

## (VI)

**KAEMPFERIA PARVIFLORA WALL. EX BAKER (ZINGIBERACEAE) A NEW RECORD  
OF MEDICINAL PLANT FOR INDIA**

During survey work on medicinal plants, some zingiberaceous plants from south Assam were collected and planted in Botanical Survey of India, Eastern Regional Centre, Shillong. It flowered in September and critically identified as *Kaempferia parviflora* Wall. ex Baker but some differences were also observed when compared to protologue (Table 1).

Tong (1995) described *Stahlianthus rubro-marginatus* (Zingiberaceae) from a cultivated plant introduced to Mengla, South Yunan from North Myanmar. Searle (1999) on the basis of cladistic analysis based on the ITS region made it a new combination under *Kaempferia* and consider sister taxon is *K. parviflora*. Our collection comes more close to *K. rubro-marginata* (S. Q. Tong) R. J. Searle but Wu and Chen (1996) considered it is synonymous to *Kaempferia parviflora* Wall. ex Baker.

After consultation of Baker (1890), Schumann (1904), Rao & Verma (1972), Karthikeyan *et al.* (1989) and Sabu (2006) revealed no mention of this species in India. Probably Wu & Larsen (2000) mentioned it from India in assumption of its possible site of occurrence.

A brief description, photographs and illustration of floral parts are given here to facilitate its easy identification in the field.

*Kaempferia parviflora* Wall. ex Baker in Hook. f., Fl. Brit. India 6: 221. 1890; K. Schum. in Engl. Pflanzenr. 20(IV.46): 78. 1904; *Stahlianthus rubro-marginatus* S. Q. Tong in Acta Phytotax. Sinica 33(5): 449. 1995 (Fig. 1).

Common Name: Black ginger

Acaulicent, leafy plants, upto 40 cm tall. Leaves radical, 2–3, distichous, blade ovate-oblong, 13.5–18 x 7.5–9.3 cm, acute, asymmetrically rounded at base, nerves 4–6 pairs, glabrous, lower surface gland dotted; petiole 12–14 cm long (including sheath), minutely hairy, channeled; sheaths pale purple at margins. Inflorescence contemporary with leaves, radical, between leaf sheaths; peduncle c. 4.5 cm long, terete, gland dotted. Involucral bracts 2, oblong, c. 3 x 1.6 cm, acute, glabrous, greenish, reflexed at tip, margins overlapping, free upto the base. Flowers 18–20 in each spike, solitary in each bract, one open at a time, white, purple at centre of lip, corolla tube much exceeding the involucral bracts. Bract oblong, c. 2.3 x 0.4 cm, rounded, membranous, hyaline; bracteole linear, c. 1.1 cm long, acute membranous, 1-nerved, hyaline. Calyx tubular, c. 2

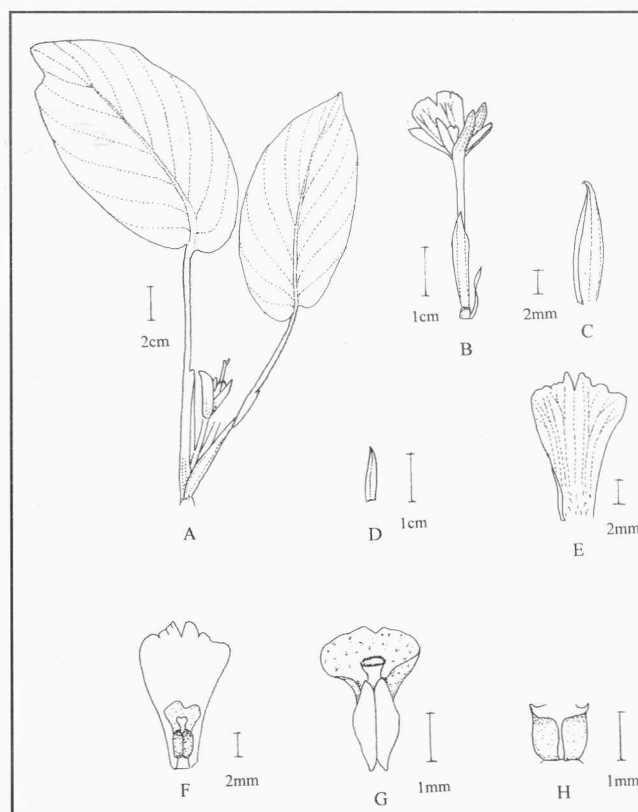
**Table 1**

*Difference between K. parviflora and our collection.*

Characters	<i>Kaempferia parviflora</i> (after Baker, 1890)	Our collections
Leaves	Sub sessile	Distinctly petiolate
Involucral bracts	Lanceolate, c. 2.5 cm long	Oblong, 1.3 cm long
Corolla segment	Greenish	White
Labellum base	-	White hairy
Anther crest	Entire	Shortly lobed

cm long, cleft at one side upto 6 mm, shortly 1-toothed, glabrous, membranous hyaline. Corolla tube c. 3.2 cm long, 3-lobed, lobes similar, oblong-elliptic, 10–11 x 2–2.7 mm, acute, 3-nerved, margins inrolled, white, dorsal lobe apiculate, laterals acute. Stamines petaloid, similar and narrower to the corolla lobes, acute. Lip obovate, emarginate, c. 1.25 x 0.8 cm, nerves 3–4 pairs, purplish at centre, base white, scattered hairy. Stamens c. 4 mm long; filament c. 1 mm long, anther 1.8–2 mm

**Fig. 1**



*Kaempferia parviflora* Wall. ex Baker A. Habit, B. Flower, C. Corolla lobe, D. Bracteole, E. Lip, F. Lip with stamen, G. Anther lobe with crest and stigma, H. Filament

long, crest 1 – 1.3 mm long, orbicular, shortly lobed at apex, brownish spotted, lobules rounded. Stigma exposed from the apex of anther, c. 0.8 mm in diameter.

*Flowering:* August–September.

*Distribution:* India (Assam); Bangladesh, Myanmar and Thailand.

*Specimen examined:* Mao 110421, Diphu, 180m, 10.09.2007 (Assam).

*Habitat:* Plants are found to grow on semi dense moist forest floor along with *Boesenbergia* spp. and many others. Due to over exploitation of rhizome for medicinal value, plants are becoming rare in its natural habitat.

*Economic uses:* Rhizomes are aromatic and high demand in market for medicinal value. Rhizome extract are used to relief stomach pain, headache and also used as tonic by local people.

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