

## 7. PHACELLARIA Benth in Bentham & J. D. Hooker, Gen. Pl. 3: 229. 1880.

重寄生属 chong ji sheng shu

Subshrubs or herbs, usually epiparasitic on the stems of species of Loranthaceae and *Dendrotrophe*. Leaves alternate, reduced to rudimentary scales. Inflorescences axillary, 1-flowered or densely clustered. Flowers bisexual or unisexual (plants dioecious, monoecious, or polygamous), sessile, minute. Male flowers: perianth tube short, lobes 3–6, valvate. Stamens as many as and opposite to perianth lobes; filaments short, compressed; anthers cordate, 2-celled, dehiscence longitudinal. Discs flat or slightly conic. Female flowers: lobes 4–8, valvate. Ovary inferior, 1-loculed; ovules 2 or 3. Bisexual flowers similar to female ones, except with stamens. Fruit a drupe, ellipsoid, with persistent lobes and discs at apex, exocarp fleshy, endocarp bony, 5- or 6-furrowed. Seed 1; endosperm copious; embryo small.

Eight species: tropical and subtropical SE Asia; six species (two endemic) in China.

All known species are epiparasites growing on *Dendrotrophe* and members of the Loranthaceae.

- 1a. Flowers bisexual, solitary; bracts 1–1.3 mm, apex reflexed; stems to 8 cm, unbranched ..... 1. *P. fargesii*
- 1b. Flowers mostly unisexual (plants monoecious or dioecious, rarely polygamous), solitary or eventually in clusters; bracts to 1 mm, apex not reflexed; stems to 30 cm, branched or unbranched.
  - 2a. Stems branched and rebranched; bracts conspicuous, ca. 1 mm; flowers solitary ..... 2. *P. caulescens*
  - 2b. Stems unbranched or with a few short lateral branches; bracts smaller, less than 1 mm; flowers eventually in clusters.
    - 3a. Flower clusters few flowered, globose ..... 5. *P. rigidula*
    - 3b. Flower clusters eventually many flowered, elongated along rachis.
      - 4b. Plant sparsely papillose-hairy when young, soon glabrous; bracts to 0.5 mm ..... 6. *P. tonkinensis*
      - 4a. Plant ferruginous-tomentose when young, indumentum persistent at least around inflorescence; young bracts to 1 mm.
        - 5a. Stems at least partly flattened; drupe ovoid-ellipsoid, 4–6 × 1.5–4 mm in diam. .... 3. *P. compressa*
        - 5b. Stems terete; drupe globose, ca. 2.5 × 2.5–3 mm in diam. .... 4. *P. glomerata*

**1. *Phacellaria fargesii*** Lecomte, Bull. Mus. Natl. Hist. Nat. 20: 401. 1914.

重寄生 chong ji sheng

Plants 6–8 cm tall. Stems in dense clusters, unbranched, striate, ferruginous pubescent when young. Flowers solitary, bisexual; bracts ovate-triangular, 1–1.3 mm, apex reflexed, ciliate; bracteoles 2, ovate-triangular, very small, ca. 0.5 mm, apex acute, ciliate; involucre absent. Perianth yellowish white, campanulate-terete, 2.3–2.5 × 1.3–1.5 mm, glabrous, lobes (4 or)5, usually distinct from discs, less than 0.7 mm, usually pilose adaxially. Stamens 5. Ovary mostly connate to perianth. Style terete, short; stigmas ± oblong-scutiform. Drupe ovoid-ellipsoid, 6–8 × 3.5 mm, 5- or 6-furrowed, base rounded, apex with straight and incurved persistent perianth lobes. Seed terete. Fl. and fr. Jul–Aug.

- Forests; 1000–1400 m. Guangxi, Guizhou, Hubei, Sichuan.

*Phacellaria fargesii* is epiparasitic on *Taxillus levinei*, among other species.

**2. *Phacellaria caulescens*** Collett & Hemsley, J. Linn. Soc., Bot. 28: 122. 1890.

粗序重寄生 cu xu chong ji sheng

Plants 20–30 cm tall. Stems usually twisted, branched and rebranched, strong, terete, finely ridged, not flat, ca. 2.5 mm thick at base, ± tomentose at apex when young, gradually glabrous later. Flowers solitary, mostly unisexual (plants dioecious); bracts imbricate, slightly orbicular, rather large, ca. 1 × 0.8 mm, apex shortly acuminate, flat; bracteoles 2 or more, tiny.

Male flowers not seen. Female bud globose, ca. 1.3 mm in diam.; perianth ellipsoid to ellipsoid-cylindric, small, lobes 4–6, triangular. Discs rather flat. Style short. Drupe yellow, sessile, ovoid-ellipsoid, 5–6 × ca. 2 mm, basal part slightly condensed, apex with persistent, incurved lobes. Fl. May–Aug, fr. Oct–Dec.

Forests; 900–2400 m. Guangxi, Yunnan [Myanmar].

This species is epiparasitic on *Macrosolen cochinchinensis*.

**3. *Phacellaria compressa*** Benth in Bentham & J. D. Hooker, Gen. Pl. 3: 229. 1880.

扁序重寄生 bian xu chong ji sheng

*Phacellaria ferruginea* W. W. Smith; *P. wattii* J. D. Hooker.

Plants usually to 20 cm tall. Stems unbranched or with very few branches, sparse (not dense), flat or mostly flattened, 1–4 mm thick, ferruginous-tomentose, later gradually deciduous and with rudimentary tomentum at the base of flower clusters. Flowers unisexual (plants usually dioecious), in dense, elongated clusters; bracts imbricate, ovate or obovate, ca. 0.8 × 0.5 mm, apex acuminate; bracteoles numerous, forming involucre, small. Male flowers oblate, ca. 1 × 1.5 mm; perianth divided to base, lobes 5–8, erect or slightly patent, shortly triangular, ca. 1 × 1 mm; filaments short and flat. Female flowers: perianth obovoid, ca. 2 × 1.5 mm, lobes 5, triangular, ca. 0.5 mm. Discs nearly flat. Style short; stigmas truncate. Drupe ovoid-ellipsoid, 4–6 × 1.5–4 mm, glabrous, apex with persistent perianth. Fl. May, fr. Oct.

Forests; 500–1800 m. Guangxi, Sichuan, Xizang, Yunnan [Myan-

mar, Thailand, Vietnam].

This species is usually epiparasitic on *Taxillus chinensis*, other species of *Taxillus*, and sometimes *Dendrotrophe*.

**4. *Phacellaria glomerata*** D. D. Tao, Acta Phytotax. Sin. 25: 407. 1987.

聚果重寄生 ju guo chong ji sheng

Plants ca. 15 cm tall. Stems in clusters, apparently unbranched, terete, 1–2 mm thick, puberulous. Flowers unisexual, in dense, elongated clusters; bracts imbricate, densely brownish gray pilose; involucre bracteole 1, broadly triangular, ca. 1 × 1 mm. Male flowers not known. Female flowers: perianth obovoid, lobes 5, triangular, 0.5–1 mm. Style short; stigma peltate. Drupe globose, rarely globose-ellipsoid, 2.5–3 mm in diam., glabrous. Seed black, ovoid, ca. 2.5 × 2 mm.

- Mixed forests; ca. 2400 m. Yunnan (Jingdong).

This species is epiparasitic on *Taxillus delavayi*.

**5. *Phacellaria rigidula*** Benth in Benth & J. D. Hooker, Gen. Pl. 3: 229. 1880.

硬序重寄生 ying xu chong ji sheng

Plants 10–25 cm tall. Stems in clusters arising from enlarged basal pulvinus, unbranched or with a few short lateral branches, slender, terete, rigid, ca. 1.5 mm thick, thinly tomentose when young, glabrous except near flowers when mature. Flowers mostly unisexual (plants monoecious), in small globose clusters; bracts imbricate, ovate-elliptic, ca. 1 × 0.6 mm,

apex acute; bracteoles at periphery of flower clusters, usually 3–6 in involucre. Male flowers subglobose, ca. 1.6 mm in diam.; perianth lobes 4 or 5, triangular. Female flowers: perianth obovoid, 1.5–1.7 mm in diam., lobes as large as or larger than in male. Discs slightly conic; stigmas ± exserted. Drupe ovoid-ellipsoid, ca. 4 × 1.5 mm, 5-ridged, base wider than apex; persistent style slightly exserted. Fl. May, fr. Sep.

Forests; 1400–2100 m. Guangdong, Guangxi, Sichuan, Yunnan [Myanmar].

This species is epiparasitic on stems of *Taxillus thibetensis*, *T. limprichtii*, and species of *Viscum*.

**6. *Phacellaria tonkinensis*** Lecomte, Bull. Mus. Natl. Hist. Nat. 20: 399. 1914.

长序重寄生 chang xu chong ji sheng

Plants 10–30 cm tall. Stems in clusters, unbranched or with a few branches, slender, terete, 1–1.5 mm thick, glabrous. Flowers mostly unisexual, less often bisexual (plants dioecious or monoecious), in dense, elongated clusters; bracts imbricate when young, semiorbicular to suborbicular, small, ca. 0.5 mm, apex sometimes acute; bracteoles inconspicuous or absent; involucre absent. Male flowers: perianth tube whitish, lobes 5, triangular, distinct from discs. Stamens 5; filaments very short; anthers small. Discs nearly flat, shallowly divided. Female and bisexual flowers: perianth ellipsoid, lobes 5 (or 6), triangular, 1.5–2 mm. Style short terete; stigmas truncate or slightly oblong-scutiform. Drupe ovoid-ellipsoid, 8–9 × 2.5–3 mm, widest at base, gradually narrowing to apex, endocarp 5- or 6-furrowed. Seed ellipsoid. Fl. Jun–Aug, fr. Oct–Feb.

Forests; ca. 1000 m. Fujian, Guangdong, Guangxi, Hainan, Yunnan [Vietnam].

This species is usually epiparasitic on stems of *Taxillus chinensis*, *Macrosolen bibracteolatus*, and *Helixanthera parasitica*, among others.

