# Hound's Tongue Biocontrol Factsheet



Hound's tongue plant



Hound's tongue burs/seeds



Hound's tongue 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 Agent**

## Mogulones crucifer

**TYPE OF AGENT:** Root feeding beetle (weevil)

COLLECTABILITY: Mass
ORIGIN: Hungary and Serbia
INVASIVE PLANTS ATTACKED:

Hound's tongue (Cynoglossum officinale L.)

## BIOCONTROL AGENT LIFECYCLE:

Jan	Feb	Mar	Apr	May	Jun	Jul	А	ug	Sep		Oct	Nov	Dec
Overwintering - Mixed Stages			Adult		All stages			Adult		Overwintering - Mixed Stages			

#### Larva:

The larva have brown heads and are 'C' shaped. Larva feeds on the roots and lower basal parts of the roots. Larva feeding and mining tunnels become filled with light brown frass. Larva feeding weakens rosette growth and bolting ability. They cause shortened bolting stalks and fewer flowers produced.

### Adult weevils:

Measure 2 to 3 mm in length and round shaped. They are dark brown in color with a noticeable white cross pattern on their wing covers. Their rostrum (nose) is long and narrow. Adults feed on foliage in circular or oval holes which also aids in dispersal monitoring. When high adult populations occur during the spring and summer, plant seedlings attacked often fail to develop into productive rosettes.



M. crucifer adult



M. crucifer feeding holes



M. crucifer larvae

### **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 is currently 1 hound's tongue biocontrol agent 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 www.gov.bc.ca/invasiveplants.





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

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