

## Lectotypifications in *Andrographis* (Acanthaceae)

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### Abstract

*Andrographis lawsonii* Gamble, *A. lineata* Wall. ex Nees var. *lawii* C.B. Clarke and *A. stellulata* C.B. Clarke are lectotypified and the images of the lectotypified specimens are provided. Besides, an overlooked taxon, *Erianthera lobelioides* Nees var. *ovalifolia* Nees is also synonymized here under *A. lawsonii*.

**Keywords:** Endemic, India, Lectotype, Synonym, Syntype

### Introduction

*Andrographis* Wall. ex Nees, a tropical Asian genus is represented by 28 taxa in India and are mainly concentrated in southern states namely, Tamil Nadu, Kerala, Andhra Pradesh and Karnataka (Karthikeyan *et al.*, 2009), of which, 23 have been recognized as endemics during the present study. It is the largest genus in the subtribe Andrographideae of the tribe Justiciae in India (Clarke, 1884). The present paper is a part of the systematic study of *Andrographis* in India, where *A. lawsonii* Gamble, *A. lineata* Wall. ex Nees var. *lawii* C.B. Clarke and *A. stellulata* C.B. Clarke are lectotypified according to Art. 9.2 of Melbourne Code (McNeill *et al.*, 2012) and the images of the designated lectotypes (Fig. 1a, c, d) are provided. Besides, an overlooked taxon, *Erianthera lobelioides* Nees var. *ovalifolia* Nees is synonymized here under *A. lawsonii*.

**Andrographis lawsonii** Gamble, Bull. Misc. Inform. Kew 1923: 375. 1923 & Fl. Madras: 1050. 1924 ('*lawsonii*'); B.D. Sharma *et al.*, Fl. Karnataka: 200. 1984; Kumari in A.N. Henry *et al.*, Fl. Tamil Nadu 2: 139. 1987; Sasidh., Biodiv. Doc. Kerala Pt. 6: Fl. Pl.: 337. 2004.

**Lectotype** (designated here): INDIA, Tamil Nadu, Sispara, Nilgiris, Nov. 1890, M.A. Lawson s.n. K (K000794274), photo!; Isolectotype MH! **Fig. 1a.** *Erianthera lobelioides* Nees var. *ovalifolia* Nees in DC., Prodr. 11: 515., 1847, **syn. nov.**

**Type:** Kaitis, Nilgherries (Nilgiris), 1840, Perrottet s.n. [Holotype G (G00317370), photo!]. **Fig. 1b.**

Gamble (1923) described *A. lawsonii* based on specimens [(*Beddome* s.n., K000592604, MH38093)] collected from South Canara Ghats in Karnataka, and from Avalanche [(*Wight* 2246, K000592603;

*Gamble* 13349, K000592602)] and Sispara [(*Lawson* s.n., K000794274, MH38092)] in Nilgiris, Tamil Nadu but without designating any one as the holotype. Of these cited syntypes, *Wight* 2246 and *Gamble* 13349 are preserved at K, whereas the original specimen of *Lawson* s.n. was cut into two parts. The upper part was retained at K while the lower part sent to MH with the annotations as '*upper part kept at Kew*'. The upper part of *Lawson* s.n. (K000794274) of K is designated here as the lectotype of *A. lawsonii*, since it matches well with the description. Moreover the herbarium sheet has an illustration of a flower and a dissected stamen drawn by Gamble. The lower part of *Lawson* s.n. available at MH is considered here as the isolectotype.

Nees (1847) described *Erianthera lobelioides* Nees var. *ovalifolia* based on a specimen collected by Perrottet (*Perrottet* s.n., G00317370) from Kaitis in Nilgiris, Tamil Nadu. The type specimen (Fig. 1b) at G-DC and the description of *E. lobelioides* var. *ovalifolia* provided in the original publication by Nees aptly match with the protologue and types of *Andrographis lawsonii*. Hence, the name *E. lobelioides* var. *ovalifolia* is reduced here as a heterotypic synonym of *A. lawsonii*.

**Andrographis lineata** Wall. ex Nees var. *lawii* C.B. Clarke in Hook.f., Fl. Brit. India 4: 505. 1884; Gamble, Fl. Madras: 1049. 1924; B.D. Sharma *et al.*, Fl. Karnataka: 200. 1984; N.P. Singh, Fl. E. Karnataka: 483. 1988.

**Lectotype** (designated here): INDIA, Karnataka, Chikkamagaluru district, Bababoodun hills [Bababudan], *s. die*, *Law* s.n., K (K000545936), photo! **Fig. 1c.**

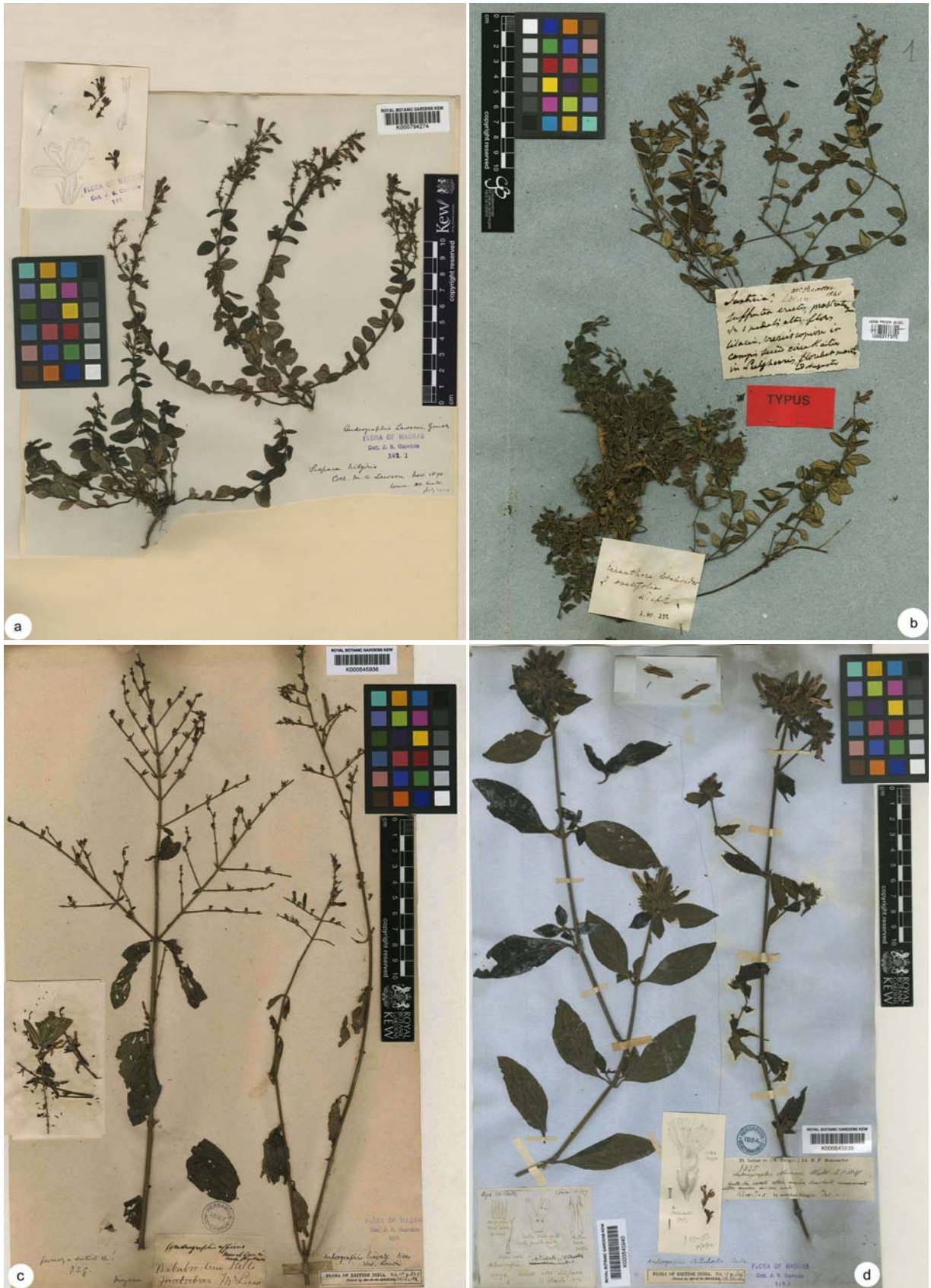


Fig 1. a. *Andrographis lawsonii* Gamble (*Lawson* s.n., K; Lectotype designated here); b. *Erianthera lobelioides* Nees var. *ovalifolia* Nees (*Perrottet* s.n., G-DC; Holotype); c. *Andrographis lineata* Wall. ex Nees var. *lawii* C.B. Clarke (*Law* s.n., K; Lectotype designated here); d. *Andrographis stellulata* C.B. Clarke (*Hohenacker* 1435, K; Lectotype designated here).

Clarke (1884) described this variety based on two collections namely, *Law* s.n. from Bababoodun hills and *Beddome* s.n. from Nundidroog (Nundidurg) in Karnataka, India. The cited syntypes are available at K (*Law* s.n.) and BM (*Beddome* s.n.). The specimen housed at K, *Law* s.n. (K000545936) was studied and annotated by Clarke as *A. lineata* var. *lawii* that best fits the description and notes provided in the protologue. Hence, it is designated here as the lectotype.

**Andrographis stellulata** C.B. Clarke in Hook.f., Fl. Brit. India 4: 504. 1884; Gamble, Fl. Madras: 1049. 1924; Kumari in A.N. Henry *et al.*, Fl. Tamil Nadu 2: 140. 1987; Sasidh., Biodiv. Doc. Kerala Pt. 6: Fl. Pl.: 338. 2004.

**Lectotype** (designated here): INDIA, Tamil Nadu, Nilgiri district, Khoondas [Kunda], December, *Hohenacker* 1435 K (K000545939), photo!; isolectotypes: K (K000545938), K photo! **Fig. 1d.**

The protologue of this species includes *Hohenacker & c.* (& c. = & cetra = et cetra = etc.), all from the Nilgiri mountains in Tamil Nadu, India (Clarke, 1884). He studied two of his own collections (*Clarke* 10778, 10177), from Coonoor at 6000 ft. besides *Hohenacker* 1435. He also made a line diagram of split open calyx, corolla and a stigma (from *Clarke* 10778) and an anther (from *Clarke* 10177) on the herbarium sheet of *Clarke* 10778. The specimen, *Hohenacker* 1435 (K000545939), which is pasted on right, along with *Clarke* 10778 (K000545940) was studied and annotated as *A. stellulata* by Clarke. *Hohenacker's* collection is explicitly stated in the protologue and it matches well with the description provided therein and hence *Hohenacker* 1435 (K000545939) is designated here as lectotype. The duplicate of *Hohenacker* 1435 preserved at K (K000545938) is referred here as isolectotype.

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