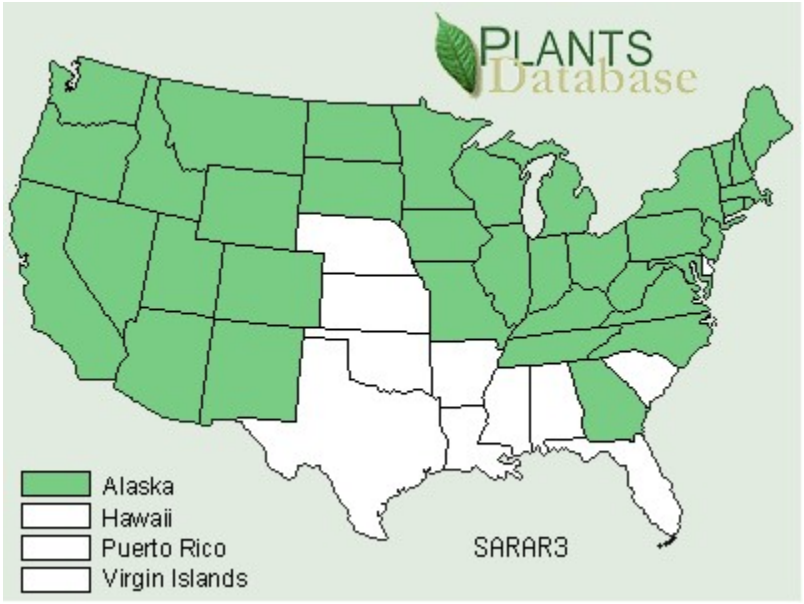
Species

Red elderberry, *Sambucus racemosa* L. ssp. *pubens* (Michx.) House var. *arborescens* (T. & G.) Gray

Perennial shrub to small tree, up to 6 m tall, leaves opposite, 15-30 cm long, deciduous, pinnately compound divided into 5-7 lanceolate leaflets. W. Cascade variety pubescent under leaflets. Flowers white to cream born in pyramidal panicles. Fruit red, three-seeded drupes. (3, 7)

Range

Circumboreal, found throughout the west cascades in riparian zones, wetlands and moist forests. (1, 3, 9)



Climate, elevation

Pacific maritime climate from sea level to 1000 m (sometimes up to 3500 m). (3, 7, 9)

Local occurrence

Common throughout Puget Sound in moist clearings, open forests, stream banks, and wetlands (1, 7)

Habitat preferences

A facultative wetland species with a preference for disturbed moist sites in riparian zones, wetlands and moist forests. (1, 7)

Plant strategy type/successional stage

Not specifically noted in literature however most reference red elderberry as associated with disturbance indicating it may be a seral species reliant on regular disturbance to persist in a community and therefore possibly ruderal. (1, 7)

Associated species

Widely associated with both broadleaf deciduous and coniferous forests throughout its range. Commonly found locally beneath red alder (*Alnus rubra*), big-leaf maple (*Acer macrophyllum*), Oregon ash (*Fraxinus latifolia*), Douglas-fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), black cottonwood (*Populus balsamifera*) and western hemlock (*Tsuga heterophylla*). Often found associated with willows (*Salix* spp.), salmonberry (*Rubus spectabilis*), thimbleberry (*Rubus parviflorus*), and snowberry (*Symphoricarpos albus*). (2, 5, 7)

May be collected as:

Seed – (400,000 to 800,000 seed/kg) ripens June-September, dry fruit and macerate with water to float off pulp or crush and dry fruit for same season seeding. (8, 9, 10)

Cuttings – one year old cuttings with 30-40% of their leaves retained taken after new wood is mature from summer through late winter. Cuttings kept in cold storage lose vigor. Cuttings can either be potted or installed directly in the field early enough to allow for rooting before winter. (8, 9, 10)

Collection restrictions or guidelines

Typical conservative collection methods for genetic integrity and minimal ecosystem impact apply.

Seed germination

Seed sown in fall after collection may not germinate until the second spring. Greenhouse germination increased by 5 minute sulfuric acid treatment followed by 48 hour water soak then warm and cold stratification. (8, 9)

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

Can be stored for several years at 5 degrees Celsius (8)

Recommended seed storage conditions

Typical low temp, low humidity conditions

Propagation recommendations

Sow seed in media filled flats then cover with light perlite layer. Cover flats with plastic or glass to maintain high humidity. Once germinated raise cover slightly to allow for circulation. Once germination is complete remove cover and pot up seedlings. Germinants are ready for outplanting after the first year. Cuttings should be treated with root hormone and planted in pots with ample enough room for root growth. Rooting can be accelerated by keeping them in hot, humid conditions. Rooted cuttings are ready for installation after the first year. (8, 9, 10)

Soil or medium requirements

1:1 peat:perlite or regular potting soil for cuttings, peat:sand:perlite mix for germination. (8)

Installation form

Seed can be directly sown into the field. Freshly collected cuttings can also be directly installed. Greenhouse raised germinants and rooted cuttings are ready for outplanting after one year. (8, 9)

Recommended planting density

Not noted in literature. Red elderberry takes on a sprawling tree-like form in favorable conditions therefore wide spacings of 2 m or more might be appropriate.

Care requirements after installed

Not noted in literature. Red elderberry has been noted to tolerated dry to wet soils. If installed in persistently moist sites favored by red elderberry watering may not be necessary. At dryer sites during the summer or during drought in wetter sites weekly watering may be needed. (7, 8, 11)

Normal rate of growth or spread; lifespan

Red elderberry is a moderately fast grower with a moderate lifespan of unspecified length (10)

Sources cited

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