

# Apple

## Diseases

### Apple Scab (*Venturia inaequalis*) :



Apple scab affects both leaves and fruits. Scattered, circular brown or olive-green spots appear on the undersurface of leaves borne on fruit-spurs. Initially the lesions cover a large portion of the leaf leading to premature yellowing of leaves, defoliation and fruit drop. Early in the season, these spots often develop around blossom end (calyx end) of the fruit and later they are found anywhere on the fruit surface. Cracks often develop in the scabbed areas, which allow the entry of other pathogens, causing rot of fruit either in the field, or in storage.

**Control :** The spray schedule recommended for effective control of scab disease is as follows -

Stage	Fungicide/100 litres of water.
Silver tip-Green tip	Mancozeb (400 g)/Captan (300 g).
Pink bud	Contaf (30 ml)/ Baycor (50 g).
Petal fall	Bavistin (50 g)/Topsin M (50 g).
Pea stage	Mancozeb (300 g)/Captan (300 g).
Fruit development	Bavistin + Mancozeb (25+250 g).
15-20 days before harvest	Mancozeb (300 g).
Before leaf fall	Urea (5 kg).

(ICAR : 50 years of crop science research in India, 1996).

### Fire Blight (*Erwinia amylovora*) :



This disease is caused by bacteria. The symptoms are seen as distinct fire-like appearance on infected plant parts. New shoots are highly susceptible to infection. The shoot tips wilt and droop without browning. Secretion of golden coloured bacterial ooze is seen on the stem. In fruits, Necrotic spots and oozing lesions are observed on the outer surface of the fruit surface.

**Control :** The affected trees and host plants should be collected and burnt immediately on observing the incidence of fire blight. Sprays of streptomycin can control the infection in spring blossom of apple.

### **Powdery Mildew (*Podosphaera leucotricha*) :**



Powdery mildew is a serious disease affecting buds, new shoots and leaves. The disease appears in the dry climatic conditions. The nursery plants are more prone to this disease. The disease is characterized by the presence of white powdery (ash like) coating in patches on both sides of the leaves, and young shoots. The affected leaves turn pale and curl up. Affected shoots remain weak and immature. In case of severe infection, leaf fall and pre-mature fruit drop may occur.

The young infected fruit show signs of russetting.

**Control :** The disease incidence can be reduced by pruning and destroying the affected plant parts. In the nurseries, spraying the young seedlings with Bayleton (500 ppm) at an interval of 7 days controls the disease. In the field, fungicidal sprays should be taken after pruning of the affected plant parts.

Spraying the crop with Sulphur (0.3%) or Carbendazim (0.05%) or Karathane (0.05%) effectively controls the disease.