

Blueberry maggot (*Rhagoletis mendax*) survey

Distribution and hosts



Blueberry maggot adult

The blueberry maggot (BBM), *Rhagoletis mendax* Curran, is native to the eastern US. It is found throughout the eastern United States including AL, CT, DL, FL, GA, ME, MD, MA, MI, NH, NJ, NY, NC, PA, RI, TN, VA, and WV. In Canada, it is known from New Brunswick, Nova Scotia, Ontario, and Prince Edward Island. It is considered a pest of blueberry, deerberry, huckleberry, and other possible hosts. Blueberry maggot is a serious threat to Oregon's blueberry industry. Oregon was rated number five in the US for the number of harvested acres of blueberries and ranked number one in the US for yield per acre. In order to keep producing high yields of blueberries, we need to prevent blueberry maggot from entering and establishing in Oregon.

Without pesticide treatments, maggots may infest nearly all of the berries in a field. Infested berries become soft and mushy. Oregon berry processors have a zero tolerance policy for blueberry maggots. Oregon has a blueberry maggot quarantine for the states listed above.

Biology and life cycle

Blueberry maggot over-winters as a pupa in the top few inches of the soil. The flies begin to emerge in mid-June and continue through mid-August. The adults feed on dew, insect honeydew, and foliage secretions. Eggs are laid, one per berry, under the fruit skin just as the berries begin to turn blue. The whitish-colored larvae feed inside the fruit for about two to three weeks until the berry is almost completely destroyed. Then the larvae drop onto the soil, burrow down about 1 to 2 inches, and pupate.



BBM larva

Basic identification

Both larvae and adults are very difficult to identify and in some cases it is impossible to distinguish them from other related species by their morphology. The adult is black with three or four white bands across the abdomen and a W-shaped pattern of dark bands on its wings. The fly is a little smaller than a housefly, about 1/5 inch long and a wingspan of eight mm. The blueberry maggot adult looks virtually identical to the apple maggot and snowberry maggot.

Survey

A statewide blueberry maggot survey will begin in June and continue through August. The survey objectives are to identify potential sites for BBM introduction and to determine if BBM is present in Oregon. Potential trap sites are commercial blueberry fields, nurseries that receive blueberries or other host material from infested states, large home blueberry plots, and blueberry fields no longer in production. An ODA technician will place a sticky yellow plastic trap(s) either on a stake or directly on a blueberry plant. The traps will be serviced approximately every two weeks.

If you have any questions about blueberry maggot or the survey program please contact us at the number provided below.

Thank you for your cooperation with this survey.