



Two new combinations in Brazilian *Dendropanax* (Araliaceae)

PEDRO FIASCHI¹ & DAVID G. FRODIN²

¹Departamento de Botânica, Centro de Ciências Biológicas, Universidade Federal de Santa Catarina. Campus Universitário, Trindade, 88040-900, Florianópolis, SP, Brasil; email: pedrofiaschi@gmail.com

²Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom; and Chelsea Physic Garden, 66 Royal Hospital Road, London SW3 4HS, United Kingdom; email: DavidFrodin@dintgrade.demon.co.uk, D.Frodin@kew.org

Abstract

New combinations and lectotypes are here proposed for two Brazilian species of *Dendropanax* (Araliaceae): *Dendropanax simplicifolius* for *Didymopanax simplicifolius* from northern Mato Grosso Amazonian forests, and *Dendropanax pruinosa* for *Gilibertia pruinosa*, known only from gallery forests in the Chapada dos Veadeiros region. Both of these species are very poorly known and more collections will be required to achieve a better understanding of their morphological variability and circumscription.

Resumo

Combinações novas e lectótipos são aqui propostos para duas espécies brasileiras de *Dendropanax* (Araliaceae): *Dendropanax simplicifolius* para *Didymopanax simplicifolius*, das florestas amazônicas do norte do Mato Grosso e *Dendropanax pruinosa* para *Gilibertia pruinosa*, conhecida apenas de florestas ciliares da região da Chapada dos Veadeiros. Essas duas espécies são pouco conhecidas e mais coletas serão necessárias para um entendimento mais adequado da sua variabilidade morfológica e circunscrição.

Key words: Chapada dos Veadeiros, *Didymopanax*, *Gilibertia*, Juruena, Mato Grosso

Introduction

Dendropanax Decaisne & Planchon (1854: 107) is a taxonomically poorly known genus of Araliaceae, with estimates of species numbers ranging from 50 to almost 100 from tropical and subtropical Asia and Western Malesia, Central and South America, and the West Indies (Fiaschi & Jung-Mendaçolli 2006, Mabberley 2008, Shang & Lowry 2007, Cannon & Cannon 2009). Frodin & Govaerts (2003, publ. 2004) formally listed 92 species for *Dendropanax*, leaving a few others unplaced. The greater part of the genus is in the Neotropics, with centers of diversity in Jamaica, southern Mesoamerica (Smith 1944, Cannon & Cannon 2009), northwestern South America, and eastern Brazil (Fiaschi 2005, Fiaschi & Jung-Mendaçolli 2006).

While working on the taxonomy of eastern Brazilian species of *Dendropanax*, the first author came across two species that were previously described under *Didymopanax* Decaisne & Planchon (1854: 109) and *Gilibertia* Ruiz López & Pavón (1794: 50, t. 8) but, if accepted, now require combinations in *Dendropanax*. These new combinations, *Dendropanax pruinosa* replacing *Gilibertia pruinosa* Taubert (1896: 448) and *Dendropanax simplicifolius* replacing *Didymopanax simplicifolius* Hoehne (1915: 59), are proposed here. While we regard these two species as distinct taxa and the combinations therefore justified, more collections of both—particularly of *Dendropanax simplicifolius*—are, however, required to achieve a better understanding of their morphological variability, and to circumscribe them more effectively with regard to the presumably related and widespread eastern South American species *Dendropanax cuneatus* (Candolle 1830: 262) Decaisne & Planchón (1854: 107).

With reference to the first of the above-mentioned species, the new combination presented here completes the necessary transfers of Brazilian *Gilibertia* to *Dendropanax*. From its first publication in 1794—sixty years before *Dendropanax*—and particularly in the nineteenth century, *Gilibertia* came into wide use in the Americas, including

Dendropanax simplicifolius shares with other species of *Dendropanax* the simple leaves, umbels with the peduncle typically possessing bracteate articulation, and petals with an internal apical projection. This species is known only from the type material, collected about one hundred years ago in Juruena, Mato Grosso. Hoehne's description of the type locality as "campo baixo" probably refers to an Amazonian white-sand "campina," following the terminology of Pires & Prance (1985).

This species may be related to *Dendropanax cuneatus*, from which it can be distinguished by the subsessile leaves, with petioles up to 1 cm long (vs. petioles > 1 cm long), and shorter inflorescences included within the subterminal flush of leaves (vs. inflorescences not included within the leaves).

Acknowledgments

We are grateful to curators of R, RB, SPF and UB herbaria for guidance when their collections were visited by P.F., to Vera Martins, from the Museu Nacional Herbarium (R), for help obtaining the high-resolution picture of Hoehne 5474, and to Hans-Helmut Poppendieck, from the Herbarium Hamburgense (HBG), for providing the high-resolution scanned image of Ule 2940 presented in this manuscript. Financial support was provided by FAPESP (post doctoral fellowship 2010/02814-7).

References

- Candolle, A.P. de (1830) Araliaceae. In: Candolle, A.P. de (Ed.) *Prodromus systematis naturalis regni vegetabilis* 4. Treuttel & Würtz, Paris, pp. 251–266.
<http://dx.doi.org/10.5962/bhl.title.286>
- Cannon, M.J. & Cannon, J.F.M. (2009) Araliaceae. In: Davidse, G., Sousa-Sánchez, M., Knapp, S. & Chiang, F. (Eds) *Flora Mesoamerica* 4, Part 1. Universidad Nacional Autónoma de México, Mexico City, pp. 365–385.
- Decaisne, J. & Planchon, J.E. (1854) Equisse d'une monographie des Araliacées. *Revue Horticole série 4* 3: 104–109.
- Fiaschi, P. (2005) Three new species of *Dendropanax* (Araliaceae) from the state of Bahia, Brazil. *Brittonia* 57: 240–247.
[http://dx.doi.org/10.1663/0007-196X\(2005\)057\[0240:tnsoda\]2.0.co;2](http://dx.doi.org/10.1663/0007-196X(2005)057[0240:tnsoda]2.0.co;2)
- Fiaschi, P. & Jung-Mendaçolli, S.L. (2006) New taxa of *Dendropanax* from the state of São Paulo, Brazil. *Candollea* 61: 457–466.
- Forster, J.R. & Forster, G. (1775) *Charteres generum plantarum*. Published by the authors, London, 75 pp., 78 pl.
<http://dx.doi.org/10.5962/bhl.title.4448>
- Frodin, D.G. (1975) Studies in *Schefflera* (Araliaceae): the *Cephaloschefflera* complex. *Journal of the Arnold Arboretum* 56: 427–448.
- Frodin, D.G. (1995) Neotropical montane Araliaceae: an overview. In: Churchill, S.P., Baslev, H., Forero, E. & Lutelyn, J.L. (Eds). *Biodiversity and conservation of Neotropical montane forests*. New York Botanical Garden, New York, pp. 421–430.
<http://dx.doi.org/10.1017/s0266467400010798>
- Frodin, D.G. & Govaerts, R. (2003, publ. 2004) *World Checklist and Bibliography of Araliaceae*. The Royal Botanic Gardens, Kew, 444 pp.
- Gmelin, J.F. (1791) *Caroli à Linné Systema Naturae*, 13rd edition, 2(1). G.E.Beer, Leipzig, 884 pp.
- Harms (1894) Araliaceae. In: Engler, H.G.A. & Prantl, K. (Eds) *Die natürlichen Pflanzenfamilien* 3.8. W.Engelmann, Leipzig, pp. 1–48.
- Hoehne, F.C. (1915) *Comissão de Linhas Telegraphicas, Estrategicas de Matto Grosso ao Amazonas. Annexo nº 5, Historia Natural, Botanica* 6. Rio de Janeiro, pp. 1–96, t. 113–131.
- Mabberley, D. (2008) *Mabberley's Plant-book, edition 3*. Cambridge University Press, Cambridge, 1021 pp.
- Marchal, E. (1878) Hederaceae. In: Martius, C.F.P. von & Eichler, A.G. (Eds) *Flora Brasiliensis* 11(1). Fleischer, Leipzig, pp. 229–258, tab. 66–71.
- Pires, J.M. & Prance, G.T. (1985) The vegetation types of the Brazilian Amazon. In: Prance, G.T. & Lovejoy, T.E. (Eds) *Key Environments: Amazonia*. Pergamon Press, Oxford, pp. 109–145.
- Plunkett, G.M., Lowry, P.P., Frodin, D.G. & Wen, J. (2005) Phylogeny and geography of *Schefflera*: pervasive polyphyly in the largest genus of Araliaceae. *Annals of the Missouri Botanical Garden* 92: 202–224.
- Ruiz López, H. & Pavón, J. (1794) *Flora Peruviana et Chilensis prodromus*. Imprenta de Sancha, Madrid, 153 pp., 37 pl.
- Shang, C.-B. & Lowry, P.P. (2007) Araliaceae. In: Wu, Z.-I. & Raven, P.H. (Eds) *Flora of China* 13: Clusiaceae through Araliaceae. Science Press, Beijing & Missouri Botanical Garden Press, St. Louis, pp. 435–491.
<http://dx.doi.org/10.3100/1043-4534-13.2.299>
- Smith, A.C. (1941) Nomenclatural notes on Araliaceae. *Tropical Woods* 66: 1–6.
- Smith, A.C. (1944) Araliaceae. In: Rickett, H.W. (Ed.) *North American Flora* 28B, Part 1. The New York Botanical Garden, New York, pp. 3–41.
- Taubert, P. (1896) Beiträge zur Kenntnis der Flora des centralbrasilianischen Staates Goyaz. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 21: 402–457.