

INSPECTION AND TREATMENT OF PLANTS FOR SPIRALLING WHITEFLY

REVISION REGISTER

Revision No.	Date of Issue	Amendment Details
First	19/04/2006	All Pages
Second	14/03/2013	All Pages
Third	24/06/2016	Updated Issue

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1. PURPOSE

The purpose of this procedure is to describe -

- (a) the design features for inspection, treatment and secure storage facilities;
- (b) the standards required for inspection and treatment equipment; and
- (b) the responsibilities and actions of personnel;

that apply to the inspection and treatment of plants for spiralling whitefly under an Interstate Certification Assurance (ICA) arrangement.

2. SCOPE

This operational procedure covers all certification of inspection and treatment of plants for spiralling whitefly from a business operating under an Interstate Certification Assurance arrangement in the Northern Territory.

This operational procedure covers the inspection and treatment of living plants and parts of plants only. It does not cover the inspection and treatment of seeds, fruit, underground parts, and dried or processed plant material.

The Operational Procedure is applicable where the requirement(s) specified in section 7, are a specified condition of entry of an interstate quarantine authority for spiralling whitefly.

Certification of inspection/treatment of plants for spiralling whitefly freedom under this Operational Procedure may not be an accepted entry condition for all plants to all intrastate and interstate markets.

Some intrastate and interstate markets may require additional quarantine certification for pests and diseases other than spiralling whitefly as a condition of entry.

It is the responsibility of the business consigning the plants to ensure compliance with all applicable quarantine requirements.

Information on intrastate and interstate quarantine requirements can be obtained from the Operations Manager, Plant Biosecurity Branch.

3. REFERENCES

WI-02

Guidelines for Completion of Plant Health Assurance Certificates.

4. DEFINITIONS

Accredit	means to authorise nominated staff within a business to issue Assurance Certificates.
Act	means the <i>Plant Health Act</i> .
AgVet Code	means the AgVet Code of the Northern Territory..
Application for Accreditation	means an Application for Accreditation of a business for an Interstate Certification Assurance (ICA) arrangement (Attachment 1).
Assurance Certificate	means a Plant Health Assurance Certificate (Attachment 2).
APVMA	means the Australian Pesticides and Veterinary Medicines Authority.
Authorised Signatory	means a person whose name and specimen signature is included as an Authorised Signatory on the business's approved Application for Accreditation form.
Business	means the legal entity responsible for the operation of the dipping facility and ICA arrangement detailed on the business's Application for Accreditation.
Category	means a type of plant in a consignment that is likely to differ in its risk of being infested. Plants in a consignment must be segregated into categories on the basis of species, size of plants or pots and site of production.
Certification Assurance	means a voluntary arrangement between the Department of Primary Industry and Resources and a business that demonstrates effective in-house quality management and provides assurance through documented procedures and records that produce meets specified requirements.
Certified/Certification	means covered by a valid Plant Health Assurance Certificate (Attachment 2).
Facility	means the location where the assembly, inspection, secure storage, certification and dispatch covered by the Interstate Certification Assurance arrangement are carried out.
ICA	means Interstate Certification Assurance.
Inspection Officer	means a person who is trained in the detection and recognition of Spiralling Whitefly and is authorised by the accredited business to conduct Spiralling Whitefly inspections on their behalf.
Inspector	means an inspector appointed under the <i>Plant Health Act</i> .
Interstate Certification Assurance	means a system of Certification Assurance developed to meet the requirements of State and Territory governments for the certification of produce for interstate and intrastate quarantine purposes.
Non-conformance	means a non-fulfilment of a specified requirement.
Plant	means living plants and parts of plants but excludes seeds, fruit, underground parts and dried or processed plant material.
PBB	means Plant Biosecurity Branch.
Spiralling Whitefly(SW)	means all stages of the species <i>Aleurodicus disperses</i> Russell.

5. RESPONSIBILITY

These position titles have been used to reflect the responsibilities of staff under the ICA arrangement. These positions may not be present in all businesses, or different titles may be used for staff who carry out these responsibilities. In some businesses one person may carry out the responsibilities of more than one position.

The **Certification Controller** is responsible for -

- representing the business during audits and other matters relevant to ICA accreditation;
- training staff in their duties and responsibilities under this Operational Procedure;
- ensuring the business and its staff comply with their responsibilities and duties under this Operational Procedure;
- maintaining a property plan for each property on which plants are assembled, inspected and stored under secure conditions for certification under this Operational Procedure (refer 7.2);
- reporting any detection of spiralling whitefly on a property where the pest has not previously been detected to the PBB Operations Manager within 24 hours of the detection (refer 7.3.4).
- ensuring the business has current accreditation for an ICA arrangement under this Operational Procedure;
- ensuring certified plants are maintained in secure conditions from inspection/treatment until dispatch (refer 7.5).

The **Treatment Operator** is responsible for -

- maintaining a tank calibration certificate for treatment tank used for treatment of plants under this Operational Procedure (refer 7.4.1).
- preparing spiralling whitefly treatment mixtures (refer 7.4.4);
- applying spiralling whitefly treatments according to specified requirements (refer 7.4.6);
- maintaining treatment mixture preparation and treatment records (refer 7.4.7).

The **Inspection Officer** is responsible for –

- inspecting all plants for the presence of spiralling whitefly prior to certification under this Operational Procedure (refer 7.3.3);
- immediately advising the Certification Controller of any detection of spiralling whitefly on inspection for certification under this Operational Procedure (refer 7.3.4);
- maintaining spiralling whitefly freedom inspection records (refer 7.3.6).

The **Authorised Dispatcher** is responsible for -

- ensuring all packages covered by an Assurance Certificate issued by the business under this Operational Procedure are identified (refer 7.6.1);
- maintaining copies of all Assurance Certificates issued by the business under the ICA arrangement (refer 7.7).

Authorised Signatories are responsible for -

- ensuring, prior to signing and issuing an Assurance Certificate, that produce covered by the certificate has been prepared in accordance with the business's ICA arrangement, and the details on the certificate are true and correct in every particular (refer 7.6.2).

6. REQUIREMENT

Plants certified for treatment and/or inspection for spiralling whitefly under this Operational Procedure **must** meet the following requirements :

1. Inspection

Inspected and found free of spiralling whitefly.

OR

2. Treatment

Plants **shall** be treated –

- with a mixture containing –
 - 0.75mL** of a concentrate containing **400g/L dimethoate**
- OR**
- 0.5mL** of a concentrate containing **80g/L bifenthrin**
- OR**
- 0.4mL** of concentrate containing **100g/L bifenthrin** per litre of water; and
- A commercial wetting agent at the rate specified on the product's registered label;
- applied as –
 - a **cover spray** to both sides of the leaves to the **point of run-off**;

OR

for dimethoate only –

- a **dip** by full immersing the plants in the treatment mixture for a **minimum of 10 seconds**.

New South Wales require certification for inspection or treatment for spiralling whitefly on potted plants, barerooted rootstocks and cuttings, but excludes flowers, fruit and seeds.

Victoria requires certification for inspection or treatment for spiralling whitefly on plants and parts of plants intended for cultivation in a greenhouse, hothouse or indoor area.

South Australia, Tasmania and Queensland do not require certification of plants for spiralling whitefly.

This procedure does not cover certification of plants to Western Australia.

Please note, interstate quarantine entry requirements may change without notice.

The Department of Primary Industry and Resources and interstate authorities maintain the right to inspect certified produce any time and to refuse to accept an assurance certificate where produce is found not to comply with specified requirements.

Some plants may be damaged by certain chemical treatments. Businesses applying

chemical treatments should check with experienced persons such as departmental officers for any available information. Testing of small quantities is recommended.

The business must use products registered under the AgVet Code in accordance with the instructions included on the product's approved label or an applicable APVMA permit, and follow any first aid, safety, protection, storage and disposal directions on the product label or permit. Treatment facilities must comply with the requirements of the local government, environmental and workplace health and safety authorities.

7. PROCEDURE

7.1 Accreditation

7.1.1 Application for Accreditation

A business seeking accreditation for an ICA arrangement under this Operational Procedure **shall** submit an Application for Accreditation (refer Attachment 1) at least 10 working days prior to the intended date of commencement of certification of produce.

Applicants **must** provide the details of all produce, plants and plant products they intend to pack and certify under this ICA/CA arrangement in Section 4 of the Application for Accreditation. Ensure application form is completed correctly and all required attachments are provided. A copy of the application form **must** be maintained for audit purposes.

Each accredited business is provided with a unique Interstate Produce (IP) number to identify the business and its produce for all interstate plant quarantine purposes as ministered by the Certificate of Accreditation.

7.1.2 Audit Process

Desk Audit

When the application is received a desk audit is conducted to ensure the application is completed correctly with the required attachments. If found to be incomplete the application form will be returned to the business for completion. Once the desk audit has been passed, an initial/compliance audit will be conducted.

Initial Audit

Prior to accrediting a business, an Inspector carries out an initial audit of the business to verify the ICA/CA system is implemented and capable of operating in accordance with the requirements of the Operational Procedure, and the system is effective in ensuring compliance with the specified requirements of the ICA/CA arrangement.

On completion of a successful initial audit, applicants will be granted provisional accreditation for a period of 4 weeks and a 'Certificate of Accreditation' for Provisional Certification will be issued (refer 7.1.3).

Initial Compliance Audit

In the first year of accreditation an initial compliance audit will be conducted within 4 weeks of accreditation or issuing an assurance certificate pursuant to the Operational Procedure. On completion of successful initial compliance audit the business **shall** be granted full accreditation.

On completion of a successful compliance audit, annual accreditation is granted to cover the current season, up to a maximum of twelve months from the date of provisional accreditation, and a new 'Certificate of Accreditation' issued (refer 7.1.3).

Compliance Audits

Compliance audits are conducted to verify that the ICA/CA system continues to operate in accordance with the requirements of the Operational Procedure.

Ongoing compliance audits are conducted at least once every six months for a business that operates for more than six months of each year.

Random audits are conducted on a selected number of accredited businesses each year. Random audits may take the form of a full compliance audit, or audits of limited scope to sample treatment mixtures, certified produce, ICA/CA system records or ICA/CA system processes.

Unscheduled compliance audits may be conducted at any time as a random audit or to investigate reported or suspected nonconformances.

Re-Accreditation

Accredited businesses are required to re-apply for accreditation each year the business seeks to operate under the ICA/CA arrangement. Businesses seeking re-accreditation **must** lodge a renewal application prior to accreditation lapsing, or if accreditation has lapsed, prior to being accredited to certify produce under the ICA/CA arrangement.

A compliance audit is conducted within twelve weeks of the business applying for re-accreditation each year.

7.1.3 Certificate of Accreditation

An accredited business will receive a 'Certificate of Accreditation for an Interstate Certification Assurance' detailing the facility location, Operational Procedure, scope (type of produce and chemical covered) and period of accreditation.

The business **must** maintain a current 'Certificate of Accreditation for an Interstate Certification Assurance' and make this available on request by an Inspector.

A business may not commence or continue certification of produce under the ICA/CA arrangement unless it is in possession of a valid and current 'Certificate of Accreditation for an Interstate Certification Assurance' for the facility, procedure, produce type and chemical covered by the Assurance Certificate.

7.1.4 Nonconformances and Sanctions

7.1.4.1 Nonconformances

Audits are regularly undertaken to evaluate the effectiveness of implementation of the requirements. If, in the opinion of the auditor, there is evidence indicating that there has been a failure to meet one or more accreditation requirements, the auditor may raise a Nonconformance Report (NCR). Actions required to address the nonconformance **shall** be discussed and recorded on the NCR.

If integrity of the accreditation has been significantly compromised, the nonconformance may provide grounds for the suspension or cancellation of the accreditation, and prosecution.

7.1.4.2 Incident Reports

Incident Reports may be raised by intra and/or interstate quarantine authorities to report the detection of a nonconformance in produce certified under this arrangement. An investigation into the incident **shall** be conducted and findings reported back to the originator.

If the integrity of the accreditation has been significantly compromised, the incident may provide grounds for the suspension or cancellation of the accreditation, and prosecution.

7.1.4.3 Suspension and Cancellation

The PBB may suspend or cancel an accreditation when a business is found, for example, to have:

- obtained accreditation through the provision of false or misleading information;
- not paid fees owing to the PBB;
- contravened an accreditation requirement that compromises the integrity of the arrangement;
- not rectified a nonconformance.

Any action taken by the PBB to suspend or cancel an accreditation **shall** be provided in writing to the business. This **shall** provide guidance in making an appeal to have the decision reviewed.

7.1.4.4 Prosecution

Businesses found to be operating contrary to the Act may be liable for prosecution.

7.1.4.5 Charging Policy

Plant Biosecurity fees will apply to businesses that participate in ICA/CA arrangements. PBB can be contacted for a schedule of the Plant Biosecurity fees.

7.2 Property Plan

The Certification Controller **shall** maintain a property plan for each property on which consignments of plants are assembled, inspected, treated or stored under secure conditions for certification under this Operational Procedure.

A business may elect to define a 'property' as only a portion of a larger area of land owned or leased by the business. However, the boundaries of the 'property' must include all areas where plants are assembled, inspected, treated or stored for certification under this Operational Procedure.

The property plan **shall** comprise of a diagram of the layout of the property including the following features –

- (a) road access including street names;
- (b) internal roadways within the property;
- (c) the location and identification of buildings on the property (eg. office, house, and other permanent roofed structure etc.);
- (d) the size and locations of the plant inspection area;
- (e) the secure area for plants awaiting dispatch; and
- (f) the boundaries of all open and covered plant growing areas.

A copy of the business's Property Plan **shall** be included with the business's Application for Accreditation (refer 7.1.1).

A blank Property Plan is included as Attachment 3 and **should** be copied for completion and inclusion with the business's Application for Accreditation.

7.3 Inspection for Freedom from Spiralling Whitefly

7.3.1 Inspection Officer

The business **shall** train one or more Inspection Officers in the detection and recognition of spiralling whitefly. Inspection Officers **shall** be able to recognise all stages of spiralling whitefly and the symptoms of spiralling whitefly infestation of plants.

The name, date of training and specimen signature of each Inspection Officer **shall** be included on a Register of Authorised Inspection Officers maintained by the business (refer Attachment 4).

7.3.2 Inspection Area Equipment

The business **shall** have a designated area for inspection of plants for spiralling whitefly.

The business **shall** maintain inspection equipment such as a hand lens, microscope or other device that provide X10 or greater magnification for examination of suspect plants.

Reference material including photographs/illustrations of spiralling whitefly **shall** be maintained and made available in the inspection area.

7.3.3 Plant Inspection Procedure

Plants **shall** be inspected as close as practicable, and not more than 48 hours prior to, the time of dispatch from the facility.

Plants **shall** be assembled at the plant inspection facility prior to inspection. Plants **shall** be categorised into lots based on their risk of being infested with spiralling whitefly including species, size of plants or pots and the source or site of production. Each category of plants in a consignment **shall** be listed on the inspection record (refer 7.3.6).

All categories of plants intended for certification **shall** be thoroughly inspected by an Inspection Officer.

Inspection **shall** comprise an examination of both sides of all leaves of each plant intended for certification under this Operational Procedure. Plants **must** be free of any visible symptoms of spiralling whitefly including white flocculence from egg laying, or the presence of adults, nymphs or eggs of spiralling whitefly living or dead.

Information on the life cycle, host range and identification of spiralling whitefly is given in Attachment 12.

The presence of white flocculence on the tops or underside of leaves, or the presence of adult insects similar to those shown in Attachment 12, **shall** be regarded as evidence of spiralling whitefly infestation until determined otherwise by an officer of the Department Primary Industry and Resources (refer 7.3.4).

7.3.4 Action Following Detection of Spiralling Whitefly

The Inspection Officer **shall** reject for certification any plant found on inspection to be infested with spiralling whitefly and all plants in the same category in the consignment.

The Certification Controller **shall** be immediately advised if any plant is found on inspection to be infested with spiralling whitefly.

The Certification Controller shall report any detection of spiralling whitefly on a property where the pest has not been previously detected, to the PBB Operations Manager within 24 hours of the detection.

7.3.5 Rejected Plants

All rejected plants **shall** be moved from the inspection area and clearly identified to prevent mixing with conforming plants.

All rejected plants **shall** be treated for spiralling whitefly in accordance with 7.4.

All rejected plants **must** be disinfested to remove any symptoms of spiralling whitefly infestation and treated in accordance with 7.4 prior to reinspection for spiralling whitefly freedom in accordance with this section.

7.3.6 Inspection Records

The Inspection Officer **shall** maintain records of the results of all spiralling whitefly freedom inspections.

Inspection records **shall** be in the form of a Spiralling Whitefly Freedom Inspection Record (refer Attachment 10) or a record which captures the same information.

Inspection records **must** include –

- the Interstate Produce (IP) Number of the business that operates the approved facility in which the inspection was undertaken;
- the number of the Assurance Certificate to which the inspection relates;
- the date of inspection;

- the type, number and size of plants or pots in each category inspected;
- the inspection result including the presence or absence of spiralling whitefly;
- the number of any rejected plants;
- the name and signature of the Inspection Officer.

An example of a completed Spiralling Whitefly Freedom Inspection Record is shown as Attachment 11.

7.4. Treatment

Treatment under this section is required for –

- all plants consigned to markets that have a treatment option for spiralling whitefly; and
- all plants rejected following spiralling whitefly inspection under this Operational Procedure (refer 7.3.5).

Treatment **shall** be carried out following spiralling whitefly freedom inspection.

The treatment mixture **shall** be applied as –

- a **cover spray** to both sides of the leaves to the **point of run-off**;
- OR**
- **for dimethoate only**, a **dip** by fully immersing the plants in the treatment mixture for a **minimum of 10 seconds**.

7.4.1 Treatment Equipment Calibration

Permanent volume indicator marks **shall** be made on the side of the treatment mixture tank, on a sight tube or sight panel on the outside of the tank, or by some other method which clearly and accurately indicates the **maximum mixture level** and any **incremental volumes** used.

Volume indicator marks **shall** include the volume in litres required to fill the tank to that level.

Each of the volume indicator marks **shall** be calibrated with the tank at the normal filling position using a calibrated flow meter. The person conducting the calibration test **shall** issue a certificate of calibration of the treatment mixture tank which **must** be available to the auditor at the initial audit and all compliance audits.

An example Chemical Mixture Tank Calibration Certificate is shown as Attachment 6.

A Tank Calibration Certificate is not required for small dip tanks or hand held spray equipment such as hand held misters or knapsack sprayers, where the capacity of the treatment mixture tank is less than 25 litres.

7.4.2 Calculating the Quantity of Concentrate to Add to the Treatment Mixture

Calculate –

(a) **0.75 mL** of a concentrate containing **400 g/L dimethoate**;

OR

(b) **0.5 mL** of a concentrate containing **80 g/L bifenthrin**;

OR

(c) **0.4 mL** of a concentrate containing **100 g/L bifenthrin**;

per litre of water.

The treatment mixture **shall** include a commercial wetting agent at the maximum rate specified on the product's registered label for the purpose.

The following calculation may be used to determine the quantity of concentrate required to add to the treatment mixture –

volume of water (L) X volume of conc./litre (mL) = total volume of concentrate (mL)

For example-

*volume of water = 400L
conc./litre of water = 0.75mL
400L X 0.75mL = 300mL concentrate*

This calculation may also be used to calculate the volume of wetting agent to add to the treatment mixture.

Calculate the volumes of concentrate and commercial wetting agent for the **maximum mixture level** and each of the **incremental volumes** marked on the treatment mixture tank and record these on the Treatment Mixture Preparation Chart (refer 7.4.3).

7.4.3 Treatment Mixture Preparation Chart

The business **shall** maintain a Treatment Mixture Preparation Chart (refer Attachment 7) or similar record in close proximity to the treatment mixture preparation area for each dip tank or spray unit used by the business for treatment under this Operational Procedure.

The chart **shall** provide the following details –

- identification of the treatment equipment to which the chart applies;
- the trade name of the concentrate to which the chart applies;
- the name and concentration of the active ingredient in the concentrate;
- the quantity of concentrate required per litre of mixture in mL per litre (refer 7.4.2);
- the trade name of the wetting agent used and the quantity required per litre of treatment mixture;
- the total volume in litres of the treatment mixture tank when filled to the maximum mixture level mark (refer 7.4.1);

- (g) the volume in millilitres (mL) of concentrate and wetting agent required in the mixture when filled to the maximum mixture level mark;
- (h) the volume in millilitres (mL) of a concentrate and wetting agent required in the mixture for any known incremental volumes used;
- (i) the printed name and signature of the person responsible for the chart's preparation and the date of preparation.

A business that uses a variety of chemical concentrates (ie dimethoate and bifenthrin) **shall** prepare a Treatment Mixture Preparation Chart for each concentrate used.

An example of a completed Treatment Mixture Preparation Chart is included as Attachment 8.

7.4.4 Treatment Mixture Preparation

The Treatment Operator **shall** prepare the treatment mixture at least daily or more frequently as required.

7.4.5 Making Up the Treatment Mixture

Using a clean graduated measuring vessel, measure the amount of concentrate required for the required volume of **mixture** (refer 7.4.2).

Suitable measuring vessels include graduated plastic or glass measuring cylinders or syringes.

Add the required amount of concentrate to the spray tank in accordance with the manufacturer's directions on the label.

Add the required amount of commercial wetting agent in accordance with the manufacturer's directions on the label.

Fill the spray supply tank with clean water to the **incremental volume** mark or **maximum mixture level** mark.

Other ingredients may only be added to the treatment mixture if they are known to be compatible with the chemical used for control of spiralling whitefly.

Ensure that the chemical is completely diluted in all of the water by mixing the tank for a minimum of 2 minutes before commencing the spray operation. Some equipment may require extended periods of mixing to fully dilute the chemical in the water.

7.4.6 Treatment Application

Cover Spraying

Plants **must** be thoroughly sprayed to the point of run-off on both sides of the leaves.

Dipping (Dimethoate Only)

Plants **must** be fully immersed in the treatment mixture for a minimum of 10 seconds.

The Treatment Operator **shall** ensure all plant material is fully immersed in the treatment mixture and any air pockets are expelled from the plant material prior to commencing the 10 second immersion period.

Do not apply dimethoate to chrysanthemums, begonias, liquid amber, gloxinias, Myer lemons, Seville oranges or cumquats. Bifenthrin and some commercial wetting agents may also be phytotoxic to certain plant species.

It is advisable to test a small number of plants before treating whole consignments.

Dimethoate is a date controlled product under the Agvet Code. The Treatment Operator should ensure that any dimethoate products used are within specified expiry/use by dates.

Bifenthrin must only be applied as a cover spray as there is no approved label or APVMA permit covering dipping of plants with bifenthrin for spiralling whitefly.

7.4.7 Treatment Mixture Preparation and Treatment Records

The Spray Operator **must** record details of all cover spray mixture preparation and treatment using a Treatment Mixture Preparation and Treatment Record (refer Attachment 9) or records which capture the same information.

The business's treatment records **must** identify –

- the date of treatment mixture preparation;
- the time of treatment mixture preparation;
- the trade name of the concentrate used;
- volume of concentrate used (millilitres) in the treatment mixture;
- volume of wetting agent used (millilitres) in the treatment mixture;
- the total volume (litres) of the made up treatment mixture;
- the date of application;
- the plants or parts of plants (eg cut flowers, foliage) treated;
- the number of plants or parts of plants treated;
- the identification of the Spray Operator.

7.4.8 Disposal of Treatment Mixture

The treatment facility **must** have the facilities to dispose of the dip mixture in a manner consistent with the label instructions.

7.5 Post Inspection/Treatment Security

Plants **must** be maintained in secure conditions immediately following inspection until dispatch from the facility.

Secure conditions **must** be more than 10 metres from infested plants and meet one of the following conditions –

- (a) un-vented packages;
- (b) vented packages with the vents secured with gauze/mesh with a maximum aperture of 1.0 mm;
- (c) fully enclosed under tarpaulins, hessian, shade cloth, mesh or other covering which provides a maximum aperture of 1.0mm;
- (d) fully enclosed or screened buildings, rooms, vehicles or other facilities free from gaps or other entry points greater than 1.0mm.

For all States and Territories except Western Australia –

Plants treated in accordance with 7.4 may be certified and consigned up to 12 hours after treatment without requiring storage under secure conditions due to the residual control of the pesticide treatment.

For plants consigned to Victoria, all plants must be stored in secure conditions (as outlined above) from the time of inspection until dispatch.

7.6 Dispatch

7.6.1 Package Identification

The Authorised Dispatcher **shall** ensure that, after packing, each package is marked in indelible and legible characters of at least 5mm, on the end of every package with -

- the "A" Registration (IP) number of the business that operates the approved facility in which the plants were inspected/treated; and
- the words "MEETS ICA-35"; and
- the date (or date code) on which the plants were inspected;

prior to the issuance of an Assurance Certificate by the business under this Operational Procedure.

If plants are consigned loose in pots and not in packages, the above information **shall** be marked on the consignment note or the invoice accompanying the plants and signed and dated by an Authorised Signatory of the business.

Plants that have not been inspected/treated in accordance with the requirements of this Operational Procedure shall not be marked as stated above.

7.6.2 Assurance Certificates

The Authorised Dispatcher **shall** ensure an Assurance Certificate is completed and signed by an Authorised Signatory of the business prior to consignment of plants to a market requiring certification of inspection/treatment for spiralling whitefly.

Assurance Certificates **shall** be in the form of a Plant Health Assurance Certificate (PHAC). A completed example is shown (refer Attachment 2).

Assurance Certificates **shall** include –

- (a) in the “Accredited Business that Prepared the Produce” section –
 - the name and address of the Accredited Business that **inspected/treated** the plants;
- (b) in the “IP No. of Acc. Business” section -
 - the IP No. of the Accredited Business that **inspected/treated** the plants;
- (c) in the “Type of Produce” section -
 - the **number and description** of plants of **each plant category** in the consignment;

NOTE: Where there is insufficient room to list each plant category the words “See Attachment” are to be used and an Attachment Sheet securely attached to each copy of the assurance certificate.

The Attachment Sheet **must** include the words “ATTACHMENT SHEET”, the name and address of the consignor, the assurance certificate number, the signature of the Authorised Signatory that signed the certificate and the date.

Alternatively, a copy of the Spiralling Whitefly Freedom Inspection Record covering the consignment may be used. An example Attachment Sheet is included with Attachment 2.

- (d) **for plants where a treatment has been applied**, in the “Treatment” section -
 - in the Date column, the date or dates of **treatment** of the plants;
 - in the Treatment column, the words “Dip” or “Cover Spray” as applicable;
 - in the Chemical (Active Ingredient) column, the concentration and name of the active ingredient of the chemical used to treat the plants (eg “400g/L dimethoate” or “100g/L bifenthrin”);
 - in the Concentration column, the words “at ## mL/L”, where ## is the number of millilitres of concentrate added per litre of spray mixture;
 - in the Duration and Temperature column, for dipping, the words “10 seconds” and for cover spraying, the words “to run-off”;
- (e) in the “Additional Certification” section the statement –

“Inspected and found free of spiraling whitefly.”

A completed example is shown as Attachment 2.

Individual Assurance Certificates **shall** be issued to cover each consignment (ie. a specified quantity of product transported to a single consignee at one time) to avoid splitting of consignments.

Assurance Certificates **shall** be completed, issued and distributed in accordance with the Work Instruction Guidelines for Completion of Plant Health Assurance Certificates (WI-02).

7.6.3 Assurance Certificate Distribution

The **original** (yellow copy) **must** accompany the consignment.

The **duplicate** (white copy) **must** be retained by the business.

The **triplicate** (green copy) **must** be sent to PBB.

7.6.4 Security During Transport

The business **shall** make every effort to ensure certified plants are isolated from uncertified plants during transport to the consignee to prevent cross-infestation by spiralling whitefly.

7.7 ICA System Records

The business **shall** maintain the following records -

- (a) Property Plan for each source property (refer 7.2);
- (b) Spiralling Whitefly Freedom Inspection Records (refer 7.3.6);
- (c) Chemical Mixture Tank Calibration Certificate (refer 7.4.1);
- (d) Treatment Mixture Preparation Chart (refer 7.4.3);
- (e) Treatment Mixture Preparation and Treatment Records (refer 7.4.7);
- (f) the duplicate copy of each Plant Health Assurance Certificate (Attachment 2) issued by the business (refer 7.6.2).

ICA system records **shall** be retained for a period of not less than 24 months from completion.

ICA system records **shall** be made available on request by an Inspector.

7.8 ICA System Documentation

The business **shall** maintain the following documentation -

- (a) a copy of the business's current Application for Accreditation (refer Attachment 1);
- (b) a current copy of this Operational Procedure;
- (c) a current Certificate of Accreditation for an Interstate Certification Assurance.

ICA system documentation **shall** be made available on request by an Inspector.

8. ATTACHMENTS

Attachment 1	Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) and/or Certification Assurance (CA) Arrangement	(BLANK)
Attachment 2	Plant Health Assurance Certificate (PHAC)	(COMPLETED EXAMPLE)
Attachment 3	Property Plan	(BLANK)
Attachment 4	Register of Authorised Inspection Officer	(BLANK)
Attachment 5	Chemical Mixture Tank Calibration Certificate	(BLANK)
Attachment 6	Treatment Mixture Preparation Chart	(BLANK)
Attachment 7	Treatment Mixture Preparation Chart	(COMPLETED EXAMPLE)
Attachment 8	Treatment Mixture Preparation and Treatment Record	(BLANK)
Attachment 9	Spiralling Whitefly Freedom Inspection Record	(BLANK)
Attachment 10	Spiralling Whitefly Freedom Inspection Record	(COMPLETED EXAMPLE)
Attachment 11	Spiralling Whitefly Information Sheet	

Tick each box that describes your business and the ICA/CA arrangement and provide specific details where required. Only one arrangement, that is one Operational Procedure at one Facility, may be covered in one application.

Indicate the type of application being made.

☐

New

☐

Renewal

☐

Amendment

1. Business/Person Details

(a) Type of Ownership of Business

☐

Individual

☐

Incorporated Company

☐

Other

☐

Partnership

☐

Cooperative Association

(please specify)

(b) Name of Business/Person

Please supply name in full. For a partnership, list the full names of each partner in their normal order. Companies must provide their Australian Company Number (ACN) or Australian Registered Body Number (ARBN) and attach a copy of the Certificate of Incorporation. Cooperative associations must provide appropriate proof of registration (i.e. a copy of the Certificate of Registration or registration search from the Office of Business Affairs or Australian Securities Commission)

☐

ARBN

--	--	--	--

--	--	--	--

--	--	--	--

☐

ACN

(c) Trading Name/s of the Business/Person (as shown on packages sent to market)

--

(d) Postal address of the Business/Person

Telephone:

()

Facsimile:

()

Mobile:

--

E-mail

--

(e) Has the business/person been registered previously for the interstate movement of produce?

☐

Yes

☐

No

If yes, give the business's/persons Interstate Produce (IP) Number

A

--

2. Operational Procedure and Facility Details

a) Operational Procedure used in this arrangement

Reference No.

--

Title of Operational Procedure

--

(b) Street address of the facility

Telephone:

()

Facsimile

()

Mobile

3. Authorised Signatories (for Plant Health Assurance Certificates)

	Family Name	Given Name/s	Specimen Signature
Certification Controller			
Back-up Certification Controller			
Additional Authorised Signatories			

4. **Types (including varieties) of Produce to be Prepared Under the ICA/CA Arrangement (if insufficient space, attach a list)**

5. **Interstate Certification Assurance/Certification Assurance System Records**

(a) What records do you maintain to verify that the business is carrying out its responsibilities and duties under the Operational Procedure?

- ☐ We maintain all our records in accordance with the examples provided in the Operational Procedure.
- ☐ We have developed alternative or additional records to those provided in the Operational Procedure.

(b) List the alternative or additional records you intend to use and attach a copy to this application.

(a)
(b)
(c)

6. **Accreditation Conditions**

(a) For the purposes of this agreement the following definitions shall apply:-

Applicant means the person, **corporation**, or other legal entity who is accredited under this agreement.

Inspector means an inspector appointed under the *Plant Health Act*

Department means the Department of Primary Industry and Resources

Interstate Certification Assurance System means the processes, equipment, personnel and resources used to implement the Operational Procedure nominated in Section 2(a).

(b) The applicant must maintain and operate the interstate certification assurance system in accordance with the Operational Procedure as nominated in Section 2(a), and must maintain the records specified in Section 5.

(c) The applicant will, upon request, allow an inspector to enter any premises where produce certified under the agreement is treated or dispatched, or where any produce, equipment, chemicals, documents for records are stored.

(d) The inspector may inspect or take samples of any relevant item present on the premises at the time of the inspection.

(e) The applicant must take all steps to assist an inspector in the conduct of audits including allowing the inspector or officer to interview any employee of the applicant in relation to the Implementation of the Interstate Certification Assurance System.

(f) The applicant authorises the persons listed in Section 3 of this application to issue certificates on his or her behalf.

(g) In the event of cancellation or non-renewal of this arrangement the certificate pad and any green copies must be returned as they remain the property of Plant Biosecurity Branch.

(h) Plant Biosecurity fees will apply to those businesses/persons that choose to participate in this ICA/CA arrangement. Plant Biosecurity Branch can be contacted for a schedule of the Plant Biosecurity fees.

The applicant agrees to abide by the accreditation conditions listed above and acknowledges that any accreditation is granted subject to those conditions.

The applicant certifies that all of the information contained in this application is true and correct.

Signature/s	Date

Note: Where the applicant is a corporation, the company seal must be applied, and signed, in the appropriate form. Where the applicants are members of a partnership, each of the partners must sign the application.

Office Use Only

Desk Audit ☐ Passed ☐ Failed

Name (print) _____ Date received ____ / ____ / ____

Signature: _____ Date completed ____ / ____ / ____

Post your application/s to: Department of Primary Industry and Resources, Plant Biosecurity Branch
GPO Box 3000, DARWIN NT 0801



Plant Health Assurance Certificate

Consignment Details (PLEASE PRINT)

CONSIGNOR (FROM)	
Name	<i>Tropical Plant Nursery Pty Ltd</i>
Address	<i>Horne Road</i>
	<i>Humpty Doo NT 0836</i>

CONSIGNEE (TO)	
Name	<i>Plants R Us</i>
Address	<i>Nursery Road</i>
	<i>Sydney NSW 2000</i>

RECONSIGNED TO (Splitting consignments or reconsigning whole consignments).	
Name	
Address	

BRAND NAME OR IDENTIFYING MARKS (as marked on packages)	DATE OR DATE CODE (as marked on packages)
<i>Tropical Plant Nursery</i>	<i>04072012</i>

Number of Packages	Type of Packages (e.g. trays, cartons)	Type of Produce	Authorisation for Split Consignment
<i>2</i>	<i>Cartons</i>	<i>See Attached</i>	

Treatment Details

Treatment	Chemical (Active Ingredient)	Treatment Date	Concentration / Duration and Temperature
<i>Cover Spray</i>	<i>Bifenthrin 100g/L</i>	<i>04/07/2012</i>	<i>@ 0.4mL/L to run-off</i>

Additional Certification / Codes

Inspected and found free of spiralling whitefly

Declaration

I, an authorised Signatory of the accredited business that prepared the plants or plant produce described above, hereby declare that the plants or plant produce have been prepared in the business's approved facilities in accordance with the *Plant Health Act* and that the details shown above are true and correct in every particular.

AUTHORISED SIGNATORY'S NAME (PLEASE PRINT)	SIGNATURE	DATE
<i>Joe Signatory</i>	<i>Joe Signatory</i>	<i>4/7/2012</i>

ATTACHMENT SHEET

Attachment 2A

Plant Health Assurance Certificate No. B012345

Consignor –

Tropical Plant Nursery Pty Ltd
Horne Rd
Humpty Doo NT 0836

Carton No.	No. and Size of Items	Type of Plant Material
1	10 X 75 mm pots	Small Leaf Lillypilly (<i>Syzygium luehmannii</i>)
1	10 X 75 mm pots	Lemon Scented Myrtle (<i>Backhousia citriodora</i>)
2	20 X 120 mm pots	Walking Stick Palm (<i>Linospadix monostachya</i>)
2	20 X 120 mm pots	Foxtail Palm (<i>Wodyetia bifurcate</i>)
2	40 X 120 mm pots	Bangalow Palm (<i>Archontophoenix cunninghamiana</i>)

Authorised Signatory -

Joe Signatory

Printed Name

J Signatory

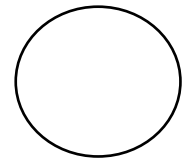
Signature

04 07 12

Date

PROPERTY PLAN

Attachment 3



INDICATE NORTH

ARRANGEMENT DETAILS/DECLARATION

ARRANGEMENT DETAILS

Applicant's Name *(as shown on the application form)*

SCOPE OF ARRANGEMENT

Street Address of Property

Postcode

Real Property Description(s) *(available from Rates Notice)*

PROPERTY PLAN DETAILS

The property plan (overleaf) is to include the following-

1. road access including street names;
2. internal roadways within the property;
3. the location and identification of buildings on the property (eg office, house, equipment and potting sheds, and permanent shadehouse structures etc)
4. the size and location of the plant inspection area;
5. the size and location of the secure area for inspected plants awaiting dispatch;

6. the size and location of all open and covered plant growing areas.

DECLARATION

I *(full printed name)* the

..... *(position in business)*

am authorised to sign on behalf of the business and I understand that-

- (a) accreditation will only be granted for properties covered by a Property Plan submitted with the *Application for Accreditation of a Business for an Interstate Certification Assurance Arrangement*;
- (b) application must be made to amend any of the current details in the *Application for Accreditation of a Business for an Interstate Certification Assurance Arrangement* or this Property Plan; and
- (c) following accreditation, certification can only be issued in accordance with scope of accreditation detailed in the *Certificate of Accreditation for an Interstate Certification Assurance* (ICA) Arrangement covering the arrangement.

.....
Signature

/ /
Date

Attachment 4

Note: Place a line through any entry for any person who is no longer authorised to carry out spiralling whitefly freedom inspections under the business's Interstate Certification Assurance arrangement.

CHEMICAL MIXTURE TANK CALIBRATION CERTIFICATE

Attachment 5

EQUIPMENT CALIBRATED

Name and Address of
Owner of Equipment:

Type of equipment
(eg boom spray, mister):

Brand:

Model:

Serial No.:

Other Identification:

TESTING DETAILS

Name and Address of the
Business Conducting the
Test:

Date of Testing:

Type of Flow Meter Used:

Date of Latest Calibration
of Flow Meter:

CALIBRATION RESULTS

Maximum Mixture Level Volume (litres)

Incremental Volumes (litres)
(as marked on the spray tank):

CERTIFICATION

The spray mixture tank on the equipment described above has been calibrated in the normal filling position using a calibrated flow meter. Volume indicator marks have been clearly marked on the tank with the volume in litres required to fill the tank to that level.

Printed Name

Signature

Date

TREATMENT MIXTURE PREPARATION CHART

Attachment 6

Treatment Unit _____

Concentrate (*Trade Name*) _____

Active Ingredient _____ Conc. _____ g/L

Concentrate Mixing Rate _____ mL/litre of mixture

Wetting Agent (*Trade Name*) _____

Wetting Agent Mixing Rate _____ mL/litre of mixture

Full Tank

Full Treatment Tank Volume = _____ Litres

Volume of Concentrate = _____ millilitres

Volume of Wetting Agent = _____ millilitres

Part Fill

_____ mL Concentrate and

_____ mL Wetting Agent / _____ Litres Mixture

_____ mL Concentrate and

_____ mL Concentrate / _____ Litres Mixture

_____ mL Concentrate and

_____ mL Concentrate / _____ Litres Mixture

Prepared by: _____ / /
Printed Name Signature Date

TREATMENT MIXTURE PREPARATION CHART

Attachment 7

Treatment Unit Hardi Mini-Variant 600

Concentrate (Trade Name) Saboteur

Active Ingredient Dimethoate Conc. 400 g/L

Concentrate Mixing Rate 0.75 mL/litre of mixture

Wetting Agent (Trade Name) Agral

Wetting Agent Mixing Rate 2 mL/litre of mixture

Full Tank

Full Treatment Tank Volume = 600 Litres

Volume of Concentrate = 450 millilitres

Volume of Wetting Agent = 60 millilitres

Part Fill

150 mL Concentrate and

20 mL Wetting Agent / 200 Litres Mixture

225 mL Concentrate and

30 mL Wetting Agent / 300 Litres Mixture

300 mL Concentrate and

40 mL Wetting Agent / 400 Litres Mixture

Prepared by: S Operator

Printed Name

S Operator

Signature

01/04/06

Date

TREATMENT MIXTURE PREPARATION AND TREATMENT RECORD

Attachment 8

[illegible]

Page_____of_____

Attachment 9

The consignment described above has been inspected in accordance with the requirements of the ICA Operational Procedure Inspection and Treatment of Plants for Spiralling Whitefly (ICA-35) and has been found on inspection to be free of Spiralling Whitefly.

Printed Name: _____ Signature: _____ Date: ____/____/____
 Authorised Signatory

SPIRALLING WHITEFLY FREEDOM INSPECTION RECORD

Page _____ of _____

Attachment 10

Business Name		Tropical Plant Nursery P/L				IP Number					A	9	9	9	9	PHA Certificate No.		B012345	
Date	Plant Category			Free of SW?		Comments	Inspection Officer												
	Type of Plants	No. of Plants	Size of Plants	Yes	No		Printed Name		Signature										
03/07/07	Royal Palms	250	tubes	✓		<div style="position: relative; height: 100px;"> Example </div>													
"	Piccabeen Palms	250	tubes	✓															
"	Cycas revoluta	25	4" pots	✓															
"	Native Violet	125	3" pots	✓				John Inspector	J Inspector										
"	Kentia Palms	30	6" pots	✓															
"	Dwarf Date Palms	10	12" pots	✓															
"	Agapanthus (White)	25	6" pots	✓															
03/07/07	Acalypha	50	6" pots		✓	2 plants infested with whitefly.	Ann Inspector	A Inspector											
"	S Leaf Lillypilly	25	6" pots	✓		remainder of lot rejected	Ann Inspector	A Inspector											
"	Heliconia flowers	125	Stems	✓		and treated with dimethoate	Ann Inspector	A Inspector											
"	Crab's claws	5	Stems	✓		as per ICA-35.	Ann Inspector	A Inspector											
"	Tropical Foliage	45	Leaves and Stems	✓			Ann Inspector	A Inspector											
"	Palm Leaves	14	Leaves	✓			Ann Inspector	A Inspector											
"	Cycad Leaves	12	Leaves	✓			Ann Inspector	A Inspector											
04/07/07	Acalypha	50	6" pots	✓		Reinspection from 03/07/07	Ann Inspector	A Inspector											

The consignment described above has been inspected in accordance with the requirements of the ICA Operational Procedure Inspection and Treatment of Plants for Spiralling Whitefly (ICA-35) and has been found on inspection to be free of Spiralling Whitefly.

	Printed Name	Signature	Date
Authorised Signatory	Joe Signatory	J Signatory	04 / 07 / 07

SPIRALLING WHITEFLY (*Aleurodicus dispersus*)**Host Range**

Spiralling Whitefly has been recorded on over 100 crop and ornamental plant species. The pest is tropical in origin and is also able to breed in sub-tropical conditions. It particularly favours crop plants such as papaw, cassava, banana, guava, chilli, tomato, egg plant and coconut and ornamentals such as frangipani, bauhinia, canna, acalypha, poinsettia, hibiscus, rose and palms. The host range could well be much more extensive as there are many subtropical and temperate horticultural and ornamental plants that are still untried against Spiralling Whitefly attack.

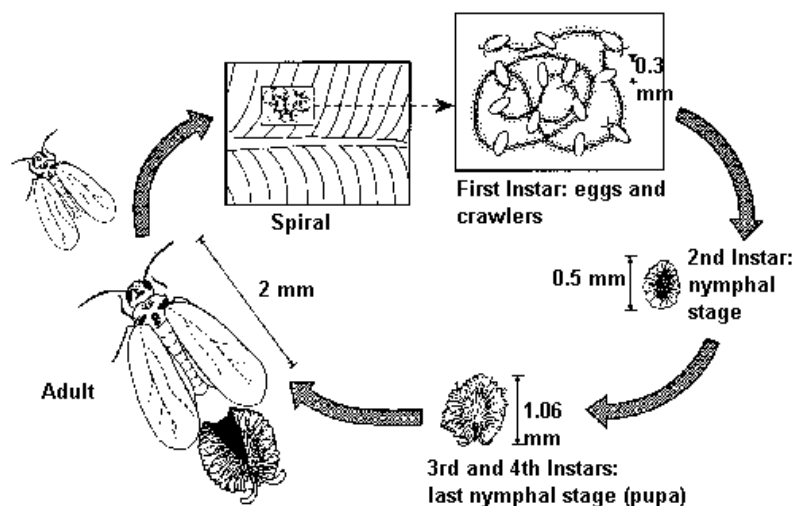
Detection and Identification

The first signs of infestation are the whitefly eggs that are laid in white silken spirals on the upper or lower surface of leaves and on the skin of fruits and vegetables.

Spiralling Whitefly adults may also be seen. They are small (2.0mm long), white and moth-like in appearance and mode of flight. The adults are generally only active during calm, still times of the day, eg. dawn and dusk, when they can be seen flying in large circular patterns around host plants. Normally adults can be induced to fly by shaking an infested plant, after which they quickly resetttle. The adult whitefly and immature nymphs occur in dense populations on the undersides of the leaves of the host plant.

Nymphal stages are covered in a heavy coating of white, curly filaments and produce sugary secretions that lead to the development of black sooty mould on the leaves and stems.

Spiralling Whitefly bears a superficial resemblance to a closely related species, coconut whitefly which occurs in Northern Territory and is a minor pest of a range of horticultural and ornamental plants. Samples of suspected Spiralling Whitefly must be submitted to DPIR for identification.

**Life History**

Eggs (0.3mm long) are lozenge in shape, almost microscopic, and are embedded in the silken spirals produced by the female. The egg hatches into an active crawler stage of about the same size as the egg. This stage crawls out over the undersides of the host's leaves and then transforms into an inert, sedentary stage that sucks nutrients from the leaves.

This nymphal stage (0.5mm-1.06mm long) has no visible legs and grows progressively through a series of moults (instars), each instar producing more and more wax and sugar secretions. The final instar acts as a pupa, out of which the adult whitefly emerges. The time from egg to adult can be less than three weeks in summer, longer in cooler weather. The female whitefly (which is identical to the male) can lay large numbers of eggs.



Spiralling Whitefly egg spirals, nymphs and adults on papaw



Spiralling Whitefly nymphs on papaw leaves



Heavy Spiralling Whitefly infestation of quava plants



Typical Spiralling Whitefly egg spirals on papaw leaves