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Procedure

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ICA-20

PRE-HARVEST TREATMENT AND POST-HARVEST INSPECTION OF TABLE GRAPES

NUMBER	ICA20	VERSION	6.0
AUTHORISED BY	Manager, Plant Product Integrity & Standards		
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ISSUED BY	Primary Industries, Biosecurity & Food Safety		

REVISION HISTORY

VERSION	DATE	AMENDMENTS	
		SECTION	DETAILS
1.0	02/01/2012	All	New ICA Procedure
2.0	14/08/2011	All	Reformat whole document
		8	Removal of Dimethoate as a cover spray option
3.0	24/10/2011	All	Reformat whole document
3.1	11/11/2011	All	Alignment with ICA-21, 26 and 56
4.0	22/08/2012	All	Reformat whole document
4.1	29/10/2012	6	Removal of Fenthion as a cover spray option
4.2	14/11/2012	6	Addition of Fenthion and Maldison as cover spray treatments
4.3	18/09/2015	All	Reformat whole document
		6	Removal of Fenthion as a cover spray option
		7	Cover spray pre harvest changed to 28 days from 5 weeks, removed requirement for harvest inspection
4.4	08/01/2016	7.4.1, 7.4.3	Change references to cover spray from bait spray
5.0	27/06/2017	All	Changes made to align with the *Biosecurity Act 2015*. 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 declaration, to a PHAC.
6.0	28/09/2018	6	Addition of Clothianidin as cover spray treatment.

NEXT REVIEW DATE:	01/10/2020

Disclaimers

The information contained in this Procedure is based on knowledge and understanding at the time of writing (September 2018). 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

Contents

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 table grapes for Queensland fruit fly (QFF) under an Interstate Certification Assurance (ICA) arrangement.

2. SCOPE

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

Disease: Queensland fruit fly (*Bactrocera tyroni*) (QFF)

Product: Table grapes

Location: This Procedure is separated into two (2) sections:

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

IMPORTANT

Suspension of Dimethoate and Fenthion

The Australian Pesticides and Veterinary Medicines Authority (APVMA) have suspended certain use patterns for Dimethoate and Fenthion. Treatment of some host fruits previously eligible for treatment are no longer permitted. Check the APVMA website at http://www.apvma.gov.au/ for further details.

ALWAYS READ THE LABEL

Users of agricultural (or veterinary) chemical products **must** always read the label and any Permit before using the product and strictly comply with the directions on the label and the conditions of any Permit. Users are not absolved from compliance with the directions of the label or the conditions of the Permit by reason of any statement made or omitted to be made in this Procedure.

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 – *http://www.dpi.nsw.gov.au/biosecurityact/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.
Authorised Signatory	means a person whose name is notified to the Secretary as a person who can issue a biosecurity certificate on behalf of the Business.
block	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.
Business	means the legal entity accredited as a biosecurity certifier under the Act.
Certification Assurance Arrangement	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.
consignment	means a discrete quantity of host produce transported to a single consignee at one (1) time covered by a single PHAC.
Department	means the NSW Department of Industry – Office of Primary Industries.
end-point inspection	means the process by which a representative sample is drawn and inspected from the consignment prior to certification.
facility	means a location where host produce is assembled, inspected, securely stored, certified and dispatched.
in-line inspection	means the process by which a representative sample is drawn during the processing and packaging of the goods.
ICA Scheme	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.
lot	means a quantity of homogenous product assembled for inspection at one (1) place and at one (1) time. A lot could consist of product from one (1) or more growers/blocks/properties.
lot identification	means any coding or marking method used to identify a lot (for example, date, date code or block code).
non-conformance	means a failure to fulfil a specified requirement.
package	means the complete outer covering or container used to transport and market the product.
packed product	means host produce in packages following grading and packing and ready for marketing.

PHAC	means a Plant Health Assurance Certificate that is issued in accordance with the requirements of a Certification Assurance Arrangement.
property	means one (1) 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.
Queensland fruit fly (QFF)	means the pest *Bactrocera tryoni* (Froggatt).
SDS	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.
table grapes	means fruit of the species *Vitis vinifera* grown for fresh consumption
unit	means a single bunch of table grapes.

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 (1) person may carry out the responsibilities of more than one (1) 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; and
- ensuring all certification of produce is carried out in accordance with this Procedure.

UNDER PART A

- ensuring the Business has current accreditation for an ICA under PART A of this Procedure;
- maintaining a Property Plan for each property on which the produce is to be grown for certification under this Procedure;
- ensuring all source blocks of 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 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 host produce is identified and controlled to prevent mixing during grading and packaging; and
- taking corrective action following detection of suspected QFF infestation during grading and packing or packed product inspection.

The **Authorised Signatory** is responsible for:

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

- The **Authorised Dispatcher** is responsible for:
- ensuring all host produce covered by a PHAC issued by the Business are identified; and
- maintaining duplicate copies of all PHACs issued by the Business under the Procedure.

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

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 under 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 host 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 produce inspection.

6. REQUIREMENTS

Pesticides Act 1999

There may be additional requirements, including records which must be kept, that a Business must meet under the Pesticides Regulation 2009 of the *Pesticides Act 1999* that are not specified in this ICA Procedure.

Table grapes for pre-harvest treatment of fruit fly and inspection under this Procedure must comply with the following requirements:

(a) Treated pre-harvest with a program of:

(i) bait sprays applied to all fruit fly host plants on the property at a maximum interval of seven (7) days commencing 42 days prior to harvest to the completion of harvest with a mixture containing;

(A) 2 L yeast autolysate protein lure and 435 mL of product containing 1150 g/L Maldison per 100 L of water; or

(B) 15.4 L of product containing 0.24 g/L Spinosad;

in accordance with all label and APVMA permit directions for the control of Queensland fruit fly (QFF).

OR

(ii) cover sprays applied to all blocks of grape plants on the property commencing 28 days prior to harvest to the completion of harvest with a mixture containing;

(A) 250 mL of product containing 500 g/L Trichlorfon per 100 L of water; or

(B) 140 mL of product containing 440 g/L Maldison per 100 L of water; or

(C) 60 mL of product containing 1000 g/L Maldison per 100 L of water; or

(D) 55 mL of product containing 1150 g/L Maldison per 100 L of water; or

(E) 40 g of product containing 500 g/kg Clothianidin per 100 L of water;

in accordance with all label and APVMA permit directions for the control of QFF.

OR

(iii) treated with a combined program of bait sprays and cover sprays applied in accordance with all the requirements of (i) and (ii) above, at intervals determined by the type of spray in the most recent application.

AND

(b) post-harvest inspected and found free from live fruit fly infestation.

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 host produce and to refuse to accept a certificate where the host produce is found not to conform to specified requirements.

7. PROCEDURE – PART A

Part A – Covers grower activities.

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 host produce is grown and pre-harvest treated (see Attachment 2) 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

(c) the cultivar and the number of vines planted in the block; and

(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).

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 bait spraying

7.2.1 Bait spraying equipment calibration and maintenance

The **Treatment Operator** must ensure permanent volume indicator marks are identified on the spray tank which clearly and accurately indicates the maximum mixture level and any incremental volumes used. The Treatment Operator shall carry out:

(a) calibration tests on baiting equipment to determine the bait application rate prior to commencement of the harvest season each year and within four (4) weeks of commencement of treatment. Results must be recorded on the 'Equipment Calibration Test Record' (Attachment 5); and

(b) regular checks of baiting equipment to ensure it continues to operate effectively and remains free from malfunction, blockages, damage or excessive wear.

Records shall identify;

(a) name 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); and

(h) application rate (L/ha).

Application rate calibration tests may be carried out by using the attached forms:

(a) Spinosad baiting:

The bait spray calibration record (Attachment 3) provides an example of calibration of baiting equipment for Spinosad treatment.

(b) Maldison baiting:

The bait spray calibration record (Attachment 4) provides an example of calibration of baiting equipment for Maldison treatment.

7.3 Pre-harvest bait spray – mixture preparation and application

7.3.1 Mixture Preparation Chart

Prior to bait spray application, the Business shall maintain a Bait Spray Mixture Preparation Chart near the mixture preparation area that provides the following details:

(a) the unique 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 shall be operated;

(c) the time in seconds required to apply the required dosage of bait spray mixture (for example, 100 mL);

(d) the total volume in litres (L) of the spray tank when filled to the maximum mixture level mark;

(e) the trade name of the concentrate to be used and the stated concentration of the active ingredient in the formulation;

(f) the volume in millilitres (mL) of;

  (i) the chosen concentrate; and

  (ii) yeast autolysate (where required); and

  (iii) water;

  required to achieve the required bait spray mixture when filled to the maximum mixture level and for any incremental volumes used;

(g) the printed name and signature of the person responsible for the Chart's preparation and date of preparation.

7.3.2 Bait mixture preparation and treatment records

The Treatment Operator must record details of all bait spray mixture preparation and pre-harvest bait spray using a 'Preparation and Treatment Record' (refer Attachment 6) or similar record which captures the same information.

(a) the name and Interstate Produce (IP) Number of the accredited Business; and

(b) date and time of bait spray mixture preparation; and

(c) volume/weight of product used in the spray mixture (mL or g); and

(d) volume of yeast autolysate (where required) used in the spray mixture (mL); and

(e) the total volume (litres) of the made up spray mixture (L); and

(f) trade name of concentrate; and

(g) other adjuvants; and

(h) calibrated (yes/no); and

(i) treatment equipment used; and

(j) type of produce treated; and

(k) number of blocks/hectares treated; and

(l) Treatment Operator's name; and

(m) signature of Treatment Operator.

7.3.3 Bait spray mix preparation

The Treatment Operator must prepare the chemical mixture within 24 hours of application, or more frequently as required.

Using a clean graduated measuring vessel, measure the required amount of concentrate for the required volume of mixture. Suitable measuring vessels include graduated 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 chemicals are completely diluted in all of the water 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 and yeast autolysate in the water.

For Spinosad bait spray, first add water equivalent to the volume of Spinosad concentrate to be mixed to the tank and start the agitation system. Then add the full amount of Spinosad concentrate followed by the remaining amount of water. Allow agitation system to operate for at least five (5) minutes before applying the mixture. Once mixed, constant agitation of the spray solution is recommended to ensure uniformity of spray mixture. Once prepared, the spray solution must be used within 24 hours.

Spray equipment, other than hand-held equipment such as knapsack or backpack sprayers, must have a means of continuous agitation of the spray mixture in the spray tank throughout the spray operation to avoid settling or separation of 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.

7.3.4 Bait spray application

The Treatment Operator must undertake bait spraying of vines from 42 days prior to harvest until the completion of harvest. The bait spray must be applied at least every seven (7) days to every alternate row of grape vines growing on the property.

The bait spray must be applied as a coarse spray to the lower canopy in a shady part of the vine, avoiding the fruit where possible. Pre-harvest bait sprays containing Spinosad must be re-applied if rain sufficient to cause run-off occurs within two (2) hours of spraying.

The Treatment Operator must carry out regular checks of spraying equipment to ensure it continues to operate effectively and remains free from malfunction, blockages, damage or excessive wear.

7.4 Treatment – pre-harvest cover spraying

7.4.1 Cover spray equipment calibration and maintenance

The **Treatment Operator** must ensure permanent volume indicator marks are identified on the spray tank which clearly and accurately indicates the maximum mixture level and any incremental volumes used. The Treatment Operator shall carry out:

(a) calibration tests on equipment to determine the spray application rate prior to commencement of the harvest season each year and within four (4) weeks of commencement of treatment. Test results must be recorded on the ‘Equipment Calibration Test Record’ (refer Attachment 5); and

(b) regular checks of cover spray equipment to ensure it continues to operate effectively and remains free from malfunction, blockages, damage or excessive wear.

7.4.2 Pre-harvest spray application calibration records

Records of spray equipment calibration tests must be maintained by the Treatment Operator.

Records shall identify the;

(a) name 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); and

(h) application rate (L/ha).

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

An example of an ‘Equipment Calibration Test Record’ is shown in Attachment 5.

7.4.3 Mixture Preparation Chart

Prior to cover spray application, the Business shall maintain a ‘Mixture Preparation Chart’ near the mixture preparation area that provides the following details:

(a) the unique 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 shall be operated;

(c) the time in seconds required to apply the required dosage of cover spray mixture (for example, 100 mL);

(d) the total volume in litres of the spray tank when filled to the maximum mixture level mark;

(e) the trade name of the concentrate to be used and the stated concentration of the active ingredient in the formulation;

(f) the volume in millilitres (mL) of concentrate required in the mixture for any known incremental volumes used;

(g) the printed name and signature of the person responsible for the Chart’s preparation and date of preparation.

7.4.4 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 in all of the water 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.

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

7.4.5 Cover spray mixture 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’ (refer Attachment 6).

The ‘Cover Spray Mixture Preparation and Treatment Record’ must identify:

(a) the name and Interstate Produce (IP) Number of the accredited Business; and

(b) the date and time of cover spray mixture preparation and application; and

(c) the trade name of the concentrate used; and

(d) volume of concentrate used (millilitres) in the spray mixture (mL); and

(e) the total volume (litres) of the made up spray mixture (L); and

(f) any other pesticide or additives in the spray mixture; and

(g) calibrated (yes/no); and

(h) the spray equipment used; and

(i) the block/s treated; and

(j) the number of blocks/hectares sprayed; and

(k) the identification of the Treatment Operator.

7.4.6 Cover spray application

The Treatment Operator must undertake pre-harvest cover spraying of all grape vines on the property every two (2) weeks prior to harvest up to completion of harvest. The first cover spray must be applied at least 28 days prior to commencing the harvest of host produce for certification.

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 fruit.

Pre-harvest cover sprays must be re-applied if rain sufficient to cause run-off occurs within two (2) hours of spraying.

7.5 Plant Health Assurance Certificate

A Business which pre-harvest treats host 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 10) with each delivery of host produce.

The PHAC must be 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 'Accredited Business that Prepared the Produce' section, the name and address of the Accredited Business that pre-harvest treated the host produce; and

(b) in the 'Grower' section, the name and address of the property on which the host produce was grown and pre-harvest treated; 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; and

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 receival, grading and packing, post-harvest inspection and certification.

8.1 Receival of produce

The **Produce Receival 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 host produce, the treatment status of the produce is clearly identified at receival by the packing facility to prevent mixing of treated and untreated host 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 block supplying host produce for certification under this Procedure; and

(d) host 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) host produce is segregated or secured upon arrival to ensure host produce does not mix with untreated host produce; and

(g) a 'Record of Receipt' (Attachment 7), or similar record which captures the same information, is maintained by the Business. The record must include the following information:

    (i) the name and Interstate Produce (IP) Number of the accredited Business; and

    (ii) the Record of Receipt number; and

    (iii) PHAC number(s); and

    (iv) date of receipt; and

    (v) produce type; and

    (vi) quantity of produce received; and

    (vii) Product Controller's name and signature.

Any host 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 host 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 table grapes certified for pre-harvest treatment and inspection are free from visible symptoms of fruit fly infestation.

Sorters and packers must inspect for characteristic sting marks that could be a potential site for fruit fly infestation. If sting marks are detected within bunches, the symptomatic grape must be cut open and inspected for the presence of either fruit fly eggs or fruit fly larvae. Any grape that has suspect fruit fly eggs or larvae must be regarded as non-conforming and must be rejected for certification.

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 host produce.

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

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

Other methods may be used provided they clearly identify and segregate treated and untreated host produce and are acceptable to the auditor.

8.2.2 Identification after packing

A Business which grades and packs treated and untreated host 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 host produce.

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

- using packaging which differs significantly in appearance; or
- marking each package of treated host 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 host produce and are acceptable to the auditor.

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 select a minimum of 600 units or a minimum of 2% of the carton count (one (1) in every 50 packages) from randomly selected packages from each load of certified produce consigned from the facility each day.

Packed product inspection may be carried out as an:

(a) **in-line** inspection during grading and packing; or

(b) **end-point** inspection following assembly of consignment.

8.3.1 Sample selection

The Packed Product Controller shall select a minimum of 600 units or a minimum of 2% of the carton count (one (1) in every 50 packages) from randomly selected packages from each load of certified produce consigned from the facility each day.

A minimum sample size of three (3) cartons must be inspected. When calculating the number of cartons in the sample, part numbers must always be rounded up to the next number. For example, where 2% of the number of cartons is calculated to be 4.2 cartons, the sample size selected for inspection must be five (5) cartons.

(a) **In-line inspection**:

  (i) In-line inspection can only be completed by Businesses who are accredited under Part A and Part B of this arrangement.

  (ii) In-line inspection must only be performed at facilities where the grapes are being packed (i.e., packing house or in-field).

(iii) The in-line inspection method is only available at the first point of packing the table grapes.

(iv) For shed and field packed grapes, the in-line inspection must involve selection of a sample of packed product from all grapes in the same category of host produce, packed on the one (1) day for certification under this Procedure.

(v) Packed produce must be sampled at the rate of a minimum of 2% of carton count (one (1) in every 50 packages), or part thereof, and must be selected at random from the final packed product as it leaves the packing line in the packing shed for consolidation.

(vi) For field packed grapes, sampling must be conducted prior to the packed product being moved from the field for consolidation.

(b) **End-point inspection**:

(i) End-point inspection must be conducted after the consignment has been consolidated but prior to certification and dispatch.

(ii) Each category in a consignment of produce to be certified must be sampled at the rate of a minimum of 2% of carton count (one (1) in every 50 packages), or part thereof, or at the rate of a 600 unit sample.

(iii) The sample must be selected at random from the final packed product. Packages must be selected at random from each category in the consignment.

8.3.2 Inspection equipment

Businesses 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 fruit fly and symptoms of fruit fly infestations as per Attachment 11; and

(d) sealable plastic bags and labels for collecting specimens of infested host produce; and

(e) pocket knife or similar to cut host produce to further investigate for the presence of fruit fly.

8.3.3 Inspection procedure

The Packed Product Controller must carry out an inspection of the table grapes from each sample package for evidence of freedom from visible symptoms of fruit fly infestation.

For shed packed grapes, packages selected for inspection must be inspected away from the packing line. For field packed grapes, packages must be inspected in a pre-determined location in the field (for example, row ends). Each grape in the sampled packages must be examined by an Authorised Inspection Person and found free from any visible symptoms of fruit fly infestation.

Each bunch in the sample must receive 100% inspection. Particular attention is to be paid to split, discoloured, deformed or deteriorating grape berries within the bunch.

Inspect each bunch in the sample for characteristic fruit fly ‘sting marks’. Sting marks are a puncture mark caused when a female QFF punctures the fruit’s skin with its ovipositor and positions eggs within the fruit. If sting marks are detected, cut open the symptomatic grape and inspect for the presence of either fruit fly eggs or fruit fly larvae.

8.3.4 Fruit fly identification

Where eggs or larvae are suspected of being QFF, the suspects must be submitted to the Department.

8.3.5 Identification of sample packages

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

The Packed Product Controller must 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 identified package the sequential sample number and their initials.

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.

An example of a PPS No. stamp or sticker is shown in Attachment 9.

8.3.6 Detection of non-conforming packed product

If any grapes are found to be infested with fruit fly, all the following actions must be taken -

All host produce harvested from the source block(s), including any product that has been packed for certification but which remains at the facility, must be rejected for certification. If the Business is unable to identify the source block for the host produce infested with fruit fly, all product from the property that was the source must be rejected for certification, including product that is already harvested and packed.

All fruit from the source blocks must be rejected for certification until the following has been completed:

(a) a program of cover sprays has been applied in accordance with the label or APVMA permit recommendations for the control of fruit fly in table grapes; and

(b) a period of at least seven (7) days have elapsed since the first cover spray was applied following the detection of fruit fly in packed product and the withholding period for the product has elapsed; and

(c) no live fruit fly eggs or larvae have been detected in the required inspection sample from the source block/s during inspection for the presence of fruit fly either in the vineyard, or in the packing shed prior to or after packing;

OR

(a) two (2) bait sprays have been applied in accordance with the requirements of Section 6 and at least 14 days have elapsed since the first bait spray was applied following the detection of fruit fly in packed product and the withholding period for the product has elapsed; and

(b) the fruit containing the suspect fruit fly has been secured in a sturdy plastic bag. Eggs or larvae have been placed in a sample tube with methylated spirits and legibly labelled with the source block ID; and

(c) the detection must be reported to the Department within 24 hours of detection, so an investigation of the cause may be carried out and any problems rectified.

8.3.7 Rejected product

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

Packages rejected for live fruit fly may be:

(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 fruit fly.

8.3.8 Packed product inspection records

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

Packed product inspection records must be in the form of a ‘Packed Product Inspection Record’ (refer Attachment 8), or a similar record which captures the same information.

Packed Product Inspection Records must include:

(a) the name and Interstate Produce (IP) number of the Business that operates the approved facility in which the produce was packed; and

(b) produce type; and

(c) the date of inspection of the sample package; and

(d) PHAC number; and

(e) the sample package sequential number (PPS No. example Attachment 9); and

(f) the inspection result for the sample package; and

(g) details of defects or problems detected during inspection; and

(h) the number of any withdrawn or rejected packages; and

(i) the inspection results and follow-up action by the Certification Controller following withdrawal; and

(j) 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 produce was packed; and

(b) the words "Meets ICA-20"; and

(c) the date (or date code) on which the produce was packed; and

(d) the IP number or other identifier of the grower of the 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 host produce that have not been prepared in accordance with the requirements of this Procedure must not be marked as stated above.

8.4.2 Plant Health Assurance Certificates (PHACs)

A PHAC (Attachment 10) must be completed and signed by an Authorised Signatory prior to the consignment being dispatched.

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

Assurance Certificates must include:

(a) in the '*Accredited Business that Prepared Produce'* section, the name and address of the accredited Business that packed the produce; and

(b) in the *'Grower'* section, the name and address of the property on which the host produce was grown. Where the consignment contains host produce from a number of growers the word "VARIOUS" must be used; 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 produce

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.

8.4.3 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 (Attachment 2); and

(b) 'Equipment Calibration Test Record' (Attachment 5); and

(c) 'Preparation and Treatment Record' (Attachment 6); and

(d) a copy of each PHAC issued under this Procedure. (Attachment 10); and

Under PART B

(a) a copy of each PHAC received (Attachment 10); and

(b) 'Record of Receipt' (Attachment 7); and

(c) 'Packed Product Inspection Record' (Attachment 8); and

(d) 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 ICA 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
Attachment 2	Property Plan – ICA-20
Attachment 3	Spinosad Bait Spray Calibration
Attachment 4	Maldison Bait Spray Calibration
Attachment 5	Equipment Calibration Test Record
Attachment 6	Preparation and Treatment Record

Attachment 7	Record of Receipt
Attachment 8	Packed Product Inspection Record
Attachment 9	Example of a Packed Product Sample Number
Attachment 10	Plant Health Assurance Certificate
Attachment 11	Inspection for QFF information sheet

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:

https://www.dpi.nsw.gov.au/biosecurity/plant under the heading **Market access**

Alternatively, contact ICA Records Management:

Phone: 02 6552 3000

Fax: 02 6552 7239

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

Property Plan – ICA-20

Business name:	
Property address:	

The Property Plan is to 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

(c) the cultivar and the number of vines planted in the block; and

(d) road access including street name/s; and

(e) internal roadways within the property; and

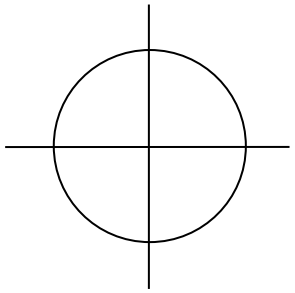
(f) location and identification of buildings (for example, house, packing shed, equipment sheds).

NOTE: A Property Plan (overleaf) must be included for each property covered by the Businesses ICA arrangement.

Complete the following details for each location shown on the Property Plan:

Reference Code or No. on Plan	Name Used on Farm for the Block	Cultivar	Number of Vines

Property Plan – ICA-20



Indicate North

Spinosad Bait Spray Calibration

Date	➔	Date of Calibration / /
		Unit ID _____
Person Conducting Test	➔	Name *(print)*
		Signature

System 1	**Continuous Band Spray** *(usually bike mounted style with directed jet out each side)*
Target ➔	Target Rate = 2.5 - 7.5 litres of mixture per hectare (l/ha)
Measure ➔	Seconds to spray 1 litre *(at standard operating pressure)* seconds _____ **(D)**
Measure ➔	Metres travelled in 10 sec *(at normal operating speed)* metres _____ **(E)**
Record ➔	Av. distance between rows metres _____ **(F)**
Calculate ➔	Litres applied per hectare = 100,000 divided by **(D)** divided by **(E)** divided by **(F)**; or 100,000 ÷ **(D)** ÷ **(E)** ÷ **(F)** = l/ha
Example ➔	**(D)** = *65 seconds to spray 1 litre* **(E)** = *28 metres travelled in 10 seconds* **(F)** = *7.3 metre average row spacing* ***On the calculator –*** *100,000 ÷ 65 ÷ 28 ÷ 7.3 = **7.5** l/ha*
Actual ➔	100,000 ÷ _____ ÷ _____ ÷ _____ = _____ l/ha

System 2	**Directed Application per Bait Spot** *(usually hand-gun style applying one directed spot per tree)*
Target ➔	Target Rate = 20-50 ml bait per spot
Measure ➔	Seconds to spray 1 litre (1000ml) = _____ **(A)**
Calculate ➔	Seconds to spray 50 ml =
	Seconds to spray 1 litre **(A)** ÷ 20 = _____ **(B)**
Calculate ➔	Seconds to spray 20 ml =
	Seconds to spray 1 litre **(A)** ÷ 50 = _____ **(C)**
Example ➔	*Seconds to spray 1 litre (A) = 50 seconds* *Seconds to spray 50 ml (B) = 2.5 seconds* *Seconds to spray 20 ml (C) = 1 second*

Calculation of Number of Bait Spots per Hectare *(for use in system 2)*		
Trees per hectare = $\frac{10{,}000}{\text{Av. distance between rows (m) X av. distance between trees (m)}}$		
Example ➔	***On the calculator –*** *10,000 ÷ (7.3 X 3.9) = **351** trees/hectare*	
Calculate ➔	10,000 ÷ (_____ x _____) = _____ trees/ha	
Target ➔	Target Rate = 125 – 150 baits/ha	
Calculate ➔	trees/ha divided by Target Rate = number of trees baited/ha	
Actual ➔	_____ ÷ _____ = bait every _____ tree	

Maldison Bait Spray Calibration

Date ➔	Date of Calibration / /
	Unit ID _____
Person Conducting Test ➔	Name *(print)*
	Signature

System 1	**Directed Application per Tree** *(usually hand-gun style applying one directed spot per tree)*
Target ➔	Target Rate = 50-100 ml bait spray per tree
Measure ➔	Seconds to spray 1 litre (1000ml) = _____ **(A)**
Calculate ➔	Seconds to spray 100 ml =
	Seconds to spray 1 litre **(A)** ÷ 10 = _____ **(B)**
Calculate ➔	Seconds to spray 50 ml =
	Seconds to spray 100ml **(B)** ÷ 2 = _____ **(C)**
Example ➔	*Seconds to spray 1 litre* ***(A)*** = *50 seconds*
	Seconds to spray 100 ml ***(B)*** = *5 seconds*
	Seconds to spray 50 ml ***(C)*** = *2.5 seconds*

Calculation of Number of Trees per Hectare *(for use in system 2)*

*Trees per hectare =

$$\frac{10{,}000}{\text{Av. distance between rows (m) X av. distance between trees (m)}}$$

Example ➔ ***On the calculator –***

*10,000 ÷ (7.3 X 3.9) = **351** trees/hectare*

Actual ➔ 10,000 ÷ (_____ x_____) = _____ tree/ha

System 2	**Continuous Spray to One Side of Each Row** *(usually bike mounted style with directed jet out each side)*
Target ➔	Target Rate = 15-20 litres per hectare (l/ha)
Measure ➔	Seconds to spray 1 litre *(at standard operating pressure)* seconds _____ **(D)**
Measure ➔	Metres travelled in 10 sec *(at normal operating speed)* metres _____ **(E)**
Record ➔	Av. distance between rows metres_____ **(F)**
Calculate ➔	Litres applied per hectare =
	100,000 divided by **(D)** divided by **(E)** divided by **(F)**; or
	100,000 ÷ **(D)** ÷ **(E)** ÷ **(F)** = l/ha
Example ➔	***(D)*** *= 30 seconds to spray 1 litre*
	(E) *= 28 metres travelled in 10 seconds*
	(F) *= 7.3 metre average row spacing*
	On the calculator –
	100,000 ÷ 30 ÷ 28 ÷ 7.3 = ***16.3*** *l/ha*
Actual ➔	100,000 ÷_____ ÷ _____ ÷ _____ = _____ l/ha
Target ➔	Target Rate = 50-100 ml per tree
Convert ➔	Litres per hectare to ml per tree =
	litres/hectare times 1000 divided by trees/hectare; or
	l/ha X 1000 ÷ trees/ha = ml/tree
Example ➔	***On the calculator –***
	16.3 *X 1000 ÷* ***351*** *= 46.4 ml/tree*
Actual ➔	_____ X 1000 ÷ _____ = _____ ml/tree

Equipment Calibration Test Record

Date of Test	No. of Nozzles	Output for individual nozzles (L/min/nozzle)	Effective Spray Width (m)	Calibration (m)	Litres used in run (L/run)	Application rate (L/ha)	Testing Officer's Name

Preparation and Treatment Record

Business Name		IP Number:	

Mixture Preparation						Treatment Application				
Date and time of preparation and application	Volume/Weight of concentrate (mL or g)	Volume of mixture (L)	Trade name of concentrate	Other adjuvant	Calibrated (Y/N)	Treatment Equipment used	Type of produce	Number treated (block or ha)	Treatment Operator's Name	Signature

Record of Receipt

Business Name:		N					Record No.:	

PHAC Number(s)	Pre-Harvest Treatment Declaration (Y/N)	Date of Receipt	Produce Type	Quantity	Name of Product Controller	Signature of Product Controller

Packed Product Inspection Record

Business Name		IP Number:	
Produce Type			

Date of Inspection	PHAC No.	PPS No	Free of live fruit fly		Comments (note any problems detected during inspection and the number of any withdrawn or rejected packages)	Inspection Officer	
			Yes	No		Printed Name	Signature

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)

PPS NO.

Completed Stamp or Sticker (Example Only)

PPS NO.

22 RB

Department of Primary Industries

Certificate Number	

Business Specific Information*

Dispatch Date: / / Ref No:

Arrival Date: / / PO No:

** These items display business specific information entered at the discretion of the consignor. They do not represent any part of the certifying conditions of the produce.*

Plant Health Assurance Certificate

A biosecurity certificate issued under Part 13 of the *NSW Biosecurity Act 2015*

All accreditation details must be completed. Please print clearly and initial any alterations.

Consignment Details

Consignor

Name

Address

State Postcode

Consignee

Name

Address

State Postcode

Certification Details

IP Number	Facility Number	Procedure
N		

Accredited Business that prepared produce

Name

Address

State Postcode

Reconsigned to: (If applicable)

Splitting consignments, preparing composite lots or reconsigning whole consignments

Name

Address

State Postcode

Grower(s) (If more than one grower – attach list)

Name

Address

State Postcode

	Number of Packages	Type of Packages (e.g. trays, cartons)	Type of Produce	Brand Name or identifying marks (as marked on packages)	Date Code (as marked on packages)	Authorisation for reconsignment
1						
2						
3						
4						

Treatment Details

	Treatment Date	Treatment Chemical (Active Ingredient), Concentration, Duration, Temperature
1	/ /	
2	/ /	
3	/ /	
4	/ /	

Additional Certification/Codes:

This certificate is valid for 21 days from date of certification

Declaration

I am a person authorised under the *NSW Biosecurity Act 2015* to issue this biosecurity certificate and I hereby certify that the details shown above are true and correct and the procedure(s) listed above have been completed.

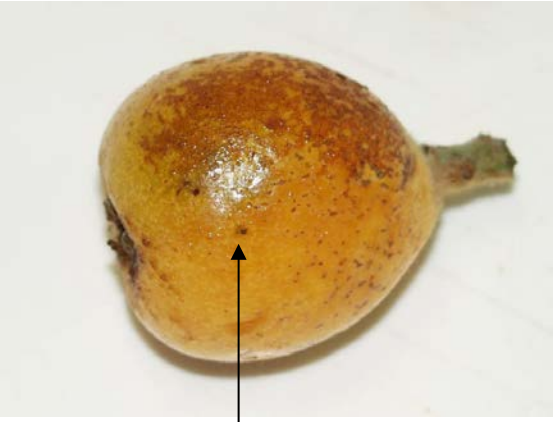
Full name *Signature* *Date*

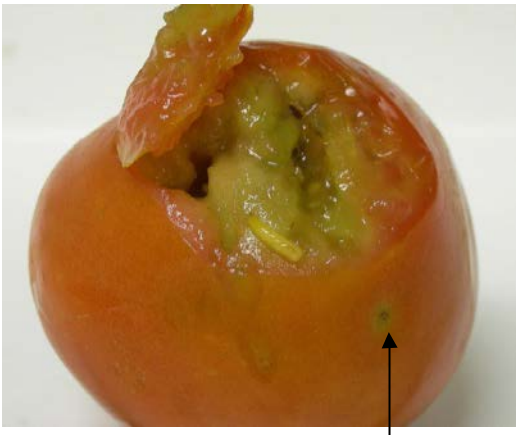
Note: A person who provides false or misleading information on a biosecurity certificate is guilty of an offence under the Act. Such action could result in a penalty infringement notice or prosecution. The maximum penalty for an individual is $1,100,000, and the maximum penalty for a corporation is $2,200,000. This information is collected by the collecting agency identified in this form in relation to its functions under the Biosecurity Act 2016. This agency/s and the NSW Department of Industry may use and disclose this information as reasonably necessary for the purpose of performing biosecurity risk functions under, or reasonably contemplated by, the Biosecurity Act 2016.

Inspection for Queensland Fruit Fly information sheet

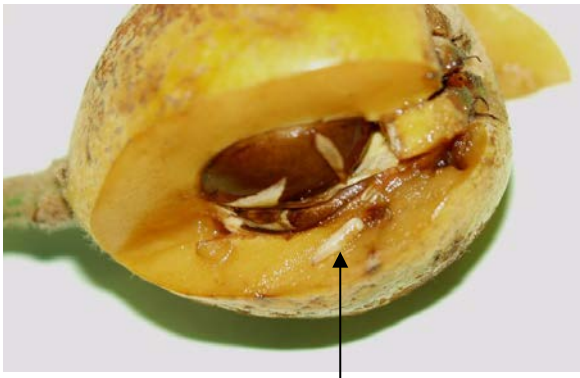
(Images courtesy of Department of Environment and Primary Industries, Victoria)

Larvae and sting marks





Sting marks



Larvae