

BIOSECURITY SA – Plant Health**Exotic Plant Pest Hotline:** 1800 084 881 (available 24 hours)Email: PIRSA.biosecuritysa@sa.gov.au

June 2017

Giant Pine Scale

Marchalina hellenica

Giant pine scale (*Marchalina hellenica*) is a scale insect that sucks the sap of pine trees. This scale insect is native to the eastern Mediterranean region, specifically Greece and Turkey.

Giant pine scale was reported for the first time in Australia in late 2014. It was found in pine trees in suburbs east of Melbourne and in Adelaide.

Giant pine scale has not been found in other parts of Australia, nor has it been detected in any pine plantations. However, as a sap sucking insect, it poses a threat to Australia's softwood plantation industry.

The Department of Primary Industries and Regions South Australia has destroyed all known giant pine scale infested trees in the state. This was completed in late 2016, with the removal of 91 infested trees and the sites decontaminated.

In Victoria, it has not been possible to destroy giant pine scale. There are more than 4300 infested trees in the south east suburbs of Melbourne.

While it has been agreed that the pest cannot be eradicated from Victoria, attention to limiting the spread and managing the impact of giant pine scale in Victoria will now be the focus.

Agriculture Victoria will continue to work with industry and stakeholders to minimise the impact of the pest on urban communities and softwood plantation industries.

What does giant pine scale look like?

Giant pine scale produces a distinctive white, cotton-like wax secretion. The adult scale insect can be up to 12 millimetres in length.

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.

In addition, look out for the black sooty mould which may grow on the large amounts of honeydew produced by the insects as they feed on plant sap.



Trunk of pine tree infested with giant pine scale
Photo: Victorian Department of Economic Development, Jobs, Transport and Resources



Magnified Giant Pine Scale
Photo: Andrea Battisti, Universita di Padova, Bugwood.org

What trees does it affect?

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 Victoria and South Australia, Giant pine scale has been found on:

Aleppo pine (*Pinus halapensis*),

Stone pine (*Pinus pinea*), Radiata pine (*Pinus radiata*), with these two being recorded as new host records for the pest).

How does it spread?

Giant pine scale moves slowly. Females do not have wings and the winged males are rarely seen. Infestations where trees are close together may be of higher risk, as the insect can more easily move from tree to tree.

However, giant pine scale can also spread with human assistance. If you are working with host trees, it is important to make sure you minimise the risk of spreading the pest by employing sustained hygiene best practices.

What is the impact?

Reports from Europe indicate that large populations of giant pine scale can cause severe dehydration and dieback of branches. In some cases, this is followed by tree death.

So far, pine death has been observed mainly in southern Greece and Crete.

The pest has also caused defoliation of *Pinus* species in parts of Italy and Turkey, with a significant impact in urban and forest environments.

Reporting

If you think you have found giant pine scale in a pine tree, please report it to Biosecurity SA by

- Emailing a photo to PIRSA.biosecuritysa@sa.gov.au

Report suspected exotic and emergency pests and diseases by phoning the Exotic Plant Pest Hotline

