

Revision of Plant Quarantine Import Requirements for Fresh Fruits of Blueberry from Chile

June 23, 2017

1. Areas and plants subject to the requirement

Fresh fruits of blueberry (*Vaccinium corymbosum*, *V. ashei*) commercially produced in areas free from fruit fly between region III and XIV in Chile.

2. Means of conveyance

Ship cargo or air cargo

3. Designation of export areas

Chilean Plant Quarantine Authority (Servicio Agrícola y Ganadero) (hereinafter referred to as SAG) shall designate production areas of fresh blueberry fruits for export to Korea (hereinafter referred to as “export areas”), and then conduct “4. Monitoring in export areas” and “5. Inspection of fresh fruits in export areas”. The export areas of fresh fruits of blueberry to Korea are included in Annex 1.

4. Monitoring in the export areas

SAG shall carry out monitoring in the export areas designated in Point 3 (Annex 1) as follows:

4.1 Fruit fly monitoring

- 4.1.1 The monitoring of fruit fly shall be performed through trap survey and inspection of fresh fruits in export areas in accordance with Point 5.
- 4.1.2 The fruit fly trap survey refers to a survey conducted by SAG using a trap to detect the presence of harmful fruit flies such as Mediterranean fruit fly, etc. in export areas.
- 4.1.3 The fruit fly trap survey shall be carried out in accordance with SAG’s “Guidelines for fruit fly (Diptera: Tephritidae) Detection” and by considering the monthly mean temperature of the area.
- 4.1.4 Traps within the export areas shall be properly distributed according to the estimated introduction risk of fruit fly from its established country or areas as well as the possible existence of fruit fly host materials in the areas.

4.2 Monitoring of Tobacco Ringspot Virus (TRSV) and Tomato Ringspot Virus (ToRSV)

- 4.2.1 SAG shall conduct monitoring survey of blueberry fields against 2 virus species, TRSV and ToRSV, once a year during cultivation as follows.

- Monitoring period: before harvest

- Inspector: SAG staff or regional NPPO staff
- Monitoring areas: export orchards in export areas
- Survey scale: monitor over 10 % of acreage of each export orchard and samples shall be taken for a lab test if there are any symptoms of disease or unusual symptoms.
- The field survey method and lab test sample collection shall follow the SAG regulations.
- SAG shall inform the Animal and Plant Quarantine Agency (hereinafter referred to as “APQA”) of the list of export orchards (including names and codes of the orchards) before export season and keep the monitoring result of orchards to submit to APQA if necessary.

4.2.2 Samples collected from the field survey shall be tested for infection by SAG using DAS-ELISA and RT-PCR methods.

4.2.3 If the presence of TRSV or ToRSV is confirmed as a result of monitoring, SAG shall immediately inform this to APQA and the export of fruits produced in the affected orchards to Korea shall be suspended for that season.

5. Inspection of fresh fruits in export areas

5.1 Inspection of fresh fruits means the fruit analysis being conducted by SAG in order to detect the existence of any harmful fruit flies including Medfly for the fruit fly host materials in the export areas.

5.2 The inspection shall be conducted according to the “Guideline for fruit fly Detection (Diptera: Tephritidae)” of the SAG.

5.2.1 The fruit samples shall be dissected to determine the presence of fruit fly larvae.

5.2.2. All of the “worms” or larvae that are detected in the fruit must be kept in appropriate bottles (one for each sample) with distilled water.

5.2.3. These samples shall be officially analyzed and identified by the person in charge of the program in the SAG office.

5.3 The inspection shall be carried out for the damaged, mis-shapen or fallen fruits.

6. Monitoring by APQA for the export areas

6.1 Plant quarantine inspector(s) of APQA, 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 inspection in the export areas under Point 4 and 5 of the requirements, respectively.

6.2 Plant quarantine inspector(s) of APQA shall conduct trap survey together with SAG inspector(s) in the urban and populated areas with a high risk of 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 terminals and train stations
 - Inspection areas at land borders
 - Parking, loading areas for trucks coming from other countries
- Fruits and vegetable markets

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

7.1 SAG shall implement EGVM risk mitigation measures in export areas as Annex 1 in accordance with Addendum.

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

8. Export Inspection and certification

8.1 Inspector(s) of SAG shall inspect the produce for export and issue a phytosanitary certificate after confirming that the produce is free from pests of Korean concern as Annex 2.

8.2 If TRSV or ToRSV is found in export inspection of fresh fruits of blueberry, the fresh blueberry fruits produced by the relevant orchard where TRSV or ToRSV is found shall be suspended from exporting to Korea for the remaining period of the season and SAG shall immediately inform the actions taken to [APQA](#).

8.3 The phytosanitary certificate shall contain the following additional declaration:

8.3.1 “This is to further certify that this fruits produced in compliance with phytosanitary requirements for export of Chilean blueberry to Korea.”

In case that a regulated area is established by detection of a fruit fly in accordance with Point 11 of the requirements, above-mentioned additional declaration shall be revised as follows:

“The fresh fruits of blueberry are free from fruit fly and are produced from an area designated as export area for Korea excluding regulated areas in compliance with phytosanitary requirements for export to Korea.”

8.3.2 Registration number of orchards and packinghouses (The information may be described in attachment of a phytosanitary certificate.)

8.3.3 In case of ship cargo, container seal number

8.3.4 “This consignment has been grown in orchards free from EGVM and is free from this pest.”

8.4 In case that TRSV or ToRSV is found during import or export inspections, fruits produced in Comuna where these diseases are found shall be required to include a name of production area (Comuna), name of orchard and date of inspection on a phytosanitary certificate or accompany an additional document including these information.

9. Loading and Sealing

9.1 The produce that passed the inspection shall be exported in the state of being sealed by SAG inspector(s) after loading the produce, and container seal number shall be described by SAG inspector(s) on the phytosanitary certificate.

9.2 The packing and sealing for air cargo on pallets or set of boxes are as follows:

9.2.1 Individual boxes shall be made of materials to be safe against harmful pests [if boxes have any holes, the holes shall be netted (the diameter of the mesh shall be limited to 1.6 mm or less)] or the whole pallets shall be wrapped with plastic or nets (less than 1.6 mm x 1.6 mm).

9.2.2 After packing, all boxes or pallets shall be sealed with a tape and stamped with SAG mark (if SAG market tapes are used, stamp may be omitted.)

10. Import inspection

10.1 Korean inspector(s) shall inspect the imported consignment, after random sampling in accordance with Korean Plant Protection Act, and then examine closely the samples in order to confirm whether the consignment is infested with quarantine pests or not in the laboratory.

10.2 In case that the additional declaration of phytosanitary certificate is omitted or not conformed to the statement under Point 8.3 of the requirements, all the consignment shall be destroyed or returned to the country of origin.

10.3 In the case that the seal of the container has problem (broken seal) or the seal number is omitted on the phytosanitary certificate, the relevant consignment shall be destroyed or returned to the country of origin. In case of air cargo on pallets or set of boxes, if it is not properly sealed, if the net (or plastic) is broken or if it is partly netted or wrapped, the consignment shall be destroyed or returned to the country of origin on the box or pallet basis.

10.4 If a fruit fly is detected during the inspection, the consignment in question shall be destroyed or returned to the country of origin, and further importation of the blueberry fruit shall be suspended until the reasons are ascertained and corrected.

10.5 If the other pests except fruit fly are found as a result of the inspection at the port of entry in Korea, the consignment shall be treated, destroyed or returned to the country of origin according to the Korean Plant Protection Act.

10.6 If TRSV or ToRSV is found, the fresh blueberry fruits produced by the relevant orchard where TRSV or ToRSV is found shall be suspended from exporting to Korea for the remaining period of the season.

10.7 Should any pest which is not distributed in Korea is found, except attached pests of Korean concern as Annex 2, during the inspection, it may be added in the quarantine pest list (Pests of Korean concern) according to pest risk analysis.

11. Emergency measures upon fruit fly detection

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

11.2 SAG shall declare an emergency including establishment of regulated areas in case of following findings:

- 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.

11.3 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 11.2 in recognized fruit fly free areas, SAG shall immediately notify APQA of the detection, 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 the SAG shall include followings:

- Date of regulated area establishment
- All Comuna names (administrative name) included in the regulated area
- Life stage of detected fruit fly (adult or immature stages)
- Number of fruit flies found
- Sex of detected fruit flies (male, female)
- Condition of detected fruit flies (mature, immature, mated, unmated, fertile etc).
- Date of find
- Date of final trap inspection before find
- Host
- Property owner and Address of property
- Trap type and number
- Locality (district, province, Region)
- Boundary areas (distance to the nearest production area etc)

11.4 Regulated area shall be defined as 7.2km radius surrounding the capture. The export of fruits produced in regulated area (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 APQA inspector(s). The cold treatment conditions are as Annex 3. After regulated area is established, the phytosanitary certificate shall contain the following additional declaration under Point 8 of the requirements:

“The fresh fruits of blueberry are free from fruit fly and are produced from an area designated as export area for Korea excluding regulated areas in compliance with phytosanitary requirements for export to Korea.”

11.5 If APQA 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 date of regulated area establishment, the fruits could be imported after cold treatment or methyl bromide fumigation on arrival. The conditions of cold treatment and methyl bromide fumigation are as Annex 4. Further details including inspection procedures, etc. which are not mentioned in Annex 4 will be complied with the related regulations of APQA in Korea.

11.6 SAG shall provide [APQA](#) with a weekly update of the activities until the eradication program is over and the area is considered free again. The SAG information will include the following:

- All affected areas including the area under eradication treatment
- Trap density increased 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

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

11.8 SAG shall declare the area free from fruit fly since a time interval equal to 3 fruit fly generations passes after the last fruit fly capture, and shall notify this to [APQA](#) immediately.

12. Imposing and Lifting of [an](#) Emergency action by [APQA](#) according to the occurrence of fruit flies in Chile

12.1 When [APQA](#) is informed of the occurrence of fruit fly by SAG, [APQA](#) shall take an import restriction action suspending the import of blueberry fruits from the regulated areas in recognition of SAG's establishment of regulated areas. In case that there is a need to take additional measures, [APQA](#) can designate the import restriction areas based on a administrative division (Region, Province, District), including neighboring administrative units according to the fruit fly occurrence status and the distance from fruit fly detection sites.

12.2 [APQA](#) can lift the import restriction measures for regulated areas in case that the regulated areas are considered as fruit fly free areas according to a comprehensive analysis of SAG notification. Chilean blueberry fruits can be shipped after the designated date to lift the ban on importation by [APQA](#).

13. Others

13.1 The names or codes of export orchards and export packing houses and the mark, "For Korea", shall be marked by each packing carton or pallet. Information to allow traceability to an export orchard shall be described in plastic inner packing inside a packing carton.

13.2 SAG shall check the sanitary conditions of export packing houses each year before export and supervise and manage to ensure the followings are in compliance.

13.2.1 Export packing houses and storage facilities shall maintain cleanliness through applying regular disinfection each year.

13.2.2 In order to prevent re-infestation by pests, export packing houses and storage facilities shall be equipped with appropriate insect-proof facilities(for example, insect-proof net, air curtain, rubber curtain, automatic door) on doors and windows.

- 13.2.3 Fresh fruits from non-export orchard shall not be sorted together with the fruits from export orchards or shall not be mixed together or stored together.
- 13.2.4 Make sure to remove any contaminants such as leaves, twigs and soil from export consignment.
- 13.3 All cost such as air tickets and accommodation required for Korean plant quarantine inspectors who would be dispatched to Chile to carry out "Monitoring by [APQA](#) for the export areas (Point 6)" or "the joint inspection (Point 11)" of the requirements shall be borne by Chilean government.
- 13.4 In case of revising the Guidelines for Fruit Fly (Diptera : Tephritidae) Detection, SAG shall immediately notify the revised Guidelines to [APQA](#).
- 13.5 In case that TRSV and ToRSV are found continuously, the import requirement of Chilean blueberry shall be reviewed.
- 13.6 In case that additional risk related to pests occurred, which are not described in the requirements, this import requirement shall be written again.
- 13.7 Any requirements, inspection procedures and actions to be taken as a result of inspection which are not provided herewith can be determined by Commissioner of [APQA](#).

[Annex 1]

Blueberry Export Areas for Korea

Region	Provinces	Districts
III Región de Atacama	Copiapó	Copiapó, Caldera, Tierra Amarilla
	Chañaral	Chañaral, Diego de Almagro
	Huasco	Vallenar, Freirina, Alto de Carmen, Huasco
IV Región de Coquimbo	Elqui	La Serena, La Higuera, Coquimbo, Paihuano, Andacollo, Vicuña
	Choapa	Illapel, Los Vilos, Canela, Salamanca
	Limari	Ovalle, Punitaqui, Combarbalá, Río Hurtado, Monte Patria
V Región de Valparaíso	Valparaíso	Valparaíso, Quilpue, Casablanca, Quintero, Concón, Villa Alemana, Juan Fernández, Viña del Mar, Puchuncavi
	Isla de Pascua	Isla de Pascua
	Los Andes	Los Andes, Rinconada, Calle Larga San Esteban
	Petorca	LA Ligua, Petorca, Cabildo, Zapallar , Papudo
	Quillota	Quillota, Limache, La Calera, Nogales, Hijuelas, Olmué, La Cruz
	San Antonio	San Antonia, El Quisco, Algarrobo, El Tabo, Cartagena, Santo Domingo
	San Felipe de Aconcagua	San Felipe, Panquehue, Catemu, Putaendo, Llay Llay, Santa María
VI Región del Libertador General Bernardo O'Higgins	Chacapoal	Rancagua, Mostazal (San Francisco de Mostazal) Codegua, Olivar (El Olivar), Cóinco, Peumo, Coltauco, Pichidegua, Doñihue, Quinta de Tilcoco, Graneros, Rengo, Las Cabras, Requinoa, Machali, San Vicente (San Vicente de Tagua Tagua), Malloa
	Cardenal Caro	Pichilemu, Marchihue (Marchigüe), La Estrella, Navidad, Litueche, Paredones
	Colchagua	San Fernando, Palmilla, Chépica, Paralillo, Chimbarongo, Placilla, Lolol, Pumanque, Nancagua, Santa Cruz
VII Región de Maule	Talca	Talca, Pelarco, Constitución, Péncahue, Curepto, Río Claro, Empedrado, San Clemente, Maule, San Rafael
	Cauquenes	Cauquenes, Chanco, Pelluhue
	Curicó	Curico, Hualañe, Sagrada Familia, Licantén, Tenó, Molina, Vichuquén, Rauco, Romeral
	Linares	Linares, Retiro, Colbún, San Javier, Longaví, Villa Alegre, Parral, Yervas Buenas
VIII Región del Bio Bio	Concepción	Concepción, Penco, Coronel, San Pedro de la Paz, Chiguayante, Santa Juana, Florida, Talcahuano,

		Hualquí, Tomé, Lota, Hualpén
	Arauco	Lebu, Arauco, Curanilahue, Cañete, Los Alamos, Tirua, Contulmo
	Biobío	Los Angeles, Quilaco, Antuco, Quilleco, Cabrero, San Rosendo, Laja, Santa Bárbara, Mulchén, Tucapel, Nacimiento, Yumbel, Negrete, Alto Biobío
	Ñuble	Chillán, Bulnes, Cobquecura, Coelemu, Coihueco, Chillán Viejo, El Carmen, Ninhue, Ñiquén, Pemuco, Pinto, Portezuelo, Quillón, Quirihue, Ránquil, San Carlos, San Fabián, San Ignacio, San Nicolás, Treguaco, Yungay
IX Región de la Araucanía	Cautín	Curarrehue, Perquenco, Freire, Pitrufrué, Galvarino, Pucón, Gorbea, Saavedra, Lautaro, Teodoro Schmidt, Loncoche, Toltén, Melipeuco, Vilcún, Nueva Imperial, Villarrica, Padre Las Casas, Cholchol, Temuco, Cunco, Carahue
	Malleco	Angol, Lumaco, Collipulli, Purén, Curacautín, Renaico, Ercilla, Traiguén, Lonquimay, Victoria, Los Sauces
X Región de Los Ríos	Valdivia	Valdivia, Mafil, Corral, Mariquina (San José de La Mariquina), Lanco, Paillaco, Los Lagos, Panguipulli
	Ranco	La Unión, Futrono, Lago Ranco, Río Bueno
XIV Región de Los Lagos	Llanquihue	Puerto Montt, Los Muermos, Calbuco, Llanquihue, Cochamó, Maullín, Fresia, Puerto Varas, Frutillar
	Chiloé	Castro, Puqueldón, Ancud, Queilén, Chochi, Quellón, Curaco de Vélez, Quemchi, Dalcahue, Quinchao
	Osorno	Osorno, Río Negro, Puerto Octay, San Juan de la Costa, Purránque, Puyehue, San Pablo
	Palena	Chaitén, Futaleufú, Hualaihué, Palena
XI Región Aysén del Gral. Carlos Ibañez del Campo	Coihaique	Coihaique, Lago Verde
	Aisén	Aisén, Cisnes, Guaitecas
	Capitán Prat	Cochrane, O'Higgins, Tortel
	General Carrera	Chile Chico, Río Ibañez
XII Región de Magallanes y Antártica Chilena	Magallanes	Punta Arenas, Laguna Blanca, Río Verde, San Gregorio
	Antártica Chilena	Cabo de Hornos (Ex Navarino), Antártica
	Tierra del Fuego	Porvenir, Primavera, Timaukel
	Última Esperanza	Natales, Torres del Paine
XIII Región Metropolitana de Santiago	Santiago	Conchalí, El Bosque, Estación Central, Huechuraba, Independencia, La Cisterna, La Florida, La Granja, La Pintana, La Reina, Las Condes, Lo Barnechea, Lo Espajo, Ñuñoa, Pedro Aguirre Cerda, Peñalolén, Providencia, Pudahuel, Quilicura, Quinta Normal, Recoleta, Renca, San Joaquín, San Miguel, San Ramón, Vitacura, Santiago,

		Macul, Cerrillos, Maipú, Lo Prado, Cerro Navia
	Cordillera	Puente Alto, Pirque, San José de Maipo
	Chacabuco	Colina, Lampa, Tiltil
	Maipo	San Bernardo, Buin, Calera de Tango, Paíne
	Melipilla	Melipilla, María Pinto, Alhue, San Pedro, Curacaví
	Talagante	Talagante, Padre Hurtado, El Monte, Peñaflores, Isla de Maipo

[Annex 2]

Pest of Korean Concern associated with Chilean Blueberry

<Pathogens>

1. *Tobacco ringspot virus**

2. *Tomato ringspot virus**

* Pathogens that require specific mitigation measures

<Insects>

1. Fruit flies including *Ceratitis capitata*

2. *Tetranychus desertorum*

3. *Aspidiotus neii*

4. *Hemiberlesia rapax*

5. *Pseudococcus calceolariae*

6. *Pseudococcus longispinus*

7. *Pseudococcus viburni*

8. *Ametastegia glabrata*

9. *Proeulia auraria*

10. *Proeulia chrysopteris*

11. *Proeulia triquetra*

12. *Lobesia botrana*

This list does not include all the pests for which quarantine action is needed.

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 blueberry.

2) Place of establishment of cold treatment facilities and Storage

- Cold treatment facilities shall be established inside the packing houses 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 fly.

3) Designation of cold treatment facilities

- ① SAG will designate the cold treatment facilities for blueberry 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 APQA 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 blueberry.

5) Measurement of treatment temperature and period

- ① APQA 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 blueberry fruit core reach $1^{\circ}\text{C}\pm 0.5^{\circ}\text{C}$, and the temperature shall be maintained for 16 days in blueberry. All sensors of fruit core shall not exceed more than $1^{\circ}\text{C}\pm 0.5^{\circ}\text{C}$ during the period of cold treatment.

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 APQA inspector(s) before the joint inspection between APQA and SAG.

2. Joint inspection between APQA and SAG

1) Place of inspection

- ① In principle, cold treated fruits shall be inspected inside the packing houses in which the cold treatment facilities are installed.
- ② The APQA 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 fly 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 fly during the transportation to other inspection place, they shall be wrapped with materials which could prevent the infestation by fruit fly.

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 APQA 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 fly 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 blueberry fruits in this shipment were treated by cold treatment method at the fruit core temperature of 1°C±0.5°C for at least 16 days.”

- ③ The PC shall bear the additional remarks on its rear side by the APQA inspector(s) like following form after confirming that the cold treatment was completed, and the shipment is free from pests.

<u>Date of cold treatment</u>	
<u>Date of inspection</u>	
<u>Name of inspector</u>	

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 APQA 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 APQA 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), APQA 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 fly 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 4]

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

1. Cold treatment

<u>Fruit core temperature</u>	<u>Minimum treatment period (days)</u>	<u>Maximum deviation</u>
<u>1°C or under</u>	<u>16</u>	<u>0.5°C</u>

2. MB Fumigation

<u>Temperature (°C)</u>	<u>Dosage (g/m³)</u>	<u>Minimum Concentration Reading (g/m³) At:</u>				
		<u>0.5 hr</u>	<u>2 hrs</u>	<u>2.5 hrs</u>	<u>3 hrs</u>	<u>3.5 hrs</u>
<u>21.1 or above</u>	<u>32</u>	<u>26</u>	<u>22</u>	<u>22</u>	<u>:</u>	<u>21</u>

[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, [APQA](#)) 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 [APQA](#).

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 APQA 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 [APQA](#) 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 [APQA](#) 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 [APQA](#) 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 Fruits

Table grape, Blueberry and Cherry

<u>Treatment</u>	<u>Dosage (g/m³)</u>	<u>Duration (hr)</u>	<u>Minimum Concentration Readings (g/m³) At:</u>		<u>Temperature (°C)</u>	<u>Atmospheric pressure</u>	<u>Facility</u>
			<u>0.5 hr</u>	<u>3 hrs</u>			
<u>Methyl Bromide (CH₃Br)</u>	<u>64</u>	<u>3</u>	<u>55</u>	<u>45</u>	<u>4.4 or above</u>	<u>NAP*</u>	<u>Tarpaulin or chamber</u>
	<u>56</u>		<u>50</u>	<u>40</u>	<u>10 or above</u>		

Kiwi

<u>Treatment</u>	<u>Dosage (g/m³)</u>	<u>Duration (hr)</u>	<u>Minimum Concentration Readings (g/m³) At:</u>		<u>Temperature (°C)</u>	<u>Atmospheric pressure</u>	<u>Facility</u>
			<u>0.5 hr</u>	<u>3 hrs</u>			
<u>Methyl Bromide (CH₃Br)</u>	<u>64</u>	<u>3</u>	<u>48</u>	<u>38</u>	<u>4.4 ~ 10 under</u>	<u>NAP*</u>	<u>Tarpaulin or chamber</u>
	<u>48</u>		<u>38</u>	<u>29</u>	<u>10 ~ 15 under</u>		
	<u>40</u>		<u>32</u>	<u>24</u>	<u>15 ~ 21 under</u>		
	<u>32</u>		<u>26</u>	<u>19</u>	<u>21 ~ 26 under</u>		
	<u>24</u>		<u>19</u>	<u>14</u>	<u>26 or above</u>		

* NAP (Normal atmospheric pressure)