# **Canada Thistle Biocontrol Factsheet**







Canada thistle leaves



Canada thistle flowers

#### HOW THEY WORK:

Biological control agents (typically insects) weaken the target plant's seed production and overall plant integrity by feeding on the seed heads, and other parts of the plant, such as their root systems. Biocontrol will not typically get rid of your weeds all together. It is a long-term control strategy and results are usually seen over numerous years.

## **Biocontrol Agents**

### Larinus carlinae

TYPE OF AGENT: Seed feeding beetle (weevil) COLLECTABILITY: Mass ORIGIN: Macedonia

#### **INVASIVE PLANTS ATTACKED:**

Bull thistle (*Cirsium vulgare*), Canada thistle (*C. arvense*) Nodding thistle (*Carduus nutans*), Plumeless thistle (*C. acanthoides*)

#### **BIOCONTROL AGENT LIFECYCLE:**



#### Larva:

The larvae have segmented white bodies with brown heads and 'C' shaped. For dispersal monitoring purposes they are found in the root in July. They feed on the entire seed-head contents thus destroying the seeds.

#### Adult weevils:

Measure 5 to 10 mm in length and oval shaped. Wing covers are slightly pock-marked with greyish-white tufts of hair. Their rostrum (nose) is long and narrow. Adults feed on plant parts which help decrease plant growth. Adult weevils are found along the flower buds, stem, leaves most notably in June.



L. Carlinae larvae



*L. Carlinae* adult



L. Carlinae adult on Canada thistle

#### More Information:

Classical biocontrol is a long term management tool used in integrated pest management (IPM). IPM involves selecting from a range of manual, mechanical, chemical, cultural and biological control methods to match the management requirements of a specific site. The goal is to maximize effective control and to minimize negative environmental, economic and social impacts. Biocontrol is an important tool in the IPM toolkit. It involves controlling invasive plants, by introducing natural enemies.

The biocontrol's listed are tertiary insects regulated by the BC Ministry of Forests. There are currently 5 Canada thistle biocontrol agents that have been released in BC. The information in this factsheet was created using the Province of British Columbia Government's Biocontrol resources found at <u>www.gov.bc.ca/invasiveplants.</u>



For more inforamtion about the TNRD's biocontrol program and how to request insects contact us!

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