forest health news

ensis

No. 171, March 2007 ISSN 1175-9755

ENSIS SCIENTISTS CONTRIBUTE TO FOREST BIOSECURITY CONFERENCE IN THE USA

The USDA Interagency Research Forum on Invasive Species, one of the principal conferences on invasive forest pests and diseases, takes place in Annapolis, Maryland, every January. Ensis scientists have attended this forum on several occasions and this year Ecki Brockerhoff and Tod Ramsfield were invited to contribute new information on bark beetle introductions and on genetic tools used in pathogen research, respectively. This conference has become an important forum for the exchange of information on invasive species and their management, and for encouraging collaboration among scientists from around the world.

Colleagues in the USA have their hands full due to a series of recent incursions and introductions including the Asian long-horned beetle (*Anoplophora glabripennis*) (*FH News 123*:2), the emerald ash borer (*Agrilus planipennis*) (*FH News 125*:2), *Sirex noctilio*, and sudden oak death (*Phytophthora ramorum*) (*FH News 123*:1). In addition, there is much ongoing work on attempting to minimise the impact and to prevent the further spread of earlier introductions such as gypsy moth (*Lymantria dispar*) which causes much defoliation in the eastern USA during periodic outbreaks.



Anoplophora glabripennis adult

In New Zealand, scientists and MAF staff (Biosecurity New Zealand) follow these activities with much interest, and several North American scientists have given advice for recent eradication programmes against painted apple moth (*Teia anartoides*) and gypsy moth (*Lymantria dispar*) in Auckland and Hamilton.

For more information on this conference see: <u>www.fs.fed.us/ne/morgantown/4557/forum/</u>

Ecki Brockerhoff

LIGHT BROWN APPLE MOTH IN CALIFORNIA

Epiphyas postvittana (light brown apple moth) is a south-east Australian leaf-rolling moth that was first found in New Zealand in 1887. It has also become established in Tasmania, south-western Australia, New Caledonia, Hawaii, and the United Kingdom.



Epiphyas postvittana adult

Recently two *E. postvittana* moths were caught in a light trap near Berkeley, California. This prompted a response from the

USDA Agriculture & Plant Inspection Service (APHIS) and the California Department of Food & Agriculture. Pheromone traps were deployed to determine the distribution of the moth, and vegetation was controlled to minimise the spread of the insect. Very soon after this detection in California, APHIS formed a Technical Working Group (TWG) to discuss and recommend survey methods, mitigation procedures, and eradication strategies. Two New Zealanders, Ecki Brockerhoff (Ensis) and Max Suckling (HortResearch), are members of the TWG.

So far *E. postvittana* has been confirmed in eight counties, centred mainly around the San Francisco Bay area. If left uncontrolled *E. postvittana* would pose a very significant threat to California's enormous fruit industry — hence the rapid response from both State and Federal authorities.

The first New Zealand record (1887) of *E. postvittana* was a specimen now in the Canterbury Museum, labelled "reared from

Tasmanian apples". By the 1890s it was widespread here. In New Zealand it has been recorded from more than 265 hosts but is best known as a serious pest of horticultural fruit crops, pomefruit, and berry fruit. On occasion it can be a problem in young, coniferous forest plantations. In conifers, in addition to feeding on the needles, the larvae use the stems and apical buds as winter feeding and refuge areas. The bud is destroyed and this can result in kinked, malformed stems and multiple leaders. *Pseudotsuga menziesii* and *Larix* species are more susceptible to this type of



damage than *Pinus* spp. Chemical control of *E. postvittana* (and other tortricids) is common in nurseries.

For further information on the Californian situation see:

http://www.cdfa.ca.gov/phpps/pdep/lbam_main.htm and http://capitalpress.com/Main.asp?SectionID=94&ArticleID=31718

John Bain & Ecki Brockerhoff

NEW RECORDS

New to New Zealand – Fungus: *Discula betulina*; Region: Mid Canterbury; Host: *Betula pendula*; Coll: P Brabury, 27/02/2007; Ident: E Orton & M Dick, 08/03/2007; Comments: Inoculation studies overseas have shown this fungus to be pathogenic on *Betula pendula* seedlings.

New host record for New Zealand – Insect: Anarsia dryinopa (Gelechiidae); Region: Gisborne; Host: Acacia mearnsii; Coll: B Rogan, 03/03/2007; Ident: J Bain, 07/03/2007; Comments: This Australian species was first found in New Zealand in 1964. It has been recorded from several Acacia and Albizia species.

New host record for New Zealand – Insect: Lindingaspis rossi (Diaspididae); Region: Gisborne; Host: Araucaria columnaris; Coll: B Rogan, 02/03/2007; Ident: J Bain, 09/03/2007; Comments: This subcosmopolitan armoured scale insect has been recorded from a wide range of native and exotic plants, including other species of Araucaria.

New host record for New Zealand – Insect: *Trioza curta* (Triozidae); Region: Dunedin; Host: *Waterhousea floribunda*; Coll: R Thum, 23/02/2007; Ident: P Dale, 09/03/2007; Comments: This species is quite common on *Metrosideros excelsa* as well as *Syzygium maire*.

New host record for New Zealand – Insect: Liogramma zelanica (Cerambycidae); Region: Gisborne; Host: Fagus sylvatica; Coll: B Rogan, 03/03/2007; Ident: J Bain, 10/03/2007; Comments: This native longhorn beetle utilises quite a wide range of dead hosts.

New host record for New Zealand – Insect: Acrocercops laciniella (Gracillariidae); Region: Auckland; Host: Eucalyptus wilcoxii; Coll: J Bartram, 15/03/2007; Ident: J Bain, 16/03/2007; Comments: This Australian leaf miner has been recorded from about 50 species of Eucalyptus in New Zealand. It has also been recorded from Lophostemon and Angophora.

New host record for New Zealand – Insect: Acrocercops laciniella (Gracillariidae); Region: Nelson; Host: Eucalyptus globoidea; Coll: B Doherty, 22/03/2007; Ident: J Bain, 24/03/2007; Comments: See above.

New host record for New Zealand – Insect: Acrocercops laciniella (Gracillariidae); Region: Nelson; Host: Eucalyptus youmanii; Coll: B Doherty, 22/03/2007; Ident: J Bain, 24/03/2007; Comments: See above.

New host record for New Zealand – Insect: *Nambouria xanthops* (Pteromalidae); Region: Auckland; Host: *Eucalyptus wilcoxii*; Coll: J Bartram, 15/03/2007; Ident: J Bain, 16/03/2007; Comments: This Australian species was first found in New Zealand in 1999 and has been recorded from about 12 species of *Eucalyptus* here. It is common on *E. nicholii* and *E. cinerea*.

New host record for New Zealand – Insect: Nambouria xanthops (Pteromalidae); Region: Bay of Plenty; Host: Eucalyptus dalrympleana; Coll: B Rogan, 21/03/2007; Ident: J Bain, 24/03/2007; Comments: See above

New host record for New Zealand – Insect: Uraba lugens (Nolidae); Region: Auckland; Host: Eucalyptus cosmophylla; Coll: J Bartram, 15/03/2007; Ident: J Bain, 17/03/2007; Comments: The main hosts of the gum leaf skeletoniser are Eucalyptus spp. but is has also been recorded from Lophostemon, Angophora, Tristaniopsis, Metrosideros, Agonis, Fagus, Quercus, Fraxinus, Betula, Liquidambar, and Populus.

New host record for New Zealand – Insect: *Uraba lugens* (Nolidae); Region: Auckland; Host: *Eucalyptus multicaulis*; Coll: J Bartram, 15/03/2007; Ident: J Bain, 18/03/2007; Comments: See above.

New host record for New Zealand – Insect: Creiis liturata (Psyllidae); Region: Auckland; Host: Eucalyptus cosmophylla; Coll: J Bartram, 15/03/2007; Ident: J Bain, 17/03/2007; Comments: This Australian psyllid was first found in New Zealand in 2002. It is known only from Auckland, Waikato, and the Bay of Plenty. It is a serious pest of Eucalyptus dunnii in New South Wales.

New host record for New Zealand – Insect: Eriococcus coriaceus (Eriococcidae); Region: Auckland; Host: Eucalyptus multicaulis; Coll: J Bartram, 15/03/2007; Ident: J Bain, 18/03/2007; Comments: This Australian species was first found in New Zealand in 1900 at Timaru. It has been recorded from about 25 species of Eucalyptus here.

New host record for New Zealand – Insect: *Prionoplus reticularis* (Cerambycidae); Region: Wairarapa; Host: *Pinus strobus*; Coll: B Rogan, 07/03/2007; Ident: J Bain, 20/03/2007; Comments: This native longhorn beetle is usually associated with the dead wood of conifers but there are a few records of it from hardwoods, e.g., *Acacia, Beilschmiedia, Eucalyptus*, and *Nothofagus*.

New host record for New Zealand – Insect: Essigella californica (Aphididae); Region: Auckland; Host: Pinus tabulaeformis; Coll: J Bartram, 15/03/2007; Ident: M Watson, 20/03/2007; Comments: This aphid was first found in New Zealand in 1998 and is now found throughout most of the country where its hosts (*Pinus*) are grown.

New host record for New Zealand – Insect: Pseudococcus longispinus (Pseudococcidae); Region: Auckland; Host: Cussonia paniculata; Coll: J Bartram, 15/03/2007; Ident: R Henderson, 26/03/2007; Comments: This cosmopolitan, polyphagous mealybug was first recorded in New Zealand in 1890.

New host record for New Zealand – Insect: Strepsicrates macropetana (Tortricidae); Region: Nelson; Host: Eucalyptus quadrangulata; Coll: B Doherty, 22/03/2007; Ident: J Bain, 26/03/2007; Comments: This Australian species was first found in New Zealand in 1921. It is common on Eucalyptus spp. and has been recorded from Melaleuca fulgens.

New host record for New Zealand – Insect: Ochrocydus huttoni (Cerambycidae); Region: Wellington; Host: Quercus palustris; Coll: B Johnson, 22/03/2007; Ident: J Bain, 27/03/2007; Comments: This native longhorn beetle is a common live-stem borer in Leptospermum scoparium, Kunzea ericoides, and Nothofagus spp. There are also records (one each) from Quercus cerris, Q. coccinea, and Agonis juniperina. The damage to the Quercus palustris trees was very severe.

New distribution record for New Zealand – Fungus: Nectria fuckeliana; Region: Mid Canterbury; Host: Pinus radiata; Coll: B Doherty, 16/02/2007; Ident: M Dick, 07/03/2007; Comments: This fungus, the cause of Nectria flute canker, has previously been recorded from Southland, Dunedin, Otago Lakes, and South Canterbury.

New distribution record for New Zealand – Fungus: Diplodia taxi; Region: Gisborne; Host: Taxus baccata; Coll: B Rogan, 28/02/2007; Ident: E Orton, 07/03/2007; Comments: This fungus causes leaf spots on the host. It has previously been recorded from Auckland, Bay of Plenty, Taranaki, and Dunedin.

New distribution record for New Zealand – Fungus: Cerotelium fici; Region: Bay of Plenty; Host: Ficus carica; Coll: B Rogan, 24/03/2007; Ident: E Orton,27/03/2007; Comments: This rust fungus has previously been recorded from Auckland, Waikato, and Gisborne.

John Bain