

Broughtonia Wall. ex Lindl. 1830

SUBFAMILY Epidendroideae, TRIBE Epidendreae, SUBTRIBE Laeliinae.

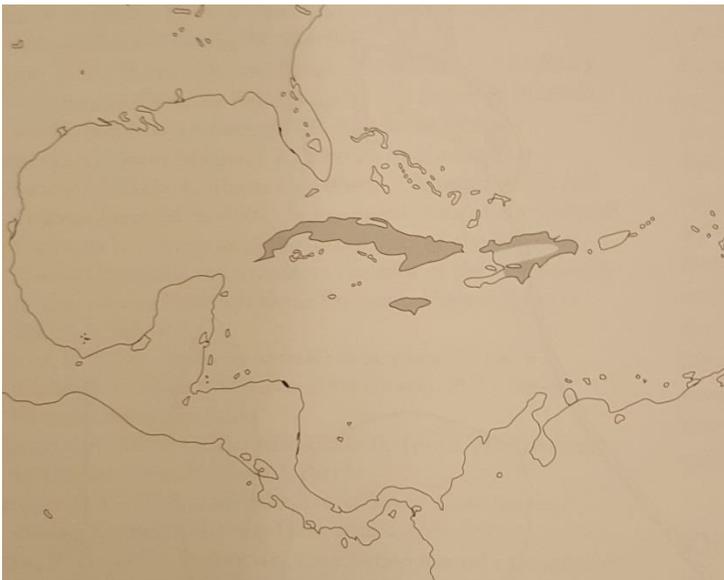
TYPE SPECIES: *Broughtonia sanguinea* (Sw.) R.Br. in W.T.Aiton

SYNONYMS: *Laeliopsis* Lindley, *Cattleyopsis* Lemaire

ETYMOLOGY: Dedicated to Arthur Broughton (1758-1796), a British physician and botanist who later settled in Jamaica and collected the West Indies flora, and author of *Enchiridion Botanicum* (1782).²

DESCRIPTION: Epiphytes, occasionally lithophytes, with clustered pseudobulbs, usually flattened, cylindrical to ovoid, enclosed by papery sheaths. Leaves 2, stiff, leathery or fleshy. Inflorescences terminal, the scape longer than the leaves, branched or unbranched, few- to several-flowered. Flowers showy; sepals subsimilar, petals much wider; lip entire or obscurely trilobed. Column winged towards the apex; pollinia 4 or 8.⁴ These plants have clustered, somewhat flattened, dull green to gray pseudobulbs, each with one to four, leathery or fleshy leaves at the tip. The long, simple to sometimes branching, few-flowered inflorescence has minute bracts and is borne from the tip of the pseudobulb that becomes grooved with age. This plant, when properly grown, is almost ever blooming. The brilliant candy striped, crimson, white, yellow to pale pink flowers have slightly incurved, oblong sepals and smaller petals. The broad to tubular, roundish, entire or obscurely trilobed lip has purple veins radiating out from the yellow or ivory colored base, and either a crisp or slightly notched margin. The flowers have a long, stout, footless column.²

DISTRIBUTION: Six sympodial epiphytes or lithophytes are confined in humid, low elevation,



forest scrub of Jamaica, Cuba, the Bahamas and Puerto Rico.² The *Broughtonia* species occur naturally in the northern Caribbean and the Bahamas. The genus *Broughtonia* is currently regarded as a genus of six species. Two of these *Broughtonia sanguinea* and *Broughtonia negrilensis* are endemic to Jamaica. *Broughtonia cubensis* and *Broughtonia ortgiesiana* are endemic to Cuba while *Broughtonia lindenii* is found in Cuba and the Bahamas. *Broughtonia domingensis* comes from Hispaniola

(the island comprised of Haiti & The Dominican Republic) and Mona Island . Persons who are not entirely familiar with these plants tend to confuse *Broughtonia negrilensis*, *Broughtonia lindenii* and *Broughtonia domingensis*. Similarly some individuals tend to confuse *Broughtonia sanguinea* and *Cattleyopsis ortgiesiana* even though there are entirely different species.

All of these species are found in fairly dry to very dry environments with plenty of light and good air movement (breezes). They are all epiphytic (growing on trees) and sometimes lithophytic (growing on rocks). Mostly they are found on small trees in the dry limestone forests, typical of the coastal areas of the Caribbean islands. In some instances they are also found growing naturally on large trees in wet areas. In these areas the plants are to be found on the high branches where they receive high light intensities and are able to dry out rapidly after they receive rainfall. They all mainly occur at sea level though some plants of these species are also found at elevations close to 2,000 feet.⁷

CULTIVATION: In general these species do not usually do well - for most growers - when potted as they tend to keep the growing medium too wet. When allowed to dry out between waterings they will however thrive in pots. They are best mounted on rafts of tree fern root, cork or on hard-wood branches, like black mangrove (and always without the bark). When mounting the *Broughtonias sanguinea*, *negrilensis* and *domingensis* it is always recommended that all the roots be completely removed. Trim them as close to the rhizome as possible. Then fix the plant firmly to the medium using wire, panty-hose, etc., ensuring that it is firmly in place. The plant will produce new roots within a few weeks and secure itself firmly to the new mount. This treatment is recommended for plants that have been mounted for two or more years and on which the backbulbs have started to die back. For the other species namely *Bro. cubensis*, *Bro. ortgiesiana* and *Bro. lindenii* heavy pruning of roots is not necessary. It is important however that any dead roots be removed prior to mounting or potting.

For potting these species we recommend a mixture of shredded tree fern root and charcoal or some similarly well drained and aerated medium. Water well then allow the roots to dry out completely before watering again. These plants grow naturally in very arid conditions and rot quickly when over-watered. Plants grown on cork require more frequent watering than those mounted on tree fern root. In the summer months in tropical areas these plants will need to be watered almost daily if mounted for optimal growth. Fertilize at least once weekly using an N.P.K. 20:20:20 or 20:10:20 mixture or similar at a rate of 1/2 teaspoonfull per gallon of water. Do not allow the fertilizer mixture to wet the flowers as this will damage the blooms.⁷

References

¹ www.orchidspecies.com

²**Aldridge, Peggy. 2008.** *An Illustrated Dictionary of Orchid Genera.* Selby Botanical Garden Press.

³**Chase MW. 2006.** Tribe Epidendreae. In: Pridgeon AM, Cribb PJ, Chase MW, Rasmussen F, eds. *Genera Orchidacearum, Vol. 4.* Oxford: Oxford University Press.

⁴**la Croix, Isobyl. 2008.** *The New Encyclopedia of Orchids.* Timber Press

⁵**Meisel, Kaufmann, Pupulin 2014.** *Orchids of Tropical America.* Cornell University Press

⁶**Withner, Carl L. 1998.** *The Cattleyas and Their Relatives: Volume V.* Timber Press

⁷www.hamlinorchids.com