# Report to Forest Biosecurity Consultative Committee

## Update on current MAF Biosecurity New Zealand forestry-related Post Border Surveillance, Pest Management and Incursion Response Activities

**For the meeting on Wednesday 10 October 2007**

**DUTCH ELM DISEASE, AUCKLAND (Disease Management programme)**

- Biosecurity New Zealand has contacted all Territorial Local Authorities (TLAs) to advise its current position and to provide one final opportunity for them to express effective interest in the DED management programme. Biosecurity New Zealand's level of continued involvement in the programme will be based on the combined financial commitment from TLAs.
- The closing date for responses is Friday 5 October 2007. A reminder of the closing date for responses is being sent to all TLAs.
- Response rates to date (1 October) have been very low.

**SUBTERRANEAN TERMITES NELSON**

- A colony of Australian subterranean termites, *Coptotermes acinaciformis*, was reported from a single property in Richmond, Nelson in January 2006. BNZ initial investigations indicated that the termites appear to have arrived in Richmond concealed within imported Australian used railway sleepers more than 10 years ago.
- A delimiting survey resulted in termite activity being located at one neighbouring property. A strategy has been implemented involving placement of wooden monitoring stakes and implementation of the Sentricon baiting system. Another delimiting survey of 38 properties within a 100 metre radius of the infected 2 properties was completed late November 2006 but there was no additional activity located.
- Inspections throughout summer 2006/07 indicated that termites were ingesting considerable amounts of toxic baits. The latest bait station inspections were completed at the end of March 2007 and at the beginning of May 2007 and in June 2007. There were no signs of termite activity, thus indicating that the colony is eliminated. A monitoring programme will be operated for up to 5 years before the infestation can be declared eradicated. MAF Biosecurity New Zealand is optimistic about successful eradication of *C. acinaciformis* from Richmond, Nelson.

**SUBTERRANEAN TERMITES AUCKLAND**

- The presence of exotic subterranean termites, *Coptotermes acinaciformis*, was confirmed at a property in South Rodney (Auckland) on 10 January 2007. An initial inspection detected termite activity within a shed and in adjacent planter boxes. The likely sources of the infestation are imported Australian railway sleepers used to construct the boxes.
- There have been no new infected sites or risk movements identified through trace back/forth activities. However, in mid-January 2007, a large swarm of winged alates was seen emerging from one of the planter boxes. The probability that new colonies have established as a result of alate flights from the known infestation is considered low.
- No termites have been detected so far in the property's main house or in neighbouring properties. Surveillance of the wider area has been completed by the end of March 2007.

Intensive surveys of 500-m radius around the infestation source resulted in detection of numerous native termites; however no exotic termites have been detected strongly suggesting that the infestation remained confined to the initial incursion spot (planter boxes and the adjacent structures).

- MAF Biosecurity New Zealand is eradicating the subterranean termites using the Sentricon baiting system. The system relies on the use of bait stations containing the active ingredient hexaflumuron, which has been proven to prevent termites from moulting, resulting in death and eventual elimination of the colony. Baits stations were laid by the end of January 2007. Inspection of stations in February and March 2007 indicated that the termites were ingesting the baits.
- A service of the Sentricon installation in May, June and August 2007 revealed no termite activity in the monitoring and baiting stations; however it is not considered at this site that the colony has been eliminated. It cannot be forecasted precisely how long the eradication action might take. Once the initial colony elimination is achieved, it will be followed with a monitoring programme for five years before the colony can be declared eradicated. MAF Biosecurity New Zealand is optimistic about successful eradication of *C. acinaciformis* from Rodney.
- A 'pre-application' (first draft) for hexaflumuron registration in New Zealand has been submitted to the Environmental Risk Management Authority (ERMA). The ERMA case manager has provided pre-application advice. Their recommended changes have been incorporated into the document, and the final application will be submitted week commencing 8 October 2007. MAF Biosecurity New Zealand is on track to have hexaflumuron registered by the end of the year.

**RED IMPORTED FIRE ANT - WHIRINAKI**

- On June 7th 2006 *Solenopsis invicta* (Red Imported Fire Ant – RIFA) was identified from Pan Pac Forest Products Ltd, Whirinaki. The nest was thoroughly treated with an insecticide drench and insecticidal ant bait on June 9th.
- The nest is estimated to be two to three years old and dispersal flights may have occurred.
- This form of RIFA is more likely to disperse by walking short distances rather than flying but is also capable of human-assisted dispersal. We are taking measures through surveillance, movement control and tracing to cover all three possibilities.
- A Controlled Area has been declared out to a 2 km radius from the nest site with restrictions on the movement of all risk goods for RIFA spread including soil, gravel, hay and goods that have been in contact with the ground for more than 24 hours (except operational cars).
- Tracing the movements of high risk items over the past three years has identified a number of high risk sites. These sites were surveyed during the summer of 2006/07 and will be surveyed again in the coming summer.
- The first round of surveillance out to a 2 km radius from the nest was completed in December 2006, and the second round completed in April 2007. The second round of surveillance will be repeated in each of the next two years.
- Aerial applications of insecticidal ant baits were completed in December 2006 and April 2007. These applications will be repeated in the next two summers.
- No further fire ants have been found to date.

This is the third detection of a RIFA colony in New Zealand, both previous finds were eradicated. Genetic analysis has confirmed that the Whirinaki colony is unrelated to the previous incursion at Port of Napier in 2004.

**ORANGE FRUIT BORER MOTH (OFB)**

- The orange fruit borer moth (*Isotenes miserana*) was detected in Auckland. *I. miserana* is a leafroller native to Australia where it has been recorded on a number of plant species. OFB has a minor pest profile primarily affecting citrus, macadamia, avocado and feijoa crops. There are records of OFB being part of a group of leafrollers attacking *Pinus radiata*. However, there are no reports of this species causing significant damage in forestry plantations in Australia.
- OFB is a cryptic species and this makes surveillance and response actions potentially very difficult. There is no pheromone currently available for OFB.
- It is not known how this moth arrived in New Zealand but the most likely methods are passive trans-Tasman dispersal on wind systems, gravid female hitch-hiker on risk goods (i.e. containers) or on cut-flowers / fresh produce. At present it is considered unlikely that the moth would have arrived via the cut flower and fresh produce pathways. Evidence to-date suggests that this moth has been present for at least 12 months. It is not likely that this detection represents the site of first arrival for OFB and it is likely that this moth is present at other sites.
- MAFBNZ has conducted a brief round of surveillance in the area and have detected the moth (larvae, pupae) on camellia bushes, an orange tree, and a single potted pohutukawa shrub. One infestation is approximately 400-500 m away from the other known infested sites. In addition MAFBNZ has examined host plants around transitional facilities in the surrounding area, as well as a green-waste transfer station for the presence of OFB without success.