

Rangeland-Pasture Recommendations

Hoary Cress Identification and Management

Hoary Cress (*Cardaria draba*) is a non-native perennial that spreads by seeds and aggressive, creeping, roots that vigorously produce new plants. Depending on conditions, hoary cress grows to a height of ½ to 2 feet tall. The first leaves emerge from a crown and are dull gray-green, oblong and often have a slightly wavy margin. Subsequent leaves are alternate, have short fine hairs and an irregularly toothed margin. Only the lower leaves have stems, others are stalk-less and clasp the plant stem with two ear-like lobes. Flowers are fragrant, numerous, small, white with 4 petals and grow in compact clusters.

Hoary cress is a member of the Mustard family. In the fall seeds germinate and rosettes become established. It frequently flowers in April and May and again in the fall during optimum conditions. Seed production begins about one month later. Hoary cress produces up to 4800 seeds per plant. Seed viability is up to 3 years. However, the primary means of spread is the vertical and horizontal root system. Root fragments are capable of forming new plants. In one year a single plant, without competition, can spread vegetatively to cover an area 12 feet in diameter and can produce 450 shoots.

Hoary cress is also known as whitetop



Rosette



Hoary cress can be found in disturbed open sites, roadsides, ditches, riparian areas, grain and vegetable fields. It does especially well in irrigated crops such as alfalfa and sugar beets. Hoary cress grows well in most soil conditions, including alkaline soils. However, it does not tolerate shade. Hoary cress displaces native vegetation for wildlife and livestock forage. It also contains glucosinolates that are toxic to cattle.

Prevention is the most cost reducing and time effective weed management strategy. Infrequent cultivation can actually facilitate the spread by dispersing root fragments. Consistent monitoring of your fields is an essential first step.

On the backside of this sheet are hoary cress management recommendations. If you have any questions, please contact the Weld County

Public Works Dept., Weed Division at (970) 304-6496 ext. 3770. Please visit our website at www.weldweeds.org

Recommended management methods:

Cultural – Establishment of selected, aggressive grasses can be an effective cultural control of hoary cress. Contact your local CSU Extension office or Natural Resources Conservation Service office for seed mix recommendations. Good grazing management will stimulate grass growth and keep pastures healthy. Healthy pastures may be more resistant to hoary cress invasion. Bare spots caused by overgrazing are prime habitat for weed infestations.

Mechanical – Due to the extensive root system, hand-pulling this plant is not a viable option. Repeated tillage (every 10 to 14 days) can destroy colonies in 2 to 4 years. Combining mowing with herbicides will further enhance control of this weed. Apply herbicides in spring and/or fall, and then mow during the summer months. Mowing alone is not an effective control option.

Biological No known biological control agents available at this time.

Herbicides – The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow label directions. The herbicide label is the LAW!

Herbicide	Rate	Application Timing/Comments
2,4-D Amine	3 qt./acre or 2 oz/gal water for each product	Spring- bolting to early bud stage and fall rosette stage. DO NOT apply when outside temperatures will exceed 85 degrees. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water.
Escort	1 oz/acre or 1.3 grams to 3 gallons of water	Apply from bud to early bloom stage or at fall rosette. Add one teaspoon of household ammonia to 3 gallons of water plus the non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Telar	1 oz/acre or ¾ of a gram to 3 gallons water	Apply at prebloom to bloom or at fall rosette stage. Add a non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Round-Up	4 qts/acre or 2.5 oz/gal water	Spring- at early bud stage and /or fall rosette stage. Add a non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Plateau	8 oz./acre or 0.25 oz/gal water	Spring apply to rosette stage or at flowering or at fall rosette. Add a methylated seed oil surfactant (MSO) @ 0.32 oz/gal water or 1 qt/100 gal water.

A field of hoary cress rosettes

