

Mango gall midges

What are Mango gall midges?

Mango gall midges (*Procontarinia* spp.) are a range of damaging fly species. The different species can attack leaves (such as Mango leaf-gall midge (*Procontarinia matfelana*), which reduces photosynthesising capacity), flowers (affecting fruit set), shoots or fruit (blemishing the fruit).

What do they look like?

In some species the eggs are laid into tender leaves, causing small reddish spots (oviposition marks). The tissue under these spots becomes soft. Gall formation begins within a week and attain their maximum diameter of 3-4 mm before the larva is even 0.5 mm. Adults usually emerge from the lower side of the leaves, leaving the pupal skin protruding from the emergence hole. Heavy oviposition in leaves causes them to dry and curl up.

What can they be confused with?

Galls are distinctive raised spots or bumps. Other spots or lesions (not raised) may be caused by Mango scab (a fungus), Stigmata leaf spot, Fruit spotting bugs or mechanical damage.

What should I look for?

Eggs are laid onto leaves causing small, red spots. The most prominent symptom is the presence of wart-like galls up to 4 mm in diameter on the leaves and occasionally on stems or fruit. Heavily galled leaves may curl up and drop prematurely, causing dieback of whole branches in susceptible mango cultivars.

How does it spread?

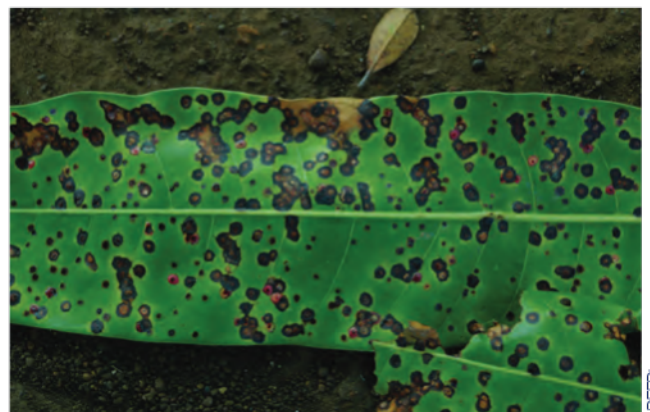
Mango gall midge is spread by wind currents and long distance dispersal is through movement of infested plant material.



Eggs are laid onto leaves causing small red spots



Galls can appear wart-like



Leaf photosynthetic capacity can be greatly reduced



Where is it now?

Mango leaf-gall midge (*Procontarinia mattei*ana), is indigenous to India and has spread via imported mango plants to Mauritius, Kenya, Reunion, South Africa and Malaysia. Significant damage to mango plants by the pest has been reported in Mauritius. Another species, *P. pustulata*, is present in Papua New Guinea, the Torres Strait Islands and northern tip of Cape York Peninsula but has not reached commercial mango production areas of Australia. The Mango fruit-gall midge (*P. frugivora*) is found in the Philippines, whilst the Mango blossom-gall midge (*P. mangiferae*) is found throughout Asia.

How can I protect my orchard from Mango gall midge?

Source plant material only from clean, accredited suppliers and preferably source material that is certified. Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common mango pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE
1800 084 881**



Whole branches may be affected



Galls are 3-4 mm in diameter



Heavily galled leaves curl up and may drop prematurely

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