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CLEOBORA MELLYI – WHAT IT IS UP TO THESE DAYS

Between 1979 and 1987 *Cleobora mellyi*, an Australian ladybird (Coccinellidae), was reared and released at several sites in New Zealand to control *Paropsis charybdis* (Chrysomelidae), an Australian species that was first found in New Zealand in 1916. *P. charybdis* is a serious defoliator of some *Eucalyptus* spp. here. *C. mellyi* established at only one site – Maori Bay in the Marlborough Sounds. It has subsequently been found at other sites in the Sounds. For further details see http://www.nzffa.org.nz/pests/Predators/Marlborough_Sounds_2005.html

C. mellyi eats *P. charybdis* eggs but to reproduce successfully it also requires additional prey, particularly psyllids (Psyllidae). Prior to 1986 there were only two species of psyllids found on *Eucalyptus* spp. in New Zealand, *Ctenarytaina eucalypti* and *Blastopsylla occidentalis* and only the former in occasional high numbers. It is generally well controlled by an encyrtid parasitoid, *Psyllaephagus pilosus*. It was thought that this paucity of psyllids was a major factor in *C. mellyi* failing to establish at most release sites. At the Maori Bay site *Eucalyptus* spp. were planted in mixture with *Acacia* spp. and the later supported high populations of psyllids, mainly *Acizzia acaciae*. *C. mellyi* is known to feed on these psyllids.

Since 1986 another seven species of Australian psyllids that feed on *Eucalyptus* spp. have established in New Zealand, *Glycaspis granulata* (1986), *Ctenarytaina spatulata* (1990), *Cardiaspina fiscella* (1996), *Cryptoneossa triangula* (1996), *Eucalyptoloma maideni* (1966), *Anoeconeossa communis* (2002) and *Creiis liturata* (2002). It was thought that these additional psyllid species might provide sufficient supplementary food to enable *Cleobora* to successfully reproduce on *Eucalyptus* spp. In 1996 another Australian paropsine beetle, *Dicranosterna semipunctata* (Chrysomelidae) was found in New Zealand for the first time. It was feeding on



Left: *Cleobora mellyi* eating *Paropsis charybdis* eggs.



Above: Eggs of *Dicranosterna semipunctata* (Photo: Dean Satchell.)

Acacia melanoxylon growing on a golf course in Auckland. *A. melanoxylon* is the main host of *D. semipunctata* but it has been recorded from other *Acacia* spp. and *Paraserianthes lophanta*.

In the early 2000s concern was mounting about the amount of damage on *Acacia melanoxylon* caused by *Dicranosterna semipunctata* and it was about the same time that *Cleobora* were found feeding on *D. semipunctata* eggs on *A. melanoxylon*. This resulted in a Ministry of Agriculture Forestry Sustainable Farming Fund funded project involving the *Acacia melanoxylon* Interest Group Organisation (AMIGO), the Eucalyptus Cooperative and Scion. The project involved collecting *Cleobora* from the field in the Marlborough Sounds and mass rearing them for release. This was done at about 18 locations, mainly in the North Island but also in Southland.

We can now report that *Cleobora mellyi* is established in Northland and the Bay of Plenty as well as the Marlborough Sounds and further work is planned to determine its distribution throughout the country.

In a somewhat novel twist Zonda Resources Ltd and Plant and Food Research are using *Cleobora* in trials to control *Bactericera cockerelli*, the potato-tomato psyllid in tomato and capsicum crops. Initial results are promising. This psyllid was first found in New Zealand on a greenhouse tomato crop in Auckland in April 2006 and is now found throughout most of the country, both indoors and outdoors. For further information this psyllid see www.hortnz.co.nz/communications/pdfs/psyllid_factsheet.pdf

Thanks to Terril Marais of Zonta Resources for supplying information on *Bactericera cockerelli*.

Toni Withers & John Bain

INTERNATIONAL FOREST BIOSECURITY CONFERENCE

The International Forest Biosecurity Conference was held in Rotorua from 16 to 20 March 2009. The conference included a workshop sponsored by the Organisation for Economic Co-operation and Development (OECD) focused on the interface between scientists, policymakers and forest managers. This workshop was opened by Hon. David Carter (Minister of Biosecurity)

The conference was attended by over 150 delegates from 14 countries and over 90 oral presentations and 20 poster presentations were made. Feedback from delegates following the conference was extremely positive, e.g.: “Best conference I have attended in 40 years in the business” and an overall average rating of 4.6/5.

Part of the conference was an all-day field trip, during which participants visited several exotic forest plantations to view pest problems. They also visited the Port of Tauranga to see a demonstration of fumigation procedure currently utilised as part of quarantine programmes (see photo below).

Tod Ramsfield & Margaret Richardson



NEW RECORDS

New host record for New Zealand – Insect: *Xylotoles* sp. (Cerambycidae); **Region:** Wellington; **Host:** *Foeniculum vulgare*; **Coll:** B Rogan, 28/01/2009; **Ident:** J Bain, 02/03/2009; **Comments:** There are about 10 species of *Xylotoles* in New Zealand. None of them have been recorded from *Foeniculum*. The larvae were boring in dead stems.

New host record for New Zealand – Insect: *Sericotrogus subaenescens* (Curculionidae); **Region:** Wellington; **Host:** *Foeniculum vulgare*; **Coll:** B Rogan, 28/01/2009; **Ident:** S Sopow, 03/03/2009; **Comments:** This native weevil feeds in dead material of a wide range of hosts.

New host record for New Zealand – Insect: *Phloeophagosoma thoracicum* (Curculionidae); **Region:** Auckland; **Host:** *Ulmus x hollandica*; **Coll:** C Inglis, 05/03/2009; **Ident:** S Sopow, 12/03/2009; **Comments:** This native weevil has been recorded from the dead wood of a variety of genera including *Cupressus*, *Dacrycarpus*, *Melicytus*, *Pinus*, *Populus* and *Salix*.

New host record for New Zealand – Fungus: *Uromyces pisi*; **Region:** Wellington; **Host:** *Teline monspessulana*; **Coll:** B Rogan, 24/02/2009; **Ident:** K Walbert, 02/03/2009; **Comments:** This rust was first recorded in Nelson in 1994 and subsequently in Wellington and Bay of Plenty. These collections were from *Cytisus*. The identification of the rust must be considered as interim as the Landcare Research database considers the occurrence of this species in New Zealand to be uncertain.

New host record for New Zealand – Fungus: *Fusicoccum australe*; **Region:** Mid Canterbury; **Host:** *Sequoiadendron giganteum*; **Coll:** P Bradbury, 17/11/2008; **Ident:** K Walbert, 17/03/2009; **Comments:** This fungus has previously been recorded from *Vitis Vinifera* and *Cytisus scoparius*.

New host record for New Zealand – Fungus: *Neofusicoccum parvum*; **Region:** Wellington; **Host:** *Tilia europea*; **Coll:** B Rogan, 18/11/2008; **Ident:** K Walbert, 19/03/2008; **Comments:** This minor pathogen has been recorded from a wide range of hosts in Northland, Auckland, Coromandel, Bay of Plenty, Hawke’s Bay and Marlborough.

New distribution record for New Zealand – Fungus: *Cosmospora* sp. (aff. *purtonii*); **Region:** Wellington; **Host:** *Myrsine australis*; **Coll:** B Rogan, 27/02/2009; **Ident:** K Walbert, 03/03/2008; **Comments:** This fungus is very similar to *Cosmospora purtonii*. It differs only in having larger asci and ascospores. It has previously been recorded from the Bay of Plenty, Nelson, Dunedin and the Chatham Islands.

New distribution record for New Zealand – Fungus: *Neofusicoccum parvum*; **Region:** Wellington; **Host:** *Tilia europea*; **Coll:** B Rogan, 18/11/2008; **Ident:** K Walbert, 19/03/2008; **Comments:** This minor pathogen has been recorded from a wide range of hosts in Northland, Auckland, Coromandel, Bay of Plenty, Hawke’s Bay and Marlborough.

New identity for New Zealand – Fungus: *Phytophthora multivora*; **Region:** Auckland; **Host:** soil; **Coll:** C Inglis, 20/02/2007; **Ident:** M Dick, 27/03/2008; **Comments:** *Phytophthora citricola* has been present in New Zealand for many years and has been recognised as potentially representing a species complex. A new species, *Phytophthora multivora*, was described from Western Australia this year as a segregate from the *P. citricola* complex. Isolates of what were called *P. citricola* from the Scion culture collection have been sequenced and some of these show a 100% match with *P. multivora*. Other isolates retain their *P. citricola* identity.

John Bain