

**168. THUAREA** Persoon, Syn. Pl. 1: 110. 1805.

蒺雷草属 *chu lei cao shu*

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Perennials. Culms creeping. Leaf blades linear-lanceolate, stiff; ligule ciliate. Inflorescence monoecious, composed of a single deciduous raceme with foliaceous rachis bearing 1–2 persistent bisexual or female spikelets at the base and several deciduous staminate spikelets above, spikelets secund in one row; staminate portion of the rachis shedding the spikelets after fertilization and folding onto the fertile spikelets, thus enclosing them in a capsule-like fruit-case. Bisexual spikelets adaxial, biconvex, florets 2; lower glume small or suppressed; upper glume equal to spikelet, 5-veined; lower floret neuter or staminate, its lemma resembling upper glume, palea often deeply split; upper floret fertile, thinly papery, its lemma with flat margins and hairy apex. Staminate spikelets similar but both florets staminate, smaller than the bisexual florets, with thinner scales.  $x = 9$ .

Two species: Madagascar to Polynesia, on sandy seashores; one species in China.

**1. *Thuarea involuta*** (G. Forster) R. Brown ex Smith, Cycl. 35. 1817 [“1819”].

蒺雷草 *chu lei cao*

*Ischaemum involutum* G. Forster, Fl. Ins. Austr. 73. 1786; *Thuarea latifolia* R. Brown; *T. media* R. Brown; *T. sarmentosa* Persoon.

Culms long and creeping, much branched, rooting at nodes, flowering culms up to 20 cm tall. Leaf sheaths loose, imbricate on the short erect shoots, pilose or only ciliate along margins; leaf blades  $2\text{--}5 \times 0.3\text{--}0.8$  cm, usually puberulous on both surfaces; ligule 0.5–1 mm. Inflorescence a terminal raceme, not exerted from the uppermost spathe-like leaf sheath; rachis broad and winglike in lower fertile part, narrowed above in staminate part. Spikelets pubescent; staminate spikelet oblong-lanceolate, 3–4 mm; fertile spikelet ovate-lanceolate, 3.5–4.5 mm. Fl. and fr. Apr–Dec.

Sandy seashores. Guangdong, Hainan, Taiwan [Indonesia, Malaysia, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Australia, Indian Ocean Islands, Madagascar, Pacific Islands (Polynesia)].

The short flowering shoots bend down as the seed ripens, and the seed may become buried in the sand. The plant is an efficient sand binder, and the prostrate, rooting stems form widely spreading mats. With its curious, watertight, buoyant fruit-case, this grass is also adapted to long-distance dispersal by sea.

The combination *Thuarea involuta* has often been attributed to Roemer & Schultes (Syst. Veg. 2: 808. 1817), but this was not published until November 1817, whereas Smith published in May of that year.

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