



May  
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# Phytosanitary treatments

## In-transit cold treatments

### – Instructional guide



### How to use this guide

This guide has been developed for Authorised Officers (AO) as a pictorial guide to the process of initiating an in-transit cold treatment (ITCT) of plants and plant products for export.

This guide must be read in conjunction with the Work Instruction: *Initiating an in-transit cold treatment for plant exports.*

### Summary of the process

The role of an AO during the initiation of an in-transit cold treatment is to supervise and verify that the client is conducting their part of the process correctly. The AO is responsible for:

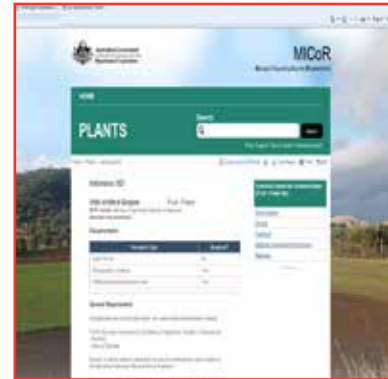
- verifying the consignment has passed a phytosanitary inspection
- inspecting the container to approve for loading
- ensuring the product is pre-cooled prior to loading if required
- securing the container for transport
- supervising the calibration of temperature sensors
- supervising the loading of the container and sensor placement

### 1. How do I prepare to initiate an ITCT?

- receive a request from the client to initiate the treatment
- check the client has provided an Notice of Intention and Export Compliance Record
- look up the relevant MICoR Plants case
- get your equipment and personal protective equipment ready
- have a blank *Certificate of loading and calibration record*
- make sure the person responsible for the treatment is available and has all equipment ready
- have the current work instruction.

## 2. How do I verify that the consignment has passed a phytosanitary inspection?

Look up the relevant MICoR Plants case.



Check that the consignment presented matches the NOI and the ECR.

Record this on the Reference: *Certificate of loading and calibration record.*



## 3. How do I inspect the container to approve for loading?

Compare the container number on the container to the container number listed on the NOI.

Record the container number on the Reference: *Certificate of loading and calibration record.*



Check all drain holes and vents holes are meshed so that no gap is bigger than 1.6mm.

This includes:

- drain holes
- air intakes
- vent holes.



Inspect the container and check it is free from pests and contaminants including soil.



Check there is no structural damage and the door seals are intact.



Record the serial number of the temperature data recorder on the Reference: *Certificate of loading and calibration record*.



Ask the technician to demonstrate that the container is set to Greenwich Mean Time (GMT).

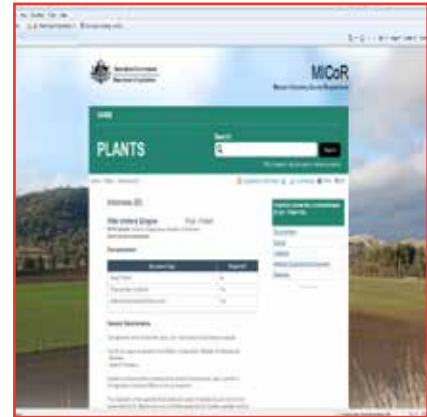
Record this on the Reference: *Certificate of loading and calibration record*.



## 4. How do I ensure the product is pre-cooled prior to loading?

Determine if you need to ensure the product is pre-cooled prior to loading by referring to the MICoR Plants case.

If so ask the client what temperature and duration they have nominated for the treatment.



Select a minimum of five pallets from the consignment.

Focus on any areas you know that tend to be warmer in that particular cool room.



Place your portable probe thermometer through a packaging vent or box opening in the carton and into a piece of fruit.

Ensure that the tip of the thermometer is covered entirely by the fruit.

Record the temperatures on the Reference: *Certificate of loading and calibration record*.



## 5. How do I supervise the calibration of temperature sensors?

Supervise the calibration of the sensors to make sure the client is using the ice slurry method as specified in the relevant section of the Reference: *USDA Treatment Manual - Nonchemical treatments - Cold Treatment - 3-7-4*.



Observe the temperature of each sensor.



Two readings for each sensor are to be taken until the readings match.

Be aware that some countries require more than two readings for each sensor.

Record these readings for each sensor and calculate the correction factor on the Reference: *Certificate of loading and calibration record*.

Refer to the work instruction for how to calculate the correction factor for a sensor.



## 7. How do I supervise the loading of the container and sensor placement?

Product must be moved in such a manner as to prevent cross-infestation and/or cross-contamination.



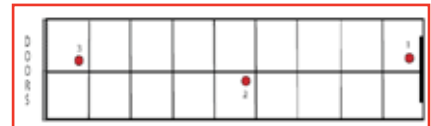
Supervise the client placement of each sensor.

Make sure the sensors are placed in the locations specified in the MICoR Plants case, protocol or work plan.

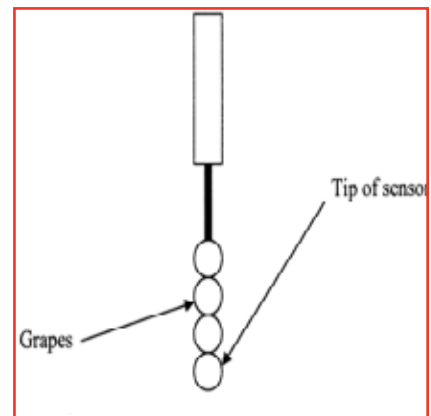
Record the placement details on the Reference: *Certificate of loading and calibration record*.



Here is an example of sensor placement in a 40 foot refrigerated container with 18 pallets of fruit (not drawn to scale).



Supervise the client placement of the fruit on the sensor.



Make sure the client covers at least 2/3 of the sensor and the tip of the sensor is covered by the fruit pulp.



Once the fruit has been inserted onto the sensor the client needs to carefully place the sensor back into the carton.

Record the temperature of each sensor as soon as it is placed back into the carton on the Reference: *Certificate of loading and calibration record*.



Make sure the client has allowed a coil of slack cable spooled either inside the carton or taped to the outside of the carton to prevent sensor dislodgement during treatment.



Make sure the running end of the cable is taped to the carton to prevent the sensor being pulled out of the fruit.



Observe the client sealing the container with a bolt seal.

Record the seal number on the Reference: *Certificate of loading and calibration record*.

