

***Agapetes quangxiensis* D. Fang (ERICACEAE),
A NEW RECORD FOR THE FLORA OF VIETNAM**

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ABSTRACT: *Agapetes quangxiensis* D. Fang, previously known only from China, is reported here as a new record for the flora of Vietnam. This species was found in Dien Bien and Ha Giang provinces of North Vietnam. It differs from the allied species, *A. rubrobracteata*, in having leaf blades ovate with serrate margins, inflorescence bracts smaller (c. 0.5 mm long) and ecalcarate anthers. Information on the taxonomy, type, ecology and distribution is provided for *A. quangxiensis*. The vouchers are housed at the herbarium of the Institute Ecology and Biological Resources, Ha Noi, Vietnam (HN). A key to the nine species of *Agapetes* in Vietnam is provided.

Keywords: *Agapetes*, *A. quangxiensis*, Ericaceae, New record, Dien Bien, Ha Giang, Vietnam.

INTRODUCTION

Agapetes D. Don ex G. Don with ca. 100 species, belongs to the family Ericaceae under subfamily Vaccinioideae Arn. and tribe Vaccinieae Rchb. [1]. The genus is distributed principally from the East Himalayas through South-West China and Indochina to South-East Asia [2]. Until now *Agapetes* was considered to be represented in Vietnam by eight species and they were taxonomically studied by several authors [3, 4]. However, during our botanical surveys, an interesting *Agapetes* species was encountered at Ha Giang and Dien Bien provinces of North Vietnam. These specimens were characterized by having small ovate leaves with serrate margin, hirsute calyx tube and short white corollas. After comparing the material with collections of *Agapetes* housed in three southern Chinese herbaria, we determined it as *A. quangxiensis* D. Fang, a species which

hitherto was considered endemic to China [5]. In the paper, we reported here *Agapetes quangxiensis* as a new record for Vietnam's flora.

MATERIALS AND METHODS

Specimens of *Agapetes* at the following herbaria were examined: Institute of Ecology and Biological Resources, Ha Noi (HN); Institute of Tropical Biology, Ho Chi Minh City (VNM), VNU University of Science (HNU), National Institute of Medicinal Materials (HNPI), Kunming Botanical Garden (KUN), South China Botanical Garden (SCBG), Guangxi Institute of Sciences (GXMI), Muséum National d'Histoire Naturelle, Paris (P).

Specimens of *Agapetes quangxiensis* collected by the authors in Vietnam are housed in HN.

RESULTS AND DISCUSSION

Key to the species of *Agapetes* in Vietnam

- 1A. Inflorescences racemose.....2
 1B. Inflorescence fasciculate or comprising solitary or paired, axillary flowers3
 2A. Inflorescences with glandular hairs; bracts large, 6-12 mm long *A. bracteata*
 2B. Inflorescences glabrous; bracts small, 0.5 - 2 mm long..... *A. lobbii*
 3A. Leaf blade longer than 4 cm.....4

3B. Leaf blade shorter than 4 cm.....	6
4A. Twigs and calyx densely spreading glandular setose; leaf blade elliptic or oblong-elliptic.....	5
4B. Twigs glabrous, calyx velutinous; leaf blade lanceolate	<i>A. velutina</i>
5A. Leaf blade 4-6 cm long; corolla 2.5 cm long	<i>A. cauliflora</i>
5B. Leaf blade 6.5-11 cm long; corolla 2 cm long	<i>A. malipoensis</i>
6A. Leaf margin entire.....	7
6B. Leaf margin not entire.....	8
7A. Twigs setose; corolla red.....	<i>A. hosseana</i>
7B. Twigs pubescent; corolla white.....	<i>A. manni</i>
8A. Leaf blade obovate, margin crenulate above middle; bracts large, 1.3-1.5 cm long, anthers calcarate	<i>A. rubrobracteata</i>
8B. Leaf blade ovate, margin serrate; bracts small, ca. 0.5 mm long, anthers ecalcarate.....	<i>A. guangxiensis</i>

***Agapetes guangxiensis* D. Fang**

D. Fang in Acta Phytotax. Sin. 36: 276. 1998; R. C. Fang et P. F. Stevens in Fl. China 14: 516. 2005. **Type:** Guangxi, Napo, Nonghua, limestone hill, in forest, alt. 890 m, Sep. 19th 1983, D. Fang, G. X. Huang & G. Lin 78397 (holotype & isotype GXMI!).

Epiphytic shrubs. Twigs terete, ca. 1.5 mm diam., setose by dense, dark brown, spreading, glandular hairs, glabrescent. Leaves dense; petiole c. 0.8-1.2 mm; leaf blade ovate, 7-12 × 4-7 mm, coriaceous, glabrous, secondary veins ca. 3 pairs, midvein raised abaxially, impressed adaxially, fine veins inconspicuous, base obtuse, margin slightly revolute, upper parts glandular spiny, apex cuneate, setose. Inflorescences fasciculate, from upper axils, 1-4 flowered. Pedicel c. 3-5 mm, expanded apically, hirsute. Calyx tube turbinate, densely hirsute; limb lobed to base; lobes triangular, c. 1.5 mm, hirsute, glandular pubescent; bracts late ovate, c. 0.5 mm long. Corolla white, tinged with pale green, subtubular, 9.5-10 mm, slightly 5-angled, angles pubescent; lobes triangular, c. 1 mm, pubescent. Filaments c. 4 mm, pubescent; anthers ca. 3 mm, tubules ca. 2 × as long as thecae, without spurs. Berry globose, 2-6 mm in diam, setose. Fl. May-Sep, fr. Oct - Dec.

Ecology and habitat: This species is epiphytic or lithophytic in humid evergreen broad-leaved forests at elevations of 1115-1500 m.a.s.l.

Distribution: Vietnam: Dien Bien (Tua Chua), Ha Giang (Quan Ba, Bac Me). **China:** Guangxi and Yunnan.

Additional specimens examined: Dien Bien, L. Averyanov et al. CPC 1006 (HN); Ha Giang, Q. H. Nguyen et al. CKF071B (HN); HAL 6464 (HN).

CONCLUSION

Agapetes guangxiensis species is morphologically the closest ally of *A. rubrobracteata* but has some striking difference in morphological characteristics such as ovate leaf blade, serrate margin; smaller bracts c. 0.5 mm. long and anthers without spurs. Present report will help prioritizing conservation of this species in Vietnam and China.

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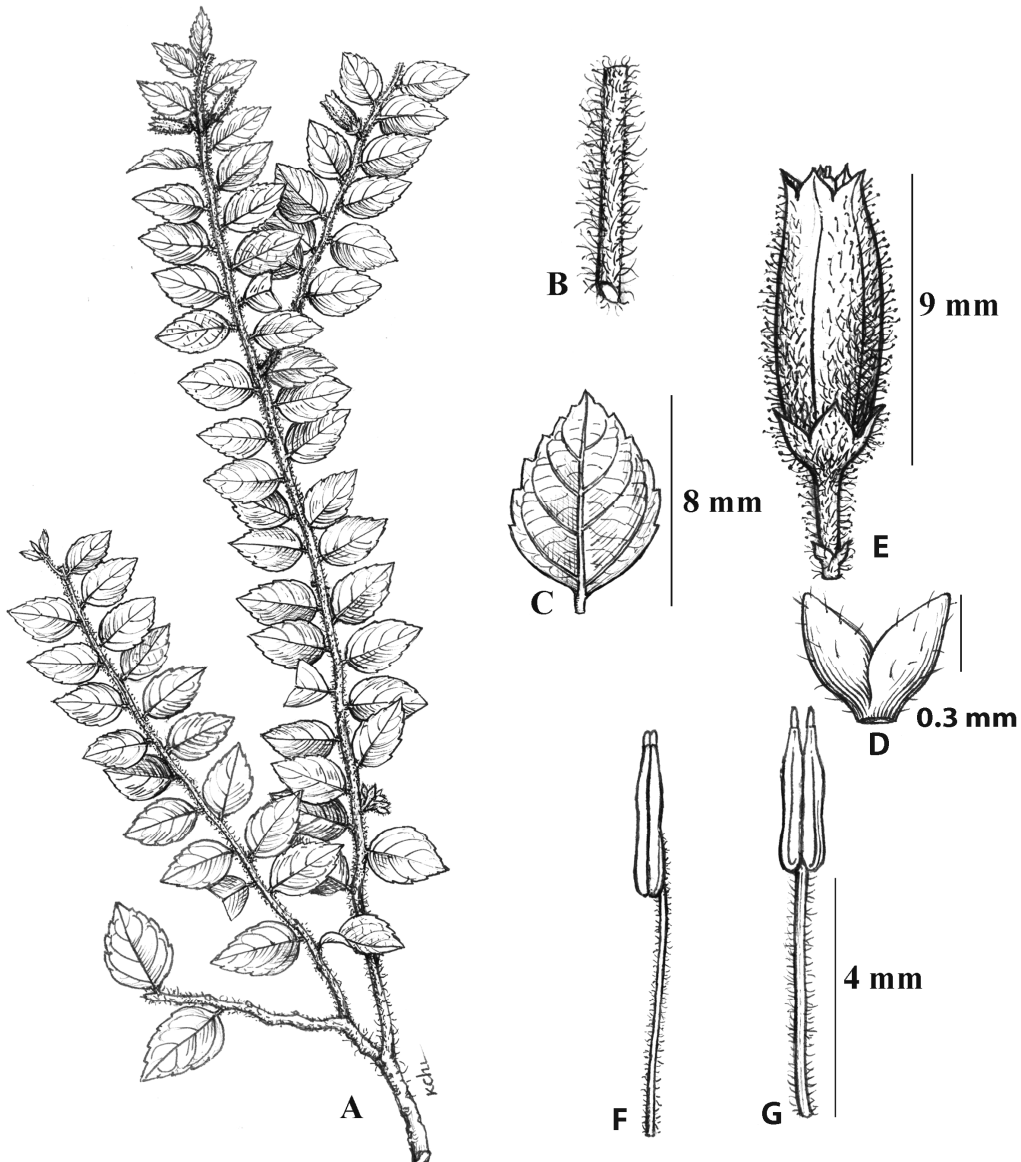


Fig. 1. Agapetes quangxiensis D. Fang

A. Habit; B. Young Branchlets; C. Leaf; D. Bracts;
E. Flower; F, G. Stamens [Drawn by Kim Chi from CPC 1006 (HN)]

**BỔ SUNG LOÀI *Agapetes quangxiensis* D. Fang (HỌ Ericaceae)
CHO HỆ THỰC VẬT VIỆT NAM**

TÓM TẮT

Trên thế giới, chi Thượng nữ (*Agapetes* D. Don ex G. Don) thuộc họ Đỗ quyên (Ericaceae Juss.) có khoảng 100 loài, phân bố chủ yếu từ phía Đông dãy Himalaya qua Đông Nam Trung Quốc, Đông Dương sang Đông Nam Á. Ở Việt Nam, chi này có 8 loài, bao gồm cả loài *Agapetes lobbi* C. B. Clarke phát hiện gần đây. Trong quá trình nghiên cứu chi Thượng nữ (*Agapetes*) ở Việt Nam, chúng tôi phát hiện loài *Agapetes quangxiensis* D. Fang có phân bố ở Hà Giang, Điện Biên.

Loài *Agapetes quangxiensis* có một vài đặc điểm đặc trưng là lá hình trứng nhỏ, mép có răng cưa; ống đài có lớp lông rậm, trắng ngắn, màu trắng. Đây là loài bổ sung cho hệ thực vật Việt Nam và loài này được ghi nhận là đặc hữu của Trung Quốc.

Từ khóa: Ericaceae, *Agapetes*, *Agapetes quangxiensis*, ghi nhận mới, Hà Giang, Điện Biên, Việt Nam.

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