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Forest Health Protection and State Forestry Organizations

Management Guide for Alder Flea Beetle

Macrohaltica ambiens (LeConte) (formerly *Altica ambiens* (LeConte))
(Coleoptera: Chrysomelidae)

The alder flea beetle is a transcontinental species occurring in the West from California and New Mexico northward into Alaska.

Hosts:

- Alder species
- Willows and poplars- occasionally

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Damage

Beetle larvae feed in groups destroying the upper leaf surface. Adults chew holes through leaves.

When populations of this beetle are high, feeding damage turn patches of alder brown leading land owners/managers to believe that the alder is dead or has been sprayed with an herbicide.

Defoliation can be complete, but seldom lasts more than one season. Defoliation does not cause economic

loss. Lasting damage from alder flea beetle defoliation is rare.



Alder leaf showing damage from alder flea beetle larvae. Photo by: Ken Gibson

Life History

Adults aggregate to hibernate during the winter in debris beneath the tree and in other sheltered places. Adults are about 1/5 inch long, metallic greenish blue or cobalt blue in color. Adults will emerge in early spring to resume feeding.

Adults mate and lay clusters of yellow/ orange eggs on leaves shortly after emerging in the spring.

Larvae emerge from the eggs within a few days. They are 1/5 to 1/4 of an inch in length when fully grown, brown/black dorsally and yellowish ventrally with shiny black heads and short legs.

Larvae reach maturity in August, and pupate on the ground in the duff. New adults appear in a week to 10 days and feed voraciously on the foliage until

the close of the season when they enter hibernation.

During the late summer/ early fall look for groups of metallic greenish blue or cobalt blue adults chewing holes through leaves.



Leaf damage from alder flea beetle. Photo by Rowena Hopkins of the Moncton Naturalist Club.

Key Points

- **Beetle larvae and adults feed on alder leaves.**
- **Adults are about 1/5 inch long and dark, shiny cobalt blue color.**
- **Skeletonize leaves with numerous larvae are signs of attack.**

**-Warning-
remember,
when using
pesticides,
always read and
follow the label!**

MANAGEMENT

Prevention

- Tactics geared toward maintaining plant vigor such as watering and fertilizing plants as needed to keep them healthy. Some have suggested that outbreaks of this insect are actually beneficial by reducing the amount of cover on a site and enabling regenerating tree species to receive direct sunlight.

Indirect Control

- Foster populations of natural enemies by minimizing use of insecticides in the area.

Chemical control

- Damage attributed to this insect has not risen to the level where insecticide use has been deemed necessary. Before using any pesticide, read the label and insure that use of the compound is registered for alder flea beetle control.

Other Reading

Berryman, A.A. 1989. Forest Insects Principles and Practice of Population Management. Plenum Press, New York, New York. Pg. 157.

Coulson, R.N. and J.A. Witter. 1984. Forest Entomology Ecology and Management. John Wiley & Sons, Inc. New York, New York. Pg. 381.

Furniss, R.L. and V.M. Carolin. 1977. Western Forest Insects. US Department of Agriculture Forest Service. Miscellaneous Publication No. 1339. Pg 315

Web Refeneces:

Gardening and Insects on Price Edward Island <http://www.gov.pe.ca/af/agweb/index.php3?number=72659&lang=E>

Maine Forest Service Condition Report 2003:<http://www.state.me.us/doc/mfs/cond03.htm>

Moncton Naturalist Club Photos:
<http://www.naturemoncton.org/fauna.htm>

Forest Health Protection and State Forestry Organizations

Assistance on State And Private Lands

Montana: (406) 542-4300

Idaho: (208) 769-1525

Utah: (801) 538-5211

Nevada: (775) 684-2513

Wyoming: (307) 777-5659

N.Dakota: (701) 228-5422

Assistance on Federal Lands

US Forest Service Region One
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