Dalmatian toadflax is a member of the figwort family (Scrophulariacea). It is native to central Europe and central Asia. Dalmatian toadflax was introduced into North America as an ornamental plant around the late 1800's. It can now be found widely distributed mostly in western United States and Canada.

Dalmatian toadflax is a perennial. Most of the above ground vegetation dies back each fall. Plant shoots regrow in the spring and can produce multiple stems. Flowers are yellow with orange markings and long spurs. Flowering occurs from mid-summer to early fall. A single plant capsule may contain as many as 200 seeds. Each plant may produce several hundred thousand seeds.



Where to get more information on Noxious Weeds:

Washington State Noxious Weed
Control Board
1111 Washington St.
Olympia, WA 98504-2560
(360)902-2053
Website:

http://www.nwcb.wa.gov

Washington State Department of Agriculture 1111 Washington St. Olympia, WA 98504-2560 http://www.agr.wa.gov

> WSU Extension Office; Cowlitz County 1946 3rd Avenue Longview, WA 98632 (360)577-3014

Cowlitz County
Noxious Weed Control Board
Administration Annex Bldg.
207 Fourth Avenue N.
(360) 577-3117

http://www.co.cowlitz.wa.us/noxiousweeds/

Dalmatian toadflax Linaria vulgaris



Cowlitz County Noxious Weed Control Board

Administration Annex Bldg. 1st Floor 207 Fourth Avenue N. Kelso, WA 98626 (360)577-3117 (360)425-7760

Biological Control

There are several insects feeding on Dalmatian toadflax. The most promising is the stem mining weevil, *Mecinus janthinus*. Adults are shiny black and slender with pronounced snouts. Females lay eggs into the stems where larvae grow for about a month as they eat the stem by tunneling. Adults emerge in late spring or early summer and feed on toad flax leaves and stems.



Integrated Pest Management Control Measures:

Mechanical:

- Digging or pulling of small infestations can be effective in controlling plants, but will
 need to be done repeatedly. As the only method of control, it needs 10-15 years.
- Cultivation can be used to control plants, and must begin in early June with repetition every 7-10 days. Tillage needs to be shallow to prevent root spread.
- Mowing or burning are NOT effective methods.

Cultural:

 Competition by planting sod, grasses or other vegetation can help reduce open spaces and eliminate areas for plants to establish.

Biological:

 There are two biological insects used to control this plant species. The most promising insect that shows significant impact to Dalmatian toad flax control:

Stem boring weevil (Mecinus janthinus)

Chemical:

Spring to summer foliar spray – Best when applied to growing plants from bud to bloom, but before flower sets.

Banvel, Telar, Roundup, Overdrive

Check each chemical label for proper use, application restrictions and relevant information