Avoid temperatures below 41°F because internal damage caused by chilling injury may occur. Delays of longer than 6 hours before cooling and higher pulp (air) temperatures during these delays will result in increased postharvest fruit decay. This is of increasing importance as the season progresses because fruit ripens faster as it increases in maturity. Haas is more tolerant to anthracnose than are Fuerte, Wurtz, and Rincon cultivars.

### **PUBLICATION**



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Diseases

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