

Cypress spurge

Euphorbia cyparissias L.



Dirk V. Baker, Tara L. Steinke, Sandra K. McDonald 1/03



Other common names: graveyard spurge

Family: Euphorbiaceae (Spurge)

USDA Code: EUCY2

Bayer Code (WSSA): EPHCY

Life cycle classification: Semi-woody perennial forb

Legal Status: Colorado Noxious Weed (new in Colorado – contact your county weed supervisor!)

Native to: Europe

Entry into Colorado: No information available

Current distribution in Colorado: Not yet widespread in Colorado, this species is typically found around residential areas and local open spaces.



Biology

Seasonal development: Plants overwinter as seed or root and crown tissue. Perennating buds develop on roots (Stahevitch et al. 1988). New shoots emerge, and seeds germinate, each spring soon after the snow cover melts. Flowering begins the first or second week of May. Seeds may mature as early as the third week in June. A second flowering often occurs in late summer or early fall (CNAP 2000).

Reproduction

Most commonly reproduces by: Vegetatively and via seed (CNAP 2000)

Numbers of seeds/plant: Generally produces between 30-900 seeds per plant, of which 85% may germinate shortly after dispersal (little innate or inherited dormancy) (Stahevitch et al. 1988).

Description

Roots: The root system consists of long roots, which spread both in horizontal and vertical planes, and short or fine roots, which spread in a strictly horizontal plane (CNAP 2000).

Stems: Mature plants are about 1-1.5 feet tall (CNAP 2000)

Leaves: Leaves are stalkless, alternate, narrow, linear to lance-shaped (CNAP 2000)

Flowers: The tiny, lime green to white flowers are clustered in small, cup-like structures (CNAP 2000)

Fruits & seeds: The three-capsuled fruits of cypress spurge explode at maturity, ejecting the seeds (CNAP 2000)

Value & Uses

Wood products: No information available

Importance to/impact on livestock & wildlife

Palatability: Its milky latex is toxic, but it is rarely consumed in quantities sufficient to cause serious injury (CNAP 2000).

Nutritional value: No information available

Cover value: No information available

Value for rehabilitation of disturbed sites: No information available

Other uses & values: Has been used as an ornamental.

Infestations

Habitat: Cypress spurge commonly occurs in dry to moderately moist meadows, pastures, forest edges, roadsides, rights-of-way, cemeteries, and gardens. Cypress spurge generally does not occur on intensively cultivated soils (Stahevitch et al. 1988).

Impacts/Threats:

Special Challenges to Management: This species is not yet widespread in Colorado, and should be a priority for immediate eradication if found. Control of cypress spurge can be hard to achieve due to its extensive root system and highly efficient seed dispersal. As with other perennial rhizomatous species, an integrated control strategy should focus on eliminating seed production while depleting the nutrient reserves in the root system. Mechanical and/or chemical control should be combined with land management practices, which maintain healthy native plant communities (CNAP 2000).

Control Methods

Physical

Manual: No information available

Mechanical:

Cultivation: Cypress spurge generally does not occur on intensively cultivated soils (Stahevitch et al. 1988).

Mowing: Repeated mowing can be used to eliminate seed production and exhaust the nutrient reserves in the root system (CNAP 2000). However, mowing has been found to result in an increase in cypress spurge density (Jordan et al. 2002)

Cultural: Prevent the establishment of new infestations by minimizing disturbance and seed dispersal, eliminating seed production and maintaining healthy native communities (CNAP 2000).

Fire: Cypress spurge was found to increase in density after treatment with fire (Jordan et al. 2002).

Biological: Sheep and goats are usually good biocontrol for spurges (CNAP 2000)

Insects: None known

Pathogens: None known

Chemical

Conventional:

Trade Name (common name)	Product/Acre (Active Ingredient/Acre)	Remarks
Many trade names (2,4-D)	(1 lb)	Apply during the true flower stage or in the fall. In sensitive areas, a wick may be used to minimize damage to adjacent desirable plants.
Many trade names (glyphosate)	1.5 qt (1.5 lb)	Apply after flowering. In sensitive areas, a wick may be used to minimize damage to adjacent desirable plants.
Tordon (picloram)	2 pt (0.5 lb)	Apply during the true flower stage or in the fall. In sensitive areas, a wick may be used to minimize damage to adjacent desirable plants.

Organic: No information available - research needed

USE PESTICIDES WISELY: Always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing.

NOTICE: Mention of pesticide products in this profile does not constitute endorsement of any material.

Additional comments:

Contacts:

Colorado Weed Management Association

<http://www.cwma.org>

Colorado Dept. of Agriculture, Division of Plant Industry

<http://www.ag.state.co.us/DPI/weeds/Weed.html>

Colorado Weed Management Guide

http://www.cepep.colostate.edu/WeedGuide/Weed_Guide_2004.pdf

Links:

References:

Beck, K.G., S.K. McDonald, S.J. Nissen, P.H. Westra. 2002. Colorado Weed Management Guide. Colorado State University Cooperative Extension. Fort Collins, CO. XCM-205.

- Colorado Natural Areas Program. 2000. Creating an Integrated Weed Management Plan: A Handbook for Owners and Managers of Lands with Natural Values. Colorado Natural Areas Program, Colorado State Parks, Colorado Department of Natural Resources; and Division of Plant Industry, Colorado Department of Agriculture. Denver, CO. pp 212-213.
http://parks.state.co.us/cnap/IWM_handbook/IWM_index.htm
- Jordan, M.J., B. Lund & W.A. Jacobs. 2002. Effects of mowing, herbicide and fire on *Artemisia vulgaris*, *Lespedeza cuneata* and *Euphorbia cyparissias* at the Hempstead Plains grassland, Long Island, New York. The Nature Conservancy, Long Island Chapter, 250 Lawrence Hill Road, Cold Spring Harbor, NY 11724 631-367-3384 ext 121, mjordan@tnc.org Text of poster prepared for the Northeast Natural History Conference, New York State Museum, Albany N.Y., April 25-26, 2002
- Stahevitch, A.E., C.W. Crompton, and W.A. Wojtas. 1988. The biology of Canadian weeds. 85. *Euphorbia cyparissias* L. Canadian Journal of Plant Science 68:175-191.
- Stubbendieck, J., G.Y. Friisoe, M.R. Bolick. 1995. Weeds of Nebraska and the Great Plains. Nebraska Department of Agriculture. Lincoln, NE. pp 293.
- USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). [National Plant Data Center](#), Baton Rouge, LA 70874-4490 USA.