# 29．TRICOSTULARIA Nees ex Lehmann，Nov．Stirp．Pug．8：50． 1844. <br> 三肋果莎属 san lei guo suo shu <br> 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．Sta－ mens 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 $30-90 \mathrm{~cm}$ tall， $1-2 \mathrm{~mm}$ 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，$\pm$ exserted from
sheath，compressed，rigid，flexuose，scabrous．Spikelets almost sessile，in clusters of 2－8，1－flowered．Glumes 4，oblong－lan－ ceolate，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］．

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