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NOTE

Aspidistra truongii – a New Species of Asparagaceae (Convallariaceae s.str.) from Southern Vietnam

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ABSTRACT: *Aspidistra truongii,* discovered in southern Vietnam is described and illustrated as new for science. Large nutant flowers are a unique feature of the new species distinguishing it from all known congeners.

KEY WORDS: Asparagaceae (Convallariaceae s.str.), *Aspidistra truongii*, new species, plant diversity, plant taxonomy, Vietnam.

INTRODUCTION

Modern field works in eastern Indochina, as well as studies of available herbarium collections clearly designated Vietnam as an important center of the genus *Aspidistra* Ker-Gawl. diversity and species formation (Brauchler, L.H.Ngoc, 2005; Tillich, 2005, 2006; Tillich, Averyanov, N.V. Dzu, 2007; Tillich, Averyanov, 2008; Averyanov, Tillich, 2012). More than 15 new species and varieties of this genus were discovered and described from the country during last years, and succeeding expeditions in earlier unstudied areas bring each time more and more new discoveries. One more novelty discovered recently in southern Vietnam is described and illustrated below.

TAXONOMICTREATMENT

Aspidistra truongii Aver. et Tillich, ***sp. nov.***

Described from southern Vietnam ("Khanh Hoa Prov., Khanh Vinh Distr., Hon Ba nature reserve, Hon Ba Peak. On fertile and well drained soil, under evergreen broad-leaved forest at elevation about 1500 m a.s.l. around point 12°06'59''N 108°56'37''E". **Type** ("12 May 2011, *Jacinto Regalado, Luu Hong Truong, Tran Gioi, JR 1888*") – LE (holotype), SING (isotype). Epitype – d-EXSICCATES OF VIETNAMESE FLORA *0198/JR 1888* (Fig. 1).

Rhizome terete, epigeous, creeping and ascending, occasionally branching, 4–6 mm in diam., densely nodal, with numerous thick rigid, semi woody, straight roots. Cataphylls convolute, cuneate, young dull reddish-brown, later light yellowish-gray, papyraceous, to 6 cm long, early dissecting into fibrous remains. Leaves distant on rhizome on 1–2(3) cm, petiolate. Petiole stiff, erect, straight, 30–40 cm long. Leaf blade arching to almost horizontal, narrowly elliptic, attenuate at base and apex, 15–22 cm long, 3–5 cm wide, uniformly grass green above and below, with prominent midvein on lower surface and 2–3(4) conspicuous secondary veins well visible at both sides. Flowers solitary or arising by 2–3(4) per rhizome apex, pedunculate, widely opening. Peduncle kept in horizontal position and nodding at apex, red-brown to dark purple-brown, 2–4(5) cm long, 1.5–2 mm in diam., with (2)3–4(5) bracts; bracts broadly ovate triangular, concave, fleshy, later thin, papyraceous, dirty reddish brown to dark purple-brown and almost purple-black, obtuse, (4)6–8(10) mm long, 4–6 mm wide. Floral bracts purple-brownish, 2–4, broadly triangular-ovate, concave, 5–8(10) mm long and wide, densely crowded at the apex of peduncle and adpressed to perigone from below. Perigone shallowly bowl shaped to almost flat, nutant, 2.5–3.5 cm in diam., of 4–5 mm depth, with 6 lobes, reddish-brown, dark purple-brown to nearly purplish-black on both sides. Lobes subequal, broadly triangular-ovate, flat, obtuse to blunt at apex, fleshy, smooth outside, finely rugose inside, straight or slightly reflexed, 6–8(10) mm long and wide. Stamens 6; inserted near perigone base, anthers sessile, slightly flattened, bean-shaped, 2 mm long, 1.8 mm wide, pollen sacs laterally facing; pollen brightly yellow. Pistil mushroom-shaped, peltate; ovary inconspicuous; style stout, white, cylindrical, 2–3 mm tall, 2.5–3 mm in diam.; stigma fleshy, discoid-hemispherical, finely purple mottled along the revolute margin, shallowly 3 lobed (with notched lobes), 10–14 mm in diam., upper surface of stigma finely verrucose. Fruit spherical, light brown to almost black, dry rigid berry 1.4–2 cm in diam., its surface rugose, tuberculate to thorny (Fig. 1).

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Fig. 1. *Aspidistra truongii* Aver. et Tillich. Digit al epitype: d-EXSICCATES OF VIETNAMESE FLORA 0198/JR 1888 (all photos by Luu Hong Truong, design by L. Averyanov).

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Distribution: Southern Vietnam (Khanh Hoa province, Khanh Vinh district). Endemic of southern Vietnam.

Ecology: Primary and secondary evergreen broad-leaved submontane and montane forests on rich, well drained soils at elev. about 1500 m a.s.l. Terrestrial herb in shady places. Flowers at April–June. Not rare (LR).

Etymology: Species is named after its discoverer – Dr. Luu Hong Truong, Head of Department of Botany of Southern Institute of Ecology (Vietnam Academy of Science and Technology).

Studied speciemens: Southern **VIETNAM**, Khanh Hoa Province, Khanh Vinh District, Hon Ba nature reserve, Hon Ba Peak, at elevation about 1500 m a.s.l., on fertile and well drained soil, under evergreen broadleaf forest. 18 May 2012, *Luu Hong Truong, Tran Gioi, KH 135, KH 136, KH 144, KH 145, KH 146, KH 147, KH 148, KH 149, KH 150* (SING!, VNM); Ibidem, elevation 1532 m, 29 June 2011, *Leong-Škorničková, J., Rybková, R., Tran H.Đ., Truong B.V. & Ponert, J. HB-17* (Hon Ba Nature Reserve Herbarium, M!, PR, SING, VNM).

Note: New species may be easily recognized for its nutant flowers that are never observed in its congeners. Described plant has flowers reaching regularly 3.5 cm in diameter, which place it into small generic group of large-flowered species. Among such species only *A. nikolaii* Aver. & Tillich was ever recorded from southern Vietnam. Meanwhile, last species has erect wiry stem that is strikingly different from much reduced, abbreviated stem of our plant. The obvious difference in vegetative morphology denies any close relations between both mentioned species.

Several fairy large populations of the described species were observed during field works in 2011 near and around the type locality on the territory of Hon Ba nature reserve additionally to the type clone. In June 2011, the populations at the type locality were also observed and collections were made by a collaborative team of Institute of Tropical Biology and Prague Botanic Gardens. All found populations exhibit no visible tendency to decreasing and probably are more or less stable in their strength. Hence species living capacity may be estimated as an category “lower risk” (LR) according to widely accepted IUCN criteria (Guidelines for Using the IUCN Red List Categories and Criteria, 2010). Meanwhile, species undoubtedly belong to group of “intact habitat dependent” - species which may be extinct very fast under forest destruction.

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臺灣大學學術期刊資料庫

越南南部發現的天門冬科新種－*Aspidistra truongii*

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摘要：本文發表一種在越南南方發現的新種*Aspidistra truongii*，並提供照片與描述。本種獨特的特徵為下垂的大型花朵，並可藉此特徵與同屬的其他植物區分。

關鍵詞：天門冬科（鈴蘭科）、*Aspidistra truongii*、新種、植物多樣性、植物分類學、越南。

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