

# 短梗千金藤，越南防己科新记录种

武进正<sup>1,2\*</sup>，郑氏福<sup>3</sup>，童毅华<sup>4</sup>，夏念和<sup>4</sup>

(1. 越南科学技术院，越南国家自然博物馆，河内，越南；2. 越南科学与技术院科学与技术研究生院，河内，越南；3. 宏德大学，清化，越南；4. 中国科学院华南植物园，中国科学院植物资源保护与可持续利用重点实验室&广东省数字植物园重点实验室，广州 510650)

**摘要：**报道了越南防己科(Menispermaceae)一新记录种：短梗千金藤(*Stephania brevipes* Craib)。据文献记载，该种仅分布于泰国，现首次在越南发现其分布。本种与粪箕笃(*S. longa* Lour.)形态相近，但叶宽三角状卵形至三角状扁圆形，雄花序小，腋生或生于无叶的茎上，总梗较短，花萼淡黄色，花瓣红紫色，内果皮外部沟数较少而与后者不同。还提供了该种详细的形态学描述、图版、分布及生态学等信息。凭证标本保存在越南国立自然博物馆标本馆(VNMN)和中国科学院华南植物园标本馆(IBSC)。

**关键词：**防己科；千金藤属；短梗千金藤；新记录；越南

doi: 10.11926/jtsb.4030

## *Stephania brevipes* Craib (Menispermaceae), A New Record for the Flora of Vietnam

VU Tien Chinh<sup>1,2\*</sup>, TRINH Thi Phuc<sup>3</sup>, TONG Yi-hua<sup>4</sup>, XIA Nian-he<sup>4</sup>

(1. Vietnam National Museum of Nature, Vietnam Academy of Science and Technology, Hanoi, Vietnam; 2. Graduate University of Science and Technology, Vietnam Academy of Science and Technology, Hanoi, Vietnam; 3. Hong Duc University, Thanh Hoa, Vietnam; 4. Key Laboratory of Plant Resources Conservation and Utilization & Guangdong Provincial Key Laboratory of Digital Botanical Garden, South China Botanical Garden, Chinese Academy of Sciences, Guangzhou 510650, China)

**Abstract:** *Stephania brevipes* Craib (Menispermaceae), previously known only from Thailand is reported from Vietnam for the first time. It is morphologically allied to *S. longa* Lour., but differs in having broadly triangular-ovate to triangular-oblate leaves, a small male inflorescence axillary or on leafless stems with shorter peduncle, yellowish sepals, red-violet petals, and endocarps with fewer transverse ridges. A detailed morphological description, a line drawing and color plate as well as distribution and ecology information of this species are given. The vouchers are kept in the herbaria of Vietnam National Museum of Nature (VNMN) and South China Botanical Garden, Chinese Academy of Sciences (IBSC).

**Key words:** Menispermaceae; *Stephania*; *S. brevipes*; New record; Vietnam

The genus *Stephania* L. comprises ca. 60 species mostly distributed in tropical and subtropical Asia<sup>[1]</sup>. Thirty-seven species are recorded in China<sup>[1]</sup>, fifteen in Thailand<sup>[2]</sup>, and seven species and one variety in Laos<sup>[3]</sup>. In Vietnam, the genus currently consists of 13 species and one variety<sup>[4]</sup>. After examining all the

specimens of *Stephania* collected in Vietnam, two specimens representing one species collected from the plateau of Gialai Province drew our attention. This species is most similar to *S. longa*, but differs from the latter by many morphological characters, such as the shape of leaf blade, the length of peduncle,

Received: 2018-12-04

Accepted: 2019-02-13

This work was supported by Vietnam National Foundation for Science and Technology Development (NAFOSTED) [Grant No. 106-NN.99-2015.26] and National Natural Science Foundation of China (Grant no. 31670196).

\* Corresponding author. E-mail: tienchinhvu@gmail.com

the color of sepals and petals and the size of male inflorescences. After referring to the related literature<sup>[2-3,5-7]</sup> and comparing with species from neighboring countries, we found that it was conspecific with *S. brevipes*, which is distributed in Thailand and never recorded from Vietnam before. Thus, it is reported as a new record for the flora of

Vietnam here. A detailed morphological description, a line drawing and color plate as well as distribution and ecology information of this species are provided.

*Stephania brevipes* Craib, Bull. Misc. Inf. Kew **1922**: 228. 1922. Type: Thailand, Doi Suthep, 900 m, 21 June 1914, Kerr 3255 (holotype K!, isotype BM !). (Figs. 1 & 2)

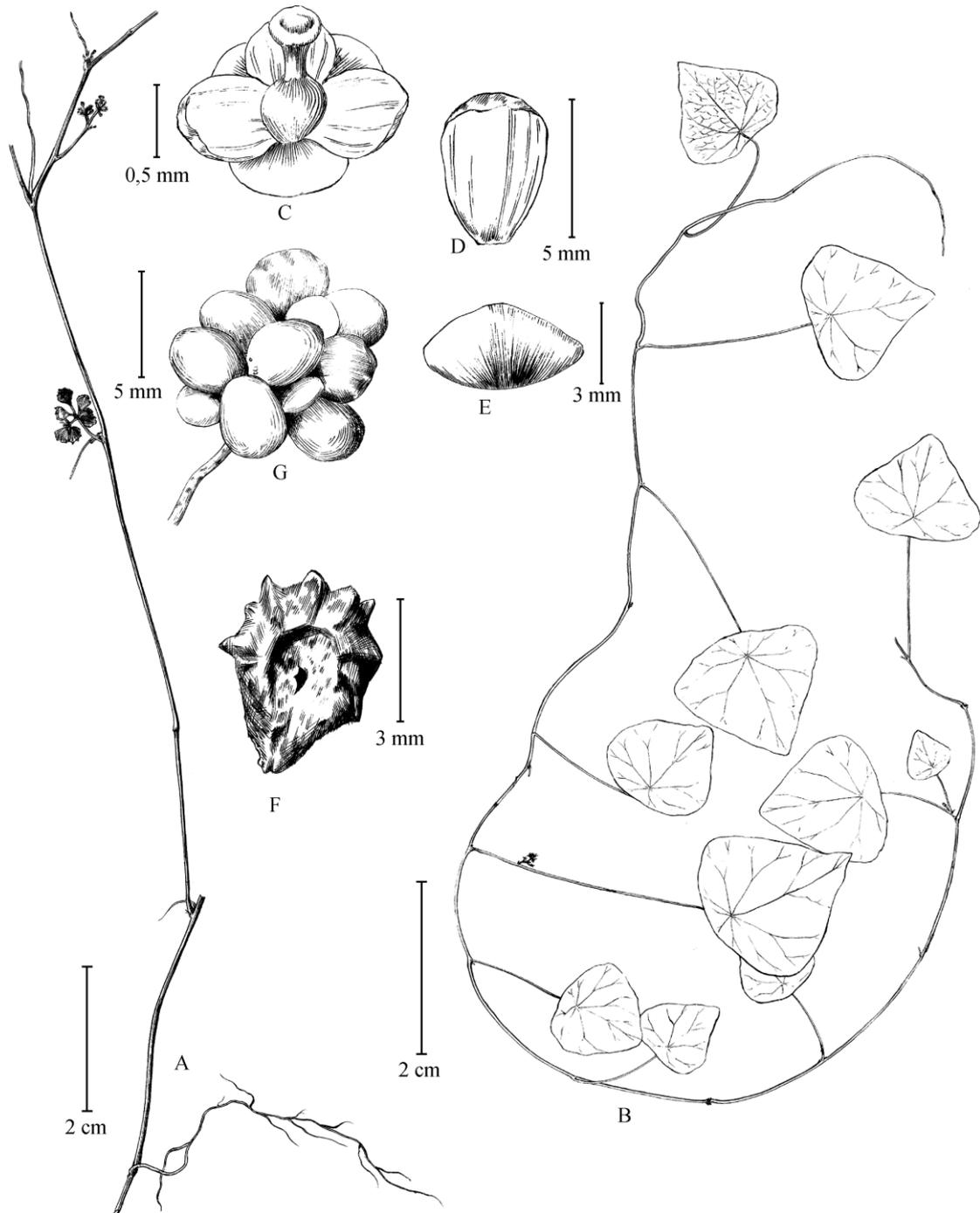


Fig. 1 *Stephania brevipes* Craib. A: Fruiting branch; B: Leafy branch; C: Male flower; D: Sepal; E: Petal; F: Endocarp; G: Fruits. (Drawn by Cui Ding Han, from VTC 73 & VTC 76.)

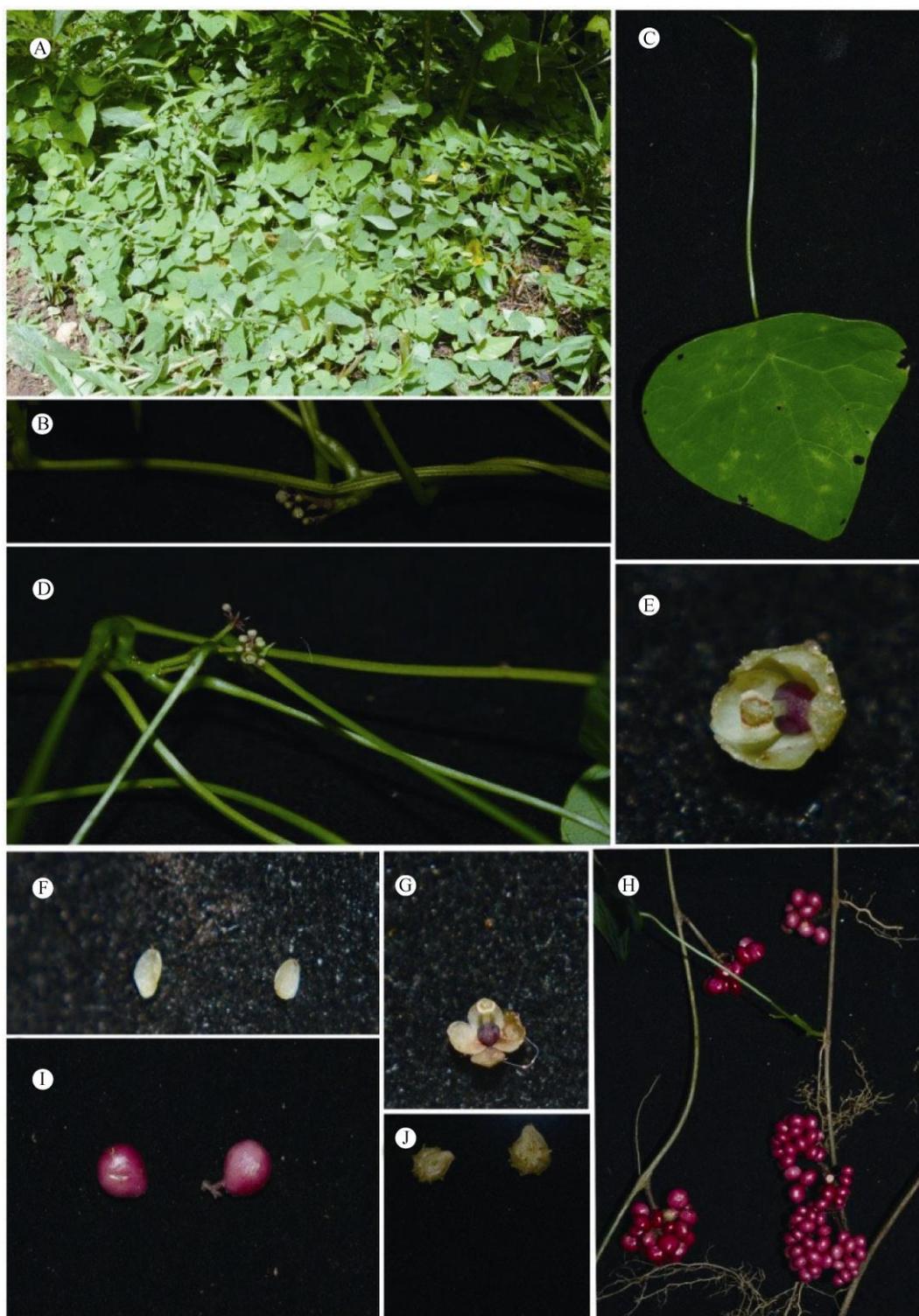


Fig. 2 *Stephania brevipes* Craib. A: Habit; B, D: Male inflorescence; C: Leaf; E, G: Male flower; F: Sepals; H: Fruiting branch; I: Fruits; J: Endocarp. (Photographed by Vu Tien Chinh)

Vine climber without tubers; stems very slender, glabrous or papillose-puberulous. Leaf blade thinly papyraceous, broadly triangular-ovate, sometimes rotund, 4–7 cm × 3.5–5.5 cm, base truncate or very slightly

cordate, apex obtuse or slightly emarginate, glabrous, lower surface papillose and sometimes glaucous; petiole 3–8 cm long, longer than leaf blade, palmately 8–9-veined. Inflorescence axillary or on leafless stems;

male inflorescence a small umbelliform few-flowered cyme, peduncle ca 0.5 cm long, sometimes papillose-puberulous; male flowers pedicellate; sepals 6, yellowish, elliptic, free, 1.2–1.8 mm long, the inner 3 slightly broader, adaxially glabrous, abaxially puberulous; petals 3, red-violet, free, obovate, ca. 0.8 mm long; synandrium 0.7–0.8 mm long; female inflorescence ca. 2.5–3.5 cm long; carpels ca. 0.75 mm long. Drupes pink, nearly rotund, glabrous, 0.6–0.8 mm diam.; endocarp ca. 5 mm long, abaxially ornamented with 6 or slightly more rows of transverse ridges, condyle perforate.

**Distribution:** Vietnam (Gialai), Thailand (Doi Suthep).

**Habitat and ecology:** *Stephania brevipes* is only

known from Kon Ka Kinh National Park, Gialai Province in Vietnam. It grows in the edges and roadside thickets of evergreen forests at an elevation of 948 m.

**Phenology:** Flowering in May–June and fruiting in July–September.

**Vietnamese name:** B ãnh v ãi c ùm hoa ng ấ n.

**Notes:** *Stephania brevipes* is similar to *S. longa* in general habit, but differs from the latter in having broadly triangular-ovate to triangular-oblate (vs. triangular-ovate) leaves, a small umbelliform cyme (vs. compound umbelliform cymes) of male inflorescence with peduncle ca 0.5 cm (vs. 1–4 cm) long, red-violet (vs. greenish yellow) petals, and endocarps with 6 (vs. 10) or slightly more rows of transverse ridges (Table 1).

Table 1 Morphological comparison of *Stephania brevipes* and *S. longa*

	<i>S. brevipes</i>	<i>S. longa</i>
Leaf blade	Broadly triangular-ovate, to triangular-oblate	Triangular-ovate
Male inflorescence	Umbelliform cymes, axillary or on leafless stems, peduncle ca. 0.5 cm long	Compound umbelliform cymes, axillary, peduncle 1–4 cm long
Sepals	6, yellowish	6 or 8, yellowish green
Petal	3, red-violet	3 or 4, greenish yellow
Endocarp	6 or slightly more rows of transverse ridges	10 or slightly more rows of transverse ridges

**Additional specimens examined:** Vietnam. Gia Lai Province: Kon Ka Kinh National Park, Mang Giang Town, 14°12'28.2" N, 108°19'01.6" E, 948 m alt., 13 July 2012, Vu Tien Chinh, VTC 73(♀) (VNMN, IBSC); *ibidem.*, 13 July 2012, Vu Tien Chinh, VTC 76 (♂) (VNMN, IBSC).

**Acknowledgments** We would like to thank the curators of the following herbaria for their help during this research: VNMN, HN, IBSC and K. Our thanks also go to Mr. Cui Dinghai who helped to draw the illustration.

## References

- [1] LUO X R, CHEN T, GILBERT M G. Menispermaceae [M]// WU Z Y, RAVEN P H. Flora of China, Vol. 7. Beijing: Science Press & St. Louis: Missouri Botanical Garden Press, 2008: 1–31.
- [2] FORMAN L L. Menispermaceae [M]// SMITINAND T, LARSEN K. Flora of Thailand, Vol. 5 (3). Bangkok: Chutima Press, 1991: 300–365.
- [3] NEWMAN M, KETPHANH S, SVENGSAKSA B, et al. A Checklist of the Vascular Plants of Lao PDR [M]. Edinburgh: Royal Botanic Garden Edinburgh, 2007.
- [4] VU T C, BUI H Q, RITESH K C, et al. *Stephania subpeltata* H. S. Lo (Menispermaceae): A new record for the Flora of Vietnam [J]. Korean J Plant Taxon, 2016, 46(3): 1–7.
- [5] JACQUES F M B. Survey of the Menispermaceae endocarps [J]. Adansonia, s. 3, 2009, 31 (1): 47–87.
- [6] NGUYEN T B. Menispermaceae [M]// Checklist of Plant Species of Vietnam Vol. 2. Ha Noi: Agricultural Publishing House, 2003: 140–152.
- [7] PHAM H H. Illustrated Flora of Vietnam, Vol. 1 [M]. Hochiminh City: Hochiminh Young Publisher, 1999.