

BROOM GALL MITE

Aceria genistae

The history of broom gall mites in New Zealand

The broom gall mite is native to Western Europe and was first imported in 2006 by Landcare Research on behalf of the Canterbury Broom Group. The first releases of this agent were made in 2008. Widespread releases are now underway, and the mite appears to be establishing readily at many sites. A mite of the same name has already been recorded in New Zealand, but on gorse. Recent research shows that *Aceria genistae* includes a number of distinct strains, each of which is specific to one species of plant. We are certain that the mites we are introducing are specific to broom and are unlikely to interbreed with the resident strain.

How would I find broom gall mites?

The adult mites are so small that you cannot easily see them with the naked eye. Under a microscope the mites are creamy-white to yellow in colour and cigar-shaped. The best way to detect the presence of the mites is to look for the galls that form as a result of their feeding.

During winter the mites live in colonies inside the base of stem buds. In the spring, feeding by mites causes the buds to develop into deformed lumps that are 5–30 mm across. Many



Galls



Close up of a gall and a mite (inset)

overlapping generations of mites live and feed in the galls over spring and summer, and this is the best time to look. In late summer and autumn the galls start to wither and, taking this cue, the mites migrate to a new stem bud for the winter.

It is rare to see galls on broom in New Zealand that are due to other causes. The broom gall mite is also easy to differentiate from other broom agents.

See *Broom leaf beetle*, *Broom seed beetle*, *Broom psyllid*, *Broom shoot moth*, *Broom twig miner*.

How do broom gall mites damage broom?

By forming galls on successive years' growth the mites cause stunting, reduced flowering, and can even kill whole bushes. Unlike many insects the gall mite is believed to happily attack broom even when it is shaded.

Will broom gall mites attack other plants?

No, it is extremely unlikely that the gall mites will damage anything other than Scotch broom (*Cytisus scoparius*).



How effective are broom gall mites?

It is too soon to know what impact the broom gall mites will have in New Zealand. However, there are already some promising signs that they could have quite a major impact. Plants at some of the earliest release sites are already showing signs of severe galling leading to plant death.

How can I get the most out of broom gall mites?

Although the gall mite can disperse by ballooning on wind currents, dispersal may still be fairly slow. As soon as galls are present in harvestable numbers it would be worth moving them to other areas where they are needed.

How do I choose a release site?

Read *Guidelines for selecting release sites for biocontrol agents*.

How do I collect broom gall mites for release?

Late spring to early summer is the best time to undertake harvesting and redistribution. Aim to shift at least 50 galls to each site and tie them onto plants so the tiny mites can move across.

How do I manage the release sites?

Avoid any activities that will interfere with the gall mites, such as herbicide application. If you need to undertake control measures then avoid the release site.



Heavily galled dying plant

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