

## 54. ASPIDISTRA Ker Gawler, Bot. Reg. 8: t. 628. 1822.

蜘蛛抱蛋属 zhi zhu bao dan shu

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*Antherolophus* Gagnepain; *Colania* Gagnepain; *Evrardiella* Gagnepain; *Macroglyne* Link & Otto; *Plectogyne* Link.

Herbs perennial, rhizomatous. Rhizome creeping, elongate; nodes dense. Leaves solitary or 2–4-tufted, basal, erect, long petiole; leaf blade many veined. Scape usually very short, with 2–8 scales, 1(or 2)-flowered. Flowers bisexual, terminal, generally embraced by 1 or 2 bracts at perianth base. Perianth campanulate, urceolate, or cupular, fleshy, apically (4–)6–8(–10)-lobed. Stamens as many as and opposite perianth lobes, usually inserted in proximal part of perianth tube; filaments very short or absent; anthers dorsifixed. Ovary 3- or 4-loculed; ovules several per locule. Style short, sometimes articulate; stigma usually peltate or mushroom-shaped, large, entire or lobed at margin. Fruit a berry, globose to ovoid-ellipsoid, usually 1-seeded.

About 55 species: China, India, Japan, Laos, Thailand, Vietnam; 49 species (46 endemic, one introduced) in China.

*Aspidistra* has never been well studied so, for the convenience of later criticisms, we use the narrowest species concept in this treatment. Accordingly, the key to the species may not function completely in some cases. Further studies are needed in order to understand the precise species variation and to establish an adequate species concept in the genus.

- 1a. Leaves 2–5-tufted (at least mostly so in a clone).
  - 2a. Perianth urceolate.
    - 3a. Perianth surface with many deep, longitudinal grooves ..... 49. *A. hekouensis*
    - 3b. Perianth surface ± flat, not deeply grooved.
      - 4a. Scares usually tufted; leaf blade rounded or nearly so at base ..... 45. *A. typica*
      - 4b. Scape solitary.
        - 5a. Stigma 10–12 mm in diam., margin slightly 3-lobed ..... 46. *A. caespitosa*
        - 5b. Stigma 1.5–2.5 mm in diam., margin 3-lobed or (4 or)6-crenate.
          - 6a. Leaf blade oblong to oblong-lanceolate; stigma strongly convex centrally, margin 3-lobed ..... 47. *A. urceolata*
          - 6b. Leaf blade lorate to lorate-oblong; stigma not strongly convex centrally, margin (4 or)6-crenate ..... 48. *A. minutiflora*
    - 2b. Perianth campanulate or subcupular.
      - 7a. Perianth subcupular; lobes deltoid, erect and smooth ..... 38. *A. cyathiflora*
      - 7b. Perianth campanulate; lobes oblong, oblong-ovate, or deltoid-ovate, recurved and/or papillose.
        - 8a. Leaf blade ovate to ovate-lanceolate; perianth white; anthers 5–6 mm ..... 39. *A. dolichanthera*
        - 8b. Leaf blade lorate, linear, linear-lanceolate, or narrowly oblanceolate; perianth blackish purple, purple, purple-red, pale green, or pale yellow-green, not white; anthers 1.5–4 mm.
        - 9a. Leaf blade spotted with pale yellow on both surfaces, narrowly oblanceolate; perianth lobes with 4 papillose keels adaxially ..... 40. *A. yingjiangensis*
        - 9b. Leaf blade without yellow spots, lorate, linear, or linear-lanceolate; perianth lobes with 2, 4, or 6 keels, or sometimes without a keel.
          - 10a. Stamens inserted at middle of perianth tube, positioned nearly as high as stigma ..... 41. *A. muricata*
          - 10b. Stamens inserted near base or proximally in perianth tube, positioned lower than stigma.
            - 11a. Perianth lobes with 4 smooth keels adaxially ..... 42. *A. hainanensis*
            - 11b. Perianth lobes with 4–6 papillose keels adaxially.
              - 12a. Stigma with white convex markings adaxially; perianth lobes 7–8 mm ..... 43. *A. omeiensis*
              - 12b. Stigma purple, with 3–6 minute grooves adaxially; perianth lobes 15–19 mm ..... 44. *A. linearifolia*
    - 1b. Leaves solitary, spaced.
      - 13a. Perianth urceolate.
        - 14a. Perianth tube with fleshy keels on both surfaces; ovary keeled ..... 34. *A. carinata*
        - 14b. Perianth tube and ovary without keels.
          - 15a. Perianth lobes narrowly oblong ..... 37. *A. marginella*
          - 15b. Perianth lobes deltoid-ovate or ovate.
            - 16a. Leaf blade oblong or narrowly oblong-lanceolate; perianth lobes purple, deltoid ..... 35. *A. leshanensis*
            - 16b. Leaf blade oblanceolate-oblong; perianth lobes yellow, ovate ..... 36. *A. fenghuangensis*
      - 13b. Perianth campanulate (including urceolate-campanulate in plants in Taiwan).
        - 17a. Perianth white or yellow (at least abaxial surface wholly white or yellow).
          - 18a. Perianth white ..... 1. *A. cavicola*
          - 18b. Perianth yellow (at least mostly so).
            - 19a. Scape 10.5–22.5 cm; perianth lobes 8–15 mm ..... 2. *A. longipedunculata*
            - 19b. Scape 0.5–2.5 cm; perianth lobes 4.5–7 mm.

- 20a. Perianth lobes narrowly ovate-lanceolate, ca. 4.5 mm, not keeled adaxially; stamens inserted at middle of perianth tube, positioned higher than stigma ..... 3. *A. triloba*
- 20b. Perianth lobes lanceolate, 5–7 mm, with 2 fleshy keels adaxially; stamens inserted in proximal part of perianth tube, positioned lower than stigma ..... 4. *A. flaviflora*
- 17b. Perianth pink, red, purple, blue, or pale green.
- 21a. Perianth pale green with purplish brown speckles.
- 22a. Leaf blade lanceolate, 25–30 × 4.5–5.5 cm; perianth lobes with 2 keels adaxially ..... 5. *A. punctata*
- 22b. Leaf blade narrowly oblanceolate or lorate-lanceolate, 2.5–3.0 × 4.5–5.5 cm; perianth lobes with 4 keels adaxially ..... 6. *A. fasciaria*
- 21b. Perianth pink, red, purple, or blue (sometimes tube white), sometimes with colored speckles.
- 23a. Scapes usually 2–5-tufted; perianth lobes smooth adaxially ..... 33. *A. saxicola*
- 23b. Scape solitary.
- 24a. Perianth lobes basally expanded inward forming toothlike, subulate, or oblong appendages.
- 25a. Perianth lobes 0.3–1 cm, shorter than or nearly as long as tube.
- 26a. Perianth lobes 0.3–0.4 cm, shorter than tube ..... 28. *A. oblongifolia*
- 26b. Perianth lobes 0.7–1 cm, nearly as long as tube ..... 29. *A. longanensis*
- 25b. Perianth lobes 2.4–7.5 cm, much longer than tube.
- 27a. Perianth tube villous, lobes 7–7.5 cm, appendages papillose ..... 32. *A. longiloba*
- 27b. Perianth tube glabrous, lobes 2.4–4.5 cm, appendages not papillose.
- 28a. Perianth pale purple; perianth lobes less than 2 × as long as tube; berry softly prickly ..... 30. *A. patetiloba*
- 28b. Perianth red-pink; perianth lobes ca. 3 × as long as tube; berry glabrous ..... 31. *A. luodianensis*
- 24b. Perianth lobes without appendages basally.
- 29a. Stamens inserted at or above middle of perianth tube, positioned as high as or higher than stigma.
- 30a. Perianth 0.9–1.2 cm ..... 7. *A. claviformis*
- 30b. Perianth 1.7–2.5 cm.
- 31a. Stamens inserted above middle of perianth tube, positioned much higher than stigma; perianth lobes (5 or)6 ..... 8. *A. retusa*
- 31b. Stamens inserted at middle of perianth tube, positioned slightly higher than stigma; perianth lobes 7 or 8.
- 32a. Perianth tubular-campanulate, lobes ovate-deltoid, not keeled adaxially ..... 9. *A. attenuata*
- 32b. Perianth urceolate-campanulate, lobes narrowly deltoid, 2-keeled adaxially ..... 10. *A. daibuensis*
- 29b. Stamens inserted nearly at base of or proximally in perianth tube, positioned lower than stigma.
- 33a. Perianth pink ..... 13. *A. mushaensis*
- 33b. Perianth not pink (at least in Chinese plants).
- 34a. Stigma subglobose or mushroom-shaped, 1–1.9 cm in diam.
- 35a. Style articulate; stigma mushroom-shaped, 1–1.2 cm in diam. .... 11. *A. fungilliformis*
- 35b. Style not articulate; stigma subglobose, to 1.9 cm in diam. .... 12. *A. subrotata*
- 34b. Stigma peltate, orbicular to cross-shaped, sometimes convex adaxially, 5–14 mm in diam.
- 36a. Perianth lobes equaling or longer than tube.
- 37a. Scape 1–4 cm; perianth 1–1.8 cm ..... 15. *A. austrosinensis*
- 37b. Scape 0.3–0.5 cm; perianth 3–3.5 cm ..... 17. *A. longipetala*
- 36b. Perianth lobes shorter than tube.
- 38a. Stigma cross-shaped ..... 26. *A. cruciformis*
- 38b. Stigma usually orbicular, not cross-shaped.
- 39a. Perianth 3–3.5 cm ..... 16. *A. tonkinensis*
- 39b. Perianth 1–2.5 cm.
- 40a. Stigma with 3 or 4 globose, fleshy projections at center adaxially ..... 14. *A. acetabuliformis*
- 40b. Stigma without globose projections.
- 41a. Stigma with 4 hollows at center adaxially ..... 27. *A. leyeensis*
- 41b. Stigma without hollows.
- 42a. Fleshy keels on adaxial surface of perianth lobes fimbriate ..... 18. *A. fimbriata*
- 42b. Fleshy keels on adaxial surface of perianth lobes not fimbriate.
- 43a. Leaf blade oblanceolate, or at least partly so.
- 44a. Leaf blade 5–9 cm wide; perianth lobes subdeltoid; stigma 3(or 4)-lobed at margin ..... 21. *A. xilinensis*
- 44b. Leaf blade 2–4 cm wide; perianth lobes narrowly lanceolate or narrowly oblong; stigma 4- or 8-lobed at margin.
- 45a. Perianth lobes narrowly lanceolate; stigma 1–1.2 cm in diam., 4-lobed at margin ..... 19. *A. ebianensis*

- 45b. Perianth lobes narrowly oblong; stigma 0.5–0.6 cm in diam., 8-lobed at margin ..... 20. *A. oblanceifolia*  
 43b. Leaf blade narrowly lanceolate to elliptic, never oblanceolate.  
 46a. Leaf blade subrounded or broadly cuneate at base; stigma 6-lobed at margin, lobes with a white hollow on adaxial surface ..... 25. *A. zongbayi*  
 46b. Leaf blade cuneate at base; stigma 4-lobed at margin, lobes without a hollow on adaxial surface.  
 47a. Keels of perianth lobes strongly fleshy, not papillose ..... 22. *A. elatior*  
 47b. Keels of perianth lobes not fleshy, papillose.  
 48a. Stigma strongly convex, lobes entire ..... 23. *A. lurida*  
 48b. Stigma slightly convex, lobes emarginate at apex ..... 24. *A. sichuanensis*

**1. *Aspidistra cavicola*** D. Fang & K. C. Yen in D. Fang et al., Acta Phytotax. Sin. 31: 180. 1993.

洞生蜘蛛抱蛋 dong sheng zhi zhu bao dan

Rhizome subterete, ca. 3 mm thick, densely covered with scales. Leaves solitary; petiole 7.5–25 cm; leaf blade elliptic to elliptic-ovate, 5–14 × 2.2–4.4 cm, base rounded or broadly cuneate, distal margin denticulate, apex acuminate, mucronate. Scape 0.7–1.5 cm; bracts ca. 4. Flower solitary, erect. Perianth white, campanulate, 5- or 6-lobed apically; tube ca. 5 × 5 mm; lobes broadly ovate, ca. 3.5 × 4 mm, 3-veined. Stamens 5 or 6, inserted in proximal part of perianth tube, subsessile; anthers oblong, ca. 2.5 mm. Pistil ca. 4.5 mm; stigma scarcely or slightly enlarged, ca. 2.5 mm in diam., slightly exceeding anthers. Berry pale purple, subglobose or depressed globose, 7–10 mm in diam., ca. 3-seeded. Fl. and fr. Jun–Jul.  $2n = 36^*$ .

- Limestone caverns; 500–600 m. NW Guangxi (Fengshan Xian).

**2. *Aspidistra longipedunculata*** D. Fang in X. X. Chen & D. Fang, Guihaia 2: 78. 1982.

长梗蜘蛛抱蛋 chang geng zhi zhu bao dan

Rhizome subterete, 4–10 mm thick, densely covered with scales. Leaves solitary; petiole 4–45 cm; leaf blade narrowly elliptic to oblong-lanceolate, 17–50 × 3.5–13.5 cm, base cuneate, apex acuminate. Scape purple-brown, 10.5–22.5 cm; bracts 6–9. Flower solitary, nodding, slightly fragrant. Perianth yellow, campanulate, (6–)8(–10)-lobed apically; tube ca. 7 × 10 mm; lobes reflexed, suboblong, 0.8–1.5 cm × 7(–9) mm, slightly fleshy, smooth adaxially. Stamens 6–10, inserted at or slightly below middle of perianth tube, subsessile; anthers subreniform, ca. 5 mm. Pistil 7–8 mm; stigma slightly enlarged, ca. 1 mm in diam., exceeding anthers, inconspicuously 3-lobed at margin. Fl. Apr–May.  $2n = 36^*$ .

- Forests along ravines. SW Guangxi (Longzhou Xian, Ningming Xian).

**3. *Aspidistra triloba*** F. T. Wang & K. Y. Lang in K. Y. Lang, Acta Phytotax. Sin. 19: 380. 1981.

湖南蜘蛛抱蛋 hu nan zhi zhu bao dan

Rhizome subterete, ca. 4 mm thick, densely covered with scales. Leaves solitary; petiole 7–9 cm, rigid; leaf blade slightly spotted with yellow, oblong-lanceolate to narrowly elliptic, 11.5–23 × 3–5 cm, base cuneate, apex acuminate. Scape 1.5–2.5 cm; bracts 2–4. Flower solitary. Perianth yellow, campanulate, 6- or 7-lobed apically; tube ca. 1.3 × 1 cm; lobes ± recurved, nar-

rowly ovate-lanceolate, ca. 4.5 × 3 mm, slightly fleshy. Stamens 6 or 7, inserted at middle of perianth tube, positioned higher than stigma; filaments 1–1.5 mm; anthers broadly elliptic, ca. 1 mm. Pistil ca. 3 mm; style articulate; stigma slightly enlarged, ca. 1.7 mm in diam., 3-parted at margin. Fl. Apr.  $2n = 36^*$ .

- Sparse forests along valleys; 300–400 m. SC Hunan (Qiyang Xian), W Jiangxi (Jinggangshan).

**4. *Aspidistra flaviflora*** K. Y. Lang & Z. Y. Zhu, Acta Phytotax. Sin. 20: 485. 1982.

黄花蜘蛛抱蛋 huang hua zhi zhu bao dan

Rhizome terete, 3–7 mm thick. Leaves solitary; petiole 10–26 cm; leaf blade spotted with yellow-white, oblong-lanceolate to narrowly elliptic, 19–30 × 3–6 cm. Scape 0.5–1.5 cm, bracts 1 or 2. Flower solitary, fragrant. Perianth yellow, tinged purplish adaxially and whitish abaxially, campanulate, 5- or 6-lobed apically; tube 7–13 × 5–7 mm; lobes reflexed, lanceolate, 5–7 × 2–4 mm, with 2 fleshy keels adaxially. Stamens 6, inserted proximally in perianth tube, positioned lower than stigma, subsessile; anthers elliptic, ca. 2 mm. Pistil 3–8 mm; stigma purple, 3–4 mm in diam., adaxially concave, slightly 3- or 6-lobed at margin. Berry ovoid, 1–1.5 cm in diam., tuberculate. Fl. Sep–Oct, fr. Jan–Jul.  $2n = 38^*$ .

- Forested slopes; ca. 800 m. SC Sichuan (Muchuan Xian).

**5. *Aspidistra punctata*** Lindley, Bot. Reg. 12: t. 977. 1826.

紫点蜘蛛抱蛋 zi dian zhi zhu bao dan

Rhizome terete. Leaves solitary; petiole 7.5–50 cm, rigid; leaf blade lanceolate, 25–30 × 4.5–5.5 cm. Scape rather short; bracts ca. 5, speckled with purplish brown. Flower solitary, nodding. Perianth pale green, densely speckled with purplish brown, campanulate, fleshy, 8-lobed apically; tube hemispheric; lobes ovate, with 2 fleshy keels adaxially, keels dark purple, densely and minutely papillose. Stamens 8, inserted at middle of perianth tube, positioned lower than stigma, subsessile; anthers oblong. Ovary with deeply colored speckles, ovoid, angled; stigma white, orbicular, large, adaxially with 4 radial, fork-tipped ridges from center to margin. Fl. Mar.

- Damp places along streams. Guangdong (Yunan Xian, Zengcheng Xian), Hong Kong.

**6. *Aspidistra fasciaria*** G. Z. Li in K. Y. Lang et al., Acta Phytotax. Sin. 37: 484. 1999.

带叶蜘蛛抱蛋 dai ye zhi zhu bao dan

Rhizome creeping, terete, covered with scales. Leaves solitary, spaced; leaf blade narrowly oblanceolate or lorately lanceolate, 50–60 × 2.5–4.5 cm, leathery, base gradually narrowed, margin entire, apex acuminate. Scape 1.8–2.5 cm; bracts 4–6. Flower solitary, erect. Perianth yellow-green, speckled with purple, campanulate, 15–16 × 1.5–2.5 mm, fleshy, 6–8(–10)-lobed apically; tube 7–8 × 1.2–1.5 mm; lobes dark purple, deltoid-ovate, 7–8 × 3–4 mm, with 4 keels adaxially, papillose. Stamens 6–8(–10), inserted at base of perianth tube; anthers broadly ovate, ca. 3 × 2.5 mm. Pistil ca. 5 mm; style short, not articulate; stigma peltate, enlarged, ca. 1.3 cm in diam., convex and purple-red adaxially, 6–8(–10)-lobed at margin, lobes suborbicular at apex. Fl. Jun.

- ?Guangxi.

*Aspidistra fasciaria* was described from a plant cultivated at the Guilin Botanical Garden, Yanshan, NE Guangxi, but no details of a wild origin were cited.

**7. *Aspidistra claviformis*** Y. Wan, Bull. Bot. Res., Harbin 4(4): 166. 1984.

棒蕊蜘蛛抱蛋 *bang rui zhi zhu bao dan*

Rhizome subterete, 6–8 mm thick, densely covered with scales. Leaves solitary, much spaced; petiole (15–)25–50 cm; leaf blade elliptic, 17.5–30 × 5.5–8.5 cm, apex long acuminate. Scape 0.9–3.5 cm; bracts 3–5, white, speckled with purple. Flower solitary. Perianth campanulate, 6-lobed apically; tube white, sometimes speckled with purple, 8–11 × 6–7 mm; lobes reflexed, purple, ovate, 4–5 × 3–4 mm. Stamens 6, inserted just above middle of perianth tube, positioned nearly level with stigma, subsessile; anthers oblong, 4.5–5.5 mm. Pistil purple, 7–9 mm; stigma scarcely enlarged, slightly concave and white adaxially, 3-lobed at margin. Fl. Nov.  $2n = 36^*$ .

- Forests on limestone hillsides. W Guangxi (Long'an Xian, Napo Xian).

**8. *Aspidistra retusa*** K. Y. Lang & S. Z. Huang in K. Y. Lang, Acta Phytotax. Sin. 19: 379. 1981.

广西蜘蛛抱蛋 *guang xi zhi zhu bao dan*

Rhizome subterete, ca. 5 mm thick, densely covered with scales. Leaves solitary; petiole 16–33 cm; leaf blade oblong to oblong-lanceolate, base cuneate, apex acuminate. Scape 2.5–4.5 cm; bracts 5 or 6. Flower solitary. Perianth campanulate, (5 or) 6-lobed; tube 1.3–1.5 × 0.9–1 cm; lobes ± recurved, deltoid-ovate, ca. 4 × 3 mm, rather thick. Stamens (5 or) 6, inserted distally in perianth tube, positioned much higher than stigma, subsessile; anthers ovate, ca. 1.8 mm. Pistil ca. 4 mm; style obviously articulate; stigma slightly enlarged, ca. 1.5 mm in diam., 6-lobed or undulate-lobed at margin. Fl. Apr.  $2n = 36^*$ .

- NE Guangxi (Jinxu Yao Zu Zizhixian, Lingui Xian, Yangshuo Xian).

**9. *Aspidistra attenuata*** Hayata, Icon. Pl. Formos. 2: 145. 1912.

薄叶蜘蛛抱蛋 *bo ye zhi zhu bao dan*

Rhizome terete, thickened, ca. 1 cm thick, usually covered with scales. Leaves solitary; petiole 30–40 cm; leaf blade oblanceolate, 45–50 × 7–10 cm. Scape erect, 3–5 cm; bracts 3–5.

Flower solitary. Perianth tubular-campanulate, 2–2.5 cm, 7- or 8-lobed apically; lobes reflexed, speckled with black, ovate-deltoid, 7–8 mm. Stamens 7 or 8, inserted at middle of perianth tube, subsessile; anthers narrowly oblong, ca. 2.5 mm. Pistil 4–5 mm; ovary broadly conical, ca. 2 mm; style ca. 2 mm; stigma peltate, large. Berry green, globose, 2–2.5 cm in diam. Fl. Jun, fr. Jun.  $2n = 36^*$ .

- Mountains; 1000–2000 m. Taiwan.

**10. *Aspidistra daibuensis*** Hayata, Icon. Pl. Formos. 9: 143. 1920.

大武蜘蛛抱蛋 *da wu zhi zhu bao dan*

Rhizome stout, densely covered with scales. Leaves solitary; petiole 10–13 cm; leaf blade green and sometimes with white or yellowish white spots adaxially, oblong-lanceolate to lanceolate, 45–50 × 8–12 cm, base cuneate, apex acute to acuminate. Scape erect, 2–2.5 cm; bracts 4 or 5. Flower solitary. Perianth urceolate-campanulate, 2–2.5 cm, 8-lobed apically; lobes narrowly deltoid, ca. 10 × 5 mm, thickened, adaxially with 2 fleshy keels at middle. Stamens 8, inserted at middle of perianth tube; anthers yellow. Ovary cylindrical. Berry globose, 1–1.5 cm in diam. Fl. Jan.  $2n = 36^*$ .

- Forests; 700–1800 m. Taiwan.

**11. *Aspidistra fungilliformis*** Y. Wan, Bull. Bot. Res., Harbin 4(4): 165. 1984.

伞柱蜘蛛抱蛋 *san zhu zhi zhu bao dan*

Rhizome subterete, 3–5 mm thick. Leaves solitary, spaced; petiole 5–17 cm, rather slender; leaf blade generally yellowish white spotted, ovate-elliptic to elliptic-lanceolate, 8.5–14 × 2.8–6.5 cm. Scape 1–4 cm; bracts 4–6, white, speckled with purple. Flower solitary. Perianth campanulate, 6-lobed apically; tube purple-black adaxially, purple abaxially, 1.2–1.6 × 1.1–1.3 cm; lobes spreading or reflexed, white adaxially, purple abaxially, broadly oblong, 6–10 × 5–8 mm. Stamens 6, inserted at base of perianth tube; filaments ca. 1 mm; anthers subreniform, 2–2.5 mm. Pistil 1–1.2 cm; style articulate; stigma hemispheric, mushroom-shaped, very large, 5–6 mm × 1–1.2 cm, exceeding anthers. Fl. Nov.  $2n = 36^*$ .

- Forests in limestone ravines; 300–400 m. W Guangxi (Long'an Xian, Tian'e Xian).

**12. *Aspidistra subrotata*** Y. Wan & C. C. Huang, Guihaia 7: 223. 1987.

辐花蜘蛛抱蛋 *fu hua zhi zhu bao dan*

Rhizome subterete, 8–10 mm thick, densely covered with scales. Leaves solitary; petiole 22–28 cm, rigid; leaf blade oblong-oblanceolate, 25–45 × 5.5–8 cm. Scape ca. 5.5 cm; bracts 3 or 4, white, speckled with purple. Flower solitary. Perianth dark purple, 6-lobed apically; tube ca. 8 × 18 mm; lobes horizontally spreading, ovate-lanceolate, 1.8–2.3 cm × 8–10 mm, adaxially minutely papillose, 4-keeled, keels papillose, central 2 extending to tube and fused with those of other lobes. Stamens 8, inserted at middle of perianth tube; filaments ca. 2 mm. Stigma subglobose, to 1.3 × 1.9 cm. Fl. Nov.  $2n = 38^*$ .

- S and W Guangxi (Dongxing Xian, Napo Xian).

**13. *Aspidistra mushaensis*** Hayata, Icon. Pl. Formos. 9: 144. 1920.

雾社蜘蛛抱蛋 wu she zhi zhu bao dan

Rhizome terete, ca. 6 mm thick, covered with scales. Leaves solitary; petiole 20–50 cm; leaf blade lanceolate to linear-lanceolate, 30–40 × 3–5 cm, leathery, base cuneate, apex acute to acuminate. Scape 1–2 cm; bracts triangular-ovate. Perianth pink, broadly campanulate, ca. 1 cm, 8-lobed apically; lobes deltoid-lanceolate, adaxially distinctly 2-keeled, margin often folded. Stamens 8, subsessile; anthers ovate, ca. 2 mm. Ovary cylindrical, 5–6 mm; stigma broadly peltate, mushroom-shaped, large. Berry globose, 1–2 cm in diam. Fl. Apr.  $2n = 36^*$ .

• 800–1900 m. C and N Taiwan.

No material of this species has been seen by the present authors.

**14. *Aspidistra acetabuliformis*** Y. Wan & C. C. Huang in Y. Wan, Acta Phytotax. Sin. 25: 396. 1987.

碟柱蜘蛛抱蛋 die zhu zhi zhu bao dan

Rhizome subterete, 4–7 mm thick. Leaves solitary, spaced; petiole 9–11 cm; leaf blade spotted with yellowish white, oblong-lanceolate to narrowly oblong, ca. 25 × 4–5 cm. Scape 1–2.7 cm; bracts ca. 4. Flower solitary. Perianth campanulate, 8-lobed apically; tube purple adaxially, white abaxially, 9–10 mm × 1.2–1.4 cm; lobes recurved, purple, deltoid, ca. 5 × 5 mm, adaxially with 2 or 3 fleshy, papillose keels. Stamens 8, inserted proximally in perianth tube; filaments ca. 1.5 mm; anthers oblong, ca. 2.6 mm. Pistil ca. 4 mm; stigma large, ca. 7 mm in diam., with 3 or 4 fleshy, globose projections at center adaxially, 8-lobed at margin. Fl. Oct.

• Guangxi.

Described from a cultivated plant originating from Guangxi, without precise locality.

**15. *Aspidistra austrosinensis*** Y. Wan & C. C. Huang, Guihaia 7: 221. 1987.

华南蜘蛛抱蛋 hua nan zhi zhu bao dan

Rhizome subterete, 5–8 mm thick. Leaves solitary, spaced; petiole 45–55 cm, stiff; leaf blade oblong-lanceolate, 40–45 × ca. 5.5 cm, margin denticulate. Scape 1–4 cm; bracts 4 or 5, white, speckled with purple. Flower solitary. Perianth campanulate, 6-lobed apically; tube pale yellow, 7–8 mm × 1–1.2 cm; lobes slightly recurved, purple, subdeltoid, 8–10 × 6–7 mm. Stamens 6, inserted proximally in perianth tube; filaments ca. 1 mm; anthers ovate, 3.5–4 mm. Pistil ca. 7 mm; stigma large, ca. 5 mm in diam., obviously exceeding anthers, undulate at margin. Fl. Oct.

• Guangxi.

Described from a cultivated plant originating from Guangxi, without precise locality.

**16. *Aspidistra tonkinensis*** (Gagnepain) F. T. Wang & K. Y. Lang in K. Y. Lang, Acta Phytotax. Sin. 16(1): 77. 1978.

大花蜘蛛抱蛋 da hua zhi zhu bao dan

*Colania tonkinensis* Gagnepain, Bull. Mus. Hist. Nat.

(Paris), sér. 2, 6: 190. 1934.

Rhizome terete, 4–5 mm thick. Leaves solitary, spaced; petiole 10–13 cm; leaf blade lanceolate-oblong, 13–20 × 4–5.5 cm, margin slightly undulate. Scape ca. 3 cm; bracts ca. 5. Flower solitary. Perianth campanulate, 6-lobed apically; tube dull purple, speckled with dark purple-red adaxially and pale purple abaxially, 2–2.3 × 1.6–1.8 cm; lobes white adaxially, dull purple with pale purple speckles abaxially, ovate to semi-orbicular, 1–1.2 × ca. 1.2 cm. Stamens 6, inserted near base of perianth tube, subsessile; anthers reniform. Style white, articulate; stigma peltate, large. Fl. Oct–Nov.  $2n = 36^*$ .

Forests; ca. 1800 m. NW Guangxi (Tian'e Xian), S Guizhou (Luodian Xian), SE Yunnan (Pingbian Miao Zu Zizhixian) [Vietnam].

**17. *Aspidistra longipetala*** S. Z. Huang, Guihaia 6: 273. 1986.

长瓣蜘蛛抱蛋 chang ban zhi zhu bao dan

Rhizome subterete, 5–7 mm thick. Leaves solitary; petiole 6–7 cm, rather slender; leaf blade ovate to elliptic, 13–17 × 5–6 cm. Scape 3–5 mm; bracts 5 or 6. Flower solitary. Perianth pale yellow adaxially, purple-red abaxially, 6-parted apically; tube ca. 1 × 1.8 cm; lobes suberect, ovate-lanceolate, (1.7–)2–2.5 cm × ca. 5 mm, rather thick. Stamens 6, inserted at base of perianth tube, subsessile; anthers oblong, ca. 2 mm. Pistil ca. 7 mm; style ca. 5 mm, thickened, 12-ribbed; stigma peltate, large, 1–1.2 cm in diam., slightly 12-lobed at margin. Fl. Mar–Apr.

• Forests in ravines. C Guangxi (Liucheng Xian, Wuming Xian).

**18. *Aspidistra fimbriata*** F. T. Wang & K. Y. Lang in K. Y. Lang, Acta Phytotax. Sin. 16(1): 76. 1978.

流苏蜘蛛抱蛋 liu su zhi zhu bao dan

Rhizome 4–6 mm thick. Leaves solitary; petiole 25–35 cm, stiff; leaf blade oblong-lanceolate, 30–45 × 3.5–6 cm. Scape 3–10 mm; bracts 4 or 5. Flower solitary. Perianth campanulate, 8–10-lobed apically; tube 7–9 mm × 1–1.5 cm; lobes slightly recurved, purple speckled abaxially, ovate-deltoid, 6–8 × 3.5–5 mm, with 4 fleshy, fimbriate keels adaxially. Stamens 8–10, inserted proximally in perianth tube, subsessile; anthers broadly ovate, ca. 1.8 mm. Pistil ca. 4 mm; stigma purple, peltate, large, ca. 7 mm in diam., 4-lobed at margin, lobes emarginate at apex. Fl. Nov–Dec.  $2n = 38^*$ .

• Forests along ravines; 400–500 m. Fujian, Guangdong, Hainan.

**19. *Aspidistra ebianensis*** K. Y. Lang & Z. Y. Zhu in K. Y. Lang et al., Acta Phytotax. Sin. 37: 492. 1999.

峨边蜘蛛抱蛋 e bian zhi zhu bao dan

Rhizome creeping, subterete, covered with scales. Leaves solitary; leaf blade spotted with yellowish white, oblanceolate-oblong, 35–65 × 3–5 cm. Scape 3–5 cm. Flower solitary. Perianth purplish or purplish red, campanulate, 8-lobed apically; tube 1–1.2 cm; lobes purple or purplish red, narrowly lanceolate, rarely deltoid-lanceolate, 8–11 × 2–3 mm, 2–4-keeled to middle of tube. Stamens 8, inserted at base of perianth tube; anthers yellow, oblong, ca. 2 × 1.5 mm. Pistil 3–5 mm; style short; stigma purple, peltate, 1–1.2 cm in diam., convex, 4-ridged at center adaxially, 4-lobed at margin, lobes emarginate at apex.

Berry obovoid, 2–6 × ca. 2 cm, scabrous. Fl. May.

- About 800 m. Sichuan.

**20. *Aspidistra oblanceifolia*** F. T. Wang & K. Y. Lang in K. Y. Lang & Z. Y. Zhu, *Acta Phytotax. Sin.* 20: 487. 1982.

棕叶草 zong ye cao

Rhizome subterete, 5–7 mm thick. Leaves solitary; petiole 6–13 cm, stiff; leaf blade sometimes inconspicuously yellowish white spotted, narrowly oblanceolate, 35–50 × 2.5–4 cm. Scape 3–2 mm; bracts several. Flower solitary. Perianth purple-red, campanulate, fleshy, 8-lobed apically; tube 9–11 × 6–10 mm; lobes slightly recurved, oblong, 3–4 × 1.5–2 mm, 2-keeled near base and papillose adaxially, keels fleshy, papillose. Stamens 8, inserted proximally in perianth tube, subsessile; anthers ovate, ca. 1 mm. Pistil 3.5–4 mm; stigma purple, peltate, orbicular, large, 5–6 mm in diam., exceeding anthers, 4-ribbed adaxially, 8-lobed at margin. Fl. Apr.  $2n = 38^*$ .

- Moist places in forests; 400–1300 m. S Guizhou (Dushan Xian), W Hubei (Badong Xian), Sichuan.

**21. *Aspidistra xilinensis*** Y. Wan & X. H. Lu in Y. Wan, *Acta Phytotax. Sin.* 25: 397. 1987.

西林蜘蛛抱蛋 xi lin zhi zhu bao dan

Rhizome subterete, 5–9 mm thick, covered with scales. Leaves solitary, spaced; petiole 20–37 cm; leaf blade with yellowish white spots, oblanceolate to subelliptic, 25–45 × 5–9 cm. Scape 0.5–5 cm; bracts 4 or 5. Flower solitary. Perianth campanulate, 6-lobed apically; tube pale yellow, 9–10 × 10 mm; lobes slightly recurved, pale purple, subdeltoid, 6–8 × 4–6 mm, adaxially 4-keeled, keels fleshy, papillose. Stamens 6, inserted proximally in perianth tube, subsessile; anthers broadly ovate, ca. 2 mm. Pistil ca. 8 mm; stigma peltate, orbicular, large, ca. 7 mm in diam., obviously exceeding anthers, 3(or 4)-lobed at margin. Fl. Sep.

- NW Guangxi (Xilin Xian).

**22. *Aspidistra elatior*** Blume, *Tijdschr. Natuuri. Gesch. Physiol.* 1: 76. 1834.

蜘蛛抱蛋 zhi zhu bao dan

*Aspidistra punctata* Lindley var. *albomaculata* Hooker; *Plectogyne variegata* Link.

Rhizome subterete, 5–10 mm thick. Leaves solitary, spaced; petiole 5–35 cm, stiff; leaf blade sometimes with yellowish white markings, oblong-lanceolate, lanceolate, or subelliptic, 20–45 × 6–10 cm. Scape 0.5–2 cm; bracts 2–4. Flower solitary. Perianth purplish to dark-purple, rarely pinkish, campanulate, (6–)8-lobed apically; tube 1–1.2 × 1–1.5 cm; lobes greenish at margin, deltoid, 6–8 × 3.5–4 mm, adaxially 4-keeled, keels purple-red, very thick, fleshy, smooth, central 2 up to 1.5 mm wide. Stamens (6–)8, inserted at base of perianth tube, subsessile; anthers elliptic, ca. 2 mm. Pistil ca. 8 mm; stigma peltate, orbicular, large, 1–1.3 cm in diam., 4-lobed at margin, lobes emarginate at apex. Fl. Jan–Apr.  $2n = 36^*$ .

- Widely cultivated in China [native to Japan (Osumi Islands)].

*Aspidistra elatior* was said to be of Chinese origin, but no wild plants have been found in China. Sako and Maruno (*Bull. Kagoshima Univ. For.* 11: 33–78. 1983) and Sako et al. (*ibid.* 16: 83–108. 1988) noted that the species originated from Kuroshima, Suwanose, and Uji Islands (Osumi Islands, S of Kyushu, Japan). The Uji Islands are largely covered with thickets of *Ardisia sieboldii* Miquel, where *Aspidistra elatior* grows abundantly. Kuroshima Island is largely covered with forests of *Castanopsis sieboldii* (Makino) Hatusima ex T. Yamazaki & Mashiba, the understory of which is occupied by *A. elatior*.

**23. *Aspidistra lurida*** Ker Gawler, *Bot. Reg.* 8: t. 628. 1822.

九龙盘 jiu long pan

*Aspidistra kouytchensis* H. Léveillé & Vaniot; *A. kouytchensis* var. *aucubimaculata* H. Léveillé; *Macroglyne conval-lariifolia* Link & Otto.

Rhizome terete, 4–10 mm thick. Leaves solitary; petiole 10–15 cm, stiff; leaf blade narrowly lanceolate, 15–22.5 × 3–5 cm. Scape arching, ca. 3 cm; bracts ca. 5, dark reddish. Flower solitary, nodding. Perianth dark purple, cupular-campanulate, 6-lobed apically; tube basally pale yellow-brown speckled with purple; lobes ovate-deltoid, shorter than tube, adaxially papillose. Stamens 6(–8), inserted proximally in perianth tube, positioned nearly level with stigma, subsessile. Pistil equalling perianth tube; ovary purple speckled; stigma peltate, orbicular, large, strongly convex adaxially, inconspicuously 4-lobed at margin, lobes entire at apex.  $2n = 36^*$ .

- Rock crevices in limestone mountains; ca. 300 m. Guangdong, NC Guangxi (Liuzhou Shi), SC Guizhou (Guiding Xian).

**24. *Aspidistra sichuanensis*** K. Y. Lang & Z. Y. Zhu, *Acta Bot. Yunnan.* 6: 387. 1984.

四川蜘蛛抱蛋 si chuan zhi zhu bao dan

Rhizome terete, 6–12 mm thick. Leaves solitary; petiole 10–35(–40) cm; leaf blade sometimes with yellowish white spots, lanceolate to elliptic-lanceolate, 20–35 × 4–8 cm. Scape 0.5–5 cm. Flower solitary. Perianth subcampanulate, (6–)8-lobed apically; tube brown-purple adaxially, purple abaxially, 7–9 × 0.9–1.5 cm; lobes recurved, purple-red, deltoid-lanceolate, 3–6 × 2–3 mm, adaxially 4-keeled, keels densely papillose. Stamens (6–)8, inserted proximally in perianth tube, subsessile. Stigma peltate, orbicular, large, 0.8–1.2 cm in diam., slightly convex centrally, 4-ridged, (3 or)4-lobed at margin, lobes emarginate at apex. Berry tuberculate. Fl. and fr. Jan–Mar.  $2n = 38^*$ .

- Forests, bamboo forests, thickets; 500–1100 m. Guangxi (Jinxu Yao Zu Zizhixian, Napo Xian, Xing'an Xian), Guizhou (Anlong Xian, Zunyi Xian), W Hunan (Yongshun Xian, Zhijiang Xian), Sichuan, Yunnan (Kunming Shi).

**25. *Aspidistra zongbaya*** K. Y. Lang & Z. Y. Zhu, *Acta Phytotax. Sin.* 20: 486. 1982.

棕粑叶 zong ba ye

Rhizome terete, 3–5 mm thick. Leaves solitary; petiole 5–25 cm, stiff; leaf blade with yellowish white spots basally, elliptic to elliptic-lanceolate, 14–25 × 3–7 cm. Scape 2–3 cm; bracts 1 or 2. Flower solitary. Perianth purple-red, campanulate, 6-lobed apically; tube 5–7 × 8–11 mm; lobes recurved, deltoid-ovate, 4–5 × 2–4 mm, adaxially with 4 fleshy, papillose keels. Stamens 6, inserted proximally in perianth tube, subsessile; anthers ovate.

Pistil 4–5 mm; stigma yellowish white or purple, peltate, orbicular, large, ca. 9 mm in diam., 6-lobed at margin, lobes with a white hollow adaxially. Berry ellipsoid-ovoid, 1–1.3 cm in diam., tuberculate. Fl. Jan–Feb, fr. Aug–Dec.  $2n = 38^*$ .

- Forests; ca. 1200 m. Sichuan.

**26. *Aspidistra cruciformis*** Y. Wan & X. H. Lu in Y. Wan & C. C. Huang, *Guihaia* 7: 217. 1987.

十字蜘蛛抱蛋 shi zi zhi zhu bao dan

Rhizome subterete, 6–12 mm thick. Leaves solitary; petiole 30–50 cm; leaf blade with yellowish white spots, elliptic to oblong-elliptic, 25–35 × 6–9 cm. Scape 0.6–1.5 cm; bracts 2 or 3. Flower solitary. Perianth dark purple, subcampanulate, 8-lobed apically; tube 1.1–1.4 × 1.4–1.6 cm, adaxially papillose; lobes slightly recurved, oblong to deltoid, 5–6.5 × 4–5 mm, adaxially papillose. Stamens 8, inserted proximally in perianth tube; filaments ca. 1.5 mm; anthers ovate, ca. 2 mm. Pistil ca. 5 mm; stigma peltate, cross-shaped, large, 1.2–1.4 cm in diam., 4-lobed at margin. Berry subglobose, ca. 7 mm in diam., scabrous. Fl. Sep.

- NW Guangxi (Longlin Ge Zu Zizhixian, Tian'e Xian).

**27. *Aspidistra leyeensis*** Y. Wan & C. C. Huang, *Guihaia* 7: 219. 1987.

乐业蜘蛛抱蛋 le ye zhi zhu bao dan

Rhizome subterete, 6–10 mm thick. Leaves solitary or occasionally paired; petiole 10–21 cm, stiff; leaf blade usually with yellowish green spots, narrowly lanceolate, 30–55 × 4–6 cm. Scape 1.5–6 cm; bracts 4–6. Flower solitary. Perianth purple except for white base, campanulate, 8-lobed apically; tube 1–1.2 × 1.3–1.5 cm, adaxially papillose; lobes spreading or reflexed, deltoid-ovate to oblong, 7–9 × 4–6 mm, 3- or 4-keeled and papillose adaxially, keels fleshy, papillose. Stamens 8, inserted proximally in perianth tube; filaments ca. 2 mm; anthers ovate, 1.5–2 mm. Pistil 5–6 mm; stigma peltate, orbicular, large, 0.9–1.1 cm in diam., with 4 hollows at center adaxially. Fl. Mar.

- NW Guangxi (Leye Xian, Tian'e Xian).

**28. *Aspidistra oblongifolia*** F. T. Wang & K. Y. Lang in K. Y. Lang et al., *Acta Phytotax. Sin.* 37: 476. 1999.

长圆叶蜘蛛抱蛋 chang yuan ye zhi zhu bao dan

Rhizome creeping, subterete, covered with scales. Leaves solitary; leaf blade oblong or ovate-oblong, 10.5–14 × 4–5 cm. Scape 5–10 mm. Flower solitary. Perianth purple, campanulate, 6-lobed apically; tube 7–8 mm; lobes oblong, 3–4 × ca. 2.5 mm. Stamens 6, inserted proximally in perianth tube; anthers broadly elliptic, 1.2–1.5 × 0.8–1.2 mm. Pistil 6–7 mm; style long, slender; stigma enlarged, ca. 1.7 mm in diam., convex adaxially, 3-ridged. Berry globose, 8–10 mm in diam., scabrous. Fl. Nov.

- N Guangxi (Hechi Xian).

**29. *Aspidistra longanensis*** Y. Wan, *Acta Phytotax. Sin.* 23: 151. 1985.

隆安蜘蛛抱蛋 long an zhi zhu bao dan

Rhizome terete, 3–6 mm thick. Leaves solitary; petiole 9–

17.5 cm; leaf blade oblong-elliptic to elliptic-lanceolate, 14–21 × 6–8.5 cm. Scape 1.5–5 cm; bracts ca. 4. Flower solitary. Perianth blue-purple, subcampanulate, 8-lobed apically; tube 0.8–1 × 1.3–1.6 cm; lobes triangular-lanceolate, 9–10 × 6–7 mm, adaxially with 2 papillose keels distally, basally expanded inward forming subulate appendages connate into a ring. Stamens 8, inserted at base of perianth tube, subsessile; anthers ovate, ca. 4 mm. Pistil 8–10 mm; stigma peltate, orbicular, large, 1–1.2 cm in diam., convex at center, 4-parted and 12-lobed at margin. Fl. Jun.  $2n = 38^*$ .

- Shady and moist places on limestone hillsides. WC Guangxi (Long'an Xian).

**30. *Aspidistra patentiloba*** Y. Wan & X. H. Lu in Y. Wan, *Bull. Bot. Res.*, Harbin 9(2): 99. 1989.

柳江蜘蛛抱蛋 liu jiang zhi zhu bao dan

Rhizome subterete, 0.8–1.5 cm thick. Leaves solitary; petiole 22–40 cm; leaf blade narrowly elliptic, 28–60 × 6–13 cm. Scape 2.5–4 cm; bracts ca. 7. Flower solitary. Perianth pale purple, deeply 8-lobed; tube ca. 1.4 × 1.8 cm, glabrous; lobes yellowish adaxially, linear-lanceolate, ca. 2.4 cm × 5–8 mm, basally expanded inward forming toothlike or spurlike appendages. Stamens 8, inserted at middle of perianth tube, subsessile; anthers ovate, ca. 3.5 mm. Pistil ca. 7 mm; stigma purple, orbicular, large, to 1.5 cm in diam., concave adaxially, 16-lobed at margin. Berry purple, subglobose, 1.4–1.7 cm in diam., softly prickly. Fl. Apr, fr. Jun.  $2n = 38^*$ .

- C Guangxi (Liujiang Xian).

**31. *Aspidistra luodianensis*** D. D. Tao, *Acta Phytotax. Geobot.* 43: 121. 1992.

罗甸蜘蛛抱蛋 luo dian zhi zhu bao dan

Rhizome terete, 2–2.5 cm thick, without scales. Leaves solitary; petiole 30–60 cm; leaf blade lanceolate, 80–110 × 10–13 cm. Scape 1–1.5 cm; bracts 1 or 2, purple. Flower solitary. Perianth red-pink, campanulate, deeply 6-lobed apically; tube 1–1.5 × 2–2.5 cm, glabrous; lobes recurved, linear-lanceolate, ca. 4.5 × 0.5 cm, basally expanded inward forming toothlike or spurlike appendages. Stamens 6, inserted at middle of perianth tube, subsessile; anthers suboblong, ca. 2.5 mm. Pistil 5–9 mm; ovary 3–5-ribbed; stigma purple, orbicular, large, 1–1.5 cm in diam. concave adaxially, slightly 8-lobed at margin. Berry red, globose, ca. 2.5 cm in diam., glabrous. Fl. Apr, fr. Jun.  $2n = 38^*$ .

- Streamsides in evergreen forests in limestone areas; ca. 500 m. NW Guangxi (Tian'e Xian), S Guizhou (Luodian Xian).

**32. *Aspidistra longiloba*** G. Z. Li, *Acta Phytotax. Sin.* 26: 156. 1988.

巨型蜘蛛抱蛋 ju xing zhi zhu bao dan

Rhizome subterete, ca. 1.5 cm thick. Leaves solitary; petiole purple-brown, 45–75 cm, rigid; leaf blade oblanceolate, 50–70 × 10–15 cm. Scape 5–11 cm; bracts ca. 4. Flower solitary, erect. Perianth purple, deeply 12(–14)-lobed apically; tube 3.5–3.7 × 3.5–4 cm, villous; lobes slightly recurved, linear-lanceolate, 7–7.5 × 1–1.2 cm, basally expanded inward forming ob-

long, papillose appendages ca.  $13 \times 6$  mm. Stamens 12(–14), inserted at base of perianth tube, subsessile; anthers oblong, ca. 6 mm. Pistil ca. 9 mm; style articulate; stigma peltate, orbicular, large, to 2.2 cm in diam., 12(–14)-lobed at margin. Fl. May–Jun.  $2n = 38^*$ .

- Guangxi.

Described from a cultivated plant originating from Guangxi, without precise locality.

**33. *Aspidistra saxicola*** Y. Wan, Guihaia 4: 129. 1984.

石山蜘蛛抱蛋 shi shan zhi zhu bao dan

Rhizome subterete, 5–7 mm thick. Leaves solitary; petiole 5–14 cm, rigid; leaf blade slightly spotted with yellowish white, elliptic to elliptic-lanceolate,  $12\text{--}23 \times 4.5\text{--}7(–9.5)$  cm. Scapes usually 2–5-tufted, 0.5–2.5 cm; bracts 4–6. Flower solitary. Perianth purple, campanulate, 6-lobed apically; tube 8–10  $\times$  6–7 mm; lobes broadly ovate, 4–5  $\times$  4–6 mm, smooth adaxially. Stamens 6, inserted at middle of perianth tube, subsessile; anthers oblong, ca. 4.5 mm. Pistil 7–8.5 mm; stigma purple, peltate, orbicular, large, 4–5 mm in diam. Berry dark purple, trigonous globose, 1–1.4 cm in diam., tuberculate. Fl. Oct.  $2n = 36^*$ .

- Evergreen forests on limestone slopes; 300–400 m. WC Guangxi (Long'an Xian).

**34. *Aspidistra carinata*** Y. Wan & X. H. Lu in Y. Wan, Bull. Bot. Res., Harbin 9(2): 97. 1989.

天峨蜘蛛抱蛋 tian e zhi zhu bao dan

Rhizome subterete, 6–8 mm thick. Leaves solitary; petiole 22–24 cm; leaf blade green with yellowish white spots, linear-lanceolate,  $60\text{--}70 \times 3.5\text{--}4.5$  cm. Scape 1–2 cm; bracts ca. 4. Flower solitary. Perianth suburceolate, 8-lobed apically; tube ca. 8  $\times$  7 mm, with fleshy keels on both surfaces; lobes reflexed, deltoid-oblong, ca. 3  $\times$  1.5 mm, adaxially with 2 or 3 papillose keels. Stamens 8, inserted proximally in perianth tube, subsessile; anthers oblong, ca. 1.5 mm. Pistil ca. 7 mm; ovary enlarged, ridged; style articulate; stigma peltate, orbicular, ca. 4 mm in diam., convex at center, 8-lobed at margin. Fl. Nov.

- N Guangxi (Jinxu Yao Zu Zizhixian, Tian'e Xian).

**35. *Aspidistra leshanensis*** K. Y. Lang & Z. Y. Zhu, Acta Bot. Yunnan. 6: 385. 1984.

乐山蜘蛛抱蛋 le shan zhi zhu bao dan

Rhizome subterete, 4–8 mm thick. Leaves solitary; petiole 27–45 cm; leaf blade sometimes with yellowish white spots, oblong to oblong-lanceolate,  $20\text{--}40 \times 3\text{--}6$  cm. Scape 1–6 cm; bracts 4–6. Flower solitary. Perianth urceolate, 6–8(or 9)-lobed apically; tube purple-brown adaxially, purple abaxially,  $0.8\text{--}1.2 \times 1\text{--}2$  cm; lobes recurved, white or yellowish white adaxially, purple abaxially, deltoid-ovate, 5–6  $\times$  4–5 mm, with 2 short, papillose keels near adaxial base. Stamens 6–8(or 9), inserted at base of perianth tube, subsessile; anthers ca. 2 mm. Pistil 4–6 mm; stigma peltate, orbicular, large, 1–1.5 cm in diam., 6–8(or 9)-lobed at margin. Berry ca. 1.5 cm in diam., tuberculate. Fl. Sep.  $2n = 38^*$ .

- Moist places in forests; ca. 600 m. SC Sichuan (Leshan Shi).

**36. *Aspidistra fenghuangensis*** K. Y. Lang in K. Y. Lang et al., Acta Phytotax. Sin. 37: 494. 1999.

凤凰蜘蛛抱蛋 feng huang zhi zhu bao dan

Rhizome creeping, subterete, covered with scales. Leaves solitary; leaf blade with yellowish white markings, oblanceolate-oblong,  $30\text{--}50 \times 4.5\text{--}6.5$  cm, margin sparsely denticulate. Scape 0.5–2.5 cm. Flower solitary. Perianth pale yellow, urceolate, 6–8-lobed apically; tube ca. 4  $\times$  8 mm; lobes incurved, ovate, ca. 3  $\times$  2 mm, with 2 keels adaxially, keels fleshy, papillose at base. Stamens 6–8, inserted at middle of perianth tube; anthers long elliptic, ca. 3  $\times$  1.8 mm. Pistil ca. 3 mm; stigma peltate, orbicular, enlarged, ca. 6 mm in diam., convex adaxially, 3- or 4-ridged, 3- or 4-lobed at margin, lobes emarginate at apex. Fl. Sep.

- About 700 m. W Hunan (Fenghuang Xian).

**37. *Aspidistra marginella*** D. Fang & L. Zeng in D. Fang et al., Acta Phytotax. Sin. 31: 182. 1993.

峭边蜘蛛抱蛋 nie bian zhi zhu bao dan

Rhizome subterete, 3–5 mm thick. Leaves solitary; petiole 11–17(–25) cm; leaf blade usually ovate,  $12\text{--}23 \times 5.5\text{--}9$  cm. Scape 2.5–6 cm. Flower solitary, slightly nodding. Perianth pale green, speckled with purple on both surfaces, urceolate, 6- or 8-lobed apically; tube 1–1.3 cm; lobes usually incurved, narrowly oblong, ca. 9  $\times$  2 mm, basally expanded inward forming a crenate appendage, margin erose. Stamens 6–8, inserted proximally in perianth tube, subsessile. Pistil ca. 7 mm; stigma large, ca. 1.2 cm in diam., 16-dentate at margin. Berry dark purple, depressed globose, 1.2–1.4 cm in diam., slightly tuberculate and prickly. Fl. May.  $2n = 38^*$ .

- Forests in limestone areas; 500–600 m. SW Guangxi (Longzhou Xian).

**38. *Aspidistra cyathiflora*** Y. Wan & C. C. Huang in Y. Wan, Bull. Bot. Res., Harbin 9(2): 100. 1989.

杯花蜘蛛抱蛋 bei hua zhi zhu bao dan

Rhizome subterete, 6–11 mm thick. Leaves solitary or 2- or 3-tufted; petiole 2–14 cm; leaf blade linear-oblanceolate,  $25\text{--}45 \times 1.8\text{--}3.5$  cm. Scape 0.8–2 cm; bracts 3–5. Flower solitary. Perianth pale yellow-green, spotted with purple abaxially, subcupular, 6-lobed apically; tube purple adaxially except for white base, ca. 7  $\times$  13 mm; lobes erect, pale yellow adaxially, deltoid, 5–7  $\times$  5–6 mm, smooth. Stamens usually 6, inserted at base of perianth tube; filaments ca. 1 mm; anthers broadly ovate, 2–3 mm. Pistil ca. 5 mm; stigma purple or with yellow center, peltate, orbicular, 5–8 mm in diam., with 3 white grooves, 3(or 4)-lobed at margin. Fl. Dec.

- Guangxi.

Described from a cultivated plant originating from Guangxi, without precise locality.

**39. *Aspidistra dolichanthera*** X. X. Chen in X. X. Chen & D. Fang, Guihaia 2: 77. 1982.

长药蜘蛛抱蛋 chang yao zhi zhu bao dan

Rhizome subterete, 6–9 mm thick. Leaves 2- or 3-tufted; petiole 20–30 cm, rigid; leaf blade green with sparse, yellow



spots, ovate to ovate-lanceolate, 18–30 × 8–15 cm, base rounded. Scape 5–15 cm; bracts 3–6. Flower solitary. Perianth white, campanulate, 6- or 7-lobed apically; tube 6–8 × ca. 8 mm; lobes recurved, oblong, ca. 12 × 7–8 mm. Stamens 6–7, inserted at base of perianth tube, subsessile; anthers oblong, 5–6 mm. Stigma slightly enlarged, ca. 1.7 mm in diam., exceeding anthers. Fl. Apr.  $2n = 36^*$ .

- SW Guangxi (Longzhou Xian).

**40. *Aspidistra yingjiangensis*** L. J. Peng, Acta Bot. Yunnan. 11: 173. 1989.

盈江蜘蛛抱蛋 ying jiang zhi zhu bao dan

Rhizome terete, 4–6 mm thick. Leaves 3-tufted; petiole 11–13 cm; leaf blade green with pale yellow spots, narrowly oblanceolate, 50–80 × 2–4.5 cm. Scape 1–1.5 cm; bracts 2 or 3. Flowers solitary or paired. Perianth campanulate, 6-lobed apically; tube 7–10 × 7–10 mm; lobes oblong-ovate, 7–10 × 3–5 mm, adaxially with 4 fleshy, papillose keels. Stamens 6, inserted at base of perianth tube, subsessile; anthers broadly elliptic, ca. 4 mm. Pistil 4–5 mm; stigma purple, peltate, orbicular, large, 5–7 mm in diam., 6-lobed at margin. Berry purple-red, globose, 5–7 mm in diam. Fl. Oct.  $2n = 36^*$ .

- Forests; 1500–1600 m. W Yunnan (Yingjiang Xian).

**41. *Aspidistra muricata*** How ex K. Y. Lang, Acta Phytotax. Sin. 19: 383. 1981.

糙果蜘蛛抱蛋 cao guo zhi zhu bao dan

Rhizome terete, ca. 5 mm thick. Leaves 2- or 3-tufted; petiole 5–10 cm; leaf blade lorate to linear-lanceolate, 30–50 × 1–1.5 cm. Scape 1–1.3 cm; bracts 4 or 5. Flower solitary. Perianth pale green, campanulate, 6-lobed apically; tube ca. 10 × 6.5 mm; lobes recurved, oblong, ca. 5 × 3 mm. Stamens 6, inserted at middle of perianth tube, positioned nearly level with stigma, subsessile; anthers oblong, ca. 3 mm. Pistil ca. 6 mm; style articulate; stigma orbicular, slightly enlarged, ca. 4 mm in diam., slightly 6-lobed at margin. Berry globose, ca. 1 cm in diam., tuberculate. Fl. and fr. Oct.

- NC and W Guangxi (Luocheng Xian, Napo Xian).

**42. *Aspidistra hainanensis*** Chun & How, Fl. Hainan. 4: 533. 1977.

海南蜘蛛抱蛋 hai nan zhi zhu bao dan

Rhizome ca. 8 mm thick, stout. Leaves 2–4-tufted; petiole 3–10 cm; leaf blade lorate, 50–70 × 1–1.5 cm. Scape 5–18 mm; bracts ca. 4. Flower solitary. Perianth purple or tinged with yellow, campanulate, 6(–8)-lobed apically; tube 1–1.2 × 1.3–1.5 cm; lobes recurved, oblong-ovate, 8–10 × ca. 2 mm, 4-keeled adaxially, keels fleshy, smooth, central 2 extending from base of tube to apex of lobes, other 2 short or sometimes inconspicuous. Stamens 6(–8), inserted proximally in perianth tube, subsessile; anthers transversely elliptic, ca. 1.5 × 2 mm. Pistil ca. 8 mm; stigma peltate, orbicular, large, 1–1.3 cm in diam., 3-lobed at margin. Fl. Mar–Apr.  $2n = 38^*$ .

- Moist places along ravines, forests; ca. 600 m. S Guangdong (Xinyi Xian, Zhuhai Shi), EC Guangxi (Jinxu Yao Zu Zizhixian), S Hainan (Sanya).

**43. *Aspidistra omeiensis*** Z. Y. Zhu & J. L. Zhang, Acta Phytotax. Sin. 19: 386. 1981.

峨眉蜘蛛抱蛋 e mei zhi zhu bao dan

Rhizome 1–2 cm thick, stout. Leaves 3–5-tufted; petiole 5–13 cm; leaf blade lorate, 8–100 × 2–4 cm. Scape 3–12 mm; bracts 3 or 4. Flower solitary. Perianth purple or purple-red, campanulate, 6(–8)-lobed apically; tube 0.8–1.1 × 1.2–1.4 cm; lobes deltoid-ovate, 7–8 × 4–5 mm, 4(–6)-keeled adaxially, keels fleshy, papillose, extending from middle or base of tube to apex of lobes. Stamens 6(–8), inserted proximally in perianth tube; filaments ca. 1 mm; anthers transversely elliptic. Pistil ca. 6 mm; stigma peltate, orbicular, large, 0.9–1.3 cm in diam., exceeding anthers, with white, convex markings. Fl. Mar.  $2n = 38^*$ .

- Forests, humus-rich places; 600–1100 m. Sichuan.

**44. *Aspidistra linearifolia*** Y. Wan & C. C. Huang, Guihaia 7: 220. 1987.

线萼蜘蛛抱蛋 xian e zhi zhu bao dan

Rhizome subterete, 1.3–2 cm thick. Leaves 2–5-tufted; petiole 3–10 cm; leaf blade lorate, 60–100 × 1.5–3.5 cm. Scape 2–5.5 cm; bracts 4 or 5. Flower solitary. Perianth blackish purple, campanulate, 6-lobed apically; tube 0.8–1.3 × 1.8–2.2 cm, papillose adaxially; lobes slightly recurved, deltoid-ovate, 1.5–1.9 cm × 0.8–1.0 mm, 6-keeled adaxially, apex widened, keels fleshy, papillose, central 4 extending from base of tube to apex of lobes. Stamens 6, inserted at base of perianth tube, subsessile; anthers subreniform, ca. 3 mm. Pistil ca. 9 mm; stigma purple, peltate, orbicular, large, ca. 1.4 cm in diam., exceeding anthers, with 3–6 minute grooves and 6 ridges adaxially. Fl. Mar.  $2n = 36^*$ .

- W Guangxi (Bose Xian).

**45. *Aspidistra typica*** Baillon, Bull. Mens. Soc. Linn. Paris 2: 1129. 1894.

卵叶蜘蛛抱蛋 luan ye zhi zhu bao dan

Rhizome subterete, ca. 7 mm thick. Leaves 2- or 3-tufted; petiole 12–21 cm, stiff; leaf blade green, sometimes sparsely yellowish spotted, ovate-lanceolate to ovate, 18–32 × 7–12 cm, base rounded or nearly so. Scapes usually tufted, arching or horizontal, 2.5–4.6 cm; bracts 3–5. Flower solitary. Perianth purple, urceolate, 6-lobed apically; tube 0.9–1.2 × 1.4–1.8 cm; lobes suberect, ovate, 3–5 × 3–5 mm. Stamens 6, inserted at base of perianth tube, subsessile. Stigma peltate, orbicular, large, 0.9–1.5 cm in diam., slightly 6-lobed at margin. Fl. Jun.

- Forests. ?SW Guangxi, SE Yunnan (Hekou Yao Zu Zizhixian) [Vietnam].

**46. *Aspidistra caespitosa*** C. Pei, Contr. Biol. Lab. Chin. Assoc. Advancem. Sci., Sect. Bot. 12: 101. 1939.

丛生蜘蛛抱蛋 cong sheng zhi zhu bao dan

Rhizome ca. 6 mm thick. Leaves usually 3-tufted; petiole 10–18 cm or shorter; leaf blade lorate, 40–80 × 1–2.5 cm. Scape solitary, arching or horizontal, 2–11 cm, geniculate; bracts 4 or 5. Flower solitary. Perianth purple or tinged with purple, urceolate, 6-lobed apically; tube 1–1.2 × 1.6–2 cm; lobes sub-

erect, ovate-lanceolate, ca.  $10 \times 4$  mm. Stamens 6, inserted near base of perianth tube, subsessile. Stigma peltate, large, 1–1.2 cm in diam., slightly 3-lobed at margin. Berry purple, ovoid, ca. 6 mm in diam., scabrous. Fl. Mar–Apr, fr. Jun–Jul.  $2n = 38^*$ .

- Forests, bamboo forests; 500–1600 m. Sichuan.

**47. *Aspidistra urceolata*** F. T. Wang & K. Y. Lang in K. Y. Lang, *Acta Phytotax. Sin.* 19: 381. 1981.

坛花蜘蛛抱蛋 tan hua zhi zhu bao dan

Rhizome subterete, ca. 6 mm thick. Leaves 2- or 3-tufted; petiole 8–16 cm, rigid; leaf blade oblong to oblong-lanceolate,  $20\text{--}25 \times 3\text{--}4$  cm. Scape solitary, ca. 3 cm, slender; bracts ca. 3. Flower solitary. Perianth with many purple speckles, urceolate, 6-lobed apically; tube ca.  $5 \times 5$  mm; lobes slightly incurved, deltoid, ca.  $1 \times 1$  mm. Stamens 6, inserted at base of perianth tube, subsessile; anthers narrowly elliptic, ca. 1 mm. Pistil ca. 2 mm; ovary basally enlarged; stigma ca. 1.5 mm in diam., highly convex at center, 3-lobed at margin, lobes emarginate at apex.

- Guizhou.

Known only from the type specimen (*Anonymous 7128*, IBSC), which was collected in Guizhou without precise locality.

**48. *Aspidistra minutiflora*** Stapf, *J. Linn. Soc., Bot.* 36: 113. 1903.

小花蜘蛛抱蛋 xiao hua zhi zhu bao dan

Rhizome subterete, 5–6 mm thick. Leaves 2- or 3-tufted; leaf blade lorate to lorate-oblong,  $26\text{--}65 \times 1\text{--}2.5$  cm, basally gradually narrowed into inconspicuous petiole. Scape solitary, 1–2.5 cm, slender; bracts 2–4. Flower solitary, small. Perianth blue-green, tinged and speckled with purple, urceolate,  $4.5\text{--}5 \times 4\text{--}6$  mm; lobes erect, deltoid,  $1\text{--}2 \times 1\text{--}1.5$  mm. Stamens (4–)6, inserted at base of perianth tube, subsessile; anthers nearly broadly ovate, 1.2–1.5 mm. Pistil 2.5–3 mm; stigma orbicular, 1.5–2.5 mm in diam., (4–)6-crenate at margin. Fl. Jul–Oct.  $2n = 38^*$ .

- Moist places on hillsides, cliffs; ca. 400 m. N Guangdong (Renhua Xian), Guangxi, ?Guizhou, Hainan (Baoting Xian), Hong Kong, SW Hunan (Xinning Xian).

**49. *Aspidistra hekouensis*** H. Li et al., *Sendtnera* 5: 15. 1998.

河口蜘蛛抱蛋 he kou zhi zhu bao dan

Rhizome 6–13 mm thick. Leaves 2–4-tufted; petiole 10–18 cm; leaf blade dark green with pale green or yellowish spots, elliptic,  $12\text{--}22 \times 8\text{--}12.5$  cm, leathery, base attenuate to obtuse and decurrent at petiole, apex cuspidate. Scape solitary, 3–4 cm; bracts ca. 3. Flower solitary. Perianth blackish purple, urceolate,  $1.5\text{--}1.8 \times 1.8\text{--}2.3$  cm, with many deep, longitudinal grooves, adaxially smooth, abaxially slightly verrucose, 6-lobed apically; tube strongly constricted at mouth and opening 4–5 mm wide; lobes reflexed, yellow adaxially, oblong,  $5\text{--}6 \times ca. 3$  mm. Stamens 6, inserted at base of perianth tube, positioned lower than stigma, subsessile; anthers oblong, ca. 2.5 mm. Stigma peltate, orbicular, large, 1.5–1.8 cm in diam., radiate rugose adaxially. Berry yellowish green, subglobose, ca. 1.5 cm in diam., with 12 longitudinal wings. Fl. Mar–Jul.

- Dense forests; 200–300 m. SE Yunnan (Hekou Yao Zu Zizhi-

xian).

No material of this species has been seen by the present authors.

