

**70. PHUOPSIS (Grisebach) Bentham & J. D. Hooker, Gen. Pl. 2: 151. 1873.**

长柱草属 *chang zhu cao shu*

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*Asperula* sect. *Phuopsis* Grisebach, Spic. Fl. Rumel. 2: 167. 1846.

Herbs, perennial, rhizomatous. Raphides present. Leaves and leaflike stipules in whorls of 6–10, sessile, without domatia, with margins minutely antrorsely aculeolate. Inflorescences terminal, pedunculate, capitate, ± many flowered, enclosed by a whorl of free leaflike bracts, flowers subtended by acuminate bracts. Flowers sessile, bisexual, monomorphic. Calyx limb obsolete. Corolla pink, slender, salverform, inside glabrous; lobes 5, valvate in bud. Stamens 5, inserted in corolla tube, included to partially exerted; filaments short; anthers dorsifixed. Ovary 2-celled, smooth, ovules 1 in each cell, erect, basal, anatropous; stigma clavate, shortly 2-lobed at apex, strongly exerted. Fruit schizocarpous, 2 mericarps ellipsoid to obovoid, dry, rather hard, indehiscent, 1-celled, each with 1 ellipsoid to curved, smooth to striate seed.

One species: SW Asia (Azerbaijan, NW Iran), occasionally cultivated as an ornamental in China.

*Phuopsis* belongs to the core genera of the tribe Rubieae (subtribe Rubiinae). Remote and DNA-supported affinities exist with *Crucianella*, some groups of *Asperula*, and particularly with the widespread annual *Sherardia*. In the present volume *Phuopsis* is briefly discussed in the introduction to the genus *Galium* and keyed out there. *Phuopsis* is a monotypic relict genus restricted to the small Hyrcanian area of NW Iran and Talysh in S Azerbaijan (Ehrendorfer et al., Fl. Iranica 176: 1–287. 2005). Its single species has secondary pollen presentation and is butterfly-pollinated.

**1. *Phuopsis stylosa* (Trinius) Bentham & J. D. Hooker ex B. D. Jackson, Index Kew. 2: 505. 1894.**

长柱花 *chang zhu hua*

*Crucianella stylosa* Trinius, Mém. Acad. Imp. Sci. St. Pétersbourg Hist. Acad. 6: 485. 1818.

Herbs, 20–60(–70) cm tall; branches quadrangular, glabrous to sparsely hairy, at least at nodes and along angles ± retrorsely aculeolate. Leaves drying papery, narrowly lanceolate, narrowly elliptic, or narrowly oblanceolate, 12–30 × 1.5–6 mm, both surfaces glabrous, base acute to attenuate, margin and midrib abaxially thickened and antrorsely aculeolate, apex acute to acuminate with acicular tip; secondary veins not visible. Inflorescences hemispherical to subglobose, 1.5–3 cm wide (not including involucre leaves); bracts leaflike, lanceolate, 8–12 mm, glabrescent, marginally and abaxially spinulose with acute apex. Ovary ellipsoid, ca. 1 mm, glabrous. Corolla glabrous outside; tube 9–12 mm; lobes 5, 1–2 mm, oblong-ovate, apex acute and somewhat thickened. Mericarps oblong-ovate, ca. 1.5 mm. Fl. May–Aug, fr. Aug–Sep.

Cultivated in Shaanxi (Wugong) [native in deciduous forests of SW Asia (Azerbaijan, NW Iran)].

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