

STRAWBERRY IPM



Growth Stages



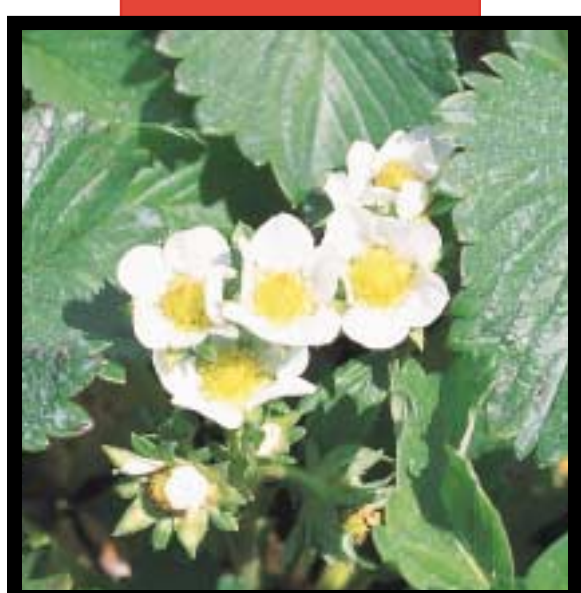
Early Growth



Flower Bud Emergence



Early Bloom



Full Bloom



Green Fruit



Ripe Fruit

Spittle bugs. Green aphid-like insects covered in froth. Feed on leaves and stems.



Strawberry aphids found on new growth. Spread virus while feeding.



Powdery mildew. White powdery growth on underside of leaves. Leaves curl upwards.



Common leaf spot caused by *Mycosphaerella* fungus.



Strawberry (Cyclamen) mite. Leaves become twisted or distorted and have a brittle feel.

Leaf Disorders

Leafrollers feed on young leaves and on berries. Usually found in a rolled up leaf.



Uneven field stunting caused by viruses. Symptoms may also include leaf yellowing, mottling and curling.



Leaf notching caused by feeding of black vine and other weevils.



Black vine weevil.



Strawberry dieback may be a result of nematodes, virus, root rots, root weevil or other causes.



Two spotted spider mites and injury. White flecking progressing to drying-up and browning.



Winter injury—internal darkening of crowns.



Larva of black vine weevil. These and other weevil larvae feed on roots and weaken plants.



Actual size



Red stele root rot caused by *Phytophthora fragariae*. Plants are stunted. A red streak can be found in new infected roots in spring and fall.



Flower and Fruit Disorders

Frost injury causes black centres in blossoms.



Lygus bug. Feeds on blossoms and green fruit causing deformed berries (monkey faces).



Monkey face. Misshapen fruit, caused by poor pollination, frost, lygus or other insects or nutrient deficiencies.



Wireworm. Burrows into berries touching soil.



Slug. Feeds on ripe strawberries.



Fruit rot caused by *Botrytis* (grey mould).

Root/Crown Disorders



Root lesion nematode damage. Dark lesions and crooking of roots.



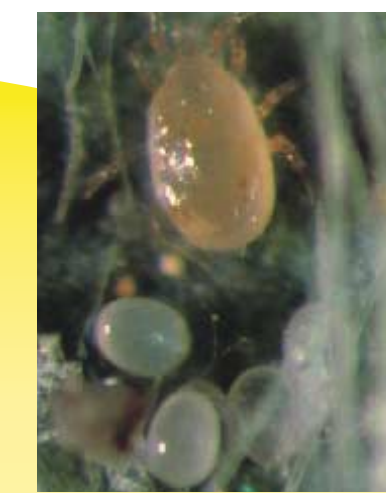
Black root rot/crown rot caused by waterlogged soil and various soil-borne fungi.



Ground beetle. Feeds on weevil larvae, leatherjackets, and slugs.



Ladybird beetle larva. Feeds mainly on aphids.



Predatory mite. Fast moving, feeds on spider mites.



Syrphid larva feeding on an aphid.

Native Beneficials



Adult *Stethorus* beetle. Feeds on mites, appears in July.



Stethorus larva. Feeds on mites.



Adult ladybird beetle. Feeds on aphids.

Photo credits: BCMAFF, PARC Agassiz and FVSGA

Strawberry Integrated Pest Management Poster

Environment Canada
Georgia Basin Eco System Initiative

Agriculture and Agri-Food Canada
Pacific Agri-Food Research Centre (PARC)



Fraser Valley
Strawberry Growers Association



Ministry of
Agriculture