ADDITIONAL RECORDS OF PLANT GALLS FROM THE ISLE OF WIGHT

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Since the publication of my last list of newly found gall-inducing organisms (Biggs 2006) nine new species have been recorded from the Island.

FUNGI

Ascomycota

Hypocreales

Epichloe clarkii White

Brian Spooner and S.L. Kemp wrote an article in 'Mycologist' dividing the species *Epichloe typhina* into six species. In Swanton's List of I.W. Fungi (1934) *Epichloe typhina* was considered to be of frequent occurrence. I have many records of it affecting and galling Creeping Soft-grass (*Holcus mollis*) and one on False Oat-grass (*Arrhenatherum elatius*). Bill Shepard and I came across a very large patch of Yorkshire Fog (*Holcus lanata*) on the cliff edge west of Whale Chine at SZ4678 on 17th July 2005 with almost every plant affected by 'Choke Disease'. The paper by Spooner and Kemp describes how the species of *Epichloe* can be identified and gives a table of host species. I was able to determine these specimens as *Epichloe clarkii* by microscopical examination of the ascospores. It appears that it is only *E. clarkii* that affects *Holcus mollis* and *H. lanata,* and *E. typhina* which affects *Arrhenatherum elatius*. Infected grasses are larger, more robust and vigorous but the fungus surrounds the grass stem, 'chokes' it and suppresses flowering.

Chytridiomycota

Blastocladiales

Physoderma vagans Schroet.

This fungus is a member of the CHYTRIDIOMYCOTA. They are rather strange organisms not closely related to most other fungi and characterised by having motile reproductive cells each equipped with a single posterior flagellum. My wife found several plants of Creeping Buttercup (*Ranunculus repens*) galled by this fungus in our garden in Gurnard SZ476954 on 23rd May 2005. Many leaves showed scattered irregular upper-surface warts c. 0.5 mm. across. Microscopy showed thick-walled resting spores. Similar species are pests of Alfalfa *Medicago sativa* and Sugar Beet *Beta vulgaris*.

ACARI

Aceria fraxinicola (Nalepa)

At Hurst Stake SZ5090 on 25th July 2005 I found one gall of this mite on a leaflet of Ash (*Fraxinus excelsior.*) The gall was a pointed very dark green pustule 1.5 mm high and 2-3 mm across on the upper leaf surface, and surrounded by a pale yellow patch 8 mm in diameter . It was situated on one of the side veins and on sectioning an irregularly divided cavity was revealed containing mites.

Eriophyes canestrinii (Nalepa)

This gall mite causes phyllanthy of the flowers of Box (*Buxus sempervirens.*) I found three deformed fruits on a bush at Langbridge, Newchurch SZ5585 on 9th November 2005. The abnormal fruits were brown and thickened and contained thick fleshy stamens and stigmas with small cavities within them containing the mites. Unusually for a mite-induced flower gall there was no abnormal pilosity.

Phyllocoptes gibbosus (Nalepa)
This mite gall was found in Firestone Copse SZ5591 on 13th March 2005 by myself. It occurs on Bramble (*Rubus fruticosus*) and is an erineum on the leaf. An erineum is a patch of abnormal hairs which the mite induces the leaf to produce. This particular erineum had been produced the previous season. One leaf had a very noticeable greyish white felt extending from the midrib to the edge of the leaf on one side. Some individual hairs were colourless and some were white and they were so thickly growing that a curious iridescent appearance was given similar to 'watered' silk. On microscopy each hair was seen to be very slender and to have an acutely pointed tip.

Phytoptus tetratrichus (Nalepa)
A tree of Lime (*Tilia x europaea*) at Freshwater SZ3387 was found by me on 18th October 2005 to exhibit multiple upper-surface leaf pustules, 3 mm across and 1.5 mm high and brown in colour. On the under-surface of the leaf were corresponding deep concavities filled to overflowing with long coiled and twisted beige hairs, particularly thick on the thickened rim of the concavity. As is usual the gall mites live amongst the hairs.

DIPTERA
Contarinia scrophulariae Kieffer, 1896
I found many old galled flowers of Water Figwort (*Scrophularia aquatica*) at Osborne SZ5295 on 12th April 2005. These were remaining on the plant from the previous growing season. At the time when the galls had been mature, the flowers would have remained closed and the internal floral parts would have been thickened. Each flower would have contained several white to citrus yellow jumping larvae. By the time I came across the galls the flowers were thickened and brown. Sectioning revealed greatly thickened stamens and stigmas with shallow depressions in them where the larvae had fed.

Jaapiella schmidti Rübsaamen, 1912
On Ribwort Plantain (*Plantago lanceolata*) at Shalfleet SZ4190 on 7th September 2005. One inflorescence of one plant attracted my attention because it was much thicker than normal, shorter, and bent over at the apex. Closer examination revealed some 20 abnormal fruits, shiny brown, smooth, and distinctly and very noticeably pointed. A hand lens revealed some to have an exit hole. Microscopy at home yielded bright orange-red larvae.

HEMIPTERA
Adelges laricis Vallot, *1836*
Sue Blackwell found one gall in Snowdrop Lane in Gatcombe SZ4885 on 24th February 2005. The gall was an old one, from a previous year, on a fallen twig of Norway Spruce (*Picea abies.*) The gall-causer is an Adelgid, closely related to ordinary aphids and sometimes called woolly conifer aphids. They have a two-year life cycle which always involves a species of Spruce as the primary host plant. The secondary host of this species is Larch (*Larix sp.*). The gall looks like and is known as a pineapple gall. It consists of the swollen bases of adjacent needles which become fused to the axis of the shoot forming a compact globular structure which encloses the insects. It is yellowish or greenish-white at maturity, globular, about 10 mm x 10 mm, on one side of the tip of a shoot, with the openings from the gall chambers produced into pointed elongated processes.

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