

# Plant Guide

### PACIFIC WILLOW Salix lucida Muhl. ssp. lasiandra (Benth.) E. Murr. Plant Symbol = SALUL

Contributed by: USDA NRCS National Plant Data Center



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#### **Alternative Names**

yellow willow, red willow, black willow, whiplash willow, golden willow, caudate willow, western black willow, waxy willow, western shining willow, *Salix lasiandra* (SALA5)

#### Uses

*Ethnobotanic*: The inner bark was dried, ground into a powder, and then added to flour for making bread. The stems and bark were used in basket making (Moerman 1998). The native Americans used the stems for bow making and the bark for fabric making and tea.

*Medicinal*: Willows produce salicin, which is closely related to acetylsalicyclic acid, commonly known as aspirin. Various preparations from willows are used to treat stomachache, sore throats, colds, diarrhea, and dandruff. The inner bark is haemostatic and has been applied externally to bleeding cuts (Moerman 1998).

*Landscaping & Wildlife*: Pacific willow is an excellent species for use in landscaping. It provides food and cover for many wildlife species. Deer and elk browse the young shoots of the plant. It is also a preferred food of mouse and cattle.

*Agroforestry: Salix lasiandra* is used in tree strips for windbreaks. They are planted and managed to protect livestock, enhance production, and control soil erosion. Windbreaks can help communities with harsh winter conditions better handle the impact of winter storms and reduce home heating costs during the winter months.

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

#### Description

*General:* Pacific willow (*Salix lasiandra*) is a tall, slender, large shrub or small tree, fifteen to forty-five feet high (McMinn & Maino 1963). The leaves are long, thin, shiny, five to ten centimeters long with finely

toothed edges. The fruits are thick catkins that are hairless, light reddish-brown, and six to eight millimeters long. The bark is furrowed with broad flat scaly plates.

*Distribution*: Pacific willow is native along stream banks from British Columbia southward to southern California and New Mexico (McMinn & Maino 1963). For current distribution, please consult the Plant profile page for this species on the PLANTS Web site.

#### Adaptation

Salix lasiandra is a fast growing but short-lived tree. This species prefers a damp heavy soil but will succeed in most soils. This species is often found in riverbanks, floodplains, lakeshores, and wet meadows often standing in quiet river backwaters (MacKinnon, Pojar, & Coupe' 1992). It grows best in a sunny position scattered at low elevations along major rivers (Ibid.).

#### Establishment

*Propagation from Seed*: Seeds must be sown as soon as they are ripe in the spring. Seeds are viable for only a few days and the maximum storage period is four to six weeks with germination rates dropping off fast after ten days at room temperature (Dirr & Heuser 1987). Willow seeds have no dormancy and germinate within twelve to twenty-four hours after

Plant Materials <a href="http://plant-materials.nrcs.usda.gov/">http://plant-materials.nrcs.usda.gov/</a> Plant Fact Sheet/Guide Coordination Page <a href="http://plant-materials.nrcs.usda.gov/intranet/pfs.html">http://plant-materials.nrcs.usda.gov/intranet/pfs.html</a> National Plant Data Center <a href="http://npdc.usda.gov">http://npdc.usda.gov</a> falling on moist ground (Ibid.). Seedbeds must be kept moist until seedlings are well established.

*Propagation from Cuttings*: Hardwood cuttings can be collected and prepared for insertion, normally from November through March. Cuttings seven to ten inches long and a half to one inch thick are initially stuck close and dug after one year (Dirr & Heuser 1987). Willows have a rooting percentage of ninety to one-hundred percent and the rooting number is not promoted by rooting hormones (Ibid.).

#### Management

Pacific willow is used to colonize disturbed sites for streambank stabilization projects. Cuttings are used for revegetating disturbed riparian areas to extract soil moisture and high amounts of carbohydrates.

## Cultivars, Improved and Selected Materials (and area of origin)

Available from wetland plant nurseries within its range. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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