

NEW TAXA, COMBINATIONS AND NAME IN SWERTIA L. (GENTIANACEAE)

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Abstract.

While preparing a monograph of the genus *Swertia* L. five new species are described. One new name is proposed. Three new combinations are made.

1. ***Swertia nepalensis* J. Shah, sp. nov.**

Type: Nepal, Tukucha, Kali Gandaki valley
12500 ft. 11-9-1954, *Stainton, Sykes* and
William 7752 (holo. E) (Pl. I).

Species *Swertia petiolata* D. Don affinis sed folis caulinis alternis inflorescentibus cymosis lobis calycorum linearioblongis, acutis differt.

Herba perennis, rhizomatosus, glabra, caulis erectus, simplex. Folia pleurumque basillaria, elliptico-oblonga acuto-acuminata, 3-9 nervia; alterna, amplexicaulia. Pedunculi filiformes. Flores pentameric. Segmenta calycum lineari-oblonga, acuta. Lobi corollarum elliptico-oblonga, biglandulosi. Filamenta filiformi-dilatata; antherae oblongae. Ovarium ovale; stigma sessile lobis sub-orbiculatis. Semina corrugata-cristata.

Nepal. *Stainton, Sykes, William*, 8512, 3881, 7957, 8593.
Nepal. *Grey-wilson and phillips*, 763.

2. ***Swertia taylorii* J. Shah, sp. nov.**

Type: S.E. Tibet, Prov. Kongbo. Doshong La 13000 ft.,
15-7-1938, *Ludlow, Sherriff and Taylor*. 5256 (holo. BM) (Pl. 2)
Hibitu *Swertia pseudohockeri* H. Smith., folia caulina sessilia infirmi
nodi 3-5 verticillata. Nectario nudo.

Planta 60 cm alta. Caulis teres. Folia rosularia 4-7x1.5-3 cm, ovata-ellipti; folia caulina 3-5 verticillata, 6-8x1.5-3 cm, ovati-spathulati. Inflorescentia laxa et nodis 3-4 anguste pyramidalis. Flores albo-virides. Calysis tubus brevissimus; lobi Ovati obtusi. Corolla tubus perbrevis lobi obcuneati; nectario nudo. Stamina tubo adnata; filamentis liberis. Ovarium ovatum stigmatibus subsessilibis. Capsule angusta, seminibus ovato-globosis, ex-alatis.

S.E. Tibet. Kongbo. *Ludlow, Sherriff & Elliot* 14376. The species is named after the famous collector Sir George Taylor.

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3. **Swertia woodii** J. Shah, sp. nov.
 Type: N. Yeman, Ubb-Udayn Pass, Mashawara, alt.
 c. 2500 m, 14 September 1979. *J.R.I. Wood* 2891
 (holo. E.; isok.) (Pl. 3)

Habitu *Swertia engleri* sed floribus brevipedicellatis, sepalis ovatis acutis, corollis albo-purpureis differt.

Herba erecta, ramosissima. Folia radicalia spathulato-oblonga. Folia caulina ovata vel obovata. Flores pentameri. Sepala ovata, acuta. Corolla albo-purpurea, lobis biglandulosus. Ovarium oblongum; stylo nullo; stigmatibus orbicularibus. Semina globosa, tuberculata.

North Yeman, Sumara Pass, *Miller* 456 & 551. North Yeman, Tibal Takar, *Hepper* 6121. Saudi Arabia Jibal Sudah. *Collenette* 1167, 2058, 2585. The name is after the famous collector Mr. John R.I. Wood, who collected for a long time in North Yeman.

4. **Swertia scottii** J. Shah, sp. nov.
 Type: Ethiopia, Siemien, Mai Shaba Valley, 11500 ft., 17-12-1962.
H. Scott 313 (holo. K. iso. K.) (Pl. 4).

Habitu *Swertia scandens* sed floribus 5-meribus, corollis albo-purpureis, lobis biglandulosus, ovariis oblongis, stylis nullis, stigmatibus sub-orbicularibus.

Herba scandens ramosissima. Folia caulina obovata, obtusa. Corolla albo-purpurea, lobis biglandulosus. Ovarium oblongum, stylo nullo; stigmata sub-orbicularia. Capsule non visa. Represented by holotype and isotype sheet with six specimens. Distinguished by obovate leaves and 1-3 flowered cymes. This new species was previously determined as *Swertia scandens* Th. Fries, probably on the basis of its wiry branches with a trailing habit present in both species. The new species has 5-merous flowers, biglandular corolla lobes, warted seed, whereas *Swertia scandens* has 4-merous flowers, uniglandular corolla lobes and corrugate seed. The name is after the collector H. Scott.

5. **Swertia latycalyx** J. Shah, sp. nov.
 Type: China, Yunnan, eastern flank of the Lichiang range, 12000 ft.,
 7 September 1910. *Forrest* 6696 (holo. E.) (Pl. 5).

Affinis *Swertia pubescens* Franch., sed inflorescentia laxior, floribus majoribus, calycis lobi late ovati dissimilis.

Planta annua. Caulis 20-60 cm altus. Folia 2-5 x 0.5-1 cm, pubescentia, anguste, ovata. Inflorescentia laxa paniculata. Flores pentameri. Calycis lobi late ovati, angusti ovati. Corolla albida ad basin violaceo-annulata; tubus 0.5-1 mm longus; lobi ovati apice obtusi breviter laciniati, unifoveolati; foveola hippocrepiformis. Filaments papillosa, medio dilatata, breviter conatae. Ovarium ovatum; stylus distinctus; stigmata linearia. Capsule maturscens ovalis 9-13 mm longa Semina verrucosa.

CHINA, YUNNAN, Mt. TSONG, *SCHNEIDER* 2917 & 2338. China Likiang, *Handel-Mazzetti* 3749. China Lichiang, *Rock* 7755, 58191. China Lichiang, *T.T. Yu* 15591.

6. **Swertia teres** (G. Don) J. Shah, comb. nov.

Syn: *Swertia racemosa* Wall., Numer. List 154, n 4377 (1831) nom. nud.

Ophelia teres G. Don, Gen. Syst. Gard. 4; 178 (1837)

Ophelia purpurascens D. Don in Trans. Linn. Soc. London 17:526 (1837)
non. Clarke (1883).

Ophelia racemosa Griseb., Gen. & Sp. Gent. 319 (1838) *Swertia racemosa* (Griseb). C.B. Clarke in Hook., Fl. Brit. Ind. 4:124 (1883).

Kingdon-Wardia condonopsidoides Marquand in Journ. Linn. Soc, London 48:207 (1929).

Type: (Himalaya), Gossainthan, Wallish 4377 (holo. K; Iso. E!, W!, WU!, BM!) Icon: Hook., Icon. Pl. 32. t. 3163 (1932) as *Ophelia racemosa*. This species has an unusually wide range of variability in the shape and length of the calyx lobes and in the degree of ciliation of the leaves. Each character seems to vary independently and the extreme forms are connected by intermediate stages.

G. Don, in 1837, published a diagnosis of *Ophelia teres* based on Wallish 4377 (*S. racemosa* in shedu). In the same year, D. Don placed *O. teres* as a synonym under his *O. purpurascens* and *S. racemosa* (Wallish, 4377) under *Agathotes chirayita*, without any comments on G. Don's earlier diagnosis. D. Don's synopsis of *S. purpurascens* is a mere translation of the G. Don diagnosis of *O. teres*, which clearly indicates that the type is 4377 not 4379.

H. Smith (1970) has rejected Marquand's (1929) treatment of this species as a distinct genus.

I am grateful to Mr. B.L. Burt (R.B.G) for discussing the nomenclature with me and confirming my conclusion.

7. **Swertia pauciflora** (Dalz.) J. Shah, comb. nov.

Syn: *Ophelia lawii* Wight & Arn., Ill. Ind. Bot.

2. 175-3c (1850) nom. nud.

Ophelia pauciflora Dalz. in Hook, Kew Journ.
Bot. 3: 211 (1851).

Swertia corymbosa var. *lawii* (Wight a Arn.)
C.B. Clarke in Hook., Fl. Brit. Ind. 4: 126 (1883)

Swertia lawii (Wight & Arn.) Burkill in Journ. As. Soc. Bengal, 2: 379 (1906).

Ophelia foliosa nomen in shedu.

Type: (S. India) W. Ghats, *Dalzell* (holo. K!).

Although this taxon was regarded by Hooker (1883) as variety of *S. corymbosa*. I think that it merits independent specific status because of the shape of its leaves, corolla lobes, and glands. The first valid name is *Ophelia pauciflora* Dalz. and the combination in *Swertia* is thus *S. pauciflora* (Dalz.) J. Shah.

8. ***Swertia umbellata*** (Hook.) J. Shah, Comb. nov.

Syn: *Ophelia umbellata* Wight in Wight and Arn.,

Ill. 2: 157-3a (1850) nom. nud.

Ophelia trichotoma Wight. loc. cit. 157-3g (1850) nom. nud.

Ophelia umbellata Hook. in Bot. Mag. t. 5397 (1863).

Swertia trichotoma C.B. Clarke in Hook., Fl. Brit. Ind. 4: 126 (1883) nom. invalid.

Type: S. India, Nilgherries, Wight (holo. K!)

The earliest publication of the names *Ophelia trichotoma* and *Ophelia umbellata* were legends to illustrations (without types or descriptions) and hence are nomina nuda. The first valid publication of this taxon is *Ophelia umbellata* Hook. (1963) and the valid combination in *Swertia* is thus *Swertia umbellata* (Hook.) J. Shah.

9. ***Swertia brownii*** J. Shah, Nom. nov.

Syn: *Swertia calycina* Brown in Dyer, Flora Trop.

Africa 4: 574 (1903) non. Franch. (1899)

Type: (Zaire) Ruwenzori Expedition 1893-94 Scott Elliot (Holo. K!).

The epithet *calycina* is not available in *Swertia* due to its earlier use by Franchet for a Chinese species. I propose to name this species from Africa after N.E. Brown as *Swertia brownii*.

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Plate 1. SWERTIA NEPALENSIS J. Shah
Holotype: Nepal, Tukucha, Kali Gandaki valley
12,500 ft., 11.9.1954, Stinton, Sykes 7 William 7752 (E).



Plate 2. Holotype SWERTIA TAYLORII J. Shah (BM)

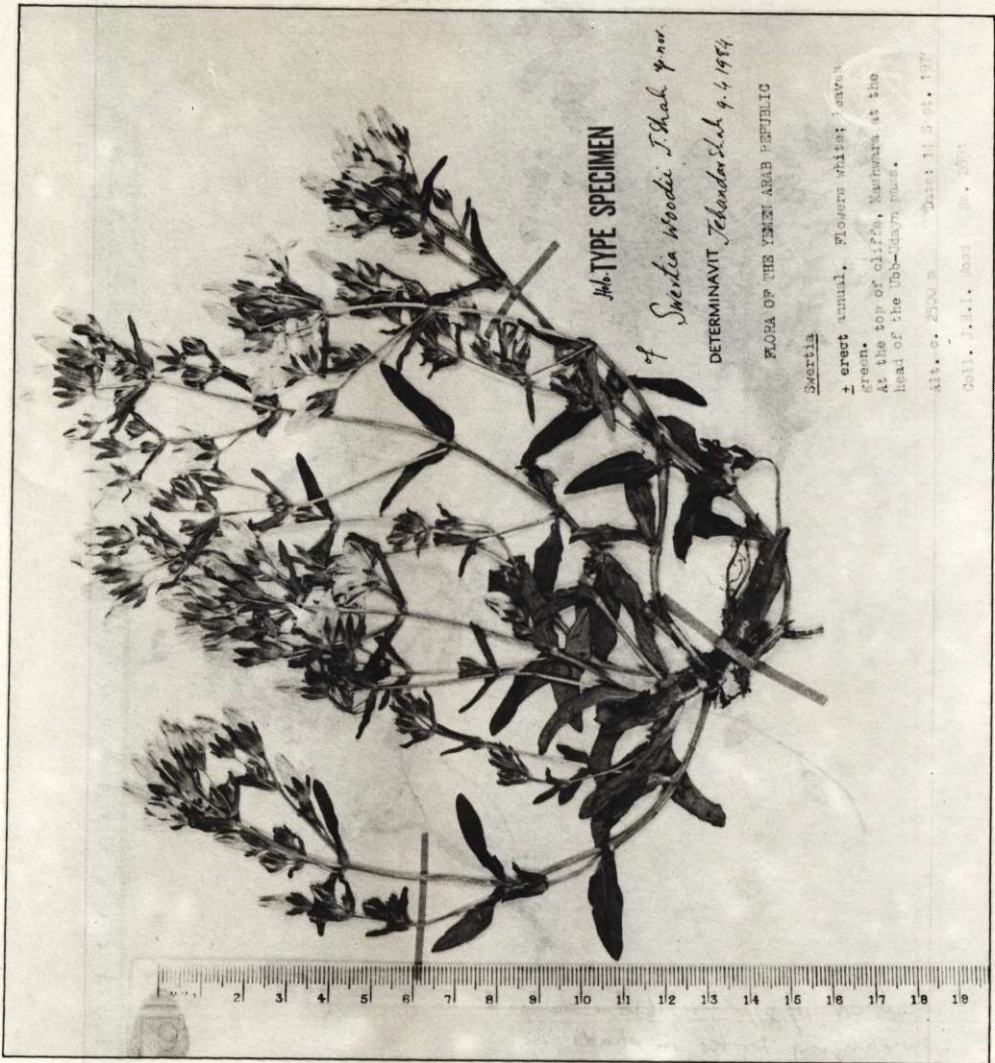


Plate 3. Holotype SWERTIA WOODII J. Shah (E)



Plate 4. Holotype of SWERTIA SCOTTII J. Shah
H. Scott No. 313 (K)



Plate 5. Holotype of SWERTIA LATICALYX J. Shah
George Forrest No. 6696 (F)