



ICA-21

PRE-HARVEST TREATMENT & POST-HARVEST INSPECTION OF APPROVED HOST PRODUCE

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REVISION HISTORY

VERSION	DATE	AMENDMENTS	
		SECTION	DETAILS
1.0	17/09/2003	All	New ICA Procedure
2.0	22/12/2003		Pages 9,25,26,27 & 28
3.0	25/05/2007	All	Reformat
4.0	15/06/2011	All	Reformat
		6.0	Amended treatment intervals for all stonefruit except low chill to align with label requirements of 4, 3 and 2 weeks.
5.0	17/10/2011	6.0	Inclusion of Trichlorfon as a treatment
5.0	17/10/2011		Changed title to include blueberries and pome fruit
5.1	19/03/2012	All	Reformatted including references to updated PHAC
		All	Inclusion of persimmons in title, Section 6 treatments and scope
6.0	12/09/2012	6	Inclusion of Dimethoate treatment of blueberries
6.1	02/10/2012	Title, Scope & 6	Amended title to approved host fruit. Addition of blackberries to scope. Change to Fenthion requirements
6.2	06/12/2012	6	Inclusion of 25 day maximum spray interval for blueberries
7.0	25/9/2013	6	Raised inspection rate from 1 to 2% for national consistency
8.0	18/11/2013	6	Restriction of Fenthion to one use 21 days pre-harvest for peaches & apricots
9.0	9/08/2014	Title, Scope & 6	Amended title to approved host produce. Add Clothianidin in combination with other treatments, remove blackberries
10.0	29/09/2015	6	Removed Fenthion
10.1	4/12/2015	6	Removed use of Clothianidin on blueberries
11.0	20/06/2017	All	Changes made to align with the <i>Biosecurity Act 2015</i> . Updated definitions, removed details for accreditation, auditing procedures, sanctions policy and charging, and replaced the application form and PHAC. Updated NSW Department of Primary Industries contact details. Changed requirement from the use of a Pre-harvest treatment and inspection declaration, to a PHAC
12.0	08/07/2021	All	Amended to align with National Protocol V1.0 issued 13 December 2020 including changes to the maldison treatment (s6), added harvest inspection requirement (s6), added post harvest inspection rates(s6), reformatted treatment into tables(s6), updated definitions for Department, Facility, QFF, added requirement for equipment calibration record(7.2.2) and treatment preparation chart (7.2.5), minor amendments to 7.1, 7.2, 7.4, 7.5, 8.1, 8.3 and 8.4.
13.0	10/03/2022	2, 4, 6, 8.3.3, 8.3.5.2, 8.3.6, Attachment 10	Removed stonefruit from scope, removed ability to re-grade, pack and inspect after detecting broken skins in stonefruit.

Disclaimers

The information contained in this Procedure is based on knowledge and understanding at the time of writing (March 2022). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up-to-date and to check currency of the information with the appropriate officer of the Department or the user's independent adviser.

PROCEDURE

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1. PURPOSE

The purpose of this Procedure is to describe:

- (a) the operation and principles; and
- (b) the responsibilities and actions of personnel;

that applies to the pre-harvest treatment and post-harvest inspection of approved host produce for Queensland Fruit Fly (QFF) under an Interstate Certification Assurance (ICA) arrangement.

2. SCOPE

This Procedure covers all certification of pre-harvest treatment and inspection of approved host produce from a Business operating under an ICA arrangement in New South Wales.

This Procedure is applicable where the requirements specified in section 6 are a specified condition of entry of an interstate quarantine authority for QFF.

Pest: Queensland fruit fly (QFF)

Produce: Blueberries, persimmons, and pome fruit.

Location: This Procedure is separated into two sections:

- Part A covering grower activities, and
- Part B covering packer activities.

Certification of fruit fly host produce under this Procedure may not be an accepted quarantine entry condition for all produce to all intrastate and interstate markets.

Some intrastate or interstate markets may require additional plant health certification for pests and diseases other than fruit fly as a condition of entry.

It is the responsibility of the Business consigning the produce to ensure compliance with all applicable quarantine requirements.

Information on intrastate and interstate quarantine requirements can be obtained by phoning 1800 084 881 or accessing <http://www.interstatequarantine.org.au/>.

3. REFERENCES

[Biosecurity Act 2015](#)

Further information – <https://www.dpi.nsw.gov.au/biosecurity/plant>

Policies – <https://www.dpi.nsw.gov.au/about-us/policies-procedures>

Accreditation of Biosecurity Certifiers

Biosecurity Audit Frequency

Work Instruction – <https://www.dpi.nsw.gov.au/biosecurity/plant>

WI-01 – ‘Guidelines for Completion of Plant Health Assurance Certificates’

4. DEFINITIONS

In this Procedure:

Act means the [Biosecurity Act 2015](#).

APVMA means the Australian Pesticides and Veterinary Medicines Authority.

Authorised Person means an authorised officer under the Act or a person authorised under a law of another State or Territory that relates to plant biosecurity.

<i>Authorised Signatory</i>	means a person whose name is notified to the Secretary as a person who can issue a biosecurity certificate on behalf of the business.
<i>block</i>	means an identifiable area of land on which produce is grown and pre-harvest treated as a unit and that is detailed on the Property Plan.
<i>blueberries</i>	means all commercial varieties of <i>Vaccinium spp.</i>
<i>Business</i>	means the legal entity accredited as a biosecurity certifier under the Act.
<i>Certification Assurance Arrangement</i>	means a CA Arrangement that enables a business or a person authorised under a corresponding law of a State or Territory, to issue a Plant Health Assurance Certificate that meets certain plant health quarantine conditions for trade within the State or between the State and other States and Territories.
<i>consignment</i>	means a discrete quantity of product transported to a single consignee at one time covered by a single PHAC.
<i>Department</i>	means the NSW Department of Primary Industries, Regional NSW.
<i>end-point inspection</i>	means the process by which a representative sample is drawn and inspected from the finalised load/consignment prior to certification.
<i>facility</i>	means the property where the produce is grown and pre-harvest treatment is carried out, and the location where post-harvest operations covered by the ICA arrangement are carried out.
<i>host produce</i>	means blueberries, persimmons and pome fruit.
<i>in-line inspection</i>	means the process by which a representative sample is drawn during the processing and packaging of the goods.
<i>inspection</i>	means the act of inspecting produce to determine if fruit fly is present.
<i>ICA Scheme</i>	means a scheme developed by the States and Territories to meet their respective plant quarantine requirements under the Memorandum of Understanding on Interstate Certification Assurance dated 6 August 1999.
<i>lot</i>	means a quantity of homogenous product assembled at one place and at one time. A lot could consist of product from one or more growers/blocks/properties.
<i>lot identification</i>	means any coding or marking method used to identify a lot (for example, date, date code or block code).
<i>non-conformance</i>	means a failure to fulfil a specified requirement.
<i>package</i>	means the complete outer covering or container in which certified host produce is consigned and may include a box, carton, bin, bundle, punnet or other packaging.
<i>packed product</i>	means host produce in packages following grading and packing and ready for marketing.
<i>persimmon</i>	means commercially produced fruit from the species <i>Diospyros kaki</i> .
<i>PHAC</i>	means a Plant Health Assurance Certificate that is issued in accordance with the requirements of a Certification Assurance Arrangement.
<i>pome fruit</i>	means all commercially produced fruits from the <i>Maloideae</i> subfamily and includes apple, pear and quince.
<i>property</i>	means one or more contiguous parcels of land (lots on plan), owned or leased by a Business, that are managed as a unit and isolated from any other parcel of land owned or leased by the same Business.
<i>Queensland fruit fly (QFF)</i>	means all stages of the species <i>Bactrocera tryoni</i> (Froggatt).

<i>SDS</i>	means Safety Data Sheet, a procedure for handling or working with chemicals in a safe manner and includes information such as physical data, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment and spill-handling procedures.
<i>source block</i>	means a block on which produce is grown and pre-harvest treated and is the source of produce certified under this arrangement.

5. RESPONSIBILITY

Position titles have been created to reflect the responsibilities which must be met by the Business under the ICA arrangement. These positions must be assigned to trained staff. 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 the ICA Procedure;
- training staff in their duties and responsibilities under this ICA Procedure;
- ensuring the Business and staff comply with their responsibilities and duties;
- ensuring all certification of host produce is carried out in accordance with this Procedure;

UNDER PART A

- Ensuring the Business has current accreditation for an ICA arrangement under PART A of this Procedure;
- maintaining a Property Plan for each property on which the host produce is to be grown for certification under this Procedure;
- ensuring all source blocks of host produce to be harvested have undergone pre-harvest treatment as per this Procedure;
- ensuring treated produce is identified and segregated from untreated produce to avoid mixing;
- instigating action following detection of suspected live QFF infestation at harvest; and
- ensuring a PHAC is completed.

UNDER PART B

- Ensuring the Business has current accreditation for an ICA arrangement under PART B of this Procedure;
- ensuring all host produce received for post-harvest packing and inspection and certification under PART B of this Procedure are sourced from a Business accredited under PART A of this Procedure and are accompanied by a valid PHAC;
- ensuring treated and untreated produce are identified and controlled to prevent mixing during grading and packaging; and
- taking corrective action following detection of a QFF infestation during grading and packing or packed product inspection.

The **Treatment Operator** is responsible for:

- reading the label and/or Permit, and SDS for the chemical product in use;
- preparing and applying pre-harvest chemical treatments to all source blocks certified under this Procedure;
- conducting pre-harvest spray application calibration tests on pre-harvest treatment equipment;
- maintaining a tank calibration certificate for each spray tank used for pre-harvest treatment of host produce;
- maintaining pre-harvest spray application calibration test records;
- maintaining treatment preparation charts;

- maintaining pre-harvest spray equipment; and
- maintaining pre-harvest spray mixture preparation and treatment records.

The **Harvest Supervisor** is responsible for:

- undertaking produce inspection;
- all harvest activities, including identification of treated and untreated blocks and produce;
- advising of any infestations found and segregating infested produce;
- maintaining 'Harvest Inspection Records'; and
- completion of PHAC.

The **Produce Receival Officer** is responsible for:

- ensuring all host produce received for grading, packing and certification under PART B of this Procedure are sourced from a Business accredited under PART A of this Procedure; and
- ensuring all host produce grown by another Business is accompanied by a completed PHAC.

The **Grader/Packer** is responsible for:

- ensuring all host produce packed for certification under PART B of this Procedure is free from visible symptoms of QFF infestation; and
- ensuring all non-conforming host produce is identified and controlled to prevent mixing with conforming produce.

The **Packed Product Controller** is responsible for:

- sampling and inspecting for freedom from visible symptoms of QFF infestation;
- identifying all sample packages;
- taking corrective action following the identification of non-conforming host produce in any sample package; and
- maintaining records of packed product inspection

The **Authorised Signatory** is responsible for:

- signing and issuing the PHAC; and
- ensuring that the product certified under the PHAC has been completed in accordance with this ICA Procedure and that the details on the PHAC or declaration are true and correct in every particular.

The **Authorised Dispatcher** is responsible for:

- ensuring all packages covered by a PHAC issued by the Business are identified; and
- maintaining duplicate copies of all PHACs issued by the Business under the Procedure.

6. REQUIREMENTS

Host produce certified under this ICA Procedure must be treated in accordance with APVMA approved product label and/or APVMA permits, as follows:

A program of cover sprays consisting of –

- any combination of the chemical active ingredient and applied in accordance with the following tables
 - Table 1 – program of cover sprays for persimmons
 - Table 2 – program of cover sprays for pome fruit
 - Table 3 – program of cover sprays for blueberries; and
- beginning at least 28 days prior to harvest (21 days for clothianidin) and continuing until the completion of harvest of host produce for certification; and
- conducted in accordance with the chemical product label and applicable APVMA permit; and

(d) harvest inspected for fruit fly infestation.

AND

(e) post-harvest inspected at a minimum of 2% of packed produce and found free of QFF infestations.

Table 1: Cover spray program for persimmons

Persimmons	(a)	with a product containing 500 g/L trichlorfon as the only active constituent: (i) containing 250 mL of a 500 g/L product per 100 L water in the first application to a block; and then (ii) containing 125 mL of a 500 g/L product per 100 L water in all subsequent spray applications; and (iii) commencing at least 28 days prior to harvest; and (iv) repeat lower rate at intervals of every 7 to 10 days; and (v) a maximum of 4 applications per season.
OR	(b)	with a product containing 500 g/kg clothianidin as the only active constituent: (i) containing 40 g of a 500 g/kg product per 100 L water; and (ii) a suitable compatible Organosilicone surfactant at label rate; and (iii) commencing at least 21 days prior to harvest; and (iv) applied at intervals of every 7 days; and (v) a maximum of 3 applications per season.
OR	(c)	with a product containing 440 g/L maldison as the only active constituent: (i) containing 140 mL of a 440 g/L product per 100 L water; and (ii) commencing at least 28 days prior to harvest; and (iii) applied at intervals of every 7 to 10 days; and (iv) a maximum of 4 applications per season.
OR	(d)	a combination of trichlorfon , clothianidin and maldison applied in accordance with all the requirements of (a), (b) and/or (c) above at intervals determined by the spray type used in the most recent application.
Notes:		<ul style="list-style-type: none">• When applying trichlorfon as part of a combination of chemicals, ensure that the first application of trichlorfon is applied at the rate of 250 mL/100 L, regardless of where in the combination of chemicals this application occurs.• Clothianidin can be applied as part of a combination of chemicals.

Table 2: Cover spray program for pome fruit

Pome fruit	(a)	with a product containing 500 g/L trichlorfon as the only active constituent: (i) containing 500 mL of a 500 g/L product per 100 L water in the first application to a block; and then (ii) containing 250 mL of a 500 g/L product per 100 L water in all subsequent spray applications; and (iii) commencing at least 28 days prior to harvest; and (iv) repeat lower rate at intervals of every 7 to 10 days.
OR	(b)	with a product containing 500 g/kg clothianidin as the only active constituent: (i) containing 40 g of a 500 g/kg product per 100 L water; and (ii) a suitable compatible Organosilicone surfactant at label rate; and (iii) commencing at least 21 days prior to harvest; and (iv) applied at intervals of every 7 days; and (v) a maximum of 3 applications per season.
OR	(c)	with a product containing 440 g/L maldison as the only active constituent: (i) containing 140 mL of a 440 g/L product per 100 L water; and (ii) applied at intervals of every 7 to 10 days; and (iii) commencing at least 28 days prior to harvest; and (iv) a maximum of 3 applications per season.
<i>Continued over ...</i>		<i>Continued over ...</i>

Table 2: Cover spray program for pome fruit

OR	(d)	a combination of trichlorfon , clothianidin and maldison applied in accordance with all the requirements of (a), (b) and/or (c) above at intervals determined by the spray type used in the most recent application.
Notes:	•	When applying trichlorfon as part of a combination of chemicals, ensure that the first application of trichlorfon is applied at the rate of 500 mL/100 L, regardless of where in the combination of chemicals this application occurs.
	•	Clothianidin can be applied as part of a combination of chemicals.

Table 3: Cover spray program for blueberries

Blueberries	(a)	with a product containing 400 g/L dimethoate as the only active constituent: (i) containing 75 mL of a 400 g/L product per 100 L water; and (ii) make at least 1 application before harvest and continue until the end of harvest; and (iii) a maximum number of 7 applications can be applied per crop per season; and (iv) applied at an interval of no less than 21 days.
OR	(b)	with a product containing 500 g/L trichlorfon as the only active constituent: (i) containing 250 mL of a 500 g/L produce per 100 L water; and (ii) commencing at least 28 days prior to harvest; and (iii) applied at intervals of 7-10 days; and (iv) a maximum number of 3 applications per crop per season.
OR	(c)	with a product containing 440 g/L, or 1000 g/L, or 1150 g/L maldison as the only active constituent: (i) containing 140 mL of a 440 g/L product per 100 L water; (ii) commencing at least 28 days prior to harvest; and (iii) applied at intervals of every 7 - 10 days; and (iv) a maximum of 6 applications per season.
OR	(d)	a combination of dimethoate , trichlorfon and maldison applied in accordance with all the requirements of (a), (b) and/or (c) above at intervals determined by the spray type used in the most recent application.

The Business must use products in accordance with the instructions included on the product's approved Permit and label, including any first aid, safety, protection, and storage and disposal directions.

Some produce may be damaged by chemical treatments. Businesses applying chemical treatments should check with experienced persons for any available information. Testing of small quantities is recommended.

Following the treatment requirements in this Procedure does not absolve the Business from the responsibility of ensuring that any pesticide run-off is fully contained and managed within the property.

The Department maintains the right to inspect, at any time, certified produce and to refuse to accept a PHAC where the host produce is found not to conform to specified requirements.

7. PROCEDURE – PART A

Part A – Covers grower activities – pre-harvest treatment, harvest and harvest inspection.

7.1 Property Plan

A Property Plan must be provided with the application for accreditation of a Business for each block/land holding on which the host produce is grown and pre-harvest treated (see example at Attachment 2 – 'Property Plan') and inspected for certification under this Procedure.

The Property Plan must include the following:

- (a) location of all the blocks on which the host produce is grown; and
- (b) Block Reference Code or Number used to identify each block; and the type of host produce grown on each block; and
- (c) the area of each block
- (d) road access including street name/s; and
- (e) internal roadways within the property; and
- (f) location and identification of buildings (for example, house, packing shed, equipment sheds); and
- (g) whether it is intended to certify host produce harvested from the block under the ICA arrangement.

If any changes occur to the Property Plan information, a new Property Plan must be submitted to ICA Records Management.

7.2 Treatment – pre-harvest cover spray

All host produce to be certified under this Procedure must be pre-harvest treated for fruit fly with an approved program of cover sprays as outlined in section 6 Requirements.

7.2.1 Spray equipment calibration and maintenance

The **Treatment Operator** must carry out:

- (a) calibration tests on spray equipment to determine the application rate prior to commencement of the harvest season each year and within four weeks of commencement of treatment; and
- (b) regular checks of spray equipment to ensure it continues to operate effectively and remains free from malfunction, blockages, damage or excessive wear.

7.2.2 Cover spray equipment calibration

Permanent volume indicator marks must be made on the side of the spray 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 must include the volume in litres required to fill the tank to that level.

Each of the volume indicator marks must be calibrated with the tank at the normal filling positing using a calibrated flow meter. The person conducting the calibration test must make a Tank Calibration Record (see example at Attachment 3) for the spray tank. A Tank Calibration Record is not required for handheld equipment such as hand-held misters or knapsack sprayers, with the capacity of the spray tank being less than 25 litres.

The Tank Calibration Record must include the:

- (a) name and address of the equipment owner;
- (b) type of equipment (e.g., boom spray, mister);
- (c) brand, model and serial number;
- (d) name and address of the Business conducting the test;
- (e) date of calibration;
- (f) type of flow meter used;
- (g) date of latest calibration of the flow meter;
- (h) calibration results; and
- (i) name and signature of the person conducting the calibration.

7.2.3 Pre-harvest spray application calibration records

Records of spray equipment calibration tests must be maintained by the **Treatment Operator**. The 'Equipment Application Calibration Test Record' (see example at Attachment 4) must identify the:

- (a) name and signature of the person conducting the test;
- (b) date of testing;
- (c) number of nozzles;
- (d) output for individual nozzles (L/minute/nozzle);
- (e) effective spray width (metres);
- (f) calibration run (metres);
- (g) litres used in run (L/run); and
- (h) application rate (L/ha).

Results of testing must include the full calculations used to determine the application rate of the spray equipment.

7.2.4 Cover spray mixture preparation

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

Using a clean graduate measuring vessel, measure the amount of concentrate required for the required volume of mixture. Suitable measuring vessels include graduate plastic or glass measuring cylinders.

Add the required amount of concentrate to the spray tank 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.

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

Spray equipment must have a means of continuous mixing of the spray mixture in the spray tank throughout the spray operation to avoid settling or separation on the concentrate. This can be achieved by mechanical mixing devices in the spray tank, or agitation from spray mixture returned via a by-pass from the spray pump.

The spray mixture may contain a fungicide or other chemical provided it is approved for use and known to be compatible with the concentrate used.

7.2.5 Treatment Preparation Chart

A Treatment Preparation Chart must (see example at Attachment 5) be maintained for each spray unit used under the Procedure and kept in close proximity to the spray mixture preparation.

The Treatment Preparation Chart shall provide the following details:

- (a) identification of the spray equipment and, if applicable, the tractor to which the chart applies;
- (b) if applicable, the gear and engine rpm at which the tractor must be operated;
- (c) the trade name of the concentrate to which the chart applies;
- (d) the name and concentration of the active ingredient in the concentrate;
- (e) the application rate in litres per hectare (L/ha);
- (f) the quantity of concentrate required per litre of spray mixture in millilitres per litre (mL/L);
- (g) the total volume in litres (L) of the spray tank when filled to the maximum mixture level mark;
- (h) the volume in millilitres (mL) of concentrate required in the mixture when filled to the maximum mixture level mark;

- (i) the volume in millilitres (mL) of a concentrate required in the mixture for any known incremental volumes used; and
- (j) the printed name and signature of the person responsible for the chart's preparation and the date of preparation.

A business that uses a number of different chemical concentrations must prepare a Treatment Preparation Chart for each concentrate used.

7.2.6 Cover spray preparation and treatment records

The **Treatment Operator** must record details of all cover spray mixture preparation and pre-harvest treatment using a 'Preparation and Treatment Record' (see example at Attachment 6), or similar record containing the same information.

The cover spray mixture 'Preparation and Treatment Record' must identify:

- (a) the date and time of cover spray mixture preparation; and
- (b) volume/weight of concentrate used (millilitres or g) in the spray mixture; and
- (c) the total volume (litres) of the made up spray mixture; and
- (d) the trade name of the concentrate used; and
- (e) any other pesticide or additives in the spray mixture (adjuvant); and
- (f) location where product used; and
- (g) date of application; and
- (h) treatment equipment used; and
- (i) type of host produce; and
- (j) the number of rows or hectares treated; and
- (k) the identification of the Treatment Operator.

A Treatment Operator using various chemical concentrates must prepare a 'Preparation and Treatment Record' for each different chemical concentrate.

7.2.7 Cover spray application

The **Treatment Operator** must ensure that the spray mixture is applied with sufficient volume, and in a manner that provides sufficient penetration and distribution to ensure thorough coverage of all host produce to the point of run-off.

Pre-harvest cover sprays must be reapplied if rain, sufficient to cause run-off, occurs within two hours of spraying.

Produce from treated blocks should not be harvested until the specified withholding period has been complied with after the cover spray application.

7.3 Harvesting

The **Certification Controller** must oversee the harvest process to ensure only treated produce is harvested for certification under this Procedure.

7.3.1 Identification of blocks of produce

A Business with blocks of treated and untreated produce must identify the treatment status of blocks to prevent mixing of treated and untreated produce.

Example of acceptable methods of identifying treated and untreated blocks include:

- (a) signs indicating both treated and untreated blocks; or
- (b) colour markers indicating treated and untreated blocks.

Other methods may be used provided they clearly identify treated and untreated blocks.

7.3.2 Identification of treated and untreated produce at harvest

A Business that maintains treated and untreated blocks of host produce must identify the treatment status of harvested produce to prevent mixing of treated and untreated produce.

Examples of acceptable methods of identifying treated and untreated produce include:

- (a) using picking bins / crates which differ in colour for treated and untreated produce; or
- (b) using picking bins / crates which differ significantly in appearance for treated and untreated produce.

Other methods may be used provided they clearly identify treated and untreated produce at harvest.

7.4 Harvest inspection

Harvest inspection must be completed prior to the completion of a PHAC and delivery to the packer (Attachment 11). The harvest inspection is required only if the business that grows and pre-harvest treats the host produce is a different business to the packer.

7.4.1 Inspection equipment

The Business must maintain the following inspection equipment:

- (a) adequate illumination; and
- (b) a hand lens, microscope or other device that provides at least X10 magnification; and
- (c) reference illustrations and photographs for identification of QFF and symptoms of QFF infestations (Attachment 7 – 'Inspection for Queensland Fruit Fly information sheet'); and
- (d) sealable plastic bags and labels for collecting specimens of infested produce; and
- (e) pocket knife or similar to cut produce to further investigate for the presence of QFF.

7.4.2 Inspection procedure

Pickers must remain alert for evidence of QFF infestation in treated produce harvested for certification under this Procedure. Any produce showing symptoms of QFF infestation (i.e., softened areas, spotted areas, weeping or showing bruising or breakdown) must be rejected and retained in suitably marked reject bins or other receptacles for inspection by the Harvest Supervisor.

The **Harvest Supervisor** must complete the inspection of host produce as follows:

- (a) Rejected produce must be broken open to expose the flesh and examined by the Harvest Supervisor for the presence of live QFF infestation. Symptoms of QFF infestation (Attachment 7 – 'Inspection for Queensland Fruit Fly information sheet') include:
 - (i) split, discoloured, deformed, blemished or deteriorating produce; or
 - (ii) characteristic QFF 'sting marks' that appear to be pin pricks. Sting marks are a puncture mark caused when a female QFF punctures the skin with its ovipositor and positions eggs within the host produce. Once the eggs hatch the larvae burrow towards the centre of the host produce; or
 - (iii) softness under the skin. Cut the symptomatic produce in half. Larvae may be found, or the host produce will appear discoloured in the centre and the flesh will have begun to turn brown and mushy at sites where larvae are present; or
 - (iv) mature QFF larvae are creamy white and up to 9 mm long, with a slightly conical shaped body and 11 segments. When examined under a hand lens the thin head has small black mouth parts. There are three (3) pairs of spiracles (small raised structures used for breathing) grouped together at the thick end of the larvae. When disturbed, and especially if exposed to sunlight, they can draw their body in to an 'n' shape and 'flick' themselves up to 10 cm in any direction. This is a dispersal mechanism of the mature QFF larvae and is diagnostic for the species.

The Harvest Supervisor must immediately advise the Certification Controller on detection of live QFF larvae.

7.4.3 Harvest inspection records

The **Harvest Supervisor** must maintain a record of harvest inspection of host produce. Harvest inspection records are to be in the form of a Harvest Inspection Record (see example at Attachment 8) or records which capture the same information.

Harvest inspection records must include:

- (a) the date of inspection; and
- (b) the Interstate Produce (IP) number of the Business that grew and pre-harvest treated the host produce; and
- (c) the block/s from which the host produce was harvested; and
- (d) the cultivar; and
- (e) the number of bins/crates harvested; and
- (f) the number of host produce cut and examined; and
- (g) the presence or absence of QFF; and
- (h) the Harvest Supervisor's name and signature.

7.4.4 Detection of non-conforming host produce at harvest

Where produce has been inspected and is suspected of being infested with QFF, the **Certification Controller** must take the following actions:

- (a) all host produce harvested from the source block, must be segregated, clearly identified and held under secure conditions to avoid mixing with non-conforming produce; and
- (b) all host produce from the source block on the day of certification (including any produce which has already been packed for certification) must not be certified or consigned under this ICA Procedure; and
- (c) harvesting from the source block shall cease for any host produce intended for certification under this procedure until a pre-harvest cover spray treatment has been applied in accordance with section 6. Requirements; and
- (d) the detection must be reported to the Department within 24 hours (during business hours) or the first available working day, so an investigation of the cause may be carried out and any problems rectified; and
- (e) no produce from the source property may be certified under the Procedure until the Department has confirmed the identity of the larvae.

7.4.5 Rejected produce

Rejected produce may be:

- (a) post-harvest treated and certified in accordance with an alternative quarantine entry condition; or
- (b) consigned to markets that do not require treatment for QFF.

7.5 Plant Health Assurance Certificate

A Business which pre-harvest treats produce that is to be packed and certified by another Business must be accredited under PART A of this Procedure.

Businesses who supply host produce to be packed by another Business for certification must supply a PHAC (Attachment 11) with each delivery of host produce.

The Harvest Supervisor must ensure a PHAC is completed and signed by an Authorised Signatory prior to the consignment being dispatched.

PHACs must be completed, issued and distributed in accordance with the Work Instruction *WI-01 Guidelines for the completion of Plant Health Assurance Certificates*.

PHACs must include:

- (a) the name and Interstate Produce (IP) Number of the accredited Business that grew, pre-harvest treated and undertook harvest inspection (where applicable) of the host produce; and
- (b) in the 'Grower' section, the name and address of the property on which the host produce was grown including the identity of the block in which the host produce was grown; and
- (c) in the 'Consignment Details' section,
 - (i) the number and type of packages in the consignment; and
 - (ii) in the '*Type of Produce*' column, a description of the host produce; and
- (d) in the 'Treatment Details' section, the details of the last pre-harvest treatment applied to the source block or blocks in which the host produce was grown including date, chemical and chemical rate.

The Business must not issue a PHAC for host produce owned by another Business. An individual PHAC must be issued to cover each consignment to avoid splitting of consignments.

Books of pre-printed PHACs are available from ICA Records Management, Department of Primary Industries, phone 02 6552 3000. Upon suspension, cancellation or withdrawal of accreditation, the PHAC book must be immediately returned to the Department.

A PHAC is not required where the Business that grows and pre-harvest treats and inspects the host produce is the same Business that packs, inspects, certifies and dispatches the host produce under this Procedure.

8. PROCEDURE – PART B

Part B – Covers the packer activities of produce receipt, grading and packing, post-harvest inspection and certification.

8.1 Receipt of produce

The **Produce Receipt Officer** must ensure the following:

- (a) All host produce received for certification under this Procedure is supplied by a grower accredited under Part A; and
- (b) where the Business receives treated and untreated produce, the treatment status of the host produce is clearly identified at receipt by the packing facility to prevent mixing of treated and untreated produce; and
- (c) each delivery of host produce supplied by another Business is accompanied by a PHAC (Attachment 11). A PHAC is required for each day for each lot of host produce supplied for certification under this Procedure; and
- (d) produce supplied for certification has undergone pre-harvest treatment in accordance with Part A of this Procedure; and
- (e) grower identification and pre-harvest treatment details are maintained for all host produce received and certified under this Procedure; and
- (f) produce is segregated or secured upon arrival to ensure produce does not mix with untreated produce.

Any produce received that is not clearly identified as treated must be regarded as non-treated and rejected and managed as untreated produce for the purpose of this Procedure.

The Business must maintain copies of all PHACs received from growers whose produce is packed and certified under this Procedure.

8.2 Grading and packing

The **Certification Controller** must supervise the sorting and packing operations to ensure that any host produce that do not conform to these requirements are clearly identified and segregated to prevent mixing with conforming product.

The Business must implement sorting systems during the grading and packing process to ensure all host produce certified for pre-harvest treatment and inspection is free from visible symptoms of QFF infestation.

8.2.1 Identification during grading and packing

Where both treated and untreated produce are packed, the Business must implement systems to identify the treatment status of host produce during grading and packing to prevent mixing of treated and untreated produce.

Examples of acceptable methods of identifying treated and untreated produce during grading and packing include:

- packing treated produce at different times to untreated produce and clearing the lines before changing over; or
- packing treated and untreated produce on different packing lines.

Other methods may be used provided they clearly identify and segregate treated and untreated produce.

8.2.2 Identification after packing

A Business which grades and packs treated and untreated produce must implement systems to identify the treatment status of the host produce after packing and before they leave the packing system to prevent mixing of treated and untreated produce.

Examples of acceptable methods of identifying treated and untreated produce after packing include:

- using packaging which differs significantly in appearance; or
- marking each package of treated produce in a manner that clearly identifies the host produce as treated in accordance with this Procedure.

Other methods may be used provided they clearly identify treated and untreated produce.

8.3 Packed product inspection

Samples must be selected at random from packed product as an in-line inspection or end-point inspection.

The **Packed Product Controller** must continually monitor the grading and packing process by selecting a sample for examination from the packed product.

The Packed Product Controller must advise the Certification Controller of any problems or potential problems detected in these samples (for example, contain suspect QFF eggs or larvae) so that corrective action can be implemented.

8.3.1 Sample selection

The Packed Product Controller must select a minimum of one package in every 50 packages or part thereof.

(a) In-line inspection:

- (i) in-line inspection must only be carried out by the Business that packs the host produce for certification under this Procedure; and
- (ii) in-line inspection must be performed at facilities where the host produce is being packed; and
- (iii) the in-line inspection method is only available at the first point of packing the host produce; or
- (iv) the in-line inspection must involve the selection of a sample of packed product from all host produce in the same category of host produce, packed on the one day for certification under this Procedure; and
- (v) where the business is packing produce from two or more growers at one time, at least one package shall be inspected from each grower's produce; and

- (vi) packed produce must be selected at random from the final packed product as it leaves the packing line in the packing shed for consolidation.

or

- (b) End-point inspection:
 - (i) end-point inspection must be conducted after the consignment has been consolidated but prior to certification and dispatch; and
 - (ii) the sample must be selected at random from the final packed product; and
 - (iii) where the business intends to combine produce from two or more growers to make up a consignment, at least one package must be inspected from each grower's product making up the consignment.

8.3.2 Inspection equipment

The Business must maintain the following inspection equipment:

- (a) illumination to a minimum of 600 Lux; and
- (b) a hand lens, microscope or other device that provides at least X10 magnification; and
- (c) reference illustrations and photographs for identification of QFF and symptoms of QFF infestations (Attachment 7 – 'Inspection for Queensland Fruit Fly information sheet'); and
- (d) sealable specimen bottles and labels for collecting specimens of infested produce; and
- (e) pocket knife or similar to cut produce to further investigate for the presence of QFF.

8.3.3 Inspection procedure

The Packed Product Controller must carry out 100% inspection of the host produce in the sample package as follows:

- (a) each piece of host produce in the sample package must be removed from the package and all surfaces examined for evidence of QFF. Symptoms of QFF infestation (Attachment 7) include:
 - (i) split, discoloured, deformed, blemished or deteriorating produce; or
 - (ii) characteristic QFF 'sting marks' that appear to be pin pricks. Sting marks are a puncture mark caused when a female QFF punctures the skin with its ovipositor and positions eggs within the host produce. Once the eggs hatch the larvae burrow towards the centre of the host produce; or
 - (iii) softness under the skin. Cut the symptomatic produce in half. Larvae may be found, or the host produce will appear discoloured in the centre and the flesh will have begun to turn brown and mushy at sites where larvae are present; or
 - (iv) mature QFF larvae are creamy white and up to 9 mm long, with a slightly conical shaped body and 11 segments. When examined under a hand lens the thin head has small black mouth parts. There are three pairs of spiracles (small raised structures used for breathing) grouped together at the thick end of the larvae. When disturbed, and especially if exposed to sunlight, they can draw their body in to an 'n' shape and 'flick' themselves up to 10 cm in any direction. This is a dispersal mechanism of the mature QFF larvae and is diagnostic for the species.

8.3.4 Identification of sample packages

Sample packages must be sequentially numbered during the day of packing.

- (a) Identify each sample package with a Packed Product Sample (PPS) number by placing either a stamp or sticker bearing the lettering "PPS No." on the exposed end of the package, then marking on or below the identifier the sequential sample number and their initials (Attachment 9 – 'Example of a Packed Product Sample Number').
- (b) For palletised consignments, the sample packages must be stacked on the pallet with the "PPS No." visible on the outside of each pallet packed for certification under this Procedure.

8.3.5 Action following detection of non-conforming packed product

The **Packed Product Controller** must take the following actions on the detection of non-conforming packed product.

8.3.5.1 Detection of live QFF larvae

If live QFF Larvae are detected, the **Packed Product Controller** must immediately advise the Certification Controller if any produce is found infested with live QFF.

The **Certification Controller** must take the following actions:

- (a) all host produce harvested from the source block/s, including any produce which has been packed for certification but which remains on the premises, must be rejected for certification under this Procedure; and
- (b) harvesting from the source block shall cease for any host produce intended for certification under the Procedure until a pre-harvest cover spray treatment has been applied in accordance with section 6 Requirements; and
- (c) the detection must be reported to the Department within 24 working hours of detection, (during business hours) or the first available working day, so an investigation of the cause may be carried out and any problems rectified.

8.3.6 Rejected product

All rejected packages must be isolated and clearly identified to prevent mixing with conforming packages.

Packages rejected for live QFF larvae must be either:

- (a) certified in accordance with an alternative quarantine entry condition; or
- (b) consigned to markets that do not require certification of treatment and/or inspection for QFF.

8.3.7 Packed Product Inspection Records

The **Packed Product Controller** must maintain records of the results of packed product inspection.

Packed product inspection records (see example at Attachment 10) must include:

- (a) Business name; and
- (b) type of host produce; and
- (c) the Interstate Produce (IP) number of the Business that operates the approved facility in which the host produce was packed; and
- (d) the date of inspection of the sample package; and
- (e) PHAC number; and
- (f) the sample package sequential number (PPS No.); and
- (g) the inspection result for the sample package; and
- (h) details of defects or problems detected during inspection; and
- (i) the number of any withdrawn or rejected packages; and
- (j) the inspection results and follow-up action by the Certification Controller following withdrawal; and
- (k) the Packed Product Controller's name and signature.

8.4 Dispatch

8.4.1 Package identification

The **Authorised Dispatcher** must ensure that, prior to issuing a PHAC, each package intended for certification under this Procedure is marked in indelible and legible characters of at least 5 mm with:

- (a) the Interstate (IP) number of the Business that operates the approved facility in which the host produce was packed; and
- (b) the words “Meets ICA-21”; and
- (c) the date (or date code) on which the host produce was packed; and
- (d) the Interstate Produce number or other identifier of the grower of the host produce, where the grower is a different Business to the packer.

Where the packer uses a different identifier to the IP number of the grower, the packer must maintain a Grower Identifier Record that matches the grower identifier with the grower’s names or IP number so that the grower can be easily identified if required.

Any packages containing produce that has not been pre-harvest treated and inspected in accordance with the requirements of this Procedure must not be marked as stated above.

8.4.2 Handling, storage and transport under secure conditions

The accredited business must handle, store and transport host produce according to the secure conditions.

Certified host produce must be transported from the facility in secure conditions that prevent infestation by fruit fly. Secure conditions include:

- (a) unvented packages; or
- (b) packages with vents secured with gauze/mesh with a maximum aperture of 1.6 mm; or
- (c) fully enclosed under tarpaulins, hessian, shade cloth, mesh or other covering which provides a maximum aperture of 1.6 mm; or
- (d) shrink wrapped and sealed as a palletised unit; or
- (e) fully enclosed or screened buildings, cold rooms, vehicles or other facilities free from gaps or other entry points greater than 1.6 mm.

8.4.3 Plant Health Assurance Certificate (PHAC)

The **Authorised Dispatcher** must ensure a PHAC (Attachment 11) is completed and signed by an Authorised Signatory prior to the consignment being dispatched.

PHACs must be completed, issued and distributed in accordance with the work instruction WI-01 ‘Guidelines for the completion of Plant Health Assurance Certificates’.

PHACs must include:

- (a) In the ‘Certification Details’ section,
 - The IP number of the Accredited Business that packed the host produce; and
- (b) in the ‘Accredited Business that Prepared the Produce’ section,
 - the name and address of the Accredited Business that packed the product; and
- (c) in the ‘Grower’ section,
 - the name and address of the Accredited Business that was responsible for pre-harvest treatment of the host produce. Where the consignment contains produce pre-harvest treated by a number of growers the words “VARIOUS” must be used; and
- (d) in the ‘Treatment’ section,
 - in the Treatment Date column, the most recent date or dates of the pre-harvest treatment of the source blocks, and
 - in the Treatment column, the words “Pre-harvest spray”; and
- (e) in the ‘Additional Certification’ section,
 - “Handled, stored and transported in secure conditions”.

The Business must not issue a PHAC for product owned by another business. An individual PHAC must be issued to cover each consignment to avoid splitting of consignments.

Books of pre-printed PHACs are available from ICA Records Management, Department of Primary Industries, phone 02 6552 3000. Upon suspension, cancellation or withdrawal of accreditation, the PHAC book must be immediately returned to the Department.

8.4.4 PHAC distribution

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

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

9. RECORDS AND DOCUMENT CONTROL

9.1 ICA system records

The Business must maintain the following records, or similar which record the same information:

Under PART A

- (a) current 'Property Plan' for each block/source property (eg Attachment 2); and
- (b) 'Tank Calibration Record' (eg Attachment 3); and
- (c) 'Equipment Application Calibration Test Record' (eg Attachment 4); and
- (d) 'Treatment Preparation Chart' (eg Attachment 5); and
- (e) 'Preparation and Treatment Record' (eg Attachment 6); and
- (f) 'Harvest Inspection Record' (eg Attachment 8); and
- (g) a copy of each PHAC issued under this Procedure. (Attachment 11)

Under PART B

- (a) a copy of each PHAC received (Attachment 11); and
- (b) 'Packed Product Inspection Record' (eg Attachment 10); and
- (c) a copy of each PHAC issued under this Procedure.

Records must be retained for 4 years from completion.

Records shall be made available on request to an Authorised Person.

9.2 ICA system documentation

The Business must maintain the following documentation:

- (a) a current copy of the Procedure; and
- (b) a current Certificate of Accreditation.

Documentation must be made available on request to an Authorised Person.

10. ATTACHMENTS

Attachment 1	Application for Accreditation as a Biosecurity Certifier
Attachment 2	Property Plan
Attachment 3	Tank Calibration Record
Attachment 4	Equipment Application Calibration Test Record
Attachment 5	Treatment Preparation Chart
Attachment 6	Preparation and Treatment Record
Attachment 7	Inspection for Queensland fruit fly Information Sheet
Attachment 8	Harvest Inspection Record
Attachment 9	Example of a Packed Product Sample Number

- Attachment 10 Packed Product Inspection Record
- Attachment 11 Plant Health Assurance Certificate

Application for accreditation as a Biosecurity Certifier

A business seeking to become accredited or renew accreditation for an ICA or CA arrangement must complete and lodge an application for accreditation using the prescribed form and paying the application fee.

The application form can be accessed at the NSW DPI Biosecurity forms web page:

<https://www.dpi.nsw.gov.au/biosecurity/managing-biosecurity/forms> under the heading **Applications**

Alternatively, contact ICA Records Management:

Phone: 02 6552 3000

Fax: 02 6552 7239

Email: bfs.admin@dpi.nsw.gov.au

Property Plan – ICA-21



Tank Calibration Record

Equipment Calibrated

Name and Address of
Owner of Equipment:

Type of equipment
(e.g. 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):

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 Preparation Chart

Equipment

Type of equipment (e.g. boom spray mister): _____

Brand: _____

Model: _____

Serial No.: _____

Other identification: _____

Tractor used: _____

Tractor operation: Gear _____ rpm _____

Chemical Concentrate (*Trade Name*): _____

Active ingredient name and concentration: _____

Application rate: _____ L/ha

Full Tank Volume: _____ Litres

Concentrate in Full Tank: _____ mL or g

Part Fill or Top-Up (Concentrate [mL or g] / Mixture [L])

_____ mL/g Concentrate / _____ Litres Mixture

Prepared by: _____

Printed Name

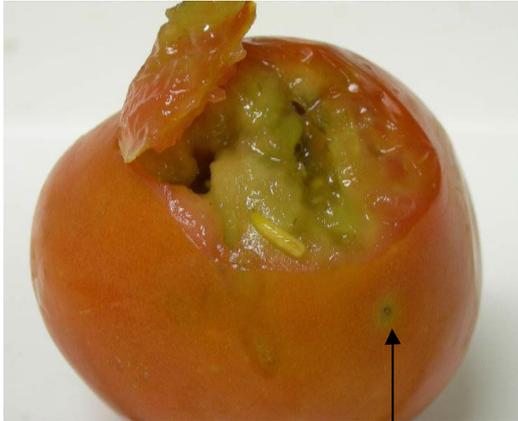
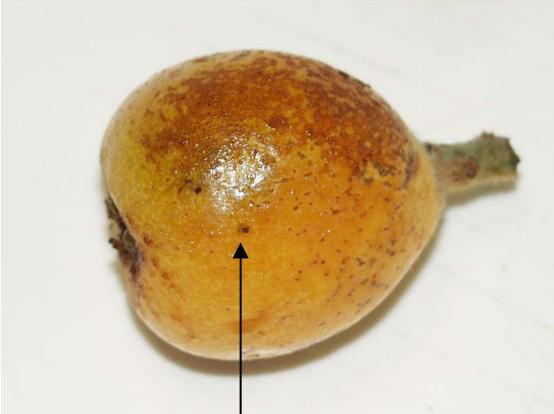
Signature

Date of preparation

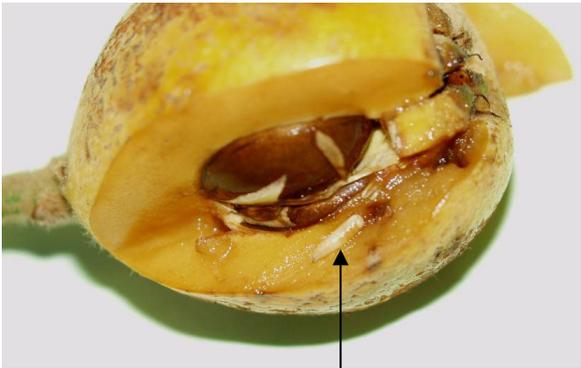
Inspection for Queensland Fruit Fly information sheet

(Images courtesy of Department of Environment and Primary Industries, Victoria)

Larvae and sting marks



Sting marks



Larvae

Example of a Packed Product Sample Number

Marking Sample Packages After Packed Product Inspection

Following inspection, the Packed Product Controller must:

- (a) mark one end of each sample package by applying a stamp or sticker with the PPS Number (Packed Product Sample Number) and their initials as shown below; and
- (b) ensure that the PPS Number stamp or sticker is visible on the exposed end of the package when the package is assembled on the pallet.

Stamp or Sticker Design (Example Only)



Completed Stamp or Sticker (Example Only)



