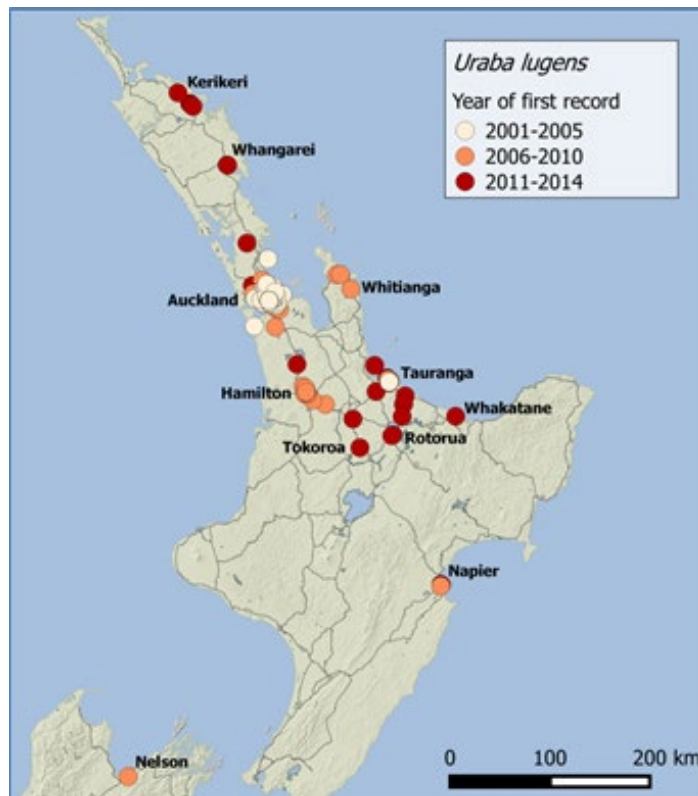




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## EUCALYPT PEST GUM LEAF SKELETONISER REACHES THE CENTRAL NORTH ISLAND

Evidence of the eucalypt pest gum leaf skeletoniser (*Uraba lugens* (Lepidoptera: Nolidae)), was recently found in a recreation reserve 5 km south of Tokoroa. Gum leaf skeletoniser established in Auckland in 2001 and is now distributed from Northland to the Bay of Plenty, with high populations also in Napier and Nelson. It was only a matter of time before gum leaf skeletoniser reached Tokoroa as it had been found in nearby Putaruru in 2012. The central North Island has an ideal climate for growing *E. nitens*, and along with *E. fastigata* there are a number of commercial plantations in the area. Although it is often difficult to predict how a pest will behave in a new environment, both of these eucalypt species are suitable for gum leaf skeletoniser larval development. So it is likely it will become a more visible presence in the area over the next three or more years. This will be discussed in the next FH issue.



*Uraba lugens* first records between 2001 and 2014.

Biocontrol is the deliberate use of natural enemies to reduce a pest population. To control the gum leaf skeletoniser, Scion assessed the potential of a tiny parasitoid wasp from Australia, *Cotesia urabae* (Diptera: Braconidae). First tests started in 2006 and permission to release *C. urabae* was gained in 2010. The first releases were made into the population hot spot of Auckland the following year. The parasitoid has been busy there ever since. Auckland University PhD student Gonzalo Avila collected nearly 500 caterpillars on Auckland eucalypts this winter (2014), and found 40% contain the *C. urabae* parasitoid, showing the wasps are well established there.



Female *Cotesia urabae* parasitoids attack gum leaf skeletoniser larvae (left). Larvae emerge from the caterpillars a few weeks later, killing them, and spin silken cocoons (right), photos G. Avila.

The success in Auckland is being replicated with additional releases and successful establishment into Whangarei and Tauranga. This coming summer will see evaluations for *C. urabae* establishment into Nelson (releases in 2013) and Napier (in 2014) as well as additional releases into areas where the gum leaf skeletoniser caterpillar is most abundant.

This parasitoid *C. urabae* holds great promise for suppressing the gum leaf skeletoniser pest and is one more step towards ensuring that all New Zealand's valued forestry and amenity trees stay healthy in the years to come. Read more about Gonzalo's PhD research on *C. urabae*, and watch amazing videos of the parasitoids emerging from their hosts here! : [www.cotesiaurabae.com](http://www.cotesiaurabae.com)

Toni Withers and Belinda Gresham (Forest Protection Scion), Gonzalo Avila (University of Auckland)

## NATIONAL FORESTRY HERBARIUM RECEIVES GENEROUS GIFT OF SPECIMENS

The National Forestry Herbarium recently received a generous gift of several hundred specimens from Mike Wilcox, a well-known Auckland botanist and author of the recently published 'Auckland's Remarkable Urban Forest'. Although he has lived in Auckland for a number of years, Mike has a long link with the herbarium, as for much of his career he was a scientist based in Rotorua at the Forest Research Institute (FRI), now Scion, involved particularly with eucalypt breeding and cultivation. In his later years at FRI Mike led the Genetics research group and he ended up becoming the Director of the Forest Health and Improvement Division. The herbarium already holds more than 2000 specimens collected by Mike, including many New Zealand native species from forests, lake surrounds and geothermal areas, along with a large number of *Eucalyptus* species collected in Australia. They are an important part of the reference resource held at the herbarium.

The gift consists of examples of many amenity species, including *Quercus*, *Fraxinus*, *Alnus*, *Eucalyptus*, *Cupressus*, *Chamaecyparis*, *Acacia* and a variety of shrubby *Myrtaceae* species, together with some unusual native and exotic herbs. Among the specimens are several species not already held by the herbarium, and these are particularly appreciated.

The gift is a valuable and much appreciated contribution to the National Forestry Herbarium, increasing its reference base for identifications and extending its ability to support biosecurity queries.

*Elizabeth Miller (Forest Protection Scion)*

## RESULTS OF THE FH NEWS READERS' SURVEY (END)

We received many comments regarding preferred topics as well as other desirable contents. Aligning with the past editorial line of the newsletter, we intend to maintain focus on what is happening in forest health.

This will primarily include brief reports on pertinent pests and diseases in New Zealand forests (including native and urban). Potential/emerging threats from overseas will also be considered, and we will try to provide regular information on surveillance.

On our research at Scion, we will provide information on current and future achievements, and science capability. We also welcome articles from others working on forest health in New Zealand.

As much as possible, we will try to accompany articles with relevant images (including fine photos of staff at work!) and links, and intend to deliver the FH News Index in electronic format, so articles on a particular organism or subject in previous editions can be searched for.

*Nicolas Meurisse and Lindsay Bulman  
(Forest Protection Scion)*

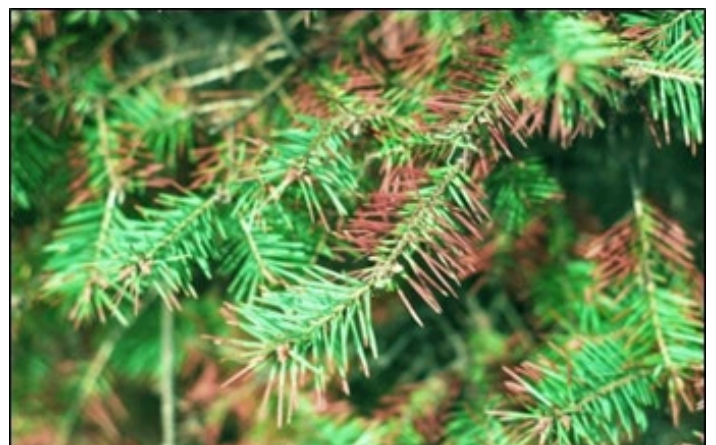
## SWISS NEEDLE CAST WORKSHOP

The arrival of Swiss needle cast in the late 1950s resulted in significant increment loss in Douglas-fir stands, particularly in the North Island. Recently there has been renewed interest in Douglas-fir and it is timely to review the current state of knowledge and develop a plan to mitigate the effects of the disease. This prompted a Swiss Needle Cast Workshop, which will be held at Scion in Rotorua on 2 and 3 December 2014. The workshop is organised as a part of a Forest Owners Association/ Scion-funded research programme to discuss how we can grow more and better Douglas-fir despite Swiss needle cast.

Leading scientists in the field from New Zealand will share their most recent knowledge on Swiss needle cast pathology, climate and its effect on the disease in different parts of the country, management of the disease, genetic solutions, and experiences from progeny trials. Forest industry representatives from Ernslaw One and Timberlands will provide their opinion on the subject. Prof. Doug Maguire from Oregon State University has been invited to deliver the keynote on "Douglas-fir silviculture in the presence of Swiss needle cast: Relative merits of designing effective management tactics and conceding to environmental limitations". On the afternoon of the first day, the workshop will be continued by a field trip to Whaka Forest, Kaingaroa and Long Mile breeding trials. The second day focusses on developing an action plan that can be implemented by Douglas-fir forestry, based on research ideas in genetics, silviculture and siting and industry priorities.

See website for further details and registration: [www.scionresearch.com/general/news-and-events](http://www.scionresearch.com/general/news-and-events)

*Mari Suontama (Forest Genetics Scion)*



Swiss needle cast (*Phaeocryptopus gaeumannii*) symptoms on Douglas-fir, photo USDA Forest Service, North Central Research Station Archive.