

Yellow toadflax

Colorado Dept. of
Agriculture
Conservation Services
Division
700 Kipling Street
Suite 4000
Lakewood, CO 80215
303-239-4100



Key ID Points

1. Yellow flowers that are like snapdragons with deep orange centers.
2. Stems that are woody at the base and smooth to the top.

Yellow toadflax Identification and Management



Identification and Impacts

Yellow toadflax (*Linaria vulgaris*) is a perennial escaped ornamental plant that is native to the Mediterranean region. It has narrow, linear, 1-2 inch long leaves. The stems are woody at the base and smooth toward the top. Sparingly branched and 1-3 feet tall. The showy snapdragon-like flowers are bright yellow with a deep orange center and have a spur as long as the entire flower.

Yellow toadflax displaces desirable plant communities reducing ecological diversity and rangeland value. Decreases forage for domestic livestock and some big game and decreases habitat for associated animal life. The plant is known to be mildly poisonous to livestock.

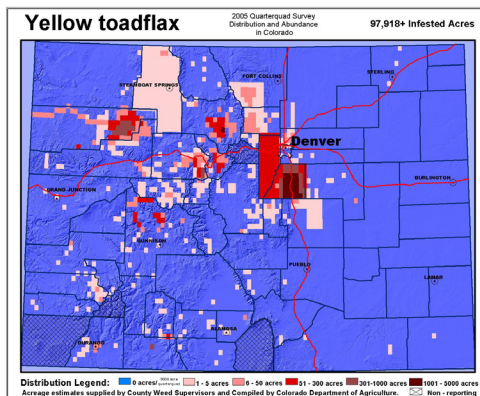
Habitats for Yellow toadflax include roadsides, vacant lots, gravel pits, fields, waste areas, other disturbed sites and rangeland. It has adapted to a variety of site conditions, from moist to dry and does well in all types of soil. The plant can even establish in areas of excellent condition in natural disturbances or small openings.

There is very little information to define the soil seed longevity of Yellow toadflax. One study has indicated that 8.4% seeds germinated one year after burial and 1.2% germinated 5 years after burial. Yellow toadflax soil seed reserve is at least 5 years.

The key to effective control of Yellow toadflax.....

..... Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Yellow toadflax is designated as a "List B" species in the Colorado Noxious Weed Act. It is required to be managed to stop its continued spread. For more information visit www.colorado.gov/ag/csd and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.



Infestation photo, above, © John M. Randall, The Nature Conservancy. Infestation map, Crystal Andrews, Colo. Dept. of Agriculture. Flower photo, top, © Missouri Extension. Flower bract photo, left, © Paul Slichter, University of Wisconsin, Stevens Point. Leaves photo © Gary Fewless, University of Wisconsin, Stevens Point.

Linaria vulgaris



CULTURAL
Establish select grasses as an effective cultural control of diffuse knapweed. Contact your local Natural Resources Conservation Service for seed mix recommendations. Bareground is prime habitat for weed invasions, so maintain healthy pastures and prevent bare spots caused by overgrazing.



BIOLOGICAL
Toadflax seed weevil is a form of biological control for Yellow toadflax. To obtain the insects or for more information, contact the Colorado Department of Agriculture's Insectary in Palisade, Colorado at 970-464-7916.



MECHANICAL
Handpulling or digging is not recommended for eradication of Yellow toadflax because it's unlikely that the entire root will be excavated and a new plant is likely to occur. A single new plant might be an exception. Tillage is not recommended due to the creeping root system.

Integrated Weed Management:

.....
.....
.....

HERBICIDES

The following are recommendations for herbicides that can be applied to range and pasturelands. *Rates are approximate and based on equipment with an output of 30 gallons per acre. Always read, understand, and follow the label directions. The herbicide label is the LAW!*

HERBICIDE	RATE	APPLICATION TIMING
Picloram plus Chlorsulfurn (Tordon - restricted use plus Telar - general use)	Apply at 1 qt.+ 1.25 oz product/A plus 0.25% v/v non-ionic surfactant.	Apply at flowering through fall. Typically late August through September application timing has shown best results. Re-treatment may be necessary.
Picloram (Tordon - restricted use)	Apply at 1.5 qt./A	Apply in fall (late August through September). Add 0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate.

Yellow toadflax

