



## ***Homalopetalum joinvillense* (Epidendreae; Epidendroideae; Orchidaceae): a new species from Southern Brazil**

WERNER SIEBJE MANCINELLI & ERIC DE CAMARGO SMIDT

Universidade Federal do Paraná, Setor de Ciências Biológicas, Centro Politécnico, Jardim das Américas, Cx Postal 19031, 81531-980, Curitiba, PR, Brazil; E-mail: [werner.mancinelli@gmail.com](mailto:werner.mancinelli@gmail.com)

### Abstract

*Homalopetalum joinvillense* (Orchidaceae) is a new species found in Joinville (Brazil). This species presents morphological similarity with *Homalopetalum alticum*, but it differs from that and another species of this genus by a combination of an oblong-obovate lip with a slightly denticulate lip margin, a callus divided in two parts, globose in the internal part and conical in the external part, and an erose clinandrium. This article presents the complete description and the illustration of the new species, as well as an identification key for the genus.

### Resumo

*Homalopetalum joinvillense* (Orchidaceae) é uma nova espécie encontrada em Joinville (Brasil). Esta espécie apresenta semelhanças morfológicas com *Homalopetalum alticum*, porém se diferencia desta e demais espécies do gênero pela combinação de um labelo oblongo-obovado com a margem do labelo levemente denteada, um calo dividido em duas partes, globoso internamente e cônico externamente e um clinândrio eroso. No presente artigo é apresentada a descrição completa e a ilustração da espécie nova, assim como chave de identificação do gênero.

**Key words:** Atlantic Forest, *Pinelia*, *Pinelianthe*, Santa Catarina.

### Introduction

The genus *Homalopetalum* Rolfe (1896: pl. 2461) includes seven small species of subtribe Laeliinae. This genus is distributed in Mexico, Central America, the tropical Andes, Venezuela, Brazil, Cuba, Hispaniola and Jamaica (Soto Arenas 2005). *Homalopetalum* has been included in the “*Domingoa alliance*”, more specifically as a sister group of *Domingoa* Schlechter (1913: 496) and *Nageliella* Williams (1940: 144) actually included in *Domingoa* (van den Berg *et al.* 2000, 2009).

The validity of this genus has been discussed since Dressler (1960) noted that *Pinelia* Lindley (1853: 1) was closely related to *Homalopetalum*, suggesting the fusion of these genera. The *Homalopetalum* species should be transferred to *Pinelia* by the priority of the name, but Dressler, in the same study, cited a homonymy with *Pinellia* Tenore (1839: 69, Araceae). Rauschert (1983) transferred the *Pinelia* species to a new genus, *Pinelianthe* (Rauschert 1983: 465), separate from *Homalopetalum*. More recently, Soto Arenas *et al.* (2007) included the three species of *Pinelianthe* in *Homalopetalum*.

During studies of vascular epiphytes in Joinville, a new species of *Homalopetalum* was collected and is described and illustrated in the present study.

-	Lip apex acute, column foot with basal auricles .....	5
5	Sepals and petals with width:length ratio of 1:6, lip elliptic, callus divided into two parts .....	
	..... <i>H. pumilio</i> (Reichenbach 1844: 402) Schlechter (1923: 48)	
-	Sepals and petals with width:length ratio of 1:2.5, lip oblong, callus entire .....	
	..... <i>H. pachyphyllum</i> (Williams 1946: 244) Dressler (1964: 246)	
6	Callus in V shape, monomorphic .....	<i>H. hypoleptum</i>
-	Callus rectilinear, globose in the internal part and conical in the external part .....	7
7	Flower white-pink, lip sub-orbicular, 5-nerved, clinandrium entire .....	<i>H. alticolum</i>
-	Flower green, lip oblong-obovate, 3-nerved, clinandrium erose .....	<i>H. joinvillense</i>

## Acknowledgements

We thank Angel Vale, Maria Delfina de Araújo Machado Rezende and Rudolf Jenny, who helped with information and bibliographies, and the reviewers for their suggestions to improve the manuscript.

## References

- Ames, O. (1941) A new *Scaphyglottis* from Mexico. *American Orchid Society Bulletin* 10: 48–49.
- Barros, F. (2004) Taxonomic and nomenclatural notes on Brazilian Orchidaceae. In: Manilal, K.S. & Sathish-Kumar, C. (Eds.) *Orchid Memories: a tribute to Gunnar Seidenfaden*. Mentor Books, Calicut, pp. 7–22.
- Dressler, R.L. (1960) Nomenclatural notes on the Orchidaceae I. *Taxon* 9: 213–214.  
<http://dx.doi.org/10.2307/1216274>
- Dressler, R.L. (1964) Nomenclatural notes on the Orchidaceae II. *Taxon* 13: 245–249.  
<http://dx.doi.org/10.2307/1216694>
- IUCN (2012) *IUCN Red List Categories and Criteria. Vol. 3.1. 2<sup>nd</sup> Edition*. IUCN, Gland/Cambridge, 32 pp.
- Fawcett, W. & Rendle, A.B. (1910) *Flora of Jamaica, containing descriptions of the flowering plants known from the island. Vol. 1. Orchidaceae*. Longmans & Co., London, 150 pp.
- Dunsterville, G.C.K. & Garay, L.A. (1965) *Venezuelan orchids illustrated, 3*. Andre Deutsch, London, 348 pp.
- Lindley, J. (1853) *Pinelia*. *Folia Orchidacea* 4: 1.
- Rauschert, S. (1983) Beitrag zur Nomenklatur der Orchidaceae. *Feddes Repertorium* 94: 433–471.
- Reichenbach, H.G.fil. (1844) *Plantae Leiboldianae: Orchidaceae*. *Linnaea* 18: 398–409.
- Reichenbach, H.G.fil. (1865) Vorstudien zu einer Orchidographie der Antillen, besonders britischen Anteils. Neuheiten und eingehende Kritiken bisheriger Literatur. *Flora* 18: 273–280.
- Rolfe, R.A. (1896) *Homalopetalum jamaicense* Rolfe. In: Thiselton-Dyer, W.T. (Ed.) *Hooker's icones plantarum: figures with descriptive characters and remarks of new and rare plants, 5*. Dulau & Co., London, pl. 2461.
- Schlechter, R. (1913) Orchidaceae. In: Urban, I. (Ed.) *Symbolae Antillanae seu Fundamenta Florae Indiae Occidentalis, 7(4)*. Nova genera et species VI. Lipsiae, Fratres Borntraeger, pp. 492–498.
- Schlechter, R. (1923) Beiträge zur Orchideenkunde von Zentralamerika. II. Additamenta ad Orchideologiam Costaricensem: I. Orchidaceae Amparoanae. *Repertorium Specierum Novarum Regni Vegetabilis* 19: 3–75.
- Schlechter, R. & Hoehne, F.C. (1926) Contribuições ao conhecimento das Orchidaceas do Brasil. *Archivos de Botanica do Estado de São Paulo* 1: 160–349.
- Soto Arenas, M.A. (2005) *Homalopetalum*. In: Pridgeon, A., Chase, M.W. & Cribb, P. (Eds.) *Genera Orchidacearum 4: Epidendroideae, Part. 1*. Oxford University, Oxford, pp. 257–260.
- Soto Arenas, M.A., Salazar, G. & van den Berg, C. (2007) New combinations in *Domingoa*, *Homalopetalum* (Orchidaceae: Laeliinae) and *Nemaconia* (Orchidaceae: Ponerinae). *Neodiversity* 2: 7–9.  
<http://dx.doi.org/10.13102/neod.21.2>
- Rede Species Link (2014) *Busca*. Available from: <http://www.splink.org.br/index?lang=pt> (accessed 19 May 2014)
- Swartz, O. (1788) Nova genera et species plantarum seu Prodromus. Bibliopolis Acad. M. Swederi, Holmiae, Upsaliae & Aboae, 152 pp.
- Tenore, M. (1839) Della *Pinellia* nuovo genere nella famiglia delle Aroidee; memoria. *Atti della Reale Accademia delle Scienze, sezione della Società Reale Borbonica* 4: 57–71.
- van den Berg, C., Higgins, W.E., Dressler, R.L., Whitten, W.M., Soto Arenas, M.A., Culham, A. & Chase, M.W. (2000) A phylogenetic analysis of Laeliinae (Orchidaceae) based on sequence data from internal transcribed spacers (ITS) of nuclear ribosomal DNA.

*Lindleyana* 15: 96–114.

van den Berg, C., Higgins, W.E., Dressler, R.L., Whitten, W.M., Soto Arenas, M.A. & Chase, M.W. (2009) A phylogenetic study of Laeliinae (Orchidaceae) based on combined nuclear and plastid DNA sequences. *Annals of Botany* 104: 417–430. <http://dx.doi.org/10.1093/aob/mcp101>

Williams, L.O. (1940) Orchids studies, XII. *Botanical Museum Leaflets Harvard University* 8: 141–151.

Williams, L.O. (1946) New and interesting Mexican orchids. *Botanical Museum Leaflets Harvard University* 12: 225–254.