

# Banana

## Pests

### **Pseudostem Borer (*Odoiporus longicollis*) :**

Adults are either reddish brown or black. The pest is active during summer and monsoon months. The grubs bore into the stem and feed within the stem. An initial symptom is in the form of exudation of plant sap and blackened mass that comes out from the hole bore by the grub. Finally the whole plant dies.

**Control:** In case of severe infection the affected plants should be uprooted and burnt. Celphos (3 tablets/plant) is recommended for control of egg, larva, pupa and adult population of the insect, application of. After placing the tablet inside the pseudostem, the slit should be plastered with mud. Clean cultivation is an important measure for its control. Application of Carbofuran (3 g of granules/stool) is very effective to control the pest. Alternately, application of Endosulphan (0.04%) or Carbaryl WP (0.1%) also controls the pest population.

### **Rhizome Weevil (*Cosmopolites sordidus*) :**

The larvae or grub of the weevil borer feeds by tunnelling in the banana plant. In severe cases, the tunnels extend several feet up the stem. The corm decays and becomes a mass of rotten tissue. Injury to corm prevents nourishment going to the plant. Leaves turn yellow, wither and die maturely. In heavily infected plantations, production is low. Adults feed on dead or dying banana plants and live under newly cut or rotting pseudostems. The female weevil either lays its eggs in the rotting pseudostem or moves to a living plant where eggs are inserted singly into a hole. The borers spread from plantation to plantation through planting material.

**Control :** Plantations should be clear of debris in which borers can survive. It is most important to use clean planting material from fields, known to be free of weevils. Pieces of old rhizomes or pseudostems 1-2 feet long are cut down split and placed on the plantation floor between plants. Adult beetles migrate into these stems and can be collected by hand and poisoned. Before planting dipping of suckers in Monocrotophos (0.5%) for 30 minutes to protect rhizome from weevil attack.

### **Banana Aphid (*Pentalonia nigronervosa*) :**

The insect, is the vector of the virus causing bunchy top disease. Yellowish green nymphs and adults suck cell sap and devitalize plants. Affected parts become discoloured and malformed. High humidity favours rapid multiplication of this pest. The aphids are mostly observed on the lower surface of the leaves.

**Control :** Spraying of Monocrotophos (0.05%) or Malathion (0.1%) at 10-15 days interval contains aphid population effectively. To prevent recurrence of the pest granular insecticides like Phorate @ 1.0 kg a.i./ha should be applied to soil.

### **Fruit and Leaf Scarring Beetle (*Colaspis hypochlora*) :**

Occurrence of this pest is usually high during the rainy season. The adult beetle feeds on young leaves and skin of young fruits. Infested fruits get spotted and severe scarring of fruit skin leads to underdeveloped fruit of less commercial value. .

**Control :** Removal of grass weeds from plantations where the population of this pest is high can often reduce the population levels enough to avoid the use of insecticides. Unless the beetles are causing serious economic losses the use of insecticides should be avoided. In case of severe infestation spraying with Endosulphan (0.04%) or Carbaryl WP (0.1 %) controls the pest population.

### **Burrowing Nematode (*Radopholus similis*) :**

The first symptom of the disease is a small dark spot on the root. The nematode deposit eggs in the root tissue. Larvae after hatching from the eggs feed on the root tissue. Fungi rapidly invade such damaged root tissue. The number of fruits in the bunch is reduced and individual fruits are small. Affected plants do not respond to fertilizers, irrigation or cultural practices. Nematode population is built up rapidly in ratoon crops.

**Control :** Application of Carbofuran 3G or Phorate 10G @10 g/pit at the time of planting or application of neem cake (250-400 g/pit) at the time of planting reduces the pest population. Control measures such as application of nematicides to the growing infected plants and planting of nematode-free corms in fallow soil are recommended. Recently granular nematicides are becoming popular. They are easy to apply by hand to the soil around the mat at times combined with fertilizers. Some have systemic action. They are carried down into the soil by rain or irrigation water. Three applications of Nema-cur (Phenamiphos) are effective in controlling the nematodes.