

MANISURIS MYSORENSIS JAIN ET HEMADRI—A NEW GRASS FROM INDIA

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ABSTRACT

Manisuris mysorensis Jain et Hemadri sp. nov. (Poaceae) is described and illustrated.***Manisuris mysorensis* Jain et Hemadri sp. nov.**

Accedit ad *M. forficulatam* Fischer, ab ea tamen differt articulis rhacheos 2.5 mm longis, absque crinibus; pedicellis brevioribus, 1.5 mm longis; gluma inferiore spiculae sessilis (alis inclusis, sed exclusis aristis) 3-4.5 mm longa, late ovata, sed alis inclusis, fere orbiculari; alis 1-2 mm longis; gluma inferiore spiculae pedicellatae (arista exclusa et ala inclusa) elliptico-ovata, 3-4.5 mm longa; ala exclusa, ovata 2.5 mm longa.

Gramen annuum caespitosum ad 20 cm altum. Culmi molliter vel dense villosi, sparse ramosi, desinentes in racemos solitarios. Foliorum vaginæ teretes, superiores spathaceae, dense villosae. Ligula 1.5-2 mm longa. Lamina linearis, 6-10 cm longa. Pedunculi villosi. Racemi 1-3.5 cm longi, compressi, glabri. Articuli rhacheos subclavati 2.5 mm longi, fusi pedicellis; pedicelli 1.5 mm longi. Spiculae binæ, quarum una sessilis et hermaphrodita, altera vero pedicellata et mascula vel neutra, formæ dissimilis. Spicula sessilis (aristis exclusis) 3.5-5 mm longa, callo molli glabro ornata. Gluma inferior (alis exclusis, sed uncis inclusis) orbicularis, 3 mm longa et lata, uncis exclusis elliptico-lanceolata, 1-1.25 mm lata, margine ornato 5-10 uncis patentibus ciliatis ad apices antrorsos, glumae dorso plano uncis ornato vel secus, apice glumae diviso et supportante alas binas 1-2 mm longas, marginibus interioribus alarum productis in aristas binas 5-8 mm longas gracilesque. Gluma superior 2.5-3 mm longa; flosculi bini, quorum inferior masculus vel neuter, superior vero hermaphroditus. Lemmata et paleae 2-2.75 mm longae, hyalinae; antherae steriles 3 vel nullae. Lodicipuli bini, 4-5 mm longi; stamina fertilia 3, styli 2, caryopsis 1.5 mm longa. Spicula pedicellata (arista exclusa) 3.5-4 mm longa. Gluma inferior ala exclusa 2.5 mm longa, ala inclu-

sa 3-4.5 mm longa, uno margine ala membranacea ornata e basi glumae ad paulo infra basin aristae, altero producto in aristam gracilem 8-10 mm longam. Gluma superior exclusa ala 2.5 mm longa, ala inclusa 3-4 mm longa, fortiter carinata, navicularis, apice producto in aristam gracilem, 4-6 mm longam; carina alata. Flosculi bini, quorum inferior vacuus, superior vero masculus; lemmata et paleae 2-2.5 mm longae, hyalinae; stamina 3, antherae ca. 1 mm longae.

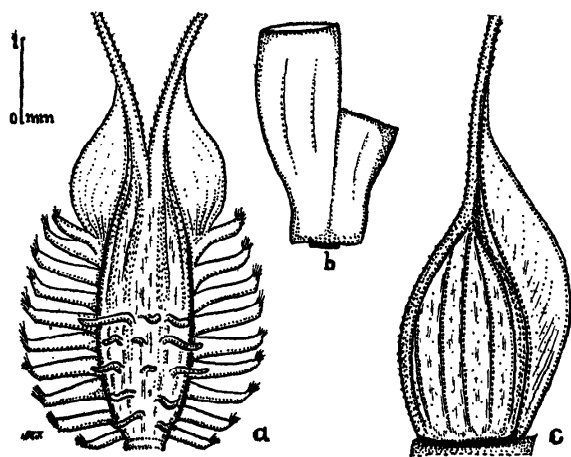
Typus lectus ad Castle Rock in St. Mysore, in India, die 25 octobris 1902 a G. A. Gammie et positus in CAL sub numero Gammie 15643 A.

***Manisuris mysorensis* Jain et Hemadri sp. nov.**

It resembles *M. forficulata* Fischer but differs in the following characters: Joints (internodes) of the rachis 2.5 mm long, without tuft of hairs; pedicels shorter, 1.5 mm long. Lower glume of sessile spikelet including the wings (excluding the awns) 3-4.5 mm long, broadly ovate; excluding the wings almost orbicular; wings 1-2 mm long. Lower glume of the pedicelled spikelet (excluding the awn) including the wings, elliptic ovate, 3-4.5 mm long; excluding the wing ovate 2.5 mm long.

Annual tufted grass up to about 20 cm high; roots fibrous. Culms erect or slightly ascending, slender, almost cylindric or shallowly grooved on one side, 3-4-noded, softly or densely villous; nodes constricted, brownish, ridged; culms sparingly branched and terminating in solitary racemes. Leaf-sheaths shorter than internodes, terete, striate, hairy, scarious on margins, upper leaf-sheaths spathaceous, densely villous. Ligule ovate, entire or dentate, 1.5-2 mm long, membranous. Blades linear, acute, flat or conduplicate, not constricted at base, villous, the lower 6-10 × 2-3 cm, upper

shorter, faintly 5-nerved. Peduncles bearing the racemes slightly thickened upwards, villous.



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Text figs. a-c: a. Lower glume of sessile spikelet. b. Joint and pedicel, unequal and without tuft of hairs. c. Lower glume of pedicelled spikelet. (All based on type Gammie 15643).

Racemes solitary, erect, 1-3.5 × 4-5 cm, compressed, pale, glabrous, very fragile. Joints (internodes) of the rhachis subclavate, compressed, concave at the tip, hollowed out on the inner face (to receive the sessile spikelet) 2.5 mm long, fused with the pedicel; devoid of tuft of hairs at tip. Pedicel subclavate, compressed, 1.5 mm long.

Spikelets paired, one sessile and hermaphrodite, the other pedicelled and male or neuter, dissimilar in shape. *Sessile spikelet* strongly dorsally compressed, (excluding the awns) ovate orbicular, 3.5-5 mm long, with a short glabrous callus; *florets* 2, lower male or neuter, upper hermaphrodite. *Lower glume* (excluding the wings, including the hooks) almost orbicular, 3 mm long, equally wide, excluding the hooks elliptic lanceolate, 1-1.25 mm wide, thinly coriaceous, glabrous or puberulous, margins of the glume bearing 5-10 hooks spreading out for about .75 mm on each side and often with a tuft of small cilia at their antrorse tips, back of the glume almost flat, 3-5 ribbed, with or without hooks; the apex of the glume cleft and bearing two short thinly membranous, 1-2 mm long wings; the two inner margins of the wings prolonged into two divergent, slender, antrorsely barbellate 5-8 mm long awns. *Upper glume* elliptic lanceolate, acute or acuminate, 2.5-3 mm long, margins narrowly inflexed, thinly membranous, faintly 3-nerved. *Lower floret* neuter;

lemma oblong lanceolate, obtuse, 2.5-2.75 mm long, hyaline; *palea* 2-2.25 mm, hyaline, or 0; *sterile anthers* 3 or 0. *Upper floret* hermaphrodite; *lemma* elliptic ovate, subacute, 2-2.25 mm long, hyaline, margins narrowly inflexed; *palea* oblong ovate, obtuse, 2 mm long, hyaline; *lodicules* 2, cuneate, hyaline, .4-5 mm long. *Stamens* 3, filaments short, anthers .75-1 mm long. *Styles* 2, stigmas plumose. *Grain* elliptic oblong, slightly compressed, about 1.5 mm long. *Pedicelled spikelet* (excluding the awn) oblong ovate, 3.5-4 mm long; *florets* 2, the lower empty, upper male or neuter. *Lower glume* (excluding the wing) ovate, 2.5 × 1.5 mm, (including the wing 3-4.5 mm long) thinly coriaceous, flat on back, glabrous or puberulous, prominently nerved, 3 nerves distinct, 2 marginal, margins narrowly inflexed; one margin with a thinly membranous, hyaline wing from base of glume up to a little above the base of the awn, the other margin produced into a slender antrorsely barbellate, 8-10 mm long awn. *Upper glume* (excluding the wing) ovate, acute, 2.5 mm long, including the wing 3-4 mm long, 3-nerved, strongly keeled, boat-shaped, apex prolonged into a slender, antrorsely barbellate, 4-6 mm long awn; keel winged from a little above the base to beyond the apex of the glume. *Lower floret* empty; *lemma* oblong lanceolate, obtuse, 2.5 mm long hyaline; *palea* 0. *Upper floret* male; *lemma* oblong lanceolate, subacute, 2.5 mm long, hyaline; *palea* narrower and shorter; *stamens* 3, anthers about 1 mm long.

INDIA: Mysore State, Castle Rock, 25 October 1902, G. A. Gammie 15643. A—holotype, B-C—iso-types (A-C mounted on one sheet) deposited in Central National Herbarium, Calcutta, CAL.

Isotypes also deposited in the herbarium of St. Xavier's College, Bombay (BLAT), and Botanical Survey of India, Poona (BSI).

Paratypes: Mysore State, Belgaum district, Amboli Ghat, 6 Oct. 1900, W. A. Talbot 4305 (*pro parte*), C in herb. BSI, D, E in CAL. Belgaum, Ritchie 808, 827 and N. Kanara, October, A. Meebold 10558 in herb. K.

Distribution: India, so far endemic in Mysore State.

Etymology: The grass is being named after its type locality.

ACKNOWLEDGEMENTS

We are grateful to Dr. C. E. Hubbard for kindly examining some type material at Kew and giving

his valuable opinion. We are very thankful to Dr. H. Santapau, for kindly providing Latin translation of the description of new taxon and for his keen interest in these studies. We are grateful to Dr. K. Subramanyam, Director, Botanical Survey

of India, and Shri Rolla S. Rao, Regional Botanist, Poona for necessary facilities in this work. Prof. P. V. Bole of St. Xavier's College, Bombay has kindly supplied some material of the genus *Manisuris* for our study.