Canadian Food Inspection Agency | Agence canadienne d'inspection des aliments

| | |
|---|---|
| **PLANT HEALTH DIVISION,**<br>**PLANT PRODUCTS DIRECTORATE,**<br>**CANADIAN FOOD INSPECTION AGENCY**<br>**59 Camelot Drive**<br>**Nepean, (Ontario), Canada**<br>**K1A 0Y9** (Tel: 613-225-2342; FAX: 613-228-6602) | **D-99-04**<br><br>**(EFFECTIVE DATE)**<br><br>**April 25, 2003**<br>**(2nd Revision)** |

**Title**
**SYSTEMS APPROACH BASED ORIENTAL FRUIT MOTH CERTIFICATION PROGRAM**

File

## SUBJECT:

This directive outlines an alternative certification program for importing fresh fruit of peach, nectarine, plum and apricot, as well as genetic crosses of apricot such as pluot and plumcot from the states of California and Washington into British Columbia (B.C.) to prevent the introduction of Oriental fruit moth. The existing requirements remain an option.

***This revision was necessary because the trial importation of stone fruits certified using the systems approach option began in 1999 and the trial period was completed successfully in 2001. The need for mandatory notification and import inspection has been removed. The additional declaration for the Phytosanitary Certificate has been modified to clearly distinguish between products certified under this program and the one described in D-87-29.***

Note: Fresh fruit of plum and quince are also regulated for Oriental fruit moth. The import requirements for plum and quince, as well as the other hosts of Oriental fruit moth are outlined in D-87-29.

Table of Contents

Review

This directive will be reviewed every five years. The next review date for this directive is April 25, 2008. The contact for this directive Joanne Rousson. For further information or clarification, please contact the Horticulture Section.

Endorsement

Approved by:

_____
Director
Plant Health Division

Amendment Record

Amendments to this directive will be dated and distributed as outlined in the distribution below.

Distribution

1. Directive mail list (Regions, PHRA, USDA)
2. Provincial Government, Industry (via Regions)
3. National Industry Organizations (determined by Author)
4. Internet

Introduction

The Oriental fruit moth does not occur in B.C. Surveys using sticky traps with Oriental fruit moth pheromone are carried out annually to verify pest freedom. The Oriental fruit moth is an economic pest of peach, plum, apricots and nectarines, feeding internally on the fruit and attacking the new shoots of fruit trees. The introduction of Oriental fruit moth into the fruit production areas of B.C. could result in increased production costs, loss of fruit quality, and a loss of export markets.

To prevent the introduction of Oriental fruit moth into B.C., hosts and carriers of Oriental fruit moth from infested areas of Canada, the United States (US) and other countries presently require fumigation before they may be shipped into B.C. This requirement is outlined in the existing directives (D-87-29 for import requirements and Quarantine Directive: Domestic-7 for the

domestic requirements).

The systems approach has been shown to be an effective alternative means of mitigating the risk of Oriental fruit moth being introduced into Canada on stone fruit. The National Plant Protection Organization developed a systems approach program involving field controls and packing house inspections (Oriental Fruit Moth Certification Program). Growers in the states of California and Washington, US are eligible to participate in the Oriental Fruit Moth Certification Program. Growers in other US states who wish to utilize the systems approach must demonstrate the effectiveness of the program using a pilot project. US stone fruit certified under this program will not require fumigation with methyl bromide to enter B.C. As there is no similar program developed at this time for fruit produced in Canada, regulated fruit shipped from other parts of Canada into B.C. require fumigation.

Scope — This directive is intended for the use of the CFIA inspection staff, Canadian Customs, importers, shippers and brokers in order to outline the necessary requirements and inspection procedures for the movement of non-fumigated fresh fruit of peaches, nectarines, apricots (and apricot crosses) and plums from the states of California or Washington to British Columbia.

References — NAPPO Standard RSPM #6, *"Guidelines for the Development and Amendment of NAPPO RSPMs*"

Department of the Secretary of State of Canada. *The Canadian Style: A Guide to Writing and Editing*. Toronto, 1993.

**This directive supersedes D-99-04 (1st Revision), dated May 22, 2001**

**This directive does not supersede the existing directives which relate to hosts and carriers of Oriental fruit moth. The import and domestic requirements for the movement of Oriental fruit moth hosts remain the same (see D-87-29 for import requirements and Quarantine Directive: Domestic-7 (1988-01-31) for the domestic requirements).**

Definitions, Abbreviations and Acronyms

**Grower** — The owner/person having the control of the production of fruit in an orchard.

**Grower Lot** — Production units of fruit from an identified location produced by an

individual grower.

**National Plant Protection Organization** — Official service established by a government to discharge the functions specified by the International Plant Protection Convention [FAO, 1990] For the purposes of this document, it refers to the Canadian Food Inspection Agency (CFIA) or the US Department of Agriculture (USDA) or the USDA's designate.

**Systems Approach** — A defined set of phytosanitary procedures, at least two of which have an independent effect in providing for the pest-free movement of commodities. (NAPPO, August 15, 1999)

## 1.0 General Requirements

1.1 Legislative Authority

*The Plant Protection Act, S.C. 1990, c. 22*
*The Plant Protection Regulations, SOR/95-212*
*The Canadian Food Inspection Fees Notice*, *Canada Gazette, Part 1 (05/13/2000)*

1.2 Fees

The CFIA is charging fees in accordance with the Canadian Food Inspection Agency Fees Notice. For information regarding fees associated with imported product, please contact the Import Service Centres (ISC) at the following phone numbers: Eastern ISC 1-877-493-0468; Central ISC 1-800-835-4486; Western ISC 1-888-732-6222. Anyone requiring further information regarding fees may contact any local CFIA office or access the CFIA web site at www.inspection.gc.ca.

1.3 Regulated pests

Oriental fruit moth, *Grapholita molesta* (Busck)

1.4 Regulated Commodities

Fresh fruit of peach, nectarine, plum and apricot, as well as genetic crosses of apricot such as pluot and plumcot, are eligible for shipment to B.C. under the systems approach.

1.5 Regulated Areas

Growers from the States of California and Washington, US are eligible for participation in the Systems Approach based Oriental Fruit Moth Certification Program.

## 2.0 Specific Requirements

2.1 Import Requirements

To import fresh fruit of peach, nectarine, plum or apricot (and apricot crosses) from the states of California or Washington into B.C., the following is required:

2.1.1 Pre-shipment conditions:

2.1.1.1 Approval of Growers

The fruit must originate from a grower approved by the National Plant Protection Organization to participate in Oriental Fruit Moth Certification Program.

2.1.1.2 Pest Monitoring and Controls

All fruit intended for shipment to B.C. under the Oriental Fruit Moth Certification Program must be grown in an orchard which meets the requirements for pest monitoring and controls as outlined by the National Plant Protection Organization.

The monitoring program used by participating growers must be specific for Oriental fruit moth and effective as a tool for estimating the optimum time for applying chemical controls.

Chemical controls and/or biological controls must be applied, if necessary, to ensure that all fruit shipped to B.C. is free from all stages of Oriental fruit moth.

All aspects of the pest monitoring and control program must be audited throughout the growing season by the National Plant Protection Organization.

Upon request, detailed information relating to pest monitoring and controls and information specific to each state utilizing the systems approach must be provided to the Plant Health Division.

2.1.1.3 Fruit Sampling and Examination

Fruit on the packing line must be inspected for internal feeders, specifically for Oriental fruit moth, by packing house employees trained by officials authorized by the National Plant Protection Organization. Fruit examination techniques must incorporate the inspection conditions and procedures described in Appendix 1. The fruit examination must include cutting of each individual piece of fruit. The number of fruit to be inspected must be based on detecting a pest infestation of 1.0% or greater with a 95% probability of finding at least one infested fruit in a lot. In practical terms, a minimum of 300 fruit are required to be selected and examined from each days harvest for each grower lot packed. The fruit examined must be representative of the entire grower lot.

2.1.1.4 Plant Protection Organization Audit Inspections

1% of the boxes in a lot to be examined by inspectors authorized by the National Plant Protection Organization. At least two fruit per inspected box must be cut and examined for internal feeders.

2.1.1.5 Labelling

All boxes must be identified with a grower lot number and the name of the packer in order to facilitate inspection, to allow for trace-back in cases of non-compliance, and to minimize losses to the importer/exporter, should pests be found.

2.1.1.6 Packing House Approval

The packing house must be approved for handling fruit for export to B.C. The facility must be clean and maintained free of quarantine pests and infested fruit. The packing line used for fruit destined to B.C. must be cleaned prior to packing. At the time of packing, packing house staff must ensure that there is no mixing of non-eligible fruit (i.e. fruit which has not been produced under the Systems Approach based Oriental Fruit Moth Certification Program) with the fruit destined to B.C.

2.1.1.7 Safeguarding

The fruit must be safeguarded from contamination from quarantine pests during packing, loading, and transportation.

2.1.1.8 Records

Growers and packing houses must keep records as requested by the National Plant

Protection Organization to demonstrate full compliance to program requirements.

2.1.2 Permit to Import:

A Canadian Permit to Import issued under the Plant Protection Regulations is not required.

2.1.3 Phytosanitary Certificate:

A federal Phytosanitary Certificate is required. This document must be issued under the authority of the National Plant Protection Organization and must accompany each shipment imported into B.C. The following additional declaration must appear on the certificate:

"The fruit in this shipment was produced under the Systems Approach based Oriental Fruit Moth Certification Program."

2.2 Inspection Requirements

Shipments may be subject to inspection and sampling by CFIA on arrival to determine if pests are present. 5% of the boxes must be randomly selected and examined. Any fruit showing signs of pest damage shall be cut and examined. All pests found will be identified to determine if quarantine pests are present. The shipment may be placed under Notice of Quarantine pending the results of a laboratory identification.

The Import Service Centre shall:

1. verify that the Phytosanitary Certificate, including the additional declaration, conforms to the requirements specified under Section 2.1. Import Requirements of this directive.

Canadian Food Inspection Agency (CFIA) inspectors shall:

1. examine shipments at the rate specified for freedom from pests;

2. inspect according to the general instructions in the Plant Protection Import Inspection Manual for fresh fruit, Section 4.02.04;

3. if any pests are found, take specimens, place the shipment under Notice of Quarantine, and submit specimens for identification, according to the instructions in the Plant Protection Import Inspection Manual, Sections 4.02.04 and 4.11.

2.3 Non-Compliance

Shipments found infested with suspect regulated pests will be held under Notice of Quarantine pending laboratory identification. Shipments may be refused entry, ordered removed from Canada or disposed of if they do not meet requirements or if they are found to be infested with Oriental fruit moth or any other regulated pests. If determined feasible by the inspector, such shipments may be rerouted to other destinations, or diverted to approved processing facilities, or fumigated provided such a course of action does not cause unwarranted pest risk.

If Oriental fruit moth is discovered during inspection in Canada, future shipments of the lot found to be infested will be disqualified for entry into Canada for the remainder of the shipping season. A suspension of importation will also apply to shipments of all other lots from the grower and from the packing house implicated in the pest interception. This suspension will be in effect until an investigation into the systems approach failure is conducted and corrections to the program have been made to prevent future failures. CFIA will suspend the Systems Approach based Oriental Fruit Moth Certification Program if multiple shipments are rejected, demonstrating that the Program is not consistently eliminating Oriental fruit moth from shipments.

The importer of the shipment is responsible for any and all costs relating to disposal, removal, rerouting or diversion to processing facilities, including costs incurred by the CFIA to monitor the action taken.

3.0 Other Requirements

Other Canadian import requirements, which are in addition to those stated above, include:

1) chemical residue standards as established under the *Food and Drug Regulations*,
2) licensing and inspection requirements as established under the *Licensing and Arbitration Regulations* under the *Canada Agricultural Products Act*,

3) regulatory requirements as established under the *Fresh Fruit and Vegetable Regulations* under the *Canada Agricultural Products Act*, and
4) packaging and labelling requirements as established under the *Consumer Packaging and Labelling Act* and *Regulations*.

It is the importer's responsibility to know and satisfy these requirements.

Questions and requests for information on any requirements should be directed to local offices of CFIA.

4.0 Appendices

Appendix 1 - Evaluation and Inspection of Fresh fruit of peach, nectarine, plum and apricot, as well as genetic crosses of apricot for the presence of Oriental Fruit Moth

# Appendix 1

**Evaluation and Inspection of Fresh fruit of peach, nectarine, plum and apricot, as well as genetic crosses of apricot for the presence of Oriental Fruit Moth**

## Equipment

- hand lens with at least 10 x magnification

- sharp knife (preferably with a long thin blade and sharp point)

## Lighting

The light intensity at the surface of the fruit shall not be less than 540 lux / 50 foot candles.

## Inspection Procedure:

Fruit surface

Under optimal lighting conditions, check the fruit surface using the hand lens and knife to investigate punctures, holes, depressions, blemishes, specks or frass. Oriental Fruit Moth interceptions have been found randomly on the fruit surface (ie. not just in the stem cavity of the fruit) therefore the entire surface must be examined in detail.

The smallest holes may be less than 1 mm in diameter which is a little larger than the lenticels in the fruit skin. The holes are often highlighted by discolourations in the skin which are caused by halos of dead skin cells. The knife can be used to cut thin slices of tissue below a surface imperfection to detect signs of larval infestation (ie. tunnels or frass). In some cases larval tunnels are easily seen because of discoloured brown fruit tissue, but sometimes the tunnel is not brown and close inspection with the lens will be necessary to see that a larva has actually bored into the fruit.

Fresh feeding injury should be cause for closer examination of the entire shipment.

If the injury is fresh but there are no larvae present, more intensive examination of the rest of the shipment should be carried out.

Stem cavity

This cavity is a protected area and it is a favourable spot for shelter and feeding used by some insects. Minute amounts of webbing and frass should be examined closely with the hand lens for concealed larvae. The tip of the knife can be used to gently lift or probe webbing under which larvae can hide, but extreme care must be taken not to injure the insects.

Detection of early instars:

Early instars can be very difficult to find because of their small size and their lack of body pigment which allows them to match the internal colour of the fruit and escape detection. However because their head capsule is pigmented, one may detect them by this colour anomaly or by their movement. Frass is also a good indication that larvae are present but due to its small size, very careful examination of the fruit is necessary. Early instar frass is often the same size and texture as flour and thus requires a hand lens for detection.

Note: Lighting is probably the most important aid in helping to detect early instars.