Medusahead

Colorado Department of Agriculture

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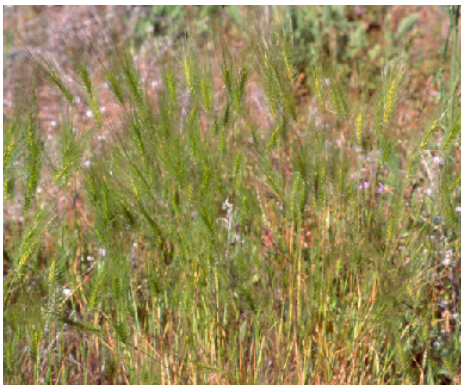
Medusahead
Identification and Management



Identification and Impacts

Medusahead *(Taeniatherum caput-medusae)* is a winter annual grass. The plant is native to Europe and Asia. It can grow to heights of 6 to 24 inches. Stems are wiry and slender containing a few short leaves. The leaf blades are narrow and rolled in the stalk. The yellowish-green sheen of dense stands are highly visible after other annual grasses turn brown. The flower is a long-awned spike and it has a fibrous root system that is quickly developed allowing it to extract soil moisture deep in the soil profile before most perennials. The seed longevity for medusahead is at least two years. The site must be monitored for at least four years after the last flowering adult plants have been eliminated and treatments repeated when necessary.

Habitats for medusahead include disturbed sites and grasslands. It grows best on clay soils where deep soil moisture is available late in the season. Medusahead infestations displace native vegetation and can greatly reduce carrying capacity of rangelands for domestic livestock of up to 75%. The barbs or awns on the seed head can cause puncture wounds to grazing animals, as well as cling to the feet and fur of animals or hikers socks. Tissues have high silica content which decrease palatability and makes the litter of dead stems slow to decompose.

The key to effective control of medusahead is preventing the establishment of plant communities. Medusahead outcompetes desirable plants when overgrazing of the site occurs. An aggressive management approach, combining several control methods (mechanical, herbicides, and burning) has proven to be the most effective dealing with medusahead plant populations. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Medusahead is designated as a "List A" species in the Colorado Noxious Weed Act. It is required to be eradicated wherever found in the State. For more information visit www.colorado.gov/ag/weeds and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

Key ID Points

1. Stems are wiry and slender with a few short leaves.
2. Grows 6 to 24 inches tall.
3. Awns are long and twisted.

Above © Steve Dewey, Utah State University

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Taeniatherum caput-medusae

Management Recommendations

CULTURAL
Preventing the establishment of the medusahead is crucial, so maintaining healthy native plant communities is a priority. Contact your local Natural Resources Conservation Service for seed mix recommendations. Bare ground is prime habitat for weed invasions, so prevent bare spots caused by overgrazing.

BIOLOGICAL
Biocontrol agents are not included in the prescribed management plans by the State for List A Species. Eradication is the management objective of all List A's. No biocontrol agent for medusahead is available. For more information on biocontrol in Colorado, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916.

MECHANICAL
Hand pull or dig from moist soil in spring before emerging from boot. Make certain to pull all roots and bad specimens carefully so as not to scatter seeds if seed heads are present. Disking and plowing or a slow hot fire before seed set can reduce medusahead by 90% or more.

Integrated Weed Management:

Preventing the establishment of this plant in Colorado is crucial since it is not yet known to exist in the state. Knowing how to identify Medusahead is important for early detection. Eradication requires intensive and persistent control efforts to effectively eliminate weed infestations and soil seed reserves. Using an integrated weed management approach if infestations occur can be effective in eradicating Medusahead.

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HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. **Always read, understand, and follow the label directions. The herbicide label is the LAW!**

Herbicide	Rate	Application Timing
Sulfometuron + Metsulfuron (Oust Extra)	3 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply in fall either preemergence or very early postemergence
Additional herbicide recommendations for other species can be found at: www.colorado.gov/agconservation/CSUHerbicideRecommendations.pdf		

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