

ADDITIONAL RECORDS OF PLANT GALLS FROM THE ISLE OF WIGHT - 2009

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Surprisingly, new galls continue to be found on the Island. During the last year seven new galls have been recorded, one caused by a Smut Fungus, one by a Gall Mite, one by a Gall Midge, two by Gall Wasps and one each by a Moth and a Sawfly.

FUNGI

Antherospora vaillantii (Tul. and C.Tul.) R Bauer *et al.* on Grape-Hyacinth *Muscari* sp.
Previously *Ustilago vaillantii* Tul.

This is a Smut Fungus the spores of which replace the pollen grains in the flower's anthers, turning them black. Although the infected anthers within the flower tube are not particularly obvious, handling such a flower will result in a small shower of powdery brownish black spores. Although the infection is systemic no discernible symptoms are visible until the anthers form. Sometimes the mouth of the corolla is stained dark violet and occasionally the ovaries can be affected. Not all species of *Muscari* are susceptible. Although I suspect that Island gardeners will know this infection there is so far only one record, from Brian Ransom's garden in Carisbrooke SZ 4888 where I found several infected plants 3.4.2009.

ACARI

Aceria macrotrichus (Nalepa) on Hornbeam *Carpinus betulus*

Bill Shepard found the gall of this Gall Mite 5.7.2009 in Fattingspark Copse SZ 5291. It appears to be common throughout Europe. The mites gall the side-veins of the leaf modifying each one into an extremely sinuous ridge and the appearance of a whole series of parallel wavy ridges is quite striking. There is an elongated slit along the vein on the leaf's upper side. Several affected leaves were found at the site. Apparently, with severe infections the whole leaf blade can be rolled up.

DIPTERA

Dasineura pyri (Bouché, 1847) on Pear *Pyrus communis*

I found many young leaves of one tree galled on the old St Helens to Bembridge railway track at SZ 631885 25.5.2009. The causative agent is a Gall Midge (Cecidomyiidae) known as the Pear Leaf Midge. Although this is not an important pest in Britain considerable damage to nursery stock and young trees has occurred in New Zealand. The gall consists of a leaf edge roll, usually on both halves of the leaf, rolled upwards but not including the leaf apex. Usually the roll is narrow but occasionally the leaf is folded upwards completely with only the midrib uninvolved. The leaf edge roll is thickened, shiny and green or yellowish. Inside the gall are white or reddish larvae.

HYMENOPTERA

CYNIPIDAE (GALL-WASPS)

Andricus amenti Giraud, 1859 on Pedunculate Oak *Quercus robur*

There are numerous more or less obscure catkin galls on Oak, many of which have not yet been recorded on the Island. The season for finding them is short and one needs to be able to examine the male catkins closely at eye level. Northwood Cemetery SZ 495946 has many suitable Oaks. I found several sexual galls of this gall wasp 24.4.2009 containing a single white larva each. The

gall is oval in shape 2mm x 1mm and is formed from the enlarged filament of a stamen with the anthers still visible as tiny cushions between twin longitudinal ridges on each side which converge and join at the apex. The galls can be solitary or gregarious, are initially a pale greenish-yellow colour, becoming brown later, and covered with pale silky hairs. The alternate agamic generation was for long unknown but has recently been shown to be a small stalked gall arising from a flower bud. This has not as yet been recorded in Britain.

Neuroterus saliens (Kollar, 1857)

on Turkey Oak *Quercus cerris*

Originally occurring around the Mediterranean littoral and in Central Europe, especially in Spain and Portugal, France, Austria, Germany and Poland the gall wasp which induces this gall appeared in England for the first time in May 2006. This first record was of the sexual generation gall, a small “anemone” gall on the fertilized flowers of Turkey Oak, in London. This gall, has not yet been discovered on the Island. However, from this “anemone” gall emerge both male and female gall wasps and the females after mating oviposit, to induce the agamic generation gall which I first found at Osborne SZ 519956 30.10.2009. This agamic generation gall occurs on the petiole, midrib or major side vein of a leaf, usually on the underside; or on the young shoot. It is a small oval object 3-5mm long, 1.5 – 2.00 mm broad, pointed at each end, shiny and hard, initially greenish and turning successively red then brown. Under high power microscopy it is seen to bear very numerous parallel transverse silvery ridges. The asexual female wasp overwinters inside the gall in the leaf litter and emerges in the spring to lay her parthenogenetic eggs into the developing female flower buds and hence continue the cycle of alternating generations which is such a feature of the gall wasps on Oak. In the west of its European range this species galls *Quercus cerris* and Cork Oak *Quercus suber* and related oaks further east. There are records now from Essex, Kent, Berkshire and Surrey but none as yet from Hampshire. I have subsequently found the gall at two other sites on the Osborne estate on Turkey Oak, and also on Lucombe Oak *Quercus x crenata* which is a hybrid between Turkey Oak and Cork Oak.

TENTHREDINIDAE (Sawflies)

Euura mucronata (Hartig, 1840)

on Grey Willow *Salix cinerea*

Although this gall is described in the literature as widespread and abundant it had not been recorded on the Island until Mike Cotterill found one specimen at Jersey Camp, Newtown SZ 4490 during the annual Fungus Foray 10.10.2009. The gall is a swollen bud, slightly pear-shaped and about twice normal size but otherwise resembling a normal bud except that it fails to open. Inside is a larval chamber containing in June/July a greenish sawfly larva which has a brown head. By October the chamber was vacated but contained plentiful frass. This sawfly apparently galls many *Salix* species.

LEPIDOPTERA

Heliozela sericiella (Haworth, 1878)

on Turkey Oak *Quercus cerris*

This moth of the family Heliozelidae is common in Hampshire but the last Island record was from Bonchurch in 1967. The gall has not been recorded here before. It is a slight elongated oval swelling of the petiole, the leaf midrib or (in my example) the base of a major side vein. It causes a slight irregularity in the direction the vein takes, and is yellowish in colour. There is a single larval chamber, inhabited June/July. The life-history of the larva is interesting. The moth oviposits beneath the bark of young shoots of various species of Oak. The larva which emerges initially mines the shoot then burrows into a petiole and thence into the midrib or even as far as a sidevein. It is the thickened terminal section of the mine which constitutes the gall. When almost fully fed the larva leaves the mine/gall and excavates a small blotch from the leaf blade and

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constructs an oval case from the leaf material and descends in the case to the ground where it pupates in leaf litter, the adult moth emerging in May. I found one vacated gall with mine and blotch at Osborne 30.10.2009 on the same tree where the gall of *Neuroterus saliens* was first found, at SZ 51959565.

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