

# EVALUATION OF HERBICIDES FOR CONTROL OF DALMATIAN TOADFLAX IN NONCROP AREAS OF CENTRAL OREGON, 2003-2004

Marvin Butler, Floyd Paye, Norm McKinley, and Claudia Campbell

## Abstract

Herbicides were evaluated for control of Dalmatian toadflax (*Linaria genistifolia* spp. *dalmatica*) in noncrop areas. Treatments included Telar<sup>®</sup> alone and in combination with Escort<sup>®</sup>, Tordon<sup>®</sup>, and Transline<sup>®</sup>. Combination treatments of Telar at 1.0 to 2.67 oz/acre plus Escort at 0.5 to 0.83 oz/acre provided 100 percent control of Dalmatian toadflax, while Telar alone at 1.33 oz/acre and 2.0 oz/acre provided 90 percent control or better.

## Introduction

Dalmatian toadflax is a category A noxious weed on the Jefferson County Weed Control List for eradication. It is aggressive and may be found along roadsides and on rangeland where it can become a serious problem by crowding out desirable forage. An extensive and deep root system along with a waxy leaf makes this an extremely difficult plant to control.

## Methods and Materials

Herbicides were evaluated for control of Dalmatian toadflax in a noncrop area on the outskirts of town at the north end of Madras, Oregon. Treatments included Telar alone or in combination with Escort, Transline, or Tordon. Applications were made October 24, 2003 to plots 10 ft by 25 ft and replicated three times using a CO<sub>2</sub>-pressurized, hand-held boom sprayer at 40 psi and 20 gal/acre water. Plots were evaluated June 3, 2004 for control of Dalmatian toadflax by counting the number of plants with new growth compared to the total number of green plants and carcasses per plot.

## Results and Discussion

Telar plus Escort at 1.0 to 2.67 oz/acre and 0.5 to 0.83 oz/acre, respectively, provided 100 percent control of Dalmatian toadflax (Table 1). Telar at 0.67 oz/acre plus Escort at 0.33 oz/acre provided 83 percent control. Telar alone at 1.33 oz/acre and 2.0 oz/acre provided 90 percent control or better, while lesser rates provided 33 percent control at 0.67 oz/acre and 76 percent control at 1.0 oz/acre. Telar at 1.0 oz/acre plus Tordon at 1 pt/acre provided 67 percent control, while Telar at 1.0 oz/acre plus Transline at 0.67 pt/acre provided 60 percent control. Telar plus Tordon and Telar plus Transline did not improve Dalmatian toadflax control compared to Telar alone.

Table 1. Effects of herbicides on the control of Dalmatian toadflax in a noncrop area near Madras, Oregon, 2003-2004.

Treatment	Product/acre	Dalmatian toadflax --Percent control--
Telar	0.67 oz	33 ab <sup>1</sup>
Telar	1.00 oz	76 bc
Telar	1.33 oz	99 c
Telar	2.00 oz	90 c
Telar + Escort	0.67 oz + 0.33 oz	83 c
Telar + Escort	1.00 oz + 0.50 oz	100 c
Telar + Escort	1.33 oz + 0.67 oz	100 c
Telar + Escort	2.67 oz + 0.83 oz	100 c
Telar + Tordon	1.00 oz + 1.00 pt	67 bc
Telar + Transline	1.00 oz + 0.67 pt	60 bc
Untreated	----	0 a

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