

Lectotypification of two names of the genus *Eranthemum* (Acanthaceae: Acanthoideae)

Das K.K. & D. Bhattacharyya*

Plant Taxonomy and Biosystematics Laboratory, Department of Life Science & Bioinformatics,
Assam University, Silchar, Assam-788 011, India

*E-mail: dbhattacharyya_au@yahoo.in

Abstract: Lectotype is designated here for two names of *Eranthemum* L. (Acanthaceae) viz. *E. purpurascens* Buch.-Ham. ex Nees and *E. strictum* Colebr. ex Wall.

Keywords: *Eranthemum purpurascens*, *E. strictum*, India, Nomenclatural type, Ruellieae, Taxonomy.

Introduction

The shrubby genus *Eranthemum* L., placed within the subtribe Erantheminae Nees under the tribe Ruellieae Dumort. of the subfamily Acanthoideae of Acanthaceae (Manzitto-Tripp *et al.*, 2021), comprises approximately 30 species globally, primarily distributed across tropical and subtropical regions of Southern Asia (Kladwong & Chantaranonthai, 2021). In India, 12 species and one variety are recognized (Arisdason *et al.*, 2020); subsequently, a recent distributional addition of *Eranthemum burmanicum* N.P.Balakr. (Dey *et al.*, 2023) was reported making a total of 13 species and one variety currently from the country. The genus is morphologically characterized by hypocrateriform, sub-equally 5-lobed corollas contorted in bud, two fertile stamens, two staminodes, and discoid compressed seeds bearing pubescent hygroscopic trichomes (Deng, 2020). While undertaking a detailed taxonomic study of *Eranthemum* in Assam, India, the necessity for lectotypification of two names, *E. purpurascens* and *E. strictum*, was necessitated. This study designates lectotype of these two names to provide nomenclatural clarity and aid in future taxonomic assessments.

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Typification

Eranthemum purpurascens Buch.-Ham. ex Nees in Wall., Pl. Asiat. Rar. 3:106. 1832. *Lectotype* (designated here): INDIA, Mungyr, '*Eranthemum purpurascens* Mihi, 09.10.1811, *Buch.-Ham. s.n.* (GZU [GZU000249948 digital image!]); isolecto K [K001116190 digital image!]; residual syntypes K [K001116191 digital image!], E [E00417705 digital image!]).

Fig. 1

Notes: Nees Von Esenbeck (1832) described *Eranthemum purpurascens* by citing "*Eranthemum montanum* Wall. Cat. n. 2492 e. *Justicia purpurascens* Herb. Hamilt. Wall. 1. C" as synonym. Upon examination of the Wallich Catalogue, *E. montanum* is listed under entry no. 2492, with five subordinate entries (2492a–e) enumerated under this name. Among these, entry no. 2492e corresponds to *Justicia purpurascens* Buch.-Ham. which can only be considered as a synonym of *E. purpurascens* other than the remaining four names (2492a–d) since *J. purpurascens* was explicitly cited by Nees in the protologue. According to Art. 36.1(b) of the *International Code of Nomenclature for algae, fungi, and plants* (Turland *et al.*, 2025), *Justicia purpurascens*, having been cited only as a synonym, constitutes a pro-synonym of *Eranthemum purpurascens*.

In the protologue of *Eranthemum purpurascens*, Nees von Esenbeck cited "In Monghir et Munihari, d. 9 Octobris a. 1811. (Hamilton.)" which clearly indicates that the description was based on at least two separate gatherings made by Buchanon (later

Hamilton). The first gathering was from Monghir (Bihar) on 9 October 1811, and the second from around 100 kms away from Monghir i.e. Munihari (Bihar) on 18 February 1810. A careful examination of Hamilton's collections reveals that herbarium label attached with the materials have two different handwriting with different ink colour. 'Justicia purpurascens', 'Mungyr 9 Oct 1811', 'Mungyr hills 9 Nov. 1811 (likely a writing error for October)' and 'Monihari 18 Feb 1810' were annotated by Hamilton and 'Eranthemum purpurascens Mihi', 'Monihari (in GZU000249948)' and '2492e' were annotated by Nees. A mixture of two specimens on a single sheet each from both localities was also observed with different labels and barcodes (K001116190, K001116191). A possible reason for the varied labels on the sheets with different dates and localities is that, due to a limited number of duplicates, Wallich sometimes combined multiple gatherings and distributed them under single entry number (pers. comm.



Fig. 1. Lectotype of *Eranthemum purpurascens* Nees, (GZU [GZU000249948]). © Karl- Franzens-University Graz, Herbarium GZU. Reproduced with permission.

Mark Watson, RBGE, May 2025).

Upon examination of specimens housed at E, GZU and K (abbreviations by Thiers, updated continuously), we were able to locate four specimens attributable to the name *Eranthemum purpurascens*. Of these, two specimens—K001116190 (the lowermost leafy twig and the flowering twig at right side of the sheet) and GZU000249948—correspond to gathering 1 i.e. from Monghir, Bihar and two specimens—E00417705 and K001116191—are associated with gathering 2 (Monihari, Bihar). All four specimens represent original material, as they bear leafy twigs with distinct flowering branches and contain annotations and locality data consistent with the protologue. Therefore, in accordance with Art. 9.6 (Turland *et al.*, 2025), all four specimens qualify as syntypes.

The name *Eranthemum purpurascens* was published without the designation of a type. Accordingly, the specimen preserved at GZU (GZU000249948) is designated here as the lectotype, in accordance with Art. 9.3 (Turland *et al.*, 2025). This specimen is well preserved, bearing both distinct leafy and flowering twigs, and includes annotations in the author's own handwriting, thus fulfilling the criteria for lectotypification.

Eranthemum strictum Colebr. ex Wall. in Carey & Wallich ed., Fl. Ind. 1: 114. 1820. *Lectotype* (designated here): INDIA, H.B.C., '*Eranthemum strictum*', *s.d.*, *s.coll. s.n.* (K [K001116205 digital image!]; isolecto GZU [GZU000249976 digital image!], CAL [CAL0000019476 digital image!]).

Fig. 2

Notes: Wallich (1820) described *Eranthemum strictum* without indicating a type. In the original description, he noted that the species was "A native of the mountains near Sylhet, and from thence introduced into the Botanic garden in 1813, where it produces its beautiful large blossoms in succession in the months of January, February, and March." The above citation clearly indicates that no specimens of *E. strictum* were collected from the wild in Sylhet; rather, only living material was sent from Sylhet to the

Calcutta Botanic Garden in 1813 for cultivation. Although, no herbarium specimens were explicitly cited in the protologue, it is evident that Wallich used specimens from H.B.C. (Hortus Botanicus Calcuttensis). Wallich Catalogue entry no. 2494 under *E. strictum* includes three subordinate entries: 2494a, recorded as “Mont. Sillet F.D.”; 2494b, as “HBC. e Sillet”; and 2494c, as “*Just. elongata* Hb. Ham. ex HBC”. Francis De Silva (abbreviated as F.D. in Wallich Catalogue) collected materials from Sylhet after 1820 (specimen dated 1828); moreover, Hamilton’s specimens were inaccessible to Wallich at the time he prepared his description, as the specimens had been transferred to London by mid-1815 (pers. comm. Mark Watson, RBGE, May 2025). Accordingly, the specimens corresponding to entries 2494a and 2494c cannot be regarded as original material. Therefore, materials from H.B.C (2494-b) should only be considered as the original materials.



Fig. 2. Lectotype of *Eranthemum strictum* Colebr. ex Wall. (K [K001116205]).
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Following an extensive consultation of Wallich’s materials housed at different herbaria as per Stafleu and Cowan (1988), we located three sheets: K (K001116205), GZU (GZU000249976) and CAL (CAL0000019476). All these specimens are original materials and bear Wallich’s handwriting and data mentioned on the sheets are also consistent with the protologue. Therefore, all three specimens are considered as syntypes according to Art. 9.6 (Turland *et al.*, 2025).

Since no type was designated at the time of publication, we designate K001116205 as the lectotype of *Eranthemum strictum* in accordance with Art. 9.3 (Turland *et al.*, 2025). The specimen is well-preserved and includes complete leafy and flowering twigs, making it an appropriate and representative choice for lectotypification of the said name.

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