

A Revision of *Scutellaria* in Taiwan

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台湾のツツナミソウ属の再検討

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As a result of research for *Scutellaria* of Taiwan, five species (including one new species *S. tarokoensis* Yamaz.), one new variety and one unclarified species were recognized.

The study of *Scutellaria* in Taiwan is insufficient, I have tried to revise the genus.

Scutellaria tashiroi Hayata (Figs. 1-c and 2) and *S. procumbens* Ohwi var. *tomentosa* Ohwi (*S. tarokoensis* Yamaz.) (Figs. 1-b and 3) have been frequently misunderstood and treated as *S. indica* L. or a variety of *S. javanica* Jungh. However, they have several specific characters such as coriaceous leaves and slender long corolla-tubes. Much slender corolla-tubes in these species are unique in the genus. These Formosan taxa and *S. longituba* Koidz. from the Bonin Islands consist of a new group, series Longitubae. *S. playfairi* Kudo (Fig. 1-a) is endemic to Taiwan. *S. taiwanensis* C. Y. Wu was reported from Mt. Arishan. Although I have not seen the specimen, the description and figure of this species indicate the resemblance to *S. indica* except for the leaf-form.

Thus, five species (including one variety) and one unclarified species (*S. taiwanensis*) are recognized in Taiwan as follows:

Ser. 1. **Barbatae** C. Y. Wu in Fl. Reip. Pop. Sinic. **65** (2): 586 (1977).

1. ***Scutellaria barbata*** D. Don, Prod. Fl. Nepal.: 109 (1825); Ohwi in Act. Phytotax. Geobot. **4**: 32 (1935); H. W. Li in Fl. Reip. Pop. Sinic. **65** (2): 229 t. 49, 5 (1977).

Scutellaria rivularis Benth in Wall., Pl. As. Rar. **2**: 66 (1831); Matsum. et Hayata, Enum. Pl. Form.: 314 (1906); Kudo, Labiat. Sino-Jap. Prod.: 268 (1929); Huang et Cheng in Li et al., Fl. Taiwan **4**: 524 (1978).

Distr. Taiwan, C. to S. China, Indochina, Burma, India and Himalayas.

Ser. 2. **Indicae** Juzepchuk in Fl. URSS. **20**: 106 (1954).

2. ***Scutellaria indica*** L., Sp. Pl.: 600 (1753); Matsum. et Hayata, Enum. Pl. Formos.: 313 (1906); H. W. Li in Fl. Reip. Pop. Sinic. **65** (2): 172 (1977); Huang et Cheng in Li et al., Fl. Taiwan **4**: 521 (1978).

Distr. Japan, Taiwan, C. to S. China and

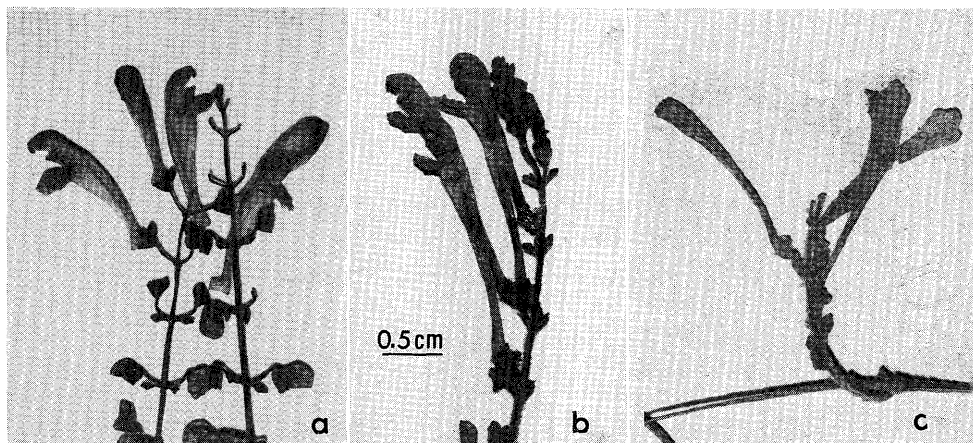


Fig. 1. a. *Scutellaria playfairi* Kudo (Chiay hsien, Hou-tapu. S. Sasaki 1917). b. *S. tarokoensis* Yamaz. (I. Sasaki 1965). c. *S. tashiroi* Hayata. Type (Lanyu Is. Y. Tashiro 1912).

Indochina.

3. *Scutellaria taiwanensis* C. Y. Wu in Fl. Reip. Pop. Sinic. **65** (2): 177, 580, t. 40, 15–21 (1977).

Distr. C. Taiwan (Mt. Arishan), specimen not seen.

4. *Scutellaria playfairi* Kudo, Labiat. Shino-Jap. Prodr.: 254 (1929), p. p., excl. pl. Ryukyu; H. W. Li in Fl. Reip. Pop. Sinic. **65** (2): 146 (1977), excl. syn. *S. procumbens* var. *tomentosa*.

Scutellaria luzonica auct. non Rolfe: Hemsley in J. Linn. Soc. Bot. **26**: 296 (1890).

Scutellaria luzonica Rolfe var. *playfairi* (Kudo) Yamamoto in J. Trop. Agric. **6**: 558 (1934).

Scutellaria procumbens Ohwi in Fedde Rep. Sp. Nov. **36**: 52 (1934).

Scutellaria tashiroi Hayata var. *playfairi* (Kudo) Yamazaki in J. Jap. Bot. **44**: 175 (1969), p. p., excl. Ryukyu specimens.

Scutellaria javanica Jungh. var. *playfairi* (Kudo) Huang et Cheng in Liu, Encycl. Nat. Sci. **8**: 836 (1972), not seen; in Li et al., Fl. Taiwan **4**: 523 (1978).

Distr. Endemic to Taiwan.

Ser. 3. *Longitubae* Yamazaki, ser. nov.

Folia coriacea. Corolla tenuiter tubifera, tubo

galeo 3–8-pro longiore.

Typus. *Scutellaria longituba* Koidzumi (Bonin Islands.)

5. *Scutellaria tashiroi* Hayata, Icon. Pl. Formos. **8**: 85 (1919).

Scutellaria javanica Jungh. var. *luzonica* auct. non Rolfe et Keng: Huang et Cheng in Li et al., Fl. Taiwan **4**: 523 (1978), p. p.

Hab. Taiwan: Lanyu Is. (Tashiro, Jul. 31, 1912. Type TI; G. Ikeda, Aug. 1968, no. 2273, TI).

var. *haianshanensis* Yamazaki, var. nov.

Folia utrinque glabra.

Hualien hsien, Tungli, Haian-shan-mo 海岸山脈 (Namba et al., Aug. 15, 1968, no. 1957, Typus TI).

Distr. Endemic to Taiwan.

6. *Scutellaria tarokoensis* Yamazaki, nom. et stat. nov.

Scutellaria procumbens Ohwi var. *tomentosa* Ohwi in Act. Phytotax. Geobot. **4**: 33 (1935). (non *S. tomentosa* Bertol., 1835).

Scutellaria tashiroi Hayata var. *tomentosa* (Ohwi) Yamazaki in J. Jap. Bot. **44**: 175 (1969).

Hab. Taiwan: Hualien hsien, Taroko (Tailuko), on limestones (S. Sato, Oct. 22, 1935, no. 248, TI;

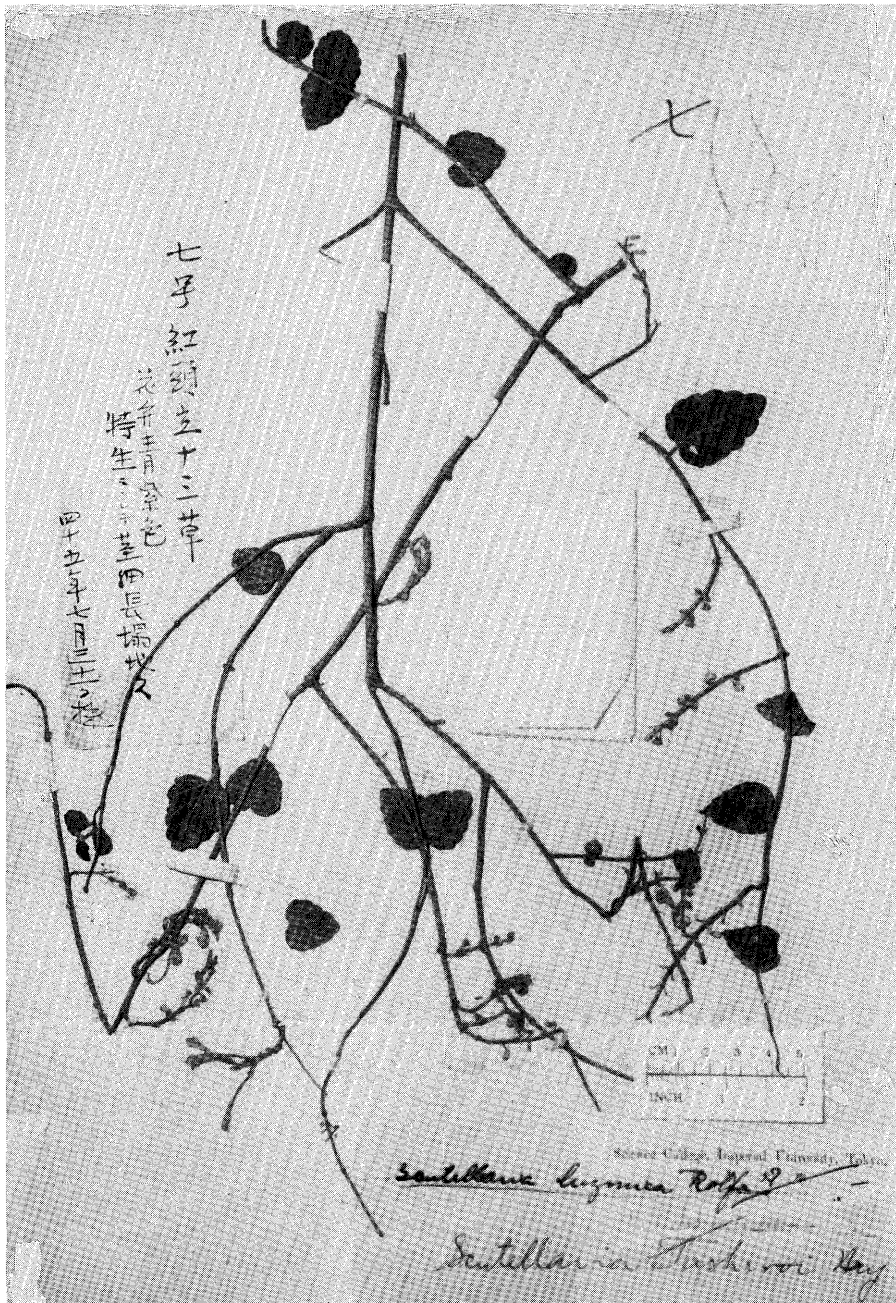


Fig. 2. *Scutellaria tashiroi* Hayata. Type.

I. Sasaki, Oct. 15, 1965, no. 887, TI).

Key to the species

A. Flowers axillary in bract-like small leaves; leaves

generally narrow-ovate, glabrous on both surfaces (Ser. 1. Barbatae) 1. *S. barbata*

A. Flowers in terminal racemes; leaves broadly triangular-ovate or triangularly orbicular-ovate;

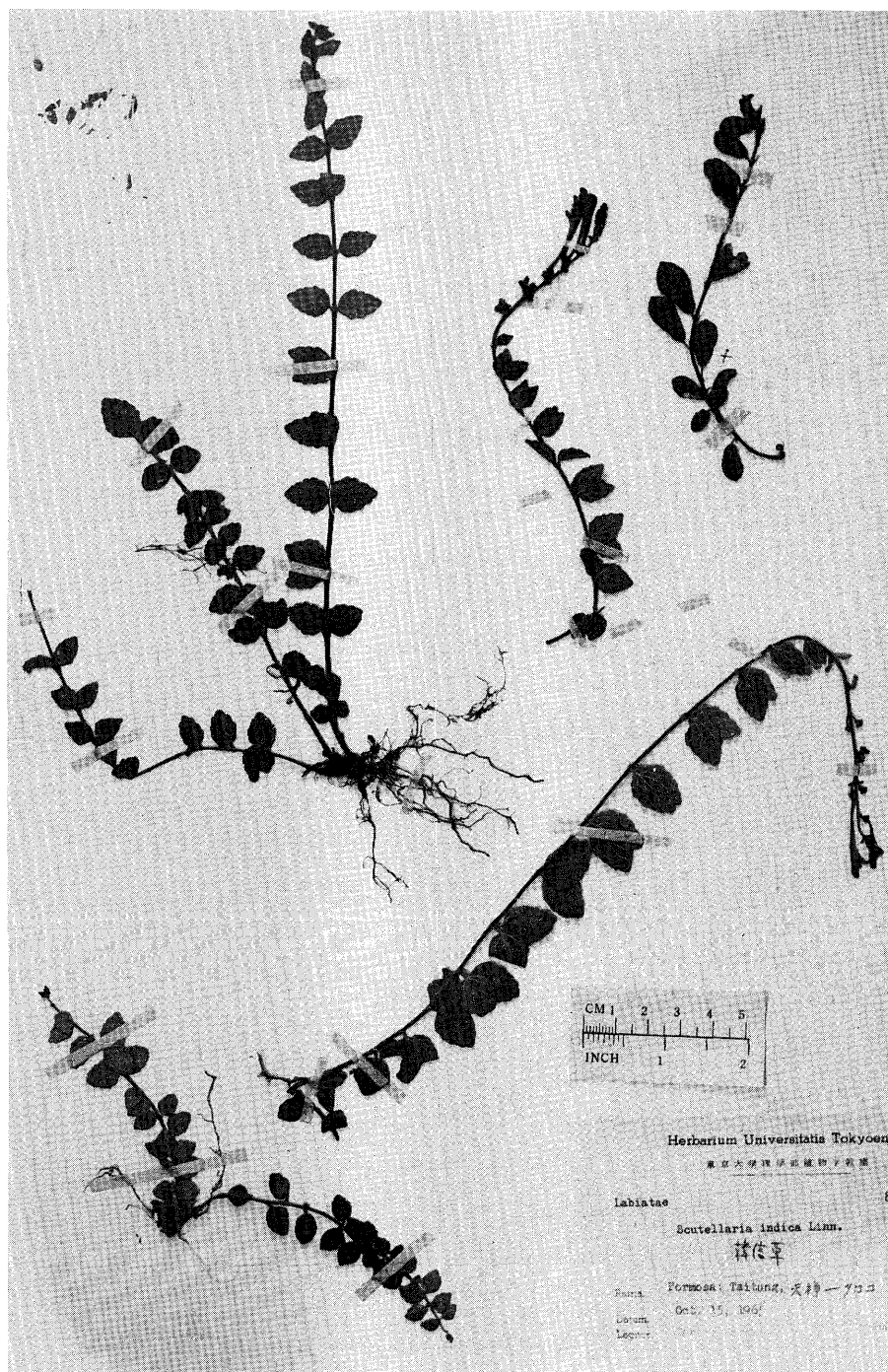


Fig. 3. *Scutellaria tarokoensis* Yamaz. (Taiwan. Hualien hsien, Tienhsiang - Tailuko, I. Sasaki 1965).

- pubescent at least on the nerves beneath.
- B. Corolla-tube 10–15 mm long, about twice longer than the galea; leaves chartaceous or thinly coriaceous (Ser. 2. Indicae).
- C. Leaves with 0.4–1.5 cm long petioles; stems spreadingly or more or less retrorsely pubescent.
- D. Leaves broadly triangular-ovate, truncate or shallowly cordate at base; with 4–6 paired teeth on margin ... 2. *S. indica*
- D. Leaves ovate, cuneate at base, with 3–4 paired teeth on margin. 3. *S. taiwanensis*
- C. Leaves with 1–3 mm long petioles; stems upcurvedly short-pubescent. 4. *S. playfairi*
- B. Corolla-tube slender, 18–20 mm long, 3–4 times longer than the galea; leaves coriaceous, with 2–3(–5) mm long petioles (Ser. 3. Longitubae).
- C. Stems retrorsely short-pubescent; leaves broadly triangular-ovate, 2–3.5 cm long, 1.5–2.5 cm wide 5. *S. tashiroi*
- D. Leaves scabrid above, densely hirsute

- beneath var. *tashiroi*
- D. Leaves glabrous on both surfaces gland-dotted beneath. ... var. *haianshanensis*
- C. Stems upcurvedly short-pubescent; leaves 0.5–2 cm long, 0.4–1.5 cm wide; densely scabrid above, tomentose beneath 6. *S. tarokoensis*

要 旨

台湾のツツナミソウ属の植物はまだ十分に研究されていない。 *S. tashiroi* Hayata や *S. playfairi* Kudo の明らかな種類も *S. javanica* Jungh. の変種とされたり、ツツナミソウ *S. indica* L. の異名とされたりして誤った解釈がなされている。 *S. tashiroi* は *S. tarokoensis* Yamazaki と共に葉が革質状に厚く、細長い花筒を持つ点で、小笠原のムニタツナミソウ *S. longituba* Koidzumi と共に特異な1群をなす。 *S. playfairi* は *S. javanica* の変種とする見解があるが、葉柄がごく短い特徴があって全く異なり、台湾の特産である。以前琉球にもこれが分布するように報告したことがあるが、それはアカボシツツナミソウ *S. rubropunctata* Hayata の誤認であったので訂正する。台湾には5種1変種と未確認の1種が存在する。