# forest health news

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## BUDDLEIA LEAF WEEVIL UPDATE

As reported in an earlier FH News (FH News 169, January 2007) the buddleia leaf weevil, *Cleopus japonicus*, was released by Scion staff at five sites in North Island plantations from October 2006 to January 2007. Release sites were established in Whakarewarewa, Kinleith, Lake Taupo, Esk, and Rawhiti Forests. These forests were selected because they represent a range of different climatic conditions. The sites have since been monitored closely for weevil establishment, dispersal, and feeding damage to buddleia. Despite many years of research in quarantine, how well the weevil would do in New Zealand forests was uncertain.

In particular, we were interested to see if cleopus would survive winter as adult weevils and/or pupae, and would larvae be found in the cooler months. Larvae do not tolerate cooler temperatures as well as adults do. Adults were found throughout winter at all sites. They could be found sunning themselves on leaves at the tops of plants on warmer sunny days. No larvae were found at any sites between June and July 2007; the first were found at the warmest site near Ohope (Rawhiti Forest) in mid-August, and they were at all sites by late September. This was earlier than expected and probably was a result of the warm winter.

(a) *above*: Typical larval damage.
(b) *lower*: Heavily defoliated buddleia at Rawhiti Forest.

During January 2008, weevils became difficult to find and no larvae were located. This is thought to be due to the sustained, high temperatures experienced during this period, with many days over 30°C at the release sites. In China the buddleia leaf weevil is known to cease laying eggs when it is hot. Our observations also indicate weevils become inactive and hide at high temperatures. However, large numbers of very small larvae and eggs were found in mid-February at all sites.

The weevil can be considered established at all sites as more than two generations have been recorded, weevils were found after winter, and numbers have increased. Buddleia leaf weevil feeding has been found 145 m from the release plants at Kinleith and 200 m from them at Lake Taupo. It is only early days, but feeding damage to some plants is impressive. Very heavy defoliation will be needed, however, to reduce the vigorous growth of buddleia.

Further releases have been made in the Kaikoura area, Whanganui, Masterton, and Bay of Plenty between November 2007 and February 2008.

*Michelle Watson*

## NEW ADDITION TO THE DIAGNOSTICS TEAM

Katrin Walbert is the latest addition to the pathology diagnostics team, which she joined in December 2007. Katrin is originally from Germany and came to New Zealand for her Master's thesis on the ecophysiology of New Zealand mangroves. She has been with the Scion FBP group since 2004 and has just completed her PhD project on ectomycorrhizal communities associated with *Pinus radiata*. Her new role includes working in the diagnostics team as well as research on the ectomycorrhizas of plantation and native trees.

## NEW RECORDS

New host record for New Zealand – Insect: *Uraba lugens* (Nolidae); Region: Auckland; Host: *Callistemon citrinus*; Coll: J Bartram, 01/02/2008; Ident: J Bain, 04/02/2008; Comments: This Australian species was first found in New Zealand in 1992. Its main hosts are *Eucalyptus* spp.

New host record for New Zealand – Insect: *Coccus longulus* (Coccidae); Region: Auckland; Host: *Castanospermum australe*; Coll: C Inglis, 14/12/2007; Ident: R Henderson, 07/02/2008; Comments: This cosmopolitan scale insect was first recorded in New Zealand in 1897 but it is seldom collected and most records are from Auckland. It has previously been recorded from *Carmichaelia* spp., *Chordospartium stevensonii*, *Melicope ternata*, *Citrus* spp., *Hypericum* sp., *Magnolia stellata*, and *Vitis vinifera*.

New host record for New Zealand – Insect: *Liogramma zelandica* (Cerambycidae); Region: Wairarapa; Host: *Dodonaea viscosa*; Coll: B Rogan, 07/02/2008; Ident: J Bain, 18/02/2008; Comments: This native longhorn beetle has been recorded from the dead wood of quite a range of species.

New host record for New Zealand – Insect: *Xuthodes punctipennis* (Cerambycidae); Region: Mid Canterbury; Host: *Acacia dealbata*; Coll: P Bradbury, 02/02/2008; Ident: J Bain, 19/02/2008; Comments: This native longhorn beetle has been has previously been recorded from *Eucalyptus*, *Myoporum*, *Nothofagus*, and *Citrus*.

New host record for New Zealand – Insect: *Glyphodes* cf. *onychinalis* (Crambidae); Region: Auckland; Host: *Nerium oleander*; Coll: B Rogan, 29/01/2008; Ident: J Bain, 18/02/2008; Comments: This species was first found in New Zealand in 1986 and all records are from Auckland. Overseas it is found from India to northern Australia. In Auckland it has previously been recorded from *Gomphocarpus* and *Hoya*.


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New host record for New Zealand – Insect: *Grapholita molesta* (Tortricidae); Region: Hawke's Bay; Host: *Pseudocydonia sinensis*; Coll: B Rogan, 19/02/2008; Ident: J Bain, 21/02/2008; Comments: This species is native to north-west China and has become established in many countries throughout the world. It was first found in New Zealand in 1973. In New Zealand it has been recorded from *Cydonia oblonga*, *Malus*, *Prunus persica*, and *Pyrus*. It is a serious pest of peaches and nectarines (*P. persica*) here.

New host record for New Zealand – Insect: *Toxoptera aurantii* (Aphididae); Region: Hawke's Bay; Host: *Agonis flexuosa*; Coll: B Rogan, 19/02/2008; Ident: J Bain, 26/02/2008; Comments: The first record of this sub-cosmopolitan aphid in New Zealand is 1933. It has a wide host range overseas and in New Zealand has been recorded from *Actinidia deliciosa*, *Citrus* spp., *Camellia* spp., *Elingamita johnsonii*, *Eucalyptus saligna*, *Ilex* sp., *Latana montevidensis*, *Macadamia* sp., *Pittosporum eugenioides*, and *Pseudopanax* sp.

New distribution record for New Zealand – Insect: *Anisoplaca cosmia* (Gelechiidae); Region: Wellington; Host: *Langunaria patersonia*; Coll: B Rogan, 12/02/2008; Ident: J Bain, 15/02/2008; Comments: This Norfolk Island species has previously been recorded from Northland, Auckland, Bay of Plenty, Gisborne, and Hawke's Bay.

New distribution record for New Zealand – Insect: *Dialectica scalariella* (Gracillariidae); Region: Hawke's Bay; Host: *Echium* sp.; Coll: B Rogan, 19/02/2008; Ident: J Bain, 22/02/2008; Comments: This European/Asia Minor species was first found in New Zealand in 1997. It was deliberately introduced into Australia for the biological control of *Echium plantagineum* (Paterson's curse). It has previously been recorded from Auckland, Nelson, Marlborough/Marlborough Sounds, Buller, and Mid Canterbury.

New distribution record for New Zealand – Insect: *Acrocercops laciniella* (Gracillariidae); Region: Mid Canterbury; Host: *Eucalyptus nicholii*; Coll: B Doherty, 26/02/2008; Ident: J Bain, 28/02/2008; Comments: This Australian leaf miner (first New Zealand record 1999) has been recorded from about 50 species of *Eucalyptus* and *Lophostemon* and *Angophora*. It is widespread in the North Island and has previously been recorded from Nelson, Marlborough Sounds, and Marlborough in the South Island.

New distribution record for New Zealand – Insect: *Holocola* sp. nr. *triangulana* (Tortricidae); Region: Wellington; Host: *Acacia longifolia*; Coll: B Rogan, 26/02/2008; Ident: J Bain, 29/02/2008; Comments: This Australian species was first found in New Zealand in 1999. It has also been recorded from *Acacia floribunda* and *Acacia melanoxylon* and has previously been recorded from Auckland, Waikato, Bay of Plenty, Gisborne, Hawke's Bay, Wanganui, and Nelson.

New distribution record for New Zealand – Fungus: *Hysterographium fraxini*; Region: Wanganui; Host: *Fraxinus excelsior*; Coll: B Doherty, 03/02/2008; Ident: R Ganley, 08/02/2008; Comments: This species was first found in New Zealand in 2004. Fruit bodies are found on dead branches and twigs. It has previously been found in Taranaki, Wairarapa, Wellington, Nelson, Marlborough, Kaikoura, North Canterbury, Mid Canterbury, South Canterbury, and Southland.

New distribution record for New Zealand – Fungus: *Hysterographium fraxini*; Region: Hawke's Bay; Host: *Fraxinus excelsior*; Coll: B Rogan, 19/02/2008; Ident: M Dick, 20/02/2008; Comments: See above.

*John Bain*



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