

**PROTOCOL BETWEEN
THE MINISTRY OF AGRICULTURE, FORESTRY
AND RURAL DEVELOPMENT OF THE PORTUGUESE
REPUBLIC AND THE GENERAL ADMINISTRATION OF
CUSTOMS OF THE PEOPLE'S REPUBLIC OF CHINA
REGARDING THE PHYTOSANITARY REQUIREMENTS
FOR EXPORT OF PORTUGUESE TABLE GRAPES TO
THE PEOPLE'S REPUBLIC OF CHINA**

In order to safely export Portuguese table grapes to the People's Republic of China, on the basis of a pest risk assessment, the Ministry of Agriculture, Forestry and Rural Development of Portugal (hereinafter called "MAFRD") and the General Administration of Customs of the People's Republic of China (hereinafter called the "GACC") , through friendly negotiation, reached the following understanding :

Article 1 - Characteristics

Portuguese table grapes (*Vitis vinifera* L.) (hereinafter called "grapes") exported to the People's Republic of China must comply with all applicable Chinese phytosanitary laws and regulations, health and safety standards, and with the requirements stated herein, and be free from any quarantine pests concerned to the People's Republic of China (as stated in Appendix 1).

This protocol pertains only to phytosanitary requirements. Other standards and requirements such as those regarding human health (e.g. the People's Republic of China's national food safety standards), may also apply to Portuguese grapes, but are outside the scope of this protocol.

Article 2 - Registration

All operators, orchards, including packing, refrigerating and cold-treatment facilities that wish to export grapes, must be registered by MAFRD, and approved by both GACC and MAFRD. Registration shall include name, address and post code, so that, whenever any product is detected as non-compliant with the requirements herein, it can be traced back to the establishment with certainty. The registration record must be forwarded by the MAFRD to the GACC for approval prior to the start of the export season.

Article 3 - Orchard Management

To ensure the traceability of production process, all orchards registered for export to the People's Republic of China must apply Good Agricultural Practices (GAP) or other International Accreditation Systems (Certificates). All orchards shall keep sanitary conditions, sort out rotten grapes, adopt an Integrated Pest Management (IPM) system which includes control measures, such as monitoring, chemical or biological pest controls and agricultural handling, etc. The orchard must remove fallen fruits timely.

All Portuguese orchards producing for export shall be monitored in regard to the pests in Appendix 1, and MAFRD shall supervise the monitoring plan and overall prediction and control measures.

All orchards must keep a record of pest monitoring and control, which must be delivered to the GACC when the GACC requests these records. The pest control record must indicate specific information,

including name and active ingredient of all chemical agents, date of application and agrochemical dosages applied during growth.

Phytosanitary quarantine activities in orchards producing for export must be performed under the guidance of technical personnel knowledgeable in phytosanitary aspects, such as pest control and monitoring, etc..

Article 4 - Control Measures for Special Pests

4.1 Ceratitis capitata

MAFRD will establish a monitoring system for *Ceratitis capitata*. Jackson traps baited with trimedlure (t-Butilo-2-metilo-4-clorociclohexanocarboxilato) and Mcphail traps baited with hydrolyzed protein must be used. The trap inspection must be carried out every 7 days. MAFRD must keep any record with all the activities related to the monitoring and supervision for fruit flies for audit purpose by GACC.

The grapes exported to the People's Republic of China shall be treated for kill Medfly. Fruits shipping by sea or by air must undergo a cold treatment under the supervision of a MAFRD official and according to the Operational Procedures for Cold Treatment at Origin for shipping by sea or by air (Appendix 2) or Operational Procedures for Cold Treatment in Transit for shipping by sea (Appendix 3). The cold treatment temperature requirement will be one of the followings:

Temperature range	Exposure time (days)
1.11°C or below	15
1.67°C or below	17
2.22°C or below	21

4.2 *Lobesia botrana* and *Spodoptera littoralis*

MAFRD personnel or authorized officers shall monitor *Lobesia botrana* and *Spodoptera littoralis*, and from grape flowering to harvest, they shall inspect visually and monitor in the registered orchards with the traps with the setting density being 1 per 1 hectares in the registered orchards. MAFRD or authorized personnel should check the trap every 7 days and change the trap once every 4 weeks to make sure the vineyard is free of *Lobesia botrana* and *Spodoptera littoralis*. If the above-mentioned pests are found by monitoring, the integrated management measures including the chemical or biological controls shall be taken to ensure that any of quarantine pests shall not be carried by grapes. If MAFRD finds the above-mentioned pests in the orchards during a second detection, the grapes from the corresponding orchards in this production season shall not be exported to the People's Republic of China.

4.3 *Planococcus ficus*, *Eulecanium tiliae*, *Ceroplastes rusci* and *Calepitrimerus vitis*

Orchards must be monitored weekly from flowering to harvest, basically to check if there are any suspicious symptoms of adult insects

on trunks, stems, branches and leaf segments.

If, during the monitoring, *Planococcus ficus*, *Eulecanium tiliae*, *Ceroplastes rusci* and *Calepitrimerus vitis* are monitored, the integrated management measures including the chemical or biological controls shall be taken to ensure that any of quarantine pests shall not be carried by grapes. If MAFRD finds the above-mentioned pests in the orchards during a second detection, the grapes from the corresponding orchards in this production season shall not be exported to the People's Republic of China.

4.4 *Daktulosphaira vitifoliae*

The field system control measures shall be taken to ensure no *Daktulosphaira vitifoliae* in the vineyard. SO₂ preservative films shall be used in the grape packaging boxes.

4.5 *Xylophilus ampelinus*, *Neofusicoccum mangiferae*, *Phaeomoniella aleophilum* and *Phaeomoniella chlamydospora*

Orchards must be monitored at least every 15 days from sprouting to harvest. The stems and leaves must be carefully inspected to check for any spots of disease, taking samples with any suspicious symptoms for laboratory test. MAFRD shall guarantee that the above pests are not carried by the grapes.

Whenever any other type of quarantine pests are detected, the MAFRD shall immediately advise the GACC and take the necessary measures, including chemical and biological controls. Integrated Pest Management measures for the foregoing pests must be authorized by the MAFRD that shall forward them to the GACC prior to beginning any exports. During the first export year, monitoring records from each orchard must be sent by the MAFRD to the GACC. From the second year on, forwarding only the result of the information shall be enough.

Article 5 – Packaging

A MAFRD official shall supervise grape processing, packaging, storage and transportation.

During the packaging process, grapes must be selected and sorted to prevent the inclusion of any insects, mites, rotten fruit, leaves, branches, roots or soil with the fresh grapes.

Packaging material must be clean, hygienic, unused and compliant with Chinese phytosanitary requirements. A mesh or perforated bags (1.6 mm maximum opening diameter) must be used in ventilated packing boxes to cover the aeration holes in each box or to cover the entire pallet.

Packaged grapes shall be immediately stored in a chamber only with grapes of the same phytosanitary condition, separate from others to prevent re-infestation by pests.

Each box must be labeled with the fruit name, production place (district, city or county), exporting country, orchard name or code, name or code of packing facility, etc. The following text must be marked in Chinese on each box and pallet:“输往中华人民共和国” (Exported to the People’s Republic of China). The same text must be marked on each box to be exported by airfreight, hence not palletized.

Containers in which grapes are loaded for export to the People’s Republic of China must have Phytosanitary Certificates and their cleanliness be checked at the time of loading. This activity must be recorded for MAFRD verification.

Article 6 - Pre-Export Inspection and Quarantine

During the first two years of establishment of this trade, the size of the sample taken from each batch of grapes exported to the People’s Republic of China for phytosanitary inspection by MAFRD officials shall be 2%. If no quarantine problems are detected during the 2-year period, the sample size shall be reduced to 1%. If any live organisms of quarantine pests of major concern to the People’s Republic of China were found, the entire batch may not be exported to this country. MAFRD officials shall find the cause and take preventive measures for betterment. At the same time, the detection record shall be kept and delivered at the request of the GACC.

Upon completing an inspection, the MAFRD official shall issue a Phytosanitary Certificate for the approved batch, clearly stating the

container number. The following must be stated: "THIS BATCH OF GRAPES COMPLIES WITH THE PROTOCOL OF PHYTOSANITARY REQUIREMENTS FOR EXPORT OF PORTUGUESE TABLE GRAPES TO THE PEOPLE'S REPUBLIC OF CHINA BETWEEN GENERAL ADMINISTRATION OF CUSTOMS OF THE PEOPLE'S REPUBLIC OF CHINA AND THE MINISTRY OF AGRICULTURE, FORESTRY AND RURAL DEVELOPMENT OF PORTUGAL, AND IS FREE FROM ANY QUARANTINE PESTS CONCERNED TO THE PEOPLE'S REPUBLIC OF CHINA."

The Phytosanitary Certificate of shipments having undergone phytosanitary treatment at origin must indicate the phytosanitary treatment method, temperature and duration, together with the facility name or code, and container number. The Phytosanitary Certificate of shipments having undergone cold treatment in transit must indicate the treatment temperature and duration, container and seal numbers, etc.

The MAFRD shall deliver copies of the Phytosanitary Certificate to the GACC for registration and reference prior to commencing any trade.

Article 7 - Entry Inspection and Quarantine

Entry ports for Portuguese grapes are all Chinese ports and airports authorized for fruit entry by the GACC.

China Customs under the GACC will check the relevant documents and identification upon grape arrival at the Chinese port of entry, and

shall complete the inspection and quarantine process. For items having undergone cold treatment at origin, the cold treatment results with attached MAFRD's sign-offs (when exporting to the People's Republic of China in the first year, both GACC's and MAFRD's sign-offs are required), as well as fruit temperature sensor record table, must also be delivered. The cold treatment report and fruit temperature sensor calibration record must be provided for those having undergone cold treatment in transit.

Shipments of grapes from unauthorized orchards shall not be allowed entry.

Any shipment that is determined as not having undergone cold treatment shall undergo a cold treatment at the destination port (such as in the container itself), or be returned or destroyed.

If *Lobesia botrana* is detected in a shipment, such shipment shall be returned or destroyed. At the same time, the GACC shall immediately inform the MAFRD and suspend grape import from related orchards or packing facilities, even stopping the program in some cases. The MAFRD shall investigate the cause and take measures to prevent recurrence of these situations. Based on the outcome of evaluating the improvement measures adopted by the MAFRD, the GACC shall decide whether or not to cancel the suspension.

If other pests requiring quarantine or any others not reported by Portugal are detected, the shipment shall be returned, destroyed or

quarantined. The MAFRD shall investigate the cause and take measures to prevent recurrence of these situations.

Article 8 - Compliance Inspection

Before starting the trade, the GACC will send at least two Chinese quarantine inspectors for a field inspection, with the assistance of MAFRD, to the table grape growing areas, registered orchards and packing houses in Portugal. The purpose of the visit is to ensure that the Portuguese grapes for export to the People's Republic of China comply with the requirements of this protocol. This field inspection mainly includes the monitoring and control of pests in the growing areas, packing and refrigerating facilities, cold treatment operation, etc. The quarantine inspectors will pre-inspect the first shipment of grapes exported by each operator to China in the first year, and to review the handling result before export. The pre-inspection should be conducted before initiation or during export season to the People's Republic of China. All operators involved should facilitate access to GACC officials to the places of production and/or packing houses.

In the process of review and pre-inspection, once any pests which is not included in this protocol and has quarantine risk to the People's Republic of China is found, both signatories must immediately revise the quarantine requirements and the protocol through consultation.

In the process of pre-inspection, once any pests in Appendix 1 is found, both signatories must take technical consultation, and amend the

protocol based consultation.

Any costs relating to the aforesaid supervision, including transportation and accommodation, shall be borne by the Portuguese party.

Article 9 - Retrospective Review

GACC will carry out further risk assessment based on the occurrence and interception of grape epidemic in Portugal, and negotiate with MAFRD to adjust the quarantine pests and relevant quarantine measures.

In order to guarantee the effective implementation of relevant risk management measures and operation requirements, the GACC shall conduct a retrospective review of the inspection and quarantine requirements for grapes upon five years of exports hereunder, including inspector visits to Portugal. The protocol shall then be amended as required based on the outcome of this inspection and with the agreement of both signatories.

Article 10 - Final Provisions

The present protocol shall come into effect on the date of its signature, for a period of two years and it shall be automatically and consecutively renewed for additional one-year terms.

This protocol shall cease to have effect when any of the signatories notifies the other of its intention to terminate it at least two months ahead of the intended expiry date.

Signed in Lisbon, on the 5th of December 2018, in two originals in the Portuguese, Chinese and English language, all texts having equal validity. In case of divergence of interpretation of this Protocol the English version shall prevail.

**For the Ministry of
Agriculture, Forestry and
Rural Development of the
Portuguese Republic**



**Luís Capoulas Santos
The Minister**

**For the General
Administration of Customs of the
People's Republic of China**



**Cai Run
Ambassador of the Peoples'
Republic of China to Portugal**

APPENDIX 1

PESTS OF QUARANTINE CONCERN TO THE PEOPLE'S REPUBLIC OF CHINA

1. *Ceratitis capitata*
2. *Lobesia botrana*
3. *Planococcus ficus*
4. *Daktulosphaira vitifoliae*
5. *Eulecanium tiliae*
6. *Ceroplastes rusci*
7. *Spodoptera littoralis* GV
8. *Calepitrimerus vitis*
9. *Xylophilus ampelinus*
10. *Neofusicoccum mangiferae*
11. *Phaeomoniella aleophilum*
12. *Phaeomoniella chlamydospora*

APPENDIX 2

OPERATIONAL PROCEDURES FOR COLD TREATMENT AT ORIGIN

1. Type of Cold-Treatment Chambers

1.1 Cold treatment at origin must be done in cold storage chambers authorized by the MAFRD and the GACC;

1.2 MAFRD officials are responsible for ensuring that the chambers used by exporters comply with the appropriate regulations and have cooling equipment capable of reaching or maintaining the required fruit temperature, according to the cold-treatment programme.

1.3 MAFRD officials shall keep records of chamber fitting for cold treatment of grapes exported to the People's Republic of China. These records include documents compliant with the following requirements:

- (a) Location of infrastructure and construction plan, including specific owner and handler contact information;
- (b) Size and capacity;
- (c) Type of wall, floor and ceiling insulation;
- (d) Brand, mode, model and capacity of the refrigerating compressor, evaporator and ventilation system, and
- (e) Documents containing technical specifications of the equipment temperature range, compound temperature recorders and

defrost circulation control

1.4 Prior to the start of each grape export season, the MAFRD shall deliver to the GACC a list with the name and address information of registered refrigerated chambers.

2. Type of Registers

2.1 The MAFRD officials must ensure that the combination of temperature sensors and temperature registers are as follows:

(a) Temperature sensors must be accurate at $\pm 0.15^{\circ}\text{C}$, in the range of -3.0 to $+3.0^{\circ}\text{C}$;

(b) The temperature registers must be capable of holding the required number of sensors;

(c) Registers must be capable of recording and storing data during treatment until checked by the MAFRD officials;

(d) Their capacity must allow for recording information from all temperature sensors at least every hour with the same precision as required from sensors, and

(e) Print capability is required to produce a hard copy identifying sensor, time and temperature, and specifying the register and container identification numbers.

3. Calibration of Temperature Sensors

3.1 Calibration shall be done with a mixture of crushed iced water and distilled water using a certified thermometer approved by MAFRD officials:

(a) Any sensor registering a temperature below -0.3 or above

0.3°C for a 0°C start must be replaced by another sensor that matches this criterion.

(b) The MAFRD officials shall check the fruit sensors calibration upon treatment completion using the method referred to in Section 3.1.

4. Temperature Sensor Placement under the Supervision of MAFRD Officials

4.1 Fruits placed on the top pallet must be pre-cooled and transferred to the cold treatment chamber under the supervision of MAFRD officials. They may also be precooled by exporters.

4.2 At least two sensors must be used to measure the temperature inside the chamber (separate at the air exit and return points). The following four sensors are the minimum number for fresh fruit temperature measurement, required by the treatment programme:

- (a) One sensor in the middle of the fruit at the center of the treatment chamber;
- (b) One on a corner of the top layer of fruit at the center of the temperature chamber;
- (c) One near the air return in the intermediate portion of loaded fruit, and
- (d) One near the air return at the top of the loaded fruit.

4.3 The deployment of the sensors and the connection to the temperature recorder shall be completed under the supervision and guidance of the MAFRD officials.

4.4 Registration may start at any time, but the start of treatment

shall only be measured from the moment at which all fruit sensors reach the specified treatment temperature.

4.5 When using the minimum number of sensors, if any one of them is out of the validity range determined by the treatment programme for four consecutive hours, the treatment shall be deemed invalid and must be repeated.

5. Verification of Treatment Results

When treatment records show parameter compliance with the requirements, the MAFRD officials may authorize ending the treatment. If sensors have been approved pursuant to "Section 3", it shall be deemed successfully completed.

Sensors must be calibrated prior to fruit removal from the chamber.

6. Confirmation of Treatment Results

6.1 Upon treatment completion, the sensors must be recalibrated as per "Section 3". All calibration records should be kept and provided at GACC's request.

6.2 Any recalibrated sensor reading after treatment higher than at placement requires reading register adjustment of the sensor (sensors). Should the adjusted register reading show that it does not comply with the treatment plan requirements, the results shall be considered invalid. The MAFRD officials and the exporter shall jointly decide whether a new treatment is to be applied.

6.3 Sufficient statistics must be attached to the printed temperature record as proof of cold treatment completion.

6.4 The MAFRD officials must approve the aforesaid record and statistics before ratifying the results as successful, and this approval must be submitted for review at the GACC's request.

6.5 For treatments not meet the requirements, the recorder may be reconnected for ongoing treatment if either of the following conditions is met:

(a) The MAFRD officials confirm that the treatment meets the requirements stated in "Section 6.3" or

(b) The time between completion and re-start is less than 24 hours.

In both cases, the data may continue to be recorded upon reconnecting the recorders.

7. Container Loading

7.1 The containers must be inspected by MAFRD officials to guarantee that they carry no pests, and their entrance covered to prevent insects from entering;

7.2 The fruits shall be loaded into the containers in insect-proof constructions, or the entrance to the chamber and container isolated with insect-proof materials.

8. Containers Seal

8.1 The MAFRD officials shall install a numbered seal on the container door, recording the seal number on the Phytosanitary Certificate.

8.2 The seal may only be removed by a Chinese Customs officer

at the port of arrival in the People's Republic of China.

9. Storage of Treated Fruit Not Immediately Loaded

9.1 If not immediately loaded, the treated fruit may be stored, but safe storage conditions need to be checked by MAFRD officials, i.e.:

(a) When the fruits are stored in the treatment chamber, the door must be closed;

(b) If transferred to other storage places, such transfer must be done in a trustworthy manner approved by the MAFRD, and no other fruit may be stored with it, and

(c) Subsequent loading of the fruits into a container must be under supervision of MAFRD officials, as specified in "Section 7".

10. Phytosanitary Certificate

10.1 The temperature and duration of the cold treatment at origin must be stated in the treatment section of the Phytosanitary Certificate, together with the name or code of the packaging facility, or treatment chamber.

10.2 The Phytosanitary Certificate and cold treatment report (including temperature records and statistics, with MAFRD official sign-offs, and records of temperature sensors calibration) must be delivered to the Chinese Customs upon arrival of the grapes to the People's Republic of China.

APPENDIX 3

OPERATIONAL PROCEDURES FOR COLD TREATMENT IN TRANSIT

1. Type of Container

The container must be a self-cooling (overall cooling) transit container and must be fitted with refrigerating equipment capable of attaining and maintaining the required temperature.

2. Type of Temperature Registers

The MAFRD officials must ensure that the proper combination of temperature sensors and temperature registers are as follows:

2.1 Sensor temperature must be accurate at $\pm 0.15^{\circ}\text{C}$, in the range of -3.0 to $+3.0^{\circ}\text{C}$.

2.2 The number of sensors placed must be sufficient.

2.3 Temperature registers must be capable of recording and storing data during treatment.

2.4 Temperature readings of all sensors must be recorded at least every hour meeting the same accuracy parameters as required for sensors.

2.5 Printed temperature records must match the time and temperature recorded for each sensor, and must show the registers and

container codes.

3. Calibration of Temperature Sensors

3.1 Calibration shall be done with a mixture of crushed iced water and distilled water using a certified thermometer approved by MAFRD officials.

3.2 Any sensor registering a temperature below -0.3 or above 0.3°C for a 0°C start must be replaced by another sensor that matches this criterion.

3.3 A "Fruit Temperature Sensor Calibration Record" must be issued for each container, signed and stamped by MAFRD officials, and the original document must be attached to the Phytosanitary Certificate at departure.

3.4 When the fruit batches arrive at the People's Republic of China port of entry, the Chinese Customs shall inspect the fruit temperature sensor calibration.

4. Temperature Sensor Placement

4.1 The packaged fruit shall be loaded into the transit container under the supervision of MAFRD officials, and arranged in a manner to ensure a uniform air flow underneath and around pallets and boxes.

4.2 At least three fruit temperature sensors and two air temperature sensors must be placed in each container at the following specific points:

(a) The fruit temperature sensor No. 1 must be placed in the center of the top layer of the first row of fruit within the container.

(b) The fruit temperature sensor No. 2 must be placed in the center 1.5 m (in 40-foot containers) or 1 m (in 20-foot containers) from the container door, at mid height.

(c) The fruit temperature sensor No. 3 must be placed in the fruits adjacent to the left wall, 1.5 m (in 40-foot containers) or 1 m (in 20-foot containers) from the container door, also at mid height.

(d) The two air temperature sensors must be placed at the container air exit and return points.

4.3 All sensors must be placed under the supervision and guidance of the MAFRD officials.

4.4 (Pre-cooled) fruit must be stored in refrigerating chambers until the temperature reaches 4°C or below prior to container loading.

5. Containers Seal

5.1 The MAFRD officials shall place a numbered seal on the freight container door.

5.2 The seal may only be removed by a People's Republic of China Customs officer at the port of arrival in the People's Republic of China.

6. Treatment Result Verification

If the treatment record shows parameters compliant with the requirements, GACC officials may authorize ending treatment, and if the sensors have been approved pursuant to "Section 3", the treatment shall be considered successful.

Sensors must be calibrated before the fruit is transferred out of the

treatment chamber.

7. Temperature Record and Confirmation

7.1 The cold treatment in transit is conducted during the container trip from Portugal to the first People's Republic of China port of arrival, or continuation after such arrival.

7.2 Registration may start at any time, but the start of treatment shall only be measured from the moment at which all fruit sensors reach the specified treatment temperature.

7.3 The shipping company shall download the cold-treatment computer records and deliver them to the People's Republic of China Customs at the People's Republic of China port of arrival.

7.4 Some sea journeys allow for the cold treatment to be completed before arriving in the People's Republic of China. Treatment records may be downloaded during the voyage and sent to the People's Republic of China Customs for verification.

7.5 The People's Republic of China Customs shall verify the records compliance with cold-treatment requirements, and determine treatment validity based on sensor calibration.

8. Phytosanitary Certificate

8.1 The cold-treatment temperature and start date must be stated in the treatment section of the Phytosanitary Certificate, followed by "In transit" indication.

8.2 The Phytosanitary Certificate, cold treatment report and fruit-temperature-sensor calibration record shall be delivered to the

People's Republic of China Customs upon arrival of the grapes to the
People's Republic of China.