

# Typification of three names in *Didymocarpus* (Gesneriaceae)

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**Abstract:** Lectotypes of *Didymocarpus lineicapsus* (C.E.C.Fisch.) B.L.Burt, *D. punduanus* Wall. ex R.Br. and *D. villosus* D.Don are designated.

**Keywords:** Nomenclature, Old-World Gesneriaceae, Second-step lectotypification.

## Introduction

*Didymocarpus* Wall. (Gesneriaceae) currently includes 111 species of perennial caulescent herbs distributed mainly in northeast India, southern China, and southwards to the western parts of Peninsular Malaysia and northern Sumatra (Weber *et al.*, 2020; GRC, 2023). The genus has 27 species in India, confined mainly to northeast India and the eastern Himalaya, with only two species extending their distribution to the western Himalaya (Prasanna & Gowda, 2021; Tuladhar *et al.*, 2021; Taram *et al.*, 2024).

While revising the taxonomy of Indian *Didymocarpus*, the authors found that three names, *Didymocarpus lineicapsus* (C.E.C.Fisch.) B.L.Burt ( $\equiv$  *Trisepalum lineicapsa* C.E.C.Fisch.), *D. punduanus* Wall. ex R.Br., and *D. villosus* D.Don, require lectotypification, as the original material associated with multiple specimens. Therefore, lectotypes for *D. punduanus* and *D. villosus* are designated, and a second-step lectotypification for *D. lineicapsus* is carried out following the ICN (Turland *et al.*, 2018).

## Typification

***Didymocarpus lineicapsus*** (C.E.C.Fisch.) B.L.Burt, Notes Roy. Bot. Gard. Edinburgh 21: 187.

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1954. *Trisepalum lineicapsa* C.E.C.Fisch., Bull. Misc. Inform. Kew. 1928(7): 276. 1928. *Lectotype* (first-step designated by Weber *et al.*, 2000; second-step designated here): INDIA, **Mizoram** (then Assam), Lushai hills, Aijal (Aizawl), 1225 m, September 1927, Mrs N.E. Parry 79 (K [K000820540 digital image!]; isolecto K [K000820539, K000820541 digital images!]).

*Notes:* Fischer (1928) described *Trisepalum lineicapsa* based on collection ‘N.E. Parry 79’ from the Lushai hills of Mizoram, India. The collections associated with C.E.C. Fischer are housed at K (Stafleu & Cowan, 1976). We could locate three specimens ‘N.E. Parry 79’ at K (K000820539, K000820540, K000820541), all referred here as syntypes (Art. 9.6 of the ICN, Turland *et al.*, 2018).

Weber *et al.* (2000) cited “Parry 79 (K; type of *T. lineicapsa*)” without specifying a single sheet, hence a second-step lectotypification is desirable (Art. 9.17 of the ICN). Of the three sheets at K, K000820539 bears shoots and fruits. The collector’s label on the bottom left reads, “Lushai hills, *Dydimocarpus* species [... illegible], Aijal 4000 ft, No. 79, Sept. 1927, flowers claret colour”, and the Kew label on the bottom right with the sheet apparently in Fischer’s handwriting, “*Trisepalum lineicapsa* Fischer, Coll. Mrs. N.E. Parry No. 79, Aijal, Sept. 1927, Lushai Hills, Assam 4000 ft”. The sheet K000820540 has a branch with flowers, whereas K000820541 has flowering shoots. Both these sheets are also marked as ‘bis’ in ink, indicating that they are duplicates, and carry the same herbarium label as K000820539. The

sheet K000820540 is designated here as the second-step lectotype, and K000820539 and K000820541 as isolectotypes.

**Didymocarpus punduanus** Wall. ex R.Br., *Cyrtandreae*. 118. 1839. *Lectotype* (designated here): INDIA, **Meghalaya** (then Pundua), *s.d.*, Francis De Silva in Wallich List No. 777 (K [K001111883 digital image!]; *isolecto* L [L0003220 digital image!] and W [W0050210 digital image!]).

*Notes:* The name *Didymocarpus punduanus* Wall. (*'punduaná'*) first appeared as a *nomen nudum* in Wallich Numerical List No. 777 (Wallich, 1829), based on Francis De Silva's collection from Pundua. Subsequently, Brown (1839) validated *D. punduanus* Wall. with a brief description and mentioned *Wall List, n. 777* from 'Montes Sylhet'. Pundua is a locality in the Sylhet region (now in Bangladesh). However, Clarke (Anonymous, 1913) noted that collections marked 'Pundua' and 'Mount Sillet [Sylhet]' in the Wallich Numerical List were most likely collected from the 'Khasi hills' of the present-day Meghalaya state in India.

Weber *et al.* (2000) cited the type for *Didymocarpus punduanus* as "*Wallich 777 (K-W, W)*". However, three sheets by *Wallich 777* are currently available, one each in K (K001111883), L (L0003220) and W (W0050210), all are syntypes (Art. 9.6 of the ICN).

The sheet K001111883 consists of two flowering and fruiting twigs, and bears Wallich's handwritten label, "*777 Didymocarpus punduana* Wall. in Herb. 1824, Pundua, De Silva", on the upper left corner. L0003220 has six fragmented leaves, and W0050210 has two detached leaves, one imperfect flowering twig, and one vegetative twig. The specimen K001111883 is well-preserved and matches the protologue of *D. punduanus* and is designated here as the lectotype, and L0003220 and W0050210 as isolectotypes.

**Didymocarpus villosus** D.Don, *Prodr. Fl. Nepal*. 123. 1825. *Lectotype* (designated here): NEPAL, *s.l.*, 1819, *Wallich s.n.* BM (BM [BM000041747 digital image!]; residual syntype BM [BM000997734 digital image!]).

*Notes:* Don (1825) cited "*Hab. in Nepaliá. Wallich*" in the protologue of *Didymocarpus villosus*. During

our search for the original materials of *D. villosus*, we located a sheet in BM with 11 plant fragments, bears two barcodes. The barcode BM000047147 (marked as "Holotype" in the BM herbarium catalogue) is assigned for three specimens with flowers and fruits mounted on the upper half (marked as 'a' in pencil), and BM000997734 for five specimens with flowers and three with fruits in the lower half (marked as 'b' in pencil). BM000047147 bears an anonymous handwritten label, "*Didymocarpus villosa* Don. Nepal 1819, Wallich", while BM000997734 has a label that reads "*Didymocarpus villosa* 14 D.Don" (in D. Don's handwriting), and C.B. Clarke's annotation as "*D. villosa* D.Don."

Weber *et al.* (2000) cited "Type, Nepal, *Wallich (BM, G)*" for *D. villosus*. The herbarium sheet at G (G00492509) cannot be a type as it was collected from Nepal in 1821, whereas Don's *Prodr. Fl. Nepal.* is based on the specimens sent by Wallich to Lambert during 1818–1819 (Miller 1970; Stafleu & Cowan 1988). BM000041747, which represents well-preserved specimens with flowers and fruits, is designated as the lectotype, and BM000997734 as a residual syntype.

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