



Hairy rockcress (*Arabis hirsuta*)

The specific name *hirsuta* means "with rather coarse or stiff hairs" in botanical Latin. Linnaeus described hairy rock cress for science in 1772.^[1] Members of North American *Arabis* sp. have recently been consolidated with genus *Boechera*.^[2]

There are both North American and European varieties of *Arabis hirsuta* in Washington. North American *Arabis hirsuta* can be characterized by underdeveloped glandular tissue of the nectarines and is often grouped with *Arabis glabra*, *Cardaminopsis* sp. and *Arabis blepharophylla*. These North American taxa, although very different in lineages, share this same characteristic.^[3]

Range

Arabis hirsuta is a relatively common species distributed across most of the United States and Canada. It is distributed from Que. to AK, s. to PA, IN, KS, NM, AR, and CA, and in the southern uplands to n. GA.^[4] Two other North American varieties (var. *pyncocarpa* and var. *glabrata*) also occur in Washington. Species are of special concern in Tennessee and endangered in Pennsylvania. The Eurasian variety is also referred to as *Arabis hirsuta* var. *hirsuta*.^[5]

Climate, elevation

Located on moderately moist to dry sites. Climatic zones can vary from less than 18 inches of annual precipitation up to 60 inches in wetter climatic zones.^[6] Elevation is from sea level to about 1500 feet.^[7]

Local occurrence

Occurs in grassland balds, on shallow soils with bedrock outcrops located in the Puget Lowland of Washington (primarily northern portion) and the adjacent Georgia Depression of B.C. Counties: San Juan Skagit Island, Jefferson, Thurston and Whatcom.⁶

Habitat preferences

Moist to dry, usually calcareous, open situations: open woods, stream banks, ledges, cliffs, bluffs, and

floodplains⁴. It occurs frequently in disturbed habitats. Dunes and dry banks⁷, rocky/chalk, limestone slopes⁹ and gravelly native prairie¹. Plants seem to be more abundant where grazing is light¹.

Plant strategy type

Hairy rock cress is either biennial (lives for two years) or perennial (long-lived and blooms each year)¹. It is a stress-tolerator (drought-resistant¹⁰, often growing in nutrient poor soils). In stressful environments it develops a system of rootstocks that allow it persist in inhospitable sites. Hairy rock cress also displays a weedy tendency, colonizing recent road cuts or animals paths.⁸

Associated species

Roemer's fescue (*Festuca idahoensis* var. *roemer*), Danthonia (*Danthonia californica*), and red fescue (*Festuca rubra*). Native graminoids include field woodrush (*Luzula campestris*) and prairie junegrass (*Koeleria macrantha*). Forbs include field chickweed (*Cerastium arvense*), woolly sunflower (*Eriophyllum lanatum*) and Hooker's onion (*Allium acuminatum*)⁶. Also found growing along with *Phacelia* sp., *Sedum* sp. and various mosses¹¹.

Collected as

Seed, or division after flowering¹²

Collection restrictions or guidelines

Allow pods to dry on plant; break open to collect seeds.¹³ Properly clean.

Seed germination

Seeds germinate in 2 - 3 weeks at 21°C.¹³

Seed life

Seeds can be successfully stored¹². However, seeds are very small and likely decrease in viability in a short amount of time. It is best to surface sow the seed as soon as it is ripe¹³.

Recommended seed storage conditions

Properly cleaned, store at cool temperature with low moisture.

Propagation recommendations

Sow the seed as soon as it is ripe in a light position in a cold frame. Seed can also be sown in spring. When large enough to handle, prick the seedlings out into individual pots and plant them out in the summer.¹³

Conduct divisions after flowering, usually in the spring. The divisions can be planted into their permanent plots if required.¹³

Soil or medium requirements

It is recommended that hairy rockcress is planted in light (sandy), medium (loamy) and heavy (clay) soils and requires well-drained soil. The plant can grow in acid, neutral and basic (alkaline) soils.

Recommended planting density

15-18 in (38-45 cm)¹²

Care requirements after installation

Water once, after installation.

Normal rate of growth or spread

Rate of spread can vary depending on environmental conditions.

Stems, which often are purplish below, usually are single, but occasionally two or three arise from a tough, persistent base, growing to 0.6m.¹ Hairy rockcress is hardy and is not frost tender. It flowers from May to July. The flowers are hermaphrodite (have both male and female organs) and are pollinated by Bees, Lepidoptera (Moths & Butterflies) and insects.¹¹

Data compiled by: Amy Lambert, 04/06/03

[1] USGS Northern Prairie Wildlife Research Center, <http://www.npwrc.usgs.gov/resource/literatr/wildflwr/species/arabhirs.htm>

[2] Price, 1997 as cited in Koch, M. 1999. *Arabidopsis and Arabis*, Plant Biology. Max-Planck-Institute for Chemical Ecology, Tatzendpromenade 1a, D-07745 Jena, Germany

[3] Rollins, 1993, as cited in Koch, M. 1999. *Arabidopsis and Arabis*, Plant Biology. Max-Planck-Institute for Chemical Ecology, Tatzendpromenade 1a, D-07745 Jena, Germany

[4] Hopkins, M. 1937. *Arabis* in eastern and central North America. *Rhodora* 39: 63-98, 106-148. Cited by Division of Natural Areas and Preserves, Ohio Department of Natural Resources

[5] USDA Natural Resources Conservation Service, <http://plants.usda.gov/>

[6] Chappell, Chris 2000. Puget-Georgia-Willamette Ecoregion Herbaceous Balds and Bluffs. Unpublished data

[7] Pojar, Jim and Andy MacKinnon, 1994. *Plants of the Pacific Northwest Coast*. Lone Pine Publishing, Vancouver, Canada

[8] Endangered and Threatened Species of the Southeastern United States FWS Region 4; <http://endangered.fws.gov/i/q/saqdg.html>

⁹ Back yard Gardener; <http://www.backyardgardener.com/pren/pg12.html>

¹⁰ *Journal of Vegetation Science* 4: (2) 195-202. Feb. cited in Oregon Endangered Species website.

¹¹ Sanders. T.W.1926. *Popular Hardy Perennials*, Collingridge

¹² <http://plantsdatabase.com/go/361/>

¹³ Rice, G. 1988. *A Wide Range of Perennial Plants that can be Grown in Britian and How to Grow Them*. Volume 2. Thompson and Morgan.