

Plant Data Sheet



* Picture taken from Native Plant Society of Oregon web page (<http://www.npsoregon.org/ann/2002.htm>)

Species Red/Western Columbine, *Aquilegia formosa*

*Note – there are several geographic races; var. *formosa* is common in our area

Range

Widely distributed in W. North America from S. Alaska and southward. Along coast and in coastal mountains to N. Baja, CA. Also in higher elevations of Sierra Nevadas. Distributed equally in Pacific and Cordillera regions.

Climate, elevation

Low moisture conditions and lack of sunlight limiting factors. Chiefly montane to subalpine, occurrence decreasing with increasing elevation.

Local occurrence (where, how common)

Common from lowlands to timberline. Mostly in subalpine forests and meadows in Olympics and Cascades.

Habitat preferences

Moist, open to partly shaded sites such as meadows, streamsides, rocky slopes and beaches, forest glades, clearings, and roadsides. Indicator of fresh and moist soils, and N-rich soils within the subalpine boreal.

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)

Inhabits early seral, exposed moist sites.

Associated species

Paintbrush (*Castilleja spp.*), Tiger lily (*Lilium columbianum*), *Penstemon spp.*

May be collected as: (seed, layered, divisions, etc.)

Seed. Plants collection doesn't seem to be restricted, but is not mentioned as method.

Collection restrictions or guidelines

Not on threatened plant list. Hybridizes easily with other species in the garden, so important to have reliable seed source and avoid collecting seeds from plants of unknown origin. Seeds mature June-August. Harvest by hand. Gently crush dried heads to release remaining seeds.

Seed germination (needs dormancy breaking?)

Scalp seeds with air screen. Some sources say no cold stratification required. Other sources say cold stratification required if growing indoors. A 3-day pre-chill is required.

Seed life (can be stored, short shelf-life, long shelf-life)

2 years or longer depending on conditions.

Recommended seed storage conditions

Can be stored up to 2 years in low temperature and low humidity environment. Can be stored longer if stored in sealed containers in low moisture environment.

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)

Direct seed outdoors in fall or sow seeds into containers in spring or fall.

Soil or medium requirements (inoculum necessary?)

Prefer mildly acidic soils (6.1-6.5 PH).

Installation form (form, potential for successful outcomes, cost)

Seeds or container plants grown from seeds..

Recommended planting density

18-24 inches apart (garden); 1200-3450 per acre per USDA.

Care requirements after installed (water weekly, water once etc.)

Moist soils preferred.

Normal rate of growth or spread; lifespan

Perennial. Puts out lots of seeds, spreads quickly (non-vegetatively). New plants next year. Moderate regrowth rate after harvest.

Sources cited

Hitchcock, C.L., A Cronquist, M. Ownbey, and J.W. Thompson. 1964. Vascular Plants of the Pacific Northwest. Part 2: Salicaceae to Saxifragaceae. University of Washington Press, Seattle WA. 597 p.

Klinka, K., V. J. Krajina, A. Ceska, and A.M. Seagel. 1989. Indicator Plants of Coastal British Columbia. University of B.C. Press, Vancouver, B.C. 288p.

Kruckeberg, A.R. 1982. Gardening with Native Plants. University of Washington, Seattle, WA. 252 p.

Manning, H. 1979. Mountain Flowers of the Cascades and Olympics. The Mountaineers, Seattle, WA. 96 p.

The Plants Database. Dave's Garden, Inc. <http://plantsdatabase.com>.

Pojar, J. and A. MacKinnon. 1994. Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia, and Alaska. Lone Pine Publishing, Vancouver, B.C. 526 p.

Rose, R., C.E. Chachulski, and D.L. Haase. 1996. Propagation of Pacific Northwest Native Plants: A Manual, Volume One, First edition. Forestry Publications Office, Oregon State University, Corvallis, OR. 66 p.

USDA, NRCS. 2002. The PLANTS Database, version 3.5 (<http://plants.usda.gov/>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

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