

### 2017 Export of BC Cherries to People's Republic of China (PRC) Program

### Canadian Food Inspection Agency (CFIA):

Growers who wish to participate in this program must apply to the BC Cherry Association (BCCA) Rhagoletis Monitoring Program for inclusion by March 26, 2017. Late or Incomplete applications will not be processed.

Packing facilities that wish to participate in this program must apply to the CFIA for inclusion by March 26, 2017. Late or incomplete applications will not be processed

A list of 2017 approved registrants (packing facilities and growers) will be prepared following application approval and recognition audit processes. CFIA registration numbers will be provided to the approved registrants. The list of approved registrants will be sent to the General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) of the PRC for approval before the exporting season starts.

The CFIA will collect ongoing orchard trap monitoring information from the 2017 Trap Monitoring Coordinator (TMC) and provide this to the AQSIQ upon request.

The CFIA will suspend registered orchards for the remainder of the season if pests of guarantine significance are detected in excess of the established threshold in traps, or detected in packed cherries, and will notify AQSIQ if this occurs.

The CFIA will conduct export inspections which include: visual inspection of samples, label requirement verification, brown sugar test and record review.

The CFIA will issue phytosanitary certificates for product that meets PRC-specific export certification requirements.

### Orchard Management Requirements

Applications to request registration of orchard blocks under the BCCA Rhagoletis Monitoring Program must be received by the BCCA on or before March 26, 2017. To register and maintain participation in this program, all the following elements are required on an ongoing basis for the production season. Failure to meet any of the listed requirements will result in removal from the program:

- 1) Attend **one** of the four **mandatory training sessions** that will be held at the Agriculture and Agri-Food Canada - Summerland Research and Development Centre (formerly known as AAFC-PARC):
  - Thursday April 6th, 2017, 9am-11am; or
  - Thursday April 6th, 2017, 1pm-3pm; or





- Friday April 7th, 2017, 9am-11am; or
- Friday April 7th, 2017, 1pm-3pm

Videoconferencing for one meeting will be available for Creston growers – date and time to be announced.

- 2) Apply good agricultural practices.
- 3) Name a pest manager who must have knowledge of orchard pests, including pests of quarantine significance to PRC (Appendix 1). The pest manager will be responsible for the pest monitoring techniques and the pest control measures applied in the registered orchard(s). The pest manager must be able to provide information on the pest management and the implementation of this program, in the registered orchard (s), as requested by CFIA or the TMC.
- 4) Maintain weekly pest monitoring records (as electronic or hard copies) using the guidelines provided and the attached form in Appendix 2. These records must be available for review at any time when audits are carried out by CFIA and/or the TMC.
- 5) Maintain chemical control of *Rhagoletis* spp. in all orchards registered in this program. This is **mandatory** in all registered orchards. All pesticides applications for the control of Rhagoletis spp. must be recorded in the Pesticide Application Record.
- 6) Maintain complete Pesticide Application Records for each registered orchard. This applies to any pesticide applied in the registered orchard (s). The application of pesticides, for control of pests, when detected during the pest monitoring program for PRC, must also be recorded, indicating the names of pesticides, their active ingredients, application dates, and concentrations. These records must be available for review at any time when audits are carried out by CFIA and/or the TMC. (See the BC Tree Fruit Production Guide for appropriate forms) and can be kept as electronic or hard copies.
- 7) Conduct trapping and maintain trap monitoring records for *Rhagoletis* spp. as outlined in Appendix 3. Trapping records must be available for review at any time when audits are carried out by CFIA and/or the TMC, and for possible submission to CFIA upon request.
- 8) Submit trapping data every week to the TMC, as outlined in Appendix 3, and using an electronic copy of the form shown in Appendix 4.
- 9) Submit all traps with any and all *Rhagoletis* spp. finds to the TMC, as outlined in Appendix 7.
- 10) Maintain and store any traps that are not submitted to the TMC or CFIA, as outlined in this document, until informed at the end of the season that traps may be discarded.
- 11) Agree to have the registered orchard(s) audited by the CFIA or the TMC when requested, and agree to be available at the pre-arranged time. All required documents must be available for review in a hardcopy or electronic format at the time of the audit: (a) orchard



map with trap locations, (b) Pesticide Application Records, including *Rhagoletis* spp. sprays, (c) weekly Pest Monitoring Records – Appendix 2, and (d) trap monitoring results – Appendix 4.

- 12) Agree that all trapping records may be used by CFIA to access other markets.
- 13) Agree that orchard/company name shall be part of a publicly available list of participants.

### **Registered Packing House Requirements:**

Applications to request registration of packing facilities must be received by the CFIA on or before **March 26, 2017**. To register and maintain participation in this program, all the following elements are required on an ongoing basis for the packing season. **Failure to meet any of the listed requirements will result in removal from the program:** 

- Attend one of the four mandatory training sessions that will be held at the Agriculture and Agri-Food Canada - Summerland Research and Development Centre (formerly known as AAFC-PARC):
  - Thursday April 6th, 2017, 9am-11am; or
  - Thursday April 6th, 2017, 1pm-3pm; or
  - Friday April 7th, 2017, 9am-11am; or
  - Friday April 7th, 2017, 1pm-3pm

Videoconferencing for one meeting will be available for Creston packing facilities – date and time to be announced.

- 2) Facilities must be registered under a GAP program. **Proof of GAP certification is required.** If available, include a copy of the GAP certificate with your application. If the GAP certificate is not available, please send it to the CFIA office as soon as it is available. GAP certification must be in place prior to BC Cherries export inspection and certification to PRC.
- 3) Fruits must be sorted to remove rotten fruits, twigs, leaves, dried blossoms, soil, and all surface defects that may represent signs and symptoms of pests. Visual inspection of at least 1% of the packed product must be carried out by designated employees as the fruit is packed. Quality control records of the visual inspection must be maintained. These records must be available for review by CFIA at any time.
- 4) Orchard waste (fruits, leaves, etc.) accumulated in the cherry handling and packing process must be removed **daily** and disposed of away from the packing facility or orchard vicinity. Associated records must be maintained.
- 5) Product traceability and associated records must be maintained and available for review by CFIA at any time.
- 6) All packing materials must be new and clean. Porous bags (maximum diameter pores 1.6 mm) must be used to line each carton.





- 7) Boxes must be marked with the following for BC cherry exports to PRC: (i) Name of the packing facility as written on the application, (ii) Location of the packing facility (city), (iii) CFIA Registration Number and (iv) "For Export to the People's Republic of China", in Chinese Characters.
- 8) The CFIA Registration Number is a 10 digit, uninterrupted, number that includes the following information: "day-of-year" (3 numbers), Packing facility (2 numbers), Grower Number (3 numbers), Orchard Number (2 numbers) -0000000000. Please note that the first three numbers will change based on the packing date. Please refer to Appendix 10 for 2017 day-of-year calendar (June-September). Packing facilities must ensure the correct CFIA registration number is on the packed product.
- 9) For shipments not exported on a pallet (e.g. by air), the marking of "For Export to the People's Republic of China", in Chinese Characters, must appear on every box. palletized shipments (pallet shipped with the product), the marking of "For Export to the People's Republic of China", in Chinese Characters, must appear at least on one side of the pallet, and must be visible.
- 10) Cherries packed for PRC must be placed immediately into cold storage.
- 11) Packed product must move within the packing facility under conditions that safeguard pest introduction, that is, within an insect-proof building.
- 12) Containers must be inspected for cleanliness and freedom from insect pests, mites, rotten fruits, twigs, leaves dried blossoms and soil, prior to loading. Associated records must be maintained.
- 13) Loading of containers must be carried out in a pest-proof building. Sea containers must be sealed.
- 14) A designated CFIA inspection area must be away from direct sun, and traffic, with a good working table and a light source.
- 15) A process for self-sampling for the brown sugar test must be carried out as per general CFIA guidelines for export of cherries. Crushing tools and prepared brown sugar solutions must be available at the time of inspection. All samples must be correctly labelled.
- 16) The facility must provide dedicated staff to assist the CFIA inspectors during inspection. Brown sugar tests must be carried out in the presence of a CFIA inspector and as outlined in Appendix 9.
- 17) A Phytosanitary Certificate must accompany all BC cherries shipments to PRC.





### **Export Certification Requirements for Packing Facilities:**

Please follow general procedures for requesting an export inspection and phytosanitary certification. The "Application for Inspection and Phytosanitary Certification" (CFIA 3369) form must be completed and submitted to your local CFIA office.

Seals must be used for sea containers. Please include the seal number and the container number on the CFIA 3369 form. Both numbers must be entered on the phytosanitary certificate.

The CFIA will issue phytosanitary certificates following audit verification and inspection activities, for product that meets PRC phytosanitary requirements. **The phytosanitary certificate must accompany the shipment.** 

Fresh cherries from BC are only permitted to enter PRC through seaports and airports designated for fruit imports by AQSIQ. It is the Canadian exporter's responsibility to ensure that the appropriate airports and seaports are indicated on the CFIA 3369 form.



**Appendix 1** 

### List of Quarantine Pests of Concern to PRC

Rhagoletis fausta (black cherry fruit fly)

Rhagoletis indifferens (western cherry fruit fly)

Rhagoletis pomonella (apple maggot)

Acrobasis tricolorella (pruneworm leafroller)

Grapholita packardi (cherry fruitworm)

Grapholita prunivora (lesser appleworm)

Archips podana (large fruit tree tortrix)

Choristoneura rosaceana (oblique-banded leafroller)

Hedya nubiferana (marbled orchard tortrix)

Platynota idaeusalis (tufted apple budmoth)

Myzus cerasi (black cherry aphid)

Monilinia fructicola (brown rot)

Pseudomonas syringae pv. Morsprunorum (bacterial canker)

Little Cherry virus (and associated vector *Phenacoccus aceris*, apple mealybug)

### Also of concern:

Drosophila suzukii (spotted wing drosophila)



### Appendix 2

# Orchard Surveillance Monitoring Program for Pests of Quarantine Significance to China

Brown Rot Monilinia fructicola	Weekly monitoring from bud break <sup>1</sup> to harvest for the presence of symptoms indicative of this disease including canker spots on flowers and young branches; and grey rotten areas of fruit. Follow recommendations for prevention and control as outlined in the Production Guide. If any symptoms consistent with this pathogen are detected, samples must be taken for lab identification. If infection is confirmed through lab analysis, apply control measures as outlined in the Production Guide.
Bacterial Canker Pseudomonas syringae pv morsprunorum	Weekly monitoring from bud break <sup>1</sup> to harvest for the presence of symptoms indicative of this disease including brown spots on leaves, branches and fruit. Follow recommendations for prevention and control outlined in the Production Guide. If any symptoms consistent with this pathogen are detected, samples must be taken for lab identification. If infection is confirmed through laboratory analysis, apply control measures as outlined in the Production Guide.
Little cherry virus and its vector:  Phenacoccus aceris (apple mealybug)	Weekly monitoring from bud break <sup>1</sup> to harvest for the presence of symptoms indicative of this disease including fruit that is small, misshapen, and does not develop dark color at maturation; and red colouration of leaves. Samples must be taken for lab identification. Weekly monitoring for the presence of the Phenacoccus aceris (apple mealybug) vector. If detected, follow pest management recommendations as outlined in the Production Guide.
Lepidoptera (moths & caterpillars)	Weekly monitoring from blossom to harvest for the presence of rolled leaves; webbing on shoots, leaves, flower buds; chewing traces on young fruit; and frass and/or exit holes indicative of these insects. If detected, follow appropriate pest management practices and controls outlined in the Production Guide. If any of these 3 pests, Acrobasis tricolorella (pruneworm leafroller), Grapholita packardi (cherry fruitworm) and G. prunivora (lesser apple worm) are found on the cherry fruit, notify the CFIA immediately. The orchard will be suspended for the remainder of the season.
Black cherry aphid Myzus cerasi	Weekly monitoring from blossom to harvest for the presence of this insect on the leaves, sunken areas of branches and on fruit. If detected, follow appropriate pest management practices and controls as outlined in the Production Guide.
Fruit Flies	Weekly fruit monitoring from fruit set to harvest for the presence of depressions, and/or exit holes indicative of these insects. If detected through fruit monitoring, notify the CFIA immediately. The orchard will be suspended for the remainder of the season. A mandatory season-long chemical control program must be carried out as outlined in the the "Integrated Fruit Production Guide for Commercial Tree Fruit Growers: Interior of British Columbia", published by BC Ministry of Agriculture and Lands (Production Guide).

<sup>1.</sup> Bud break - refers to initiation of growth from a bud, where bud is no longer dormant.



### Canadian Food Inspection Agency

### Appendix 2 (Ctd)

# 2017 Weekly Orchard Surveillance Pest Monitoring Record for Export of BC Cherries to PRC

## **CFIA REGISTRATION #:**

	Growth Stage¹	Quarantine pest	Observations	Recommendation	PAR No.2
		Fungi			
		Brown Rot (Monilinia fructicola)			
		Bacteria			
		Bacterial Canker (Pseudomonas syringae pv morsprunorum)			
		Viruses			
		Little Cherry Virus (LCV)			
tino I <b>in</b> u		Scale Insects			
		Apple Mealybug (Phenacoccus aceris), vector for LCV			
Ì		Lepidoptera (moths and caterpillars)			
o pi		Pruneworm Leafroller (Acrobasis tricolorella) <sup>3</sup>			
uə Į		Cherry Fruitworm (Grapholita packardi) <sup>3</sup>			
		Lesser Apple Worm (Grapholita prunivora) <sup>3</sup>			
sən n w		Large Fruit Tree Tortrix (Archips podana)			
		Oblique-Banded Leafroller (Choristoneura rosaceana)			
		Marbled Orchard Tortrix (Hedya nubiferana)			
<b>q</b> u		Tufted Apple Bud Moth (Platynota idaeusalis)			
-ror		Aphids			
ł		Black Cherry Aphid (Myzus cerasi)			
t set to b	16	Fruit flies <sup>3</sup>			
	:24	Western Cherry Fruit Fly (Rhagoletis indifferens)			
litr	יופו	Black cherry fruit fly (Rhagoletis fausta)			
		Apple Maggot (Rhagoletis pomonella)			

| Growth Stage: Indicates the growth stage of bud or tree development i.e. dormant, green tip, blossom, summer etc.

<sup>3</sup> If these pests are found on the fruit in the orchard, notify the CFIA immediately. The orchard will be suspended for the remainder of the season.



<sup>&</sup>lt;sup>2</sup> Pesticide Application Record (PAR) No.: If treatment is applied, indicate the number starting at #1 and ensure it is recorded in the regular pesticide spray records.

### Trapping program for *Rhagoletis* spp.

The yellow cardboard sticky traps and ammonium carbonate lures provided to participants by the BC Cherry Association must be used for this program. Traps and lures will be available for pick up at the mandatory training sessions at the Agriculture and Agri-Food Canada - Summerland Research and Development Centre, on April 6<sup>th</sup> and April 7<sup>th</sup>, 2017. There will be no other opportunity to collect your traps, so please arrive at the meeting ready to take them with you when you leave.

The traps are to be placed in each registered orchard at the following density and replacement schedule: For registered orchards that are smaller than 10 acres, there must be 4 trap sites. For registered orchards that are from 10 to 40 acres in size, there must be 1 trap site for every 2 acres. Orchards larger than 40 acres must have 20 trap sites.

Traps must be replaced every 2 weeks, AFTER examining them for Rhagoletis species and filling out the Tuesday monitoring report. Lures must be replaced every 4 weeks. Remove leaves in the immediate vicinity of the trap to avoid getting debris on the sticky cards.

Trap requirements (3 or 4 months) must be determined based on location and cherry varieties (early or later harvest) grown in each registered orchard. If orchards are mixed with early and later varieties in a single block, trap requirements must be calculated for 4 months:

For South Okanagan and Similkameen Locations, set your traps out on April 25, 2017:

- Early varieties (harvested before Lapins), April 25 July 24, 2017 (or harvest): 3 months
- Later varieties (harvested with Lapins or later), April 25 August 21, 2017 (or havest): 4 months

For Central Okanagan, North Okanagan, Rock Creek, and Creston Locations, set your traps out on May 9, 2017:

All varieties, May 16 - September 4, 2017 (or harvest): 4 months

Please use the tables on page 10 for determining the number of traps and lures needed for the production season.

Trap placement must start on the dates indicated above, based on your location and varieties grown in the orchard. Remove the tape to expose the lure, and attach to the trap, as per manufacturer's instructions. Each trap must be clearly labelled with the CFIA number, trap number, and the date, on the outside (yellow) part of the trap. A map of locations where all traps are placed in each registered orchard must be forwarded to the 2017 Trap Monitoring Coordinator (TMC) with your first weekly report.

Traps must be monitored **once a week** from the time they are placed out until the week prior to harvest. Traps must be monitored twice a week starting the week prior to starting harvest until the end of harvest. If traps are covered with debris at the time of monitoring, they must be replaced, even if traps are not due to be changed yet. Lures must be changed every 4 weeks.



# Trap and Lure needs for the 2017 BCCA Rhagoletis Monitoring Program

**3 months**: South Okanagan and Similkameen Locations **only**, for blocks containing only early varieties.

Acres	6-0	10-11	0-9   10-11   12-13   14-15   16-17	14-15	16-17	18-19	20-21	18-19   20-21   22-23   24-25   26-27	24-25	26-27	28-29	30-31	28-29   30-31   32-33   34-35   36-37   38-39	34-35	36-37		40 +
# Trap sites in orchard	4	5	9	2	8	6	10	11	12	13	14	15	16	17	18	19	20
Total # traps for 3 months	28	35	42	49	99	63	70	<i>LL</i>	84	91	86	105	112	119	126	133	140
Total # lures for 3 months	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	29	09

### 4 months:

Everyone else.

Acres	6-0	0-9   10-11   12-13   14-15   16-17	12-13	14-15	16-17	18-19	20-21	18-19   20-21   22-23   24-25   26-27   28-29   30-31   32-33   34-35   36-37   38-39   40 +	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	40+
# Trap sites in orchard	4	5	9	7	80	6	10	11	12	13	14	15	16	17	18	19	20
Total # traps for 4 months	36	45	54	63	72	81	06	66	108	117	126	135	144	153	162	171	180
Total # lures for 4 months	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80





For each registered orchard, weekly records of the orchard trap monitoring, using the approved Excel form (example shown in Appendix 4), must be maintained. These electronic records must be emailed to the TMC by the end of the day every Tuesday, until 1 week before harvest, and by the end of day every Tuesday and Friday, starting 1 week before harvest, and continuing until harvest is complete. Send files as Excel or PDF email attachments only. Files sent as jpegs, or faxes or in Post Canada mail will not be accepted.

Failure to submit weekly monitoring results to the TMC, as indicated above, will result in immediate removal from the list of orchards approved to export cherries to the PRC. Late submission of records can also result in an orchard's removal from the program. On the first occasion on which records are received late, the TMC will send a first warning. If records are not submitted on time again, the TMC will send a second and final warning. If there is a 3<sup>rd</sup> occurrence of late-submitted records, the TMC will report the registered orchard to the CFIA. At such time, the CFIA will inform the registrant that the registered orchard has been removed from the approved list and will no longer be permitted any exports to PRC for the 2017 season.

If any Rhagoletis spp. (Appendix 5) are found on a trap at the time of monitoring, the total number of specimens must be reported on an electronic copy of the "2017 Rhagoletis spp. Trap Monitoring Record" (Appendix 4). Note that the wing patterns shown in Appendix 5 are magnified images. Use a hand lens to examine traps carefully. The traps containing specimens must be wrapped, labeled, and submitted to the TMC, as outlined in Appendices 7 and 8. If a trap is submitted to the TMC, it should be replaced immediately in the designated orchard site and labeled correctly. Be sure to re-attach the existing lure to the new trap.

Note 1: A registered orchard will be removed from the program when the Rhagoletis indifferens or Rhagoletis fausta threshold is reached. The threshold is an average of two (2) R. indifferens or R. fausta per trap, for two consecutive weeks.

Note 2: The TMC will communicate the threshold for each registered orchard at the beginning of the season.

When a pest manager consistently reports zero *Rhagoletis* specimens on the traps, the TMC will ask that all stored traps from the registered orchard be submitted as outlined in Appendices 7 and 8. Stored traps **must** be properly wrapped, as mentioned on page 12. Failure to submit these traps, as requested by the TMC will result in removal from the program.

When a registered orchard's results indicate that the average number of *R. indifferens* and *R.* fausta is above the threshold, the TMC will communicate with the designated pest manager, and ask them to prepare and submit traps as outlined in Appendices 7 and 8, for the following week. If the orchard is near or at harvest, and the monitoring is being carried out twice a week, all traps for each week must be submitted.

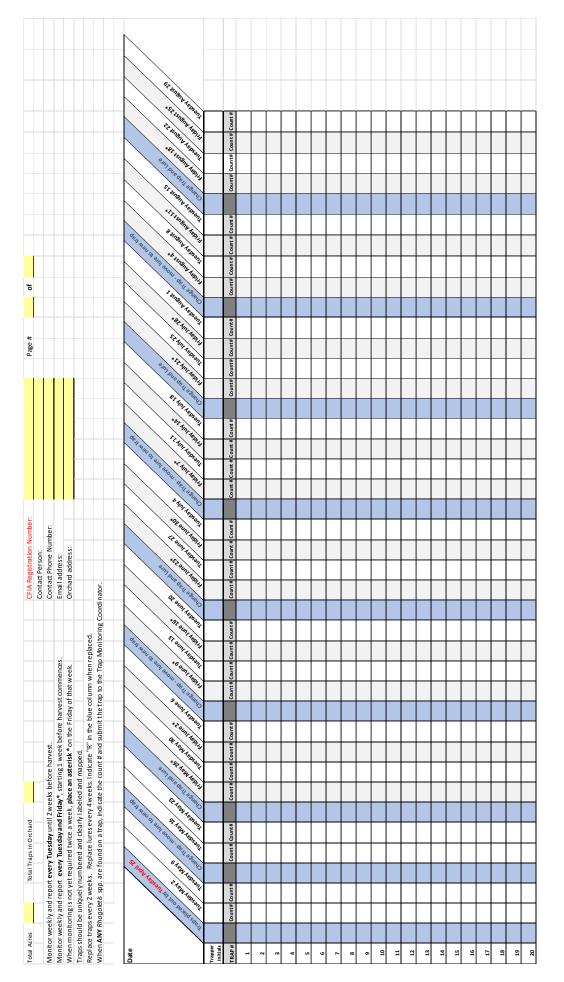
The TMC will immediately notify the CFIA when a registered orchard reaches a *Rhagoletis* indifferens and/or Rhagoletis fausta level that is 'at threshold' (as defined in Note 1, above) for two consecutive weeks. Notification for removal from the program will be sent by the CFIA. Once a registered orchard is removed from the list, export of BC cherries from this registered orchard will not be permitted for the remainder of the season (this includes all cherries from this registered orchard that may have been picked but have not yet been exported). AQSIQ will be notified by the CFIA when an orchard has reached the threshold and has been removed from the list.

Registered orchards must neatly wrap all unsubmitted traps with clear plastic wrap (as shown during the training sessions) after changing them out for new traps. Traps must be wrapped individually and separately, with the yellow sticky side out, and stored until the end of the season. As soon as harvest is completed in the registered orchard, all traps must be taken down immediately, wrapped and stored. Traps may be discarded following the end of the growing season once the orchard's designated has been notified by the TMC.

The TMC will be carrying out orchard audits throughout the season to verify the implementation of the trapping program and other orchard management procedures under this program (pest monitoring, pesticide application records, *Rhagoletis* spp. control program). Pest managers or designated orchard managers of registered orchards must be available at the time of audit to answer any questions.

## Agence canadienne d'inspection des aliments

# 2017 Rhagoletis spp. Trap Monitoring Record for each Registered Orchard







### Rhagoletis spp. wing patterns found in the BC Interior\*\*



Any find on a trap that has similar Rhagoletis spp. wing pattern as per above must be submitted to the 2017 Trap Monitoring Coordinator for identification.

\*\*Images courtesy of Dr. Howard Thistlewood laboratory, Summerland Research and Development Centre, Agriculture and Agri-Food Canada, Summerland, BC



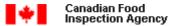
### **2017 Trap Monitoring Coordinator Activities**

The 2017 Trap Monitoring Coordinator (TMC) is hired by the BC Cherry Association to undertake the following tasks under the BCCA Rhagoletis Monitoring Program:

- 1) Finalize the list of applicants that will be eligible under the BCCA Rhagoletis Monitoring Program.
- 2) Keep an up-to-date database of records of all registrants in the program and the associated trap monitoring activities.
- 3) Communicate with all registrants via email to send updates, reminders, and results related to the BCCA Rhagoletis Monitoring Program.
- 4) Receive and maintain up-to-date trapping results as communicated by the registrants via emails, by the end of business on Tuesdays (and Fridays when applicable).
- 5) Receive traps and identify *Rhagoletis* spp. Keep all submitted traps on file.
- 6) Relay all information regarding the BCCA *Rhagoletis* Monitoring Program results to the CFIA: This includes (1) lack of or incomplete weekly submissions of the trap monitoring sheet, AND (2) all finds of *Rhagoletis* spp. based on trap submissions and identification.
- 7) Notify orchard registrants and the CFIA of the Rhagoletis indifferens and Rhagoletis fausta threshold before the start of the season.
- 8) Request trap submission from any registered orchard reporting nil suspect results.
- 9) Notify a registered orchard if threshold has been reached on the first week and request delivery of traps for the following week, or the same week and the following week, when monitoring is carried out twice a week.
- 10) Carry out orchard audits to verify the implementation of the BCCA Rhagoletis Monitoring Program and the overall pest monitoring and pesticide application programs. All registered growers must facilitate the orchard audits as requested by the 2017 Trap Monitoring Coordinator
- 11) Relay information to the CFIA when a registered orchard needs to be removed from the program and for what reason.
- 12) Notify CFIA immediately if Quarantine Pests of significance to Canada are detected (i.e. Apple Maggot - Rhagoletis pomonella).

The 2017 Trap Monitoring Coordinator (TMC) is **Beth Cavers**. She will be communicating with all approved participants under this program using the following e-mail address:

trapmonitor@bccherry.com



### Trap Preparation and Submission to the 2017 Trap Monitoring Coordinator

### A. Trap Preparation

Please follow these steps when a *Rhagoletis* spp. is found on a numbered trap during the weekly Rhagoletis spp. trap monitoring in a registered orchard:

- 1) Record the number of the *Rhagoletis* spp. specimens on the trap monitoring record.
- 2) Replace the trap with a new, labeled trap (same information as the trap with the find) and reattach the lure to the new trap.
- 3) Prepare each trap for submission as follows:
  - Ensure the trap carries the 10-digit CFIA registration number, and is numbered to identify its location within the orchard.
  - Keep the yellow side out, and wrap the sticky portion of the trap with plastic food wrap (i.e. Saran wrap) making sure not to damage the *Rhagoletis* spp. find(s) on the trap. The trap can be held open with a staple or paper clip on the edge of the trap, if necessary.
  - Complete the shipping label information as per Appendix 8.
  - Staple 1 copy of the shipping label to one corner of the trap.
  - Place trap in a shipping container. Place the second shipping label in an envelope and affix it to the outside of the shipping container.
  - Drop off the shipping container no later than the following day at the nearest Grower's Supply Company Ltd. outlet.
- 4) Email the 2017 Trap Monitoring Coordinator your updated trap monitoring record, and include a message to notify when and where the trap(s) were submitted.

Note: Ensure all information is complete and accurate. Incomplete trap submissions will not be processed and may result in removal from the program.

### **B.** Trap Submission

All traps must be submitted as follows:

### 1) For Okanagan Valley registered orchards:

Deliver the prepared and packaged traps to the Grower's supply outlet closest to the orchard (Keremeos, Oliver, Penticton, Kelowna) by the end of business day on **Wednesday** when reporting results on Tuesday, and by end of business day on **Monday** when reporting results on Friday.

### 2) For Creston Valley registered orchards:

Deliver the prepared and packaged traps to the Greyhound outlet by end of business day on Wednesday when reporting results on Tuesday and by the end of business day on Monday when reporting results on Friday.



Creston growers, please label all packages to the attention of:

**Beth Cavers** Trap Monitoring Coordinator 3213 Corral Court West Kelowna, BC Phone: 250-317-8529.

A bus leaves Creston for the Okanagan every day at 6:50 AM.

### C. Trap Storage

All traps that are not submitted to the TMC must be wrapped and stored as demonstrated during the training sessions on April 6 and 7, 2017 and must be available for verification during CFIA or TMC audits. In addition, throughout the season, the TMC will request the submission of all stored traps from a significant number of the growers registered in the 2017 program. If traps are not wrapped neatly in plastic wrap with the yellow side out, this damages the insects and compromises the TMC's ability to examine traps properly. As a consequence, submission of improperly wrapped stored traps could affect your continued participation in the program to export BC cherries to PRC.



### **Appendix 8**

### **Trap Submission Shipping Labels**

Grower/pest manager:
CFIA Registration number:
Orchard address:
Trap ID number:
Date sample collected:
Comments:
Grower/pest manager:
CFIA Registration number:
Orchard address:
Trap ID number:
Date sample collected:
Comments:



### **Brown Sugar Test: Sampling Table and Method**

Number of Units (cartons) in the Lot	Minimum Number of Units (cartons) Sampled
1 - 50	2
51 – 100	3
101 – 200	4
201 – 350	6
351 - 500	8
501 - 750	10
751 - 1,200	12
1,201 - 2,000	15
2,001 - 3,500	20
3,501 - 5,000	25
5,001 - 10,000	32
10,001 - 20,000	40
20,001 - 40,000	50
40,001 and up	60

The brown sugar test is applied to 35 cherries from each 5 kg box, or 50 cherries from each 9 kg box, selected using the above table. Samples may be collected from the grading line or from packed cherries. When samples are collected from the grading line, an equivalent number of cherries are collected and used in the brown sugar test as would be sampled from individual boxes. Sampling of cherries must be carried out in a manner whereby a representative sample is selected according to specific proportions and includes cherries of various sizes.

- Samples must be clearly labelled so that they can be easily traced to specified packed product.
- Brown sugar and water are mixed at a rate of approximately 7 lb of sugar per 5 gallons of water (~ 3 kg of sugar per 20 litres of water).
- Adjust with sugar/water until a refractometer reading of +15 to +18 soluble solids is achieved.
- Place the cherry sample in a pail and crush the fruit so that it is split to the pit, but not macerated.
- Pour the brown sugar solution over the crushed cherries so that all fruit is covered. Gently stir. Let stand for a minimum of 10 minutes.
- The CFIA will inspect the solution for the presence of larvae after 10 minutes and will report the results as per standard export certification procedures.
- If a Rhagoletis spp. or Grapholita spp. larvae are detected during the brown sugar test, the shipment will fail inspection and will not be certified for export. In addition, the associated orchard will be removed from the registered list and will not be permitted to export to PRC for the remainder of the shipping season.

### Appendix 9 (Ctd)

A tolerance level for *Drosophila* spp. larvae has been established by AQSIQ. Please refer to the table listed below. This is different than the tolerance level that the CFIA applies for cherries for all other markets. If *Drosophila* spp. larvae are detected during the brown sugar test, the following table will be used to determine if the shipment is within the established tolerance. If the *Drosophila* spp. larvae found are not within the tolerance listed, the shipment will fail the inspection and will not be certified for export to PRC.

### Drosophila spp. tolerance table

Lot size (total # boxes of cherries)	# of boxes to be sampled	5KG boxes / 35 cherries per box (total # of cherries in the sample)	Maximum # of Drosophila larvae per sample	9KG boxes / 50 cherries per box (total # of cherries in the sample)	Maximum # of Drosophila larvae per sample
1-50	2	70	2	100	3
51-100	3	105	3	150	4
101-200	4	140	4	200	5
201-350	6	210	5	300	8
351-500	8	280	7	400	10
501-750	10	350	9	500	12
751-1200	12	420	10	600	15
1201-2000	15	525	13	750	19
2001-3500	20	700	17	1000	25
3501-5000	25	875	22	1250	31
5001-10000	32	1120	28	1600	40
10001-20000	40	1400	35	2000	50
20001-40000	50	1750	43	2500	62
40001 or more	60	2100	52	3000	75



### 2017 Day-of-Year Calendar

### **June**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
				152	153	154
4	5	6	7	8	9	10
155	156	157	158	159	160	161
11	12	13	14	15	16	17
162	163	164	165	166	167	168
18	19	20	21	22	23	24
169	170	171	172	173	174	175
25	26	27	28	29	30	
176	177	178	179	180	181	

### July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
						182
2	3	4	5	6	7	8
183	184	185	186	187	188	189
9	10	11	12	13	14	15
190	191	192	193	194	195	196
16	17	18	19	20	21	22
197	198	199	200	201	202	203
23	24	25	26	27	28	29
204	205	206	207	208	209	210
30	31					
211	212					

### August

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 213	2 214	3 215	4 216	5 217
6	7	8	9	10	11	12
218	219	220	221	222	223	224
13	14	15	16	17	18	19
225	226	227	228	229	230	231
20	21	22	23	24	25	26
232	233	234	235	236	237	238
27 239	28 240	29 241	30 242	31 243		

### September

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 244	2 245
3 246	4 247	5 248	6 249	7 250	8 251	9 252