



Photo: Matt Lavin, Bozeman, Montana

# MEDUSAHEAD

Taeniatherum caput-medusa

## CONTROL

### Hand Pulling

Pulling and or hoeing individual plants may be effective on a smaller scale. This should be done when plant is distinguishable from other grasses but before it sets seed. This is helpful in small, newly established populations as this type of control will reduce damage to surrounding populations. Be sure to follow up with other control methods.

### Mowing

Mowing in the late spring can slow seed production and reduce population size the next year. Late spring is the early flowering stage for Medusahead, whereas most desirable grasses at low elevation will have already produced their seed, thus reducing harm to native populations. High elevation sagebrush communities are not recommended for this type of control.

### Biological control

There are currently no known biological control agents in the state of Montana for controlling Medusahead.

### Grazing

Rotational grazing that is consistent in its timing and intensity is the most effective fore dramatically reducing seed production. Late spring after Medusahead elongates

| Ideal Timing for Treatment Options |        |              |
|------------------------------------|--------|--------------|
| Spring                             | Summer | Fall         |
| Mowing                             |        |              |
| Hand-pulling                       |        |              |
| Grazing                            |        |              |
| Foliar Spray                       |        | Foliar Spray |

and before the seed milk stage is the best time for livestock to graze. The most successful grazing results have stemmed from high intensity and short duration.

### Herbicide

There are a number of herbicides that are effective in suppressing Medusahead; difficulties arise surrounding selectively controlling Medusahead without causing damage to desirable forage grasses. The herbicide chart on the back lists approved controls for Medusahead. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



## Medusahead Life Cycle

| Life Cycle | Root    | Leaves   | Stems                                  | Flower  | Seed/Fruit  |
|------------|---------|--|--|---|---|
| Annual     | Fibrous | Few bright green leaves are short and narrow (to 3/8 inch wide), slightly rolled. Short, membranous ligule where leaf separates from stem. Auricles present. | 6 to 24 inches tall, wiry and slender. | Each stem produces a single spike seedhead. Awns are 3 inches long, barbed, and twist when mature and dry. Inflorescence stays intact after seed dispersal. | Minutely barbed. Awns up to 3 inches long extending from tip. |

## Herbicides for Medusahead, *Taeniatherum caput-medusa*

| Active Ingredient | Rate                     | Efficacy   | Comments   |
|-------------------|--------------------------|--|--|
| Picloram          | 1.5-3.3 quarts/acre      | Postemergence (spring), or actively growing plants before seed | This is a nonselective herbicide; care must be taken to avoid application onto non-target and native species.  |
| Glyphosate        | 4-8 fl oz/acre           | Early postemergence (spring)                                   | Annual grasses will be severely injured or killed. Grazing restrictions, check with label. Use on non-crop, fallow ground, and native prairie restoration projects.  |
| Clethodim         | 24 fl oz/acre            | Early postemergence (spring)                                   | Annual grasses will be severely injured or killed. Do not graze for 12 months after application. Use on non-crop, fallow ground, and native prairie restoration projects.                                      |
| Fluazifop         | 4 fl oz/ acre            | Fall or spring   | Some soil residual activity and mixed selectivity. Safe on established perennial grasses   |
| Imazapic          | 4 oz /acre               | Fall to early spring   | Controls several annual grasses and broadleaves. Provides soil residual control in cool climates but degrades rapidly under warm conditions. Add surfactant when applying postemergence. Grazing restrictions. |
| Rimsulfuron       | 0.75-1.5 oz product/acre | Preemergence (Fall) are most effective                         | Broad spectrum herbicide fairly safe on native perennial grasses. Fairly long residual soil activity. Grazing restrictions.  |

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.