

# Hoary Alyssum

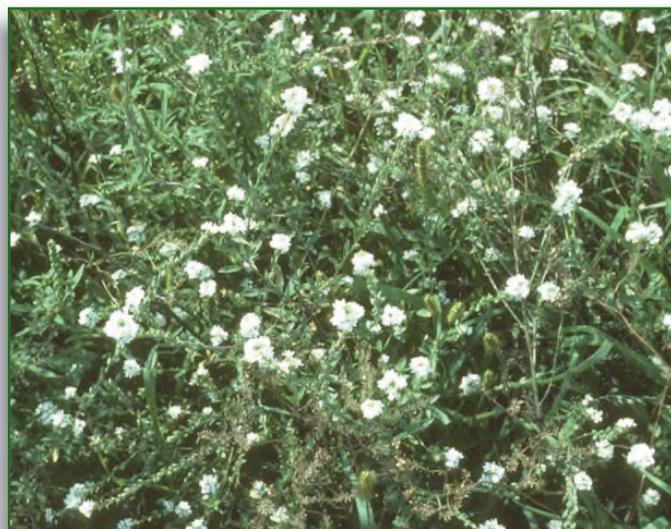
Krishona Martinson, PhD, Mike Murphy, DVM, PhD, Lynn Hovda, DVM  
and Roger Becker, PhD



*Providing research-based information to Minnesota horse owners*



Mature hoary alyssum plant



Hoary alyssum in a pasture

**Scientific Name:** *Berteroa incana*.

**Origin:** Introduced from Europe and Asia.

**Lifecycle:** Can be an annual, winter annual, biennial, or a short-lived perennial and reproduces by seed. Hoary alyssum can spread rapidly due to the high number of seeds produced per plant.

**Identification:** Stems are grayish-green, hairy, one to three feet tall, with many branches near the top. Leaves are oblong, grayish-green and covered with rough hairs. Flowers are white with four deeply divided petals. Seed pods are hairy, oblong and appear to be swollen with a point on the end.

**Distribution:** Is commonly found throughout Minnesota, the upper Midwest, and Western States.

**Habitat:** Most abundant in disturbed sites but is also found in meadows and pastures and is a common weed in hay fields. It is particularly adapted to dry conditions on sandy or gravelly soils. It prefers direct sunlight but can also tolerate shade.

**Control:** A healthy, dense stand of pasture forages can help prevent establishment or spread of hoary alyssum. Hand pulling or digging and mowing can be very effective for small infestations but should be done before flowering. There are several effective herbicides, but they may require more than one application and should be applied prior to flowering. If the weed is flowering mowing or hand pulling is recommended prior to seed production. When using a herbicide, be sure to carefully follow all grazing restrictions and other pertinent information stated on the herbicide label.

**Toxin:** Unknown.

**When Toxic:** Hoary alyssum is toxic when the fresh plant is grazed in pasture, or the dried plant is eaten in hay. Although, most horses prefer other, more palatable forages over hoary alyssum when on pasture, hoary alyssum toxicosis



Hoary alyssum flower



Hoary alyssum seed head

in pastured horses has occurred. Most hoary alyssum toxicosis occurs when horses ingest hoary alyssum infested hay.

**Signs and Effects of Toxicosis:** Most horses react differently to hoary alyssum toxicity. Signs are usually observed 12 to 24 hours after the horse ingests hoary alyssum. Just under 50% of horses ingesting hoary alyssum will show clinical signs of edematous, swelling of the lower legs commonly called “stocking up”, a fever of 103° F or higher, warm hooves, pronounced digital pulse (often called laminitis), stiffness of joints, reluctance to move, a “camped out” stance, and vary rarely death. Death was not observed in any horses dosed experimentally with hoary alyssum, although all other clinical signs were observed. In most cases, mild “stocking up” has been observed in horses on pasture or in those ingesting hay with less than 20% hoary alyssum. However, more severe clinical signs have been observed in horses ingesting hay with more than 20% hoary alyssum. These have tended to be rodeo, race, dressage or other physically fit horses. Horses with laminitis may rarely have rotation of the coffin bone through the hoof, especially if transported during the acute phase of toxicosis. Transporting horses during this phase is not recommended.

**Treatment:** Clinical signs normally subside with supportive treatment 2 to 4 days following removal of the weed source. Recovery of animals with clinical evidence of founder may take several more days. However, horses may not return to full performance fitness for a few months after onset of clinical signs.

**Recommendations:** Hay containing 20% or more hoary alyssum should not be fed to horses.

Thanks to the following fact sheet reviewers: Ron Genrick, Assurance Feeds and Harlan Anderson, DVM.  
Photos provided by the University of Minnesota Strand Memorial Herbarium.

In Partnership...



This fact sheet was funded by the Minnesota Racing Commission

UNIVERSITY OF MINNESOTA  
**EXTENSION**

Minnesota Equine Research Center  
**College of Veterinary Medicine**  
UNIVERSITY OF MINNESOTA