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A LEAF MINER IN NO HURRY TO GO ANYWHERE

Stigmella microtheriella (Nepticulidae) is a European leaf miner that infests *Corylus* (hazel). It was first found in New Zealand in the 1850s at two localities near Stoke, Nelson. It was not recorded again until it was found at Geraldine, South Canterbury, in 2000. In January this year, a hazel grower in the Bay of Plenty sent samples of heavily damaged leaves to the Forest Health reference laboratory. The grower estimated that many of his trees were up to 60% defoliated. Over the past few years this grower had purchased hazels from both Nelson and South Canterbury and it would seem likely that this was the source of the infestation on his Bay of Plenty property. When the larvae are fully grown they emerge from the leaf and pupate on the stem and twigs of the host and in this way can be transported on dormant material. It is thought likely that this is how the insect reached Nelson. It is known that a local farmer brought out cuttings from Britain in the 1850s.

In March this year we received samples of this miner from a grower in mid-Canterbury. It would be interesting to know just how widespread this insect is in New Zealand. The moths are very active but they do not usually stray far from the host plant so their natural rate of spread is likely to be very slow. The mines in the leaves are conspicuous and unlikely to be overlooked, particularly by those people growing hazels on a commercial basis.

(*Editor*)

Damage caused by *Stigmella microtheriella*

HYSTEROGRAPHIUM

In December last year, as a result of a public enquiry regarding dieback of *Fraxinus excelsior* in Timaru, a Northern Hemisphere fungus was recorded in New Zealand for the first time. It is *Hysterographium fraxini* and its occurrence here was reported in the February issue of "Biosecurity" (Issue 57) with the comment that Biosecurity New Zealand is carrying out an initial investigation to assess whether further actions are required against the fungus.

The fruit bodies of *H. fraxini* (*see* below), which are found on dead branches and twigs, are very distinctive and have been likened to "smiley lips". When the sample was being examined in the laboratory there were so many oohs and aahs from the pathologists that a normally staid entomologist had to go over and duly admire the specimen under the stereo microscope.

Fruit bodies of *Hysterographium fraxini*

In the Northern Hemisphere *H. fraxini* is generally recorded as a non-specialised, facultative saprophyte. In Switzerland in the 1940s it was reported that *H. fraxini* might be responsible for extensive damage to ash (*Fraxinus excelsior* and *F. ornus*) under conditions adverse to the host, e.g., humid sheltered situations or water-logged soils. The fungus enters branches of any age through fresh wounds in the spring and at first develops saprophytically, but later it may encroach on the surrounding living tissue. Towards the end of the summer the leaves above the site of infection begin to wither, since by this time the branch is almost completely girdled. In vigorous trees the formation of callus between the upper and lower parts of the branch arrests further growth. Re-infection can occur only through a fresh injury in healthy trees, but in trees which are seriously weakened and where no callus is formed the fungus may pass from the already invaded branches to sound ones and finally to the trunk. More recent references from Switzerland and England describe the fungus as "rare".

Since the initial find in South Canterbury, *H. fraxini* has been found in mid-Canterbury, Marlborough, Marlborough Sounds, Nelson, Wellington, and Wairarapa on *Fraxinus excelsior*, *F. angustifolia*, *F. ornus*, and *Fraxinus* sp. Its behaviour in New Zealand is that of a saprophtye. The dieback of the tree in Timaru was probably caused by high numbers of *Acizza* sp. (Psyllidae).

(*Editor, based on information supplied by Margaret Dick. Forest Research*)

Newsletter of the ***Forest Biosecurity and Protection Unit****, and the* ***Forest Health Reference Laboratory*** *(incorporating the Forest Research Mycological Herbarium (NZFRI-M), the Forest Research Culture Collection (NZFS), and the National Forest Insect Collection (FRNZ). Edited by John Bain, New Zealand Forest Research Institute Ltd, Private Bag 3020, Rotorua. <john.bain@forestresearch.co.nz> Web site < http://www.foresthealth.co.nz>*

FOREST HEALTH NEWS PROFILE

Neil Alexander has recently arrived from Gloucestershire, UK, to join the Forest Biosecurity and Protection Unit of Forest Research in the new role of GIS Professional. Prior to joining us, Neil worked in the conservation and regeneration team at British Waterways and has a background of providing GIS support and expertise to specialists in a multitude of fields. His skills include managing large ecological databases, linking them to GIS, and developing GIS/GPS hand-held data collection solutions.

Neil will initially be working with Lindsay Bulman and Darren Kriticos to develop an on-line mapping application for the Forest Health Monitoring Database. He will also be sharing his time between working with the VIGIL team to develop a more automated digital data collection/reporting procedure and assisting with the unit's weed habitat modelling work.

Neil has a BSc from the University of Lancaster and a Masters Degree in Geographical Information Management from Cranfield University; during his Masters he investigated the potential application of Computer Assisted Crown Recognition Software and Digital Aerial Photography for assessing palm plantations.

NEW RECORDS

New to New Zealand record – Fungus: *Colpoma quercinum*; **Bioregion:** Marlborough Sounds; **Host:** *Quercus* sp.; **Coll:** B Doherty, 18/02/2005; **Ident:** M Dick, 22/02/2005; **Comments:** The fungus was sporulating on dead twigs. It is recorded as common in Great Britain and Europe and is a recognised saprophyte of *Quercus* spp. It is also recorded in the USA and Pakistan. It has probably been present but unnoticed in New Zealand for some time.

New distribution record for New Zealand – Fungus: *Hysterographium fraxini*; **Bioregion:** Taranaki; **Host:** *Fraxinus angustifolia*; **Coll:** B Doherty, 03/02/2005; **Ident:** J Gardner, 07/02/2005; **Comments:** This saprophytic fungus has previously been recorded from Wellington, Nelson, and South Canterbury.

New distribution record for New Zealand – Fungus: *Hysterographium fraxini*; **Bioregion:** Marlborough Sounds; **Host:** *Fraxinus angustifolia*; **Coll:** B Doherty, 18/02/2005; **Ident:** M Dick, 22/02/2005; **Comments:** This saprophytic fungus has previously been recorded from Wellington, Taranaki, Nelson, and South Canterbury.

New distribution record for New Zealand – Fungus: *Hysterographium fraxini*; **Bioregion:** Wanganui; **Host:** *Fraxinus excelsior*; **Coll:** B Doherty, 21/02/2005; **Ident:** J Gardner, 28/02/2005; **Comments:** This saprophytic fungus has previously been recorded from Wellington, Taranaki, Nelson, Marlborough Sounds, and South Canterbury.

New distribution record for New Zealand – Fungus: *Hysterographium fraxini*; **Bioregion:** Marlborough; **Host:** *Fraxinus excelsior*; **Coll:** B Doherty, 18/03/2005; **Ident:** M Dick, 22/03/2005; **Comments:** This saprophytic fungus has previously been recorded from Taranaki, Wanganui, Wellington, Nelson, Marlborough Sounds, and South Canterbury.

New distribution record for New Zealand – Fungus: *Uromyces edwardsiae*; **Bioregion:** Rangitikei; **Host:** *Sophora microphylla*; **Coll:** G La Cock, 08/02/2005; **Ident:** M Dick, 11/02/2005; **Comments:** This rust fungus causes galls on the host. It is quite widespread in New Zealand.

New distribution record for New Zealand – Fungus: *Septoria ceridis*; **Bioregion:** Gisborne; **Host:** *Cercis siliquastrum*; **Coll:** B Rogan, 01/03/2005; **Ident:** M Dick, 04/03/2005; **Comments:** This fungus was first collected in Auckland in 1969. It causes leaf spots on *Cercis siliquastrum* and *C. canadensis.*

New host record for New Zealand – Fungus: *Gliocladium vermoesenii*; **Bioregion:** Auckland; **Host:** *Washingtonia* sp.; **Coll:** S Cook, 21/01/2005; **Ident:** M Dick, 04/02/2005; **Comments:** This fungus causes a disease known as "pink rot" of palms. New Zealand records date back to 1962.

New host record for New Zealand – Fungus: *Hysterographium fraxini*; **Bioregion:** Nelson; **Host:** *Fraxinus ornus*; **Coll:** B Doherty, 10/02/2005; **Ident:** M Dick, 18/02/2005; **Comments:** This fungus has previously been found on *Fraxinus angustifolia*, *F. excelsior*, and *Fraxinus* sp.

New distribution record for New Zealand – Insect: *Sycoscapter australis* (Agaonidae); **Bioregion:** Gisborne; **Host:** *Ficus macrophylla*; **Coll:** B Rogan, 25/02/2005; **Ident:** D Jones, 01/03/2005; **Comments:** This Australian species was first recorded in New Zealand in 1995 and has previously been recorded from Auckland and Hawke's Bay. Apparently it is confined to *F. macrophylla* and can reduce seed set and curtail the spread of this potentially weedy tree.

New distribution record for New Zealand – Insect: *Pseudidarnes minerva* (Agaonidae); **Bioregion:** Gisborne; **Host:** *Ficus rubiginosa*; **Coll:** B Rogan, 01/03/2005; **Ident:** D Jones, 07/03/2005; **Comments:** This species was first recorded from New Zealand in 1993 and has previously been recorded only from Auckland. It is a non-pollinating wasp of *F. rubiginosa.*

New distribution record for New Zealand – Insect: *Pleistodontes imperialis* (Agaonidae); **Bioregion:** Gisborne; **Host:** *Ficus rubiginosa*; **Coll:** B Rogan, 01/03/2005; **Ident:** D Jones, 07/03/2005; **Comments:** This Australian species was first recorded in New Zealand in 1979. It has been recorded from Northland, Auckland, Coromandel, Bay of Plenty and Hawke's Bay. It is a pollinator of *F. rubiginosa.*

New distribution record for New Zealand – Insect: *Stigmella microtheriella* (Nepticulidae); **Bioregion:** Mid Canterbury; **Host:** *Corylus avellana*; **Coll:** B Thomas, 18/03/2005; **Ident:** J Bain, 21/03/2005; **Comments:** This European leaf miner was first found in New Zealand in the 1950s. It was not seen again until 2000 in South Canterbury. In January 2005 it was found in the Bay of Plenty causing considerable damage to its host.

New host record for New Zealand – Insect: *Uraba lugens* (Nolidae); **Bioregion:** Auckland; **Host:** *Eucalyptus acmenoides*; **Coll:** C Inglis, 19/02/2005; **Ident:** D Jones, 22/02/2005; **Comments:** This Australian species was first found in NZ in 1992. The main hosts are *Eucalyptus* spp. but it has also been recorded from *Lophostemon*, *Angophora*, *Metrosideros*, *Quercus*, and *Fraxinus*, usually when these hosts are growing in close association with *Eucalyptus* spp.

New host record for New Zealand – Insect: *Oemona hirta* (Cerambycidae); **Bioregion:** Gisborne; **Host:** *Clerodendrum trichotomum*; **Coll:** B Rogan 25/02/05; **Ident:** J Bain, 02/03/2005; **Comments:** This native twig and branch borer has an extremely wide host range.

New host record for New Zealand – Insect: *Navomorpha lineata* (Cerambycidae); **Bioregion:** Gisborne; **Host:** *Catalpa bignoniodes*; **Coll:** B Rogan, 28/02/2005; **Ident:** J Bain, 08/02/2005; **Comments:** This native twig and branch borer has a wide host range.

(*Editor*)