

# Draft of the “Quarantine Requirements for the Importation of Fresh Apples from Italy”

( In case of any discrepancy between the Chinese text and the English translation thereof, the Chinese text shall govern )

1. The importation of fresh apples (*Malus* spp.) from Italy shall be regulated pursuant to the “Quarantine Requirements for the Importation of Plants or Plant Products into Taiwan” along with the regulations in these quarantine requirement.
2. These quarantine requirements apply to the fresh fruits of apple (*Malus* spp.) produced in Italy.
3. The terms used in this quarantine requirements are defined as follows :
  - 3.1 GAP: Good Agricultural Practices.
  - 3.2 Supplying orchard: Production site on which apples are grown. Multiple varieties of apples could be grown at one site.
  - 3.3 Codling moth (*Cydia pomonella*): All stages of its life cycle, including egg, larvae, pupae, and adult.
  - 3.4 Mediterranean fruit fly (*Ceratitis capitata*): All stages of its life cycle, including egg, larvae, pupae, and adult.
  - 3.5 Lot: The set of unit of packages of apples to be exported to Taiwan, or the set of unit to be exported.
  - 3.6 Export season: Season of the export of apples produced in Italy, from 01 August to 31 July of the following year.
4. **REQUIREMENTS FOR SUPPLYING ORCHARDS**
  - 4.1 The supplying orchards must be GAP certified with traceable records. The Servizio Fitosanitario Nazionale (hereinafter referred to as the “SFN”) and Bureau of Animal and Plant Health Inspection and Quarantine (hereinafter referred to as “BAPHIQ”) may check the certification.
  - 4.2 The supplying orchards must implement one or a combination of the following measures to control codling moth:
    - 4.2.1 Installing sex pheromone traps: Traps must be installed in the fields of supplying orchards before apples reach their full blossom stage. For supplying orchards up to (including) 8 hectares, one trap per hectare is required. For supplying orchards exceeding this size, one additional trap must be installed for every additional 2 hectares. One inspection per week is required for the detection of the presence of codling moths. If the population density of codling moths reaches 3 or more per trap per week, effective control measures must be taken immediately.

Pheromone lures must be replaced regularly and complete records of monitoring and control must be kept for audit.

4.2.2 Mating disruption of codling moths: Using the mating disruption method, one codling moth specific sex pheromone trap with a high concentration of pheromone shall be installed in each orchard to monitor the population dynamics of codling moths. Complete records of monitoring and control must be kept for audit.

4.3 Supplying orchards shall meet the aforementioned requirements and be registered with the SFN. This registering action shall include the orchard's code and name, along with the identification of the region and county where the supplying orchard is located.

## 5. **REQUIREMENTS FOR PACKINGHOUSES**

5.1 Packinghouses shall be registered by the SFN.

5.2 Packinghouses shall be equipped with insect-proof equipment. Windows or air holes must be covered with a screen of fine meshes with diameter of 1.6 mm or less. Entrances or doors shall be equipped with air curtains (where air is blown downwards), rubber curtains, or other insect-proof equipments.

5.3 Packinghouses shall be equipped with fresh fruits sorting apparatuses and sufficient light to perform inspections.

5.4 Packinghouses shall have at least one qualified technician, who is able to identify apple fruits infested by codling moths, and is involved in the sorting and selection of apples for exporting to Taiwan. Complete training records of the technician or related information must be kept in the packinghouses.

5.5 Packinghouses shall provide adequate apparatuses and equipments to facilitate plant health inspectors to perform inspections, pest identification, and other required work.

5.6 Prior to the start of the packing process each year, appropriate pest control measures shall be taken to remove quarantine pests inside the packinghouse. If necessary, sterilization measures shall be performed to ensure sanitation in the packinghouse.

5.7 Packinghouses shall confirm that the apples to be exported to Taiwan which they have packed are from supplying orchards which meet the above-mentioned requirements. Apples not sourced from supplying orchards meet the above-mentioned requirements must not be packed and exported to Taiwan. If apples from supplying orchards which do not produce apples to be exported to Taiwan are stored inside the cold storage warehouse at the same time, a properly separated space shall be provided for storing apples to be exported to Taiwan.

- 5.8 If the boxes used for packaging have air holes, these air holes shall be sealed with a screen of fine meshes having diameters of 1.6 mm or less, or the transport shall be conducted in completely sealed conditions to prevent pest infestation.
- 5.9 Inspectors of the SFN shall inspect the packinghouses each year prior to the start of the packing process and confirm that they comply with these quarantine requirements.
- 5.10 Two months prior to the apple export season every year, the SFN shall provide BAPHIQ with the list and codes of legal packinghouses that meet the aforementioned requirements.

## 6. **PRE-SELECTION PROCEDURES**

- 6.1 Apples shall be sorted at least twice before packaging by the packinghouse staffs with plant pest control training, in order to remove all deformed or damaged fruits. The procedures are as follows:
- 6.1.1 First sampling (before the packing process)
- 6.1.1.1 For every lot of apples that comes from supplying orchards producing apples to be exported to Taiwan, 600 apple samples shall be taken for inspection before the packing process, and at least 50 apples among these must be cut for inspection.
- 6.1.1.2 Damaged apples which are suspected of being infested by the codling moth shall be preferably selected as samples for inspection. If there is no damaged apple present, the sample will then be selected randomly.
- 6.1.1.3 This sampling procedure will be conducted by the packinghouse staff and supervised by the SFN.
- 6.1.1.4 If two or more apples with codling moth damage or two or more dead codling moths are detected, the given lot will be rejected for exportation to Taiwan.
- 6.1.1.5 If any live codling moth is detected during this pre-inspection, the lot will be rejected from exportation and the supplying orchard which has produced this lot of apples will be withdrawn from the qualified list for the remainder of this export season for apple export to Taiwan.
- 6.1.1.6 All sampling and inspection records shall be properly maintained.
- 6.1.2 Second sampling (on the packing line)
- 6.1.2.1 Apples shall be taken from the packing line for sample inspection every hour.
- 6.1.2.2 Damaged apples which are suspected of being infested by the

- codling moth will be selected as fruits for inspection. These damaged apples shall all be cut and checked for live codling moth.
- 6.1.2.3 From each lot, at least 100 apples must be selected for inspection. Damaged apples which are suspected of being infected by the codling moth shall be preferably selected as samples for inspection. If there is no damaged apple present, the sample will then be selected randomly.
- 6.1.2.4 This procedure will be conducted by the packinghouse staff and supervised by the SFN.
- 6.1.2.5 If two or more apples with codling moth damage or two or more dead codling moths are detected, the given lot will be rejected for exportation to Taiwan.
- 6.1.2.6 If any live codling moth is detected during this pre-inspection, the lot will be rejected for exportation and the supplying orchard producing this lot of apples will be withdrawn from the qualified list for the remainder of this export season for apple export to Taiwan.
- 6.1.2.7 All sampling and inspection records shall be properly maintained.
- 6.2 Culled apples shall be placed in containers and discarded or destroyed every day. All security measures implemented by the packinghouses in the packing process shall be supervised by the SFN.
- 6.3 Measures shall be taken to prevent pest infestation while packaged apples are shipped from packinghouses to airplanes, vessels or containers.

## **7. EXPORT INSPECTION PROCEDURE**

- 7.1 Packaged apples must be inspected by the inspectors of the SFN.
- 7.2 The sampling standard is as follows:
- 7.2.1 At least 2% of total number of boxes of this lot of apples must be sampled.
- 7.2.2 All apples of each sampled box must be inspected.
- 7.2.3 For each sampled box, two apples must be taken and cut for inspection.
- 7.3 If two or more apples with codling moth damage or two or more dead codling moths are detected, the given lot will be rejected for exportation to Taiwan.
- 7.4 If any live codling moth or other quarantine pests are found during inspection, the given lot will be rejected for exportation to Taiwan, and the supplying orchard producing this lot of apples will be withdrawn from the qualified list to export to Taiwan for the remainder of this export season.
- 7.5 If any live codling moth is found during inspection, the packinghouse

which is responsible for packing this lot of apples must be temporarily suspended from exporting apples to Taiwan until the SFN has identified the cause of the event and has taken appropriate action to solve the problem.

The relevant investigation reports shall be provided to BAPHIQ by the SFN.

**8. IN-TRANSIT COLD TREATMENT DURING SEA TRANSPORTATION FOR THE MEDITERRANEAN FRUIT FLIES:**

8.1 After the inspector of the SFN conducts the export inspection, all the packed apples from Italy to Taiwan should be treated with in-transit cold treatment during sea transportation.

**8.2 Pre-cooling Treatment**

8.2.1 Fresh apples to be treated with in-transit cold treatment during sea transportation must undergo pre-cooling treatment. The pre-cooling temperature shall not be higher than the designated temperature for cold treatment (for relevant schedules, please see Annex).

8.2.2 The SFN shall provide a pre-cooling certificate, which shall specify the pre-cooling temperature. Alternatively, the pre-cooling temperature before cold treatment shall be stated on the phytosanitary certificate.

**8.3 Guidelines for Conducting Cold treatment**

8.3.1 For refrigerated containers used for in-transit cold treatment, temperature loggers should be calibrated by authorized agencies under the supervision of the SFN.

8.3.2 The temperature probes used to measure apple pulp temperature in refrigerated containers must be inserted and secured in the apple pulp.

8.3.3 If automatic temperature recorders are to be used in the refrigerated containers, then a minimum of three temperature recorders shall be placed in the middle row of the consignment, 50 cm to 100 cm from the container doors, with one recorder in the center at the top of the container, and one each on the left and right hand sides at the bottom of the container.

8.3.4 If the refrigerated containers are equipped with temperature probes and computerized temperature recording facilities, then three temperature probes shall be used. The probes shall be placed in the middle row of the consignment, 50 cm to 100 cm from the container doors, with one probe in the center at the top of the container, and one each of the left and right hand sides at the bottom of the container.

8.3.5 If temperature is not recorded in a continuous way, then the temperature in the containers shall be recorded at least once every hour.

8.3.6 Cold treatment is calculated from when the core temperature of the apple has reached the regulated temperature. Cold treatment may be commenced on-shore (prior to sea vessel departure) but shall not be completed on-shore in Italy.

8.4 Apples which are treated with cold temperature shall not be mixed with other fruits, vegetables or articles in the same container during transportation.

8.5 Refrigerated containers must be sealed with a container seal before the commencement of cold treatment.

## 9. EXPORT CERTIFICATION ACTIVITIES

9.1 The name or code number of the packinghouse must be marked on the packing boxes.

9.2 The export phytosanitary certificate issued by the SFN shall accompany the apples that passed the inspection for exporting to Taiwan.

9.3 The export phytosanitary certificate shall contain the following additional declaration: This lot of apples has been inspected and found free of *Ceratitis capitata*, *Cydia pomonella*, *Frankliniella occidentalis*, *Erwinia amylovora* and *Anarsia lineatella*.

9.4 If the relevant requirements established by BAPHIQ have been changed, the previous additional declaration shall be amended in accordance with the new requirements.

9.5 The export phytosanitary certificate issued by the SFN shall not only contain the contents of item 3 of this Article, but also contain the information of the supplying orchard (name or code), the packinghouse (name or code), the inspection date, the refrigerated container numbers and container seal numbers. In addition, the pre-cooling temperature should be declared on the phytosanitary certificate if there is no pre-cooling certificate.

9.6 Fresh apples, which have passed the export inspection and for which the phytosanitary certificate has been issued, shall be exported within 14 days. If not, a further inspection shall be conducted and a new export phytosanitary certificate issued by the SFN must be issued before export.

## 10. IMPORT INSPECTION

10.1 During shipping and upon arrival, the lock of the ship's compartment or seal of the container shall not be unlocked or broken before the BAPHIQ quarantine inspectors are on site.

10.2 BAPHIQ will verify that the phytosanitary certificate issued by the SFN is in compliance with the aforementioned quarantine requirements.

- 10.3 Procedures, methods, and sampling for import inspection shall follow the “Enforcement Rules on The Plant Protection and Quarantine Act” and other quarantine regulations.
- 10.4 The temperature of the refrigerated container shall be inspected and verified in accordance with the following stipulations:
- 10.4.1 The temperature records of the apple pulp temperatures in the refrigerated containers must be read on site during the inspection. If it is not possible to read the temperature records, the information of temperature records must be downloaded onto a suitable recording medium on site for reading at a later time or the actual temperature recorders taken away for down loading. The temperature record sheets and the inspection and quarantine record sheets are still required to be printed out at a later time for filing purposes.
- 10.4.2 If the duration of continuous cold treatment of the imported fresh apple fails to meet the requirement for duration upon arrival in Taiwan, the treatment must be continued after arrival at the port. Application for on-site inspection and quarantine shall not be submitted until the designated requirements for treatment are met. However, if the refrigerated containers have already been opened and have failed to meet the temperature requirements during BAPHIQ inspection, the lot of apples shall not continue to be disinfested or treated with low temperature.
- 10.4.3 The temperature record of the readings of various temperature recorders in the refrigerated containers must meet the treatment temperature requirements. If any temperature logger fails to comply with the requirements, the particular lot of apples would be deemed as failing to meet the inspection and quarantine assessment.
- 10.4.4 If two or more temperature loggers malfunction or cannot measure temperatures due to detached probes, that the lot of apples would be deemed as non-compliant to the temperature standards and failing to meet the import quarantine inspection.
- 10.5 If the lot of apples is not accompanied by the phytosanitary certificate or the pre-cooling certificate issued by the SFN, or the contents listed on the phytosanitary certificate do not meet these quarantine requirements and other related regulations, the correct certificate must be re-submitted, or the lot of apples shall be returned or destroyed.
- 10.6 If any live Mediterranean fruit fly is found during the inspection, the following measures will be applied:

- 10.6.1 The lot of apples will be rejected or destroyed.
  - 10.6.2 BAPHIQ will notify the SFN, provide the copy of the phytosanitary certificate, the picture of the Mediterranean fruit fly and the information of the packing box. The SFN must temporarily suspend the export of fresh apples from Italy.
  - 10.6.3 The export of fresh apples to Taiwan according to the cold treatment schedule shall not resume until the SFN has investigated and determined the cause for the presence of live Mediterranean fruit fly, has adopted effective remedial measures, and has obtained approval from BAPHIQ.
- 10.7 If any live codling moth is found during import inspection, the following measures will be applied:
- 10.7.1 The lot of apples will be rejected or destroyed.
  - 10.7.2 BAPHIQ will notify the SFN, and provide the copy of the phytosanitary certificate, the picture of codling moth and the information of the packing box.
  - 10.7.3 The sourcing orchard and the packinghouse will be withdrawn for export to Taiwan for the remainder of the export season. Any shipment from the sourcing packinghouse will remain eligible for export to Taiwan if the following conditions are met:
    - 10.7.3.1 Inspection date is prior to the suspension date.
    - 10.7.3.2 The lot of apples was loaded on board traveling to Taiwan within 3 days from the notification date.
  - 10.7.4 Additionally, the sampling level at packinghouse will be increased as follows:
    - 10.7.4.1 First sampling - before the packing process: 800 apples will be selected for inspection.
    - 10.7.4.2 At least 100 apples will be cut for inspection in the first sampling before the packing process.
- 10.8 If a second detection occurs, the following measures will be applied:
- 10.8.1 The lot of apples will be rejected or destroyed.
  - 10.8.2 BAPHIQ will notify the SFN, and provide a copy of the phytosanitary certificate, the picture of codling moth and the information of the packing box.
  - 10.8.3 In addition to provisions 10.7.3 and 10.7.4, the sampling level at the SFN inspection will be increased as follows:
    - 10.8.3.1 Inspection level will be 3% during the export season.
    - 10.8.3.2 For each sampled box, four apples will be cut for inspection.

10.9 If a third detection occurs, emergency actions will be applied according article 11.

10.10 If any other plant pest of quarantine significantly occurs in Italy, and it poses risks to the production safety of Taiwan's agriculture, the importation could be suspended by BAPHIQ at any time.

## **11. SYSTEM SUSPENSION AND REINSTATEMENT IN CASE OF CODLING MOTH DETECTION**

11.1 If a third detection of live codling moth occurs within the same export season, BAPHIQ will immediately notify the SFN of the complete suspension of the export of apples to Taiwan.

11.2 Consequently, the SFN shall immediately suspend all apple export activities to Taiwan after being notified. Shipments of apples packaged by other packinghouses where no live codling moths have been detected will face stricter inspection but remain eligible for export to Taiwan if the following conditions are met:

11.2.1 Inspection date is prior to the suspension date.

11.2.2 The lot of apples is loaded on board traveling to Taiwan within 14 days from the inspection date.

11.3 The SFN shall conduct investigations, prepare relevant reports and establish improvement measures regarding this matter, and provide the reports and improvement measures to BAPHIQ for review.

11.4 After the SFN sends the report to Taiwan, BAPHIQ will review the measures established for the export of apples and send inspector(s) to conduct an on-site verification of the apple export process. The cost associated with this activity will be borne by Italy.

11.5 The suspension of apple export may be revoked only after BAPHIQ finalizes the review of the investigation report and on-site verification of the improvement measures of the system is confirmed.

## **12. SPECIAL REQUIREMENTS**

12.1 Two months prior to the apple export season every year, the SFN shall officially invite BAPHIQ to dispatch inspector(s) to Italy to perform the on-site inspection and verification of the operation of the system of apple export to Taiwan jointly with the SFN along with the formal official invitation, the list of registered packinghouses shall be provided.

12.2 After the first two years of the commencement of trade of fresh apples from Italy to Taiwan, the SFN may undertake the inspection on behalf of BAPHIQ based on agreed criteria as follows:

- 12.2.1 All packinghouses for this coming export season were previously audited by BAPHIQ.
- 12.2.2 There are no detection records of live codling moth during export inspection or import inspection in the previous export season.
- 12.2.3 On-site audit is conducted by BAPHIQ in the previous year.
- 12.3 If the SFN undertakes the on-site audit on behalf of BAPHIQ, it shall provide the report to BAPHIQ within one month after the inspection.
- 12.4 All expenses related to inspection and verification shall be borne by Italy.

Annex: Benchmarks of cold treatment for Mediterranean fruit fly

°F	°C	Minimum period (days)
32 or below	0 or below	12
35 or below	1.7 or below	14
38 or below	3.3 or below	18