

# *Microstegium* (Poaceae), a new generic record for Andaman & Nicobar Islands, India

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**Abstract:** The genus *Microstegium* Nees (Poaceae) is reported for the first time from Andaman & Nicobar Islands, India based on *M. fasciculatum* (L.) Henrard. *Microstegium fasciculatum* is a common species in mainland India. A brief description and photo plate are provided for easy identification.

**Keywords:** Andropogoneae, *Microstegium fasciculatum*, Taxonomy.

## Introduction

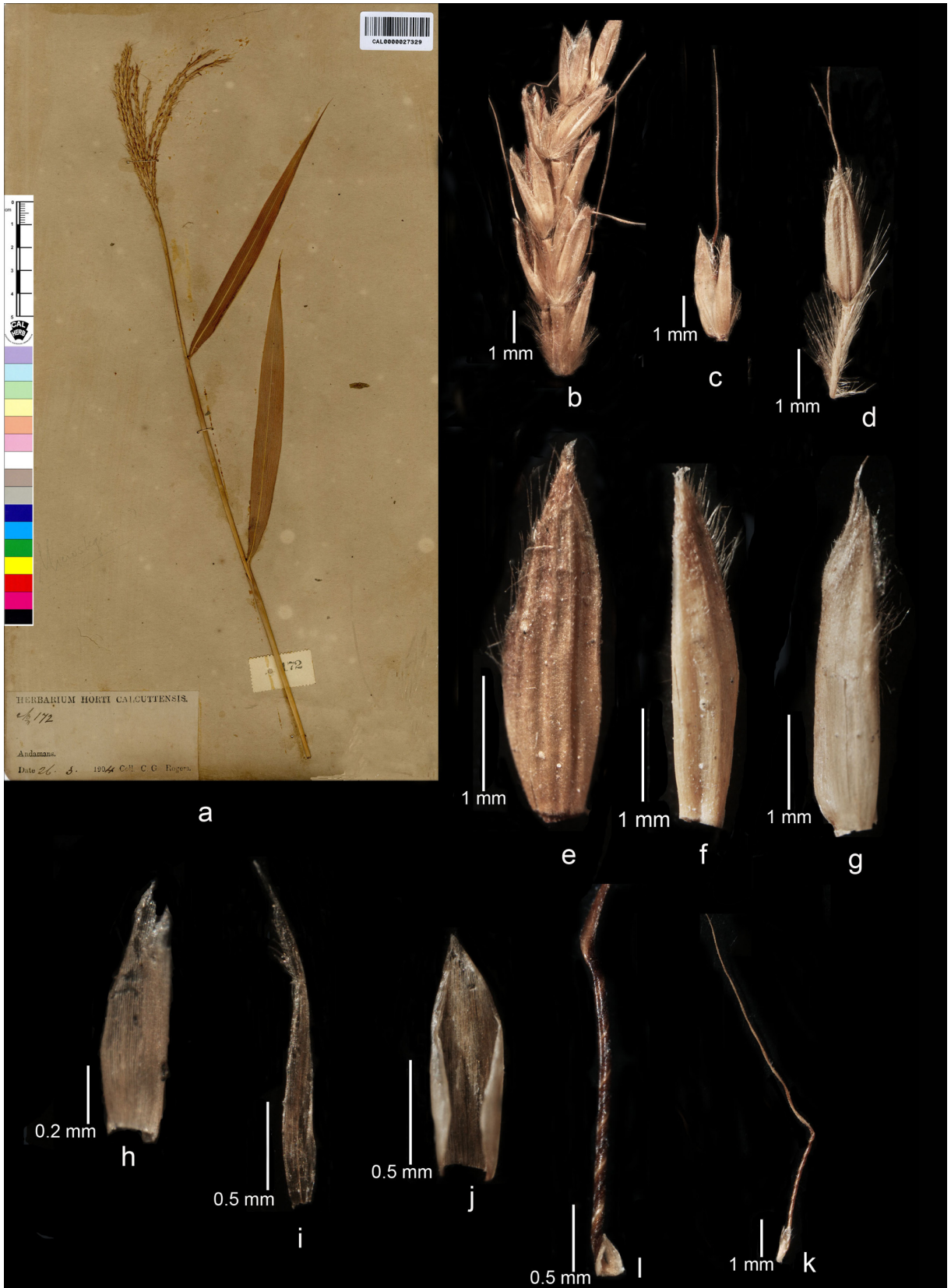
*Microstegium* Nees (Poaceae, Andropogoneae) comprises c. 25 species (Clayton *et al.*, 2018) in the world, distributed in tropical and subtropical Africa, Asia, Australia and some Pacific islands (Clayton & Renvoize, 1986; Koyama, 1987; Watson & Dallwitz, 1992; Hsu, 2000). Chen *et al.* (2012), however, mentioned that *Microstegium s.str.* is represented by 16 species and one variety globally. Sur (1985) reported seven species and one variety while Karthikeyan *et al.* (1989) and Kellogg *et al.* (2020) enumerated eight species from India. During identification of different taxa in *Microstegium*, the authors came across five sheets of this genus at CAL, collected from Andaman Islands (probably South Andaman) by C.G. Rogers during March 1904. After critical study and careful scrutiny of literature (Rao, 1986; Matthew, 1998; Pandey & Diwakar, 2008; Murugan *et al.*, 2016) it is identified as *M. fasciculatum* (L.) Henrard, which is not yet reported from Andaman &

Nicobar Islands and hence constitute a new distributional record at genus level.

## Taxonomic Treatment

***Microstegium fasciculatum*** (L.) Henrard, *Blumea* 3(3): 453. 1940. *Tripsacum fasciculatum* (L.) Raspail, *Ann. Sci. Nat. (Paris)* 5: 306. 1825. *Andropogon fasciculatum* L., *Sp. Pl.* 2: 1047. 1753 ('fasciculatus'). *Lectotype* (designated by Cope in Cafferty *et al.*, 2000): Habitat in Indiis, Herb. Linn. No. 1211.27, lower central specimen (LINN). **Fig.1**

Perennial, mat-forming herbs, rooting from the lower nodes. Culms up to 4 m tall, robust or of moderate build; internodes glabrous, sometimes pubescent; nodes glabrous or bearded. Leaf sheaths bearded, outer margins pilose, mouth glabrous or hairy; ligule membranous, 1–3 mm long, blades linear-lanceolate, 8–30 × 0.5–2 cm, attenuate to slightly rounded at base, pseudopetiole absent, pilose, more densely on ventral surface, acuminate to setaceous at apex. Inflorescence of 3–25 digitate racemes, 5–15 cm long; racemes straight, 4–15 cm long; rachis angular, margins ciliate. Spikelets paired, sessile or pedicelled. Sessile spikelets 2.6–4.5 × 0.7–0.8 mm, oblong, acute at apex, awned; lower glume elliptic-oblong, 3–4 × 0.5–1 mm, dorsally shallowly grooved, 3–4-nerved, 2-keeled; keels ciliate to hairy towards apex, acute, obtuse or emarginate at apex; upper glume elliptic, 3–4 × 0.6–0.8 mm, strongly compressed, with 0.2–0.4 mm long bristle at tip, 3-nerved with prominent midnerve and 2 faint lateral nerves, midnerve keeled and scabrid. Florets 2, lower floret present, barren; lower lemma 0.5–0.6 × 0.2–0.3 mm, hyaline, with



**Fig. 1.** *Microstegium fasciculatum* (L.) Henrard. **a.** Herbarium specimen (CAL0000027329); **b.** Spikelet; **c.** Sessile spikelet; **d.** Pedicelled spikelet; **e.** & **f.** Lower glumes; **g.** Upper glume; **h.** Lower lemma; **i.** Lower palea; **j.** Upper palea; **k.** Awn with hyaline upper lemma at base; **l.** Awn (magnified) showing chestnut brown twisted lower part (from *C.G. Rogers* 172; photos by S. Dey).

notched apex; lower palea 2.1–2.5 mm, narrowly oblong, acute; upper lemma glabrous, reduced to hyaline base of the awn 0.2–0.4 (–1) mm, apex rounded to emarginate and continued with the awn; awn 6–12 mm long, geniculate, lower two-third chestnut brown in colour, twisted; upper palea ovate-oblong, 0.8–0.9 × 0.4–0.5 mm, hyaline, acute at apex. Anthers 3, 1.5–2.5 mm long. Pedicelled spikelets 2.5–2.8 × 0.6–0.7 mm; pedicels 2–2.5 mm long, ciliate; lower glume 2.5–2.8 × 0.6–0.7 mm, keels finely serrulate; upper glume 2.5–2.8 × 0.6–0.7 mm; upper lemma awn 4–5 mm long; other features similar to sessile spikelet. Caryopsis not seen.

*Flowering & fruiting*: Flowering from August to November and fruiting from December to January.

*Habitat*: Open disturbed areas.

*Distribution*: Africa (West-Central, East Tropical, South Tropical), Bhutan, China, Java, Laos, Lesser Sunda Island, Malaysia, Moluku, Myanmar, Nepal, Philippines, Sri Lanka, Sulawesi, Sumatra, Thailand, Taiwan, Vietnam and India.

*Specimens examined*: INDIA, **Andaman & Nicobar Islands**, Andamans, 26.03.1904, C.G. Rogers 172 (CAL). **Andhra Pradesh**, Visakhapatnam district, S.E. of Gudem camp, 24.02.1947, V. Narayanaswami & Party 592 (CAL). **Assam**, Ahitamo Reserve (15 miles) from Fatimabad T.E., 31.01.1955, M.P. Guha 71 (CAL); Gowhatti hills, November 1852 (CAL). **Maharashtra**, Bombay (Mumbai), Malawani, 13.12.1956, P.C. Nanda 1061 (CAL). **Meghalaya**, Garo hills, Dambu, December 1886, C. Mann 1 (CAL). **Nagaland**, Kohima, 22.12.1885, C.B. Clarke 41737 (CAL). **Uttarakhand**, Dehradun, 2000 ft, October 1892, J.S. Gamble 93946 (CAL). **West Bengal**, Darjeeling, 2000 ft, 02.10.1870, C.B. Clarke 12576D (CAL); Jalpaiguri, Jaldapara National Park, Kodalbashi, 26.11.2013, K. Karthikeyan 61224 (CAL).

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