



## *Aspidistra huashuishanensis* (Asparagaceae), a new species from Guangdong, China

Yi-Hua TONG<sup>1,#</sup>, Shu-Yan CHEN<sup>2,#</sup>, Hai-Jian HUANG<sup>3</sup>, Yuan-Qiu LI<sup>2</sup>, Xin-Yu WAN<sup>4,5</sup>, Chun-Rui LIN<sup>4,\*</sup>

1. State Key Laboratory of Plant Diversity and Specialty Crops & Key Laboratory of National Forestry and Grassland Administration on Plant Conservation and Utilization in Southern China, South China Botanical Garden, Chinese Academy of Sciences, CN-510650, Guangzhou, Guangdong, China. 2. Guangdong Shimentai National Nature Reserve, CN-513000, Yingde, Guangdong, China. 3. Yingde City Forestry Bureau, CN-513000, Yingde, Guangdong, China. 4. Guangxi Institute of Botany, Guangxi Zhuang Autonomous Region and Chinese Academy of Sciences, CN-541006, Guilin, Guangxi, China. 5. College of Tourism and Landscape Architecture, Guilin University of Technology, 541006, Guilin, China. #Contributed equally, \*Corresponding author's email: lynchunrui@gxib.cn.

(Manuscript received 9 February 2026; Accepted 8 April 2026; Online published 20 April 2026)

**ABSTRACT:** *Aspidistra huashuishanensis*, a new species from Guangdong Province, China, is described and illustrated. It is similar to *A. daqingshanensis* in shape and color of leaves and flowers, but can be distinguished by urceolate perianth tube, perianth lobes suberect or slightly recurved, purplish red, ovate-triangular, acuminate or obtuse at apex, and upper surface of stigma with dense small papillae. The new species is currently only known from the type locality in northern Guangdong. Detailed colour plates and data on morphology, ecology, phenology and distribution of the new species are also provided.

**KEY WORDS:** *Aspidistra daqingshanensis*, *Aspidistra triradiata*, Huashuishan City-level Nature Reserve, new taxon.

### INTRODUCTION

*Aspidistra* Ker-Gawler (1822: 628) (Asparagaceae) is widely distributed in eastern and southeastern Asia, with the main center of species diversity in southern China and Vietnam, and a few species extending to Laos, Thailand, Malaysia, northeastern India, and southernmost Japan (Liang and Tamura, 2000; Li, 2004; Tillich, 2023). It currently comprises over 240 species (Vislobokov *et al.*, 2024, Lin *et al.*, 2024a; Averyanov *et al.*, 2025; POWO, 2025), and over 140 species are recorded from China, with most endemic to that country and mainly distributed in Guangxi, Guizhou, Yunnan, Sichuan, Chongqing, Hunan and Guangdong (e.g. Meng *et al.*, 2014; Sun *et al.*, 2014; Zou *et al.*, 2017; Lou *et al.*, 2018; Nong *et al.*, 2018; Luo *et al.*, 2018; Cai *et al.*, 2020; Wang *et al.*, 2021; Lin *et al.*, 2023, 2024b; Xi *et al.*, 2025). In recent years, new species of the genus *Aspidistra* have been discovered in Guangdong, such as *Aspidistra shimentaiensis* C.X. Peng, Y.Q. Li & C.R. Lin (Peng *et al.*, 2023), *A. xiaoyunii* C.R. Lin, B.M. Wang & Yan Liu (Lin *et al.*, 2023), *A. luofushanensis* C.R. Lin, Z.R. Liu & Y.B. Zeng (Liu *et al.*, 2024), and *A. yangchunensis* S.P. Dong & Z.L. Ning (Dong *et al.*, 2024). During a field survey of northern Guangdong Province, China in October 2023, an unknown *Aspidistra* species with narrowly lanceolate leaf blade, urceolate and purplish red flowers, was discovered in Huashuishan, Yingde City. In the following year, we conducted a follow-up investigation and collected flowers and fruits. After comparison with morphologically similar species, and consultation of herbarium specimens and relevant literature of *Aspidistra*, we reached the conclusion that it represents a new taxon, and is described here.

### MATERIALS AND METHODS

The new species was collected during fieldwork in Guangdong Province, China, and introduced to grow in the Guilin Botanical Garden of the Guangxi Institute of Botany. Type specimens were deposited in the herbaria of Guangxi Institute of Botany (IBK) and South China Botanical Garden (IBSC). Habitat information was recorded from field surveys. Morphological observations and measurements were carried out on living plants in their habitats and in cultivation. The photographs of vegetative parts and fruit were taken from the living plants in situ, and the photographs of flower structure were taken from the living plants under situ and cultivation.

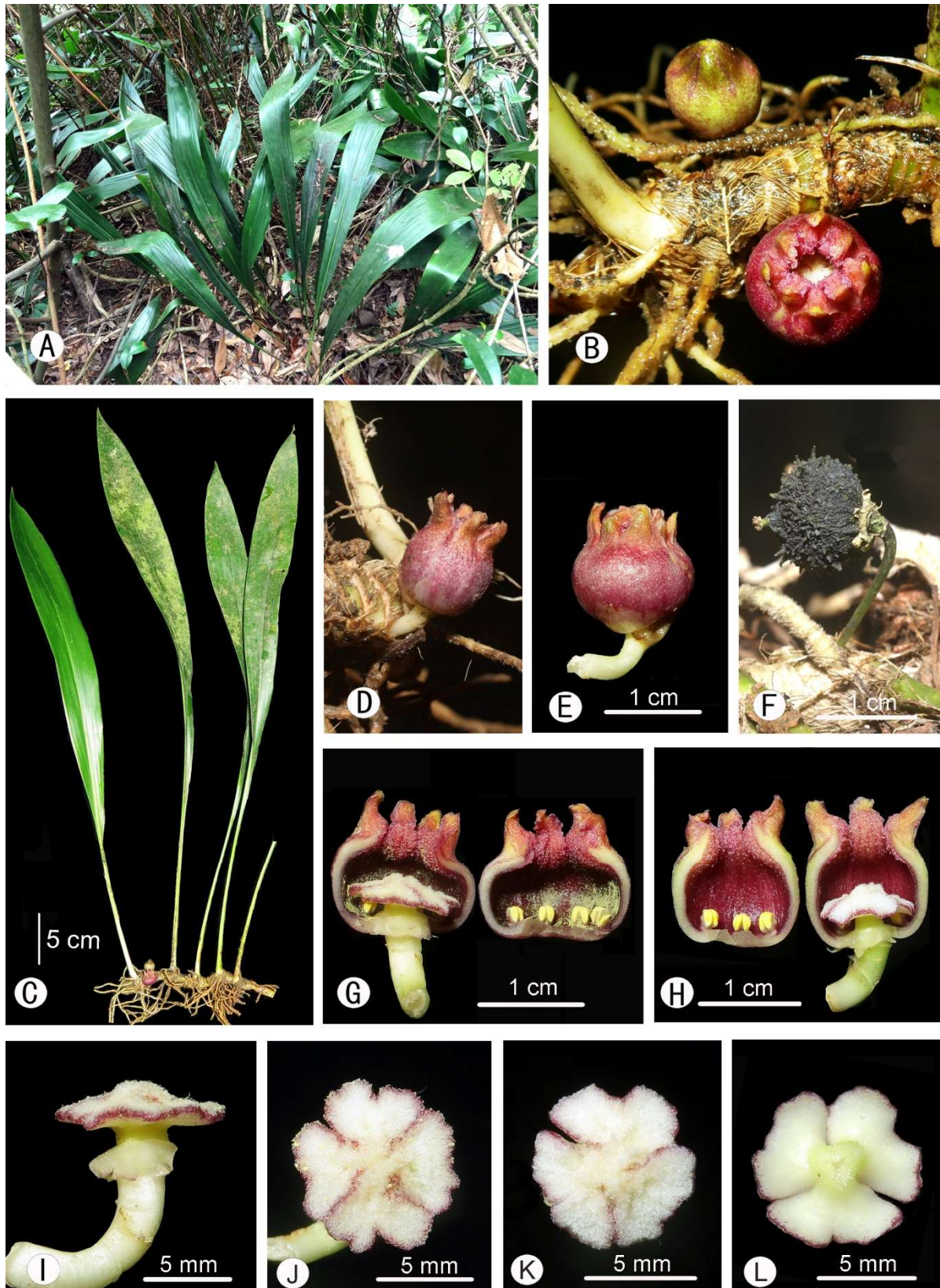
### TAXONOMIC TREATMENT

*Aspidistra huashuishanensis* C.R. Lin, Y.H. Tong & Y.Q. Li, *sp. nov.* 滑水山蜘蛛抱蛋 Fig. 1

**Type:** CHINA, Guangdong Province, Yingde City, Huashuishan City-level Nature Reserve, near 24.45° N, 113.64° E, at elevation about 280 m, 12 Oct. 2024. Yuan-Qiu Li & Chun-Rui Lin 2038 (holotype: IBK!; isotype: IBSC!).

**Diagnosis:** The new species is similar to *A. daqingshanensis* Y.L. Pan & C.R. Lin in shape and color of leaves and flowers, but can be distinguished by urceolate perianth tube, perianth lobes suberect or slightly recurved, purplish red, ovate-triangular, acuminate or obtuse at apex, and upper surface of stigma with dense small papillae.

Herbs perennial, evergreen. Rhizome creeping, epigeous, subterete, 8–12 mm thick, densely covered with



**Fig. 1.** *Aspidistra huashuishanensis* sp. nov. **A.** Habit; **B.** Flowers; **C.** Flowering plant; **D-E.** Flower side view; **F.** Fruit; **G.** Flower longitudinally dissected showing stamens and pistil (8-merous); **H.** Flower longitudinally dissected showing stamens and pistil (6-merous); **I.** Pistil; **J.** Stigma top view (8-merous); **K.** Stigma top view (6-merous); **L.** Stigma bottom view (6-merous).

**Table 1.** Morphological comparison of *Aspidistra huashuishanensis* with *A. daqingshanensis* and *A. triradiata*.

Characters	<i>A. huashuishanensis</i>	<i>A. daqingshanensis</i>	<i>A. triradiata</i>
Leaf blade	solitary, 34–58 × 4–8 cm	solitary, 36–80 × 4–8 cm	fascicled, 56–82.5 × 1.2–2 cm
Petiole	12–28 cm	5–20 cm	leaves not divided into petiole and lamina
Perianth tube	urceolate, 8–10 mm long, Ø12–15 mm	campanulate, 7–9 mm long, Ø13–15 mm	urceolate, 15.6–18.6 mm long, Ø14.2–19.8 mm
Perianth lobes	ovate-triangular, 4–6 × 2–4 mm, suberect or slightly recurved, purplish red	broadly ovate to obround, 7 × 4–5 mm, recurved, yellowish	triangular-ovate, 7.6–10.5 × 3.9–8.3 mm, recurved, purple spotted to purple
Pistil	4–5 mm long	4–5 mm long	6.5–8.8 mm long
Stigma	Ø8–10 mm, white, papillose	Ø9–10 mm, white, smooth	Ø11.7–15 mm, white, papillose

nodes, roots numerous. **Sheathing leaves** 4–5, purplish red, 1–7 cm long, enveloping base of petiole, fibrous when withered. **Leaves** solitary, 1–3 cm spaced; **petiole** stiffly upright, 12–28 cm long, 2–3 mm in diameter, adaxially sulcate; **leaf blade** narrowly lanceolate, 34–58 cm long, 4–8 cm wide, dark green, apex acuminate, base cuneate, gradually narrowing into a petiole, inequilateral, margin entire, mid vein strongly prominent on abaxial surface, secondary veins prominent, 4–5 each side. **Peduncle** erect or declining, white, 6–25 mm long, with 3–4 bracts, **bracts** gradually wider from base to top of peduncle, the topmost one broadly ovate, 4–6 mm long, 8–10 mm wide, white with small purplish red spots, apex obtuse. **Flower** solitary; **perianth** urceolate, fleshy, slightly 6 (rarely 8)-lobed apically; **perianth lobes** usually suberect or slightly recurved, subequal, ovate-triangular, 4–6 mm long, 2–4 mm wide at base, unequal, acuminate or obtuse at apex, outside purplish red, inside purplish red, sometimes yellow red, finely papillose and obviously thickened at base, reducing the perianth opening to 5–6 mm in diameter; **perianth tube** 8–10 mm long, 12–15 mm in diameter, outside entirely purplish red, sometimes white with purplish red spots, inside purplish red to blackish purple. **Stamens** 6 (rarely 8), opposite to lobes, inserted at ca. 2 mm from the base of perianth tube, positioned conspicuously lower than stigma, filaments ca. 1 mm long; anthers oblong, 1.5–2 mm long and ca. 1.5 mm wide, connective slightly broadened and thickened, pollen yellow. **Pistil** mushroom shaped, 4–5 mm long, ovary inconspicuous, style short, white, cylindrical, ca. 1 mm long, 2–3 mm in diameter, **stigma** peltate, 8–10 mm in diameter, cream-white and slightly reddish at margin, upper surface with dense small papillae, deep 3 (rarely 4)-lobed at margin, lobes emarginate at apex. **Fruit** subglobose, 15–20 mm in diameter, blackish purple to black, surface irregular tuberculate. Flowering from October to December, fruiting mature in October of the next year.

**Distribution and ecology:** *Aspidistra huashuishanensis* is currently known only from Yingde City in northern Guangdong, China. It is a relatively rare plant growing under secondary evergreen broad-leaved forest by the stream at an elevation range of 230–350 m.

**Additional specimens examined (paratype):** CHINA,

Guangdong Province, Yingde City, Huashuishan Nature Reserve, 28 Mar. 2024, *Chun-Rui Lin, Xin-Yu Wan, Shi-Li Chang and Jin-Quan Huang 2343* (IBK); *ibid.*, 12 Oct. 2024. *Yuan-Qiu Li & Chun-Rui Lin 2040* (fr., IBK).

**Note:** *Aspidistra huashuishanensis* is similar to *A. daqingshanensis* Y.L. Pan & C.R. Lin (Pan *et al.*, 2023) in shape and color of leaves and flowers, but can be distinguished by perianth tube urceolate (vs. campanulate), perianth lobes suberect or slightly recurved (vs. recurved), ovate-triangular (vs. broadly ovate to obround), purplish red adaxially (vs. yellow), acuminate or obtuse (vs. rounded) at apex, upper surface of stigma with dense small papillae (vs. smooth). The new species is also similar to *A. triradiata* N. Vislobokov (Vislobokov, 2015; Nuraliev *et al.*, 2023), but differs by its leaves solitary (vs. fascicled), leaves distinctly differentiated into petiole and blade (vs. not divided), blade wider (4–8 cm vs. 1.2–2 cm), flowers smaller (perianth tube Ø12–15 mm vs. 14.2–19.8 mm), and perianth lobes shorter (4–6 mm vs. 7.6–10.5 mm) long, suberect or slightly recurved (vs. recurved), adaxially thickened (vs. flat) at base. The detailed morphological comparison between these species is shown in Table 1.

## ACKNOWLEDGMENTS

We are grateful to Mr. Shi-Li Chang and Jin-Quan Huang for assistance in the fieldwork. This research was supported by Flagship Project of Guangdong Provincial Basic Research (2023B0303050001), the Biological Resources Programme, Chinese Academy of Sciences (KfJ-BRP-007-012 & CAS-TAX-24-049) and Natural Science Foundation of China (31760061).

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