

Hiroshi HARA*: **New or noteworthy flowering plants
from Eastern Himalaya (6)****

原 寛*: 東部ヒマラヤ植物新知見 (6)**

The following reports include a part of results obtained by the Botanical Expedition of University of Tokyo to Bhutan in April—June, 1967 (Members: H. Hara, T. Yamazaki, O. Tanaka, H. Kanai, G. Murata, and H. Ohashi).

28) ***Smilacina tatsienensis*** (Franch.) Wehrhahn, *Gartenstauden* **1**: 176 (1929).

Tovaria tatsienensis Franchet in *Bull. Bot. Soc. France* **43**: 47 (1896).

Smilacina tatsienensis (Franch.) Wang et Tang in *Bull. Fan Mem. Inst. Biol.* **7**: 286 (1937).

E. Bhutan. Tzatogang—Dotanang, 2900–2600 m (May 27, 1967, fl.); Nala—Tzatogang, 3000–3200 m (May 26, 1967, bud).

Distr. sp. Bhutan, and W. & C. China (Szechuan, Yunnan, Hupeh).

This is the first record of this group from Eastern Himalaya. Although the group is very polymorphic in West China, our specimens from Bhutan agree well with typical *S. tatsienensis* from West China. In 1936 Handel-Mazzetti identified *Streptopus paniculatus* Baker (1890) (non *Smilacina paniculata* Mart. et Gal., 1843) with *Tovaria yunnanensis* Franch. (1896), and in 1937 Wang and Tang reduced the former together with *Tovaria Delavayi* Franch. to a variety of *Smilacina tatsienensis*. In the typical form, *Streptopus paniculatus* is a large plant, and has large paniculate inflorescences, more slender pedicels 3–6 mm long, linear-lanceolate tepals, and short trilobed style, and *Tovaria yunnanensis* (excl. var. *rigida* Franch.) is a much smaller plant with fewer leaves, simple raceme, and subsessile trifold stigmas. Also *Tovaria stenoloba* Franch. (1896) closely resembles *T. yunnanensis*. It is noteworthy that this group is functionally dioecious, and male plants have more branched broader inflorescences, slender pedicels, longer stamens, and smaller pistils. In our specimens from Bhutan, the pistil of female flowers has a distinct style with 3-lobed stigmas, and that of male flowers has subsessile trifold stigmas. In case that these plants are regarded to fall within the variation of a single

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species, I wish to adopt the specific epithet *tatsienensis* for them.

29) ***Souliea vaginata*** (Maxim.) Franchet in Journ. de Bot. **12**: 68 (1898)—Drummond et Hutchinson in Kew Bull. **1920**: 167, f. 8—Hand.-Mzt., Symb. Sin. **7**: 271 (1931); in Act. Hort. Gothob. **13**: 46 (1940).

Isopyrum vaginatum Maxim., Fl. Tangt. **1**: 18, t. 30 (1889).

Coptis ospriocarpa Brühl in Ann. Bot. Gard. Calcut. **5**: 89, t. 115 (1896)—Mukerjee in Bull. Bot. Surv. India **2**: 106 (1960).

E. Bhutan. Laya—Laum Thang, in *Juniperus* forest, 3800 m (May 18, 1967, fl.); Shodu—Barshong, in *Abies* forest, 3500—3700 m (May 24, 1967, fl.).

Distr. E. Himalaya (Sikkim, Bhutan), Tibet, N. Burma, and W. China (Szechuan, Yunnan, Sikang, W. Kansu).

In 1931, Handel-Mazzetti correctly identified *Coptis ospriocarpa* from Sikkim with *Souliea vaginata*, but the genus *Souliea* has not yet been adopted in Indian botanical literature.

30) ***Pegaeophyton bhutanicum*** Hara, sp. nov. (Fig. 1, 2)



Fig. 1. *Pegaeophyton bhutanicum* Hara. \times ca. 3/4.

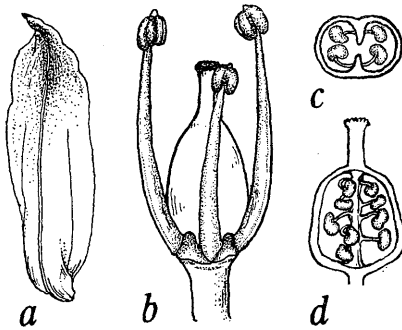


Fig. 2. *Pegaeophyton bhutanicum* Hara.
a. Sepal. $\times 8$. b. Side view of a flower,
petals and sepals removed. $\times 8$. c. Cross
section of an ovary. $\times 8$. d. Longitudinal
section of a pistil. $\times 8$.

Perennis acaulis. Rhizoma fusi-
forme ad 2 cm crassum interdum mul-
ticeps innovationes emittens. Folia
omnia rosulata numerosa anguste ob-
longa apice obtusa basi cuneatim longe
attenuata 2-8 cm longa 5-15 mm lata
margine in parte superiore grosse ser-
rata, serris ovatis vel lanceolatis acuti-
usculis 1-3.5 mm longis, carnosae glabra
vel margine et ad apicem parce pilosa,
pilis irregulariter furcato-ramosis. Flores
numerosi axillares longe pedicellati,
pedicellis gracilibus elongatis 1-3 cm

longis. Sepala suberecta apice recurva oblonga apiculata viridia 4-5 mm longa
1.5-2 mm lata glabra vel dorso pilis paucis adspersa. Petala alba obovata apice
minutissime erosa inferiore cuneatim attenuata viridescencia 8-10 mm longa 4-5 mm
lata. Stamina 6, 3.5 mm longa, filamentis lineari-lanceolatis, antheris rotundato-
cordatis apice minute mucronatis 0.7 mm longis fuscis. Glandulae nectariferae
laterales verruciformes. Pistillum ca. 3 mm longum; ovarium ovoideum paullo
compressum, septo imperfecto; stylus brevis 0.8 mm longus; stigma truncatum dis-
coideum.

E. Bhutan. Shodu—Barshong, 3500-3700 m, on wet rocks or cliffs (May 24,
1967, fl.—type in TI); Barshong—Nala, 3200-3400 m, on rocks (May 25, 1967, fl.).

In general appearance, the plant is near to *P. sinense* (Hemsl.) Hayek et Hand.-
Mzt. which is recently often included in *P. scapiflorum* (Hook. f. et Thoms.)
Marquand et Shaw. But this species is clearly distinguished from them by leaves
with numerous sharp teeth, green sepals reflexed at the apex, and roundish black
anthers mucronulate at the tip, and also by the structure of glands and ovary. As
the capsule is not known as yet, the systematic position of the species is still un-
certain.

31) ***Prunus carmesina* Hara, sp. nov.**

P. cerasoides D. Don var. *rubea* C. Ingram in Gard. Chron. ser. 3, 122: 162
(1947)—Sealy in Bot. Mag. n. s. t. 12 (1948)—Hara, Fl. E. Himal. 125 (1966).

Sikkim. Gangtok, planted (Mar. 24, 1963, fr.). E. Bhutan. Chimakhothi, 2400 m
(Apr. 4, 1967, fl. deep purple-red).

Distr. E. Himalaya (Nepal, Sikkim, Bhutan), Naga Hills, Manipur, N. Burma, and W. China (W. Yunnan).

This Carmine Cherry was critically studied and illustrated by Sealy in 1948. He regarded it as a well-marked variety of *P. cerasoides* D. Don, and pointed out the differences between the two plants. Besides the different flowering periods, this cherry is distinguished from typical *P. cerasoides* in having caducous bracts, slightly larger crimson calyces with oblong or ovate lobes, and suberect (not wide-spreading) rose-red petals.

In early April of 1967, we had a chance to observe this splendid cherry in full bloom in Bhutan where it occurs wild near Chimakhothi and on the east side of Dochu La at about 2400–2600 m high. So far as our Bhutan material is concerned, the leaves are more sharply serrate than those of *P. cerasoides*; the young leaves are brownish red; the petals are deep purple-red as in *P. campanulata*; and the calyx-lobes are more obtuse, ciliate on the margin, and often reflexed. This cherry seems to me to merit the specific recognition distinct from *P. cerasoides*.

32) ***Viola paravaginata*** Hara, sp. nov. (§ Nomimum—Vaginatae)

Acaulis estolonifera. Rhizoma crassum horizontale elongatum articulatum 3–7 (12) cm longum 4–7 mm crassum, radicibus numerosis obsitum. Folia longe petiolata, petiolis 3–12 (16) cm longis; lamina rotundato-vel ovato-cordata apice abrupte acuminata basi profunde cordata margine apresse crenato-serrata 2–5.5 (9) cm longa 2–4 (7) cm lata glabrescens vel supra parce pilosa et subtus ad nervos parce pilosa. Stipulae liberae oblongo-ovatae apice longe attenuatae acutae 6–10 mm longae 3–4 mm latae margine minute glanduloso-ciliatae castaneae. Pedunculi 5–8 (13) cm longi infra medio bi-bracteati, bracteis lineari-lanceolatis 4 mm longis. Sepala oblongo-lanceolata obtusiuscula 3–3.5 mm longa, appendice 1–2 mm longo crenato. Petala oblongo-ovata 8–9 mm longa 4–5 mm lata alba? violaceo-venosa, lateralia imberbia; calcar breve crasse saccatum 2 mm longum. Stigma rostratum. Capsulae oblongo-ovatae acutiusculae ca. 9 mm longae glabrae purpureo-maculatae. Semina ovoidea acutiuscula 2 mm longa ochracea paullo fusciscentia.

Singalila Range. Phalut.—Chia Bhanjang, 3300 m (May 11, 1960, no. 196, fl.—type in TI); Nayathang—Phalut, 3300–3100 m (Jun. 2, 1960, no. 735, fr.). E. Nepal. Tutay—Tinjuray—Hati Sar, 2800 m (Oct. 27, 1963, fr.).

This E. Himalayan violet can be included in the Vaginatae group which has hitherto been known from Japan, and C. & W. China. Except for estoloniferous habit, this species seems to be also related to *V. Hookeri* Thomson.

This Himalayan species differs from *V. vaginata* Maxim. of Japan by more roundish leaves deeply cordate at the base, much smaller flowers, smaller sepals with shorter appendage, and smaller seeds. *V. vaginata* subsp. *alata* (Beck.) Beck. from China closely resembles typical *V. vaginata*, but has barbate lateral petals.

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本報には1967年4月～6月に第3次東京大学インド植物調査隊(隊員:原 寛, 山崎敬, 田中治, 金井弘夫, 村田源, 大橋広好)がブータンで採集した資料の研究結果の一部もふくまれている。

28) *Smilacina tatsienensis*. ヒロハノユキザサに類縁をもった中国西部に多い一群で東部ヒマラヤでは初発見である。

29) *Souliea vaginata*. シロカネソウ属とサラシナショウマ属とに関連の深い一属一種の興味ある植物でブータンで採集された。今後更に詳しく研究する予定である。

30) *Pegaeophyton bhutanicum*. Fig. 1に見られるようにきわめて特異なアブラナ科の新植物で、ブータン東北部高地の岩上に生育している。果実が不明なのでその所属についてはなお疑問が残されている。

31) *Prunus carmesina*. ヒマラヤのサクラ *P. cerasoides* は秋咲きであるが、本種は春咲きで台湾産のヒカンザクラに似た紫紅色の半開の花が美しい。

32) *Viola paravaginata*. スミレサイシンに近い新種で、葉は更に円味があり花は各部小形である。これも日本と東部ヒマラヤの植物学的関連を示す一例である。

○朝日新聞社(編): 北方植物園 pp. 330+2, 新書変化版, 1968・1・, 朝日新聞社, 380. 北海道に自生, 植栽の主な樹木, 小低木, 藤本の話を植物別にまとめて随筆風の文章とし, それらの伝承, 郷土史, 利用, 林学, 植物学など多方面の話題が手ぎわよく, 知的に, 時には適度の詩情を交えて語られる。例えばハルニレのユーカラ神話, オヒョウのアイヌ・アツシ織, ハマナスの香料, 染料, ジャムへの利用, ライラック, ポプラ, アカシア, スズカケノキなどの輸入の歴史, パルプ工業の苦心, 元祿時代に溯るエゾマツ商人の活躍など, とりどりに雄大な北海道北方温帯林の自然と蝦夷地時代, 開拓使時代, それ以後現在にいたる社会の変遷とが織りなす“植物一日一話”とでも云うべきもの。1967年7月以降, 北海道版に86回にわたって連載されたものの再出版。監修者は館脇操教授。北海道大学その他の諸教授, 画家, 郷土史家, 民芸家, 香料, 工芸, 製紙, 林業などの専門家から資料を得た。担当執筆記者は北海道支社中島純氏。鮫島惇一郎, 和子博士夫妻の植物カット図および, 多数の林木を主とする挿入写真がある。

(津山 尚)