

# EVALUATION OF HERBICIDES FOR CONTROL OF MEDUSAHEAD IN CENTRAL OREGON RANGELAND, 2003-2004

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## Abstract

Herbicides were evaluated for control of medusahead (*Taeniatherum caput-medusae*) and cheatgrass (downy brome, *Bromus tectorum*) in central Oregon rangeland. Treatments included three rates of Oust<sup>®</sup> plus Telar<sup>®</sup>, and a single rate of Plateau<sup>®</sup> applied October 24, 2003. Oust and Telar provided 100 percent control of medusahead and cheatgrass at all three rates, while Plateau provided 81 percent control of medusahead and 74 percent control of cheatgrass. Intermediate wheatgrass (*Thinopyrum intermedium*), the resident rangeland bunchgrass, was increasingly stunted by increased rates of Oust and Telar, while increased growth was observed in plots treated with Plateau compared to untreated plots.

## Introduction

Medusahead is a category B noxious weed on the Jefferson County Weed Control List for containment. Medusahead is predominant on millions of acres of semi-arid rangeland in the Pacific Northwest. It is extremely competitive, crowding out all other vegetation on infested rangeland, including such undesirable species as downy brome.

## Methods and Materials

Herbicides were evaluated for control of medusahead and cheatgrass in rangeland 20 miles north of Madras off South Junction Road. Treatments included Oust plus Telar at three rates, and Plateau at a single rate. Applications were made October 24, 2003 to plots 10ft by 25ft replicated four times using a CO<sub>2</sub>-pressurized, hand-held boom sprayer at 40 psi and 20 gal/acre water. Plots were evaluated June 1, 2004 for control of medusahead and cheatgrass and the effect on intermediate wheatgrass growth as compared to observations in the untreated plots.

## Results and Discussion

Oust plus Telar provided excellent control (100 percent) of both medusahead and cheatgrass at all three rates evaluated (Table 1). However, all rates of Oust plus Telar caused 20 to 25 percent stunting in the resident bunchgrass compared to the untreated plots. Plateau provided significantly less control of both medusahead (81 percent) and cheatgrass (74 percent). However, we observed a 95 percent increase in growth of intermediate wheatgrass compared to that in the untreated plots. This is due to reduced competition from the medusahead and cheatgrass.

Table 1. Effect of herbicides on the control of cheatgrass and medusahead in rangeland bunchgrass north of Madras, Oregon, 2003-2004.

Treatment	Product/ac	Medusahead	Cheatgrass	Bunchgrass Size
		-----Percent control-----		Percent of untreated
Oust + Telar	0.75 oz + 0.37 oz	100 a <sup>1</sup>	100 a	45 d
Oust + Telar	1.00 oz + 0.50 oz	100 a	100 a	32 cd
Oust + Telar	1.50 oz + 0.75 oz	100 a	100 a	20 c
Plateau	6.00 oz	81 b	74 b	195 b
Untreated	----	0 c	0 c	100 a

<sup>1</sup>Mean separation with Least Significant Difference (LSD) at  $P \leq 0.05$ .