

BRACHIARIA MARSELINI SP. NOV. A NEW SPECIES OF POACEAE FROM MAHARASHTRA¹

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Genus *Brachiaria* (Trin.) Griseb. (Poaceae) consists of about 90 species distributed in warm regions, generally in Africa and Asia, with the exception of one European species. In India, there are about 20 species and 7 infraspecific taxa, of which 7 species are represented in Maharashtra. The authors have collected an undescribed species from Malvan in Sindhudurg District, Maharashtra, belonging to genus *Brachiaria* and described herein.

Key words: *Brachiaria*, Panicoideae, Poaceae, Malvan, Maharashtra, Sindhudurg

During a floristic survey on flowering plants of Malvan taluka, Sindhudurg district, Maharashtra, in September 2000, we came across a patch of interesting grass under the shade of a tree, on the bank of a stream. A few plants were collected from the area, processed and preserved in the Blatter Herbarium and later assigned to the genus *Brachiaria* Griseb. Comparison with material deposited at Blatter Herbarium (BLAT) and literature at the BLAT library (Almeida 1990; Blatter and McCann 1935; Bor 1960; Cooke 1903-1908; Dalgado 1898; Hooker 1872-1897; Kulkarni 1988; Karthikeyan *et al.* 1989) confirmed it as a new species of the genus *Brachiaria* Griseb., Family Poaceae, and was named *Brachiaria marsekini* sp. nov. The new species is very closely allied to *Brachiaria ramosa* (Linn.) Stapf. in external morphology, but differs in the following characters:

Species similis *Brachiaria ramosibus* differet tamen

Habitus annualis gracilis. Axis inflorescentia 2-4 ramus.

Superus glumae planus.

Holotype: N.D. Gawade 1442 - Masure - Malvan, Sindhudurg, 27.ix.2000 (BLAT)

Isotype: N.D. Gawade 1445 - Masure - Malvan, Sindhudurg, 27.ix.2000 (BLAT)

A detailed description of the plant, along with floral peculiarities, is provided in the text.

A prostrate annual runner, 20-30 cm tall, rooting at nodes; roots 2-3, mostly arising from the basal node, slender, thin, narrow, 1.5-6 cm long, giving out lateral roots at some distance. Stem slender, covered by sheathing petiole; grooved, striate, hairy on the ventral surface; hairs short, brown, erect, closely arranged on the edges of the stem. Internodes 3-3.2 cm long, ensheathed by petiole. Leaves linear-lanceolate, up to 7 cm, 0.5-0.6 cm long, excluding the petiole. Petiole 2-2.1 cm long, striate, brownish-hairy on the margins, slightly constricted at the joint with the lamina; hairs longer than the hairs of the stem, arising in clusters below the

junction of the petiole, telescopic. Lamina slightly curved at the base towards one side; mid-vein of the lamina prominent, lateral veins interspersed with 4 stronger parallel veins, running parallel from the base to the apex, base of the lamina rounded, one portion of the lamina slightly overlapping at the base with the other. Petiole hollow. Hairs present at the junction of the lamina, and petioles of two types, of which one type occurs in clusters and the other spreads on the edges of the petiole. Mid-vein of lamina very prominent, continues with mid-vein of petiole on the lower surface. Ligule U-shaped, situated at the junction of the lamina and the petiole, where it is slightly grooved and hairy, hairs brown, linear, unicellular, slightly curved at the apex. Inflorescence terminal panicle, about 10 cm long, with 4-5 branches, holding distantly arranged spikelets on a green, slender, striate ribbed rachis somewhat grooved in the middle, arising from the axil of a leaf. Spikelets in pairs, one stalked and the other almost sessile to the naked eye, 8 mm long; outer bracts 2, small, ensheathing the flowering glume, forms a V shape at the base. Lower involucre glume 4 mm long, more or less equal in length of the flowering glume, ovate, acuminate, 3-nerved with a prominent mid-nerve. Upper involucre glume 4.5 mm long, 6-nerved, light green, membranous. Lower floral glume 4 mm long, 5-nerved, acuminate; upper floral glume 3-nerved, 4 mm long, acuminate; palea of upper floral glume ovate, acute, 3.5 mm long.

Male spikelet with 3 stamens, filament white, slender; anthers dark yellow, divaricate at both ends. Pollen grains rounded, 2-porate, exine smooth, intine pinkish; lodicule one, oval-shaped fleshy, situated at the base of the lemma. Inner floret bisexual, consisting of 3 stamens; anthers long, golden yellow when mature, divaricate at both ends, filaments slender, white. Gynaecium with superior, white, ovate ovary; style 2-partite from the base; stigma 2, plumose, free. Caryopsis globose with short acute apex, testa of caryopsis 3-4 veined, ovule anatropous, prominent, fleshy.

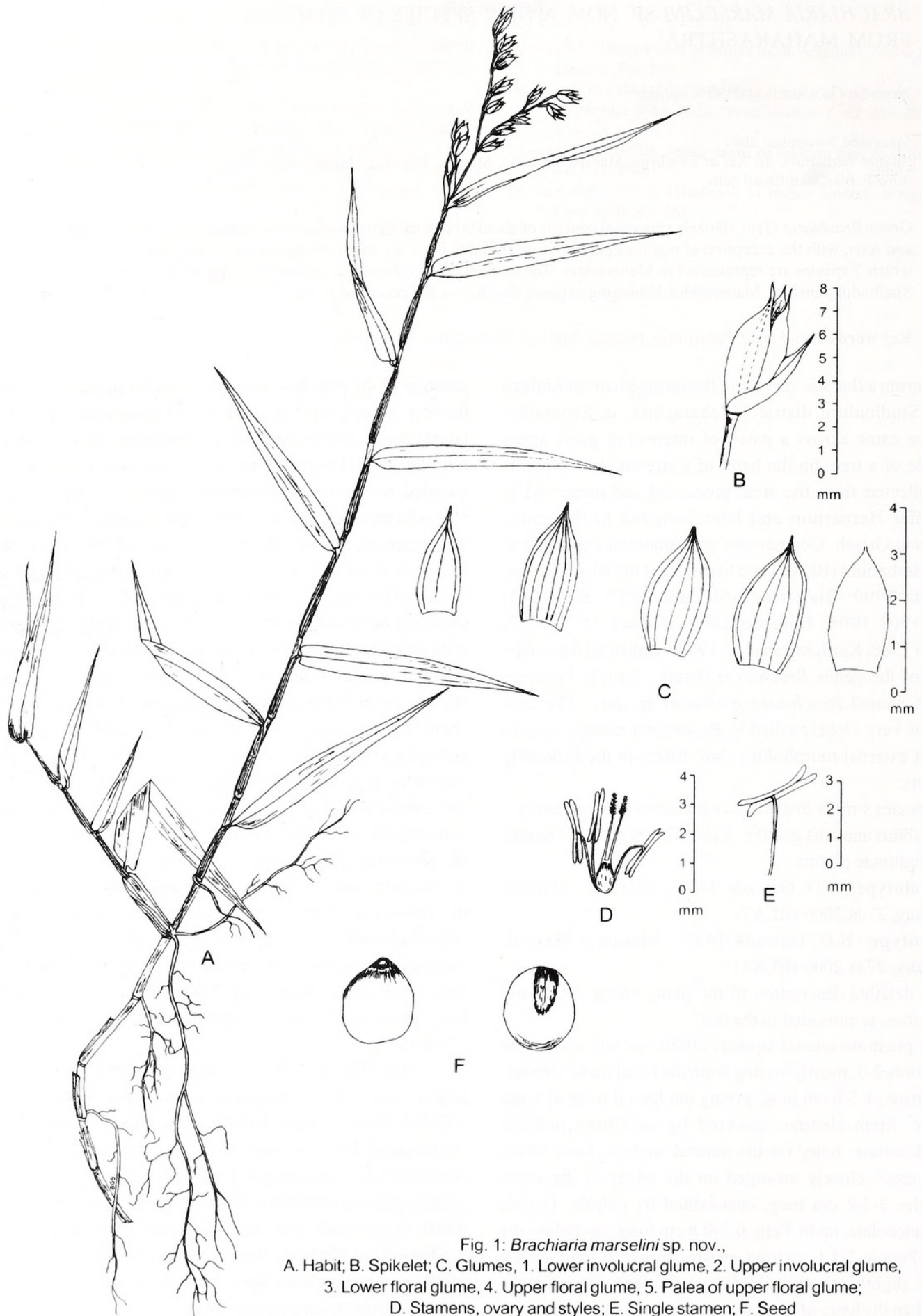


Fig. 1: *Brachiaria marselini* sp. nov.,
A. Habit; B. Spikelet; C. Glumes, 1. Lower involucre glume, 2. Upper involucre glume,
3. Lower floral glume, 4. Upper floral glume, 5. Palea of upper floral glume;
D. Stamens, ovary and styles; E. Single stamen; F. Seed

Table 1: Differences between *Brachiaria marselini* sp. nov. and *B. ramosa* (Linn.) Stapf

<i>Brachiaria marselini</i> sp. nov.	<i>Brachiaria ramosa</i> (Linn.) Stapf.
1. Slender annual.	1. Stout annual.
2. Internodes 2-2.2 cm long, nodes covered by sheathing leaf base, which is hairy all over the edges. Hairs short, erect, standing in the form of toothbrushes, many at the juncture of the node.	2. Internodes 8-10 cm long, distinctly ribbed; constricted narrowly, short, white, wooly hairs all around. Sheathing leaf base slightly auricled, hairy, hairs of two types, long and stiff hairs at the base on both sides and short hairs in the middle.
3. Leaves linear-sagittate, terminating in a long acuminate apex. Lamina curved at base, hairy on one side, hairs brown.	3. Leaves linear; leaf margins wavy, undulate, thick, with stiff hairs on ventral surface.
4. Mid vein thick, prominent, lateral veins faint, lamina punctate all over. Margin with prominent spicules slightly curved upwards (visible under microscope).	4. Veins parallel, of two types, 4-5 stronger veins alternating with thinner veins, lamina hairy; spicules inconspicuous.
5. Panicle terminal with 2-4 branches.	5. Panicle terminal with 8-10 branches.
6. Spikelets and rachis not hairy.	6. Spikelets with 2-3 erect hairs at apex of short stalk.
7. Lower involucral glume more or less equal in length to the lower floral glume.	7. Lower involucral glume 1/2 as long as lower floral glume.
8. Upper involucral glume with plain surface	8. Upper involucral glume cuspidate
9. Upper floral glume plain	9. Upper floral glume scrobiculate.
10. Anthers divaricate at both ends	10. Anthers linear, straight.

Brachiaria marselini sp. nov. is illustrated here (Fig. 1) to clearly show the peculiar features of the species.

Holotype: N.D. Gawade 1442 - Masure - Malvan, Dist. Sindhudurg, 27.ix.2000 (BLAT)

Isotype: N.D. Gawade 1445 - Masure - Malvan, Dist. Sindhudurg, 27.ix.2000 (BLAT)

The material has been deposited at the Blatter Herbarium, St. Xavier's College, Mumbai.

Etymology: This species is named after Prof. (Dr.) Marselin R. Almeida D.Sc., as a mark of respect for his

contribution to the field of Plant Taxonomy, especially of Maharashtra, western India and his ever-willing help to anybody who approaches him for identification of plants.

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