McDonald's rockcress (Arabis macdonaldiana)



ENDANGERED



Flowering plant (left), vegetative plant (center), and habitat (right) of McDonald's rockcress. Photos by Maureen Jules. If downloading images from this website, please credit the photographer.

Family

Brassicaceae

Taxonomic notes

Synonyms: Arabis mcdonaldiana*, Red Mountain rockcress

*McDonald's rockcress was named in honor of Captain James M. McDonald and was originally published as *Arabis mcdonaldiana*. The spelling of the species' name was later changed to "macdonaldiana" to reflect a recommended change in international botanical naming conventions.

Plant description

McDonald's rockcress is a mat-forming perennial species usually with several simple stems 5-30 cm high growing from a branched caudex. Basal leaves are arranged in rosettes, are spatulate with an essentially glabrous surface, usually 1-2 cm (-3) long and 0.3-0.7 cm wide, with slightly to strongly repand or toothed margins, teeth sometimes bristle-tipped. Cauline leaves are reduced, spatulate to narrowly oblong, obtuse, sessile, and appressed, 0.3-1.0 cm long, with entire or obtuse-toothed margins. Fragrant flowers are arranged in a simple raceme and borne on pedicels 0.8-1.0 cm long. Sepals are greenish or dark purple, 0.4-0.8 cm long. Petals are crimson to purple in color, oblanceolate with an obtuse apex, 0.8-1.6 cm long. Siliques are 2-4 cm long and erect-spreading.

Distinguishing characteristics

Although several closely-related endemic *Arabis* species occur within its range, McDonald's rockcress is distinguished by having nearly glabrous surfaces, spatulate basal leaves 1-2 cm long, and fruits 2-4 cm long.

When to survey

Surveys should be completed when McDonald's rockcress is flowering, from May through June, as vegetative plants are difficult to locate. Flowering has been observed

as early as March, depending on conditions.

Habitat

McDonald's rockcress occurs on rocky serpentine soils below 1800 m (5900 ft) in dry, open woods or on brushy slopes. Associated species include *Quercus vaccinifolia*, *Ceanothus pumilus*, *Arctostaphylos canescens*, *Eriogonum* spp., *Sanicula* spp., *Viola* spp., and *Allium* spp.

Range

McDonald's rockcress is reported from approximately eight sites in Oregon, all of which are located in the Siskiyou mountains of Curry and Josephine counties. In California, the species is reported from Del Norte, Mendocino, Siskiyou, and Trinity counties.

Oregon counties

Curry, Josephine

Federal status

Endangered

Threats

Mining within the metal-rich serpentine areas in which McDonald's rockcress occurs threatens the species and its habitat. Other potential threats to McDonald's rockcress include road maintenance and construction and over-collection.

Conservation planning

A U.S. Fish and Wildlife Service <u>Recovery Plan</u> (pdf document, 1.52 MB) was released for McDonald's rockcress in 1984.

Did you know?

Although first described in 1903 from northern California, McDonald's rockcress wasn't discovered in Oregon until decades later in 1980.

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