

## TYPIFICATIONS IN BRAZILIAN NAMES OF THE GENUS *ENCYCLIA* (ORCHIDACEAE)

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### ABSTRACT

Thirteen types are designated for Brazilian names of the genus *Encyclia* (Orchidaceae), including eleven lectotypes for João Barbosa Rodrigues' names and two epitypes for names described by L.C. Menezes.

*Encyclia* Hook. is a Neotropical genus of Orchidaceae with about 120 species distributed from the United States of America (Florida) and Mexico to southern Brazil and northeastern Argentina (van den Berg et al. 2005).

In the present paper, illustrations by João Barbosa Rodrigues are chosen as lectotypes of eleven out of the twelve names described by this author (1877, 1881, 1891), since the whereabouts of any related herbarium material is unknown and they were probably destroyed (Cribb & Toscano de Brito 1996). The original illustrations selected as lectotypes are from the fourth volume of his unpublished "Iconographie des Orchidées du Brésil", which are deposited at AMES and were reproduced by Sprunger et al. (1996). These illustrations were also reproduced in Cogniaux (1898) but they are black and white drawings instead of a colored prints like the original paintings. Copies of the illustrations made by Mrs. Harriet Thiselton-Dyer are deposited at K (Cribb & Toscano de Brito 1996). We could not designate a lectotype for *Encyclia albopurpurea* (Barb.Rodr.) Porto & Brade due to the inexistence of an illustration. We also have doubts of the true

identity of this species, as the protologue is not sufficiently informative, and we also were not able to collect any material from the type locality which might have led to a better understanding of the species and designation of a neotype ("La Rivière Tapajoz à Uricurityba, dans la province de Pará", Barbosa Rodrigues 1877).

Because the holotypes of two names published by Menezes (1990, 1991) are sterile materials, pictures of the expanded perianth which were respectively published in the same articles of the protogues are designated as epitypes.

It is not the purpose of this paper to present exhaustive lists of synonyms, and names presented are restricted to those whose types are here designated and their respective correct names according to our experience and the literature (Castro Neto 1998a, 1998b, 2006; Castro Neto & Campacci 2000; Campacci 2003; Toscano de Brito & Cribb 2005; Romanini & Barros 2007; Withner 2000). The aim of this paper is to designate types for thirteen names, anticipating an ongoing taxonomic revision of the genus in Brazil.

**Encyclia advena** (Rchb.f.) Porto & Brade, Rodriguésia 1: 28. 1935.

Basionym: *Epidendrum advenum* Rchb.f., Gard. Chron. 1872: 1194. 1872. Type: BRAZIL: s.l., s.d., J.Day s.n. (holotype W not seen, picture seen).

*Epidendrum megalanthum* Barb.Rodr., Gen. Sp. Orchid. 1: 51. 1877. *Encyclia megalantha* (Barb.Rodr.) Porto & Brade, Rodriguésia 1: 29. 1935. Type: BRAZIL, "Hab. Près de Barbacena, dans la province de Minas Geraes. Fleurit en Janvier". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil: t. 217" and reproduced in Sprunger et al. (1996, p. 278, t. 15).

**Encyclia bracteata** Schltr. ex Hoehne, Album Orchid. Bras.: t. 33. 1930.

Replaced synonym: *Epidendrum bracteatum* Barb.Rodr., Gen. Sp. Orchid. 1: 52. 1877, nom. illeg. non Vell. 1831. *Epidendrum pabstii* A.D.Hawkes, Orquídea (Rio de Janeiro) 18: 177. 1957. Type: BRAZIL, "Hab. Dans la province du Espírito Santo. Fleurit en Octobre". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil: t. 344" and reproduced in Sprunger et al. (1996, p. 272, t. 9).

Barbosa Rodrigues (1877) published *Epidendrum bracteatum* Barb.Rodr. However it is considered an illegitimate name because the epithet was already occupied by *E. bracteatum* Vell., 1831. Hoehne (1930) published a posthumous combination proposed by Schlechter based on Barbosa Rodrigues' name "*Encyclia bracteata* (Barb.Rodr.) Schltr. ex Hoehne". According to article 58 of the International Code of Botanical Nomenclature (McNeil et al. 2006) it should be interpreted as a new name based on the same type, not a combination, thus the correct name is

*Encyclia bracteata* Schltr. ex Hoehne.

**Encyclia chloroleuca** (Hook.) Neumann, Rev. Hort., 2e sér., 4: 138. 1846.

Basionym: *Epidendrum chloroleucum* Hook., Bot. Mag. 64: t. 3557. 1837. Type: GUYANA, Demerara: s.l., s.d., J.Allcard s.n. (holotype K not seen, picture seen).

*Encyclia viridiflava* L.C.Menezes, Orchid Digest 55: 21. 1991. Type: BRAZIL, Rondônia: "Nova Alvorada", JUL 1990, L.C.Menezes UB4 (holotype UB!). Epitype here designated: Menezes (1991, p. 21, color picture on the left).

The exactly place of collection of the holotype is doubtful. The label of the holotype indicates Nova Alvorada, Rondônia State, which we believe is actually a district of Comodoro, Nova Alvorada, Mato Grosso, ca. 60 km from Rondônia border. Also, the protologue indicates other two other cities: Rolim de Moura and Ariquemes (Menezes 1991), both which are actually in Rondônia.

**Encyclia conchaechila** (Barb.Rodr.) Porto & Brade, Rodriguésia 1: 28. 1935.

Basionym: *Epidendrum conchaechilum* Barb.Rodr., Gen. Sp. Orchid. 1: 53. 1877. Type: BRAZIL, "Hab. Le fleuve Solimões, près de l'embouchure du Rio Negro. Floraison in Mars". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil: t. 304" and reproduced in Sprunger et al. (1996, p. 271, t. 8).

**Encyclia dichroma** (Lindl.) Schltr., Orchideen (Schltr.): 209. 1914.

Basionym: *Epidendrum dichromum* Lindl., Edwards's Bot. Reg. 29 (misc.): 78. 1843. *Encyclia dichroma* (Lindl.) Porto & Brade, Rodriguésia 1: 29. 1935, nom. superfl. Type: BRAZIL, Pernambuco: s.l., s.d., M. Quesnel s.n. (holotype K not seen, picture seen).

*Epidendrum biflorum* Barb.Rodr., Gen.

Sp. Orchid. 1: 52. 1877, *nom. illeg. non* G.Forst 1786, Ruiz & Pav. 1798 *nec* Cogn. 1902. *Epidendrum dichromum* var. *biflorum* Cogn., Fl. Bras. (Martius) 3(5): 63. 1898. *Epidendrum brasiliense* A.D.Hawkes, Orquídea (Rio de Janeiro) 18: 168. 1957. *Encyclia dichroma* subsp. *biflora* Fowlie, Orchid Digest 56: 141. 1992. Type: BRAZIL, “Hab. Le sertão dos Lençóes, dans la province de Bahia. Fleurit au mois de Mars”. Lectotype here designated: Barbosa Rodrigues’s original drawing (AMES) which would be issued in his unpublished book “Iconographie des Orchidées du Brésil: t. 366” and reproduced in Sprunger et al. (1996, p. 277, t. 14).

The *Encyclia dichroma* case is similar to that discussed for *Encyclia bracteata*. Barbosa Rodrigues (1877) published *Epidendrum biflorum* Barb.Rodr., a name considered illegitimate because the epithet was already taken by two other names: *E. biflorum* G.Forst, 1786 and *E. biflorum* Ruiz & Pav., 1798. As a result the combinations proposed by Cogniaux (1898) and Fowlie (1992), “*Epidendrum dichromum* var. *biflorum* (Barb.Rodr.) Cogn” and “*Encyclia dichroma* subsp. *biflora* (Barb.Rodr.) Fowlie”, respectively, should be interpreted as new names, also in accordance with article 58 (McNeill et al. 2006).

#### **Encyclia gallopavina** (Rchb.f.) Porto & Brade, Rodriguésia 1: 29. 1935.

Basionym: *Epidendrum gallopavinum* Rchb.f., Bonplandia 3: 219. 1855. Type: BRAZIL, Rio de Janeiro: *s.l.*, *s.d.*, Schiller *s.n.* (holotype W not seen, picture seen).

*Epidendrum purpurachylum* Barb.Rodr., Gen. Sp. Orchid. 1: 49. 1877. *Encyclia purpurachyla* (Barb.Rodr.) Porto & Brade, Rodriguésia 1: 29. 1935. Type: BRAZIL, “Hab. a Queimados et à la Parahyba do Sul, dans la province Rio de Janeiro; croît sur des Mimosées et Myrtacées. Pleine floraison au mois d’Août”. Lectotype here designated: Barbosa Rodrigues’s original drawing (AMES) which would be issued in his

unpublished book “Iconographie des Orchidées du Brésil: t. 126” and reproduced in Sprunger et al. (1996, p. 275, t. 12).

#### **Encyclia oncidioides** (Lindl.) Schltr., Orchideen (Schlechter): 210. 1914.

Basionym: *Epidendrum oncidioides* Lindl., Edwards’s Bot. Reg. 19: tab. 1623. 1833. Type: South America: *s.l.*, *s.d.*, R. Harrison *s.n.* (holotype K; isotype LE).

*Epidendrum longifolium* Barb.Rodr., Gen. Sp. Orchid. 2: 133. 1881. *Encyclia longifolia* (Barb.Rodr.) Schltr., Orchideen (Schltr.): 210. 1914. Type: BRAZIL, “Hab. dans le sertão da Bahia, près Lençóes. Fleurit en Décembre”. Lectotype here designated: Barbosa Rodrigues’s original drawing (AMES) which would be issued in his unpublished book “Iconographie des Orchidées du Brésil: t. 509” and reproduced in Sprunger et al. (1996, p. 276, t. 13).

#### **Encyclia osmantha** (Barb.Rodr.) Schltr., Orchideen (Schlechter): 210. 1914.

Basionym: *Epidendrum osmanthum* Barb.Rodr., Gen. Sp. Orchid. 2: 134. 1881. Type: BRAZIL, “Hab. croissant par touffes sur les arbres des forêts près de la Casa de Pedra, à S. José d’El-Rey, Minas Geraes. Fleurit en Septembre”. Lectotype here designated: Barbosa Rodrigues’s original drawing (AMES) which would be issued in his unpublished book “Iconographie des Orchidées du Brésil: t. 783” and reproduced in Sprunger et al. (1996, p. 277, t. 14B).

#### **Encyclia patens** var. **serroniana** (Barb.Rodr.) Romanini & F.Barros, Fl. Fanerog. Ilha Cardoso 12: 102. 2007.

Basionym: *Epidendrum serronianum* Barb.Rodr., Gen. Sp. Orchid. 1: 53. 1877. *Encyclia serroniana* (Barb.Rodr.) Hoehne, Arq. Bot. Estado São Paulo 1: 124. 1952. *Encyclia odoratissima* var. *serroniana* (Barb.Rodr.) Brieger ex F.Barros, Hoehnea 10: 91. 1983. Type: BRAZIL, “Hab. La serra da Gavêa, à Rio de Janeiro, chez mon

maître, feu le savant naturaliste Dr. Custodio Alves Serrão; croit sur les roches. Floraison en Juin". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil: t. 66" and reproduced in Sprunger et al. (1996, p. 270, t. 7).

**Encyclia pauciflora** (Barb.Rodr.) Porto & Brade, Rodriguésia 1: 29. 1935.

Basionym: *Epidendrum pauciflorum* Barb.Rodr., Gen. Sp. Orchid. 1: 49. 1877. Type: BRAZIL, "Hab. Dans la province de Minas Geraes; fleurit au mois de Décembre". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil: t. 191" and reproduced in Sprunger et al. (1996, p. 274, t. 11).

**Encyclia randii** (Barb.Rodr.) Porto & Brade, Rodriguésia 1: 29. 1935.

Basionym: *Epidendrum randii* Barb.Rodr., Vellozia, ed. 2, 1: 123. 1891. Type: BRAZIL, "Hab. as mattas de Teffé, rio Solimões. Floresce em outubro". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil: t. 841" and reproduced in Sprunger et al. (1996, p. 268, t. 5A).

**Encyclia spiritusanctensis** L.C.Menezes ex L.C.Menezes, Bol. CAOB 3: 17. 1990.

*Encyclia megalantha* var. *spiritusanctensis* L.C.Menezes, Comunicado Técnico IBAMA 1. 1990, nom. inval. *Encyclia spiritusanctensis* L.C.Menezes, Bol. CAOB 2: 9. 1990, nom. inval. *Encyclia spiritusanctensis* L.C.Menezes, Orchid Digest 55: 22. 1991. nom. superfl. Type: BRAZIL, Espírito Santo: s.l., Feb 1990, H. Kundergraber sub L. C. Menezes UB3 (holotype UB!). Epitype here designated: Menezes (1990, picture on p. 16).

The first and the second names in the synonym list are considered invalid due to the inexistence of latin diagnosis and indication of a type, according to the articles 36 and 37 (McNeill et al. 2006). The third name is superfluous because it is an identical version of the protologue, except for being in english, while the protologue is in portuguese, and published just a few months after it.

**Encyclia yauaperyensis** (Barb.Rodr.) Porto & Brade, Rodriguésia 1: 29. 1935, as '*jauaperiensis*'.

Basionym: *Epidendrum yauaperyense* Barb.Rodr., Vellozia, ed. 2, 1: 1223. 1891. Type: BRAZIL, "Hab. as arvores das mattas virgens do rio Yauapery. Floresce em março". Lectotype here designated: Barbosa Rodrigues's original drawing (AMES) which would be issued in his unpublished book "Iconographie des Orchidées du Brésil 4: t. 855" and reproduced in Sprunger et al. (1996, p. 268, t. 5B).

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