PENTAPHYLACACEAE

五列木科  wu lie mu ke

Min Tianlu (闵天禄 Ming Tien-lu)¹; Bruce Bartholomew²

Shrubs or trees, evergreen. Stipules persistent. Leaves simple, alternate. Flowers axillary, bisexual, actinomorphic, arranged into pseudospikes or pseudoracemes along branchlets below apex. Bracteoles 2, persistent, close to calyx. Sepals 5, persistent, unequal, imbricate. Petals 5, white, imbricate in bud, basally slightly connate. Stamens 5, inflexed in bud, alternate with petals, shorter than petals; anthers small, 2-celled, dehiscing by apical pores. Ovary superior, 5-loculed; ovules 2 per locule, collateral, pendulous from locule apex; style simple, apically 5-lobed. Capsule 5-loculed, loculicidal. Seeds 2 per locule; embryo U-shaped; endosperm very thin.

One species: China, Indonesia (N Sumatra), Malaysia, Vietnam.

This family is sometimes included in the subfamily Ternstroemioideae within the Theaceae.


五列木属  wu lie mu shu

Morphological characters and geographic distribution are the same as those of the family.


Pentaphylax arborea Ridley; P. malayana Ridley; P. racemosa Merr & Chun; P. spicata Merr.

Shrubs or trees, 4–10 m tall. Branchlets grayish brown, terete, glabrous. Petiole 1–1.5 cm, adaxially grooved; leaf blade ovate, oblong-ovate, or oblong-lanceolate, 5–9 × 2–5 cm, leathery, abaxially pale green, adaxially dark green, both surfaces glabrous, secondary veins obscure on both surfaces, base rounded to broadly cuneate, margin entire and slightly revolute, apex caudate. Pedicel ca. 0.5 mm; bracteoles triangular, 1–1.5 mm, outside with white scales, inside sparsely white puberulent, margin ciliolate. Sepals 5, orbicular, 1.5–2.5 mm in diam., outside with dense grayish white scales, inside sparsely white appressed puberulent, margin ciliolate, apex retuse to 2-cleft. Petals oblong-lanceolate to oblanceolate, 4.5–5.5 × 1.5–2 mm, glabrous, apex retuse to 2-cleft. Stamens 5; filaments oblong, petaloid, 2.5–3.5 × ca. 1 mm; anthers ca. 0.5 mm in diam., 2-celled, distinct. Ovary ca. 1 × 2.5 mm, glabrous; style columnar, ca. 2 mm, 5-ribbed, apically 5-lobed. Capsule purplish brown to dark brown, ellipsoid, 6–9 × 4–5 mm, valves dehiscing along either side of midrib leaving persistent midrib between valves; columella persistent, 5-edged. Seeds reddish brown, linear-oblong, ca. 9 × 1.5–2 mm, compressed, apex very compressed or winged.

Evergreen broad-leaved forests; 600–2000 m. S Fujian, Guangdong, Guangxi, Guizhou, Hainan, S Hunan, S Jiangxi, Yunnan [Indonesia (N Sumatra), Malaysia, Vietnam].

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