



# DIPPING WITH DIMETHOATE

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Biosecurity Queensland



DIPPING WITH DIMETHOATE

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## TABLE OF CONTENTS

1.	PURPOSE .....	4
2.	SCOPE .....	4
3.	REFERENCES .....	4
4.	DEFINITIONS .....	4
5.	RESPONSIBILITY .....	6
6.	REQUIREMENT .....	7
6.1	Dimethoate .....	7
7.	PROCEDURE .....	8
7.1	Accreditation .....	8
7.1.1	Application for Accreditation .....	8
7.1.2	Audit Process.....	8
7.1.3	Certificate of Accreditation.....	9
7.2	Dip Preparation.....	9
7.2.1	Volume of the Dip Tank .....	10
7.2.2	Calculating the Quantity of Concentrate to Add To the Dip Mixture.....	10
7.2.3	Dip Mixture Preparation Chart .....	10
7.2.4	Ensuring Correct pH .....	10
7.2.5	Preparing the Dip Mixture .....	11
7.2.6	Pre-Dipping Treatments.....	11
7.2.7	Dip Preparation Records .....	12
7.3	Dipping.....	12
7.3.1	Manual Fruit Immersion.....	12
7.3.2	Mechanical Fruit Feeding .....	12
7.3.3	Last Treatment before Packing .....	13
7.4	Maintaining Dip Concentration and Volume .....	13
7.4.1	Topping Up .....	13
7.4.2	Top-Up Program .....	14
7.4.3	Top-Up Preparation Records.....	14
7.5	Treatment Records.....	14
7.6	Dip Concentration Testing .....	14
7.6.1	Frequency of Sampling.....	15
7.6.2	Collection of the Sample.....	15
7.6.3	Storing and Packaging the Sample .....	15
7.6.4	Chemical Mixture Analysis Records .....	16
7.7	Disposal of Dip Mixture.....	16
7.8	Dip Calibration - Mechanical Fruit Feeding .....	16
7.8.1	Dip Calibration Test Records.....	17
7.9	Dip Maintenance.....	17
7.10	Post Treatment Security (Tasmania only) .....	18
7.11	Dispatch.....	19
7.11.1	Package Identification.....	19
7.11.2	Assurance Certificates.....	19
7.11.3	Assurance Certificate Distribution .....	19
7.12	ICA System Records .....	20
7.13	ICA System Documentation .....	20
8.	ATTACHMENTS .....	21

DIPPING WITH DIMETHOATE

## 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 procedure covers all certification of dipping with dimethoate by a Business operating under an Interstate Certification Assurance arrangement in Queensland.

**Dipping with dimethoate** may be used for citrus fruits (excluding all edible skin species and mandarins that have received pre-harvest treatment with dimethoate), tropical and sub-tropical fruit with inedible peel, and melons (including watermelons).

***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 interstate quarantine requirements can be obtained from the plant quarantine service in the destination state or territory.***

## 3. REFERENCES

- ICA-WI-02** *Guidelines for Completion of Plant Health Assurance Certificates.*

## 4. DEFINITIONS

- Accredited Certifier** means the legal entity responsible for the operation of the ICA arrangement detailed on the Accredited Certifier's Application for Accreditation.
- Accrediting Authority** means the Department of Agriculture and Fisheries Queensland (DAF Queensland).
- Agvet Code** means the *Agvet Code of Queensland*.
- approved laboratory** means a laboratory approved by the National Association of Testing Authorities (NATA) or DAF Queensland.

DIPPING WITH DIMETHOATE

<b>Application for Accreditation</b>	Application for accreditation of an accredited certifier for an Interstate Certification Assurance (ICA) arrangement [CAF-47].
<b>APVMA</b>	means the Australian Pesticides and Veterinary Medicines Authority.
<b>Assurance Certificate</b>	means a <i>Plant Health Assurance Certificate</i> [CAF-16].
<b>Authorised Signatory</b>	means a person whose name and specimen signature is provided as an Authorised Signatory on the Business's Application for Accreditation.
<b>banana fruit fly</b>	means all stages of the species <i>Bactrocera musae</i> .
<b>business</b>	means the legal entity responsible for the operation of the dipping facility and ICA arrangement detailed in the accredited certifier's Application for Accreditation.
<b>Certification Assurance</b>	means a voluntary arrangement between DAF Queensland and a Business that demonstrates effective in-house quality management and provides assurance through documented procedures and records that produce meets specified requirements.
<b>citrus</b>	means as defined in <i>Codex Alimentarius</i> and includes fresh fruit of grapefruit, lemon, lime, mandarin, orange, pomelo, tangelo, tangerine and tangor. Excludes all edible skin species (e.g. kumquats) and mandarins that have received pre-harvest treatment with dimethoate.
<b>Certified/certification</b>	means covered by a valid <i>Plant Health Assurance Certificate</i> [CAF-16].
<b>DAF Queensland</b>	means the Department of Agriculture and Fisheries Queensland.
<b>defective flower end-type papaws</b>	means fruit from plants of the Solo family of cultivars, or from plants that contain significant Solo parentage, or from plants that are hermaphrodite, or from any cultivar which has a tendency to produce fruit with an invaginated flower end.
<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 Queensland fruit fly and banana fruit fly.
<b>ICA</b>	means Interstate Certification Assurance.
<b>inspector</b>	means an inspector appointed under the <i>Biosecurity Act 2014</i> .

## DIPPING WITH DIMETHOATE

<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>melon</b>	means as defined in <i>Codex Alimentarius</i> , several varieties and cultivars of <i>Cucumis melo</i> L.
<b>papaw/papaya</b>	means fruit of the species <i>Carica papaya</i> .
<b>Queensland fruit fly</b>	means all stages of the species <i>Bactrocera tryoni</i> and related species <i>B. aquilonis</i> and <i>B. neohumeralis</i> .
<b>Tasmania only</b>	means the section only applies to consignments being consigned to Tasmania.
<b>tropical and sub-tropical fruits with inedible peel</b>	includes but is not limited to avocado, banana, breadfruit, custard apple, durian, feijoa, guava (inedible peel varieties only), jackfruit, kiwifruit (inedible peel varieties only), litchi, longan, mango, mangosteen, passionfruit, pawpaw, persimmon (inedible peel varieties only), pomegranate, rambutan, sapodilla and sapote.
<b>watermelon</b>	means fruit of the species <i>Citrullus lanatus</i> .

## 5. RESPONSIBILITY

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

The **Certification Controller** is responsible for -

- representing the Business during audits and other matters relevant to ICA accreditation;
- ensuring the Business has current accreditation for an ICA arrangement under this Operational Procedure;
- 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 ([refer 7.2.7](#));
- maintaining dip concentration testing analysis records ([refer 7.6.4](#));
- 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

### 6.1 Dimethoate

**All fruit** must be treated by –

**Full immersion** of the fruit in a mixture containing **400 mg/L dimethoate** for a period of not less than **60 seconds**.

Dipping must be the last treatment before packing, except that a non-recovery gloss coating (“wax”) may be applied to citrus not less than 60 seconds after treatment.

Citrus fruit may be washed, treated with a fungicide and/or a gloss coating applied a minimum of 24 hours after dipping.

Passionfruit may be dipped for 10 seconds, after which they must remain wet for a period of not less than 60 seconds.

***One hundred percent control of fruit fly eggs and larvae in treated fruit cannot be guaranteed with these treatments. Accredited businesses should not treat or certify fruit that is known to be infested with fruit fly under the ICA arrangement.***

***DAF Queensland 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 an applicable APVMA permit, and follow any first aid, safety, protection, storage and disposal directions on the product label or permit. Treatment facilities must comply with the requirements of the local government, environmental and workplace health and safety authorities.***

***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

An Accredited Certifier seeking accreditation for an Interstate Certification Assurance arrangement must make application for accreditation by lodging the form *Application for Accreditation of an Accredited Certifier for an Interstate Certification Assurance (ICA) Arrangement* [CAF-47] (refer Attachment 1) at least 10 working days prior to the intended date of commencement of operation under the ICA arrangement. Audit Process

#### 7.1.2 Audit Process

##### ***Initial Audit***

Prior to an Accredited Certifier becoming accredited an initial audit of the business is carried out to verify the ICA 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 arrangement.

On completion of a successful initial audit accreditation is granted to cover the current season, up to a maximum of twelve months from the date of initial accreditation and a Certificate of Accreditation is issued ([refer 7.1.2 Certificate of Accreditation](#)).

##### ***Compliance Audits***

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

Compliance audits are, wherever practical, conducted when the ICA system is operating.



A Compliance Audit is conducted within four weeks of initial accreditation or 12 weeks of the annual renewal of accreditation of the ICA arrangement.

An additional compliance audit is conducted between six and nine months after the date of accreditation for an ICA arrangement that operates for more than six months of the year.

Random audits are conducted on a selected number of ICA arrangements 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 system records or ICA system documentation.

Unscheduled compliance audits may be conducted at any time to investigate reported or suspected non-conformances.

### **Re-Accreditation**

Accredited Certifiers are required to re-apply for accreditation each year the Accredited Certifier seeks to operate under the ICA arrangement. Accredited certifiers seeking re-accreditation must lodge a renewal application prior to accreditation lapsing, or if accreditation has lapsed, prior to commencing further certification of produce under the ICA arrangement.

A compliance audit is conducted within twelve weeks of the date of re-accreditation for a business applying for annual re-accreditation.

### **7.1.3 Certificate of Accreditation**

An Accredited Certifier will receive a *Certificate of Accreditation for an Interstate Certification Assurance Arrangement* detailing the scope of the arrangement including –

- the facility location;
- the Operational Procedure;
- any restrictions on the accreditation such as the chemicals covered; and
- the period of accreditation.

The Accredited Certifier must maintain a current Certificate of Accreditation and make this available on request by an Inspector.

**An Accredited Certifier may not commence or continue certification of produce under the ICA arrangement unless it is in possession of a valid and current Certificate of Accreditation for the facility, procedure, produce type and chemical covered by the Assurance Certificate.**

## **7.2 Dip Preparation**

The Treatment Operator shall prepare a fresh dip mixture at a minimum 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.

DIPPING WITH DIMETHOATE

Periods longer than 48 hours may be considered where a Business can demonstrate by analysis of the chemical mixture ([refer 7.6 Dip Concentration Testing](#)) 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 1 mL of a concentrate containing 400 g/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 Dip Mixture Preparation Chart - Attachment 4](#) & [Attachment 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 400 mg/L dimethoate in a full tank of the made up dip mixture;
- (c) the volume in millilitres (mL) of a concentrate required to achieve 400 mg/L dimethoate in a made up dip mixture for **incremental volumes** or top-up volumes used ([refer 7.4.1 Topping Up](#));
- (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.

DIPPING WITH DIMETHOATE

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

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

An acidifying buffer 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 400 mg/L of dimethoate for the required volume of **mixture**.

Suitable measuring vessels include graduated plastic or glass 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 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 and 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 Maintaining Dip Concentration and Volume](#)).

### 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 ([refer 7.5 Treatment Records](#)).

## 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. Requirement](#)). 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 Dip Calibration - Mechanical Fruit Feeding](#)).

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

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 ([refer 6. Requirement](#)).

### 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 Top-Up Program](#)).

Calculate the required amount of concentrate and water by first determining the required volume of dip mixture to be added during the top-up procedure. Calculate the quantity of concentrate required for every litre of **mixture** added in the top-up procedure ([refer 7.2.2 Calculating The Quantity Of Concentrate To Add To The Dip Mixture](#)).

Refer to the facility's Dip Mixture Preparation Chart.

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 that 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 Dip Concentration Testing](#)).

### 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 Treatment Records](#)).

## 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 same information.

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;
- volume of concentrate used (millilitres);
- total volume of the made-up dip mixture or top-up mixture (litres);
- the trade name of the concentrate used;
- the date the dip mixture was discarded;
- the date of treatment;
- treatment commencement time;
- 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

Samples shall be gathered and tested -

- (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) at least annually during each season thereafter.

Annual sampling is required during the season for each fruit species being treated where there is a difference -

- (a) in the method of processing the fruit (i.e. one species is dipped wet and the other dry); or
- (b) in chemicals or other treatments applied to the fruit prior to dipping (i.e. one species is treated with a fungicide and one is not);

where either of these may materially affect the maintenance of the dip mixture concentration.

Dip samples shall be collected at a minimum of -

- (a) immediately following preparation of a fresh dip mixture; and
- (b) 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.

Businesses are exempted from the requirement for a second dip sample at the cessation of treatment when -

- (a) treating less than 500 kg of fruit with each batch of a made-up chemical mixture; and
- (b) holding and using the chemical mixture for less than 12 hours.

Additional dip samples required for a facility using a top-up program shall include a sample of a dip mixture taken immediately prior to topping-up the mixture according to the facility's documented top-up program.

### 7.6.2 Collection of the Sample

The contents of the dip tank shall be thoroughly mixed prior to sampling. Samples of a minimum of 200 mL shall be taken from the centre of the dip tank and placed in a clean glass sample bottle with a secure water tight lid.

### 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.

Samples shall be accompanied by a completed *Fruit Fly Chemical Treatment Sample for Analysis* [CAF 23] form and a duplicate copy of the completed form kept on file. A copy of the form is included as [Attachment 6](#).

#### 7.6.4 Chemical Mixture Analysis Records

Results of the analysis must be retained by the Business for a minimum of 12 months from receipt and be made available when requested by an Inspector ([refer 7.12 ICA System Records](#)).

Details of chemical mixture analysis results shall be maintained using a Chemical Mixture Analysis Record ([refer Attachment 7](#)) or records which capture the same information.

The Business's chemical mixture analysis records must include -

- the date and time of collection of the sample;
- the full trade name and batch number of the concentrate used;
- the total volume of concentrate added to the dip mixture;
- the total volume of the prepared spray mixture from which the sample was taken.

Additional data that should be recorded by the Business includes -

- the name and quantity of any detergents, fungicides or other additives added to the spray mixture;
- type and quantity of fruit treated prior to collection of the sample;
- whether the fruit was dry, moist or wet when it entered the dip mixture.

Once accredited, any deficiency in an analysis result ([refer 7.4 Maintaining Dip Concentration and Volume](#)) **must**, as soon as practical, be reported to the Accrediting Authority so an investigation may be carried out to determine the cause and rectify any problems.

#### 7.7 Disposal of Dip Mixture

Dip mixture is to be disposed of in a manner consistent with the requirements of the relevant State Government and Local Authorities (Shire or City Councils etc.).

#### 7.8 Dip Calibration - Mechanical Fruit Feeding

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



DIPPING WITH DIMETHOATE

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. Requirement](#)) remain wet and do not undergo any drying process (e.g. sponge rollers, 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 minimum time period. Small fruits requiring only a ten second dip must remain wet for a further sixty after dipping for ten seconds.***

***If any of the tests reveal that fruit is not remaining fully immersed for the 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 8](#).

### 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 Post Treatment Security (Tasmania only)

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

Treated fruit shall be held for the minimum practical period after treatment before it must be secured against reinfestation.

Any fruit which is stored outside the treatment facility after treatment and prior to dispatch must be held under secure conditions.

Any treated fruit 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 fruit must be stored at and transported from the facility in secure conditions which prevent infestation by fruit fly.

Certification Assurance Certificates must state that fruit was; "Packed in such a way as to prevent infestation of fruit fly".

Secure conditions include -

- (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, coldrooms, vehicles or other facilities free from gaps or other entry points greater than 1.6 mm.

***Fruit 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 Brand Name or Identifying Marks section of the Assurance Certificate covering the consignment ([refer Attachment 2](#)).***

***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 Plant Health Assurance Certificate covering the consignment and the date.***

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

## 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, with -

- the Interstate Produce 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* [CAF-16]. A completed example is shown as [Attachment 2](#).

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

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

### 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) the duplicate copy of each *Fruit Fly Chemical Treatment Sample for Analysis* [CAF-23] form completed by the Business ([refer 7.6.3](#));
- (e) Chemical Mixture Analysis Record ([refer 7.6.4](#));
- (f) Mechanical Fruit Feed Calibration Test Record (if mechanical fruit feed equipment is used) ([refer 7.8.1](#));
- (g) the duplicate copy of each *Plant Health Assurance Certificate* [CAF-16] issued by the Business ([refer 7.11.3](#)).

ICA system records shall be retained for a period of not less than 12 months from completion or until the next compliance audit of the business, whichever is the later.

***An accredited Business must hold a minimum of 12 months ICA system records at the time of any compliance audit. If the compliance audit is conducted more than 12 months from the last compliance audit, the business must maintain all records completed since the previous compliance audit.***

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 Arrangement*;
- (d) a current copy of the *Work Instruction Guidelines for Completion of Plant Health Assurance Certificates* [ICA-WI-02].

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

## 8. ATTACHMENTS

<a href="#">Attachment 1</a>	<i>Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) Arrangement</i>	<b>CAF-47 (FRONT PAGE ONLY)</b>
<a href="#">Attachment 2</a>	<i>Plant Health Assurance Certificate</i>	<b>CAF-16 (COMPLETED EXAMPLE)</b>
<a href="#">Attachment 3</a>	Dip Mixture Preparation, Top-Up and Treatment Record	<b>CAF-93 (BLANK)</b>
<a href="#">Attachment 4</a>	Dip Mixture Preparation Chart	<b>CAF-94 (BLANK)</b>
<a href="#">Attachment 5</a>	Dip Mixture Preparation Chart	<b>CAF-94 (COMPLETED EXAMPLE)</b>
<a href="#">Attachment 6</a>	<i>Fruit Fly Chemical Treatment Sample for Analysis</i>	<b>CAF-23 (BLANK)</b>
<a href="#">Attachment 7</a>	Chemical Mixture Analysis Record	<b>CAF-95 (BLANK)</b>
<a href="#">Attachment 8</a>	Mechanical Fruit Feed Calibration Test Record	<b>CAF-96 (BLANK)</b>

## Application for accreditation of an accredited certifier for an Interstate Certification Assurance (ICA) arrangement

Pursuant to section 420 of the *Biosecurity Act 2014*

**OFFICE USE ONLY**

DATE RECEIVED:
THIS NUMBER:
DATE APPROVED OR REFUSED:
FURTHER INFORMATION REQUEST DATE:
DATE FURTHER INFORMATION RECEIVED:
PAYMENT PROCESSED DATE:
PAYMENT AMOUNT RECEIVED:
RECEIPT NUMBER:

**Important information for applicants**

This form is to be used to apply as an accredited certifier for an Interstate Certification Assurance (ICA) arrangement.

Information requested will enable your application to be processed as prescribed by the *Biosecurity Act 2014*. Your application must be assessed and granted by the chief executive before you can proceed with the proposed activity.

Before lodging this application you should be familiar with the requirements of the *Biosecurity Act 2014* available on the Office of the Queensland Parliamentary Counsel website <http://www.legislation.qld.gov.au>.

**How to complete form for a new application**

- Must complete entire form.

**How to complete form for an amendment or renewal**

- Update any areas that require amendments;
- Must complete part A section 1, part B sections 2-4 and part C.

**How to submit this form**

- In person to:  
Any [Department of Agriculture and Fisheries regional office](#); or
- Via post to:  
Department of Agriculture and Fisheries  
PO Box 5083  
Nambour Qld 4560

**Prescribed fee**

- Fees are applicable until 30 June 2017.
- Payment of prescribed fee must be paid at the application submission for it to be processed.

**Term of accreditation**

The term of this accreditation shall be one (1) year unless sooner cancelled or suspended from the date of your application being approved.

**Notification**

The applicant will be notified of the outcome within thirty (30) days of receipt of the application. The applicant will be notified by post to the applicant's postal address.

The application is deemed to have been received when the [District Co-ordinator \(Certification and Accreditation Services\)](#) in your district is in receipt of an accurate and complete application and payment of the prescribed fee has been received, processed and cleared.

**Contact us**

For more information please contact the District Co-ordinator (Certification and Accreditation Services), Plant Biosecurity & Product Integrity, Biosecurity Queensland, Department of Agriculture and Fisheries in your district or the Department of Agriculture and Fisheries Customer Service Centre on 13 25 23.







# DIP MIXTURE PREPARATION CHART

Chemical Concentrate = \_\_\_\_\_

Target Mixture Concentration = \_\_\_\_\_ ppm

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

Chemical Concentrate = Dimethoate

Target Mixture Concentration = 400 ppm

Full Dip Tank Volume = 1,400 Litres

Concentrate to Full Tank = 1,400 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: T Operator 7 Operator 12/01/16  
Printed Name Signature Date

# FRUIT FLY CHEMICAL TREATMENT SAMPLE FOR ANALYSIS

(Only one sample to be submitted per form)

## SAMPLE DETAILS

Client's Name:  IP Number:

Postal Address:  Street Address:

Telephone No:  Fax No:

Crop Treated:

Chemical used (tick one):  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:

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

Fruit Wetness immediately prior to Treatment (tick one):  Dry  Moist  Dripping

Sample Number as marked on sample bottle:

Date sample collected:  Time sample collected:

Fruit 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

**Laboratory Identification:**  
(Apply stamp)

Laboratory Number:  Date Received:  Date Analysed:

Analysis Method:

**Result:** Chemical:  Concentration:  mg/L Date Reported:

Comments:

Analyst Name:  Signature:  Date:

Forward one copy with the sample to be analysed and retain a duplicate copy.  
Laboratory to complete Analysis section and return a copy to the client.

## CHEMICAL MIXTURE ANALYSIS RECORD

SAMPLE DETAILS	CHEMICAL MIXTURE DETAILS		FRUIT DETAILS	ANALYSIS DETAILS
Date of Sampling-	Trade Name of Concentrate-	Other Additive/s-	Fruit 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 <input checked="" type="checkbox"/> - <input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet	Analysis Result-
Date of Sampling-	Trade Name of Concentrate-	Other Additive/s-	Fruit 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 <input checked="" type="checkbox"/> - <input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet	Analysis Result-
Date of Sampling-	Trade Name of Concentrate-	Other Additive/s	Fruit 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 <input checked="" type="checkbox"/> - <input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet	Analysis Result-
Date of Sampling-	Trade Name of Concentrate-	Other Additive/s-	Fruit 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 <input checked="" type="checkbox"/> - <input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet	Analysis Result-

# MECHANICAL FRUIT FEED CALIBRATION TEST RECORD

Date of Test	Fruit Type	Time Immersed in Dip (seconds)			Time to Drying Process (seconds)	Name of Testing Officer	Comments
		Test 1	Test 2	Test 3			
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**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).
4. **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.**