

Plant Gall associates.

Rosemary Winnall

There are over 1,000 different kinds of galls in the British Isles found on a range of woody and herbaceous plants. A plant gall is “an abnormal growth induced by the presence of another organism living in or on the host plant causing its cells to enlarge and/or multiply to provide both food and shelter for the gall-causer” (Michael Chinery 2011).

Most galls are caused by insects, mites and fungi, although they may be induced by other organisms - bacteria, protozoa, other plants, nematodes, rotifers, and copopods. Insect galls may be induced by aphids, psyllids, beetles, micromoths, flies, sawflies, chalcid wasps, or gall wasps, and many have complicated life histories.

In a mite or insect-induced gall, as well as the larva of the gall causer, there may also be found a parasitoid – an insect that feeds on one host animal and invariably kills it, and/or an inquiline – a mite or an insect that lives in and feeds on gall tissue caused by another species.

But recently (through *Cecidology* the journal of the British Plant Gall Society), I have become aware of another term – successori – late colonisers that are associated with some old galls for hiding, feeding or reproduction. These may be springtails, psocids, thrips, earwigs, non-galling gall midge larvae, mites, worms, spiders, earwigs, ants, beetles, and snails. Some of these feed on microfungi and detritus, or use the gall for shelter.



01. Mature Artichoke gall *Andricus foecundatrix* in early September. Rosemary Winnall.

We are familiar with the common artichoke or hop gall which is an enlarged bud on oak twigs caused by the gall wasp *Andricus foecundatrix*. Within the bud scales in the centre of this gall, there is

a hard inner gall in which a single larva develops. This matures in August when this inner gall is forced out and drops to the ground. Pupation occurs within the gall and the adult emerges in late spring. Eggs from this generation are laid in the male flower buds. Meanwhile the dried scales of the artichoke gall are left on the tree and these can make sheltered retreats for other invertebrates. Simon Haarder reports from Denmark that he’d found eggs within one of these galls which he hatched out. To his surprise the emerged nymphs were Oak Bush Crickets *Meconema thalassinum*. He reports that in the Netherlands this bush cricket has also been bred from old Oak Marble Galls *Andricus kollari*.

So I wonder what is lurking in empty galls in Worcestershire? This is another microhabitat to explore!



02. Old Artichoke galls *Andricus foecundatrix* in late October. Rosemary Winnall.

Acknowledgement

Thanks are due to Mike Bloxham who provided me with a copy of his article cited below written with Margaret Redfern. It makes fascinating reading!

References

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 Redfern, M. and Shirley, P. 2011. *British Plant Galls*. Field Studies Council
 Chinery, M. 2011. *Britain’s Plant Galls, a photographic guide*. WildGuides

Images

- 01. Mature Artichoke gall *Andricus foecundatrix* in early September. Rosemary Winnall.
- 02. Old Artichoke galls *Andricus foecundatrix* in late October. Rosemary Winnall.