29. TRICOSTULARIA Nees ex Lehmann, Nov. Stirp. Pug. 8: 50. 1844.

三肋果莎属 san lei guo suo shu

Liang Songyun (梁松筠 Liang Song-jun); Jeremy J. Bruhl, Karen L. Wilson

Herbs, perennial. Rhizomes short. Culms tufted, erect, terete or 3-angled. Leaves basal, rarely 1 or 2 cauline, often reduced to sheaths; ligule absent. Inflorescences paniculate, usually much branched. Spikelets solitary or clustered, compressed, narrowly ovoid-oblong, 1- or 2(or 3)-flowered, basalmost flower usually male, apical flower(s) bisexual. Glumes 4–6, pale brown, distichous, membranous, glabrous, 1-veined, keeled, basal 2–4 empty. Perianth scales (3–)6, whitish, lanceolate to linear, short, flat, hyaline. Stamens 3; connective apex apiculate. Stigmas 3. Nutlet brown, sessile, obovoid or pyriform, small, 3-sided, with 3 pale ribs, hispid at apex.

Six species: all in Australia, one extending to Asia; one species in China.

1. Tricostularia undulata (Thwaites) J. Kern, Acta Bot. Neerl. 8: 267. 1959.

三肋果莎 san lei guo suo

Cladium undulatum Thwaites, Enum. Pl. Zeyl. 353. 1864.

Herbs, tussock-forming. Roots thick. Culms 30–90 cm tall, 1–2 mm thick, rigid, obtusely 3-angled, sulcate-striate, smooth. Leaves basal, shorter than to as long as culm; leaf blade 1–3 mm wide, rigid, margin involute and scabrous. Inflorescences paniculate, branched, diffuse to dense, consisting of 4 or 5 fascicles; branches 2 or 3 together, unequal, ± exserted from

sheath, compressed, rigid, flexuose, scabrous. Spikelets almost sessile, in clusters of 2–8, 1-flowered. Glumes 4, oblong-lanceolate, apex acute; basal 2 glumes ca. 2 mm, apical ones 4–5 mm. Perianth scales 6, lanceolate to linear-lanceolate, densely covered with white antrorse short hairs. Stamens 3; anthers ca. 2 mm; connective apex 3-sided, oblong. Nutlet chestnut-brown to blackish, obtusely 3-sided, slightly reticulate-rugulose, with 3 whitish ribs, apex hispidulous.

Watersides near seacoast; near sea level. Hainan (Wenchang) [India, Indonesia, Malaysia, Papua New Guinea, Sri Lanka, Thailand, Vietnam; N Australia].