Fact sheet



Giant pine scale

Description

Giant pine scale (*Marchalina hellenica*) is a large scale insect that reaches a length of 8–19 mm and 3–5 mm wide. The pest feeds on the sap of various conifers and, while feeding, secretes a white waxy substance.

The insect feeds mostly on the lower trunk of infested trees but will also feed on branches or, in some cases, above ground roots.

This species originates from the Mediterranean but has been found in Australia in Melbourne and Adelaide.

Primary hosts

Giant pine scale feeds exclusively on plants of the family Pinaceae. Overseas host records include the following genera and species:

- Firs: Greek fir (Abies cephalonica), Caucasian fir (A. nordmanniana),
- **Spruces:** Engelmann spruce (*Picea engelmannii*), Oriental spruce (*P. orientalis*)
- Pines: Turkish pine (*Pinus brutia*), Aleppo pine
 (*P. halepensis*), Caucasian pine (*P. kochiana*,
 P. sosnowskyi), Corsican pine (*P. laricio*), Black pine
 (*P. nigra*), Stone pine (*P. pinea*), Scots pine (*P. sylvestris*).

In Australia, giant pine scale has been found on Aleppo pine (*Pinus halapensis*), stone pine (*Pinus pinea*) and radiata or Monterey pine (*Pinus radiata*).

Symptoms

Giant pine scale produces a distinctive white, cottonlike, wax secretion, which stands out within the cracks of the dark trunks and branches of host trees. The insect prefers the lower part of the tree and mainly occurs on the trunk, but it may also be found on branches well up in the canopy, and even on exposed roots.

Giant pine scale attacks the tree from the base to the top. In heavily infested trees, there is gradual desiccation, causing drained needles and branch dieback which can eventually kill the tree.



Waxy secretions caused by the giant pine scale



Adult giant pine scale



What it can be confused with

Early symptoms could be confused with pine woolly aphid (*Pineus pini*) but a significant infestation is unlikely to be confused with other organisms. Any unusual symptoms should be reported to the Exotic Plant Pest Hotline on 1800 084 881.

Plant part affected

Giant pine scale typically affects the lower part of the tree, mainly occurring on the trunk, but it may also be found on branches well up in the canopy, and even on exposed roots.

Age of plant

All ages of tree are susceptible.

Time of year pest is most likely to be seen

Early infestations will be most prevalent during spring and summer. Heavy infestations can be observed throughout the year as the old scale covering remains on the tree even when the insect has died.

Further information

Giant pine scale (Agriculture Victoria)

agriculture.vic.gov.au/agriculture/pests-diseasesand-weeds/pest-insects-and-mites/giant-pine-scale

Giant pine scale (Primary Industries and Regions SA) pir.sa.gov.au/biosecurity/plant_health/emergency_and_significant_plant_pests/giant_pine_scale

Giant pine scale (NSW Department of Primary Industries dpi.nsw.gov.au/biosecurity/plant/insect-pests-and-plant-diseases/giant-pine-scale

If you see giant pine scale outside of Melbourne or Adelaide, call the Exotic Plant Pest Hotline

EXOTIC PLANT PEST HOTLINE 1800 084 881

Disclaimer: The material in this publication is for general information only and no person should act, or fail to act on the basis of this material without first obtaining professional advice. Plant Health Australia and all persons acting for Plant Health Australia expressly disclaim liability with respect to anything done in reliance on this publication.