

A BETTER APPROACH TO CONTROLLING Dalmatian Toadflax

(AKA *LINARIA DALMATICA*)

It's common for Dalmatian toadflax to establish in the West after disturbance in rangeland and forested areas. This non-native, invasive perennial weed overtakes native grass and forbs. Using a proactive approach to vegetation management can slow the advance of this invasive weed, restore native plants and biodiversity, and create habitat that attracts a variety of local wildlife.

Professional
Vegetation
Management

 **BASF**
The Chemical Company

Herbicide Benefits:

- Economical
- Controls the entire plant, including root system
- Allows for re-colonization of desirable species

Named for its native habitat along the Dalmatian coast of Croatia, Dalmatian toadflax is believed to have been introduced to North America for cultivation as an ornamental plant. By the 1920s, the plant had spread widely across the western United States. Today, it is found throughout the Dakotas, Idaho, Montana, Nevada, Oregon, Washington and Wyoming.

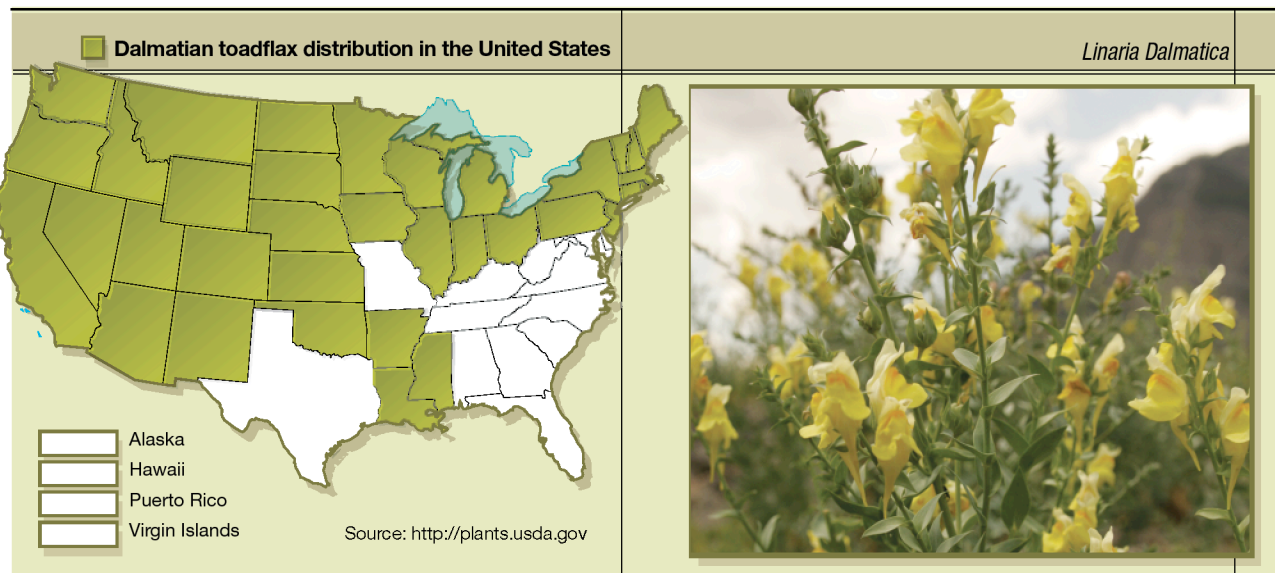
Dalmatian toadflax is difficult to control for several reasons. It produces many seeds and grows a deep and extensive root system. Dalmatian toadflax readily takes root along roadsides, in rangelands, fields, overgrazed pastures, idle cropland and waste areas. Soil disturbances – such as road construction, fire or overgrazing – spur the weed's establishment.

Mowing, tilling and burning are typically ineffective ways to treat Dalmatian toadflax because none of these methods destroy the plant's roots. Such methods can also spread seed and stimulate shoot growth.

Journey® Herbicide

Journey effectively controls difficult invasive weed species in the western U.S., including Dalmatian toadflax.

Journey helps prepare a site by providing broad-spectrum weed control prior to planting. This helps the establishment of desirable competitive plants. Plants providing competitive cover, such as perennials and winter annuals, are ideal to help prevent Dalmatian toadflax seedlings from taking root early in the season.



**Journey**
herbicide

**PLATEAU**
herbicide

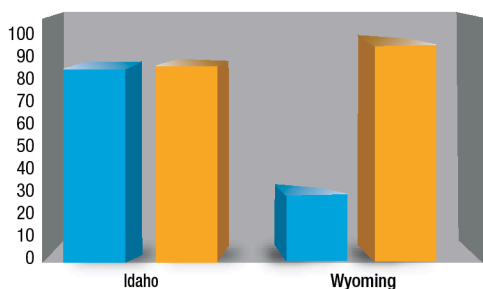
Plateau® Herbicide

For government agencies and land managers working with **Quality Vegetation Management™ (QVM)** Certified Applicators, **Plateau** can also be used to provide effective Dalmatian toadflax control.

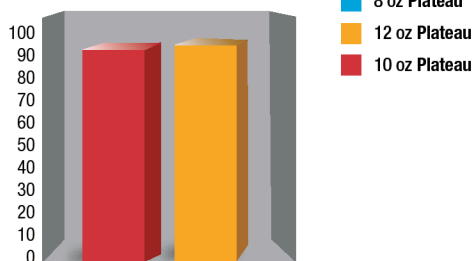
Consistent Dalmatian toadflax control results have been achieved with 12 oz/acre of **Plateau**. In studies conducted in Wyoming and Idaho in 1999 and 2000, respectively, an average of 98 percent control was achieved with **Plateau** on five sites, one year after application. Three years after treatments, control was measured at 93 to 96 percent.

Dalmatian Toadflax Control

1 Year After Treatment



3 Years After Treatment



10 oz data is from Wyoming sites only
12 oz data is from all five trials

Locations:

Cody, WY, North Fork of Shoshone River, Site 1
Cody, WY, North fork of Shoshone River, Site 2
Cheyenne, WY, ARS Research Station
Casper, WY, City Park
Post Falls, ID, New Hope Fellowship Church

Site Description:

Gravelly, sloped soils
Silty plateau
Silty plateau
Gravelly, sandy river bottom
Fill

BASF Recommendations for Release of Desirable Plants:

- 12 oz/acre **Plateau** + 1 qt/acre MSO applied in late fall when top 15% of the plant is necrotic, usually after a hard frost (late September through November).
- As long as there is a green stem and/or leaf tissue remaining, good control can be achieved. This timing often corresponds to fall basal growth.

BASF Recommendations for Site Preparation Prior to Revegetation:

- 32 oz/acre **Journey** + 1 qt/acre MSO applied in late fall when top 15% of the plant is necrotic, usually after a hard frost (late September through November).
- As long as there is a green stem and/or leaf tissue remaining, good control can be achieved. This timing often corresponds to fall basal growth.

BASF Recommendations for Integrated Vegetation Management:

- Fall applications of **Plateau** work well in conjunction with biological control.
- Fall applications result in stems standing through the winter. This allows biological-control insects to finish feeding and go dormant without interrupting their life cycle.
- When insects emerge in the spring, they migrate to herbicide skips and plants outside the treated area.

For Use with Goats:

- Goats can be used to feed on Dalmatian toadflax to reduce flower production. Remove grazers at least 8 weeks prior to herbicide application to allow sufficient re-growth for adequate herbicide uptake to control large root system.

For more information about **Journey** or **Plateau** or any of our vegetation management products, call **1-800-545-9525** or visit **www.vmanswers.com**.

Always read and follow label directions.