

INVASIVE SPECIES ALERT!

APPLE MAGGOT

(*Rhagoletis pomonella*)

REPORT INVASIVE SPECIES
www.reportinvasives.ca

NATIVE RANGE

Apple maggots are native to eastern North America.

DESCRIPTION

Apple maggots...

- Are white to cream coloured and grow to 6.5- 8 mm long as larvae (found in fruit)
- Are golden-brown in colour and 5mm long as pupae (found in soil)
- Are black bodied and 5-6 mm long as adult flies
- Have a yellow head and yellowish legs as adult flies
- Are 'picture wing flies', with zig-zag black bands, resembling an 'F' on their wings

WHY SHOULD WE CARE?

Apple maggots...

- Destroy the marketability and usefulness of apple fruit (Larvae)
- Can inhabit and affect other fruit such as hawthorns (*Crataegus*) berries (Larvae)
- Necessitate the use of rigorous management in order to protect the apples for harvest, including the use of insecticides

BIOLOGY & SPREAD

Apple maggots can be transported to new regions as larvae in fruit or pupae in soil. Larvae remain in a single fruit, before dropping to the soil to pupate. Pupae overwinter in soil. Once developed, the adults emerge in late June-Sept and spread via flight, infecting developing apples. Adult flies live 3-4 weeks, and during that time can travel > 1 km and females can produce up to 200 eggs. Eggs are laid just under the skin of developing fruit, and then hatch into larvae that tunnel through the fruit, creating damage, and allowing rot organisms to enter and hasten decay of fruit.

HABITAT

Apple maggots can be found in a variety of habitats where host fruits are found including cultivated/ agricultural land, managed forests, plantations/orchards, urban areas, and natural terrestrial areas.



PHOTO: JOSEPH BERGER, BUGWOOD.ORG

PRIMARY IMPACT:
Apple maggots pose a serious threat to fruit crops of both backyard and commercial fruit growers.

DID YOU KNOW?

Apple maggot larvae leave the host fruit to enter into the soil to transform into pupae (between larvae and adult form). Pupae stay dormant over winter, and **may even persist in the soil for several years.** This greatly increases its risk of being transferred in soil to non-infected regions.

(over)

APPLE MAGGOT (*Rhagoletis pomonella*)

ARE THEY HERE YET?

Yes. Apple maggots are established in Coastal B.C. including Vancouver and surrounding area, Fraser Valley, Vancouver Island, and Gulf Islands, and the city of Prince George. B.C.'s southern interior is the only major fruit growing region in North America that is free from this pest.

HOW CAN WE STOP THEM?

Prevention:

- Check fruit for signs of damage (i.e. brown tunnels)
- Do not move apple maggot infested plants, fruit or soil out of coastal B.C.
- Do not compost infested fruit (flies can complete development in backyard composts)
- Choose non-host whenever possible
- Protect developing fruit with a 'tree bag' or individual 'fruit bags'. Be sure to get the netting/bag on by mid-June, before the flies emerge
- If you do not wish to harvest your apples, fruit can be removed/stripped after bloom to avoid apple maggot infestation
- Raise awareness to avoid further spread in B.C.
- Refer to the following link for management, control and removal practices

<http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-plant-diseases/tree-fruits/apple-maggot>

REPORTING CONTACTS

- If any suspected apple maggot flies or larvae are found in the southern interior of B.C., please contact and/ or bring the suspect fly or larvae to the B.C. Ministry of Agriculture or Canadian Food Inspection Agency (CFIA).

Contact: Ministry of Agriculture

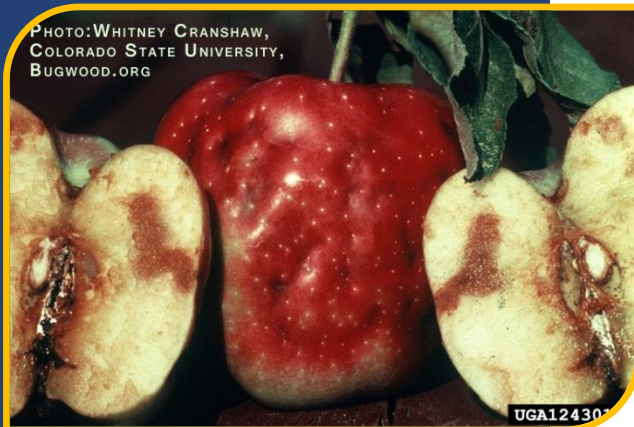
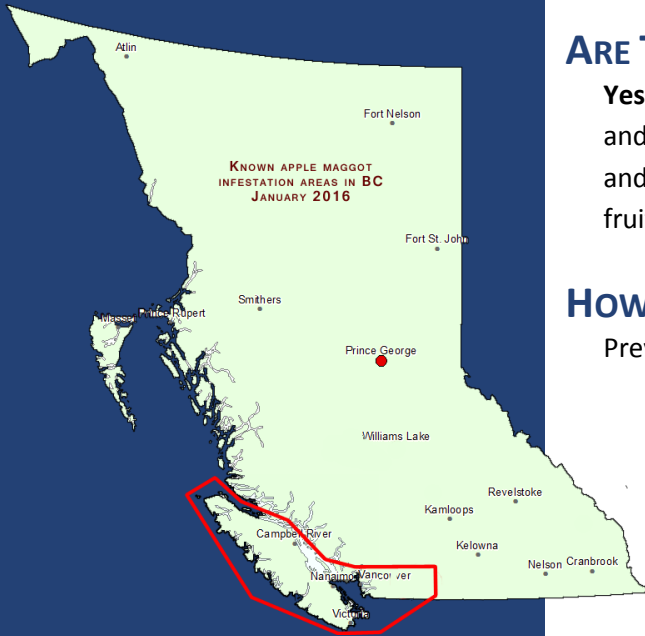
1767 Angus Campbell Road,
Abbotsford BC, V3G 2M3

Phone BC Coast: (604) 556-3001 / Phone BC Interior: (250) 861-7681

E-mail: PAHB@gov.bc.ca (Plant and Animal Health Branch, B.C. Ministry of Agriculture)

Contact: Canadian Food Inspection Agency

<http://www.inspection.gc.ca/about-the-cfia/contact-us/eng/1299860523723/1299860643049>



WHAT SHOULD I DO IF I FIND ONE?

Report apple maggots, or any other invasive species via the **Report Invasives phone app**, or via the **webform** available on the B.C. Inter-Ministry Invasive Species Working Group website:

www.gov.bc.ca/invasive-species