

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Citrus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**1. Type of *Citrus* nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture

**2. Pests of *Citrus***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Citrus* cuttings from offshore MPI-accredited facilities (quarantine stations)**

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Citrus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Citrus*.

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* cuttings exported to New Zealand.

(ii) Inspection, Testing and Treatments of the consignment

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the accredited facility as specified in the agreement between MPI and the accredited facility operator. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Citrus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

AND

- sourced from either mother plants that have been kept in insect proof plant houses or from open ground mother plants

AND

- held and tested for/classified free from specified regulated pests at a MPI-accredited facility

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the

phytosanitary certificate:

"The *Citrus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

AND

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as required in the agreement between MPI and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(v) Post-entry quarantine

**PEQ:** Level 2. **Plants must be held at 18-25°C throughout the quarantine period.**

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pathogens. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Indicative minimum quarantine periods are:

- 6 months for *Citrus* cuttings sourced from mother plants that have been kept in insect proof plant houses, **which may be extended to 12 months to allow for testing to be completed;** or
- 16 months for *Citrus* cuttings sourced directly from open ground mother plants.

The previous text included in this section of the IHS is included in this text box. Or to review the wording in the current IHS please refer to <http://www.biosecurity.govt.nz/files/ihs/155-02-06.pdf> (from page 71).

(v) Post-entry quarantine

**PEQ:** Level 2

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pathogens. Indicative minimum quarantine periods are: 6 months for *Citrus* cuttings sourced from mother plants that have been kept in insect proof plant houses, or 16 months for *Citrus* cuttings sourced directly from open ground mother plants. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

*(This text box will be removed from the IHS prior to issuance)*

### 3.2 *Citrus* cuttings from non-accredited facilities in any country

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* cuttings exported to New Zealand.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Citrus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

(iii) *Additional declarations to the phytosanitary certificate*

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with the current phytosanitary requirements of MPI."

(iv) *Inspection, Testing and Treatments of the consignment*

Following inspection at the border, upon arrival, the *Citrus* cuttings will be directed to a facility accredited to the standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MPI-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3 MPI-accredited facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(v) *Post-entry quarantine*

**PEQ:** Level 3

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

### **3.3 *Citrus* plants in tissue culture from offshore MPI-accredited facilities**

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Citrus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Citrus*.

(i) *Documentation*

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* tissue culture exported to New Zealand.

(ii) *Pest proof container and growing media for tissue culture*

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) *Inspection, Testing and Treatments of the consignment*

The inspection, treatment and testing requirements for specified pests must be undertaken at the accredited facility as specified in the arrangement between MPI and the accredited facility operator. Refer to *Citrus* Inspection, Testing and Treatment

Requirements following the *Citrus* pest list.

(iv) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Citrus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at a MPI-accredited facility

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(v) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as specified in the agreement between MPI and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(vi) Post-entry quarantine

**PEQ:** Level 2

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

### 3.4 *Citrus* plants in tissue culture from non-accredited facilities in any country

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* nursery stock exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Citrus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with the current phytosanitary requirements of MPI."

(v) Inspection, Testing and Treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3 MPI-accredited facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(vi) Post-entry quarantine

**PEQ:** Level 3

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments/testing are required.

# Pest List for *Citrus*

## REGULATED PESTS (actionable)

### Insect

#### Insecta

#### Coleoptera

##### Bostrichidae

*Apate indistincta*

shot-hole borer

*Apate terebrans*

shot-hole borer

##### Buprestidae

*Agrilus alesi*

flatheaded citrus borer

*Agrilus auriventris*

citrus flatheaded borer

##### Cerambycidae

*Anoplophora malasiaca*

white-spotted longicorn beetle

*Chelidonium gibbicolle*

-

*Dihammus vastator*

fig longhorn

*Melanauster chinensis*

-

*Paradisterna plumifera*

speckled longicorn

*Promeces linearis*

-

*Skeletodes tetrops*

longhorn beetle

*Strongylurus thoracicus*

pittosporum longicorn

*Uracanthus cryptophagus*

citrus branch borer

##### Chrysomelidae

*Colasposoma fulgidum*

bluegreen citrus nibbler

*Colasposoma scutellare*

-

*Geloptera porosa*

pitted apple beetle

*Luperomorpha funesta*

mulberry flea beetle

*Monolepta australis*

red-shouldered leaf beetle

*Sebaethe fulvipennis*

flea beetle

##### Coccinellidae

*Cheilomenes lunata* [Animals Biosecurity]

-

*Chilocorus cacti* [Animals Biosecurity]

-

*Chilocorus distigma* [Animals Biosecurity]

-

*Chilocorus nigrita* [Animals Biosecurity]

-

*Exochomus flavipes* [Animals Biosecurity]

-

*Pentilia castanea* [Animals Biosecurity]

-

*Rhyzobius lophanthae* [Animals Biosecurity]

-

*Scymnus nanus* [Animals Biosecurity]

-

*Serangium parcesetosum* [Animals Biosecurity]

-

*Stethorus aethiops* [Animals Biosecurity]

-

*Stethorus histrio* [Animals Biosecurity]

-

*Stethorus punctata picipes* [Animals Biosecurity]

-

##### Curculionidae

*Amystax fasciatus* [Animals Biosecurity]

-

*Artipus* sp.

-

*Brachycerus citriperda*

-

*Callirhopalus bifasciatus*

two-banded Japanese weevil

*Dereodus recticollis*

-

*Diaprepes abbreviatus*

citrus weevil

*Diaprepes* spp.

-

*Eutinophaea bicristata*

citrus leaf-eating weevil

*Leptopius squalidus*

fruit tree root weevil

*Naupactus xanthographus*

fruit tree weevil

*Otiorhynchus cribricollis*

cribrate weevil

*Pachnaeus citri*

-

*Pachnaeus litus*

citrus root weevil

*Perperus lateralis*

white-striped weevil

*Prepodes* spp.

-

*Protostrophus avidus*

weevil

*Sciobius marshalli*

citrus snout beetle

*Sympiezomias lewisi*

-

<b>Lucanidae</b>	
<i>Prosopocoilus spencei</i>	-
<b>Scarabaeidae</b>	
<i>Hypopholis indistincta</i>	scarab beetle
<i>Maladera matruda</i>	scarab beetle
<b>Scolytidae</b>	
<i>Salagena</i> sp.	-
<i>Xylosandrus germanus</i>	alnus ambrosia beetle
<b>Diptera</b>	
<b>Cecidomyiidae</b>	
<i>Contarinia citri</i>	leafcurling midge
<i>Contarinia okadai</i>	citrus flower gall midge
<i>Trisopsis</i> sp.	-
<b>Chamaemyiidae</b>	
<i>Leucopis alticeps</i> [Animals Biosecurity]	-
<b>Drosophilidae</b>	
<i>Drosophila paulistorum</i>	-
<i>Drosophila pseudoobscura</i>	-
<i>Drosophila simulans</i>	-
<i>Drosophila willistoni</i>	-
<b>Tephritidae</b>	
<i>Dirioxa pornia</i>	island fruit fly
<b>Hemiptera</b>	
<b>Anthocoridae</b>	
<i>Orius thripoborus</i> [Animals Biosecurity]	-
<i>Thripheps thripoborus</i> [Animals Biosecurity]	-
<b>Coreidae</b>	
<i>Acanthocoris striicornis</i>	larger squash bug
<i>Anoplocnemis curvipes</i>	coreid bug
<i>Leptoglossus membranaceus</i>	coreid bug
<i>Mictis profana</i>	crusader bug
<i>Paradasynus spinosus</i>	squash bug
<i>Veneza phyllopus</i>	leaf-footed bug
<b>Lygaeidae</b>	
<i>Nysius vinitor</i>	Rutherglen bug
<b>Miridae</b>	
<i>Austropeplus</i> sp.	citrus blossom bug
<b>Pentatomidae</b>	
<i>Antestia variegata</i>	antestia bug
<i>Antestiopsis orbitalis</i>	-
<i>Antestiopsis variegata</i>	antestia bug
<i>Biprorulus bibax</i>	spined citrus bug
<i>Glaucias subpunctatus</i>	polished green stink bug
<i>Halyomorpha mista</i>	brown-marmorated stink bug
<i>Musgraveia sulciventris</i>	bronze orange bug
<i>Plautia stali</i>	oriental stink bug
<i>Rhynchocoris humeralis</i>	pentatomid bug
<b>Unknown Hemiptera</b>	
<i>Holopterna vulga</i>	bug
<b>Homoptera</b>	
<b>Aleyrodidae</b>	
<i>Aleurocanthus citriperdus</i>	whitefly
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
<i>Aleurocanthus</i> spp.	whiteflies
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Aleurodicus dispersus</i>	spiralling whitefly
<i>Aleurolobus marlatti</i>	Marlatt whitefly
<i>Aleuroplatus</i> sp.	whitefly
<i>Aleurothrixus floccosus</i>	woolly whitefly
<i>Aleurotuba jelinekii</i>	-
<i>Aleurotuberculatus aucubae</i>	aucuba whitefly
<i>Bemisia citricola</i>	-

<i>Dialeurodes citri</i>	citrus whitefly
<i>Dialeurodes citrifolii</i>	cloudywinged whitefly
<i>Dialeurolonga</i> sp.	-
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
<i>Siphoninus phillyreae</i>	phillyrea whitefly
<b>Aphididae</b>	
<i>Aphis fabae</i>	bean aphid
<i>Aulacorthum magnoliae</i>	Japanese elder aphid
<b>Cicadellidae</b>	
<i>Asymmetrasca decedens</i>	leafhopper
<i>Circulifer opacipennis</i>	-
<i>Circulifer tenellus</i>	beet leafhopper
<i>Cuerna costalis</i>	leafhopper
<i>Edwardsiana flavescens</i>	leafhopper
<i>Empoasca bodenheimeri</i>	-
<i>Empoasca citrura</i>	green citrus leafhopper
<i>Empoasca decipiens</i>	green leafhopper
<i>Empoasca distinguenda</i>	-
<i>Empoasca fabae</i>	potato leafhopper
<i>Empoasca onukii</i>	tea green leafhopper
<i>Homalodisca coagulata</i>	glassy-winged sharpshooter
<i>Homalodisca lacerta</i>	-
<i>Jacobiasca lybica</i>	cotton jassid
<i>Nealoturus haematoceps</i>	leafhopper
<i>Penthimiola bella</i>	citrus leafhopper
<i>Scaphytopius nitridus</i>	leafhopper
<b>Cicadidae</b>	
<i>Cryptotympana facialis</i>	black cicada
<i>Meimuna opalifera</i>	elongate cicada
<b>Coccidae</b>	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Ceroplastes rusci</i>	fig wax scale
<i>Coccus celatus</i>	-
<i>Coccus pseudomagnoliarum</i>	citricola scale
<i>Coccus viridis</i>	green scale
<i>Cribrolecanium andersoni</i>	white powdery scale
<i>Gascardia brevicauda</i>	white waxy scale
<i>Protopulvinaria pyriformis</i>	pyriform scale
<i>Pulvinaria aethiopica</i>	soft green scale
<i>Pulvinaria aurantii</i>	citrus cottony scale
<i>Pulvinaria cellulosa</i>	pulvinaria scale
<i>Saissetia citricola</i>	citrus string cottony scale
<i>Saissetia somereni</i>	-
<b>Dactylopiidae</b>	
<i>Dactylopius filamentosis</i>	-
<i>Dactylopius vastator</i>	-
<b>Diaspididae</b>	
<i>Aonidiella citrina</i>	yellow scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus bifasciculatus</i>	brown scale
<i>Chrysomphalus dictyospermi</i>	dictyospermi scale
<i>Chrysomphalus pinnulifera</i>	false purple scale
<i>Ischnaspis longirostris</i>	black thread scale
<i>Lepidosaphes beckeri</i>	purple scale
<i>Lepidosaphes gloverii</i>	Glover scale
<i>Parlatoria ziziphi</i>	black parlatoria scale
<i>Pseudaonidia duplex</i>	camphor scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<i>Unaspis citri</i>	citrus snow scale
<i>Unaspis yanonensis</i>	Japanese citrus scale



<b>Flatidae</b>	
<i>Colgar peracuta</i>	-
<i>Geisha distinctissima</i>	green broad-winged planthopper
<i>Lawana conspersa</i>	green flatid planthopper
<i>Metcalfa pruinosa</i>	planthopper
<b>Fulgoridae</b>	
<i>Anzora unicolor</i>	-
<b>Margarodidae</b>	
<i>Drosicha howardi</i>	persimmon mealybug
<i>Icerya seychellarum</i>	Seychelles scale
<b>Ortheziidae</b>	
<i>Nipponorthezia ardisiae</i>	ensign scale
<b>Pseudococcidae</b>	
<i>Allococcus</i> spp.	-
<i>Ferrisia consobrina</i>	mealybug
<i>Ferrisia virgata</i>	striped mealybug
<i>Nipaecoccus vastator</i>	nipa mealybug
<i>Nipaecoccus viridis</i>	hibiscus mealybug
<i>Paracoccus burnerae</i>	spherical mealybug
<i>Planococcus kraunhiae</i>	Japanese wisteria mealybug
<i>Planococcus lilacinus</i>	citrus mealybug
<i>Planococcus minor</i>	passionvine mealybug
<i>Pseudococcus citriculus</i>	smaller citrus mealybug
<i>Pseudococcus commonus</i>	-
<i>Pseudococcus filamentosus</i>	mealybug
<i>Rastrococcus spinosus</i>	mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
<b>Psyllidae</b>	
<i>Diaphorina citri</i>	citrus psyllid
<i>Trioza erythrae</i> [vector]	citrus psyllid
<b>Ricaniidae</b>	
<i>Scolytopa</i> sp.	-
<b>Tropiduchidae</b>	
<i>Tambinia</i> sp.	-
<b>Hymenoptera</b>	
<b>Aphelinidae</b>	
<i>Aphytis africanus</i> [Animals Biosecurity]	-
<i>Aphytis holoxanthus</i> [Animals Biosecurity]	-
<i>Aphytis lepidosaphes</i> [Animals Biosecurity]	-
<i>Aphytis lingnanensis</i> [Animals Biosecurity]	-
<i>Aphytis melinus</i> [Animals Biosecurity]	-
<i>Azotus platensis</i> [Animals Biosecurity]	-
<i>Cales noacki</i> [Animals Biosecurity]	-
<i>Cales orchamoplati</i> [Animals Biosecurity]	-
<i>Centrodora penthimiae</i> [Animals Biosecurity]	-
<i>Coccophagus caridei</i> [Animals Biosecurity]	-
<i>Coccophagus pulvinariae</i> [Animals Biosecurity]	-
<i>Encarsia ectophaga</i> [Animals Biosecurity]	-
<i>Encarsia lahorensis</i> [Animals Biosecurity]	-
<i>Encarsia lounsburyi</i> [Animals Biosecurity]	-
<i>Encarsia opulenta</i> [Animals Biosecurity]	-
<i>Encarsia smithi</i> [Animals Biosecurity]	-
<i>Eretmocerus serius</i> [Animals Biosecurity]	-
<i>Marietta connecta</i> [Animals Biosecurity]	-
<i>Marietta leopardina</i> [Animals Biosecurity]	-
<b>Braconidae</b>	
<i>Apanteles aristotalilae</i> [Animals Biosecurity]	-
<i>Biosteres longicaudatus</i> [Animals Biosecurity]	-
<i>Pholetesor ornigis</i> [Animals Biosecurity]	-
<b>Encyrtidae</b>	
<i>Anicetus beneficus</i> [Animals Biosecurity]	-
<i>Comperiella bifasciata</i> [Animals Biosecurity]	-

<i>Habrolepis rouxi</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus helvolus</i> [Animals Biosecurity]	-
<i>Metaphycus luteolus</i> [Animals Biosecurity]	-
<i>Metaphycus stanleyi</i> [Animals Biosecurity]	-
<i>Metaphycus varius</i> [Animals Biosecurity]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity]	-
<b>Eulophidae</b>	
<i>Aprostocetus ceroplastae</i> [Animals Biosecurity]	-
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	-
<b>Eupelmidae</b>	
<i>Anastatus biproruli</i> [Animals Biosecurity]	-
<b>Eurytomidae</b>	
<i>Bruchophagus fellis</i>	citrus gall midge
<b>Formicidae</b>	
<i>Acromyrmex octospinosus</i>	leaf-cutting ant
<i>Anoplolepis braunsi</i> [Animals Biosecurity]	-
<i>Anoplolepis custodiens</i>	ant
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Atta cephalotes</i>	leaf-cutting ant
<i>Atta sexdens</i>	-
<i>Atta texana</i>	Texas leaf-cutting ant
<i>Camponotus rufoglaucus</i>	-
<i>Crematogaster castanea</i>	-
<i>Crematogaster liengmei</i>	-
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Lepisiota capensis</i> [Animals Biosecurity]	-
<i>Myrmecaria natalensis</i>	-
<i>Pheidole tenuinodis</i>	ant
<i>Polyrhachis schistaceus</i>	ant
<i>Solenopsis invicta</i> [Animals Biosecurity]	red imported fire ant
<i>Tapinoma arnoldi</i>	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity]	-
<b>Mymaridae</b>	
<i>Chaetomyrmex gracile</i> [Animals Biosecurity]	-
<i>Chaetomyrmex lepidum</i> [Animals Biosecurity]	-
<i>Gonatocerus incomptus</i> [Animals Biosecurity]	-
<b>Platygasteridae</b>	
<i>Amitus hesperidum</i> [Animals Biosecurity]	-
<i>Amitus spiniferus</i> [Animals Biosecurity]	-
<i>Fidiobia citri</i> [Animals Biosecurity]	-
<b>Scelionidae</b>	
<i>Trissolcus oeneus</i> [Animals Biosecurity]	-
<i>Trissolcus oenone</i> [Animals Biosecurity]	-
<i>Trissolcus ogyges</i> [Animals Biosecurity]	-
<b>Signiphoridae</b>	
<i>Signiphora fax</i> [Animals Biosecurity]	-
<i>Signiphora flavella</i> [Animals Biosecurity]	-
<i>Signiphora perpauca</i> [Animals Biosecurity]	-
<b>Trichogrammatidae</b>	
<i>Trichogramma platneri</i> [Animals Biosecurity]	-
<b>Vespidae</b>	
<i>Polistes</i> spp. [Animals Biosecurity]	paper wasps
<b>Isoptera</b>	
<b>Termitidae</b>	
<i>Odontotermes lokanandi</i>	termite
<b>Lepidoptera</b>	
<b>Arctiidae</b>	
<i>Lemyra imparilis</i>	mulberry tiger moth
<b>Blastobasidae</b>	
<i>Holcocera iceryaeella</i>	-
<b>Cosmopterigidae</b>	

<i>Pyroderces rileyi</i>	pink scavenger caterpillar
<b>Geometridae</b>	
<i>Anacamptodes fragilaria</i>	koa haole looper
<i>Ascotis selenaria reciprocaria</i>	citrus looper
<i>Gymnoscelis rufifasciata</i>	geometrid moth
<i>Hyposidra talaca</i>	-
<b>Gracillariidae</b>	
<i>Phyllocnistis citrella</i>	citrus leafminer
<b>Hepialidae</b>	
<i>Endoclita excrescens</i>	Japanese swift moth
<i>Endoclita sinensis</i>	-
<b>Lycaenidae</b>	
<i>Virachola isocrates</i>	pomegranate butterfly
<b>Lymantriidae</b>	
<i>Orgyia vetusta</i>	western tussock moth
<b>Metarbelidae</b>	
<i>Indarbela tetraonis</i>	stem borer
<b>Noctuidae</b>	
<i>Arcte coerula</i>	fruit-piercing moth
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Helicoverpa assulta</i>	cape gooseberry budworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Tiracola plagiata</i>	banana fruit caterpillar
<i>Xylomyges curialis</i>	noctuid moth
<b>Nymphalidae</b>	
<i>Charaxes jasius</i>	nymphalid butterfly
<b>Oecophoridae</b>	
<i>Psorosticha melanocrepida</i>	citrus leafroller
<i>Psorosticha zizyphi</i>	citrus leafroller
<i>Stathmopoda auriferella</i>	apple heliodinid
<b>Papilionidae</b>	
<i>Papilio aegeus aegeus</i>	-
<i>Papilio anactus</i>	small citrus butterfly
<i>Papilio cressphontes</i>	orange dog
<i>Papilio dardanus cenea</i>	-
<i>Papilio demodocus</i>	orange dog
<i>Papilio demoleus demoleus</i>	-
<i>Papilio helenus nicconicolens</i>	-
<i>Papilio machaon asiatica</i>	-
<i>Papilio memnon</i>	citrus swallowtail
<i>Papilio memnon thunbergii</i>	-
<i>Papilio nireus lyaeus</i>	-
<i>Papilio polytes polytes</i>	-
<i>Papilio protenor demetrius</i>	-
<i>Papilio xuthus</i>	citrus swallowtail
<i>Papilio zelicaon</i>	anise swallowtail
<b>Psychidae</b>	
<i>Eumeta hardenbergi</i>	-
<i>Eumeta japonica</i>	-
<i>Eumeta minuscula</i>	tea bagworm
<i>Eumeta moddermanni</i>	-
<i>Hyalarcta huebneri</i>	leaf case moth
<b>Pyralidae</b>	
<i>Apomyelois ceratoniae</i>	date pyralid
<b>Tortricidae</b>	
<i>Adoxophyes</i> sp.	-
<i>Amorbia cuneana</i>	leafroller
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips machlopiis</i>	leafroller
<i>Archips occidentalis</i>	leafroller
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix

<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia batrachopa</i>	-
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona magnanima</i>	oriental tea tortrix
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<i>Tortrix capensana</i>	tortricid moth
<b>Yponomeutidae</b>	
<i>Prays citri</i>	citrus flower moth
<i>Prays parilis</i>	citrus flower moth
<b>Neuroptera</b>	
<b>Chrysopidae</b>	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
<b>Coniopterygidae</b>	
<i>Coniopteryx vicina</i> [Animals Biosecurity]	-
<i>Conwentzia barretti</i> [Animals Biosecurity]	-
<b>Orthoptera</b>	
<b>Acrididae</b>	
<i>Zonocerus elegans</i>	elegant grasshopper
<b>Gryllidae</b>	
<i>Ornebius kanetataki</i>	cricket
<b>Tettigoniidae</b>	
<i>Caedicia</i> sp.	-
<i>Holochlora japonica</i>	Japanese broadwinged katydid
<i>Microcentrum retinerve</i>	smaller angular-winged katydid
<i>Scudderia furcata</i>	fork-tailed bush katydid
<b>Psocoptera</b>	
<b>Archipsocidae</b>	
<i>Archipsocus</i> sp.	bark louse
<b>Thysanoptera</b>	
<b>Aeolothripidae</b>	
<i>Franklinothrips vespiformis</i> [Animals Biosecurity]	-
<b>Thripidae</b>	
<i>Chaetanaphothrips orchidii</i>	banana rust thrips
<i>Leptothrips mali</i>	black hunter thrips
<i>Scirtothrips aurantii</i>	citrus thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scirtothrips mangiferae</i>	mango thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<i>Taeniothrips kellyanus</i>	-
<i>Taeniothrips</i> sp.	-
<i>Thrips coloratus</i>	thrips
<i>Thrips flavus</i>	flower thrips
<i>Thrips palmi</i>	palm thrips
<b>Unknown Insecta</b>	
<b>Unknown Insecta</b>	
<i>Cosmophyllum pallidulum</i>	-
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Acaridae</b>	
<i>Thyreophagus entomophagus italicus</i> [Animals Biosecurity]	-
<b>Anystidae</b>	
<i>Anystis agilis</i> [Animals Biosecurity]	-
<b>Eriophyidae</b>	
<i>Aculops pelekassi</i>	eriphyid mite
<i>Tegolophus australis</i>	brown citrus mite
<b>Phytoseiidae</b>	
<i>Amblyseius addoensis</i> [Animals Biosecurity]	-
<i>Amblyseius citri</i> [Animals Biosecurity]	-

<i>Amblyseius swirskii</i> [Animals Biosecurity]	-
<i>Euseius hibisci</i> [Animals Biosecurity]	-
<i>Euseius scutalis</i> [Animals Biosecurity]	-
<i>Euseius stipulatus</i> [Animals Biosecurity]	-
<i>Euseius tularensis</i> [Animals Biosecurity]	-
<i>Iphiseius degenerans</i> [Animals Biosecurity]	predatory mite
<i>Typhlodromus athiasae</i> [Animals Biosecurity]	-
<b>Stigmaeidae</b>	
<i>Agistemus africanus</i> [Animals Biosecurity]	-
<i>Agistemus tranatalensis</i> [Animals Biosecurity]	-
<i>Eryngiopus siculus</i> [Animals Biosecurity]	-
<b>Tarsonemidae</b>	
<i>Tarsonemus cryptocephalus</i> [Animals Biosecurity]	-
<b>Tenuipalpidae</b>	
<i>Brevipalpus chilensis</i>	false spider mite
<i>Brevipalpus lewisi</i>	bunch mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus emeticae</i> [Animals Biosecurity]	-
<i>Tuckerella ornata</i>	-
<i>Ultratenuipalpus gonianaensis</i>	tenuipalpid mite
<b>Tetranychidae</b>	
<i>Calacarus citrifolii</i>	clover mite
<i>Eotetranychus kankitus</i>	tetranychid mite
<i>Eotetranychus lewisi</i>	big beaked plum mite
<i>Eotetranychus yumensis</i>	Yumi spider mite
<i>Eutetranychus africanus</i>	tetranychid mite
<i>Eutetranychus banksi</i>	Texas citrus mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<b>Tuckerellidae</b>	
<i>Tuckerella knorri</i>	hawthorn spider mite
<b>Spider</b>	
<b>Arachnida</b>	
<b>Araneae</b>	
<b>Clubionidae</b>	
<i>Cheiracanthium mildei</i> [Animals Biosecurity]	-
<b>Theridiidae</b>	
<i>Theridion</i> sp. [Animals Biosecurity]	-
<b>Mollusc</b>	
<b>Gastropoda</b>	
<b>Stylommatophora</b>	
<b>Achatinidae</b>	
<i>Achatina immaculata</i>	-
<i>Lissachatina immaculata</i>	snail
<b>Bradybaenidae</b>	
<i>Acusta despecta sieboldiana</i>	snail
<b>Subulinidae</b>	
<i>Rumina decollata</i>	snail
<b>Urocyclidae</b>	
<i>Urocyclus flavescens</i>	-
<i>Urocyclus kirkii</i>	-
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i> )	phomopsis canker
<b>Dothideales</b>	
<b>Elsinoaceae</b>	

<i>Elsinoe australis</i>	sweet orange scab
<b>Capnodiaceae</b>	
<i>Capnodium citri</i>	sooty mould
<b>Didymosphaeriaceae</b>	
<i>Didymosphaeria</i> sp.	--
<b>Mycosphaerellaceae</b>	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i> ) [black spot strain]	citrus black spot
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i> )	rind blotch
<i>Mycosphaerella horii</i>	greasy spot
<b>Patellariales</b>	
<b>Patellariaceae</b>	
<i>Rhytidhysteron rufulum</i>	--
<b>Saccharomycetales</b>	
<b>Saccharomycetaceae</b>	
<i>Debaryomyces hansenii</i>	-
<i>Galactomyces citri-aurantii</i> (anamorph <i>Geotrichum citri-aurantii</i> )	sour rot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Boletales</b>	
<b>Coniophoraceae</b>	
<i>Coniophora eremophila</i>	brown wood rot
<b>Basidiomycota: Teliomycetes</b>	
<b>Septobasidiales</b>	
<b>Septobasidiaceae</b>	
<i>Septobasidium pseudopedicellatum</i>	felt fungus
<b>Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<i>Sphaceloma fawcettii</i> var. <i>scabiosa</i>	-
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Macrophoma mantegazziana</i>	-
<i>Phoma erratica</i> var. <i>mikan</i>	--
<i>Phoma tracheiphila</i>	mal secco
<i>Phomopsis</i> sp.	rot
<i>Septoria</i> spp.	-
<i>Sphaeropsis tumefaciens</i>	stem gall
<b>Unknown Coelomycetes</b>	
<b>Unknown Coelomycetes</b>	
<i>Aschersonia placenta</i> [Animals Biosecurity]	--
<i>Gloeosporium foliicolum</i>	fruit rot
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Alternaria limicola</i>	-
<i>Alternaria pellucida</i>	--
<i>Cercospora microsora</i>	-
<i>Phaeoramularia angolensis</i>	cercospora spot
<i>Stemphylium rosarium</i>	--
<i>Ulocladium obovoideum</i>	ulocladium rot
<b>Unknown Hyphomycetes</b>	
<b>Unknown Hyphomycetes</b>	
<i>Aureobasidium</i> sp.	-
<i>Hirsutella thompsonii</i> [Animals Biosecurity]	--
<i>Isaria</i> sp. [Animals Biosecurity]	-
<i>Oidium tingitaninum</i>	powdery mildew
<i>Sporobolomyces roseus</i>	--
<i>Stenella</i> sp.	--
<b>Zygomycota: Zygomycetes</b>	
<b>Glomales</b>	
<b>Glomaceae</b>	

<i>Glomus etunicatum</i> [Animals Biosecurity]	--
<b>Mucorales</b>	
<b>Syncephalastraceae</b>	
<i>Syncephalastrum racemosum</i>	--
<b>Bacterium</b>	
<b>Bacterium family unknown</b>	
<i>Liberobacter africanum</i>	citrus greening bacterium
<i>Liberobacter asiaticum</i>	citrus greening bacterium
<i>Liberobacter</i> sp.	citrus greening bacterium
<i>Spiroplasma citri</i>	citrus stubborn
<b>Pseudomonadaceae</b>	
<i>Burkholderia cepacia</i>	sour skin
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	citrus canker
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	-
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	citrus bacterial spot
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylella fastidiosa</i> pv. <i>citri</i>	variegated chlorosis of citrus
<b>Virus</b>	
Indian citrus mosaic badnavirus	-
citrus cachexia viroid	-
citrus chlorotic dwarf	-
citrus infectious variegation ilarvirus	-
citrus infectious variegation ilarvirus [crinkly leaf strain]	-
citrus leaf rugose ilarvirus	-
citrus leathery leaf virus	-
citrus leprosis rhabdovirus	-
citrus mosaic virus	-
citrus ringspot virus	-
citrus tatter leaf capillovirus	-
citrus tristeza closterovirus [strains not in New Zealand]	-
citrus variable viroid	-
citrus viroids (groups I-IV)	-
citrus yellow mosaic badnavirus	-
citrus yellow mottle virus	-
dwarfing factor viroid	-
navel orange infectious mottling virus	-
satsuma dwarf nepovirus	-
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-
<b>Phytoplasma</b>	
<i>Candidatus</i> Phytoplasma <i>aurantifolia</i>	witches' broom phytoplasma
rubbery wood	-
<b>Disease of unknown aetiology</b>	
Australian citrus dieback	-
blind pocket	-
bud union disease	-
citrus blight disease	-
citrus fatal yellows	-
citrus impietratura disease	-
citrus sunken vein disease	-
concave gum	-
crisacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-

shell bark of lemons  
zonate chlorosis

-  
-

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## Inspection, Testing and Treatment Requirements for *Citrus*\*

ORGANISM TYPES	MPI ACCEPTABLE METHODS
<b>Insects</b>	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions).
<b>Mites</b>	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions).
<b>Fungus</b>	Country freedom OR growing season inspection for symptom expression.
<b>Bacterium</b>	
<i>Burkholderia cepacia</i>	Growing season inspection for symptom expression.
<i>Liberobacter africanum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Liberobacter asiaticum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Spiroplasma citri</i>	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> 30°C) and incubate cultures at 32°C.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xylella fastidiosa</i>	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
<i>Xylella fastidiosa</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus indicator.
<b>Virus</b>	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures temperatures 18 to 25°C.
citrus infectious variegation ilarvirus	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus [crinkly leaf strain]	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus leaf rugose ilarvirus	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.
citrus leprosis rhabdovirus	Country freedom OR graft inoculated sweet orange. Grow indicators at cool temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin (Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf capillovirus	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> , citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not in New Zealand]	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.
citrus yellow mottle virus	Country freedom OR other suitable test.
Indian citrus mosaic badnavirus	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
navel orange infectious mottling virus	Country freedom OR graft inoculated Satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.

<b>ORGANISM TYPES</b>	<b>MPI ACCEPTABLE METHODS</b>
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
yellow vein clearing of lemon	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
<b>Viroid</b>	
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus viroids (groups I-IV)	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.
<b>Disease of unknown aetiology</b>	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated <i>Citrus macrophylla</i> .
citrus impietratura disease	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth indicators at cool temperatures 18 to 25°C.
citrus sunken vein disease	Country freedom OR other suitable test.
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
crisacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
Gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
Kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube necrosis	Country freedom OR other suitable test.
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
<b>Phytoplasma</b>	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot temperature 27 to 32°C.

\* Country freedom is accepted as equivalence to a treatment.

### Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. With prior notification, MPI will accept other internationally recognised testing methods.