



Department of Primary Industries

Procedure

PRIMARY INDUSTRIES
Biosecurity & Food Safety NSW
 PO Box 232, Taree NSW 2430
 Tel: 02 6552 3000 Fax: 02 6552 7239
 Email: ica.scheme@dpi.nsw.gov.au

ICA-07

COLD TREATMENT

| | | | |
|-----------------|---|----------------|-----------|
| NUMBER | ICA-07 | VERSION | 4.0 |
| AUTHORISED BY | Manager, Plant Product Integrity & Standards | | |
| AUTHORISED DATE | 23/06/2017 | EFFECTIVE DATE | 1/07/2017 |
| ISSUED BY | Primary Industries, Biosecurity & Food Safety | | |

REVISION HISTORY

| VERSION | DATE | AMENDMENTS | |
|---------|------------|-----------------------|--|
| | | SECTION | DETAILS |
| 1.0 | 16/09/03 | All | New Procedure |
| 1.1 | 22/12/03 | Pages 8,25,26,27 & 28 | |
| 2.0 | 14/09/06 | All | |
| 3.0 | 16/11/10 | All | Whole document reformat |
| 3.1 | 10/03/15 | | Add definitions for Department, host produce and secure conditions. Add sensor locations to facility plan. Include sections for sensor identification, equipment and supplies, and sensor calibration procedure to section 7.4.1. Update sections 8 – 10. Update PHAC. Renumber attachments to align with procedure. Remove references to ICA-37 in attachments 3 & 5. |
| 4.0 | 20/06/2017 | All | Changes made to align with the <i>Biosecurity Act 2015</i> . Updated definitions, removed details for accreditation, auditing procedures, sanctions policy and charging, and replaced the application form and PHAC. Updated NSW Department of Primary Industries contact details. |

NEXT REVIEW DATE: 01/07/2018

Disclaimers

The information contained in this Procedure is based on knowledge and understanding at the time of writing (June 2017). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up-to-date and to check currency of the information with the appropriate officer of the Department or the user's independent adviser.

PROCEDURE

Contents

| | |
|--|----|
| 1. Purpose | 5 |
| 2. Scope..... | 5 |
| 3. References..... | 5 |
| 4. Definitions | 5 |
| 5. Responsibility..... | 7 |
| 6. Requirements..... | 8 |
| 7. PART A Procedure – Covers cold treatment | 8 |
| 7.1 <i>Facility plan</i> | 8 |
| 7.2 <i>Cold rooms</i> | 8 |
| 7.3 <i>Temperature sensing and recording equipment</i> | 8 |
| 7.3.1 <i>Temperature sensors</i> | 9 |
| 7.3.2 <i>Temperature recording equipment</i> | 9 |
| 7.3.2.1 <i>Strip chart recorder display standards</i> | 9 |
| 7.3.2.2 <i>Data logger display standards</i> | 9 |
| 7.3.2.3 <i>Mini data logger display standards</i> | 9 |
| 7.3.2.4 <i>Manual recording systems</i> | 9 |
| 7.4 <i>Calibration of temperature sensing and recording equipment</i> | 10 |
| 7.4.1 <i>Calibration method</i> | 10 |
| 7.4.1.1 <i>Sensor identification</i> | 10 |
| 7.4.1.2 <i>Equipment and supplies</i> | 10 |
| 7.4.1.3 <i>Sensor calibration procedure</i> | 10 |
| 7.5 <i>Cold treatment</i> | 11 |
| 7.5.1 <i>Loading the cold room</i> | 11 |
| 7.5.2 <i>Verification of cold treatment using pulp temperatures</i> | 11 |
| 7.5.2.1 <i>Sensor placement</i> | 11 |
| 7.5.3 <i>Treatment method</i> | 12 |
| 7.5.4 <i>Verification of cold treatment using return air temperature</i> | 12 |
| 7.5.5 <i>Sensor placement</i> | 12 |
| 7.5.6 <i>Treatment method</i> | 12 |
| 7.6 <i>Treatment records</i> | 12 |
| 7.7 <i>Post treatment security</i> | 13 |
| 7.8 <i>Plant Health Assurance Certificate</i> | 13 |
| 8. PART B PROCEDURE – COVERS PACKER ACTIVITIES | 13 |
| 8.1 <i>Host produce receipt</i> | 13 |
| 8.1.1 <i>Receipt of host produce treated by another business</i> | 13 |
| 8.2 <i>Packing</i> | 14 |
| 8.2.1 <i>Packing records</i> | 14 |
| 8.2.2 <i>Identification of treated and untreated host produce during packing</i> | 14 |
| 8.2.3 <i>Identification of treated and untreated host produce after packing</i> | 14 |
| 8.3 <i>Post treatment security</i> | 14 |
| 8.3.1 <i>Identification</i> | 14 |
| 8.4 <i>Dispatch</i> | 15 |
| 8.4.1 <i>Package identification</i> | 15 |
| 8.5 <i>Plant Health Assurance Certificates (PHACs)</i> | 15 |
| 8.5.1 <i>PHAC distribution</i> | 15 |
| 9. Records and Document Control | 15 |
| 9.1 <i>ICA system records</i> | 15 |
| 9.2 <i>ICA system documentation</i> | 16 |

10. Attachments..... 16

1. PURPOSE

The purpose of this Procedure is to describe:

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

that applies to the Cold Treatment and certification of host produce, under an Interstate Certification Assurance (CA) arrangement.

2. SCOPE

This Procedure covers all certification of Cold Treatment of host produce from a Business operating under an ICA arrangement in New South Wales.

Pest: Queensland Fruit Fly (*Bactrocera tyroni*).

Product: Queensland Fruit Fly Host Produce.

Location: New South Wales.

This Procedure is separated into two (2) sections:

- Part A covering cold treatment activities, and
- Part B covering packer activities.

This Operational Procedure is applicable where cold treatment is an acceptable entry condition of the interstate authority.

Certification of cold treatment under this Operational Procedure may not be an accepted quarantine entry condition for all produce to all intrastate and interstate markets.

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

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

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

3. REFERENCES

[Biosecurity Act 2015](#)

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

Policies – <http://www.dpi.nsw.gov.au/biosecurityact/procedures>

Accreditation of Biosecurity Certifiers

Biosecurity Audit Frequency

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

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

4. DEFINITIONS

In this Procedure:

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

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

| | |
|--|---|
| <i>Authorised Signatory</i> | means a person whose name is notified to the Secretary as a person who can issue a biosecurity certificate on behalf of the business. |
| <i>Business</i> | means the legal entity accredited as a biosecurity certifier under the Act. |
| <i>Certification</i> | means a Plant Health Certificate or a Plant Health Assurance Certificate, which verifies that a consignment meets the requirements of an Interstate Certification Assurance Procedure or an interstate quarantine entry requirement. |
| <i>Certification Assurance Arrangement</i> | means a CA Arrangement that enables a business or a person authorised under a corresponding law of a State or Territory, to issue a Plant Health Assurance Certificate that meets certain plant health quarantine conditions for trade within the State or between the State and other States and Territories. |
| <i>cold treatment</i> | means the maintenance of host produce at specified cold temperatures over a specified time to control possible fruit fly infestation. |
| <i>consignment</i> | means a discrete quantity of host produce transported to a single consignee at one (1) time covered by a single PHAC. |
| <i>Department</i> | means the NSW Department of Industry – Office of Primary Industries. |
| <i>facility</i> | means a location where host produce is treated, assembled, securely stored, certified and dispatched. |
| <i>host produce</i> | means fruit or vegetables which are susceptible to infestation by Queensland fruit fly. |
| <i>ICA Scheme</i> | means a scheme developed by the States and Territories to meet their respective plant quarantine requirements under the Memorandum of Understanding on Interstate Certification Assurance dated 6 August 1999. |
| <i>non-conformance</i> | means a failure to fulfil a specified requirement. |
| <i>PHAC</i> | means a Plant Health Assurance Certificate that is issued in accordance with the requirements of a Certification Assurance Arrangement. |
| <i>Queensland fruit fly</i> | means the pest <i>Bactrocera tyroni</i> (Froggatt) |
| <i>secure conditions</i> | means: <ul style="list-style-type: none"> (a) unvented packages; or (b) vented packages with the vents secured with gauze/mesh with a maximum aperture of 1.6 mm; or (c) fully enclosed under tarpaulins, hessian, shade cloth, mesh or other covering which provides a maximum aperture of 1.6 mm; or (d) shrink wrapped and sealed as a palletised unit; or (e) fully enclosed or screened buildings, cool rooms, vehicles or other facilities free from gaps or other entry points greater than 1.6 mm. |
| <i>Treatment lot</i> | means a discrete quantity of produce collected in a coldroom and cold treated together as a unit. |
| <i>Treatment lot number</i> | means a unique number or alpha-numeric code that identifies a treatment lot and the coldroom and facility in which it was treated. |

5. RESPONSIBILITY

Position titles have been created to reflect the responsibilities which must be met by the Business under the ICA arrangement. These positions must be assigned to trained staff. One (1) person may carry out the responsibilities of more than one (1) position.

The **Certification Controller** is responsible for:

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

UNDER PART A

- Ensuring the Business holds current accreditation under Part A of this ICA;
- if the cold treatment facility has more than one (1) cold room, maintaining a facility plan for each facility in which host produce is cold treated; and
- ensuring cold room and temperature sensing and recording equipment conforms to the requirements of this Procedure.

UNDER PART B

- Ensuring the Business holds current accreditation under Part B of this ICA;
- ensuring all host produce received for packing and/or certification are sourced from a Business accredited under Part A and, if applicable, are accompanied by a valid PHAC;
- overseeing the packing of host produce for certification under this procedure; and
- maintaining packing records that allows trace back of host produce to the original treatment lot and Cold room Loading and Treatment Record or PHAC.

The **Treatment Operator** is responsible for:

- Calibrating temperature sensors and recording equipment;
- maintaining temperature sensing and recording equipment calibration records;
- loading the cold room, placement of temperature sensors and oversight of cold treatment and temperature recording; and
- maintaining cold treatment records.

The **Authorised Dispatcher** is responsible for:

- Ensuring all packages covered by a PHAC are identified; and
- maintaining copies of each PHAC issued.

The **Authorised Signatory** is responsible for:

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

6. REQUIREMENTS

All host produce certified under this Operational Procedure must be subjected to cold treatment in an approved facility in accordance with one (1) of the following treatment schedules:

| Temperature | Minimum Number of Days |
|---------------|------------------------|
| 0.0°C ± 0.5°C | 14 |
| 1.0°C ± 0.5°C | 16 (Lemons14) |
| 2.0°C ± 0.5°C | 16 (Lemons14) |
| 3.0°C ± 0.5°C | 16 (Lemons14) |

Most tropical and some temperate fruits are susceptible to cold injury and are not suitable for cold treatment and testing of small quantities is recommended.

The Department accepts no responsibility for any damage to produce from this treatment.

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

7. PART A PROCEDURE – COVERS COLD TREATMENT

7.1 Facility plan

The Certification Controller must maintain a Facility Plan (Attachment 2) for the approved facility.

The Facility Plan must include a diagram of the facility layout and clearly show all areas associated with the treatment, segregation, storage and consignment of host produce, including non-host produce.

These areas include:

- (a) the location and identification of buildings and facilities (i.e., loading docks, host produce receival areas, and segregated storage areas); and
- (b) for each location identified on the plan, the name of the location or location code used to identify the location; and
- (c) the location and size (m³) of each cold room and the cold room number or other code that uniquely identifies each cold room at the facility; and
- (d) the location and identification of each temperature sensor; and
- (e) road access including street names; and
- (f) internal roadways.

A copy of the Facility Plan must be included with the Business' Application for Accreditation (Attachment 1).

If any changes occur to the facility plan information, a new Facility Plan must be submitted to the Certification Assurance Records Officer.

7.2 Cold rooms

Cold rooms in which cold treatment is to occur shall be purpose built, have appropriate cooling, temperature measurement and recording equipment and must be lockable to ensure the security and integrity of the host produce being treated.

Cold rooms shall have adequate air circulation to ensure effective and equal cooling of all host produce in the room.

7.3 Temperature sensing and recording equipment

Temperature sensing and recording systems shall have an overall accuracy of not more than ±0.5°C in the range of -3°C to +3°C and a resolution of up to 0.1°C (i.e., the combined sensing and data recording systems must be accurate to within 0.5°C of the true temperature and must be able to be read in increments of 0.1°C or less).

Low resolution mini data loggers may be used which have an overall accuracy of not more than $\pm 0.5^{\circ}\text{C}$ at 0°C and a resolution of up to 0.5°C . Where low resolution mini data loggers are used, treatment duration and certification shall be based on a temperature that is 0.5°C above the maximum temperature recorded during the treatment period (e.g. if the maximum temperature reading during treatment is 1.0°C , then treatment duration and certification shall be at 1.5°C).

7.3.1 Temperature sensors

Remote sensors used for measuring host produce temperature shall have an outer sheath of 6.4 mm diameter or less. The sensing unit shall be located within the first 25 mm of the sensor. Sensors shall be accurate to within $\pm 0.2^{\circ}\text{C}$ in the range of -3°C to $+3^{\circ}\text{C}$.

Each sensor shall be uniquely identified in a manner such as a tag attached to the sensor or on the adjacent wall or host produce container. Sensors shall be matched to a specific data recorder.

A Facility plan (Attachment 2) indicating the location and identity of each sensor shall be kept with the data recording instrument.

7.3.2 Temperature recording equipment

Reading of recording instruments shall be accurate to within $\pm 0.2^{\circ}\text{C}$ of the true temperature in the range of -3°C to $+3^{\circ}\text{C}$ in the normal operating environment. The instrument must be capable of repeatability in the range of -3°C to $+3^{\circ}\text{C}$.

For low resolution mini data loggers, temperature recording shall be accurate to within $\pm 0.5^{\circ}\text{C}$ at 0°C .

7.3.2.1 Strip chart recorder display standards

The scale deflection for strip chart recorders shall not be less than 5 mm for each degree Celsius. A print interval of approximately two (2) minutes and a chart speed of approximately 500 mm per hour shall be used.

The chart scale shall be graduated with major scale marks at every degree Celsius and minor scale marks at every 0.2°C . Temperature values for each sensor shall be printed at least once every hour.

Each symbol on the wheel shall correspond to and identify the sensor it represents. The chart shall be of sufficient length to display a complete treatment record.

7.3.2.2 Data logger display standards

For each sensor the temperature value shall be sampled at least once an hour with identified temperature points accurate to 0.2°C . Each hourly reading shall be displayed on the data log sheet and contain a clear, fully informative record including the sensor identity/location, the temperature reading to a resolution of at least 0.2°C , and the date and time of sampling.

7.3.2.3 Mini data logger display standards

For mini data loggers, temperature records shall be downloaded onto a personal computer at completion of the treatment period. At conclusion of the treatment, the Treatment Operator shall obtain print outs of the treatment temperatures throughout the treatment period and date and sign these data log sheets as the treatment record.

For each sensor the temperature value shall be sampled at least once an hour with identified temperature points accurate to 0.2°C (or 0.5°C for low resolution data loggers). Each hourly reading shall be displayed on the data log sheet and contain a clear, fully informative record including the sensor identity/location, the temperature reading to a resolution of at least 0.2°C (or 0.5°C for low resolution data loggers) and the date and time of sampling.

7.3.2.4 Manual recording systems

Temperature reading and recording may be done manually on log sheets maintained by the Treatment Operator. Temperatures shall be sampled from each sensor and recorded on log sheets every 12 hours in a 24 hour cycle for each day of the cold treatment.

Each 12 hourly sample shall be recorded on the log sheet and contain a clear, fully informative record including the sensor identity/location, the temperature reading to a resolution of at least 0.2°C, the date and time of sampling and the identification and initials of the officer taking the reading. Manual temperature sampling shall only be carried out by the Treatment Operator or Certification Controller.

7.4 Calibration of temperature sensing and recording equipment

Temperature sensors and recording systems must be calibrated at the freezing point (0°C) prior to commencement and on completion of each cold treatment. At calibration, each sensor must be uniquely identified and matched with the corresponding data recorder.

Calibration shall be undertaken by the Treatment Operator or by a recognised Testing Authority. For the purpose of this Procedure, a recognised Testing Authority is a person or company that is approved by the Department to calibrate cold treatment temperature sensing and recording equipment.

7.4.1 Calibration method

Where calibration is undertaken by the Treatment Operator, the following calibration method shall be used.

The Treatment Operator shall maintain records of the results of calibration of all temperature sensors and recording equipment used under this Procedure.

Records shall be in the form of calibration test records from the recognised Testing Authority or a Cold room Sensor Calibration Test Record (see Attachment 3) or similar record completed by the Treatment Operator.

7.4.1.1 Sensor identification

Each sensor shall be uniquely identified by means of a tag attached to the sensor or on the adjacent wall or host produce container.

Each sensor shall be matched with the output data recorder.

A Facility Plan (see Attachment 2) showing the location and identity of each sensor shall be maintained with the data recording instrument.

7.4.1.2 Equipment and supplies

The Treatment Operator shall be provided with the following:

- (a) an insulated container with a volume of at least 1 litre and an open neck;
- (b) thermometer clamp or similar device;
- (c) 5 litres of chilled de-ionised water; and
- (d) crushed ice made from de-ionised water.

7.4.1.3 Sensor calibration procedure

Sensor calibration shall be undertaken prior to commencing, and on completion of each cold treatment.

Calibration shall be conducted using a mixture of crushed ice made from de-ionised water, and de-ionised water in an insulated container using the following procedure:

- (a) Fill the insulated container with crushed ice. Add sufficient pre-cooled de-ionised water to cover the ice.
- (b) Thoroughly stir the ice/water mixture. Add additional ice as the ice melts.
- (c) Using the thermometer clamp or similar device, submerge each sensor in the ice/water mixture. Sensors must not touch the sides or bottom of the container.
- (d) Constantly stir the ice/water mixture while testing is being carried out. Allow the temperature shown by the sensors to stabilise at the lowest temperature obtainable.
- (e) Two (2) consecutive readings shall be recorded for each sensor at the lowest temperature obtainable. There shall be at least a 60 second interval between the two (2) readings, for any one (1) sensor.

Calibration shall be to the nearest 0.2°C. For low resolution mini data loggers, calibration shall be to the nearest 0.5°C.

Any sensor that records a temperature of $\pm 0.5^\circ\text{C}$ or more from the standard of 0.0°C shall be replaced.

The temperature variance of each sensor shall be calculated as the mean of the variation of the two (2) readings from 0°C and shall be clearly identified for each sensor and traceable to the data recording instrument.

7.5 Cold treatment

All host produce certified under this Procedure must have been treated for fruit fly in an approved cold treatment facility in accordance with an appropriate temperature/time schedule as detailed in section 6 Requirements.

Access to cold rooms during treatment shall be restricted to essential personnel. When access to cold rooms is not required, cold rooms shall remain locked during treatment.

7.5.1 Loading the cold room

Produce shall be placed in such a way as to ensure unrestricted circulation of refrigerated air through the stack and thus minimise the development of localised hot spots.

The Treatment Operator must ensure that each bin and/or package of produce placed in cold storage for treatment is clearly labelled with the treatment lot number and, if applicable, the owner of the host produce. The treatment lot code or number shall be a unique identifier that identifies the treatment lot and is traceable to the relevant Cold room Loading and Treatment Record (see Attachment 4).

The Treatment Operator shall ensure a Cold room Loading and Treatment Record (see Attachment 4) is kept for each treatment lot placed in the cold room. Multiple treatment lots may be treated in one (1) cold room at one (1) time.

Identification of the owner of the treatment lot is not required where the Business only cold treats its own host produce.

7.5.2 Verification of cold treatment using pulp temperatures

7.5.2.1 Sensor placement

A minimum of three (3) sensors shall be used for volumes of up to 250 m^3 of host produce. One (1) sensor shall measure air temperature and two (2) shall measure host produce pulp temperature. One (1) host produce pulp sensor shall be used for each additional 250 m^3 of host produce or part thereof. These requirements also apply where mini data loggers are used for sensing and recording treatment temperatures.

Host produce pulp sensors shall be inserted into the centre of a test host produce in the top layer of the package or bin. The test host produce shall be selected from the largest host produce size in the lot. With small host produce, such as grapes, the sensor shall penetrate two (2) or more host produce. Cartons, if used, must be fully closed following insertion of the sensors.

During initial cooling the warmest area in the load of host produce is to be determined by placing sensory probes or thermometers in air and host produce at various locations in the stack and measuring and recording the temperature profiles. A history of these records should be accumulated and used to determine optimum sensor placement for a particular cold room and/or stack configuration.

At the commencement of treatment a sensor shall be placed to measure air temperature and one (1) to measure pulp temperature in the warmest part of the load as determined by temperature profiles.

Further sensors shall be placed to measure pulp temperatures at locations representing different areas of the cold room from midway to the top of the load.

7.5.3 Treatment method

Treatment shall commence only when host produce pulp temperature has equilibrated for at least 24 hours at the specified target temperature (see section 6 Requirements).

If pulp temperature increases to more than the tolerance limit (0.5°C) above the specified target temperature at any time during the treatment period, the host produce temperature must be lowered within tolerance limits and the treatment recommenced as if starting a new treatment period. Alternatively, treatment may be continued at a higher target temperature (if one is specified in section 6 Requirements) and the host produce held for the corresponding longer treatment period.

The Treatment Operator shall regularly check temperature recording equipment to ensure it continues to function correctly. If temperature sensing or recording equipment fails during the treatment, the equipment must be repaired and the treatment re-commenced as if starting a new treatment period.

7.5.4 Verification of cold treatment using return air temperature

Records of the return air temperature may be used to verify cold treatment for host produce in long term air or controlled atmosphere (CA) cold storage when return air temperature has been maintained at, or below, the selected target temperature for at least four (4) weeks prior to treatment commencing.

This option shall only be used for controlled atmosphere or air stored host produce that cannot be accessed to place pulp temperature sensors.

7.5.5 Sensor placement

Return air temperature shall be monitored by a single sensor located near the thermostat probe in the return air stream to the cooling unit. This requirement also applies where a mini data logger is used for sensing and recording return air temperature.

7.5.6 Treatment method

The Treatment Operator must record the return air temperature of the cold room for 26 days after loading at intervals of not less than every five (5) days, and continuously for at least two (2) days at hourly intervals (every 12 hours for manual recording), prior to commencement of treatment to ensure the temperature is consistently at, or below, the selected target temperature.

Following commencement of treatment, return air temperatures must remain at, or below, the target temperature during the treatment period. If the temperature of return air (other than that associated with periodic defrost cycle fluctuations) exceeds the return air target temperature by more than 0.5°C during the treatment period, the treatment is deemed to be invalid and recording must re-commence as if starting a new treatment period. Alternatively, a higher target temperature (if one is specified in section 6 Requirements) may be selected and records kept for the corresponding longer treatment period.

The Treatment Operator shall regularly check temperature recording equipment to ensure it continues to function correctly. If temperature sensing or recording equipment fails during the treatment, the equipment must be repaired and the treatment re-commenced as if starting a new treatment period.

7.6 Treatment records

The Treatment Operator shall maintain records of each cold treatment. Cold treatment records shall include a Cold room Loading and Treatment Record (see Attachment 4) for each treatment lot and a strip chart, continuous data log sheet or manual data log sheet for each cold treatment.

Strip charts, continuous data log sheets or manual data log sheets shall be maintained with the Cold room Loading and Treatment Record to which they relate.

For mini data loggers, temperature records may be downloaded onto a personal computer at completion of the treatment period. At conclusion of the treatment, the Treatment Operator shall obtain printed data log sheets of the treatment temperatures throughout the treatment period.

Treatment temperature records must identify:

- (a) the cold room; and
- (b) the date and time of temperature sampling; and
- (c) the sensor identification to which the temperature reading relates; and
- (d) the temperature reading to a resolution of at least 0.2°C (or 0.5°C for low resolution temperature mini data loggers).

The Treatment Operator shall date and sign the treatment record at the conclusion of the treatment as verification of the accuracy of the record.

Any alterations to treatment temperature or time schedules must be noted on the relevant treatment temperature record with an explanation for the alterations and the date and initials of the Treatment Operator.

7.7 Post treatment security

Treated host produce shall be held for the minimum practical period before it must be secured against infestation by fruit fly.

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

Host produce must be stored at, and transported from, the cold treatment facility in secure conditions that prevent infestation by fruit fly.

7.8 Plant Health Assurance Certificate

A Business which cold treats host produce to be packed by another Business for certification must be accredited for an ICA arrangement under Part A of this Procedure.

The Business shall supply a PHAC (see Attachment 6) with each delivery of host produce supplied to the packing business for certification.

A PHAC is not required where the Business that cold treats the host produce is the same Business that packs and certifies the host produce under this Procedure.

8. PART B PROCEDURE – COVERS PACKER ACTIVITIES

8.1 Host produce receipt

The Host Produce Receipt Officer shall ensure that all host produce received for certification under this Procedure:

- (a) is supplied by a Business accredited under Part A; and
- (b) each bin or pallet is identified with the treatment lot number of the treatment lot in which it was treated.

Any bin or pallet that is not clearly identified with the treatment lot number shall be regarded as untreated for the purpose of this Procedure.

8.1.1 Receipt of host produce treated by another business

A Business that packs and/or certifies host produce that has been cold treated by another Business shall ensure:

- (a) each delivery of host produce received from another Business is accompanied by a PHAC (see Attachment 6); and
- (b) the treatment lot number and cold treatment details are maintained for all host produce received and certified under this Procedure through to certification and dispatch.

The Business shall maintain copies of each PHAC received.

8.2 Packing

The Certification Controller shall oversee the packing process to ensure only host produce from bins that have been cold treated and are identified with the treatment lot number, is packed for certification.

8.2.1 Packing records

Where produce is cold treated in bulk and packed after treatment, packing records shall be maintained by the Certification Controller that provide trace back of certified produce to the original treatment lot and the relevant PHAC (Attachment 6) or Cold room Loading and Treatment Record (Attachment 4).

Packing records shall be in the form of a Cold Treatment Packing Record (see Attachment 5) or records which capture the same information.

8.2.2 Identification of treated and untreated host produce during packing

A Business that packs treated and untreated host produce shall implement systems to identify the treatment status of host produce during packing to prevent mixing of treated and untreated host produce.

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

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

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

8.2.3 Identification of treated and untreated host produce after packing

A Business that packs treated and untreated host produce shall implement systems to identify the treatment status of host produce after packing to prevent mixing of treated and untreated host produce.

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

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

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

8.3 Post treatment security

Packing shall commence as soon as practicable after treatment. Any treated host produce that is not in the process of packing must be held in secure conditions until packed.

Completed pallets of packed produce shall be held for the minimum practical period before placing in secure conditions.

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

8.3.1 Identification

Each treatment lot shall be identified with a lot number affixed to all individual plant containers in the lot or a sign placed at entry points to the designated treatment area immediately after treatment is completed.

8.4 Dispatch

8.4.1 Package identification

The Authorised Dispatcher shall ensure that, prior to issuing a PHAC, each package is marked on an outermost side or end surface in indelible and legible characters of at least 5 mm high, with:

- (a) the Interstate Produce (IP) number of the accredited Business; and
- (b) the words "MEETS ICA-07"; and
- (c) the date (or date code) on which the host produce was packed; and
- (d) the IP number or other identifier of the grower of the produce, where the grower is a different Business to the packer.

Any packages containing host produce that have not been treated and meet the requirements specified in this Procedure shall not be marked as stated above.

8.5 Plant Health Assurance Certificates (PHACs)

The Authorised Dispatcher shall ensure a PHAC (see Attachment 6) is completed and signed by an Authorised Signatory of the Business prior to the consignment of the host produce.

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

PHACs must include:

- (a) in the '*Accredited Business that Prepared Produce*' section, the name and address of the Accredited Business that packed the host produce; and
- (b) in the '*Grower*' section, the name and address of the property on which the host produce was grown. Where the consignment contains host produce from a number of growers the word "VARIOUS" must be used; and
- (c) in the '*Consignment Details*' section,
 - (i) the number and type of packages in the consignment; and
 - (ii) in the '*Type of Produce*' column, a description of the host produce; and
- (d) in the '*Additional Certification*' section the statement "Meets ICA-07".

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

Books of pre-printed PHACs are available from ICA Records Management, Department of Primary Industries, phone 02 6552 3000.

Upon suspension, cancellation or withdrawal of accreditation, the PHAC book must be immediately returned to the Department.

8.5.1 PHAC distribution

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

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

9. RECORDS AND DOCUMENT CONTROL

9.1 ICA system records

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

Under PART A;

- (a) a current 'Facility Plan'; and
- (b) 'Cold room Sensor Calibration Test Record'; and
- (c) 'Cold room Loading and Treatment Record'; and
- (d) a 'Harvest Inspection Record'; and

- (e) if applicable, a copy of each 'PHAC

Under PART B;

- (a) if applicable, a copy of each 'PHAC' received from Part A businesses; and
- (b) 'Cold Treatment Packing Record'; and
- (c) a copy of each 'PHAC' issued by the Business.

Records must be retained for at least 4 years from completion.

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

9.2 ICA system documentation

The Business must maintain the following documentation:

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

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

10. ATTACHMENTS

| | |
|--------------|--|
| Attachment 1 | Application for Accreditation as a Biosecurity Certifier |
| Attachment 2 | Facility Plan |
| Attachment 3 | Cold room Sensor Calibration Test Record |
| Attachment 4 | Cold room Loading and Treatment Record |
| Attachment 5 | Cold Treatment Packing Record |
| Attachment 6 | Plant Health Assurance Certificate |

Application for accreditation as a Biosecurity Certifier

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

The application form can be accessed at:

<http://www.dpi.nsw.gov.au/biosecurity/plant/ica> under the heading [Resources](#)

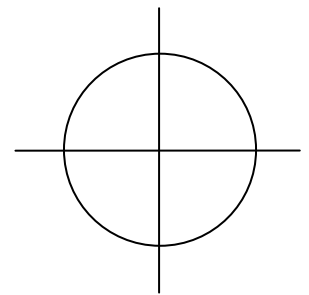
Alternatively, contact ICA Records Management:

Phone: 02 6552 3000

Fax: 02 6552 7239

Email: ica.scheme@dpi.nsw.gov.au

FACILITY PLAN – ICA-07



Indicate North

COLDROOM SENSOR CALIBRATION TEST RECORD

| Business Name: | | | | | IP Number: | N | | | |
|--------------------------------------|-----------------------|-----------------------|------------------------|--------------------------------|----------------------|-----------|--|--|--|
| Data Recording Instrument ID: | | | | | | | | | |
| Date of Testing | Sensor Identification | First Reading at 0 °C | Second Reading at 0 °C | Sensor Correction Value (± °C) | Authorised Inspector | | | | |
| | | | | | Printed Name | Signature | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

