

Typification of two accepted names and one synonym in the genus *Nepeta* L.

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Possible lectotype of
glechoma erecta Buch.-Ham. ex Roxb.
see Kew Bull. 52(2): 527, 1902
Det. Pater by L.L. Sonnerup

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= *Nepeta hindostana* (B. Heyne
ex Roemer) Hainan



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KEY WORDS

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ABSTRACT

Two accepted names in *Nepeta* L. (Lamiaceae), namely *N. hindostana* (B.Heyne ex. Roth) Haines and *N. hindostana* var. *woodrowii* (Cooke) Santapau, in addition to *Glechoma erecta* Buch.-Ham. ex Roxb., synonym of *N. hindostana*, are typified. *Nepeta ruderalis* Buch.-Ham. ex Benth. and *G. indica* Spreng. are treated here as illegitimate superfluous names for *G. hindostana* B.Heyne ex. Roth.

MOTS CLÉS

India,
Glechoma,
Nepeta,
noms superflus,
lectotypification,
néotypification.

RÉSUMÉ

Typification de deux noms acceptés et un synonyme dans le genre Nepeta L.

Deux noms acceptés de *Nepeta* L. (Lamiaceae), *N. hindostana* (B.Heyne ex. Roth) Haines et *N. hindostana* var. *woodrowii* (Cooke) Santapau, ainsi que *Glechoma erecta* Buch.-Ham. ex Roxb., synonyme de *N. hindostana*, sont typifiés. *N. ruderalis* Buch.-Ham. ex Benth. et *G. indica* Spreng. sont considérés ici comme des noms superflus illégitimes pour *G. hindostana* B.Heyne ex. Roth.

INTRODUCTION

The genus *Nepeta* L. (Lamiaceae Martinov, Tribe Mentheae Dumort.) is represented by c. 200 species worldwide, primarily in the mountains, semi-deserts and steppes of Eurasia, extending into North Africa (Harley *et al.* 2004). Bentham (1848) recognized 9 sections within *Nepeta* (*Schizonepeta* Benth., *Pycnonepeta* Benth., *Cataria* Benth., *Orthonepeta* Benth., *Macronepeta* Benth., *Glechoma* Benth., *Psilonepeta* Benth., *Oxynepeta* Benth., *Micronepeta* Benth.) comprising a total of 109 species and four doubtful species. Hooker (1885) recognized 33 species from Indian subcontinent. Finally, Mukerjee (1940) revised the genus and included 41 species from Indian subcontinent. Hassan *et al.* (2011) documented 22 species of *Nepeta* from the Kashmir Himalaya.

While working on flora of Protected areas of Bihar & Jharkhand, India, the first author (AK) collected *Nepeta hindostana* (B. Heyne ex. Roth) Haines which occurs in Afghanistan, India, Nepal, Pakistan and West Himalaya (POWO 2019). As currently circumscribed this species is taken to include *N. ruderalis* Buch.-Ham. ex Benth., *Glechoma erecta* Buch.-Ham. ex Roxb. and *G. indica* Spreng. as synonyms. While we accept this circumscription for the species, after critical examination of the relevant literature, we have identified nomenclature issues regarding the name *Nepeta hindostana* and its typification as well as its one synonym and one variety, which are outlined and discussed below.

NOMENCLATURE

Nepeta hindostana (B. Heyne ex. Roth) Haines

REMARKS

Glechoma hindostana B. Heyne ex. Roth was described by Roth (1821) based on the collection of Benjamin Heyne from “Hindostana”. Later, Haines (1922) transferred the species to *Nepeta* and established the new name combination *Nepeta hindostana* (B. Heyne ex. Roth) Haines. According to Stafleu & Cowan (1983), Roth’s herbarium and types were deposited at B while other materials are known to be present at BM, DUIS, FH, GOET, HAL, JE, LD, M, S, TCD, W & WELT. We have communicated with all the aforesaid herbaria but unfortunately the type collection could not be traced. So, there is a need to choose a neotype for this name. According to Stafleu & Cowan (1979), Benjamin Heyne was appointed as botanist at Samalkota and assigned to Madras presidency and later superintendent at Bangalore gardens. Heyne mainly collected plants from Coimbatore and Bangalore in South India (Stewart 1982). So, we have designated a Beddome’s collection from Nilgiris district, Tamil Nadu, South India (MH00082441) housed at Botanical Survey of India, Southern Regional Centre (MH) as neotype.

Glechoma erecta Buch.-Ham. ex Roxb.

REMARKS

Roxburgh (1814) published the name *G. erecta* which does not constitute valid publication under Art. 38.2 Ex. 1 of the

International Code of Nomenclature for algae, fungi, and plants (Turland *et al.* 2018) because this lacked description or diagnosis or reference to a description or diagnosis, but was subsequently validated (Roxburgh 1832). Forman (1997) noted that Roxburgh specimens under this name are deposited at BR and OXF. We traced two specimens (BR0000021496585, BR0000021496608) at BR and one specimen (OXF0006375) at OXF. Further, we could trace out one more collection (K001115251) at Kew which was not cited by Forman (1997). So, we have lectotypified the name with Oxford specimen (OXF0006375) which bears the name *G. erecta* on the label with Roxburgh’s own handwriting and also annotation of L.L. Forman as ‘possible lectotype of *glechoma erecta* Buch.-Ham. ex Roxb.’.

Nepeta ruderalis Buch.-Ham. ex Benth.

REMARKS

Nepeta secunda Benth. was included in the Wallich’s Catalogue with three cited collections, one from Nepal (1821), one from Hurdwar (1825) and one of Nepalia origin cultivated in Calcutta Botanic Garden (Wallich 1828-1849), but this lacked description or diagnosis or reference to a description or diagnosis and therefore does not constitute valid publication under Art. 38.2 Ex. 1 of the *Code*. Later, Bentham (1830) published the name *N. ruderalis* based on the unpublished manuscript of Buchanan-Hamilton, cited as “*N. ruderalis* (Hamilt. MSS.)” and treated *N. secunda* Benth., *G. erecta* Buch.-Ham. ex Roxb., *G. hindostana* B. Heyne ex. Roth and *G. indicum* Spreng. as synonyms. Therefore, the name *N. ruderalis* should be illegitimate under Art. 52.2 of the *Code* (Turland *et al.* 2018) as Bentham cited the earlier validly published name *G. hindostana* in synonymy.

Glechoma indica Spreng.

REMARKS

G. indica (‘*indicum*’) was described by Sprengel (1825) who cited *G. hindostana* as synonym. So, the name should be illegitimate superfluous for *G. hindostana* under Art. 52.2 of the *Code* (Turland *et al.* 2018).

TYPIFICATIONS

Nepeta hindostana (B. Heyne ex. Roth) Haines

In *The Botany of Bihar and Orissa*: 744 (1922). — Basionym: *Glechoma hindostana* B. Heyne ex. Roth, *Novae Plantarum Species praesertim Indiae Orientalis*: 258 (1821). — Neotype (designated here): India. Tamil Nadu, ‘Neilgherries’ [Nilgiris district], 1866, R.A. Beddome s.n. (neo-, MH[MH00082441 image]) (Fig. 1).

Glechoma indica Spreng., *Systema vegetabilium*, Gottingae 2: 727 (1825). ‘*indicum*’, nom. illeg. superfl.

Nepeta ruderalis Buch.-Ham. ex Benth., *Plantae Asiaticae Rariores* 1: 64 (1830), nom. illeg. superfl.

Glechoma erecta Buch.-Ham. ex Roxb., *Flora Indica* ed. 1832, 3: 7 (1832).



FIG. 1. — Neotype of *Glechoma hindostana* B. Heyne ex. Roth (MH00082441). © The Director, Botanical Survey of India, Kolkata.



FIG. 2. — Lectotype of *Glechoma erecta* Buch.-Ham. ex Roxb. (OXF00006375). © Oxford University Herbaria. Reproduced with permission.

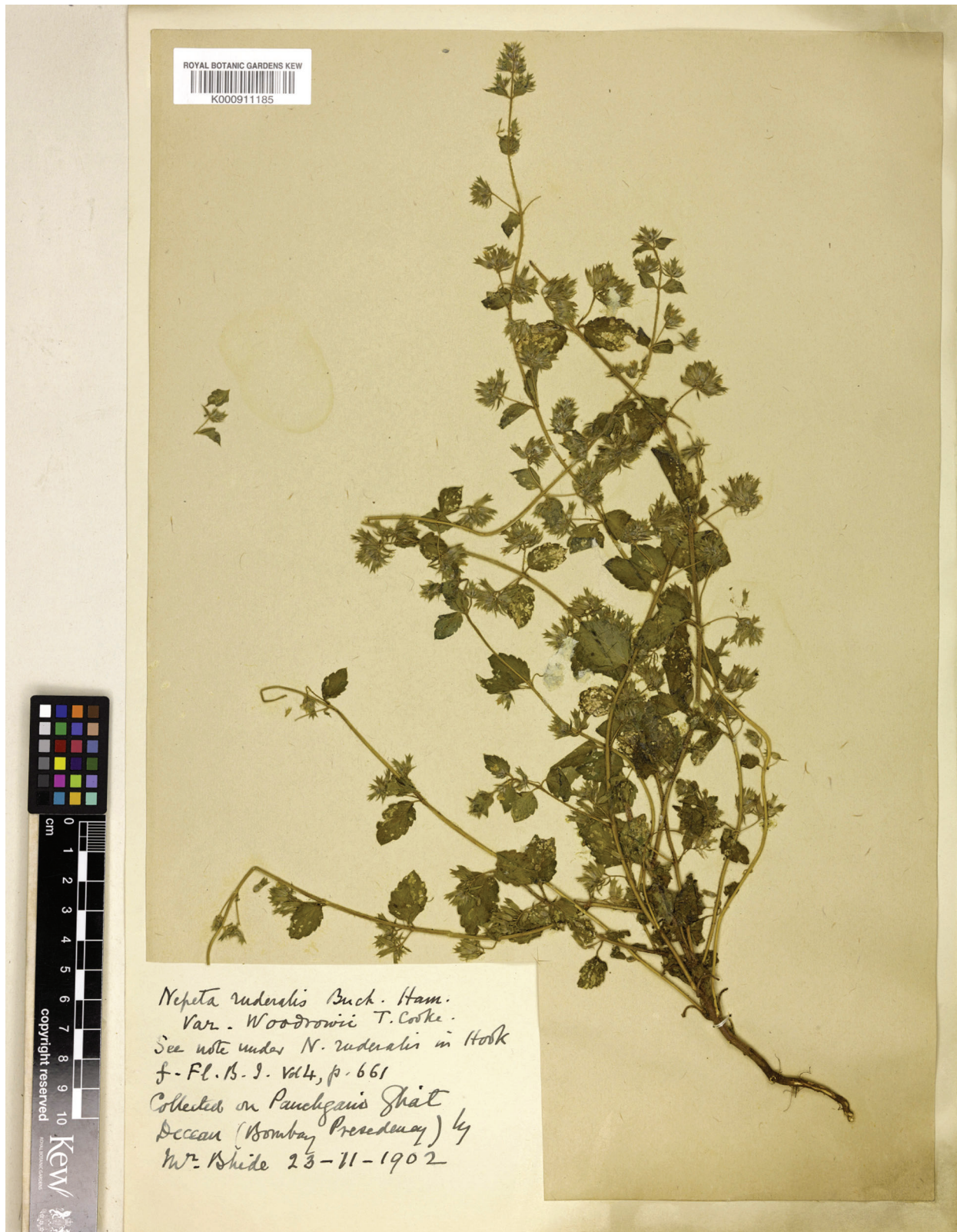


FIG. 3. — Lectotype of *Nepeta ruderalis* Buch.-Ham. ex Benth. var. *woodrowii* Cooke (K000911185). © The Board of Trustees of the Royal Botanic Gardens, Kew. Reproduced with permission.

LECTOTYPE (designated here). — [India, HBC]. *Roxburgh s.n.* (OXF[OXF00006375 image!]) (Fig. 2).

RESIDUAL SYNTYPES. — *Wallich 2122* (syn-, K[K001115251 image!]); *Roxburgh s.n.* (syn-, BR[BR0000021496585 image!]); “Hort. bot. Calc.” (HBC), *Wallich s.n.* (syn-, BR[BR0000021496608 image!]).

Nepeta hindostana (B. Heyne ex Roth) Haines
var. *woodrowii* (Cooke) Santapau

In *The Flora of Purandhar*: 110 (1957). — Basionym: *Nepeta ruderalis* Buch.-Ham. ex Benth. var. *woodrowii* Cooke, *Flora of the Presidency of Bombay*: 473 (1906).

LECTOTYPE (DESIGNATED HERE). — India. Maharashtra, Satara district, Panchganis Ghat, 23.IX.1902, Mr. Bhide *s.n.* (lecto-, K[K000911185 image!]) (Fig. 3).

RESIDUAL SYNTYPES. — India. Maharashtra, Pune district, on the walls of Sinhadgad fort, 12 miles from Poona, 29.IX.1905, Mr. Bhide *s.n.* (syn-, K000911186 image!); “Poona” (Pune district), V.1880, G.M. Woodrow 476 (syn-, K000911183 image!).

REMARK

Hooker (1885) noted under *N. ruderalis* that he had received the specimens collected by Mr. Woodrow from Pune district (‘Poona’) resembling the habit of *N. ruderalis* but with larger calyx and nutlets like *N. bombaiensis* Dalzell. Finally, Cooke (1906) described *N. ruderalis* var. *woodrowii* based on collection of Mr. Bhide from Sinhabad hill fort (4000 ft) near Pune district (‘Poona’), Panchgani hills (4000 ft) near Mahabaleshwar and Woodrow collection (No. 476) from Pune district (‘Poona’). We traced three collections (K000911183, K000911185 and K000911186) at K and we here lectotypify the name with Kew specimen (K000911185) bearing Cooke’s annotation in his own handwriting.

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