

Prosthechea prismatocarpa (Rchb.f.) W.E.Higgins, Phytologia 82: 380 (1997 publ. 1998).

Name Derivation: Latin *prismaticus*, “prism shaped” and *carpus* “fruit”²



Synonyms

Encyclia prismatocarpa (Reichenbach f.) Dressler, *Panarica prismatocarpa* (Reichenbach f.) Withner & P. A. Harding

Description

Pseudobulbs to 20 cm long, pear-shaped, 2- or 3-leaved. Leaves to 30 x 5 cm. Inflorescence 15-45 cm tall, many flowered. Flowers to 5 cm across, scented; sepals and petals greenish cream to greenish yellow blotched with deep purple; lip mid-lobe lilac-purple; margins white.¹ with elongate, conic pseudobulbs partially enveloped basally by a few scarious sheaths and carrying 2 to 3 apical, oblong-elliptic, basally conduplicate and clasping leaves carrying bright, long lasting, fragrant flowers in the spring, summer and fall on an apical, erect, to 15" [37.5 cm] long, densely to loosely, few to many [6 to 35] flowered raceme subtended by a papery basal sheath and arising on a newly matured pseudobulb carrying long-lasting waxy, fragrant flowers.³

Habitat

Epiphytic in rain forest and cloud forest, 100-2450 m (330—8100 ft.) Central and South America.¹ Costa Rica and Panama. In Panama, plants are found in Chiriquí Province at 3950-4450 ft. (1200-1360 m). -- Source: Charles Baker⁴ Found in Costa Rica and Panama in lower montane cloud forests on larger tree branches at elevations of 1200 to 3300 meters as a large-sized, cool to cold growing epiphyte.³

F-1 Hybrids and Progeny

24 First Generation (F1) Offspring Found; 4 Awarded (16.7%)										
	S/P	Genus	Name	=	Genus	Name	Originator	Year	Offs.	Awds.
x	Seed:	Psh	cochleata	=	Psh	Elfin	L. DeGarmo	1967	0	4
x	Pollen:	Psh	tripunctata	=	Psh	Bob Freeman	H & R	2004	2	2
x	Seed:	C	guttata	=	Ctyh	Cindy Lou	J.Tarr	1978	0	1
x	Pollen:	Psh	radiata	=	Psh	Edith Arakawa	Yoshida Orch.	1990	0	1
x	Pollen:	C	tenebrosa	=	Ctyh	Bradfordiensis	Charlesworth Lt	1906	0	0
x	Pollen:	C	cinnabarina	=	Ctyh	Cinna-Carpum	Charlesworth Lt	1906	0	0
x	Seed:	Psh	fragrans	=	Psh	Fragracarpum	Colman	1915	0	0
x	Seed:	E	cordigera	=	Prc	Abigail Anderson	O.Kirsch	1949	0	0
x	Seed:	C	loddigesii	=	Ctyh	Loddicarpum	Higgins	1963	0	0
x	Pollen:	Cau	bicornutum	=	Prh	Spots	Masao Yamada	1965	0	0
x	Seed:	E	adenocaula	=	Prc	Gertrude	G.H.Slade	1966	0	0
x	Seed:	C	Edward Ayau Senior	=	Ctyh	Opaka Li'i	W.K.Nakamoto	1968	0	0
x	Pollen:	L	lyonsii	=	Psl	Spots	W.W.G.Moir	1969	0	0
x	Pollen:	C	Amelia	=	Ctyh	Ziet Guist	B.Cole	1987	0	0
x	Pollen:	E	Sietetrescuartos	=	Prc	Prismartos	H.Rohrl	1999	0	0
x	Pollen:	C	forbesii	=	Ctyh	Domenico Pozzi	Fl.Edmondo Pozz	2003	0	0
x	Seed:	C	harrisoniana	=	Ctyh	Little One Inch	Yamada	2004	0	0
x	Seed:	B	nodosa	=	Psv	Nodoprismo	A.Black	2005	0	0
x	Seed:	B	Yaki	=	Psv	Best Pug Ever	A.Black	2007	0	0
x	Seed:	E	Atropine	=	Prc	Nathan C. Drummond	F.A.Williams II	2008	0	0
x	Seed:	C	Angelwalker	=	Ctyh	Priang	C.A.Hammond	2009	0	0
x	Seed:	L	anceps	=	Psl	Lieber Freund Gerd Fran	Unknown	2011	0	0
x	Seed:	E	Tamcorata	=	E	Fourplay	Dong-Tien Chan	2015	0	0
x	Seed:	Psh	trulla	=	Psh	Lydia Peschel	Roellke Orch.	2016	0	0

Prosthechea prismatocarpus has not had great success in hybridization. Although it has 24 F-1 grexes, only one has produced a second generation and only 4 have been awarded. Its intergeneric hybrids include crosses with *Cattleya* (Ctyh), *Encyplea* (Prc), *Caularthon* (Prh), *Laelia* (Psl), *Brassivola* (Psb).⁴



Prosthechea Elfin HCC/AOS

Prosthechea prismatocarpa x *Prosthechea cochleata*



Cattleychea Cindy Lou

Cattleya guttata x *Prosthechea prismatocarpa*

Awards

Prosthechea prismatocarpa: The species has 32 awards, with 17 from the AOS including 4 AM, 7 CCM, 2 FCC, 3 HCC and 1 JC.

Culture

LIGHT: 2000-3000 fc. The moderately bright light should be dappled or diffused. Plants should never be exposed to direct sun. Strong air movement should be provided at all times.

TEMPERATURES: Summer days average 74F (24C), and nights average 57F (14C), with a diurnal range of 17F (9C). Spring is the warmest season when days average 76-80F (24-27C), and nights average 55-58F (13-15C), with a diurnal range of 19-25F (10-14C).

HUMIDITY: 85-90% most of the year, dropping to near 70% in the late winter dry season.

WATER: Rainfall is moderate to heavy most of the year with a 2-month dry season in late winter. Cultivated plants should be watered often while they are actively growing, but they need to dry some between waterings. Water should be gradually reduced after new growths mature in late autumn.

FERTILIZER: 1/4-1/2 recommended strength, applied weekly. A high-nitrogen fertilizer is beneficial from spring to midsummer, but a high-phosphate fertilizer should be used in late summer and autumn.

REST PERIOD: Winter days average 74-79F (23-26C), and nights average 53-55F (12-13C), with a diurnal range of 19-25F (10-14C). Rainfall is low for about 2 months in winter, but high humidity and large diurnal temperature range indicates that additional moisture is available from the heavy dew. Cultivated plants need less in winter, and they should be allowed to dry somewhat between waterings. Plants should never stay dry for long periods, however. Fertilizer should be reduced or eliminated until water is increased in spring.

GROWING MEDIA: Plants may be mounted on tree-fern or cork slabs if humidity is high and plants are watered at least once daily in summer. Mounted plants may need several waterings a day during very hot, dry weather. Because most growers find it difficult to keep mounted plants moist enough, however, so the plants are usually grown in pots using an open, fast draining medium which contains materials such as perlite that retains some moisture and charcoal which holds the medium open and keeps it from souring. Plants should be repotted in late winter or early spring just as new root growth is starting.

MISCELLANEOUS NOTES: The bloom season in the habitat is summer and autumn.⁵

References

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

¹**la Croix, Isobyl. 2008.** *The New Encyclopedia of Orchids.* Timber Press

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

²**Withner, Carl L., Harding, Patricia A. 2004.** *The Cattleyas and Their Relatives: The Debatable Epidendrums.* Timber Press

³www.orchidspecies.com

⁵www.orchidculture.com

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⁴OrchidWiz.Database X4.1