

CONTROL

Hand Pulling

Hand pulling is not an effective method of control for yellow toadflax.

Mowing

Mowing is not an effective method of control for yellow toadflax, though it can be used to limit seed production if done just before flowering. It can also improve the effectiveness of chemical control in an integrated management program.

Biological control

There have been six biocontrol agents released in the U.S. for the control of yellow and Dalmatian toadflax. While none have them have proven to be the best fit for yellow toadflax (they tend to be more effective on Dalmatian toadflax), they do affect the overall fitness of a yellow toadflax infestation if present. They should definitely be considered as part of an integrated approach to the management of yellow toadflax.

Ideal Timing for Treatment Options					
Spring	Summer	Fall			
Mowing as part of IMP					
Foliar spray		Foliar spray			

Grazing

Grazing is not recommended as a method of control for yellow toadflax as livestock generally tend to avoid it as a type of forage.

Herbicide

There are a number of herbicides that have been used to control yellow toadflax if reapplied annually for up to three years. Yellow toadflax recovers very well from single treatments, so expect a long term management regime for effective control. The herbicide chart on the back lists approved controls for yellow toadflax. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.







Yellow Toadflax Life Cycle							
Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit		
Perennial	Creeping rhizomes	Numerous, alternate, pale-green to gray-green, 2½ inches or longer and narrow, pointed at both ends, with smooth edges.	8 to 24 inches tall, usually not branched.	Yellow, snapdragon- like flowers often with orange center, 1 to 1¼ inch long with 1 inch long spur. Dense clusters at top of stems.	Seeds dark brown to black, less than 1/10 inch diameter, flattened, with papery circular wing. Capsule brown, round to oval with two compartments.		

Herbicides for Yellow Toadflax, Linaria vulgaris							
Active Ingredient	Rate	Efficacy	Comments				
imazapic	2-12 oz/ acre	Apply in fall when top 25% of plant is necrotic, usually after hard frost.	Use methylated seed oil surfactant for best results				
picloram	1-2 quart/ acre	Apply to actively growing toadflax in spring before full bloom or in late summer or fall.	Do not use near surface water, shallow ground water, landscaped areas, or current/future veggie gardens.				
metsulfuron	1.5 oz/acre	Apply in fall or spring. Has shown control for up to 3 years.	Do not use near surface water, shallow ground water.				
chlorosulfuron	1.5 oz/acre	Apply to actively growing toadflax in spring before full bloom or in late summer or fall.					

 $Information\ on\ diagnostic\ identifying\ characteristics\ adapted\ from\ "Montana's\ Noxious\ Weeds"\ by\ Pokorny\ and\ Mangold,\ Montana\ State\ University\ Extension\ Bulletin\ EB0159.$

