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Major changes to container pathway: p5

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Marine biosecurity risk management

Ruminant protein regulations

Prioritising import health standards

What to do if a snake bites you

Horowhenua onions OK for Australia

Pest response brings scientific collaboration

Fungus fright

**MAF**  
Biosecurity

# Biosecurity

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Cover: By 31 December 2003, every sea container arriving in New Zealand will be required to undergo a biosecurity inspection – inside and out – at an approved transitional facility. Details on page 5.

# Biosecurity strategy a new milestone

Hon Jim Sutton  
Minister for Biosecurity

We have reached another milestone in New Zealand's biosecurity systems this month. Not only do we have a new import health standard introducing the screening of all sea containers, but we have a biosecurity strategy setting out a framework for the continued improvement of our biosecurity system.

The Labour-Progressive Government is committed to a programme of constant improvement in biosecurity.

Cabinet had approved extra government funding of just over \$3.5 million this financial year to train the inspectors needed as part of the sea container import health standard, and to begin the process of implementing the biosecurity strategy across the whole of government.

The funding was announced at the same time as the publication of the biosecurity strategy, which outlines the objectives and targets for New Zealand's biosecurity programmes into the future.

The implementation of the new *Import Health Standard for Sea Containers* was identified in the strategy as a high priority.

I think we can be very proud of the biosecurity system we have at the moment: it's world class and no-one does it better. But it's not an area we can be complacent about.

As an isolated island nation reliant on primary production, we need to have the best systems in place. I'm proud of what we have now, and of the extra resources this Government has put into biosecurity.

In 2001, the Labour-led Government implemented a \$200 instant fine for biosecurity breaches found at airports – something that previous Governments had been too scared to do. We also put in the extra money for soft-tissue x-ray machines and detector dog teams to make sure screening of air passengers and crew was 100 percent.

As a result, biosecurity baseline funding



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I think we can be very proud of the biosecurity system ... it's world class and no-one does it better  
//

has increased steadily each year since we became Government in 1999. The Auditor-General quite clearly says in a recent report that this Government is spending more than \$50 million a year more than the previous Government on baseline border security funding. This will continue. It has been clear for some time that sea container traffic was the most vulnerable point in our biosecurity system.

We have been working with officials and industry to come up with the best way to close that gap. It is an important area that hasn't been tackled by previous Governments, so we needed to make sure we got it right. Scientific research was carried out, and there was widespread consultation with port companies, industry, and importers.

The implementation of the sea container screening will be in stages to take account of the large number of containers (450,000 a year), transitional facilities (up to 10,000) and accredited persons (up to 15,000) that will be affected by the new standard. The first

ports to be involved will be Auckland and Tauranga, where almost two-thirds of New Zealand's imports come through.

The standard's primary aim is to keep biosecurity risks offshore by requiring exporters and importers to provide more accurate information relating to the container, packaging and cargo. All imported containers must be certified that they have been internally and externally inspected.

The standard also specifies the biosecurity requirements once the vessel has arrived, when the containers are unloaded at the wharf, and subsequent unpacking at transitional facilities. Non-MAF personnel will be able to check containers after they have passed a MAF-accredited training process and MAF officers will continue to inspect all high-risk containers. Every container will be required to be unpacked at an approved facility with a MAF-approved person present.

Of course, this is not the silver bullet that will end all incursions by foreign pests and diseases.

Short of putting a huge glass dome over the country to stop those pests swimming, flying, or being blown over here, there will always be ways for pests and diseases to enter – and that's why we need good surveillance systems so that we can ensure we find, and where possible eradicate, them before they get established.

The dramatic growth in tourist traffic, thanks to all the new airlines visiting here, is likely to put our biosecurity workers under pressure. I believe there are likely to be more people arriving here for summer holidays this year than ever before. That will add to the expectations on MAF Quarantine staff at Auckland airport in particular, but at other airports as well.

All MAF's biosecurity staff work hard for New Zealand, and we appreciate that. There will be no let-up, and I commend you for your efforts and urge you to continue that vigilance in the future.

# Strategy targets coordinated programme

Murray Sherwin, Director General,  
Ministry of Agriculture and Forestry

On 25 August 2003 the Government released the Biosecurity Strategy, the Government's agreed response to the strategy, and an initial work plan for implementing it. The strategy sets out a framework for a coordinated biosecurity operation for New Zealand. It is the result of more than three years' work and extensive consultation.

The strategy identifies those things that need to be done urgently and recommends ten first steps to improve governance, strategic leadership and funding as well as engaging community support and improving decision-making. The strategy also sets out 57 expectations about how biosecurity will work in the future. The expectations cover institutional arrangements, Maori and stakeholder participation, capability gaps, science, assessing priorities, funding sources, changing behaviours, pre- and post- border programmes, surveillance, incursions and pest management.

The strategy, along with the many other recent reviews of biosecurity, reaffirmed that New Zealand already has a world-leading biosecurity programme, but identified that more can be done – especially to enable a consistent overall strategic approach to biosecurity and secondly to clarify leadership and accountabilities. Based on this, MAF is being asked to take overarching accountability for the biosecurity programme.

Biosecurity grew from a concern about potential damage to New Zealand's economy from pests and diseases affecting our livestock, crops and forests. The scope of biosecurity has evolved over time to include threats to indigenous flora and fauna, the marine environment and human health. This broader scope means that we need new mechanisms to achieve comprehensive protection and consistency in responding to risks, across the full spectrum of biosecurity concerns.

These mechanisms include a ministerial

## Ten steps to biosecurity programme improvement

- 1 Make MAF clearly accountable for overall management of the whole biosecurity system, on behalf of all New Zealanders.
- 2 Put in place the necessary systems, structures and capabilities within MAF to support its role – starting with strong strategic capability.
- 3 Establish governance mechanisms (including a reconstituted Biosecurity Council and Chief Executives' forum) to support this strategy's implementation and monitor performance.
- 4 Encourage all New Zealanders to support and participate in biosecurity through a social marketing programme.
- 5 Identify ways to involve Maori fully in biosecurity issues and decisions, nationally and locally.
- 6 Identify, prioritise and review current and emerging risks – from pre-border to pest management and across aquatic and terrestrial environments.
- 7 Establish national leadership and coordination of pest management.
- 8 Recognise the contribution of science to biosecurity (strategically and operationally) and fund it properly.
- 9 Ensure decision-making processes take account of risks to the economy, biodiversity, taonga, human health and lifestyle in setting priorities.
- 10 Increase funding over the next five years for priority areas, and build organisational capability across the system.

committee and a Chief Executives' Forum to provide oversight on strategic matters and to monitor the performance of the biosecurity system. The Chief Executives' Forum will be chaired by me and will include the Ministry of Fisheries, the Ministry of Health and the Department of Conservation, who will continue to have biosecurity roles. Other mechanisms to support a 'whole-of-system' and fully accountable biosecurity approach will also be developed, such as a central/regional government forum and reconstituting the Biosecurity Council as a ministerial advisory group.

MAF has begun a change management process, led by the Deputy Director General Larry Fergusson, to equip the organisation to cope with this new biosecurity role.

MAF is fully committed to implementing improvements to the biosecurity programme as soon as possible. We expect to have the major elements of this change management process completed by early 2004. This will involve establishing a work

programme to implement Cabinet's decisions, setting up the various liaison and consultative groups, defining roles and responsibilities and making appointments to key roles. While the initial implementation decisions will happen over the next 6 months or so, it will take some years to fully implement all the recommendations coming from the strategy.

We also acknowledge that improving biosecurity outcomes depends on many groups and industries, including the public, working together – not just the work of central government agencies.

The full strategy document (67 pages), the four associated Cabinet papers, and a briefing paper proposing a framework for prioritising biosecurity activities are all available from MAF's website (see right). There is also a 10-page companion document that summarises the findings and expectations of the strategy, and the Government's decisions. Hard copies of the strategy can be ordered for \$20 (\$30 if posting overseas).

# Involved in cargo logistics? We need your help!

Container importers, transporters and unpackers are at the front line of New Zealand's biosecurity defences against pests and diseases that could damage our environment, economy and lifestyle. They are among the many groups identified in the newly released Biosecurity Strategy, who have an important role in protecting New Zealand from unwanted invaders. In this article we explain how all those involved in cargo logistics can do their bit, by implementing new rules about biosecurity clearances for sea containers.

## New import health standard

The new *Import Health Standard for the Importation of Sea Containers from all Countries* came into effect earlier this month.

The standard's primary aim is to keep biosecurity risks offshore, by requiring exporters and importers to provide more accurate information relating to the container, packaging and cargo. All imported containers must be certified that they have been internally and externally inspected.

The standard also specifies the biosecurity requirements prior to arrival, once the vessel has arrived, when the containers are unloaded at the wharf, and subsequent unpacking at



transitional facilities. The Biosecurity Act 1993 requires that all places where uncleared imported sea containers are held must be approved as transitional facilities. In addition there must be a MAF-accredited person present during unpacking of imported containers to undertake the required biosecurity checks.

Because the standard will be implemented in stages, there may not be any immediate change to your current business practice. However, **by 31 December 2003** all unpacking of containers will need to happen at an approved transitional facility with a MAF-accredited person present who will check the exterior and interior of the container.

## Online information available

MAF will provide regular updates as the standard is implemented so that you will know what changes will affect you, and what you need to do. By subscribing online via [www.maf.govt.nz/bio-lists](http://www.maf.govt.nz/bio-lists) and selecting Border Management, you can receive this information. MAF is asking subscribers to this information service to bring the mailing list to the attention of colleagues, clients and customers who may be affected by the new import health standard.

If you or your company unpacks imported sea containers then you are advised to apply for registration online from 1 September 2003 by going to [www.maf.govt.nz/transitional-registration](http://www.maf.govt.nz/transitional-registration)

Inspection of the site and interview with the operator will be conducted when the facility is routinely audited. From 31 December 2003, importers without an approved transitional facility and

accredited person will need to make arrangements to send their containers to an approved facility where an accredited person is present or to have them unpacked at the port of arrival. The accredited person will refer contaminated containers to a MAF inspector. Cargo that requires inspection will continue to be inspected by MAF. The checking at the importer's premises supplements the overseas certification and checking of containers on arrival.

## Tracking for compliance

A detailed electronic intelligence-based risk assessment and tracking system will be developed to manage risk and track containers for compliance.

Educational material is being prepared for use by exporters to New Zealand and New Zealand importers. In addition, training material is being developed for those who will carry out exterior and interior checking of containers. Those who register for information updates will be notified of details for the MAF-accredited training programme as they become available.




For the *Import Health Standard for Sea Containers from all Countries*:

 [www.maf.govt.nz/sea-container-review](http://www.maf.govt.nz/sea-container-review)

To subscribe for online notifications about upcoming changes:

 [www.maf.govt.nz/bio-lists](http://www.maf.govt.nz/bio-lists)

To register as a company that unpacks sea containers (from 1 September):

 [www.maf.govt.nz/transitional-facilities/registration](http://www.maf.govt.nz/transitional-facilities/registration)


For any other information on becoming a container transitional facility or accredited person please contact **0800 222 018**.

## continued from page 4

I would like to thank all those people who have contributed to this strategy over the last three years. It has required a huge effort, but I think the result has been worth it. In many ways the hard work has just begun.

I am looking forward to the challenge of implementing the strategy and improving New Zealand's already impressive biosecurity system.

For the full Biosecurity Strategy and associated papers:

 [www.maf.govt.nz/biosecurity-strategy](http://www.maf.govt.nz/biosecurity-strategy)

# Ballast water convention forging ahead

After 12 years of talking we have a result. The international community has now agreed on controls for managing ships' ballast water, which are set to pass into international law in the next few years.

The July 2003 meeting of the International Maritime Organisation's Marine Environment Protection Committee formally sent the "International Convention for the Control and Management of Ships' Ballast Water and Sediments" to a diplomatic conference planned for February 2004. After that, the signatory nations will need to ratify it before it can come into force. A rapid ratification could see the convention coming into force in as little as five years' time.

The Ministry of Fisheries Biosecurity Group attended the July 2003 Committee meeting and is now investigating implementation needs and planning for New Zealand's ratification of the Convention.

## New technology encouraged

The Convention aims to prevent, minimise and ultimately eliminate the risk to environment, human health, property and resources arising from the transfer of harmful aquatic organisms. It aims to do this while avoiding unwanted side effects and encouraging new technology to treat ballast water.

Ballast water became a prominent issue in the mid 1980s when it became clear that it had been the agent for the spread of several damaging organisms: zebra mussels in the Great Lakes, Asian clams in San Francisco, and comb jelly in the Black Sea.

The organisms spread through ballast water from parts of the world where they lived in balance in their environment, to new locations where they spread rapidly with severe consequences. Transfers of ballast water are also suspected of causing an increase in toxic algal blooms, while the organism that causes cholera has been found in ballast water taken from ports where the disease was endemic.

## Mid-ocean transfer hitches

At present, the only way to remove coastal organisms from ballast water and avoid transferring them to another region is to exchange ballast water mid-ocean by emptying and refilling the tanks. This is not very satisfactory for several reasons:

- it is unsafe for the vessel
- partial exchange may simply refresh the coastal organisms in the tanks with food and oxygen
- the sediment in the tanks, which acts as a refuge for organisms, is difficult to remove.

## New treatments

The Convention looks forward to the future when new treatments will be available using methods such as filtration, ultraviolet, heat and chemicals. Once the Convention comes into force, all ships will be required to carry out satisfactory (95%) mid-ocean exchange and, after a period of a few years, to have approved treatment systems installed.



New Zealand's present import health standard for ballast water requires exchange on the high seas of all tanks before discharge in our ports. This has been difficult to enforce as a unilateral requirement. The Convention will improve this situation as all shipping world-wide will be subject to the same requirements.

The Convention will operate in the same way as other international marine regulations: port states can inspect visiting ships and pass on information about any non-compliance. The vessel's flag state is responsible for surveying ships and certifying that they are capable of meeting the requirements, carrying out prosecutions and imposing penalties for its own vessels. The system will be monitored by the International Maritime Organisation. All vessels will be aware of the requirements once they are an international regulation so lack of awareness will no longer be an excuse for non-compliance.

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## New Zealand Biosecurity Summit: Wellington, 3-4 October 2003

Biosecurity has continued to undergo significant changes and improvements over recent years, along with a number of reviews. The latest significant development has been the launch on 25 August of the **Biosecurity Strategy for New Zealand** (see page 4).

The primary objective of next month's Summit is to examine the Strategy, and in doing so determine the key expectations of stakeholders, while looking at what the Strategy will do to ensure economic, environmental and societal biosecurity outcomes are delivered for the future.

Presentations will focus on expectations of the strategy from various industry perspectives and also look at the strategic direction, priorities and planned changes within government departments. The Minister for Biosecurity, Director-General of MAF and Chair of the Biosecurity Council will be among the key speakers.

Registrations have closed but there may still be an opportunity to attend. It costs \$200 to attend the Summit at Te Papa and it runs from 9am to 5 pm on both days.

Details of how to obtain a copy of the Summit proceedings will be included in the 1 November 2003 issue of *Biosecurity*.

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# Risk management framework in action for marine biosecurity

Biosecurity is about managing risk. Biosecurity programmes aim to reduce risks from introduced species to valued aspects of New Zealand's economy, environment and society. But risks are uncertain, resources are limited and trade-offs must be made.

In 1999, the Ministry of Fisheries started developing a risk management framework (RMF) for marine biosecurity. The purpose of the RMF is to make decisions transparent and consistent, determine priorities, improve documentation, and structure processes. The RMF concentrates on organisational risk management but biological risk assessment remains a vital component of decision making.

The first step in the RMF was to establish context and identify the outcomes to which marine biosecurity should be working. We asked, "What are we trying to achieve?" Searching government documents (including oceans policy and biosecurity strategy papers) revealed a reassuring degree of consistency in what New Zealanders want for the marine environment. These outcomes were grouped into four "values": healthy environment, strong communities, vibrant commerce and high quality recreation. For each of these, we described a minimum and optimum level of achievement, estimated our current level of achievement, and proposed a five-year target.

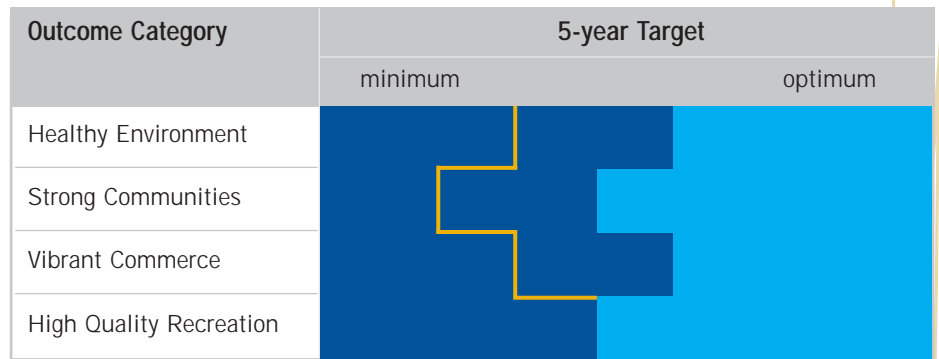


Fig. 1: Risk Management Framework model for "best fit" between four key outcomes.

## Balanced "best fit" strategy

There are many ways to move from current levels to the target levels of achievement. But, with limited resources and the conflicting nature of some outcomes, advancing one outcome may be at the expense of another. The graphic above illustrates a balanced, "best fit" strategy. In the example, outcomes are advanced to different levels (dark blue bar); and some are maintained at the current level (yellow line). The RMF, by defining outcomes, makes it easier to identify the necessary tradeoffs.

The Ministry of Fisheries uses the RMF for planning and priority setting in marine biosecurity. Gaps that ought to be addressed can be identified.

Any new activity can easily be assessed and prioritised relative to existing activities and contribution to achieving targets. Activities that cannot be undertaken due to inadequate funding and unexpected demands are readily

identifiable. Our intention is to undertake some longer term planning using the RMF involving wider consultation and focusing on the invasion process. A planned "value" map of the coastline will help identify priorities by relating contribution to the four values to specific geographical areas.

The RMF is a flexible tool, which responds to changing contexts because it is designed to be reviewed regularly. This flexibility means that the new Biosecurity Strategy outcomes can be integrated into marine biosecurity planning. While nothing replaces sound knowledge, the RMF is a very useful way of improving the way we use our knowledge to manage biosecurity risks for the marine environment.

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## Border bites

### Bad kitty!



A small ornamental kitten was found recently by MAF Quarantine Service Officers inspecting a Japanese imported used vehicle at the Port of Auckland. The tiny kitten looked very lifelike but had been made

from synthetic fur stretched over a fibreglass shell. It lay on a bed of straw in a nest made of real plant twigs and, as both of these are quarantine risks, the toy was seized and destroyed.

### "Monkey balls" declared



MAF Quarantine Officers at Auckland International Airport were surprised to discover that the "monkey balls" declared by a couple returning from holiday in South Africa, were in fact small painted gourds.

The gourds required heat treatment, as did the dolls (pictured), which were stuffed with straw.

# Ruminant protein proposals proceed with minor changes

The ban on feeding ruminant protein to other ruminant animals is a fundamental plank of New Zealand's defence against BSE (mad cow disease), and other forms of transmissible spongiform encephalopathies (TSEs).

The Biosecurity (Ruminant Protein) Regulations 1999 ban the feeding of ruminant protein to ruminant animals. Proposals to fine-tune the regulations were circulated for public comment in the discussion document *Review of Ruminant Protein Regulations* in September 2002 (*Biosecurity* 37:10). MAF received 26 submissions from rendering plants, animal feed, pet food and fertiliser manufacturers, meat and dairy producers, processors and exporters, land care groups and government departments.

After reviewing the submissions, the project team recommended that the original proposals should proceed, with minor changes and with the exception of controls on specified animal protein. Some new proposals were

developed in response to matters raised in submissions.

Submissions were divided on the merits of excluding porcine (pig) and avian (chicken) meat and bone meal from the range of proteins available for use in ruminant feeds. This contingency measure was intended to facilitate feed monitoring, but may not be needed as MAF has now validated an effective test for bovine (cow) and ovine (sheep) protein in feed.

Proposed controls on wastewater from ruminant processing operations attracted the most submissions because some stakeholders construed the regulations as preventing irrigation onto pasture. In fact, the current regulations do not prevent slaughter wastewater being applied to pasture. A majority of submissions supported the move to give legal clarity that this practice can continue.

Most submitters accepted the proposed charge for registering a ruminant protein control programme and the need to re-categorise the absolute

liability offences in clauses 5, 13 and 14 of the regulations.

Almost all submitters supported aligning the regulations with the OIE International Animal Health Code regarding rennet, dicalcium phosphate, gelatin and collagen, peptides and amino acids. These highly processed ruminant products will be excluded from the feed ban, subject to certain conditions.

## MAF recommendations accepted

MAF's recommendations arising from its analysis of the submissions have been considered and accepted by the inter-departmental TSE Steering Group. The analysis will now be sent to submitters for their information.

MAF is now preparing proposals to amend the regulations and expects that Government will consider them within the next 3 months.

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## Amendments strengthen biosecurity defences

Parliament has recently made a number of amendments to the Biosecurity Act 1993. Most of the amendments contained within the Biosecurity Amendment Act 2003 enhance or clarify existing provisions in the Act. The most notable amendments are:

### Relationship between Biosecurity Act and Wildlife Act 1953

In the past, the Wildlife Act took precedence over the Biosecurity Act in cases where the two Acts were in conflict. This could prevent swift action from being taken under the Biosecurity Act in cases where a potentially harmful animal (such as the Rainbow Lorikeet) was found in the environment but the animal was not listed in the Wildlife Act as having unprotected status.

The Biosecurity Act now takes

precedence in relation to unwanted organisms. This means that Biosecurity Act powers can be used in relation to unwanted organisms, even if the unwanted organism comes within the scope of the protective provisions in the Wildlife Act.

Biosecurity Act restrictions on activities relating to unwanted organisms (such as the restrictions on selling and breeding under sections 52 and 53) prevail over any authorisation to carry out those activities that is granted under the Wildlife Act.

### Public duty to report unusual organisms

The public has a new duty to report the presence of organisms that are not normally seen or otherwise detected in New Zealand.

This duty provides a legislative

foundation for the important role that all New Zealanders should play in reporting organisms that might be new to New Zealand. People finding unusual organisms should phone MAF's freephone hotline, 0800 809 966.

### Extension to power of entry

The power to enter and inspect places has been expanded and can now be used to check on compliance with the Biosecurity Act, and regulations made under it. This amendment will help to facilitate audits of important programmes, such as the controls on the use of ruminant protein under the Biosecurity (Ruminant Protein) Regulations 1999.

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# Varroa update

## New movement control line planned

Surveillance in autumn-winter 2003 has shown significant spread of varroa south of the existing movement control line, which runs from Taranaki to East Cape.

MAF and the beekeeping industry have long agreed that this line is no longer serving a useful purpose and should be removed. There is less agreement on what should replace the existing line.

In July 2003, MAF released an options paper that recommended a new movement control line around the Hawke's Bay-Wairarapa regions. The paper also recommended that hives could be moved across this line following miticide treatment.

Beekeepers in the Wairarapa have expressed a strong preference for a line

preventing any hives from entering the region, while Hawke's Bay beekeepers have suggested only allowing entry of hives where there is a prior history of movement.

MAF is discussing these options with beekeepers in the lower North Island.

## National pest management strategy development

The Varroa Planning Group (VPG) has concluded that funding a national pest management strategy (NPMS) via voluntary funding contributions from stakeholder groups is not feasible. Representatives of the VPG met with staff from South Island regional councils in Queenstown on 27 July.

The regional councils present recognised

the potential impact of varroa on the South Island and are willing to consider the possibility of a council collection mechanism to fund a varroa strategy. This would be conditional on support for such measures from affected ratepayers.

Regional councils agreed to supply data on different rating mechanisms to the VPG, which will evaluate the different mechanisms to determine the most appropriate basis for apportioning the NPMS costs among the councils.



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# Biosecurity People

## Exotic Disease Response, Animal Biosecurity



**Dorothy Geale** has recently joined Animal Biosecurity as one of the Programme Coordinators, Exotic Disease Response. She graduated from Ontario Veterinary College in 1983 and has a Postgraduate Diploma in Veterinary Medicine from the University of Saskatchewan. Previous degrees include a PhD in Ecology from Saskatchewan and BSc (Hons) from Queen's University.

Foreign Animal Disease (FAD) has always been a strong interest for Dorothy. As Senior Staff Veterinarian for the Canadian Food Inspection Agency (CFIA) in Ottawa, Dorothy was responsible for FAD Outbreak Management in Canada. The position included the development of technical plans for 22 exotic diseases; FAD procedure manual updates; legislative amendments; virology research review, defining and addressing FAD training needs; planning and executing national and North American simulation exercises and collaboration on the development of an internet-based FAD information management system.

Dorothy's international experience includes practical studies with the USDA, a year at the National Australian Animal Health

Laboratory in Geelong (1994), membership in the Quadrilateral and Tripartite Emergency Management Working groups as well as the Canadian policy representative to the North American Foot and Mouth Vaccine Bank.

A strong believer that experience is the best teacher, Dorothy organised participation of CFIA veterinarians to assist with the Classical Swine Fever outbreak in the Netherlands in 1997, the USDA Pseudorabies eradication in 1999 and the UK Foot and Mouth Disease outbreak in 2001.

## Surveillance and Response, Animal Biosecurity



**Suvi van Smit** has recently joined Animal Biosecurity as the Programme Adviser for the Surveillance and Response Team.

Suvi has always had an interest in the environment and biodiversity, one that was strengthened by working with environmental, health hazard and asbestos claims at an underwriting

syndicate of Lloyd's Insurance, London. She then decided to return to New Zealand and complete a BSc in Environmental Studies and Geography at Victoria.

Suvi has recently moved from Auckland where she worked as an administrator.

# Forming an orderly queue: Prioritising animal biosecurity risk analyses

The importation of an animal or animal product is determined by risk analyses. The requests for risk analyses are many and varied and for that reason, prioritisation is essential.

Import risk analyses assess the disease risks associated with the importation of animals and animal products in an objective and defensible way. Under the Sanitary and Phytosanitary (SPS) agreement, risk analyses must be scientifically based and transparent to provide the exporting country with clear reasons for the import conditions it sets, or for a refusal to import.

Risk analysis work is demanding and time-consuming. Because the expertise required is so specialised, personnel resources in this area are limited and there may always be a long list of importation requests awaiting attention.

Prioritisation is necessary to manage the list and ensure that requests are dealt with appropriately.

The highest priority is given to current biosecurity concerns. These may involve disease outbreaks overseas, changes in current knowledge about existing disease agents, or changes in the exporting country's status. Trade may be initiated or re-established if there is a significant change to a country's disease status (e.g. declaration of freedom from a particular animal disease).

The next priority goes to risk analyses that are underway, including the review of work completed by outside consultants.

Once these two priorities are addressed, other factors considered when prioritising include:

- responses to trade issues
- environmental impact (e.g. consideration of biological agents for dealing with environmental issues)
- economic returns to New Zealand of imports/exports (e.g. new genetics)
- combating smuggling (of particular importance when considering endangered native species)
- number of requests for a certain type of import and therefore the volume of trade likely to result from any resulting import health standard (although this can be difficult to predict).

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**Table 1: Risk analyses in progress**

| Commodity  | Stage of development   |
|--|--|
| <i>Babesia gibsoni</i> in dogs                                       | Public consultation completed (30 April 2003) and review of submissions underway.  |
| Biologicals  | Project team in formation.   |
| Budgerigars (C)  | Internal and external review completed (December 2002), comments sent to consultant for reviewing.   |
| Cattle, and bovine embryos and semen                                 | In progress.   |
| Cooked duck meat from Australia (C)                                  | Internal review complete, comments sent to consultant for redrafting.  |
| Duck foie gras from France   | In progress.   |
| Dogs and cats  | Hazard list completed (March 2003).  |
| Freshwater prawns (C)  | Internal and external review completed (December 2002), comments sent to the consultant for redrafting.  |
| Hides and skins  | External review completed (December 2002).   |
| Honey bee hive products  | Review of submissions completed (June 2003); changes are required in scope and approach. Planning to re-write the analyses without used bee keeping equipment.                                     |
| Horses – equine viral arteritis (EVA) shedders – addendum            | Public consultation completed.   |
| Juvenile yellowtail kingfish (C)                                     | Public consultation completed (April 2003). Submissions sent to consultant for review.   |
| Non-viable eggs and egg products                                     | Intending to use Agriculture, Fisheries & Forestry Australia (AFFA) risk analysis where possible. Risk analysis on 3 Belovo egg powders as a streamlined analysis, review of submissions underway. |
| Ornamental fish  | National Centre for Disease Investigation (NCDI) undertaking this and is based on the AFFA risk analysis. Preliminary hazard list completed (July 2003).   |
| Pigeons (C)  | Internal and external review completed (December 2002). Comments sent to consultant for redrafting.  |
| PMWS (Post-weaning Multisystemic Wasting Syndrome) (C)               | Consultation with industry completed (June 2003). Analysis of submissions underway.  |
| PRRS (Porcine Reproductive & Respiratory Syndrome) virus in pig meat | Release assessment completed and external review finished (December 2002). Waiting for notification of results from Canadian trials to confirm the presence of virus in pig meat.                  |
| Sheep embryos from South Africa (C)                                  | Work began in 2003. Hazard identification in progress.   |
| Turkey rhinotracheitis in turkey hatching eggs (C)                   | Internal review complete (June 2003). Comments sent to consultant for redrafting.  |

Note: (C) indicates risk analyses being undertaken by external consultants on behalf of proponents.

**Table 2. Risk analyses prioritised as next in line to commence this year**

| Commodity                        | Reasons for high priority   |
|----------------------------------|---|
| Hatching eggs                    | To facilitate trade and combat smuggling. A range of species is to be considered, including poultry and cage birds. |
| Live sheep from Australia        | Hydatids is the main area of concern.   |
| Sheep and goat embryos and semen | Many longstanding requests from many countries.   |

continued from page 10

**Table 3. Risk Analyses waiting commencement**

|   |
|---|
| Cage and aviary birds   |
| Equine embryos  |
| Fish bait   |
| Frozen dried horse hooves   |
| Harp seal oil   |
| Inovatech frozen egg yolk   |
| Kangaroo meat for pet food  |
| Laboratory animals  |
| Live deer from the UK   |
| Mammalian meat and meat products                                  |
| Pigs, porcine semen and embryos                                   |
| Psittacine birds from Australia                                   |
| Ratites   |
| Rescue dogs   |
| Risk of permitting vaccination of animals against exotic diseases |
| Unloading from foreign craft of animals destined for export       |
| Zoo – reptiles  |
| Zoo – primates  |
| Zoo – sun bears   |

## Biosecurity People

### Biosecurity Policy Adviser brings home team gold

In June, New Zealand successfully competed in the Taekwon-Do world championships in Poland, finishing third in the competition, ahead of 47 other countries.



**Suzanne Main** (Policy Adviser, Biosecurity Coordination – Policy) travelled to Warsaw as part of the New Zealand team and brought back a gold medal for her contribution to the women's team gold medal in the power test. The power test involves breaking wooden boards with specific kicks and hand techniques and is a test of technique, speed and power.

She also competed in sparring and patterns disciplines. Suzanne's gold medal was just reward for 8 years' Taekwon-Do training. "It was an amazing experience to bring home gold for my country and to know that all the months of hard work had paid off," she says.

Suzanne is a second degree black belt and hopes to grade to third degree at the end of the year. Her colleagues in the Biosecurity Authority are all immensely proud of Suzanne's achievement, are glad that she was part of such a successful team, and promise to be very, very nice to her!

## Animal Welfare Chapter hears of UK health and welfare initiative

A presentation from Dr Judy MacArthur Clark on a new animal health and welfare initiative was one of the highlights of the Animal Welfare Chapter's third conference in June 2004, held in association with the Australian College of Veterinary Scientists (ACVSc) Science Week. Dr Clark is chair of the UK Farm Animal Welfare Council.

Eleven ACVSc chapters were involved in the two and half day scientific programme, which was attended by a record 350 delegates. The ACVSc provides veterinarians with an opportunity for the recognition of advanced professional skills and proficiency. The College conducts post-graduate examinations in a range of subjects including animal welfare. Success in the examinations and subsequent membership in the Animal Welfare Chapter equips veterinarians

with a detailed understanding of animal welfare and the scientific basis which underpins animal welfare standards.

This year, three candidates (Gwyneth Verkerk and Kim Ankenbauer-Perkins from New Zealand, and Len Cantrill from Australia) sat and passed the Animal Welfare Chapter examinations. This brought to 12 the total number of successful candidates, since the Animal Welfare Chapter commenced in 2001.

This year's presentations featured a range of topics including the OIE and animal welfare, balancing cloning research, commercial pressure and animal welfare, analgesic best practice for animals used in research and teaching, the veterinary profession and painful procedures, animal welfare in Australian livestock farming systems and a presentation from Dr Judy MacArthur Clark, chair of the UK Farm Animal Welfare Council.

Dr Clark provided a European perspective on animal welfare and outlined a recent UK initiative to develop an Animal Health and Welfare Strategy. She said the outbreaks of BSE and FMD in the UK have highlighted the need for a strategic approach to disease management, biosecurity and the welfare of livestock.

The strategy will primarily focus on the health and welfare of animals kept for food production but will be extended to cover other species.

Dr Clark noted that animal health and welfare are inextricably linked, and the veterinarian as guardian of both has a key role in the development and successful implementation of the strategy.



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# Playing hide and seek with deadly snakes

The 'cut and suck' technique for dealing with a deadly snakebite is a definite no-no. Electric shocks and tourniquets won't do the victim much good, either. This was just some of the myth-dispelling advice received by eight MAF and two DOC staff attending a course at Cleland Wildlife Park in Adelaide, Australia during July on the handling of venomous snakes.

The training provides a pool of staff capable of dealing with any snakes that turn up in mail, containers or overseas vessels arriving in New Zealand. These people are also able to respond



Jaimie Baird stays calm in the company of a non-venomous carpet python snake. Photo: Paul Bingham

to post-border reports of snakes. Upgraded snake handling equipment and updated operating procedures are other likely outcomes of the course.

The New Zealand trainees learned to separate fact from the mythology and misinformation that surrounds these reptiles. During the three days, they gained confidence in holding a non-venomous carpet python. Then,

using handling equipment, they graduated to venomous tiger snakes, brown snakes, a mulga snake and the death adder. One of the more challenging practical sessions involved 'hide and seek', which demonstrated snakes' camouflage capabilities and ability to curl into very small spaces. So, what do you do if you find a snake?

Here, briefly, is what the trainees were told:

- Don't approach – secure the area to restrict public access.
- Throw a light cover over the snake to provide secure shelter (use a jersey, or similar).
- Get help – a register of trained snake handlers is available through the 0800 809 966 Disease and Pest Hotline.
- If bitten – stay calm (easy to say!). Follow pressure-immobilisation first-aid treatment (see sidebar opposite).

The key is to be extremely cautious and respect the animal. New Zealand does not have anti-venom and practical medical experience with snakebites is limited here. On the positive side, instant death from snake bites is apparently just a myth and expert medical advice is only a phone call away from any New Zealand hospital.

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## Global animal welfare conference a milestone

The first OIE global conference on animal welfare, to be held in Paris, from 23 to 25 February 2004, will be a major milestone in approaching the development of science-based animal welfare standards on a truly international basis.

With the theme, *Bringing together science, ethical and cultural values, and practical realities to provide international guidance and standards*, the aim of the conference is "to bring together stakeholders (governmental authorities, scientists, private sector and non-profit NGOs, consumers) from countries around the world to support the OIE in its animal welfare activities and to assess the way they can contribute most effectively".

The international steering committee (right) has been established to be responsible for conference planning, selection of topics and speakers.

The International Steering Committee met in Paris from 11-12 June and was chaired by Dr Bayvel.

The objectives of the conference are:

- To give visibility to OIE's work and to explain the OIE's strategy on animal welfare to the widest number of stakeholders, and to obtain their support.

- To enhance OIE's leadership role in providing global animal welfare guidance and standards.

|                      |  |
|----------------------|--|
| Dr David Bayvel      | Director Animal Welfare, MAF Biosecurity Authority, New Zealand  |
| Dr Herbert Schneider | President, World Veterinary Association, Namibia   |
| Dr David Fraser      | Professor and Chair of Animal Welfare, Faculty of Agricultural Sciences and Centre for Applied Ethics – University of British Columbia, Canada |
| Dr David Wilkins     | International Council for Farm Animal Welfare (ICFAW), Belgium   |
| Dr Elisabetta Canali | Istituto di Zootechnica Facoltà di Medicina Veterinaria – Milano, Italia   |
| Dr Emma Stamper      | Animal Transport Association (AATA)  |
| Dr Sira Abdul Rahman | Retd. Dean, Bangalore Veterinary College, India.   |

## In the unlikely event of a snake bite ...

If bitten – stay calm and as still as possible. Immediately follow the pressure-immobilisation method (below). Venom travels from the bite site via the lymphatic system – surface pressure on the limb occludes lymphatic vessels, while immobilisation further inhibits lymphatic flow by stopping the muscle-pump transport system, so preventing venom from entering the circulation.



*How close can you get to a venomous snake?  
Photo: Paul Bingham*

### Pressure-immobilisation first-aid

- The patient must not be moved. The bitten limb especially should remain as still as possible.
- Remove any rings, bracelets, etc from the bitten limb and do not clean the wound.
- A broad compression bandage (use clothing strips/panty hose in an emergency) should be applied over the bitten area about as firmly as that used for a sprained ankle.
- If clothing cannot be cut from a bitten limb then a compression bandage should be applied over the clothing – rather than move the limb.

- A second bandage should then be applied, starting from the tip of the limb (fingers or toes) and heading toward the body, as firmly as used for a sprained ankle. Crepe bandages are ideal, but strips of clothing or towels may be used.
- Immobilise the arm or leg with a splint and then bandage the splint to the limb to prevent movement. Tell the patient to stay still.
- Transport to hospital (preferably by ambulance). Transport should be brought to the patient to prevent movement. If this cannot be done, the patient should be carried.
- Do not give alcohol, fluid or food by mouth.

Contact the National Poisons Centre (0800 764 766) who have access to the National Antidote Database and are in contact with expert toxicologists in New Zealand and abroad. A very useful website for all poisonings, reviewed by worldwide experts and specific to the New Zealand situation is at [www.toxinz.com](http://www.toxinz.com)

A number of often commonly used techniques for snakebite first aid are actually contraindicated – these include tourniquets, cut-and-suck and electric shock. None of these techniques should be attempted!

It is important to continue procedures to contain and trap the snake as definitive identification is often vital to the choice of anti-venom.

Acknowledgement: Compiled by Tom Rawdon, Exotic Disease Investigator, National Centre for Disease Investigation – Many thanks to Dr John Fountain, Toxicologist, University of Otago, for his review of these recommendations

- To examine the role of stakeholders in the framework of the OIE standards development process and the most effective way they may contribute.
- To stimulate links with international organisations able to support OIE's work and to agree on how they can best contribute.
- To consider the future role of OIE in animal welfare and its influence on member countries' decision-making worldwide.
- To support the OIE in a science-based approach to the welfare of animals including the provision of international guidance and standards.

Simultaneous interpretation from, and into, French-English-Spanish will be provided for the plenary sessions. Abstracts and papers can be written in English, Spanish or French.

Expressions of interest in participating in the Conference are required by 31 October 2003 and submitted applications will be screened by 1 December 2003. A registration fee of €350 will be applied to selected applicants and will include access to all sessions of the conference, conference kit and proceedings. In order to reach a geographic and interest group balance


among participants, expression of interest applications will be screened by the Steering Committee. Therefore, applicants are encouraged to complete the application form by:

- describing their affiliation with a national or international organisation or association
- indicating how they have been actively involved in animal welfare, production or transport issues
- explaining their interest in participating in the conference.

Expressions of interest should be sent to:

 OIE  
Dr Antonio Petrini  
12, rue de Prony 75017  
Paris  
France  
fax +33 (1) 42 67 09 87  
[animalwelfare-conference@oie.int](mailto:animalwelfare-conference@oie.int)  
[www.oie.int](http://www.oie.int)



 A C David Bayvel,  
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# OE for Horowhenua onions

Never mind those Duff Creek onions – Australians will be eating onions from Horowhenua after MAF Plants Biosecurity succeeded in securing a new export line to Australia.

Bob Macfarlane, National Adviser – Market Access Plant Exports, has been working with the Onion Exporters' Association to add Horowhenua to the list of New Zealand regions permitted to export onions to Australia.

"The Australians' main concern was that the onions were free from onion smut," says Bob.

Onion smut, *Urocystis cepulae*, is a

fungal disease of onions, leeks, garlic and snapdragons, he explains.

"This disease can at times affect 70-90% of seedlings and 40% of mature bulbs and reduce yields by 70%. It has a restricted distribution in New Zealand and can be transmitted as spores attached to onion bulbs."

New Zealand-grown onions are exported to several countries in Asia and the Pacific, while some go as far afield as Europe and South America. Australia is a niche market where exporters can obtain good spot prices during times of shortage. Previously only onions from

Ashburton, Blenheim, Hawke's Bay, Katikati, Manawatu, Nelson, Northland, Opiki, Raglan, Rangitiki, and Waikato were exported to Australia. Now growers from Horowhenua have access to this profitable market.

This is just one part of the work that MAF Plants Biosecurity does in securing and facilitating exports of plants and plant products worldwide.

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## Plant quarantine facilities impress during UK tour

Tamsin Smales from MAF Biosecurity Plants has just returned from a trip to Scotland where she visited the Scottish Crop Research Institute (SCRI) in Dundee and the Scottish Agricultural Science Agency (SASA) in Edinburgh. SASA is an executive agency of the Scottish Executive Environment and Rural Affairs Department.

Part of Tamsin's trip involved reviewing offshore plant quarantine facilities and operators against MAF's *Accreditation of Offshore Plant Quarantine Facilities and Operators Standard*.

"Overall the facilities at SCRI and SASA were very good and although they are not accredited to a formal quality system, they are working towards one," says Tamsin.

"I spent some time with Dr Teifion Jones and Alison Dolan at SCRI and discussed the New Zealand testing requirements for viruses on the import health standards for strawberries, raspberries and currants.

"This was important because if SCRI can meet New Zealand's testing requirements for these crops it will mean that we can import high health material into level 2 quarantine facilities



in New Zealand. This will mean New Zealand importers can have access to new germplasm.

"One of the highlights of my trip was meeting Dr Colin Jeffries, Head of the UK Potato Quarantine Unit at SASA, as well as discussing requirements for quarantine facilities, Colin and I discussed the testing requirements for viruses listed on the draft import health standard for potatoes," Tamsin says.

"In the UK, potato quarantine testing is done at the UK Potato Quarantine Unit, a purpose-built facility at SASA. This is run on behalf of the UK Plant Health Authorities. The plant health team at SASA has a long track record in potato quarantine and diagnostics.

"The micropropagation facilities at SASA's potato quarantine unit were pretty impressive. Each unit of potato material is established as *in vitro* microplant cultures; they are then observed in the glasshouse for the presence of diseases and tested for specific pathogens.

"One of the main differences between New Zealand and Scotland is the cool Scottish summers, which discourage aphid multiplication and flight. This means the spread of aphid-transmitted diseases is limited. Scotland's climate has allowed the incorporation of very low tolerances of virus diseases into the seed potato inspection scheme in Scotland.

"At SASA they also produce quality antibodies for the diagnosis of potato viruses and produce freeze-dried positive controls of potato viruses."

Tamsin's trip to Spain will be reported in the next issue of *Biosecurity*.

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## Lentil pot-pourri intercepted

Earlier this year an imported container of lentils from Australia was found to contain a little more than was expected.

"After sampling eight sacks of the import, MAF found serious contamination and a number of other products including wild oats, barley and ryegrass," says Dave Nendick from the MAF Plants Imports team.

"At that point we advised the importers that the 'lentils' would not receive biosecurity clearance until treated or alternatively the consignment could be re-shipped back to Australia or destroyed by MAF."

## Biosecurity People

### Plant Imports Team



Kathryn Hurr recently joined the Plant Imports team as Technical Adviser, Genetically Modified Organisms (GMO) and Containment Facilities.

She comes to MAF from Wallaceville Animal Research Centre, where she worked as a Research Associate with the Infectious Diseases Group.

Kathryn's work was focused on the development of a vaccine strain of bovine tuberculosis (*Mycobacterium bovis*), using molecular biology and bacteriological techniques.

Prior to this she spent 4 years in amenity horticulture, working as Head Gardener at Eden Garden in Auckland, then relocating to Wellington becoming Head Gardener at Government House in Newtown.

Kathryn holds an MSc (Hons.) in Plant Molecular Biology from Massey University, Palmerston North.

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## Field trips cap successful conference

Pest control contractors, researchers, central and local government agencies, recreation organisations and many others with a stake in biosecurity were among the 200 attendees at the Annual New Zealand Biosecurity Conference held in Nelson in July.

The conference was staged by the New Zealand Biosecurity Institute and the Vertebrate Pest Management Institute of New Zealand, in association with the Tasman District Council, the Nelson City Council, the Marlborough District Council, the Department of Conservation, the Cawthron Institute and Landcare Research.

"This is the first conference that has really covered the full biosecurity spectrum," says National Biosecurity Institute President Lynley Hayes.

A presentation from Biosecurity Council Chairman John Hellström on the Biosecurity Strategy prompted positive discussion.

Organisations working under the Biosecurity Act are interested to see how the Biosecurity Strategy will form the necessary linkages between organisations, which are needed to intensify the overall biosecurity system. The Biosecurity Strategy is a very positive step for enhancing the biosecurity system for the country, Lynley Hayes notes.



David Butler of DOC (second from right), a proponent of the proposed Brook Sanctuary at Nelson, explains the objectives of the pest free sanctuary to visitors during the Biosecurity Conference field trip.

The conference included two field trips. One of these was a visit to Port Nelson to see the Port's biosecurity systems in action. In follow-up discussion it was noted the increase in freight is placing extra pressure on the Port's biosecurity system.

The second field trip was a visit to the Brook Sanctuary, a proposed biodiversity enhancement project.

A series of workshops on the final day covered topics ranging from the identification of aquatic weeds, through to a popular and well attended "Weedbusters" workshop.

Next year's New Zealand Biosecurity Conference is being held in Rotorua from 21-23 July, with the theme, "The Interaction between Biodiversity and Biosecurity".

Information on the conference will be available late this year on the Biosecurity Institute's website at [www.biosecurity.org.nz](http://www.biosecurity.org.nz)

# Unique scientific collaboration in exotic pest responses

It is not easy working out the optimum response to a pest incursion in New Zealand. For this reason, the latest moth incursions have resulted in a unique partnership between the Ministry of Agriculture and Forestry and the scientific community.

The seriousness of the latest incursions such as painted apple moth, gypsy moth and fall webworm has seen the collective intelligence of the best experts in the country applied to the complex issue of how best to eradicate these pests. This cooperation is being achieved despite the fact that scientists are operating in a competitive business environment.

The development of scientific and technical advisory groups (TAGs) to look at the best way of managing each incursion has increased the rigor of decision making. Having scientists working together on each incursion response has given MAF greater surety that decisions are based on the best expertise and advice available. The incursions have also given the scientific community a chance to apply their skills to both the operational logistics of incursion responses as well as longer term research projects.

## Specialised knowledge applied to all facets

Scientists and technical experts evaluate the effectiveness of every facet of the operation, and in the case of the painted apple moth programme, this includes projects as diverse as establishing the most effective droplet size of the spray (undertaken by the Forest Research team) to modelling the population dynamics of the moth (undertaken by AgResearch scientists).

Teams from Forest Research and Hort Research provided critical information on the timing of the painted apple moth life stages. This information was used to implement the most effective treatment on the population in the field.

AgResearch mathematicians kept a close look over the success of the eradication effort in the field by modelling the trap



*Cracking the code for a synthetic pheromone is one of the most significant goals for scientists collaborating on the painted apple moth response. Photo: Hort Research*

and ground search results and provided an early warning concerning the potential "hot" spots.

## Assessment of spray impact on environment

Prior to MAF opting for a wide area treatment with the *Bacillus thuringiensis* var. *kurstaki* based insecticide, insect pathologists from AgResearch assessed the potential impact of the spray on the environment. As the operation proceeds, Landcare Research is monitoring the effects of spraying in west Auckland on the native moth fauna.

The incursions have also provided scientists with the opportunity to develop complex techniques supporting the eradication effort. A team of Hort Research scientists developed a sterile moth technique for the painted apple moth, initially to gather data on male flight patterns. This helps MAF to understand trapping results and devise more effective treatments. The method has become an important additional eradication tool in the final stages of the response. Moths were bred in large numbers at insect rearing facilities at Hort Research in Mt Albert and Forest Research in Rotorua, irradiated at the National Radiology Laboratory in Christchurch and then released into the wild in west Auckland to mate with any remaining wild females causing infertile eggs to be laid. The sterile insect technique has been used in the control and eradication of a number of pest insect species overseas.

Following advice from the TAG, the final component of this project has been to monitor the success of the sterile releases within the extensive trapping programme of more than 1600 traps Auckland wide.

## Answers sought offshore

To enable sound decision making on a response due to the incursion of exotic organisms, scientists may be sent overseas in search of answers to some critical questions. In the case of the fall webworm and gypsy moth responses, a Forest Research scientist relocated to Europe to carry out host testing trials to assess the susceptibility of native flora.

## Probing secrets of PAM pheromone

One of the most vexing issues for scientists has been to break the code and create a synthetic pheromone for the painted apple moth. The combined efforts of a number of teams within Hort Research are concentrated on finding the right answer. The painted apple moth has proved to have one of the most complex pheromones among all Lepidoptera (moths and butterflies) although scientists at Hort Research are confident that they are well on the way to cracking it. In fact, they are currently preparing to test their result in the field.

The involvement of the New Zealand scientific community is crucial for the successful management of MAF's response to exotic pest incursions. Although intruders like painted apple moth, fall webworm, gypsy moth are not wanted here they have provided the scientific community with some real motivation and opportunities to work together. Valuable experience gained in these emergencies will be applied to the management of biosecurity incursions in the future.



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# Teak posts become fungus factory

Importers of raw wood products beware! Wood preparation is important. Before shipping, make sure it is dried to less than 20 percent moisture content. If not, your consignment may have to be reshipped to the country of origin, or subjected to expensive treatment to deal with the biosecurity risk from fungi.

Every so often a shipment arrives in New Zealand containing wood that is sprouting fungi. The fungi on imported sawn wood cannot usually be identified to determine whether or not it is a risk to New Zealand's biodiversity, and so is considered a biosecurity risk.

In the last twelve months, goods such as wire (around a wooden reel), sleepers, sawn timber, pallets and other wood packaging, logs or poles, and wooden ornaments, have all arrived at the New Zealand border sprouting a healthy crop of fungal mycelia (the interwoven filaments that form the vegetative portion of fungi).

In all cases the wooden component was either green (wet or non-dried) or had become wet during loading or transport.

As goods are usually shipped to New Zealand by sea freight in shipping containers, they can be in the containers a week or more. If they are shipped from the northern hemisphere, passing through the tropics, they provide a near-perfect warm and wet substrate with plenty of nutrients to nurture the growth of fungi.

In July 2003, one such shipment arrived at Port Chalmers in shipping containers from Indonesia. A door inspection of the container by the MAF Quarantine Service revealed a very humid environment within, and a spectacular carpet of fungi covering the teak posts (see photo).

The posts had been imported to be used for strainers in organic vineyards. They had been cut green as thinnings from plantation rows, loaded into the containers and fumigated with methyl bromide prior to shipping. While methyl bromide can be effective against insect



The spectacular carpet of fungi that greeted MAF Quarantine Service inspectors when they opened the container of teak posts. Photo: MAF Quarantine Service

infestations it is not usually effective against fungi.

## Four species identified

As the photo graphically demonstrates, even durable teak posts can be a substrate for fungi if kept wet and in a suitably warm environment. Samples of the fungi were taken and sent to the MAF National Plant Pest Reference Laboratory at Lynfield in Auckland for diagnosis. Four species were identified:

*Neurospora sitophila*, a fruity smelling fungus not known in New Zealand.

*Nectria haematococca*, a common saprophyte in New Zealand.

*Trichoderma viride*, a common saprophyte in New Zealand

*Aspergillus* sp., a genus of common fungi, but containing species potentially of concern to New Zealand.

A number of other fungi were isolated that could not be identified. Many fungi can only be identified from fruiting bodies, which can be difficult to produce in the laboratory. A consignment containing wood showing high levels of fungal growth such as the teak fence posts must be either treated to kill the fungi (heat at 70°C or greater), or reshipped back to the country of origin.

## Posts kiln treated

In this instance a kiln was located in Dunedin that could heat-treat the posts. To manage the risk, the containers were placed as close as possible to the kiln doors while still allowing space to unload, the area sprayed with chlorine and a plastic tarpaulin, also sprayed with

chlorine, placed on the ground to cover the space between the containers and the kiln. After unloading was completed the area was again sprayed with chlorine, the containers sent for a 140°C steam clean, and the tarpaulin destroyed.

Given the level of moisture within the teak fence posts, the kiln took 14 days to complete the treatment, reducing the moisture level to 18 percent. Wood with less than 20 percent moisture content is unlikely to support surface fungal growth.

These considerable costs all had to be covered by the importer.

Importers are encouraged to ensure that, where practicable, wood is dried to below fibre saturation point (about 20 percent moisture content, but depends on wood type) before shipping to New Zealand.



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National Adviser Import  
Health Standards,  
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ormsbym@maf.govt.nz

## Update

### NAEAC annual report available

The 2002 annual report of the National Animal Ethics Advisory Committee (NAEAC) was published recently.

If you would like a copy of the report go to:



[www.maf.govt.nz/animal-welfare](http://www.maf.govt.nz/animal-welfare)  
or contact:



Pam Edwards,  
Executive Coordinator Animal Welfare,  
phone 04 474 4129,  
fax 04 498 9888,  
animalwelfare@maf.govt.nz

# Update

## New and amended import health standards

### Edible tallow products from Canada and the United States

#### Edible tallow products from Australia

The following clause has been added to these standards:

"Any tallow of ruminant origin has been purified in such a way that the maximum levels of remaining total insoluble impurities does not exceed 0.15% in weight."

The new standards are dated 20 August 2003 and replace those dated 14 January 1998 and 3 August 1998.

### Specified products for human consumption containing dairy products, eggs or meat from all countries

A definition of "retort pouch" has been added to clarify packaging requirements.

Bone-in meat products must now be accompanied by a Manufacturer's Declaration that certifies that the bone-in meat products were subjected to a thermal treatment of Fo3 or greater in the bone (Fo3 is a processing standard equating to 121°C for 3 minutes).

The new standard is dated 20 August 2003 and replaces that dated 19 September 2002.

### Specified inedible animal products and biologicals from all countries

CYPHER Sirolimus-eluting stent, a surgical implant has been added to this standard. The new standard is dated 20 August 2003 and replaces that dated 4 October 2002.

### Bovine embryos from the European Union

#### Bovine semen from the European Union

The individual standards for all European Union countries have been amalgamated into these two generic standards dated 27 August 2003.

The standards include an additional requirement to test donor females for bovine viral diarrhoea (BVD) as New Zealand is free from BVD2.

The 1993 New Zealand Embryo and Semen Standards have been removed and replaced by Directives 89/556 and 88/407 respectively.

The bovine embryo standard replaces the previous standards for Austria, Belgium, Denmark, Eire, Finland, France, Germany, Italy, the Netherlands and Sweden, all dated 29 June 2001.

The bovine semen standard replaces the previous standards for Austria (16 May 2001), Belgium (16 May 2001), Denmark (27 October 2001), Eire (29 June 2001), Finland (30 March 2001), France (29 June 2001), Germany (16 May 2001), Italy (16 May 2001), the Netherlands (29 June 2001), Sweden (17 April 2001), Northern Ireland (28 August 2001) and the United Kingdom and Channel Islands (14 November 2002).

### Horses from Australia, the European Union, Canada and the United States

#### Horse semen from Australia, the European Union and the United States

Changes to these import health standards were notified for consultation in *Biosecurity* 43:19. The changes related to stallions that had previously shed equine arteritis virus (EAV) but had subsequently tested negative for EAV.

A submission on these standards highlighted the potential use of gonadotropin-releasing hormone (GnRH) antagonist to mask the shedding of EAV. There is no method available to determine whether a stallion has been treated with GnRH antagonist and it is not clear how long the effects of the substance can be expected to last. There is a significant risk that stallions treated with GnRH antagonist could revert to shedding EAV after importation or could provide infected semen for importation.

MAF will continue to research the use of GnRH antagonist. In the meantime, stallions that have previously shed EAV will not be eligible for entry into New Zealand; nor will they be acceptable donors for the export of semen. A declaration regarding the EAV shedding history of all stallions will be required as part of the revised import health standards.

The new standards are dated 11 August 2003, and replace the horse standards dated 13 March 2003 and the horse semen standards dated 15 December 2001 (Australia and USA) and 13 November 2002 (EU).

#### Carniolan honey bee (*Apis mellifera carnica*) semen from Germany

Varroa resistant genetic material may now be imported under a new import health standard. The import health standard for Carniolan honey bee (*Apis mellifera carnica*) from Germany was issued on 11 August 2003 and replaces the standard dated 9 January 1998. Practical difficulties with the implementation of the old standard meant that it had not been used.

The new standard is based on the risk analysis *Honey Bee (Apis mellifera) Genetic Material*, completed in June 2003. The analysis was primarily carried out to find acceptable conditions under which genes for varroa tolerance can be introduced into New Zealand. Due to the well-recognised risk posed by European foulbrood and the uncertainty surrounding deformed wing virus and its association with varroa and colony collapse, semen is the only form of genetic material that can practically comply with the recommended conditions.

The necessary official certification includes confirmation of country freedom from Africanised honey bees and Cape honey bees. Due to timing, the import health standard will not be used until next season.



Carolyn Hini, National Manager, International Animal Trade,  
phone 04 470 2780, fax 04 474 4227,  
hinic@maf.govt.nz



[www.maf.govt.nz/biosecurity/imports/animals/standards/honeybeesemic.ger.htm](http://www.maf.govt.nz/biosecurity/imports/animals/standards/honeybeesemic.ger.htm)

## Special import conditions for film bear

Special one-off import conditions are being established for the temporary importation into quarantine of a Kodiak bear (*Ursus arctos middendorffi*) for film production purposes, pending ERMA approval. The bear will be held in a transitional and containment facility in complete isolation from all other animals before re-export after filming.

## Draft import health standards

The following draft import health standards (IHSs) have been amended and are available for public consultation.

### Cattle from Australia

### Deer from Australia

### Sheep from Australia

### Goats from Australia

### Lamoids from Australia

The most important change to these standards is to pre-export isolation, to ensure that all imported ruminants are tick-free.

The property of origin must now declare freedom from *Echinococcus granulosus* for 5 years.

Safeguards for *Salmonella dublin* have also been included in all the standards. The new requirements include negative culture of faecal samples and property of origin freedom for 3 years.

The Australasian lamoid industry has developed significantly in recent years and there is now more information about the disease status of lamoids. As a result, post arrival quarantine is no longer required for lamoids from Australia.



The deadline for submissions is **Friday 10 October 2003**, addressed to:



Jennie Brunton, Technical Adviser,  
International Animal Trade,  
MAF Biosecurity Authority,  
PO Box 2526, Wellington,  
phone 04 474 4116,  
fax 04 474 4227,  
bruntonj@maf.govt.nz

### Heat-treated (cooked) pet food from Australia

### Specified protein digested animal products from France

### Organic-based fertilisers from the United States

### Poultry feather meal products for animal feeding from Australia

### Liquid berley, berley straps, berley blocks and lure skirts from Australia

### Marine fish for petfood from all countries

These standards have been updated in line with the **Chicken and Chicken Meat Risk Analysis**.

Heat treatments for diseases of concern have been added and the fish component of these products has been amended to ensure consistency. The specific changes include:

Product that comprises marine fish only must either have been frozen to below  $-18^{\circ}\text{C}$  for a minimum of 18 hours prior to importation; or have been subject to irradiation with 2.5 megarads.

Product that comprises fishmeal must have been heat treated at a minimum core temperature of  $85^{\circ}\text{C}$  for 15 minutes.

Product that comprises poultry meal, poultry feather meal and poultry oil, must have been heat treated at a minimum core temperature of  $110^{\circ}\text{C}$  for at least 1 hour.

Product that comprises poultry blood meal must have been heat-treated at a minimum core temperature of  $90^{\circ}\text{C}$  for 30 minutes.

The Eligibility section of some of the standards has also been amended for clarification purposes.



The deadline for submissions is **Friday 3 October 2003**, addressed to:



Paul Berentson,  
Technical Adviser,  
International Animal Trade,  
MAF Biosecurity Authority,  
PO Box 2526, Wellington,  
phone 04 989897,  
fax 04 474 4227,  
berentsonp@maf.govt.nz

A copy of the standards can be obtained from the MAF website:



[www.maf.govt.nz/biosecurity/consultation.htm#draft-ihs](http://www.maf.govt.nz/biosecurity/consultation.htm#draft-ihs)

## Zoo Regulations 1977 replaced by a new containment standard for zoos

As of 28 July 2003, the Zoological Gardens Regulations 1977 have been revoked and replaced by MAF Biosecurity Authority Standard 154.03.04: *Containment facilities for zoo animals*.

The new containment standard was approved by MAF and the Environmental Risk Management Authority in June 2003 and has been distributed to all current zoos.

There are some significant differences between the Regulations and the containment standard. One important factor is that only zoos that hold new organisms must be approved under the new standard. New organisms are defined in the standard and include animals that cannot be held outside the zoo such as antelope, flamingos, crocodiles and piranha. Thar, llamas and kiwi are not new organisms and any registered zoo that holds only this type of animal does not require approval under the containment standard.



Kerry Mulqueen,  
National Adviser, Animal Imports and Exports,  
phone 04 498 9624, fax 04 474 4132



[www.maf.govt.nz/biosecurity/border/transitional-facilities/animals/154-03-04.htm](http://www.maf.govt.nz/biosecurity/border/transitional-facilities/animals/154-03-04.htm)

## Codes of ethical conduct – approvals, notifications and revocations since the last issue of *Biosecurity*

All organisations involved in the use of live animals for research, testing or teaching are required to adhere to an approved code of ethical conduct.

### Codes of ethical conduct approved

- Lincoln University (expiry 30 June 2008)

**Transfer of code of ethical conduct approved:** Nil

**Amendments to codes of ethical conduct approved:** Nil

### Notifications to MAF of minor amendments to codes of ethical conduct

- Nelson Marlborough Institute of Technology


### Notifications to MAF of arrangements to use an existing code of ethical conduct

- Ancrum Consultancies (to use Lincoln University's code; renewal – code expired)
- Dairy Production Systems Ltd (to use AgResearch Ltd's code and Ruakura AEC)
- ImmunoEthical Associates (NZ) Ltd (to use Lincoln University's code; renewal – code expired)
- Newall, Michael Douglas (to use Animal Health Services Centre's code)
- Pest Control Research Ltd (to use Lincoln University's code; renewal – code expired)
- Pest-Tech Ltd (to use Lincoln University's code; renewal – code expired)
- Pyne Gould Guinness Ltd (to use Lincoln University's code; renewal – code expired)
- Wool Research Organisation of New Zealand (to use Lincoln University's code; renewal – code expired)
- Wrightson Research (to use Lincoln University's code; renewal – code expired)

### Codes of ethical conduct revoked or expired or arrangements terminated:

**Approvals by the Director-General of MAF for the use of non-human hominids:** Nil

**Approvals by the Minister of Agriculture of research or testing in the national interest:** Nil


 Linda Carsons, Senior Policy Adviser, Animal Welfare, phone 04 470 2746, fax 04 498 9888, carsonsl@maf.govt.nz

## Import Health Standards issued – Plants


The following Import Health Standard was re-issued by MAF Biosecurity Authority, Plant Imports on 25 August 2003:

The MAF Import Health Standard 155.02.02.06 – *Importation of Grain for Processing* was amended by removing redundant operational information and retaining the current phytosanitary information that is held in species-specific import health standard schedules.

The re-issued MAF standard 155.02.02.06 is available on the MAF website at:


 [www.maf.govt.nz/biosecurity/imports/plants/standards/155-02-02-06.pdf](http://www.maf.govt.nz/biosecurity/imports/plants/standards/155-02-02-06.pdf)

In addition, a new MAF import health standard was approved for issue on 25 August 2003. MAF Operational Standard PIT-GFP-ISR – *Grain for Processing, Import System Requirements* holds operational information on pre-import requirements and information for the management of grain after importation into New Zealand. The new MAF standard PIT-GFP-ISR is available on the MAF website at:

 [www.maf.govt.nz/biosecurity/imports/plants/standards/pit-gfp-isr.pdf](http://www.maf.govt.nz/biosecurity/imports/plants/standards/pit-gfp-isr.pdf)

The following import health standard schedule has been issued by MAF Biosecurity Authority, Plant Imports:

The *Triticum* sp. (wheat grain) import health standard schedule was amended and approved for inclusion in MAF Standard 155.02.02.06 – *Importation of Grain for Processing* on 8 August 2003. The amended standard is available on the MAF website at:

 [www.maf.govt.nz/biosecurity/imports/plants/standards/155-02-02-06.pdf](http://www.maf.govt.nz/biosecurity/imports/plants/standards/155-02-02-06.pdf)


## Seed import requirements amended

The post-entry quarantine requirements for experimental seed were amended on 4 August 2003. The purpose of this amendment is primarily to ensure that the level of quarantine is sufficient to prevent the entry of associated pests into New Zealand (e.g. those experimental seed species currently imported will require at least Level 2 post-entry quarantine).


Three other changes have also been made:

- seed of any species which has requirements additional to the basic conditions may be imported into post-entry quarantine;
- seed of these species may be imported from any country (Level 3 post-entry quarantine will be required for seed from new countries not currently approved); and
- importers of such seed will no longer be required to be “registered operators”, provided that importers have facilities which are registered and operated according to MAF standard PBC-NZ-TRA-PQCON.

The new requirements can be found in the revised version of MAF's import health standard 155.02.05 *Importation of seed for sowing*

 [www.maf.govt.nz/biosecurity/imports/plants/standards/155-02-05.pdf](http://www.maf.govt.nz/biosecurity/imports/plants/standards/155-02-05.pdf)

The analysis of submissions made during consultation is available on:

 [www.maf.govt.nz/biosecurity/imports/plants/standards/drafts/experimental-seeds-submissions-june-2003.pdf](http://www.maf.govt.nz/biosecurity/imports/plants/standards/drafts/experimental-seeds-submissions-june-2003.pdf)

 Plants Biosecurity, MAF Biosecurity Authority  
Ministry of Agriculture and Forestry,  
PO Box 2526, Wellington  
phone 04 498 9843, fax 04 474 4257,  
plantimports@maf.govt.nz

# Directory New organism records: 21/06/03 – 08/08/03

Biosecurity is about managing risks – protecting the New Zealand environment and economy from exotic pests and diseases. MAF Biosecurity Authority devotes much of its time to ensuring that new organism records come to its attention, to follow up as appropriate. The tables below list new organisms that have become established, new hosts for existing pests and extension to distribution for existing pests. The information was collated by MAF Forest Biosecurity and MAF Plants Biosecurity during 21/06/03 – 08/08/03, and held in the Plant Pest Information Network (PPIN) database. Wherever possible, common names have been included.

## PLANTS BIOSECURITY RECORDS 21/06/2003 – 08/08/2003

### Validated new to New Zealand reports

| Organism   | Host  | Location | Submitted by                                  | Comment  |
|--|---|----------|---|--|
| <i>Pestalotzia subsessilis</i>                           | <i>Geranium pratense</i><br>(meadow cranesbill) | Auckland | National Plant Pest Reference Library (NPPRL) | This fungus is known to occur in the United States, Europe and Australia. It has only been recorded from true <i>Geranium</i> spp. |
| <i>Pseudocercospora coprosmae</i>                        | <i>Coprosma robusta</i><br>(karamu)             | Auckland | NPPRL   | This new to science leaf spot fungus is known only from New Zealand and is considered to be an indigenous species.                 |
| <i>Pseudocercospora dianellae</i>                        | <i>Dianella nigra</i><br>(blue-berry, turutu)   | Auckland | NPPRL   | This new to science leaf spot fungus is known only from New Zealand and is considered to be an indigenous species.                 |
| <i>Pseudocercospora libertiae</i>                        | <i>Libertia ixioides</i><br>(mikoikoi)          | Auckland | NPPRL   | This new to science leaf spot fungus is known only from New Zealand and is considered to be an indigenous species.                 |
| <i>Pseudocercospora pomaderridis</i><br>(no common name) | <i>Pomaderris kumeraho</i><br>(kumarahou)       | Auckland | NPPRL   | This new to science leaf spot fungus is known only from New Zealand and is considered to be an indigenous species.                 |
| <i>Pseudocercospora heleni</i>                           | <i>Helenium autumnale</i><br>(sneezeweed)       | Auckland | NPPRL   | This new to science fungus produces a lesion on the leaves of its host, a long-established exotic plant.                           |
| <i>Stenella aucklandica</i>                              | <i>Geniostoma rupestre</i><br>(hangehange)      | Auckland | NPPRL   | This new to science leaf spot fungus is known only from New Zealand and is considered to be an indigenous species.                 |
| <i>Tymovirus Poinsettia mosaic virus</i> (PnMV)          | <i>Euphorbia pulcherrima</i><br>(poinsettia)    | Auckland | NPPRL   | Poinsettias are commonly infected with this virus. Infection is often symptomless.   |
| <i>Phytoplasma</i> sp<br><i>X disease group</i>          | <i>Euphorbia pulcherrima</i><br>(poinsettia)    | Auckland | HortResearch                                  | This host-specific phytoplasma causes the free-branching growth habit seen in commercial poinsettia plants.                        |

### New host reports

| Organism   | Host   | Location       | Submitted by | Comment   |
|--|--|----------------|--------------|---|
| <i>Pseudococcus longispinus</i><br>(longtailed mealybug)                                     | <i>Cordylone fruticosa</i><br>(Ti pore, Pacific Island cabbage tree)   | Northland      | NPPRL        | This mealybug has a very wide host range.   |
| <i>Erwinia carotovora</i> ssp. <i>carotovora</i><br>(bacterial soft rot, bacterial stem rot) | <i>Brassica campestris</i> ssp. <i>pekinensis</i><br>(Chinese cabbage) | Mid Canterbury | NPPRL        | Other PPIN hosts include tomato, cucumber, rock melon, squash, Calla lily, potato, onion, capsicum, carrot, Chinese cabbage, moth orchid and <i>Cymbidium</i> sp. |
| <i>Peronospora parasitica</i><br>(downy mildew)  | <i>Brassica campestris</i> ssp. <i>pekinensis</i><br>(Chinese cabbage) | Mid Canterbury | NPPRL        | Other PPIN hosts include stock and bok choy.  |
| <i>Leptosphaeria maculans</i><br>(black leg canker, dry rot)                                 | <i>Brassica campestris</i> ssp. <i>pekinensis</i><br>(Chinese cabbage) | Mid Canterbury | NPPRL        | Other PPIN hosts include kale.  |
| <i>Nectria radicola</i><br>(cylindrocarpon root rot)   | <i>Panax quinquefolium</i><br>(American ginseng)                       | Dunedin        | NPPRL        | This organism has a wide host range.  |
|  | <i>Musa acuminata</i><br>(Australian ladyfinger)                       | Auckland       |              |   |
| <i>Pseudomonas fluorescens</i><br>(no common name)   | <i>Hydrangea macrophylla</i><br>(hydrangea)                            | Dunedin        | NPPRL        | Other PPIN hosts include onion, tomato, garden pea, tamarillo, black currant, primrose, and Nikau palm.   |
| <i>Gibberella zeae</i> (basal rot, ear blight, fusarium rot)                                 | <i>Musa acuminata</i><br>(Australian ladyfinger)                       | Auckland       | NPPRL        | This organism has a very wide host range.   |
| <i>Glomerella cingulata</i><br>(anthracnose, bitter rot)                                     | <i>Musa acuminata</i><br>(Australian ladyfinger)                       | Auckland       | NPPRL        | This organism has a very wide host range.   |
|  | <i>Musa x paradisiaca</i><br>(banana)                                  |                |              |   |
|  | <i>Jubaea chilensis</i><br>(Chilean wine palm)                         |                |              |   |
|  | <i>Cycas kennedyana</i><br>(cycad)                                     | Northland      |              |   |
|  | <i>Musa</i> sp. (banana)   |                |              |   |
| <i>Phoenix canariensis</i><br>(Phoenix palm)   |  |                |              |   |
| <i>Deightoniella torulosa</i><br>(black tip of fruit, deightoniella speckle)                 | <i>Musa acuminata</i><br>(Australian ladyfinger)                       | Auckland       | NPPRL        | Other PPIN hosts include <i>Musa</i> sp.  |

continued on page 22

PLANTS BIOSECURITY RECORDS continued

| New host reports   |  |                |                 |  |
|--|--|----------------|-----------------|--|
| Organism   | Host   | Location       | Submitted by    | Comment  |
| <i>Pestalotiopsis versicolor</i><br>(pestalotiopsis)               | <i>Annona cherimola</i><br>(cherimoya)             | Auckland       | NPPRL           | Other PPIN hosts include kiwifruit, apricot, feijoa, grape, pine, black currant, Chile nut, Date plum, black beech and passionfruit.   |
|  | <i>Psidium guajava</i><br>(tropical guava)         |                |                 |  |
|  | <i>Phoenix canariensis</i><br>(Phoenix palm)       | Northland      |                 |  |
| <i>Colletotrichum acutatum</i><br>(anthracnose, bitter rot)        | <i>Annona cherimola</i><br>(cherimoya)             | Auckland       | NPPRL           | This organism has a wide host range.   |
|  | <i>Jubaea chilensis</i><br>(Chilean wine palm)     |                |                 |  |
|  | <i>Psidium guajava</i><br>(tropical guava)         |                |                 |  |
|  | <i>Musa</i> sp. (banana)                           | Northland      |                 |  |
| <i>Cercospora violae</i><br>(cercospora leaf spot)                 | <i>Viola x wittrockiana</i><br>(pansy)             | Nelson         | NPPRL           | Other PPIN hosts include English violet.   |
| <i>Plectosphaerella cucumerina</i><br>(crown canker, root rot)     | <i>Musa</i> sp. (banana)                           | Northland      | NPPRL           | Other PPIN hosts include tomato, passionfruit, cucumber, potato, tamarillo, pea, and carnation.  |
| <i>Phoma macrostoma</i><br>(phoma leaf spot)                       | <i>Musa</i> sp. (banana)                           | Northland      | NPPRL           | Other PPIN hosts include kiwifruit, apple, cucumber, apricot, perennial ryegrass, passionfruit, feijoa, Kaki, nectarine, peach, plum and clover.   |
|  | <i>Musa x paradisiaca</i><br>(banana)              | Auckland       | NPPRL           |  |
| <i>Gibberella baccata</i><br>(canker, false coral spot)            | <i>Musa</i> sp. (banana)                           | Northland      | NPPRL           | This organism has a wide host range.   |
| <i>Nigrospora sacchari</i><br>(no common name)                     | <i>Musa acuminata</i><br>(Australian ladyfinger)   | Auckland       | NPPRL           | Other PPIN hosts include feijoa.   |
| <i>Epicoccum purpurascens</i><br>(sooty mould)                     | <i>Musa x paradisiaca</i><br>(banana)              | Auckland       | NPPRL           | Other PPIN hosts include corn, bean, asparagus, wheat, tamarillo, passionfruit, feijoa, garden pea, peach, <i>Prunus</i> spp., carrot, olive, chrysanthemum, barley, oat and Gypsophila. |
| <i>Pestalotiopsis maculans</i><br>(pestalotiopsis leaf spot)       | <i>Phoenix reclinata</i><br>(Senegal date palm)    | Auckland       | NPPRL           | Other PPIN hosts include feijoa, apple, Kaki, peach, nectarine, grape, kiwifruit, black currant, Nikau palm, tamarillo, coastal banksia, and Rhododendron.                               |
|  | <i>Musa</i> sp. (banana)                           | Northland      |                 |  |
| <i>Nigrospora sphaerica</i><br>(no common name)                    | <i>Musa</i> sp. (banana)                           | Northland      | NPPRL           | Other PPIN hosts include bean, Kauri, passionfruit, Kaki, tamarillo, kiwifruit and peach.  |
| <i>Ceroplastes sinensis</i><br>(Chinese wax scale)                 | <i>Vaccinium</i> sp. (blueberry)                   | Waikato        | NPPRL           | Other PPIN hosts include citrus, apple, feijoa, kiwifruit, peach, nectarine, Wilga, grape, barberry and hawthorn.  |
| <i>Ceroplastes destructor</i><br>(soft wax scale, white wax scale) | <i>Choisya ternata</i><br>(Mexican orange blossom) | Auckland       | Forest Research | Other PPIN hosts include orange, mandarin, lemon, tangelo and kiwifruit.   |
| <i>Rosellinia necatrix</i><br>(white root rot)                     | <i>Pittosporum crassifolium</i><br>(karo)          | Taranaki       | NPPRL           | Other PPIN hosts include Japanese plum, apple, kiwifruit, grape, almond, plum, apricot, cherry, daffodil, blueberry and olive.   |
| <i>Phytophthora parasitica</i><br>(Phytophthora root rot)          | <i>Petunia hybrida</i><br>(petunia)                | Mid Canterbury | NPPRL           | No other hosts recorded in PPIN.   |
| <i>Armillaria novae-zealandiae</i><br>(armillaria)                 | <i>Musa</i> sp. (banana)                           | Auckland       | NPPRL           | Other PPIN hosts include kiwifruit, peach and <i>Citrus</i> sp.  |
| <i>Heliethrips haemorrhoidalis</i><br>(greenhouse thrips)          | <i>Actinidia arguta</i><br>(kiwifruit)             | Auckland       | NPPRL           | This organism has a wide host range.   |
| <i>Pseudocercospora coprosmae</i><br>(no common name)              | <i>Coprosma propinqua x robusta</i><br>(coprosma)  | Auckland       | NPPRL           | Other PPIN hosts include <i>Coprosma robusta</i> .   |
|  | <i>Coprosma macrocarpa</i><br>(karamu)             |                |                 |  |
|  | <i>Coprosma repens</i><br>(taupata)                |                |                 |  |
|  | <i>Coprosma arborea</i><br>(mingimingi)            |                |                 |  |
| <i>Pseudocercospora dianellae</i><br>(no common name)              | <i>Dianella caerulea</i><br>(blue flax-lily)       | Auckland       | NPPRL           | Other PPIN hosts include <i>Dianella nigra</i> .   |
| <i>Gibberella avenacea</i><br>(foot rot, root rot)                 | <i>Musa</i> sp. (banana)                           | Northland      | NPPRL           | This organism has a wide host range.   |
| <i>Pseudomonas marginalis</i><br>(bacterial rot, pink eye)         | <i>Ranunculus</i> sp. (no common name)             | Mid Canterbury | NPPRL           | Other PPIN hosts include tomato, kiwifruit, potato, onion, carrot, lettuce, leek, ginseng and parsnip.   |

**PLANTS BIOSECURITY RECORDS continued**

**Extension to distribution reports**

| Organism   | Host   | Location    | Submitted by | Comment   |
|--|--|-------------|--------------|---|
| <i>Atrichonotus taeniatus</i><br>(Little fringed weevil) | <i>Crocus sativus</i><br>(saffron)               | Marlborough | NPPRL        | Other PPIN distributions include Mid Canterbury.  |
| <i>Pseudocercospora coprosmae</i>                        | <i>Coprosma robusta</i><br>(karamu)              | Coromandel  | NPPRL        | Other PPIN distributions include Auckland.  |
| <i>Rosellinia necatrix</i><br>(white root rot)           | <i>Pittosporum crassifolium</i><br>(karo)        | Taranaki    | NPPRL        | Other PPIN distributions include Hawke's Bay, Waikato, Auckland, Bay of Plenty, Gisborne, Wellington, Central Otago and North Canterbury. |
| <i>Nectria radicola</i><br>(cylindrocarpon root rot)     | <i>Panax quinquefolium</i><br>(American ginseng) | Dunedin     | NPPRL        | This organism has a wide geographic distribution.   |

**i** Plants records: George Gill, Technical Adviser, Pest Management, MAF Plants Biosecurity, phone 04 470 2742, fax 04 474 4257, george.gill@maf.govt.nz

**ANIMALS BIOSECURITY RECORDS 21/06/2003 – 08/08/2003**

**Validated new to New Zealand reports**

| Organism  | Host           | Location      | Submitted by | Comment   |
|---|----------------|---------------|--------------|---|
| <i>Solenopsis geminata</i><br>(tropical fire ant) | Container yard | Bay of Plenty | NPPRL        | A biting, stinging ant native to United States and South America, now cosmopolitan and recently established in Australia. A single nest was detected, destroyed and excavated. An intensive local delimiting survey was initiated with no further sign of these ants. Monitoring is ongoing over the winter and wider surveillance in the immediate area is planned for the spring. |

**i** Animals records: Amelia Pascoe, Programme Co-ordinator, Exotic Animal Response, Animal Biosecurity, phone 04 470 2785, fax 04 474 4133, pascoe@maf.govt.nz

**FOREST BIOSECURITY RECORDS 21/06/2003 – 08/08/2003**

**Validated new to New Zealand reports**

| Organism  | Host                                      | Location | Submitted by    | Comment   |
|---|---|----------|-----------------|---|
| <i>Trimmatostroma betulinum</i><br>(no common name) | <i>Betula pendula</i><br>(silver birch)   | Taupo    | Forest Research | Found on a dead branch. Considered as saprophyte or endophyte.  |
| <i>Rhizosphaera pini</i><br>(no common name)        | <i>Picea pungens</i><br>(Colorado spruce) | Taranaki | Forest Research | Found colonising needles that have been injured by the aphids. Likely to have been in NZ for many years unrecognised. |

**New host reports**

| Organism   | Host  | Location       | Submitted by    | Comment  |
|--|---|----------------|-----------------|--|
| <i>Diaporthe helianthi</i><br>(no common name)             | <i>Quercus robur</i><br>(English oak, truffle oak)                    | Waikato        | BioLinc         | Other PPIN hosts include carrot and grape and nashi.   |
| <i>Phomopsis amygdali</i><br>(no common name)              | <i>Quercus robur</i><br>(English oak, truffle oak)                    | Waikato        | BioLinc         | <i>P. amygdali</i> was recorded on peach by Cunningham 1931 (as <i>Phoma persicae</i> ), Dingley 1969 (as <i>Fusicoccum amygdali</i> ); Pennycook 1989 (as <i>Fusicoccum amygdali</i> ). |
| <i>Phomopsis viticola</i> Taxon 1<br>(phomopsis leaf spot) | <i>Quercus ilex</i><br>(holly oak)                                    | Waikato        | BioLinc         | Other PPIN hosts of <i>Phomopsis viticola</i> include grape, pear and walnut.  |
| <i>Uraba lugens</i><br>(gum leaf skeletoniser)             | <i>Eucalyptus globulus</i> ssp. <i>maidenii</i><br>(Maiden's gum)     | Auckland       | Forest Research | Other PPIN hosts include silver dollar tree, cut tail, narrow-leaved black peppermint, sugar gum, Bosisto's box, Southern mahogany and white iron bark.                                  |
|  | <i>Eucalyptus siderophloia</i><br>(eucalypt)                          |                |                 |  |
|  | <i>Eucalyptus pilularis</i><br>(eucalypt)                             |                |                 |  |
| <i>Hyphantria cunea</i><br>(Fall Webworm)                  | <i>Liquidambar styraciflua</i><br>(Sweet gum)                         | Auckland       | NPPRL           | No other hosts recorded in PPIN.   |
| <i>Cardiaspina fiscella</i><br>(Brown lace lerp)           | <i>Eucalyptus major</i><br>(eucalyptus)                               | Auckland       | Forest Research | Other PPIN hosts include Sydney blue gum and Deane's gum.  |
|  | <i>Eucalyptus leucoxydon</i><br>(white iron bark)                     |                |                 |  |
| <i>Ernobius mollis</i><br>(pine knot borer)                | <i>Sequoia sempervirens</i><br>(Californian redwood, coastal redwood) | Bay of Plenty  | Forest Research | No other hosts recorded in PPIN.   |
| <i>Eulepidosaphes pyriformis</i><br>(no common name)       | <i>Pseudowintera colorata</i><br>(Pepper tree)                        | Taupo          | Forest Research | No other hosts recorded in PPIN.   |
| <i>Fusarium culmorum</i><br>(fusarium rot)                 | <i>Alnus cordata</i><br>(Italian alder)                               | Mid Canterbury | NPPRL           | This organism has a very wide host range.  |
| <i>Pythium</i> sp.<br>(pythium rot)                        | <i>Alnus cordata</i><br>(Italian alder)                               | Mid Canterbury | NPPRL           | This genus has a very wide host range.   |

continued on back page

## FOREST BIOSECURITY RECORDS continued

### New host reports

| Organism   | Host   | Location      | Submitted by    | Comment   |
|--|--|---------------|-----------------|---|
| <i>Carulaspis juniperi</i><br>(scale)                                      | <i>Cupressus sempervirens</i><br>(Mediterranean cypress,<br>Swane's golden<br>pencil pine) | Bay of Plenty | Forest Research | No other hosts recorded in PPIN.  |
| <i>Parlatoria fulleri</i><br>(scale)                                       | <i>Melaleuca hypericifolia</i><br>(Bottlebrush)  | Hawke's Bay   | Forest Research | No other hosts recorded in PPIN.  |
| <i>Botryosphaeria obtusa</i><br>(black rot, botryosphaeria<br>stem canker) | <i>Quercus ilex</i><br>(holly oak, holm oak)   | Auckland      | Forest Research | Other PPIN hosts include grape, apple, orange, feijoa, Japanese plum, apricot, nectarine, peach, pear, kiwifruit and lemon. |
| <i>Lindingaspis rossi</i><br>(circular black scale,<br>Ross's black scale) | <i>Leptospermum laevigatum</i><br>(coast tea tree)   | Nelson        | Forest Research | Other PPIN hosts include lemon, grape, pear, feijoa, orange and New Zealand grapefruit.                                     |
| <i>Pseudaulacaspis eugeniae</i><br>(white palm scale)                      | <i>Eucalyptus microcorys</i><br>(tallowood)  | Auckland      | Forest Research | No other hosts recorded in PPIN.  |
|  | <i>Syncarpia glomulifera</i><br>(lustre wood,<br>turpentine tree)                          |               |                 |   |
| <i>Cephaeleuros virescens</i><br>(algal leaf spot, red rust)               | <i>Angophora floribunda</i><br>(apple gum)   | Auckland      | Forest Research | Other PPIN hosts include passionfruit, Saw banksia, Willow myrtle and Kermadec pohutukawha.                                 |

### Extension to distribution reports

| Organism  | Host   | Location    | Submitted by    | Comment                                    |
|---|--|-------------|-----------------|--|
| <i>Anisoplaea cosmia</i><br>(Norfolk Island<br>hibiscus moth) | <i>Lagunaria patersonia</i><br>(Norfolk Island hibiscus) | Hawke's Bay | Forest Research | Other PPIN distributions include Auckland. |
| <i>Parlatoria fulleri</i><br>(scale)                          | <i>Melaleuca hypericifolia</i><br>(Bottlebrush)          | Hawke's Bay | Forest Research | No other distributions recorded in PPIN.   |

 Forest records: Peter Thomson, Director MAF Forest Biosecurity, phone 04 498 9639, fax 04 498 9888, thomsonp@maf.govt.nz

## CODES OF WELFARE – Animal Welfare Act Update

The table below is a quick guide as to the status of the various codes of welfare as they are developed under the Animal Welfare Act 1999.

| Code                      | Status  |
|---------------------------|---|
| Broiler Code              | Final Code issued by the Minister of Agriculture on 26 June 2003                                    |
| Pig Code                  | Public consultation completed. Final Code to be presented to Minister of Agriculture September 2003 |
| Rodeo Code                | Public consultation completed. Final Code to be presented to Minister of Agriculture September 2003 |
| Layer Hen Code            | Public consultation completed. Final Code to be presented to Minister of Agriculture October 2003   |
| Zoo Code                  | Under development. Final Code to be presented to Minister of Agriculture early 2004                 |
| Circus Code               | Under development. Final Code to be presented to Minister of Agriculture early 2004                 |
| Commercial Slaughter Code | Public consultation completed. Final code to be presented to Minister of Agriculture early 2004     |

Exotic disease and pest emergency hotline: 0800 809 966

Animal welfare complaint hotline: 0800 327 027

[www.maf.govt.nz/biosecurity](http://www.maf.govt.nz/biosecurity)