# Addition of Cardamom and Ginger for the Flora of Maharashtra

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# महाराष्ट्र वनस्पतिजात के लिए कार्डामोम एवं जिंजर का अभियोजन

गोवेकर, रविकिरण एवं एम.एम. सरदेसाई

# सारांश

पूर्वी महाराष्ट्र के फिल्ड सर्वेक्षण के दौरान एमोमम मैक्सिमम (रॉक्सब.) एवं जिंजिबर केपिटाटम रॉक्सब प्रभेद. इलेटम (रॉक्सब.) बेकर पादप जाति को संग्रहित किया गया है। वानस्पतिक साहित्य और पादपालय नमूनों से उपरोक्त दोनों जातियों का महाराष्ट्र के वनस्पतिजात में प्रथम अभिलेखन का बोध होता है। प्रस्तुत शोध–पत्र इन दोनों जातियों के महाराष्ट्र राज्य में विस्तार एवं संक्षिप्त वर्णन, वितरण तथा संग्रहित प्रत्येक जाति के पादपालयी नमुनों की व्याख्या करता है।

#### **ABSTRACT**

Field survey of eastern Maharashtra resulted in collection of *Amomum maximum* Roxb. and *Zingiber capitatum* Roxb. var. *elatum* (Roxb.) Baker. A scrutiny of the literature and herbaria revealed that both the taxa forms the first report for flora of the Maharashtra state. The present paper reports range extension of these two species for the State of Maharashtra and provides short description, distribution and herbarium specimens collected for each species.

**Keywords:** Zingiberaceae, *Amomum, Zingiber*, New Records, Flora, Maharashtra

## INTRODUCTION

The family Zingiberaceae (ginger family) consists of 53 genera and over 1200 species (Kress & al. 2002). According to Mabberley (2008), the family excl. Costoideae (= Costaceae) comprises 48 genera and 1275 species. *Amomum* Roxb. is the second largest genus after *Alpinia* Roxb. within Zingiberaceae with 150 – 180 species, widely distributed in Southeast Asia (Xia & al. 2004). According to Mabberely (2008), the genus comprises c. 150 species distributed in Asia and Australia. In India, the genus is represented by 22 species, mostly restricted to North-East India and

South India (Thomas & al. 2010).

Zingiber Mill. with about 141 species is chiefly distributed in tropical Asia (Sabu, 2006). According to Mabberley (2008), the genus comprises of c. 100 species, distributed in Indo-Malesia to E. Asia & tropical Australia. In India, the genus is represented by 22 species, mostly restricted to North-East India and South India (Thomas & al. 2010). Similarly genus Amomum is represented by single species whereas Zingiber with 6 species including one cultivated species for the state of Maharashtra (Lakshminarasimhan, 1996). The voucher specimens deposited in the Herbarium (BAMU) of Department of Botany, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

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Amomum maximum Roxb., Fl. Ind. (eds. Carey & Wall.)1: 41. 1820; Karthik. & al., Fl. Ind. Enum. Monocot: 290. 1989.

Plants 2 – 3 m tall. Leaves oblong or oblong-elliptic, adaxially glabrous, abaxially white villous, with caudate apex. Flowers in subglobose spikes near base. Inflorescence stalk procumbent, woody. Calyx 3-toothed. Corolla tube slightly longer than calyx; lobes white, oblong. Labellum white, yellow on each side of midvein, red striate at base. Capsule purple-green, ovoid, 9-winged.

Flowering and Fruiting: May - November.

*Distribution*: India- Karnataka, Kerala, Goa and Maharashtra states.

*Specimens examined*: Maharashtra state, Gadchiroli District, Podewada, 9-5-2011, *R.S. Govekar* 416.

*Notes*: The species found along streams, in shady places. Forms a thicket along the hill streams around Bhamaragad sanctuary, Binagunda, Kuwakodi Pirmilbhatti and Podewada. Arils of the ripen fruits are edible.

Zingiber capitatum Roxb. var. elatum (Roxb.) Baker in Hook.f., Fl. Brit. India 6: 249. 1892; Sabu, Zingiberaceae & Costaceae of South India 229, f. 230, t.17A. 2006. Zingiber elatum Roxb., Fl. Ind.(eds. Carey & Wall.) 1: 57. 1820.

Plants 1.5 - 2 m tall. Leaves bifarious, oblong, adaxially glabrous, abaxially minutely hairy. Flowers in elongated terminal spikes, turning red at maturity. Calyx 3-toothed, white. Corolla lobes bright yellow. Capsule oval, bright red, many seeded.

Flowering and Fruiting: August - November.

*Distribution*: India- Andhra Pradesh, Bihar, Bengal and Sikkim states.

*Specimens examined*: Maharashtra, Gadchiroli District, Binagunda, 10-10-2011, *R.S.Govekar* 516.

*Notes*: Found in the moist forest floors and slopes. Glory of Allapalli, Bhamaragad sanctuary, Binagunda, Chaprala, Gatta, Lakkameta and Surjagad.

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