

Plant Quarantine Import Requirements for Fresh Cherry from Chile

1. Plants and areas subject to the requirements

Fresh fruits of cherry (*Prunus avium* L.) commercially produced in areas free from fruit flies between region IV and XIV listed in Annex 1 (hereinafter referred to as "export areas").

2. Means of conveyance

Ship cargo or Air cargo

3. Registration of Export Orchards and Export Packinghouses

3.1. Orchards growing cherry for export to Korea (hereinafter referred to as "export orchards") and packinghouses including fruit storages for export to Korea (hereinafter referred to as "export packinghouses") shall be registered with and managed by the National Plant Protection Organization of Chile (hereinafter referred to as "SAG").

3.2. SAG shall provide the list of registered export orchards and export packinghouses to the National Plant Protection Organization of the Republic of Korea, Animal and Plant Quarantine Agency, (hereinafter referred to as "QIA") and the list of registered export orchards and export packinghouses shall be approved by QIA each year before commencement of export.

4. Pest control of export orchards

SAG shall oversee and supervise implementation of the pest control and management to prevent outbreaks of Korea's pests of concern (in Annex 2) in export orchards.

5. Trap surveillance and inspection of fresh fruits for *Cydia pomonella* in export orchards

5.1. SAG or SAG authorized organizations shall conduct trap surveillance and inspection of fresh fruits for *Cydia pomonella* in accordance with Annex 3.

5.2. SAG shall keep and supervise the records of trap surveillance and inspection of fresh fruits for *Cydia pomonella* and shall provide QIA with records of trap surveillance and inspection of fresh fruits for *Cydia pomonella* upon QIA's request.

6. Implementation of EGVM (European grapevine moth, *Lobesia botrana*) risk mitigation measures in export areas

6.1. SAG shall implement EGVM risk mitigation measures in export areas in accordance with Addendum.

6.2. This Addendum has been approved and agreed by two countries on January 12, 2015 and has been revised on December 5, 2015.

7. Control of *Stigmina carpophila* in export orchards

7.1. SAG shall manage and supervise export orchards to prevent outbreaks of *Stigmina carpophila*.

7.2. To maintain low prevalence or freedom of *Stigmina carpophila* in export orchards, at least 6 treatments with copper-based fungicides shall be made during growing period of cherries, to be distributed as follows:

7.2.1. At least 2 applications during leaf fall, at least 2 applications during winter dormancy and at least 2 applications from bud swelling to the start of blooming.

7.3. SAG shall keep and supervise the records of control for *Stigmina carpophila* and shall provide QIA with records control for *Stigmina carpophila* upon QIA's request.

8. Implementation of fruit flies risk mitigation measures in export areas

- 8.1. Pest surveillance of fruit flies and Inspection of fresh fruits for fruit fly detection in export areas and Emergency action upon fruit fly detection and Lifting of the emergency action shall be implemented by SAG and Trap survey monitoring of fruit flies in export areas shall be implemented by QIA in accordance with Annex 4.
- 8.2. If Guideline for fruit fly detection (Diptera: Tephritidae) is amended, SAG shall immediately notify QIA of the revision.

9. Management and supervision in export packinghouses

SAG shall check sanitary conditions of export packinghouses each year before commencement of export and shall manage and supervise to ensure that the following measures are in place.

- 9.1. Export packinghouses shall maintain cleanliness by applying regular disinfection.
- 9.2. In order to prevent pest recontamination, export packinghouses shall be equipped with nets (the diameter of the mesh shall be 1.6 mm or less) on windows and ventilation holes and shall be equipped with appropriate insect-proof facilities (such as insect-proof net, air curtain, rubber curtain, and automatic door) on doors. (In case export packinghouses are not equipped with appropriate insect-proof facilities, cherry fruits after sorting shall be taken measures to prevent pest recontamination such as immediately packed with poly vinyl.)
- 9.3. Cherry fruits from non-export orchards and other fresh fruits shall not be sorted together with cherry fruits from export orchards, and shall not be mixed or loaded together.
- 9.4. Contaminants such as leaves, twigs and soil shall be not included in export consignment.
- 9.5. Sorting shall be implement in accordance with general commercial procedures and cherry fruits for export shall be cleaned with water during sorting process in order to remove contaminants and pests attached to the surface of cherry fruits.

10. Packaging and labeling

- 10.1. Each carton or each pallet for export to Korea shall be labeled with registration name or registration code of export orchards and export packinghouses and have the marking, "for Korea".
- 10.2. In case of air cargo, each carton shall be made of materials that are safe from harmful pests [if cartons have any holes, the holes shall be netted (the diameter of the mesh shall be 1.6 mm or less)] or the whole pallets shall be wrapped with poly vinyl or nets (less than 1.6 mm×1.6 mm).
- 10.3. Information (registration name or number of the export orchard) to allow traceability to an export orchard shall be described in inner plastic packing inside a packing carton. In case of bulk packing with a plastic bag in a packing carton, description of information may not be required.

11. Export Inspection and Certification

- 11.1. SAG shall carry out export inspection on at least 2% of export consignment and shall confirm that the consignment is free from Korea's pests of concern. SAG shall especially confirm the consignment is free from *Cydia pomonella*, *Lobesia botrana*, *Stigmia carpophila* through visual target inspection.
- 11.2. In case *Cydia pomonella* or *Lobesia botrana* or *Stigmia carpophila* is found in export inspection of fresh cherry fruits, the fresh cherry fruits produced by the relevant orchards where *Cydia pomonella* or *Lobesia botrana* or *Stigmia carpophila* is found shall be suspended from exporting to Korea for the remainder of the season and SAG shall immediately inform the actions taken to QIA.
- 11.3. Each export packing carton or pallet of a consignment of fresh cherry fruits that passed export inspection shall be sealed using the approved methods (including tape, sticker or label) by SAG.

- 11.4. A consignment that passed export inspection shall be sealed by each pallet or each carton (in case of air cargo), or each container (in case of ship cargo) in order to verify the identity of the export consignment; and SAG shall be responsible for verification and supervision. In case of air cargo, all cartons or pallets shall be sealed with a tape and stamped with SAG mark. (if SAG marked tapes are used, stamps may be omitted.)
- 11.5. SAG shall issue a phytosanitary certificate including the following information in additional declaration for fresh fruits that are free from Korea's pests of concern (See Annex 2) and consignments that comply with requirements agreed by the two countries through export inspection before shipment and shall ensure and guarantee traceability and the identity of export consignment throughout the whole export process.
- 11.5.1. Registration number of export orchards and export packinghouses (The information may be described in attachment of a phytosanitary certificate)
- 11.5.2. Security seal number of container (in case of ship cargo) issued by SAG
- 11.5.3. “This consignment complies with the agreed import requirements and is free from *Cydia pomonella* and *Stigmina carpophila*.”
- 11.5.4. “This consignment has been grown in orchards free from EGVM and is free from this pest.”
- 11.6. A consignment that passed export inspection shall be separated from rejected consignments or consignments for export to other countries for management; and the storage shall be sealed or be equipped with insect proof facilities to prevent pest re-contamination.

12. Import Inspection

- 12.1. Upon arrival of consignments, QIA inspectors shall check the following points. If the consignment has the following problems, all or parts of the consignment shall be destroyed or returned.

12.1.1. A phytosanitary certificate and additional declaration and the identity of the consignment

12.1.2. Label requirements including "registration name or number of export orchards and export packinghouses" and the marking "For Korea" on each packing carton or each packing pallet

12.1.3. Compliance of packing requirements

12.1.4. Compliance of sealing requirements [each carton or each pallet (in case of air cargo), or container (in case of ship cargo)]

12.2. In case the consignment has no problem during the procedure to check the above-mentioned point in Article 12.1 at the point of entry in Korea, QIA inspectors shall conduct import inspection in accordance with Plant Protection Acts and Regulation of Korea.

12.2.1. In case a fruit fly or *Cydia pomonella* is found during import inspection, the consignment shall be destroyed or returned, and the importation of cherry fruit from Chile shall be suspended until the two countries reach an agreement after the cause is identified and remedial measures are implemented.

12.2.2. In case EGVM or *Stigmia carpophila* is found during import inspection, the consignment shall be fumigated or returned or destroyed. The orchards where fruits infested with EGVM are grown shall be suspended from exporting to Korea for the remainder of the season.

12.2.3. In case other live quarantine pests are found during import inspection, the consignment shall be treated. If no treatment is available, the consignment shall be destroyed or returned.

12.2.4. In case a new pest that has not been assessed is intercepted or in case Korea's concerned pests (Annex 2) is continuously intercepted, pest risk assessment shall

be conducted and necessary measures will be determined through consultation between the two countries.

12.3. Import inspection procedures and actions to be taken as a result of inspection which are not provided herewith can be determined by Commissioner of QIA.

13. On-site survey

13.1. SAG shall send QIA an official letter requesting for on-site survey by QIA inspectors during exportation of cherry fruits. QIA inspectors shall check trap surveillance and inspection of fresh cherry fruits for *Cydia pomonella* and post-harvest phytosanitary managements during on-site survey in Chile.

13.2. The on-site surveys for checking fruit fly surveillance and eradication program and EGVM national surveillance program shall be implemented in accordance with Annex 4 and Addendum, respectively.

13.3. All costs pertaining to the on-site surveys by the QIA inspector shall be paid by the Chilean side in accordance with Korea's Standards for Overseas Travel Expenses of Public Officers. The Chilean side shall provide all of conveniences such as arrangement of transportation and interpreter for the QIA inspector.

【Annex 1】

Export areas of Chilean fresh cherry for Korea

Región	Comuna		
Región de Coquimbo (IV)	- Andacollo - Canela - Combarbalá - Coquimbo - Illapel	- La Higuera - La Serena - Los Vilos - Monte Patria. - Ovalle	- Paiguano - Punitaqui - Río hurtado - Salamanca - Vicuña
Región de Valparaíso (V)	- Algarrobo - Cabildo - Calera - Calle Larga - Cartagena - Casablanca - Catemu - Concón - El Quisco - El Tabo - Hijuelas - Isla de Pascua - Juan Fernández	- La Cruz - La Ligua - Limache - Llay Llay - Los Andes - Nogales - Olmué - Panquehue - Papudo - Petorca - Puchuncaví - Putaendo - Quillota	- Quilpue - Quintero - Rinconada - San Antonio - San Esteban - San Felipe - Santa Maria - Santo Domingo - Valparaíso - Villa Alemana - Viña del Mar - Zapallar
Región del Libertador General Bernardo O'Higgins (VI)	- Chépica - Chimbarongo - Codegua - Coínco - Coltauco - Doñihue - Graneros - La Estrella - Litueche - Las Cabras - Lolol	- Machali - Malloa - Marchihue - Mostazal - Navidad - Nancagua - Olivar - Palmilla - Paredones - Peralillo - Peumo	- Pichidegua - Pichilemu - Placilla - Pumanque - Quinta de Tilcoco - Rancagua. - Rengo - Requínoa - San Vicente - San Fernando - Santa Cruz
Región del Maule (VII)	- Cauquenes - Chanco - Colbún - Constitución - Curepto - Curicó - Empedrado - Hualañé - Licantén - Linares	- Longaví - Maule - Molina - Parral - Pelarco - Pelluhue - Pencahue - Rauco - Retiro - Río Claro	- Romeral - Sagrada Familia - San Clemente - San Javier - San Rafael - Talca - Teno - Vichuquén - Villa Alegre - Yerbas Buenas

Región	Comuna		
Región del Bio Bio (VIII)	- Alto Bio Bio - Antuco - Arauco - Bulnes - Cabrero - Cañete - Chillán - Chillán Viejo - Chiguayante - Cobquecura - Coelemu - Coihueco - Concepción - Contulmo - Coronel - Curanilahue - El Carmen - Florida	- Hualqui - Hualpén - Laja - Lebu - Los Álamos - Los Ángeles - Lota - Mulchén - Nacimiento - Negrete - Ninhue - Ñiquén - Pemuco - Penco - Pinto - Portezuelo - Quilaco - Quilleco	- Quillón - Quirihue - Ránquil - San Carlos - San Fabián - San Ignacio - San Nicolás - San Pedro de la Paz - San Rosendo - Santa Bárbara - Santa Juana - Talcahuano - Tomé - Tirua - Treguaco - Tucapel - Yumbel - Yungay
Región de la Araucanía (IX)	- Angol - Carahue - Cholchol - Collipulli - Cunco - Curacautín - Curarrehue - Ercilla - Freire - Galvarino - Gorbea	- Lautaro - Loncoche - Lonquimay - Los Sauces - Lumaco - Melipeuco - Nueva Imperial - Padre las casas - Perquenco - Pitrufoquén - Pucón	- Purén - Renaico - Saavedra - Temuco - Teodoro Schmidt - Toltén - Traiguén - Vilcún - Villarica - Victoria
Región de Los Ríos (XIV)	- Corral - Frutroneo - Lanco - La Unión	- Lago Ranco - Los Lagos - Máfil - Mariquina	- Paillaco - Panguipulli - Río Bueno - Valdivia
Región de Los Lagos (X)	- Ancud - Castro - Chonchi - Curaco de Vélez - Dalcahue - Puqueldón - Queilén - Quellón - Quemchi - Quinchao	- Calbuco - Cochamó - Fresa - Frutillar - Llanquihue - Los Muermos - Maullín - Puerto Montt - Puerto Varas - Osorno	- Puerto Octay - Purranque - Puyehue - Río Negro - San Juan de la Costa - San Pablo - Chaitén - Futaleufú - Hualaihué - Palena

Región	Comuna		
Aysén Region of General Carlos Ibáñez del Campo (XI)	- Aysén - Cisnes - Guaitecas - Coihaique	- Río Lago Verde - Chile Chico - Río Ibáñez	- Cochrane - OR´Higgins - Tortel
Región Metropolitana de Santiago (XIII)	- Alhué - Buin - Calera de Tango - Colina - Conchalí - Curacaví - El Bosque - El Monte - Estación Central - Huechuraba - Independencia - Isla de Maipo - La Cisterna - La Florida - La Granja	- La Pintana - La Reina - Las Condes - Lo Barnechea - Lo Espejo - Lampa - María Pinto - Melipilla - Ñuñoa - Padre Hurtado - Paine - Pedro Aguirre Cerdea - Peñaflor - Peñalolén - Pirque - Providencia	- Pudahuel - Puente Alto - Quilicura - Quinta Normal - Recoleta - Renca - San Bernardo - San Joaquín - San José de Maipo - San Miguel - San Pedro - San Ramón - Talagante - Tiltill - Vitacura

【Annex 2】

Korea's pests of concern associated with Chilean fresh cherry

Pathogen

Stigmina carpophila (= *Thyrostroma carpophilum*) (*)

Prune dwarf virus

Pests

Fruit flies including *Ceratitis capitata*

Cydia pomonella (*)

Lobesia botrana (*)

Leptoglossus chilensis

Epidiaspis leperii

Pseudococcus viburni

Naupactus xanthographus

Proeulia auraria

Proeulia chrysopteris

*** The 3 pests require specific risk mitigation measures.**

【Annex 3】

Trap surveillance and Inspection of fresh fruits for *Cydia pomonella* in export orchards

1. Trap Surveillance for *Cydia pomonella* in export orchards

- 1.1. All export orchards are required to have a monitoring system based on delta traps with (E,E)-dodeca-8,10-1-OL (Pherocon CM) lure to determine the population of *Cydia pomonella*.
- 1.2. All of host plants of *Cydia pomonella* , excluding cherries, shall be removed from export orchards.
- 1.3. Trap surveillance for *Cydia pomonella* shall be conduct from the first week of September to end of harvest of fresh cherry fruits.
- 1.4. Two traps shall be placed in export orchards smaller than 1 ha and an extra trap shall be placed for every additional hectare in export orchards larger than 1.

Area (ha)	The number of traps
Smaller than 1	2
1 to 1.99	3
2 to 2.99	4
3 to 3.99	5
N to N.99	N + 2

- 1.4.1. In case an export orchard is divided into sectors or blocks, trap surveillance may be conducted as following considerations:

1.4.1.1. When the distance between sectors or blocks is more than 100 meter, regardless of their respective areas, they shall be considered separate units, hence trap numbers shall be determined according to the area of each block or sector.

1.4.1.2. When the distance between sectors or blocks is less than or equal to 100 meter, they shall be considered a single unit, the number of traps shall be determined on the basis of their aggregate areas.

1.5. Traps shall be checked every week and the pheromone lure for *Cydia pomonella* shall be replaced every 30 days.

1.6. In case the average number of captures of *Cydia pomonella* from all its traps in an export orchard exceeds 5 moths per a week, the export orchard (a unit in case an export orchard is divided into blocks or sectors) shall be suspended from exporting to Korea for the rest of the season. SAG shall provide QIA with the name and registration number of the export orchards which exceed 5 moths per a week.

1.6.1. The average number of captures = the number of all captures in an export orchard
per week / the number of traps in an export
orchard

1.7. SAG shall oversee and supervise monitoring system of *Cydia pomonella* and shall keep the record of monitoring per an export orchard and shall provide QIA with the record of monitoring upon QIA's request.

2. Inspection of fresh cherry fruits for *Cydia pomonella* in export orchards

2.1. Inspection of fresh cherry fruits for *Cydia pomonella* per an export orchard shall be conducted in order to determine presence of *Cydia pomonella*.

2.2. Cut open inspection of fresh cherry fruits for *Cydia pomonella* shall be conducted on a random 600 cherry fruits from each orchard before harvest, or shall be conducted on a

random 600 harvested cherries in a separated area inside the export packinghouses or located outside the export packinghouse.

2.3. In case any *Cydia pomonella* immature stages (egg, larva or pupa) are detected in cut open fruit inspection, the fresh cherry fruits produced by the relevant orchards (a unit in case an export orchard is divided into blocks or sectors) where *Cydia pomonella* is detected shall be suspended from exporting to Korea for the remainder of the season. SAG shall notify this to QIA.

2.4. SAG shall oversee and supervise the inspection of fresh cherry fruits for *Cydia pomonella* and shall keep the record of inspection of fresh cherry fruits and shall provide QIA with the record upon QIA's request.

【Annex 4】

Fruit flies Risk Mitigation Measures in Export areas

1. Pest surveillance of fruit flies in the export areas

SAG shall carry out pest surveillance in the export areas (Annex 1) as follows:

- 1.1. Pest surveillance shall be conducted according to the fruit fly trapping program and the fruit inspection in the export areas under Point 2 of the requirements.
- 1.2. The fruit fly trapping program means the surveys being conducted by the SAG using traps in order to detect the presence of any harmful fruit flies including Medfly in the export areas.
- 1.3. The fruit fly trapping program shall be conducted according to the “Guideline for fruit fly Detection (Diptera: Tephritidae)” of SAG, and also shall be carried out taking into consideration of the average monthly temperature in the survey areas.
- 1.4. Traps within the export areas shall be properly distributed according to the estimated entry risk of fruit fly from its established country or area as well as the possible existence of fruit fly host materials in the areas.

2. Fruit examination for fruit fly detection in the export areas

- 2.1. Fruit examination means the surveys being conducted by SAG in order to detect the presence of any harmful fruit flies including Medfly for the Medfly host materials in the export areas.
- 2.2. The examination shall be conducted according to the “Guideline for fruit fly detection (Diptera: Tephritidae)” of SAG.
- 2.3. The examination shall be carried out for the damaged, mis-shapen or fallen fruits.

3. Trap survey monitoring of fruit flies by QIA for the export areas

- 3.1. Plant quarantine inspector(s) of QIA, along with SAG inspector(s), shall visit the export areas during the fruit growing periods of every exporting season, and review

and monitor the effectiveness of the trapping program and the fruit examination in the export areas under Point 1 and 2 of the requirements, respectively.

3.2. Plant quarantine inspector(s) of QIA shall conduct trap survey together with SAG inspector(s) in the urban and populated areas with a high risk of fly fruit fly introduction in order to effectively carry out the above mentioned monitoring activities. Traps shall be placed in the following locations:

- Areas frequented by tourists from fruit fly infested areas.
 - Beach, sight-seeing resort
- Transportation terminal
 - Ports of entry and international airports
 - Bus and train terminals
 - Inspection areas at land borders
 - Parking, loading areas for trucks coming from other countries
- Fruits and vegetable markets

4. Emergency action on fruit fly detection

4.1. If any fruit fly is found, SAG shall take emergency actions including establishment of quarantine areas in accordance with emergency actions under “Guideline for fruit fly detection (Diptera: Tephritidae)” of SAG.

4.2. SAG shall declare an emergency including establishment of regulated areas in case of followings.

- Multiple captures
- Immature stages
- Inseminated female
- Repeated captures (including immature stage, regardless of sex), defined as any detection following a previous finding within 2.25km radius during the same generation.

4.3. If one fruit fly (including immature stage regardless of sex) is detected in recognized fruit fly free area or if regulated area is established under Point 4.2. in recognized fruit flies free areas, SAG shall notify this to QIA immediately, or within 72 hours only in case of unforeseen delaying factors (for example, weekends, holidays either in Chile or Korea and so forth) (hereinafter “immediately” means immediately or within 72 hours only in case of unforeseen delaying factors). The information provided by SAG shall include followings:

- Establishment date of regulated area
- All comunas' name (administrative district name) included in the regulated area
- Life stage of detected fruit flies (adult or immature stages)
- Number of flies found
- Sex of detected flies (male, female)
- Condition of detected flies (mature, immature, mated, unmated, fertile, etc.)
- Date of find
- Date of prior trap inspection
- Host
- Name and address of property
- Trap type and number
- Locality (District, Province, Region)
- Boundary areas (distance to the nearest production area, etc.)

4.4. Regulated areas shall be defined as 7.2km radius surrounding the capture. The export of fruits produced in regulated areas (including already harvested fruits from the area during storage) to Korea shall be suspended, and the fruits could be exported only under the cold treatment, supervised by QIA inspector(s). The cold treatment conditions are as Annex 5. After a regulated area is established, the phytosanitary certificate shall contain the following additional declaration:

“This is to further certify that (cherry fruits) covered by this certificate are free of fruit fly and have been grown in designated export areas for Korea excluding regulated area.”

4.5. If QIA does not recognize the effect of cold treatment in transit for the fruits produced from the comunas included in the regulated area shipped before the establishment date of regulated areas, the fruits could be imported after cold treatment or methyl bromide fumigation on arrival. The schedules for cold treatment and methyl bromide fumigation are as Annex 6.

4.6. SAG shall provide QIA with a weekly update of the activities until the eradication program is over and the area is considered free again. The SAG information shall include the following:

- All affected areas including the areas under eradication treatment
- Trap density increase within the affected areas
- Number and type of traps used within the affected areas
- Number of inspections/servicing of the traps in the affected areas
- Results of trapping activities
- Analysis of collected fruits
- Soil treatments, aerial and ground spraying activities
- Removal of the hosts

4.7. The eradication and control activities shall be continued for at least one fruit fly generation

4.8. SAG shall declare the area free of fruit fly since a time interval equal to 3 fruit fly generations passes after the last fruit fly capture, and shall immediately notify this to QIA.

5. Imposing and Lifting of an Emergency action by QIA according to the occurrence of fruit flies in Chile

5.1. When QIA is informed of the occurrence of fruit fly by SAG, QIA shall approve the regulated area that SAG designated. In case that there is a need to take an additional measures, QIA can designate regulated areas based on the administrative division (Region, Province, District), including neighboring administrative units according to the fruit fly occurrence status and the distance from fruit fly detection sites.

5.2. QIA can lift regulated areas in case that regulated areas are considered as fruit fly free areas according to a comprehensive analysis of SAG notification. Chilean fruits can be shipped after the designated date to lift the ban on importation by QIA.

【Annex 5】

Cold treatment and joint inspection between Korean and Chilean plant quarantine authorities in case of detection of fruit fly in export areas

1. Cold treatment

1) Conditions of cold treatment facilities

- ① Treatment facilities shall be equipped with the automatic temperature recorder to monitor both the fruit core temperature and the chamber temperature from outside from time to time.
- ② Each treatment facilities are able to maintain the fruit core temperature at $1^{\circ}\text{C}\pm 0.5^{\circ}\text{C}$ during the cold treatment for cherry fruits

2) Place of establishment of cold treatment facilities and Storage

- Cold treatment facilities shall be established inside the packinghouses and the treated fruits shall be stored in the place whose openings shall be screened with the net below 1.6mm in diameter in order to prevent infestation by fruit flies.

3) Designation of cold treatment facilities

- ① SAG will designate the cold treatment facilities for cherry fruits to be exported to Korea after confirming whether their conditions are in compliance with above 1) and 2).
- ② The Korean plant quarantine inspector (hereinafter referred to as QIA inspector) shall evaluate the cold treatment facilities before initiating the cold treatment jointly with the Chilean plant quarantine inspector (hereinafter referred to as SAG inspector).

4) Temperature and period of cold treatment

- The fruit produced in the export areas designated by SAG shall be treated to the fruit core temperature of $1^{\circ}\text{C}\pm 0.5^{\circ}\text{C}$ for 16 days in cherry.

5) Measurement of treatment temperature and period

- ① QIA inspector(s) shall confirm the accuracy of thermometer's sensors before starting the cold treatment.
- ② Total 4 pulp sensors (in the top, middle and bottom spots) for each lot shall be placed in fruit core in order to calibrate the fruit core temperature, and 2 air sensors (placed in the top and bottom of chamber) shall be placed in order to

measure the air temperature.

- ③ The period of cold treatment shall be calculated after all sensors of the cherry fruit core reach $1^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$, and the temperature shall be maintained for 16 days in cherry.
- 6) Record and maintenance of cold treatment temperature
- Cold treatment temperature shall be recorded with a chart speed of 50mm/hr. The temperature records in cold treatment shall be approved by the QIA inspector(s) before the joint inspection between QIA and SAG.

2. Joint inspection between QIA and SAG

1) Place of inspection

- ① In principle, cold treated fruits shall be inspected inside the packinghouses in which the cold treatment facilities are installed.
- ② The QIA inspector(s) could designate other inspection place, if necessary. Other inspection place shall be in accordance with following:
 - shall be adjacent to the cold treatment facilities.
 - the openings shall be screened with the net below 1.6 mm in diameter in order to prevent introduction of fruit flies into inspection place.
 - shall be appropriate size in order to be possible to load the passed fruits into containers.
- ③ In case that there is concern of re-infestation of the cold treated fruits by fruit flies during the transportation to other inspection place, they shall be wrapped with materials which could prevent the infestation by fruit flies.

2) Method of inspection

- ① Plot of inspection lot

Each inspection lot shall be made of the total of the cold treated fruits by each cold chamber at one time.
- ② Sampling for inspection

Both the SAG inspector(s) and the QIA inspector(s) shall sample 1% of each lot randomly and inspect them jointly.
- ③ Action measures on the result of joint inspection
 - If a fruit fly is detected during the inspection, the inspection and cold treatment shall be suspended until the reason is ascertained.
 - If the other quarantine pests except fruit flies are detected during the inspection,

the lot in question shall be treated with other treatment methods such as fumigation before shipped.

3) Certification

- ① The passed fruits by inspection shall be attached with the Phytosanitary Certificate (PC) issued by the plant quarantine authority of exporting country.
- ② The following additional declaration shall be cited on the PC:
“the cherry fruits in this shipment were treated by cold treatment method at the fruit core temperature of $1^{\circ}\text{C}\pm 0.5^{\circ}\text{C}$ for at least 16 days.”
- ③ The PC shall bear the additional remarks on its rear side by the QIA inspector(s) like following form after confirming that the cold treatment was completed, and the shipment is free from pests.

Date of cold treatment	
Date of inspection	
Name of inspector	

3. Loading and sealing

The passed fruits after the inspection shall be loaded into a container inside the inspection place, sealed by SAG, except for the cases that the opening of the fruits boxes are screened with the net of below 1.6 mm or microhole bags are used. The container loaded the fruits shipment to be exported to Korea shall be sealed by the SAG inspector(s) and the seal number described in the PC.

4. Import inspection

1) Confirmation at the entry point in Korea

The QIA inspector(s) shall confirm followings on the imported fruits shipment, and inspect them by sampling 1% of each lot randomly, and then select sample in order to confirm whether the consignment is infested by injurious pests or not in the laboratory.

- Additional declaration on the PC of the above Point 2. 3) ②.
- Confirmation by the QIA inspector(s) of the above Point 2. 3) ③.
- Seal number and sealing of a container, or the net of boxes and bags of the above Point 3.

- Packing status of the boxes.

2) Action measures on the result of confirmation

- ① In case that the consignments are not in compliance with the condition of the above Point 4. 1), QIA inspector(s) shall destroy or return to the country of origin. In case that the boxes are broken, they are selected and destroyed.
- ② If any fruit fly is detected during the inspection, the shipment in question shall be destroyed or returned to the country of origin, and the import of fruits shall be suspended until the reason is ascertained.
- ③ If other pests except fruit flies are found as a result of the inspection at the entry point of Korea, then the shipment shall be destroyed, returned to the country of origin or treated according to Korean Plant Protection Act.

[Annex 6]

Cold treatment and MB fumigation on arrival schedules for Chilean fresh cherry fruits in transit from regulated areas

1. Cold treatment

Item	Fruit core temperature	Minimum treatment period (days)	Maximum deviation
Cherry	1°C or under	16	0.5°C

2. MB Fumigation

Temperature (°C)	Dosage (g/m ³)	Minimum Concentration Reading (g/m ³) At:					
		0.5 hr	2 hrs	2.5 hrs	3 hrs	3.5 hrs	4 hrs
21.1 or above	32	26	22	22	-	21	-
18.3 - 21	32	26	22	22	-	-	19

[Addendum]

**PLANT QUARANTINE REQUIREMENTS FOR CHILEAN FRESH TABLE GRAPE,
KIWIFRUIT, BLUEBERRY AND CHERRY EXPORTS TO THE REPUBLIC OF
KOREA**

EGVM Risk Mitigation Measures

1. GENERAL

In order to reduce the risk of finding the quarantine pest European grapevine moth (EGVM, *Lobesia botrana*) in Chilean blueberry, grape, kiwifruit and cherry exports to the Korean market, the National Plant Protection Organization of Korea (Animal and Plant Quarantine Agency, QIA) and the Chilean Agriculture and Livestock Service (SAG) have jointly defined the measures contained herein to be applied as a complement to the existing protocols agreed between both countries for the aforesaid species.

Without limiting the foregoing, the SAG hereby states that blueberries, kiwifruit and cherries are only occasional hosts of this pest in Chile.

2. ORCHARD MANAGEMENT MEASURES

- 2.1 Every blueberry, table grape, kiwifruit or cherry orchard wishing to export to Korea must register with the SAG.
- 2.2 A list of registered orchards by species shall be forwarded to Korea every year before exports begin, specifying orchard name and allotted identification code for produce traceability.
- 2.3 The following phytosanitary surveillance activities must be performed in table grape, blueberry and cherry orchards:

2.3.1 At least one (1) EGVM trap shall be placed by the SAG in every orchard wishing to export to Korea, according to the instructions defined in the National Program for EGVM Control in Chile.

A 500 meter Pest Control Area shall be established around any detected EGVM outbreaks.

In the case of table grapes, an outbreak is defined as any of the following occurrences:

- Capturing two (2) or more EGVM adult specimens in a trap, or
- Detecting one (1) immature stage (egg, larva or pupa) in fruit

For blueberries and cherries, an outbreak consists in detecting one (1) immature stage (egg, larva or pupa) in fruit.

2.3.2. Orchards within the mandatory 500-m Control Area wishing to export to Korea must sample their fruit to verify the absence of any EGVM immature stages. An EGVM positive result of any sample analysis shall entail the suspension of the concerned orchard for the remaining of the season. This monitoring must be done by SAG authorized organizations before harvest begins in each orchard.

2.4 All kiwifruit orchards in places with high presence of EGVM shall undergo surveillance, pursuant to the National Program for EGVM Control.

2.4.1. In the event of any EGVM immature stages being detected in kiwifruit, the SAG shall implement a surveillance program like that of table grapes, blueberries and cherries.

For kiwifruit, an outbreak consists in detecting one (1) immature stage (egg, larva or pupa) in fruit.

2.4.2. The orchard where the fruit causing the outbreak was grown may not send any shipments to Korea for the rest of the season.

2.4.3. In the event of any EGVM immature stages being detected in kiwifruit, SAG shall notify this to QIA.

3. PACKINGHOUSE MANAGEMENT MEASURES AND OFFICIAL PHYTOSANITARY INSPECTION

- 3.1 Every blueberry, table grape, kiwifruit or cherry packinghouse wishing to export to Korea must register with the SAG.
- 3.2 A list of registered packinghouses shall be sent every year to Korea before harvests begin, specifying the name and allotted identification code of each participant for produce traceability.
- 3.3 Every box of fruit going to Korea must be marked with the code of the orchard where the fruit was grown (CSG) and the packinghouse code (CSP).
- 3.4 Official phytosanitary inspections shall be conducted by the SAG.
- 3.5 Only consignments having passed the SAG phytosanitary inspection as free from EGVM and other pests of quarantine importance to Korea, as per current protocols, may be exported to Korea.
- 3.6 Should any presence of EGVM be detected during an official phytosanitary inspection of blueberries, table grapes, kiwifruit or cherries, the orchard of the country of origin shall be suspended from exporting to Korea for the remaining part of the season, and QIA shall be informed of this situation.
- 3.7 To the extent possible, table grape consignments must contain fruit from a single grower.

4. PHYTOSANITARY CERTIFICATION

- 4.1 Table grape, blueberry and cherry Phytosanitary Certificates must include the following Additional Declaration: “This consignment has been grown in orchards free from EGVM and is free from this pest.”
- 4.2 The following Additional Declaration must be included in kiwifruit Phytosanitary Certificates: “This consignment is free from EGVM.”
- 4.3 An appendix shall be attached to all Phytosanitary Certificates, stating relevant orchard and packinghouse codes, respectively CSG and CSP.

5. IMPORT INSPECTION

- 5.1 Should any live EGVM specimens be detected during an import inspection at a Korean port of entry, the shipment shall be fumigated or returned or destroyed (See Attachment for fumigation treatment schedules). In case the above-mentioned Additional Declaration is missing on Phytosanitary certificate issued by SAG, the shipment shall be returned or destroyed.
- 5.2 The orchard where fruit with detected presence of EGVM was grown shall be suspended from exporting to Korea for the rest of the season.

6. IN TRANSIT FRUIT

- 6.1 If any shipments in transit contain produce from an orchard in the fruit of which EGVM presence was detected during either inspection, the import one at destination or the official SAG phytosanitary one at origin, the consignment shall be fumigated, returned or destroyed at the point of entry.

7. ON-SITE VISIT

- 7.1 Two visits to Chile shall be made by QIA officers from Korea to supervise the National EGVM Program during the export season, one before blueberry and cherry harvest begins and the other prior to the table grape and kiwifruit picking period.
- 7.2 The SAG shall send an invitation letter to the QIA in advance of each harvesting season, January to February for table grapes and kiwifruit, and August to October in the case of blueberries and cherries.
- 7.3 All costs arising from these visits shall be borne by the Chilean party.

8. OTHERS

- 8.1 SAG shall provide QIA with an updated version of the National Program for EGVM Control in Chile every year.
- 8.2 This Addendum may be reviewed and modified at any time through consultation between the NPPOs of the two countries.

<Attachment>

Fumigation Treatment Schedules for Cherry fruits

○ Pest: *Lobesia botrana* (European grapevine moth)

Treatment	Dosage (g/m ³)	Duration (hr)	Minimum Concentration Readings (g/m ³) At:		Temperature (°C)	Atmospheric pressure	Facility
			0.5 hr	3 hrs			
Methyl Bromide (CH ₃ Br)	64	3	55	45	4.4 or above	NAP*	Tarpaulin or chamber
	56		50	40	10 or above		

* NAP (Normal atmospheric pressure)