

Fimbristylis griffithii (Cyperaceae), a new record for Peninsular India

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Abstract

Fimbristylis griffithii Boeckeler (Cyperaceae) is reported for the first time from Peninsular India. In India, this species was earlier reported only from northeastern state of Assam and the Andaman and Nicobar Islands. A brief description and photo plate are provided for facilitating easy identification.

Keywords: *Fimbristylis griffithii*, Kerala, New record, Peninsular India.

Introduction

Fimbristylis Vahl is one of the largest genera of family Cyperaceae comprising c. 316 species (Govaerts *et al.*, 2018) distributed worldwide, especially in the tropics and subtropics. Karthikeyan *et al.* (1989) enumerated 91 species and Prasad and Singh (2002) reported 115 species from India. Nayar *et al.* (2006) reported 59 species from Kerala, while Sasidharan (2013) included only 52 species, and Nayar *et al.* (2014) listed 91 species from the Western Ghats.

During a floristic survey in the forests of Ernakulam district in Kerala, a few interesting specimens of *Fimbristylis* were collected from the marshy riverbanks in Koomul forest and Kalady plantation. A perusal of the literature and a critical study of the specimens at CAL revealed that they belong to *F. griffithii* Boeckeler, which is not yet reported from Peninsular India. Hence, its occurrence in Kerala forms a new distributional record for Peninsular India.

Taxonomy

Fimbristylis griffithii Boeckeler, Flora 43: 241. 1860; J. Kern, Blumea 8: 142. 1955 & in Steenis, Fl. Males., Ser.1. Spermat. 7: 584. 1974; A.S. Rao & D.M. Verma, Cyperaceae NE India 34. 1982; Karthik. *et al.*, Fl. Ind. Enum. Monocot. 53. 1989. *F. aestivalis* var. *glaberrima* Boeckeler, Linnaea 37: 11. 1871. *F. aestivalis sensu* C.B. Clarke in Hook.f., Fl. Brit. India 6: 637. 1893, *p.p. non* (Retz.) Vahl, 1805.

Fig. 1.

Annuals with fibrous roots, glabrous. Culms densely tufted, 8–36 cm long, 1–1.5 mm thick, compressed, 3–5-angled, smooth. Leaves slender, often falcate when young, flat or canaliculate, 7.5–32 × 0.2–0.45 cm, acute to acuminate at apex, sub-coriaceous, scabrid on involute margins; sheaths 2–3.5 cm long; ligule absent. Inflorescence a decompound corymb, loose, 4.5–10 × 6–13 cm, bearing 70–90 spikelets. Involucral bracts 4–7, shorter than inflorescence, scabrid at margins. Primary rays up to 7, 2–8 cm long. Spikelets solitary, angular, oblong-ovoid or ellipsoid, 2.5–4 × 1–1.3 mm, acute at apex, creamy-greenish, 6–19-flowered, glabrous. Glumes spiral, membranous, elliptic or ovate-lanceolate, 1.3–1.6 × 0.6–1 mm, keeled, with the prominent midvein excurrent into a mucro, with nerveless sides, hyaline towards margins. Stamen 1; filament 1–1.3 mm long, hyaline; anther oblong, 0.3–0.4 mm long. Ovary obovate; style 0.8–1 mm long, glabrous; stigmas 2, c. 0.5 mm long, ciliate. Achenes biconvex, obovate, 0.5–0.7 × 0.4–0.5 mm, shortly stipitate, smooth; epidermal cells elliptic to rectangular or of different shapes, in 12–15 vertical rows on either face.

Flowering & fruiting: February–May.

Habitat: Grows in marshy areas at about 130 m elevation post-monsoon season. It grows in association with *Cyperus haspan* L. and *Fimbristylis aestivalis* (Retz.) Vahl.

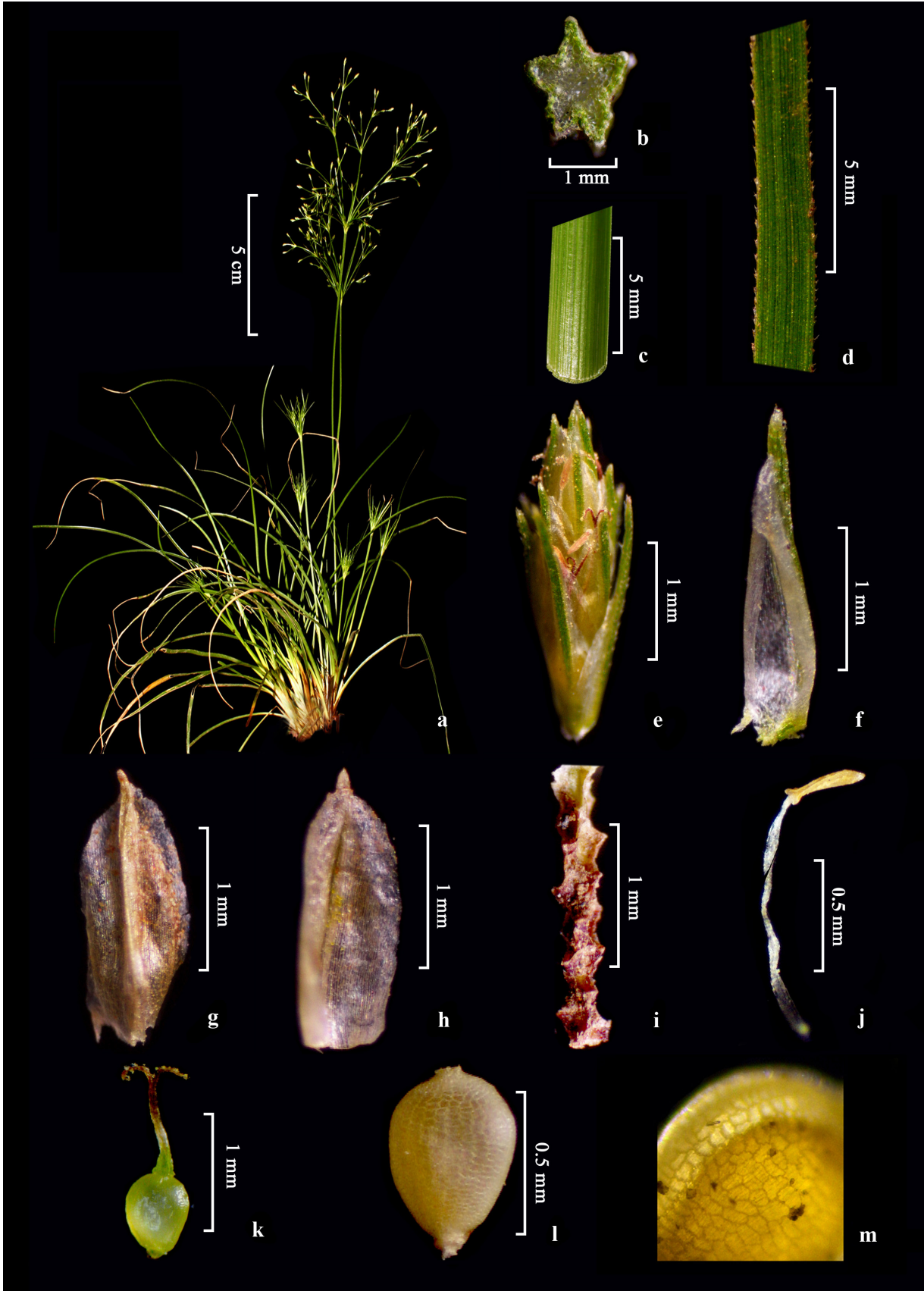


Fig. 1. *Fimbristylis griffithii* Boeckeler: **a.** Habit; **b.** T.S. of culm; **c.** Leaf blade – lower portion; **d.** Leaf blade – upper portion; **e.** Spikelet; **f.** Glume – lateral view; **g.** Glume – dorsal view; **h.** Glume – ventral view; **i.** Rachilla; **j.** Stamen; **k.** Pistil; **l.** Achene; **m.** Portion of the achene enlarged.

Distribution: India (Andaman and Nicobar Islands, Assam and now in Kerala), Malaysia, Myanmar, New Guinea, Thailand and Vietnam.

Specimens examined: INDIA, Kerala, Ernakulam district, Koomul, 13.4.2014, Sunil & Naveen Kumar 6483 (SNMH); Kalady plantation, 12.2.2017, Sunil & Naveen Kumar 9402 (CAL).

Notes: *Fimbristylis griffithii* is very similar to *F. aestivalis*. However, the former can be differentiated by its glabrous culms and style.

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