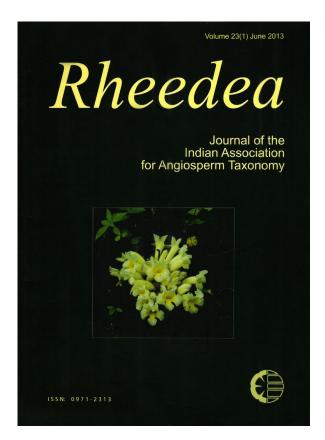


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# *Globba sherwoodiana* (Zingiberaceae) – A new record for India from Manipur

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#### Abstract

*Globba sherwoodiana* W.J. Kress & V. Gowda, characterised by large, white bract and imbricate inflorescence with orange labellum is reported and described as a new distributional record for India from Manipur.

Keywords: Manipur, India, New Record, Zingiberaceae, Globba sherwoodiana

## Introduction

The genus Globba L. represents more than 100 species making it the third largest genus of the family Zingiberaceae behind Alpinia and Amomum (Kress et al., 2002). It is primarily distributed throughout tropical and parts of subtropical Asia, ranging from India to Southern China, south and east Phillipines and New Guinea, with the centre of distribution in monsoonal Southeast Asia, especially Thailand and Myanmar (Williams et al., 2004; Larsen, 1996; Kress et al., 2003). In India, the genus is represented by 21 species and 1 variety with a preponderance in eastern India where 16 species are distributed in different terrains (Baker, 1890; Rao & Verma, 1972; Singh & Kumar, 2011; Sabu, 2006; Somadeva, 1981; Srivastava, 1998; Thongam et al., 2011)

During a floristic assessment of Chavangphai Village in the Moreh region of Chandel district, Manipur in the year 2010, a small population of dry vegetative parts was encountered. The rhizomes were collected and planted at the Zingiberaceae germplasm of Institute of Bioresources and Sustainable Development (IBSD), Imphal. In August, 2011, the plants started flowering following which taxonomic evaluation was conducted and the herbarium is deposited at the Institute (IBSD/ Z-49).

On critical examination of the specimen, it was identified as *Globba sherwoodiana* W.J. Kress & V. Gowda reported only from Myanmar (Gowda *et al.*, 2012). Hence, this report represents a new record of the species from India. A detailed description, illustration and photograph are given.

Globba sherwoodiana W.J. Kress & V. Gowda, Phytokeys 13:5-14, 2012. Fig. 1,2

Perennial herbs. Leafy shoots slender, 30–40 cm tall, light green in colour. Rhizomes compact, non tuberous, white. Leaves 6–8 in number, shortly petiolate, 0.4–0.6 cm long, ligule small, bilobed, sparsely pubescent on midrib. Lamina oblong–



Fig. 1. *Globba sherwoodiana* W.J. Kress & V. Gowda: a. Habit; b. Flower; c. Calyx; d. Labellum; e. Dorsal corolla lobe; f. Lateral corolla lobe; g. Lateral staminodes; h. Anther; i. Style with epigynous gland; j. Epigynous glands; k. T.S. of ovary.



Fig. 2. Globba sherwoodiana W.J. Kress & V. Gowda

lanceolate, 15-20 × 5-8 cm, margin entire, lower surface minutely pubescent along the mid rib, upper surface glabrous, apex acuminate, base attenuate. Inflorescence terminal, drooping, 8-12 cm long, peduncle  $3-4 \times 0.4-0.5$  cm, pale green. Bracts spirally arranged, reflexed, imbricate and widely separated, ovate to ovate-oblong, decreasing in size from base to the tip,  $2.5-3 \times 1.5-$ 1.8 cm, snowy-white, glabrous. Bracteole tubular, smaller than the bract, persistent. Flowers small, sessile, yellowish-orange, 4-4.5 cm long. Calyx tubular, 0.3-0.4 cm long, trilobed, greenish-yellow, glabrous. Corolla tube 1.1-1.4 cm long, slender, widening gradually towards the mouth, with lobes reflexed. Corolla lobes 3; dorsal lobe concave, c. 0.5 × 0.2 cm, orange in colour; lateral lobe ovate, c. 0.5 × 0.2 cm. Labellum triangular, 0.6–0.8 × 0.2–0.4 cm, orange-yellow with a reddish patch at centre, tip deeply bifid, glabrous. Lateral staminodes elliptic, 0.7-1 × 0.2-0.5 cm, orange-yellow, glabrous. Filament slender, c. 1.6-2.6 cm long, orange, glabrous, anther linear, 0.2-0.3 cm long, thecae parallel, with two triangular appendages on either

side, glabrous. Style filiform, stigma with hairy margin. Epigynous glands 2, linear, apex pointed. Ovary 0.3 cm long, pale green, glabrous, unilocular with many ovule on parietal placenta.

Flowering: August-September.

Altitude: 260 m above sea level

*Ecology:* Found growing as undershrub in the tropical decidous forest floor.

*Notes: G. sherwoodiana* was originaly described from a cultivated source in Myanmar. It is also assumed that wild populations might be present in the border region between Myanmar and Thailand (Gowda *et al.* 2012). This finding presents the first wild collection of *G. sherwoodiana* with populations in the Indian region bordering Myanmar.

Specimen examined: INDIA, Manipur, Chandel Dist., Chavangphai, Lat. N 24º15'20.8", Long. E 094º18'47.5" Alt. 260 msl. 20.01.2010, Biseshwori & Bipin (IBSD/Z-49).

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## Literature Cited

- Baker, J.G. 1890. Scitamineae. In: Hooker, J.D. (Ed.). *The Flora of British India* Vol. 6. L. Reeve & Co. Ltd., London, UK. pp. 198–264.
- Gowda V., Kress W.J. & T. Htun 2012. Two new species of gingers (Zingiberaceae) from Myanmar. *Phytokeys* 13: 5-14.
- Kress, W.J., Defilipps R.A., Farr E., & Yin Yin Kyi 2003. A checklist of the trees, shrubs, herbs, and climbers of Myanmar. Contributions from the United States National Herbarium 45: 1–590.
- Kress, W.J., Prince L.M., & K.J. Williams 2002. The phylogeny and a new classification of the gingers (Zingiberaceae): Evidence from molecular data. *Amer. J. Bot.* **89**: 1682 – 1696.
- Larsen, K. 1996. A preliminary checklist of the Zingiberaceae of Thailand. *Thai Forest Bull. Bot.* 24: 35–49.
- Rao, A.S. & D.M. Verma 1972. Material towards a

monocot flora of Assam-II (Zingiberaceae and Marantaceae). *Bull. Bot. Surv. India* **14(1–4)**: 114–143.

- Sabu, M. 2006. Zingiberaceae and Costaceae of South India. Indian Association for Angiosperm Taxonomy, Calicut.
- Singh S.K. & R. Kumar 2011. *Globba wardii* (Zingiberaceae) – a very rare species - New Record for India. *Taiwania* 56 (3): 261–264.
- Somadeva 1981. The genus *Globba* (Zingiberaceae) from Dehradum and Garhwal Himalaya, India. *Indian J. Forest.* 4: 230–235.
- Srivastava, S.K. 1998. Zingiberaceae in Andaman and Nicobar Islands, India. *Indian J. Forest.*, Add. Ser. 8: 1–33.
- Thongam B., Sarangthem N. & B. Konsam 2011. Globba schomburgkii Hook.f. (Zingiberaceae): A new record from Manipur, Northeast India. Folia Malaysiana 12(1): 39–42.
- Willams, K.J., Kress W.J. & P.S. Manos 2004. The phylogeny, evolution, and classification of the genus *Globba* and tribe *Globbeae* (Zingiberaceae): appendages do matter. *Amer. J. Bot.* 91: 100–114.

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