

# Exotic mealybugs

## What are exotic mealybugs?

Mealybugs are small, soft-bodied insects that feed on plant sap, reducing vigour and damaging fruit and foliage, as well as transmitting viruses. There are a number of mealybugs that are damaging to grapevine that are not present in Australia but which would cause considerable damage if they became established. The vine mealybug (*Planococcus ficus*), grape mealybug (*Pseudococcus maritimus*) and Comstock's mealybug (*Pseudococcus comstocki*) are exotic mealybugs considered to be high priority pests for the Australian viticulture industries.

## What do they look like?

The vine, grape and Comstock's mealybugs are small (about 3-5 mm in length), soft-bodied, segmented insects covered in a white, powdery wax. Mealybugs secrete honeydew as a by-product of their feeding activities which can encourage the growth of mould and fungal diseases.

The grape mealybug has long 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. Comstock's mealybug has a pink to reddish-brown colour visible between body segments.

## 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 WA and eastern Australia.

If you observe mealybugs or signs of mealybug infestation that appear unusual or more severe than usual, or are not as responsive to normal management strategies, you should report this to the Emergency Plant Pest Hotline on 1800 084 881.



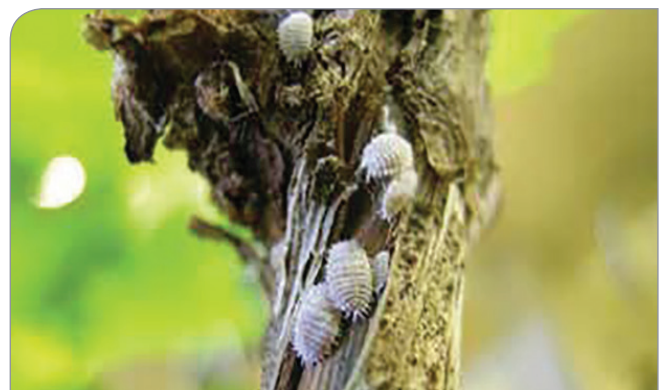
Adult vine mealybug; note that this species of mealybug does not have long tail filaments

*Martin Hauser, California Department of Food and Agriculture*



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

*Jack Kelly Clark, University of California*



Mealybugs commonly hide amongst grapevine bark peelings

*Kent M. Daane, University of California*



### What should I look for?

The vine, grape and Comstock's 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 or 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, or through the movement of propagation material or fruit.

### Where are they now?

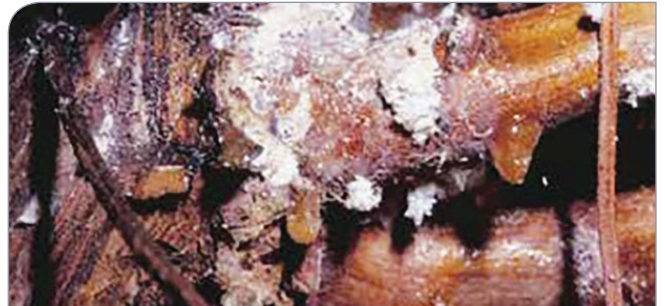
The presumed native range of vine mealybug includes southern Europe, the Middle East and north Africa. Vine mealybug is also present in southern Asia, South America, USA (California), Mexico as well as South Africa. Grape mealybug is present in Europe, Russia, USA (California and Washington), Mexico and Chile. Comstock's mealybug is present in Asia, Central and South America, Europe, and North America.

### How can I protect my vineyard from exotic mealybugs?

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. Check for any visible signs of pest infestation before planting. 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** on **1800 084 881**.

**IF YOU SEE ANYTHING UNUSUAL,  
CALL THE 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

*Kent M. Daane, University of California*



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

*Kent M. Daane, University of California*



Comstock's mealybug infestation; note the white waxy covering surrounding infested plant parts

*Clemson University- USDA Cooperative Extension Slide Series, Bugwood.org*

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