

# adansonia

2025 • 47 • 6



343097

## Typification of three names in Indian Justiciinae Nees (Acanthaceae)

Samrat GOSWAMI,  
Soumya PULIYAKODE,  
Rohan MAITY &  
Sudhanshu Sekhar DASH



343097



DIRECTEUR DE LA PUBLICATION / PUBLICATION DIRECTOR: Gilles Bloch  
Président du Muséum national d'Histoire naturelle

RÉDACTEUR EN CHEF / EDITOR-IN-CHIEF: Thierry Deroin

RÉDACTEURS / EDITORS: Porter P. Lowry II; Zachary S. Rogers; Mathieu Gardère

ASSISTANT DE RÉDACTION / ASSISTANT EDITOR: Emmanuel Côté (adanson@mnhn.fr)

MISE EN PAGE / PAGE LAYOUT: Emmanuel Côté

COMITÉ SCIENTIFIQUE / SCIENTIFIC BOARD:

F. Blasco (CNRS, Toulouse)  
M. W. Callmänder (Conservatoire et Jardin botaniques de Genève)  
J. A. Doyle (University of California, Davis)  
P. K. Endress (Institute of Systematic Botany, Zürich)  
P. Feldmann (Cirad, Montpellier)  
L. Gautier (Conservatoire et Jardin botaniques de Genève)  
F. Ghahremaninejad (Kharazmi University, Téhéran)  
K. Iwatsuki (Museum of Nature and Human Activities, Hyogo)  
A. A. Khapugin (Tyumen State University, Russia)  
J.-Y. Lesouef (Conservatoire botanique de Brest)  
P. Morat (Muséum national d'Histoire naturelle, Paris)  
J. Munzinger (Institut de Recherche pour le Développement, Montpellier)  
S. E. Rakotoarisoa (Millenium Seed Bank, Royal Botanic Gardens Kew, Madagascar Conservation Centre, Antananarivo)  
P. H. Raven (Missouri Botanical Garden, St. Louis)  
G. Tohmé (Conseil national de la Recherche scientifique Liban, Beyrouth)  
J. G. West (Australian National Herbarium, Canberra)  
J. R. Wood (Oxford)

COUVERTURE / COVER:

Réalisée à partir des Figures de l'article/Made from the Figures of the article.

*Adansonia* est indexé dans / *Adansonia is indexed in:*

- Science Citation Index Expanded (SciSearch®)
- ISI Alerting Services®
- Current Contents® / Agriculture, Biology, and Environmental Sciences®
- Scopus®

*Adansonia* est distribué en version électronique par / *Adansonia is distributed electronically by:*

- BioOne® (<http://www.bioone.org>)

*Adansonia* est une revue en flux continu publiée par les Publications scientifiques du Muséum, Paris  
*Adansonia is a fast track journal published by the Museum Science Press, Paris*

Les Publications scientifiques du Muséum publient aussi / The Museum Science Press also publish: *Geodiversitas*, *Zoosystema*, *Anthropozoologica*, *European Journal of Taxonomy*, *Naturae*, *Cryptogamie* sous-sections *Algologie*, *Bryologie*, *Mycologie*, *Comptes Rendus Palevol*

Diffusion – Publications scientifiques Muséum national d'Histoire naturelle  
CP 41 – 57 rue Cuvier F-75231 Paris cedex 05 (France)  
Tél.: 33 (0)1 40 79 48 05 / Fax: 33 (0)1 40 79 38 40  
[diff.pub@mnhn.fr](mailto:diff.pub@mnhn.fr) / <http://sciencepress.mnhn.fr>

© Publications scientifiques du Muséum national d'Histoire naturelle, Paris, 2025  
ISSN (imprimé / print): 1280-8571/ ISSN (électronique / electronic): 1639-4798

# Typification of three names in Indian Justiciinae Nees (Acanthaceae)

**Samrat GOSWAMI**  
**Soumya PULIYAKODE**  
**Rohan MAITY**

Botanical Survey of India, Central National Herbarium, Howrah – 711 103, West Bengal (India)

**Sudhanshu Sekhar DASH**

Botanical Survey of India, CGO Complex, 3<sup>rd</sup> MSO Building, Salt Lake,  
Sector – I, Kolkata – 700 064, West Bengal (India)  
[ssdash2002@gmail.com](mailto:ssdash2002@gmail.com) (corresponding author)

Submitted on 3 October 2024 | accepted on 6 November 2024 | published on 24 March 2025

Goswami S., Puliyakode S., Maity R. & Dash S. S. 2025. — Typification of three names in Indian Justiciinae Nees (Acanthaceae). *Adansonia*, sér. 3, 47 (6): 41-46. <https://doi.org/10.5252/adansonia2025v47a6>. <http://adansonia.com/47/6>

## KEY WORDS

Justicieae,  
Justiciinae,  
Justicia,  
Rungia,  
lectotypification.

## ABSTRACT

In course of on-going taxonomic studies on the subtribe Justiciinae Nees (Acanthaceae Juss.: Justicieae Dumort.), lectotypes for three names *viz.* *Justicia craibii* W.W. Smith, *Rungia muralis* Nees and *Rungia punduana* Wall. ex Nees are designated here.

## MOTS CLÉS

Justicieae,  
Justiciinae,  
Justicia,  
Rungia,  
lectotypification.

## RÉSUMÉ

*Typification de trois noms dans les Justiciinae Nees (Acanthaceae) indiennes.*

Au cours d'études taxonomiques sur la sous-tribu des Justiciinae Nees (Acanthaceae Juss.: Justicieae Dumort.), des lectotypes pour trois noms, à savoir, *Justicia craibii* W.W. Smith, *Rungia muralis* Nees et *Rungia punduana* Wall. ex Nees, sont désignés ici.

## INTRODUCTION

The family Acanthaceae Juss. with about 4900 species under 191 genera distributed worldwide (Manzitto-Tripp *et al.* 2022), is one of the most taxonomically diverse and complex groups of flowering plants. The genus *Justicia* L. with about 1000 species (Manzitto-Tripp *et al.* 2022) and *Rungia* Nees with about 50 species (Deng *et al.* 2020) worldwide, are two pantropic genera belonging to the sub-tribe Justiciinae Nees under the tribe Justicieae Dumort. in this family (Graham 1988; Manzitto-Tripp *et al.* 2022). In India, 81 taxa (72 species and 9 varieties) were reported combinedly for both the genera *Justicia* and *Rungia* (Arisdason *et al.* 2020; Bhattacharya & Karthigeyan 2023); whereas, in Pan-Himalayan region only 20 species of *Justicia* and five species of *Rungia* were documented (Deng *et al.* 2020).

While working on the comprehensive account of these two genera in India, it was found that, though many new species have been described from this complex, many of the original materials did not explicitly indicate the types or the specific herbaria where the types were deposited. In the present communication, lectotypification of three such names, *viz.*: *Justicia craibii* W.W. Smith, *Rungia muralis* Nees and *Rungia punduana* Wall. ex Nees are discussed, strictly adhering the provisions laid in the International Code of Nomenclature for algae, fungi, and plants (Turland *et al.* 2018) for fixing the application of these names.

## SYSTEMATICS

Family ACANTHACEAE Juss.  
Genus *Justicia* L.

*Justicia craibii* W.W. Smith

*Records of the Botanical Survey of India* 4: 285 (Smith 1913). — Type: **India** • Haflong, North Cachar Hills, Assam; s.d.; W.G. Craib No. 463; lectotype: CAL[CAL0000020181]! here designated (Fig. 1) • same data; residual syntypes: CAL[CAL0000020180, CAL0000020182]!, K[K000884071, K000884072]!).

## NOTES

*Justicia craibii* W.W.Sm. (Smith 1913) was described based on collections of W.G. Craib from Haflong, North Cachar Hills in Assam, having the number 463. While searching the type materials for the name *J. craibii* W.W. Sm., five sheets of Craib's collection were traced, out of which three are at CAL (CAL0000020180, CAL0000020181 and CAL0000020182) and two sheets at K (K000884071 and K000884072). Therefore, all the specimens are considered as original material, and as well as the syntypes, *vide* Art. 9.4 and 9.6 of ICN (Turland *et al. l.c.*). The specimen bearing the barcode, CAL0000020181 contains an annotation of Smith, who identified the specimen as type for *J. craibii*. This specimen at CAL[CAL0000020181] is complete with well-preserved flower buds, inflorescence and fruits which agrees exactly with the description provided in the protologue. Hence, CAL0000020181 is selected here as the lectotype of the name *J. craibii* W.W. Smith.

Genus *Rungia* Nees

*Rungia muralis* Nees

*Prodromus Systematis Naturalis Regni Vegetabilis* 11: 470 (Nees 1847). — Type: **India** • “Coromandel”; s.d.; Macé *s.n.*; lectotype: P[P02898041]! here designated (Fig. 2) • same data; isolectotype: P[P02898039]! digital image • same location; “Coromandel”; s.d.; Macé “n. 114”; residual syntypes: GZU[GZU000250321, *pro parte*]!; “In muris Bernhampore ad Gangetem fluvium”, GZU[GZU000250323]!).

## NOTES

C.G.D. Nees von Esenbeck (1847) described *Rungia muralis* Nees in de Candolle's “Prodromus Systematis Naturalis Regni Vegetabilis”, Volume 11 based on multiple gatherings and cited the specimen details as: “4 In muris Bernhampore ad Gangetem fluvium, in Courtallum (Wight!), Coromandel (Macé! In h. Mus. Paris. et Nees, n. 114)”. Thus, it is apparent that, while describing the species, Nees referred to multiple collections – plants growing on the walls of Bernhampur, near the river Ganges and collection from Courtallum by Wight along with collections from Coromandel by Macé deposited in P and the specimen deposited in Nees's own herbarium (GZU) labelled n.114. This referring of multiple collections, requires lectotypification of the name *Rungia muralis*. In our search we found four herbarium sheets, two at herbarium of Karl-Franzens-Universität Graz (GZU) and two sheets at herbarium of Muséum national d'Histoire naturelle (P). The two specimens at P (P02898039 and P02898041), were collected from Coromandel, by Macé; while one of the two herbarium sheets present at GZU (GZU000250323) contains a single individual with a label mentioning *Rungia muralis* on the walls at Bernhampore, Ganges, collected by Wight. The other sheet at GZU (GZU000250321) contains two individuals with two different labels; of which, one label as “HERB. MUS. PARIS” printed on it showing the details as “*Rungia muralis*” collected from Coromandel by Macé, and possesses the number 114. The other label reads as “*R. muralis* ex. h. Roxb.”, which indicates that the specimen was received from Roxburgh's collection. Scrutiny of literature confirmed the annotation “*R. muralis* ex. h. Roxb.” and “*Rungia muralis*” on GZU000250321 does not match with Roxburgh's handwriting (Steinberg 1977); but confirmed to be of Nees (Burdet 1977). This implies that Nees had studied the specimens and pasted an annotation crediting Roxburgh for the sample. This creates an ambiguity regarding the source of the individuals on GZU000250321, i.e. which one is Macé's collection from “Coromandel” with “n. 114” and which one was received from Roxburgh's collection. Therefore, selection of any individual from GZU000250321 for lectotypification of the name *Rungia muralis* Nees may not be correct, as it does not confirm which specimen was cited by Nees in protologue. The specimen collected from Coromandel by Macé deposited in P (P02898041) for being one of the best-preserved original materials, representing better morphological characters and not being in any conflict with the protologue, is selected here as the lectotype of the name *Rungia muralis* Nees, in accordance with Art. 9.3, 9.11 and 9.12 of ICN (Turland *et al.* 2018).



Fig. 1. — Lectotype of *Justicia craibii* W.W. Smith (CAL, barcode CAL0000020181) © Director, Botanical Survey of India, Kolkata.

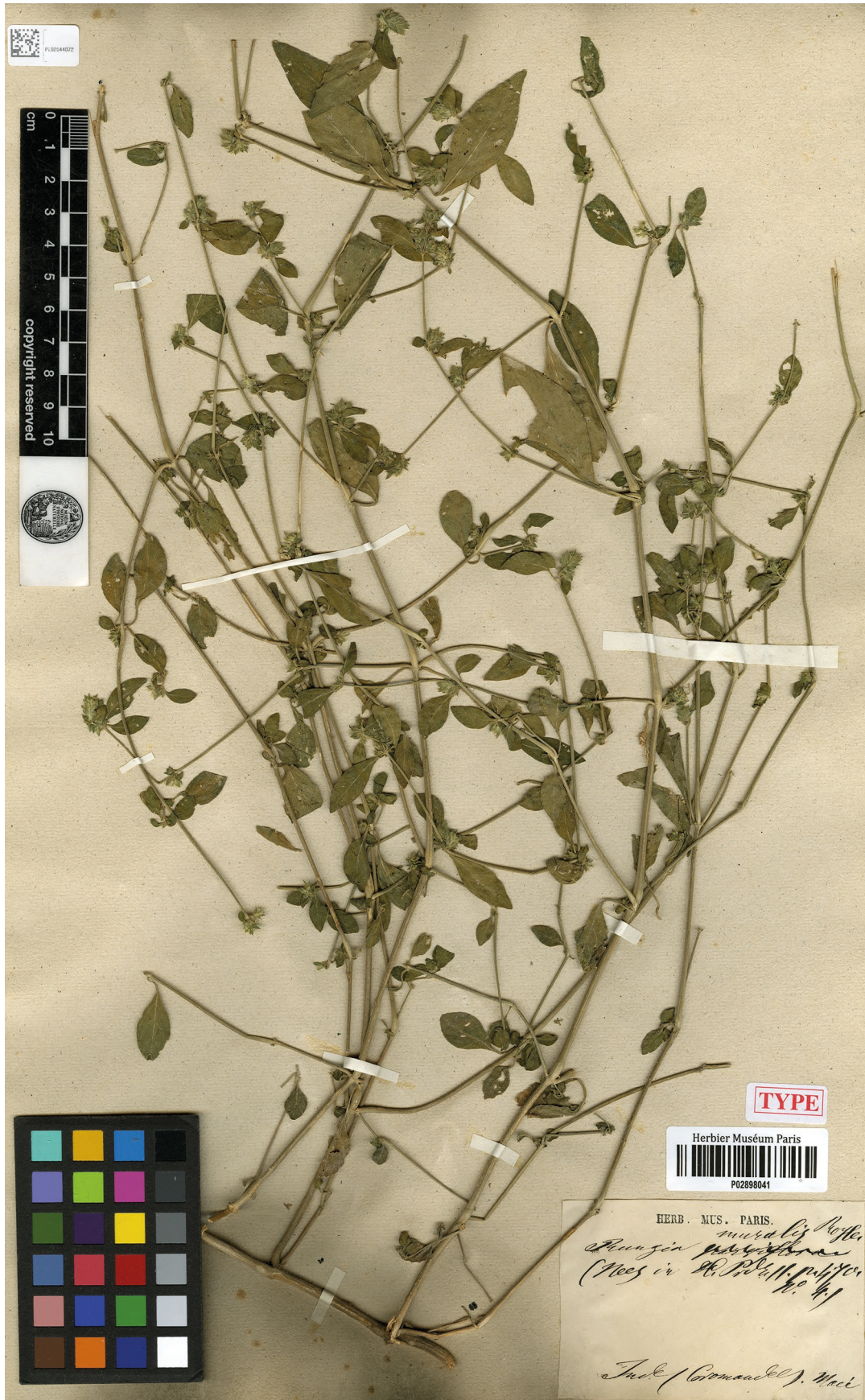


Fig. 2. — Lectotype of *Rungia muralis* Nees (P barcode P02898041) © Muséum national d'Histoire naturelle (P), Paris.



Fig. 3. — Lectotype of *Rungia punduana* Wall. ex Nees (GZU, barcode [GZU000251499](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63864-p0025-1-499-9)) © the Karl-Franzens-Universität Graz (GZU), Austria.

*Rungia punduana* Nees

*Plantae Asiaticae Rariores* 3: 110. (Nees 1832). — Type: **India** • “In Pundua legit Fr. de Silva”; lectotype: GZU[GZU000251499]! here designated (Fig. 3) • residual syntype: BM[BM000950153]!).

NOTES

The name *Rungia punduana* Nees was first appeared in Wallich’s Catalogue with the number “2453” without any description. Nees von Esenbeck in 1832, validated the name and validly published in “*Plantae Asiaticae Rariores*”; with an annotation of specimen as “In Pundua legit Fr. de Silva” ascribing to Francis de Silva, one of the collectors of Nathaniel Wallich (Nees 1832). While working on Indian Justiciinae, two herbarium sheets of *Rungia punduana* Nees were traced; one at BM (BM000950153) with a single individual with label as “INDIA, WALLICH, 2453” without any details on locality and collector. The other herbarium sheet at GZU (GZU000251499) is also with a single individual with label details mentioned as “*Rungia punduana*, Pandua, Wall. Cat. no. 2453” and the collection was credited to Fr. De Silva. Both the specimens are to be treated as original material and therefore, are the syntypes in accordance with the Art. 9.6 of ICN (Turland *et al.* 2018). The specimen at GZU(GZU000251499), is well preserved and matches perfectly with the protologue which leads to its selection as the lectotype of the name *Rungia punduana* Nees in accordance to Article 9.3, 9.11 and 9.12 of ICN (Turland *et al.* 2018).

Acknowledgements

The authors are grateful to Dr A. A. Mao, Director, Botanical Survey of India (BSI), for encouragement and facility. Authors are also grateful to Curators and In-charges of BM, CAL, GZU, K and P for providing high resolution images of type materials. The first two authors (SG & SP) duly acknowledge Botanical Survey of India, Ministry of Environment, Forest and Climate Change, Government of India, for the Research Fellowship received under *Flora of India* Project and Research Associate Programme. Drs Carrie A. Kiel and Thierry Deroin are also thanked for their remarks on a previous version of the manuscript.

REFERENCES

ARISDASON W., LAKSHMINARASIMHAN P., KARTHIGEYAN K., KRISHNA G., ALBERTSON D., VENU P., PANJA D., GHOSH T., DEBNATH H. S., GNANASEKARAN G., MURTHY G. V. S. & ROY D. K. 2020. — Acanthaceae, in DASH S. S. & MAO A. A. (eds), *Flora of India, an Annotated Checklist, Dicotyledons*. Volume 2. Botanical Survey of India, Kolkata: 287-294.

BHATTACHARYA J. & KARTHIGEYAN K. 2023. — Subtribe Justiciinae Nees (= Eujusticieae), in LAKSHMINARASIMHAN P., ARISDASON W., KARTHIGEYAN K., KRISHNA G. & MAO A.A. (eds), *Flora of India*. Volume 20. Botanical Survey of India, Kolkata, 368 p.

BURDET H. M. 1977. — Cartulae ad botanicorum graphicem. X. *Candollea* 32 (1): 189-190.

DENG Y., LI Z. Y., WANG Q. & PENG H. 2020. — *Rungia* Nees and *Justicia* L., in HONG D. Y. (ed.), *Flora of Pan-Himalaya*. Volume 46. Science Press, Beijing: 381-431.

GRAHAM V. A. 1988. — Delimitation and infra-generic classification of *Justicia* (Acanthaceae). *Kew Bulletin* 44 (4): 551-624. <https://doi.org/10.2307/4129957>

MANZITTO-TRIPP E. A., DARBYSHIRE I., DANIEL T. F., KIEL C. A. & MCDADE L. A. 2022. — Revised classification of Acanthaceae and worldwide dichotomous keys. *Taxon* 71 (1): 103-153. <https://doi.org/10.1002/tax.12600>

NEES VON ESENBECK C. G. D. 1832. — Acanthaceae indiae orientalis, in WALLICH N. (ed), *Plantae Asiaticae Rariores*. Volume 3. Treuttel, Wurtz, Richter, London: 110-111.

NEES VON ESENBECK C. G. D. 1847. — Acanthaceae, in DE CANDOLLE A. P. (ed.), *Prodromus systematis Naturalis Regni Vegetabilis*. Volume 2. Treuttel & Würz, Paris: 470-471. <https://doi.org/10.5962/bhl.title.286>

SMITH W. W. 1913. — Four new species of the compositae from South India and a *Justicia* from Assam. *Records of Botanical Survey of India*. Volume 4. Calcutta, India, 285 p.

STEINBERG C. H. 1977. — The collectors and collections in the Herbarium Webb. *Webbia* 32 (1): 1-49. <https://doi.org/10.1080/00837792.1977.10670081>

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. & SMITH G. F. (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>

Submitted on 3 October 2024;  
accepted on 6 November 2024;  
published on 24 March 2025.