

## Generis *Gentiana* L. Tres Species Novae e Tibetia

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Three new species of *Gentiana* from Tibet are described. One of these, *Gentiana subpolytrichoides*, belongs to sect. *Chondrophylla* and the other two, *G. pseudazurea* and *G. Tischkovii*, to sect. *Gentianella*.

### SECT. CHONDROPHYLLA

#### 1. *Gentiana subpolytrichoides* Grubov, sp. nov.

(Fig. 1)

Planta annua 1.5–2 cm alta, fructifera (capsulifera) 3.5–4.5 cm alta, glabra, a basi ramosissima, ramis brevibus ad 5 mm longis, caespitulos minutos compactos formans. Folia basalia rosulata nulla, caulina 2–3 juga, lanceolata vel obovato-lanceolata, ad 4 mm longa. Flores pentameri solitarii, terminales, sessiles, erecti, arcte congesti; calyx rubens, tubulosus, 8–10 mm longus, dentibus reflexis transverse obalivus breviter mucronatis, margine cartilagineis in unguem brevem subito angustatis, sinus obtusis interjectis; corolla pallida coerulea vel alba (?) secus venas striis atropurpureis notata, anguste tubulosa 11–13 mm long, limbo subindistincto, lobis acute triangularibus 1.5–2 mm longis, plicis eis similibus, sed duplo brevioribus. Stamina tubo corollae inserta ca 1 mm longa, anthera ovali rosea 0.3 mm longa. Styli lineares ca 1.5 mm longi, stigmatis capitatis. Capsula lineariteres 7–9 mm longa, 1.5–2 mm lata, membranacea, maturitate stipite tenui 2.5–3.5 cm longo fulta.

Typus: Rep. Pop. Sinica. Tibetia: montes Himalaici, mons Czoja, 5200 m. s. m. declive ad septemtrionem expositum, in schistosis morenae recentis. 1 X 1991. A.A. Tischkov legit. In herbario Instituti Botanici

Acad. Sci. Rossicae, Petropoli (LE).

Species ex affinitate *G. squarrosae* Ledeb. *Gentianae bhutanicae* Grubov<sup>1)</sup>, a qua floribus anguste tubulosis lobis acute triangularibus corollae limbi; capsulis linearibus stipite altissimo 2–3 cm alto e corolla exsertis differt. Habitu muscum *Polytrichum* in mentem revocat.

### SECT. GENTIANELLA

#### 2. *Gentiana pseudazurea* Grubov, sp. nov.

(Fig. 2a)

Planta annua 2.5–3.5 cm alta, a basi furcatim ramosa, glabra; caules ramique quadrangulares; folia obovata, in petiolum brevem 4–8 mm longum, 1.8–2.5 mm latum attenuata, obtusa, radicalia minora, cito emortientia. Flores 5-meri solitarii terminales pedicello ad 10 mm longo suffulti; calyx 4–5 mm longus, in lacinias oblongas vel oblongo-ovales (duas latiores), obtusas vel breviter acuminatas haud nigro-marginatas, basi haud tuberculatas ad basin fere dissectus; corolla pallide violacea, infundibuliformi-tubulosa, 8–9 mm longa, glabra, lobis ovalibus apice rotundatis, integerrimis erectis ca 3 mm longis. Stamina filamentis longis, antheris coeruleis, tubo corollae haud exsertis; ovarium sessile fusiforme stigmatis sessilibus. Capsula oblonga, corollae haud exserta. Semina ovalia laevia,

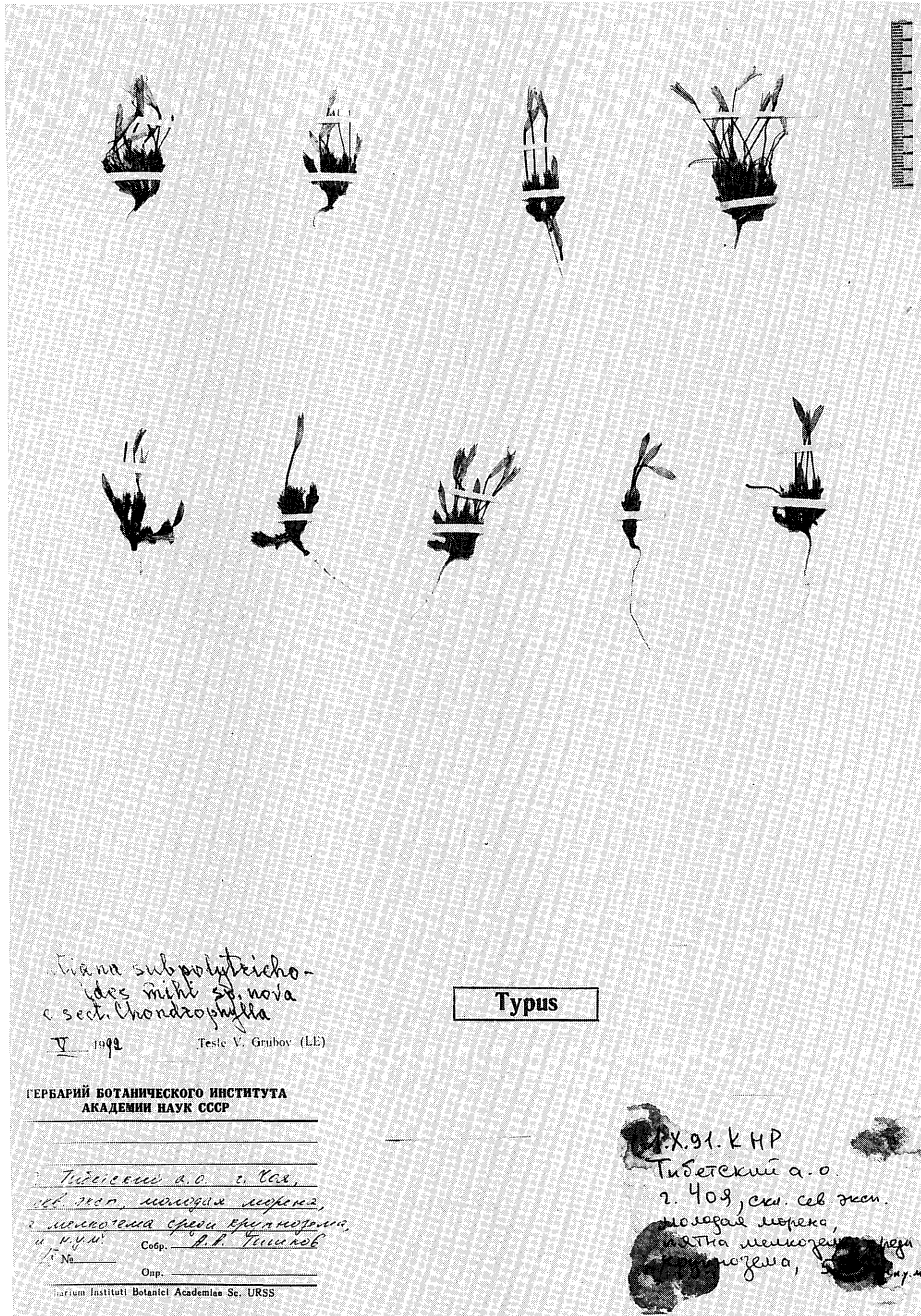


Fig. 1. Type of *Gentiana subpolytrichoides* Grubov.

0.5 mm longa.

Typus: Reip. Pop. Sinica. Tibetia: 4 km ad meridiem a lacu Pejku, 4900 m s.m., moraena vetusta, in declivi

arenificato. 3 IX 1991. A.A. Tischkov (LE).

A *Gentiana azurea* Bunge, cui affinis est, foliis petiolatis, calycis laciniis haud nigro-marginatis, basi

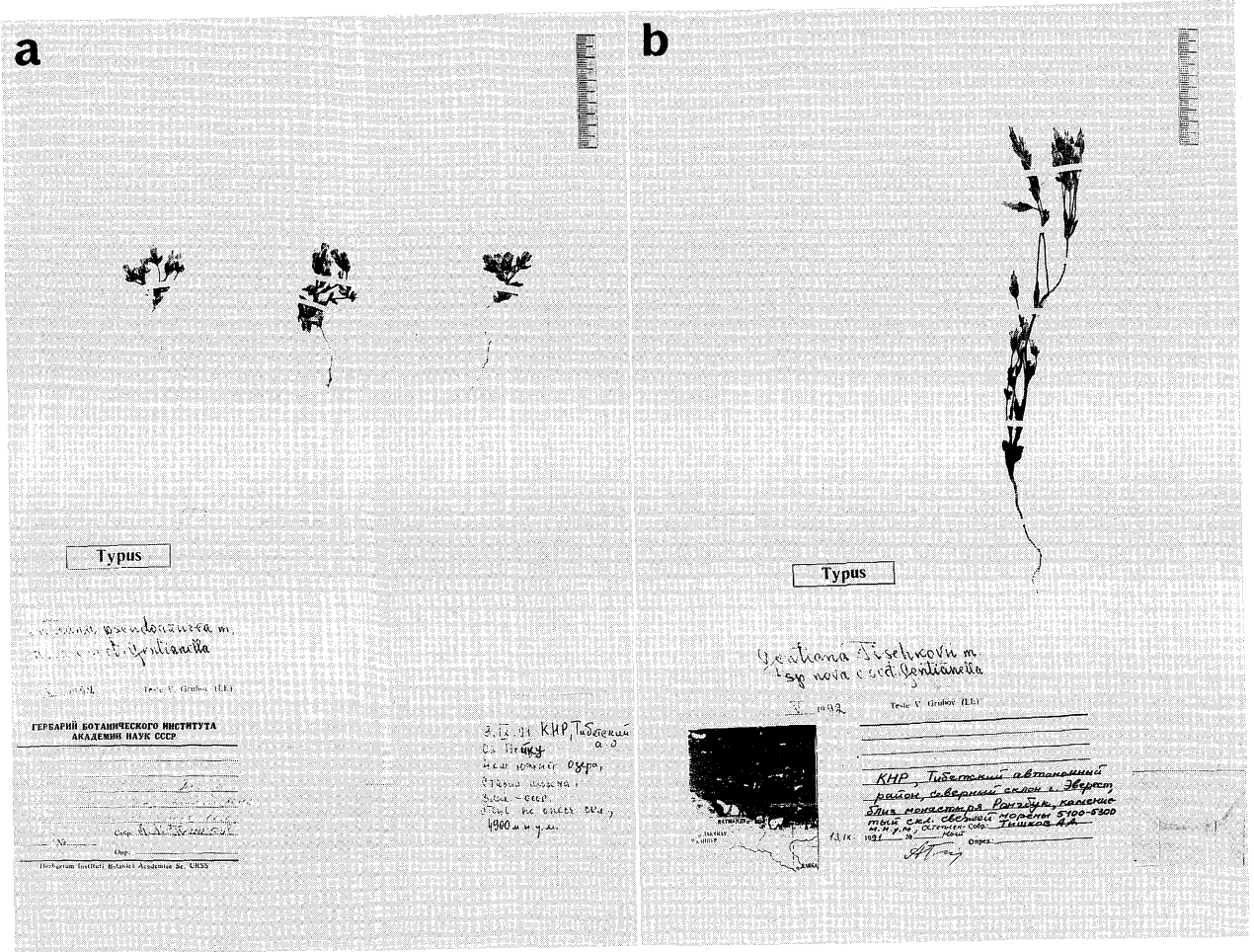


Fig. 2. Type of *Gentiana pseudazurea* Grubov (a) and type of *G. Tischkovii* Grubov (b).

haud tuberculatis, corollae pallide violaceae lobis  
 rotundatis necnon ramificatione furcata differt.

### 3. *Gentiana Tischkovii* Grubov, sp. nov. (Fig. 2b)

Planta annua, glabra; caulis rectus tenuis, ca 18 cm  
 altus, ramosus, ut rami a basi quadrangularis rubescens,  
 ramis rectis strictis, foliis a superioribus lanceolatis  
 ad obovata, breviter petiolatis, obtusis vel acutiusculis,  
 ad 11 mm longis, radicalibus congestis sed non  
 rosulatis, rubescentibus. Flores terminales solitarii,  
 longe pedicellati, pedicellis ad 2 cm longis, 5-meri  
 stricti; calyx viridis in lobos lanceolatos vel oblongos  
 inaequimagnos 5.5–7 mm longos sinibus acutis  
 interjectos usque ad basin dissectus; corolla pallide  
 coerulea, tubulosa, 7–10 mm longa, 2–2.5 mm in  
 diam., in lobos oblongo-ovatos rectos acumine brevi  
 imposito ad medium fere dissectus. Stamina corollae  
 haud exserta, filamentis tenuibus, antheris flavis.  
 Ovarium estipitatum, stigmatis sessilibus. Capsula  
 oblonga, corollae subexserta. Semina fusca ovalis,

0.8 mm longa, laevia.

Typus: Reip. Pop. Sinica. Tibetia: montes  
 Himalaici, declive boreale montis Everest prope  
 coenobium Rongbuk, 5100–5300 m s.m., declive  
 lapidosum moraenae recentis. 13 IX 1991. A.A.  
 Tischkov (LE).

A *Gentiana Moorcroftiana* Wall., cui affinis est,  
 caulibus glabris, foliis obovatis vel lanceolatis (nec  
 linearibus) et lobis calycinis sinibus acutis interjectis  
 differt.

Species A. A. Tischkovio, Expeditionis Glacio-  
 logicae Sovietico-Chinensis Socii, collectionem  
 plantarum pretiosam legetis dedicatur.

### Endnote

<sup>1)</sup>*Gentiana bhutanica* Grubov, nom. nov.

*Gentiana Andersonii* Biswas in Hook. Icon. Pl. 34:  
 tab. 3358 fig. 8–15 (1938), non Clarke in Journ. Linn.  
 Soc. London 14: 436 (1875).

### V. I. グルボフ：チベットからのリンドウ属植物 3新種

ヒマラヤ山脈北側のチベットで、中ソ氷河学会  
 共同学術調査に参加した A. A. Tischkov が採集  
 したリンドウ属植物に3つの新種が見いだされた  
 ので記載した。 *Gentiana subpolytrichoides* は、ミ  
 ヤマリンドウ節の1種で、コケリンドウやヒマラ

ヤの *G. bhutanica* Grubov に近縁である。 *G. pse-  
 udoazurea* と *G. Tischkovii* は、チシマリンドウ節  
 の種で前者は *G. azurea* Bunge, 後者は *G. Moor-  
 croftiana* Wall. に近い。なお、Biswas が1938年  
 Hooker の *Icones Plantarum* 34巻の3358図に発  
 表した *G. Andersonii* Clarke は、*G. Andersonii* と  
 は異なるので、*G. bhutanica* の新名を与えた。

## A New Name for a Taiwanese *Photinia* (Rosaceae)

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A new combination, *Photinia davidiana* var. *formosana* (Card.) H. Ohashi et Iketani, is proposed for a Taiwanese endemic species which is known usually as *Photinia niitakayamensis* or *Stranvaesia niitakayamensis*.

*Photinia niitakayamensis* Hayata has usually been known as a distinct species of *Stranvaesia* and endemic to high mountains in central Taiwan (Li 1963, Liu and Su 1977). Sasaki (1928) and Yü and Lu (1974), however, treated this species as identical with *Stranvaesia davidiana* var. *salicifolia* (Hutch.) Rehder which is known to be distributed in Yunnan and Sichuan. We agree their treatment that *S. niitakayamensis* and *S. davidiana* var. *salicifolia* are not distinct from each other.

Recently, however, *Stranvaesia* and *Photinia* are combined into one genus (Kalkman 1973, Robertson et al. 1991, Iketani and Ohashi 1991). Previously, it is believed that *Stranvaesia* has dehiscent fruits, while *Photinia* has indehiscent fruits (Rehder 1940, Hutchinson 1964), but, this characterization is known to be erroneous. Anatomically, there are no structures of the abscission layer in fruits of *Stranvaesia* (Iketani and Ohashi 1991). Under *Photinia davidiana* no valid names at the rank of variety are available instead of *S. davidiana* var. *salicifolia* or *P. niitakayamensis*. The earliest name valid for them is *P. undulata* var. *formosana* Card. *Stranvaesia davidiana* Decne. and

*S. undulata* Decne. were published in 1874 at the same time, but Rehder and Wilson (1912) selected the former name for the species when he united both. We, therefore, can make the new combination for *P. niitakayamensis* as a variety of *Photinia davidiana* as follows:

***Photinia davidiana*** (Decne.) Card.

var. ***formosana*** (Card.) H. Ohashi et Iketani, comb. nov.

*Photinia niitakayamensis* Hayata in J. Coll. Sci. Univ. Tokyo **30** (1): 103 (1911); Icon. Pl. Formos. **1**: 246 (1911).

*Photinia undulata* Card. var. *formosana* Card. in Lecomte, Not. Syst. **3**: 372 (1914).

*Stranvaesia niitakayamensis* (Hayata) Hayata, Ic. Pl. Formos. **8**: 33 (1919); Kanehira, Formos, Tr. 287, f. 243 (1936); Liu, Ill. Nat. Introd. Ligneous Pl. Taiwan **1**: 482, f. 416 (1960); Li, Woody Fl. Taiwan 328, f. 113 (1963); Liu et Su in Fl. Taiwan **3**: 141, f. 502 (1977).

*Stranvaesia salicifolia* Hutch. in Curtis's Bot. Mag. **146**: t. 8862 (1920).

*Stranvaesia davidiana* Decne. var. *salicifolia* (Hutch.) Rehd. in J. Arn. Arb. **7**: 29 (1926); Sasaki, List Pl. Formosa **222** (1928); Yü et Lu in Fl. Reip. Pop. Sin. **36**: 212 (1974).

*Photinia integrifolia* auct. non Lindley: Matsum. in Bot. Mag. Tokyo **12**: 55 (1898); Matsum. et Hayata, Enum. Pl. Formos. **130** (1906).

*Photinia notoniana* Wight et Arn. var. *eugenifolia* auct. non Hook.: Koidz. in Bot. Mag. Tokyo **23**: 170 (1909).

#### References

- Hayata B. 1919. Materials for a flora of Formosa. J. Coll. Sci., Imp. Univ. Tokyo **30**.
- Hutchinson J. 1964. The Genera of Flowering Plants **1**: 213.
- Clarendon. Press, Oxford.
- Iketani H. and Ohashi H. 1991. Anatomical structure of fruits and evolution of the tribe Sorbeae in the subfamily Maloideae (Rosaceae). J. Jpn. Bot. **66**: 319–351.
- Kalkman C. 1973. The Malesian species of the subfamily Maloideae (Rosaceae). Blumea **21**: 413–442.
- Li H. L. 1963. *Stranvaesia*. In Woody Flora of Taiwan. 326–328. Livingston Publ. Co., Pennsylvania.
- Liu T. S. and Su H. J. 1977. Rosaceae. In Flora of Taiwan **3**: 57–144. Epoch Publ. Co., Ltd., Taipei.
- Rehder A. and Wilson E. H. 1912. *Stranvesia* Lindl. Plantae Wilsonianae **1**: 192.
- 1940. Manual of Cultivated Trees and Shrubs, 2nd ed. MacMillan Co., New York.
- Robertson K. R., Phipps J. B., Rohrer J. R. and Smith P. G. 1991. A synopsis of genera in Maloideae. Syst. Bot. **16**: 376–394.
- Sasaki S. 1928. List of plants of Formosa. Nat. Hist. Soc. Formosa, Taihoku.
- Yü T. T. and T. C. Lu 1974. *Stranvaesia*. In T. T. Yü (ed.), Rosaceae. Flora Reip. Pop. Sin. **36**: 210–216.

大橋広好, 池谷祐幸: 台湾のニイタカカマツカの新学名

バラ科の *Stranvaesia nitakayamensis* (Hayata) Hayata (ニイタカカマツカ) は, 台湾特産の独立種とされることが多いが, 佐々木舜一 (1928) や Yü and Lu (1974) はこれを中国大陸の雲南, 四川に分布する *S. davidiana* var. *salicifolia* と同一

種であると考えた。この同定は正しいと思われる。一方, *Stranvaesia* 属とカナメモチ属 *Photinia* とは区別できないことが明らかとなった (Iketani and Ohashi 1991)。カナメモチ属の下では, ニイタカカマツカの学名は *Photinia davidiana* var. *formosana* (Card.) H. Ohashi et Iketani となる。