

## TWO NEW TAXA OF THE FAMILY ORCHIDACEAE FROM DARJEELING HILLS, WEST BENGAL (INDIA)

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Orchidaceous flora of Darjeeling and Sikkim Himalayas is very rich. In our recent floristic exploration two new orchids have been discovered. The specimens were compared with type and/or authenticated specimens at the Central National Herbarium (herb. CAL). Protologues were also consulted for confirmation.

***Gastrochilus corymbosus*** A.P. Das et Chanda,  
*sp. nov.*

*G. disticho* (Lindley) Kuntze similis, sed differt ramis rigidis, brevioribus, crassioribus (O. 2 cm), internodis brevioribus (O. 25-0.3 cm), foliis ovato-oblongis, acuminatis 2.5 x 0.8 cm, percarosis, vaginis juvenibus laminisque maculis numerosis brunneis instructis; pedunculis (1.3 cm) cum caulibus arcte compressis; pedicellis 0.5 cm; bracteis 0.4 cm, oblongis; floribus 4, oppositis, decussatis, corymbum perfectum formantibus, eorum labellis procurrentibus versus centrum, majoribus, 1.8 x 1.2 cm; sepalis et petalis majoribus, 0.8 x 0.4 cm, navicularibus, maculis, infra

permajoribus (usque ad 2 mm), paucioribus (4-6), plus fuscioribus; calcari perlatiore, 0.7 x 0.6 cm, labello perlatiore, rhombico, depressione transverse rhombica cum maculis pervis, congestis, brunneis.

*Holotypus* : Jalapahar, Darjeeling (West Bengal), 2200 m, 29.10. 1982, A.P. Das 823 (CAL).

An epiphyte. Roots cylindrical, 0.15 cm thick. Old stem covered with dried leaf-bases; open stem 0.2 cm thick; branches  $\pm$  15 cm long with very short (0.3-0.4 cm) internodes. Leaf base sheathing with a slightly widened mouth; lamina ovate, acuminate, 2.2 x 0.8 cm, thickly fleshy, midvein slightly impressed above; young sheath and lamina brown-spotted. Peduncles axillary, 1.3 cm, remain closely adpressed with the stem; bracts 0.4 cm, oblong, tips rounded; pedicels 0.5 cm. Flowers four opposite decussate, forming a perfect corymb with their labelli projecting towards the centre, 1.8 x 1.2 cm. Sepals and petals large (0.8 x 0.4 cm), boat-shaped, much

darker brown and larger but few (4-6) blotches on the ventral surface; spur broad (0.7 x 0.6 cm); labellum much broader, rhomboid, diamond shaped depressed area

covered with small brown spots. [Plate I]

*Distribution* : INDIA; endemic to Darjeeling and Sikkim Himalayas

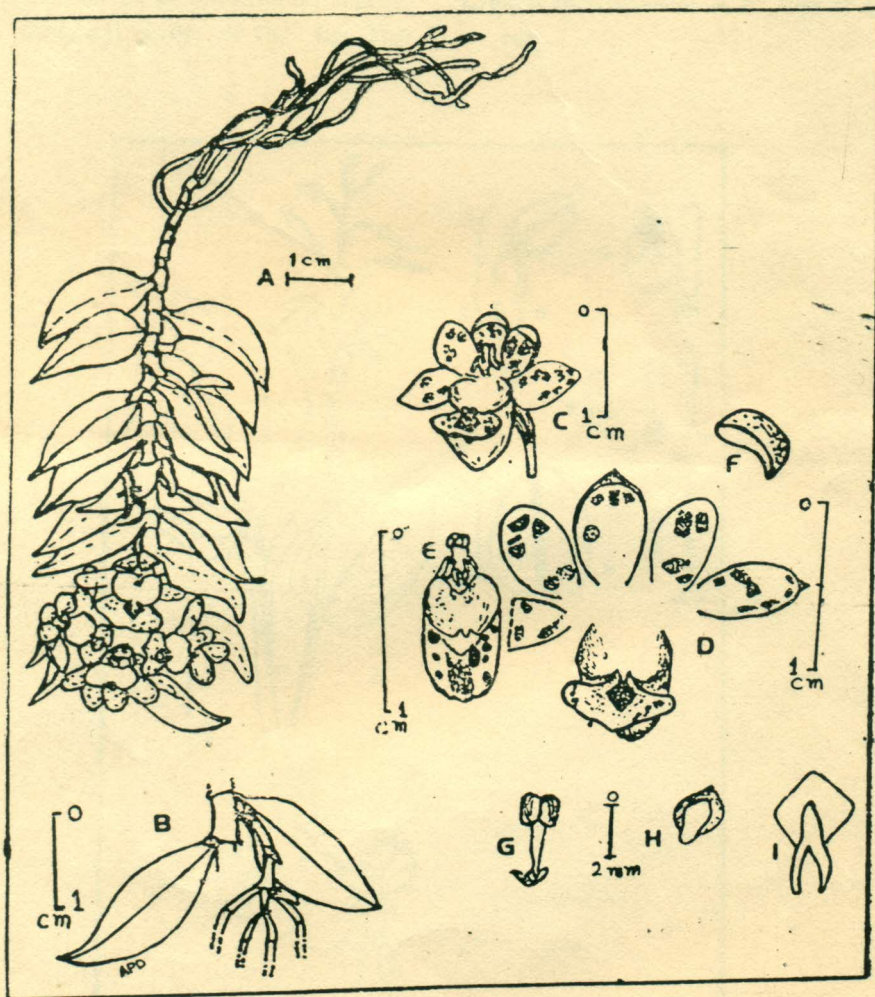


Plate 1. *Gastrochilus corymbosus* AP. Das et Chanda, sp. nov.

A. a plant; B. mode of flower bearing; C. a flower; D. different parts of a flower; E the spur and the column; E. dorsal surface of a sepal; G. a bipollinium; H. hood of the anther cavity; I. the rostellum; S= sepal; P=petal.

This species is allied to *Gastrochilus distichum* (Lindley) Kuntze but differs in having much shorter peduncle which remain adpressed with the stem; four opposite decussate flowers forming a perfect corymb; number, size and shape of blotches on sepals, petals and terminal lobes of the lip. The

absence of calli and the structure and colour of the terminal lobe of lip are the distinguishing characters to make a distinction in respect of *G. pseudodistichum* (King et Pantl. Kuntze.

*Liparis tigerhillensis* A.P. Das et Chanda, sp. nov.

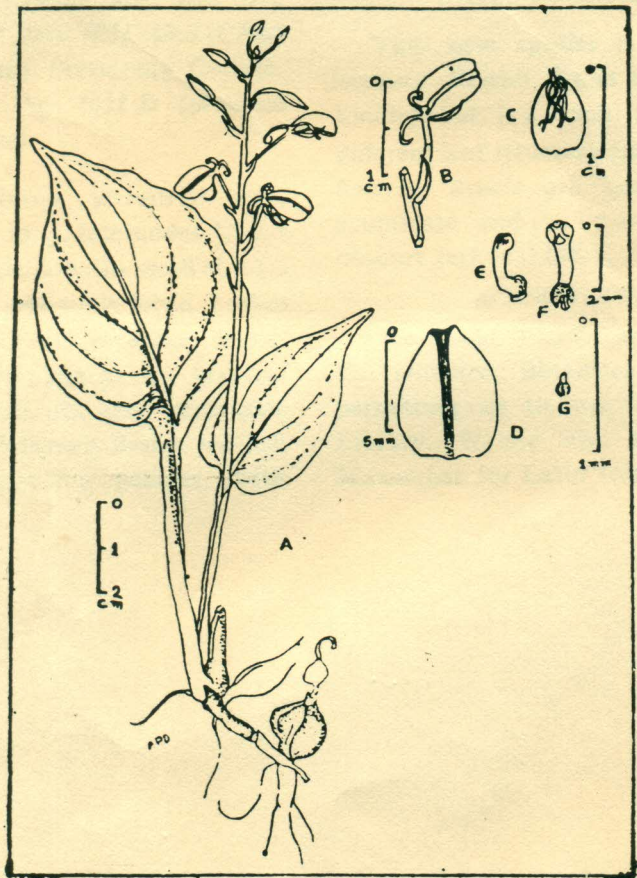


Plate 2. *Liparis tigerhillensis* A.P. Das et Chanda, sp. nov.

A. a plant; B. a flower; C. dorsal surface of the lip with sepals and petals; D. ventral surface of the lip; E. column in side view; F. column in front view; G. a bipollinium

*L. rostrata* Reichb. f. et *L. odorata* (Willd.) Lindley affinis, sed distinguenda herba parva, ceraceo-virida, tenella; pseudobulbis parvis, late ovatis, foliis manifeste petiolatis, rotundato-ovatis, acuminatis subcaudatisve, bracteis anguste lanceolatis, acuminatis; sepalis petalisque pergracilibus, apice recurvis labello atro-brunneo, integro, complanato, apice obscure trilobo.

*Holotypus* : Tiger Hill, Darjeeling (West Bengal), 2500 m, 16.7.1982, A.P. Das 1051 (CAL). *Isotypus* : A.P. Das 1051 A&B (CAL) A.P. Das 1051 C (Herb. Presidency College, Calcutta) and A.P. Das 1051 D (personal herbarium of A.P. Das).

Small, erect, glabrous, terrestrial herb, waxy green; rhizomes long, internodes 1.8-6.5 cm  $\pm$  0.2 cm thick; pseudobulbs small (1.2-1.5 x 0.9-1.2 cm), ovoid, obscurely lobed. Leaves 2, rarely 1, alternate, bases sheathing below; petioles long,  $\pm$  6 cm; lamina of first leaf 6-7.2 x 4-4.7 cm, entire, obtusely acuminate or slightly caudate; delicately fleshy, whitish green. Peduncles exceeding petioles, with

no nodes et the middle, slender, acutely angled; racemes simple,  $\pm$  6 cm, lax,  $\pm$  10 flowered; bracts 0.3-0.5 cm, lanceolate, acuminate; pedicels slender, 0.8 cm; ovary 0.35 cm; sepals and petals 0.6 cm, linear; lip oblong, 0.8 x 0.6 cm, deep brown with a shiny and broad midvein, flat. tip obscurely 3-lobed column  $\pm$  0.3 cm, slightly curved, hood like. [Plate II]

*Distribution* : INDIA; endemic to Darjeeling and Sikkim Himalayas.

This new species is allied to *Liparis rostrata* Reichb. f. and *L. odorata* (Willd.) Lindley, but is a much smaller plant with a different leaf structure and having very small flowers. Bracts are narrowly lanceolate, acuminate and the lip is deep brown with obscure terminal lobes.

#### ACKNOWLEDGEMENTS

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