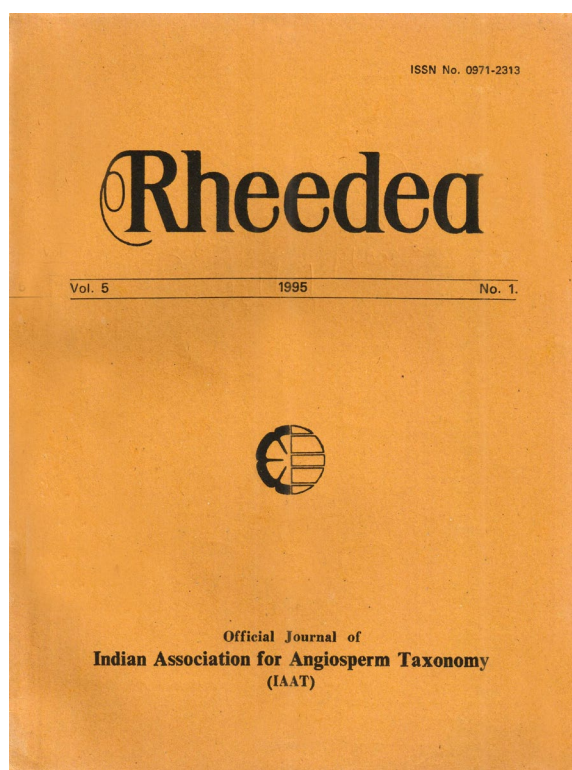




Two new species of *Dimeria* R.Br. (Poaceae) from Kerala, India

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Two new species of *Dimeria* R. Br. (Poaceae) from Kerala, India

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Abstract

Two new species of *Dimeria* R. Br. viz., *D. chelariensis* and *D. eradii*, are described and illustrated

Dimeria, a tropical and subtropical genus of mostly montane species, has so far been reported to have 17 species in Kerala, (Sreekumar & Nair, 1991, Ravi & Anilkumar, 1992).

The author, during the course of his taxonomic exploration of the northern districts, Malappuram and Kozhikode of Kerala, collected specimens of two species of *Dimeria* R. Br. which appeared to be distinct from the known species of the genus. Subsequently, after consultation with Dr. Thomas A. Cope of Royal Botanic Gardens, Kew and Dr. P. V. Sreekumar of Andaman and Nicobar Circle of Botanical Survey of India, they were confirmed as new. They are described and illustrated here.

***Dimeria chelariensis* Ravi, sp. nov.**

(Fig. 1)

D. copeana Sreekumar et al. affinis, sed a hoc distincta lamina lineari-lanceolata latiore, usque ad 3,5 mm lata, racemis 2—4, spiculis brevibus, 2.5—3 mm longis, glumis inferioribus breviter aristatis, glumis superioribus acuminatis ad aristatis, anguste alatis in carinis versus apicem, lemmatibusque superioribus oblanceolatis paleatisque.

Type: India, Kerala, Malappuram Dist., Chelari, 28. Nov. 1992. Ravi 3606 (Holo TBGT, Iso MH, KFRI)

Dimeria chelariensis is allied to *D. copeana* Sreekumar et al. but distinct in having broader, linear-lanceolate leaf blades up to 3.5 mm wide, 2—4 racemes, smaller, 2.5—3 mm long, spikelets shortly aristate lower glumes, acuminate to

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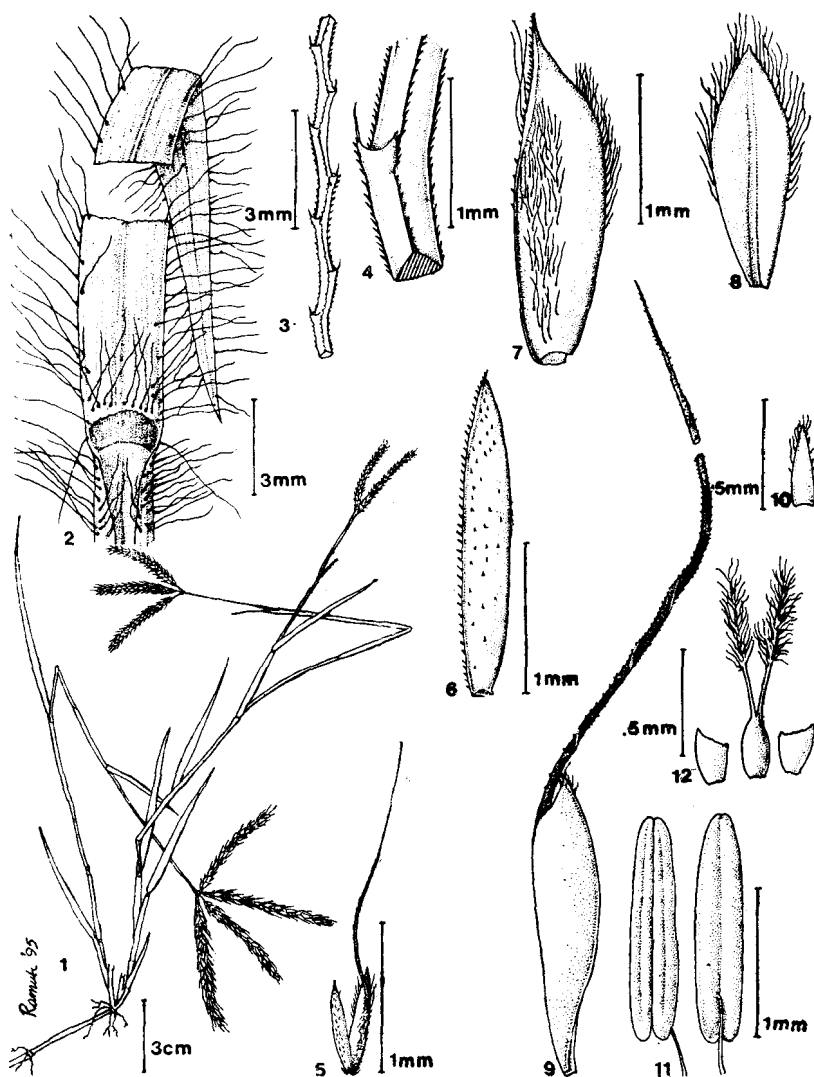


Fig. 1. *Dimeria chelariensis* Ravi. 1. Habit, 2. Leaf, 3. Rachis, 4. A portion of rachis enlarged 5. Spikelet, 6. Lower glume, 7. Upper glume, 8. Lower lemma, 9. Upper lemma, 10. Upper palea, 11. Stamen, 12. Lodicules & pistil.

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ariate upper glumes narrowly winged on the keel towards apex and oblanceolate and paleate upper lemmas.

Perennial herb. Culms slender, basal portion procumbent or subteranean, rooting at nodes; nodes bearded. Leaves scattered; sheath to 4.5 cm long, sharply keeled on the back, lower sheaths long-ciliate, especially towards apex with bulbous-based hairs, upper ones sparsely ciliate to almost glabrous; blade up to 15 cm \times 3.5 mm, linear-lanceolate, acuminate, long-ciliate with bulbous-based hairs mostly on the margins and mid-rib below, more profuse towards the base in the lower leaves and mostly on the margins in the upper ones; ligule membranous, more or less rounded and prominently fimbriate at apex, up to 1. mm long. Racemes 2–4; rachis 5–7 cm \times 0.25–0.5 mm, zig-zag, triquetrous, sharply angled and scabrid at angles. Spikelets elliptic, 2.5–3 mm; pedicel c. 0.25 mm long, concave at apex, scabrid on the margins with one or more bristly hairs towards apex; callus short, c. 0.25 mm long, callus hairs c. 0.5 mm long. Lower glume 2.25–2.5 \times 0.25 mm, linear-oblong, acuminate-aristate and incurved at apex, keeled on the back; keel scabrid, narrowly winged towards apex, sides subcoriaceous, sparsely scabrid, especially towards apex. Upper glume 2.5–2.75 \times 0.6–0.7 mm, elliptic to oblong-oblanceolate, acute-aristate at apex, keeled on the back; keel scabrid and narrowly winged towards apex, with a few long cilia, sides subcoriaceous, ciliate towards the keel except at tip, glabrous otherwise, margins hyaline, long-ciliate from the middle upwards except the tip. Lower lemma 1.5–1.75 mm long, hyaline, oblanceolate-acute, 2-veined along the middle, ciliate on the margins 2/3 towards apex. Upper lemma c. 2 mm long, hyaline, 2-fid at apex; lobes acute, sparsely short-ciliate on the margins, awned from the sinus; awn c. 8 mm long with a 2.5 mm long column, scaberulous. Palea small, c. 0.4 mm long, lanceolate, papillate. Lodicules 2, small, wedge-shaped. Stamens 2; anthers 1.5 mm long. Ovary small, c. 0.3 mm long; styles c. 0.2 mm long; stigmas c. 0.5 mm long. Grains oblong, compressed, obliquely acute at apex, c. 1.5 mm long.

The specimens of the new taxon were collected from an open field near Calicut University campus in Chelari, Malappuram Dist. The specific epithet is after type locality. They were growing along with other grasses including species of *Dimeria* like *D. thwaitesii* Hack. and *D. ornithopoda* Trin.

***Dimeria eradii* Ravi, sp. nov.**

(Fig. 2)

Dimeria raizadae V. J. Nair et. al. affinis, sed differt habitu annuis, culmis gracilibus c. 0.3 mm latis sub inflorescentiis, nodis ciliatis glabrescentibus, foliis basalibus pedunculisque bene exsertis e vagina suprema, racemis

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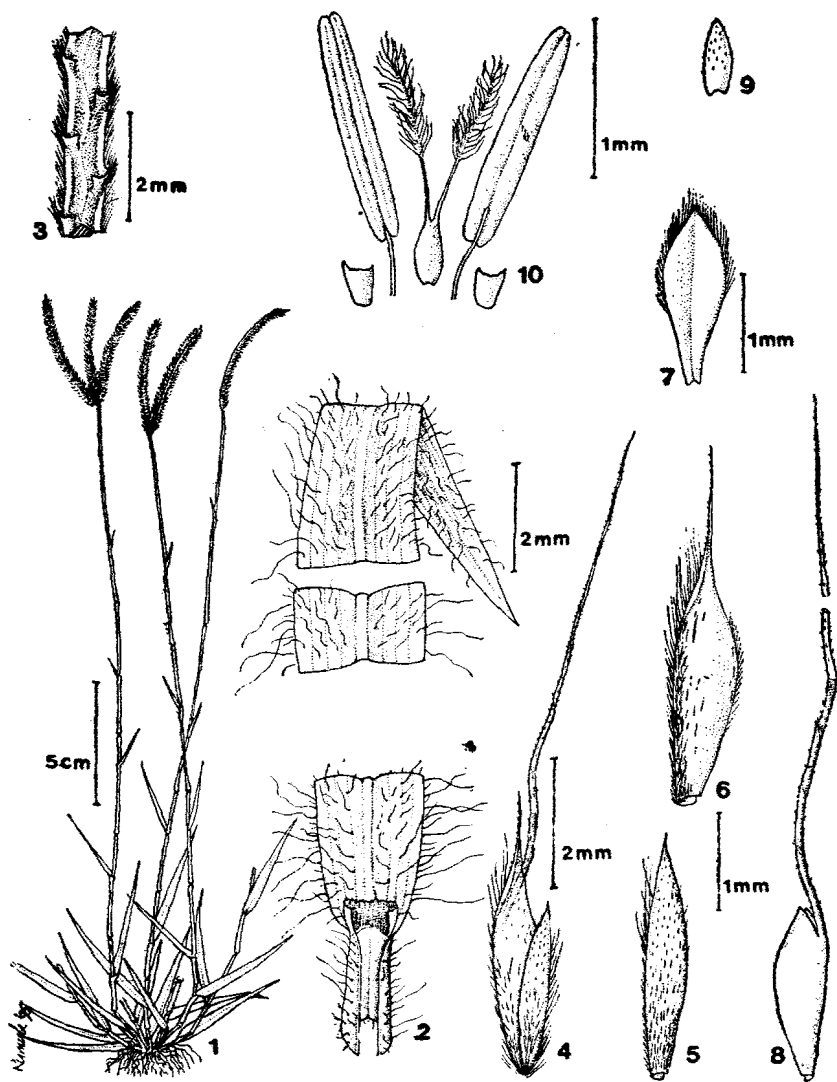


Fig. 2. *Dimeria eradii* Ravi. 1. Habit, 2. Leaf, 3. Rachis, 4. Spikelet, 5. Lower glume 6. Upper glume, 7. Lower lemma, 8. Upper lemma, 9. Upper palea, 10. Lodicules, Stamens & Pistil.

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1—3, pilis calli brevibus, 0.5—0.75 mm longis, glumisque superioribus infra apicem anguste alatis.

Type: India, Kerala, Malppuram Dist. Tenhipa'am, 29, Nov. 1992 Ravi 3641, (Holo TBGT; Iso MH, KFR I)

D. eradii is allied to *D. raizadæ* V. J. Nair et al. but distinct in being annual, having slender culms c. 0.3 mm wide below the inflorescence, ciliate nodes glabrous at length, leaves basal, peduncles well exerted from the uppermost sheath, 1—3 racemes, shorter callus hairs 0.5—0.75 mm long and upper glumes narrowly winged below the apex.

Tufted annual. Culms slender, glabrous, up to 40 cm long, 0.3 mm wide below the inflorescence; nodes ciliate, glabrous at length. Leaves basal, decrescent to sheath towards apex; sheath up to 7 cm long, keeled on the back, lower ones sparsely ciliate with bulbous based hairs towards apex, glabrous otherwise, upper ones more or less glabrous and longer towards the apex of the culm; ligule membranous, more or less fimbriate at apex. 0.5—0.75 mm long; blade upto 9 cm \times 4 mm, narrowly elliptic-lanceolate, acute to acuminate at apex, slightly cuneate or rounded at base, ciliate with bulbous based and simple hairs on the lower surface, the former especially on the margins and midrib, more or less sparsely ciliate on the upper surface, scaberulous on the margins towards apex. Racemes 1 to 3, well exerted from the uppermost sheath; rachis upto 10 cm long, 0.6—1 mm wide, more or less flexuous, compressed-trigonal, broadly winged and ciliate on the margins. Spikelets on short, c. 0.3 mm long pedicels, 3—4.5 mm long including the awn of the upper glume; callus c. 0.25 mm long, callus hairs 0.5 to 0.75 mm long. Lower glume 2.5—3 \times 0.3—0.4 mm elliptic-oblong, acuminate-aristate at apex, keeled on the back; keel narrowly winged and ciliate except towards apex. sides subcoriaceous, hyaline towards margins, sparsely but prominently scaberulous, sparsely ciliate below the middle, more so towards base. Upper glume 2.75—4.25 mm long including 1 mm long arista and 0.6 mm broad, oblong-oblancheolate to oblong-elliptic, acuminate-aristate at apex, keeled on the back; keel winged 1/3 towards apex, scaberulous throughout and ciliate except at apex, a few cilia above the middle longer, sides subcoriaceous, sparsely ciliate near the keel, margins hyaline and ciliate in the middle. Lower lemma upto 2 \times 0.7 mm, hyaline oblancheolate, acute at apex, cuneate at base, 1-nerved, ciliate on the margins from below the middle upwards. Upper lemma c. 2 \times 0.7 mm (when folded), oblancheolate, hyaline, 2-fid at apex, lobes acute, awned from the sinus; awn scaberulous, 6.5—7.5 mm long; column c. 2.5 mm long. Palea small, c. 0.4 mm long, papillate. Lodicules 2. Stamens 2; anthers 1.5 to 1.75 mm long. Ovary

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c. 0.25 mm long; styles c. 0.3 mm long; stigmas c. 0.5 mm. Grains oblong-elliptic, compressed, obliquely acute at apex, 1—1.25 mm long.

The species is named after the author's teacher, Late Prof. N. A. Erady who initiated him into taxonomic research and was himself a well known researcher with several new taxa to his credit. The specimens of the new species were collected from the campus of Calicut University and neighbouring places in Malappuram Dist. as well as from the hilly places of Olavanna near Kozhikode town. In both places the new species forms a very conspicuous component of the vegetation during the months of November-February,

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