

Prosthechea Kn. & Westc. 1838

SUBFAMILY Epidendroideae, TRIBE Epidendreae, SUBTRIBE Laeliinae.

TYPE SPECIES: *Prosthechea glauca* (Sw.) Knowles & Westc. 1838

SYNONYMS: *Anacheilium* Hoffmannsegg, *Euchile* (Dressler & G. E. Pollard) Withner

ETYMOLOGY: From Greek prostheke, appendage, referring to the tissue on the back of the column of the type species, *P. glauca* Knowles & Westcott⁴

DESCRIPTION: There are at least 13 species in this epiphytic to lithophytic genus occurring in all of tropical America and is characterized by the oblong pseudobulbs a terminal inflorescence with flowers under 2.4" [6 cm] in diameter with a lip that is free from the column for most of its length, a footless column and usually auriculate and carrying four hard pollina attached to the caudicles.¹

Elongated pseudobulbs and fleshy flowers with partial fusion of the lip and column distinguish *Prosthechea*. Flower: Typically plastic or waxy in texture, the large flowers are yellow or greenish yellow, but reddish orange in a few species. Sepals and petals are similar, and most species have flowers oriented lip-uppermost (non-resupinate), the lip hooding the column and fused to it for half the lip's length. The tip of the column bears small ears, and a knob-like bump from which the genus takes its name, Greek for "appendage" (and the root of "prosthesis"). Many species have pleasantly fragrant flowers. Plant: Mostly clustered pseudobulbs range in shape from eggs to slender egg-plants. Strap-like leaves, leathery but thin, emerge from each pseudobulb, separated by a thin seam. A distinctive leafy bract clasps the base of the inflorescence.⁵

Epiphytes or lithophytes with spindle-shaped, often flattened, pseudo-bulbs. Leaves 1—5, often glaucous. Inflorescences unbranched, usually with a basal sheath. Flowers usually nonresupinate; lip joined to lower half of column; callus usually a thick pad. Column without wings or a foot, the apex with 3 teeth; pollinia 4. Capsule with 3 Wings or 3 sharp angles. (Encyclia capsules do not have wings or angles.) Although the name *Prosthechea* was proposed in 1838, until recently the species have been classified in *Encyclia* and are still better known by that name. DNA analysis indicates that they should be treated as a separate genus.⁴

DISTRIBUTION: More than 100 species of *Prosthechea* reside as epiphytes and rock dwellers in seasonal forest and scrub. They occur across a wide altitudinal range, from southern Texas and the Caribbean to Venezuela, Bolivia, and Brazil.⁵

ECOLOGY and HISTORY: The partial fusion of the lip and column forces the pollinators, medium-sized wasps, to squeeze beneath the column to reach the scented base of the lip. In

doing so they fertilize the flower. One species, *P. virellina*, is pollinated by hummingbirds that respond to its bright orange color (wasps cannot see orange or red): the bill is forced beneath the column, and pollinia are attached to the bird's forehead or bill. *Prosthechea cochleata* is the national flower of Belize, where its dark purple lip markings earned it the local name Black Orchid; however, no truly black orchids exist in nature. Several species in this genus have proven medically useful. In Mexico, *P. michuacana* and *P. varicosa* are called camote de agua, or water bulb: chewing the pseudobulbs was a common traveler's trick to slake their thirst. Extracts from the former species recently were proven to promote wound healing and reduce inflammation, a practical example of the value of biodiversity.⁵

CULTIVATION: Most species are easily grown and do Well in intermediate temperatures with good light. They are usually grown potted in a standard epiphyte compost and need plenty of Water While growing but should dry out between waterings.⁴

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, 443-449.

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