# Glyphochloa henryi, a new species of Poaceae from Goa, India

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#### **Abstract**

A new species of Glyphochloa from Goa, India is described and illustrated.

#### INTRODUCTION

The genus Glyphochloa Clayton belongs to the tribe Andropogoneae and subtribe Rottboellineae. This genus is endemic to central and peninsular India and is represented by eight species and three varieties. Clayton (1983) segregated this genus from Manisuris L., by transferring all but one species from Manisuris. Jain (1970) provided an excellent account of all the Glyphochloa species under the genus Manisuris. During our recent floristic survey in the state of Goa, we collected some specimens of Glyphochloa, which are different from the species described so far. Based on the account of Jain (l.c.), we concluded that it is hitherto undescribed species and hence being described here as a new species.

Glyphochloa henryi Janarthanam, Vaishali C. Joshi et Rajkumar, sp. nov. (Fig. 1).

Glyphochloae talbotii (Hook. f.) Clayton similis, articulis rectis, spiculae sessilis gluma inferiore crista transversali unica marginibus sursum curvatis differt.

Types: India, Goa, Tisk-Usgao, 15<sup>o</sup> 24' 52.4" N, 74° 04' 36" E, 27.9.1998, Janarthanam & Rajkumar 1661 (Holo - CAL; Iso - BSI, L, MH); Cotigao Sanctuary, 11.11.1998, Vaishali Joshi & Rajkumar 1690 (Para - Goa University Herbarium).

An annual tufted herb, up to 90 cm high. Culms erect, cylindrical, glabrous, 5-6 noded; nodes swollen, glabrous, yellowish green with purple ring. Leaf blade up to 15 x 0.8 cm, truncate at base, entire along margins, acute-acuminate at apex, 7-8 nerved, glabrous, dark green adaxially, pale green abaxially; sheath up to 5.6 cm long. Racemes solitary, cylindrical, up to 9 cm long; peduncle cylindrical, narrow at base, apex slightly swollen with long ciliate hairs. Joints fused with pedicels, c. 0.3 cm long, straight, narrow at base, ciliate at both ends. Sessile spikelets:Lower glume c. 1.5 x 0.2 cm (including awn), single transverse ridge at base

## M.K. Janarthanam et al.

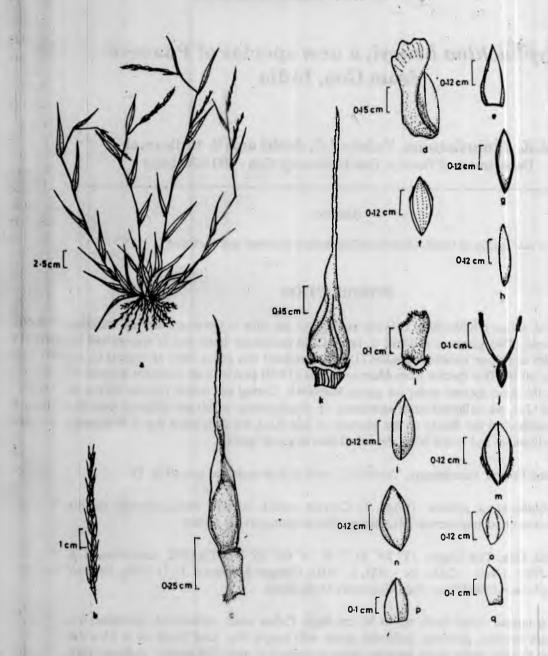


Fig.1. Glyphochloa henryi Janarth. et al.: a. Habit; b. Raceme; Pedicelled spikelet: c. Lower glume with pedicel; d. Upper glume; e. Upper lemma; f. Lower lemma; g. Lower palea; h.Upper palea; i. Joint; j. Ovary with stigma; Sessile spikelet: k. Lower glume; l. Upper glume; m. Lower lemma (abaxial view); n. Lower lemma (adaxial view); o. Lower palea; p. Upper lemma; q. Upper palea.

## Glyphochloa henryi, a new species of Poacae

extending end to end, turning upwards along the margins; margin wavy, ciliate at lateral edges, rarely with two lateral hooks below the ridge; vertical furrows 8-9 at base of ridge, faint. Upper glume c. 0.3 x 0.1 cm, oblong, 3- nerved, pale green, dark green along the nerves, pubescent without, hairy at base. Lower floret staminate; lemma c. 0.3 x 0.15 cm long, hyaline, oblanceolate, margins incurved, sparsely hairy along the margins, 2-nerved; palea c. 0.3 x 0.1 cm, ovate, hyaline, 2- nerved; anthers c. 0.1 cm long, purple. Upper floret hermaphorodite; lemma c. 0.3 x 0.1 cm, ovate, acute at apex, 1-nerved, ciliate at tip; palea c. 0.25 x 0.11 cm, ovate, hyaline; anthers c. 0.2 cm long; ovary obovate; stigma 2, c. 0.2 cm long, feathery at apex. *Pedicelled spikelets:* Lower glume c. 1.2 cm (including awn), cucullate, winged on one side, glabrous. Upper glume c. 0.5 x 0.2 cm, strongly keeled, margins unequal, winged on one side; wings broad at base and apex, narrowing in the middle, undulate at apex, hyaline. Lower floret staminate; lemma c. 0.3 x 0.1 cm, oblong, 3- nerved, margin ciliate, hyaline; palea c. 0.3 x 0.1 cm, oblong, lanceolate, hyaline. Upper floret hermaphorodite; lemma c. 0.3 x 0.15 cm, lanceolate, faintly 3- nerved, hyaline; palea 0.3 x 0.1 cm, hyaline. Grains brown.

Flowering and fruiting: September - November.

Etymology: This new species is named after Dr. A. N. Henry, a renowned taxonomist and teacher of the senior author, in recognition of his contributions in the field of plant taxonomy.

Habitat: Found on hard lateritic rocks in open areas.

Glyphochloa henryi is similar to Glyphochloa talbotii (Hook. f.) Clayton but differs in having straight joints and a single transverse ridge with curved up margins on lower glume of sessile spikelet. Further differences between these two species are shown in table 1.

Table 1. Comparison of major characters of Glyphochloa talboltii (Hook. f.) Clayton and G. henryi Janarth. et al.

Glyphochloa talbotii	Glyphochloa henryi
<ul> <li>Joints 1.5 - 2 mm long</li> <li>Joints and pedicels form a tumid structure, glabrous</li> </ul>	<ul> <li>Joints c. 3 mm long</li> <li>Joints and pedicels almost straight, narrow at base, not tumid, ciliate</li> </ul>
Lower involucral glume of sessile spikelets without vertical furrows	Lower invloucral glume of sessile spikelets with inconspicuous vertical furrows only below ridges
Transverse ridges of lower glume of sessile spikelets 2-3, flat, pointing upwards	Transverse ridge of lower glume of sessile spikelets only one, only margins curved upwards
Margins of the transverse ridges entire	Margins of the transverse ridges wavy, curved up

### M.K. Janarthanam et al.

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