

Hoary Alyssum *(Berteroa incana (L.) DC)*

INTRODUCTION

Hoary alyssum is an annual to short lived perennial which originated in Eurasia. In BC it has expanded from the Thompson Okanagan and Kootenay regions, and is threatening eastern and northern regions. It is only classified as noxious in the Kootenay-Boundary region, however, it is a priority species in all interior regions.

Hoary alyssum prefers dry sandy or gravelly soils and establishes well in dry, disturbed habitat such as: pastures, hayfields, roadsides, rangelands and embankments. It can be very troublesome to ranchers, as horses have been known to become intoxicated after eating green or dried hoary alyssum plants. Some symptoms associated with severe intoxication include stiffness, fever, diarrhea, intravascular hemolysis, and hypovolemic shock. Death has only been recorded in horses eating hay infested with 30-70% hoary alyssum. Ruminants (cattle, sheep, goats, and llamas) are not known to have adverse reactions to it.

IDENTIFICATION

- Annual to short lived perennial
- White flowers 4-6 mm long with 4 deeply notched petals
- Slender taproot
- Erect and branched stems covered with star-shaped hairs (0.3-1.1 m tall)
- All leaves are greenish-grey and lower stems purple
- Flattened oval seed pods are 5-8 mm long, have star-shaped hairs, and are held close to the stem

Flowers are carried on slender stalks and have hairy sepals that soon drop off. It has flattened oval seedpods that are chambered and can contain anywhere from 3-7 seeds aligned in rows. Each seed is 2-3 mm long.



Hoary alyssum plants can vary in form considerably depending on site-specific conditions such as soil type, nutrient availability, moisture, and competition. These variables may cause them to be simple, slender and unbranched, to partially branched, or even fully branched and rounded.

BIOLOGY

Hoary alyssum is commonly referred to as a biennial, but can also behave as an annual or perennial at times. It reproduces only by seed. The plant emerges as a rosette in early spring and then bolts and grows a cluster of white flowers. From late spring flowers and seeds continue to be produced until the first frost. When acting as a perennial it over-winters as a rosette and emerges again in the spring.



INTEGRATED MANAGEMENT

The best overall method of control for hoary alyssum will be achieved through an integrated program using a combination of control methods. Hand-pull plants before they mature or apply herbicides to control seedlings and actively agrowing plants. It is also important to seed disturbed areas with grasses and forbs to provide cover and competition.

PREVENTION

The most effective way to ensure that your lands do not become infested with hoary alyssum is by prevention. Here are some recommendations to prevent hoary alyssum from invading your property:

- Learn to identify hoary alyssum and other invasive plants.
- Maintain your crops and natural lands in a healthy, vigorous condition to ensure a competitive plant community; competitive perennial grasses and forbs utilize water and nutrients that would otherwise be readily available to hoary alyssum.
- Regularly patrol your property for hoary alyssum plants and immediately control or remove infestations before seed set. Do not leave plants to compost as they may still produce viable seed.
- Cooperate with adjacent landowners and encourage them to prevent hoary alyssum spread.
- Immediately re-vegetate disturbed, bare soils with a suitable seed mixture that provides dense, early colonization to prevent weed invasion.
- Do not move contaminated soils to a new area.

PHYSICAL CONTROL

The first plants found in an area should be managed and priority should be control. Small populations can be successfully controlled by diligent hand-pulling or hoeing in the spring during seedpod development to prevent seed production. Mowing is ineffective on hoary alyssum. Continually re-visit sites annually and remove new plants, before they go to seed. Re-vegetate managed areas with competitive, desirable plants to compete against re-invasion. Plants with mature seedpods should be removed and disposed of by burning or burial in the landfill.

BIOLOGICAL CONTROL

There are no biological controls for hoary alyssum available at this time.

For further information on weeds in BC check out the provincial websites at: <http://www.weedsbc.ca> or <http://www.agf.gov.bc.ca/cropprot/weeds.htm>

For more information about the Regional District of Okanagan-Similkameen Noxious Weed Education Program please contact the Regional District at 250-492-0237 or toll free at 1-877-610-3737. Information is also available on our website at: <http://www.rdos.bc.ca>

