



## Research Article

## ***Cymbidium macrorhizon* (Orchidaceae): A new record for the Flora of Odisha, India.**

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**Abstract:** *Cymbidium macrorhizon* Lindl. is reported first time for Odisha from Koira forest of Bonai Forest Division. The correct botanical nomenclature, brief taxonomic description, with photo plate of the taxon is provided for easy identification.

**Keywords:** Bonai, *Cymbidium*, Flora, Orchidaceae, Taxon.

### Introduction

The genus *Cymbidium* Sw. (Orchidaceae) is one of the most attractive and desirable genera of orchids in the world because of their showy and fragrant flowers. It comprises different epiphytic, lithophytic and terrestrial species having 72 species, 10 varieties, 8 subspecies and 14 natural hybrids distributed all over the world: India, Southeast Asia, China, Japan, Indonesia to Australia (Govaerts *et al.*, 2014). Out of which 26 species, 5 subspecies and 4 varieties are found in India (Misra, 2007).

During the plant exploration in Bonai forest division of Sundargarh district, authors collected some interesting orchid specimens from Koira forest of Bonai. After critical examination of fresh and herbarium specimens including type material housed in various herbaria and perusal of literatures (Hooker, 1890; Haines, 1924; Mooney, 1950; Misra, 2004 & 2014; Saxena & Brahmam, 1995) these interesting specimens were identified as *Cymbidium macrorhizon* Lindl. Correct botanical nomenclature, brief description, with photo plate of the taxon is provided for easy identification.

### Taxonomic treatment

*Cymbidium macrorhizon* Lindl. Gen. & Sp. Orchid. Pl. 3: 162. 1833; Hook. f. Fl. Brit. India 6: 9. 1890; Duthie in Ann. Roy. Bot. Gard. Calcutta 9:134.t.114.1906; Babu, Herb. Fl. Dehradun: 481. 1977; Murti in Bull. Bot. Surv. India 24: 236.1983. *Yuania aberrans* Finet, Bull. Soc. Bot. France 47: 274. 1900. *Cymbidium aberrans* (Finet) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 4:264.1919. *Cymbidium macrorhizon* var. *aberrans* (Finet) P.J. Cribb *et Du Puy*, Gen. *Cymbidium*, ed. 2: 330.2007 (Fig. 01).

Terrestrial saprophytic herbs, up to 20 cm high. Rhizome 5-20 x 0.7-1.2 cm, branched, creeping, jointed. Pseudo bulb and leaves absent. Inflorescence in lax racemes, few flowered; floral bracts 7-18 x 4-7 mm, oblong-lanceolate, acute-acuminate, entire, weakly keeled, glabrous, scarious. Flowers 3-6 cm across, pale yellow, streaked and spotted with pink, spreading; dorsal sepal 1.8-2.6 x 0.3-0.6 cm, lanceolate, entire-undulate, acuminate, spreading, 3-nerved; lateral sepals similar; petals elliptic-lanceolate, 1.5-2 x 0.5-0.7 cm, oblique, entire, acute, forming hood over the column, 3-veined. Lip rhombic to ovate in outline 1.2-1.7 x 0.8-1.2 cm, 3-lobed; lateral lobes small, globose, margin inflexed; mid-lobes broadly ovate, reflexed, acute; disc bi-lamellate; lamellae converging in the apical half forming a tube at the base of mid-lobe. Column 0.9-1.6 cm long, stout, faintly curved at the distal half, inner surface streaked with crimson; anther papillose. Pollinia 4, broadly ovate to sub globose, stipitate; stipe crescent-shaped. Capsules 3-5 cm long, fusiform to ellipsoidal, ridges, stalked.

**Flowering & Fruiting:** June-August.

**Habitat:** Rare in decaying humus of moist deciduous forests at 634 m elevation.

**Notes:** This is the only species of *Cymbidium* in India which is of saprophytic nature. However, *C. madidum* in Australia is also saprophytic. The biology of such heterophytic plants are quite interesting and there is a need for detailed observations on the reproductive biology of these plants.

**Distribution:** INDIA: Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Odisha (Present finding), Sikkim, Uttarakhand, West Bengal: Bhutan, Burma; Cambodia; China; Japan; Nepal; Loas; Myanmar; Pakistan; Taiwan.

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**Specimens examined:** INDIA, **Odisha** (Present finding): Mendhamaruni RF, Koira, Bonai Forest Division, Sundargarh district, 29.06.2017, Mandal & Kar 847 (CAL); **Jharkhand:** Netarhal, Latehar, 11.09.2004, P. Kumar 0411190 (WII); **Meghalaya:** Shillong, woodlands, 16.06.1970, B. Krishna 38395 (ASSAM); Mairang forest, 03.07.1980, A.S.

Chauhan 62376 (ASSAM); **Nagaland:** Naga Hills, June 1936, N.L. Bor 21078 (ASSAM); **Uttarakhand:** Near Mussoorie, on Banog, 24.07.1899, P.W. Mackinnon 22717 (DD); Near chorela sal forest, Dehradun, 20.06.2003, J.S. Jalal 13767 (WII).

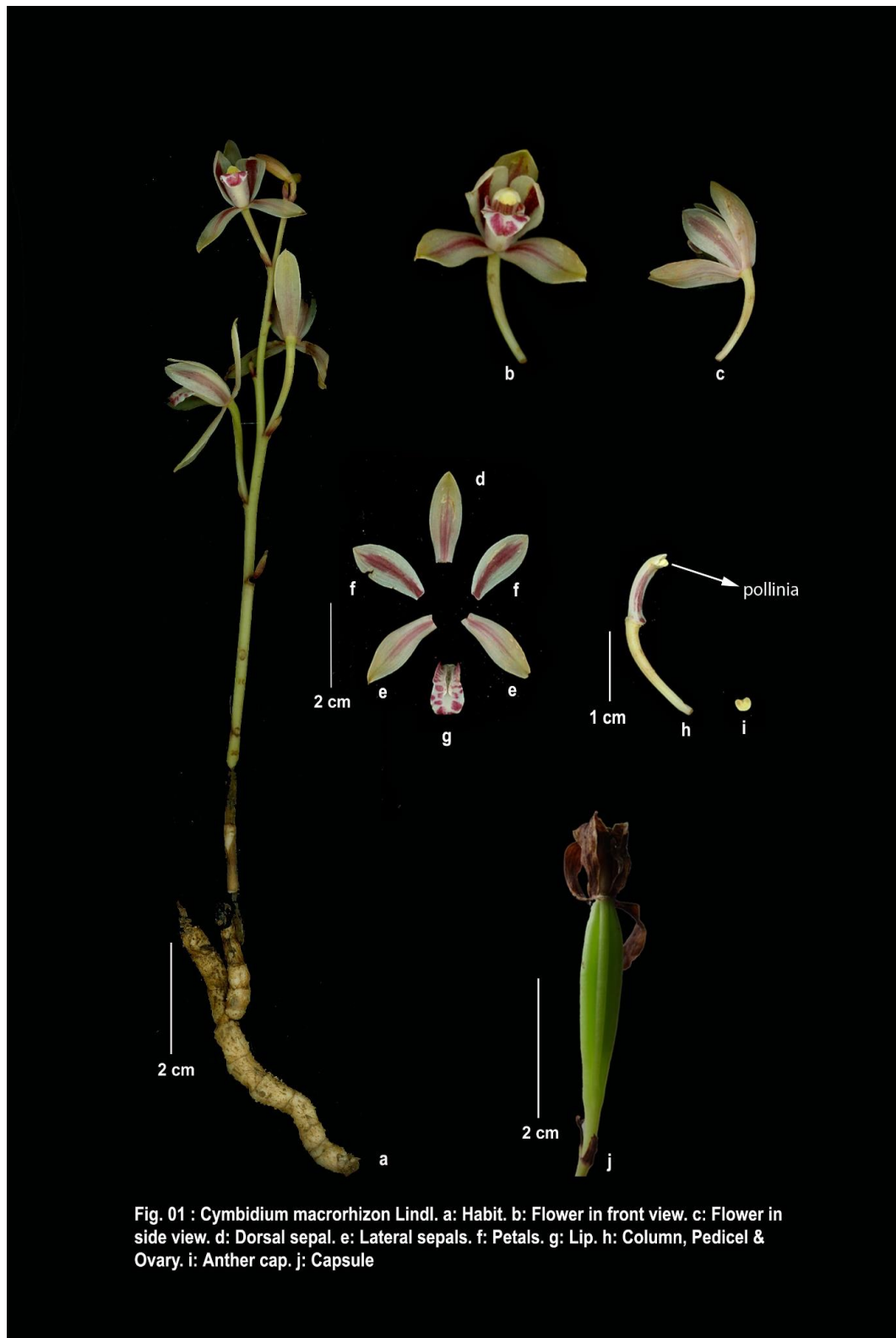


Fig. 01 : *Cymbidium macrorhizon* Lindl. a: Habit. b: Flower in front view. c: Flower in side view. d: Dorsal sepal. e: Lateral sepals. f: Petals. g: Lip. h: Column, Pedicel & Ovary. i: Anther cap. j: Capsule

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