

Natural Resources Conservation Service

Plant Guide

ARIZONA CYPRESS Hesperocyparis arizonica (Greene) Bartel

Plant Symbol = HEAR22

Alternative Names: Cedro blanco *Scientific Names: Cupressus arizonica,* or *Callitropsis arizonica*

Description

General: Arizona Cypress is a native evergreen conifer tree that grows to a height of 40 to 75 feet. It grows in an upright, pyramidal shape, but can be shrubby in areas subject to wildfires. Arizona cypress grows quickly and is long-lived. Leaves are small and scalelike, gray-green to blue-green, closely pressed to the stems, similar in appearance to juniper leaves. Leaves contain resin glands that give off a strong aroma when bruised. Pollen cones are very small, about 1/8 inch long. Seed cones are round, about an inch in diameter, with 6 to 8 pointed scales. Seed cones are initially green with a waxy coating, but mature to a brown color in two growing seasons. The scales open and release seed after dessication or fire. Mature cones may not fall off the tree for several years. There are several varieties of Arizona cypress with minor differences in foliage and bark. Bark may be fibrous and gray, or may peel from the trunk in papery sheets, revealing reddish inner bark. Intergradations of bark



Arizona cypress, Photo by Mary Wolf, USDA NRCS Tucson Plant Materials Center

texture make it difficult to distinguish between varieties. *Hesperocyparis arizonica* var. *arizonica* is known as rough-bark Arizona cypress. *Hesperocyparis arizonica* var. *glabra* (also known as *Hesperocyparis glabra, see PLANTS Database*) is known as smooth-bark Arizona cypress. (Kearney and Peebles, 1964; Benson and Darrow, 1981; eFloras, 2017; Johnson and Karrfalt, 2007; Elmore, 1976.)

Distribution: Arizona cypress is native to limited areas of Arizona, southwest New Mexico, and western Texas. It is more widely distributed in northern Mexico. For current U.S. distribution, please consult the Plant Profile page for this species on the PLANTS website.

Habitat: The native habitat of Arizona cypress includes canyon bottom and riparian areas, and rocky slopes in piñon-juniperoak woodland and chaparral plant communities. Arizona cypress is generally found at elevations between 3500 ft and 8000 ft in its natural habitat, but landscape specimens are often found outside this elevation range.

Adaptation

Arizona cypress is a long-lived species that is adapted to recolonizing after fire. It requires bare, mineral soil for germination and sunlight for seedling growth (Parker, 1980). Associated plants include: Arizona sycamore (*Platanus wrightii*), cottonwoods (*Populus* spp.), Arizona walnut (*Juglans major*), juniper (*Juniperus* spp.), piñon pine (*Pinus* spp.), scrub oaks (*Quercus* spp.), and Douglas fir (*Pseudotsuga menziesii*).

Uses

Plant Arizona cypress in windbreaks and shelterbelts, for wildlife habitat, landscape ornamental trees and Christmas trees. The wood has little commercial value as timber, but when seasoned properly, can provide durable fenceposts.

Ethnobotany

Due to historical confusion between various species of cypress and juniper (*Juniperus*), there is a lack of information pointing specifically to the use of Arizona cypress by Native American peoples.

Status

In Nevada, Arizona cypress is protected under the category of "Cactus, Yucca, or Christmas Tree" (Nevada Natural Heritage Program, 2017).

.Wetland Indicator: Arizona cypress is not a wetland indicator species.

<u>Weedy or Invasive</u>: Arizona cypress is not known to be an invasive species. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use.

Please consult the PLANTS website (<u>http://plants.usda.gov/)</u> and your state's Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Planting Guidelines

Plant Arizona cypress in well-drained soil. While it will not tolerate poorly drained soil or a high water table, it will need supplemental water during establishment. For windbreak plantings, it can serve as the windward row or as a dense single-row windbreak. Use 8 to 16 foot within-row spacing (Wildermuth and Bruce).

Management

Arizona cypress generally requires little maintenance. For desert landscape plantings, deep watering at least every other week is necessary during the growing season to prevent water stress.

Pests and Potential Problems

Cypress bark beetles can kill or damage Arizona cypress trees, especially those weakened by water stress (Schalau, 2011). Foliage blight caused by *Cercospora sequoiae* may limit commercial production in some areas (Johnson and Karrfalt, 2008). Seedlings are susceptible to damping-off fungus (Johnson and Karrfalt, 2008).

Environmental Concerns

None known.

Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

Seeds and Plant Production

There are approximately 90 to 120 seeds per Arizona cypress cone. There are approximately 83,000 seeds per pound. Seeds fall readily from mature, open cones. Immature cones must be dried for the scales to open and the seed to be released (Johnson and Karrfalt, 2007). Cold stratification stimulates seed germination (Young and Young, 1986; Ceccherini et al. 1998). Cold stratification preceded by soaking in 0.1% citric acid solution has been shown to improve seed germination (Groggans et al., 1974).

Nursery planted seeds should be sown in spring. Seedlings are susceptible to damping off fungus, so nursery soil should be fumigated, if possible. Arizona cypress trees can be outplanted as 1 to 2 year old seedlings (Johnson and Karrfalt, 2007).



Arizona cypress cones, Photo © 2016 Zoya Akulova, CalPhotos

Cultivars, Improved, and Selected Materials

There are numerous cultivars of Arizona cypress available as potted stock in the horticultural trade. 'Carolina Sapphire' (Clemson University) and 'Blue Ice' (New Zealand) are two of the most common. Cultivars should be selected based on the local climate, resistance to local pests, and intended use. Consult with your local land grant university, local extension or local USDA NRCS office for recommendations on adapted cultivars for use in your area.

Literature Cited

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Citation

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