

## ***EPIDENDRUM TRIPUNCTATUM* (ORCHIDACEAE, LAELIINAE): THE TALE OF TWO SPECIES**

WESLEY E. HIGGINS

Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, FL 34236-7726 USA. :  
whiggins@selby.org.

ABSTRACT. Homonyms can often create confusion and this is the case with *Epidendrum tripunctatum*. A new combination, *Prosthechea micropus*, is required to correct the misapplied nomenclature. The author recognizes the Brazilian species as *Prosthechea punctifera* and the Central American species is recognized as *Prosthechea micropus*.

RESUMEN. El nombre *Epidendrum tripunctatum* fue usado por John Lindley para dos especies claramente diferentes; una de México, la otra de Brasil. Los homónimos pueden crear a menudo mucha confusión; en el caso referido es necesaria una nueva combinación, *Prosthechea micropus*, para corregir la nomenclatura errónea.

PALABRAS CLAVE / KEY WORDS: Orchidaceae, Laeliinae, homonym, new combination, *Epidendrum tripunctatum*, *Prosthechea tripunctata*, *Pollardia tripunctata*, *Encyclia tripunctata*, *Pseudencyclia tripunctata*, *Epidendrum punctiferum*, *Anacheilium punctiferum*, *Prosthechea punctifera*, *Epidendrum calamarium*, *Anacheilium calamarium*, *Prosthechea micropus*.

**Introduction.** When Lindley used the same name for two different species, one Mexican and one Brazilian in *Folia Orchidaceae* (1853), it started a chain of confusion that continues to this day (Table 1). However Lindley is not alone and homonyms abound in taxonomic literature. After examining microfiches of the types at K-Lindl., it is clear that these two uses of *Epidendrum tripunctatum* Lindl. represent two different entities, although both would be included in *Encyclia* s.l. (Dressler 1961). The following combinations may be validly published, yet incorrect, as they are based on later and wrong homonyms:

*Prosthechea tripunctata* (Lindl.) W. E. Higgins,  
*Phytologia* 82: 381, 1997.

*Pollardia tripunctata* (Lindl.) Withner & Harding,  
*Cattleyas & Relatives: Debatable Epidendrums*,  
244, 2004.

### **The Mexican Plant**

John Lindley (1841) described a very distinctive species that he received from Richard Harrison, Esq. of Aighburgh, which was most likely of Mexican or Central American origin. Lindley described the plant as having long grassy leaves and a very short two-flowered scape. The sepals are twice as broad and

much larger than the petals; both of them are widely spreading and a dull yellow green. The column is deep purple, with three lobes, each of which is tipped with one pale orange-colored spot. The lip is rather more than half an inch long, obovate, rugose, without being warted, and distinctly emarginate near the apex of the column; its color is pale citron. This plant (Fig. 1) was clearly the species we know today from Mexico. Dressler (1961) transferred the Mexican species to *Encyclia tripunctata* (Lindl.) Dressler. Higgins (1997) attempted to transfer the Mexican plant to *Prosthechea* but incorrectly cited the Brazilian homonym. Withner and Harding (2004) illustrated the Mexican species but cited the Brazilian basionym when they proposed the genus *Pollardia*. This leaves the Mexican species without a valid *Prosthechea* combination (or in *Pollardia* for that matter).

### NEW NOMENCLATURE

***Prosthechea micropus*** (Rchb.f.) W.E. Higgins *comb. nova*

Basionym: *Epidendrum micropus* Rchb. f.  
*Hamburger Garten- und Blumenzeitung* 20: 13.  
1863. Type: Borsig s.n., cult. (W).

Synonyms: *Encyclia tripunctata* (Lindl.) Dressler,

Table 1. Comparison of nomenclature for the two species.

	Mexican Plant	Brazilian Plant
<b>Current Name</b>	<i>Prosthechea micropus</i> (Rchb.f.) W.E.Higgins, Lankesteriana 4(3): 223. 2004.	<i>Prosthechea punctifera</i> (Rchb.f.) W.E.Higgins, Phytologia 82: 381. 1997 (1998).
<b>Basionym</b>	<i>Epidendrum micropus</i> Rchb.f. Hamburger Garten-Blumenzeitung 20: 13. 1863.	<i>Epidendrum punctiferum</i> Rchb.f., Gard. Chron. n.s. 16: 38. 1881.
<b>Original Description</b>	<i>Epidendrum tripunctatum</i> Lindl., Edwards's Bot. Reg. 27: 66. 1841.	<i>Epidendrum tripunctatum</i> Lindl., Fol. Orchid. Epidendrum 41. 1853.
<b>Other Synonyms</b>	<p><i>Epidendrum diguetii</i> Ames, Sched. Orch. 1: 15. 1922.</p> <p><i>Encyclia diguetii</i> (Ames) Hoehne, Arq. Bot. Estado São Paulo, nova ser., f. maior, 2: 151. 1952.</p> <p><i>Encyclia tripunctata</i> (Lindl.) Dressler, Brittonia 13: 265. 1961.</p> <p><i>Pseudencyclia tripunctata</i> (Lindl.) V.P. Castro &amp; Chiron, Richardiana 4(1): 33. 2003.</p>	<p><i>Encyclia punctifera</i> (Rchb.f.) Pabst, Orquidea (Rio de Janeiro) 29(6): 277. 1967 (1972).</p> <p><i>Anacheilium punctiferum</i> (Rchb.f.) F.Barros, Hoehnea 10: 85. 1983 (1984).</p> <p><i>Prosthechea punctifera</i> (Rchb.f.) W.E.Higgins, Phytologia 82: 380. 1997 (1998).</p> <p><i>Prosthechea tripunctata</i> (Lindl.) W.E.Higgins, Phytologia 82: 381. 1997 [nom. err.]</p> <p><i>Pollardia tripunctata</i> (Lindl.) Withner &amp; Harding, Cattleyas &amp; Relatives: Debatable Epidendrum 244. 2004 [nom. confus.]</p>

Brittonia 13: 265. 1961.

*Encyclia diguetii* (Ames) Hoehne, Arq. Bot. Estado São Paulo 2: 151. 1952.

*Epidendrum diguetii* Ames Sched. Orchid. No. 1: 15. 1922.

*Epidendrum tripunctatum* Lindl., Edwards's Bot Reg. 27: 66, 1841 [non Lindl. 1853].

*Pseudencyclia tripunctata* (Lindl.) V.P. Castro & Chiron, Richardiana 4(1): 33, 2003.

Note: The epithet “*micropus*” is a noun in apposition that remains “*micropus*” even under a feminine generic name. Another example of an indeclinable noun is “*saxicola*” therefore *Orthophytum saxicola* (Bromeliaceae).

### The Brazilian Plant

Lindley (1853) described a Brazilian species using the same name *Epidendrum tripunctatum*. This plant collected in the wilds of Brazil and sent to Loddiges, was described as being much like *Epidendrum calamarium* Lindl. in form (fig. 2). Flowers yellowish, with three deep purple spots in the front of the calli, and two or three smaller on each side above the furrows of the lip. Reichenbach *f.* recognized the homonymy and published a new name for the second “*E. tripunctatum*” as *Epidendrum punctiferum* Rchb.f. in 1881. Pabst (1967) transferred the Brazilian species to *Encyclia* followed by Barros (1983) who transferred it to *Anacheilium*. When

Higgins (1997) resurrected *Prosthechea*, he included the Brazilian species. The Withner and Harding combination and the Higgins combination based on *Epidendrum tripunctatum* Lindl., Fol. Orchid. *Epidendrum* 41, 1853 are superfluous. Withner and Harding include *Epidendrum punctiferum* Rchb.f. as a synonym of *Anacheilium calamarium* (Lindl.) Pabst, Moutinho & A.V.Pinto when *E. punctiferum* is a replacement name for *E. tripunctatum* (1853). Higgins treats *Epidendrum punctiferum* Rchb.f. as *Prosthechea punctifera* (Rchb.f.) W.E.Higgins.

### TAXONOMIC TREATMENT

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

Basionym: *Epidendrum punctiferum* Rchb.f., Gard. Chron. n.s. 16: 38, 1881.

Synonyms: *Anacheilium punctiferum* (Rchb.f.) F.de Barros, Hoehnea 10: 85, 1983 (1984).

*Encyclia punctifera* (Rchb.f.) Pabst, Orquidea (Rio de Janeiro) 29(6): 277. 1967 (1972).

*Epidendrum tripunctatum* Lindl. [nom. illeg.] Fol. Orchid. *Epidendrum* 41, 1853, non Lindl. 1841.

*Pollardia tripunctata* (Lindl.) Withner & Harding, Cattleyas and their Relatives, 244, 2004 [nom. confus.]

*Prosthechea tripunctata* (Lindl.) W. E. Higgins, Phytologia 82: 381, 1997 (1998). [nom. err.]

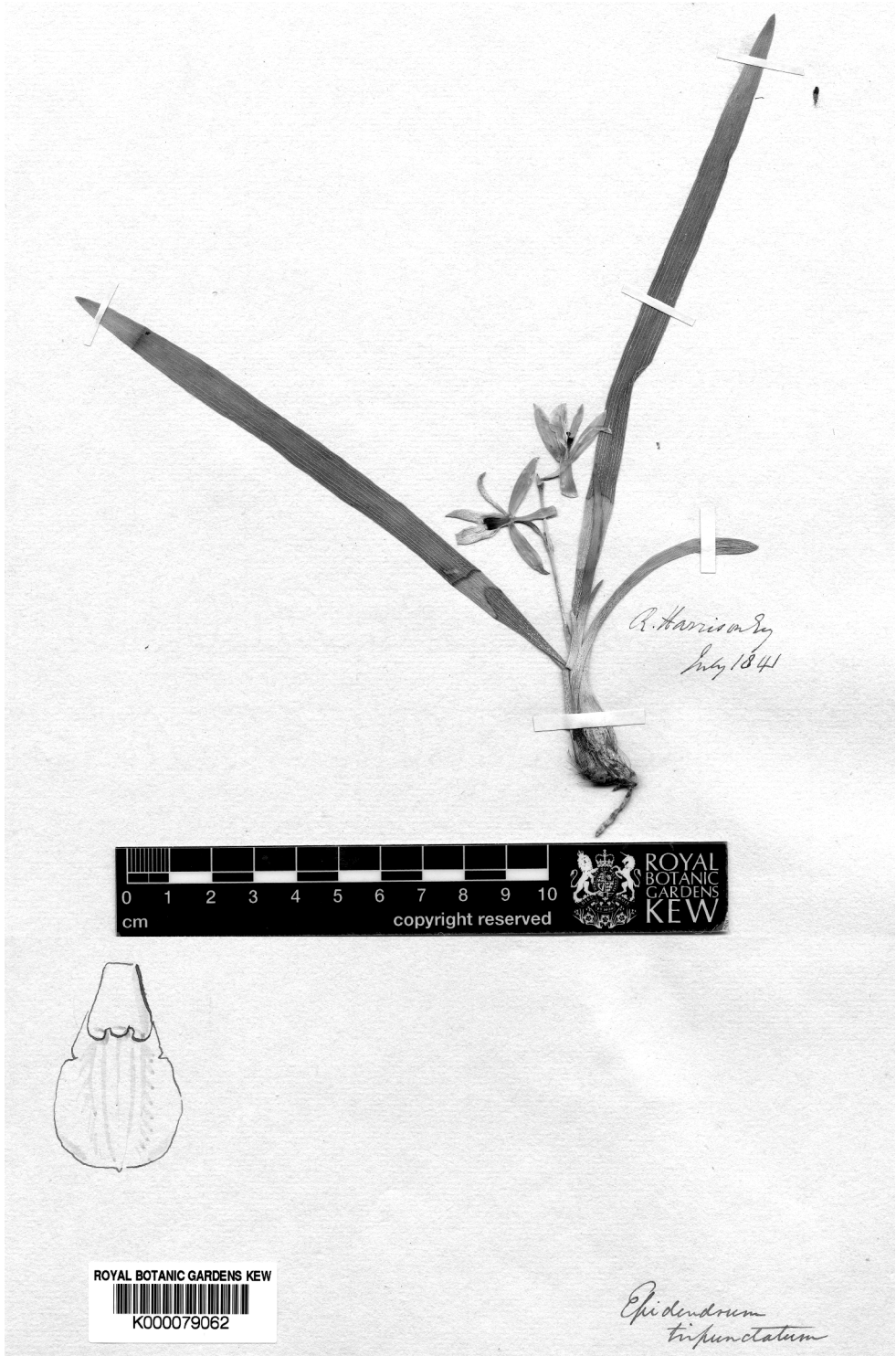


Fig. 1. *Epidendrum tripunctatum* Lindl. 1841 [Type: K-Lindl.] Reproduced with the kind permission of the Director and Trustees of the Royal Botanic Gardens, Kew.

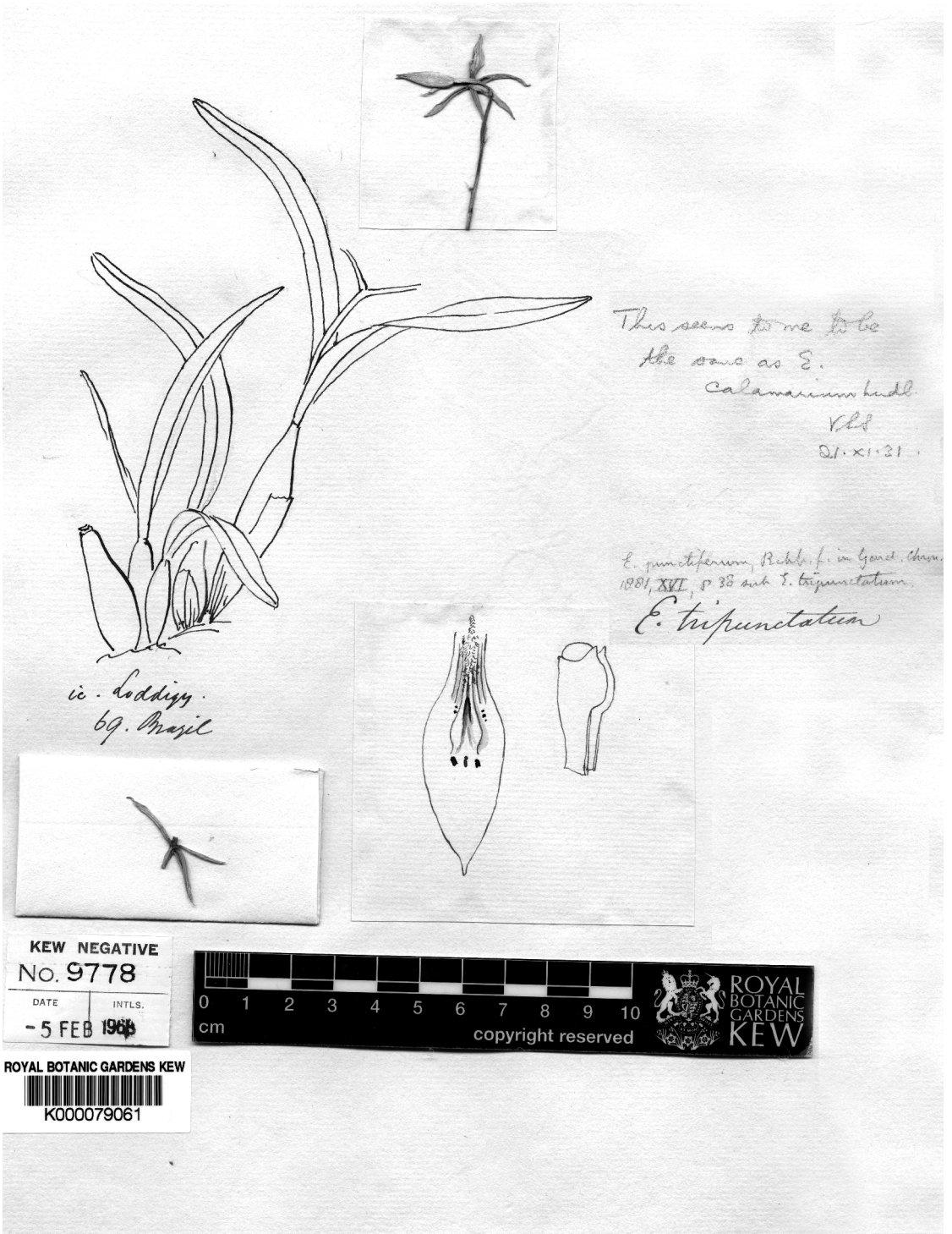


Fig. 2. *Epidendrum tripunctatum* Lindl. 1853 [Type: K-Lindl.] Reproduced with the kind permission of the Director and Trustees of the Royal Botanic Gardens, Kew.

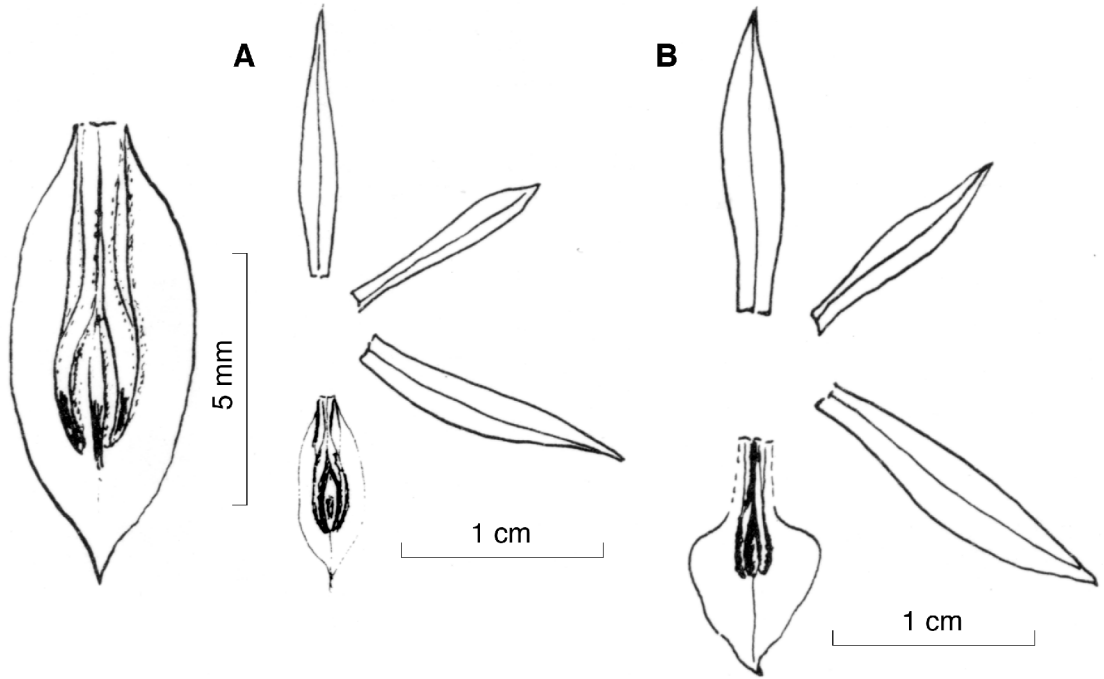


Fig. 3. Drawings of: A. *Prosthechea punctifera* (No. 683) and B. *Prosthechea calamaria* (No. 679) from Pabst & Dungs, I:300, 1977.

CHRONOLOGICAL

NOMENCLATURALLY IMPORTANT CITATIONS

*Epidendrum tripunctatum* Lindl. Edwards' Bot. Reg. 27: 66, 1841.

*Epidendrum tripunctatum* Lindl. Fol. Orchid. *Epidendrum* 41, 1853. [nom. illeg.]

*Epidendrum punctiferum* Rchb.f., Gard. Chron. n.s. 16: 38, 1881.  
Basionym: *Epidendrum tripunctatum* Lindl., Fol. Orchid. *Epidendrum* 41, 1853, non Lindl. 1841.

*Encyclia tripunctata* (Lindl.) Dressler, Brittonia 13: 265, 1961.  
Basionym: *Epidendrum tripunctatum* Lindl., Edwards's Bot Reg. 27: 66, 1841 [non Lindl. 1853].

*Encyclia punctifera* (Rchb.f.) Pabst. Orquidea (Rio de Janeiro) 29(6): 277. 1967 (1972).  
Basionym: *Epidendrum punctiferum* Rchb.f., Gard. Chron. n.s. 16: 38, 1881.

*Anacheilium punctiferum* (Rchb.f.) F. Barros, Hoehnea 10: 85, 1983 (1984)  
Basionym: *Epidendrum punctiferum* Rchb.f., Gard. Chron. n.s. 16: 38, 1881.

*Prosthechea punctifera* (Rchb.f.) W.E.Higgins, Phytologia 82: 380, 1997 (1998).  
Basionym: *Epidendrum punctiferum* Rchb.f., Gard. Chron. 2: 38, 1881.

*Prosthechea tripunctata* (Lindl.) W. E. Higgins, Phytologia 82: 381, 1997 (1998).  
Basionym: *Epidendrum tripunctatum* Lindl., "Fol. Orchid. *Epidendrum* 41, 1841 [sic 1853]".

*Pseudencyclia tripunctata* (Lindl.) V.P.Castro & Chiron. Richardiana 4(1): 33. 2003  
Basionym: *Epidendrum tripunctatum* Lindl. Edward's Bot. Reg. 27: misc. 66. 1841.

*Pollardia tripunctata* (Lindl.) Withner & Harding, Cattleyas & Relatives: Debatable Epidendrums, 244, 2004.  
Basionym: *Epidendrum tripunctatum* Lindl., Fol. Orchid. *Epidendrum* 41, 1853.

Related taxonomic treatment

Withner and Harding (2004) cite *Epidendrum punctiferum* Rchb.f. under the synonymy of *Anacheilium calamarium* (Lindl.) Pabst. When I examine the Lindley drawing on the type specimen sheet I find a number of differences in lip and callus shape. Thus it is my opinion that *Prosthechea calamaria* and *P. punctifera* are two distinct species (Fig. 3).

*Prosthechea calamaria* (Lindl.) W.E.Higgins, Phytologia 82: 377. 1997 (1998).

Basionym: *Epidendrum calamarium* Lindl. Bot. Reg. 24 misc. 88, n. 163. 1838.

Synonyms: *Anacheilium calamarium* (Lindl.) Pabst, Moutinho & A.V.Pinto, Bradea 3(23): 183. 1981

*Encyclia calamaria* (Lindl.) Pabst, Orquidea (Rio de Janeiro) 29(6): 276. 1967 (1972)

*Hormidium calamarium* (Lindl.) Brieger, Publicação Científica Universidade de São Paulo, Instituto de Genética 2:69. 1961.

ACKNOWLEDGEMENTS. I thank Kanchi Gandhi and Gustavo A. Romero for bringing these errors to my attention, David Roberts and Board of Trustees of RBG Kew for the photos of the Lindley specimens, Walter Till for Latin assistance, and Robert Dressler and two anonymous reviewers for comments on the manuscript.

#### LITERATURE CITED

- Barros, F. 1983 (1984). Flora fanerogâmica da reserva do parque estadual das Fontes do Ipiranga (São Paulo, Brasil). *Hoehnea* 10: 74-124.
- Dressler, R. L. 1961. A reconsideration of *Encyclia* (Orchidaceae). *Brittonia*, 13: 253-266.
- Higgins, W. E. 1997 (1998). A reconsideration of the genus *Prosthechea* (Orchidaceae). *Phytologia* 82: 370-383.
- Lindley, J. 1841. *Epidendrum tripunctatum*. *Edwards's Bot Reg.* 27: 66.
- Lindley, J. 1853. *Folia Orchidaceae: Epidendrum*. London: Bradbury and Evans, Printers, Whitefriars.
- Pabst, G.F.J. 1967 (1972). *Encyclia punctifera*. *Orquidea* (Rio de Janeiro) 29(6): 277.
- Pabst, G.F.J. & F. Dungs. 1977. *Orchidaceae Brasilienses*. Gesamtherstellung: Hagemann-Druck, Hildesheim.
- Withner, C.L. & P.A. Harding. 2004. *The Cattleyas and Their Relatives: The Debatable Epidendrums*. Timber Press, Portland.