**Eleocharis neglecta** (Cyperaceae): an addition to the flora of South India

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**Abstract:** *Eleocharis neglecta* Borude, Chandore, Gholave & S.R.Yadav, closely similar to *E. dulcis* (Burm,f.) Trin. ex Hensch., was collected from Thrivananthapuram district and reported here for the first time from South India. A detailed description of the species along with a photoplate and relevant notes are provided for easy identification.

**Keywords:** *Eleocharis*, Cyperaceae, Kerala, Thrivananthapuram

**Introduction**

*Eleocharis* R.Br. is a cosmopolitan genus comprising c. 300 species worldwide (Govaerts et al., 2021). The genus is represented by 25 species in India (Borude et al., 2016), of which 12 species occur in Kerala (Sasidharan, 2004).

During the course of a floristic revision of the genus *Eleocharis* in Kerala, the authors collected some specimens from waterlogged areas of Chirayinkeezhu taluk in Thrivananthapuram district, which were later identified as *E. neglecta* Borude, Chandore, Gholave & S.R.Yadav of subgenus *Limnochloa* (P.Beauv. ex Lestib.) Torr. This species has been described from the Konkan region of Maharashtra, India (Borude et al., 2016), but has not been reported from South India (Karthikeyan et al., 1989; Prasad & Singh, 2002). It is hence reported here as an addition to the flora of South India.

**Micromorphological studies of nut:** Mature achenes were subjected to SEM studies. Achenes were acetolyzed by submerging it in 1:9 concentration of sulfuric acid and acetic anhydride, later sonicated, washed with distilled water and finally coated with gold-palladium alloy. SEM micrographs were taken using EVO 18 scanning electron microscope (Zeiss, Germany) at Central Laboratory for Instrumentation and Facilitation (CLIF), Thrivananthapuram.

**Taxonomic Treatment**


**Type:** INDIA, Maharashtra, Ratagiri district, Rajapur, A.N. Chandore 1951 (holo: CAL; iso: BSI, K [K000342305 digital image!], SUK).

Fig. 1

Perennials. Rhizome short with elongated stolons bearing sub-globose white tubers. Culms terete, tufted, erect, transversely septate, pale green, 40–90 × 0.15–0.3 cm. Leaves reduced to sheath around the base of culms. Sheaths brownish, apically mucronate, outer sheath 5 cm long, inner sheath 10–15 × 0.15–0.3 cm. Inflorescence a terminal spikelet, angular, many-flowered, acute, slightly wider than culm, 1.5–2.5 × 0.2–0.35 cm. Glumes 25–30 per spikelet, lower glume sterile, green, ovate, acute, membranous towards apex, c. 0.5 × 0.4 cm, upper fertile glumes ovate to elliptic, mostly membranous, fairly imbricate, persistent, scarious along margins at apex, central nerve prominent, c. 0.45 × 0.17 cm. Hypogynous bristles 7, two to three times longer than nut, unequal, retrorsely scabrid, 0.3–0.35 cm long. Stamens 3; anthers linear, 2–3 mm, filament whitish. Style trid. Achenes biconvex, yellowish, swollen at middle, narrow towards base, 1.5–1.8 × 0.8–1 mm, style base persistent, conical, 0.6–0.8 mm long.

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**References:**


Fig. 1. *Eleocharis neglecta* Borude, Chandore, Gholave & S.R. Yadav: a. Habitat; b. Culms; c. Rhizome with tubers; d. Spikelets; e. Fertile glume; f. Sterile glume; g. Stamens; h. Achene; i. SEM image of achene (from Kavya K. Nair & A.R. Viji 5202; photos by Kavya K. Nair).
Eleocharis neglecta: an addition to the flora of South India

Flowering & fruiting: Flowers and fruits were observed during May to July.

Habitat: Eleocharis neglecta grows abundantly in water-logged areas of Chirayinkeezhu along with Eleocharis spiralis (Rottb.) Roem. & Schult., Fimbristylis ferruginea (L.) Vahl. (Cyperaceae) and Nymphaea nouchali Burm.f. (Nymphaeaceae).

Distribution: Endemic to India.

Specimen examined: INDIA, Kerala, Thiruvananthapuram district, Chirayinkeezhu, 27.10.2022, Kavya K. Nair 5202 (TBGT).

Notes: Eleocharis neglecta closely resembles E. dulcis (Burm.f.) Trin. ex Hensch., but can be distinguished by its slender, sub-rigid culms, angular spikelets which are wider than the culms, and the testa cells are minute, oblong-hexagonal and arranged in several vertical rows. Borude et al. (2016) named the species E. neglecta in reference to the fact that it had been neglected by earlier taxonomists presumably due to its close resemblance to E. dulcis.

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Literature Cited


