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Self-help approach to possum control: p5

## Also in this issue

New pig disease provisionally confirmed

Risk analysis for imported sheep and goat genetics

Varroa control line moved

Gum leaf skeletoniser management

Brown rot response exercise

Post-entry quarantine for plant material

ANZCCART conference report

Welfare issues for broilers and layers

New transitional facility standard for sea containers

# BioSECURITY

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# Contents

## Features

- 3 Biosecurity stakeholders need to 'fly in formation'
- 4 Exotic pig disease provisionally confirmed  
Massey scientist honoured
- 5 Possum control areas: The Hawke's Bay approach to self-help
- 6 Risk analysis for sheep and goat semen and embryos  
Risk analysis study wins PM's prize
- 7 Varroa update: Major shift for North Island movement control line  
Silver medal for varroa book  
New Zealand Biosecurity Summit proceedings
- 8 Gum leaf skeletoniser long-term management approved  
Biosecurity People: Leone Basher
- 9 Brown rot simulation exercise highlights challenges  
Collaboration with Australian Plant Health Committee
- 10 US visit broadens plant diagnostic capacity  
Plum pox virus focus of international symposium
- 11 Public-private partnership mooted for post-entry quarantine service  
Biosecurity Organisms Register for Imported Commodities (BORIC)
- 12 Welfare issues discussed at Australian Veterinary Association Conference  
Plant and forestry imports permit offices: closure dates over holiday period
- 13 'Veil of secrecy' challenge addressed  
\$5,500 fine for illegally released seeds
- 14 Life without cages considered at symposium  
Direct measurement best way to monitor broiler welfare
- 15 Transitional facilities for sea containers

## Update

- 15 Draft import health standards for consultation  
Import health standards amended or revoked
- 16 Code of ethical conduct – approvals, notifications and revocations since the last issue of *Biosecurity*  
Import health standards issued – Plants
- 19 New RNZSPCA advisory committee  
New import health standard: Heat treated vehicles

## Directory

- 17 New organism records: 11/08/03–19/09/03
- 20 Codes of Welfare – Animal Welfare Act Update

Cover: Hawke's Bay Regional Council and landowners are working together to keep possum numbers down. Photo: Department of Conservation.

# Biosecurity stakeholders need to 'fly in formation'

Murray A Sherwin  
Director-General  
Ministry of Agriculture and Forestry

Change is on the way for New Zealand's biosecurity system. This change follows Cabinet decisions made in response to a Biosecurity Strategy prepared by the Biosecurity Council and published in August 2003.

This strategy has been several years in the making, involving significant consultation. Biosecurity is now a very high profile activity and is engaged daily in high impact and controversial activities. The nature of the biosecurity risks we face has grown as trade and international passenger flows have increased, and as our international trading relationships have expanded to include a whole new set of countries and products, each with new risks.

The strategy found that while New Zealand has a world-class biosecurity system, it is under considerable stress and needs improvement in several areas.

The strategy recommended that there should be one lead agency for biosecurity and that that agency should be MAF. This recommendation reflected a sense that the current arrangements of multiple agencies and multiple biosecurity votes, with the Biosecurity Council sitting over the top of the structure, was failing to provide the overarching leadership and drive needed by the system.

Some of the reasons for giving this lead agency responsibility to MAF include:

- MAF houses the vast bulk of our biosecurity capability. Around 800 of MAF's 1,300 staff are engaged more or less directly in biosecurity.
- MAF's biosecurity role and expertise have extended considerably in recent years as the focus has broadened from animal, plant and forest health, to encompass environmental and other biosecurity concerns.
- There are strong links between the biosecurity system and our ability to

provide food safety assurances to domestic customers and foreign governments.

The starting point for this overhaul is MAF's Statement of Intent (SOI) – our key statement of organisational strategic direction published in July this year. We have adopted strategic priorities that fit within a sustainable development framework.

To flourish, New Zealand's primary industries must meet cost/productivity efficiency and environmental, social and cultural sustainability objectives.

However, while many things will change as a result of the Government's adoption of this Biosecurity Strategy, there are also things that will not.

High on that list is the degree of protection provided for our primary industries. While there are clear messages in the strategy about the need to lift the game with respect to environmental, human health and marine biosecurity risks, that should not be achieved at the expense of primary industries. Those sectors are simply too significant to contemplate a lesser degree of biosecurity protection.

Last year's Reserve Bank and Treasury study on the economic impacts of a foot and mouth disease outbreak demonstrates starkly why we must maintain and enhance our efforts on that front. While the study focused on economic impacts, we shouldn't forget that an economic shock of the scale projected would equally be a shock to our capacity to meet environmental, social and cultural goals.

MAF 'leadership' does not mean MAF does everything. The leadership role is about a single point of accountability, a single point at which biosecurity strategy and priorities are articulated and driven. MAF becomes that central point of focus and coordination. An aim



is to improve coordination, not remove the need for it. Other agencies will continue to deliver significant biosecurity activities.

MAF will continue to need active engagement of other agencies and their specific and specialised knowledge. There will be formal delegation of some

roles and responsibilities to other chief executives, especially in the marine and health areas.

Other roles are likely to continue unchanged (e.g. the Department of Conservation's pest management roles) but with clearer knowledge and shared understandings of respective priorities and strategies.

The vote funding structure review will need to support the governance structure.

There are other points that all people with an interest in biosecurity should also understand. One is that good and timely decision-making will not always result in popular decisions. Much of the work we do is inherently contentious.

Another is that expectations are high, and resources are finite. While we expect to add some additional resource to our biosecurity effort, hard-edged prioritisation is inevitable. Again, this won't always be popular.

Capability development will not happen overnight. And while MAF is now responsible for leading the process, we are not the only player on the field.

Biosecurity has multiple stakeholders. We need to be flying in formation if we are to be successful.

MAF wants to do this job and to do it well. I look forward to working with you as we strive to meet the many expectations of this strategy.

# Exotic pig disease provisionally confirmed

Post-weaning multisystemic wasting syndrome (PMWS), a disease of young pigs with no known treatment or vaccine for prevention, has been provisionally confirmed on a Waikato piggery under investigation by MAF. Final results on tissue samples were expected by the end of October. Although it is a significant animal health problem, PMWS poses no danger to public health or food safety.

The MAF investigation was launched in early September after weaner pigs failed to respond to veterinary treatment.

Allen Bryce, MAF Biosecurity National Manager Surveillance and Response, says PMWS is a complex disease and diagnosis is difficult. While the investigation progresses, a restricted place notice has been put on the affected farm, he says.

"There are no public health or food safety issues associated with this disease, which is specific to weaner pigs aged 6 to 12 weeks," Mr Bryce adds. "While its presence is of concern to the pig industry, it will have a negligible impact on our trade because it is wide

spread throughout the world."

While the cause of PMWS is still uncertain, it is associated with porcine circovirus type 2 (PCV2), and the clinical signs can be associated with at least two other pig viruses – porcine reproductive and respiratory syndrome virus (PRRSV) – and porcine parvovirus (PPV).

PCV2 and PPV are present in New Zealand, but PRRSV is not. Diagnostic tests have definitely excluded the presence of PRRSV on the affected farm.

PMWS is characterised by a progressive loss of weight and appetite; pigs have visibly enlarged lymph nodes, and they may experience respiratory distress, diarrhoea, gastric ulcers and jaundice.

Currently, there is no vaccine to prevent PMWS and there is no treatment. It can vary in severity and virulence but generally there is low morbidity, and high mortality. Mortality rates vary between 4-10 percent, but farms with post-weaning mortality up to 60 percent have been reported.

Little is known about how PMWS spreads. While it has been suggested that

spread in some European countries may have been the movement of pigs or by semen, very little spread has been reported from affected properties in Canada.

A Technical Advisory Group (TAG) made up of representatives from MAF, pork industry and national experts has been established to consider further investigation and control options now that a provisional diagnosis has been made.

Eight farms are under investigation. Results from these investigations will be available in early November, at which time the TAG will meet to decide possible next steps.

Management practices to help mitigate the effects of PMWS include:

- limiting litter to litter contact
- reducing animal stress and susceptibility to disease by limiting exposure to micro-organisms
- practising good management, hygiene and biosecurity on the farm.



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## Massey scientist honoured

A Massey University veterinarian has been honoured for his work in the humane use of animals in scientific research, testing and teaching.

Professor Alex Davies of the Institute of Veterinary Animal and Biomedical Sciences is the first person to receive the National Animal Ethics Advisory Committee (NAEAC) Three Rs award.

The award was presented by NAEAC Chairperson Wyn Hoadley at the Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) conference held in Christchurch in August.

Ms Hoadley says the award recognises excellence in the humane use of animals in research, teaching and testing and embraces the concept of the three Rs – reduction, refinement and replacement



*Alex Davies using computer-based teaching methods in place of 'real' animals – supporting the concept of the three Rs.*

– in the practice of humane animal-based science.

"The award is just a small tribute to the important advances Professor Davies has made in this field. He has been an inspiration to his students and colleagues and is a veterinarian of international repute. We are very proud that he is a member of New Zealand's scientific community," she says.

Over the last ten years, Professor Davies has focused on the use of computer technology as an alternative to using animals in teaching.

He says he has long been motivated by a desire to explore ways to improve classical methods of teaching anatomy as well as an awareness of the ethical issues involved in using live animals and student expectations of alternatives being available. It was this awareness that led to a funding partnership in 1994 with the New Zealand Fund for Humane Research, which sponsors and supports research into viable alternative techniques to replace living animals in scientific investigations.



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# Possum control areas: The Hawke's Bay approach to self-help

The Hawke's Bay Regional Pest Management Strategy helps landowners to minimise the damaging economic and environmental effects of possums in Hawke's Bay.

This is done through self-help possum control areas. Under this programme, the regional council pays for initial possum control through a pest rate, and in following years landowners are responsible for maintaining low possum numbers at their own cost.

## Possum control areas

In possum control areas, a majority of landowners have agreed to maintain low possum densities. The regional council arranges and pays for initial possum control work, which leaves the land with a very low possum density. Occupiers are then required to maintain low possum numbers over their land in accordance with a rule in the regional pest management strategy. The regional council monitors for compliance and takes enforcement action where necessary.

Possum control area boundaries are drawn to reduce the level of possum reinvasion and often follow physical features such as rivers or streams.



*Hawke's Bay Regional Council team leader Allan Beer discusses the finer arts of bait station placement with Robert Death and dog Jane in the Wallingford self-help possum control area.*

Existing possum control areas, Department of Conservation control programmes and Animal Health Board vector control operations also help determine boundaries.

## Establishing a self-help possum control area

The regional council may recommend a possum control area be established in problem areas, or to landowners who contact the regional council for possum control advice and assistance. Once an initial level of support is achieved, all landowners in the proposed possum control area are visited and the proposal discussed with them to ensure they understand their obligations. To establish a possum control area, the council requires the occupiers of at least 75% of the land area within the proposed possum control area to sign an agreement. Once this has happened, regional council staff notify all occupiers the possum control area has been established. Where a proposed possum control area contains areas of commercial forestry or land administered by DoC, it may take longer to establish – these parties need time to plan for the initial possum control because they must do this at their cost.

## Initial possum control

Once a possum control area is set up, the council arranges initial possum control work. Contractors on performance-based contracts reduce possum numbers to below 3% residual trap. (A 3% trap catch means that for every 100 traps set for one night, only three possums are caught.)

All landowners within the possum control area are required to maintain possum numbers at or below 5% residual trap catch by a rule in the regional pest management strategy. Land occupiers either use contractors, or do the control work themselves.

## Pest control advisory service

The regional council biosecurity team provides advice and information to landowners in self-help possum control

## Key facts and figures

- 211,688 hectares involving 683 landowners have received initial possum control as part of the Hawke's Bay self-help possum control area programme
- Over 72,000 hectares of initial possum control completed in 2002-2003
- Over 50% of landowners use a professional contractor to carry out maintenance
- Average 3.4% residual trap catch across self-help possum control areas under landowner maintenance.

areas on baits and traps, possum control techniques, where and when to control possums, and cyanide licence training. Where necessary, biosecurity staff arrange practical field days and on-farm demonstrations, involving regional council staff and experienced animal pest control contractors. Staff also recommend possum control contractors who can provide professional and cost effective maintenance services.

## Subsidy scheme

Hawke's Bay Regional Council subsidises products such as cyanide and bait stations. These are available from selected stock and station agents branches throughout Hawke's Bay.

## Monitoring and enforcement

The regional council monitors possum control areas to ensure control work is maintained. This is done randomly, or in response to complaints about large numbers of possums. If monitoring shows the possum population is above the required 5% residual trap catch, council will take action to reduce possum numbers and the landowner billed for the work.

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# Risk analysis for sheep and goat semen and embryos

MAF has initiated a risk analysis for ovine (*Aries ovis*) and caprine (*Capra hircus*) frozen semen and frozen, *in vivo*-derived embryos.

The sheep and goat industries play an important role in New Zealand's economy. The national sheep flock (about 40 million sheep) produces annual exports of over \$2 billion in sheep meat and \$824 million in fibre. New Zealand's 154,000 farmed goats produce exports valued at around \$7.5 million annually. (Source: Annual Review of the Sheep and Beef Industry 2002-2003.)

Part of this success is due to the absence from New Zealand of many of the serious animal diseases that affect international trade.

To increase competitiveness, New Zealand's sheep and goat farmers constantly select stock from overseas to improve the gene pool. MAF has

received requests for the importation of genetic material from the Republic of South Africa and Europe. There are currently no import health standards for germplasm from these countries. The importation of frozen semen and frozen, *in vivo*-derived embryos from a wider range of countries may offer an opportunity for increasing genetic diversity whilst safeguarding the health of livestock in New Zealand.

Transfer of *in vivo*-derived embryos has been used commercially for over 30 years. In this risk analysis the embryos considered for importation into New Zealand will be those collected and processed according to the internationally accepted guidelines of the *International Embryo Transfer Society* (IETS). In association with the animal health safeguards recommended by the OIE *International Animal Health Code, mammals, birds and bees*, the IETS guidelines aim to ensure that:

- embryo transfer does not result in transmission of pathogens; and
- embryos are correctly identified.

*In vitro* techniques will not be considered in this risk analysis as they are relatively new and little information is available regarding the risks such embryos pose for trade. As more information is published, MAF will extend this risk analysis to consider *in vitro*-derived embryos.

A project team is being formed and the standard MAF risk analysis procedure will be followed. Organisms on the IETS lists and other pathogens exotic to New Zealand will be considered. Sanitary measures will be recommended where appropriate, to achieve the objective of free and safe importation.

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## Risk analysis study wins PM's prize

MAF Biosecurity Authority's National Manager of Animal Risk Analysis, Howard Pharo, has been awarded the prestigious Prime Minister's Prize in Public Policy Studies for 2003 for his work towards a Master of Public Policy degree.

Howard's research paper for the degree was on acceptable risk as it relates to biosecurity – and the 'appropriate level of protection' (ALOP) for New Zealand.

In his paper he points out that the World Trade Organization Sanitary and Phytosanitary Agreement (WTO SPS) provides a framework for managing biosecurity risks in imported agricultural products, under which the application of risk management measures must be justified by a scientific assessment of risks.

The lynchpin of this framework is the concept of an appropriate level of protection or acceptable level of risk, which each country is obliged to specify.

The paper examines the practical application of this framework, and finds



*Biosecurity Minister, Hon Jim Sutton (right) presents Howard Pharo with the Prime Minister's Prize in Public Policy Studies.*

that neither the scientific assessment of risks nor the risk-reduction effect of safeguards can be as objective as envisaged. Moreover, an examination of societal risk perception suggests that there are fundamental issues of democracy at stake if the assessment of risk and the judgement of acceptable levels of risk are left entirely to technical experts.

Howard's research concludes that the determination of acceptable risk is essentially a political process, and requires a participatory approach on a case by case basis, including the involvement of politicians, scientific experts and the public. "The interests of

different groups in this process are diverse," he says, "and with the increasing biosecurity focus on environmental protection that is emerging in this country, there are few incentives to adopt positions that are not relatively risk-averse.

"This project gave me an opportunity to immerse myself in a problem that has long been discussed in MAF Biosecurity – how is New Zealand going to define its appropriate level of protection? It's a concept that's clearly the foundation of the WTO SPS agreement," Howard says.

He concludes that, as in many other fields, acceptable biosecurity risk decisions are political.

"In the face of the technical complexity of the arguments around biosecurity risk, however, politicians have not yet been able to indicate the level of risk that New Zealanders should be prepared to accept in exchange for the benefits of 'free' international trade. It can be expected that this will continue, making the field of biosecurity risk analysis demanding and frequently stressful."



# Varroa update

## Major shift for North Island movement control line

Defences against the spread of the varroa bee mite into parts of the North Island have undergone a major shape change. On 24 September the movement control line stretching from Taranaki to East Cape was removed, and a new line put in place around Hawke's Bay and the Wairarapa.

The changes come after autumn 2003 surveillance revealed varroa in many regions south of the previous movement control line. Gisborne, Taranaki, Manawatu, Horowhenua and Wellington now join the upper North Island as part of the Infected Zone.

Hives and beekeeping equipment can be freely moved within this zone, but a permit is required to move beehives, bees and honey boxes over this new line into Hawke's Bay and the Wairarapa from other parts of the North Island. Permits will only be issued to hives which have undergone miticide treatment. Conditional movement controls around Hawke's Bay and the Wairarapa are expected to slow the impact of the varroa mite in these areas.

The autumn surveillance findings confirmed low level varroa infestation in Hawke's Bay. Because of the volume of risk materials moved into the Wairarapa over the past summer, it is likely that the mite has also spread into that region, says MAF's Varroa Programme Coordinator, Paul Bolger.

"MAF believes the advantages of imposing more restrictive movement controls do not outweigh the disadvantages.

"Generally the decision has support from the beekeeping industry but it does not have the full consensus of other movement control decisions. MAF believes this outcome is the most appropriate given that more restrictive movement controls will not stop the inevitable spread of varroa throughout the North Island," he says.

Restrictions preventing the movement of bees and other risk items to the South Island will remain in place, and will be extended to incorporate Great Barrier Island.

### Lower North Island West/East Movement Control Line



For movement control permit information:

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### Silver medal for varroa book



The New Zealand book, *Control of Varroa*, by Dr Mark Goodwin and Cliff Van Eaton of HortResearch, won a silver medal in the professional books category at Apimondia 2003, the biennial congress organised by a European-based beekeeping organisation.

The book was published by MAF Biosecurity in 2001, following the detection of varroa bee mite in New Zealand.

### New Zealand Biosecurity Summit proceedings

Biosecurity stakeholders gathered in Wellington last month for a Summit to examine the Biosecurity Strategy and the expectations, strategic direction, priorities and planned changes that will arise from it.

For a copy of the Summit proceedings, visit:

**👉** [www.maf.govt.nz/biosecurity-summit](http://www.maf.govt.nz/biosecurity-summit)

# Gum leaf skeletoniser long-term management approved

Cabinet has approved funding for the first two years of a long-term management programme for the gum leaf skeletoniser (*Uraba lugens*).

The gum leaf skeletoniser is an Australian insect pest, which defoliates a large number of eucalypts. It was first discovered in the Auckland region during August 2001 and, mainly due to its wide distribution, eradication was not pursued.

The basis core of the Long-Term Management (LTM) programme will be research to fill knowledge gaps on the insect, and to control the population within New Zealand. MAF will fund the first two years of the programme and facilitate the longer-term transition.

The LTM programme will include the following four research areas:

## 1. Population dynamics and impact assessment on host plants

Research into population dynamics will be carried out to establish life cycle, growth and dispersal information. Impact assessment on host plants will identify impacts in the absence of control activities and identify the most susceptible host species. The linkages between the size of the gum leaf skeletoniser population, defoliation

impacts and any subsequent effects on tree growth will also be modelled.

## 2. Biological control

This research will involve selection of parasites and pathogens of the gum leaf skeletoniser identified in Australia. A limited number of them would be tested to determine whether there are any significant impacts on desirable New Zealand fauna such as related native moths. The research programme would progress to the point that forest managers and landowners could seek approval for release of the control agents from the Environmental Risk Management Authority.

## 3. Suitable insecticides for aerial and ground application

This research will test Btk formulations in conjunction with wetting or penetrative agents to increase their effectiveness. It will also identify non-Btk formulations suitable for use in non-urban areas or in closely controlled urban conditions. It will then be up to forest managers and landowners to seek and fund any necessary label changes.

## 4. Monitoring and mass trapping

Using the synthetic pheromone developed for the gum leaf skeletoniser as a lure in a trapping programme is an effective means of monitoring the

population. The pheromone developed for gum leaf skeletoniser requires further refinement and testing to establish its effectiveness and to enable the accurate interpretation of trap catch results. Once this is achieved it could be used to monitor the population and to develop a mass trapping technique for use by forest managers and landowners. Mass trapping would provide low-cost control for those who prefer not to use insecticides or for use in sensitive areas.

## Technology transfer

To assist in the transition to long-term pest management for forest managers and landowners, the results of this research programme will be presented as leaflets, handbooks, web pages and, in the case of the predictive model, a user-friendly computer interface. Educational field-days involving key researchers will be conducted to assist in the uptake of this information. In addition, a controlled area will be maintained to help slow the spread of the Auckland gum leaf skeletoniser population.



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## Biosecurity People



### International Animal Trade Team

**Leone Basher** has recently joined Animal Biosecurity as a National Adviser for International Animal Trade. She graduated with a BVSc from Massey University in 1984. After an initial period in the meat industry, Leone worked in small animal practice.

Prior to joining MAF, Leone was completing a doctorate in science education while working for the Ministry of Education revising the compulsory national curriculum. She has had particular responsibility for the science and technology curricula, initiatives for gifted and talented learners, and environmental education.

Her work in education involved developing national change through learning communities, contract management, developing effective communication strategies, developing local and global alliances, lecturing in teacher education, and teaching a wide range of school subjects from philosophy to physics.

# Brown rot simulation exercise highlights challenges

The pipfruit fungal disease, brown rot (*Monilinia fructigena*) was the focus of an emergency response simulation workshop based in Christchurch in mid-May. Brown rot is a high impact disease that could have a major impact on New Zealand's pipfruit industry if it ever became established in this country.

Participating in the workshop were representatives from MAF Plants Biosecurity, MAF National Plant Pest Reference Laboratory (NPPRL), MAF Quarantine Service, AgriQuality and the pipfruit industry. The industry was represented by Mike Butcher (Technical Manager for New Zealand Pipfruit), Bruce Tweedy (President of Canterbury Fruit Growers' Association), Lou Bird (Executive Secretary of the Plant Market Access Committee) and Warwick Montram (an orchardist).

The three-day workshop is one of several conducted throughout the year by MAF's contracted service provider AgriQuality to test capabilities to respond to an incursion of a high impact plant pest.

Pipfruit industry representatives



*Brown rot would have a major impact on New Zealand's pipfruit industry if it became established here.*

contributed information on the structure of the industry while MAF reviewed the technical nature of the disease along with its identifying features, eradication options and wider economic implications of the spread of brown rot. The group also heard from Joe Cavey, Branch Chief, National Identification Services and an observer from the United States Animal & Plant Health Inspection Services in Maryland. Mr Cavey told the group he was impressed with the commitment shown by New Zealand to biosecurity issues and incursion response.

A field trip to a local orchard provided an opportunity for hands-on experience of sample collection, methods of identification and an appreciation of containment procedures in the event of

an incursion. Emergency response teams simulated the various activities required to manage an outbreak of brown rot throughout the two days of the exercise. Teams including field survey, crop and vector treatment, host collection and disposal, tracing, movement control, geographical information systems, logistics, and media liaison worked together with MAF and industry to deliver a coordinated response to the exercise.

"The simulation exercise highlighted the technical and logistical challenges we face with coordinating a response to an incursion by a high impact exotic plant organism," says Dr Barney Stephenson, MAF Plants Biosecurity National Adviser for Plant Pest Surveillance and Response. "It also highlighted the need for strong industry involvement for developing plant pest response contingencies."

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## Collaboration with Australian Plant Health Committee

MAF Biosecurity Authority National Adviser Dr Barney Stephenson attended a meeting of the Australian Plant Health Committee (PHC) in Canberra late last year.

The Committee includes representatives from the Australian States, Commonwealth Science and Research Organisation (CSIRO) and the Department of Agriculture, Fisheries and Forestry – Australia. The committee assists with overall policy development for endemic and exotic pest administration across Australia.

Barney says attendance at the PHC is a valuable opportunity to participate in high level discussions on exotic pest surveillance and response systems in

Australia. It should provide opportunities to share information and collaborate, he says.

"We need to make decisions about the resources we commit to collaboration, particularly sharing diagnostic and surveillance and response capability."

Discussion included the development of the three party (Commonwealth, State and Industry) company called Plant Health Australia which was officially established in April 2000 with its own structure and CEO. Plant Health Australia has 28 member organisations, including plant industries and government organisations.

"Plant Health Australia develops and promotes policy that encourages the

agricultural sector and government to effectively respond to and manage the risks from pests, diseases and weeds affecting crops," Barney adds.

He says there is strong support by industry and government in Australia for a cost sharing agreement. There was further opportunity for exploring potential collaboration at a workshop convened by Plant Health Australia in association with the 8<sup>th</sup> International Congress on Plant Pathology in Christchurch in February 2003.

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# US visit broadens plant diagnostic capacity

Two MAF staff have recently returned from a conference in the United States where they looked at everything from citrus diseases to bioterrorism threats.

Dr Francisco Ochoa-Corona and Dr Joanne Wilson attended the Annual Meeting of the American Phytopathology Society (APS) in North Carolina, in August 2003.

Francisco presented a paper on the detection of High Plains Virus under containment in New Zealand.

“My presentations were well received and provided useful discussion on diagnostic techniques for other exotic organisms of concern to New Zealand,” says Francisco.

“I also used the opportunity to visit laboratories at the University of Florida, including the Plant Pathology Department, the Citrus and Gulf Coast Research and Education Centres.”

Francisco is working in a cooperative project on developing methods for identifying various citrus diseases with the Citrus Research laboratory.

“I was able to exchange information on diagnostics of citrus and other plant viruses and obtain reference specimens

of ants and viruses. This exchange has broadened the diagnostic capabilities for the NPPRL in New Zealand,” he says.

As well as technical papers, the APS conference included a number of sessions dedicated to biosecurity and the development of the United States National Plant Diagnostics Network.

The majority of papers presented in the biosecurity section covered strategies to defend against bioterrorism threats rather than accidental invasion by exotic organisms. Since the September 11 terrorist attacks the awareness of the potential threat of plant pathogens being used as biological weapons has increased in the United States.

Joanne says that the principles of surveillance, diagnostics and response in relation to plant pathogens as biological weapons is still much the same as for accidental introduction of exotic organisms. The most significant difference is the increased level of preparedness that the United States is developing for high priority pathogens.

Joanne also visited the United States Department of Agriculture (USDA) in Maryland to discuss active surveillance. “The USDA visit provided discussion on

specific high impact exotic plant pests such as plum pox, citrus canker and karnal bunt. It also gave insight into the US Cooperative Agricultural Pest Survey (CAPS) which reports finds and movements of exotic pests.”

CAPS is a cooperative project between the USDA, Animal and Plant Health Inspection Service, Plant Protection and Quarantine and university extension services. The programme provides a cooperative agreement mechanism to fund domestic surveys of recently established exotic pests, pests not known to occur in the United States, and pests of export significance.

“The conference and visit to the USDA served as a useful exchange of science and ideas used in New Zealand and the United States,” Joanne concludes.



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## Plum pox virus focus of international symposium

Tamsin Smales from MAF Plants Biosecurity recently attended the 19<sup>th</sup> International Symposium on virus and virus-like diseases of temperate fruit crops and the 10<sup>th</sup> International Symposium on small fruit virus diseases, held in Valencia, Spain.

One of the main focuses of the conference was plum pox virus (PPV). PPV is one of the most destructive viral diseases of *Prunus* spp. It has major economic impacts on stonefruit production in many countries due to vast amounts of crops being unsaleable in many infested areas.

“PPV is present in Valencia – apricot cultivars are particularly susceptible to PPV,” says Tamsin. “The eradication of PPV did not work in Valencia.

“PPV is particularly relevant to New Zealand because New Zealand does not have this virus and it is important for us to stay up to date on the latest diagnostic techniques for quarantine testing,” Tamsin adds. (A suspected case was investigated in New Zealand earlier this year (*Biosecurity* 43:17) but the disease was ruled out.)

Dr Delano James, a speaker from the Canadian Food Inspection Agency in British Columbia presented information about research into a new strain of PPV, which does not belong to any of the currently recognised strains.

Other conference presenters spoke about new phytoplasma diseases occurring in currants and stonefruit. Strawberry viruses, blackcurrant viruses, pear

viruses and apple viruses were also discussed, and there were presentations on viroid diseases infecting stonefruit and pipfruit.

During the conference delegates visited the Instituto Valenciano de Investigaciones Agrarias (IVIA), which conducts research on diseases of citrus, stonefruit and rice. The IVIA is an autonomous institution of the regional government, assigned to the agriculture, fisheries and food authority. Its aims are to stimulate scientific research and technological development in the agro-food sector of Valencia.



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# Public-private partnership mooted for post-entry quarantine service

A public-private partnership model is emerging as the best option for ensuring a viable post-entry quarantine service is available for importers of new plant material.

New genetic material is crucial to the development and marketing of improved agricultural and horticultural varieties. However, new plant genetic material is only permitted to enter New Zealand via quarantine, in order to prevent any pests or pathogens that may be harboured in the new material from being released into New Zealand. The majority of high-value crops must be imported through a level 3 post-entry quarantine (L3 PEQ) system, a significant element of which involves diagnostic testing for the presence of pests or pathogens.

In 1998, responsibility for the entire post-entry quarantine system (plants and animals) was passed from MAF to the private sector. While this policy has been generally successful for animal quarantine, it remains largely unsuccessful for plants because providing quarantine for plants is much harder to profit from.

For a period between 2001 and 2003, New Zealand was completely without a functioning L3 PEQ system for plants,



*Lack of L3 PEQ facilities limited options for importers.*

which has severely limited the ability to import new plant material. There continue to be limited options for most importers.

An ongoing MAF Policy study into the L3 PEQ situation in New Zealand began with extensive consultations with past and hopeful providers of L3 PEQ services, as well as with people in the agricultural and horticultural sectors hoping to use these services. Based on this information, the idea of a public-private partnership to reinstate and maintain a new L3 PEQ service has evolved.

At a meeting on 27 August 2003, MAF Policy was joined by representatives of other organisations with an interest in the provision of L3 PEQ services, including HortResearch, Crop & Food Research, Riversun Nursery, Landcare Research, Auckland University, MAF Biosecurity Authority and the National Plant Pest Reference Laboratory. This was a significant

meeting, where all parties agreed to a common goal and vision for a New Zealand L3 PEQ service, including the concept of a public-private partnership.

Following on from this meeting, MAF Policy is commissioning a consultancy study into the most appropriate and effective way that a public-private partnership could work for L3 PEQ.

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## Biosecurity Organisms Register for Imported Commodities (BORIC)

MAF Plants and Forest Biosecurity have placed a searchable list of regulated and non-regulated organisms on the Internet. These are the organisms that may infest, or be associated with, plants or plant products (including wood) that are imported into New Zealand. Some organisms that cause adverse affects to animals or humans are listed because they may be associated with imported plants and plant products.

The primary purpose of this register is to provide information for MAF border staff on the regulated or non-regulated status of intercepted organisms. Organisms are continually being added to the register and it is updated frequently, usually at 1-2 week intervals.

Note that a search will yield no more than 2000 entries as the primary purpose of the list is not to obtain lists of organisms

but to check whether an organism is regulated or non-regulated.

The list is located on the MAF website at:

**globe** [www.maf.govt.nz/boric](http://www.maf.govt.nz/boric)

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# Welfare issues discussed at Australian Veterinary Association Conference

The 2003 Australian Veterinary Association (AVA) Annual Conference was held at the Cairns Conference Centre in May.

The first of two plenary speakers was Hon John Kerin, former Federal Minister for Primary Industries and Energy and an honorary member of the AVA. The second plenary speaker was Philip Adams, Australia's most widely published columnist, popular radio broadcaster and a best-selling author.

The scientific programme contained a significant amount of animal welfare content, with papers presented in a number of special interest group sessions.

The following invited papers were presented by New Zealand speakers:

- Conflicts of interest for veterinarians in the management of practices with the potential to compromise animal welfare (Virginia Williams, New Zealand Veterinary Association)
- Pain considerations in foetal sheep experiments – an AEC perspective (Virginia Williams, New Zealand Veterinary Association)
- Responsiveness, behavioural arousal and awareness in foetal and newborn lambs: experimental, practical and therapeutic implications (David

Mellor, Massey University)

- Animal welfare implications for neonatal mortality and morbidity in farm animals (David Mellor, Massey University)
- Animal Welfare and the OIE (David Bayvel, Ministry of Agriculture and Forestry, New Zealand).

The following papers were also of particular interest:

- Animal welfare and live animal export (David Adams, Agriculture, Fisheries and Forestry – Australia)
- Welfare of horses in the Olympic disciplines: Dressage, eventing and showjumping (Simon Bain, Australian National University)
- Welfare of race horses (Lionel Richards)
- Endurance riding and horse welfare – Are they mutually exclusive? (Brian Sheahan, Samford Valley Veterinary Hospital)
- Veterinarians and the development of animal welfare policy within the AVA and elsewhere (Steve Atkinson, University of New England, NSW)
- The science for the welfare requirements of the laying hen (John Barnett and Paul Hemsworth, Animal Welfare Centre)
- The role of the industry veterinarian

and input to the welfare of the laying hen (Peter Scott, Scolexia Pty Ltd)

- The science for the welfare requirements of the meat chicken (John Barnett, Animal Welfare Centre)
- The role of the industry veterinarian and input to the welfare requirements of the broiler chicken (Peter Scott)
- Issues and challenges involving a wide range of species faced by James Cook University AEC (Phil Summers, James Cook University)
- Animal models for lysosomal storage diseases: overview of clinical signs and development of new therapies (Dyane Auclair, Women's and Children's Hospital, Adelaide)
- Ethically engaging schools – using dogs to teach new tricks (Alison Crook, Department of Primary Industries).

Further details on this very successful conference are available from:

 avacos@ava.com.au or

 www.ava.com.au

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## Plant and forestry imports permit offices: closure dates over holiday period

The MAF Biosecurity Plant and Forestry Imports Permit Offices will be closed from Tuesday 16 December 2003 until Sunday 11 January 2004. They will reopen on Monday 12 January 2004.

Therefore, importers wanting applications processed before the Christmas break will need to ensure they are lodged by close of business Monday 15 December 2003. Importers who wish to renew a permit that expires during this closure period must also submit the application for renewal by the 15 December 2003 deadline. Assuming there are no difficulties with the application, permit applications received by 15 December will be processed before 25 December 2003.

All import permit application information should be returned to MAF Biosecurity (see contact details) for processing before

the import permit is issued. Processing time for import permits is 10 working days.

Plant import enquiries:

 Plant Import Office,  
MAF Biosecurity Authority,  
PO Box 2526, Wellington,  
phone: 04 498 9631, fax 04 474 4257,  
dicksonm@maf.govt.nz

Forestry import enquiries:

 Dr Michael Ormsby,  
National Adviser – Import Health Standards,  
Forest Biosecurity, MAF Biosecurity Authority,  
PO Box 2526, Wellington,  
phone 04 498 9630, fax 04 470 2741,  
ormsby@maf.govt.nz

# 'Veil of secrecy' challenge addressed

by Virginia Williams  
Animal Welfare Coordinator,  
New Zealand Veterinary Association

The research community responded to Green MP Sue Kedgley's assertions of "a veil of secrecy" in the area of animal use in research, testing and teaching by taking a critical look at itself during the ANZCCART (Australian and New Zealand Council for the Care of Animals in Research and Teaching) Conference held in Christchurch in August.

The theme, *Lifting the veil: finding common ground*, invited speakers to take a step back and explore just how much attention is being paid to the 'Three Rs' (reduction, refinement and replacement) that form the basis of the ethical use of animals in research, testing and teaching. The benefits of research involving animals were demonstrated in the Cam Reid Oration, given this year by Professor Jane Harding from the Liggins Institute. Her presentation, *What have we learned from animal experiments about mothers and babies?*, focused on developments in perinatal management and medicine (both human and veterinary) that have arisen out of the use of sheep in foetal research.

Other presentations described animal models for human conditions such as heart and neurodegenerative diseases, but alongside these there was also

acknowledgement that in some areas, animal models have not always been valid, or have been less than ideally applicable. Professor Bruce Baguley of the Auckland Cancer Society Research Centre, for example, noted concerns about the relevance of the mouse xenograft model in cancer research, although the lack of a clear alternative means that mice continue to be used in the search for new anti-cancer drugs.

While the search for alternatives to animal use is progressing in some areas – testing for marine biotoxins is one example where use of live animals may no longer be necessary within the next five years – a lack of adequate funding for alternatives research was noted.

However, money apart, there are still obstacles to the establishment of effective *in vitro* models. For example, there is no valid alternative to animal studies for exploring the complex biological pathways required for the generation of protective immunity following natural infection or vaccination. The use of human subjects, too, is often limited by the problem of variability within any group, reducing the ability to adequately control studies.

Alongside explanations of the New Zealand animal ethics system and the collection of data concerning animal use, international perspectives on animal experimentation, policing and statistics were provided by Dr Norman

Burton of the UK Home office, Dr Deborah Kelly of the South Australia Department of Environment and Heritage, and Dr Lynn Anderson of Merck & Co in the United States. Many similarities in ethical approach were noted, despite the US legislation not covering rats, mice and birds.

There was general acknowledgement that researchers could do more to inform and educate the public about the use of animals in research, testing and teaching. There is a general lack of awareness that most cases of severe suffering occur not as part of research but as part of legally required testing, for example for marine biotoxins, or for ongoing safety and efficacy tests for vaccines. The simple separation of the numbers of animals used into the three different categories (research, testing and teaching) was said to demonstrate that in research as opposed to testing, refinement of techniques and use of analgesics reduces both numbers used and degrees of suffering.

Finally, in addressing Ms Kedgley's 'secrecy' claims, the possibility of having a more open and transparent regime while ensuring the safety of researchers and their families was explored, with the suggestion that lay summaries of all research, testing and teaching projects involving animals should be published.



[www.adelaide.edu.au/ANZCCART/](http://www.adelaide.edu.au/ANZCCART/)

## \$5,500 fine for illegally released seeds

A Canterbury seed importing company and the operator of the company's transitional facility were sentenced in September and ordered to pay a total of \$5,500 for illegally releasing contaminated seeds from the facility in November 2000.

MAF prosecuted Canterbury Seed Company Ltd and Mr Adrian Bliss (transitional facility operator) after an incident where the company distributed the seeds without gaining biosecurity clearance. Mr Bliss was sentenced to pay a total of \$1,100. The company imported the consignment of 500 kg of *Phacelia tanacetifolia* (balo) from Hungary in 2000 for multiplication. Balo plants attract hover flies for aphid control and the balo seeds (an oil seed crop) are also used for cosmetics production. The two paddocks of balo that were

subsequently planted on behalf of the company in Ashburton and Darfield, Canterbury, had to be destroyed by MAF after the crops were found to contain two species of weed not previously found in New Zealand.

"These weeds are considered to be serious weeds in arable crops in Europe and Africa," says Jockey Jensen, MAF Biosecurity Authority Special Investigation Group. "Should weeds like this become established in New Zealand they could pose a substantial threat to the agricultural sector. Canterbury Seed Company Ltd has been importing seeds for many years and is well aware of MAF's requirements for importing seeds."

MAF also suspended the operator's approval to run the transitional facility and subsequently removed the company's ability to operate a facility of this type.

# Life without cages considered at symposium

You can please some of the hens all of the time, and all of the hens some of the time, but can you please all of the hens all of the time? That rhetorical question was put by a speaker at the recent World Poultry Science Association (WPSA) symposium.

Kate Littin of Massey University represented MAF and the National Animal Welfare Advisory Committee at the 27<sup>th</sup> Poultry Science Symposium on Welfare of the Laying Hen, held by the UK Branch of the WPSA in July. The symposium was chiefly directed at identifying whether 'furnished' cages should be banned along with conventional cages when the UK ban is implemented in 2012. The symposium also reviewed current information on alternative systems, and identified information gaps that need research.

Research has shown that furnished cages offer some welfare advantages. At least one major egg producer is supporting their use and experiences high productivity from these cages. There were concerns, however, from the egg industry about the financial costs of implementation, and also from the Eurogroup on Animal Welfare, who will be lobbying for all cages to be banned. Some symposium delegates voiced



Conventional cages are due to be banned in the UK by 2012.

concern about the importation of eggs from other countries with lower welfare standards, which highlighted the need for information on hen welfare to be disseminated internationally.

Aspects of hen behaviour such as aggression, feather pecking and cannibalism were discussed. Hens can be group-selected for reduced aggression (and therefore reduced feather pecking and cannibalism) without affecting their productivity, and several commercial strains are now selected for reduced aggression.

However, hens selected against these behaviours usually have to be kept in cages. They need to be selected for reduced aggression and feather pecking in large groups if they are to be kept in

alternative systems. The identification of the genes responsible for these behaviours might allow faster and more accurate selection against them. The importance of consumer education about egg production was also considered. Do consumers,

retailers, or legislative requirements on producers drive a conversion to alternative systems? It was noted that consumers' choices in whole eggs off-the-shelf can only be a limited driver for change, as most eggs are sold as egg products such as liquids or powders.

The UK's Department for Environment, Food and Rural Affairs (DEFRA) is making contestable funds available for a comparison of hen welfare in different systems. This would require a review of current information followed by research to fill in the gaps. Projects in this area are already underway in New Zealand and Australia.

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 [www.wpsa-uk.com](http://www.wpsa-uk.com)

## Direct measurement best way to monitor broiler welfare

Broiler welfare is becoming a more important issue, particularly for consumers, lobbyists and researchers. Dr Lindsay Matthews attended the international conference *Measuring and Auditing Broiler Welfare: a practical guide* at Bristol University, in May 2003, along with 100 delegates from research institutes, policy and welfare organisations, producers, processors, breeders, retail and pharmaceutical industries.

Lameness was foremost among a number of important welfare issues discussed at the conference. It is perceived to be the major welfare problem facing the industry, and there remains a need to quantify its extent,

and to determine the effect of abnormal gait on welfare. Several countries (New Zealand, UK, Sweden, Denmark and the United States) are currently measuring the incidence and severity of gait abnormalities in broiler flocks. Researchers in the UK and Denmark are investigating methods of measuring lameness. In addition, a major UK retailer is auditing lameness and transport, and auditing for lameness has also begun in the United States.

Scoring systems have also been developed for skin conditions such as pododermatitis (lesions on the foot pads), hock burn and breast blisters. The incidence of contact dermatitis is a good indicator of litter quality (and the

factors that influence litter quality), and is a very important measure of welfare. Contact dermatitis is easily preventable, so where this is a problem, rapid improvements in welfare can be made.

There was a prevailing view among delegates at the conference that indirect measures of welfare (e.g. measuring resources or inputs) is no longer an acceptable way to measure and audit welfare. Direct measures on the animals (such as the gait and dermatitis scoring systems) are seen as the best way forward, and regular auditing will become a feature of systems to assure broiler welfare.

 Dr Lindsay Matthews,  
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# Transitional facilities for sea containers

The standard for transitional facilities for sea containers has now been signed off.

One of the main features of the new standard is that assistance from industry has been sought to assist MAF by checking low-risk containers for contamination and by providing suitable staff for MAF training and accreditation.

MAF will continue to inspect high-risk containers and cargo. The transitional facility standard outlines the requirements for the facilities, the operator and the accredited person who will be checking the sea containers.

To ensure that the checking done by industry personnel is effective, basic training has been developed and implemented. Staff from port companies and the larger container importers are the first to undergo the

training. The *Guide to the import health standard for sea containers* has been printed. It is being used as the basis for the training, and also as an informative layman's guide to the intent and workings of the standard.


In addition, a brochure for overseas suppliers is available both in hard copy from MAF Quarantine Service Offices, and on the MAF website.

The other important feature of the sea container standard is the use of electronic risk profiling to identify higher biosecurity risk containers.


Terms of reference are now being developed for the ESCRIP (Electronic Sea Container Risk Profiling) system. MAF is working very closely with the New Zealand Customs Service and industry representatives to ensure that the solution developed is industry friendly, does not duplicate current

functionality, and results in consistent risk profiles being set for containers.

If you are involved in the container trade in any way, and haven't already done so, please sign up for further notifications by email by selecting 'Border Management' at the link below:

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

You can also apply to have your facility, operator and accredited person approved online by going to:

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

All transitional facilities must be approved by 31 December 2003.

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## Update

### Draft import health standards for consultation

#### Biological products

A draft standard for biological products from all countries has been developed and is now available for consultation.

This is a new standard that addresses the importation requirements for both general and restricted biological products.



Submissions should be received in writing by Friday, 28 November 2003.

Addressed to:



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International Animal Trade,  
MAF Biosecurity Authority,  
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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)

### Import health standards amended or revoked

#### Fish food, fish bait, *Artemia salina* and *Artemia franciscana* from all countries

This IHS has been amended to allow for importation of fish food products that contain poultry meal and oil.

Specific heat treatment requirements for raw ingredients have been introduced based on the Chicken Meat Risk Analysis (poultry feather meal, poultry blood meal, poultry oil meal), and the Bait Fish Review 1995-96 (fish meal). These changes were consulted in *Biosecurity* 43:19.

The new standard is dated 24 July 2003 and replaces the standard dated 20 November 2002.

#### Importation of dogs and cats into New Zealand from Vanuatu

This is a new import health standard dated 22 September 2003.

Vanuatu was previously included in the import health standard DOMANIIC.ISL.

## Importation of chicken hatching eggs into New Zealand from Canada and the United States

The proposal to add the United States to the standard for hatching eggs from Canada was consulted in *Biosecurity* 44:16. Clauses 7 and 8 relating to Newcastle disease testing and the use of live vaccines have been updated in line with other current hatching egg standards.

The new standard is dated 1 October 2003 and replaces the Canada standard dated 5 September 2002.

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## 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:** Nil

**Transfers 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:** Nil

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

- Abacus Biotech Ltd (to use AgResearch Ltd's code and Invermay AEC)
- Canesis Network Ltd (to use Lincoln University's code)
- Central Southland Veterinary Services Ltd (to use AgResearch Ltd's code and Invermay AEC and to use Animal Health Services Centre's code and AEC)
- Cook, Trevor George (to use Animal Health Services Centre's code)
- Stockguard Laboratories (NZ) Ltd (to use Animal Health Services Centre's code)
- Xcluder Pest Proof Fencing Company Ltd (to use AgResearch Ltd's code and Ruakura AEC)

**Codes of ethical conduct revoked or expired or arrangements terminated**

- Baker, Allan J
- Wool Research Organisation of New Zealand (Inc)

**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

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## Import health standards issued – Plants

### Entry conditions for nursery stock

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


The Nursery Stock Import Health Standard 155-02-06 has recently been amended for the schedule of special conditions for Citrus, Fortunella, Paeonia (herbaceous species), Poncirus and Vitis. The schedule for Paeonia (herbaceous species) was amended on 22 September 2003, with the others as previously specified amended on 19 September 2003. The amendments are effective from the date of approval.

The amended standard is available on the MAF website at:

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

### Entry conditions for *Cicer* (chickpea) seed


The schedule for entry conditions for *Cicer* seed was amended on 22 September 2003. The purpose of this amendment is to include the option of importing from a pest-free place of production as defined by the International Standards for Phytosanitary Measures (ISPM) Food & Agriculture Organisation, publication No. 10 *Requirements for the establishment of pest free place of production and pest free production sites*. 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)

### Entry conditions for *Beta* (sugar beet), *Lens* (lentil), *Malus* (apple), *Medicago* (lucerne), *Prunus* (plum), *Pyrus* (pear) and *Vaccinium* (blueberry)

MAF Plants Biosecurity recently identified a number of seed-borne pests that would have a major impact on the economy and/or on the environment were they to be introduced into New Zealand. Consequently, MAF Plants Biosecurity amended the schedule of entry conditions for the following genera: *Beta* (sugar beet), *Lens* (lentil), *Malus* (apple), *Medicago* (lucerne), *Prunus* (plum), *Pyrus* (pear) and *Vaccinium* (blueberry) on 31 October 2003. The purpose of these amendments is to ensure that there are appropriate phytosanitary measures in place to prevent the entry of these high impact pests into New Zealand. These changes consist of additional declarations on the phytosanitary certificate, importation of seed from pest-free areas, or a requirement for post-entry quarantine.

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

*Updates continued on page 19*

# Directory New organism records: 11/08/03 – 19/09/03

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 11/08/03 – 19/09/03, and held in the Plant Pest Information Network (PPIN) database. Wherever possible, common names have been included.

## PLANTS BIOSECURITY RECORDS 11/08/2003 – 19/09/2003

### Validated new to New Zealand reports

Organism	Host	Location	Submitted by	Comment
<i>Graphium penicillioides</i> (no common name)	<i>Annona cherimola</i> (cherimoya, custard apple)	Auckland	National Plant Pest Reference Library (NPPRL)	This saprophytic fungus has a wide geographical distribution including the Americas, Africa and the Solomon Islands. DoC has been informed of this detection.
<i>Dendrobaena veneta</i> (earthworm)	Inanimate Host (in soil)	Taranaki	Crop & Food Research	This composting worm species has been widely distributed via compost. DoC has been informed of this detection.
<i>Perionyx excavatus</i> (earthworm)	Inanimate Host (in soil)	Auckland	Crop & Food Research	This worm is also a composting species. It has been sold and distributed throughout the country. Earthworm fauna was last surveyed comprehensively in New Zealand in 1959. DoC has been informed of this detection.
<i>Nepovirus Cycas necrotic stunt virus</i> (Cycas necrotic stunt virus)	<i>Paeonia lactiflora</i> (white peony)	Central Otago	NPPRL	Originally detected in post-entry quarantine, this virus is widely distributed in New Zealand peonies.
<i>Fusicladium convolvularum</i> (no common name)	<i>Convolvulus arvensis</i> (bindweed)	Auckland	NPPRL	This obscure fungus is a secondary pathogen and is known overseas from <i>Convolvulus</i> and <i>Calystegia</i> .

### New host reports

Organism	Host	Location	Submitted by	Comment
<i>Botryosphaeria dothidea</i> (botryosphaeria stem blight)	<i>Annona cherimola</i> (cherimoya, custard apple)	Northland	NPPRL	This fungus has a wide range of hosts recorded in PPIN.
<i>Botryotinia fuckeliana</i> (botrytis blight, stem blight)	<i>Chamaedorea elegans</i> (parlour palm)	Northland	NPPRL	This species has a very wide host range and geographic distribution.
	<i>Yucca</i> sp. (yucca)	Northland	NPPRL	
	<i>Dracaena</i> sp. (dracaena)	Northland	NPPRL	
	<i>Psidium guajava</i> (tropical guava)	Northland	NPPRL	
<i>Botryosphaeria stevensii</i> (black rot, botryosphaeria canker, diplodia rot)	<i>Buxus</i> sp. (box)	Waikato	NPPRL	This fungus has a wide range of hosts recorded in PPIN.
<i>Cephaleuros</i> sp. (algal leaf spot)	<i>Phoenix canariensis</i> (Phoenix palm)	Northland	NPPRL	Other PPIN hosts include <i>Banksia</i> , feijoa, red honeysuckle, Kermadec pohutukawa, and avocado.
	<i>Ravenea rivularis</i> (majesty palm)	Northland	NPPRL	
<i>Colletotrichum acutatum</i> (anthracnose, bitter rot)	<i>Chamaedorea elegans</i> (parlour palm)	Northland	NPPRL	This fungus has a very wide host range.
<i>Colletotrichum capsici</i> (anthracnose)	<i>Yucca</i> sp. (yucca)	Northland	NPPRL	Other PPIN hosts include day lily & grape.
<i>Deightonella torulosa</i> (black tip of fruit, deightonella speckle)	<i>Musa</i> sp. (banana)	Northland	NPPRL	Other PPIN hosts include Australian ladyfinger.
<i>Epicoccum purpurascens</i> (sooty mould)	<i>Daphne odora</i> (daphne, winter daphne)	Mid Canterbury	NPPRL	This fungus has a very wide host range.
	<i>Vitis vinifera</i> (grape, table grape, wine grape)	Gisborne	NPPRL	
<i>Fusarium poae</i> (bud rot)	<i>Festuca</i> sp. (Fescue)	Mid Canterbury	NPPRL	Other PPIN hosts include carnation, butter bean, nectarine, maize and sweetcorn.
<i>Fusarium sporotrichioides</i> (no common name)	<i>Musa</i> sp. (banana)	Northland	NPPRL	Other PPIN hosts include Douglas fir.
<i>Gibberella zeae</i> (ear blight, fusarium rot)	<i>Olea europaea</i> (African olive, olive)	Northland	NPPRL	This organism has a very wide host range.
<i>Glomerella cingulata</i> (anthracnose, bitter rot)	<i>Annona</i> sp. (cherimoya, custard apple)	Northland	NPPRL	This organism has a very wide host range.

continued on page 18

## PLANTS BIOSECURITY RECORDS continued

### New host reports

Organism	Host	Location	Submitted by	Comment
	<i>Psidium guajava</i> (tropical guava, yellow guava)	Northland	NPPRL	
	<i>Dioon spinulosum</i> (gum palm, cycad)	Northland	NPPRL	
	<i>Rhapis</i> sp. (palm)	Northland	NPPRL	
<i>Lindingaspis rossi</i> (circular black scale, Ross' black scale)	<i>Alseuosmia macrophylla</i> (shrubby honeysuckle)	Wellington	Forest Research	Other PPIN hosts include <i>Citrus</i> spp., coast tea tree, tree privet, nashi and grape.
<i>Nectria haematococca</i> (dry rot, stem rot)	<i>Dracaena</i> sp. (dracaena)	Northland	NPPRL	This species has a wide host range and geographic distribution.
<i>Nigrospora sacchari</i> (no common name)	<i>Psidium guajava</i> (tropical guava)	Northland	NPPRL	Other PPIN hosts include Australian ladyfinger and feijoa.
<i>Pestalotiopsis maculans</i> (pestalotiopsis leaf spot)	<i>Psidium guajava</i> (tropical guava)	Auckland	NPPRL	This fungus has a wide range of hosts recorded in PPIN.
	<i>Howea forsteriana</i> (kentia palm)	Auckland	NPPRL	
<i>Pestalotiopsis versicolor</i> (pestalotiopsis)	<i>Olea europaea</i> (olive)	Northland	NPPRL	This fungus has a wide range of hosts recorded in PPIN.
	<i>Cycas</i> sp. (cycad)	Northland	NPPRL	
	<i>Buxus</i> sp. (box)	Waikato	NPPRL	
	<i>Washingtonia</i> sp. (palm)	Northland	NPPRL	
<i>Phoma exigua</i> (phoma leaf spot, phoma rot)	<i>Annona</i> sp. (cherimoya)	Auckland	NPPRL	This species has a wide host range and geographic distribution.
<i>Phoma exigua</i> var. <i>exigua</i> (blight, gangrene, leaf spot, mouldy core, stem spot)	<i>Annona cherimola</i> (cherimoya, custard apple)	Northland	NPPRL	This species has a wide host range and geographic distribution.
	<i>Lactuca sativa</i> (lettuce)	Hawkes Bay	NPPRL	
<i>Pleospora tarda</i> (sooty mould)	<i>Daphne odora</i> (daphne, winter daphne)	Mid Canterbury	NPPRL	This species has a wide host range and geographic distribution.
	<i>Olea europaea</i> (olive)	Northland	NPPRL	
	<i>Annona cherimola</i> (cherimoya, custard apple)	Northland	NPPRL	
<i>Pseudomonas syringae</i> pv. <i>syringae</i> (bacterial blast, brown spot)	<i>Musa</i> sp. (banana)	Northland	NPPRL	This species has a wide host range and geographic distribution.
<i>Thanatephorus cucumeris</i> (black scurf, Rhizoctonia damping-off)	<i>Festuca</i> sp. (fescue)	South Canterbury	NPPRL	This species has a wide host range and geographic distribution.
<i>Xanthomonas campestris</i> (no common name)	<i>Trevesia palmata</i> (snowflake plant)	Northland	NPPRL	Other PPIN hosts include Chilean nut and olive.

### Extension to distribution reports

Organism	Host	Location	Submitted by	Comment
<i>Pseudocercospora nogalesii</i> (no common name)	<i>Chamaecytisus profliferus</i> var. <i>palmensis</i> (tree lucerne)	Nelson	NPPRL	Other PPIN distributions include Auckland.

 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 11/08/2003 – 19/09/2003

**Validated new to New Zealand reports:** No new to New Zealand records for this period.

### Extension to distribution reports

Organism	Host	Location	Submitted by	Comment
<i>Hypoponera punctatissima</i> (Roger's ant)	Boiler room	Dunedin	NPPRL	Large numbers of queens were observed swarming out of the boiler room that was being demolished in a 19th century Dunedin hotel. More ants were collected from other parts of the building. Roger's ant is present on the Kermadec Islands. However, this is the first record of this species being present on mainland New Zealand. MAF NPPRL are currently working with overseas technical experts to determine whether this find is likely to represent a recent incursion, or has been established in the area for many years.

 Animals records: Amelia Pascoe, Programme Coordinator, Exotic Animal response, Animal Biosecurity, phone 04 470 2785, fax 04 474 4133, pascoe@maf.govt.nz

## FOREST BIOSECURITY RECORDS 11/08/2003 – 19/09/2003

**Validated new to New Zealand reports:** No new to New Zealand reports in this period.

### New host reports

Organism	Host	Location	Submitted by	Comment
<i>Anacis</i> sp. (Ichneumonid wasp)	<i>Uraba lugens</i> (gum leaf skeletoniser)	Auckland	NPPRL	No other hosts recorded in PPIN.
<i>Diaspidiotus perniciosus</i> (San José scale)	<i>Araucaria cunninghamii</i> (Hoop pine)	Auckland	Forest Research	Other PPIN hosts include monkey apple, kiwifruit, New Zealand grapefruit, sweet orange, tangelo, <i>Malus</i> sp., apple, European plum, peach, nectarine, Japanese plum, <i>Prunus</i> sp., pear, nashi and grape.
<i>Eriococcus coriaceus</i> (gum tree scale)	<i>Eucalyptus conferruminata</i> (eucalypt)	Auckland	Forest Research	PPIN hosts include meyer lemon, black peppermint, silver dollar tree, sugar gum, Yate tree, alpine ash, Tasmanian blue gum, tallowwood, narrow-leaved black peppermint, shining gum, silver-leaved mountain gum, Sydney blue gum, <i>Eucalyptus conferruminata</i> & <i>Eucalyptus</i> sp.
<i>Harknessia globosa</i> (no common name)	<i>Sequoia sempervirens</i> (Californian redwood, coastal redwood)	Auckland	Forest Research	Other PPIN hosts include Halls' totara.
<i>Hemiberlesia lataniae</i> (latania scale)	<i>Alectryon excelsus</i> (titoki)	Auckland	Forest Research	Other PPIN hosts include kiwifruit, titoki, box, mandarin, sweet orange, apple, Japanese plum, rose, grape and Japanese zelkova.
<i>Hierodoris atychioides</i> (gregarious tineid)	<i>Abies veitchii</i> (Veitch fir)	Mid Canterbury	Forest Research	Other PPIN hosts include Farges fir.
<i>Parlatoria fulleri</i> (scale)	<i>Griselinia littoralis</i> (broadleaf)	Auckland	Forest Research	Other PPIN hosts include bottlebrush.
<i>Rhizosphaera pini</i> (no common name)	<i>Picea sitchensis</i> (Sitka spruce)	Buller	Forest Research	Other PPIN hosts include Colorado spruce.

### Extension to distribution reports

Organism	Host	Location	Submitted by	Comment
<i>Holocola</i> sp. cf. <i>triangulana</i> (pink blackwood leafyter, pink wattle gouger)	<i>Acacia floribunda</i> (gossamer wattle)	Waikato	Forest Research	Other PPIN distributions include Auckland, Bay of Plenty, Gisborne and Wanganui.
<i>Rhizosphaera pini</i> (no common name)	<i>Picea sitchensis</i> (Sitka spruce)	Buller	Forest Research	Other PPIN distributions include Taranaki.

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

# Update

## New RNZSPCA advisory committee

A National Inspectorate Advisory Committee has been set up by the Royal New Zealand Society for the Prevention of Cruelty to Animals. The committee will provide a forum for senior inspectors and auxiliary officers to discuss national issues affecting the inspectorate.

The committee will meet six monthly, and will advise the RNZSPCA National Council on matters concerning the Society's inspectors. While the committee will not have any decision-making powers, it can initiate action on issues, both directly through individual members' roles, or by bringing appropriate issues to the National Council.

**i** Kate Hellström-Park,  
Policy Adviser,  
Animal Welfare,  
04 474 4296,  
hellstromk@maf.govt.nz

## New import health standard: Heat treated vehicles

A new import health standard for used vehicles has been signed off and is available for use. Inspection of vehicles is still required, but non-MAF staff may carry out this work. Following the inspection, the temperature of the vehicle is raised to 54°C for not less than 10 minutes. This temperature and duration is sufficient to kill all arthropod pests without damaging the vehicle.

Although the inspection and treatment will be carried out by non-MAF staff, the vehicles will be audited by MAF to ensure that the required specifications are met.

Currently, used vehicles are inspected by MAF either offshore or on arrival. The new standard represents another option under which vehicles may be imported.

**i** Michael Alexander, National Adviser – Border Standards,  
MAF Biosecurity Authority,  
phone 04 474 4280, fax 04 470 2738, mikea@maf.govt.nz

A copy of the import health standard for treated vehicles from all countries can be viewed at:

**i** [www.maf.govt.nz/biosecurity/imports/non-organic](http://www.maf.govt.nz/biosecurity/imports/non-organic)

# Directory

## 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
Rodeo Code	Final Code presented to Minister of Agriculture 24 September 2003
Pig Code	Final Code to be presented to Minister of Agriculture October 2003
Layer Hen Code	Final Code to be presented to Minister of Agriculture October 2003
Circus Code	Public consultation commenced 2 October 2003. Submissions close 14 November 2003
Zoo 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)