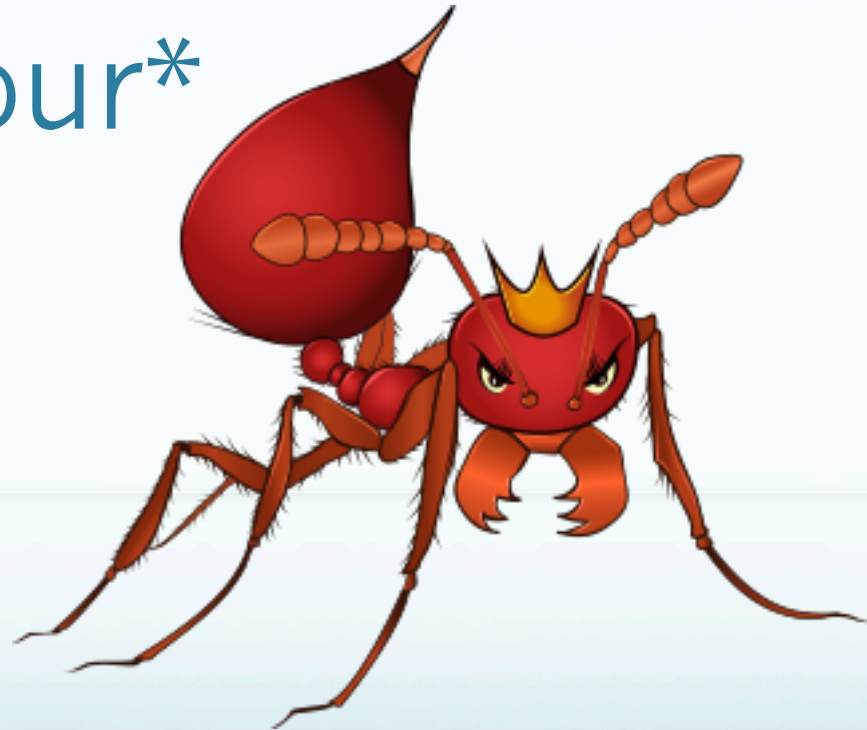


Invasive Insects: A Tour*



*All information contained in this powerpoint was provided by Tracy Hueppelsheuser, Ministry of Agriculture and prepared by Jacquie Rasmussen of LRISS.

Invasive Pests & Biosecurity

Crop biosecurity prevents, minimizes and controls the introduction and spread of plant pests at the farm level. Implementing a biosecurity plan for your farm can help to protect you from introduction of new pest problems.

Help prevent the introduction and spread of plant pests from farm to farm by following the Biosecurity Guidelines for Farm Visitors and **O**n-Farm and Greenhouse Sanitation and Disinfection Practices to Minimize the Impact of Plant Pests.

[Biosecurity Guidelines for Farm Visitors](#)

[On-Farm and Greenhouse Sanitation and Disinfection Practices to Minimize the Impact of Plant Pests \(PDF\)](#)

[Biosecurity Disinfection and Sanitation Practices \(PDF\)](#)

Excerpt from:

<http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/invasive-and-biosecurity>

What do you do when you have an unknown insect or mysterious plant damage?

- Plant Health Laboratory: Diagnostics is the first step—need to verify what you have first before deciding on a plan of action.
- [Plant Health Laboratory](#)
- Insect or damage samples can be sent here for species ID. There is no charge for submissions if you suspect a new species to the area.



Other Resources

BC Plant Protection Advisory Council. The Plant Pest Emergency Manual is the third link on this page.

<http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/invasive-pests-and-biosecurity/bcppac>

Plant Health Strategy: broader than just invasives.

<http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/animal-and-crops/plant-health/phstrategy.pdf>

Both of these are good resources and give some basic guidelines for prevention of pest incursion and what should happen if they do show up.

Pest Alerts

Pest Alerts highlight new and invasive plant pests of concern to agriculture in B.C. Early detection and identification of a new pest will greatly improve chances of eradicating the pest or slowing its spread and damage.

[Apple Maggot - Pest Alert \(PDF\)](#)

[Brown Marmorated Stink Bug](#)

[Grey Tortrix Moth - Pest Alert \(PDF\)](#)

[Spotted Wing Drosophila \(Fruit Fly\) Pest Alert](#)

[Balsam Woolly Adelgid \(PDF\)](#)

[European Brown Garden Snail \(PDF\)](#)

GO TO: [Ministry of Agriculture Website: Pest Alerts](#)

Colorado Potato Beetle

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Colorado Potato Beetle (CPB) (*Leptinotarsa decemlineata*)

- Native to North America, fed on wild solanum plants.
- Adapted to potato crops in 1850s and moved east through cultivated crops as it became a significant pest



Feeding damage and frass, by CPB larvae

CPB
larvae



BC Ministry of Agriculture

CPB damage and life cycle

- One generation per year.
- Adult beetle overwinter in soil outside of fields
- In spring (late May) adults move from field edges to find and lay eggs in hosts: potato, tomato, eggplant, pepper
- Larvae feed in June, July.
- Adults & larvae eat foliage
- Pupate in fall.



Figure 1. Colorado potato beetles, *Leptinotarsa decemlineata* (Say), feeding on foliage. Photograph by David Cappaert, Michigan State University, www.insectimages.org.

Colorado Potato Beetle distribution in B.C.?

- First report in B.C. 1911 at Newgate (border south of Cranbrook) (Gerber 1994, B.C. Ministry of Agriculture)
- 1994: present in Kootenay valleys, south Okanagan and Similkameen valleys.
- 2000s: Lillooet
- Elsewhere?
- **NOT present in the Fraser Valley**



Management of Colorado Potato Beetle

For back yard gardeners:

- <https://www.extension.umn.edu/garden/insects/find/colorado-potato-beetles/>
- Hand pick beetles, larvae, and eggs off and destroy
- Check plants weekly in the summer for insects
- Control weeds

From Ontario:

- <http://www.omafra.gov.on.ca/IPM/english/tomatoes/insects/colorado-potato-beetle.html>

Other ideas:

- Floating row covers
- netting

Brown Marmorated Stink Bug

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Stop the BMSB Website

- Part 1: History and Identification
- Part 8: Host Plants and Damage in the Pacific Northwest



GO TO [Stop the Brown Marmorated Stink Bug Website](#)