Mealybugs

Mealybugs are small insects covered with a white woolly secretion. They are sap suckers and they cause damage to tender leaves and fruits. The infestation can lead to shedding of leaves, flowers and fruits. Mealybugs excrete honeydew on which sooty mould develop (Figure 30). The honeydew attracts sooty mould and ants. The sooty moulds darken the leaves, branches and fruit. This reduces photosynthesis and affects the market value of the fruit. It can also cause the fruit to rot (Figure 30). Mealybugs are mainly controlled by the natural enemies including lady bird beetle when the infestation is low. Pruning and burning of affected parts before spreading can assist to destroy the colonies. Localized spraying with chemicals can assist but should be minimized as they may kill natural enemies. Mealybugs also have protective cover that makes chemical spray less effective.

Figure 30: Red ants with mealybugs on kent

The mango seed weevil feeds on mango leaves, tender shoots or flower buds. Female weevils lay a single egg on the young fruit leaving a small dark mark on the fruit skin. The larvae burrow through the flesh into the seed and destroy it. The larva develops and grows in the mango seed. The finding of a maggot or a weevil in a fruit is always disgusting to consumers. The adult beetle sometimes digs its way out spoiling the fruit's palatability and marketability. Sanitation by removal of dropped leaves and fruits is the key to controlling mango weevil. Fruits with infestation marks should be plucked and buried or destroyed by other means to kill the larvae or adults before they emerge.

The mango gall flies is a small midge about 1 to 2 mm long with long legs and antenna. The flies lay eggs on young leaves. Eggs hatch into maggots that bore into the leaf tissue to feed. Their feeding induces formation of small galls, which look like pimples on the leaves (Figure 31). Mature larvae leave the galls and drop to the soil to pupate, leaving small holes on the leaves. These holes may serve as entrance for fungal infections. The affected Leaves stiffen and may lead to premature leaf drop. The mango galls are basically controlled by natural enemies. Their cover protects them from chemical sprays.

Figure 31: Heavy infestation with gall insect

Scales are small immobile insects and appear dead. They can be black, brown or white and appear to be well protected (Figure 32). The tiny ones move or are helped by red ants to reach other destinations. They suck sap and secrete honeydew which attracts the ants, and strengthen mutualism. Scales may mainly be controlled by natural enemies. At the onset of infestation the affected branches can be pruned and burnt. Widespread presence of ants or chemical sprays can worsen the spread as natural enemies will be killed but not scales.

Figure 32: Red ants with scale insects (dotted black) on the fruit