



## NOTE

## *Jasminum extensum* Wall. ex G. Don (Oleaceae), a New Record to the Flora of Vietnam

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**ABSTRACT:** One rare, poorly known species from India, South China and Thailand - *Jasminum extensum* Wall. ex G. Don is recently discovered in Vietnam representing a new record to the flora of the country. The plant differs from its closely related species viz. *Jasminum pierreanum* in having coriaceous leaves and 5–6 primary veins in each side of the mid-rib. Detailed information on taxonomy, types, morphology, habitat, ecology, distribution and studied voucher specimens, as well as illustrations are provided here for species identification.

**KEY WORDS:** Flora of Vietnam, *Jasminum*, new record, Oleaceae, Taxonomy.

## INTRODUCTION

*Jasminum* L. is one of the largest genera under the family Oleaceae with 200 species distributed in tropical and subtropical regions of South East Asia, Europe, Australia and Africa (Mabberley, 2008). During our floristic investigation in the Hon Ba Nature Reserve, Khanh Hoa province of Vietnam, an interesting species of *Jasminum* was collected. On the basis of available literatures (Gagnepain, 1933; Chang, 1996; Green, 2000; Ho, 2003; Tran, 2003) and carefully studying the type specimens, the new specimen was identified as *Jasminum extensum* Wall. ex G. Don which is a new addition to the Flora of Vietnam. Hereunder, follows a short data on taxonomy, types, morphology, ecology and distribution of the mentioned species accompanied with the illustrations.

## TAXONOMIC TREATMENT

*Jasminum extensum* Wall. ex G. Don, Gen. Hist. 4: 62. 1837; P.S.Green in Fl. Thailand 7(2): 332. 2000; P.S. Green, Kew Bull. 58(2): 286. 2003. Figs. 1 & 2

*J. seguinii* H. Lev., Repert. Spec. Nov. Regni Veg. 13: 151. 1914; Maio in Fl. Reipubl. Pop. Sin. 61: 204. 1992; Chang *et al.* in Wu & Raven (eds.), Fl. China 15: 315. 1996. (Type. China: Kouy-Tcheou. Environs de Hoang Ko Chon, 9/6/1898, Séguin J 2354 (Holo) – Photo!) - (P)

*J. taliense* W.W. Sm., Notes Roy. Bot. Gard. Edinburgh 12 (59): 210. 1920. (Type. China: Yunnan explorations of George Forrest (1917–1919), No. 15605 (syntype) - Photo!) - (P)

**Type:** Described from the mount Taong Dong in Myanmar. (Wallich cat. No. 2862; 2862 K-W; isotype K).

Woody climber, twining, 1–5 m. Branchlets terete or flat, young shoots glabrous. Leaves opposite, simple, coriaceous, elliptic or elliptic oblong to lanceolate, 3–10 × 5–8 cm; base obtuse to rounded; apex acuminate; glabrous; 5–6 primary veins on each side of the midrib, the lowest at a broad angle to the midrib, veins prominently raised below and slightly raised above, finely reticulate to obscure; 4–5 small, slightly hairy domatia on each side; petioles glabrous, 5–10 mm long. Inflorescence- Cymes racemose, terminal or axillary, (5 -to) many flowered, glabrous; bracts subulate or lanceolate, 1–10 mm long; pedicels 2–20 mm long, glabrous. Calyx cupular, glabrous; tube 1–2 mm long, 4–5 lobed, 0.5–1(–3) mm long, triangular to lanceolate, broadly acute. Corolla white to purplish, salverform, glabrous, tube slender, 15–25 mm long; lobes usually 7, narrowly lanceolate, 10–15 × 2–3 mm. Stamens 2; filaments *ca.* 0.5 mm long, glabrous. Anthers *ca.* 3.5 mm with an acute connective appendage 0.5 mm. Ovary barrel 0.5 mm, glabrous; style *ca.* 6 mm long, glabrous; stigma *ca.* 3 mm long, glabrous. Berry subglobose, 5–6 mm in diam.

**Flowering & Fruiting:** Aug.–Nov.

**Note:** This species differs from closely related taxa *J. pierreanum* Gagnep. by having coriaceous leaves, ovate to narrowly elliptic (rarely lanceolate) blade, 5–6 primary veins in each side of the midrib, cuneate to rounded leaf base, glabrous petiole, longer pedicel and

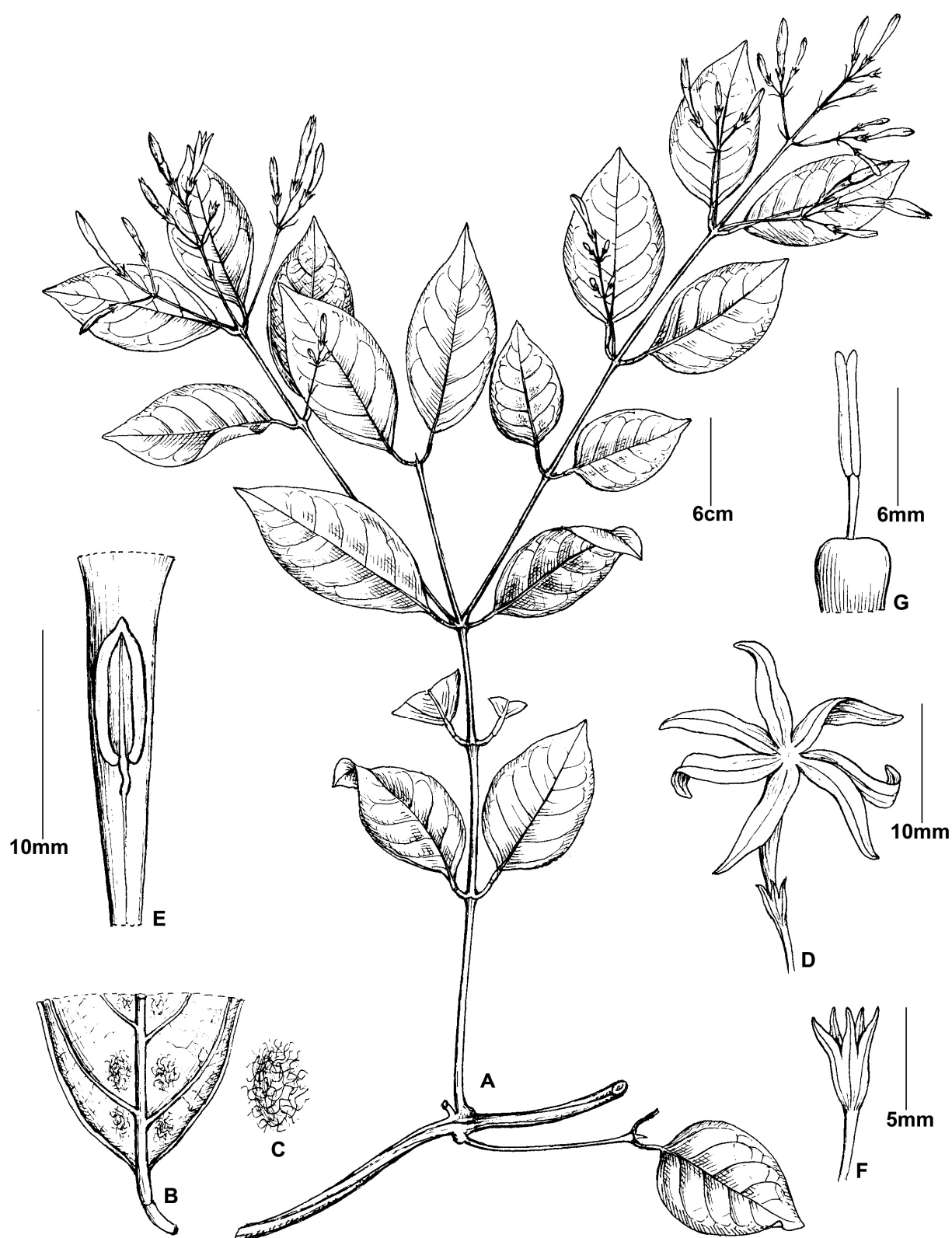


Fig. 1. *Jasminum extensum* Wall. ex G. Don A: Flowering twig. B: Abaxial portion of leaf. C: Hairy domatia. D: Flower. E: Corolla tube. F: Calyx. G: Pistil. [Illustration drawn by Mrs. Kim Chi from HIKK-143]

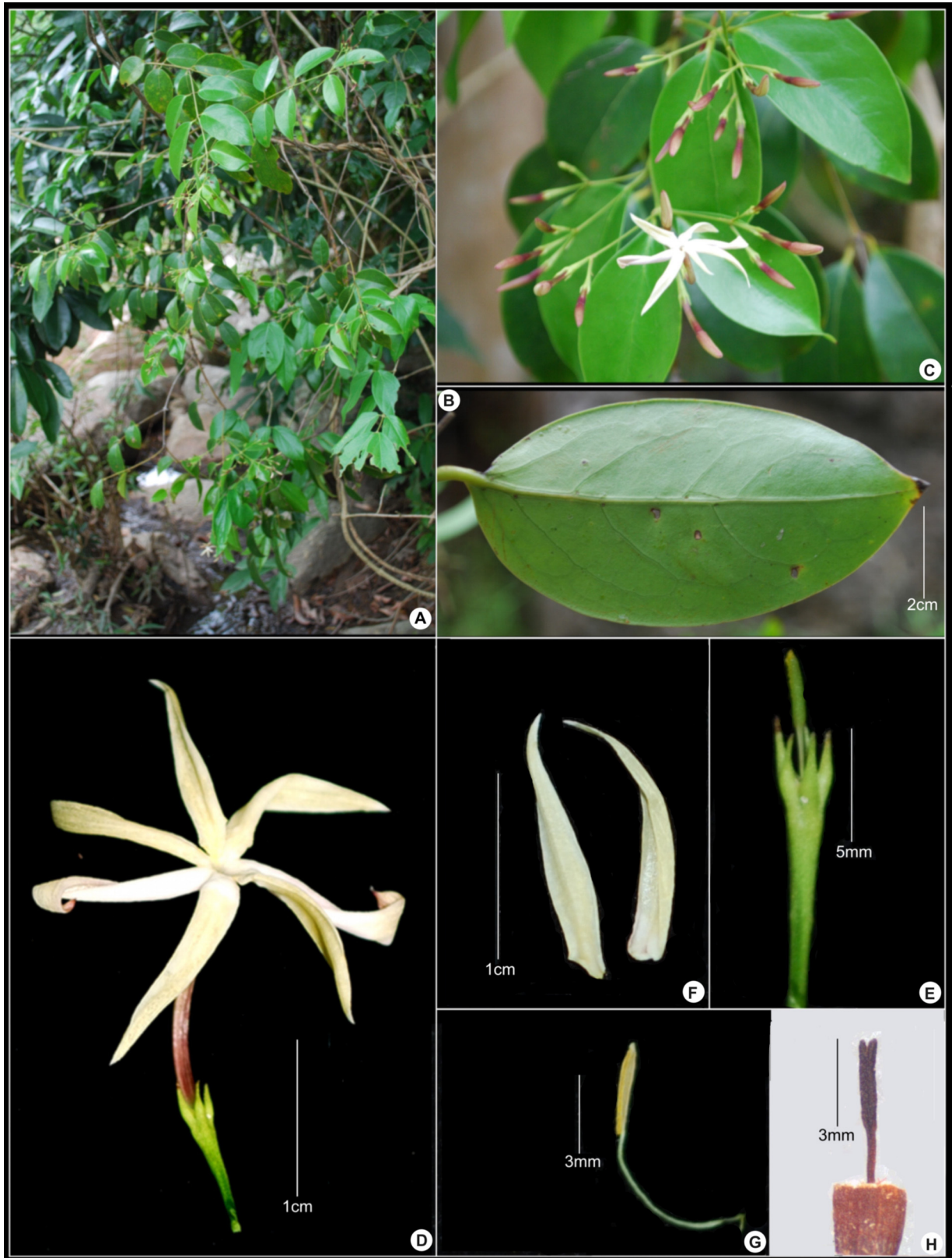


Fig. 2. *Jasminum extensum* Wall. ex G. Don A: Flowering branch. B: Abaxial portion of leaf. C: Inflorescence. D: Flower. E: Calyx. F: Corolla lobes. G: Stamen. H: Pistil. (Photos by Bui Hong Quang)



shorter corolla lobes.

Distribution: S. China, India, Thailand, Vietnam (Khanh Hoa Province).

Studied specimens: VIETNAM: Khanh Hoa province: Hon Ba, 7<sup>th</sup> November, 2011, T.T. Bach et al. HIKK-143 (HN).

Habitat and Ecology: *Jasminum extensum* was found in the secondary forests of Hon Ba Nature Reserve in Khanh Hoa Province of Vietnam, growing along the streams at an altitude of 235 m.

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## LITERATURE CITED

- Chang, M. C., L. Q. Qui, Z. Wei and P. S. Green. 1996. *Jasminum*. In: Wu, Z. and Raven, P.H. (eds). Flora of China. 15: 307–319. Science Press, Beijing, Missouri Botanical Garden Press, St. Louis, U.S.A.
- Gagnepain, F. 1933. Oleaceae. In: M. H. Lecomte (ed.). Flore Générale de L'Indochine 3: 1034–1084. Masson et Cie, Paris.
- Green, P. S. 2000. Oleaceae. In: Santisuk, T. and Larsen, K. (eds). Flora of Thailand 7: 271–340. The Forest Herbarium, Royal Forest Department, Bangkok, Thailand.
- Greene, P. S. 2003. Synopsis of the Oleaceae from the Indian Sub-Continent. *Kew Bulletin* 58 (2): 257–295.
- Ho, P. H. 2003. Cay Co Viet Nam (An illustrated flora of Vietnam). Vol. 2: 881–899. Nha Xuat Ban Tre, TP. Ho Chi Minh, Vietnam.
- Mabberley, D. J. 2008. Mabberley's plant-book: a portable dictionary of plants, their classification and uses. Cambridge University Press, England.
- Tran, D. L. 2003. Oleaceae. In: Nguyen, T. B. (ed.) Checklist of Plant Species of Vietnam 2: 1162–1166. Agricultural Publishing House, Hanoi, Vietnam.

## 來自越南的素馨屬（木犀科）新紀錄分布—*Jasminum extensum* Wall. ex G. Don

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摘要：*Jasminum extensum* 以往的分布紀錄在印度、中國南方及泰國，本文報導了在越南首次發現的新分布紀錄。本種可從革質狀的葉及由中肋延伸的5–6條主脈辨認並與其相近種 *Jasminum pierreanum* 區分開來。本文一併提供分類、型態、棲地、生態與標本資訊以及圖片以供物種鑑定。

關鍵詞：越南植物誌、素馨屬、新紀錄、木犀科、分類學。