



Original Research Article

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Eriochloa barbatus (Poaceae: Paniceae): An addition to the Flora of Southern India

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Article Info

Abstract

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Eriochloa barbatus (Trin.) S. Yadav and M. R. Almeida (Poaceae: Paniceae), a species indigenous to Africa, Madagascar and Arabian Peninsula is reported here as an addition to the grass flora of Southern India from Telanganastate. Detailed description and photographs of the species are provided here for its easy identification.

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Introduction

The genus *Eriochloa* Kunth belongs to the family Poaceae (subfamily Panicoideae, tribe Paniceae and subtribe Melinidinae) is distributed in tropical and subtropical regions of the world and represented by 33 species (POWO, 2022). In India the genus is represented by 3 species, namely *Eriochloa barbatus* (Trin.) S. Yadav & M.R. Almeida and *E. procera* (Retz.) C.E. Hubb. (Prasanna *et al.*, 2020), including recently reported *E. meyeriana* (Nees) Pilg. (Das, 2021) from West Bengal.

While exploring the grasses of Telangana state, the authors have collected a *Eriochloa* species in flowering

and fruiting, which was later identified as *Eriochloa barbatus* (Trin.) S. Yadav and M. R. Almeida. Scrutiny of literature revealed that in India this species so far has been reported from Delhi, Maharashtra, Punjab and Rajasthan (Prasanna *et al.*, 2020), but not from southern parts of the country (Sreekumar and Nair, 1991; Kabeer and Nair, 2009; Pullaiah, 2015; Reddy and Reddy *et al.*, 2016; Prasanna, 2019; Prasanna *et al.*, 2020; Jalander *et al.*, 2021). Hence, it is reported here as an addition to the flora of southern India from Telangana. A detailed description and photographs are provided to facilitate its identification. Voucher specimens of the present collection are deposited at Telangana University Herbarium (TUW), Dichapally, Nizamabad, Telangana state.

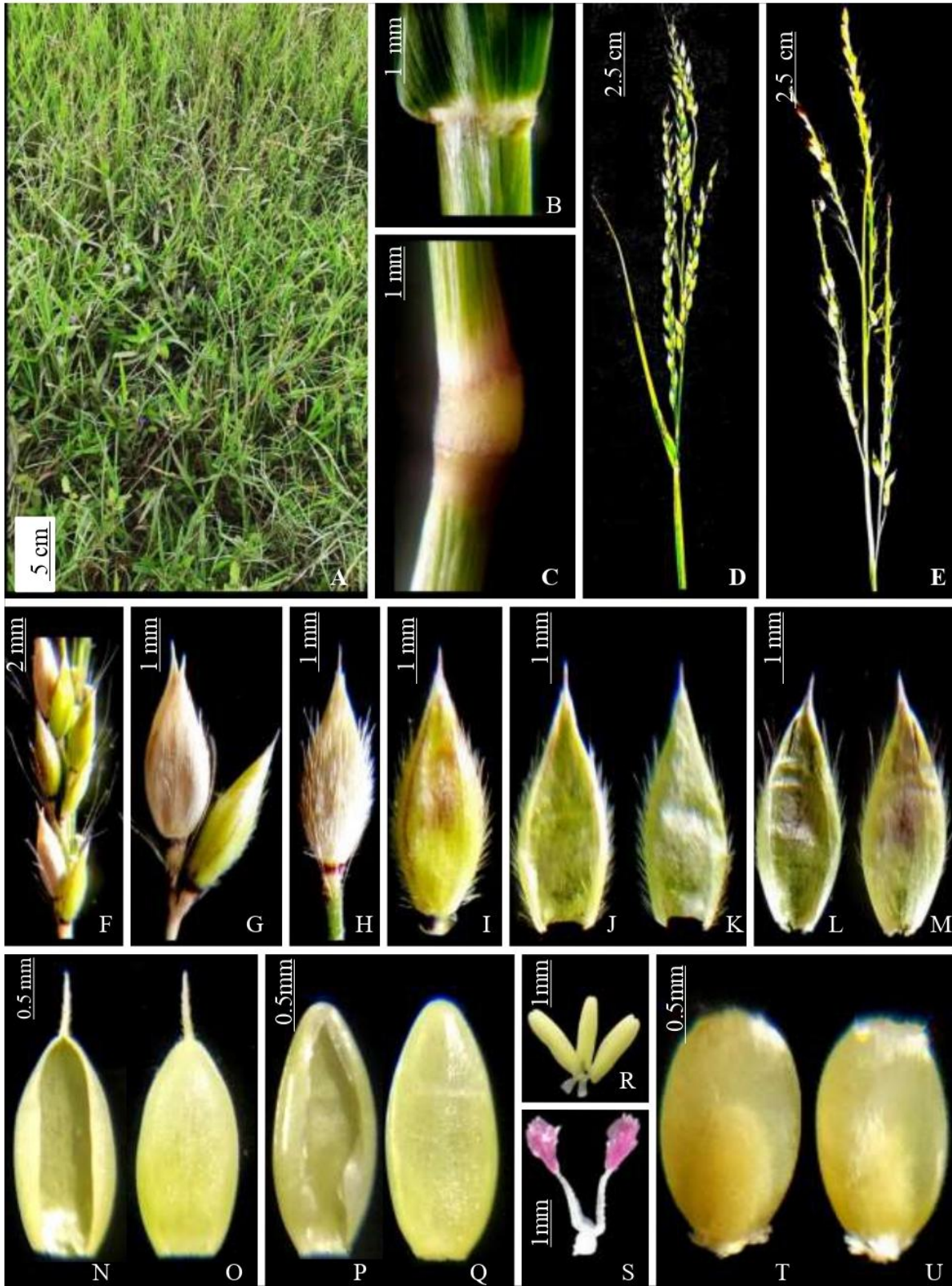


Fig. 1: *Eriochloa barbatus* (Trin.) S. Yadav & M.R. Almeida: A. Habitat; B. Ligule; C. Node; D-E. Inflorescence; G. Spikelets in pair; H-I. Spikelets; J-K. Upper glume; l-m: Lower lemma; N-O. Upper lemma; P-Q. Upper palea; Stamens & lodicules; S. Pistil; T-U. Caryopses.

Taxonomic treatment

Eriochloa barbatus (Trin.) S. Yadav & M.R. Almeida in Fl. Maharashtra, VIA. 145. 2014. *Helopus barbatus* Trin. in Spreng., Neue Entdeck. ii. 49. 1821. *E. fatmensis* (Hochst. & Steud.) Clayton in Kew Bull. 30(1): 108. 1975; Prasanna *et al.*, Poaceae in A. A. Mao & S. S. Dash (eds.), Fl. Pl. India Annot. Checkl. Monocot. 370. 2020. *Panicum fatmense* Hochst. & Steud., Unioltin. Schimper 806. 1837. *H. nubicus* Steud., Syn. Pl. Glumac. 1(2): 100. 1854. *E. nubica* (Steud.) Hack. & Stapf *ex* Thell. in Vierteljahrsschr. Naturf. Ges. Zurich 64: 697. 1919; Bor, Grasses Burma, Ceylon, India & Pakistan 312. 1960; Bhattacharya, Grasses Bamboos India 1: 102. 1997. *P. annulatum* A. Rich., Tent. Fl. Abyss. 2: 370. 1851.

Annuals 30-110 cm high. Culms erect or decumbent, sometimes rooting at the lower nodes; nodes and internodes glabrous. Leaf sheath compressed, 3-10 cm long, glabrous; ligule with a fringe of hairs; hairs 0.3-0.5 mm long; leaf blades linear, flat to involute, 5-20 × 0.3-0.6 cm long, glabrous. Panicles 6-15 × 0.6-3 cm; rachises 0.4-0.6 mm wide, smooth or scabrous, with 20-30 spikelets; spikelets solitary or in unequally pedicellate pairs at the middle of the branches; pedicels 0.5-1.2 mm long, consists up to 10 long hairs at the apices of pedicel; hairs 0.5-4 mm long.

Spikelets 3.6-4.2 × 0.8-1.2 mm, lanceolate, greenish or purplish-pink, yellow on maturity, entire spikelet disarticulating from the tip of pedicel. Lower glume reduced to a pink-coloured ring at the base of spikelet. Upper glume 3.5-3.9 × 1.5-1.6 mm, ovate-lanceolate, margins folded, hairy, shortly awned at apex; awns 0.2-0.3 mm long. Florets 2; lower barren, epaleate, upper bisexual paleate. Lower lemma 3-3.5 × 1-1.3 mm, elliptic, setose, acuminate, mucronate at apex. Lower paleas absent. Upper lemma 2.8-3 × 0.8-1 mm, elliptic, granulose, indurate, rounded with mucronate at apex; mucro 0.2-0.5 mm long. Upper palea 2.5-2.8 × 0.6-0.9 mm, indurate, finely rugose, obtuse-rounded at apex. Stamens 3; anthers 1.2-1.5 mm long. Ovary elliptic, 0.45 mm long; style hyaline; stigma plumose. Caryopsis ellipsoid, 1.5-1.75 × 0.8-1 mm, glabrous.

Flowering and fruiting

August-February.

Habitat

Occasional in marshy habitats. It grows in association with *Chloris quinquesetica* Bhide, *Commilina* sp., *Eragrostis atrovirens* (Desf.) Trin. ex Steud., *Eragrostis uniolooides* (Retz.) Nees ex Steud., *Paspalum distichum* L., etc.

Distribution

Delhi, Maharashtra, Punjab and Rajasthan; China, Myanmar and Sri Lanka.

Specimens examined

Telangana, Nizamabad district, Dichpally, 09.01.2022, V. Jalander & J. Swamy 0489 (TUV) (Fig. 1).

Conflict of interest statement

The authors declare that there is no conflict of interest regarding the publication of this article.
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