

Mecinus janthinus

Stem-boring Weevil

Weed(s) Attacked: Dalmatian Toadflax
SCNWCB February 2006

GENEALOGY

Original source for Canadian release was Yugoslavia and Italy. The agent is well established in British Columbia. *Mecinus janthinus* was approved for release in the U.S. in 1995. It migrated from southern British Columbia into northern Stevens County and was first documented in 2000. The first known U.S. collections and releases took place in Stevens County WA. Field Insectaries are being established throughout the county.

LIFE CYCLE

Starting in June females lay a single egg per chewed out cavity in the toadflax stems and seal the hole with a cap of chewed material. When the eggs hatch the larvae begins tunneling within the stem, increasing the size and length of the tunnel as they grow. After about a month the larvae stop tunneling and over several more weeks pupate into a new adult. These new adults remain inside the stem during the winter. Snow cover helps the dormant adults inside the stems survive the freezing temperatures of winter. Starting in May these new adults chew their way out of the stem, feed, and in June start laying eggs.

EFFECT

Adult feeding does substantial damage to the leaves. An attacked plant exhibits leaves with "buckshot" holes. The larval stem tunneling disrupts the food transport system between the roots and the leaves. At the initial collection sites in northern Stevens County the impact of this agent has been remarkable.

REDISTRIBUTION

This agent can be collected in late May and June. It is a focus of collections and redistribution in Stevens County. The population of this agent is on the increase in the county.

COMMENTS

At the initial collection sites in northern Stevens County this agent has proven highly destructive to Dalmatian Toadflax. At numerous new sites the population is increasing and damage is evident. A county wide grid of release sites has been selected and will receive the bulk of the insects collected over the coming years. It is expected that the populations of the insect will increase at these undisturbed "Field Insectaries" and move out into all areas of the county where Dalmatian Toadflax is found, which is almost everywhere.



Mecinus janthinus adult



Mecinus janthinus breeding



Mecinus janthinus damage