

Short Communication

ON THE OCCURRENCE OF *Calamus longisetus* GRIFF. IN BANGLADESH

Calamus longisetus Griff. (Palmae) has been recorded to be distributed in Andaman Islands, Burma, Thailand, Indonesia and Malay Peninsula (Beccari and Hooker 1892-93; Blatter 1926; Dransfield 1979; Basu and Basu 1987). The various floristic works by Beccari and Hooker (1892-93), Prain (1903a; 1903b), Brandis (1906), Heinig (1925), Raizada (1941), Sinclair (1955) and Khan *et al.* (1984), have not recorded its occurrence in the region now under Bangladesh.

During the recent collection trips to Cox's Bazar forest areas (South Eastern Bangladesh) few clumps of *C. longisetus* were found growing in the forest areas of Rajarkul, Ramu, Madhuchara, Hatimara, Ukhia and Kutopalong of Cox's Bazar Forest Division.

The detailed taxonomic descriptions based on Bangladeshi materials are given below :

Calamus longisetus Griff., Cal. Jour. Nata. Hist. 5 : 36 (1845); Palms of Brit. East India ; 44, t 189A, B (1850). Beccari and

Hook. f., Fl. Brit Ind. 6 : 440 (1892); Blatter, The Palms of Brit. India, and Ceylon : 295 (1926); Dransfield, A Manual of Rattans of Malay Pennin. Malayan Forest Records 29 : 154 (1979); Basu and Basu, RIC Bull. 6 (3 & 4) : 7 (1987). *C. tigrinus* Kurz, For Fl. Brit. Burma, 2 : 519 (1877).

Local name : Udom bet (Cox's Bazar)
(Fig. 1)

Very robust, clustering to form dense clumps; erect to climbing (where support is available). Stems with sheath 8-10 cm and without sheath 4-5 cm in diameter, internode 18-25 cm long. Leaf sheath greenish-yellow, densely armed with 3-4.5 cm long, flat, blackish-brown, erect, spreading and reflexed spines and with slender bristles in between, in oblique semi-circular lines and covered with grey-brown indumentum; knee small or inconspicuous, sheath-mouth oblique, ocrea fibrous; generally non-flagellate (sometimes sterile inflorescence emerges before the emergence of fertile inflorescence). Leaf ecirrate, 3-4m



Fig. 1. *Calamus longisetus*: A. Stem segment with culm-sheath and petiole
 B. Portion of leaf with petiole
 C. Segment of female inflorescence
 D. Fruit
 E. Scale of the fruit
 F. Seed (dorsal view)
 G. Seed (ventral view)

long including petiole, petiole 0.9–1.3 m long, rachis and petiole yellowish, armed with flat black-brown yellow based laminated spines; leaflets 40–50 on either side, grouped in 2s–3s upto upper mid of the rachis, solitary towards the top, alternate or opposite, the two apical leaflets joined upto 1/3 of their length, 30–75 x 2–4 cm, linear-ensiform, green on both sides, 3-costate, sharply spinulose along margins and mid veins on upper sides, sparsely long slender bristles upto 2 cm long on the mid veins and sometimes on the lateral veins beneath, tip ciliated. *Inflorescence*: male and female superficially similar; from the lateral side of the sheath mouth; flagelliform, upto 5 m long, tip flagellate, normally with 5 alternate, branched, partial inflorescence upto 1 m long, base of the partial inflorescence enclosed within the bract tube; primary bract tubular-flat, compressed towards base, covered with seriate, flat spines, secondary bracts tubular and tattering, upper flagellate tube covered with clawed spines. *Male flowers* densely distichous on rachillae upto 10 cm long. *Female flowers* on rachillae upto 15 cm long. *Fruit* sessile, 3–3.5 x 2 cm, ellipsoid-ovoid, apiculate, supported by lacerated perianths, covered by 12 vertical rows of shiny dark brown to blackish mottled flat scales, scales trapezoid, about 10 x 5 mm, transverse blackish band in the mid with conspicuous pale fringed margins, lacerated at the apex. *Seeds* about 15 x 10 mm, oblong-ovate, light brown, shiny, longitudinally 5–7 costate, costae ecentric; endosperm homogenous, embryo basal, in dried seed pulp dries up into thin layer and seed is covered with dense silky hairs. *Flowering*: October–December; *fruiting*:

March–June. *Ecology*: Occurs in the dry hill slopes on sandy-loam soils in mixed evergreen forests and associated with scrubby vegetation and trees. *Mode of propagation* through seeds and rhizome planting. *Uses*: The cane is used to make walking sticks, batons, bird-traps and structural frames of furniture. Leaflets are used as thatching materials. Fruits are reported to be eaten by birds and thus seeds are dispersed. It is also reported that fruits are eaten by man but not palatable. Squirrels eat the fruits (Basu and Basu 1987).

Distribution: Andaman Islands, Thailand, Indonesia and Malay Peninsula.

In Bangladesh it is known only from some areas of Cox's Bazar forests. This species is degenerating in an alarming rate.

It can be easily recognised in the field by its robust habit, absence of cirrus and flagellum, densely armed leaf-sheath and leaflets clustered in 2s–3s.

Specimen examined: Ukhia, June, 1987, Mohiuddin (fruits only); Hatimara, Ukhia, 21.03.1989, Alam, Mohiuddin and Jahangir 6311; Rajerkulm Ramu, 29.03.1989, M. K. Alam 6377.

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