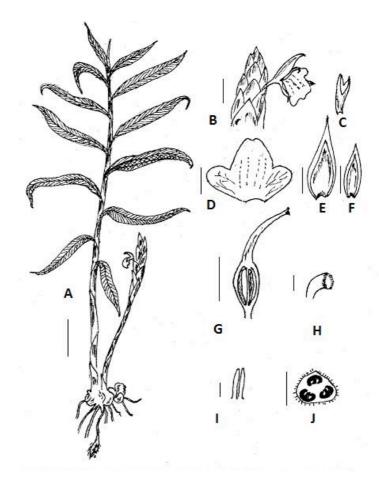
Zingiber neesanum (J. Graham) Ramamoorthy in C.J. Saldanha and D.H. Nicolson (Zingiberaceae) – a new record for Tamil Nadu, India Binitha Pushpakaran¹ and R. Gopalan²

The Zingibers are perennial rhizomatous herbs growing in shady habitats and are characterised by the presence of a rhizomatous roots and aerial shoots covered by sheathing leafbases. The family Zingiberaceae consists of about ca.53 genera and more than 1200 species, distributed mainly in the tropics and sub-tropics with the centre of distribution in the Indo-Malayan region, but extending through tropical Africa to Central and South America (Kress et al., 2002). Out of the 21 indigenous genera of Zingiberaceae present in India, 10 are represented in South India (Sabu, 2006). The genus Zingiber, represented by 141 species (Theilade, 1999; Theilade & Mood, 1999) globally and distributed mainly in tropical Asia, of which only 8 species have been reported from South India (Sabu, 2006).

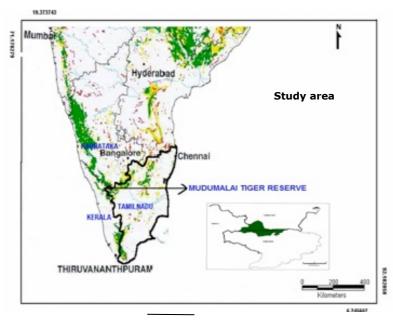
Recent botanical exploration in Mudumalai Tiger Reserve was carried out and the authors came across a *Zingiber* growing on the slopes of the moist and dense semi-evergreen forest. After critical examination and thorough literature review, it was identified as *Zingiber neesanum* (Graham).

Zingiber neesanum is endemic to Peninsular India and Myanmar. So far it has been reported from Maharashtra, Karnataka and Kerala (Sabu, 2006). The present report indicates that the species has an extended distribution to the state of Tamil Nadu.

Zingiber neesanum (Graham)
Ramamoorthy. in C.J. Saldanha & D.H. Nicolson., Fl. Hassan Distr, 769.1976; Manilal, Fl. Silent Valley 314. 1988; Bhat, Fl. Udupi, 635. 2003; Sabu, Folia Malaysiana 4(1): 36.2003. Alpinia neesana J. Graham, Cat. Pl. Bombay: 207. 1839. Zingiber macrostachyum Dalzell, Hooker's J. Bot. Kew Gard. Misc. 4: 342. 1852; Baker in Hook.f., Fl. Brit. India 6:247. 1892; Cooke, Fl. Bombay 2:735. 1907; C.E.C. Fisch. in Gamble, Fl.



Zingiber neesanum: A. Habit (10cm), B. Part of inflorescence (1cm), C. Calyx (1cm), D. Labellum (1cm), E Corolla-dorsal lobe (1cm), F. Corolla lateral lobe (1cm), G. Anther (1cm), H. Stigma (1mm), I. Epigynous glands (1mm), J. C.S. of ovary (1cm)



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Z. neesanum inflorescence



Z. neesanum infructescence

Madras 8: 1490, 1928.

Perennial herbs, 60-120cm high: roots fleshy; rhizome thick, yellow in transverse section. Leafy shoot, erect, thick, fleshy, enclosed within reddish green sheaths. Leaves shortly petiolate; liqule 2-5 mm long, membranous, hairy; lamina 15-30 x 2.5-3.5cm, oblonglanceolate, base acute, apex acuminate, glaucous-pubescent beneath. Inflorescence on peduncle arising from rhizome, 20-30cm high, clothed with reddish sheaths; spike 10-20 x 1-1.5 cm, cylindrical, apex acute. Bracts 2.5-3.5 x 1.5-2.5 cm, ovate, apex acute, reddish green, pubescent, closely



Z.neesanum habitat

Photos: Binitha Pushpakaran

imbricating. Bracteoles 2-3 x 1-1.5cm, lanceolate, pubescent, persistent. Flowers upto 4.5 cm long, one in each bract, fragile. Calyx tubular, 1.3-1.8cm, split on one side, membranous, glabrous. Corolla-tube slender, 2-2.5cm, equal to or longer than the bracts; 3-lobed, lobes unequal, white, longitudinally veined; dorsal lobe 2.5 x 1cm, hooded at the apex; lateral lobes linear, 2 x 0.6 cm. Labellum equal to or shorter than lateral corolla lobes, 1.8-2 x 1.3-1.5cm, obovate, 3lobed, mid lobe emarginate, white with pink or purple spots or stripes. Lateral staminodes adnate to the mid-lobe, ca. 1 x 6.6 cm, white glabrous. Filament short and broad; anther thecae ca. 1 X 0.5cm, connective with violet stripes on the upper surface. Style long, filiform. Stigma equal to staminal beak in length, mouth surrounded by stiff hairs; ovary 5.8-6 mm, minutely pubescent. Epigynous glands two, 3 mm long, yellow. Capsules ca 1.5 cm long, obovoid, red, pubescent. Seeds dark purple or black, aril white.

Flowering & fruiting: June – September.

Distribution: World: South India, Myanmar.

Habitat: Commonly grown as an under growth in semi-evergreen and evergreen forests at an altitude of 992m above sea level.

Specimens examined: Kerala, Trivandrum, Ponmudi, 6.7.02, Prasanth Kumar G., 86370 (CALI); Kerala, Cannanoor Dist, Panoth, 13.11.99, V.S. Ramachandran, 120195 (MH). Kerala, Idukki Dt., Pindimedu, 2.10.90, P. Bhargavan, 157746 (MH). Tamil Nadu: Mudumalai Tiger Reserve, Agnibetta, 10.6.2012, Binitha Pushpakaran 449 (Karpagam University Herbarium).

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