

Mexican Devil Weed Gall Fly



The Mexican devil weed gall fly (*Procecidochares utilis*) is native to Mexico. It was first imported into New Zealand in 1958 and released at a limited number of sites soon after. The fly established readily and can now be commonly found wherever its host occurs.

The adults are similar in size (8 mm wing span) and appearance to several other introduced biological control agents such as the closely related Mist flower gall fly (*Procecidochares alani*) and the thistle gall flies (*Urophora* spp.). They have boldly patterned wings and females have a long black ovipositor. You may also be able to see the adult flies resting on plants at any time during the warmer months.

This fly is a multivoltine species, it is expected to be able to complete several generations during the warmer months. A generation can be completed in as little as 6–7 weeks. Adults begin egg-laying in spring. Eggs are laid into the apical or lateral growing points. Larvae are creamy-white and they burrow into the tender buds. As the larvae feed and grow, the plant forms gall tissue around them which look like deformities. These small pea-sized swellings increase in size with mature galls up to about 2–3 cm in diameter, especially if several coalesce. Although the galls start to become noticeable in early summer the best time to look for them is late summer or autumn. Pupation also occurs inside the plant with new adults emerging several weeks later. They emerge through a thin window which is made by the larvae before pupation.

Larval feeding tricks the plant into diverting valuable nutrients, which would normally be used for plant growth, into the galls to feed the developing fly larvae. Stem elongation may be retarded, resulting in shorter Mexican devil weed plants with reduced vigour that can be more easily out-competed by desirable vegetation. Although there were initially reports of major damage, today only minor galling is commonly seen because of moderate-high levels of parasitism by an Australian wasp (*Megastigmus* sp). It is extremely unlikely that the flies will damage any plants other than Mexican devil weed. Even the closely related mist flower (*A. riparia*) is unlikely to be attacked.

Because this fly is already widespread and limited by parasitism no further efforts to increase its abundance or distribution are necessary.

