



## *Aspidistra vangviengensis*, a new species of *Aspidistra* (Asparagaceae) from Laos

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**ABSTRACT:** *Aspidistra vangviengensis*, a new species from Laos, is described and illustrated. This new species is similar to *A. opaca*, *A. austroyunnanensis* and *A. fungilliformis*, but differs from them in the length of peduncle, number and color of perigone lobes, number and position of stamens, shape and size of anthers, presence of staminal corona, ridged style and size of stigma.

**KEY WORDS:** *Aspidistra*, *Aspidistra austroyunnanensis*, *Aspidistra fungilliformis*, *Aspidistra opaca*, Laos, new taxon.

### INTRODUCTION

The large and fast-growing genus *Aspidistra* Ker-Gawler (1822: 628) (Asparagaceae) currently comprises about 245 species; distributed mainly in southern China and Indochina, and the center of distribution is the karst region adjacent to southern China and northern Vietnam (Liang and Tamura, 2000; Li, 2004; Tillich, 2005, 2008, 2014; POWO, 2025). Laos is not far from the distribution center of the genus. Over the past decade, as plant diversity surveys in the country have intensified, an increasing number of new *Aspidistra* species have been discovered and described (Averyanov and Tillich, 2014, 2015, 2016; Averyanov *et al.*, 2019, 2021, 2025; Huang *et al.*, 2018; Xi *et al.*, 2020; Ding *et al.*, 2021). Up to now, the total number of *Aspidistra* species recognized in Laos has reached 12 (*A. congestiflora* Aver., Vislobokov & Nuraliev, *A. elegans* Aver. & Tillich, *A. glandulosa* (Gagnep.) Tillich, *A. globulifera* (Aver., K.S.Nguyen & Tillich) Aver., *A. hainanensis* Chun & F.C.How, *A. khangii* Aver. & Tillich, *A. laongamensis* C.R.Lin & X.Y.Huang, *A. laotica* Aver. & Tillich, *A. medusa* Aver., K.S.Nguyen & Tillich, *A. nitens* Aver., K.S.Nguyen & Tillich, *A. partita* Y.H.Tan & H.B.Ding, *A. purpureomaculata* H.C.Xi, J.T.Yin & W.G.Wang) and all of the species, except for *A. hainanensis*, are endemic to Laos (POWO, 2025).

During a field survey of central Laos in 2024, an unknown *Aspidistra* species was collected in karst forest of Vang Vieng District, Vientiane Province. The presence of a staminal corona, a rather rare morphological feature in the genus, attracted our attention. After a literature review, specimen examination, and comparison with all other species in this genus, we confirmed that it is new to science. Therefore, it is described and illustrated.

### TAXONOMIC TREATMENT

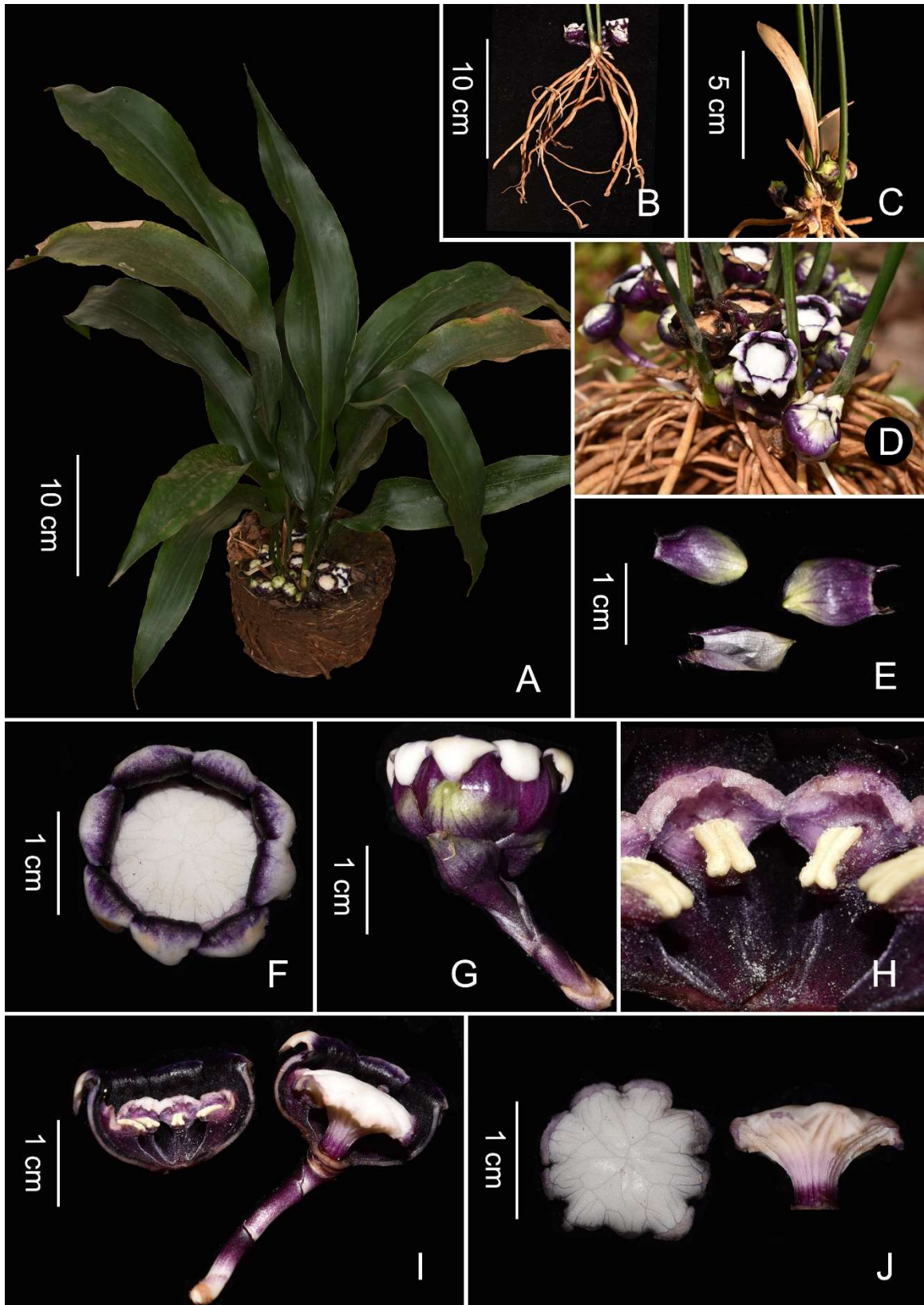
*Aspidistra vangviengensis* H.C.Xi & S.S.Zhou, *sp. nov.*

**Fig. 1**

**Type:** Laos, Vientiane Province, Vang Vieng District, Phoudindeng, in karst forest, 18.97°N, 102.44°E, elev. 372 m, the voucher from a plant cultivated at Biotechnology and Ecology Institute, Ministry of Agriculture and Environment, Lao PDR, 28 March 2025, S.S. Zhou & P. Phothisath, ZSS552 (holotype: HITBC!; isotypes: HITBC!).

**Diagnosis:** The new species is most morphologically similar to *Aspidistra opaca* Tillich (Tillich, 2005) but differs from it in peduncle 1.6–4.3 cm long (vs. subsessile), perigone lobes 8(–9), white at both surfaces (vs. 6, insides dull purple, outsides dull-green, red mottled), stamens 8(–9), inserted at the middle of perigone tube (vs. 6, at base of perigone tube), anthers narrowly cordate, 3.5–4 mm long (vs. ovate, 2–2.5 mm long), staminal corona present (vs. absent), style with longitudinal ridges (vs. smooth, without ridges) and stigma 12–15 mm in diameter (vs. 10 mm in diameter).

**Description:** Herbs perennial, rhizomatous, evergreen, to 40 cm tall. **Rhizome** creeping, subterete, ca. 5 mm in diameter, internodes very short; cataphylls brown, lanceolate, up to 7.5 cm long. **Leaves** solitary on each node. **Petiole** 7–21 cm long, 2.5–4 mm in diameter, adaxially grooved. **Leaf blade** green, oblong, 30–40 × 4.5–8 cm, apex acuminate, base gradually narrowed into petiole, margin entire. **Peduncle** white to purple, 1.6–4.3 cm long, with 5–9 bracts. **Bracts** white to purple, sometimes light green at apex, broadly ovate, 5–11 mm long, 4–15 mm wide. **Flowers** solitary at the top of peduncle. **Perigone** widely bowl-shaped, 11–13 mm long, 17–21 mm in diameter; tube dark purple outside, blackish purple inside, 8.5–12 mm long, 17–20 mm in diameter;



**Fig. 1.** Illustration of *Aspidistra vangviengensis* H.C.Xi & S.S.Zhou. **A.** Plant in cultivation. **B–D.** Basal part of the plant. **E.** Bracts. **F.** Flower, front view. **G.** Flower, side view. **H.** Stamens, showing staminal corona. **I.** Dissected flower, showing stamens and pistil. **J.** Pistil, front and side view, showing stigma and style. (Photos by Shi-Shun Zhou.)

**Table 1.** Morphological comparison of *Aspidistra vangviengensis*, *A. opaca*, *A. austroyunnanensis* and *A. fungilliformis*.

| Characters      | <i>A. vangviengensis</i>              | <i>A. opaca</i>  | <i>A. austroyunnanensis</i>             | <i>A. fungilliformis</i>          |
|-----------------|---------------------------------------|--|---|-----------------------------------|
| Peduncle        | 1.6–4.3 cm long                       | subsessile   | 4.5–8 cm long                           | 1–4 cm long                       |
| Perigone lobes  | 8(–9), white at both surfaces         | 6, insides dull purple, outsides dull-green, red mottled | 6, white at both surfaces               | 6, insides white, outsides purple |
| Stamens         | 8(–9), at the middle of perigone tube | 6, at base of perigone tube                              | 6, at the basal fourth of perigone tube | 6, at base of perigone tube       |
| Anthers         | narrowly cordate, 3.5–4 mm long       | ovate, 2–2.5 mm long                                     | oblong-elliptical                       | reniform, 2–2.5 mm long           |
| Staminal corona | present                               | absent   | absent                                  | absent                            |
| Style           | with more than 20 longitudinal ridges | smooth   | smooth                                  | smooth                            |
| Stigma          | 12–15 mm in diameter                  | 10 mm in diameter  | ca. 20 mm in diameter                   | 8–9 mm in diameter                |

lobes 8(–9), white at both surfaces, revolute, subequal, triangular, apex blunt to almost round, 4.5–5 mm long, 4.5–6.5 mm wide at base. **Stamens** 8(–9), inserted at the middle part of the perigone tube, below the stigma; anthers narrowly cordate, 3.5–4 mm long, ca. 1 mm wide; filaments extending upward and enlarged to form the staminal corona, staminal corona light purple, clasping the stigma margin; pollen light yellow. **Pistil** fleshy, table-shaped, ca. 8 mm tall, style dark purple at base, creamy white at the upper part, with more than 20 uniformly arranged longitudinal ridges, ridges extend to the margin of the stigma; stigma creamy white, convex, subrotund, 12–15 mm in diameter, surface smooth, with repeatedly bifurcated radial lines.

**Etymology:** The specific epithet “*vangviengensis*” refers to the type locality in Vang Vieng District, Vientiane Province, Laos.

**Phenology:** *Aspidistra vangviengensis* was observed flowering in March–April in cultivation.

**Distribution and Habitat:** *Aspidistra vangviengensis* is currently known from only one population with no more than 50 individuals from the type locality in Vang Vieng, Laos, growing in limestone forest.

**Conservation assessment:** Due to insufficient fieldwork, the new species is assessed as “Data Deficient” (DD) based on the IUCN Red List Categories and Criteria (IUCN Standards and Petitions Committee, 2024).

**Notes:** The new species is also morphologically similar to *Aspidistra austroyunnanensis* (Cai *et al.*, 2018) and *A. fungilliformis* (Wan, 1984), but differs from them in a number of characters—most notably by the presence of the staminal corona. This unique structure is the most prominent characteristic distinguishing the new species from other members of *Aspidistra*. A detailed morphological comparison of *A. vangviengensis*, *A. opaca*, *A. austroyunnanensis* and *A. fungilliformis* is presented in Table 1.

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