

Anderson 830 (CAL).

Field notes: Craspedodromous leaf venation, up to 37 cm long scape; perulate head in umbel (3.5 × 3.5-5.5 cm) beset with white dust-like grains throughout; 15-18 mm long flowers; short puberulous deep blue pedicel up to 3 mm long; puberulous bract and calyx lobes; 12-16 mm long corolla; short stamens (c. 1.5 mm long) and styles (c. 1.5 mm long) and loculicidal 5-valved obovoid-globose capsule (c. 9 × 3 mm) not reported earlier.

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18. NEW ADDITIONS TO THE SEDGE FLORA OF ANDAMAN & NICOBAR ISLANDS

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During the inventory of floristic diversity of the Mahatma Gandhi Marine National Park (MGMNP) in South Andaman, two Cyperaceae members were collected from the swampy area and along sandy seashores. On critical examination, the specimens were identified to be *Eleocharis acutangula* (Roxb.) Schult. and *Pycneus stramineus* (Nees) C.B. Clarke. Scrutiny of literature revealed that these species were hitherto unrecorded from this archipelago and hence reported here as new additions to the sedge flora of Andaman & Nicobar Islands (Vasudeva Rao 1986; Mathew 1998). Of the two species, *E. acutangula* is widely distributed and *P. stramineus* is found to be distributed in the South-East Asian region. Brief descriptions, illustrations, phenology and notes on their distribution are provided.

Eleocharis R. Br.

Eleocharis acutangula (Roxb.) Schult. in R. & S. Mant. 2: 91. 1824; Ridley, Fl. Malay Peninsula 5: 151. 1925; Baker & Bakhuizen, Fl. Java 3: 461. 1968; Kern in Steenis (ed.), Fl. Malesiana Ser. I. 7: 525. 1974; Koyama in Dassanayke (ed.), Rev. Handb. Fl. Ceylon 5: 256. 1985; Simpson & Koyama in Santisuk & Larsen (eds.), Fl. Thailand 6(4): 285. 1998. *Scirpus acutangulus* Roxb. Fl. Ind. 1: 216. 1820. *Eleocharis fistulosa* Schult. in R. & S. Mant. 2: 89. 1824; C.B. Clarke in Hook. f., Fl. Brit. India 6: 626. 1893; Ridley, Fl. Malay Peninsula 5: 151. 1925. (Fig. 1)

Perennial herbs, stoloniferous. Culms tufted, 40-60 cm long, triquetrous; sheaths 3-8 cm long, pale brown. Spikelet terminal, cylindrical, 2-5 cm long, pale green-yellow.

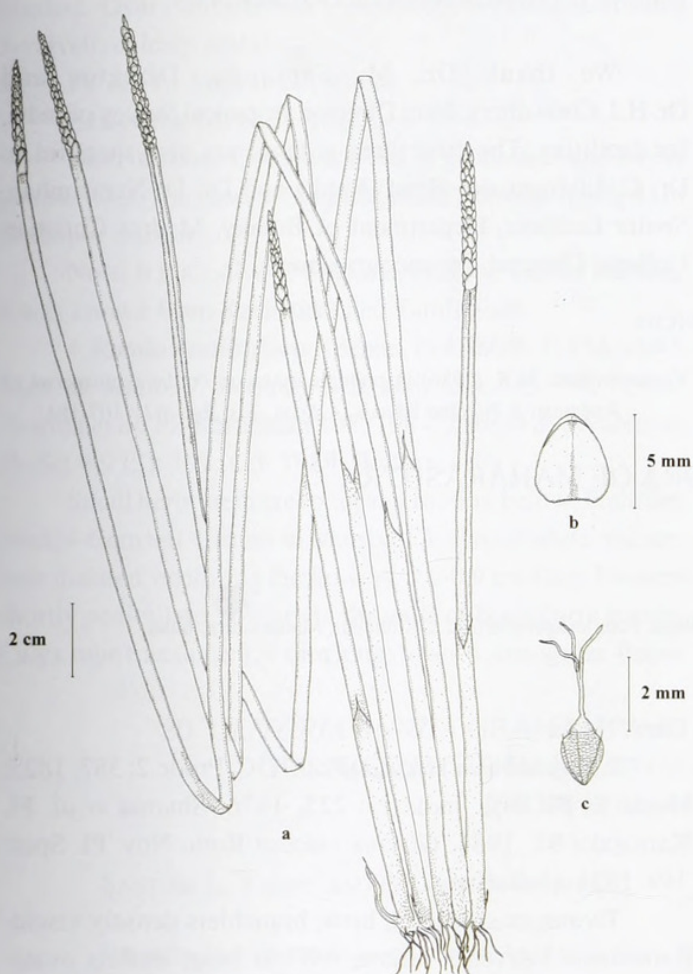


Fig. 1: *Eleocharis acutangula* (Roxb.) Schult. – (a) Habit; (b) Glume; (c) Nutlet

Glumes ovate, 4-5 mm long, 1-nerved, obtuse at apex, hyaline along margin. Nutlets obovoid, *c.* 1.8 x 1.2 mm, compressed, yellow-brown, annular at apex, indistinctly transversely pitted. Hypogynous bristles 6, retrorsely barbellate, *c.* 2 mm long.

Fl. & Fr.: August-December.

Ecology: Occasional; in swampy areas forming large communities near Wandoor.

Specimen examined: South Andaman, Mahatma Gandhi Marine National Park, Wandoor, Karthigeyan 19593 (PBL). 11.x.2003.

Distribution: Pantropical.

Note: This widespread species was so far not recorded from the Andaman Islands. It could be easily recognized from *E. dulcis* (Burm.f.) Trin. ex. Henschel, by its triquetrous stem.

Pycneus P. Beauv.

Pycneus stramineus (Nees) C.B. Clarke in Hook. f. Fl. Brit. India 6: 589. 1893; Koyama in Dassanayke (ed.), Rev. Handb. Fl. Ceylon 5: 216. 1985; Simpson & Koyama in Santisuk

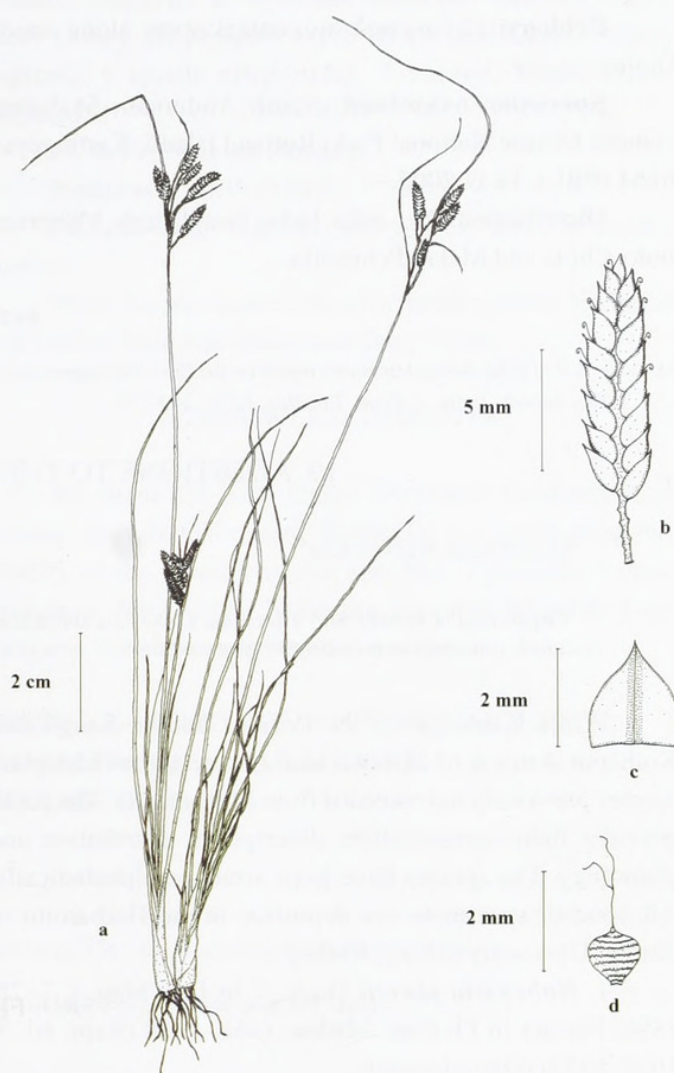


Fig. 2: *Pycneus stramineus* (Nees) C.B. Clarke – (a) Habit; (b) Spikelet; (c) Glume (ventral side); (d) Nutlet

& Larsen (eds.), Fl. Thailand 6(4): 391. 1998. *Cyperus stramineus* Nees in Wight, Contr. Bot. India 74. 1834. *C. substramineus* Kukenth. in Pflanzenr. 4(20). 101 Heft: 398. 1936; Kern in Steenis (ed.), Fl. Malesiana Ser. I. 7: 653. 1974. (Fig. 2)

Annual herbs. Culms tufted, 8-20 x 0.1-0.2 cm, smooth. Leaves few, linear-filiform, 2-16 x 0.1 cm, acuminate at apex; sheaths 2.0-3.5 cm long, purplish. Bracts 3, 1-8 cm long. Inflorescence slightly congested with 5-8 spikelets, 2-3 cm long. Spikelets oblong-lanceolate, 1.0-1.5 x 0.1-0.2 cm, flattened, acute at apex, straw-coloured. Rachilla straight, wingless. Glumes distichous, broadly ovate, *c.* 2.0 x 1.2 mm, mucronate at apex, dull greenish-yellow, hyaline along margin; keel green, 3-nerved. Stamens 2, *c.* 0.8 mm long. Style 1.0-1.2 mm long; stigmas 2. Nutlets obovoid, *c.* 1.0 x 0.8 mm, biconvex, laterally flattened, transversely wrinkled, dark brown, minutely apiculate.

Fl. & Fr.: September–November.

Ecology: Occasional; in coastal areas along sandy shores.

Specimen examined: South Andaman, Mahatma Gandhi Marine National Park, Rutland Island, Karthigeyan 6164 (PBL). 14.ix.2002.

Distribution: Sri Lanka, India, Bangladesh, Myanmar, Indo-China and Malay Peninsula.

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19. ADDITIONS TO THE FLORA OF MAHARASHTRA

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While investigating the flora of Satara, Sangli and Kolhapur districts of Maharashtra, I came across four plant species previously not recorded from Maharashtra. The paper provides their nomenclature, description, distribution and phenology. The species have been arranged alphabetically. All voucher specimens are deposited in the Herbarium of Shivaji University (SUK), Kolhapur.

1. *Habenaria elwesii* Hook. f. in Bot. Mag. t. 7478. 1896; Fischer in Fl. Pres. Madras 1468. 1928 (Repr. ed. 3: 1026. 1957) (Orchidaceae).

Herb, erect slender 25–40 cm high; tuber c. 2.0 x 1.0 cm, hairy. Leaves 3–6 alternate, about middle of the stem, 4.0–7.0 x 1.0–2.0 cm, lanceolate to oblong, acute. Inflorescence 8–16 cm long, lax-flowered. Flowers white, sessile, bracteate. Bracts 3.0 x 1.0 cm, foliaceous, cymbiform, longer than the ovary, broadly ovate-lanceolate, acuminate at tip, finely puberulous along margin. Lateral sepals obliquely lanceolate, spreading, abruptly acuminate, 5-nerved. Dorsal sepal ovate-oblong, concave, acuminate, finely scabrid, 3-nerved. Lateral petals bipartite, almost to the base, densely hirsute or bearded along the margins; lower segment slightly shorter than the upper segment, curved. Lip spurred, longer than ovary, trilobed below the middle with a narrow claw; lobes narrow, divaricate, midlobe subequal with side lobes. Spur shorter than ovary. Capsule 2.5 cm, long, ribbed, fusiform.

Fl. & Fr.: September–October.

Exsiccata: MPB – 20349.

Distribution: Very rare. It grows near the edges of the forest at an altitude c. 800 m. Kolik (Chandgad) in Kolhapur district.

Note: Earlier it was known from Nilgiri hills,

Tamil Nadu.

2. *Rhynchosia viscosa* (Roth) DC. Prodr. 2: 387. 1825; Hook. f. Fl. Brit. India 2: 225. 1876. Sharma *et al.* Fl. Karnataka 81. 1984. *Glycine viscosa* Roth. Nov. Pl. Spec. 349. 1821. (Fabaceae).

Twiner or spreading herb; branchlets densely viscid-tomentose. Leaves 3-foliate, 6–8 cm long; leaflets ovate-deltoid, 3.0–5.0 x 2.0–4.5 cm, tomentose; base cuneate, obtuse; apex acuminate, apiculate; stipules lanceolate. Flowers brownish-purple, in 8–15 cm long dense racemes; bracts minute. Calyx tomentose; lobes lanceolate. Corolla exerted; deep brown-purple; wings and keels yellowish. Ovary pubescent. Pods oblong, horned, viscid-pubescent, 2–4 seeded.

Fl. & Fr.: November–January.

Exsiccata: MPB-6054.

Distribution: Rare along ghats. Khadgaon, Pasarni ghat in Satara district.

Note: Earlier it was known from Karnataka and Tamil Nadu.

3. *Richardia scabra* L. Sp. Pl. 330. 1753; Balkr. Bull. Bot. Surv. India 6: 85. 1964. Mathew, Ill. Fl. Tamil Nadu Carnatic t. 346. 1982; Sharma *et al.* Fl. Karnataka 132. 1984. (Rubiaceae).

Procumbent herb; branchlets spreading, terete to angular, hispid. Leaves simple, decussate or whorled, elliptic-ovate, 2–4 x 1–2 cm, scabrous; base obtuse; apex acute; petiole 5 mm long; upper leaves sessile; stipules setiferous. Flowers 3-merous in terminal sessile, capitate clusters, subtended by 4 subsessile leaves. Calyx truncate, globose; lobes 6, abovate, scabrous. Corolla white; lobes 6, triangular. Stamens 6, partly



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