

Lectotypification of *Ischaemum thomsonianum* Stapf ex C.E.C.Fisch. (Poaceae: Panicoideae: Andropogoneae)

Settipalle GURAPPA &
Thiruppathi SENTHIL KUMAR



DIRECTEUR DE LA PUBLICATION / PUBLICATION DIRECTOR: Bruno David
Président du Muséum national d'Histoire naturelle

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

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

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

MISE EN PAGE / PAGE LAYOUT: Emmanuel Côté

COMITÉ SCIENTIFIQUE / SCIENTIFIC BOARD:

P. Baas (Nationaal Herbarium Nederland, Wageningen)
F. Blasco (CNRS, Toulouse)
M. W. Callmender (Conservatoire et Jardin botaniques de la Ville 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 Jardins botaniques de la Ville de Genève)
F. Ghahremaninejad (Kharazmi University, Téhéran)
K. Iwatsuki (Museum of Nature and Human Activities, Hyogo)
A. A. Khapugin (Tyumen State University, Russia)
K. Kubitzki (Institut für Allgemeine Botanik, Hamburg)
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 / <http://sciencepress.mnhn.fr>

© Publications scientifiques du Muséum national d'Histoire naturelle, Paris, 2022
ISSN (imprimé / print): 1280-8571/ ISSN (électronique / electronic): 1639-4798

Lectotypification of *Ischaemum thomsonianum* Stapf ex C.E.C.Fisch. (Poaceae: Panicoideae: Andropogoneae)

Settipalle GURAPPA
Thirupathi SETHIL KUMAR

Department of Botany, Bharathidasan University, School of Life Sciences,
Tiruchirappalli – 620 024, Tamil Nadu (India)
sgurappa2014@gmail.com
senthilbdc@bdu.ac.in (corresponding author)

Submitted on 27 January 2022 | accepted on 18 March 2022 | published on 18 July 2022

Gurappa S. & Senthil Kumar T. 2022. — Lectotypification of *Ischaemum thomsonianum* Stapf ex C.E.C.Fisch. (Poaceae: Panicoideae: Andropogoneae). *Adansonia*, sér. 3, 44 (20): 211-214. <https://doi.org/10.5252/adansonia2022v44a20>. <http://adansonia.com/44/20>

KEY WORDS

India,
Presidency of Madras,
Gideon Thomson,
grass,
lectotypification.

MOTS CLÉS

Inde,
Province de Madras,
Gideon Thomson,
graminée,
lectotypification.

ABSTRACT

In the systematic study of Panicoid grasses of southern India and in the process of taxonomic validation of grasses described from India, *Ischaemum thomsonianum* Stapf ex C.E.C.Fisch. is lectotypified with taxonomic notes.

RÉSUMÉ

Lectotypification de Ischaemum thomsonianum Stapf ex C.E.C.Fisch. (Poaceae: Panicoideae: Andropogoneae).
Dans l'étude systématique des graminées panicoides du sud de l'Inde et dans le processus de validation taxonomique des graminées décrites de l'Inde, *Ischaemum thomsonianum* Stapf ex C.E.C.Fisch. est lectotypifiée avec des notes taxonomiques.

INTRODUCTION

Ischaemum L. (Linnaeus 1753: 1049), a tropical grass genus of 82 species, is distributed worldwide (Clayton *et al.* 2006). It is represented in India by 62 species, two varieties and three sub-varieties (Prasanna pers. comm. 2021). The genus is currently treated in the tribe Andropogoneae subfamily Panicoideae of Poaceae (Kellogg *et al.* 2020). *Ischaemum thomsonianum* Stapf ex C.E.C. Fisch. was described by Fischer (1934: 1722) from Peninsular India based on the specimens collected by G. Thomson from “Mysore; Cochin; Travancore; up to 3,000 ft.” Native range: India to China (Yunnan) and Indo-China: India, Bangladesh, Myanmar, Andaman & Nicobar islands, South-central China and Vietnam. In India, it is reported from Maharashtra, Karnataka and Kerala (Kellogg *et al.* 2020; POWO 2021).

During the taxonomic study of Panicoideae, the authors found that the species name *I. thomsonianum* Stapf ex C.E.C. Fisch. requires lectotypification. While searching for the original material from the habitat India on which the species was based, four specimens of Gideon Thomson, Esq. (brother of Thomas Thomson (1817-1878; Superintendent of Botanical Garden, Calcutta: 1854-1861) were located. There are two sheets at Kew (K: Circular Ink/hand stamp ‘Herbarium Hookerianum 1867’: Madras collection number 99), one in Royal Botanic Garden, Edinburgh (E) and another at Central National Herbarium (CAL): 1) Maisor & Carnatic, Madras, *G. Thomson s.n.* (K000245701), labeled as the type material with no date of collection but with scattered illustrations drawn on the sheet; 2) Maisor and Carnatic, 1899, *G. Thomson s.n.* (K000245702), with pencil illustrations on a pasted paper; 1899, the year of collection mentioned in the Kew data sheet (K000245702) is an obvious error for C.B. Clarke’s workout date on the sheet in September 1899; 3) Maisor & Carnatic, *G. Thomson s.n.* (E00393557) which was again of original material from ‘Herbarium Hookerianum 1867’ presented by the Herbarium, Royal Gardens, Kew, with isotype label; and 4) Madras & Concan, 1852, *G. Thomson s.n.* (CAL0000002287); P.R. Sur (*det.*; *s.d.*); isotype as per Srivastava & Nair (2010: 89) and Singh & Rao (2008: 824). The last-specimen mentioned (CAL0000002287) is a different collection and not from the type locality. Obviously, it is not an isotype as labeled or cited in the literature. Furthermore, this specimen was not cited either by Hooker filius or Fischer in the species accounts concerned. Moreover, the first three (K, E) are the specimens (sheets) authenticated by Fischer in 1932.

TYPIIFICATION

Family POACEAE Barnh.
Genus *Ischaemum* L.

Ischaemum thomsonianum Stapf ex C.E.C. Fisch.
(Fig. 1)

Flora of the Presidency of Madras 3: 1722 (Fischer 1934).

TYPE CITATION. — “Mysore; Cochin; Travancore; up to 3,000 ft.”

LECTOTYPE (here designated). — **India.** Maisor & Carnatic, *G. Thomson s.n.* (lecto-, K[K000245702, image!]; isolecto-, K[K000245701, image!]; E[E00393557, image!]).

DISTRIBUTION. — **India.** Karnataka, Kerala, Maharashtra and Tamil Nadu.

REMARKS

Hooker filius (1897: 135) identified the grass specimens of G. Thomson from “Mysore or the Carnatic” as *Ischaemum murinum* Forst. in September 1889, C.B. Clarke dissected the type material, illustrated it (as can be seen from the original material of two sheets at Kew, cited in the ‘Introduction’) and identified it to be the species of Forster (Forster 1780: 185). But, later, on examination, O. Stapf found it different from the New Caledonian species *I. murinum* Forst. (Native range from New Guinea to SW Pacific) and assigned the name *I. nonum* Stapf (*det.*; *s.d.*).

Having confirmed of its distinct identity, Fischer (1934: 1722) provided a new replacement name “*Ischaemum thomsonianum*, Stapf MS., n. nom. differently from *I. murinum* Hook.f. non Forst.; FBI. vii. 135”, as suggested by Stapf in preference (cf. determinavit slip on the original material by C.E.C. Fischer; 14.IX.1932 at K and 20.XII.1932 at E).

No later homonym situation arise in the present case but misapplication of a validly published name.

While proposing the new name in *Flora of Madras*, Fischer (1934: 1722) proposed the name in the species list of *Ischaemum* with its distribution as “Mysore; Cochin; Travancore; up to 3,000 ft.’. The name has a diagnostic key (Fischer 1934: 1719) but no description following the name, as per the format of *Flora of Madras*. The description was provided earlier by Hooker filius (1896 [“1897”]). Moreover, Fischer (1934: 1722) proposed a new name but not a new species, which was an error. However, having mentioned “non G. Forst.” he excluded its type. Conversely, *I. thomsonianum* is an accepted name (Bor 1960; Karthikeyan *et al.* 1989; Sur 2001; Srivastava & Nair 2010; Kellogg *et al.* 2020) but needs lectotypification according to ICN for Algae, Fungi, and Plants (Turland *et al.* 2018).

Finally, of the original material housed at Kew, the specimen K000245702 is the most suitable having pencil sketches (drawings of dissected floral parts pasted at one place) by C.B. Clarke, and the sheet matches well with the key provided by Fischer in *Flora of Madras* (Fischer 1934: 1719). Therefore, it was chosen and designated here as lectotype for *I. thomsonianum* Stapf ex C.E.C. Fisch.

Acknowledgements

The authors are grateful to Dr Kanchi N. Gandhi (Nomenclature Registrar, Harvard Herbaria), Professor Dr Vatsavaya S. Raju (Kakatiya University, Warangal, India) and Dr P. V. Prasanna (Botanical Survey of India, Deccan Regional Centre, Hyderabad) for their constructive criticism on the manuscript, Dr Alok R. Chorgha (Rajiv Gandhi Regional



Fig. 1. — Lectotype of *Ischaemum thomsonianum* Stapf ex C.E.C. Fisch. (K000245702). © The Board of Trustees of the Royal Botanic Gardens, Kew.

Museum of Natural History, Sawai Madhopur, Rajasthan) for academic help, and the Keeper, Kew Herbarium, for making available the digital images of type specimens for examination while the copy rights of their use rests with the Kew. Thanks are due to the Director, Botanical Survey of India and Dr R. K. Gupta (HoO, CNH), Kolkata for providing the digital image of type specimen, Dr A. Lakshmi Prabha, Professor and Head, Department of Botany, Bharathidasan University, Tiruchirappalli for facilities and Dr M. V. Rao, retired Professor, Department of Botany, for encouragement, and DST-PURSE (Grant No.SR/PURSE Phase 2/16) and UGC-SAP DRS-II (No.F.5-13/2018/DRS-II (SAP-II), for financial support.

REFERENCES

- BOR N. L. 1960. — *The Grasses of Burma, Ceylon, India and Pakistan (excluding Bambuseae)*. Pergamon Press, Oxford, 767 p.
- CLAYTON W. D., VORONTSOVA M. S., HARMAN K. T. & WILLIAMSON H. 2006 (onwards). — GrassBase – The Online World Grass Flora. <http://www.kew.org/data/grass-db.html>.
- FISCHER C. E. C. 1934. — *Flora of the Presidency of Madras*. Vol. 3. Adlard & Son, Limited, London: 1348-2017.
- FOREST G. 1780. — *Nova Acta Regiae Societatis Scientiarum Upsaliensis*. Vol. 3. Almqvist & Wiksells, Uppsala, 354 p.
- HOOKE J. D. (1896) 1897. — *The Flora of British India*. Vol. 7. Reeve and Co., London, 842 p. <https://www.biodiversitylibrary.org/page/18722702>
- KARTHIKEYAN S., JAIN S. K., NAYAR M. P. & SANJAPPA M. 1989. — *Florae Indicae Enumeratio: Monocotyledonae*. Botanical Survey of India, Calcutta, 435 p.
- KELLOGG E. A., ABBOTT J. R., BAWA K. S., GANDHI K. N., KAILASH B. R., GANESHIAH K. N., SHRESTHA U. B. & RAVEN P. H. 2020. — Checklist of the grasses of India. *PhytoKeys* 163: 1-560. <https://doi.org/10.3897/phytokeys.163.38393>
- LINNAEUS C. VON 1753. — *Species Plantarum*. Vol. 2. Holmiæ, impensis Laurentii Salvii, 1200 p. <https://www.biodiversitylibrary.org/page/26068530>
- POWO 2021. — Plants of the World Online. Published by the Royal Botanic Gardens, Kew. <https://powo.science.kew.org/taxon/406314-1> (retrieved: 20 Sept. 2021).
- SINGH R. K. & RAO P. S. N. 2008. — The genus *Ischaemum* L. (Poaceae) in India. *Journal of Economic and Taxonomic Botany* 32 (4): 797-826.
- SRIVASTAVA S. K. & NAIR V. J. 2010. — Genus *Ischaemum* L. (Poaceae) in India. *Nelumbo* 52: 63-92.
- SUR P. R. 2001. — A revision of the genus *Ischaemum* Linn. (Poaceae) in India. *Journal of Economic and Taxonomic Botany* 25: 407-438.
- 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. 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 27 January 2022;
accepted on 18 March 2022;
published on 18 July 2022.