

# INVASIVE SPECIES ALERT!

## APPLE MAGGOT

*(Rhagoletis pomonella)*

### HAVE YOU SEEN THIS ANIMAL?

#### DESCRIPTION

- White-to-cream coloured and grow to 6.5- 8 mm long as larvae (found in fruit).
- Golden-brown in colour and 5mm long as pupae (found in soil).
- 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 that resemble an 'F' on the wings.



Photo credit: J.F. Walgenbach, NC State Extension

### REPORT INVASIVE SPECIES

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[www.gov.bc.ca/invasive-species](http://www.gov.bc.ca/invasive-species)

### PRIMARY THREAT:

*Apple Maggots pose a serious threat to fruit crops of both backyard and commercial fruit growers.*

### 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-September 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.

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



Photo credit:  
Top - Whitney Cranshaw, Colorado State University, Bugwood.org  
Bottom- Joseph Berger, Bugwood.org

For more information: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species>



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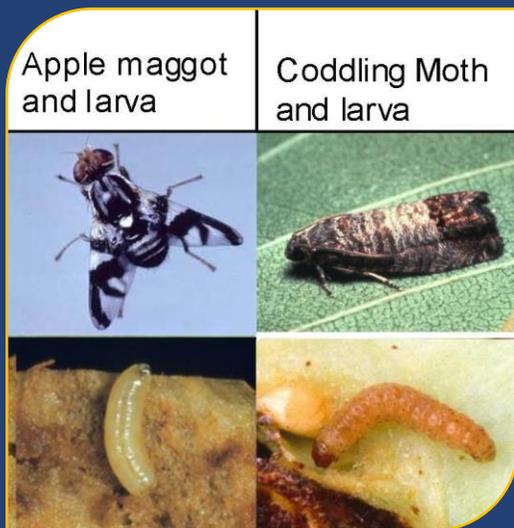


Photo credit: WSU Skagit County Extension Master Gardeners, Facebook.com

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## WHAT CAN YOU DO?

- 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 plants 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 Ministry of Agriculture website for management, control and removal practices.

For more information: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species>

## DISTRIBUTION & STATUS

Apple Maggots are native to eastern North America. They 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.

## LOOK-ALIKES:

Codling moth, a caterpillar and a major pest of apples both in backyards and in commercial orchards, also feeds inside apple fruit. Codling moth caterpillars feed around the core of the apple, leave webbing and frass, grow to 20 mm and have brown heads and six legs. Conversely, Apple Maggots **feed in the fruit cortex, creating brown tunnels throughout the apple, grow to 10 mm and have no head or legs**. Many 'picture wing flies' are established throughout B.C. and infest various fruit and nuts. These can easily be confused with Apple Maggot flies. Contact a professional for proper identification.



## DID YOU KNOW?

Apple Maggot larvae leave the host fruit to enter 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 their risk of being transferred in soil to non-infected regions.

