Commentary on *Pseudencyclia* Chiron & Castro Neto (Orchidaceae)

ROBERT L. DRESSLER

Jardín Botánico Lankester, Universidad de Costa Rica, P.O. Box 1031–7050 Cartago, Costa Rica, A.C.; Missouri Botanical Garden; Florida Museum of Natural History; and Marie Selby Botanical Gardens.

Email: sobralia@flmnh.ufl.edu

ABSTRACT. *Pseudencyclia* is a hodgepodge of diverse species artificially separated from their closest relatives, and thus quite polyphyletic.

Key words: resupination, Epithecia, Prosthechea, Pseudencyclia

In Brazil the cockleshell group and the pygmaea group of Prosthechea are quite distinct, and one can understand why Pabst et al. (1981) and Chiron and Castro Neto (2003) might prefer to treat the two as distinct groups. Nevertheless, both groups are surely derived from Mexico and Central America, where there are many intermediate species. Chiron and Castro Neto give too much importance to "resupinate/nonresupinate" and have not observed this feature very carefully. It should be enough to consider a group of four very closely allied species: Prosthechea campylostalix, P. fortunae, P. glauca, and P. ortizii. All of these are glaucous and have very similar flower structure. Prosthechea fortunae may be considered "passively" resupinate, since the plants are pendent, and the flowers open in the resupinate position without torsion. A similar pattern is clearly shown in the drawing of Epithecia glauca by Knowles and Westcott (1839), in which the inflorescence arches over, and the flowers are in the resupinate position. In P. campylostalix and P. ortizii, the inflorescences are erect, and the flowers are clearly resupinate through torsion, at least in allogamous forms. The resemblances within this small group are much too close to place the species in different genera (FIGURE 1).

It is illogical to assign *Prosthechea campylostalix* to the "brassavolae complex." The flower structure of *P. campylostalix* is quite like that of *P. glauca*. In the "brassavolae complex," on the contrary, the median tooth of the column is vestigial and much shorter than the

acute lateral teeth, while the prominent "ligule" is flabellate, lacerate, and subequal to the lateral teeth (Pupulin 2002). *Pseudencyclia*, as seen by Chiron and Castro Neto, is a hodgepodge of diverse species artificially separated from their closest relatives, and thus quite polyphyletic. It is interesting to see that in the molecular analysis of Higgins et al. (2003), *Prosthechea glauca*, the type species, is embedded among species of "*Pseudencyclia*." Additional commentary on subdividing *Prosthechea* can be found in The Cutting Edge (Grayum et al. 2004).

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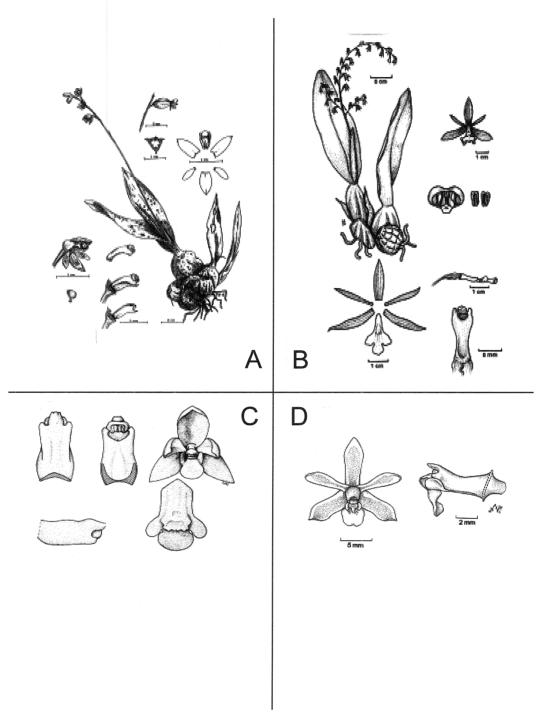


FIGURE 1. Comparison of four closely allied *Prosthechea* species. **A.** *Prosthechea glauca*, Selbyana 10(Suppl.): 173. 1988. **B.** *Prosthechea campylostalix*, Icones Plantarum Tropicarum, plate 1422. 1992. **C.** *Prosthechea fortunae*, Orquidea (Mexico City) 7(4): 356. 1980. **D.** *Prosthechea ortizii*, Novon 5(2): 141. 1995.