

***Kaempferia galanga* L. (Zingiberaceae): An addition to the flora of Andhra Pradesh**

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Abstract

Kaempferia galanga L. is reported here as a new addition to the Flora of Eastern Ghats of Andhra Pradesh from Vizianagaram district. The detail description and colour photographs are provided for easy identification.

Keywords : Andhra Pradesh, Eastern Ghats, *Kaempferia*, new record, Zingiberaceae

INTRODUCTION:

The family Zingiberaceae Martinov consists of about 53 genera and more than 1200 species, distributed mainly in tropics and subtropics with centre of distribution in the Indo-Malayan region, but extending through tropical Africa to Central and South America (Kress et al., 2002). India is one of the richest and diverse regions for Zingiberaceae, having 20 genera and around more than 200 species. The genus *Kaempferia* comprises of about 60 species (Sirirugsa, 1992), distributed from tropical Africa to India, and throughout South East Asia. In South India five species are reported viz., *K. elegans* (Wall.) Baker, *K. evansii* Blatt., *K. galanga* L., *K. rotunda* L. and *K. scaposa* (Nimmo) Benth., of this *K. elegans* (Wall.) Baker widely cultivated as an ornamental plant throughout South India (Sabu, 2006). *K. evansii* Blatt. is an endemic to Tamil Nadu (Ahmedullah & Nayar, 1987) and *K. scaposa* was transferred to the genus *Curcuma* in 2007 and made new combination as *Curcuma scaposa* (Nimmo) Škorničk. & M.Sabu (Škorničková et al., 2007).

During a short visit to the Eastern Ghats of Andhra Pradesh, the first author collected an interesting *Kaempferia* species in flower, which was later identified as *Kaempferia galanga* L. Scrutiny of literature revealed that this species native to India also cultivated in many parts of India, China, Java, Malesia and Sri Lanka. In south India it is reported from Karnataka, Kerala, Tamil Nadu not from Andhra Pradesh (Sabu, 2006; Pullaiah, 2018). Hence, it is reported here as a new addition to the flora of Andhra Pradesh. A detailed description and colour photographs are provided to facilitate identification.



TAXONOMIC TREATMENT

Kaempferia galanga L., Sp. Pl.1:3.1753; Baker in Hook.f., Fl. Brit. India 6:219. 1890; C.E.C. Fischer in Gamble, Fl. Madras 3:1484.1928.

Small perennial rhizomatous aromatic herbs. Rhizomes 1.5-3 x c. 2 cm, strongly aromatic. Roots numerous, bearing ovoid to spherical tubers. Leaves two spreading horizontally and lying flat on the surface of the ground; lamina 10-12 x 8-10 cm, ovate to orbicular, rounded to sub cordate at base, entire and hyaline along margin, broadly pointed at tip, dark green on upper surface, pale green on lower surface, 9-10 ribbed. Inflorescence sessile, 6- 10 flowered, enclosed within 1.5 to 2.5 cm long imbricate leaf sheaths, one flower opens at a time, bracteates. Bracts bifarious, glabrous, outer larger, inner smaller white with green tip. Bracteoles split to the base, transparent, membranous, glabrous. Calyx linear- lanceolate, acute- acuminate tip, equal to or shorter than the tip. Corolla tube c. 5 cm long; lobes white. Labellum c. 2 cm, slightly broader than long, divided 2/3 to the base, each lobe again splits shortly into two unequal halves, white with violet bands in basal half. Lateral staminodes obovate, white, glabrous. Anthers white, sessile, connective prolonged into a bi-lobed crest, lobes rounded. Stigma globular with a lateral slit. Epigynous glands two, filiform, erect, embracing the lower part of the style. Ovary tri-carpellary; ovules numerous on axile placentation. Fruits not seen (Fig. 1.)

Flowering & fruiting: June to September.

Habitat: Rarely found in thickets of Eastern Ghats.

Distribution: **World:** Native of India also cultivated in many parts of India, China, Java, Malaysia and Sri Lanka; **India:** Karnataka, Kerala, Tamil Nadu and West Bengal (Sabu, 2006) and now from Eastern Ghats of Andhra Pradesh.

SPECIMEN EXAMINED: India, Eastern Ghats, Andhra Pradesh, Vizianagaram, Gummalaxmipuram mandal, Mantrajola, 06.04.2018, *R. Prameela 004349*(BSID).

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Fig. 1. *Kaempferia galanga* L.: A. Habit; B. Rhizomes; C. Flower