



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

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In the course of investigating limestone plants in south-western Guangxi, China in 2011, we discovered an unusual *Aspidistra* Ker Gawler (1822: without pagination) in Jinxi Xian, Guangxi, the leaf blade usually narrowly long to ribbon-shaped, its flower was dark purple, emitting unique flavor, the stamens were inserted on the bottom of perigone tube, closely attached to the pistil base. The plant was brought to the Guangxi Institute of Botany, Guilin. In the following year it flowered regularly, making possible a detailed description based on living plant material. Consultation of herbarium material and careful comparison with all *Aspidistra* species hitherto known from Guangxi Prov. and adjacent North Vietnam (Wan & Huang 1987, Liang & Tamura 2000, Li 2004, Tillich 2005, 2008, Tillich *et al.* 2007, Liu *et al.* 2011, He *et al.* 2011, Lin *et al.* 2010, 2012, Lin & Liu 2011, Averyanov & Tillich 2012, Tillich & Averyanov 2012), made clear that the plant is an new species, which we describe below.

### *Aspidistra tenuifolia* C.R.Lin & J.C.Yang, *sp. nov.* (Figs. 1, 2)

Herb perennial, evergreen, rhizomatous. Rhizome creeping, subterete, 8–12 mm thick, covered with scales, nodes dense. Vaginal leaves 3–4, purplish red, 2–10 cm long, enveloping base of petiole, becoming blackish brown when dry. Leaves paired or occasionally solitary, 5–15 mm apart; petiole stiffly upright, 12–20 cm long, 2–3 mm thick, adaxially sulcate; leaf blade usually narrowly long to ribbon-shaped, 60–75 cm long, 2–4 cm wide, dark green, base cuneate, gradually narrowing into a petiole, inequilateral, apex acuminate, margin entire. Peduncle decumbent or declining, purplish red to dark purple, 3–6 cm long, with 3–4 bracts, bracts gradually wider from base to top of peduncle, the two uppermost at base of perigone broadly ovate-cucullate, purplish red, 7–10 mm long, 8–10 mm wide, obtuse at apex. Inflorescence a solitary flower; perigone campanulate, 2–2.5 cm long, fleshy, dark purple, 6-lobed apically; lobes slightly outcurved, broadly ovate, apex rounded, distinctly 2-whorled, lobes of outer whorl 10–13 mm long, 8–10 mm wide, those of the inner whorl smaller, adaxially densely purplish red mottled, and each with six prominent keels 1–2 mm high, keels basally running to the base of the tube; tube 12–14 mm long, 13–15 mm in diam., adaxially purplish black; stamens 6, opposite to lobes, inserted at the bottom of perigone tube, closely attached to the pistil base, filaments upright, enlarged, ca. 1 mm long and ca. 2 mm in diam., anthers yellow, extrorse, ovoid or subglobose, 3–4 mm long, ca. 3 mm wide, connective broadened and thickened, inverted triangular in surface view, base ca. 1 mm wide; pistil 5–6 mm long, ovary inconspicuous, style short, cylindrical, ca. 2 mm in diameter, stigma enlarged, obconical, 7–8 mm in diam., upper surface flat and glabrous, purplish red, blackish purple at margin, with 3 inconspicuous radial, bifurcate lines in center, 3 lobed at margin, lobes emarginate at apex, abaxially white. Flowering in November to December.

**Type:**—China. Guangxi Zhuang Autonomous Region, Jingxi County, Ande town, alt. 880 m, in a valley on limestone hill, 21 November 2011, *Chun-Rui Lin 1031* (holotype IBK!, isotype IBK!).

**Distribution and ecology:**—This new species is only known from Jingxi Xian in southwestern Guangxi Zhuang Autonomous Region, China, that borders northern Vietnam. It grows in valleys on shaded rocky limestone slopes at 820–880 m altitude.

**Taxonomic relationships:**—*Aspidistra tenuifolia* is similar to *A. linearifolia* Wan & Huang (1987: 220) and *A. alata* Tillich in Tillich *et al.* (2007: 336) with linear leaves, perigone campanulate and dark purple. A detailed comparison to distinguish the three species is presented in Table 1.

**TABLE 1.** Morphological comparison of *Aspidistra tenuifolia* with *A. linearifolia* and *A. alata*.

	<i>A. tenuifolia</i>	<i>A. linearifolia</i>	<i>A. alata</i>
Leaf			
Size	65–75 × 2–4 cm	60–100 × 1.5–3.5 cm	60–80 × 2.5–3.5 cm
Petiole	15–20 cm	7–25 cm	15–20 cm
Tube			
Shape	campanulate	campanulate	urceolate
Size	12–14 × 13–15 mm	8–13 × 18–22 mm	8–10 × 10–12 mm
Lobes			
Shape	broadly ovate	triangular-ovate	ligulate
Length	10–13 mm, slightly shorter than tube	15–19 mm, longer than tube	8 mm, subequal to tube
Position	explanate, distinctly 2-whorled	slightly bent outwards	reflexed
Stamens			
Filaments	upright and enlarged, 1 × 2 mm	subsessile	sessile
Anthers	3–4 × 3 mm, connective broadened and thickened	3 × 2 mm	1.2 × 0.8 mm
Position	closely attached to the pistil base	inserted at the bottom of perigone tube	closely attached to the pistil base
Stigma			
Shape	obconical, upper surface flat and glabrous, margin deeply 3-lobed and lobes emarginate at apex	peltate and orbicular, upper surface convex with small papillae densely, margin slightly undulate 6-lobed	hemispherical, upper surface with irregular furrows similar to a brain surface
Size (ϕ)	7–8 mm	14 mm	5 mm

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