



## *Aristolochia xuanlienensis*, a new species of Aristolochiaceae from Vietnam

NGUYEN THI THANH HUONG<sup>1\*</sup>, DO VAN HAI<sup>1</sup>, BUI HONG QUANG<sup>1</sup>, NGUYEN THE CUONG<sup>1</sup>, NGUYEN SINH KHANG<sup>1</sup>, DANG QUOC VU<sup>2</sup> & JIN-SHUANG MA<sup>3</sup>

<sup>1</sup>Department of Botany, Institute of Ecology and Biological Resources, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet Road, Hanoi, Vietnam

<sup>2</sup>Forest Protection Department, Vietnam Administration of Forestry, Hanoi, Vietnam

<sup>3</sup>Shanghai Chenshan Plant Science Research Center, Chinese Academy of Sciences, Shanghai Chenshan Botanical Garden, 3888 Chenshan Road, Songjiang, Shanghai 201602, China; E-mail: majinshuang@sibs.ac.cn

### Introduction

*Aristolochia* Linneaus (1753: 960), the largest genus of Aristolochiaceae, consists of about 400 species (Hwang, 1988, Ma, 1989) but most of them are in the New World (Hou, 1984: 53; Huang *et al.* 2003: 246). It is widely distributed throughout tropics and subtropics but also extends into warm temperate regions. However, the genus is also rich in Asia, particularly in eastern and southern Asia, with more than 70 species (Ma, 1989). In Vietnam, there are 13 species and 1 variety (Ban, 2003, Lecomte, 1910, Ho, 2000, Do *et al.* 2014). During a field expedition to Thanh Hoa Province, Xuan Lien Nature Reserve, an unknown species of *Aristolochia* was collected and studied in the Vietnamese Herbaria; in comparison with other species of the genus, particularly the floral and fruit characteristics of those in the nearby area, it became obvious that it indeed represented a species new to science, which we described here.

*Aristolochia xuanlienensis* N.T.T Huong, B. H. Quang & J. S Ma, *sp. nov.* (Figs. 1, 2)

*Aristolochia xuanlienensis* is similar to *A. hainanensis* Merrill (1922: 341), *A. balansae* Franchet (1898: 311) and *A. quangbinhensis* Do (2014: 52), but its white perianth with light purple veins on the outside and dark purple spots both in tube and on limb has never been reported before among the Asian species.

Type:—VIETNAM. Thanh Hoa Province: Xuan Lien Nature Reserve, 19°59'44.5"N, 105°00'08.7"E, elevation about 870 m, 7 November 2011, Hai, Quang, Cuong, Vu, Thanh & Thanh 129 (holotype HN 00000 68875; isotypes: CSH).

Other specimens examined:—VIETNAM. Thanh Hoa Province: Xuan Lien Nature Reserve, 19°50'51.3"N, 105°14'40.6"E, elevation about 200 m, 17 April 2014, Huong, Hai, Quang & Khang 105 (HN, VNMN).

Liana with a woody stem, terete, striate, yellow, hairs brown, old branchlets glabrous, up to more than 1 cm in diameter. Leaves with the petioles 3–8 cm long, densely yellow-brown villous; leaf blade ovate or ovate-lanceolate to narrowly ovate, 12–25 x 7–15 cm, both surface densely villous when young, becoming glabrous when old; margin entire; veins palmate, 4–5 pairs from base; base rounded, apex acuminate. Racemes usually in axils of leafy shoots or on old woody stems, 3–4(–5) flowers, ca 3.5 cm long; peduncle often pendulous, ca. 3 cm long, densely pubescent. Perianth white with light purple veins outside and dark purple spots both in tube and on limb; limb obliquely trumpet-shaped, ca 2.5 cm in diameter, trilobed; lobes subequal, densely papillate, upper 2 oblong, lower one broadly deltoid. Gynostemium is with trilobed stigma on top, anthers 6 in 3 pairs, oblong, ca. 2 mm long. Capsule narrowly cylindric, yellow, 8.0–10.0 x 2.0–2.5 cm. Seeds cordate, ca. 4–6 x 3–4 mm.

**Vernacular name:**—Phòng kỹ Xuân Liên (Vietnamese)

**Distribution and habitat:**—*Aristolochia xuanlienensis* is currently known only from Xuan Lien Nature Reserve, Thanh Hoa Province, Vietnam, at elevations between 200–900 m. The new species usually grows in the understory of primary subtropical evergreen forests, along with tree species including *Raphidophora* sp., *Alocasia* sp., *Pothos* sp., *Paraborea* sp., *Tarennia latifolia* Pit., *Boehmeria* sp., *Ficus* sp., ferns and others.

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