



## A Note on the Occurrence of *Acer oblongum* var. *oblongum* in Eastern Ghats of India

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### Abstract

*Acer oblongum* Wall. Ex DC. var. *oblongum* (Sapindaceae) has been discovered from Mahendragiri hills, Gajapati, Odisha, part of the Eastern Ghats, India growing at an elevation of 1197 m amsl which constitutes a new generic record for flora of Odisha and new distributional record for Eastern Ghats of India. The present finding extends its distribution from North India to Eastern Ghats of India which enhanced the phytogeographic significance of Eastern Ghats.

**Keywords:** Mahendragiri hill, Odisha, Sapindaceae, peninsular India.

### Introduction

Maple trees are classified in the genus *Acer* L. under the family Sapindaceae. About 156 species of *Acer* including more than 20 recently described taxa (Jianhua, Jipei and Suzanne, 2006) have been recorded worldwide. Although *Acer* mainly occur in temperate to subtropical areas, several species extend their distribution ranges up to the tropics (Jianhua, Jipei and Suzanne, 2006). About 17 species of *Acer* are so far reported from India (Nayar and Datta, 1982).

Mahendragiri hill (18° 58' 28" N, 84° 22' 5" E) located in Paralakhemundi division of Gajapati District, Odisha is the amalgamation of biodiversity representing species from northern and southern India, the Himalaya and the Nilgiris making the region an ecological estuary of genetic diversity (Dash, *et al.*, 2015). It is spread over an area of over 2,000 km<sup>2</sup> bordering Andhra Pradesh. The lush green tropical forests (semi-evergreen to moist and dry deciduous type) of Mahendragiri are a critical habitat for many threatened and endemic plants. Floristically the hill represents 35% of the reported flora of Odisha. Saxena and Brahman, (1994) enumerated the floristic account of Mahendragiri hills in the book 'Flora of Orissa'

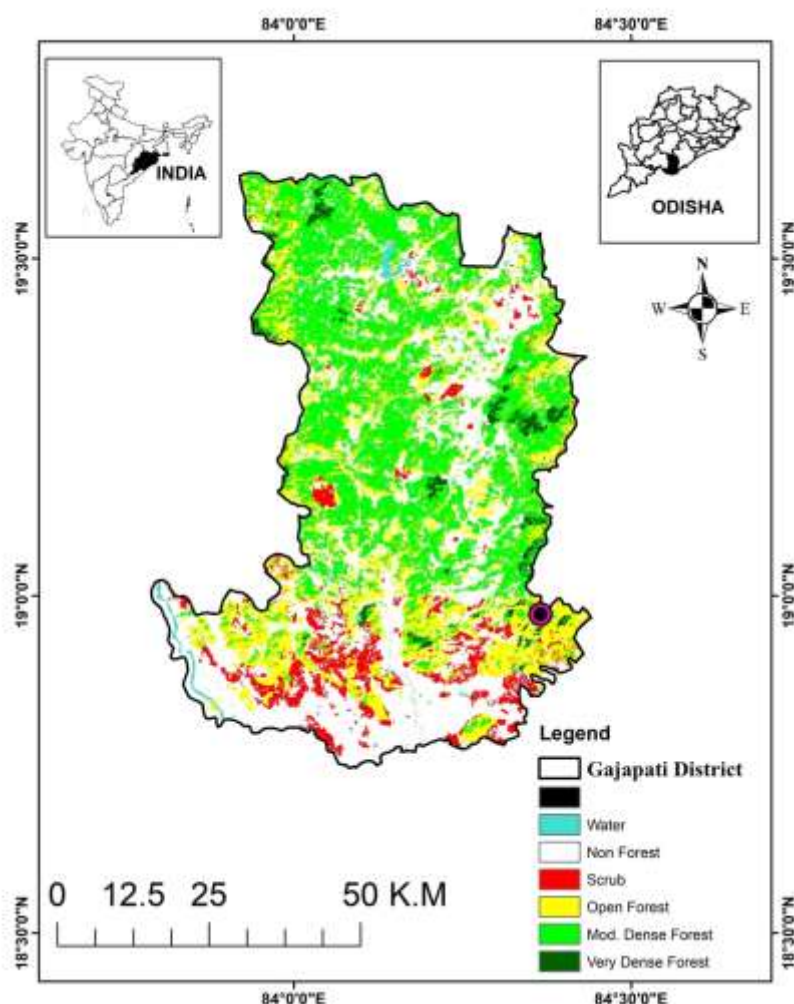
and reported 600 plant species from here which was augmented by Dash and Kumar, 2013 and reported 660 species of angiosperms, gymnosperms and pteridophytes from the hill. Latter dash, *et al.*, 2015 reported the occurrence of *Cheirostylis parvifolia* from Mahendragiri hill which was earlier reported from Western Ghats (Sri Lanka, Kerala and Maharashtra) only increasing its phytogeographic significance. Recently three new plant species such as *Tripogon mahendragiriensis*, *Themeda odishae* and *Brachystelma mahendragiriense* are also reported by Chorgha, *et al.*, 2015, Chorgha, *et al.*, 2016 and Prasad, *et al.*, 2017 which are considered as the second third and fourth endemic species of Odisha from Mahendragiri hill after *Dimeria mahendragiriensis* which was reported from here by Ravi, Saxena and Brahman, 1997. One epiphytic fern, *Microsorium zippelii* is also reported from here by Sahu, *et al.*, 2015.

### Methodology

During an inventory study of flora of Mahendragiri, the 1st author has collected some flowering and fruiting specimens of a rare tree species growing in wild (18° 58' 22.8504" N, 84° 21' 34.2" E, Elev. 1197m amsl)

(Figure 1). Thorough taxonomic studies and detailed literature review the species is conformed as *Acer oblongum* var. *oblongum*. This constitutes a new distributional record for flora of Eastern Ghats, India and a new

generic record for flora of Odisha. For further studies, one herbarium (Redg. No.-OBB/Angio/Tree/010) having mature fruits is deposited at Odisha Biodiversity Board.



**Figure- 1:** Location map of *Acer oblongum* var. *oblongum* from Mahendragiri hill, Gajapati, Odisha

## Result and Discussion

### Taxonomic Treatment

*Acer oblongum* Wallich ex A.P. de Candolle, Prodr. 1: 593. 1824; Hooker f. in Fl. Brit. Ind. 1: 693. 1875; Hara in Fl. E. Him. 1: 192. 1966: 2: 73. 1971; Hara & Williams in En. Fl. Pl. Nep. 2: 98. 1979; Nayar & Datta, Fasc. Fl. Ind. 9: 12. 1982; Das & Chanda in Trans. Bose Res. Inst. 51(4): 104. 1987; Grierson & Long in Fl. Bhutan 2(1): 63. 1991. *A. lanceolatum* Molliard, Bull. Soc. Bot. Fr. 50: 134, t. 5. 1903. *Acer discolor* Maximowicz; *A. eucalyptoides* W. P. Fang & Y. T. Wu; *A. guanense* W. P. Fang; *A. oblongum*

var. *concolor* Pax; *A. oblongum* var. *latialatum* Pax; *A. oblongum* var. *trilobum* Henry.

**Description:** Trees, 10 to 20 meters. Bark gray or dark gray, rough, fragmented into flakes off. Branchlets slender, nearly cylindrical; twigs purple or purple-green, nearly hairless; perennial older branches brown or dark brown. Winter buds small, brown, and nearly hairless. Leaves leathery, coriaceous, dark green when mature, oblong-ovate, 10-17 cm long and 5-7 cm broad, entire, base obtuse or nearly rounded, apex acuminate or obtuse; petiole 2-3 cm long, yellow-green, glabrous. Flowers polygamous, yellow-green; sepals 5, oblong, apex obtuse, 2 mm long;

petals 5, obovate, 3 mm; stamens 8, slender, pubescent, anthers round; ovary glabrous, style short, hairless, 2 crack stigma reflexed; peduncle 1-2 cm long, slender; Samara green to pale brown; 2-3 cm long and 0.5 mm broad.

#### Key to varieties of *Acer oblongum*

1 a. Leaves membranous, dull red or reddish concolored,

Leaf base acute or subacute.....  
*var. membranaceum*

b. Leaves coriaceous, mature leaves dark green,

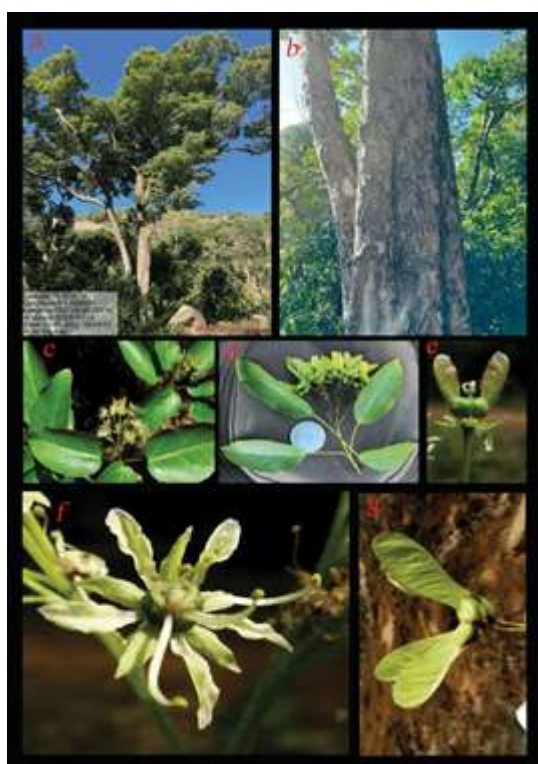
Pale to silvery glaucous beneath, leaf base obtuse or rounded.....2

2. a. Leaves 10-17 x 5-7 cm, samara 2-3 cm long..... [var. oblongum](#)

b. Leaves 5-12 x 3-5 cm, samara 1 cm long..... [var. microcarpum](#)

**Flowering and Fruiting:** October-January.

**Distribution and ecology:** India: Jammu and Kashmir, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Sikkim, Meghalaya, Manipur, Nagaland, Tamil Nadu and Uttar Pradesh and China at an altitude between 1400 – 2200m amsl and Mahendragiri hills, Odisha in semi-evergreen forests at an altitude of 1000-1100 m amsl.



**Figure- 2:** *Acer oblongum* var. *oblongum*  
a - Whole tree, b - Bark



**Figure- 3:** Herbarium specimen of *Acer oblongum* var. *oblongum* deposited in the herbarium of Odisha Biodiversity Board, Bhubaneswar.

**Specimens examined:** **Jammu & Kashmir:** Basaoli, 25.09.1876, C.B. Clarke, 95967 (Acc. No.) (CAL); **Manipur:** Laireen, 05.04.1882, G. Watt, 6250 (CAL); **Nagaland:** Naga Hill, Sept. 1886, D. Prain, 95989 (Acc. No.) (CAL); **Tamil Nadu:** Sims Park, Coonoor, Nilgiri dist., 14.05.1957, K.M. Sebastine, 3236 (CAL); **Sikkim:** Kulbait, 22.10.1875, C.B. Clarke, 25511 (CAL); **Uttarakhand:** Dafia Dhoore, Kumaon dist., 05.09.1979, C.M. Arora, 52402 (CAL).

Odisha: 10. 01.2022, S.S Hansda OBB (FoO-G-MH-10) from Mahendragiri hills, Gajapati district.

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