Recommendations for Management & Control of Mango Anthracnose

Like other fungal disease measures taken to prevent infection offer the best control. Hence, a program combining the provision of proper plant nutrition, good cultural practices and timely fungicide applications must be followed diligently.

In the Cayman Islands, the moist and warm weather during September and October are particularly favourable to the growth of the fungus and development of spores. Spraying the tree with a recommended fungicide at least once during these months can reduce fungal growth on the leaves. Subsequently, trees should receive at least two other spray treatments before January/February of the following year when mature trees begin to flower.
As leaf fall is natural during the last three months of the year, practice good field sanitation. Fallen leaves (including those from the local round and long mango trees) should be collected and disposed of carefully. This may not be practical for large orchards but is a good practice for a few trees planted in a backyard setting. Harvesting un-ripened but **mature fruits** may help to reduce loss of yield in the field.

Recommended fungicides are any **one** of the following: Benlate, Manzate, Tribasic copper or Triple Action Neem Oil.

CAUTION: To prevent the development of pesticide resistance, Benlate should be used in a rotation or mixed together with Manzate. A spreader/sticker may be added to the mixture, this will allow the product to spread across the leaf more uniformly and enhance the absorption of the active ingredient by the plant.

PLEASE NOTE:

- Read all pesticide labels and follow the directions carefully.
- Use at the recommended rate.
- Store all pesticides in secure storage and out of the reach of children.

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Information Sheet

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Anthracnose Disease of Mango

ANTHRACNOSE DISEASE OF MANGO

Anthracnose is the most important economic disease of mango. It is caused by a fungus called *Colletotrichum gleosporioides*. The disease is a very serious threat as it has the ability to attack all parts of the plant: leaves flowers, fruits and roots and plants of all ages can be affected.

On leaves, anthracnose infections start as small, angular, brown to black spots. If the leaves are young when originally infected, the spots can enlarge to form extensive dead areas (Figure 1).

FIGURE 1

Infections that begin in older leaves usually result in smaller lesions with a maximum diameter of 1/2 inch that appear as glossy dark-brown to black angular spots (Figure 2).

FIGURE 2

On the flower clusters (panicles) anthracnose infection starts as small black or dark-brown spots, these can then enlarge, join together (coalesce) and kill the flowers (Figure 3) resulting in very few or no fruit set.

FIGURE 3

Fruit infection is particularly common and can result in serious fruit decay problems before and after harvesting. The fungus apparently invades the skin of young fruits and remains in a "latent" (a living but non-active) state until fruit ripening begins. Ripe infected fruit, either before or after picking, develop prominent dark-brown to black decayed, sunken spots (Figure 4). These usually coalesce and penetrate deep into fruit, resulting in extensive fruit rotting.

FIGURE 4

Another indication of anthracnose fruit damage is the symptom called "tear staining"(Figure 5). Here anthracnose stains are created on the fruit when water containing spores of the fungus fall from infected twigs and flower clusters above and run along the surface of the fruit. These stains are usually only superficial but greatly reduce the visual attractiveness and hence the marketability of the fruit.

FIGURE 5

Anthracnose is usually more serious in years when rain and heavy dews are more frequent during the critical periods of infection from the onset of flowering until fruit are about half size.