

Papaya mealybug

Paracoccus marginatus

FACTSHEET



Papaya mealybug is currently not present north of Townsville or in papaya production areas in Far North Queensland.

Early detection will be important to mitigate impact.

If you suspect papaya mealybug incursion in the region, please contact Queensland Biosecurity on [13 25 23](tel:132523) or [report online](#).

Updated in November 2025

Background

Papaya mealybug (PMB) is an invasive pest originally from Mexico. It was reported in more than 70 countries worldwide. In Australia, it was first detected in the Northern Territory in 2023 and found in Queensland in 2024, in South East Queensland and Townsville. This pest poses a serious threat to several industries, particularly the papaya industry.

Hosts

Papaya mealybug can attack over 200 plant species. Its main hosts include papaya, frangipani, hibiscus, cassava and mulberry. It can also feed on other economically important crops such as avocado, beans, cotton, mango, potato, and a wide variety of weed species, which can act as reservoirs for the insect.

Appearance

Adult females (1)

- Oval, yellow, and covered in a white, waxy coating.
- Flat-bodied, around 2–3.5 mm long.
- Each female can lay up to 600 eggs.
- Populations can produce up to five generations per year.

Adult males (2)

- Smaller, with wings.
- They do not feed on plants.

Crawlers (young nymphs) (3)

- Tiny (around 0.3 mm) and highly mobile.
- Yellow females and pink males develop a waxy coating as they mature.
- As they feed and grow, they become immobile adult females or winged males.

Eggs (4)

- Found inside white, cotton-like sacs that are around four times longer than the adult female body.



Damage

Papaya mealybug feeds on plant sap, causing:

- Yellowing (chlorosis) (1).
- Leaf curling and distortion (2).
- Rosetting and stunted growth (3).
- Black sooty-mould caused by honeydew excretion (4).

Severe infestations reduce the plant overall health due to the toxic enzymes the mealybug releases with its saliva while feeding on the plant. It impacts negatively fruit quality and yield, and in serious cases, kill the plant.



1



2



3



4



5



6



Integrated Pest Management (IPM)

Monitoring

- Inspect plants regularly, especially undersides of leaves for white, cotton-like masses (5).
- Look for ants, which are attracted to honeydew and protect mealybugs from natural enemies (6).
- Watch for distorted, yellowing, or sooty-mould covered leaves as signs of infestation.

Biological Control

The parasitic wasp *Acerophagus papayae* is highly effective and used globally to control PMB (7).

Other beneficial insects include the Australian ladybird (*Cryptolaemus montrouzieri*) (8) and lacewings, which feed on mealybugs.

Chemical Control

Chemical sprays can suppress but will not eliminate PMB due to their protective wax coating.

Overuse may also harm beneficial insects that help control PMB naturally.

The following products are registered for mealybugs on papaya, but not specific to PMB:

- Acetamiprid + Pyriproxyfen
- Potassium salts of fatty acids
- Sulfoxaflor

Supporting Innovation in the Australian papaya industry (PP23003)

More information on <https://www.australianpapaya.com.au>