

Cephalanthus occidentalis

Family: *Rubiaceae*



Fort Myers, Florida

August

Buttonbush; button willow; pincushion flower; snowball; globe-flower

Synonyms (discarded names): None found

Origin: From Eastern Canada south to Texas and Florida, north-central U.S.A., to Central California

U.S.D.A. Zone: 5-10 (Minimum -20°F)

Plant type: Shrub; occasionally a small tree

Growth Rate: Moderate

Light requirements: Full sun; partial shade

Flower color: White

Flowering Months: Primarily March - August

Leaf Persistence: Deciduous; semi-deciduous in south Florida

Soil Salt Tolerance: Low

Drought Tolerance: None

Soil requirements: Moist

Nutritional Requirements: Low

Major Pests: None

Typical Dimensions: 10 feet with a spread of 6-8 feet

Propagation: Seeds; cuttings planted in moist, sandy soil

Human hazards: Bark contains a poison that can induce vomiting, paralysis and convulsions.

Uses: Shoreline planting; wet sites; wildlife; reclamation; naturalist gardens and landscapes; rain gardens; .



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Natural geographic distribution

Buttonbush grows naturally in freshwater wetlands at the margins of swamps and ponds and in marshy roadside ditches. It is one of the few temperate shrubs that extends its range into the tropics. The plants in the United States and Canada are known from New Brunswick and Ontario, south to Florida, and west to Texas, Arizona and Central California. It also ranges into Central America and Cuba. It is not found in the Bahamas.

Ecological and Ethnobotany Functions

Buttonbush can be a pioneer species in frequently flooded swamps by establishing itself on rotting logs and stumps. The flowers attract butterflies, bees and hummingbirds. The seeds are a food source for ducks and shorebirds. The ducks also use the plant for shelter. Indigenous people used the plant for treating toothaches, eye trouble and several internal maladies including diarrhea and stomach aches. Europeans and Americans also used the plant to treat various ailments until it was found that the side effects were worse than the malady being treated. Buttonbush contains toxins that can destroy blood corpuscles and lead to death. The leaves are toxic to horses.



Buttonbush flowering in moist swale

Crystal Lakes, Florida

June



Anhinga Trail, Everglades National Park

August



Anhinga Trail, Everglades National Park

August

Growth Habit

The buttonbush shrub can grow to become a small tree but usually does not attain a height of more than 10 to 12 feet. This multi-stemmed, rounded bush has arching branches and a somewhat open and spreading appearance. Trees remain little-branched because apical dominance is strong. The coarse stems are almost 4-sided. Stem color varies from gray-brown to shiny olive, turning reddish-brown with age. The bark is smooth, becoming ridged and furrowed, often with vertical, raised, corky lenticels. These lenticels enlarge into fissures on older stems. Buttonbush shrubs can form colonies from self-sown seedlings and root sprouts. The plant has a disheveled, scrubby appearance due to the dying of leader shoots, which leave dead and dying stumps. In south Florida, this species remains more or less evergreen although it is deciduous further north.



Younger stems with corky lenticels



Older stems without lenticels

Leaves

The simple, petiolate, dark green, glossy leaves vary in size, from 2 to 7 inches long and 2-3 inches wide, with an ovate, or elliptic shape and pointed tip. They are arranged in opposite pairs or whorled in groups of three or four (varying on a given plant). The leaves have a yellow midrib and prominent, depressed veins. Upper leaf surfaces are glossy green, the undersides are dull, sometimes glabrous (smooth and hairless).



Oppositely paired leaves



Opposite leaves are attached to stems by petioles

Flowers

Flowers are sessile, borne terminally on the twigs of the current season growth. They are bisexual, compound, staminate with many florets of fused white tubular corolla. These 1-1½” flower spheres are on long pedicels with many white stamens extending beyond the corollas and topped by yellow anthers.



Flowers are borne terminally on the twigs of the current season growth



Most flowers are arranged across from each other on long pedicels



Staminate flower



Oppositely paired leaves and flowers. Note the yellow midrib and depressed veins of the leaves

After flowering, the flower heads turn into one inch, ball-shaped, brown fruit, splitting into two to four nutlets. The fruits persist on the plant throughout the winter. The nutlets are inversely pyramidal, with the attachment at the narrower end.

Maintenance Guidelines

Buttonbush is well suited as an understory shrub for moderate to wet soil. It does best in wet sites with poor drainage in full sun to part shade. The plant typically requires moderate irrigation, especially in drier situations. It will colonize much of the water's edge if left unattended along lakes or ponds. Buttonbush is difficult to establish on the "fill" soils of South Florida. The shrub responds well to pruning and can be kept to a small size in the landscape. It is moderately long-lived. In rare cases it can live for as long as 50 years.

References

- Austin, Daniel F. 2004. Florida Ethnobotany. CRC Press. Boca Raton, London, New York, Washington, D.C.
- Godfrey, Robert K. and Wooten, Jean W. 1981. Aquatic and Wetland Plants of Southeastern United States Dicotyledons. University of Georgia Press, Athens.
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- Tomlinson, P.B. 1986. The Biology of Trees Native to Tropical Florida. Harvard University Printing Office, Allston, Massachusetts

Useful Links

- [South Florida Native Plant Fact Sheets](#)
- [Stephen Brown's YouTubes](#)
- [Coccoloba Chapter of Florida Native Plant Society](#)
- [Native Plant and Service Directory](#)

All pictures taken by Stephen Brown except where indicated.

This fact sheet was reviewed by Tom Becker, Lee County Extension; Jenny Evans, [Sanibel-Captiva Conservation Foundation](#); Cathy Feser, Naples, Florida.

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