Rangeland-Pasture Recommendations

Common Mullein and Moth Mullein Identification and Management

Common Mullein (*Verbascum thapsus)* and **Moth Mullein** (*Verbascum blattaria)* are non-native escaped ornamental biennials that have spread throughout the United States. These plants develop fibrous roots and a deep taproot. Both form a basal rosette in the first growth year and midway through the second season the plants "bolt" producing flower stalks.

Common Mullein has rosette leaves which can be over a foot long. They have smooth edges with dense silvery hairs on both sides giving the leaves a woolly appearance. The flowering stalk is usually solitary and can be over 8 feet tall. Occasionally a few upright branches occur near the top. Leaves on the flowering stem are alternate and become smaller and more pointed close to the top of the plant. The flowers are sulfur-yellow, 5 lobed and united at the base. The stalk is densely packed with flowers attached directly to the stalk. A prolific seed producer, common mullein seeds can remain viable in the soil for 100 years. Common mullein is a List C noxious weed and is frequently found in pastures, roadsides and dry disturbed sites.

Densely Haired Common Mullein Rosette

Moth Mullein Rosette Lacking Hair

Common Mullein Flower

Moth Mullein Flower – Notice The Stem

Moth Mullein leaves are dark green, are oblong tapering to a point with toothed edges, have prominent veins and lack the hairy covering. It has a shorter flowering stalk (2 to 5 feet) and supports flowers ranging from yellow to white with a purplish center. The flowers are each on a short stem and arranged in loose clusters at the top of the stalk. Moth mullein also is a prolific seed producer and the seeds remain viable for 90 years. It is a B list noxious weed and is presumably eradicated in Weld County. Its preferred habitat is similar to common mullein

Below are management recommendations for both common and moth mullein. If you have any questions or would like more information, please contact the Weld County Public Works Dept., Weed Division at (970) 304-6496 ext. 3770. Please visit our website www.weldweeds.org

Recommended management methods:

Cultural – Establishment of selected, aggressive grasses can be an effective cultural control of mullein. Contact your local CSU Extension office or Natural Resources Conservation Service office for seed mix recommendations.

Mechanical – Mowing or chopping is most effective when mullein plants are at the early flower stage but will have to be repeated throughout the season. Grubbing or digging the plants below the root crown level is effective in the rosette stage.

Biological –There is no recommended Biological control at this time.

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

Herbicide	Rate	Application Timing/Comments
Milestone	7 oz./acre or 1 oz/gal water	Spring rosette to pre-bud stage and/or fall rosette. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water.
Tordon 22K + 2,4 D	1 – 1.5 pints/acre + 1 qt/acre	Spring rosette to pre-bud stage and/or fall rosette. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water. Do not apply near or under trees or near water.
Telar XP	1 – 3 oz/acre	Apply from rosette to early bolt stage of growth. Add non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Roundup	2-3 qts/acre Or 2-3 oz/gal water	Roundup is a non-selective herbicide – do not let spray drift to non-target species. Apply when plants are actively growing.

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Common Mullein Plant

Moth Mullein Plant