



A Note on Occurrence of *Alpinia zerumbet* (Zingiberaceae) from Campbell Bay, Andaman and Nicobar Islands, India

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ABSTRACT: *Alpinia zerumbet* (Pers.) B.L. Brutt. & R.M. Sm. is known as Shell Ginger and distributed in tropical & subtropical regions around the world. The present paper deals with the Range extension and first report of this species for the flora of Andaman and Nicobar Islands, India. A brief description and distribution is provided here along with the photographic plates for easy identification of the species.

Keywords: *Alpinia zerumbet*, Campbell Bay, Range extension, Addition, Flora.

INTRODUCTION

Alpinia, a genus of flowering plants in the ginger family, Zingiberaceae, with about 230 species (WFO, 2023), is mainly distributed in the Indo-Pacific region. It is represented by ca. 18 species (Mao & Dash 2020) in India, out of which 4 species are reported so far from the Andaman and Nicobar Islands (Rao, 1986; Lakshminarasimhan & Rao 1996; Pandey & Diwakar 2008; Murugan *et al.*, 2016; Naik *et al.*, 2020; Singh *et al.*, 2021). *Alpinia zerumbet* is so far reported from Arunachal Pradesh, Assam, Kerala, Meghalaya (Mao & Dash 2020) from India.

MATERIAL AND METHODS

During our recent botanical exploration tour to Great Nicobar Islands, the first author came across an interesting specimen of the genus *Alpinia* which is after critical examination and consultation of relevant literature and herbarium, identified as *Alpinia zerumbet* (Pers.) B.L. Brutt & R.M. Sm. After going through the literatures (Rao, 1986; Mangaly & Sabu 1992; Lakshminarasimhan and Rao 1996; Hajra *et al.*, 1999; Sabu, 2006; Pandey and Diwakar, 2008; Singh and Murugan 2014; Singh *et al.*, 2014, 2021, 2023; Murugan *et al.*, 2016; Naik and Singh 2018; Naik *et al.*, 2020; Purohit & Vivek, 2022; Purohit *et al.*, 2022, 2023a & 2023b;) it is revealed that this species has not been reported so far from Andaman and Nicobar group of Islands. Therefore, this *Alpinia* species is reported here as a new distributional record for this archipelago flora. A brief description along with distribution is provided along with the photographic plates for easy identification. Specimens were deposited in the PBL.

RESULT AND DISCUSSION

Alpinia zerumbet (Pers.) B.L. Brutt & R.M.Sm. Notes Roy. Bot. Gard. Edinburgh 31: 204 (1972); R.M. Sm. Edinburgh J. Bot. 47: 62. 1990; Mangaly & Sabu

Rheede, 2(1): 51. 1992. *Costus zerumbet* Pers., Synops. 1: 3. 1805.

Rhizomes creeping, thick. Pseudostems many, well developed. Leaves many, rarely 1-4; leaf blade oblong or lanceolate. Inflorescence a terminal panicle, raceme, or spike, dense or lax, covered by 1-3 spatulate involucral bracts when immature; bracts (when present) open to base, rarely hooded, each subtending 1 flower or a cincinnus of 2 to many flowers; bracteoles open to base or tubular, rarely hooded, sometimes absent. Calyx usually tubular, sometimes split on 1 side. Corolla central lobe hooded, usually wider than lateral lobes. Lateral staminodes small or absent, subulate or tooth like, adnate to base of labellum. Labellum often showy, usually larger than corolla lobes, sometimes inconspicuous, margin variously lobed or entire. Filament present or absent; connective crested or not. Ovary usually 3-loculed and placentation axile. Stigma usually well expanded, sometimes clavate, rarely geniculate. Stylodes often massive. Capsule usually globose, dry or fleshy, indehiscent or irregularly dehiscent. Seeds numerous, often angled, arillate (Saboo *et al.*, 2014; Teschke and Xuan 2018; Xuan *et al.*, 2019; Nishidono and Tanaka 2024) (Fig. 1).

Flowering and fruiting: February to June

Habitat and ecology: Grasslands.

Specimen examined: Andaman and Nicobar Islands: Nicobar Islands, Campbell Bay, Magar Nallah, 13.01.2023, 6°59'30.50"N, 93°54'56.40"E, C.S. Purohit & B.C. Dey 34323 (PBL).

Distribution: This species is considered to be a native in North-East India, Burma and Indo-China (Holttum, 1950). India: Arunachal Pradesh, Assam, Kerala, Meghalaya (Mao & Dash 2020), Andaman & Nicobar Islands (Present Survey) [Fig. 2].

Note: It is highly economic important plant. *Alpinia zerumbet* is closely resembles to *Alpinia malaccensis* but can be distinguished by pendulous inflorescence, large flowers and white bracteoles with pink tip. It is

also closely resembles with *Alpinia mutica* but differs in the presence of large bracteoles and large flowers. This plant produces the largest and showy flowers. Hence, it is cultivated as an ornamental plant in gardens. Plants with large glazing leaves are also very attractive. It can be propagated easily by rhizome and seeds (Sabu, 2006; Dalisay *et al.*, 2023). This plant has its natural flavour and multipurpose uses, such as food

stuffs condiments, tea, drink, perfume, cosmetics, soaps and deodorant products (Saboo *et al.*, 2014; Teschke & Xuan 2018; Xuan *et al.*, 2019; Nishidono & Tanaka 2024). It has effective healing property, so it has been popularly known as a traditional medicinal crop and grown widely in many countries including India. It's an herbal medicine to treat cold, fever, diarrhoea, coughing etc. (Saboo *et al.*, 2014; Nishidono and Tanaka 2024).



Fig. 1. *Alpinia zerumbet* (Pers.) B.L. Burt & R.M.Sm.: Habit, inflorescence, different part of flowers and rhizome.

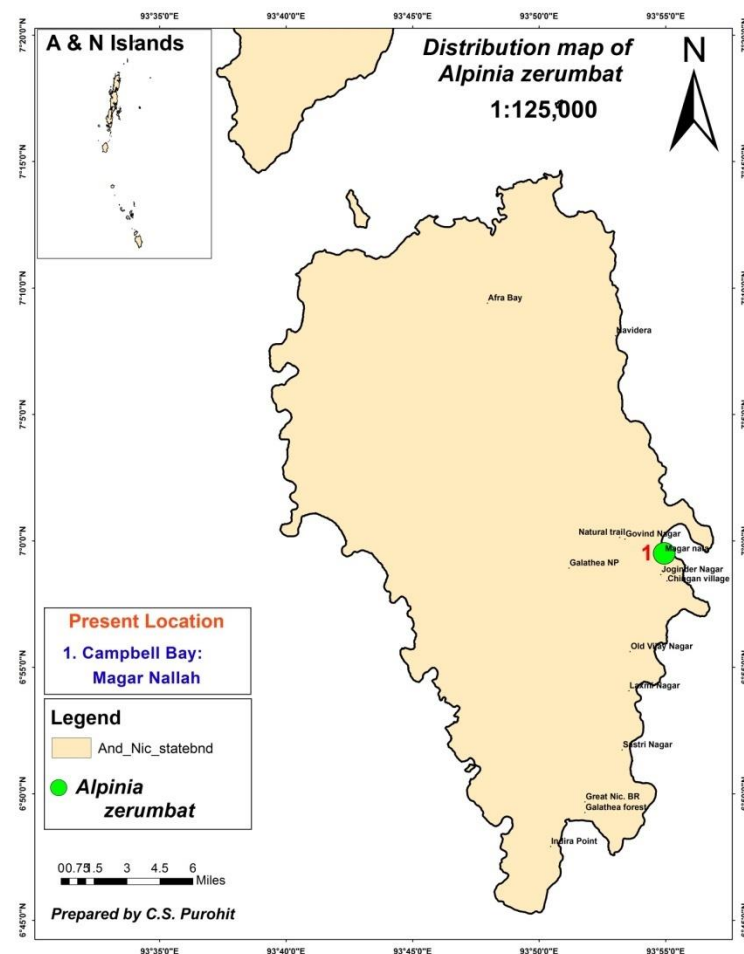


Fig. 2. Distributional map of *Alpinia zerumbet* in Great Nicobar Islands.

CONCLUSIONS

Alpinia zerumbet (Pers.) B.L. Brutt. & R.M. Sm. is known as Shell Ginger and highly economic important plant is used such as food stuffs condiments, tea, drink, perfume, cosmetics, soaps and deodorant products. It is reported from Arunachal Pradesh, Assam, Kerala and Meghalaya in India. The present paper deals with the range extension and first report of this species for the flora of Andaman and Nicobar Islands, India.

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