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中国蜘蛛抱蛋属一新记录种——博格纳蜘蛛抱蛋

蔡磊^{1,2}, 张贵良³, 胡光万^{4,5*}, 刀志灵^{1*}

(1. 中国科学院昆明植物研究所, 云南省极小种群野生植物综合保护重点实验室, 昆明 650201; 2. 中国科学院大学, 北京 100049;

3. 河口瑶族自治县林业局, 云南河口 661300; 4. 中国科学院武汉植物园, 武汉 430074;

5. 中国科学院中-非联合研究中心, 武汉 430074)

摘要: 报道了产自中国云南喀斯特地区的蜘蛛抱蛋属一新记录种——博格纳蜘蛛抱蛋 (*Aspidistra bogneri* H.-J. Tillich)。该种以前报道仅产于越南宁平省菊芳国家公园 (Ninh Binh, Cuc Phuong National Park), 本次是中国首次记录。对该种的特征进行了详细描述并提供了彩色图片, 凭证标本存放于中国科学院昆明植物研究所标本馆 (KUN)。

关键词: 博格纳蜘蛛抱蛋; 天门冬科; 喀斯特地区; 新记录; 分类学

中图分类号: Q949.71+8.23

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Aspidistra bogneri H.-J. Tillich, a newly recorded species of *Aspidistra* (Asparagaceae) from China

Cai Lei^{1,2}, Zhang Gui-Liang³, Hu Guang-Wan^{4,5*}, Dao Zhi-Ling^{1*}

(1. Yunnan Key Laboratory for Integrative Conservation of Plant Species with Extremely Small Populations, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650201, China; 2. University of Chinese Academy of Sciences, Beijing 100049, China; 3. Hekou Yao Autonomous Forestry Bureau, Hekou, Yunnan 661300, China; 4. Wuhan Botanical Garden, Chinese Academy of Sciences, Wuhan 430074, China; 5. Sino-Africa Joint Research Center, Chinese Academy of Sciences, Wuhan 430074, China)

Abstract: *Aspidistra bogneri* H.-J. Tillich (Asparagaceae) is reported as a new record in China from the Karst region of Yunnan Province. It was previously known only from the Cuc Phuong National Park, Ninh Binh Province, Vietnam. Detailed characteristic descriptions of this species and color images are provided here. Voucher specimens are stored in the Herbarium of the Kunming Institute of Botany, Chinese Academy of Sciences (KUN).

Key words: *Aspidistra bogneri*; Asparagaceae; Karst region; New record; Taxonomy

The genus *Aspidistra* Ker-Gawler (1822: 628) was traditionally placed in Liliaceae, then revised to Ruscaceae, and is now placed in Asparagaceae based on molecular phylogenetic studies^[1]. In the past 20 years, more than 100 species of the genus have been described from

southern and southwestern China, Vietnam, and adjacent regions. Thus, *Aspidistra* now consists of over 170 species distributed primarily in southwestern China and northern Vietnam, with a small number of species in Laos, India, Malaysia, Thailand, and Japan^[2-14].

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作者简介: 蔡磊 (1986-), 男, 博士研究生, 主要从事植物分类和保护生物学研究 (E-mail: cailei@mail.kib.ac.cn)。

* 通讯作者 (Author for correspondence. E-mail: daoahl@mail.kib.ac.cn; guangwanhu@wbcas.cn)。

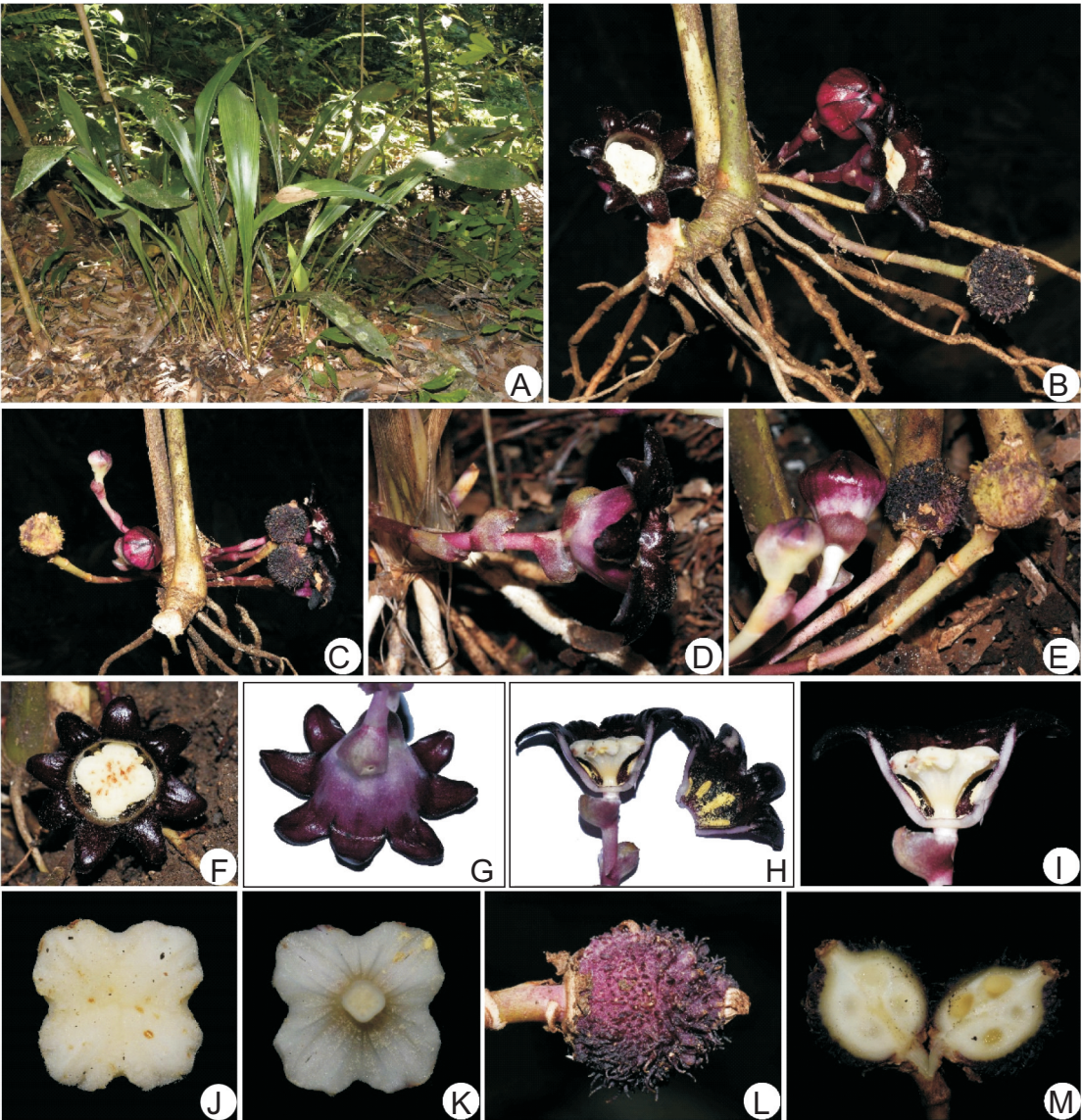
In November 2018, during field investigations of the karst region in southeastern Yunnan, an unknown species of *Aspidistra* was collected from the Daweishan National Nature Reserve in Hekou County. After careful examination of relevant specimens and literature of the genus within adjacent regions^[2, 5, 11–13], we conclude that this plant represents a newly recorded species to China, i.e., *Aspidistra bogneri* H.-J. Tillich. (2005: 317)^[13], which is originally described from Vietnam and which we re-describe

below.

博格纳蜘蛛抱蛋 (新拟, Fig. 1)

Aspidistra bogneri H.-J. Tillich, in *Feddes Repertorium* 116 (5–6): 317, Fig. 1E & F. 2005.

Type: From a plant in cultivation at the Botanical Garden Munich (accession-nr. 97/2374), collected by J. Bogner, March 1997 (Bogner 2500) in Vietnam, Prov. Ninh Binh, Cuc Phuong. Tillich 4360 (M), including flowers in the liquid collection at (M)^[13].



A: Habitat; B & C: Rhizome with flowers and fruits; D: Side view of flower; E: Flowers and fruits; F: Front view of flower; G: Backside of flower; H & I: Opened perigone showing stamens and pistil; J: Stigma, adaxial view; K: Stigma, abaxial view; L: Fruit; M: Opened fruit. (All photographs by Lei Cai)

Fig. 1 *Aspidistra bogneri* H.-J. Tillich

Terrestrial rhizomatous herb, 40 – 90 cm tall. Rhizome creeping, subterete, 15 – 18 mm in diameter, covered with scales, dense nodes. Roots numerous. Leaves solitary, ca. 1 cm apart; petiole stiff upright, missing or inconspicuous to 20 – 40 cm long, 6 – 8 mm thick, adaxially sulcate; leaf blade narrow lanceolate or narrow oblanceolate to lorate-oblanceolate, 40–75 cm long, 6 – 10 cm wide, dark green, base cuneate, gradually tapering to petiole, margin entire, apex acuminate. Peduncle purple, subsessile or peduncle 0.5 – 7 cm long, with 3 – 6 bracts, bracts gradually wider from base to top of peduncle, bract immediately below perianth broadly ovate, purple white, 6–10 mm long, 8 – 12 mm wide, apex rounded. Flower solitary at top of peduncle, perigone campanulate, red, purple to blackish purple, 1.5 – 3 cm long, 1.5 – 3.6 cm wide, tube campanulate, outside purple, inside blackish purple, 1.2 – 1.5 cm long, 1 – 2.4 cm wide, fleshy, 1.5 mm thick, lobes 8, rounded at tips, 6 – 10 mm long, 6 – 8 mm wide, upper surface smooth, with four indistinct blunt short ribs in lower quarter. Stamens 8, anthers yellow, 4 mm long, 2 mm wide, sessile at lower third of tube. Pistil obconical, 1 – 1.2 cm long, stigma flat, white, 4-lobed, ca. 1.3 cm in diameter, with fine radial lines, ovary inconspicuous. Fruit yellow green to blackish purple, globose, with soft spines, ca. 1.5 cm in diameter.

Phenology: Flowering from September to November; fruiting from October to December.

Distribution and ecology: Vietnam (Ninh Binh, Phu Tho, Hoa Binh, and Than Hoa) and China (Yunnan). The species grows on shaded slopes of karst landform under evergreen broad-leaved forests.

Specimens examined: China: Yunnan Province, Hekou County, Nanxi Town, Longbao Village, Shangniuchang, 22°40'N, 103°58'E, elev. ca. 645 m, under limestone monsoon rain forest, in flower, 2 November 2018, *Lei Cai et al.* CL176

(KUN).

Notes: At first sight, flowers of this species were observed in the wild, which led to our initial consideration that this may be a potential new species very similar to *Aspidistra bogneri* due to the different morphology: i.e., leaf blade narrow oblanceolate to lorate-oblanceolate (vs. narrow lanceolate), petiole 20 – 40 cm long (vs. petiole missing or inconspicuous), flowers sparse, peduncle 3 – 7 cm long (vs. flowers numerous, dense, subsessile or peduncle 0.5 – 1 cm), perigone widely campanulate, purple to blackish purple (vs. perigone campanulate, red) as well as the geographical isolation of more than 200 km^[13, 14]. However, a detailed comparison of this plant to *A. bogneri* reveals no fundamental differences, and the figures of *A. bogneri* from Vietnam are highly similar to the discovered plant. Thus, any differences between the discovered plant and *A. bogneri* are likely infra-specific variation^[15]. Not only do they exhibit close similarity in having a campanulate perigone with eight lobes, but the pistils and stamens are the same shape, and the stamens are in the same position in the perianth tube. In addition, the flower characters of the discovered plant fall within the variability of *A. bogneri*. Thus, we identify the newly discovered plant as *A. bogneri* based on its floral characteristics and the views of Professor Hans-Juergen Tillich and other researchers. In recent years, several new and newly recorded species have been discovered in this karst area, which exhibits different vegetation types and abundant biodiversity. As such, we will pay more attention to *Aspidistra* species diversity in this area^[2, 5, 11, 12].

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