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ADDITION TO INDIAN ORCHID FLORA - *CLEISOSTOMA DUPLICILOBUM* (J. J. SM.) GARAY FROM NAGALAND

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During a plant collection tour in connection with "Flora of Mt. Saramati, Nagaland" under Annual Action Plan of Botanical Survey of India, Eastern Circle, Shillong some orchids were collected and brought to Shillong. One species among these orchids initially thought to be *Renanthera imschootiana* due to its resemblance in habit were collected during December 2003 from a tree trunk of felled *Quercus semisserata* between Penkim and Thanamir village of Kiphirie district in Nagaland (India) at an altitude of 1600 m. The vegetation of the area is mixed pine forest, completely cleared for 'Jhum Cultivation', which is the only type of agricultural practice of the area. The forest thus cleared was burnt in the month of March 2004. On second visit during May 2004 no further collections could be made, as the area was already a paddy field. The collected plants raised in the 'National Orchidarium' of Botanical Survey of India, Eastern Circle, Shillong, Meghalaya, flowered during July 2005. On critical examination the orchid was identified to be *Cleisostoma duplicilobium* (J.J. Sm.) Garay a species known from Thailand, Laos, Vietnam and Java. Therefore collection of this species is a new record for India. One flowering specimen was made a voucher specimen for record and rest three plants are thriving well in the Orchidarium.

Cleisostoma duplicilobium (J. J. Sm.) Garay, Bot. Mus. Leafl. Harv. Univ. 23, 4: 171, 1972; Scidenf. In Dansk. Bot-Ark 23 (3): 36. 1975; Op. Bot. 114: 390. 1992. Comber, Orch. Java 337-338, 1990. *Sarcanthus duplicilobium* J. J. Smith, Bull. Dept. Agr. Ned. Ind. 13: 64. 1907. *S. carinatus* Rolfe ex Downnie, Kew Bull. 408, 1925. *Cleisostoma carinatum* (Rolfe) Garay, Bot. Mus. Leafl. Harv. Univ. 23, 4: 170, 1972.

Epiphytic, stems erect, 4-5 mm thick, about 20 cm long, older portion covered with sheaths of fallen leaves, leafy upwards, internodes about 5 mm long, sheaths 1-18 cm long; roots arise from lower portion of the stem, smooth, 4-5 mm thick. Leaves distichous 5-8 × 1.5-2 cm, linear-oblong, unequally bilobed with obtuse lobes. Inflorescence extraxillary, upto 22 cm long, branched, many flowered, the peduncle purple dotted, with 2-3 distant sterile bracts. Flowers 10-12 mm across, spreading, sepals and petals dark purple-brown with yellow apices and a median line. Sepals; dorsal 4 × 2 mm, oblong, obtuse, hooded over the column, lateral sepals 4 × 3 mm, broadly oblong, obtuse. Petals 4 × 1 mm, linear, subacute. Lip light yellow, 6 mm long, 3 lobed; lateral lobes obtuse, purplish on margins, the front edge slightly inwards curved, at the proximal and horizontal edge a rather conspicuous flap and a conical or subulate callus below the tip; midlobe more or less at a right angle to the spur, the apical part slightly upwards bent with a small mucronate tip; with a fat rounded median keel towards base and highest at the front edge of the sidelobes, continuing as a fattened papillous upper edge of septum. Spur broad conical, somewhat forwards bent due to the gibbous back, the septum complete, the back wall callus bilobed, papillous at its lower end. Column yellow with purple-brown tinge on the inner side, 2 mm long. Anther-2 lobed, with wavy trilobed front edge, 1.25 × 1.25 mm. Pollinia 4 - in two pairs. Stipe mitre-shaped with vertical flanges on the front side of the basal arms, which connect to the saddle shaped disc.

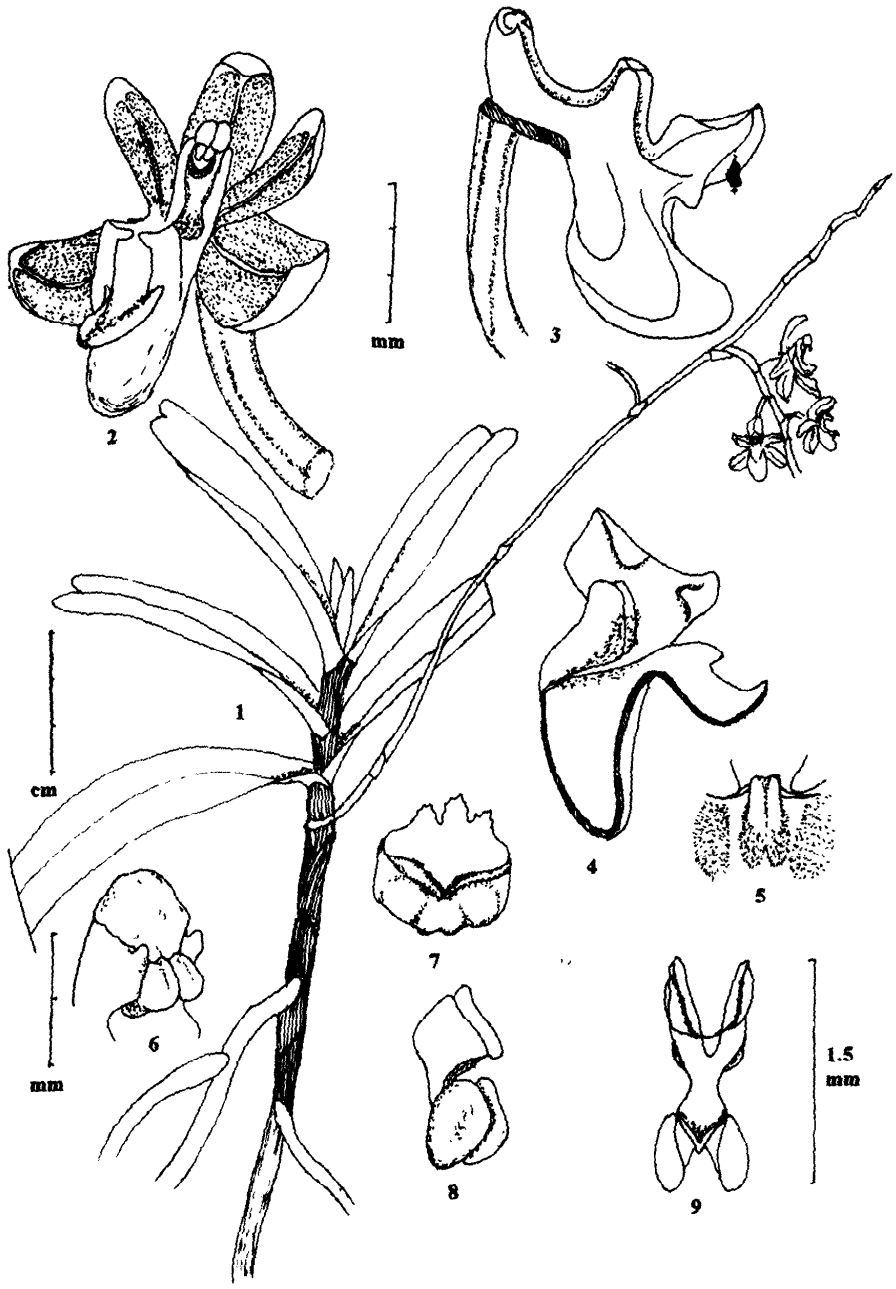


Fig. : Cleisostoma duplicilobum (J. J. Sm.) Garay :
1. Plant, 2. Flower; 3. Lip with column; 4. L.S. of lip; 5 Back wall of callus; 6. Column; 7. Operculum; 8 & 9. Pollinia with stipe.





Figs. 1 & 2 : Cleisostoma duplicilobum (J. J. Sm.) Garay

Fl. : July.

Distrib. : Thailand : Laos, Vietnam, Java; India : Nagaland.

Specimens examined : Nagaland : Kiphirie district, Penkim to Thanamir village, December 2003. Flowered in National Orchidarium, Shillong on 8.7.2005, *Phukan & Odyuo* 102868 (ASSAM).

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