

Plant Data Sheet

Western larch, *Larix occidentalis*



Range

Western larch can be found from western Montana to eastern Oregon and Washington and southern British Columbia. (1)

Climate, Elevation

Western larch grows in a relatively moist-cool climatic zone, with low temperature limiting its upper elevational range and deficient moistures its lower extremes. (2) Elevation ranges from 650 to 2450 m. (1)

Local occurrence (where, how common)

Valley bottoms, benches, and north- and east-facing mountain slopes.(2)

Habitat preferences

deep, well-drained and fairly nutrient-rich soils, and appears to need calcium and magnesium.(1)

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

Shade intolerant. (1) And it is a seral species well adapted to seedbeds exposed by burning or mechanical scarification. (2)

Associated species

Douglas-fir (*Pseudotsuga menziesii* var. *glauca*), ponderosa pine (*Pinus ponderosa*), grand fir (*Abies grandis*), western hemlock (*Tsuga heterophylla*), western redcedar (*Thuja plicata*), and western white pine (*Pinus monticola*), Engelmann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), lodgepole pine (*Pinus contorta*), and mountain hemlock (*Tsuga mertensiana*)(2).

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

Seed. Cuttings have been successfully rooted by researchers at the Intermountain Forest and Range Experiment Station, but methods have not been fully tested at this time. (1)

Collection restrictions or guidelines

Flowering occurs from April to June and seed dispersal is from September to October. Pick larch cones from the tree in the fall as soon as they ripen. (1)

Seed germination (needs dormancy breaking?)

Larch germinates well without pretreatment. However, cool, moist stratification for 18 days may enhance germination of spring-sown seed. (1)

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

Three or more years. (1)

Recommended seed storage conditions

Stored in cold and dry sealed containers. (1)

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

Collect cones, separate seeds, plant seeds. Out plant seedlings after one year. (1).

Soil or medium requirements (inoculum necessary?)

Sow in the fall or spring and cover with not more than 0.5 cm of soil. Cover fall-sown seed with mulch. (1)

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

Seeds.

Recommended planting density

216,045-434,305 seeds per kilogram. (1)

Care requirements after installed (water weekly, water once, never water, etc.)

Keep soil from drought and high temperature. (2)

Normal rate of growth or spread; lifespan

Larch grows faster in height than any other conifer. Height: 6m at 20 years old, 19m at 40, 29m at 60, 35m at 80, 40 at 100. Western larch, which is 900 years old, has been found. (2)

Sources cited

- (1). Rose, R., C. Chachulski and D. Haase. 1996. Propagation of Pacific Northwest Native Plants: A Manual, Volume Two, First Edition. Nursery Technology Cooperative, Oregon State University, Corvallis, Oregon, 201 p
- (2). Burns, R. and B. Honkala 1990. Silvics of North America, Volume 2, Hardwoods. Agricultural Handbook 654. U.S. Department of Agriculture, Forest Service, Washington, D. C..

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