



## Golden root mealybug (*Chryseococcus arecae*)



### Introduction

The golden root mealybug is a root-feeding insect native to New Zealand. It has been introduced to Eastern and South Australia, including Tasmania, where it was found to impact ornamental plants of high economic value. The first record outside Australasia and in Europe was in a private garden in Perthshire, Scotland, in 2012. Here it caused severe damage to the UK National Collection of *Meconopsis* spp., commonly known as Himalayan blue poppies.

The golden root mealybug is considered a pest of ornamental plants, and has spread across the UK. Since 2015, It has been found in private and public gardens at several locations in Scotland and England, and in 2019, it was reported in Northern Ireland for the first time.

The dissemination of this pest is facilitated by the transportation of infested plants in trade and the exchange of plants between private and public collections, leading to its dispersal over significant distances. Additionally, rapid dispersal can occur within nurseries and botanic gardens by the mealybugs being carried with the watering run-off, as these insects can float on water.

### Host

This mealybug is polyphagous, as this bug has been recorded feeding on the roots of plants assigned to at least 54 different genera in 29 families. Many new hosts have been recorded in the UK. Its hosts include many ornamental plant genera commonly grown in Britain, crop species (aubergine, raspberry and tomato), grasses, and herbaceous weeds.

Some examples of host genera are: *Achillea*, *Agropyron*, *Alchemilla*, *Aquilegia*, *Aster*, *Auricula*, *Cirsium*, *Clematis*, *Cordylina*, *Cyclamen*, *Dendrobium*, *Dianthus*, *Epilobium*, *Erica*, *Eryngium*, *Gentiana*, *Geranium*, *Hedera*, *Lavandula*, *Meconopsis*, *Philadelphus*, *Potentilla*, *Primula*, *Pulmonaria*, *Rhododendron*, *Rubus*, *Salvia*, *Solanum* and *Veronica*.

### Biology

The biology of the golden root mealybug has not been studied in detail. But it is known to have multiple generations each year, and is sexually reproductive. The first instars or crawlers are the main natural dispersal stage, but the distance they can crawl is limited. It occurs on the roots of its host-plants and in soil, litter and under moss, and appears to be a generalist root-feeder, mainly on herbaceous plants. No natural enemies have been recorded for the mealybug.

The adult female mealybugs are broadly-oval, 2-3 mm long with a bright golden wax dusting. They excrete very long, fine, curved, blue-iridescent wax filaments which are readily broken and lost. These wax filaments are more numerous and conspicuous on the final-nymph stage than the adult.

### Symptoms

For details of the symptoms, scan or click on the QR code to access the accompanying poster.



### More information

- The Meconopsis Group: <https://themeconopsisgroup.org/pests-and-diseases>
- Entomologist's Gazette: <https://www.researchgate.net/publication/290581505>
- Royal Horticultural Society: <https://www.rhs.org.uk/biodiversity/golden-root-mealybug>
- UK Plant Health Risk Register: <https://planthealthportal.defra.gov.uk/pests-and-diseases/uk-plant-health-risk-register/viewPestRisks.cfm?csref=27237>

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This factsheet was written by Chris Malumphy, Fera Science Ltd, UK. Edited and produced by Itxaso Quintana, BGCI, March 2024.