

NOTES ON THE FLORA OF TAIWAN (2) — The
Sarcopyramis Wall. (Melastomataceae)

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Abstract: A new record, *Sarcopyramis bodinieri* Lévl. & Van., is described. This species is different from *S. delicata* C. B. Robinson by smaller petal, and calyx with two horn-like hairs at the apex of a lobe and seed with expansive raphe.

The genus, *Sarcopyramis* Wall., contains about six species in tropical Asia. The first record for plants of *Sarcopyramis* in Taiwan was *S. nepalensis* Wall. (Hayata, 1908), which was corrected as *S. delicata* C. B. Robinson by Hayata (1913). In 1944, Prof. H. L. Li pointed out that *S. delicata* occurred in Taiwan without citing any Taiwan's specimens. In 1955, Prof. H. Keng revised this genus of Taiwan and recognized only one species, *S. delicata*. Though his description followed the original description of Robinson (1908), Prof. Keng cited two different taxa. Later on, Keng doubted that there might be a new one, hence, drew a sketch on the specimen (Keng & Kao s.n. 1955). In 1977, the publication of the Melastomataceae in the Flora of Taiwan, which was contributed by Professors Keng and Li, nearly maintained their past treatment. In 1984, C. Chen treated *S. delicata* as a variety of *S. bodinieri*. *S. bodinieri* was treated as a variety of *S. nepalensis* by Léveillé in 1914 (Hu, 1952), but Hu retained it as a species state.

In July, 1987, the first author had collected plants which Keng doubted as a new one at Hsiaokotou, a vicinity to Taipei City. The detailed comparative study of the related taxa cited in the Table 1 was arose.

From the Table 1, *S. nepalensis* is easily recognized by its ovate bract and finely serrate leaf margin and *S. delicata* is characterized by its large petal and obscure filamentous appendage. The new plant is near *S. bodinieri* but differs from it by the location of the bristle of leaf margin and shape of petal. Both the new plant and *S. bodinieri* are characterized by their smaller petals and sepal with two horn-like hairs.

Chen (1984) treated *S. delicata* as a variety of *S. bodinieri*, but the new plant is different from *C. delicata* greatly (Table 1), especially the shape of seeds (Fig. 1), so that a species-state must be adoptive. The new plant has some minor differences with *S. bodinieri* and also is geographically different, a state of subspecies might be valid. But we will wait to examine specimens from Mainland China. We, therefore, treat it as a new record here.

The specimens examined in this paper are all deposited in TAI.

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Table 1. The comparative study of the morphological characters between *S. bodinieri* and its allies. (The characters of *S. bodinieri* are from Anonymous (1979) and Anonymous (1984), of *S. delicata* are from Robinson (1908) and Keng (1955), of *S. nepalensis* are from Anonymous (1984)).

Taxa		<i>S. bodinieri</i>	<i>S. delicata</i>	<i>S. nepalensis</i>	New Taiwan plant
Leaves	shape	ovate	lanceolate- to broadly-ovate	ovate to broadly-ovate	lanceolate- to broadly-ovate
	length	1-3 cm	1-3 cm	(2-)5-10 cm	2-5 cm
	width	0.7-2 cm	1-2 cm	2.5-4.5 cm	1.5-3 cm
	apex	obtuse or acute	obtuse	acuminate	acuminate or obtuse
	margin bristle	roughly serrate between teeth	roughly serrate at the apex of teeth	finely serrate at the apex of teeth	roughly serrate at the apex of teeth
Bract		spathulate	spathulate	ovate	spathulate
Flower		1-3(-5)	1-3(-5)	1-3	1-3
Calyx	length	3 mm	5 mm	5 mm	2-3 mm
	lobe horn-like hair	rectangular 2	triangular 5-7	rectangular 6-8	rectangular 2
Petal	shape	ovate	obovate	obovate	obovate
	length	3-4 mm	10-14 mm	7 mm	3-4 mm
Stamen	filament appendage	½ length of the anther	short or obscure	—¼ length of the anther	½ length of the anther
Seed	raphe	unknown	narrow without middle slit	unknown	expansive with middle slit

Key to the species

1. Calyx 2-3 mm long, the lobe rectangular with 2 horn-like hairs; petal 3-4 mm long; filament-appendage about half the length of anther; seed with expansive raphe 1. *S. bodinieri*
1. Calyx 5 mm long, the lobe triangular with 5-7 horn-like hairs; petal 10-14 mm long; filament-appendage obscure; seed with narrow raphe 2. *S. delicata*
1. *Sarcopyramis bodinieri* Lévl. & Van. in Mem. Soc. Sci. Nat. Cherbourg 35: 397. 1906 & in Fedde Repert. Sp. Nov. 4: 95. 1907; Hu in Journ. Arn. Arb. 33: 172. 1952 — (Fig. 2) 肉穗草

S. delicata sensu Keng in Quart. Journ. Taiwan Mus. 8(1): 34-35. 1955, p.p., non C. B. Robinson.

S. nepalensis sensu Li in Journ. Arn. Arb. 25: 25. 1944, p.p., non Wall.

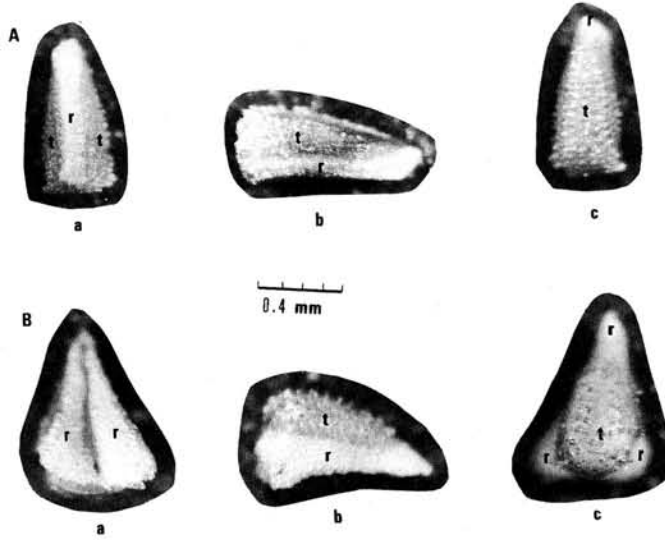


Fig. 1. Different views of seeds of A: *S. delicata* (S. F. Huang 3768). B: *S. bodinieri* (S. F. Huang 3769). a: raphe-view; b: side-view; c: counter raphe-view; r: raphe; t: tuberculate.

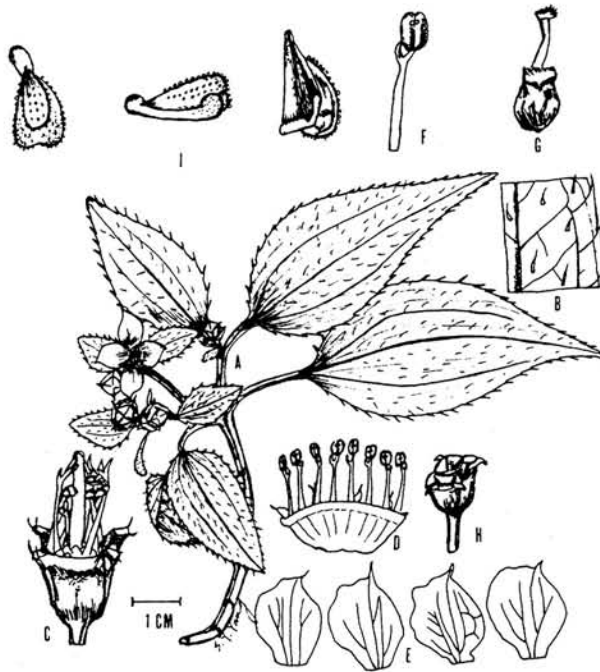


Fig. 2. *Sarcopyramis bodinieri* Lévl. & Van.
 A: Habit. B: Portion of leafy surface. C: Flower without petals. D: Stamens inserted in calyx. E: Petals. F: Stamen. G: Pistil. H: Capsule. I: Seeds.

A flesh herb, simple or sparingly branched, up to 15 cm tall; leaves opposite, ovate to lanceolate-ovate, 2-5 cm long, 1.5-3 cm wide, the apex acuminate to obtuse, the margin dentate-ciliate with a bristle on the apex of tooth, erect stiff hairs on both surfaces; petioles 8-20 mm long. Flowers 1-3; calyx 2-3 mm long, the lobes 4, rectangular, the apex with 2 horn-like hairs; petals 4, obovate, 3-4 mm long; stamens 8, equal, filament-appendage about the half length of anther; stigma capitate. Capsule rectangular, opening by 4 valves at the top; seeds numerous, tuberculate on the surface, with expansive raphe.

Taipei: Hsiaokotou, *S. F. Huang* 3769; Kang-gu, *Keng & Kao* s.n. 1955; Tunghou, *C. L. Huang* 84, Yinghotung, *M. T. Kao* 7620; Wenshan, *N. Fukuyama* s.n. 1931, 1935; Huangtsueshan, *C. M. Kuo* 7188; Matzao, *K. C. Yang* 1361; Chihsingshan, *T. Nakamura* s.n. 1940; Urai, *Matuda* T287. Nantou: Chitou, *T. C. Huang* 3451, *Ou & Kao* 9083.

This species distributes in the South China and Taiwan; Taiwan, in the northern and central parts at the elevation from 300 m to 1000 m high.

2. *Sarcopyramis delicata* C. B. Robinson in Bull. Torrey Bot. Club. 35: 72, 75. 1908; Hayata, Icon. Pl. Formos. 3: 124. 1913; Li in Journ. Arn. Arb. 25: 26. 1944; Keng in Quat. Journ. Taiwan Mus. 8(1): 35. 1955, *p.p.*. 東方肉穗草

S. nepalensis sensu Hayata in Journ. Coll. Sci. Univ. Tokyo 25: 98. 1908, Icon. Pl. Formosa. 2: 24. 1912, *non* Wall.

A fleshy herb, simple or sparingly branched, up to 15 cm high. Leaves broad ovate to lanceolate-ovate, 1-3 cm long, 1-2 cm wide, the apex obtuse, the margin dentate-ciliate with a bristle on the apex of tooth, stiff hairs on both surfaces; petioles 10-28 mm long. Flowers 1-3; calyx 5 mm long, the lobes 4, triangular, the apex with 5-7 horn-like hairs; petals 10-14 mm long, obovate; Stamens 8, equal, the filament with short appendage or obscure; style about 4 mm long. Capsule hemispheric, 4-5 mm long, opening by 4 valves at the top. Seeds numerous, tuberculate on the surface, with narrow raphe.

Taipei: Wenshan, *T. Suzuki* 19268. Ilan: Nan-ao, *T. C. Huang & S. F. Huang* 13382; Tayuan-shan, *M. T. Kao* K3148; Gilitin-Denshankou, *C. S. Kuoh* 3106; Taipinshan, *Ou et al.* 8975. Taoyuan: Lalashan, *S. Sasaki* s.n. 1930; Peichatienshan, *C. M. Kuo* 2514. Hsinchu: Yuanyang Lake, *T. C. Huang* 5482; Kuanwu, *T. C. Huang* 4147. Taichung: Pahsienshan *Chuang et al.* 2732. Nantou: Sanlinchi, *S. F. Huang* 110; Meifeng, *S. F. Huang* 3768; Tusefeng-Sungkang, *Y. C. Jeng* 1886. Chiayi: Tungpushan, *W. S. Tang* 597; Tashan, *T. C. Huang* 4536. Kaohsiung: *Yamazaki & Nanba* 882. Pingtung: 16K-Chinshuiying, *T. C. Huang* 10228; Tawushan, *S. Sasaki* s.n. 1928. Taitung: Ramaramani, *Cheng & Kao* 6075; Tienchih-Yakou, *Huang et al.* 8917. Hualien: Muhkwashan, *M. T. Kao* 4124; Chinshuishan, *T. Nakamura* 3832; Luanshan, *T. C. Huang* 4233.

This species distributes in the Philippines, South China and Taiwan; Taiwan, throughout the whole island at the elevation from 700 m to 2800 m high.

ACKNOWLEDGEMENT

We thank Miss Shioh-Yu Yang for her line drawing, and Mr. Kuoh-Cheng Yang for his valuable opinion. This study was supported in part by grant NSC-77-0211-B002-07.

REFERENCES

- ANONYMOUS, 1979. *Sarcopyramis*. In: Flora Yunnanica 2: 118-121. Science Press.
_____ 1984. *Sarcopyramis*. In: Flora Reip. Pop. Sinicae 53: 245-249. Science Press.
CHEN, C., 1984. Materia ad Flora Melastomataceae Sinensium. Bull. Bot. Research 4(3): 33-81.
HAYATA, B., 1908. Flora Montana Formosae. Journ. Coll. Sci. Imp. Univ. Tokyo 25(9): 1-260.
_____ 1912. *Sarcopyramis*. In: Icones Plantarum Formosarum 2: 24-25.
_____ 1913. *Sarcopyramis*. In: Icones Plantarum Formosarum 3: 124.
HU, S. Y., 1952. Notes on the Flora of China, II. Journ. Arn. Arb. 33: 166-178.
KENG, H., 1955. The Melastomataceae of Taiwan. Quart. Journ. Taiwan Mus. 8(1): 17-36.
_____ and H. L. LI, 1977. Melastomataceae. In: Fl. Taiwan 3: 839-867. Epoc. Publ. Co. Ltd.
LÉVEILE, H., 1907. Melastomataceae novae chinenses. Fedde Repert Sp. Nov. 4: 94-95.
LI, H. L., 1944. Studies in Melastomataceae of China. Journ. Arn. Arb. 25: 1-42.
ROBINSON, C. B., 1908. Alabastra philippinensia-1. Bull. Torrey Bot. Club. 35: 63-75.

臺灣植物誌之觀察 (2) —

肉穗草屬 (野牡丹科)

黃星凡 黃增泉

摘 要

本文描述臺灣新紀錄植物——肉穗草 (*Sarcopyramis bodinieri* Lévl and Van.)。肉穗草與東方肉穗草 (*S. delicata* C. B. Robinson) 之最大區別在於前者之花瓣較小，花萼齒具2枚角狀毛，同時種子具擴大之種阜。