# Forest Health News





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# **GUM TREE WEEVIL - SAME INSECT, DIFFERENT NAME**

A very recently published paper by Mapondera *et al* (see below) means that the Australian gum tree weevil present in New Zealand now has different name. For years it has been referred to as *Gonipterus scutellatus* but it has now been determined that this is a misidentification. The species we have in New Zealand is *Gonipterus platensis*.

Apparently *Gonipterus platensis* is native to Tasmania and has also been introduced into southern South America (Argentina, Brazil, Chile), western North America (California, Hawaii) and western Europe (Portugal, Spain). The *Gonipterus* introduced into South Africa and Italy have in the past been referred to as *G. scutellatus* (and sometimes *G. gibberus*) are an undescribed species. There is some evidence that *G. platensis* is also present in South Africa.

*Gonipterus* was first recorded in New Zealand in 1890 in Wellington. It was first recorded as *Gonipterus* sp. and then was known as *Gonipterus reticularis* until 1925 when it was referred to as *G. scutellatus*. This determination was made at the Imperial Bureau of Entomology, London.

By the late 1920s *Gonipterus* was considered to be a serious enough pest of eucalypts in New Zealand that an egg parasitoid, *Anaphes nitens* (Pteromalidae), was introduced from Australia as a biological control agent. The initial consignment in 1927 was sent here by a South African entomologist who was sending parasitoids back to South Africa. Progeny of this importation did not establish and more were imported from Australia in 1929-30. By the mid 1930s the parasitoid was well established in North Island and in parts of the South Island. It is now known to occur throughout New Zealand. *Gonipterus* is well controlled by the parasitoid and is an excellent example of successful biological control.

Anaphes nitens has been introduced to various parts of the world to control *Gonipterus* with varying results. In the light of current knowledge this is not surprising because we now know that several species of *Gonipterus* have established in different parts of the world and it some cases there might not be a good match with the parasitoid and the host. Perhaps we were lucky in New Zealand because "our" *Gonipterus* comes from Tasmania but the parasitoid was obtained from mainland Australia.

This unravelling of the *Gonipterus "scutellatus"* complex is a very good example of the importance of taxonomy. It could result in improvements to biological of *Gonipterus* indifferent parts of the world by better matching parasitoids. For example, trials are underway in Portugal using two Tasmanian species of *Anaphes*; "their" *Gonipterus* like "ours" came from Tasmania; i.e. it is *G. platensis*.

John Bain and Toni Withers

### Reference:

Mapondera, T S; Burgess, T; Matsuki, M; Oberprieler, R G, 2012: Identification and molecular phylogenetics of the cryptic species of the *Gonipterus scutellatus* complex (Coleoptera: Curculionidae: Gonipterini). *Australian Journal of Entomology*. Article first published online: 1 FEB 2012. DOI: 10.1111/j.1440-6055.2011.00853.x



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# BIOLOGICAL CONTROL AGENT RELEASED FOR THE GUM LEAF SKELETONISER IN BAY OF PLENTY

Bay of Plenty Regional Council biosecurity staff recently assisted in the release of a parasitic wasp (*Cotesia urabae* (Braconidae)) to control the gum leaf skeletoniser (*Uraba lugens* (Nolidae)).

Gum leaf skeletoniser (*Uraba lugens*) is an Australian moth whose caterpillars are capable of defoliating plantation and amenity eucalyptus trees in New Zealand. It was first discovered in Mount Maunganui in 1992. This population was eradicated but the skeletoniser was discovered nearly 10 years later to be well established in Auckland.

The gum leaf skeletoniser moth has been slowly moving from Auckland and was recently detected near Mt Maunganui. It has also been found in Northland, Waikato, Coromandel and Hawke's Bay. It has even "jumped" to Nelson. Biosecurity staff from the Regional Council assisted an entomologist from Scion to release the parasitic wasp. This was done by releasing some parasitized caterpillars of the gum leaf skeletoniser onto a tree where skeletoniser caterpillars were already present.

The hairs of the gum leaf skeletoniser caterpillars can cause an irritating skin rash. Children playing beneath amenity eucalypt trees in school grounds are especially vulnerable. The Environmental Risk Management Authority approved the import and release of a parasitic wasp, *Cotesia urabae*, in July 2010. The wasp parasitizes only gum leaf skeletoniser caterpillars, does not harm native insects and cannot not sting or harm humans.

Belinda Gresham



Cotesia cocoons and dead Uraba larvae

## PHORACANTHA LONGHORN BEETLES IN NEW ZEALAND

*Phoracantha* is a large genus of longhorn beetles. It is predominately Australian and is mainly associated with *Eucalyptus*. Two of the more common species in Australia, *Phoracantha semipunctata* and *P. recurva* have become established in many parts of the world where eucalypts are grown. *Phoracantha semipunctata* has been established in New Zealand since 1873.

Several frequently visited internet sites state that the Australian longhorn beetle *P. recurva* is also established in New Zealand. These sites include <u>http://www.cabi.</u> <u>org/isc/?compid=5&dsid=40371&loadmodule=datasheet&p</u> <u>age=481&site=144, www.eppo.org/QUARANTINE/Alert.../</u> <u>Phoracantha\_recurva.doc</u> and <u>ftp://ftp.fao.org/docrep/fao/011/</u> <u>i0640e/i0640e10s.pdf</u>. This is not surprising because when <u>Phoracantha</u> was first recorded in New Zealand it was misidentified as *P. recurva* and was referred to by that name for a long time. However, with the odd exception, it has been known as *P. semipunctata* in New Zealand for about the last fifty years.

Duffy (1963), in a monograph of Australian timber beetles, states that both *P. semipunctata* and *P. recurva* occur in New Zealand and Wang (1995), in a revision of *Phoracantha*, says the same. Neither of these authors examined *Phoracantha* material from New Zealand so it is presumed that their records are based on the literature.

There is only one species of *Phoracantha* established in New Zealand and it is *P. semipunctata*.

John Bain

### References:

Duffy, E.A.J. 1963. A monograph of the immature stages of Australasian timber beetles (Cerambycidae). British Museum, London.

Wang, Q. (1995). Revision of *Phoracantha*. Invertebrate Taxonomy 9(5): 865-958.



Phoracantha recurva

Phoracantha semipunctata