

HYDROPHYLLACEAE

田基麻科 tian ji ma ke

Fang Rhui-cheng¹; Lincoln Constance²

Herbs or shrubs, glabrous or pubescent, occasionally glandular, bristly, or thorny. Leaves alternate or opposite, occasionally in a basal rosette, simple or variously lobed or divided, without stipules. Inflorescences solitary flowers, cymose, or paniculate. Flowers bisexual, actinomorphic, usually 5-merous, often showy. Calyx \pm gamosepalous, sinuses sometimes appendaged. Corolla gamopetalous, campanulate, tubular, or rotate; lobes overlapping in bud. Stamens usually 5; filaments attached to corolla, often alternating with scalelike appendages; anthers 2-locular, longitudinally dehiscent. Ovary superior, 1- or 2- (several) locular, with 2 parietal placentae; ovules few or numerous. Styles 1 or 2, usually lobed or divided; stigma capitate. Fruit a loculicidal capsule, rarely also septicial or opening irregularly. Seeds usually with a sculptured or pitted coat; endosperm enclosing a small embryo.

Eighteen to 22 genera and ca. 300 species: mostly in North and South America, with a few in Africa, Asia, and Australia; one genus with one species in China.

Fang Rhui-cheng & Huang Shu-hua in Wu Cheng-yih, ed. 1979. Hydrophyllaceae. Fl. Reipubl. Popularis Sin. 64(1): 160–161.

1. **HYDROLEA** Linnaeus, Sp. Pl. (ed. 2) 1: 328. 1762, nom. cons.

田基麻属 ti ji ma shu

Herbs, rarely low shrubs, perennial, semi-aquatic, usually erect, glabrous or glandular pubescent, sometimes with axillary spines. Leaves alternate, simple, entire or serrulate. Inflorescences terminal or axillary, commonly corymbose or paniculate. Calyx persistent; lobes nearly distinct. Corolla blue or white, rarely purple, campanulate to rotate. Stamens 5, inserted at base of corolla tube; filaments dilated at base; anthers 4-lobed, basifixed. Ovary usually 2-locular; ovules numerous; placentation axile. Styles 2. Capsule ovoid, globose, or ellipsoid, dehiscent longitudinally or irregularly; pericarp thin. Seeds numerous, seed coat longitudinally ridged and reticulate.

Eleven to 20 species: Africa, Asia, Australia, North America, South America; one species in China.

1. *Hydrolea zeylanica* (Linnaeus) Vahl, Symb. Bot. 2: 46. 1791.

田基麻 tian ji ma

Nama zeylanica Linnaeus, Sp. Pl. 1: 226. 1753; *Beloanthera oppositifolia* Hasskarl; *Hydrolea arayatensis* Blanco; *H. inermis* Loureiro; *H. javanica* Blume; *H. zeylanica* (Linnaeus) Vahl var. *ciliata* Choisy; *Steris aquatica* N. L. Burman; *S. javanica* Linnaeus.

Herbs, erect to prostrate, sometimes rooting from lower nodes, 10–60(–100) cm tall, often branched, glabrous or pubescent, unarmed. Leaf blade lanceolate to ovate, 2–10 \times 0.5–2.5 cm, glabrous or pubescent, base acute, margin entire, apex acute. Flowers in terminal panicles or clusters at branch apices, rarely solitary. Pedicel 1–3 mm, elongating after

anthesis. Calyx lobes lanceolate, 4.5–8 mm, pubescent or glabrous. Corolla purple-blue or deep purple-green, 3–5 mm; tube white. Anthers scarlet. Capsule ovoid, septicial or irregularly dehiscent, included in persistent calyx. Seeds oblong-ovoid, 0.3–0.4 mm. $2n = 18, 24$.

Paddies, pond margins, streamsides, open forests, swampy or inundated soil; 0–1000 m. Fujian, Guangdong, Guangxi, Hainan, Taiwan, S Yunnan [India, Indonesia, Malaysia, Nepal, Philippines, Sri Lanka; Africa, SW Asia, Australia].

On an herbarium sheet at BM, G. T. Sampson commented that this species occurs sporadically and postulated that it was introduced as a seed contaminant of rice.

¹ Kunming Institute of Botany, Academia Sinica, Heilongtan, Kunming, Yunnan 650204, People's Republic of China.

² University Herbaria, University of California, Berkeley, California 94720, U.S.A.