

A KEY TO THE SPECIES OF *PTERNOPETALUM*  
OCCURRING IN INDIA

- Plants more than 3 dm tall; leaves ternate decompound, umbels terminal; rays 20-50 in number ... *P. senii*
- Plants .8-3 dm tall; leaves pinnate ternate.  
Umbels terminal and lateral, short peduncled, rays 6-8; calyx teeth obsolete ... *P. radiatum*
- Umbels strictly terminal, long peduncled.

- Calyx teeth lanceolate; rays 12-20, vittae solitary at dorsal intervals, 2-3 at the laterals *P. vulgare*
- Calyx teeth obsolete; rays 4-15, vittae solitary at intervals ... *P. tanakae*

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*VANILLA PILIFERA* HOLTT. (ORCHIDACEAE) IN MIKIR HILLS, ASSAM

Apart from the tropical American *Vanilla planifolia* Andr. introduced and cultivated in some gardens in India, two species *V. walkeriae* Wt. and *V. wightii* Lindl. occur wild in South India and one, *V. andamanica* Rolf. is known from the Andaman Islands. *V. parishii* Reichb. f. (suspected to be only *V. wightii* Lindl.) is distributed in neighbouring Burma and Bangladesh. The discovery of an extensively climbing orchid, in the Garampani and Kalioni Reserve forest of Mikir Hills, Assam, turned out to be another species of *Vanilla* Sw. A critical study showed it to be identical with *Vanilla pilifera* Holtt. hitherto known from Malaya.

A detailed description of the species with an illustration is furnished.

***Vanilla pilifera*** Holtt. Gard. Bull. Singapore 13: 253. 1951. & Fl. Malaya 1: 95. 1953.

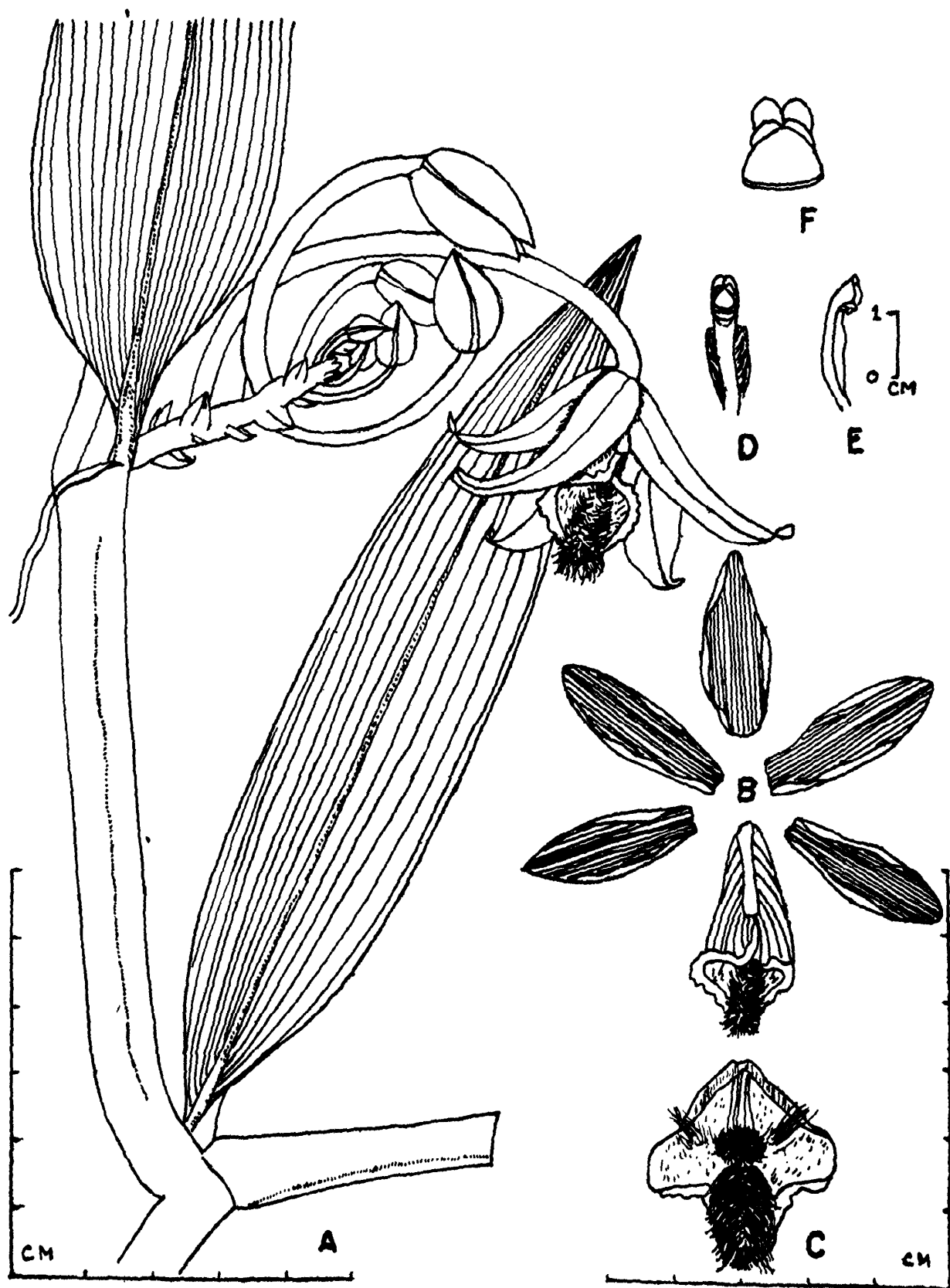
Terrestrial root-climbing leafy herb attaining a considerable height, depending upon the supporting trees. Stem branched, terete, channelled, fleshy, green, 0.4-0.5 cm thick; internodes 5-14 cm long; leaves alternate, coriaceous, subsessile, elliptic, acuminate, dark green, many-nerved, 6-14 × 0.8-2.5 cm; inflorescence an axillary raceme, 5-20-flowered, 3-5 cm long; bracts green,

persistant, ovate, obtuse, clawed, 3-7 × 2-5 mm, pedicellate ovary, white, 2-3 mm thick, 5-7 cm long; flowers fragrant, green with pinkish white lip, sepals and petals subequal, 2.5-3.0 cm from dorsal sepal to lip; sepals pale green, subequal, lanceolate; apex obtuse; margin slightly reflexed inward, coriaceous; dorsal sepal 2.9-3 × 0.9-1.1 cm, 12-15-veined, laterals 2.9-3.0 × 0.8-1.3 cm, 10-12-veined; lip white with pale pink veins on the upper surface 2.5-3.0 × 2.7-3.2 cm, 3-lobed; side-lobes overlapping and enfolding the end of the column; mid-lobe with thin undulate edges and the mid-part bearing erect hairs; mid-line of the lip raised above, grooved below, bearing opposite the anther a tuft of fine hairs directed towards the base of the lip; column white, jointed 3/4 of its length; with the claws of the lip, 0.9-2.1 cm long; operculum pale yellow, 3 × 3 mm (Figs. A-F).

Occurs in shade inside the forest. *Flowering*: April-May.

*Specimens examined*: Karbi Anglong, Garampani, Hajra 65482, 30.1.1977; Kalioni, Borthakur 69360, 2.2.1977 (both without flowers, ASSAM); Garampani, Borthakur 69777, 19.4.1977 (ASSAM).

The plant have been for the first time introduced in the National Orchidarium, Woodland, Shillong and successfully propagated by cuttings.



*Vanilla pilifera* Holtt.

Figs. A-F: A. Portion of the plant. B. Sepals and Petals, spread out. C. Lip, spread out. D. & E. Front and side view of the column. F. Top of column (much enlarged not to scale). Borthakur 69777.

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**BURMANNIA CHAMPIONII THW.—AN ADDITION TO THE FLORA OF THE ANDAMAN AND NICOBAR ISLANDS**

During a botanical exploration trip to Great Nicobar Island in June 1977, a rare saprophytic herb was collected along stream-sides in partially shaded humus covered soil in dense inland hill forests. On further study this was found to be *Burmattia championii* Thw., a new addition to the flora of the Andaman and Nicobar islands. The family Burmanniaceae itself is a new record for Andaman & Nicobar Islands. The species is described below with illustrations.

***Burmattia championii*** Thw. Enum. Pl. Zeyl. 325. 1864; Jonker, Monogr. 138. 1938 et in Fl. Males. I, 4: 17, f. 6. 1948; Backer & Bakh. f. Fl. Java 3: 213. 1968.

Saprophytic rhizomatous herb, 6-12 cm, completely white; rhizome subglobose to oblong, 6-12 mm long, 3-5 mm thick, beset with several spirally arranged subulate  $\pm$  0.5 mm long, scales in axils of short transverse grooves, terminally crowned with several imbricate 2-4 mm long, ovate to linear-lanceolate scales in a rosettee, from the middle of which the stem arises; stem simple, slender, terete. *Leaves* spirally arranged, scale-like, white, hyaline, lanceolate to oblong, amplexicaul at base, acute at apex, convex, appressed to stem by margins, 3-4 mm long. *Inflorescence* capitate, terminal, condensed cymes, 3-8 flowered; bracts several, linear-lanceolate to ovate-lanceolate, acute, 4-5 mm long, 1-4

mm wide, hyaline. *Flowers* white with yellowish perianth segments, erect to patent, crowded, subsessile, subtended by one or more bracts, 6-12 mm long. *Perianth* tubular, 3-ribbed outside with 3 faint ribs in between, outer perianth lobes 3, ovate, triangular with incurved winglike flaps on inner side along each margin, fleshy-papillose inside; inner perianth lobes 3, attached to perianth tube at apex between the outer lobes, ovate-obtuse, recurved, convex inside,  $\pm$  1 mm long, papillose hairy at margins. *Anthers* 3, inserted on the perianth tube below the inner segments, sessile; connective oblong, obtusely conical apiculate at apex. *Ovary* ellipsoid oblong, adnate to perianth-tube, 3-celled, 2-3 mm; ovules many on axile placenta; style erect thickly filiform, 4-5 mm long; stigma 3-lobed, each lobe thick funnel-shaped. *Capsule* dehiscent irregularly; seeds many, ovoid, dark brown.

Occurs in dense evergreen hill forests on humus covered soil in partially shaded moist places, especially near streams; flowering and fruiting during June to August.

*Specimens examined*: GREAT NICOBAR: On path to Shompen Village from 36.8 km on East-West Road,  $\pm$  75 m, 17 June, 1977, Balakrishnan 5815 (PBL).

*Distribution*: Ceylon, Malaysia, Java, Borneo, New Guinea, S. China and Japan. A new record for India.

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