



United States Department of Agriculture

'Keystone' Buttonbush

Cephalanthus occidentalis L.

A Conservation Plant Released by the USDA NRCS Big Flats Plant Materials Center, Corning, New York



'Keystone' buttonbush flower in full bloom (photo taken at the Big Flats Plant Materials center in Corning, New York).

'Keystone' buttonbush (*Cephalanthus occidentalis* L.) is a cultivar released in 1996 by the USDA Natural Resources Conservation Service and the Pennsylvania Game Commission.

Description

Keystone is a native, deciduous, erect multi-stemmed wetland shrub, obtaining heights from 8 to 12 feet and widths from 5 to 8 feet. It spreads by seed dispersal. It has dark green leaves that are glossy and attractive, and white flowers occurring in clusters of roundheads, appearing in July and August. The fruit is a dense, round ball or button about one inch in diameter that contains many pods.



Buttonbush branch by water's edge (photo by Frank L. Hoffman (www.all-creatures.org)).

Source

Keystone (PI-9051750), is an open pollinated composite of accessions, 9026820, 9026824, 9028215, 9028620, and

9028621. Accessions 9026820, 9028620 and 9028621 were collected from Crawford County, PA; accession 9026824 was collected from Mason County, WV and accession 9028215 was collected from Wayne County, NY. These accessions were selected from 38 accessions collected from the following states: NY, PA, WV, MA, TX, ME, VT and NJ. These accessions were evaluated over a 7 year period for vigor, stem and foliage abundance, and basal area. From the top 5 accessions, the best 3 plants were transplanted to a randomized crossing block.

Conservation Uses

Keystone is used as a plant for wetland restoration, created wetlands, erosion control, pollinator habitat enhancement, wildlife food and cover, and riparian areas, especially in areas with fluctuating water levels. It can tolerate periodic flooding.

Keystone is an obligate wetland plant, but will live if planted in some upland areas. This plant has exceptional wildlife benefits, particularly for wetland birds such as wood ducks and mallards.

Area of Adaptation and Use

Keystone has been successfully planted from Maryland to Maine. As an obligate wetland plant, it will grow in wetter soils of swamps and bogs, and along borders of ponds and streams with full sunlight. It will tolerate water depths up to 3 feet. Keystone has a delayed leaf emergence until warmer temperatures arrive. Flowering response is poor in shady or dry sites.

Establishment and Management for Conservation Plantings

One year old or older seedlings or rooted cuttings can be established at 2' spacing for erosion control or wider for wetland mitigation or habitat development. Controlling weed competition during the first growing season is the biggest establishment challenge. Seedlings and rooted cuttings should be properly handled prior to planting, and once planted, the soil should be tamped firmly around the plant to eliminate air pockets. No fertilizer or lime should be applied at planting. Spring water levels may delay planting until they have declined, but early plantings are preferred.

For assistance in planning your plantings and locating sources of Keystone, contact your local NRCS field office or your local Soil and Water Conservation District.

Ecological Considerations

Keystone was selected from a Northeast native plant collection for its superior plant vigor, form, and has no serious pest problems.

Seed and Plant Production

Collections of Keystone seed can be made as soon as the fruiting heads turn reddish-brown, usually in October. Light pressure on the fruit will break them into separate seeds. Buttonbush seeds will germinate easily without any pre-treatment or cold-moist stratification.

Seedlings should emerge in about two weeks. Propagation can be achieved in the nursery with hardwood cuttings if rooting hormones are applied (40-96% success). It is intended for nurseries to propagate Keystone from seed and sell 1-0 or 2-0 stock for field plantings. There are 134,000 seeds per pound.



Close-up of buttonbush seed (photo from USDA PLANTS database).

Availability

For conservation use: Keystone is widely available in commercial and state nurseries.

For seed or plant increase: Nursery owners may obtain propagated material and seed from the Big Flats Plant Materials Center, in Corning, New York, to start their seed production block for commercial production.

For more information, contact:
Big Flats Plant Materials Center
3266 State Route 352
Corning, New York 14830
Ph: 607-358-6009

Or
Shawna.clark@usda.gov
<http://plant-materials.nrcs.usda.gov/nypmc/>

Citation

Fact Sheet for release 'Keystone' buttonbush (*Cephalanthus occidentalis* L.). USDA-Natural Resources Conservation Service, Big Flats Plant Materials Center, Corning, New York, 14830. Published [March 2015].

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

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