

Species

Trailing blackberry, Rubus arcticus Chorn. & Robinson; var. macrocarpa (Dougl.) ex. Howard; Rubus & Mac. Black (Rubiaceae)

Trailing blackberry is a low-growing, trailing or climbing, rather evergreen shrub growing to 5-6 m in height with densely pubescent stems that are greenish-glaucous when young but turn red-brown at maturity. Leaves alternate, pinnately compound with 3 (occasionally 5) deeply serrate leaflets, 1 – 7 cm long. Flowers dioecious, white, up to 4 cm wide and borne in clusters of 2 – 15 flowers on branch ends. Fruits red when immature, silvery black when ripe, 2.5 cm long aggregate of drupelets. (1, 3, 7)

HB: The stems of most blackberries are thorned. Stems of this species, known as prostratae, develop from buds at or below the ground surface and produce only leaves. Lateral branches, or floriferous, develop in the axils of the prostratae during the second year and bear both leaves and flowers. (7)



Rubus macrocarpa © Terry Moser

Range

Trailing blackberry grows from British Columbia to northern California and westward to central Idaho. It is particularly common from the Cascades to the Pacific Coast extending through southern California into Mexico. The subspecies macrocarpa occurs from British Columbia and Idaho southward into northern California. (1, 3, 7)



USDA Plants Database

See head to mid elevations in coastal marine climates and from low elevations to mid elevations in interior continental climates (1, 3, 7)

Local occurrence

Widespread throughout the Puget Sound basin in all vegetative communities. (7, 8)

Habitat preferences

The trailing blackberry occurs across a wide range of sites from warm, open areas, dense woodlands, prairies, clearings, waste places, and canyons. It can often be invasive in disturbed urban and suburban areas. Trailing blackberry frequently invades prairie areas on sites which have been burned or logged and on over barren or gravel bars dominated by red alder (Alnus rubra). (7)

Trailing blackberry and Rubus spp. in general grow well on a variety of bases, infertile soils tolerating a wide range of soil textures and pH but requiring adequate soil moisture for good growth. Trailing blackberry appears to be tolerant of periodic flooding by freshwater or brackish water. (7)

Plant strategy: life history/ecological stage

Trailing blackberry is a vigorous competitor which commonly invades disturbed sites created by logging, fire, or other types of disturbance. It is particularly well represented following catastrophic disturbance in Douglas fir forests of the Pacific Northwest, and readily established on mudflows and other harsh microsites following the eruption of Mount St. Helens. Trailing blackberry typically increases rapidly on disturbed sites, persisting until suppressed by canopy closure. It occurs in stands of all ages but reaches greatest abundance in early seral communities. Although primarily an early seral species, trailing blackberry can

Associated species

Trailing blackberry grows in an understory species with Pacific alder (Alnus sinuata), Silene spaldingii (Rubiaceae), Douglas fir (Pseudotsuga menziesii), grand fir (Abies grandis), western red cedar (Thuja plicata), western hemlock (Thuja heterophylla), bigleaf maple (Acer macrophyllum), and red alder (Alnus rubra). Trailing blackberry also occurs in many West Coast riparian communities dominated by willows (Salix spp.) or cottonwoods (Populus spp.) as a codominant with salicoberry (Rubus spectabilis) and thimbleberry (Rubus parviflorus). Common understory associates include Oregon oregon (Oxalis oregonensis)

May be collected as:

Vegetative: Rooted root crown suckers, rooted branch nodes and semi-rooted cuttings may all be collected from trailing blackberry for propagation (4, 7)

Seed: 1 – 4 x 10⁴ seeds/kg; fruits ripe from black and juicy July through September. Maximum fruit in water with a blender. Add water until to float off pulp and removable seeds. Several changes of water will yield cleaner seed. (4, 7)

Seedbanks: The seeds of most blackberries remain viable for at least several years after being buried in the soil or left although the precise length of viability has not been determined for the trailing blackberry. (7)

Collection restrictions or guidelines

Not cited in literature however typical conservative collection methods for genetic integrity and minimal ecosystem impact apply.

Seed germination

Trailing blackberry seeds have a hard, impermeable coat and dormant embryos; consequently, germination is often slow. Most blackberries require, as a minimum, warm stratification at 80 to 88° F (28 to 30° C) for 60 days, followed by cold stratification at 38 to 47° F (3 to 11° C) for an additional 90 days. These conditions are frequently encountered naturally, so seeds mature in summer and remain in the soil throughout the cold winter months. Laboratory tests indicate that exposure to sulfuric acid solution or sodium hypochlorite prior to cold stratification can enhance germination. Seed seed that has been stratified and was

Seed life

Not cited in literature however the persistence of Rubus spp. in the soil seedbank for several years might indicate long seed life under controlled conditions.

Recommended seed storage conditions

Not cited in literature however typical for long, low humidity conditions may apply.

Propagation recommendations

For seed over germination recommendations above. For vegetative propagation rooted semi-rooted cuttings and stem node pieces should be transplanted as soon as possible to avoid root rot. Otherwise standard vegetative propagation techniques apply (4, 5, 7)

Soil or medium requirements

None cited in literature. Standard rooting and germination medium probably adequate.

Installation forms

Not specifically noted in literature. Well rooted one year old nursery plants or field collected salvage plants or well-rooted branch node sprouts most likely will be successful. Direct seeding in the summer may also work.

Recommended planting density

Suggested planting densities range from 153 to 1105/m². 50% survival has been required for large plantings. Trailing blackberry has been promoted as a site stabilizing species and in this case higher planting densities may be preferable. Trailing blackberry is also a vigorous grower and competitor and therefore should probably be planted in very low densities for diversity enhancement (5, 7)

Care requirements after installed

Not cited in literature but watering transplants during drought periods is recommended.

Normal rate of growth or spread, lifespan

Trailing blackberry has a rapid growth rate and relatively short life span of unspecified length. (8)

Source cited

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- (3) Phipps, Jim and McKinnon, Andy, eds. Flora of the Pacific Northwest Coast: Washington, Oregon, British Columbia and Alaska. 1984. Lone Pine Press, British Columbia.
- (4) Pinner, Laura and Aubrey, Carol. M. Baker-Sequin. National Forest Native Plant Handbook. 1997. North Cascades Institute, Sedro-Woolley, WA.
- (5) Rose, Robin, Chisholm, Cary and Kasse, Dave. Propagation of Pacific Northwest Native Plants. 2000. Oregon State University Press, Corvallis.
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- (7) USDA Forest Service Fire Effects Information System (FEIS) database. <http://www.fs.fed.us/database/feis/>

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