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中国蜘蛛抱蛋属植物一新记录种——垂花蜘蛛抱蛋

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摘要:报道了产自云南屏边的中国蜘蛛抱蛋属一新记录种——垂花蜘蛛抱蛋 (*Aspidistra nutans* Aver. & Tillich)。该种是2017年发表的新种, 采集于越南西北部地区, 原文缺少果实描述, 现补充描述该种果的形态特征。本种与辐花蜘蛛抱蛋 (*A. subrotata* Y. Wan & C. C. Huang) 在形态上相近, 但其叶片中脉和侧脉明显突出, 花梗近先端向下弯曲, 长0.8 ~ 4.5 cm, 花下垂, 常贴生于地面, 花被紫褐色, 常平展, 柱头纯白色(后者叶脉凹陷, 花梗直立, 长约5 mm, 花斜向上开, 花被暗紫色, 内面具有小乳突, 柱头白色带紫色斑点)而显著有别于后者。

关键词: 垂花蜘蛛抱蛋; 蜘蛛抱蛋属; 新记录; 中国

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Aspidistra nutans, a newly recorded species of *Aspidistra* from China

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Abstract: *Aspidistra nutans* Aver. & Tillich (Asparagaceae), a new species published in 2017, is reported here as a new record species for China. It was first found in northwestern Vietnam and has now been found in Pingbian, Yunnan Province, China. Its fruit characteristics are described here for the first time. This species is similar to *A. subrotata* Y. Wan & C. C. Huang, but differs by its midveins and secondary veins being prominent on lamina (vs. veins concave); peduncles 0.8 – 4.5 cm long, hook-like curved distally (vs. ca. 5 mm long, straight); nutant flowers often flowering in underground or semi-underground position (vs. flowering obliquely upward, face up); perigone lobes smooth, purplish-brown (vs. inside papillate, dark purple); and stigma pure white (vs. white with purple spots).

Key words: *Aspidistra nutans*; *Aspidistra*; New record; China

The genus *Aspidistra* Ker Gawler (1822: 628) (Asparagaceae) contains about 170 species^[1], with most distributed in southwestern

China and northern Vietnam^[2,3], though some species also extend to Japan. In recent years, a large number of new taxa from this genus have

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been reported from southwest China and northern Vietnam^[3-11]. In August 2008, one of the authors (G. W. Hu) collected a special *Aspidistra* species from Pingbian, Yunnan Province, and transplanted some individuals in the Kunming Botanical Garden (Kunming, Yunnan) and later in the Wuhan Botanical Garden (Wuhan, Hubei). During cultivation, the plants flowered in September 2008 in Kunming and in November 2017 in Wuhan. Later in 2016, Hu returned to the same collection locality and discovered additional mature fruits for this plant. After careful examination of the distinct morphological characters of the flowers and fruits and reviewing relevant literature^[1-11], we determined the species to be *Aspidistra nutans*, as described below, which is a new record species for China.

垂花蜘蛛抱蛋(新拟 Fig. 1)

Aspidistra nutans Aver. & Tillich, *Nordic Journal of Botany* 35: 48–57, 2017.

Type: Vietnam. Transplant collected from Son La Province, Van Ho District, Tan Xuan Municipality, Cot Moc Village, at ca. 1000 m a.s.l. 20°40'33.3"N, 104°39'0.3"E, 10 Nov 2015, L. Averyanov, CPC 7158a, b / 13279 (holotype, LE, not seen).

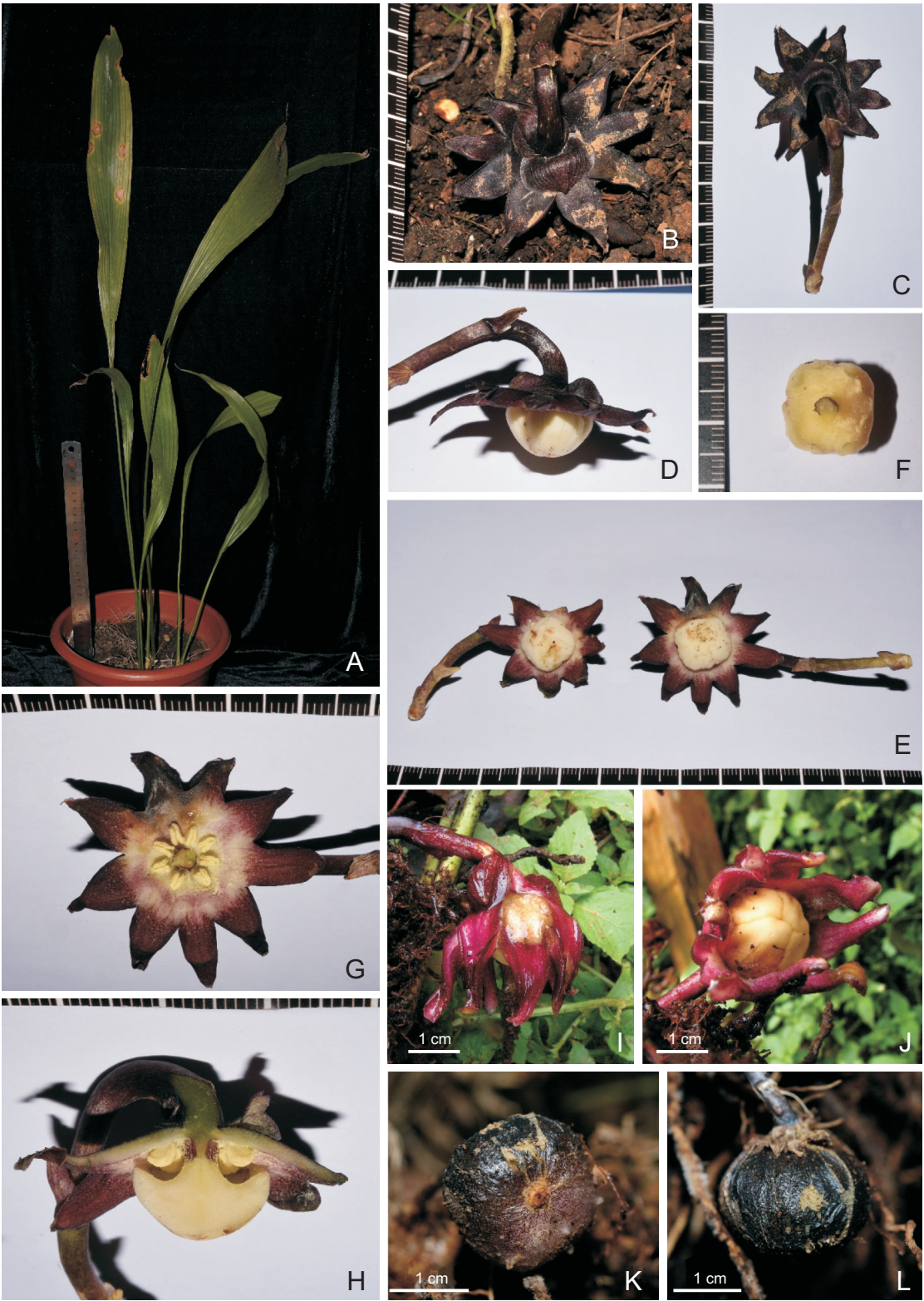
Terrestrial perennial herb with underground or semi-epigeous simple or few branching. Rhizome thick, stout, (4–)5–8(–12) cm long, (0.8–)1.0–1.5(–1.7) cm in diameter. Leafy shoot at apex of rhizome, erect, very short, simple, 0.5–1.0 cm tall. Cataphylls narrowly tubular, when flattened triangular, oblong, or linear-lanceolate, (1.5–)2.0–16.0(–18.0) cm long, obtuse, erect, and straight. Leaf on individual shoot 1(2), erect, (0.6–)0.9–1.2(–1.5) m tall, long petiolate. Petiole stiff, straight erect, dark dull green, (45–)50–70(–90) cm long, adaxially shallowly channeled. Leaf blade leathery, oblique to arching, narrowly elliptic, slightly pleated, tapering at base, shortly attenuate

into acute apex, (25–)30–45(–50) cm long, (4.5–)5.0–7.5(–8.0) cm wide, with prominent median and secondary veins. Flowers 1–3(5), solitary, arising from apical part of rhizome at base of leafy shoot, (2.0–)2.2–3.0(–3.2) cm across, campanulate, often opening underground or semi-underground, sometimes opening above-ground. Peduncle ascending to erect, hook-like curved near apex, facing flower down, purplish-red to dark dirty purplish-brown, (0.8–)1.0–3.5(–4.5) cm long, with (3–)4–5(–6) distant sterile bracts; bracts broadly triangular to broadly ovate, dull greenish finely densely speckled with dirty purple-brownish, (4–)5–10(–12) mm long, (3.5–)4.0–10.0(–12.0) mm wide (flattened), two distal bracts close to each other and to flower base, often splitting at apex. Perigone campanulate, with rather spreading lobes, dull purplish-brown on both sides, fleshy, rather smooth, (1.2–)1.3–1.5(–1.6) cm long, (2.0–)2.2–3.0(–3.2) cm wide, with 8(9) free lobes. Perigone lobes subequal, fleshy, rather smooth, triangular narrowly ovate, almost flat, straight and spreading, rarely dropping, (7–)8–11(–12) mm long, (3.8–)4.0 mm–5.5(–6.0) mm wide, blunt or roundish at apex. Stamens 8, subsessile, inserted at base of tube close to ovary. Pistil pure white; style fleshy, cylindrical, slightly broadening towards base and apex, (2.8–)3.0–3.5(–4.0) mm long; stigma fleshy, hemispheric, (4.5–)5.0–7.0(–7.5) mm tall, (10–)11–12(–14) mm in diameter, densely adpressed to perianth tube, glabrous and glossy. Mature fruits purple black, oblate, 0.9–1.4 cm long, 1.3–1.8 cm wide, surfaces irregularly tuberculate, without soft spines.

Distribution and habitat: Northwestern Vietnam (Son La) and southwestern China (Yunnan); growing in humus soil in jungles.

Phenology: Flowers in September to November under cultivation; mature fruits seen in April.

Specimens examined: China: Yunnan Province,



A: Plant; B-E: Flower; F: Stigma from abaxial view; G: Perigone (showing stamens); H: Longitudinal section of flower; I-J: Flower (flower extending out of flowerpot); K-L: Fruit. A-H from plants cultivated in Wuhan (voucher: HGW-001128); I-J from plants cultivated in Kunming (voucher: Guang-Wan Hu 24554); K-L from wild plant. Scale: B-H: 1 mm per grid.

Fig. 1 *Aspidistra nutans* Aver. & Tillich

Pingbian County, Yuping Town, 23°00'01"N, 103°41'52"E, 1590 m a.s.l., 28 September 2008, *Guang-Wan Hu* 24554 (HIB); cultivated plant collected in same location on 14 April 2016, 22 December 2017, *Guang-Wan Hu* HGW-001128 (HIB).

Observation: China, Yunnan Province, Pingbian County, Yuping Town, 23°00'01"N, 103°41'52"E, 1590 m a. s. l., 14 April 2016, *Guang-Wan Hu*, mature fruits (Fig. 1: K–L).

Notes: *Aspidistra nutans* was first found from a single locality in northwestern Vietnam^[4]. *Aspidistra nutans* is now reported as a new record from adjacent areas of southwestern China with similar climate and habitat. Characteristics of fruits were lacking in the original description^[4], and are described here for the first time.

Aspidistra nutans can be distinguished from other species of the genus *Aspidistra* by its hook-like curved peduncle at apex, nodding flowers opening underground or semi-underground, dark purple perigones, and purely white fleshy hemispheric stigmas. Moreover, it is morphologically similar to *A. subrotata* based on large flowers up to 4 cm in diameter with spreading perigone lobes and fleshy hemispheric stigmas but differs by having large and long petiolate leaves up to 1.5 m long with prominent veins on lamina, hook-like curved peduncles, purely white stigmas without pale purple spots, and nodding flowers often opening underground or semi-underground.

Some morphological variations were observed from the cultivated materials. The plants cultivated in Kunming had purplish-red pendulous perigone lobes (Fig. 1: I–J), whereas those cultivated in Wuhan had purplish-brown spreading ones. The flowers always have at least eight perigone lobes, and occasionally nine (Fig. 1: G). Thus, future field observations on floral characters are

needed to understand the variation patterns and taxonomical significance.

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