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FIMBRISTYLIS AGGREGATA C.E.C. FISCH. (CYPERACEAE), REDISCOVERED FROM THE ANAMALAIS, WESTERN GHATS, TAMIL NADU

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Fimbristylis aggregata C.E.C. Fisch. is known so far only from type collection. Fischer described it in Bulletin of Miscellaneous information (1931) based on a material of Beddome collected from Anamalais. It also appeared in the Flora of Madras in the same year. He allied it to *F. paupercula* Boeck. and distinguished from it in having robust nature, 5-angled stem, inflorescence of decompound umbel with many spikelets and nuts trabeculate. Since then this species was neither collected nor reported from anywhere. Govindarajalu who revised Indian *Fimbristylis* in 1970's also had not collected it. Bhargavan (1989) included it based on Fischer *(l.c.)* and designated it as a rare. It has found a place in recent compilations of Ahmedullah & Nayar (1987), Karthikeyan *& al.* (1989) and Nayar (1996) who included it based on literature. Cook (1996) did not consider it as a true: wetland species but enlisted as one found in damp or wet localities and citied only Tamil Nadu as its area of occurrence. This species has been collected after a lapse of 70 years of it discovery from Grass Hills, between 1600 and 1800 m during an exploration in Indira Gandhi National Park, Anamalais, Tamil Nadu. There is no report and detailed description in any of the recent floras and nor any specimen at any of the Indian herbaria. Hence, a detailed description with illustration is provided based on recent collection for its easy identification and to pave its recollection from other parts of Western Ghats.

Fimbristylis aggregata C.E.C. Fisch., Bull. Misc. Inform. 1931: 44. 1931 & in Gamble, FI. Pres. Madras: 1660(1152). 1931; Bhargavan in A.N. Henry *& al.*, FI. Tamil Nadu 3: 77. 1989; Ahamedul. & M.P. Nayar, Endemic PI. Ind. Reg.: 213. 1987; Karthik. *& al.*, Enum., Monocot.: 50. 1989; C.D.K. Cook, Aquat. Wetland PI. India: 132. 1996; M.P. Nayar, Hotspots Endem. PI. India: 219. 1996. Type: Anamalais, without precise locality, date, *R.H. Beddome* s.n. (BM ?). (Fig. 1. A - I)

Perennial tufted herb. Stem to 90 cm high, distinctly 5-angled and star-shaped in cross section, *ca* 1.5 cm across or in diam. space between angles 1-3 mm, minutely scabrous, dark green, swollen and compactly sheathed at base; rhizome absent; roots stout, cylindric, arising from swollen stem base. Sheaths broadly ovate, oblong-lanceolate, acute, blunt or acuminate at apex, coriaceous, scarious at margin, variable in length; lower most sheath to 8 mm long, glabrous or sparsely long dark-brown hairy; upper most 1.0-16.5 cm long, glabrous, many-nerved. Leaves absent or as long as the stem, thickened and minutely scaberulous at margin, main nerves deeply grooved above with many obscure minor nerves between, slightly raised beneath, scabrous above, dark brown or purplish short stellate

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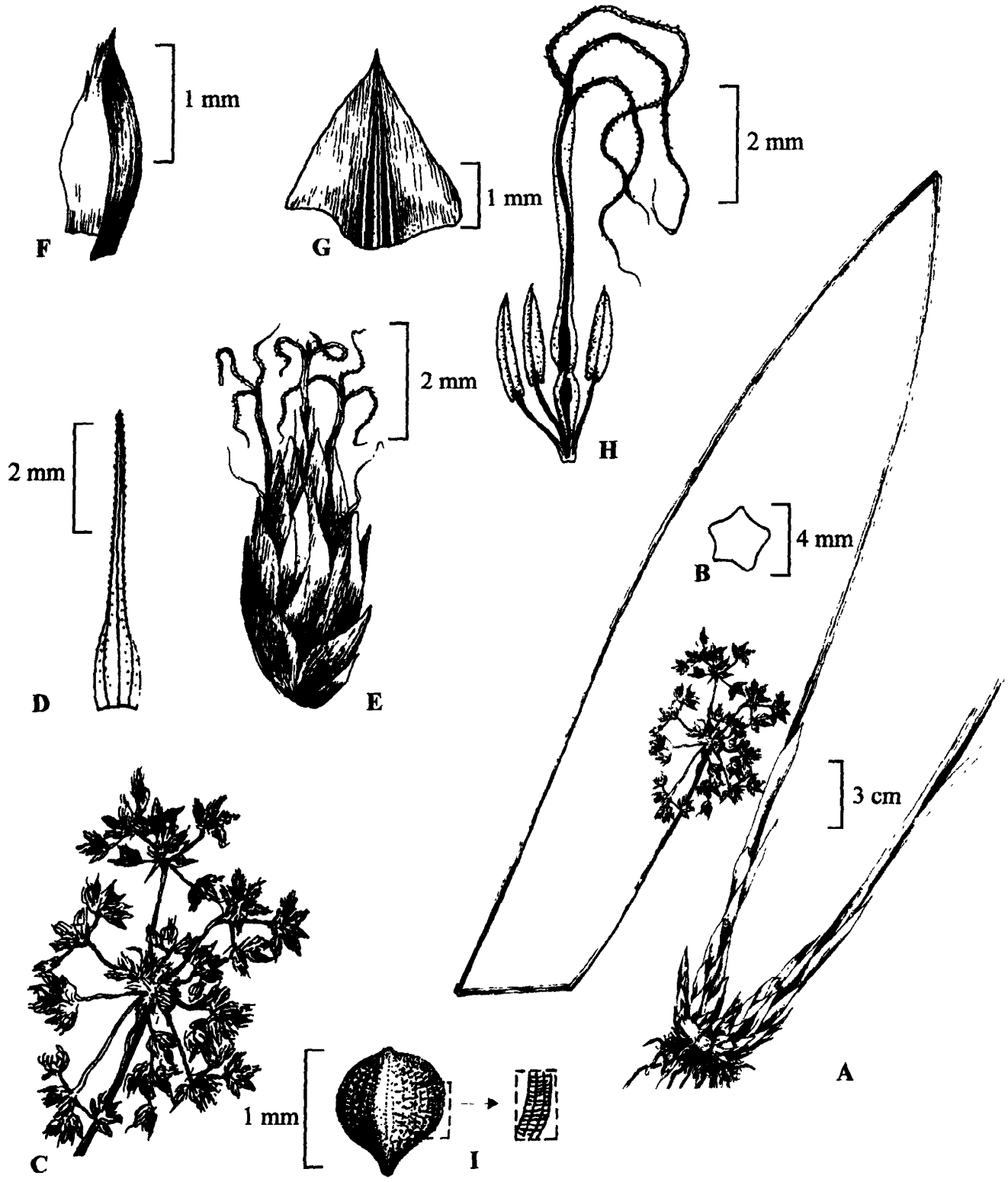


Fig. 1 (A-1). *Fimbristylis aggregata* C.E.C. Fisch. A. Habit; B. Stem outline in C.S.; C. Inflorescence; D.E. Spikelet; F & G. Glume lateral & ventral views; H. Stamens & pistil; I. Nut (*W. Arisdason* 115006, MH).

hairs beneath, *ca* 9 mm across, dark green, dull greyish brown on drying. Bracts much shorter than inflorescence, with broad rhombic or ovate base 1.3-1.8 mm across, 3-nerved, brown, abruptly tapering into a caudate apex, 4-8 mm long, setulose-scabrid at margin, green. Inflorescence a decompound umbel, to 5.5 cm across. Rays 6-15 including primary and secondary ones, 2-4.7 cm long, strongly ribbed and grooved; ribs scabrid. Spikelets many, sessile, in umbellate clusters, compressed or terete, ellipsoid, ovoid-elliptic or ovoid-lanceolate, acute-acuminate at apex, 5-6 × 2.8-3 mm, reddish brown, *ca* 12-flowered, distichous; rachilla zig-zag; internodes *ca* 1 mm long. Glumes spirally arranged, broadly ovate or rhombic-ovate when spread, strongly-keeled, shortly cuspidate or apiculate at apex, *ca* 3 × 2.2-2.75 mm, reddish brown, pale at margin, 3-5 nerved. Stamens 3; filaments stout, *ca* 0.6 mm long constricted at anther, 1-nerved; anthers oblong, linear lanceolate, divergent, or sagittate at base, shortly or minute-mucronate at apex, *ca* 2 × 0.2 mm, yellow, 2-celled; connective prominent. Sometimes out of 3 stamens 2 are flat, ribbon like, linear-oblanceolate, gradually tapering towards base, 1-nerved, very light yellowish brown, obtuse at apex, *ca* 3 × 0.3 mm. Ovary obovoid, trigonous, shortly stalked for *ca* 0.2 mm long, obtuse at apex, *ca* 0.55 × 0.3 mm; style broad and triquetrous at base, *ca* 2 mm long, 1-nerved; stigmas 3 spreading, coiling, densely pubescent with short hairs to 2 mm long, reddish brown. Nut obovoid, trigonous, shortly stalked at base, subtruncate or obtuse with a minute acute point at apex, *ca* 1.2 × 1 mm, whitish cream-coloured, slightly shining, trabeculate; trabeculae cells rectangular, in longitudinal rows.

Fl. & Fr. : Nov. Dec.

Distrib. : India : Tamil Nadu: Western Ghats of Coimbatore District. Endemic and rare.

Habitat : Moist rocky localities, to 1800 m.

Specimen examined : INDIA: Tamil Nadu: Coimbatore Distr., Anamalais, on way to Konalar hut, Grass Hills, 1600 1800 m, 7.11.2002, *W. Arisdason* 115006 (MH).

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