

CALANTHE YUKSOMNENSIS S. Z. LUCKSOM (ORCHIDACEAE) - A NEW RECORD FOR DARJEELING HIMALAYA OF W.B.

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ABSTRACT : Present paper deals with the *Calanthe yuksomnensis* S. Z. Lucksom (Orchidaceae) is collected from Sukiapokhari, Takdah and Mim Tea Estate, Dhotrey and Rambhi forest of Darjeeling Himalaya and is reported as new record for the Darjeeling Himalaya of West Bengal. A detailed description is provided herewith for easy identification.

Kew words : New record, Orchid species, *Calanthe yuksomnensis*, Darjeeling Himalaya, India.

INTRODUCTION

Orchids are considered to be the highly evolved among the monocotyledons. It is estimated 25,000 to 35,000 Orchid species widely distributed all over the world and about 1300 species with 140 genera of Orchid species are found in India with temperate Himalayas as their natural home (Yonzone and Kamran, 2008). In India, Orchids from 9% of our flora and are the largest family of higher plants. The genus *Calanthe* is one of the terrestrial Orchid species which was described in 1821 by Robert Brown. The genus comprises about 100 species from tropical, subtropical and warm temperate regions from Africa to Asia and the Pacific Islands with a single species in the Tropical Americas (Pearce and Cribb, 2002).

Plant terrestrial, stems pseudobulbous. Leaves 2 to several, elliptic-oblong, plicate. Inflorescence amongst the leaves and axillary, terminal or from the base of pseudobulb, erect, long or short, few to many-flowered, racemose. Flowers resupinate, small to large and showy. Sepals and petals similar, free, spreading. Lip entire, 3 or 4-lobed, adnate to column base, usually spurred; mid-lobe often deeply bifid; disc with lamellae. Column short. Anther usually conical, 2-celled. pollinia 8, waxy, clavate or elliptic. While working on Orchid flora of Darjeeling Himalaya, the authors came across interesting specimens of terrestrial Orchid species. After critical examination and comparison with other authenticated specimens and literatures, an unknown species of terrestrial Orchid that was identified as *Calanthe yuksomnensis* S. Z. Lucksom (Orchidaceae) and was collected from Sukiapokhari, Takdah, Mim Tea Estate, Dhotrey and Rambhi forest of Darjeeling Himalaya. A perusal of earlier literature related to the Orchid flora of Darjeeling (Hooker, 1888-1890; King & Pantling, 1898; Hara, 1966; Hara, 1971; Ohashi, 1975; Pradhan, 1979, Pradhan & Pradhan, 1997 and Pearce & Cribb, 2002) revealed that the occurrence of this species has not been reported earlier from Darjeeling Himalayan region and hence the present collection is its first record of occurrence as *Calanthe yuksomnensis* S. Z. Lucksom, for Darjeeling Himalaya of West Bengal, India. The newly collected specimens have been deposited in the Herbarium of Department of Botany, St. Joseph's College, North Point, Darjeeling and Herbarium of Taxonomy and Ethnobiology Research Laboratory, Cluny Women's College, Kalimpong for future references. A detailed taxonomic account of the species along with a sketches, photograph, habitat, altitudinal range, current status, local distribution within Darjeeling and geographical distribution is provided here to authenticate the new record and facilitate its easy identification.

Taxonomic enumeration :

Calanthe yuksomnensis S.Z. Lucksom in *J. Bombay Nat. Hist. Soc.*, **95(2)** : 319. 1998. (Fig. 1a&1b)

Plant 20-30 cm tall. **Pseudobulbs** 2-3 x 1.6-2 cm, ovoid; internodes 2 or 3. **Leaves** 3, 20-30 x 7-12 cm, elliptic-lanceolate, acute, petiolate, new leaves sheathing at base; petiole 17-26 cm long, channeled. **Inflorescence** 3 to 12-flowered; peduncle 14-24 cm long, erect, terete, puberulous, sheathed; rachis 5-8 cm long, terete, puberulous; **Pedicellate-ovary** 2-2.4 cm long; floral bracts lanceolate. **Flowers** 3.4-4.3 cm across, mildly fragrant. **Sepals and petals** brownish-purple with green tips and bases, lip creamy-white. **Dorsal sepal** 1.2-1.4 x 0.7-0.8 cm, elliptic, acute, puberulous externally, 5 to 7-veined; **Lateral sepals** 1.2-1.6 x 0.7-0.8 cm, spreading, 5-veined. **Petals** 1.4-1.6 x 0.4-0.5 cm, rhombic, subacuminate, 3-veined. **Lip** 2-2.3 x 1.6-1.7 cm, 3-lobed, spurred, base clawed and adnate to column; lateral lobes ovate-oblong, obtuse; apical lobe subreniform, bilobulate, lobules subobovate, obtuse, crenulate; disc with 3 shallow elongate calluses; spur 2.3 cm long, straight, cylindrical. **Column** 7-7.5 mm long. **Anther** ovate. **Pollinia** 8, obovate to clavate.

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Flowering and Fruiting time : April-July, **Habitat :** Terrestrial on grassland. **Altitudinal range :** 1700-2900 m. **Specimen examined :** Sukiapokhari, Takdah and Mim Tea Estate Dhotrey and Rombi forest of Darjeeling Himalaya. **Present availability status :** (persist threat; Rare in natural habitat). **Date of collection and Voucher Specimen number :** 12.05.2009; Rajendra *et al.*, 1853 (Darjeeling, West Bengal, India). **Geographical distribution :** India (Sikkim).

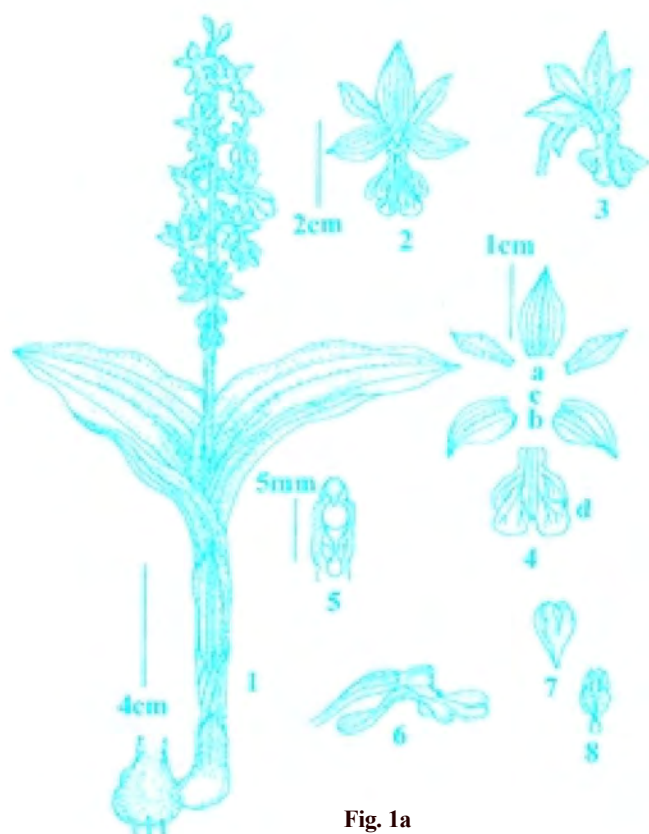


Fig. 1a



Fig. 1b

Fig. 1a *Calanthe yuksomnensis* S.Z. Lucksom, 1. Habit; 2. Front view of flower; 3. Side view of flower
4. Floral perigone, a. dorsal sepal, b. lateral sepals, c. petals d. lip; 5. Column with anther in situ;
6. Side view of pedicellate-ovary, column, lip and spur; 7. Anther; 8. Pollinia.
Fig. 1b Whole flowering plant in natural habitat.

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