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NOTES ON DISTRIBUTION OF *ZINGIBER SQUARROSUM* ROXB. (ZINGIBERACEAE)

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Zingiber squarrosum Roxb., a native of Pegu (Myanmar) described by William Roxburgh in the year 1810, was first reported in India from Andaman Islands by Bhargava & Nair (1979). The genus has been revised by several workers in different phytogeographical regions within India (Rao & Verma 1972, Srivastava 1998, Sabu 2003 & 2006, Tripathi & Singh 2006), but *Zingiber squarrosum* remained a poorly known species.

During botanical exploration in Dibang Valley district of Arunachal Pradesh in 2005 some live plants of *Zingiber* were collected and planted in experimental garden of Botanical Survey of India, Eastern Circle, Shillong. In September it flowered and identified as *Z. squarrosum* Roxb. It is a new distributional record for North East India.

Earlier this species was distributed between approximately 12° – 18° N latitude and 93° – 97° E longitude. But present collection from Dibang valley district of Arunachal Pradesh extends its northern limit up to 28° N and falls within the range of east longitude i.e. 93° E.

A detailed description, line drawing, colour photos and location map are provided for its easy identification in the field.

Zingiber squarrosum Roxb. in Asiat. Res. II: 348. 1810 & Fl. Ind. ed I, I: 54. 1820; Baker in Hook. f., Fl. Brit. India 6: 245. 1892. non Wight; K. Schum. in Engler, Pflanzenr. 20: 184. 1904.

Fig. 1, Plate 1 A - C.

Rhizome stout, c.1 cm diameter, yellowish inside. Pseudostem 1 – 1.2 m tall, 1.6 cm in diameter; bladeless sheaths 3 – 5, brownish red, villous. Leaf sheaths white pubescent, blade elliptic-lanceolate, 14.5 – 28 × 8 – 10 cm, acuminate, upper surface glabrous, pubescent beneath. Ligule oblong, 0.5 – 1 cm long, rounded, notched at middle, pubescent. Inflorescence radical, peduncle 2 – 3 cm long, brownish red; peduncular sheaths oblong, rounded, 1.8 – 3 × 2 – 3 cm, apiculate. Spike 1 – 2 (-3), oblong ovoid 4 – 5 × 2 – 2.5 cm. Flower solitary in each bract, outer bract oblong, c. 3 × 1.7 cm, obtuse, apiculate, hairy at margin and base; inner bract c. 3.2 × 1 cm, narrower, similar to outer; bracteoles tubular at base, c. 3 cm long, recurved; calyx tubular, c. 1.8 cm long, 2-lobed, lobes c. 0.7 × 0.3 cm, rounded, yellowish at base, hyaline towards apex, ciliate at mouth; corolla tubular at base, 3-lobed, tube c. 3.2 cm long, pale yellow, sparsely white ciliate, dorsal lobes lanceolate, c. 3.2 × 0.8 cm, acute to acuminate, glabrous, pale yellow at base reddish purple towards apex, lateral lobes narrower, c. 0.6 cm wide. Labellum 3- lobed, dorsal lobes oblong, c. 1.5 × 1 cm, rounded, recurved, lateral lobes oblong, c. 0.6 × 0.3 cm, rounded pale yellow at base, deep reddish purple towards apex, glabrous, deflexed; ovary oblong c. 6.5 × 0.4 cm, yellowish, hairy; anther c. 1.2 cm long, yellowish, filament 0.5 cm long, crest curve c. 0.8 cm long, dark purple.

Fl. & Fr.: August – October.

Distribution: India: Arunachal Pradesh & Andaman Islands; Myanmar.

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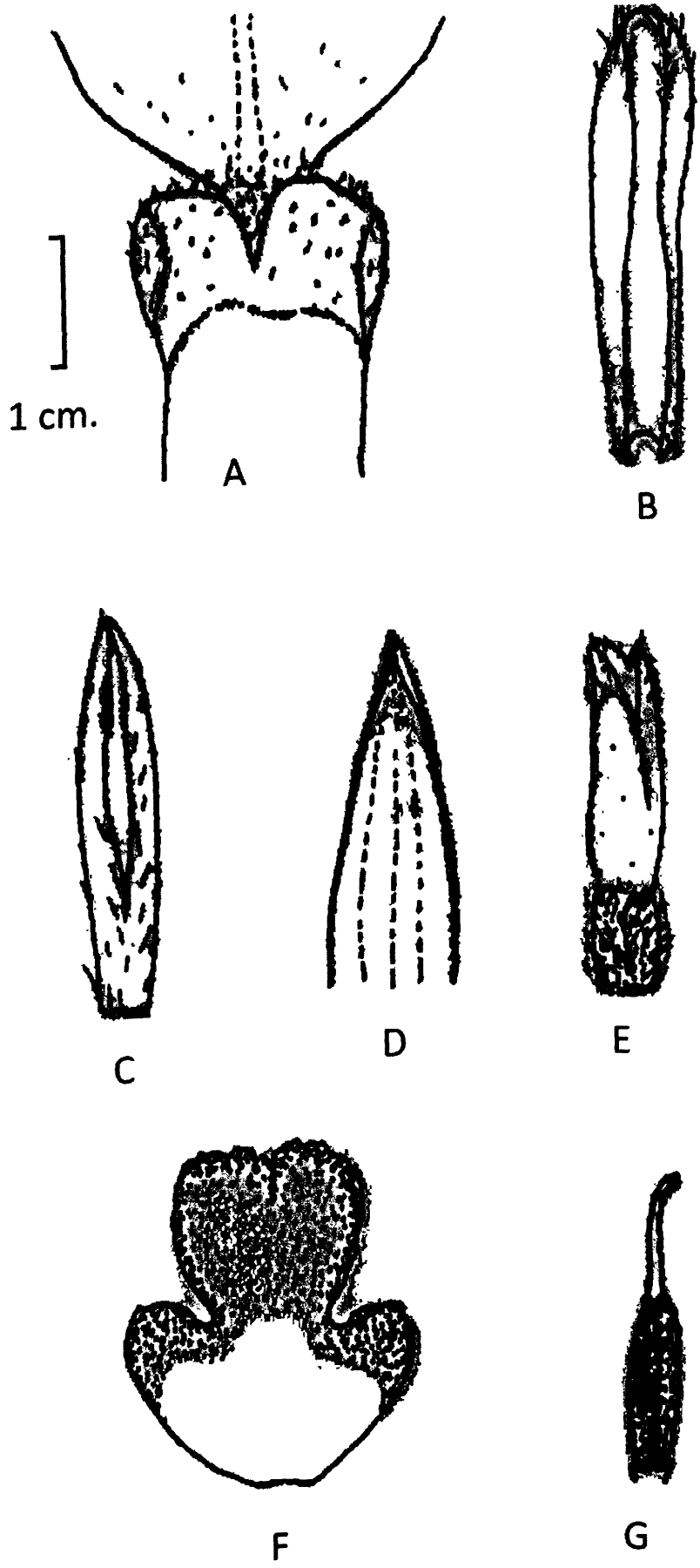


Fig 1. *Zingiber squarrosum* Roxb. **A.** Ligule; **B.** Outer bract; **C.** Bracteole; **D.** Dorsal lobe of corolla; **E.** Ovaiy with calyx; **F.** Labellum & **G.** Stamen.

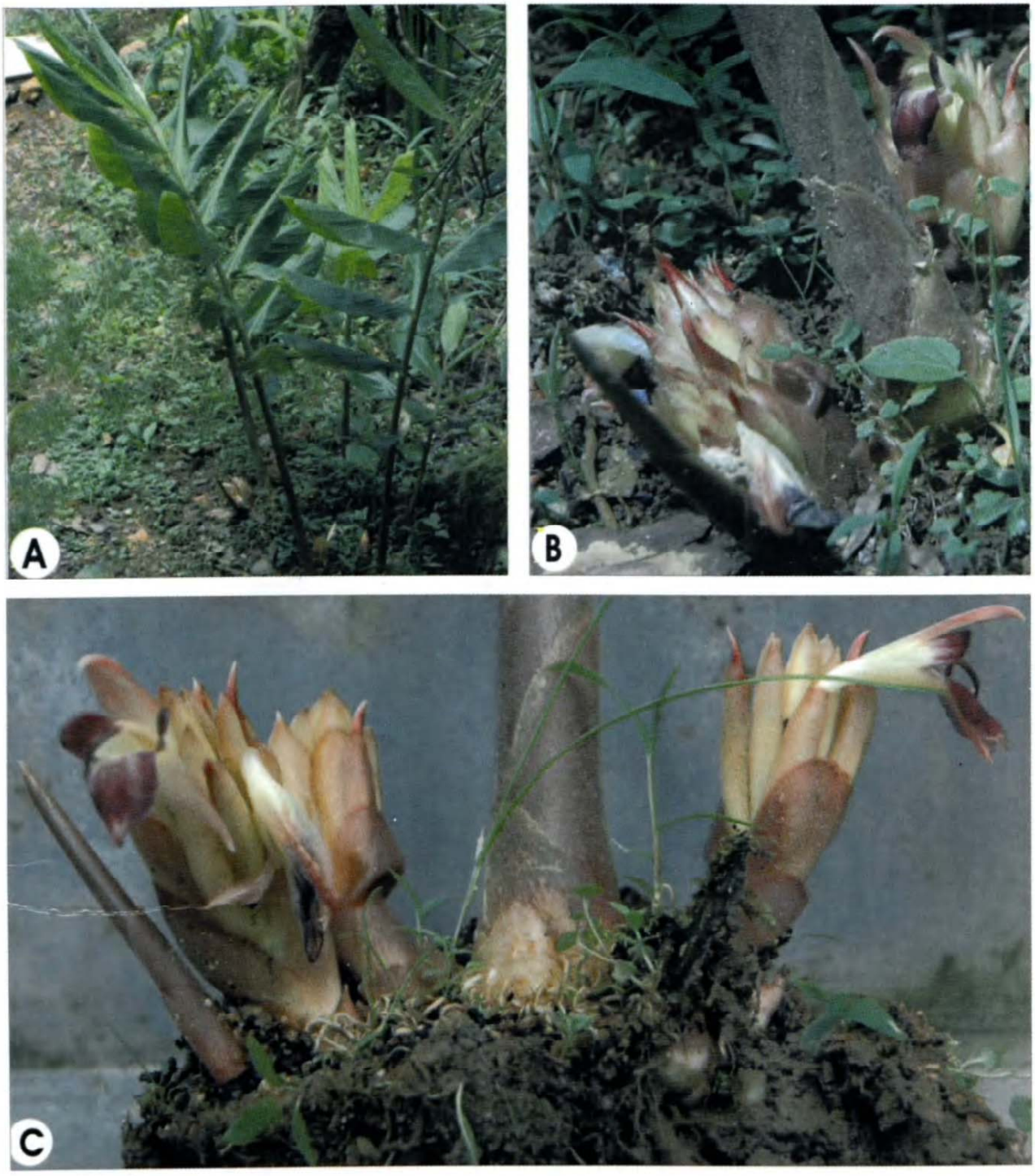


Plate 1. A - C. *Zingiber squarrosum* Roxb. :
A. Habit; **B & C.** Inflorescence

Specimens examined: Way to Hunli from Italin, Dibang valley, 700 m, September 2005, *N. Ansari*, s.n. (Acc. No. 65945) (ASSAM); Pegu (Myanmar) 30.12.1870, *Kurz* 3289 (Acc. No. 67938 – 67939) (CAL); Arracan, Low sandstone hills at Kolodyne valley, October 1869, *Kurz* s.n. (Acc. No. 467926- 467927) (CAL).

Notes: The plants are found to grow on open moist hill slopes at an elevation of 700 m. Where soils are humus rich, sandy mixed with gravels. It is associated with *Hedychium* spp., *Alocasia fornicata* Schott, *Pandanus furcatus* Roxb., *Bauhinia* sp. and many others.

Due to its bright reddish purple showy flower it easily attract and has enough potential for horticulture. Special care to be needed for conserving germplasm in various experimental gardens.

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