

LAND MANAGEMENT

CONSERVATION TREES WILLOW SAWFLY

What is the problem?

The willow sawfly, *Nematus oligospilus*, has become established in Hawke's Bay and there is growing concern by landowners about the threat to flood control plantings on nearby rivers and to erosion control plantations on farmland.

This information sheet is the current situation (at June 2001) to help landowners make decisions about future plantings of willows. It is updated periodically as research provides more information.

Where is it found?

This species of sawfly is widely distributed in the Northern Hemisphere. It was found in South Africa in 1993 following which large defoliations occurred. The first New Zealand sighting was in Auckland in autumn 1997. It has now moved to the Bay of Plenty, Waikato, Hawke's Bay, Wellington, and as far south as Otago.



Larva is 15-20mm long when fully grown
(photo courtesy of D. Allan, HortResearch)

Lifecycle

Sawflies are members of the Nematus family of which there are a number of members already in New Zealand e.g. the Willow Gallfly.

The adult fly lays eggs on willow leaves. These hatch into grubs which look like caterpillars, the same colour as the green willow leaves. The grub forms a pupa which in turn hatches into the adult. It can lay up to 50 eggs. The number of generations in a season depends on temperature with up to 6 generations being likely in lowland Hawke's Bay.

What does it look like?

The egg is difficult to see unless familiar to the viewer. It is clear and only 1-2mm long. The damage-causing larvae (grubs) are green and first visible at about 5mm in length and then grow to a length of 15-20mm. The larvae are easily overlooked because of the way they lie along the eaten edge of the leaf.



Typical feeding pattern of larvae
(Photo courtesy of C. van Kraayenoord, HortResearch)