



## Validation of the name *Heliconia* ×*rauliniana* (Heliconiaceae)

JOÃO MARCELO ALVARENGA BRAGA<sup>1\*</sup> & ANA JOFFILY<sup>2</sup>

<sup>1</sup> Instituto de Pesquisas Jardim Botânico do Rio de Janeiro. Rua Pacheco Leão, 915. 22460-030, Rio de Janeiro, RJ, Brazil; E-mail: [jmabraga@jbrj.gov.br](mailto:jmabraga@jbrj.gov.br)

<sup>2</sup> Universidade Federal Fluminense, Instituto de Biologia, Departamento de Biologia Geral. Rua Outeiro de São João Batista s.n., Campus Valonguinho. 24020-150, Caixa Postal 100436, Niterói, RJ, Brazil; E-mail: [anajoffily@id.uff.br](mailto:anajoffily@id.uff.br)

### Abstract

In the protologue, two specimens of *Heliconia* collected on different dates and locations were designated as a single holotype. Consequently, *Heliconia* ×*rauliniana* (*pro sp.*) must be considered an invalidly published name. This natural hybrid is widely cultivated and used in worldwide floriculture trade. The present work proposes to validate the name *H.* ×*rauliniana*.

**Kew words:** *Heliconia*, new hybrid, nomenclature, ornamental plants, Venezuela

### Introduction

*Heliconia* ×*rauliniana* (*pro sp.*) was first described and illustrated by Barreiros (1974: 453) as a species, not as a hybrid. In the protologue, two specimens from different gatherings were cited and designated as a single holotype and with the same RB herbarium accession number (RB 159909). The first specimen, *Burle Marx s.n.*, was collected in 1971 in the Roberto Burle Marx private garden otherwise known as “Sítio Santo Antonio da Bica” (Rio de Janeiro, Brazil), although it was originally harvested in Barlovento, Venezuela. The second specimen, *H.S. Barreiros s.n.*, was collected in 1972 from the Botanical Garden of Rio de Janeiro, Brazil. Thus, the plants were collected at different times and erroneously joined as a single holotype. As a result, this holotype consists of a set of specimens collected on different dates and locations. Consequently, *H.* ×*rauliniana* must be considered an invalidly published name, as it is in disagreement with Article 8.2 (McNeill *et al.* 2012).

This ornamental plant is widely recognized as a natural hybrid of *H. bihai* (Linnaeus 1753: 1043) Linnaeus (1771: 211) × *H. marginata* (Griggs 1915: 323) Pittier (1926: 299) (Berry & Kress 1991; Lorenzi & Mello Filho 2001; Ribeiro *et al.* 2010). In spite of its importance in the floriculture trade, the matter of plant name typification has never been raised.

### Taxonomic treatment

*Heliconia* ×*rauliniana* Barreiros, *nothosp. nov.*

*Heliconia rauliniana* Barreiros (1974: 453), not validly published contrary to Article 8.2 (McNeill *et al.* 2012).

Type:—VENEZUELA. Barlovento (“Barlavento”), 1971, *R. Burle Marx* (“*B. Mars*”) *s.n.* (holotype RB 159909!; isotype US 2853014!).

Notes:—The morphological and chromatic characteristics in *H.* ×*rauliniana* are visibly present in the parental taxa (*H. bihai* × *H. marginata*), except the features that express its hybrid state, such as oblique inflorescences, mostly closed flowers and no development fruits. Therefore, a new nothospecies is herein validated with direct reference to the original description and diagnosis published in Latin in the protologue of *H. rauliniana* (*pro sp.*) (Barreiros 1974: 453) and the knowledge of parental taxa (McNeill *et al.* 2012: Articles 39.2 and H 3.2). According to

### Additional specimens examined (paratypes):

**Brazil. Rio de Janeiro** (cultivated): Jardim Botânico do Rio de Janeiro, 20 December 1972, *H. de S. Barreiros s.n.* (RB 232609 [previously RB 159909]!, NY 1546306!); *ibidem*, 15 January 1975, *H. de S. Barreiros s.n.* (RB 173202!); *ibidem*, 1981, *H. de S. Barreiros s.n.* (RB 204505!); *ibidem*, 27 December 2002, *J.M.A. Braga 7145* (RB!); *ibidem*, 27 January 2003, *J.M.A. Braga 7153* (RB!).

### Acknowledgments

We are very grateful to Richard K. Brummitt (in memoriam) and Katherine M. Challis for their valuable discussions on nomenclature.

### References

- Barreiros, H.S. (1972) *Heliconia nova brasiliana et varietas*. Morfologia e Ecologia – Dispersão e polinização (Heliconiaceae (End.) Nakai). *Revista Brasileira de Biologia* 32: 205–208.
- Berry, F. & Kress, W.J. (1991) *Heliconia. An Identification Guide*. Smithsonian Institution Press, Washington, 334 pp.
- Griggs, R.F. (1915) Some new species and varieties of *Bihai*. *Bulletin of the Torrey Botanical Club* 42: 315–330.
- Linnaeus, C. (1753) *Species Plantarum*. Laurentii Salvii, Holmiae, 1231 pp.
- Linnaeus, C. (1771) *Mantissa Plantarum Altera*. Laurentii Salvii, Holmiae, 584 pp.
- Lorenzi, H. & Mello Filho, L.E. (2001) *As plantas tropicais de R. Burle Marx*. Ed. Instituto Plantarum, Nova Odessa, 504 pp.
- McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold, K., Prado, J., Prud'homme van Reine, W.F., Smith, G.F., Wiersema, J.H. & Turland, N.J. (eds.) (2012) *International Code of Nomenclature (Melbourne Code): Adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011*. Regnum Vegetabile 154. Koeltz Scientific Books, 208 pp.
- Pittier, H. (1926) *Manual de las Plantas Usuales de Venezuela*. Litografía del Comercio, Fundación Eugenio Mendoza, Caracas, 458 pp.
- Ribeiro, W.S., Carneiro, G.G., Almeida, E.I.B., Lucena, H.H. & Barbosa, J.A. (2010) Pós-colheita e conservação de inflorescências de *Heliconia marginata* x *Heliconia bihai* (*Heliconia rauliana*) submetidas a soluções de manutenção. *Agropecuária Técnica* 31: 70–74.