Aspidistra hezhouensis (Ruscaceae s.l.), a new species from Guangxi, China

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Aspidistra hezhouensis Qi Gao & Yan Liu, sp. nov.

贺州蜘蛛抱蛋 (**S2-1.** Fig. 1, **S2-2.** Fig. 2: A–C)

Type: **China. Guangxi Zhuang Autonomous Region:** Hezhou City, Babu District, Huangtian Zhen (township), Xincun, limestone mountains, alt. 180 m, 2005-04-01, *Yan Liu L1186* (holotype, IBK); Guilin City, Guilin Botanical Garden, cultivated, introduced by Yan Liu from the type locality, *Qi Gao 351* (paratype, IBK).

Latin diagnosis: Haec species nova *A. quadripartitae* similis stigmate cruciformi, sed perianthii tubo campanulato, lobis flavis, lanceolatis et recurvatis differt; etiam similis *A. flaviflorae* perianthii lobis flavis, sed staminibus prope medium tubi insertis, stigmatibus aequantibus in positione, stigmate cruciformi, supra ad centrum convexo, margine plerumque 4-lobato differt.

Morphological description: Herbs perennial, evergreen, rhizomatous. Rhizome creeping, subterete, ca. 6 mm in diam., covered with scales, nodes dense. Leaf at tip of rhizome embraced by 1–3 reddish-purple cataphylls (2–12 cm long); petiole stiff, upright, 10–23 cm long; blade oblong-lanceolate to narrowly elliptic, 15–28 cm long, 3–6 cm wide, dark green, base cuneate, margin entire, apex acuminate. Peduncle erect or declining, 1.5–3.8 cm long, with 3–5 bracts, bracts gradually wider from base to top of peduncle, two bracts at perianth base broadly ovate, light purple, ca. 10 mm long, ca. 8 mm wide, apex acuminate. Flowers solitary; perianth campanulate, yellow, tinged purplish adaxially and whitish abaxially, (6–)8-lobed apically; lobes recurved, subequal, lanceolate, 6–10 mm long, 2–3 mm wide at base; tube 6–12 mm long, 5–10 mm in diam.; stamens 8, rarely 6, subsessile, inserted at middle of perianth tube, anthers elliptic, ca. 3 mm long; pistil 4–6 mm long; stigma purple, ca. 3 mm in diam., centrally concave, cross-shaped, 4-lobed at margin, rarely 3-armed, 3-lobed at margin. Fl. March–April.

Distribution: Currently known only from the type locality, Babu District, Hezhou City, Guangxi Zhuang Autonomous Region, China (**S2-3.** Fig. 3). The new species grows on shaded rocky slopes of limestone mountains at an altitude of 180 m.

Etymology: The specific epithet is derived from the type locality, Hezhou City, Guangxi Zhuang Autonomous Region, China.

Aspidistra hezhouensis is similar to *A. quadripartita* in the cross-shaped stigma (**S2-2.** Fig. 2: C, F), but readily distinguished from the latter by the flower campanulate (**S2-2.** Fig. 2: A) (vs. the flower subcampanulate, **S2-2.** Fig. 2: D), and perianth lobes yellow, lanceolate, and obviously recurved (**S2-2.** Fig. 2: B) (vs. lobes yellowish-green, ovate-deltoid, and suberect (**S2-2.** Fig. 2: E).

The chromosome number of *Aspidistra hezhouensis* was counted to be $2n = 36$ (**S2-4.** Fig. 4: A), and the karyotype was formulated as $2n = 20\text{m} + 4\text{sm} + 12\text{st}$ (**S2-4.** Fig. 4: C). The chromosome number of *A. quadripartita* was also counted to be $2n = 36$ (**S2-4.** Fig. 4: B), and the karyotype was formulated as $2n = 20\text{m} + 4\text{sm} + 12\text{st}$ (**S2-4.** Fig. 4: D).

Aspidistra hezhouensis is also similar to *A. flaviflora* in having yellow perianth lobes (**S2-2.** Fig. 2: A, G), differing in the stamens inserted at middle of perianth tube, positioned nearly equal to stigma (**S2-2.** Fig. 2: B) (vs. the stamens inserted proximally in perianth tube, positioned lower than stigma which is positioned nearly equal to the entrance of tube, **S2-2.** Fig. 2: H), in the stigma centrally concave, cross-shaped, usually 4-lobed at margin (**S2-2.** Fig. 2: C) (vs. stigma indistinctly 6-lobed at margin, **S2-2.** Fig. 2: I), and in the chromosome number ($2n = 36$ vs. $2n = 38$) and morphology (see below).

Online supplementary data:

S2-1. Fig. 1. *Aspidistra hezhouensis* Qi Gao & Yan Liu. **A,** Habit. **B,** Flower. **C,** Perianth opened, showing stamens. **D,** Pistil, side view. **E,** Stigma in upper view. Drawn from the holotype, *Yan Liu L1186* (IBK).

S2-2. Fig. 2. A–C, *Aspidistra hezhouensis*. **D–F,** *A. quadripartita* G. Z. Li & S. C. Tang. **G–I,** *A. flaviflora* K. Y. Lang & Z. Y. Zhu. **A, D, G,** Flowers. **B, H,** Flowers opened, showing pistil and stamens. **E,** Flowers, side view. **C, F, I,** Flowers in upper view, showing the stigma. Scale bar = 5 mm.

S2-3. Fig. 3. Distribution of *Aspidistra hezhouensis* (circle) in Guangxi Zhuang Autonomous Region, China.

S2-4. Fig. 4. Chromosomes at mitotic metaphase (A, B) and karyotypes (C, D) in *Aspidistra hezhouensis* and *A. quadripartita*. **A, C,** *A. hezhouensis*, from *Qi Gao 351* (IBK). **B**, **D**, *A. quadripartita*, from *Qi Gao 297* (IBK). Scale bar = 10 μm.

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