



# Golden root mealybug (*Chryseococcus arecae*)



## Background

The golden root mealybug is a generalist 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. It was first detected in the UK, in Scotland, in 2012, and has since spread to England and Northern Ireland, as a pest of ornamental plants.

The spread of this pest over long distances is facilitated through the transportation of infested plants in trade and the exchange of plants between private and public collections. Rapid dispersal can also occur within nurseries and botanic gardens by the mealybugs being carried with the watering run-off.

Many pests and pathogens cause similar symptoms to an infestation of this mealybug. Additionally, the golden root mealybugs can easily be overlooked due to their subterranean habit, and the only way to confirm their presence is by removing the plant from its container and examining the roots.

## Symptoms

- Infested plants might show wilting, poor growth, and even dieback. Mortality of plants occurs sporadically, leading to patchy areas of death.
- The plant roots should be checked to confirming golden root mealybug infestation (Fig 1a,b,c). The adults are small (2-3 mm), broadly-oval, covered in bright sulphur yellow (described as golden in the literature) wax dusting (Fig 2 & 3), and they often occur in dense groups (Fig 3). Newly moulted adult golden root mealybugs are orange to pale brown before they secrete a coat of 'golden' wax (Fig. 4). The colour of these mealybugs is highly distinctive, and they are unlikely to be confused with any other root-feeding mealybugs currently found in the UK, which are mostly cream or white (Fig. 5).



Fig 1. a) Plants need to be removed from their pots to examine the roots. b,c) Roots infested by golden root mealybug.



Fig 2. Close up of two adult females showing the coarse granular dorsal 'golden' wax.



Fig 3. Group of golden root mealybugs, with their characteristic 'golden' colour.



Fig 4. Newly moulted adult females appear orange, before secreting the 'golden' wax.



Fig 5. Root mealybug (*Rhizococcus* sp.) unlikely to be mistaken for the golden root mealybug.