

Pseudotsuga menziesii - Douglasfir (*Pinaceae*)

Pseudotsuga menziesii is a pyramidal evergreen tree that has blue-green or bright green needles. Prized as a timber tree in Western North America, Douglasfir is alternatively used as an ornamental tree in landscapes, or as a Christmas tree.

Form



FEATURES

- large evergreen tree
- maturing at about 50' tall x 20' wide under optimum Midwestern conditions, but up to 300' tall under Pacific Northwest conditions (*P. menziesii* var. *menziesii*) or 125' tall under Rocky Mountain conditions (*P. menziesii* var. *glauca*)
- upright pyramidal growth habit in youth, developing an upright

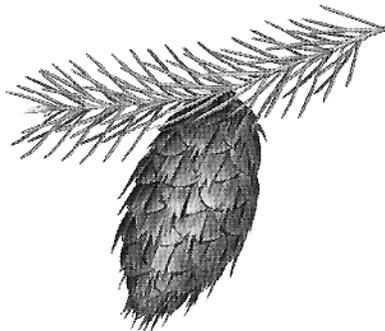
yet irregular crown with age
-medium to slow growth rate

Culture

- full sun to partial sun
- performs best in full sun in moist, well-drained, slightly acidic, rich, cool soils, with cool, humid summers and wind-sheltered sites in winter;
- somewhat intolerant of poor soils, dry soils, poorly drained soils, exposed sites, drought, and urban stress areas in general
- numerous potential diseases and pests of ornamental significance
- commonly available in B&B form
- Douglasfir does not naturally have the tight, formal appearance of most other Spruces or true Firs; if unshaped, it has a relatively open and loose habit in youth, similar to unshaped Hemlock or White Pine

Foliage

- foliage color ranges from blue-green (for the Rocky Mountain variety) to various shades of spring-green, mint green, dark green, or yellowish green (for the Pacific Northwest variety)
- evergreen, thin, flattened needles are about 1" long and arranged in 2 rows on either side of the thin stems (with an overall V-shape, known as pectinate arrangement), with 2 bands of white stomata on the needle undersides



Flowers

-ornamentally insignificant, with the staminate flowers axillary, and the pistillate flowers terminal as purplish immature cones

Fruits

-cones are about 3" long, slightly curved, with unique 3-pronged seed bracts (resembling a 3-forked snake's tongue) extending beyond the cone scales, and actually being the best identification feature for the species

Twigs

-yellow-green during the first season, becoming gray or brown with maturity

Trunk

-often hidden when limbs branch to the ground, being brown-gray and smooth in youth, becoming red-brown, very thick, and deeply ridged and furrowed with age

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Function

-specimen, focal point, or screen planting

Texture

-medium-fine texture
-average density overall (although sections of the canopy can have an open or thick density, especially with maturity)

Assets

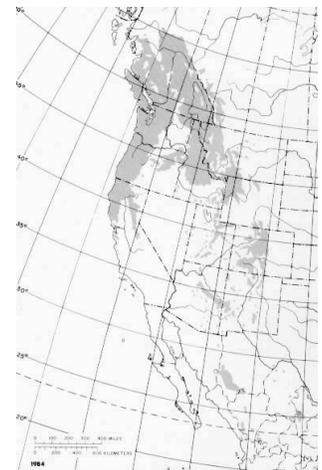
-evergreen pyramidal tree with a spring-green or blue-green needle color
-very important timber tree in portions of Western North America

Liabilities

-slow growth rate, coupled with a somewhat stunted growth pattern in areas without its native climatological and soil conditions, which also makes it more prone to pathogens and pests (in other words, it is not very adaptable to harsh, non-native conditions)

Habitat

-Zones 4 to 6
-Native to the Pacific coastal regions (Northern Mexico to Southern Canada) and Rocky Mountain regions of North America



SELECTIONS

Alternates

-evergreen pyramidal trees (members of the genera *Abies*, *Picea*, *Pinus*, *Tsuga*, etc.)

Cultivars - Variants - Related

-*Pseudotsuga menziesii* 'Pendula' - semi-pendulous branches with bluish-green needles