

# NEW PLANT RECORDS FOR KARNATAKA FROM UTTARA KANNADA DISTRICT

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## ABSTRACT

Two sedges *Fimbristylis pubisquama* Kern and *Schoenoplectus grossus* (L.f.) Palla, and two grasses *Isachne pulchella* Roth ex R. & S. and *Dimeria avenacea* (Retz.) C. Fischer are reported from Uttara Kannada district, part of Central Western Ghats. The flora of Uttara Kannada hosts large number of endemic and interesting plant species. Recent discoveries of sedges, grasses and two critically endangered tree species (Chandran, 2008) highlight the need for making intensive efforts for locating, documenting and conservation of such species.

## INTRODUCTION

Uttara Kannada district of Karnataka State lies between 74°9' to 75°10' E and 13°55' to 15°31' N and extends over an area of 10,327 sq km. It is one of the three coastal districts of the State alongside the Arabian Sea. Many workers have surveyed and prepared floras for sedges and grasses for different regions of Karnataka and India (Cooke, 1903; Sharma *et al.*, 1984; Bhat & Nagendran, 2001; Sreekumar & Nair, 1991; Cook, 1996). Recently more species were added to the list of Karnataka flora by Udayan *et al.* (2004) & Ravikumar *et al.* (2005). The flora of Uttara Kannada hosts large number of endemic and interesting plant species. Recent discovery of two critically endangered tree species highlights the need for making intensive efforts for

locating, documenting and conservation of such species (Krishnakumar & Shenoy, 2006; Chandran *et al.*, 2008). Two species of sedges and two of grasses that we came across in the district in the course of our ecological studies, later identified to be new reports to Karnataka State, are being described here.

***Fimbristylis pubisquama*** Kern in Blumea 8:131. 1955. *F.compressa* Boeck. in Lannaea 38 : 387. 1874, non Roem. & Schult.; Clarke in Hook. f., Fl. Brit. India. 6: 639. 1893. (CYPERACEAE)

Annuals, with golden yellow roots and densely tufted culms which are obtusely 3-sided, attaining 45 cm height. Leaves 2-5, basal. Inflorescence simple or compound, corymbose. Primary rays 3-7. Spikelets ovoid-ellipsoid, deep rusty brown, 0.7 cm long, wholly pubescent, hairs towards tip of glume darker, ciliate on margins. Stamens 2. Styles flat, 2-



cleft, sparsely hairy above; stigma shorter than style. Nuts biconvex, obovoid, hexagonal cells on either face, yellowish brown.

*Flowering & Fruiting:* Aug.-Sept.

*Habitat:* Coastal marshes.

*Specimen examined:* Uttara Kannada: Karwar, 05.09.06, G.R. Rao 1013 (Herbarium, C.E.S field station, Indian Institute of Science, Kumta).



Figure 1. *Fimbristylis pubisquama* habit

**Schoenoplectus grossus** (L. f.) Palla in Allg. Bot. Zeit. 17: Beibl. 3. 1911; T.Koyama in Dassan. & Fosb., Rev. Handb. Fl. Ceylon 5: 154. f. 6. 1985. *Scirpus grossus* L. f., Suppl. 104. 1781; C. B. Cl. in Hook. f., Fl. Brit. India 6: 659. 1893; Cooke, Fl. Bombay 3: 408. 1958 (Repr. ed); Kern in Steenis, Fl. Males. 1, 7: 498. f. 22. 1974. *S. kysoor* Roxb., Fl. Ind. 1: 230. 1832; Cooke, *op. cit.* 409. *S. grossus* L.f. var. *kysoor* (Roxb.) C.B. Cl. in Hook. f., *op. cit.* 660. (CYPERACEAE)

Perennials, with culms corm like at the base, sharply 3-angled, the faces concave and smooth. Leaves few to a culm, linear, mostly equaling the culm. Inflorescence a large terminal corymb with primary, secondary and tertiary rays. Spikelets solitary, the terminal ones sessile, the rest pedicellate, ellipsoid, 0.5-0.7 cm long, 0.35-0.4 cm in diameter, many-flowered, light brown to rusty coloured. Glumes boat-shaped, 0.2-0.3 cm long, 0.2-0.25 cm wide, rusty-brown, ciliate along margins. Stamens 3. Nuts somewhat flattened, broadly obovate, yellowish-brown.

*Flowering & Fruiting:* September-December

*Habitat:* Shallow fresh water marshes.

*Specimen examined:* Uttara Kannada: Mundgod, 06.01.06, G.R. Rao 1024 (Herbarium, C.E.S field station, Indian Institute of Science, Kumta).



Figure 2: *Schoenoplectus grossus* (L.f.) Palla inflorescence

**Isachne pulchella** Roth ex R. & S., Syst. Veg. 2: 476. 1817; Bor in Kew Bull. 1952:321. 1952 & Grasses Bur. Ceyl. Ind. & Pak. 582. 1960; Ved Prakash & Jain in Fasc. Fl. India 14:33. 1984. (POACEAE)

Herbs, annuals, ascending. Leaves 2-3 x 0.3-0.5 cm, ovate-lanceolate, apex acute or acuminate, hairy, margins cartilaginous. Spikelets globose, 0.12-0.15 cm long; glumes broadly elliptical, obtuse, distinctly unequal, the lower shorter and narrower than the upper; anthers of the lower florets 0.07-0.09 cm long.

*Flowering & Fruiting:* July to December

*Habitat:* Fresh water swamps

*Specimen examined:* Uttara Kannada : Ankola, 23.11.05, G.R Rao 1045 (Herbarium, C.E.S field station, Indian Institute of Science, Kumta).





Figure 3: *Isachne pulchella* Roth ex R. & S. - inflorescence

***Dimeria avenacea*** (Retz.) C. Fischer. in Kew Bull. 1932: 72. 1932 & in Gamble, Fl. Madras. 1713. 1934; Bor, Grasses Bur. Ceyl. Ind. & Pak. 139. 1960. *Anthoxanthum avenaceum* Retz. Obs. Bot. 3:8. 1783. *Dimeria pusilla* Thw., Enum. Pl. Zeyl. 369. 1864. (POACEAE)



Figure 4: *Dimeria avenacea* in inflorescence

Annual, slender grasses, to 15 cm long. Internodes of the rachis less than half as long as the upper glume. Racemes solitary. Glumes coriaceous; upper glume 0.6 cm, shortly awned, tipped with long hairs, winged all down the keel and ciliate; lower glume 0.4 cm, awn to 2.6 cm long; callus 0.18 mm.

*Flowering and Fruiting:* September- December

*Habitat:* Granitic hilly slopes

*Specimen examined:* Uttara Kannada : Karwar, 05.09.06, G.R Rao 1045 (Herbarium, C.E.S field station, Indian Institute of Science, Kumta).

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