

Prosthechea neglecta Pupulin, sp. nov. TYPE: Costa Rica. San José: Dota, San Pedro, ca. 1900 m, flowered in cultivation at Gaia Botanical Garden in Quepos, May 1999, *M. Flores s.n.* (Holotype, USJ). FIGURE 4.

Species *Prosthechea prismatocarpae* (Rchb.f.) W.E. Higgins similis, sed planta plerumque lithophytica pseudobulbis pyriformibus multo longioribus, inflorescentia laxa, ovario ampullaceo, floribus omnino minoribus inodoribusque, sepalibus dorsaliter verruculosus recedit.

Plant lithophytic, with elongate rhizome covered by papyraceous, brown bracts, the internodes to 5 cm long. **Roots** flexuous, glabrous. **Pseudobulbs** narrowly ovate to linear-conic, elongate, to 26.5 cm long, 3.2 cm wide, 2-foliolate at apex. **Leaves** separated by an internode to 2.5 cm long, oblong-elliptic to narrowly elliptic, fleshy, obtuse to retuse, narrowed to a conduplicate, sessile base, 26.0–32.0 cm long, 3.2–3.8 cm wide. **Inflorescence** terminal, a loose raceme to 33 cm long including the peduncle, many-flowered, emerging from a papery spathe to 10 cm long. **Ovaries** subglobose, about 2 cm long including the pedicel. **Flowers** rather large, with sepals and petals free, spreading, yellowish cream; the sepals and petals spotted with purple, the lip rose-purple. **Dorsal sepal** elliptic-lanceolate, acute, somewhat reflexed at the base, adaxially verruculose, to 19.0 mm long, 4.5 mm wide. **Lateral sepals** obliquely linear-lanceolate, acute, subcarinate, slightly concave, adaxially verruculose, 19 mm long, 4 mm wide. **Petals** subfalcate, narrowly lanceolate, acute, 18.0 mm long, 3.5 mm wide. **Lip** 3-lobed, shortly clawed, basally adnate to the column, 15 mm long, 6 mm wide; the lateral lobes rounded, slightly reflexed; the midlobe sagittate, concave, acuminate; disc

with a callus formed by 2 fleshy keels uniting centrally and diverging at apex. *Column* stout, semiterete, 8.5 mm long, provided at the apex with a pair of fleshy, lateral teeth, and a central, 3-dentate projection. *Anther* incumbent, operculate, subspherical, 4-celled. *Pollinia* 4, waxy, obovate-complanate, on a short, linear, shortly bifid caudicle.

Distribution. Known only from the type locality in Costa Rica.

Etymology. From the Latin *neglectus*, “neglected,” alluding to the long time this species has been in cultivation without specific recognition.

Ecology. Lithophytic, usually forming very large clumps in submontane forests at ca. 2000 m elevation.

A close relative of *Prosthechea prismatocarpa* (Rchb.f.) W.E. Higgins, *P. neglecta* may be distinguished from this species by the usually lithophytic habit, the distinctly longer pyriform pseudobulbs (>25 cm vs. <18 cm), the lax inflorescence, the apically swollen ovary, and the smaller (<20 mm vs. >20 mm), scentless flowers, with the sepals dorsally provided with short papillae. Typical forms of *P. prismatocarpa* usually grow in premontane and lower montane forests above 1000 m elevations. Atwood and Mora-Retana (1992) interpreted *P. prismatocarpa* as including some populations with papillose sepals, but their observation of ants exclusively visiting flowers provided with papillae does not support such a wide circumscription. The voucher of the illustration published in Atwood and Mora-Retana (1992) is a plant from Monteverde which lacks papillae on the abaxial surface of sepals. The concept of *P. prismatocarpa* likely includes in Costa Rica several different related species in need of a systematic study based on more distributional, ecological, and morphological data.

Another relative of *Prosthechea neglecta* is *P. ionocentra* (Rchb.f.) W.E. Higgins, of which *Epidendrum auriculigerum* Rchb.f. is likely a synonym, but this species has larger flowers (tepals >4 cm long vs. <2 cm long in *P. neglecta*), the sepals and petals without purple spots, and the midlobe of the lip is triangular-cordate, caudate at apex.

The following key is included to the species close to *Prosthechea neglecta* in Costa Rica, or the *P. prismatocarpa* group.

- 1. Lip 3-lobed, provided with 2 small lobules at the base 2
- 2. Midlobe of lip triangular-cordate, caudate, >4 cm long; sepals and petals unspotted *P. ionocentra*
- 2. Midlobe of lip sagittate, attenuate, <3.5 cm long; sepals and petals spotted brown 3
- 3. Sepals adaxially papillose; ovary swollen; inflorescence lax *P. neglecta*
- 3. Sepals adaxially glabre; ovary clavate; inflorescence dense *P. prismatocarpa*

KEY TO THE COSTA RICAN SPECIES OF THE *PROSTHECHEA PRISMATOCARPA* GROUP

- 1. Lip entire, without basal lobules *P. brassavolae*