NOTE

Dendrobium multilineatum Kerr (Orchidaceae): a New Distributional Record for Vietnam

Ritesh Kumar Choudhary[(1)], Tran The Bach[(2)], Duong Duc Huyen[(2)], Luu Van Nong[(3)], Do Van Hai[(2)], Bui Hong Quang[(2)], Pankaj Kumar[(4)], Sang-Hong Park[(1)], Changyoung Lee[(1)], You- Mi Lee[(5)] and Joongku Lee[(1*)]

1. International Biological Material Research Center, Korea Research Institute of Bioscience and Biotechnology, 125 Gwahak-ro, Yuseong-gu, Daejeon 305-806, South Korea.
2. Institute of Ecology & Biological Resources, 18-Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam.
3. Hon Ba Natural Reserve, Khanh Hoa, Vietnam.
4. Orchid Conservation Section, Flora Conservation Department, Kadoorie Farm and Botanical Garden Corporation, Tai Po, New Territories, Hong Kong.
5. Korea National Arboretum, Pocheon-Si, Gyeonggi-Do, South Korea.
** Corresponding author. Email: joongku@kribb.re.kr*

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ABSTRACT: *Dendrobium multilineatum* Kerr, is being reported as an addition to the orchid flora of Vietnam. Line drawing and color illustration of the taxon has been provided in support of taxonomic treatment and to facilitate easy identification of the species.

KEY WORDS: *Dendrobium multilineatum*, new record, Orchidaceae, Vietnam.

INTRODUCTION

Dendrobium Sw. is one of the largest groups of epiphytic (occasionally lithophytic) orchids and is represented by about 1,250 species (Mabberley, 2008) distributed from tropical and sub-tropical Asia to Pacific New Zealand (Govaerts et al., 2011). In Vietnam, the genus is represented by 101 species (Huyen, 2007). During a floristic exploration trip to Hon Ba Natural Reserve in Khanh Hoa province of Vietnam, an interesting species of *Dendrobium* [family-Orchidaceae] was encountered. After a thorough scrutiny of available literature (Huyen, 2007; Averyanov and Averyanova, 2003), it was found to be new record for Vietnam and with a detailed study of the genus along with type specimen, identified as *Dendrobium multilineatum* Kerr. This species was so far known to be endemic to Laos and was included under the appendix II of CITES (Thomas et al., 2006). However, Averyanov et al. (2003), reported this plant from Central Annamese floristic province without mentioning any specific locality or herbarium records. We could neither find any mention in his updated check list (Averyanov et al., 2003) nor any herbarium records at HN or in the recent revisionary work on the *Dendrobium* of Vietnam (Huyen, 2007). Hence, we report this species as a new distributional record and addition to the orchid flora of Vietnam. A detailed description along with illustration and color photographs (Figs. 1 and 2) has been provided.

TAXONOMIC TREATMENT

Dendrobium multilineatum Kerr in J. Siam Soc. Nat. Hist. Suppl. 9 (2): 230. 1933.

Type: Described from Laos. (Isotype, AMES, *A.F.S. Kerr* 0972-Photo**!**)

Herbaceous epiphyte. Stem semi-erect, terete, slender, broad at the base and thick in the middle with tapering tip, grooved, 35-45 cm long, 4-6 mm in diam., internodes 4-6 cm long. Leaf sheath tubular, *ca*. 4.5 cm long, covered with dense black hairs. Leaves oblong-ovate, base rotund, apex unequally bilobed, hirsute with dense black hairs in abaxial portion, 6-7 cm × 1.5-1.8 cm. Inflorescence terminal to subterminal, 1-2 flowered, bracteate. Bracts ovate, acute, prominently 3-5 nerved, hirsute with black hairs. Flowers spreading, white, base of the labellum reddish-brown. Pedicel and ovary 3-edged, 2.5-3.5 cm long. Spur slightly curved forward-conical, *ca.* 2 cm long. Sepals white, non-carinate, dorsal sepals white, oblong-lanceolate, acuminate, 9-nerved, 2.5-3 cm × 0.8-1.1 cm; lateral sepals similar, decurrent at the foot, 3-3.5 cm × 1-1.2 cm. Petals white, wide, obtuse, apiculate, 13-nerved, 2.8-3 cm × 2-2.1 cm. Lips white with red veins towards the foot, cuneate at the base and then enlarging towards the tip, 3-lobed, 3.5-3.7 cm × 2.5-2.7 cm; lateral lobes rotund, margin entire, 1-1.2 cm wide; disc elevated, minutely tomentose till half the

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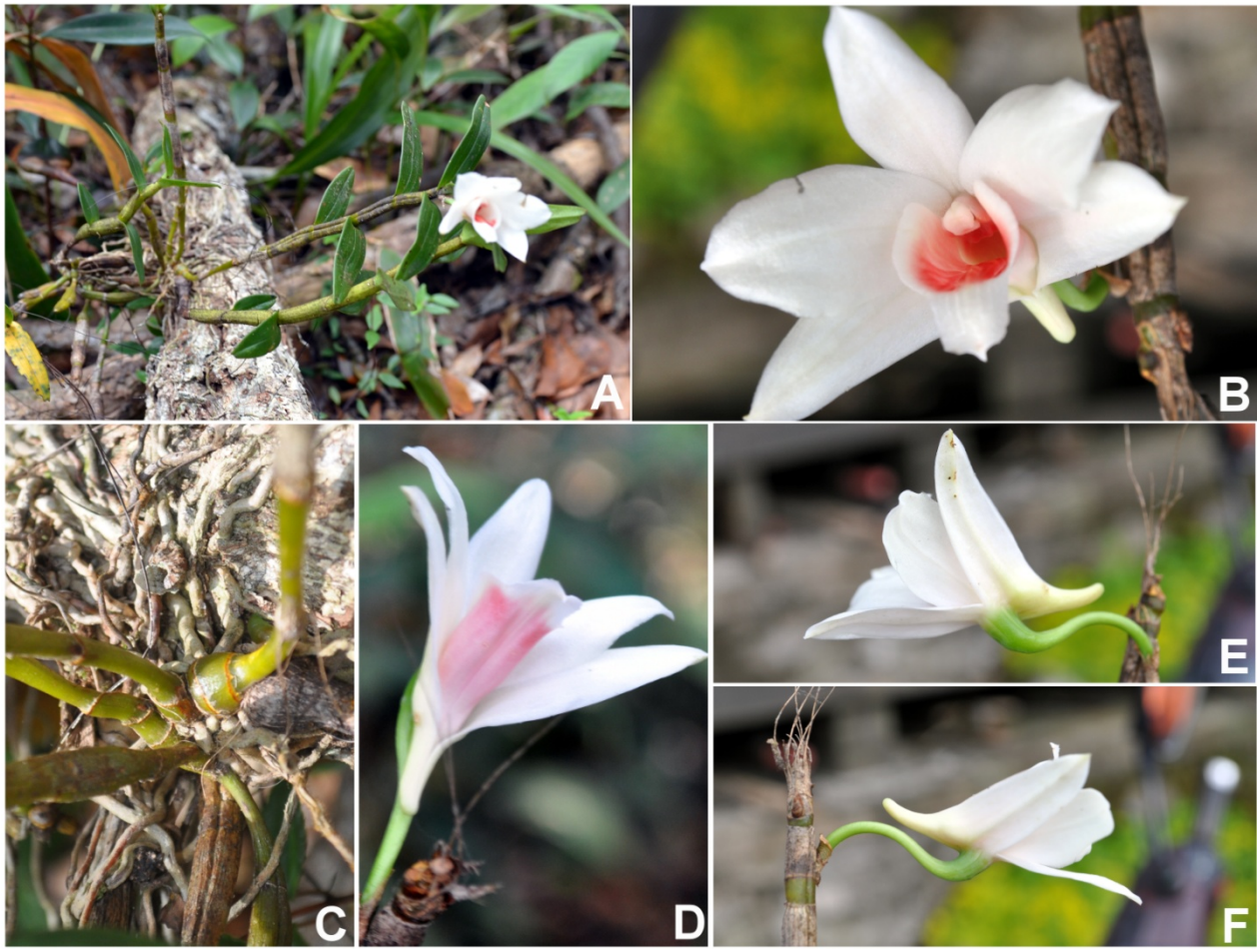


Fig. 1. *Dendrobium multilineatum* Kerr A: Habit. C: Roots. B & D-F: Flower shown in various angle.

length of labellum in the front; midlobe of the labellum flabelliform, emarginated, stretched forward, conspicuously bilobed, attenuate at the tip giving a look of apiculate apex. *Gynostemium* 7-8 mm × 2.5-3 mm;stelidia sufficiently enlarged, rotund; anthers minutely papillose, mitriformis, margin in the front with white pilose hairs.

Flowering and fruiting: April-June.

Distribution: Laos, Vietnam (Khanh Hoa Province).

Specimens examined: VIETNAM, Khanh Hoa province: Hon Ba, 9th April, 2011, *J. Lee et al. HIKK-0904201101 (HN).*

Ecology: Found growing on moist, hill slopes of Hon Ba Natural Reserve in Khanh Hoa Province at an altitude of about 1,300 m.

Note: Many areas of Vietnam still remain unexplored and new records from these areas are obvious. Presence of *Dendrobium multilineatum* Kerr in Cambodia is not unlikely.

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LITERATURE CITED

Averyanov, L. V. and A. L. Averyanova. 2003. Updated checklist of the Orchids of Vietnam. Vietnam National University Publishing House, Hanoi, Vietnam.

Averyanov, L. V., K. L. Phan, T. H. Nguyen and D. K. Harder. 2003. Phytogeographic review of Vietnam and adjacent areas of Eastern Indo-China. *Komarovia* **3**: 1-83.

Govaerts, R. J. Pfahl, M. A. Campacci, D. Holland Baptista, H. Trigges, J. Shaw, P. Cribb, A. George,

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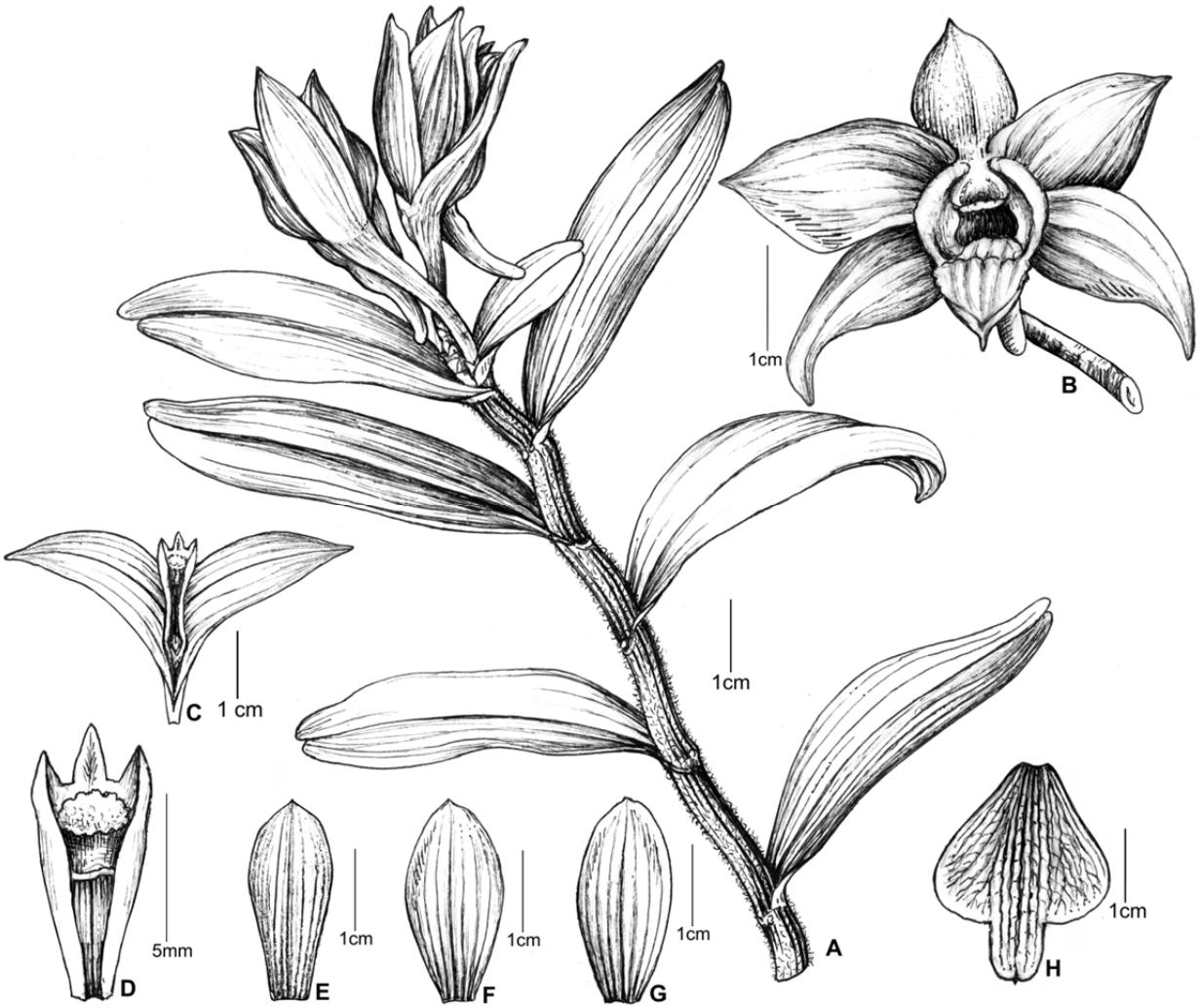


Fig. 2. ***Dendrobium multilineatum*** **Kerr A: Habit B: Flower C: Lateral sepals D: Column E: Dorsal sepal F & G: Petals H: Labellum [Illustration by Mrs. Kim Chi].**

K. Kreuz and J. Wood. 2011. *World Checklist of Orchidaceae.* The Board of Trustees of the Royal Botanic Gardens, Kew. http://www.kew.org/wcsp/. (Accessed on 28 Nov. 2011).

Huyen, D. D. 2007. *Dendrobium.* In *Flora of Vietnam* 9: 1-220. Science and Technics Publishing House, Hanoi, Vietnam.

Mabberley, D. J. 2008. Mabberley's plant-book: a portable dictionary of plants, their classification and uses. Cambridge Univsersity Press, England. pp 1-1004.

Thomas P., M. Newman, B. Svengsuksa and S. Ketphanh. 2006. A review of CITES Appendices I and II Plant Species from Lao PDR. A report for IUCN Lao PDR., Laos.

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來自越南的石斛屬（蘭科）新紀錄分佈 – 長角石斛

Ritesh Kumar Choudhary[(1)], Tran The Bach[(2)], Duong Duc Huyen[(2)], Luu Van Nong[(3)], Do Van Hai[(2)], Bui Hong Quang[(2)], Pankaj Kumar[(4)], Sang-Hong Park[(1)], Changyoung Lee[(1)], You- Mi Lee[(5)] and Joongku Lee[(1 *)]

1. International Biological Material Research Center, Korea Research Institute of Bioscience and Biotechnology, 125 Gwahak-ro, Yuseong-gu, Daejeon 305-806, South Korea.
2. Institute of Ecology & Biological Resources, 18-Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam.
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5. Korea National Arboretum, Pocheon-Si, Gyeonggi-Do, South Korea.
* 通信作者。*Email: joongku@kribb.re.kr*

摘要：本文報導了在越南發現的蘭科新紀錄種長角石斛，同時提供手繪圖及彩色照片，以支持本文之處理並方便鑑定此物種。

關鍵詞：長角石斛，新紀錄，蘭科，越南。

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