## Outdoor Production Pest Module – Anthonomus rubi (Strawberry Blossom Weevil)

Pest Modules are required to enable trade when there is a regulated pest and there are plants in production that could be a pathway for the regulated pests. In the case of *A. rubi*, the facility must meet the requirements of ISPM 10 for a Pest Free Place of Production (PFPP) or a Pest Free Production Site (PFPS) to export host plants to the United States. The goal for facilities outside of British Columbia is to confirm the production site is pest free, and to maintain pest freedom.

| For facilities in British Colombia, the goal is to confirm the production <u>site</u> is pest free, and to maintain pest free status. There are additional criteria for places of production in BC, including Monitoring practices in infested areas shall include debris removal, bud removal for strawberry plants, and aborted/dropped bud dissections/inspections  Additional scouting is required in infested regions (determined in collaboration with CFIA)  Buffer zone requirement – will need to establish a scouting program, ensure no hosts a in the buffer area, and include a spray program for the buffer area (e.g., use of herbicides to control potential hosts, flower). Buffer depth determined in collaboration with CFIA. |  |  |  |  |  |
|--|--|--|--|--|--|
| Any positive find within the PFPP/PFPS means the host plants are not eligible to export.   |  |  |  |  |  |
| The following sections should be used to descriintroduction of <i>A. rubi</i> at your facility. Facilities determine any additional pest mitigation meas listed here. The CFIA may accept or reject the paccept the proposal if additional conditions specified and Contact Information  | must work with their respective CFIA to ure(s) that may be required, other than what is proposed Pest Module or may conditionally        |  |  |  |  |
| Does your facility participate in a Systems  | □ Yes  |  |  |  |  |
| Approach (Assurance) Program? (e.g., GCP, CNCP)  | □ No   |  |  |  |  |
| In which geographical region is your facility located?   | ☐ Infested region - specify where within BC: ☐ Fraser Valley/metro Vancouver ☐ other ☐ Not known to be infested (province outside of BC) |  |  |  |  |
| Does your facility have outdoor production   | ☐ Yes ☐ No   |  |  |  |  |
| of host plants?  | If no, your facility may require fewer   |  |  |  |  |
|  | measures. There is a separate pest module template for greenhouse production.  |  |  |  |  |
| 1  | template for greeninouse production.   |  |  |  |  |

Contact your CFIA for guidance.

| e.g., CAN-GCP-xxxx, etc.  |
|---|
| Name of Contact Person (e.g., Certification Manager, GCP Manager) |
| Specific blocks/farm locations*                                   |
| Specific blocks/farm locations                                    |
| Email   |
|   |

| Phone   | Email  |  |  |  |
|---|--|--|--|--|
| *Specific fields or blocks must be separated by at least 3 m (10')  |  |  |  |  |
| We have the following host plants in production country of propagative origin, and the region if Rubus spp. (Source(s): Rosa spp. (Source(s): Fragaria spp. (Source(s): Note: Rubus spp. are ineligible to ship under the guidance.   | the plants are sourced from infested areas):))) e GCP label or the CNCP. Contact your CFIA for |  |  |  |
| Describe the production process at your facility (describe the incoming host plants, production steps, outbound plant description, etc.). It is particularly important to describe the host plants if they are bare root, bud wood, or plant material that based on pest biology would have no/low risk associated. The following three categories can provide some guidance as to level of increasing risk, A through C:  A – bare root, tissue culture or stem cutting, no active growth, no foliage or flower buds  B – potted dormant to semi-dormant, maybe some minimal vegetative growth C – potted with foliage and potentially flower buds |  |  |  |  |
| Attach a map of your facility that illustrates t (including the specific blocks/fields or farm lo   | · · · · · · · · · · · · · · · · · · ·  |  |  |  |

areas. Note that if you are applying as a Pest Free Place of Production, all fields would need to be included in your scouting & monitoring program (including bare root field production). Your current GCP/CNCP maps may be sufficient.

## Describe the additional or specific measures at your facility Check only the boxes that apply, and provide more detail where applicable (e.g., green highlighted sections). Additional measures and details are required in areas where there is increased risk. **Administrative Controls** Staff designation Designated scouts are assigned to inspect and monitor for all pests, including SBW (strawberry blossom weevil) The list of trained personnel can be found xxx, and is maintained by xxx (i.e., the person responsible) Personnel will be trained to identify or detect SBW based on **Training** damage symptoms and insect biology, at receiving, through production, and at shipping. Emphasis will be placed on identifying symptoms of bud damage and techniques for inspecting buds Resources Resources will include (but are not limited to): ☐ SBW factsheet from BC Invasive Council ☐ CFIA's website ☐ Hort Development Council UK ☐ Russell IPM online information resources ☐ OMAFRA CropIPM information on Strawberry Clipper Weevil (Anthonomus signatus) is reviewed as a comparison to SBW ☐ Other, provide details Resources are available to designated personnel and are stored on our computer system **or** in a pest information binder found XXX. A hand lens or microscope is available. **Purchasing** ☐ Host plant material will be sourced from locations free of SBW, or from certified/approved facilities if applicable (with appropriate declarations or GCP/CNCP authorized facilities with an approved SBW module) ☐ Host plant material for production is purchased as seed, tissue culture, bare root or in a vegetative state (e.g., cuttings) ☐ Host plant material for production is generated through selfpropagation ☐ We will request that host plant material received as plugs have debris and flower buds removed prior to packing/shipping ☐ Inspection upon arrival of host plants that are purchased from an infested region (e.g., they are bare root, vegetative, no host plant litter, etc. Be clear as to the level of risk (see page 2 – A, B or C risk level)

|  | ☐ Other, provide details  |
|--|---|
| Records  | Proof of these procedures is maintained in our facility records for at least 3 years as per the requirements of the GCP/CNCP  |
| Other  | Our facility is registered with the APHIS stakeholder registry and the CFIA Email Notification Subscription Self-Service Ongoing contact with local regulators and extension authorities will be maintained to verify if the pest is absent in the region of the facility.  |
| FACILITIES NOT GCP/CNCP AUTHORIZED (In addition to the other requirements of this pest module) | <ul> <li>□ Assign a main contact person for interactions with CFIA and who is responsible for the administration of the pest module (or a Pest-Free Protocol for non-CNCP/GCP facilities), and establishing the Pest Free Place of Production or Pest Free Production Site(s)</li> <li>□ Notify CFIA in the event of a suspected or positive SBW find and stop all shipping of product from the PFPP and/or PFPS(s)</li> <li>□ Maintain records of         <ul> <li>incoming host plant material inspection</li> <li>incoming/received paperwork</li> <li>all scouting and actions related to the pest module</li> <li>outbound host plant material inspection</li> <li>outbound/shipping paperwork</li> <li>Maintain traceability of the host plants</li> <li>Do not ship plants with evidence of any regulated pest</li> <li>CFIA export inspection must be arranged to verify plants are produced in a PFPP/PFPS and to inspect the shipment to confirm freedom from A. rubi</li> <li>CFIA phytosanitary certificate with additional declaration must accompany all shipments</li> </ul> </li> </ul> |
|  | Other, provide details  |
| Systems to Establish & N   |   |
| Monitoring and inspection program  | Recommended/suggested monitoring methods:  Note that the pest is very small; it may be more practical to scout for pest damage to buds versus the actual pest life stages, and adults are much easier to scout for and identify than larval stages  |
|  | ☐ Prior to bud development and at the early emergence of buds, random whole plants with dry foliage will be selected and tapped above a white container or similar (dry plants are important since the weevil is known to hide in wet conditions, e.g., after irrigation)   |

|                    | <ul> <li>□ Once flower buds develop, plants will be inspected for evidence of SBW using the tapping technique and aborted bud dissections</li> <li>□ Scout for adults by tapping from April to September. Scout for eggs and larvae by collecting and dissecting clipped/severed flower buds May through September. Peak clipping and weevil activity is expected May – June.</li> <li>□ In an infested area: Weekly scouting of host plants includes inspection for damage or signs of the insect pest during flower bud development and emergence (May-September)</li> <li>□ In a non-infested area: Scouting of host plants once every two weeks during flower bud development and emergence (May-September)</li> <li>□ Monitoring practices shall include debris removal, bud</li> </ul>  |
|--------------------|---|
|                    | removal for strawberry plants, and aborted/dropped bud dissections/inspections  Coco-discs (if used in container production) will be inspected for presence of adults from April to September  Other, provide details  NOTE: If your facility stores plants in coolers/freezers, scouting/monitoring may be suspended during this period. Describe the process for pre-cooler/freezer inspection and provide enough detail of process so that CFIA is confident there is no risk of infestation   |
| Cultural practices | ☐ The facility will be maintained according to good agronomic practices ☐ Commercial/sterile soil-free media will be used for container production ☐ Maps indicating where the Pest Free Place of Production or Pest Free Production Site occurs (identify each field/block/zone) ☐ Separately identified host plant production blocks (see page 2) will be separated by at least 10′ (3 m) ☐ A minimum 10′ (3 m) host-free border will be maintained around the perimeter of all outdoor host plant production areas ☐ Treatments to reduce or manage flowering in plants within the host-free border (as per federal & provincial recommendations) ☐ Plant debris will be managed, i.e., plant debris will be removed as production and handling practices provide; visible plant debris will be removed prior to shipping ☐ If host plants are found outside of the 10′ (3 m) buffer then details what actions your facility takes to manage this risk |

|   | ☐ Spray program – in crop (as p   |                                |  |  |
|---|---|--------------------------------|--|--|
|   | management recommendations)   |                                |  |  |
|   | ☐ Buffer zone requirement — will need to establish a buffer-  |                                |  |  |
|   | specific scouting program, ensur  | •                              |  |  |
|   | buffer area, and include a spray program for the buffer area  |                                |  |  |
|   | (e.g., use of herbicides to control potential host plants on your   |                                |  |  |
|   | property)   |                                |  |  |
|   | ☐ Other, provide details  |                                |  |  |
| Infrastructure controls   | ☐ Host plant returns will not be accepted from infested areas☐ Host plants will be shipped in sealed (i.e., closed) vehicles to |                                |  |  |
|   |   |                                |  |  |
|   | prevent infestation (if being ship  | pped through infested areas)   |  |  |
|   | $\square$ Cross-docking of inbound and  | d outbound host plants (i.e.,  |  |  |
|   | having uncertified, uninspected   | received plants adjacent to    |  |  |
|   | plants ready for shipping) will be  | e avoided during flowering     |  |  |
|   | stages, or a minimum of 10' (3 m) distance will be maintained   |                                |  |  |
|   | between inbound and outbound host plants  |                                |  |  |
|   | $\square$ Prior to packing/shipping, all visible plant litter (debris) will be  |                                |  |  |
|   | removed   |                                |  |  |
|   | ☐ Other, provide details (e.g., d   | o not ship between May-Sept,   |  |  |
|   | other measures?)  |                                |  |  |
| Verification that Pest Free   | edom has been Attained or   | Maintained                     |  |  |
| Specific Records  | Records of all scouting and income  | ming/outbound inspections will |  |  |
|   | be maintained as per the requirements of the CNCP (if   |                                |  |  |
|   | applicable).  |                                |  |  |
|   | $\square$ Surveys during active pest pe   | riod (e.g., CFIA, CNCP or GCP  |  |  |
|   | facilities)   |                                |  |  |
|   | $\square$ Inspections (scouting) during   | the active pest period         |  |  |
|   | ☐ Other records as requested by CFIA  |                                |  |  |
| Other   | ☐ An inspection of the product prior to shipment  |                                |  |  |
|   | ☐ Other, provide details  |                                |  |  |
|   |   |                                |  |  |
|   |   |                                |  |  |
|   | pplication is accurate and repr   |                                |  |  |
| measures in place at our facility to prevent the spread of this pest. |   |                                |  |  |
| Applicant Name  | Signature   | Date                           |  |  |
|   |   |                                |  |  |
|   |   |                                |  |  |
|   |   |                                |  |  |
| For CFIA Administrative Use Only                                      |   |                                |  |  |
| Date Received   | Date Approved   | Verified By (Name)             |  |  |
|   |   |                                |  |  |