

# 1. PaDIL Species Factsheet



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## Scientific Name:

*Phenacoccus madeirensis* Green  
(Hemiptera: Pseudococcidae)

## Common Name

Madeira Mealybug

Live link: <http://www.padil.gov.au/maf-border/Pest/Main/142948>

## Image Library

New Zealand Biosecurity

Live link: <http://www.padil.gov.au/maf-border/>

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MPI (Ministry for Primary Industries)

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## 2. Species Information

### 2.1. Details

**Specimen Contact:** New Zealand Arthropod Collection - [nzac@landcareresearch.co.nz](mailto:nzac@landcareresearch.co.nz)

**Author:** Rhode, B.E. & Crosby, T.K.

**Citation:** Rhode, B.E. & Crosby, T.K. (2013) Madeira Mealybug (*Phenacoccus madeirensis*) Updated on 4/16/2014 Available online: PaDIL - <http://www.padil.gov.au>

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### 2.2. URL

Live link: <http://www.padil.gov.au/maf-border/Pest/Main/142948>

### 2.3. Facets

**Commodity Overview:** Field Crops and Pastures, Horticulture

**Commodity Type:** Capsicum & Chilli pepper, Citrus produce, Fabaceous produce, Figs & Breadfruit, Grapes, Mango, Persimmon, Pineapple, Rosaceous produce, Tomato, Tamarillo & Egg plant

**Distribution:** Afrotropic, Australasia, Indo-Malaya, Nearctic, Neotropic, Palearctic

**Groups:** Bugs

**Host Family:** Acanthaceae, Agavaceae, Amaranthaceae, Amaryllidaceae, Apocynaceae, Araceae, Araliaceae, Asclepiadaceae, Asteraceae, Begoniaceae, Bignoniaceae, Boraginaceae, Bromeliaceae, Cactaceae, Convolvulaceae, Crassulaceae, Cupressaceae, Ebenaceae, Ericaceae, Euphorbiaceae, Fabaceae, Geraniaceae, Gesneriaceae, Lamiaceae, Malvaceae, Moraceae, Oleaceae, Polygonaceae, Primulaceae, Rosaceae, Rubiaceae, Rutaceae, Sapindaceae, Scrophulariaceae, Smilacaceae, Solanaceae, Sterculiaceae, Tiliaceae, Umbelliferae, Urticaceae, Verbenaceae, Vitaceae, Loasaceae, Lobeliaceae, Taccaceae

**Pest Status:** 0 Unknown

**Status:** 0 NZ - Unknown

### 2.4. Other Names

*Phenacoccus grenadensis* Green & Laing, 1924

*Phenacoccus harbisoni* Peterson, 1965

*Phenacoccus madeirensis* Green, 1923

### 2.5. Diagnostic Notes

**\*\*Description from McKenzie (1967)\*\***

Adult female, mounted, 2.50-3.75 mm long; 1.40-2.10 mm wide; body form broadly oval.

Dorsum normally with 18 pairs of cerarii. Anal lobe cerarius normally with 2-3 quite large, slightly lanceolate cerarian setae, often accompanied by 1 or more somewhat smaller auxiliary setae, slight concentration trilocular pores. Remaining cerarii usually with 2 setae (occasional head cerarii with 3 setae), slightly smaller than those of anal lobes, accompanied by small group trilocular pores.

Multilocular disc pores present on dorsum in a band or row across posterior border of abdominal segments 8-4, few situated laterally on posterior part of segment 3. Trilocular pores evenly over entire dorsum. Minute circular pores scattered on abdomen. Small numbers of oral-collar tubular ducts situated over entire dorsal surface. Body setae rather numerous, all about same shape as those of cerarii, variable in size, none larger

than setae of lateral cerarii. Anal ring apical, with no unusual features; each of its 6 setae about twice as long as greatest diameter of ring.

Venter with numerous multilocular disc pores, these situated in region posterior to vulva forward to 3rd abdominal segment, also in lateral areas of segments 7-3. Numerous quinquelocular pores present in midregion of head, thoracic segments, anterior abdominal segments. Trilocular pores distributed fairly evenly except for certain "clear" areas in midregion of thorax. Very small oral-collar ducts, some with slight development of an oral rim, especially in deeply stained specimens, present in moderate numbers in median region of abdomen; other oral-collar ducts, same size as those on dorsum, occur in lateral abdominal regions, also in median and lateral regions of thoracic segments. Body setae slender, slightly longer than those of dorsum.

Circulus relatively quite large, usually produced laterally into a narrow extension on each side, resembling an ox yoke, or with anterior margin only slightly produced laterally, not divided by intersegmental line. Legs well developed; hind tibia with translucent pores scattered along segment. Claw with prominent denticle or tooth on plantar surface. Antennae normally 9-segmented, slender.

### **\*\*Biology\*\***

Life history, under laboratory conditions, in Sicily studied by Longo et al. (1995). In Sicily it develops 5-6 generations per year (Sinacori, 1995). Ho et al. (2009) identified and synthesized the female sex pheromone.

### **\*\*Structure\*\***

Colour photograph of adult female by Matile-Ferrero et al. (2004). *Phenacoccus madeirensis* has a grey oval body covered by thin, white, mealy wax, with red legs and dark dorso-submedial bare spots on intersegmental areas of the thorax and abdomen. These areas form 1 pair of dark longitudinal lines on the dorsum. The ovisac covers the entire dorsum, with 18 pairs of lateral wax filaments, the posterior pairs being the longest, about or less than the length of the body. (Papadopoulou & Chrysohoides, 2012)

### **\*\*Economic Importance & Control\*\***

This mealybug is common on cassava, causing, however, little damage. It is often injurious to potatoes in Peru. It is extremely common in Africa, probably been introduced there from Neotropical region (Williams & Granara de Willink, 1992). In 2010 and 2011, a serious mealybug infestation was observed on *Ocimum basilicum* (large leaf or sweet basil) in Greece. (Papadopoulou & Chrysohoides, 2012)

### **\*\*Foes\*\***

COLEOPTERA Coccinellidae: *Clitostethus neuenschwanderi* Fursch, *Diomus austrinus* Green, *Diomus hennesseyi* Fursch, *Nephus phenacoccephagus* Fursch.

### **\*\*General Remarks\*\***

Description and illustration of adult female by Williams (1958, 1987c), Williams & Granara de Willink (1992), Williams (2004a) and by Granara de Willink & Szumik (2007). The redescrptions and illustrations of the adult female given by Ferris in Zimmerman (1948), Ferris (1950b) and by McKenzie (1967), and of the adult male by Beardsley (1960) (of H

## 2.6. References

- <http://www.sel.barc.usda.gov/catalogs/pseudoco/Phenacoccusmadeirensis.htm> - Williams, D.J. & Watson, G.W. (1988). \_The scale insects of the tropical South Pacific region. Part 2. The mealybugs (Pseudococcidae)\_. CAB International, Wallingford. 262 pp. -  
<http://www.sel.barc.usda.gov/ScaleKeys/Mealybugs/Key/Mealybugs/Media/html/SelectSpeciesFSet.html>

## 2.7. Web Links

**ScaleNet:** <http://www.sel.barc.usda.gov/catalogs/pseudoco/Phenacoccusmadeirensis.htm>

### 3. Diagnostic Images

Results Generated:

Tuesday, August 16, 2022

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