DOORYARD DISEASE CONTROL FOR MANGOS IN FLORIDA

There are two diseases that mangos in south Florida commonly get. **Anthracnose** is the most common fungal disease, but occasionally **powdery mildew** can also infect mangos. When the blooms and young fruit get infected, these diseases can cause poor fruiting or crop failure.

To reduce the need for spraying fungicides, you can grow disease resistant varieties of mangos. The following varieties are **resistant** or moderately resistant to **anthracnose**: 'Carrie', 'Edward', 'Florigon', 'Keitt', 'Saigon', and 'Tommy Atkins'. There are other disease resistant varieties available. You can call your local county Extension office for advice.

In general, the Indo-Chinese/Philippine-type varieties are more resistant to anthracnose. This mango type tends to have mature fruit that has a green skin and is not as colorful as the Indian-type of mango that is more commonly grown in south Florida.

Mango varieties that are **susceptible** to **anthracnose** are: 'Cogshall', 'Graham', 'Haden', 'Irwin', 'Julie', 'Kent', 'Mallika', 'Valencia Pride', 'Zill', and others. Those that are **susceptible** to **powdery mildew** are: 'Alphonso', 'Carrie', 'Glenn', 'Haden', 'Keitt', 'Kent', 'Nam Doc Mai', 'Zill' and a few others. These will most likely need to be sprayed with fungicides each year.

Fungal disease on the foliage and some fruit spotting can be tolerated and may not need to be treated. Again, it's important to treat the blooms and young fruit if you are growing disease susceptible varieties.

ANTHRACNOSE

The fungal disease anthracnose is a common disease of mango in Florida. Mango anthracnose causes blossom blight, leaf spot, fruit "tear" staining, and fruit rot. Disease damage is closely dependent upon humidity. Spring rains and/or heavy dews during the critical period for infection greatly increase the disease.

Anthracnose on the flower spike appears at first as small brown or black spots which gradually enlarge to cause the death of flowers either directly or indirectly by invasion of the flower stalks.

Anthracnose on a flower spike. **UF/IFAS**

Tip dieback caused by anthracnose.
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Anthracnose leaf spots on mango. **U Hawaii**

Anthracnose leaf spots. **U Hawaii**

At first, infections on young leaves develop as small, dark, angular to irregular spots which often merge together to form large dead spots which may crack and fall out. Infections on older leaves usually remain semi-circular to angular and less than ¼ inch in diameter.

The very young fruit are readily infected. Spots on the young fruit may remain as pinpoint spots, but in wet weather may enlarge.

Infections on the green mature to ripe fruits appear as black spots of varied form. Spots may be slightly sunken and show surface cracks, and spots may merge to cover large areas.

Anthracnose "tears" and fruit spots. **U Hawaii**

GENERAL SPRAY SCHEDULE FOR ANTHRACNOSE CONTROL

Spray a liquid copper fungicide which may be found at garden centers and retail nurseries. Make sure no matter what the product is, it has to be labeled for use on dooryard (residential) fruit trees. Mix and use all pesticides according to label directions. Mixing in a spreader-sticker (if the fungicide label allows) helps to get better fungicide coverage. Removing dead or infected shoots and old flowers stems helps reduce the amount of the fungal spores.

Spray when the first bloom spikes are 2 inches long.

Repeat once a week as long as there are open flowers and until fruit is set.

Mango flower spike that is already 4 inches long.

A mango in full bloom. **Ian Maguire, UF/TREC**

Repeat once a week for 3-4 more weeks.

Under dooryard circumstances, it is not necessary to totally control this disease. Fungal spots on fruit are usually superficial and the fruit is still edible. Use your own good judgment concerning the extent of control necessary.

POWDERY MILDEW

Powdery mildew is another fungal disease but is considered to be minor disease on mango in Florida. However, when spring weather is cool and dry, this disease can be severe during flowering and yield reduction can be serious. Leaf drop can also occur.

In severe cases, the flowers, flower stalks and young fruit are coated with a whitish powdery fungal growth, and the flowers and fruit turn brown and fall.

Dead flowers infected with powdery mildew.
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White fungal webbing on a flower spike.
U Hawaii

The underside of infected leaves and the skin of infected fruit are coated with the white growth of the fungus. In some cases leaves may be distorted. The underside of older infected leaves and infected skin of mature green fruit has a purplish brown cast after the white growth wears off.

Leaf curling and spots caused by powdery mildew infection. U Hawaii

The underside of an infected leaf.

GENERAL SPRAY SCHEDULE FOR POWDERY MILDEW CONTROL
Powdery mildew is controlled by sulfur sprays or dusts. Use these and all pesticides, according to label directions. The first application should be made at early bloom, repeated at full bloom, at fruit set, and 3 weeks after fruit set.

Remember, always follow label directions. The Label is the Law!

Contact your local county Extension office for sample identification, and recommendations.

FOR ADDITIONAL INFORMATION:

http://edis.ifas.ufl.edu/

http://miami-dade.ifas.ufl.edu/

http://trec.ifas.ufl.edu/fruitscapes/

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