

Specific pest risk mitigation measures to be applied for *Drosophila suzukii* (spotted winged drosophila) for the export of blueberries to the Philippines

This document is to be used in conjunction with the “WORK PLAN FOR THE EXPORT OF FRESH FRUIT OF HIGHBUSH BLUEBERRIES OF THE SPECIES *Vaccinium corymbosum* L., *Vaccinium virgatum*, and *V. corymbosum* hybrids FROM THE UNITED STATES OF AMERICA TO THE PHILIPPINES and provides additional guidance for specific risk mitigation measures required for *Drosophila suzukii*.

1. PRE-HARVEST

Risk mitigation measures for Drosophila suzukii (spotted winged drosophila): Growers in all production states must specifically apply management measures to control *Drosophila suzukii* (spotted winged drosophila). At minimum, management measures must include the repeat application of insecticides and monitoring of fields for the presence of larvae in fruit as follows.

- i. **Insecticide application:** Specifically, insecticides must be applied every 7-14 days (depending upon the product label), beginning at the time fruit is first susceptible (when the color turns from green to pink) and continuing through the time of the final harvest of all varieties in that production field. Alternatively, if the presence of spotted winged drosophila adults is monitored through a trapping program, either at the grower or production area level, insecticide applications must begin when any adult is trapped and the fruit is susceptible. Trapping at the grower level must be conducted by a licensed Pest Control Advisor (PCA), or by a trained person under the supervision of a licensed PCA.
- ii. **Monitoring production field for the presence of larvae in fruit:** If spotted winged drosophila adults have been detected in the production field, once fruit is susceptible to infestation, the production field must be monitored at least weekly by a licensed PCA or by a trained person under the supervision of a licensed PCA, to determine the presence of spotted winged drosophila larvae in fruit. Fruit will be sampled and inspected following an approved fruit extraction method using a solution of brown sugar or salt and water. An example of an approved fruit extraction method may be found in “*A Detailed Guide for Testing Fruit for the Presence of Spotted Winged Drosophila (SWD) Larvae*” located at: <https://catalog.extension.oregonstate.edu/em9096>
- iii. The dates and results of the monitoring must be recorded and provided to the packing facility prior to or at the time of the harvest of any blueberries potentially destined for export to the Philippines.
- iv. Fruit from fields with detections of spotted winged drosophila larvae may not be packed for export to the Philippines, unless the fields have been treated with an appropriate insecticide and subsequent fruit sampling in those fields confirms that fruits are free from larvae.

2. POST-HARVEST:

The following risk mitigation measures must be applied at the packing facility to ensure that blueberry fruits packed for export to the Philippines are free of *Drosophila suzukii* (spotted winged drosophila).

a) Fruit sampling and inspection using a fruit extraction method to confirm freedom from larvae.

- i. A representative sample of fruit will be collected randomly from each load of fruit arriving at the packing facility.
- ii. Each sample will consist of a minimum of 1 liter (approx. 1.4 lbs.) of fruit.
- iii. Each fruit sample will be subjected to an approved fruit extraction method (i.e. either a brown sugar or salt water flotation test) to confirm freedom from *Drosophila suzukii* larvae.
- iv. Either a concentrated sugar or salt solution may be used. See the following for examples of solution composition:
 - Sugar solution: Dissolve 3.5 kg of brown sugar in 20 liters of water. The resulting solution should have a brix reading of at least 15.
 - Salt solution: Dissolve 1 liter of salt in 16 liters of water.
- v. Ideally samples will be tested as soon as possible after the fruit arrives at the packing facility, but must be tested within 24 hours of the time of harvest.
- vi. Packing facilities must have a designated area for fruit testing with good lighting and appropriate equipment and materials.
- vii. The solution must be carefully inspected for larvae. An example of the inspection process may be found in “*A Detailed Guide for Testing Fruit for the Presence of Spotted Winged Drosophila (SWD) Larvae*” located at:
<https://catalog.extension.oregonstate.edu/em9096>
- viii. Inspections must be conducted by trained packing facility staff and are subject to oversight/monitoring by regulatory officials. Alternatively, the inspections may be conducted an APHIS approved regulatory official.
- ix. Any larvae detected must collected and identified by an APHIS approved regulatory official.
- x. The results of each fruit sample inspection must be documented on the form provided by APHIS (an equivalent document may be used if approved by APHIS).
- xi. If any larvae of *Drosophila suzukii* is detected during this fruit sampling, fruit from that lot will not be eligible to pack for export to the Philippines.
- xii. A copy of the inspection results confirming that all lots in the consignment were found to be free of larvae of *Drosophila suzukii* must be provided to APHIS and/or the APHIS cooperator with the request for phytosanitary inspection.