

# Chrysanthemum

## Pests

### **Aphids (*Macrosiphoniella sanborni*) :**

Greenish-black nymphs and chocolate brown adults suck the cell sap from growing shoots and lower surface of leaves. Damage by aphid's results in loss of vigour, yellowing and premature leaf fall and stunted growth of attacked plants. Honey dew secreted by aphids favours development of sooty mould. The pest also acts as a vector of viral diseases.

**Control :** Spraying of Monocrotophos @0.05% or Phosphamidon @0.02% at 15-20 days interval controls aphid population effectively. Grubs and adults of *Coccinellid* beetles prey upon the aphids and effectively wipe out their population.

### **Thrips (*Frankliniella sp.*) :**

Slender, white coloured nymphs and black adults feed on tender leaves causing silvering, mottling and distortion of leaves. Damaged flowers look discoloured, withered and dried due to scorching. Severe infestation adversely affects quality and quantity of flower production.

**Control :** Spraying with Monocrotophos (0.04%) twice or thrice at 15 days interval controls thrip population. Drenching the soil with good insecticide also helps in reducing the population.

### **Leaf Folder (*Hedylepta indicata*) :**

It occasionally attains a status of serious pest on chrysanthemum. Pale-white coloured eggs are laid singly or in small groups on lower side of leaves. Green coloured larvae with brown head fold leaves together and feed on chlorophyll. The affected leaves get skeletonized and dry. The larvae also damage flowers.

**Control :** Cutting and burning infested plant parts reduces pest infestation. Two or three sprays of Methyl Parathion or Quinalphos @0.05% gives effective control of leaf folders.

### **Bud Borer (*Helicoverpa armigera*):**

Female adult deposits round, cream coloured eggs singly on bracts and petals of buds. Larvae feed on growing flowers resulting in considerable flower loss.

**Control:** Collection and destruction of damaged buds and flowers reduces further damage. Setting of light traps helps to control adult population by attracting them. Sprays of Endosulfan (0.07%) or Methyl Parathion (0.05%) taken up at the appearance of eggs on buds and tender foliage controls borer damage.

### **Hairy Caterpillar (*Spilosoma obliqua*) :**

Female moth lays eggs in clusters on lower side of leaves. Black coloured matured larvae feed voraciously on leaves and buds and cause severe defoliation.

**Control :** Collection and destruction of egg masses and leaves infested with early larval instars of hairy caterpillar reduces pest build up. Deep ploughing in summer exposes pupae to predators.

### **Termites (*Microtermes obesi*) :**

Termites mainly feed on roots. In case of severe infestations they spread to stem portion of the bark. Attack by the pest becomes severe under dry soil conditions. Damaged plants wilt, dry and finally die if infestation is very high.

**Control :** Deep ploughing destroys the termite colonies. Proper irrigation and avoiding dry soil conditions prevents pest build-up. Drenching the soil with Chlorpyrifos @0.05% or Endosulphan @0.1% before planting protects plants from termite attack.

### **Lesion Nematode (*Pratylenchus coffeae*) :**

The nematode causes heavy rot damage, which subsequently leads to poor growth of chrysanthemum. The symptoms are in the form of stunting of plants with premature yellowing and drying of leaves, reduced flower size and dark lesions on the roots.

**Control :** Application of neem cake @ 1ton/ha or Carbofuran @ 2kg/ha reduces the nematode population.

### **Bud and Leaf Nematode (*Aphelenchoides ritzemabosi*) :**

The nematode causes considerable damage to the foliage of chrysanthemum. Interveinal discolouration of leaves and their death is the characteristic symptom.

**Control :** Hot water treatment of suckers at 46°C for 5 minutes and spraying 0.02% Thionazin or 0.01% Methyl Parathion on aerial parts is recommended.