



# CONDUCTING AN INSPECTION OF HIGH-RISK PRODUCT FOR FRUIT FLY

## VERSION REGISTER

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Authorised:

Biosecurity Queensland



**CONDUCTING AN INSPECTION OF HIGH-RISK PRODUCT FOR FRUIT FLY**

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## TABLE OF CONTENTS

1. PURPOSE .....	4
2. SCOPE .....	4
3. REFERENCES .....	4
4. DEFINITIONS .....	4
5. ACTIONS .....	5
5.1 General .....	5
6. ACTIONS .....	5
6.1 Sampling Fresh Fruit and Vegetables for Inspection .....	5
6.1.1 Inspection Type .....	5
6.1.2 Inspection Rate .....	5
6.1.3 Minimum and Maximum Sample Size .....	6
6.1.4 Sampling from Punnets and Bulk Bins .....	6
6.2 Examination of Produce .....	6
6.3 Detection of Suspect Fruit Fly .....	7
6.3.1 Dealing with Non-conforming Product .....	7
6.4 Sampling Suspect Fruit fly .....	8
6.4.1 Taking the Sample .....	8
7. ATTACHMENTS .....	8



## 1. PURPOSE

The purpose of this work instruction is to provide guidelines for the inspection of high-risk product for Queensland and Mediterranean fruit fly.

## 2. SCOPE

This work instruction covers the requirements for the inspection of high-risk product for Queensland and Mediterranean fruit fly by an Authorised Inspection Person in accordance with the requirements of Interstate Certification Assurance (ICA) Operational Procedure *Fumigation with Methyl Bromide* [ICA-04].

## 3. REFERENCES

**ICA-04** *Fumigation with Methyl Bromide*

## 4. DEFINITIONS

<b>Accredited Certifier</b>	means a person who holds accreditation under chapter 15 of the <i>Biosecurity Act 2014</i> to give biosecurity certificates.
<b>Authorised Inspection Person (AIP)</b>	means a person trained and deemed competent in the detection and recognition of fruit fly and who is authorised to conduct inspections on behalf of an accredited business.
<b>Approved taxonomist</b>	means a person who is approved by DAF Queensland and is listed on the DAF Queensland's Plant Health Register of Approved Taxonomists.
<b>Authorised Signatory</b>	means a person whose name and specimen signature is included as an Authorised Signatory on the business's application for accreditation.
<b>Business</b>	means the legal entity responsible for the operation of the facility and the ICA arrangement detailed in the Business' Application for Accreditation.
<b>consignment</b>	means a quantity of inspected packed produce described on one Fruit Fly Inspection Record by a single consignee. A consignment may contain a number of lots.
<b>DAF Queensland</b>	means the Department of Agriculture and Fisheries Queensland.
<b>Fruit fly</b>	Means all life stages of the Mediterranean fruit fly species <i>Ceratitis capitata</i> (Wiedemann) and Queensland fruit fly species <i>Bactrocera tryoni</i> (Froggatt) and related species <i>B. aquilonis</i> and <i>B. neohumeralis</i> .
<b>High-risk product</b>	means product as defined by the receiving jurisdiction as requiring pre-fumigation inspection.



<b>Lot</b>	means a quantity of produce assembled for inspection, prior to treatment (fumigation), at one place at one time. A lot could consist of chillies, stone fruit and other produce from one or more growers/packers.
<b>produce</b>	means plants and plant products and includes members, alive or dead, of the plant kingdom and any material of plant origin.

## 5. ACTIONS

### 5.1 General

This Work Instruction refers to the pre-treatment inspection (high-risk products) requirements of the Interstate Certification Assurance Procedure *Fumigation with Methyl Bromide* [ICA-04]. Persons responsible for this activity must ensure they refer to the relevant sections of the ICA-04 Operational Procedure before applying any task in this Work Instruction.

## 6. ACTIONS

### 6.1 Sampling Fresh Fruit and Vegetables for Inspection

#### 6.1.1 Inspection Type

The **Authorised Inspection Person** shall inspect high-risk product by conducting a packed product inspection following assembly of a lot prior to treatment.

#### 6.1.2 Inspection Rate

The **Authorised Inspection Person** shall inspect 600 units of the packed product.

A separate representative 600-unit inspection must be completed for each high-risk product in a chamber load (i.e., 600 chillies and 600 stone fruit for a given chamber load).

The **Authorised Inspection Person** shall ensure that the selection represents an even distribution of all the high-risk product varieties and suppliers (growers/packers) in the chamber load. Refer following examples.

Example 1: If a chamber load contains three varieties of chillies (from the same chilli grower) and ten varieties of stone fruit (from the same stone fruit grower), then 200 units are to be inspected from each variety of chilli and 60 units from each variety of stone fruit.

Example 2: If a treatment chamber contains five varieties of stone fruit from ten growers, then 60 units of stone fruit from each grower must be inspected, making sure that samples are drawn in a way that ensures a proportional sub-sample from each variety is inspected.

Where there are less than 600 units of any high-risk product in a chamber load, all the high-risk product of that type must be inspected. Additionally, where there are not enough units to inspect from one inspection lot, the lot must be made up of fruit of the same type from other inspection lots. Refer following example.

Example: Where a chamber load comprises ten inspection lots of chillies, 60 units must be inspected from each inspection lot. Where one inspection lot of chillies in the chamber load comprises only 18 units, the additional 42 units must be inspected from across the nine other inspection lots of chillies.

### 6.1.3 Minimum and Maximum Sample Size

A minimum of three (3) packages will be drawn when undertaking an inspection.

Where the **Authorised Inspection Person** identifies that the number of units in a lot is less than the required 600 units the **Authorised Inspection Person** shall examine all units in the lot.

Where the **Authorised Inspection Person** identifies that the number of units in a lot is more than the required 600 units the **Authorised Inspection Person** shall examine no more than 600 units in the lot.

### 6.1.4 Sampling from Punnets and Bulk Bins

Individual punnets and bulk bins are considered as packages for the purposes of sampling.

## 6.2 Examination of Produce

The **Authorised Inspection Person** shall examine produce from sampled packages after drawing the required number of packages depending on the inspection type and rate (refer 6.1.1 Inspection Type and 6.1.2 Inspection Rate).

All produce examinations shall be carried out by an **Authorised Inspection Person**.

The **Authorised Inspection Person** shall -

1. move all sample packages (including bulk bins) to the inspection facility;
2. record information on the *Fruit fly Inspection Record* [CAF-151] in accordance with the relevant section of Interstate Certification Assurance Operational Procedure *Fumigation with Methyl Bromide* [ICA-04];
3. place sample cartons (where possible) on the inspection bench.

Where it is not possible to place the sample package on the inspection bench, the **Authorised Inspection Person** shall remove the produce from the packaging (e.g., bulk bins) and place on the inspection bench;

4. visually examine the required number of units (refer 6.1.2 Inspection Rate) within each sample package for fruit fly.

Whilst examining the produce the **Authorised Inspection Person** will rotate the unit so that 100% of the surface area is inspected. The **Authorised Inspection Person** shall pay attention to any signs or symptoms of fruit fly damage. Signs and symptoms of fruit fly damage may appear as 'sting marks', cracks, splits, bruises, rots and other blemishes.

Sting marks may appear as a pin prick on the skin that can be encircled by a lighter colour or appear as a dark softened spot. In light coloured stone fruit (peaches and nectarines) fruit fly larval activity can be seen as a dark shadow under intact skin. Further examination is required if any signs or symptoms are present, to look for evidence of any live suspect fruit fly.

The **Authorised Inspection Person** will use, as necessary, a hand lens of at least X10 magnification or similar device to assist in the examination of the produce and detection of suspect fruit fly.

An **Authorised Inspection Person** may remove the peel/skin or cut produce that is being examined to investigate for the presence of suspect fruit fly.

All produce that has been peeled or cut must be discarded;

5. place the sampled units back into the package, where applicable, until the sample package has been fully repacked;
6. return the sample packages to the lot following the inspection;
7. record information on the *Fruit fly Inspection Record* [CAF-151] in accordance with the relevant section of Interstate Certification Assurance Operational Procedure *Fumigation with Methyl Bromide* [ICA-04].

### 6.3 Detection of Suspect Fruit Fly

On the detection of suspect fruit fly The **Authorised Inspection Person** shall immediately cease the inspection and advise the Certification Controller.

The **Authorised Inspection Person** shall determine by reference illustrations and photographs (refer Attachment 4 Identification of Queensland fruit fly) whether the sample is suspect fruit fly.

The **Authorised Inspection Person** shall record the detection of suspect fruit fly on the *Fruit Fly Inspection Record* [CAF-151] in accordance with the relevant section of Interstate Certification Assurance Operational Procedure *Fumigation with Methyl Bromide* [ICA-04].

#### 6.3.1 Dealing with Non-conforming Product

Immediately following advising the Certification Controller of the detection of suspect fruit fly the **Authorised Inspection Person** shall ensure all produce in the lot is rejected and segregate. Following rejection of the lot the Certification Controller will determine the most suitable options for dealing with the non-conforming produce.

There are a number of options available to deal with the non-conforming produce subject to the relevant interstate plant quarantine authority's entry requirements or conditions. The Certification Controller will determine the most suitable option in accordance with the relevant section of Interstate Certification Assurance Operational Procedure *Fumigation with Methyl Bromide* [ICA-04]. If the Certification Controller determines to have the suspect fruit fly identified the **Authorised Inspection Person** shall take a sample in accordance with Section 6.5.

If the suspect fruit fly is subsequently confirmed not to be Queensland fruit fly by the Approved Taxonomist, the inspection of the lot may continue and subject to no further detections of suspect fruit fly the lot may be declared 'inspected and free of fruit fly' in accordance with the relevant sections of Interstate Certification Assurance Operational Procedure *Fumigation with Methyl Bromide* [ICA-04].

## 6.4 Sampling Suspect Fruit fly

### 6.4.1 Taking the Sample

All suspect fruit fly samples must be taken and submitted to an Approved Taxonomist by an **Authorised Inspection Person**. Where possible, an **Authorised Inspection Person** should take more than one sample for identification.

The **Authorised Inspection Person** shall take each sample by -

1. carefully retrieving the suspect fruit fly with an appropriate instrument i.e., brush, forceps or scalpel, to avoid damaging the suspect;
2. placing the suspect fruit fly in a specimen bottle that contains an appropriate preservative material i.e., methylated spirits.

Where a suspect fruit fly is contained on produce, the produce or part of the produce with the suspect fruit fly must be wrapped in damp paper towel and placed into a plastic bag without a preservative material i.e., do not use methylated spirits;

3. completing a *Fruit fly Sample Submission Form* [CAF-121] in accordance with the relevant section of Interstate Certification Assurance Operational Procedure *Fumigation with Methyl Bromide* [ICA-04] (refer Attachment 2 for correctly completed example) for each sample taken; and
4. placing the specimen bottle or produce (if applicable) along with completed sample submission form into a sealable plastic bag and then sealed.

The **Authorised Inspection Person** shall forward the sample to an Approved Taxonomist within 24 hours of the sample being taken.

Where a suspect pest sample cannot be delivered in person by an **Authorised Inspection Person**, the sample shall be forwarded by secured mail or courier to an Approved Taxonomist for identification.

## 7. ATTACHMENTS

Attachment 1	<i>Pre-Treatment Fruit Fly Inspection Record</i>	CAF-151 <b>(COMPLETED EXAMPLE)</b>
Attachment 2	<i>Fruit Fly Sample Submission Form</i>	CAF-121 <b>(COMPLETED EXAMPLE)</b>
Attachment 3	Queensland fruit fly Recognition Card	





# PRE-TREATMENT FRUIT FLY INSPECTION RECORD

Date of Inspection: <i>19 June 2019</i>		Package Identification: <i>A Smith (mangoes) and B Brown (nectarines)</i>	
Place of Inspection: <i>Fresh Market wholesalers, Brisbane</i>		IP Number: <i>Q9999</i>	
Name of Authorised Inspection Person: <i>A Inspector</i>		Name & Address of Grower and or Packer <small>(if multiple, list in comments/findings column)</small> <i>Refer below</i>	
Inspection Rate <input checked="" type="checkbox"/> 600 Unit <input type="checkbox"/> > 600 Unit – All High-Risk Product Inspected		Produce Type <small>(if multiple, list in comments/findings column)</small> <i>Refer below</i>	
Notes:		Total Number of Packages in Lot <small>(list separately if multiple commodities)</small> <i>200 (144 chillies and 56 nectarines)</i>	
Package No.	Number of Units	Total Number of Units	Comments/Findings
1	24	24	<i>Able Smith, 123 Grower Road, Bowen, 4805</i>
2	24	48	✓
3	24	72	✓
4	24	96	✓
5	24	120	<i>Rots, cut three fruit, nothing found</i>
6	24	148	✓
7	24	172	✓
8	24	196	✓
9	24	220	✓
10	24	244	✓
11	24	268	✓
12	24	292	✓
13	24	316	✓
14	24	340	✓
15	24	364	✓
16	24	388	✓
17	24	412	✓
18	22	432	✓
19	54	486	<i>Bob Brown, 999 Green Road, Kingaroy, 4610</i>
20	56	542	✓
21	58	600	✓
Pass	<input checked="" type="checkbox"/>	Fail	Signature of Authorised Inspection Person: Alan Inspector
Actions resulting from a suspected detection of fruit fly <i>Not Applicable</i>			

# FRUIT FLY SAMPLE SUBMISSION FORM

Name of business submitting sample:

*Bob's Wholesale Produce*

IP Number:

**Q**

9	9	9	9
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Postal address for response:

*PO Box 123, Markets Road, Brisbane 4107*

Telephone number:

*(07) 1234 5678*

Facsimile number:

*(07) 1234 5678*

Mobile number:

*0424 234 567*

Name of person who collected sample:

*A Inspector*

Time and date collected:

*16:00* AM  
PM *23/07/19*

Street address of property where specimen collected:

*39 Markets Road, Brisbane*

Maturity of Sample:

Eggs       Larvae       Adults       Other (specify)

Level of Infestation:

High (>10)       Medium (5-10)       Low (<5)

Street address of Source Block:

*Not known*

Source Block IP Number: **Q**

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Source Block Reference Code or Number (as per Property Plan):

Printed Name

*A Inspector*

Signature

*A Inspector*

Date

*23/04/19*

**OFFICE USE ONLY**

Sample number:

--	--	--	--	--

Time and date received:

: AM  
PM / /

Identification:

.....

.....

.....

.....

.....

Identified by:

Printed Name

--

Signature

--

Date

/ /

Business advised by:

Post       Facsimile

Time and date sent:

: AM  
PM / /

Printed Name

--

Signature

--

Date

/ /

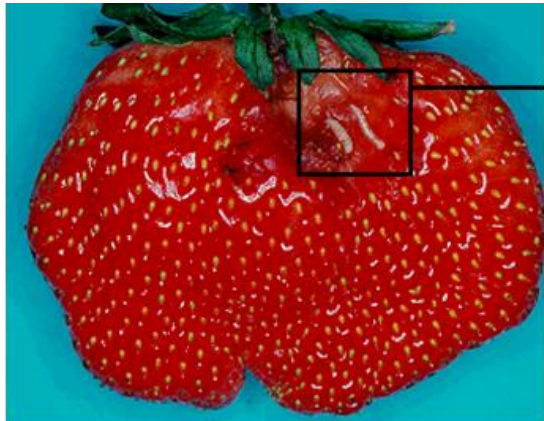
# QUEENSLAND FRUIT FLY RECOGNITION CARD



**Left:** Adult Queensland fruit fly



**Above:** Infested citrus fruit with well-developed larvae (photo courtesy Primary Industries and Regions SA)



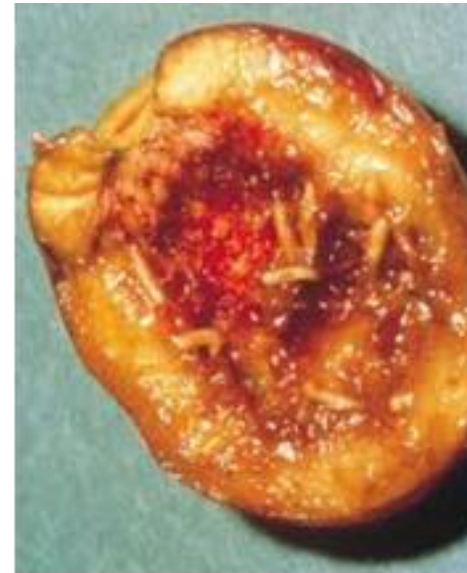
**Left:** Infested strawberry with large well developed larvae placed on the fruit surface



**Above:** Magnified section showing larvae of Queensland fruit fly



**Left:** Infested tomato with large well developed larvae.



**Above:** Infested stone fruit and fruit fly larvae (photo courtesy Plant Health Australia)