

# MURAINA GRASS

## New distribution record of the endemic grass *Ischaemum kingii* in Karnataka



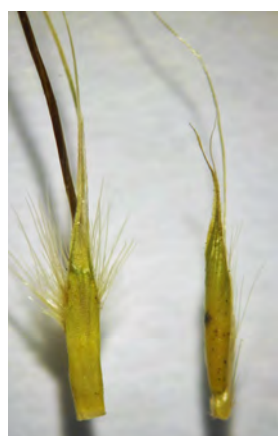
A



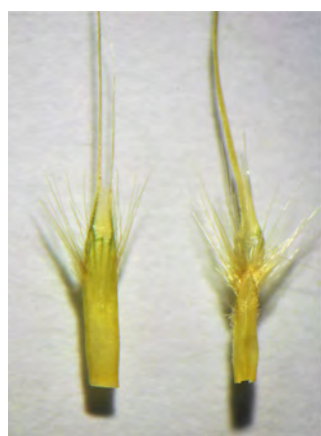
B



C



D



E



F



G

*Ischaemum kingii*: A - habitat, B - habit, C - raceme, D - spikelets, E - lower and upper glumes, F - lemma, palea, stamens & pistil, G - joint. (Photo: H.U. Abhijit)

**IUCN Red List:**  
Data Deficient

**Liliopsida**

[Class of monocotyledons]

**Poales**

[Order of flowering plants in the monocotyledons]

**Poaceae**

[Family of grass]

***Ischaemum kingii***

[Muraina grass]

Species described by Hook in 1896

The grass genus *Ischaemum* L. is globally represented by 81 species (including 29 annuals and 53 perennials). Among these, 58 species are disseminated in India (including 36 endemic species) and 38 in the Western Ghats (Nayar et al. 2014). This complex and diverse genus is generally distributed in tropical regions, exclusively in Asian countries (Sunil et al. 2017). *Ischaemum* is characterized by well-developed pedicelled spikelets, transversely wrinkled, furrowed lower glumes with nodules on margins (Bor 1960; Singh & Rao 2008).

The Indian endemic grass *Ischaemum kingii* Hook. f. (Poaceae) was formerly reported from the states of Maharashtra,

Madhya Pradesh, and Rajasthan; this is the first report of the species from Karnataka. This species is distinguished from others by its tuft of hairs on the margin, just above the middle of the lower glume with long bicuspidate awn of sessile spikelet and bulged joints. Though *I. diplopogon* resembles *I. kingii* in some ways, the lower glume of sessile spikelet is muticuous and shortly bicuspidate in the former (Potdar et al. 2012). The plant list displays *I. raizadae* to be synonymous to *I. kingii*.

**Global Distribution:**

India: Maharashtra,  
Madhya Pradesh,  
Rajasthan, Karnataka

The authors collected specimens from Chitramoola, Kodachadri Hills of Mookambika Wildlife Sanctuary, central Western Ghats, Karnataka. The specimen characters were matched with the Kew (K) Herbarium K000245688 (1894). The collected specimens were dried, pressed, and prepared for herbarium. The herbarium was deposited in the Western Regional Center, Botanical Survey of India, Pune, and also at the Department of Applied Botany, Kuvempu University, Shimoga.

*Ischaemum kingii* Hook. f., Fl. Brit. India 7: 129. 1896; Bor, Grass. Burma Ceylon India Pakistan 182. 1960; Laxmi. in Sharma et al. (eds.), Fl. Maharashtra, Monocot. 519. 1996; S. Moulik, Grass. Bamb. India 1:294. 1997.

Annual erect grass with 20–30 cm height. Tufted, terete culms with branches arising from the base, nodes glabrous. Semi-compressed leaf sheath 3–10 cm long, narrowly ovate, glabrous or sparsely hairy, acute-tipped leaf blades. Ligule membranous 0.6mm long. Raceme two, 3–8 cm long. Joints clavate, three-toothed tips. Sessile spikelets oblong, 4–6 mm (excluding the arista), awned. Lower glume coriaceous, narrowly ovate, 4–6 mm long (excluding the arista), two-keeled, keels sparsely ciliate above, nine-nerved with bulge in the lower third, apex long bicuspidate awn. Upper glume subcoriaceous, linear ovate-oblong, 6mm long (excluding the arista), three-nerved, with tuft of hairs on the dorsal side above the middle, cleft at apex, aristate from the sinus, arista 20–26 mm long (Singh et al. 2008). Lower lemma hyaline, oblong-elliptic 3mm long, two-keeled, obscurely nerved, glabrous. Palea hyaline. Lodicules two. Stamens three, anthers 1mm long. Upper lemma hyaline, cleft at apex into two lobes, awned from the sinus, geniculate awn 30–40 mm long. Pedicelled spikelets narrowly ovate, 7–8 mm long. Lower glume subcoriaceous, glabrous, two-keeled, 11-nerved, apex two aristate. Upper glume boat-shaped 6–8 mm long (including arista), nerved, one-keeled. Lower lemma hyaline, narrowly ovate. Palea elliptic. Upper lemma hyaline; Bhat & Nagendran 2001; Potdar et al. 2012).

**Flowering and fruiting:** September–November.

**Habitat:** Rocky areas of waterfalls.

**Specimens examined:** KUABYLK-452, 06 ex., 03.xi.2018, India, Karnataka, Shivamoga District, Mookambika Wildlife Sanctuary, Kodachadri Hills, Chitramoola, 13.857°N, 74.865°E, 1202m (error 3m), coll. H.U. Abhijit.

#### References

- Bhat, K.G. & C.R. Nagendran (2001).** *Sedges and Grasses (Dakshina Kannada and Udupi Districts)*. Bishen Singh Mahendra Pal Singh, Dehradun, 341pp.
- Bor, N.L. (1960).** *The Grasses of Burma, Ceylon, India and Pakistan (excluding Bambusae)*. Pergamon Press, Oxford, 767pp.
- Nayar, T.S., A.R. Beegam & M. Sibi (2014).** *Flowering Plants of the Western Ghats, India, Vol. 2*. Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Thiruvananthapuram, 748pp.
- Potdar, G.G., C.B. Salunkhe & S.R. Yadav (2012).** *Grasses of Maharashtra*. Shivaji University, Kolhapur, 656pp.
- Singh, R.K. & P.S.N. Rao (2008).** The genus *Ischaemum* L. (Poaceae) India. *Journal of Economic and Taxonomic Botany* 32(4): 797–827.
- Sunil, C.N., M.V. Nithya, C.R.R. Krishnan, V.V.N. Kumar, M.S. Simi & K.J. Jyothi (2017).** A new species of *Ischaemum* L. (Poaceae) from Kerala, India. *Bangladesh Journal of Plant Taxonomy* 24(1): 33–38.

**Acknowledgements:** We thank Prof K.G. Bhat, Poorna Prajna College, Udupi, and the Karnataka Forest Department for giving permission to enter the forest area. The first author thanks DST, Government of India, for awarding INSPIRE fellowship.

#### Hanchali Udayashankar Abhijit<sup>1</sup> & Yelugere Linganaik Krishnamurthy<sup>2</sup>

<sup>1,2</sup>Department of Applied Botany, Kuvempu University, Jnanasahyadri, Shankaraghatta, Karnataka 577451.  
Email: <sup>1</sup>abhijitogon@gmail.com, <sup>2</sup>murthy\_ylk@yahoo.co.in (Corresponding author)

Citation: Abhijit, H.U. & Y.L. Krishnamurthy (2019). Muraina grass: new distribution record of the endemic grass *Ischaemum kingii* in Karnataka. *Plantasia* #12, In: *Zoo's Print* 34(4): 19-21