COUNTRY REPORT

of

NEW ZEALAND

25th Session

of the

Asia and Pacific
Plant Protection Organization

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Beijing

China

1. Introduction

Since the last Session of the Asia and Pacific Plant Protection Organisation (APPPC), New Zealand has continued to develop and refine its Biosecurity system.

In December 2006, the Director-General of the Ministry of Agriculture and Forestry (MAF) announced that MAF's two biosecurity businesses - Biosecurity New Zealand (BNZ) and MAF Quarantine Service (MQS) would be structurally integrated. The new integrated organisation commenced operations on the1st of July 2007, and is now known as MAF Biosecurity New Zealand (MAF BNZ).

The objectives of creating a single, integrated organisation are to have biosecurity policy development, risk assessment, standard setting, and implementation functions better connected and working to a common vision and strategy, with clearer accountabilities, better defined roles and responsibilities, and with stronger business support capability.

2. New Pest records

The following exotic organisms associated with plants were recorded as new to New Zealand by MAF BNZ for the period June 2005 – June 2007. MAF BNZ has officially responded to the presence of a number of these organisms.

Note: The below table includes species that were detected for the first time in New Zealand, but may represent endemic species or species that have likely been present in the country for decades, but just never before been detected.

Organism	**Host**	**Comments**
Ampelovirus? grapevine leafroll associated virus type 9 (GLRaV-9)	*Vitis vinifera*	Validated present in New Zealand in 2006.
Austrosalomona sp. (katydid)	Inanimate host	A single adult was detected and investigations are continuing.
Bactericera cockerelli (potato/tomato psyllid)	*Lycopersicon esculentum* (tomato)	Established in New Zealand in glasshouses and some field potato crops.
Bemisia tabaci biotype Q (white fly)	*Capsicum* sp. (capsicum)	Detected using molecular techniques. Investigations are continuing to determine which biotypes are present in New Zealand.
Botryotinia sphaerosperma (fungus: no common name)	*Allium triquetrum* (three-cornered garlic)	Detected on a common weed.
Carlavirus Verbena latent virus (proposed name) (VeLV)	*Tropaeolum majus* (garden nasturtium)	Detected in a widely distributed weed species.
Cercospora resedae (fungus: no common name)	*Reseda odorata* (mignonette)	Detected infecting a weed species.
Cladosporium arthropodii (fungus: no common name)	*Arthropodium cirratum* (rengarenga)	Potentially endemic to New Zealand. Originally recorded as *C. allii*.
Cladosporium oncobae (fungus: no common name)	*Oncoba spinosa* (fried egg tree)	New to science species.
Contarinia sp. (gall midge)	*Alstroemeria* sp. (Peruvian lily)	Potentially an undescribed exotic species.
Curvularia inaequalis (fungus: no common name)	*Hordeum vulgare* (barley)	Found on 2nd generation barley seeds.
Dactylaria dimorpha (fungus: no common name)	*Cymbidium* sp. (cymbidium orchid)	Hyperparasite of fungus *Colletotrichum gloeosporioides acervuli*.

Organism	Host	Comments
Dettopsomyia nigrovittata (insect: no common name)	*Ficus carica* (fig)	Drosophilid fly detected on fallen fruit.
Diachus auratus (leaf beetle)	unidentified plant	Recovered from two widely separated sites.
Diaporthe abdita (fungus: no common name)	*Melia azedarach* (Indian bead tree)	Anamorphic name of *Phomopsis* sp. Pathogenicity not known.
Discula betulina (fungus: no common name)	*Betula pendula* (silver birch)	This fungus has been reported as pathogenic to *Betula pendula* seedlings overseas.
Distocercospora livistonae (fungus: no common name)	*Livistona decipiens* (Australian ribbon palm)	New to science species.
Ditylenchus drepanocercus (Nematode)	*Pittosporum* sp. (pittosporum)	This nematode is known overseas.
Emplesis bifoveata (weevil: no common name)	*Syzygium paniculatum*	Australian native weevil.
Fabavirus Broad bean wilt virus 1 (BBWV-1)	*Tropaeolum majus* (garden nasturtium)	Detected infecting a common weed.
Fusariella sarniensis (fungus: no common name)	*Lathyrus latifolius* (everlasting pea)	A saprophytic fungus.
Fusarium oxysporum f. sp.?*perniciosum* (fungus: mimosa wilt)	*Albizia julibrissin* (silk tree)	Evidence to-date indicates a widespread distribution in the Auckland area
Fusarium sp. NRRL 25204 (fungus: no common name)	*Cymbidium* sp. (cymbidium orchid)	Known in NZ since 1977, fungus currently awaiting description.
Fusarium sterilihyphosum (fungus: no common name)	*Nidularium amazonicum* (bromeliad)	Detected only on bromeliads in Northland.
Fusicladium orchidis (fungus: no common name)	*Phalaenopsis* sp. (phalaenopsis orchid)	Fungus on widely-grown orchid species.
Grapevine leafroll associated virus type 4 (GLRaV-4)	*Vitis* sp. (grape)	Validated present in New Zealand in 2006.
Hypurus bertrandi (portulaca leaf-miner weevil)	*Asparagus asparagoides* (smilax asparagus)	Wide geographic distribution.
Ilarvirus spinach latent virus	*Lycopersicon esculentum* (tomato)	This virus is also known from Europe.
Ipomovirus Sweet potato mild mottle virus (SPMMV)	*Ipomoea batatas* (kumara)	Potentially widespread in all kumara-growing regions in NZ.
Leptosphaerulina argentinensis (fungus: no common name)	*Sisyrinchium* sp. (no common name)	A saprophytic fungus.
Megadrymus terraereginae (seed bug, no common name)	Leaf litter under *Ficus macrophylla* (Moreton Bay fig)	Abundant at 2 public parks in Auckland.
Mycoleptodiscus terrestris (fungus: no common name)	*Ceratophyllum demersum* (hornwort)	Detected infecting an aquatic weed species in a large waterway.
Mycosphaerella africana (fungus: no common name)	*Rhododendron* sp. (rhododendron)	Primarily a pathogen of *Eucalyptus* overseas.
Mycosphaerella effigurata (fungus: ash leaf spot)	*Fraxinus angustifolia* (narrow-leafed ash)	This fungus produces a leaf-spot disease of *Fraxinus* spp. in North America.
Nerine latent carlavirus (Nerine latent virus, NeLV)	*Nerine* sp. (nerine)	Widespread in New Zealand.
Paratrichodorus allius (nematode: no common name)	*Rubus fruticosus* (blackberry)	Causes corky ring spot in potatoes.
Pectobacterium carotovorum ssp. w*asabiae* (bacteria: no common name)	*Solanum tuberosum* (potato)	Known from Japan on wasabi.
Peronospora cristata (chromist: downy mildew)	*Papaver somniferum* (opium poppy)	Prior to DNA analysis was identified morphologically as *Peronospora arborescens*.

Organism	Host	Comments
Phoma enteroleuca var. *influorescens* (fungus: no common name)	*Olea europaea* (African olive)	An opportunistic pathogen found mainly on dead plant parts or stressed trees.
Phyllosticta abietis (fungus: no common name)	*Cedrus atlantica* (Atlas cedar)	Effects considered minor in North America.
Phytophthora captiosa (chromist: no common name)	*Eucalyptus saligna* (Sydney blue gum)	New to science species.
Phytophthora europaea (chromist: no common name)	*Iris sibirica* (Siberian iris)	Literature suggests *P. europaea* is low grade pathogen of oak.
Phytophthora fallax (chromist: no common name)	*Eucalyptus delegatensis* (alpine ash)	New to science species.
Phytophthora inundata (chromist: no common name)	*Pinus radiata* (Monterey pine)	This chromist has been identified in both the North and South Islands.
Phytophthora kernoviae (chromist: no common name)	*Annona cherimola* (cherimoya)	Isolated from cherimoya, collected in 2002. Subsequent investigations have recovered this chromist from soil in several areas of the North Island. Apart from cherimoya, no effect on other plant species has been observed in New Zealand.
Planococcus citri (citrus mealybug)	*Cassia fistula* (Indian senna)	Detected in a low number of heated glasshouses on ornamentals.
Potyvirus Apium virus Y (apium virus Y)	*Apium graveolens* (celery)	This aphid-transmitted virus was detected in commercial celery plants.
Potyvirus Narcissus late season yellows virus (NLSYV)	*Narcissus pseudonarcissus* (daffodil)	Virus is widespread in New Zealand and overseas.
Potyvirus Sweet potato feathery mottle virus (SPFMV)	*Ipomoea batatas* (kumara)	Probably widespread in all kumara-growing regions in NZ.
Pseudocercospora arecacearum (fungus: no common name)	*Rhopalostylis sapida* (nikau palm)	New to science species
Pseudocercospora gunnerae (fungus: no common name)	*Gunnera tinctoria* (Chilean rhubarb)	New to science species
Pseudocercospora pandoreae (fungus: no common name)	*Pandorea pandorana* (wonga wonga vine)	New to science species.
Pseudovalsa longipes (fungus: canker)	*Quercus robur* (English oak)	Anamorphic name of *Coryneum umbonatum*, a common saprophyte of oaks.
Puccinia cygnorum (fungus: no common name)	*Astartea fascicularis* (false baeckea)	Possible susceptibility of indigenous *Leptospermum* and *Kunzea* is of concern.
Puccinia myrsiphylli (fungus: bridal creeper rust)	*Asparagus asparagoides* (smilax asparagus)	Introduced into Australia as a biocontrol agent for smilax.
Pythium chamaehyphon (chromist: no common name)	*Olea europaea* (African olive)	No evidence it is pathogenic.
Ramularia subtilis (fungus: no common name)	*Ligularia clivorum* (no common name)	New to science species.
Ramularia tenella (fungus: no common name)	*Lupinus polyphyllus* (Russell lupin)	Infected plants died, but it is considered likely that the fungus persists on this common host.
Ramularia veronicae (fungus: no common name)	*Veronica persica* (Birdeye speedwell)	Not known to have any economic impact overseas.
Rhexocercosporidium panacis (fungus: rusted root)	*Panax quinquefolius* (American ginseng)	Causes superficial lesions on root.
Septocyta ruborum (fungus: purple blotch)	*Rubus ursinus* (boysenberry)	Present in both North and South Islands of New Zealand. One of the hosts is a widely distributed weed species.
Septoria stachydis (fungus: stachys leaf spot)	*Stachys sylvatica* (hedge stachys)	Fungus only known to occur on *Stachys* species.
Stegonsporium pyriforme (fungus: no common name)	*Acer pseudoplatanus* (sycamore)	A saprophytic fungus.

Organism	Host	Comments
Synchytrium endobioticum (fungus: potato wart)	*Solanum tuberosum* (potato)	MAF has eradicated this detection.
Tritimovirus Wheat streak mosaic virus (WSMV)	*Triticum aestivum* (wheat)	Potentially well-established and widespread in NZ wheat.
Ustilago maydis (fungus: boil smut)	*Zea mays* (maize)	Plants removed and incinerated. Affected area has been solarised. Under eradication.
Xanthomonas translucens (bacterial leaf streak)	*Hordeum vulgare* (barley)	Taxonomy of pathovars uncertain. Detected as a result of a surveillance exercise.

3. Integrated pest management

Integrated pest management is an integral and ongoing component of orchard management programmes in New Zealand. There are no new initiatives in this area to report.

4. Plant Quarantine

4.1 NPPO Organisational Structure

The delivery of the MAF's National Plant Protection Organization functions is undertaken by MAF BNZ.

MAF BNZ is comprised of ten Directorates, the organisational structure of which is shown in **Figure 1**.

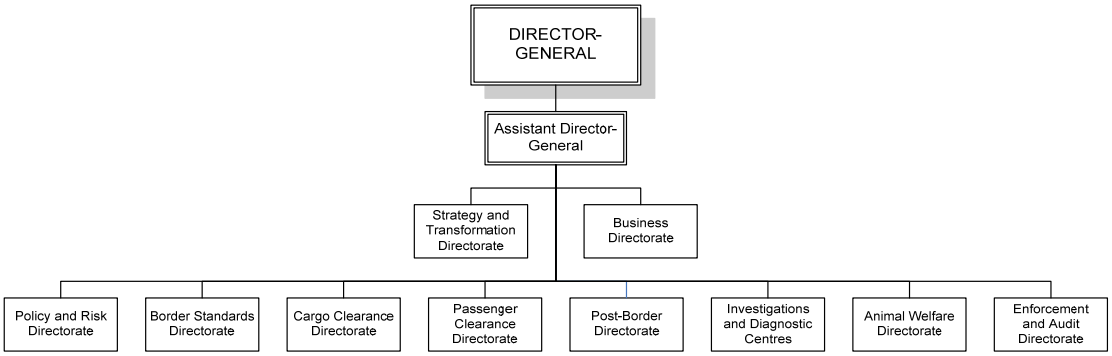

Figure 1. MAF BNZ organisational structure

The responsibilities and functions for each of the 10 Directorates include:

Strategy and Transformation Directorate will deliver a future focused and cross system and cross-business transformation role. Accountabilities of the Directorate include; assessing the effectiveness of system wide strategies and performance, strategic planning, oversight of biosecurity expenditure, and acting as secretariat to domestic biosecurity governance forums.

Policy and Risk Directorate's key accountabilities include providing policy advice on the frameworks, systems, processes, legislation and interventions used to manage biosecurity risks, completion of risk analyses for imported goods, providing direction for biosecurity science research, and contribution to multilateral trade agreements and international standard setting organizations and free trade agreement negotiations.

Border Standards Directorate is accountable for the development of Import Health Standards and operational procedures to mitigate the risk of harmful organisms being introduced to New Zealand, and for the development of systems to facilitate exports. Responsibilities include monitoring of slippage on border pathways, and the approval and audit of transitional/containment facilities and laboratories within New Zealand and offshore.

Cargo and Passenger Clearance Directorates are accountable for the provision of biosecurity inspection and clearance services for international passenger and cargo pathways. This includes the detector dog programme, screening of mail, and the provision of offshore pre-import inspections.

Post Border Directorate is accountable for the development, implementation and management of surveillance and response programmes, and national pest management programmes for harmful organisms that have entered New Zealand. Responsibilities include the coordination of surveillance, response and eradication activities.

Investigation and Diagnostic Centres Directorate delivers and manages the investigation and diagnosis of suspected pests and diseases from laboratory facilities located at Tamaki (Auckland), Wallaceville (near Wellington) and Lincoln (near Christchurch).

Animal Welfare Directorate promotes policies and develops standards appropriate to society's expectations for the humane treatment of animals. It also contributes to market access and optimal product positioning for New Zealand animal products and animals.

Enforcement and Audit Directorate audits, investigates and responds to serious breaches of legislation administered by MAF BNZ (Animal Welfare and Biosecurity Acts) and the Hazardous Substances and New Organisms Act.

Business Directorate provides business services to MAF BNZ and develops and implements business processes across the organisation.

4.2 New Zealand Biosecurity Legislation

The Biosecurity Act 1993 is the principal legislation for the exclusion, eradication and management of pests and unwanted organisms in New Zealand. MAF BNZ administers this legislation.

The Hazardous Substances and New Organisms (HSNO) Act prevents and manages risks to New Zealand's environment, public health and safety associated with the importation or manufacture of hazardous substances, and the introduction of new organisms (including genetically modified organisms). HSNO is administered by the Ministry for the Environment.

Refer to the Plants Biosecurity Index for plant species which are permitted to be imported into New Zealand http://www1.maf.govt.nz/cgi-bin/bioindex/bioindex.pl

4.3 Progress of pest risk assessments

New Zealand continues to develop and review import health standards, based on pest risk assessment. Since the 24th Session of the APPPC, New Zealand has developed or reviewed a number of import health standards for plants and plant products. Examples include:

Seeds for sowing

Anethum
Avena
Brassica
Cannabis
Glycine
Hordeum
Medicago
Pisum
Triticum
Vicia
Zea spp.

Grain for processing/consumption

Cannabis
Lens ensculenta
Medicago

Nursery stock

Acacia
Acer
Actinidia
Aesculus
Allium
Arbutus
Camellia
Canna
Castanea
Cotoneaster
Cycas
Fagus
Ficus
Gaultheria
Hippeastrum
Hydrangra
Iris
Lilium
Pesticide treatments for dormant bulbs
Photinia
Prunus
Vaccinum

Fresh produce

Allium cepa from Australia, USA
Allium sativum China
Carica papaya from Australia and Hawaii
Citrus from Vanuatu
Cucurbita maxima from Tonga
Dimocarpus longan from Thailand
Garcinia mangostana from Thailand
Litchi chinensis from Thailand
Musa spp. from Australia
Prunus avium from USA
Solanum melongena from Vanuata
Zingiber offinale from PNG and Thailand

4.4 Regulated Pest List

New Zealand maintains a master register of organisms that may be associated with plants and plant products that are imported into New Zealand. The register is called the "Biosecurity Organisms Register for Imported Commodities" (BORIC) and can be viewed on the MAF BNZ website at the following address:

http://www.biosecurity.govt.nz/pests-diseases/registers-lists/boric/

The register is updated approximately every fortnight, and contains both regulated and non regulated organisms.

4.5 Establishment of pest free places of production and pest free production sites

The establishment of pest free places of production and pest free production sites in New Zealand is ongoing, and usually on an annual basis. The major crops for which these pest free places and sites are established include tomatoes and potatoes.

4.6 Status of implementation of ISPMs and RSPMs

New Zealand is active in the development, implementation and promotion of international and regional standards. New Zealand bases its phytosanitary measures and operational standards on the International Standards for Phytosanitary Measures.

4.7 International Phytosanitary Portal (IPP)

New Zealand utilises the IPP to share pertinent information with other NPPOs. Up to date information on the New Zealand NPPO, New Zealand entry points and SPS notifications are available on the IPP. Also available are links to information made available on the New Zealand Ministry of Agriculture and Forestry and other New Zealand government agency websites, including relevant legislation and a list of regulated pests.

4.8 GMO Crops

No GMO crops are commercially grown in New Zealand.

4.9 Pesticide Management

Within the last two years New Zealand has:

- Established an approvals framework for pesticides under the HSNO Act.
- Developed a substance reassessment programme, i.e. where new information regarding the effects from a substance has become available, the use of the substance has changed significantly or a 'better' alternative has become available.
- Implemented a compliance structure to support the approvals framework, e.g. the provision of information to assist compliance, working with industry to provide appropriate training.

5. National Plant Protection Organization Contact Details

For information on the functions of New Zealand's National Plant Protection Organisation contact:

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