Common pests and diseases on mango in Ghana

Mealybugs
*Rastrococcus iceryoides (Rastrococcus invadens)*
©NBAIR

- Cotton wool-like small oval insects in stem joints, under leaves and on other protected areas of the plant
- Sticky leaves (caused by residue secreted by mealybugs to attach themselves)
- Wilting, yellowing or deformation of leaves

Mealybug natural enemy — parasitic wasp
*Anagyrus* spp.
©Mourad Louadfel, Bugwood.org

- Tiny, 1-2 mm in length, orange/brown/black
- Parasitic wasp that lays eggs inside mealybug eggs

Fruit flies
*Ceratitis* spp., *Bactrocera* spp., *Dacus* spp.
©Ko Ko Maung, Bugwood.org; John W. Dooley, USDA APHIS PPQ, Bugwood.org

- Adults: 0.5-1 cm in length, variable colour (often yellow/black)
- Larvae: white/cream, in fruits and soil below tree (2-5 cm deep)
- Pupa: reddish brown, about the size of a grain of wheat, in soil below tree (2-5 cm deep)
- Tiny egg laying holes surrounded by patches of brown/black soft rot and/or oozing or dry sap, on fruit surface

Mango seed weevil
*Sternochetus mangiferae*
©Peter A. Follett; ©Georg Goergen/IITA Insect Museum, Cotonou, Benin; Renkang Peng

- Adults: black/grey/red/yellow, 7.5 mm long with a long ‘nose’, under bark, around tree base, in forks of branches or leaf litter
- Feeding damage on new leaf growth
- Egg laying marks (small, dark, crescent-shaped, area of about 0.3 mm) on fruit skin when fruit is marble size
- Amber coloured sap on immature fruit, abnormal fruit shape, malformed skin
- Larvae: (white, legless, dark head) feed inside the seed and cause rot
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**Powdery mildew**

*Acrosporium mangiferae* (syn. *Oidium erysiphoides f. mangiferae*)

(© Mary Musyoka; AA Self, ICIPE; Scot Nelson, Flikr)

- Small patches of white powder on flowers and leaves which may join together. As white patches wear away, purpleish-brown patches may appear on leaves and fruits — blots may crack and form corky tissue
- Flowers may fail to open or drop from the panicles
- Distorted leaves may curl downwards, turn brown, dry and fall

**Anthracnose**

*Colletotrichum gloeosporioides*

(© Scot Nelson, Flikr)

- Small, angular brown/black lesions on leaves, stems and flowers. These may join together to form large lesions
- Flowers may not set fruit
- Dark brown sunken decay spots on ripe fruit
- Pinkish-orange spore masses on stem and fruit lesions under wet conditions

**Mango thrips**

*Scirtothrips mangiferae*

(© Scot Nelson, Flikr)

- Thrips scrape the underside of the leaf, producing downwards curl and silvery sheen.
- Leaves turn brown and if infestation is severe may die.

**Bacterial black spot**

*Xanthomonas axonopodis pv. mangiferaeindicae*

(© Scot Nelson; Jeremiah Nuste Teye, MOFA)

- Small brown oily spots on leaves that turn into necrotic black angular raised spots, sometimes surrounded by a yellow halo
- Cracks, raised spots and cankers on branches, petioles and peduncles
- Small, black, raised spots, often teardrop-shaped on fruits. These enlarge and crack
- Sticky gum may ooze from cankers