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Scleria neesii Kunth var. *gadchiroliensis* (Cyperaceae), a New Variety from Central India

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ABSTRACT: A new variety of *Scleria* P. J. Bergius (Cyperaceae) *S. neesii* Kunth var. *gadchiroliensis* from Central India is described here with description, line-drawing, photographic illustration and notes. It resembles with *S. neesii* Kunth var. *neesii* in overall morphology but differs in having milky white nuts covered with ribbon like hairs on distinct stalk.

KEY WORDS: *Scleria, S. neesii var. gadchiroliensis*, Vidarbha, Maharashtra, India.

INTRODUCTION

Cyperaceae are the third largest family among monocots, with about 5,460 species belonging to 106 genera (Govaerts *et al*., 2013). In India, there are 38 genera and *ca* 580 species (Kartikeyan *et al*., 1989; Prasad & Singh, 2002).

The genus *Scleria* P.J. Bergius (*s.l.*) is distributed throughout the World with c. 250 species (Goetghebeur, 1998) and is represented by 32 species and one variety in India (Karthikeyan *et al*., 1989) of which 27 are found in Peninsular India (Wadood Khan, 1998; Wadood Khan *et al.* 2007). Interestingly Verma and Chandra (1990) reported only 23 species and one variety of *Scleria* from India.

While exploring Gadchiroli district of Vidarbha region of Maharashtra state, authors collected some interesting specimens of *Scleria*. (Fig. 1) On critical analysis of the specimens it is found to be closely allied with *S. neesii* differing only in nut characters. Hence a new variety of the species is described and illustrated here, with notes on its phenology and ecology.

TAXONOMIC TREATMENT

Scleria neesii Kunth. var. ***gadchiroliensis*** Govekar, Sardesai & Kahalkar, ***var. nov***. Figs. 2 & 3

Type: **INDIA**: Maharashtra, District Gadchiroli, Tehsil Aheri, Kotagudam (19°6′03″65 N and 79°56′38″00 E, *ca.* 150 m, 4 Sep. 2011, *R.S.Govekar 1711* (Holotype, CAL; Isotypes, BSI, BAMU, MH).

The new variety resembles very much with *S. neesii* Kunth in overall morphology but differs in having milky white nuts covered with ribbon like hairs on distinct stalk.

Rhizomes short. Culms erect, 10–20 cm tall, 1.0–3 mm wide, slender, trigonous, copiously hairy with 1–1.5 mm long spreading hairs. Leaves basal and cauline.



Fig. 1. The habitat of *Scleria neesii* var. *gadchiroliensis*.

Basal leaves reduced to sheaths; sheath pale brown, 3-angled, edges villous, apex with three triangular teeths. Cauline leaves with sheath similar to basal leaves; leaf blades linear, 5–15 cm × 1.5–3 mm, narrowed at apex, both surfaces villous, margins scabrous, apex obtuse. Involucral bracts 2–4, leaflike, sheathing, up to 5 cm long; glumes setaceous, densely pilose. Inflorescence subcapitate, laxly globose, 1–3 cm in length, with 5–13 spikelets. Spikelets ovoid, 4–8 mm long, villous, unisexual, sessile, elongated. Staminate spikelets (resembling female spikelet) 4–7 mm long; staminate glumes with a yellowish brown midrib and scabrous apex; stamens 3, anthers 1.3–1.5 mm long. Pistillate spikelets 5–8 mm long; glumes 4, with brownish green midrib, pubescent towards the apex; style slender; stigmas three, longer than style, sparsely puberulous. Disk reduced to a columnar stipe like hypogynium. Nuts milky white, subspherical, 1.5–2 mm in diam., tuberculate, shiny with a tuft of ribbon like flat dense hairs on 1.5–2 mm long stalk.

Flowering & Fruiting: August – December.

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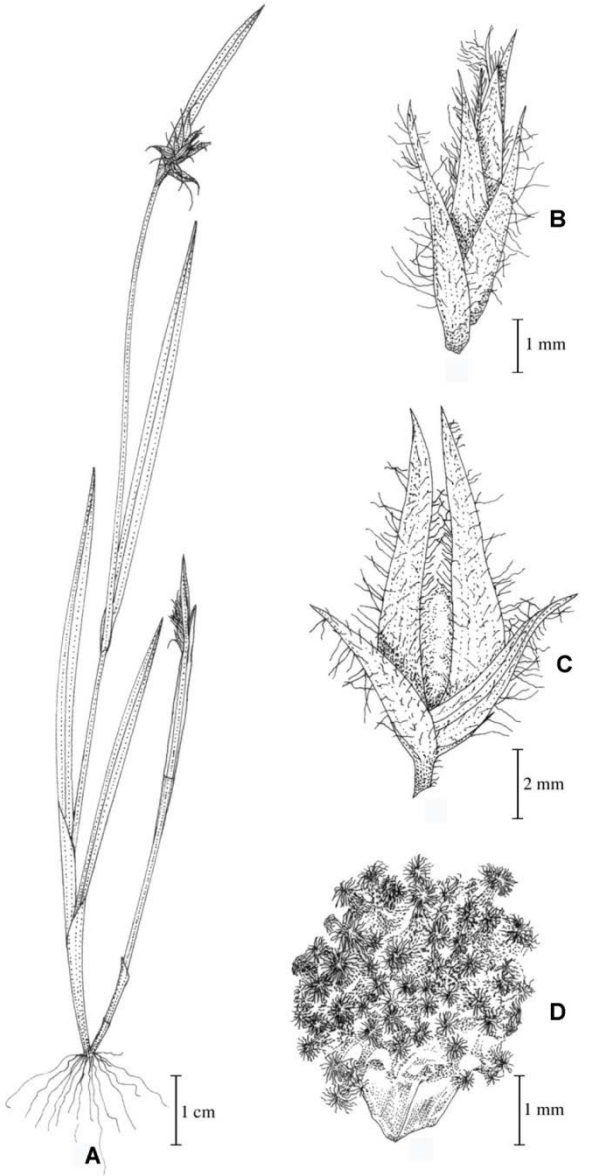


Fig. 2. *Scleria neesii* var. *gadchiroliensis.* A: Habit. B: Male spikelet. C: Female spikelet. D: Nut.

Habitat: The variety is so far known to occur in the trapezoid formed by coordinates 19°16′37″N & 79°56′45″E, 19°16′37″N & 79°59′00″E, 19°14′46″N & 79°56′00″E and 19°14’46″N & 79°59′42″E encompassing an area about 15 km^2. The area falls under compartment No. 259–262, 264–266, 268, 270–273 of Watra Budruk-1, Watra Budruk-2 of the Devalmari Round of Pranhita Range in Sironcha Forest Division. The forests area is broadly called as Pranhita Reserve Forests. The variety is distributed in low lying flat sandy-loamy areas developed along the periphery of rocky outcrops with average altitude 150 m. The general vegetation in the area is scrub-open type *Euphorbia* mixed forest.

Paratypes: **INDIA**: Maharashtra, Gadchiroli District, Watra Budruk (Pedda Watra), 5 Sep. 2011, *R.S. Govekar 1743* (BAMU).

Etymology: Specific epithet is named after the Gadchiroli district from which the taxon is so far known to occur.

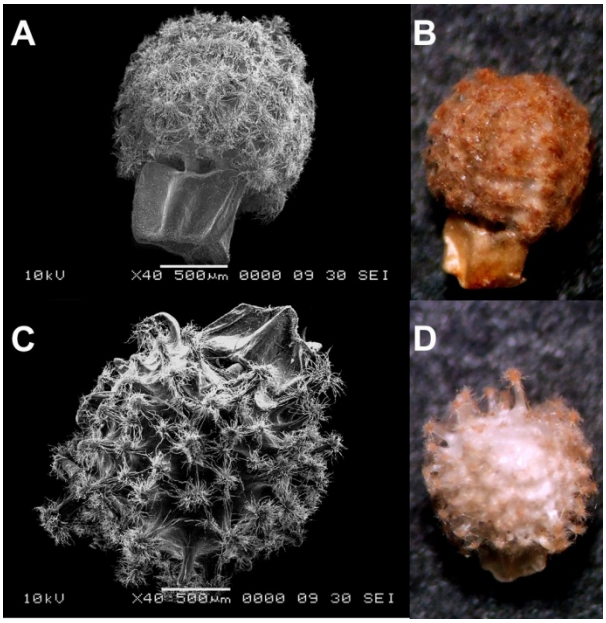


Fig. 2. Seeds of *Scleria neesii* (A, B)and its new variety var. *gadchiroliensis* (C, D). (A, C SEM)

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