

## **Introduction**

The presence of *Otiorhynchus corruptor* in several shipments of grape from Italy led to the need to fumigate this commodity with methyl bromide before it may be shipped into Canada. The use of methyl bromide for fumigation treatment of table grapes was abolished from 18 March 2010, pursuant to Decision 2008/753/EC. Furthermore, other quarantine pests, such as *Lobesia botrana* and *Eupoecilia ambiguella*, are also present in Italy and pose a phytosanitary risk.

A systems approach has been shown to be an effective alternative means of mitigating the risk of these pests being introduced into Canada on table grape. The National Plant Protection Organization developed a systems approach program involving field controls and packing house inspections. Only the Italian growers registered in an official list are eligible to participate in this Program. Italian grape shipments certified under this Program will not require fumigation with methyl bromide to enter Canada.

## **Definitions, Abbreviations and Acronyms**

Ministry of Agricultural, Food and Forestry Policies (MiPAAF)

Central Phytosanitary Service

Regional Phytosanitary Service (RPS)

National Plant Protection Organization (NPPO: Central Phytosanitary Service + Regional Phytosanitary Services)

Council for Research in Agriculture and Economic Analysis (CREA)

A grower lot is defined as the fruit produced from a same geographic location under the same phytosanitary management system.

## **Regulated pests**

*Otiorhynchus corruptor*, *Lobesia botrana*, *Eupoecilia ambiguella*, *O. ligustici*, *Argyrotenia ljugiana*, *Elsinoe ampelina*, *Monilinia fructigena*, *Phomopsis viticola*, *Coniella diplodiella* and *Helix aspersa*.

## **Regulated Commodities**

Table grapes from Italy is eligible for shipment to Canada under a Systems Approach Program. Bulk grapes exported for processing/crushing/wine making in Canada are not part of this program and they must be still fumigated prior to entering Canada.

## **Regulated Areas**

Growers from Italy registered in an official list are eligible for participation in the Systems Approach Program.

## **Specific Requirements**

### **Import Requirements**

To import table grapes from Italian authorized growers, who are listed in an official list, into Canada, the following is required:

## **Pre-shipment conditions:**

### **Approval of Growers**

The fruit must originate from a grower approved by the National Plant Protection Organization to participate in this Program (Annex 2).

### **Pest Monitoring and Controls**

All fruit intended for shipment to Canada under this Program must be grown in an orchard which meets the requirements for pest monitoring and controls as outlined by the National Plant Protection Organization (Annex 3). Please, note that the Annex 3 consists of the Integrated Pest Management Guidelines that are already adopted in Italy, and the requirements intended to avoid the presence of pests other than those adopted in the Integrated Pest Management Guidelines, in shipments to Canada.

The monitoring program used by participating growers must be specific for the regulated pests 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 Canada is free from all stages of regulated pests.

All aspects of the pest monitoring and control program must be audited throughout the growing season by the NPPO.

Upon request, detailed information relating to pest monitoring and controls and information specific to each participant grower utilizing the systems approach must be provided to the Plant Health and Biosecurity Directorate of the CFIA.

### **Fruit Sampling and Examination**

Fruit on the packing line must be inspected for internal feeders, specifically for *Lobesia botrana* and *Eupoecilia ambiguella*, by packing house employees or by external trained technicians, with well documented expertise in the area of integrated pest management and quality control trained by officials authorized by the NPPO (Annex 4). Fruit examination techniques must incorporate the inspection conditions and procedures described in Annex 1. The fruit examined must be representative of the entire grower lot. If a pest is detected, shipments from the infested lot will be disqualified for entry into Canada for the remainder of the shipping season.

### **National Plant Protection Organization Audit Inspections**

A minimum of 2% of the boxes shall be inspected for pest presence by the phytosanitary inspectors from the National Plant Protection Organization during certification. This certification must be of the finished product that is ready for shipping. If a pest is detected, shipments from the infested lot will be disqualified for entry into Canada until the origin of the problem has been identified and addressed.

### **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.

## **Packing House Approval**

The packing house must be approved for handling fruit for export to Canada (Annex 5). The facility must be clean and maintained free of quarantine pests and infested fruit. The packing line used for fruit destined to Canada 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 this Program) with the fruit destined to Canada.

## **Safeguarding**

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

## **Records**

Checks for pest presence and signs of pest presence must be included at each of the already existing control points (at harvest, upon receipt of the lot at the packing house, during processing of the grapes, and at the post-processing quality control). Growers and packing houses must keep records of these activities for a minimum of two years, as requested by the National Plant Protection Organization to demonstrate full compliance to program requirements.

## **Phytosanitary Certificate**

A 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 Canada. The following additional declaration must appear on the certificate: "The fruit in this shipment was produced under the Systems Approach Program approved by CFIA."

## **Inspection Requirements**

The CFIA authorizes the import of Italian grapes under a trial period during which 100% of the shipments will be inspected into Canada to verify compliance. When instances of non-compliance occur, the CFIA will inform timely the Italian NPPO in order to investigate to determine the possible cause with a view to avoid recurrence.

## **Non-Compliance**

If a pest 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.

## **ANNEX 1**

### **Measures to be implemented under the Systems Approach developed in order to export table grapes from Italy to Canada according to the ISPM 14**

#### **Pre-planting**

Production sites (vineyards) and facilities (packing warehouses) must be registered by the Italian NPPO before each growing season. A list of approved production sites and facilities must be maintained by the Italian NPPO. If necessary, the Central Phytosanitary Service at the MIPAAF shall send an updated list once a year, in July, to take into account of new participants or changes in the name of the company, address and so on.

Production sites and facilities will be approved and registered just if they comply with the specific criteria that the Italian NPPO has developed:

- growers and packing warehouses shall submit an application to the relevant Regional Phytosanitary Service in order to take part to this Program;
- growers shall adopt Integrated Pest Management National Guidelines for table grape;
- growers shall use just phytosanitary products authorized on table grapes by Italian law. They can use all the active substances envisaged in organic agriculture also, provided that they are authorized for table grapes;
- packing warehouses shall have premises, facilities and equipment able to ensure the processing of the commodity in an enclosed structure and its traceability. A traceability system must be in place, as to allow tracking of a lot from any stage between the field up to and including the carton marketed to Canadian consumers;
- packing warehouses shall indicate a contact person as responsible manager, who is technically qualified and duly authorized by RPS. He will inform the relevant Regional Phytosanitary Service about the possible finding of any regulated pest in order to evaluate if the relevant lot is eligible for shipping to Canada;
- packing warehouses shall guarantee the traceability, safety and quality of the products through an appropriate certification system;
- every year by the end of April, packing warehouses shall notify in writing the relevant Regional Phytosanitary Service the list of growers (vineyards) to be authorized (Annex 2);
- growers and packing warehouses shall ensure that adequate training is provided to staff involved with harvest and processing of the grapes by the relevant technicians of their Cooperative or Consortium, in order to identify the presence of a pest or signs of damage and inform the reference responsible manager (Annex 4).

The presence of a regulated pest in vineyards, if authorized treatments are not available or effective, determines the "non-compliance" of the grower lot. The production site, from which the non-compliant lot comes from, will be excluded from the export program for the remainder of the shipping season.

In case of interception of a consignment by CFIA due to the presence of a regulated pest, the Italian NPPO suspends the relevant growers and packing warehouses, until investigation will be concluded and the reason of non-compliance will be identified and corrective actions adopted.

The Italian NPPO evaluates, case by case, depending on the outcome of the surveys and monitoring activities, the opportunity to re-instate the non-compliant growers and packing warehouses and informs adequately CFIA.

### **Pre-harvest**

The growers participating at this Program shall adopt the Integrated Pest Management National Guidelines for table grape. These Guidelines define the criteria for intervention, the agronomic solutions and strategies for crop protection and weed control, with a view to get a lower impact on people and the environment, and a sustainable production. They are drawn up every year by a specific Committee (IPM Committee) and published on the website of the MiPAAF. This Committee consists of regional experts, 2 representatives of the MiPAAF and 3 scientific experts from Italian Universities and CREA and meets at the headquarters of the MiPAAF. These Guidelines provide for specific thresholds to intervene against the key pests affecting table grapes in Italy, included the regulated pests under this document (see the relevant sheets in attachment). To detect *O. corruptor*, that is rare in Italian vineyards, specific traps can be used as white batting wrapped around the trunk.

Although the *Eupoecilia ambiguella* is uncommon in the vineyards of Southern Italy, in order to ensure control this insect, the monitoring of the insect will be carried out by some traps with the specific pheromone will be placed in each signalled and traced vineyard. Anyway, the phytosanitary treatments carried out against the European grapevine moth are also effective against this parasite.

The authorized growers must fill in a register with reference to the monitoring and cultivation activities carried out daily in the vineyards intended for export to Canada. This register has been endorsed by the RPS. Particularly, should be recorded data on:

- pest monitoring activities (by trap placement, visual inspections etc.) (Annex 6)
- pest control (chemical treatments, mating disruption, biological control agents etc.)

At this regard, please, note that Italian growers must keep a register, called “quaderno di campagna”, for these purposes, according to the law in force in Italy.

### **Harvest**

Grapes are grown under plastic netting in order to maximize heat and extend the growing season, and protect them from hail and frost. They are harvested in general until late December. At this stage, damaged or infested products will be removed on site by staff involved with harvest.

The Annex 7 (Product Control) represents a recording sheet guide for the specific internal controls that the Packing house must carry out on the product along the chain, from pre-harvest to shipping. The sheet card can be used as such or may be integrated into the existing quality control modules already adopted in the Packing house.

The key pests to be monitored are *O. corruptor*, *L. botrana* and *E. ambiguella* following the scheme reported in Annex 6.

Records of this check must be maintained at the production site for a minimum of 2 years.

Grapes are sent to a packing warehouse for processing and packing. Packing the commodity directly in the field is not allowed.

## **Post-harvest treatment and handling**

Grapes arrive at the packing warehouse into a receiving area in plastic bins where they are inspected prior to be processed; the controls to be carried out at the acceptance stage should cover 3% of the packages and be registered on the appropriate form (Annex 7).

Records of this check must be maintained at the packing warehouse for a minimum of 2 years.

The bins can be processed immediately or pre-cooled, depending on the outside temperature.

During storage and packaging, a traceability system will be in place both at level of cold storage rooms, and at level of the processing lines, by labeling (the label makes reference to the field of origin). At these stages, checks for pest presence and symptoms of pest presence shall performed by staff involved with processing of the grapes; the checks to be carried out during the packaging should cover 5% of the packages and be registered on the appropriate form (Annex 7).

Records of these activities must be maintained at the packing warehouse for a minimum of 2 years.

After processing, a sample of the boxes is re-inspected for quality purposes, including destructive sample for pesticide residues, before being loaded onto pallets that are then sent to the cold storage. At the post-processing quality control, checks for pest presence and symptoms of pest presence shall performed by staff involved with processing of the grapes; the controls to be carried out at the acceptance stage should cover 3% of the packages and be registered on the appropriate form (Annex 7).

Records of this check must be maintained at the packing warehouse for a minimum of 2 years.

Phytosanitary inspectors verify compliance with the abovementioned procedures at least once during the growing season and commercial campaign through the following activities:

- ✓ inspection in the vineyards interested in joining the Program,
- ✓ checking of recordings,
- ✓ checking of packaging procedures and compliance with traceability requirements of products on the labels.

Prior to shipping, Phytosanitary checks must be carried out on consignments by Phytosanitary inspectors in order to issue the phytosanitary certificate. A minimum of 2% of the boxes shall be inspected for pest presence by Phytosanitary inspectors during certification of the finished product that is ready for shipping. After loading the consignment into a container, Phytosanitary inspectors shall seal the container and put the container number and the seal number on the phytosanitary certificate to guarantee a high level of shipment safety.

## **Storage and distribution**

After packing, for all the pallets must be guaranteed the rapid reduction of temperature.

Thanks to the forced air ventilation which characterizes the process, the rapid reduction allows a continuous and rapid heat extraction from the product - insuring its cooling also internally, in a rather short time.

In addition, the rapid reduction allows to maintain the right degree of humidity of the grapes, which is indispensable for the successive reheating.. In fact, the fast lowering of the temperature reduces drastically the risk of bacterial proliferation on the grapes.

The loading of the grapes must be carried out by guaranteeing the maintenance of the cold chain; also the areas for loading must be temperature controlled.

It's essential to set up automatic temperature recorders (at least 2) inside the shipping container, reporting the identification code of the recorders on the relevant transport document. The temperature recorders shall be set up in pallets centrally located in the container.

Before shipment, it is mandatory to check grapes and container's by recording the data on the product control module (Annex 7).