



Bredemeyera divaricata, a new combination for the well-known Amazonian species of Polygalaceae

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Abstract

A recent effort to study Ferreira's material brought to Paris from Lisbon in the beginning of the XIXth century revealed the identity of one often overlooked name in Polygalaceae, *Badiera divaricata* which had not been revised since its original publication. We provide the typification of the names involved and propose a new combination for the species nowadays known as *Bredemeyera altissima*.

Resumo

Os recentes esforços para estudar a coleção de Ferreira trazida de Lisboa para Paris durante o começo do século XIX revelou a identidade de um nome de Polygalaceae, *Badiera divaricata* publicado em 1824, não foi revisado deste então. Este estudo fornece tipificação dos nomes envolvidos e uma nova combinação para a espécie conhecida atualmente como *Bredemeyera altissima*.

Key words: De Candolle, Ferreira, *Bredemeyera altissima*

Introduction

The well-known species *Bredemeyera altissima* (Poeppig 1844: 65) Bennett (1874: 50) is an Amazonian native (Bolivia, Brazil, Guyana, Peru, and Venezuela) and presents a wide morphological variation of leaf shapes and fruit. Thus, Bennett (1874: 50) described the variety *B. altissima* var. *emarginata* to include specimens with that leaf shape in order to differentiate it from the specimens with the acuminate or acute leaves. During a revision of the A.R. Ferreira's collection in Paris, the type collection of *Badiera divaricata* De Candolle (1824: 335) was determined, in fact, to be that of *Bredemeyera altissima*. We therefore propose for it a new combination under the genus *Bredemeyera* (Willdenow 1801: 412).

Ferreira's collection

The original specimens of *Bredemeyera divaricata* are found in the A.R. Ferreira's collection brought to Paris from Lisbon during the Napoleonic wars. Other specimens of Polygalaceae from Lisbon were also used to describe new species, such as *Caamembeca oxyphylla* (De Candolle 1824: 331) Pastore (2012a: 441) and *Polygala brachyostachios* Poiret (Pastore 2012b). It is, therefore, yet another instance of the importance to science of Ferreira's and others as Fr. Vellozo or Dr. Velloso collections, yet to be generally recognized.

1. *Bredemeyera divaricata* (DC.) J.F.B.Pastore, *comb. nov.*

Basionym: *Badiera divaricata* DC. Lectotype (herein designated):—BRAZIL. Pará: October 1783–January 1792, A.R. Ferreira s.n. (P[00697589]!; iso-lectotype P[00303393]!).

<http://science.mnhn.fr/institution/mnhn/collection/p/item/p00697589>

Catocoma altissima Poeppig (1844: 65) Lectotype (herein designated):—BRAZIL. Amazonas: Tefê, “Crescit in primaveris circa Ega”, 1834, *E.F. Poeppig 2901* (W! isolectotypes: G!, P[00733594]!, P[00733593]!, B† photo F neg. 13072!). *Bredemeyera altissima* (Poepp.) Bennett (1874: 50).

Bredemeyera altissima var. *emarginata* Bennett (1874: 50). Lectotype (herein designated):— GUYANA: June 1854, *R. Spruce 3721* (K[000263980]!, iso-lectotypes BR[8574138]!, CGE!, P[733592]!).

Taxonomic note:—Based on morphology of the leaves, the infra-specific classification used Bennett (1874) is not relevant. *Bredemeyera divaricata* is recognized by the leaves with glabrous blades on the adaxial surface and puberulent on the abaxial surface mainly on the mid vein; panicles 15–40 cm; flowers with pedicel between 1–2 mm, lateral petals slightly widening to the apex, internally pubescent, style bended, and ovary glabrous. *Bredemeyera lucida* (Bentham 1842: 101) Klotzsch ex Hasskarl (1864: 189) cannot be easily separated from *B. divaricata* and might be synonymous. There are two specimens of *Badiera divaricata* in P that constitute the type collection. Although they were marked as “*Polygala divaricata*” in De Candolle’s handwriting, instead “*Badiera divaricata*”, the specimens without a doubt represent the type collection of *Badiera divaricata*, also supported by the original De Candolle’s note “v.s. in h. Mus. Par.”. De Candolle’s mistake is easily understood since the genus *Bredemeyera*, although described by Willdenow in 1801, was delimited much later by Bentham (1842, as *Catocoma*) and then by Hasskarl (1864) who applied the correct name, *Bredemeyera*, for that genus (Marques 1980). In fact, the name *Badiera divaricata* was used by De Candolle with an explicitly stated doubt about its correctness as applied to that species and expressed in his note (“an hujus generis?”). Not surprisingly, the original material was annotated by De Candolle, in his own handwriting, as “*Polygala divaricata*”. Therefore, it must be considered the second known *Bredemeyera* described by De Candolle under a different genus, another one was *Securidaca hebeclada* De Candolle moved to *Bredemeyera hebeclada* (De Candolle) J.F.B.Pastore (Pastore 2010).

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LITERATURE CITED

- Bennett, A.W. (1874) Polygalaceae. In: Martius, C.F.P., Eichler, A.W. & Urban, I. (Eds.) *Flora Brasiliensis* 13 part 3. Frid. Fleischer, Leipzig, pp. 1–82.
- Bentham, G. (1842). Schomburgk’s Guiana Plants. *The Journal of Botany* 4: 99–105.
- De Candolle, A.P. (1824) *Prodromus Systematis Naturalis Regni Vegetabilis* 1, Treuttel & Würtz, Paris, 745 pp.
<http://dx.doi.org/10.5962/bhl.title.286>
- Hasskarl, J.C. (1864) Polygalaceae, praesertim indicae. *Annales Musei Botanici Lugduno-Batavi* 1: 142–196.
- Marques, M.C.M. (1980). Revisão das espécies do gênero *Bredemeyera* Willd. (Polygalaceae) do Brasil. *Rodriguésia* 32: 269–321.
- Pastore, J.F.B. (2010) *Bredemeyera hebeclada* a new combination in Polygalaceae. *Novon* 20: 314–316.
<http://dx.doi.org/10.3417/2008135>
- Pastore, J.F.B. (2012a) *Caamembeca*: Generic status and new name for *Polygala* subgenus *Ligustrina* (Polygalaceae). *Kew Bulletin* 67: 1–8.
<http://dx.doi.org/10.1007/s12225-012-9360-x>
- Pastore, J.F.B. (2012b) Proposal to conserve the name *Polygala longicaulis* against *P. brachistachyos* (Polygalaceae). *Taxon* 62: 16–17.
- Poeppig, E.F. (1844) *Nova Genera ac Species Plantarum quas in Regno Chilensi Peruviano et in Terra Amazonica* 3, Sumptibus Friderici Hofmeister, Leipzig, 300 pp.
<http://dx.doi.org/10.5962/bhl.title.453>
- Willdenow, C.L. (1801) Drei neue Pflanzen-Gattungen. *Neue Schriften der Gesellschaft Naturforschender Freunde zu Berlin* 3: 403–412.