

# DIPPING WITH DIMETHOATE

## REVISION REGISTER

Revision No.	Date of Issue	Amendment Details
Second	24/04/1998	All Pages
Third	23/08/1998	New Issue
Fourth	24/11/1999	Updated Issue
Fifth	21/09/2000	Pages 2, 18, 20 & 26
Sixth	27/01/2005	Pages 19 & 20
Seventh	25/07/2005	Updated Issue
Eighth	22/02/2010	All Pages
Ninth	11/02/2013	Updated Issue
Tenth	18/03/2014	Updated Issue
Eleventh	28/10/2015	Updated Issue
Tewelveth	06/06/2016	Updated Issue
Thirteenth	10/04/2017	Updated Issue
Fourteenth	13/07/2017	Section 7.6.1
Fifteenth	13/11/2023	Updated scope to account for APMVA suspension of dimethoate of tropical and sub-tropical fruit with inedible peel, but continuing to allow treatment of citrus with inedible peel.  APVMA minor use permit of post-harvest dipping for melons including watermelons remains active.

Controlled Copy No: \_\_\_\_\_

Controlled: ☐

Authorised:  \_\_\_\_\_  
Quality Control Officer

Uncontrolled: ☒

*Uncontrolled copies of this document are not subject to amendment or revision. Holders of uncontrolled copies should contact the DITT, Operations Manager, PBB GPO Box 3000, Darwin NT 0801, Telephone: (08) 8999 2118 to obtain a current version of this document.*

## TABLE OF CONTENTS

<b>1. PURPOSE .....</b>	<b>4</b>
<b>2. SCOPE .....</b>	<b>4</b>
<b>3. REFERENCES .....</b>	<b>5</b>
<b>4. DEFINITIONS .....</b>	<b>5</b>
<b>5. RESPONSIBILITY .....</b>	<b>6</b>
<b>6. REQUIREMENT .....</b>	<b>7</b>
<b>7. PROCEDURE .....</b>	<b>8</b>
<b>7.1 Accreditation.....</b>	<b>8</b>
7.1.1 Application for Accreditation .....	8
7.1.2 Audit Process .....	8
7.1.3 Certificate of Accreditation.....	10
7.1.4 Nonconformance and Sanctions.....	10
7.1.4.1 Nonconformance .....	10
7.1.4.2 Incident Reports .....	10
7.1.4.3 Suspension and Cancellation .....	10
7.1.4.4 Prosecution .....	10
7.1.4.5 Charging Policy .....	11
<b>7.2 Dip Preparation.....</b>	<b>11</b>
7.2.1 Volume Of The Dip Tank .....	11
7.2.2 Calculating The Quantity Of Concentrate To Add To The Dip Mixture .....	11
7.2.3 Dip Mixture Preparation Chart .....	11
7.2.4 Ensuring Correct pH .....	12
7.2.5 Preparing The Dip Mixture .....	12
7.2.6 Pre-Dipping Treatments.....	12
7.2.7 Dip Preparation Records .....	13
<b>7.3 Dipping.....</b>	<b>13</b>
7.3.1 Manual Fruit Immersion .....	13
7.3.2 Mechanical Fruit Feeding.....	13
7.3.3 Last Treatment Before Packing .....	13
<b>7.4 Maintaining Dip Concentration and Volume .....</b>	<b>14</b>
7.4.1 Topping Up .....	14
7.4.2 Top-Up Program.....	14
7.4.3 Top-Up preparation Records .....	15
<b>7.5 Treatment Records .....</b>	<b>14</b>
<b>7.6 Dip Concentration Testing .....</b>	<b>14</b>
7.6.1 Frequency of Sampling.....	15
7.6.2 Collection of the Sample.....	16
7.6.3 Storing and Packaging the Sample.....	16

<b>7.7</b>	<b>Disposal of the Dip Mixture.....</b>	<b>16</b>
<b>7.8</b>	<b>Dip Calibration - Mechanical Fruit Feeding .....</b>	<b>16</b>
7.8.1	Dip Calibration Test Records .....	17
<b>7.9</b>	<b>Dip Maintenance .....</b>	<b>17</b>
<b>7.10</b>	<b>Handling, Storage and Transport Under Secure Conditions (Tasmania only) .....</b>	<b>17</b>
<b>7.11</b>	<b>Dispatch .....</b>	<b>17</b>
7.11.1	Package Identification .....	17
7.11.2	Assurance Certificates.....	18
7.11.3	Assurance Certificate Distribution.....	18
<b>7.12</b>	<b>ICA System Records.....</b>	<b>18</b>
<b>7.13</b>	<b>ICA System Documentation .....</b>	<b>18</b>
<b>8.</b>	<b>ATTACHMENTS.....</b>	<b>19</b>
	ATTACHMENT 1 - Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) and/or Certification Assurance (CA) Arrangement (Blank) .....	20
	ATTACHMENT 2 - Plant Health Assurance Certificate (PHAC) (Example) .....	22
	ATTACHMENT 3 - Dip Mixture Preparation, Top-Up and Treatment Record (Blank) .....	23
	ATTACHMENT 4 - Dip Mixture Preparation Chart (Blank).....	24
	ATTACHMENT 5 - Dip Mixture Preparation Chart (Example).....	25
	ATTACHMENT 6 - Mechanical Fruit Feed Calibration Test Record (Blank) .....	26

## 1. PURPOSE

The purpose of this procedure is to describe -

- (a) the principles of operation, design features and standards required for dipping equipment; and
- (b) the responsibilities and actions of personnel;

that apply to dipping produce with dimethoate for fruit fly under an Interstate Certification Assurance (ICA) arrangement.

## 2. SCOPE

This operational procedure covers all certification of dipping with dimethoate by a business operating under an Interstate Certification Assurance arrangement in the Northern Territory.

### Post harvest dipping with a Dimethoate mixture.

**Pests:** For citrus fruit (excluding all edible skin species, and citrus fruit that has received pre-harvest treatment with dimethoate):

- Queensland fruit fly (*Bactrocera tryoni*),
- Mediterranean fruit fly (*Ceratitis capitata*),
- Lesser Queensland fruit fly (*Bactrocera neohumeralis*), and
- Northern Territory fruit fly (*Bactrocera aquilonis*).

For melons (including watermelons):

- Cucumber fly (*Bactrocera cucumis*),
- Lesser Queensland fruit fly (*Bactrocera neohumeralis*),
- Queensland fruit fly (*Bactrocera tryoni*),
- Mediterranean fly (*Ceratitis capitata*),
- Banana fly (*Bactrocera musae*), and
- Mango fly (*Bactrocera frauenfeldi*).

**Produce:** **Dimethoate** may be used for:

- All melon fruits as specified on the APVMA minor use permit; or
- All citrus specified on the APVMA minor use permit, except for WA, which do not accept citrus except mandarins.

**Location:** All Australian states and Territories.

### **IMPORTANT**

#### ***Suspension of dimethoate.***

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

***Dipping in dimethoate may not be an accepted quarantine entry condition for all fruits to all intrastate or interstate markets.***

***Some intrastate or interstate markets may require additional quarantine certification 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 from Northern Territory Quarantine.***

### **3. REFERENCES**

<b>WI-02</b>	Guidelines for Completion of Plant Health Assurance Certificates.
<b>APVMA Permit No. PER87164</b>	Permit to Allow Minor Use of an AgVet Chemical Product for Postharvest Treat of Specified Citrus Fruit to Control Various Fruit Fly Species. 1 March 2019 to 30 September 2028.
<b>APVMA Permit No. PER87065</b>	Permit to Allow Minor Use of an AgVet Chemical Product for Postharvest Treatment of melons, including watermelon to control pests of quarantine concern. 18 February 2019 to 28 February 2024.

### **4. DEFINITIONS**

<b>Accredit</b>	means to authorise nominated staff within a business to issue Assurance Certificates.
<b>Act</b>	means the <i>Plant Health Act 2008</i> .
<b>Application for Accreditation</b>	means an Application for Accreditation of a business for an Interstate Certification Assurance (ICA) and/or Certification Assurance (CA) arrangement (Attachment 1).
<b>Approved Laboratory</b>	means a laboratory approved by the National Association of Testing Authorities (NATA) or the Northern Territory Department of Industry Tourism and Trade.
<b>Assurance Certificate</b>	means a Plant Health Assurance Certificate (Attachment 2).
<b>APVMA</b>	means the Australian Pesticides and Veterinary Medicines Authority.
<b>Authorised Signatory</b>	means a person whose name and specimen signature is included as an Authorised Signatory on the business's approved Application for Accreditation form.
<b>Business</b>	means the legal entity responsible for the operation of the dipping facility and ICA arrangement detailed on the business's Application for Accreditation.
<b>Certification Assurance</b>	means a voluntary arrangement between the Department of Industry Tourism and Trade and a business that demonstrates effective in-house quality management and provides assurance through documented procedures and records that produce meets specified requirements.
<b>Certified/Certification</b>	means covered by a valid Plant Health Assurance Certificate (Attachment 2).
<b>Concentrate</b>	means an agricultural chemical concentrate containing 400mg/L dimethoate, registered or approved under an APVMA minor use permit for the control of fruit fly by dipping of the specific host fruit.
<b>Dipping</b>	means full immersion in a diluted chemical mixture.

<b>Facility</b>	means the location of the dipping operation covered by the Interstate Certification Assurance arrangement.
<b>Fruit fly</b>	means Cucumber fly ( <i>Bactrocera cucumis</i> ), Queensland fruit fly ( <i>Bactrocera tryoni</i> ), Lesser Queensland fruit fly ( <i>Bactrocera neohumeralis</i> ), Mediterranean fly ( <i>Ceratitis capitata</i> ), Northern Territory fruit fly ( <i>Bactrocera aquilonis</i> ), Banana fly ( <i>Bactrocera musae</i> ) and Mango fly ( <i>Bactrocera frauenfeldi</i> ); as applicable to the host produce.
<b>Host Produce</b>	means melons (including watermelons), and citrus fruit (excluding all edible skin species and mandarins that have received pre-harvest treatment with dimethoate).
<b>ICA</b>	means Interstate Certification Assurance.
<b>Inspector</b>	means an inspector appointed under the <i>Plant Health Act 2008</i> .
<b>Interstate Certification Assurance</b>	means a system of Certification Assurance developed to meet the requirements of State and Territory governments for the certification of produce for interstate and intrastate quarantine purposes.
<b>PBB</b>	means Plant Biosecurity Branch.

## 5. RESPONSIBILITY

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

The **Certification Controller** is responsible for -

- ensuring the business has current accreditation for an ICA arrangement under this Operational Procedure and maintains a copy of the current application form for audit purposes;
- representing the business during audits and other matters relevant to ICA accreditation;
- training staff in their duties and responsibilities under this Operational Procedure;
- ensuring the business and its staff comply with their responsibilities and duties under this Operational Procedure;
- ensuring that all dimethoate dipping certified under the business's ICA arrangement is carried out in accordance with this Operational Procedure.

The **Treatment Operator** is responsible for -

- preparing and maintaining dip mixtures and top-up mixtures (refer 7.2);
- maintaining dip preparation, top-up and treatment records immediately after or during the relevant procedure (refer 7.2.7 and 7.5);
- where applicable, calibrating mechanical fruit feeding equipment and maintaining calibration test records (refer 7.8.1);
- maintaining dipping equipment (refer 7.9).

The **Authorised Dispatcher** is responsible for -

- ensuring all packages covered by an Assurance Certificate issued by the business under this Operational Procedure are identified (refer 7.11.1);
- maintaining copies of all Assurance Certificates issued by the business under the ICA arrangement (refer 7.12).

**Authorised Signatories** are responsible for -

- ensuring, prior to signing and issuing an Assurance Certificate, that produce covered by the certificate has been prepared in accordance with the business's ICA arrangement, and the details on the certificate are true and correct in every particular (refer 7.11.2).

## 6. REQUIREMENT

This Operational Procedure describes the critical features of an ICA system for host fruit dipping with dimethoate for the quarantine entry requirement:

(a) post-harvest treatment.

### Post-harvest treatment:

1. Host produce **must** be dipped:
  - a) in a mixture containing 400mg/L dimethoate, which is registered or approved under an APVMA minor use permit for the control of fruit fly for dipping of the specific host produce;
  - b) in a mixture containing 100ml of concentrate per 100L water in the dip tank;
  - c) by full immersion of produce for not less than 60 seconds for all produce;
  - d) dipping **must** be the last treatment before packing, with the following exceptions;
 

For citrus only;

    - i. a non-recovery gloss coating ("wax") may be applied not less than 60 seconds after treatment; or
    - ii. produce may be washed, treated with a fungicide and/or a gloss coating applied not less than 24 hours after dipping.

***The Department of Industry Tourism and Trade and interstate quarantine authorities maintain the right to inspect at any time certified produce and to refuse to accept a certificate where produce is found not to conform to specified requirements.***

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

***The business must use products registered under the AgVet Code in accordance with the instructions included on the product's approved label or issued by the Northern Territory Government or an APVMA permit, and follow any first aid, safety, protection, storage and disposal directions on the product label or permit.***

***Treatment facilities must comply with the requirements of the local government, environmental and workplace health and safety authorities.***

***Following the required treatments in this procedure does not absolve the business from the responsibility of ensuring that treated produce does not contain a pesticide residue above the Maximum Residue Level (MRL).***

## 7. PROCEDURE

### 7.1 Accreditation

#### 7.1.1 Application for Accreditation

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

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

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

#### 7.1.2 Audit Process

##### Desk Audit

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

##### Initial Audit

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

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

##### Initial Compliance Audit

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

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



## Compliance Audits

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

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

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

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

## Re-Accreditation

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

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

### 7.1.3 Certificate of Accreditation

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

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

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

### 7.1.4 Nonconformances and Sanctions

#### 7.1.4.1 Nonconformances

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

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

#### 7.1.4.2 Incident Reports

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

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

#### 7.1.4.3 Suspension and Cancellation

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

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

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

#### 7.1.4.4 Prosecution

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

#### 7.1.4.5 Charging Policy

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

### 7.2 Dip Preparation

The Treatment Operator **shall** prepare a fresh dip mixture at a maximum of every 48 hours or more frequently as required.

Unused dip mixture may be held overnight for use the next day, however the mixture **must** be thoroughly mixed for at least two minutes prior to further use.

Periods longer than 48 hours may be considered where a business can demonstrate by analysis of the chemical mixture (refer 7.6) the ability to control and maintain concentration for a specified longer period.

#### 7.2.1 Volume Of The Dip Tank

Permanent volume indicator marks **shall** be made on the inside of the dip 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 any **incremental volumes** used.

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

## 7.2.2 Calculating The Quantity Of Concentrate To Add To The Dip Mixture

### Dimethoate

Using the calibrated volume of the dip tank, calculate 1ml of a concentrate containing 400g/L dimethoate for every litre of mixture in the dip tank.

***A similar calculation may be used when part filling the tank to a known incremental volume.***

## 7.2.3 Dip Mixture Preparation Chart

The business **shall** maintain a Dip Mixture Preparation Chart (refer Attachments 4 and 5) or similar record in close proximity to the dipping equipment.

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

- (a) the total volume in litres of the dip tank when filled to the **maximum mixture level** mark;
- (b) the volume in millilitres (ml) of concentrate required to achieve 400mg/L dimethoate in a full tank of the made up dip mixture;
- (c) the volume in millilitres (ml) of a concentrate required to achieve 400mg/L dimethoate in a made up dip mixture for **incremental volumes** or top-up volumes used (refer 7.4.1);
- (d) the printed name and signature of the person responsible for the chart's preparation and the date of preparation.

## 7.2.4 Ensuring Correct pH

Dimethoate dips **shall** be maintained at a pH below 7.0 to prevent breakdown of the pesticide.

The Treatment Operator **shall** regularly check the dip water and monitor the dip mixture to ensure correct pH by testing with a pH tester. Dip pH checks **shall** be recorded by the Treatment Operator on the Dip Preparation Record.

After measuring the pH, the Treatment Operator **shall** determine if a pH buffer is required.

An acidifying buffer (e.g. vinegar) may be used to achieve and maintain an acceptable pH level.

## 7.2.5 Preparing The Dip Mixture

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

Using a clean graduated measuring vessel, measure the required amount of chemical needed to achieve either 400mg/L of dimethoate for the required volume of **mixture**, as specified on the Dip Mixture Preparation Chart.

Suitable measuring vessels are measuring cylinders or syringes.

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

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.***

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

### 7.2.6 Pre-Dipping Treatments

Fruit can be treated with water or other chemical treatments prior to dipping with dimethoate provided there is enough time for the majority of the water to drain off to minimise the dilution of the dip mixture.

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

Where fruit has undergone pre-dip washing or chemical treatment, a dip top-up program may be required to maintain the dip mixture concentration within the required tolerance (refer 7.4).

### 7.2.7 Dip Preparation Records

Records of dip mixture preparation **shall** be maintained by the Treatment Operator which record the date, time and volumes of concentrate and water used to prepare the dip mixture immediately after or during the relevant procedure (refer 7.5).

## 7.3 Dipping

Fruit should be clean before dipping to avoid fouling the dip mixture and restricting or reducing contact of the chemical with the fruit surface.

### 7.3.1 Manual Fruit Immersion

The Treatment Operator **shall** ensure all fruit are placed into appropriate dipping containers.

These containers **must** be made from a material that allows adequate circulation of the dipping mixture over and around the fruit.

For example, plastic crates, wooden slatted or open metal bulk bins or perforated plastic buckets may be used.

Place the containers into the dip, ensuring that all fruit is fully immersed and fruit does not float from containers. A mesh lid or other device may be required to ensure all fruit remains fully immersed during dipping.

Allow the minimum time period for the fruit type after complete immersion (refer 6.). An accurate timing mechanism capable of measuring time to the second **shall** be used for timing fruit immersion.

Remove the container from the dip and allow the pesticide mixture to drain from the container. Repeat the process until all fruit has been treated.

### 7.3.2 Mechanical Fruit Feeding

The Treatment Operator **shall** ensure mechanical fruit feed equipment is designed and operated to ensure fruit remains completely immersed in the dip mixture for the required time period (refer 7.8).

Fruit feed mechanisms **must** be designed in a manner that prevents fruit from passing through the dip in less than the required time period as specified in 6. Requirements.

Operation of equipment and volume of fruit feeding through the dip **shall** be carefully monitored by the Treatment Operator to ensure fruit is prevented from being pushed or carried through the dip in less than the required time period.

Small fruits that may be dipped for ten (10) seconds **must** be allowed to remain wet with chemical for at least a further sixty (60) seconds after dipping for ten (10) seconds.

### 7.3.3 Last Treatment Before Packing

Dip Treatments **must** be the last treatment before packing.

The Treatment Operator **shall** ensure that no other treatments, such as fungicide treatment or washing, are applied to fruit between dipping and packing. However, other processes may be approved provided they do not affect the efficacy of the dip treatment.

**Citrus fruits only** may -

(a) have a non-recovery gloss coating (wax) applied at least (60) seconds after dipping with dimethoate;

**OR**

(b) be washed, fungicide treated and/or have a gloss coating applied a minimum of 24 hours after dipping with dimethoate.

## 7.4 Maintaining Dip Concentration and Volume

Concentration of the chemical mixture **must** be maintained within  $\pm 15\%$  of the required concentration at all times as specified (refer 6.).

### 7.4.1 Topping Up

During the dipping process it may be necessary for the Treatment Operator to top-up the dip mixture to maintain dip concentration and/or volume. This is done by adding the required volume of water and the required volume of concentrate to the dip mixture as determined by the facility's top-up program (refer 7.4.2).

Add the required amount of concentrate to the dip tank prior to topping-up with water (if required) to assist mixing of the chemical and the water.

Add the required volume of water (if required) to the dip tank using a graduated measuring vessel or a liquid metering device, or use **incremental volume** marks marked on the side of the dip tank.

Ensure that the chemical is completely diluted in all of the water by thoroughly mixing the tank for a minimum of two minutes before recommencing the dip operation.

### 7.4.2 Top-Up Program

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

The top-up program **shall** state -

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

The business **shall** provide evidence that the dip top-up program being used is effective in achieving and maintaining dip concentration within  $\pm 15\%$  of the required concentration (refer 7.6).

### 7.4.3 Top-Up Preparation Records

Records of dip top-up preparation **shall** be maintained by the Treatment Operator which record the date, time and volumes of concentrate and water added to the dip mixture (refer 7.5).

### 7.5 Treatment Records

The Treatment Operator **must** record all dip mixture preparation, top-up mixture preparation and fruit treatment using a Dip Mixture Preparation, Top-Up and Treatment Record (refer Attachment 3) or records which capture the required information immediately after or during the relevant procedure.

The business's treatment records **must** record -

- the date of dip mixture or top-up mixture preparation;
- the time of dip mixture or top-up mixture preparation;
- the volume of concentrate used (millilitres);
- the total volume of the made-up dip mixture or top-up mixture (litres);
- the trade name of the concentrate and the chemical used;
- the date the dip mixture was discarded;
- the date of treatment;
- the treatment commencement time;
- the treatment completion time;
- the type of fruit treated;
- the approximate quantity of fruit treated;
- the identification of the Treatment Operator.

### 7.6 Dip Concentration Testing

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

### 7.6.1 Frequency of Sampling

Dimethoate concentrate **must** be sampled at least every 3 months during use. Newly purchased concentrate with a receipt of less than 30 days does not have to be sampled.

Dip mixtures of dimethoate **must** be sampled at least every 3 months and at any time the species of fruit being handled is changed or if there is a change to the method of processing the same species of fruit which could affect the concentration of insecticide. Such a change may be whether fruit is wet or dry before treatment.

Samples **shall** be collected -

- (a) once prior to initial approval of the facility (so an analysis result is available for the Inspector carrying out the initial audit of the business's facility and operating procedures); and
- (b) immediately following preparation of the dip mixture; and
- (c) at cessation of treatment after the chemical mixture has been used to treat the maximum quantity of fruit that will be treated in the facility before a dip mixture is discarded.

An additional dip 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.

### 7.6.2 Collection of the Sample

Samples of the dip **shall** be taken from the centre of the dip tank, and placed in a **clean glass sample bottle** with a secure water tight lid. The sample size will be of sufficient quantity for chemical analysis.

### 7.6.3 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.

### 7.7 Disposal of the Dip Mixture

The treatment facility **must** have the facilities to dispose of the dip mixture in a manner consistent with the label instructions or as recommended by relevant governing authorities.

### 7.8 Dip Calibration - Mechanical Fruit Feeding

The Treatment Operator **shall** carry out calibration tests on mechanical fruit feed equipment at regular intervals.

Calibration tests **shall** be carried out at a minimum of -

- (a) once immediately prior to commencement of treatment and certification of produce each season for each fruit type being treated; and
- (b) within a minimum of four weeks from commencement of treatment each season, or prior to the annual compliance audit, whichever is the earlier; and



- (c) once a month during each fruit season.

The Treatment Operator **shall** ensure that fruit species that only require a ten (10) second dip (refer 6.) remain wet and do not undergo any drying process (e.g. fans, blowers or heaters) for at least a further sixty (60) seconds after the fruit has been fully immersed in the dip for 10 seconds.

***Calibration tests may be carried out by placing an identifiable piece of fruit (e.g. marked with a waterproof ink) on the feed mechanism with a normal flow rate of other fruit. The Treatment Operator times the period that the marked piece of fruit is immersed in the dipping mixture.***

***This process is repeated three times and on each occasion the fruit must remain fully immersed in the dipping mixture for the required minimum time period. Small fruits requiring only a ten second dip must remain wet for a further sixty seconds after dipping for ten seconds.***

***If any of the tests reveal that fruit is not remaining fully immersed for the required minimum time period, the equipment shall be adjusted and the procedure repeated until a satisfactory result is achieved.***

### 7.8.1 Dip Calibration Test Records

Records of mechanical fruit feed 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 test.

An example Mechanical Fruit Feed Calibration Test Record is included as Attachment 6.

### 7.9 Dip Maintenance

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

### 7.10 Handling, Storage and Transport Under Secure Conditions (Tasmania only)

The accredited business **must** handle, store and transport host produce according to the secure conditions requirements in Schedule 1B of the Plant Biosecurity Manual, Tasmania.

The Plant Biosecurity Manual can be found at [Plant Biosecurity Manual Tasmania | Department of Natural Resources and Environment Tasmania \(nre.tas.gov.au\)](http://PlantBiosecurityManualTasmania|DepartmentofNaturalResourcesandEnvironmentTasmania(nre.tas.gov.au)).

Certification Assurance certificates **must** state that host produce was; “handled, stored and transported in secure conditions.”



## 7.11 Dispatch

### 7.11.1 Package Identification

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

- the "A" Registration (IP) number of the business that operates the approved facility in which the produce was treated; and
- the words "MEETS ICA-01"; and
- the date (or date code) on which the fruit was treated;

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

**Any packages containing fruit that has not been treated in accordance with the requirements of this Operational Procedure shall not be marked as stated above.**

### 7.11.2 Assurance Certificates

The Authorised Dispatcher **shall** ensure an Assurance Certificate is completed and signed by an Authorised Signatory of the business prior to consignment of produce to a market requiring certification of dimethoate dip treatment.

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

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

Additional detail for Tasmania only: In the additional certification section, the statement "handled, stored and transported in secure conditions."

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

### 7.11.3 Assurance Certificate Distribution

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

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

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

## 7.12 ICA System Records

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

- (a) Dip Mixture Preparation Chart (refer 7.2.3);
- (b) Dip Mixture Top-Up Program (if dip mixture is topped-up) (refer 7.4.2);
- (c) Dip Mixture Preparation, Top-Up and Treatment Record (refer 7.5);

- (d) Mechanical Fruit Feed Calibration Test Record (if mechanical fruit feed equipment is used) (refer 7.8.1);
- (e) the duplicate copy of each Plant Health Assurance Certificate (Attachment 2) issued by the business (refer 7.11.3).

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

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

### **7.13 ICA System Documentation**

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

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

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

## **8. ATTACHMENTS**

Attachment 1	Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) and/or Certification Assurance (CA) Arrangement	<b>(BLANK)</b>
Attachment 2	Plant Health Assurance Certificate (PHAC)	<b>(COMPLETED EXAMPLE)</b>
Attachment 3	Dip Mixture Preparation, Top-Up and Treatment Record	<b>(BLANK)</b>
Attachment 4	Dip Mixture Preparation Chart	<b>(BLANK)</b>
Attachment 5	Dip Mixture Preparation Chart	<b>(COMPLETED EXAMPLE)</b>
Attachment 6	Mechanical Fruit Feed Calibration Test Record	<b>(BLANK)</b>

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

Indicate the type of application being made.

☐

New

☐

Renewal

☐

Amendment

## 1. Business/Person Details

### (a) Type of Ownership of Business

☐

Individual

☐

Incorporated Company

☐

Other

☐

Partnership

☐

Cooperative Association

(please specify)


### (b) Name of Business/Person


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

☐

ARBN

--	--	--

--	--	--

--	--	--

☐

ACN

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

--

### (d) Postal address of the Business/Person


Telephone:

( )

Facsimile:

( )

Mobile:

--

E-mail

--

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

☐

Yes

☐

No

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

**A**

--

## 2. Operational Procedure and Facility Details

### a) Operational Procedure used in this arrangement

Reference No.

--

Title of Operational Procedure

--

### (b) Street address of the facility


Telephone:

( )

Facsimile

( )

Mobile


## 3. Authorised Signatories (for Plant Health Assurance Certificates)

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

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


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

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

☐  
☐

We maintain all our records in accordance with the examples provided in the Operational Procedure.

We have developed alternative or additional records to those provided in the Operational Procedure.

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

(a) (b) (c)
-------------------

6. **Accreditation Conditions**

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

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

*Inspector* means an inspector appointed under the *Plant Health Act 2008*

*Department* means the Department of Industry Tourism and Trade

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

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

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

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

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

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

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

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

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

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

Signature/s	Date

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

**Office Use Only**

**Desk Audit** ☐ Passed ☐ Failed

Name (print) \_\_\_\_\_ Date received \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Signature: \_\_\_\_\_ Date completed \_\_\_\_ / \_\_\_\_ / \_\_\_\_

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

**Plant Health Assurance Certificate****Consignment Details** (PLEASE PRINT)

CONSIGNOR (FROM)
Name <i>Joe's Citrus Farm Pty Ltd</i>
Address <i>Lot 2000 Beddington Road</i>
<i>Humpty Doo NT 0836</i>

CONSIGNEE (TO)
Name <i>Adelaide Produce Market</i>
Address <i>Burma Road</i>
<i>Pooraka South Australia 5095</i>

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

**Certification Details** (PLEASE PRINT)

IP NUMBER	FACILITY NUMBER	PROCEDURE
A 9999	01	ICA- 01

ACCREDITED BUSINESS THAT PREPARED THE PRODUCE
Name <i>Joe's Citrus Farm Pty Ltd</i>
Address <i>Lot 2000 Beddington Road</i>
<i>Humpty Doo NT 0836</i>

GROWER OR PACKER
Name <i>As Above</i>
Address

OTHER FACILITIES SUPPLYING PRODUCE

BRAND NAME OR IDENTIFYING MARKS (as marked on packages)	DATE OR DATE CODE (as marked on packages)
<i>Joe's Citrus Farm</i>	<i>18032014</i>

Number of Packages	Type of Packages (e.g. trays, cartons)	Type of Produce	Authorisation for Split Consignment
<i>40</i>	<i>Cartons</i>	<i>Tahitian Limes</i>	

**Treatment Details**

Treatment	Chemical (Active Ingredient)	Treatment Date	Concentration / Duration and Temperature
<i>Dipping</i>	<i>Dimethoate</i>	<i>16/03/2014</i>	<i>(400 ppm) for 1 min</i>

**Additional Certification / Codes***Meets ICA01***Declaration**

I, an authorised Signatory of the accredited business that prepared the plants or plant produce described above, hereby declare that the plants or plant produce have been prepared in the business's approved facilities in accordance with the *Plant Health Act 2008* and that the details shown above are true and correct in every particular.

AUTHORISED SIGNATORY'S NAME (PLEASE PRINT)	SIGNATURE	DATE
<i>Joe Signatory</i>	<i>Joe Signatory</i>	<i>18/3/2014</i>

## DIP MIXTURE PREPARATION TOP-UP AND TREATMENT RECORD

[illegible]

# DIP MIXTURE PREPARATION CHART

Attachment 4

**CHEMICAL CONCENTRATE = \_\_\_\_\_**

**FULL DIP TANK VOLUME = \_\_\_\_\_ LITRES**

**CONCENTRATE TO FULL TANK = \_\_\_\_\_ MILLILITRES**

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

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

\_\_\_\_\_ ml Concentrate/\_\_\_\_\_ Litres Mixture

Prepared by: \_\_\_\_\_ / /  
Printed Name
Signature
Date

# DIP MIXTURE PREPARATION CHART

Attachment 5

**CHEMICAL CONCENTRATE = DIMETHOATE  
(400mg/L)**

**FULL DIP TANK VOLUME = 1,400 LITRES**

**CONCENTRATE TO FULL TANK = 1,050 MILLILITRES**

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

**50 ml Concentrate / 50 Litres Mixture**

**100 ml Concentrate / 100 Litres Mixture**

**250 ml Concentrate / 250 Litres Mixture**

**400 ml Concentrate / 400 Litres Mixture**

**500 ml Concentrate / 500 Litres Mixture**

**750 ml Concentrate / 750 Litres Mixture**

**1000 ml Concentrate / 1000 Litres Mixture**

Prepared by: *TOPEATOR*  
Printed Name

*TOPEATOR*  
Signature

*30/10/2015*  
Date



# MECHANICAL FRUIT FEED CALIBRATION TEST RECORD

## Attachment 6

[illegible]

## NOTES

1. Mechanical fruit feed equipment calibration tests **must** be carried out immediately prior to commencement of treatment and certification of produce, within four weeks of commencement of treatment or prior to the business's compliance audit, and once a month during the season for each fruit type being treated.
2. Three tests **must** be carried out. For each test, record the number of seconds an identifiable piece of fruit is completely immersed in the dipping mixture in the normal flow of fruit.
3. For small fruits requiring only a ten second dip, record the minimum time period between completion of the ten second dip and any drying process (e.g. fans, blowers or heaters) is applied to the fruit. Where no drying process is applied show not applicable (N/A).

**Adjust the equipment and repeat the test if any of the three tests are below the minimum specified time period for complete immersion or drying of small fruits.**