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RESEARCH ARTICLE

TAXONOMIC STATUS OF *SCLERIA FLACCIDA* C. B. CLARKE: A REVIEW

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ABSTRACT

Scleria flaccida Clarke often treated under synonym of *S. rugosa* R. Br. Due to apparent similarity in spite of its distinctiveness noted by several systematists. Based on revised study with fresh collections, it has been reinstated as a separate species with adequate justification. Also provides a detailed taxonomic description, photographs and relevant information for its easy identification in the field.

INTRODUCTION

Scleria P. J. Bergius. (1765: 142) is the fifth largest genus of Cyperaceae and represented by over 200 species distributed throughout the world. The genus has pantropical distribution and can also occasionally be found in warm temperate regions of the old world. As part of taxonomic revision of the family Cyperaceae in Nilgiri Biosphere Reserve, an interesting species of *Scleria* has been collected by the authors. On critical examination and perusal of literature, it was identified as *S. flaccida* C. B. Clarke (1894: 688). This species was described by C. B. Clarke in 1894 based on a collection from Assam (Seebsagar). It is mainly characterised by its hairy nature, presence of small, ovoid, smooth, white nut with glandular disc having sub entire margin. Kern (1974), while studying the Malaysian Cyperaceae treated *S. flaccida* C. B. Clarke as the synonym of *S. rugosa* R. Br. (1810: 240), with a note that he cannot find any correlation of characters of these two species. Verma and Chandra (1990) when revised the genus for India followed Kern and treated *S. flacida* C. B. Clarke as the synonym of *S. rugosa* R. Br. overlooking the differences between these two taxa. Subsequently Wadoodkhan *et al*. (2007) also treated it as the synonym of *S. rugosa* R. Br. and remarked that 'the complex needs further investigation', in spite of the fact that the specimen collected by them having smooth white nut and hairy nature which are characteristic to *S. flaccida* C. B. Clarke. The other workers also pursued without due recognition of *S. flaccida* in their respective floras (Koyama, 1985; Karthikeyan, 1989; Lekshminarasimhan, 1996; Pullaiah, 1997; Sasidharan, 2004; Nayar *et al*., 2006). Our specimen found to be quite distinct from *S. rugosa* R. Br. in its smooth, shiny, white nut and hairy nature of the habit and confirmed its distinct entity as separate population which needs to recognise taxonomically. Therefore *S. flaccida* C. B. Clarke is a distinct species over *S. rugosa* R. Br. which necessitate reinstating the species status by amply justifying the treatment of Clarke (1894 and 1909) based on fresh collection. A detailed description, phenology, photographs, distribution and relevant notes are provided.

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Taxonomic treatment

Scleria flaccida C.B.Clarke in Hook. f., Fl. Brit. Ind. 6: 688. 1894, *non* Steudel, 1855; Clarke, Illus. Cyper. t. 127, f. 3-5. 1909. Annual *herb*, densely hairy all over. *Roots* fibrous, reddish. *Culms* slender, obliquely erect, 10–30 x 0.1–0.15 cm, acutely angular, hairy. *Leaves* 1–4 per culm, basal as well as at longer intervals in the upper part of the culms; lower leaves reduced to bladeless sheaths; sheaths reddish-brown, hairy, 0.5–2 cm long, striate; blades lanceolate, 5–12 x 0.2–0.4 cm, 3-nerved, mid vein prominent on upper surface, lateral veins raised on the lower surface, densely hairy, apex sub-obtuse. *Inflorescence* narrow, terminal and lateral panicles, panicles single or binate at the nodes; peduncles stout, recurved.

FIGURE 1. *Scleria flaccida* C. B. Clarke. **A.** Habit, **B-C.** A portion of culm & leaf showing hairy nature, **D.** Terminal Spikelet, **E.** Axillary Spikelet, **F-G.** Nut, **H.** Disc.

Spikelets unisexual; male spikelets lanceolate, 2–2.5 mm long, shortly peduncled; peduncles 1–1.5 mm long, angular, hairy; male glumes 1–4 per spikelet; first glume 2–2.3 mm long, linear, hairy; second, third and fourth glumes 1–1.5 mm long, hyaline; female spikelets ovoid, 3–4 mm long; female glumes linear–ovate, 2.5–3.5 x 0.5–1 mm, boat-shaped, shortly keeled, hairy, apex acute. *Stamen* 1; anther oblong, 0.5–1 mm long, apiculate. *Nut* ovoid, terete, 1.5–1.75 x 1.3–1.5 mm, smooth, shining, white, apex obtuse, not apiculate; disc thick almost to the base, 3-lobed; lobes obtuse, sub-entire, densely cellular – glandular (Fig. 1).

Phenology:—Flowering and fruiting was observed from September to November.

Distribution:—**INDIA**: Assam (Seebsagar); Nilgiri Biosphere Reserve (Teppakkadu).

Specimen examined:—**Tamil Nadu**: Nilgiri district, Teppakkadu, ± 884 m, 11°.34'.46.0" N and 76° 34'48.7"E, 08-11-2012, A. R. Viji and A. G. Pandurangan, 75365 (TBGT).

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