

Diseases of Mango

1. Anthracnose: *Colletotrichum gloeosporioides*



Symptoms

- The disease appears on young leaves, stem, inflorescence and fruits.
- Leaves show oval or irregular, greyish-brown spots which may coalesce to cover larger area of the leaf.
- Leaves on infected petioles droop and fall. On young stem, grey brown spots develop. These enlarge and cause girdling and drying of the affected area.
- The disease appears on young leaves, stem, inflorescence and fruits. Often, black necrotic areas develop on the twigs from the tip downwards causing a dieback..

Favorable conditions

- Temperature of 25°C and Relative Humidity 95-97%.

Management

- Spray P. fluorescens (FP 7) at 3 weeks interval commencing from October at 5g/like on flower branches.
- Before storage, treat with hot water, (50-55°C) for 15 minutes or dip in Benomyl solution (500ppm) or Thiobendazole (1000ppm) for 5 minutes.

2. Powdery mildew: *Oidium mangiferae* (*Acrosporium mangiferae*)

Symptoms

- The characteristic symptom of the disease is the white superficial powdery fungal growth on leaves, stalk of panicles, flowers and young fruits.
- The affected flowers and fruits drop prematurely reducing the crop load considerably or might even prevent the fruit set.
- Rains or mists accompanied by cooler nights during flowering are congenial for the disease spread.



Management

- Dusting the plants with fine sulphur (250-300 mesh) at the rate of 0.5 kg/tree.
- The first application may be soon after flowering, second 15 days later (or) spray with Wettable sulphur (0.2%), (or) Carbendazim (0.1%), (or) Tridemorph (0.1%), (or) Karathane (0.1%).

3. Mango malformation : *Fusarium moliliforme* var. *subglutinans*



Symptoms

- In bunchy top phase in nursery bunching of thickened small shoots, bearing small rudimentally leaves.
- In vegetative malformation, excessive vegetative branches of limited growth in seedlings.
- In malformation of inflorescens, shows variation in the panicle. Malformed head dries up in black mass and persist for long time.

Management

- Diseased plants should be destroyed.
- Use of disease free planting material.

- Incidence reduced by spraying 100-200ppm NAA during October.
- Pruning of diseased parts along the basal 15-20 cm apparently healthy portions. This is followed by the spraying of Carbendazim (0.1%) or Captafol (0.2%).

4. Stem end rot: *Diplodia natalensis*



Symptoms

- The dark epicarp around the base of the pedicel.
- In the initial stage the affected area enlarges to form a circular, black patch.
- Under humid atmosphere extends rapidly and turns the whole fruit completely black within two or three days.
- The pulp becomes brown and somewhat softer. Dead twigs and bark of the trees, spread by rains.

Management

- Prune and destroy infected twigs and spray Carbendazim or Thiophanate Methyl(0.1%) or Chlorathalonil (0.2%) as fortnightly interval during rainy season.

5. Red-rust: *Cephaleuros virescens*



Symptoms

- Algae attacks foliage and young twigs.
- Rusty spots appear on leaves, initially as circular, slightly elevated, coalesce to form irregular spots.
- The spores mature fall off and leave cream to white velvet texture on the surface of the leaves.

Management

- Bordeaux mixture (0.6%) or Copper oxychloride 0.25%

6. Grey Blight: *Pestalotia mangiferae*



Symptoms

- Brown spots develop on the margin and at the tip of the leaf lamina.
- Black dots appear on the spots which are acervuli of the fungus.
- Spreads through wind borne conidia.
- Heavy infection is noticed during the monsoon when the temperature is 20-25°C and high humidity.

Management

- Remove and destroy infected plant parts. Spraying copper oxychloride 0.25 Mancozeb 0.25% or Bordeaux mixture 1.0%.

7. Sooty mould : *Capnodium mangiferae*



Symptoms

- They grow on sugary secretions of the plant hoppers.
- Black encrustation is formed which affects the photosynthetic activity.
- The fungus grows on the leaf surface on the sugary substances secreted by jassids, aphids and scale insects.

Management

- Controlling of insect by spraying systemic insecticides like Monocrotophos or methyl demeton.
- After that spray starch solution (1kg Starch/Maida in 5 liters of water Boiled and dilute to 20 liters). Starch dries and forms flake which are removed along with the fungus.