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REVIEWARTICLE

ON THE OCCURRENCE AND PHYTOGEOGRAPHICAL SIGNIFICANCE OF *SCLERIA FOLIOSA*
(CYPERACEAE) IN TAMIL NADU

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ABSTRACT

Scleria foliosa Hochst. ex A. Rich, a little known sedge species has been reported for the first time from Tamil Nadu, India. The disjunct distribution nature exhibited by this species at varying degrees deserves scientific scrutiny and is of phytogeographical significance. The study provides a detailed taxonomic description, photographs and relevant information based on fresh collections for recognition.

Key words:

Cyperaceae, *Scleria*, New report,
Tamil Nadu, India.

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INTRODUCTION

The genus *Scleria* belongs to the tribe *Scleriae* of the family Cyperaceae is predominantly inhabitant of moist habitats on a variety of soil types. It is a pantropic genus of ca. 200 species, some extending to subtropical and warm temperate regions. In India, it is represented by 27 species of which 9 taxa are found in Tamil Nadu (Henry *et al.*, 1989; Karthikeyan *et al.*, 1989; Prasad and Singh, 2002). It is taxonomically a complex genus and is recognised by its rather large nuts, with usually white glistening crustaceous pericarp, a well-developed hypogonium or disk and complete absence of perianth. As part of taxonomic revision of the family Cyperaceae in Nilgiri Biosphere Reserve, an interesting *Scleria* specimen has been collected from Masinagudi, Tamil Nadu. On critical examination and perusal of literature, this specimen was identified as *S. foliosa* Hochst. ex A. Rich (Verma and Chandra, 1990; Prasad and Singh, *l.c.* means abbreviation of location cited without repeating the year of publication normally followed in taxonomy paper. Therefore this may be retained). On further analysis of its distribution it was confirmed that *S. foliosa* Hochst. ex A. Rich is reported so far only from Mt. Abu (Rajasthan), Pune (Maharashtra) and Chickmangalur (Chikkamagaluru - Karnataka) (Verma and Chandra, *l.c.*; Prasad and Singh, *l.c.*, Wadoodkhan, 2007). This species show a varying degree of disjunct distribution across continents and within the Indian subcontinent which deserves phytogeographical significance.

The present report forms a new distributional record to Tamil Nadu. In spite of its wider distribution, the species remains little known and hence being described with photographs and relevant notes to facilitate its recognition.

Taxonomic treatment

Scleria foliosa Hochst. ex A. Rich., Tent. Fl. Abyss. 2: 509. 1851; Clarke in Dyer, Fl. Trop. Afri. 8: 503. 1902; Nelms in Kew Bull. 102. 1956; Robinson in Kew Bull. 18: 525. 1966; Napper in Hepper, Fl. West Trop. Africa 3(2): 343. 1972; Hooper in Saldanha and Nicolson, Fl. Hassan 700. 1976; Sharma *et al.*, Fl. Karnataka 316. 1984; Karthik *et al.*, Fl. Ind. Enum. Monocot. 71. 1989; Verma and Chandra, Bull. Bot. Surv. Ind. 32: 67. 1990; Prasad and Singh, Sedg. Karnataka 316. 2002.

Roots fibrous, reddish brown. *Culms* glabrous, 15 – 150 cm high, 1 – 3 mm thick. *Leaves* basal, upper leaves at longer intervals on the culms; lower leaves reduced to bladeless sheaths; sheaths many nerved, glabrous, 5 – 15 cm long, 3 – 6 mm wide, mouth truncate or narrowly ovate, margins membranous, narrowly winged; lamina 11 – 73 cm long, 4 – 8 mm wide, glabrous, scabrid on the margins above and sometimes on the midrib beneath and on 2 prominent nerves on the upper surface towards apex. *Inflorescence* terminal and lateral panicles; terminal panicle sessile, 2 – 3 cm long; lateral ones single at nodes, 1 – 2 cm long, distinctly spaced, scarcely to shortly exerted from the sheaths on peduncles which become pendulous when mature; bracts overtopping the panicles.

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Spikelets unisexual; male spikelets 3.5 – 4 x 0.7 – 1 mm, subsessile or pedicel shorter than spikelet; female spikelets ovoid, 4 – 5 mm long; male glumes 3 – 4 x 0.5 – 1m, stramineous, brownish; female glumes ovate-lanceolate, 3 – 5 x 0.5 – 1 mm, glabrous, light brown to blackish-red. *Stamens* 3; anthers 0.8 – 1 mm long, apiculate. *Nut* broadly ovoid, 3 – 4 x 2 – 2.5 mm, umbonulate, white or sometimes discoloured and brownish, base pitted, surface rugose, mostly longitudinally verrucose – laccunose, glabrous. Disc almost to the base, 3-lobed; lobes orbicular-ovate, thick, appressed, white or pale brown. Fig. 1.

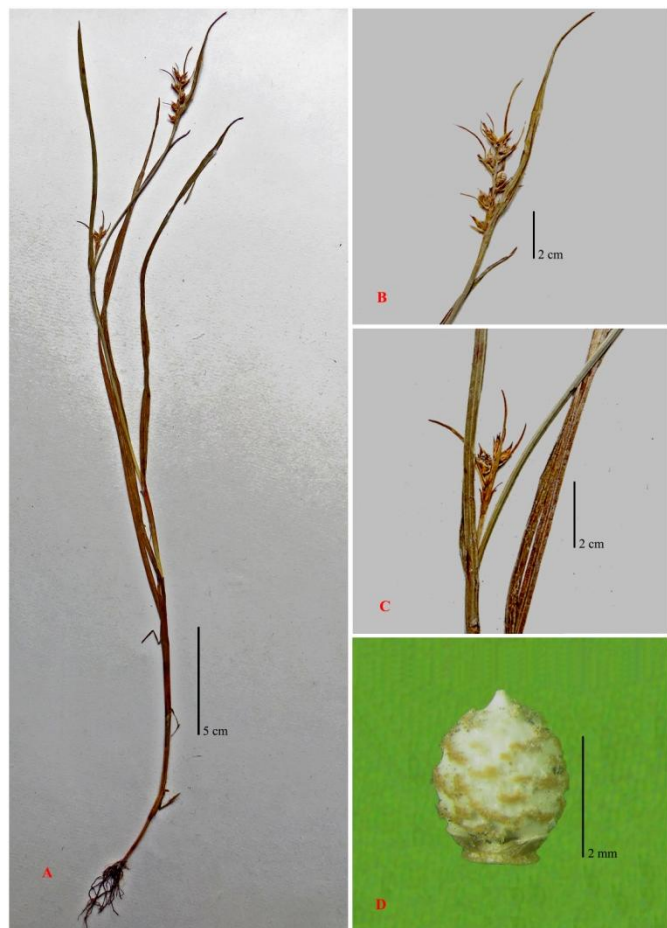


Fig. 1. *Scleria foliosa* Hochst. ex A. Rich. A. Habit; B. Terminal Spikelet; C. Axillary Spikelet; D. Nut.

Flowering and Fruiting: September – November.

Habitat and ecology: It is naturally growing in the marshy areas in and around Masinagudi located in the biosphere region at an altitude of \pm 943 m. The common associated species in the community are: *Cyperus haspan* L., *Eragrostis unioides* (Retz.) Nees ex Steud., *Fimbristylis miliacea* (L.) Vahl, *Kyllinga brevifolia* Rottb, *Diplacrum caricinum* R. Br. etc.

Distribution: *Scleria foliosa* is known from Southern Africa and Madagascar. In India, it is reported from Maharashtra, Rajasthan, and Karnataka (Karthikeyan *et al.*, 1989; Verma and Chandra, *l.c.*; Prasad and Singh, *l.c.*; Nayar *et al.*, 2006).

Specimen examined: INDIA, Tamil Nadu, Nilgiri distr., Masinagudi, \pm 943 m, 11°33'46.4"N and 76°-38'59.2"E, 08-11-2012, A. R. Viji and A. G. Pandurangan, 75349 (TBGT)

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