



No. 212, January 2011 ISSN 1175-9755

PAROPSIS BIOLOGICAL CONTROL AGENTS HAD A WHITE CHRISTMAS IN DUBLIN

The week before Christmas, Scion entomologist Toni Withers supplied about one thousand parasitic wasps of *Enoggera nassau* (Hymenoptera: Pteromalidae) within eggs of their host, the eucalyptus tortoise beetle *Paropsis charybdis*, to Dublin.

As Ireland had been experiencing record snow falls in the days leading up to their arrival, they had snowy views from their secure room in the quarantine insectary of the University of Dublin.

Scion supplied the parasitoids to entomologist Jan-Robert Baars to see if they might be a suitable biological Control agent for *Paropsisterna gloriosa* (Coleoptera: Chrysomelidae). This beetle is a close relative to the eucalyptus tortoise beetle. Both are native to Australia and defoliate a range of eucalypts.

Paropsisterna gloriosa is threatening the small eucalyptus forest industry in southern Ireland, which grows a variety of eucalypts, some for pulp, firewood and many for as decorative foliage for the floral industry. *Paropsisterna gloriosa* was first found in Ireland in 2007.

Scion has a long history associated with research on this beneficial egg parasitoid *E. nassau*. Nod Kay and John Bain were responsible for its introduction from Perth in 1988; Brendan Murphy completed his MSc and PhD studying it; and Tara Murray her PhD, which she received last year.

We were hopeful the beetle in Ireland would be acceptable to *E. nassau* as they oviposit happily within eggs of many paropsine beetles including the genera *Paropsisterna* (= *Chrysophtharta*), *Paropsis*, *Trachymela* and *Dicranosterna*. Brendan never collected the eggs of this rare *Paropsisterna gloriosa* during his research in Tasmania during his PhD studies.

Dr Baas has since reported that *Enoggera nassau* was more than happy to accept the *Paropsisterna gloriosa* eggs for oviposition, and adults were reared. Unfortunately being a much smaller beetle than *Paropsis charybdis*, the *E. nassau* are emerging from the small eggs at least half the size that we see them in New Zealand. Theory would suggest they will be less able to thrive when being forced to use such a small host, but time will tell.

Toni Withers



At left: *Enoggera nassau* on paropsine eggs.

Below: *Paropsisterna gloriosa* adult.

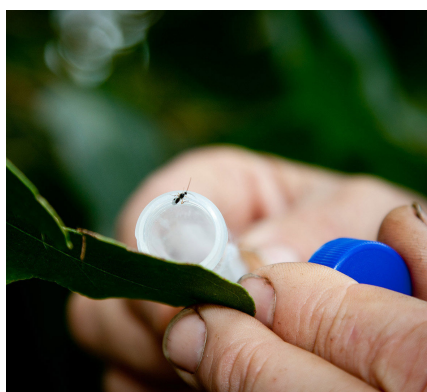


GUMLEAF SKELETONISER PARASITOID RELEASED

In the previous Forest Health News it was mentioned that a braconid parasitoid would be released soon as a control agent for the gumleaf skeletoniser (*Uraba lugens*).

Cotesia urabae was released in Auckland, where *Uraba* populations are greatest, in early January this year. Scion will continue to distribute the parasitoid to other areas where the moth occurs and these will be monitored to determine their success and the effect the parasitoid is having on *Uraba* populations.

Lisa Berndt



Left: *Cotesia urabae* - the tiny parasitic wasp released as a biological control agent for gumleaf skeletoniser

GUMLEAF SKELETONISER JUMPS COOK STRAIT

The gumleaf skeletoniser (*Uraba lugens*), an Australian species that was first found in New Zealand in 1992 at Mt Maunganui has been found in Nelson. An old egg mass and four clusters of young larvae along with skeletonised leaves were found in early January, on a residential property by a member of the public. The

identification was made by Ministry of Agriculture and Forestry entomologists. This is the first record of the gumleaf skeletoniser from the South Island and there is no reason it should not spread further south. Previously the moth had been known only from Auckland, Coromandel, Waikato, Bay of Plenty and Hawke's Bay.



John Bain



Above: Peter Berg (NZFOA Chairman) and Ian Maxwell (Auckland Council Parks Manager) participate in the official release of *Cotesia urabae* in the Auckland Domain.

UPDATE ON GUMLEAF SKELETONISER IN WESTERN AUSTRALIA

In the last issue of Forest Health news we reported on a potential outbreak of *Uraba lugens* in Western Australia. Currently the affected area is 200,000 hectares and the populations are double what they were at the peak of the last outbreak in the 1980s. This will result in 100% defoliation of around 100,000 hectares and significant defoliation of the remainder of the affected forest. Pheromone trapping will be used to monitor moth populations and it is hoped to check population gradients across differential defoliation levels and forest areas with differing management histories. Thanks to Janet Farr, Forest Entomologist, Western Australia Department of Environment and Conservation for this update.

GUAVA/MYRTLE RUST IN QUEENSLAND

The last issue of Forest Health News dealt with guava/myrtle rust (caused by *Puccinia psidii*) in New South Wales and speculated on what this means for New Zealand. As the populations of *P. psidii* in Australia increase it seems likely that the spores of the rust will reach here when atmospheric conditions are right. Just before Christmas last year *P. psidii* was found at three plant nurseries just north of Brisbane and subsequent surveys have found it on more than 10 sites in south east Queensland.



NEW RECORDS

We are no longer publishing details of new records. For further information on results of MAF funded programmes see MAF's Biosecurity magazine (<http://www.biosecurity.govt.nz/publications/biosecurity-magazine/index.htm>) where information on new biosecurity identifications is regularly published.

John Bain