ICA-02

FLOOD SPRAYING WITH DIMETHOATE

NUMBER  ICA02  VERSION 7.0

AUTHORISED BY  Manager, Plant Product Integrity & Standards

AUTHORISED DATE  10/04/2019  EFFECTIVE DATE 10/04/2019

ISSUED BY Primary Industries, Biosecurity & Food Safety

REVISION HISTORY

<table>
<thead>
<tr>
<th>VERSION</th>
<th>DATE</th>
<th>AMENDMENTS</th>
<th>SECTION</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>16 Sept 2003</td>
<td>All</td>
<td></td>
<td>New ICA Procedure</td>
</tr>
<tr>
<td>2.0</td>
<td>22 Dec 2003</td>
<td></td>
<td></td>
<td>Pages 8, 15, 16, 17 &amp; 18</td>
</tr>
<tr>
<td>3.0</td>
<td>27 May 2006</td>
<td></td>
<td></td>
<td>All pages</td>
</tr>
<tr>
<td>4.0</td>
<td>15 September 2011</td>
<td>All</td>
<td>Section 2</td>
<td>Reformat whole document</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Scope changed following APVMA suspension of Dimethoate for some host produce.</td>
</tr>
<tr>
<td>5.0</td>
<td>6 October 2015</td>
<td>All</td>
<td></td>
<td>Reformat whole document, include tank calibration certificate, addition of calibration methods and records.</td>
</tr>
<tr>
<td>6.0</td>
<td>20 June 2017</td>
<td>All</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>7.0</td>
<td>5 April 2019</td>
<td>2</td>
<td></td>
<td>Scope changed following APVMA updating Dimethoate permit for several host fruits. Removal of hot chillies. Removal of melons. Inclusion of requirement that citrus with inedible peel cannot be pre-harvest treated with dimethoate.</td>
</tr>
</tbody>
</table>

NEXT REVIEW DATE: 10/04/2012
Disclaimers

The information contained in this Procedure is based on knowledge and understanding at the time of writing (April 2019). 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 ............................................................................................................................................. 4
2. SCOPE .................................................................................................................................................. 4
3. REFERENCES ...................................................................................................................................... 4
4. DEFINITIONS ........................................................................................................................................ 5
5. RESPONSIBILITY ................................................................................................................................. 6
6. REQUIREMENTS .................................................................................................................................. 6
7. PROCEDURE ........................................................................................................................................ 7
   7.1 Flood spraying machinery and equipment ........................................................................................ ......... 7
   7.2 System calibration ............................................................................................................ ......................... 8
   7.3 Flood spray preparation ............................................................................................................................. 9
      7.3.1 Spray Mixture Preparation Chart ............................................................................................... 10
      7.3.2 Preparing the spray mixture....................................................................................................... 10
      7.3.3 Pre-flood spraying treatments ................................................................................................... 10
      7.3.4 Last treatment before packing ................................................................................................... 10
      7.3.5 Maintaining spray concentration and volume ............................................................................. 11
      7.3.6 Treatment records ..................................................................................................................... 11
   7.4 Spray concentration testing ................................................................................................... .................. 11
      7.4.1 Frequency of sampling .............................................................................................................. 11
      7.4.2 Collection of the sample ............................................................................................................ 12
      7.4.3 Storing and packaging the sample ............................................................................................. 12
      7.4.4 Chemical mixture analysis records ............................................................................................ 12
   7.5 Disposal of the spray mixture ................................................................................................. .................. 12
   7.6 Flood spraying equipment maintenance .......................................................................................... ........ 12
   7.7 Post Treatment Security (Tasmania only) ....................................................................................... ......... 12
      7.7.1 Package Identification ................................................................................................................ 13
      7.7.2 Plant Health Assurance Certificates (PHACs) ........................................................................... 13
      7.7.3 Plant Health Assurance Certificate (PHAC) distribution ............................................................. 14
7.8 RECORDS AND DOCUMENT CONTROL .......................................................................................... 14
   8.1 ICA system records............................................................................................................. ..................... 14
   8.2 ICA system documentation ...................................................................................................................... 14
9. ATTACHMENTS .................................................................................................................................. 14
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 post-harvest flood spraying of Queensland fruit fly (QFF) host produce with Dimethoate under an Interstate Certification Assurance (ICA) arrangement.

2. **SCOPE**

This Procedure covers all certification of post-harvest flood spraying with Dimethoate of eligible QFF host produce by a Business operating under an ICA arrangement in NSW.

**Disease:** Queensland Fruit Fly (QFF) (*Bactrocera tryoni*)  
**Produce:** Dimethoate may be used for:  

- citrus fruit (excluding edible skin species e.g. kumquats, and citrus fruit that has received pre-harvest treatment with dimethoate),  
- tropical and sub-tropical fruit with inedible peel. Including: Abiu/Abius, Achiote, Akee apple, Avocado, Banana, Breadfruit, Cactus Fruit (e.g. Prickly Pear), Caimito/Star Apple, Canistel, Casimiro/White Sapote, Cherimoya, Custard Apple, Durian, Elephant Apple, Feijoa, Guava (inedible peel varieties only), Genip, Granadilla, Imla, Jackfruit, Kiwifruit (inedible peel varieties only), Litchi, Longan, Mammey Apple, Mango, Mangosteen, Marmaladedos, Naranjilla, Papaya, Passionfruit, Pawpaw, Plantain, Pomegranate, Pulasan, Rambutan, Rollinia, Santol, Sapodilla, Sapote (black, green, mammey & white), Soursop, Spanish Lime, Sweetsop/Sugar Apple, Tamarillo and Wax Jambus

**Location:** New South Wales

---

**IMPORTANT**

**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 under this Procedure may not fulfil all quarantine entry conditions for all host produce to interstate markets. It is the responsibility of the consigning Business 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/](http://www.interstatequarantine.org.au/).

3. **REFERENCES**

- **Biosecurity Act 2015**
  - Accreditation of Biosecurity Certifiers  
  - Biosecurity Audit Frequency

ICA-02 – Flood spraying with Dimethoate – v7.0

**Valid on day of printing:** 10/04/2019
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.
- **Business** means the legal entity accredited as a biosecurity certifier under the Act.
- **Certification** means a Plant Health Certificate or a Plant Health Assurance Certificate, which verifies that a consignment meets the requirements of an Interstate Certification Assurance Procedure or an interstate quarantine entry requirement.
- **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 packages consigned to a single consignee at 1 location at one time.
- **Department** means the NSW Department of Industry – Office of Primary Industries.
- **facility** means a location where produce is assembled, inspected, securely stored, certified and dispatched.
- **flood spraying** means flooding with a high volume application which applies at least 16 L/minute of the chemical mixture per square metre of the area being flood sprayed.
- **host produce** means fruit or vegetables which are susceptible to infestation by QFF.
- **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.
- **non-conformance** means a failure to fulfil a specified requirement.
- **PHAC** means a Plant Health Assurance Certificate that is issued in accordance with the requirements of a Certification Assurance Arrangement.
- **property** means 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 as required by Safework Australia.
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 1 position.

Certification Controller is responsible for:

- ensuring the Business and its staff comply with their responsibilities and duties under this Procedure;
- representing the Business during audits and other matters relevant to ICA accreditation;
- training staff in their duties and responsibilities under this Procedure;
- ensuring the Business has a current accreditation for an ICA arrangement under this Procedure; and
- ensuring all certification of host produce is carried out in accordance with this Procedure.

Treatment Operator is responsible for:

- reading the label and/or permit, and SDS for the chemical product in use;
- preparing and maintaining flood spray mixtures and top-up mixtures;
- maintaining spray preparation, top-up and treatment records;
- maintaining spray mixture concentration testing analysis records;
- calibrating flood spray equipment;
- maintaining spray coverage and spray application rate test records; and
- maintaining flood spraying equipment.

Authorised Dispatcher is responsible for:

- ensuring all packages covered by a PHAC are identified;
- ensuring certified produce is transported in secure conditions (Tasmania only); and
- maintaining copies of all PHACs issued by the Business under this Procedure.

Authorised Signatory is responsible for:

- ensuring, prior to signing and issuing a PHAC, that produce covered by the certificate has been prepared in accordance with this Procedure;
- ensuring the details on the certificate are true and correct in every particular; and
- signing and issuing the PHAC.

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.

Host produce certified for treatment under this Procedure must be treated in accordance with this Procedure and label recommendations.

All eligible host produce must be flood sprayed:

(a) in a single layer with a mixture containing 400 mg/L Dimethoate in accordance with all label requirements and APVMA permit directions for the control of QFF; and

(b) with a mixture containing 1mL of concentrate per litre of mixture in the spray tank; and
in a high volume application of at least 16 L/minute per each square metre of the area being sprayed, which provides complete coverage of the host produce for a minimum of 10 seconds, after which the host produce must remain wet for not less than 60 seconds; and

(flood spraying must be the last treatment before packing; and

(i) for citrus fruit only;

A. a non-recovery gloss coating (“wax”) may be applied to citrus not less than 60 seconds after treatment; or

B. citrus fruit may be washed, treated with a fungicide and/or have a gloss coating applied a minimum of 24 hours after flood spraying.

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 certificate where the host produce is found not to conform to specified requirements.

7. PROCEDURE

7.1 Flood spraying machinery and equipment

Flood spraying equipment shall be designed and operated to ensure host produce passes under the spray in a single layer and the entire surface of the host produce is completely covered for a duration of at least 10 seconds and stays wet for no less than 60 seconds.

All surfaces of the host produce must be in contact with the spray mixture either by rotating the host produce as it passes under the spray, or through designing the spray system to ensure complete coverage of the host produce as it passes through the spray.

Host produce feed mechanisms must be designed in a manner that prevents host produce from passing through the spray before it has been completely covered with spray for a duration of 10 seconds or more, or allows hand-operated processes to be accurately timed.

7.1.1 Volume of the spray tank

Prior to initial use of tank, the equipment shall be calibrated for tank volume using a calibrated flow meter. Re-calibration is required where the tank has been altered to the extent that the changes will impact the volume calibration, i.e., changed tank size.

During calibration, permanent volume indicator marks shall be made on the inside of the tank, or on a sight tube or sight panel on the outside of the tank, or by some other device which clearly and accurately indicates the maximum mixture level and incremental volumes used.

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

A tank calibration certificate shall be issued, which shall include the following minimum information:

(a) Business IP number;
(b) unique identification of the tank;
(c) name of person conducting calibration;
(d) date of calibration;
(e) type of calibrated flow meter used;
(f) date of last calibration of calibrated flow meter;
(g) maximum volume calibrated; and
(h) incremental volumes calibrated.

7.2 System calibration

The Treatment Operator must carry out spray coverage and spray application rate calibration tests at a minimum of:

(a) once immediately prior to commencement of treatment and certification of produce each season for each host produce type being treated;
(b) within 4 weeks of commencement of treatment each season, or prior to the compliance audit, whichever is the earlier; and
(c) once a month during each host produce season.

7.2.1 Spray coverage calibration

The Treatment Operator must ensure host produce is completely covered by the flood spray for a minimum of 10 seconds. The host produce must remain wet and not undergo any drying process (for example, fans, blowers or heaters) for at least a further 60 seconds after the host produce has been flood sprayed for 10 seconds.

Calibration tests may be carried out by placing an identifiable piece of host produce (for example, marked with a waterproof ink) on the feed mechanism with a normal flow rate of other host produce. The Treatment Operator times the period that the marked piece of host produce is under the spray. This process is repeated until the host produce remains completely covered with the spray mixture for at least 10 seconds and remains wet for a further 60 seconds after flood spraying for 10 seconds.

If any of the tests reveal that host produce is not remaining fully under the spray for at least 10 seconds, or host produce is undergoing a drying process within 60 seconds of treatment, the equipment shall be adjusted and the procedure repeated until a satisfactory result is achieved.

7.2.2 Spray coverage calibration records

Records of spray coverage calibration tests shall be maintained by the Treatment Operator which record:

(a) the name of the person conducting the test;
(b) the date of testing; and
(c) the results achieved during the tests.

Spray Coverage Calibration Test Records can be recorded using the form in Attachment 2.

7.2.3 Spray application rate calibration

The Treatment Operator shall ensure that the application rate of the flood spray equipment is at least 16 Litres per minute per each square metre of the area being flood sprayed.

Records of spray application rate calibration tests (Attachment 3) shall include:

(a) the name of the person conducting the test;
(b) the date of testing;
(c) the full calculations used to determine the spray equipment’s application rate (for example, m² of treatment area); and
(d) the results achieved during the tests.

7.2.4 Maintaining correct pH

The Treatment Operator shall ensure that the Dimethoate flood spray is maintained at a pH below 7.0 to prevent breakdown of the pesticide.
The mixture pH must be monitored at commencement of treatment each day to ensure correct pH. The mixture shall be tested with a commercially available pH tester. The flood spray mixture pH monitoring record (Attachment 4) shall include:

(a) person conducting check;
(b) date and time of check;
(c) result; and
(d) corrective action taken, for example, type of buffer added and quantity.

7.2.5 Topping-up

During the spraying process, it may be necessary for the Treatment Operator to top-up the spray mixture to maintain the required concentration and/or volume. This is done by adding the required quantity of water with the required amount of concentrate to the spray mixture as determined by the facility’s top-up program.

Where top-up mixtures are prepared in the spray tank, volume of the top-up mixture must be calculated by using either the incremental volume marks, or a calibrated measuring vessel or liquid metering device so that allowance is made for mixture already in the spray tank.

Ensure that the chemical is completely diluted in all of the water by thoroughly mixing the tank for a minimum of 2 minutes before recommencing flood spraying.

7.2.6 Top-up program

A facility which uses topping-up as a means of maintaining spray volume and/or concentration must develop and document a top-up program for maintaining spray mixture concentration.

The top-up program shall state:

(a) the frequency of topping-up based on the quantity of host produce treated or time; and
(b) the quantity of concentrate and water required to be added.

The Business shall provide evidence that the spray top-up program is effective in achieving and maintaining spray mixture concentration within ± 15% of the required concentration.

7.2.7 Top-up preparation records

Records of spray top-up preparation shall be maintained by the Treatment Operator (Attachment 4). The record must include:

(a) the date and time of topping-up;
(b) operator initials;
(c) volume of concentrate added to spray mixture (mL);
(d) volume of water added to spray mixture (L).

7.3 Flood spray preparation

The Treatment Operator must prepare fresh spray mixture at a minimum of every 48 hours or more frequently, as required.

Unused spray mixture may be held overnight for use the next day; however the mixture must be thoroughly mixed for at least 2 minutes prior to further use.

Periods longer than 48 hours may be considered where a Business can demonstrate, by analysis of the chemical mixture, the ability to control and maintain concentration for a specified longer period.

Host produce should be clean before spray treatment is applied to avoid fouling the spray mixture and restricting or reducing contact of the chemical with the host produce surface.
7.3.1 Spray Mixture Preparation Chart
The Business must maintain a 'Spray Mixture Preparation Chart' (Attachment 5) or similar record in close proximity to the flood spraying equipment.

The Chart must provide the following details:

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

(b) the volume in millilitres (mL) of concentrate to achieve the required concentration of the chemical in a full tank of the made-up spray mixture; and

(c) the volume in millilitres (mL) of a concentrate to achieve the required concentration of the chemical in a made-up spray mixture for incremental volumes or top-up volumes used; and

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

7.3.2 Preparing the spray mixture
Fill the tank with clean water to the appropriate incremental volume mark or maximum mixture level mark.

Other ingredients may only be added to the mixture if they are known to be compatible with the chemical used to control fruit flies.

If a buffer is required, add it to either the empty dip tank, or during filling.

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 dip operation. Some facilities may require extended periods of mixing to fully dilute the chemical in the water.

The ‘Spray Mixture Preparation, Top-Up and Treatment Record’ (Attachment 4) must include:

(a) the date and time of treatment preparation

(b) person preparing mixture;

(c) pH of mixture;

(d) volume of concentrate in mixture (mL); and

(e) volume of water in mixture (L).

7.3.3 Pre-flood spraying treatments
Host produce can be treated with water or other chemical treatments prior to flood spraying with Dimethoate provided there is enough time for the majority of the water to drain off and minimise the dilution of the spray mixture.

The direct addition of chemicals to the wash water or carriage of chemicals on host produce that raise pH or otherwise destroy the pesticide must be avoided.

Where host produce has undergone pre-flood spraying washing or chemical treatments, a spray mixture top-up program may be required to maintain the spray mixture concentration within the required tolerance.

7.3.4 Last treatment before packing
Flood spraying must be the last treatment before packing.

Citrus fruit only may:

(a) have a non-recovery gloss coating (wax) applied at least 60 seconds after flood spraying with Dimethoate; and

(b) be washed, fungicide treated and/or have a gloss coating applied a minimum of 24 hours after flood spraying with Dimethoate.
The Treatment Operator must ensure that no other treatments, such as fungicide treatment or washing, are applied to host produce between flood spraying and packing. However, other processes may be approved provided they do not affect the efficacy of the flood spray treatment.

### 7.3.5 Maintaining spray concentration and volume

During flood spraying operations, the concentration of the chemical mixture must be maintained within ± 15% of the required concentration and in accordance with any endorsed top-up program.

### 7.3.6 Treatment records

The Treatment Operator must record all spray mixture preparation, top-up mixture preparation and host produce treatment using a ‘Spray Mixture Preparation, Top-Up and Treatment Record’ (Attachment 4), or records which capture the same information.

The treatment records must record:

(a) the date of flood spray mixture or top-up mixture preparation; and
(b) the time of flood spray mixture or top-up mixture preparation; and
(c) whether it is a top-up; and
(d) whether there is a pH check; and
(e) the volume of concentrate used (mL); and
(f) the volume of the made-up spray mixture or top-up mixture (L); and
(g) the trade name of the concentrate used; and
(h) the date the spray mixture was discarded; and
(i) the date of treatment; and
(j) treatment commencement time; and
(k) treatment completion time; and
(l) the type of host produce treated; and
(m) approximate quantity of host produce treated; and
(n) the identification of the Treatment Operator.

### 7.4 Spray concentration testing

The Business must verify the ability to achieve and maintain spray concentrations by providing the results of analysis of samples of a spray mixture from an approved laboratory.

#### 7.4.1 Frequency of sampling

Spray mixtures of Dimethoate must be sampled at least every 12 months and at any time the species of host produce being handled is changed or there is a change to the method of processing the same species of host produce, which could affect the concentration of insecticide.

Samples shall be collected:

(a) once prior to initial approval of the facility (so an analysis result is available for the Authorised Person carrying out the initial audit of the Business’ facility and operating procedures); and
(b) immediately following preparation of the spray mixture; and
(c) at cessation of treatment after the chemical mixture has been used to treat the maximum quantity of host produce that will be treated in the facility before a spray mixture is discarded.

An additional spray mixture sample is required for a facility using a top-up program after topping-up the mixture according to the facility’s documented top-up program.
7.4.2 Collection of the sample

Samples of a minimum of 200 mL must be taken from the centre of the spray tank or, if this is not practical, from a spray nozzle after the spray has run for a minimum of 5 minutes, and placed in a clean glass sample bottle with a secure watertight lid.

7.4.3 Storing and packaging the sample

Samples should be stored under refrigeration and dispatched within 24 hours of collection to minimise losses in chemical concentration.

Samples must be carefully packaged to prevent damage in transit and comply with any hazardous chemical packaging and transport requirements.

Samples shall be accompanied by a completed ‘Fruit Fly Chemical Treatment Sample for Analysis’ form (Attachment 6).

7.4.4 Chemical mixture analysis records

Results of the analysis must be retained by the Business for a minimum of 24 months from receipt and be made available when requested by an Authorised Person.

Details of chemical mixture analysis results must be maintained using a ‘Chemical Mixture Analysis Record’ (Attachment 7) or similar record which captures the same information.

The chemical mixture analysis records must include:

(a) the date and time of collection of the sample; and
(b) the full trade name and batch number and expiry date of the concentrate used; and
(c) the total volume (mL) of concentrate added to the spray mixture; and
(d) the total volume (L) of the prepared spray mixture from which the sample was taken.

Additional data that should be recorded by the Business includes:

(a) the name and quantity of any detergents, fungicides or other additives added to the spray mixture;
(b) type and quantity of host produce treated prior to collection of the sample; and
(c) whether the host produce was dry, moist or wet when it entered the spray mixture.

Once the Business is accredited, any deficiency in an analysis result must be reported to the accrediting authority within 24 hours so an investigation may be carried out to determine the cause and rectify any problems.

7.5 Disposal of the spray mixture

The treatment facility must have the facilities to dispose of the spray mixture in a manner consistent with local government and Environmental Protection Authority (EPA) requirements.

7.6 Flood spraying equipment maintenance

The Treatment Operator shall carry out regular checks of dipping equipment to ensure it continues to operate effectively according to the required standards and remains free from soiling, malfunction, blockages, damage or excessive wear.

7.7 Post Treatment Security (Tasmania only)

Packing shall commence as soon as practicable after treatment. Host produce may be allowed to dry adequately prior to packing.

Treated host produce shall be held for the minimum practical period after treatment before it must be secured against reinestation.

Any host produce which is stored outside the treatment facility after treatment, and prior to dispatch, must be held under secure conditions.
Any treated host produce which remains unpacked at the end of the day must be held in secure conditions until packed. Completed pallets shall be held for the minimum practical period before placing in secure conditions.

Certified host produce must be stored at, and transported from, the facility in secure conditions which prevent infestation by fruit fly.

PHACs must state that host produce was; “Packed in such a way as to prevent infestation of fruit fly”.

Secure conditions are:

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

The Business shall have adequate procedures in place which prevent mixing of treated and untreated host produce at the facility.

Host produce consigned to Tasmania must be transported in full container lots sealed prior to transport, or as lesser container lots in accordance with the requirements of (a), (b) or (d) above.

Where consignments are transported to Tasmania as full container lots, the seal number must be included in the additional declaration section of the PHAC covering the consignment (Attachment 8).

Where consignments are transported in vented packages that are sealed as a palletised unit in accordance with (d) above, the Business must secure the top layer of the pallet by applying a row of tape over the shrink-wrap and have applied to the tape, in waterproof ink, the signature of an Authorised Signatory, the number of the PHAC covering the consignment and the date.

### 7.7.1 Package Identification

The Authorised Dispatcher shall ensure that, after treating and packing, each package is marked in indelible and legible characters of at least 5 mm, with:

(a) the Interstate Produce (IP) number of the Business that operates the approved facility in which the produce was treated;
(b) the words “MEETS ICA-02”; and
(c) the date (or date code) on which the host produce was treated;

prior to the issuance of a PHAC by the Business under this Procedure.

Produce that has not been verified as conforming to the requirements specified in this Procedure must not be marked as stated above.

### 7.7.2 Plant Health Assurance Certificates (PHACs)

The Authorised Dispatcher must ensure a PHAC (Attachment 8) 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’.

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.

7.7.3 Plant Health Assurance Certificate (PHAC) distribution
The original (yellow copy) must accompany the consignment.
The duplicate (white copy) must be retained by the Business.

8. RECORDS AND DOCUMENT CONTROL

8.1 ICA system records
The Business must maintain the following records, or similar which record the same information:
(a) ‘Spray Coverage Calibration Test Record’ (Attachment 2); and
(b) ‘Spray Application Test Record’ (Attachment 3); and
(c) ‘Spray Mixture Preparation Chart’ (Attachment 4); and
(d) ‘Spray Mixture Preparation, Top-Up and Treatment Record’ (Attachment 5); and
(e) ‘Chemical Treatment Sample Analysis Form’ (Attachment 6); and
(f) ‘Chemical Mixture Analysis Record’ (Attachment 7); and
(g) a copy of each PHAC issued by the Business.
Records must be retained for at least 4 years from completion.
Records shall be made available on request to an Authorised Person.

8.2 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.

9. ATTACHMENTS
Attachment 1 Application for Accreditation as a Biosecurity Certifier
Attachment 2 Spray Coverage Calibration Test Record
Attachment 3 Spray Application Test Record
Attachment 4 Spray Mixture Preparation Chart
Attachment 5 Spray Mixture Preparation, Top-Up and Treatment Record
Attachment 6 Fruit Fly Chemical Treatment Sample Analysis Form
Attachment 7 Chemical Mixture Analysis Record
Attachment 8 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:
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
## Spray Coverage Calibration Test Record

<table>
<thead>
<tr>
<th>Date of Test</th>
<th>Host produce Type</th>
<th>Time covered in spray (seconds)</th>
<th>Time to drying process (seconds)</th>
<th>Name of Testing Officer</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NOTES

1. Spray coverage calibration tests must be carried out immediately prior to commencement of treatment and certification of produce, within 4 weeks of commencement of treatment or prior to the Business’ compliance audit, and once a month during the season for each host produce type being treated.

2. For each test, record the number of seconds an identifiable piece of host produce is covered by the spray mixture in the normal flow of host produce.

3. Adjust the equipment and repeat the test if any of the tests are below the minimum specified time period for complete spray coverage and drying of the host produce.
### Spray Application Test Record

<table>
<thead>
<tr>
<th>Date of Test</th>
<th>Application Rate Required</th>
<th>No. of Nozzles</th>
<th>Output for Individual Nozzles (L/min/nozzle)</th>
<th>Total Output (L/min)</th>
<th>Total Spray Area (m²)</th>
<th>Application Rate (L/min/m²)</th>
<th>Testing Officer’s Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
<tr>
<td>/ /</td>
<td>L/m²/min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L/m²/min</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES**

1. Spray application rate calibration tests must be carried out immediately prior to commencement of treatment and certification of produce, within 4 weeks of commencement of treatment or prior to the Business’s compliance audit, and once a month during the season for each host produce type being treated.

2. Calculate the Total Output of the spray equipment by placing a collection vessel under each spray nozzle for a measured time period and determine the volume of output from each nozzle over a 1 minute period. Total the output (L/min) from each of the nozzles to give the Total Output (L/min).

3. Calculate the Total Spray Area (m²) by multiplying the spray area width by the spray area length, the boundary being the line at which the host produce’s surface is fully wetted.

4. Divide the Total Output (L/min) by the Total Spray Area (m²) to give the Application Rate (L/min/m²) - 

   \[
   \text{Total Output (L/min)} + \text{Total Spray Area (m²)} = \text{Application Rate (L/min/m²)}
   \]

5. Adjust the equipment and repeat the test if the test shows a spray application rate below the minimum specified requirement.
# Spray Mixture Preparation, Top-up and Treatment Record

<table>
<thead>
<tr>
<th>Spray Mixture Preparation &amp; Top-up Preparation</th>
<th>Host Produce Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date of treatment</td>
</tr>
<tr>
<td>Time</td>
<td>Start time</td>
</tr>
<tr>
<td>Top-up (✓)</td>
<td>Finish time</td>
</tr>
<tr>
<td>pH check (✓)</td>
<td>Type of host produce treated</td>
</tr>
<tr>
<td>Volume of Concentrate (mL)</td>
<td>Quantity of host produce treated (kg or packages)</td>
</tr>
<tr>
<td>Volume of Mixture (L)</td>
<td>Date mixture discarded</td>
</tr>
<tr>
<td>Trade Name of Concentrate</td>
<td>Treatment Operator’s Name</td>
</tr>
<tr>
<td>Date mixture discarded</td>
<td>Signature</td>
</tr>
</tbody>
</table>

**Spray Mixture Preparation & Top-up Preparation**
- Date
- Time
- Top-up (✓)
- pH check (✓)
- Volume of Concentrate (mL)
- Volume of Mixture (L)
- Trade Name of Concentrate
- Date mixture discarded

**Host Produce Treatment**
- Date of treatment
- Start time
- Finish time
- Type of host produce treated
- Quantity of host produce treated (kg or packages)
- Treatment Operator’s Name
- Signature
SPRAY MIXTURE PREPARATION CHART

Concentrate (Trade Name): ________________________________

Mixture Application Rate: ________________________________

Mixture Rate (mL): ____________________________________

Full Tank (Concentrate [mL or g]/Mixture [L])

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

________________________ mL/g Concentrate / ____________ Litres Mixture

________________________ mL/g Concentrate / ____________ Litres Mixture

________________________ mL/g Concentrate / ____________ Litres Mixture

________________________ mL/g Concentrate / ____________ Litres Mixture

________________________ mL/g Concentrate / ____________ Litres Mixture

________________________ mL/g Concentrate / ____________ Litres Mixture

Prepared by: ______________________ _____________________ ____________

Printed Name Signature Date
**FRUIT FLY CHEMICAL TREATMENT SAMPLE FOR ANALYSIS FORM**

### SAMPLE DETAILS

<table>
<thead>
<tr>
<th>Client’s Name:</th>
<th>IP Number:</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postal Address:</td>
<td>Street Address:</td>
<td></td>
</tr>
<tr>
<td>Telephone No:</td>
<td>Fax No:</td>
<td></td>
</tr>
<tr>
<td>Crop Treated:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chemical used (tick):**
- [ ] Dimethoate

**Chemical Brand Name:**

**Batch Number:**

**Total Volume of Mixture:** __________ litres

**Volume of concentrate added:** __________ mL

**Name and Amount of other chemicals added:**

**Date of Mixing:**

**Time of Mixing:** AM

**Method of Application (tick one):**
- [ ] Dip
- [ ] Flood Spray
- [ ] Non-recirculating Spray

**Host produce Wetness immediately prior to Treatment (tick one):**
- [ ] Dry
- [ ] Moist
- [ ] Dripping

**Sample Number as marked on sample bottle:**

**Date sample collected:**

**Time sample collected:** AM

**Host produce volume treated up until sample collected:** __________ cartons

**Total volume of chemical mixture at time of sampling:** __________ litres

**Other information on sample:**

---

### ANALYSIS DETAILS - For Laboratory Use Only

<table>
<thead>
<tr>
<th>Laboratory Identification:</th>
<th>(Apply stamp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Number:</td>
<td>Date Received:</td>
</tr>
<tr>
<td>Analysis Method:</td>
<td></td>
</tr>
<tr>
<td><strong>Result:</strong></td>
<td>Chemical:</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
<tr>
<td>Analyst Name:</td>
<td>Signature:</td>
</tr>
</tbody>
</table>
## Chemical Mixture Analysis Record

<table>
<thead>
<tr>
<th>Sample Details</th>
<th>Chemical Mixture Details</th>
<th>Host produce Details</th>
<th>Analysis Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Sampling-</td>
<td>Trade Name of Concentrate-</td>
<td>Host produce Treated-</td>
<td>Laboratory-</td>
</tr>
<tr>
<td>Time of Sampling-</td>
<td>Batch No.-</td>
<td>Quantity Treated-</td>
<td>Analysis No.-</td>
</tr>
<tr>
<td>Sample No.-</td>
<td>Volume of Concentrate-</td>
<td>Condition</td>
<td>Analysis Result-</td>
</tr>
<tr>
<td></td>
<td>mL</td>
<td>☐ Dry ☐ Moist ☐ Wet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Date of Sampling- | Trade Name of Concentrate- | Other Additive/s- | Host produce Treated- | Laboratory- |
| Time of Sampling- | Batch No.- | Volume of Additive/s- mL | Quantity Treated- | Analysis No.- |
| Sample No.- | Volume of Concentrate- mL | Total Volume of Mixture- Litres | Condition | Analysis Result- |
| | | | ☐ Dry ☐ Moist ☐ Wet | | |
| | | | | | |

| Date of Sampling- | Trade Name of Concentrate- | Other Additive/s- | Host produce Treated- | Laboratory- |
| Time of Sampling- | Batch No.- | Volume of Additive/s- mL | Quantity Treated- | Analysis No.- |
| Sample No.- | Volume of Concentrate- mL | Total Volume of Mixture- Litres | Condition | Analysis Result- |
| | | | ☐ Dry ☐ Moist ☐ Wet | | |
| | | | | | |

| Date of Sampling- | Trade Name of Concentrate- | Other Additive/s- | Host produce Treated- | Laboratory- |
| Time of Sampling- | Batch No.- | Volume of Additive/s- mL | Quantity Treated- | Analysis No.- |
| Sample No.- | Volume of Concentrate- mL | Total Volume of Mixture- Litres | Condition | Analysis Result- |
| | | | ☐ Dry ☐ Moist ☐ Wet | | |
| | | | | | |

| Date of Sampling- | Trade Name of Concentrate- | Other Additive/s- | Host produce Treated- | Laboratory- |
| Time of Sampling- | Batch No.- | Volume of Additive/s- mL | Quantity Treated- | Analysis No.- |
| Sample No.- | Volume of Concentrate- mL | Total Volume of Mixture- Litres | Condition | Analysis Result- |
| | | | ☐ Dry ☐ Moist ☐ Wet | | |
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

Reconsigned to: (if applicable)

Splitting consignments, preparing composite lots or reconsigning whole consignments

Name
Address
State Postcode

Certification Details

IP Number Facility Number Procedure

Accredited Business that prepared produce

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. tray, cartons) Type of Produce Brand Name or identifying marks (as marked on packages) Date Code (as marked on packages) Authorization for reconsignment

1
2
3
4

Treatment Details

Treatment Date 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 2015. 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 2015.