

Vine and Grape mealybug

What is the Vine mealybug and Grape mealybug?

Both the Vine mealybug (*Planococcus ficus*) and Grape mealybug (*Pseudococcus maritimus*) are small, cryptic insects that infest all parts of the vine and produce large amounts of honeydew (clear, sugary excretions) that damage the fruit and foliage, resulting in unmarketable grapes. The mealybugs also cause the grapevine to decline in vigour and production, as well as transmitting grapevine viruses.

What do they look like?

Vine and Grape mealybug are small (about 3 mm in length) and are difficult to see because of their cryptic nature. Adult mealybugs are soft bodied, segmented insects covered in a white powdery wax. They are slow moving and feed on sap, secreting honeydew as a by-product of their feeding activities. They live in colonies composed of adults, eggs and nymphs. Females are oval and flattened, flightless and have three nymphal stages with no pupal phase. Males are much smaller, have wings and go through four nymphal stages. The Grape mealybug has long tail filaments making the mealybug appear to have a tail. The Vine mealybug is oblong in shape and has shorter filaments around the body, with no tail filament.

What can they be confused with?

Several different species of mealybugs can infest grapevines, some of which are endemic to Australia. The Longtailed mealybug (*Pseudococcus longispinus*) is present throughout Australia, has long tail filaments and when poked it excretes body contents which are pale yellow. The Citrophilus mealybug (*Pseudococcus calceolariae*) has dark red body excretions, short thick tail filaments and is confined to south-eastern Australia. The Tuber mealybug (*Pseudococcus viburni*) has orange excretions and short tail filaments. It is present in some regions of Qld, WA and eastern-Australia.



Adult Vine mealybug; note that this species of mealybug does not have long tail filaments, which is present with the Grape mealybug

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Grape mealybug; note the long tail filaments with this species of mealybug

Jack Kelly Clark, University of California



Mealybugs commonly hide amongst grapevine bark peelings

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What should I look for?

Both the Vine mealybug and Grape mealybug can be detected through visual surveys of grapevines. Look for intense ant activity feeding on honeydew secreted by the mealybugs on grapevines, or honeydew on the trunk, cordons, leaves and fruit. Look for white waxy clusters of mealybugs in grapevine crevices which will often be covered with honeydew and black sooty mould.

How do they spread?

Long range dispersal of adults or nymphs may occur through wind-assistance, propagation material or on fruit. Vine and Grape mealybug dispersal as crawlers is limited.

Where are they now?

Vine mealybug is present throughout the Mediterranean, Africa, Middle East, Pakistan, Argentina and in the United States of America. Grape mealybug is present in Europe, Asia, New Zealand, North and South America.

How can I protect my vineyard from Vine and Grape mealybug?

Only source high health status (preferably certified) plant material from reliable and accredited suppliers. Check your vineyard frequently for the presence of new pests and investigate any sick grapevines for unusual symptoms. Make sure you are familiar with common grapevine pests so you can tell if you see something different. Keep records of anything unusual and ensure that all staff and visitors adhere to on farm biosecurity and hygiene practices.

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

**EXOTIC PLANT PEST HOTLINE
1800 084 881**



Mealybugs often hide in the junction point between canes and branches; note the white, waxy covering and the honeydew on the canes

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Mealybug infested grape bunch; note the white powdery wax and honeydew on grapes, which are typical symptoms of infestation

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Mealybug infested canes, leaves and grape bunch

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