Field Identification Guide
Oriental Chestnut Gall Wasp
Dryocosmus kuriphilus is a species of gall wasp native to China that is commonly referred to as the oriental chestnut gall wasp (OCGW). In June 2015 it was discovered for the first time in Britain. OCGW induces galls (distinctive growth irregularities) to form on sweet chestnut trees (Castanea sativa) which can result in a reduction of growth and fruiting. At this time, we believe that OCGW is the only insect that is forming galls on Sweet Chestnut.

**Species affected**
Sweet chestnut (Castanea sativa) and other Castanea species.

**Symptoms**
OCGW galls are conspicuous and distinctive. They can develop on young twigs or leaves, either on the petiole or on the midrib. The galls can cause leaf distortion and deformity. Each individual gall is between 5 and 20 mm in diameter, but larger galls may be found where several coalesce. Young galls are green or rose-pink but later turn red then brown. Galls that have developed on twigs shrink considerably over time and become woody and may remain on the tree for two years or more. Galls that have formed on leaf material senesce (age) in the autumn. Leaf retention has also been observed around the galls but this is not always the case.

The adult wasp is only 2.5 to 3.0 mm long with a black body, translucent wings and orange legs. Its small size means it is unlikely to be noticed, especially as it does not have a sting and is harmless to humans.

OCGW is univoltine (one generation per year) and females lay eggs in the growth / leaf buds of sweet chestnut trees during the summer, with eggs typically hatching into larvae within 30 to 40 days. The early stage larvae become dormant and overwinter in the buds but resume activity in the spring, causing the formation of the characteristic galls which are home to the developing larvae. The larvae feed for 20-30 days within the galls before pupating and adult wasps usually emerge during June to August, creating holes in the galls as they exit. These wasps live for approximately 10 days, completing their life cycle as they lay more eggs. Wasp reproduction is achieved from unfertilised eggs without any mating and male wasps have never been recorded.
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<th><strong>Timing</strong></th>
<th>Current year galls can be observed from May with leaf distortion occurring as galls form.</th>
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<td><strong>Biosecurity</strong></td>
<td>If you are sampling for galls please ensure that all potentially infected material is double bagged on site to prevent accidental escape of larvae or wasps, and that all plant debris, especially leaves and twigs, are removed from clothing, boots and vehicles, before leaving.</td>
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<td><strong>Reporting requirements</strong></td>
<td>This is a notifiable pest so if the galls are discovered you must report it. Please report through Tree Alert (<a href="http://www.forestry.gov.uk/treealert">www.forestry.gov.uk/treealert</a>). In Northern Ireland please report via the TreeCheck website (<a href="http://www.treecheck.net">www.treecheck.net</a>) or phone app, or by emailing <a href="mailto:afib.planthealth@dardni.gov.uk">afib.planthealth@dardni.gov.uk</a></td>
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Based on information available in December 2015.

Clusters of galls formed by OCGW larvae in the canopy of a sweet chestnut tree.
Signs and symptoms

Galls formed by the larvae of OCGW on sweet chestnut leaves.

Gall on the leaf midrib causing leaf distortion.
Signs and symptoms

OCGW gall on the leaf petiole (stalk).

OCGW gall on the leaf petiole (stalk).
Signs and symptoms

OCGW gall dissected to reveal the developing larvae.

Rose coloured OCGW gall on the leaf petiole.
Signs and symptoms

Rose coloured OCGW gall.

Small gall forming on the side of the leaf midrib causing leaf distortion.
Signs and symptoms

OCGW gall over 1 year old, shrunken and lignified and far more difficult to spot than the fresh galls.

Hardened gall with the emergence hole of a parasitic wasp.
Signs and symptoms - winter

Winter - hard, brown, desiccated galls with retained leaves.
Winter - hard, brown, desiccated gall with retained leaf giving a ‘scrunched up’ appearance.
Winter - hard, brown, desiccated gall showing adult exit hole.
Winter – retained foliage with galls is noticeable after majority of leaves have fallen in autumn.
The cause of this leaf distortion is unknown, but it is not thought to be due to OCGW.

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This booklet forms part of a set that supports Observatree volunteers when out looking for priority pests and diseases. It supplements face-to-face training and is not intended as a full or detailed description. It will also be useful for others who have some knowledge of the particular pest or disease and understand how to look for these. Further information is available online from the websites listed below:

Observatree: www.observatree.org.uk
Forestry Commission: www.forestry.gov.uk
Forest Research: www.forestry.gov.uk/forestresearch