

Ruellia malabarica, a superfluous name for *Andrographis echoides* (Acanthaceae)

Basil P.^{1*}, Arisdason W.¹ & C. Murugan²

¹ Botanical Survey of India, Southern Regional Centre, TNAU Campus, Coimbatore, Tamil Nadu – 641 003, India

² Botanical Survey of India, Headquarters, CGO Complex, 3rd MSO Building, Salt Lake, Kolkata, West Bengal – 700 064, India

*E-mail: basilpaul35@gmail.com

Abstract: *Ruellia malabarica* Kostel. is recognised here as a superfluous name for *Andrographis echoides* (L.) Nees (Acanthaceae).

Keywords: *Andrographis*, *Hortus Indicus Malabaricus*, Illegitimate name, *Justicia echoides*, *Pee-tumba*.

Introduction

Ruellia Plum. ex L. (Acanthaceae: Acanthoideae) is distributed chiefly in the tropical and subtropical regions to North America with c. 375 species globally (Manzitto-Tripp & Daniel, 2023). The genus is represented in India by 11 species (Arisdason *et al.*, 2020), of which four species, including two species recognised under *Dipteracanthus* Nees, are recorded in Kerala (Nayar *et al.*, 2006).

Rheede (1689) in *Hortus Indicus Malabaricus* provided a brief description and medicinal properties of the plant called “Pee-tumba” (Malayalam) with an illustration [Vol. 9: 87, t. 46 (Fig. 1)]. Kosteletzky (1834), gave the name *Ruellia malabarica* for Rheede’s tabula, and though he did not provide a description, his reference to ‘Rheede 9, t. 46’ validated the name. Hitherto, it has been considered as a distinct, endemic species, narrowly confined to the Malabar region of Kerala in different publications (Karthikeyan *et al.*, 2009; Nayar *et al.*, 2014; Singh *et al.*, 2015) and online databases, such as Plants of the World Online (POWO, 2023) and World Flora Online (WFO, 2023).

However, a perusal of the pertinent literature revealed that the Rheede’s tabula was treated as *Andrographis echoides* (L.) Nees by Clarke (1884). Whereas, Nicolson *et al.* (1988) recognised the tabula as *Indoneesiella echoides* (L.) Sreem. [= *Andrographis*

echoides (L.) Nees], but erroneously treated the name *Ruellia malabarica* Kostel. as a synonym of *Dipteracanthus patulus* (Jacq.) Nees. During the present study on the taxonomy of Acanthaceae in Kerala, a careful examination of Rheede’s tabula 46 (on which Kosteletzky (*l.c.*) established the name *Ruellia malabarica*) and the type of *Justicia echoides* L. (Herb. Hermann 4: 40, No. 21, BM-000628183, digital image!) revealed that *R. malabarica* is in fact *Andrographis echoides*. Linnaeus (1753) described *Justicia echoides* based on “*Herm. lugdb.* 668. t. 669” and “*Pee-tumba. Rheed. mal.* 9. p. 87. t. 46”. Therefore, *Ruellia malabarica* established by Kosteletzky (*l.c.*) based on one of the types (Rheede’s t. 46) of *Justicia echoides* is recognised here as an illegitimate superfluous name of the latter in accordance with Art. 52.2e (Turland *et al.*, 2018).



Fig. 1. Pee-tumba, tabula 46 of Rheede’s *Hortus Indicus Malabaricus*.

Received: 04.08.2023; Revised & Accepted: 24.12.2023

Published Online: 31.01.2024

Nomenclature

Andrographis echiioides (L.) Nees in Wall., Pl. Asiat. Rar. 3: 117. 1832.

≡ *Justicia echiioides* L., Sp. Pl.: 16. 1753. *Lectotype* (designated by Stearn ex L.H. Cramer, 1998): Herb. Hermann 4: 40, No. 21 (BM [BM-000628183, digital image!])

≡ *Indoneesiella echiioides* (L.) Sreem., Phytologia 16: 466. 1968.

Ruellia malabarica Kostel., Allg. Med.-Pharm. Fl. 3: 925. 1834, *nom. illeg. superfl.*

Acknowledgements

The authors express their sincere gratitude to Dr. A.A. Mao, Director, Botanical Survey of India and Dr. M.U. Sharief, Scientist 'F' and Head of Office, Botanical Survey of India, Southern Regional Centre, Coimbatore for facilities and encouragement. The authors are grateful to Dr. J. McNeill, Royal Botanic Garden, Edinburgh, U.K., Dr. K.N. Gandhi, Senior Nomenclatural Registrar, Harvard University Herbaria, Cambridge, USA, and Dr. Subir Bandyopadhyay, former Scientist, Central National Herbarium, Botanical Survey of India, Howrah for their clarification and expert opinion.

Literature Cited

- ARISDASON W., LAKSHMINARASIMHAN P., KARTHIGEYAN K., KRISHNA G., ALBERTSON W.D., VENU P., PANJA D., GHOSH T., DEBNATH H.S., GNANASEKARAN G., MURTHY G.V.S. & D.K. ROY 2020. Acanthaceae. In: MAO A.A. & S.S. DASH (eds.), *Flowering plants of India, an annotated checklist, dicotyledons*. Volume 2. Botanical Survey of India, Kolkata. pp. 270–319.
- CLARKE C.B. 1884. Acanthaceae. In: HOOKER J.D. (ed.), *The flora of British India*. Volume 4. L. Reeve & Co. Ltd., London. pp. 387–558.
- CRAMER L.H. 1998. Acanthaceae. In: DASSANAYAKE M.D. (ed.), *A revised handbook to the flora of Ceylon*. Volume 12. Oxford & IBH Publishers Co. Ltd., New Delhi. pp. 1–140.
- KARTHIKEYAN S., SANJAPPA M. & S. MOORTHY 2009. *Flowering plants of India. Dicotyledons*. Volume 1.

Acanthaceae – Avicenniaceae. Botanical Survey of India, Kolkata.

KOSTELETSKY V.F. 1834. *Allgemeine Medizinisch-Pharmazeutische Flora*. Volume 3. Borrosch & Andre, Prague.

LINNAEUS C. 1753. *Species Plantarum*. Volume 2. Impensis Laurentii Salvii, Holmiae.

MANZITTO-TRIPP E.A. & T.F. DANIEL 2023. Phylogeny and revised classification of New World *Ruellia*. *Taxon* 72(5): 1034–1056. <https://doi.org/10.1002/tax.13001>

NAYAR T.S., BEEGAM A.R., MOHANAN N. & G. RAJKUMAR 2006. *Flowering plants of Kerala: a handbook*. Tropical Botanic Garden and Research Institute, Thiruvananthapuram.

NAYAR T.S., BEEGAM A.R. & M. SIBI 2014. *Flowering plants of the Western Ghats, India*. Volume 1. Dicots. Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Thiruvananthapuram.

NICOLSON D.H., SURESH C.R. & K.S. MANILAL 1988. *An interpretation of van Rheede's Hortus Malabaricus*. *Regnum Vegetabile* 119. Koeltz Scientific Books, Königstein.

POWO 2023. *Plants of the World Online*. Facilitated by the Royal Botanic Gardens, Kew. Available at: <http://www.plantsoftheworldonline.org/> (Accessed on 28.07.2023).

RHEEDE H.A. VAN 1689. *Hortus Indicus Malabaricus*. Volume 9. Joannis and D.V. Joannis, Amsterdam.

SINGH P., KARTHIGEYAN K., LAKSHMINARASIMHAN P. & S.S. DASH 2015. *Endemic vascular plants of India*. Botanical Survey of India, Kolkata.

TURLAND N.J., WIERSEMA J.H., BARRIE F.R., GREUTER W., HAWKSWORTH D.L., HERENDEEN P.S., KNAPP S., KUSBER W.H., LI D.Z., MARHOLD K., MAY T.W., MCNEILL J., MONRO A.M., PRADO J., PRICE M.J. & G.F. SMITH (eds.) 2018. *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. *Regnum Vegetabile* 159. Koeltz Botanical Books, Glashütten. <https://doi.org/10.12705/Code.2018>

WFO 2023. *World Flora Online*. Available at: <http://www.worldfloraonline.org>. (Accessed on 28.07.2023).