|  |
| --- |
| Pacific Willow |
| *Salix lucida* Muhl. ssp. *lasiandra* (Benth.) E. Murr. |
| Plant Symbol = SALUL |

Contributed by: USDA NRCS National Plant Data Center

# 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.



Charles Webber

© California Academy of Sciences

@ CalPhotos

# 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 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.”

# References

Britton, N.L. 1908. *North American trees*. Henry Holt & Company, New York, New York

Dirr, M.A. & C.W. Heuser, Jr. 1987. *The reference manual of woody plant propagation: from seed to tissue culture*. Varsity Press, Athens, Georgia.

Farrar, J.L. 1995. *Trees of the northern United States and Canada*. Iowa State University Press, Ames, Iowa.

Howell, J.T. 1949. *Marin Flora: manual of the flowering plants and ferns of Marin County, California*. University of California Press, Berkeley & Los Angeles, California.

MacKinnon, A., J. Pojar, & R. Coupe´ 1992. *Plants of the northern British Columbia*. Lone Pine Publishing, Canada.

McMinn, H.E. & E. Maino 1963. *An illustrated manual of Pacific Coast trees*. University of California Press, Berkeley, California.

Moerman, D. 1998. *Native American ethnobotany*. Timber Press, Oregon.

Pojar, J & A. MacKinnon 1994. *Plants of the Pacific Northwest coast: Washington, Oregon, British Columbia, and Alaska*. Lone Pine Publishing, Redmond, Washington.

Preston, R.J., Jr., 1989. *North American trees*. 4th ed. Iowa State University Press, Ames, Iowa.

Rehder, A. 1990. *Manual of cultivated trees and shrubs: hardy in North America*. 2nd ed. Dioscorides Press, Portland, Oregon.

Sargent, C.S. 1961. *Manual of the trees of North America*. Vol. 1. Dover Publications, Inc., New York, New York.

Viereck, L.A. & E.L. Little, Jr. 1972. A*laska trees and shrubs*. United States Department of Agriculture, Agriculture Handbook No. 410. Washington, D.C.

Vines, R.A. 1960. *Trees, shrubs, and woody vines of the southwest*. University of Texas Press, Austin, Texas.

# Prepared By & Species Coordinator

## *Lincoln M. Moore*

USDA, NRCS, National Plant Data Center, Baton Rouge, Louisiana

Edited: 29jan03 jsp; 09jun03 ahv; 060816 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site<<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

*The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's* [*TARGET Center*](http://www.usda.gov/oo/target.htm) *at 202-720-2600 (voice and TDD).*

*To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.*

*Read about* [*Civil Rights at the Natural Resources Convervation Service*](http://www.nrcs.usda.gov/about/civilrights/)*.*