

Eragrostis nairii Kalidass C. (Poaceae): New Record for Southern Western Ghats, India

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Abstract

The present paper confirms the occurrence of *Eragrostis nairii* Kalidass C., a newly described taxon from Similipal Biosphere Reserve in Odisha in the Southern Western Ghats of Tamil Nadu. In the present study, a detailed description and ecology of this newly recorded species is provided.

Keywords: *Eragrostis nairii*, Poaceae, Nilgiri, Southern Western Ghats, Tamil Nadu, New record.

1. Introduction

Eragrostis Wolf, the largest Chloridoid grass genus, is morphologically diverse and taxonomically complicated (Veldkamp 2002; Ingram 2010) with an estimated total of 423 species, occurring in tropical, subtropical and warm temperature regions of the world (Ingram & Doyle, 2007). In India, the genus *Eragrostis* is represented by 36 species (Karthikeyan *et al.*, 1989). Various workers have added eight additional species for India either as new species or as new records (Ravichandran *et al.*, 1996; Matthew, 1999; Vivek *et al.*, 2012; 2013a, & 2013b). *Eragrostis nairii* Kalidass C. (2015) was described as a new species much later from Sal forests in Similipal Biosphere Reserve, Mayurbhanj.

During the floristic studies of Nilgiri hills of Southern Western Ghats in Tamil Nadu, a few species of monocots were collected. On critical examination of literature concerning the genus *Eragrostis* it is identified as *Eragrostis nairii* Kalidass Chitherto unknown/unreported species in the Southern Western Ghats forms a new distributional record.

Notes

The newly described *Eragrostis nairii* is an annual herb; it is very allied to *E. pilosa* (L.) P. Beauv. but differs from by having culms 15-25 cm in high, panicles lanceolate or elliptic, to 15 cm long, spikelets linear-oblong or elliptic, florets ca. 8-florets, stamens 2 and caryopsis ovoid, to 0.3 mm long (Kalidass, 2015).

Systematic Treatment

Eragrostis nairii Kalidass C. in *J. Econ. Taxon. Bot.* Vol. 39(1): 126-129. 2015.

Herb, densely tufted, Culms dense, branched at base, up to 25 cm high; 1.0-1.5 mm in wide; nodes glabrous. Leaves sheaths 1.0-4.5 cm, ligulate; ligule a membranous rim, vilous; leaf blade linear, 3-8 x 0.1 – 0.15 cm, base truncate & apex filiform. Panicles lanceolate or elliptic, 10-15 cm long, purple to violet, shade from base, breaking up from the base, c. 8-floret, rachilla branched, persistent, opposite florets slightly overlapping. Lower glume, ovate to lanceolate, to 0.3 mm, acute at apex, cuneate at base, glabrous, chartaceous, minutely ciliated, 1-nerved. Upper glume, ovate-lanceolate, up to 1.0 mm, tips acuminate, obtuse at base, chartaceous, 1-nerved, Lemma broadly ovate, to 1.1 mm, prominent, membranous, tips acuminate, 3-nerved. Palea, obovate, to 0.7 mm long, 2 keeled, minutely ciliate along the keels. Lodicules 2, oblong, c. 0.05 mm. stamens 2, anthers elliptic, purple, c. 0.1 mm long, versatile, glabrous, filaments c. 0.03 mm long. Ovary ovate to obovate; c.0.04 mm; style c. 0.04 mm long, divided into two filaments with ovary, stigmas plumose, c.0.2 mm long. Caryopsis globose, 0.005 mm.

Flowering and Fruiting: July - December

Distribution and Ecology:

It is described based on the collections from the riparian banks of semi-evergreen forest of Similipal Biosphere Reserve, Patbil and Thakurmundha forest, Mayurbhanj district, Odisha. The species *E. nairii* is

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growing along the forest, infrequently found in some cool areas. Sometimes this species living associates with some grasses. Hence, it is first time report from Nilgiri hills in Southern Western Ghats of Tamil Nadu.

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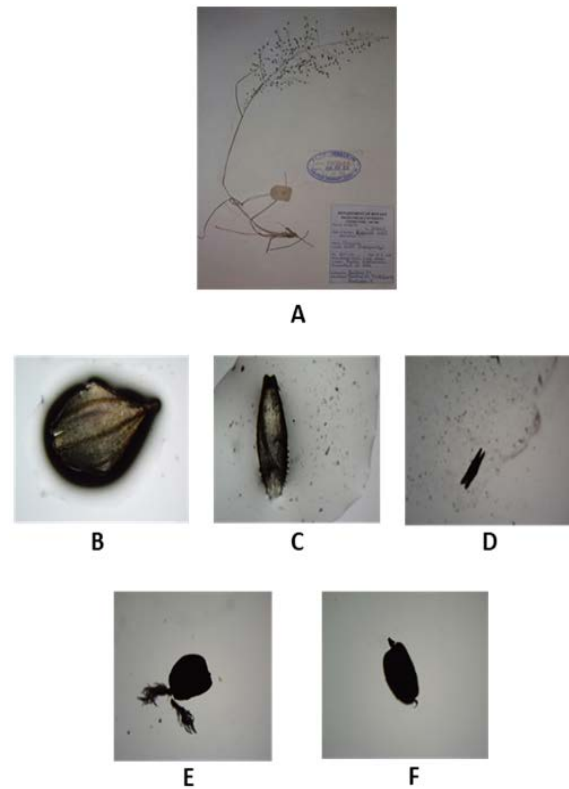


Figure 1. *Eragrostis nairii* Kalidass C.: A. Habit, B. Glume, C. Palea, D. Anther, E. Lodicules, F. Caryopsis