



December 2016

NOTIFICATION UPDATE
BRITISH COLUMBIA'S FRUIT AND HORTICULTURAL INDUSTRY
APPLE MAGGOT DETECTION IN THE KELOWNA AREA
SPRING/SUMMER 2016 SURVEY FINDINGS

This is an update to information previously provided about the September 2015 detection of a single apple maggot female fly (*Rhagoletis pomonella*) on a Canadian Food Inspection Agency (CFIA) trap placed in a residential area in West Kelowna, British Columbia. Apple maggot is a regulated pest in Canada and is not known to occur in the Okanagan. This was the first detection of apple maggot in the area.

Based on this detection of apple maggot, the CFIA conducted further surveillance activities in West Kelowna in the fall of 2015. Results from this surveillance, which involved collecting and examining fruit from host plants in the area, were negative.

In the spring/summer of 2016, the CFIA, with contribution and support from Agriculture and Agri-Food Canada (Summerland Research and Development Centre), the BC Ministry of Agriculture, the Sterile Insect Release Program, the BC Fruit Growers Association, the BC Tree Fruits Cooperative, the Regional District of Central Okanagan, the City of West Kelowna and the Westbank First Nation, conducted a delimitation survey in West Kelowna around the 2015 detection site and an extensive detection survey throughout the Okanagan and Creston Valleys, using traps to catch adult apple maggot flies.

There were no apple maggot flies detected on any traps in the 2016 delimitation survey carried out in West Kelowna. However, a single apple maggot female fly was found on a trap placed in a commercial area in Kelowna as part of the 2016 detection survey.

Residents with major plant hosts within 200 metres of the 2016 detection received a Notice of Prohibition of Movement for plants, fruit, and soil associated with the plants. In addition, Notices of Prohibition of Movement for plants, fruits and soil associated with the plants, issued to homeowners within the 200 meters of the 2015 detection in West Kelowna, will remain in place until further notice.

In the Spring /Summer of 2017, the CFIA, in collaboration with partners sited above, will carry out delimitation survey activities around the 2015 and 2016 detection sites in West Kelowna and Kelowna, respectively. In addition, a detection survey will be conducted throughout the Okanagan and Creston Valleys.

The major hosts of apple maggot are apple, crabapple and hawthorn trees. It also may be found on plum, cherry, peach, pear, apricot, chokeberry, cotoneaster, serviceberry and roses.

Apple maggot larvae remain in dropped fruit until the larvae mature. Heavily infested fruit drop to the ground and the larvae may enter the soil and pupate. The pupae stay dormant over winter and may persist in soil for several years. The flies typically emerge in late June or July. The larvae then burrow into fruit, making it unmarketable.

The pest poses no threat to human health.

Anyone in the southern interior of BC who suspects apple maggot must report the finding to their local CFIA office as soon as possible. Contact information of CFIA's District offices in British Columbia may be found on the CFIA's website at <http://inspection.gc.ca/about-the-cfia/offices/eng/1313255382836/1313256130232>



Recognizing Apple Maggot

The maggot is difficult to find in its larvae stage because of its pale colouration.



During its larvae stage it creates dimple looking marks on the outside of an apple and brown looking tunnels on the interior.



Larval feeding damage appears as distinctive brown tunnels through the flesh of the fruit.



The mature insect measures 5 mm (smaller than a normal house fly) and is recognizable by four irregular or zig-zag black bands on the wings. The body is generally black with a yellowish head and legs and greenish eyes. The male has three white bands on the abdomen and the female has four similar white bands and is considerably larger.



For more information concerning apple maggot including symptoms of infested fruit, please visit the CFIA's website at <http://www.inspection.gc.ca/plants/plant-protection/insects/apple-maggot/fact-sheet/eng/1330366145611/1330366375524>