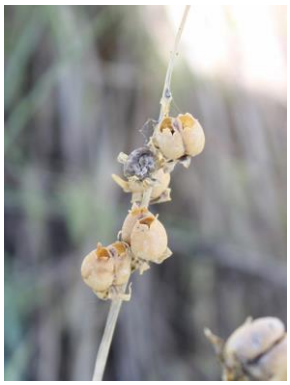
JEFFERSON COUNTY COLORADO | Invasive Species Management

Dalmatian toadflax

Linaria dalmatica




Dalmatian toadflax	
General	Family: Plantain (Plantaginaceae)(formally in the Figwort family - Scrophulariaceae) Introduced from Europe Has been used as an ornamental Colorado List B - Control required
Common names	Wild snapdragon
Habitat	Herbaceous perennial Pastures, rangelands, roadsides, gravel pits, and grasslands. Tolerant to low temperatures and coarse soils. Prefers open sunny locations. Individual patches can last for 13 or more years. Toadflax can significantly reduce crop yields and stress native communities
PLANT	
Vegetation	Up to 3 feet tall Produces 1 - 25 floral stems that are woody at the base Top growth dies back in fall, prostrate stems form in the fall and overwinter Leaves are waxy, heart shaped and clasp the stem; 1-3 inches long, ⅜-¾ inches wide
Roots	Taproots 4-10 feet deep. Lateral roots 2-8 inches deep and spread to 10+ feet. New plants can develop from root buds 2-3 weeks after germination and from root fragments as small as ¼ in long
Flower	Spring - Fall Yellow snapdragon-shaped ¾ -1½ inches long. Has a spur that is usually as long as the flower
Seed	Each plant can produce up to 500,000 seeds that can remain viable for up to 10 years Seed capsules begin opening in July Seed matures from July through September
Seedling	Most emerge in April, some fall germination possible under optimum conditions
Reproduction	Seed and vegetative

700 Jefferson County Parkway, Ste 100, Golden, CO 80401
303-271-5989
www.jeffco.us/jcism

CONTROL -- CHEMICAL		
Timing	***Herbicide***	***Notes***
Spring – Flowering or Fall – Mature Plants	Aminocyclopyrachlor + Chlorsulfuron (Perspective) Chlorsulfuron (Telar) Picloram (Tordon) Restricted Use	Use of a surfactant is recommended for most herbicides to help increase contact with the vegetation and to facilitate herbicide uptake. Refer to the specific label for the appropriate type of surfactant. Treating at younger stages stops weeds from using resources that desirable plants need to prosper. Refer to the individual label for allowed sites, specific timing, and restrictions about grazing and haying. Formulations with more than one active ingredient are available.
Fall – Seedlings	Imazapic (Plateau)	Control will take a few years so treatment will need to be repeated.

CONTROL -- NON-CHEMICAL		
Technique	***Timing***	***Method***
Biological	Summer	*Calophasia lunula*, a defoliating moth *Mecinus janthiniformis,* a stem boring weevil
Burning	Not recommended	Burning is not recommended. The deep roots protect the plant. Areas disturbed by fire are susceptible to re-invasion because of the lack of competition from desirable plants.
Cultivation	Not recommended	Cultivation severs the roots which will regrow plants from the fragments.
Grazing	Not recommended	Intensive grazing contributes to ideal habitat conditions that actually help the spread of Dalmatian toadflax. May be toxic to livestock.
Mowing	Spring to Early Fall	Repeat monthly for each flush of plants prior to seed set followed up in the fall with herbicide after last flush of plants.
Prevention	Anytime	Maintain the health of the site by encouraging healthy stands of grass. Revegetation of highly disturbed sites.
Removal	Not recommended	Hand pulling is not effective. Pulling perennial weeds with deep or spreading roots breaks the roots. New plants grow from the fragmented pieces and can increase an infestation.
	Spring to Fall Flowering	Cutting of prostrate stems in spring and fall reduces floral stems. Bag and dispose of in the trash or landfill. Clip plants at base. Plants without flower buds do not need to be put in the trash. **Do not pull established plants because they will resprout from the root fragments.**

Use all chemicals according to the manufacturer's label. The label will provide specific instructions including allowed sites, application methods, rates, storage, re-entry requirements and personal protective equipment. No specific recommendation or endorsement is made or implied by listing the above methods or products. 9/2021