

Research paper

# *Piper sarmentosum* (Piperaceae), a Newly Naturalized Plant in Taiwan

Tian-Chuan Hsu<sup>1</sup> Shih-Wen Chung<sup>2,\*</sup>

【**Abstract**】 *Piper sarmentosum* Roxb. (Piperaceae) is reported from Taiwan as a newly naturalized plant. It could be easily distinguished from all native *Piper* species by its herbaceous habit with erect stems and long creeping stolons.

【**Key words**】 Newly naturalized plant, *Piper sarmentosum*, Piperaceae, Taiwan, taxonomy.

研究報告

## 台灣新歸化植物—假蒟(胡椒科)

許天銓<sup>1</sup> 鐘詩文<sup>2,\*</sup>

【**摘要**】 本文報導臺灣新歸化植物：假蒟(*Piper sarmentosum*)。其植物體為具直立莖與長走莖之草本植物，易與其他原生之風藤屬(*Piper*)植物區辨。

【**關鍵詞**】 新歸化植物，假蒟，胡椒科，臺灣，分類學

【**Introduction**】 In this study, *Piper sarmentosum* Roxb. (Piperaceae) is reported as a newly naturalized plant in Taiwan. General taxonomic data, morphological description, color photos and voucher specimens are also provided. *P. sarmentosum* is introduced to Taiwan in recent years mainly by Vietnam immigrants as a traditional vegetable and medicine. The wild population is possibly originated from cultivated plants since they could easily escape into field and reproduce asexually by their long creeping stolons. Future monitoring of the naturalized population is necessary to ascertain if it could pose a threat to local vegetation and ecology.

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1. Institute of Molecular & Cellular Biology, National Tsing Hua University, No. 101, Section 2, Kuang-Fu Rd., Hsinchu 30013, Taiwan. 國立清華大學，30013新竹市光復路二段101號

2. Botanic Garden Division, Taiwan Forest Research Institute, No. 53, Nanhai Rd., Taipei 10066, Taiwan. 林業試驗所，10066台北市南海路53號

\* Corresponding author, No. 53, Nanhai Rd., Taipei 10066, Taiwan.

通訊作者，10066台北市南海路53號

Tel:+886-2-23039978 ext.2705;e-mail: biflora@gmail.com

## TAXONOMIC TREATMENT

*Piper sarmentosum* Roxb., Fl. Ind., ed. 1: 162. 1820. Fig. 1.

**Type:** INDIA, *Roxborgh s.n.* (holotype: BM!).

**Morphology:** Herbs dioecious, ca. 1 m tall, stoniferous, most parts finely powdery pubescent, gradually turning glabrescent when old. Stems erect, with ascending fertile branches at apex. Petiole 2-5 cm; leaf blades suborbicular, ovate or ovate-lanceolate, subsymmetric, 6-14 × 6-13 cm, membranous, base cordate, rounded or cuneate, apex acute, finely powdery pubescent along veins abaxially, glabrous adaxially, 7-veined, with conspicuous reticulate veinlets. Spikes solitary, leaf-opposed. Male spikes white, 15-25 × 2-3 mm; peduncle 10-25 mm; rachis pubescent; bracts broad elliptic, 0.5-0.6 mm, peltate, sessile. Stamens 2; filaments ca. 2 × as long as anthers; anthers subglobose. Female spikes 2-5 cm, to 7-8 mm thick in fruit; peduncle 12-40 mm; rachis glabrous; bracts suborbicular, peltate, 1-1.3 mm. Stigmas 4, occasionally 3 or 5, hispidulous. Drupe subglobose, 4-angled, 2.5-3 mm, partly connate to rachis.

**Chinese name:** 假蒟

**Distribution:** Native in Cambodia, India, Indonesia, Laos, Malaysia, Philippine, Vietnam and widely cultivated in SE Asia.

**Habitat and phenology:** Forest margin, 100-230 m. Flowering and fruiting from April to November.

**Voucher specimens:** Taoyuan City: Mt. Jiulutou (舊路頭山), 200-230 m, 20 Jan 2013, T. C. Hsu 6255 (TAIF); same loc., 5 Jul 2013, T.C. Hsu 6725 (TAIF). Kaohsiung City: Mt. Panping (半屏山), 100-200 m, 8 Oct 2015, S.W. Chung & T.H. Chen 12336 (TAIF).

**Note:** In morphology, *P. sarmentosum* is easily distinguished from the eight native *Piper* species in Taiwan (Lin & Lu 1996) by its herbaceous habits composed of erect stems and long creeping stolons. *P. umbellatum*, the only native *Piper* species with erect stems, is not stoloniferous, and all other native species are climbers with hanging or pendulous fertile branches.

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## LITERATURE CITED

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Fig 1. *Piper sarmentosum* Roxb. (from Hsu 6725). A: Habitat and habits at Mt. Jiulutou, Taoyuan City. B: Leaves. C: Male spike.

