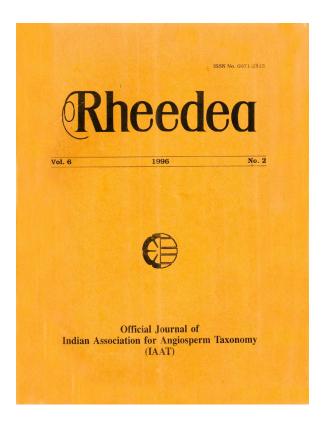


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Dimeria sivarajanii (Poaceae), a new species from Kerala, India

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Abstract

A new species of Dimeria R.Br. viz., D. sivarajanii, is described and illustrated.

INTRODUCTION

Dimeria R. Br. is a tropical and subtropical genus of grasses of over 48 species, and is represented in India by over 35 species of which 21 species have been reported from the state of Kerala (Sreekumar & Nair, 1991; Ravi & Anilkumar, 1992; Ravi, 1995; Ravi, Saxena & Brahmam, 1995; Ravi, 1996, ined.).

The second author originally made a collection of a species of *Dimeria* from Kochu Pampa hills (100 m alt.) of Pathanamthitta district in Kerala, which appeared to be distinct from all the known species of the genus. Subsequently, the authors made several collections of the species from different areas of Kochu Pampa hills during January, 1996. On critical study with the help of Dr. Thomas A. Cope (K), the species was confirmed to be a new one allied to *D. lawsonii* (Hook.f.) C.E.C. Fischer.

Dimeria sivarajanii Mohanan et Ravi, sp. nov. (Fig.1)

D. lawsonii (Hook.f.) C.E.C. Fischer affinis, a qua distincta racemis 1 ad 2, rhachidi latiore, usque ad 1.5 mm lata, ad marginem late alata, callo longiore, usque ad 1 mm longo, gluma inferior plus manifeste alata, gluma superior acuminato-aristata, late alata in carina, ala deorsum suberosa sursum papyracea, anthera longiore, 1.25-2 mmm longa, arista longiore, usque ad 14 mm longa, cum columna longiore 3-5 mm longa.

Type: India, Kerala, Pathanamthitta Dist., Kochu Pampa hills, 4 Jan. 1996, Ravi TBG&RI 24041 (Holo-TBGT; Iso - MH, KFRI).

Additional specimens examined: Kerala, Pathanamthitta Dist., Kochu Pampa hills, 17 Dec. 1992, Ravi SNCH 3723 (TBGT); ibid., Ravi SNCH 3726 (TBGT).

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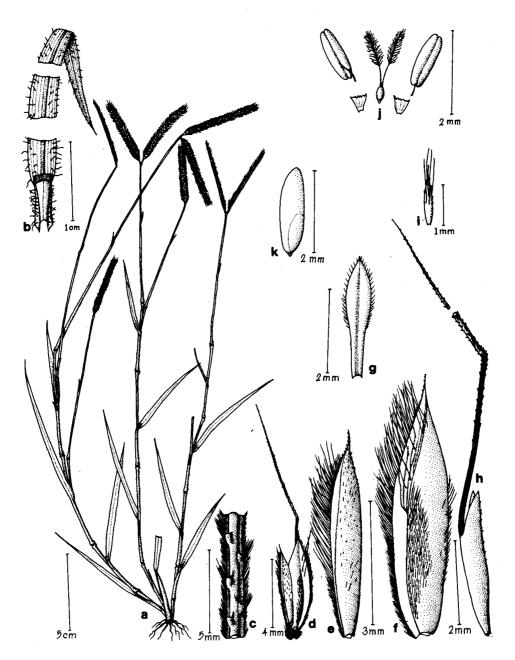


Fig. 1. Dimeria sivarajanii Mohanan et Ravi. A. Habit; B.Leaf; C. Rachis, D. Spikelet; E. Lower glume; F. Upper glume; G. Lower lemma; H. Upper lemma; I. Upper palea; J. Lodicules, stamens & pistil; K. Grain.

Dimeria sivarajanii (Poaceae), a new species from Kerala, India

D. sivarajanii sp.nov. is allied to D. lawsonii (Hook.f.) C.E.C. Fischer, but distinct from it in having 1-2 racemes; rachis broad up to 1.5 mm wide, broadly winged on its margins, callus long, to 1 mm; wing more prominent for the lower glume, upper glume acuminate-aristate, broadly winged on its keel, wing corky below and papery above, anther 1.25-2 mm long, and awn up to 14 mm long with a 3-5 mm long column.

Annual erect herb. Culms tufted and branched, up to 40 cm tall; nodes bearded. Leaves all along the culms; sheath keeled on the back, hyaline towards the margins, lower ones shorter and slipping from the culms, upper ones longer and more or less closely embracing the culms, up to 8 cm long, closely beset with bulbous-based hairs except towards the base, progressively less hairy towards the apex of the culms, with the uppermost ones being more or less glabrous; blade linear, elliptic-lanceolate, shortly narrowed and rounded at the base, acuminate at apex, 15 cm x 5 mm, garnished all over with bulbous-based hairs, more so on upper side; ligule membraneous, truncate-fimbriate at apex, c. 1 mm long. Racemes 1 or 2; rachis flattened on the back, longitudinally ridged or not on the convex face, broadly winged, up to 7 cm long, 1-1.5 mm wide, ciliate on the margins; pedicels 0.5-0.75 mm long, concave at the apex, densely ciliate on the outside, sparsely so to glabrous on the inside. Spikelets elliptic-oblong in profile, 5.5-7.5 mm long including the arista of the upper glume; callus prominent, 0.5 -1 mm long, callus hairs up to 1.5 mm long. Lower glume subcoriaceous, oblong-elliptic, acuminate-aristate at the apex, 4.5 - 5.5 mm long including the arista of c. 0.5 mm long 0.5-0.6 mm wide, keeled on the back, keel narrowly winged all along, wing 0.2-0.3 mm wide above the middle, narrowed to the base, densely ciliate on the back except towards the spinulose apex, minutely scaberulous to sparsely shortciliate on the sides. Upper glume oblong-elliptic, acuminate-aristate at the apex, 5.5-6.5 mm long including the arista of c.0.5 mm long, 1-1.5 mm wide, broadly winged all along the keel, wing c. 0.4 mm wide, coriaceous and opaque c. 3/5 towards the base, thin and papery towards the apex, densely ciliate on the back except towards the spinulose apex, with a few long cilia in the upper 1/3 on the sides of the wing; sides coriaceous, sparsely to moderately ciliate, especially towards the wing more or less in the middle, sometimes with a few long cilia towards the apex; margins hyaline, sparsely short-ciliate in the middle. Lower lemma hyaline, linear-oblanceolate, 2.75 - 3.75 mm long, broadly cuneate in the lower half, acute at the apex, shortly ciliate on the margins from below the middle upwards, 2-nerved and epaleate. Upper lemma hyaline, oblong-elliptic, 3-4 x 0.75 mm (when folded), bifid at the apex, lobes acute, sparsely short-ciliate on the margins and awned from the sinus; awn geniculate, up to 14 mm long with a column 3-5 mm long. Palea linear-lanceolate, acuminate-aristate at the apex, up to 1.5 mm long, sparsely papillate and with or without 1 or more long cilia. Lodicules 2. Stamens 2, anthers 1.25-2 mm long. Grains oblong elliptic, 2-2.5 x 0.5-0.75 mm, flattened, more or less subacute to roundish at the apex.

The specific epithet of the new taxon is after the late Dr. V.V. Sivarajan whose contributions in the field of angiosperm taxonomy has given a tremendous boost to taxonomic studies in Kerala.

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