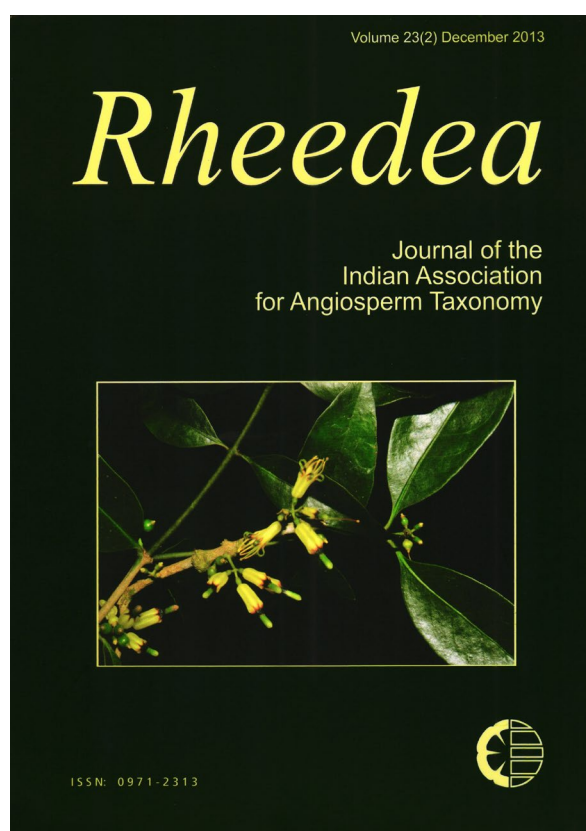




## *Cenchrus prieurii* (Poaceae): a new record for North eastern India

Pathak S.



How to cite:

**Pathak S. 2013.** *Cenchrus prieurii* (Poaceae): a new record for north eastern India. *Rheedia* 23(2): 132-134.

<https://dx.doi.org/10.22244/rheedia.2013.23.02.09>

Received: 17.04.2013

Revised and accepted: 02.12.2013

Published in print: 31.12.2013

Published Online: 31.12.2013



# *Cenchrus prieurii* (Poaceae): a new record for north eastern India

S. Pathak

Botanical Survey of India, CGO Complex, Salt Lake City, Kolkata – 700 064

E-mail: spathak.bsi@gmail.com

## Abstract

*Cenchrus prieurii* (Kunth) Maire, previously known from the North Western, semi-desert regions of India, is collected and reported for the first time from north eastern India. Detailed description and illustration are provided to facilitate easy identification.

**Keywords:** *Cenchrus prieurii*, new record, north eastern India, Poaceae

## Introduction

Grasses are the fourth largest family of flowering plants, globally represented by 10550 species under 715 genera (Mabberley, 2008). They are cosmopolitan in distribution and forming the main component of most degraded land and grassy ecosystems (Saarela, 2005). At present, there 1334 species under 261 genera are reported from India (Karthikeyan, 2005). The grasses of this region have gained very less attention and focus from the botanists.

Field exploration conducted at regular intervals in different areas of Mizoram during 2010-2011, the author collected several grass specimens. On critical examination and perusal of literature, one of the specimens was identified to be *Cenchrus prieurii*, which was previously neither collected nor reported from north-eastern India (Bor, 1940, 1960; Shukla, 1996; Noltie, 2000).

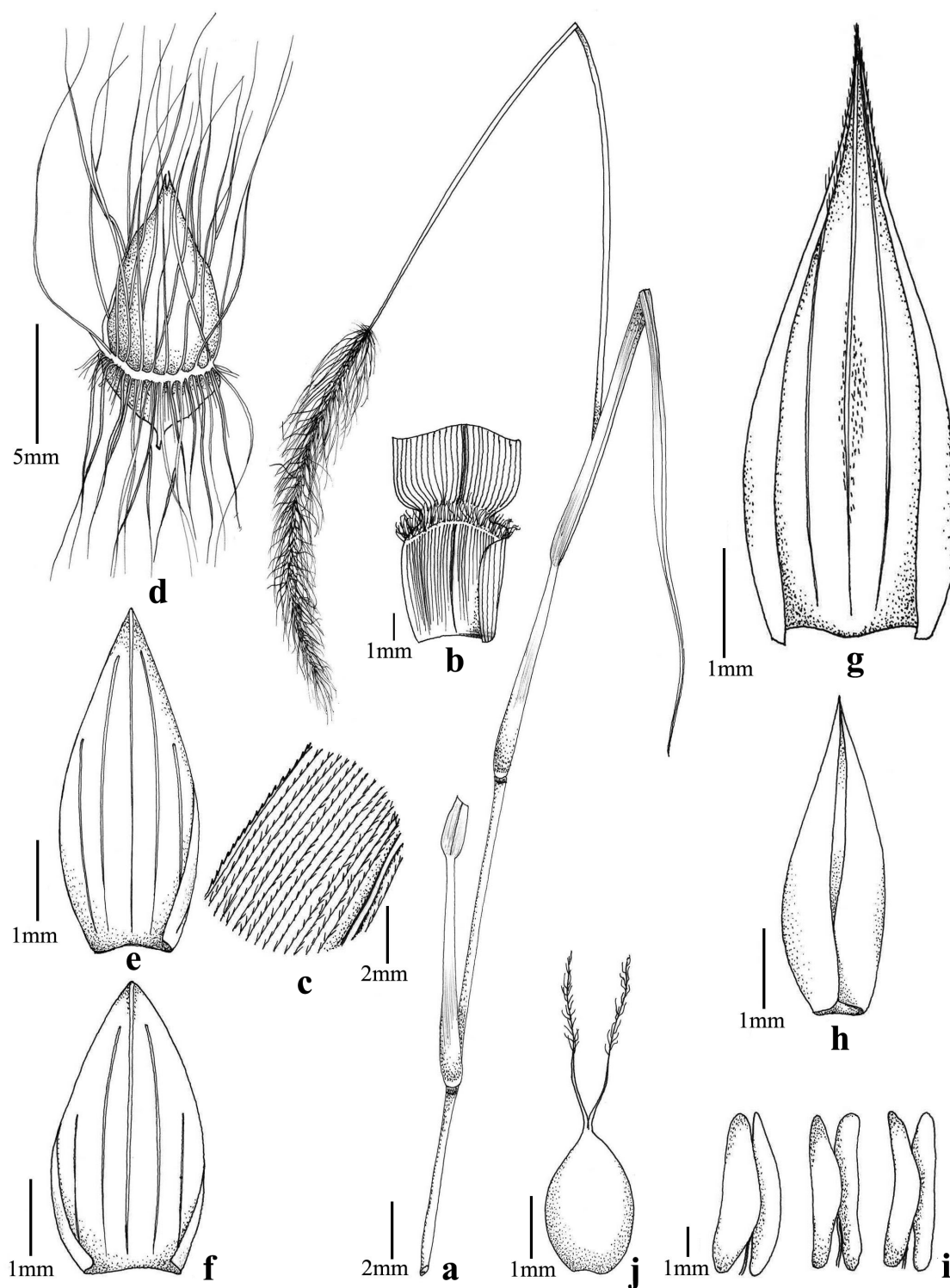
*Cenchrus* L. comprises of 23 species, predominantly distributed in the tropical regions of the world (Phillips, 1995; Mabberley, 2008). Hooker (1897) reported 2 species from British India. Later, Bhandari (1978) enumerated 5 species including 1 variety from desert region in western Rajasthan. Karthikeyan (2005) reported 7 species including 2 varieties from India. The present collection of *C. prieurii* from Mizoram is not only an extended distribution of this species, but also the first report of the genus from the north eastern India.

***Cenchrus prieurii*** (Kunth) Maire, Bull. Mus. Natl. Hist. Nat., II, 3: 523 1931; *Pennisetum prieurii* Kunth,

Revis. Gram. 2: 411.t.119.1831; Sultan & Stewart, Grasses W. Pakistan 1: 59. 1958; Bor, Burma, Ceylon, Grasses. India, Pakistan 290. 1960.

*Cenchrus prieurii* var. *scabra* Bhandari, Fl. Indian Des. 395. 1978. **Fig. 1**

Annuals. Culms erect or geniculately ascending; 30–175 cm tall, thin, slender, cylindrical, surface smooth, glabrous to slightly villous, yellowish green; nodes round, glabrous, dark brownish in colour, slightly bulging with a blackish nodal line below. Leaf blade 11–17 × 0.5–0.7 cm, linear to lanceolate, apex acuminate, filiform, base clasping the culm, margin faintly denticulate, mid-rib whitish, flat, lateral veins many, adaxial surface glabrous, scaberulous, abaxial surface hairy on nerves; ligule 0.8–1 mm long, fringe of shiny, white hairs; sheaths 6–7 mm long, striated, slightly keeled, scaberulous, glabrous, margins hyaline, dorsally compressed. Panicle spiciform, linear to oblong, 12–15 cm, peduncle introrsely scabrous above, primary branches accrescent to the central axis, with sessile scars on axis; axis angular, scaberulous, bearing deciduous spikelet in clusters. Spikelets subtended by an involucre of bristles, connate into a disc or cup below; bristles deciduous, numerous, 2- whorled, outer whorl of short, thin bristles, 0.7–1 cm long, inner bristles longer, 1.9–2.3 cm long, flattened, grooved on the face, rigid, antrorsely scaberulous, barbillate, yellowish brown. Spikelets sessile, 2 in a cluster, 2.7–3 × 0.7 cm, ovate to lanceolate, apex acuminate, base obconical, falling entire, dorsally compressed,



**Fig. 1.** *Cenchrus prieurii* (Kunth) Maire: **a.** Habit; **b.** Leaf ligule; **c.** Abaxial surface of leaf; **d.** Spikelet; **e.** Lower glume; **f.** Upper glume; **g.** Lemma; **h.** Palea; **i.** Stamens; **j.** Pistil. *S. Pathak* 48517 (CAL).

comprising of 1 basal sterile floret, 1 fertile floret. Glumes present, dissimilar, shorter than spikelet. Lower glume lanceolate, obtuse at apex,  $3.8-4 \times 2$  mm, glabrous, entire at margin, membranous, delicate, keeled near apex, 5-nerved, nerves green, fainting at base. Upper glume ovate, obtuse at apex,  $3.7 \times 1.8-2$  mm, glabrous, margins entire, membranous, partly hyaline, delicate, 5-nerved, lateral nerves faint. Basal florets sterile, without significant palea. Lemma ovate to broadly lanceolate, apex mucronate,  $4.7-5 \times 1.2$  mm, margin infolded at base, entire, faintly hairy at apex, 5-nerved, 2 lateral pairs faint or absent, membranous, surface coriaceous, granulose centrally. Palea broadly lanceolate, apex acute,  $4 \times 2.8$  mm, 2-veined, coriaceous, leathery. Anthers 3, yellowish, 4.6–5 mm long, filament white. Pistil 3.5–4 mm long; ovary round, brown, tapering at apex; style 2, filiform; stigma 2, feathery, purplish-brown.

*Flowering & Fruiting*: Mid April – late November.

*Habitat*: Grows in patches in open areas, dry, waste zones and sometimes along forest edges.

*Specimens examined*: INDIA, **Mizoram**, Aizawl, way to Reiek Peak, 292 m,  $23^{\circ}41'38.187''$  N –  $92^{\circ}36'36.838''$  E, 16.04.2011, S. Pathak 48517 (CAL). **Rajasthan**, Jaipur District, Raja Park, 430 m, 10:08:1964, S. Sharma 625 Barmer, Jogidhora, 21.11.1973, G.L. Tiwari 954, 08.10.1976, A.N. Singh 3126 (CAL!).

*Distribution*: India, America, Ethiopia, Pakistan, Saudi Arabia, Tropical Africa (Stewart, 1945).

## Acknowledgments

Author is grateful to the Director, Botanical Survey of India for facilities, to the Ministry of Environment and Forests for providing financial assistance under AICOPTAX project and also to the Forest Department, Mizoram for permission to explore the protected areas in the state.

## Literature Cited

- Bhandari, M.M. 1978.** *Flora of Indian Desert*, Scientific Publishers, Jodhpur. pp. 394-396.
- Bor, N.L. 1940.** *Flora of Assam*, Vol. 5. Gramineae, Government of Assam.
- Bor, N.L. 1960.** *The Grasses of Burma, Ceylon, India and Pakistan* (excluding Bambuseae) Pergamon Press, London.
- Hooker, J.D. 1897.** *The Flora of British India*, Vol. 7. L. Reeve & Co. London.
- Karthikeyan, S. 2005.** Common tropical and sub tropical sedges and grasses: an illustrated account: review. *Rheedea* **15** (2): 141-142.
- Mabberley, D.J. 2008.** *Plant book - A portable dictionary of Plants, their classification and uses*. 3<sup>rd</sup> edition, Cambridge University Press, Cambridge.
- Noltie, H. J. 2000.** *Flora of Bhutan*. Royal Botanic Garden, Royal Government of Bhutan.
- Phillips, S. 1995.** *Flora of Ethiopia and Eritrea*. Addis Ababa University Uppsala, Sweden.
- Saarela, J.M. 2005.** *North to Alaska: Collecting in America*. Plant Press.
- Shukla, U. 1996.** *The Grasses of North-Eastern India*, Scientific Publishers, Jodhpur.
- Stewart, R.R. 1945.** The Grasses of Northwest India, *Brittonia*, Vol. **5**(4): 404-468, New York Botanical Garden Press.

---

Received: 17.04.2013

Revised and Accepted: 02.12.2013