Epiphytes. Roots tufted. Stem elongating; leaves 11-18 cm long, channelled, apices primose. Inflorescence panicle, spreading, erect, leaf opposed. Flowers small star like, 5-8 mm across, yellow except the white lip; dorsal sepal erect, 3 x 1 mm, 3-nerved, spatulate, laterals spreading, 3 x 2 mm, oblique, obovate, 3-nerved; petals equal, spatulate, 3 x 1.5 mm, spreading, obtuse, margins near the apices crenate, 1-nerved; lip 3 mm long, white flushed with pink, 3-lobed, sidetobes subulate, midlobe thick, ovate with 2 side lobules, disk with a scale about the middle, hairs at base, spur white, incurved, cylindric, acute, not sepiate, hairy within, callus at the mouth of the spur flat, pubescent; column short, broad, anther rostrate; pollinia unequal, 4(2+2), smaller two occupy in the depression of the larger two; style thin, gland minute (take off when dry); pedicel 5-7 mm long; capsule fusiform, 2-2.5 cm long, ridged (Fig. 2).

Flowering & Fruiting: April-May.

Distribution: Bangladesh, Burma and India (Sikkim).

Specimens studied: MEGHALAYA: Bhau-mik (1975), Balat 62094 and Ranikor 62120, Khasi Hills (ASSAM).

Note: The callus at the mouth of the spur is entire and petals 1-nerved as against 2-lobbed callus and 3-nerved petals (Hooker, 1890).

ACKNOWLEDGEMENTS

We are thankful to Dr. S. K. Jain, Director, BSI for providing the facilities and to Dr. R. B. Majumder, Regional Botanist, BSI, Shillong for kindly going through the manuscript.

N. C. Deori and G. H. Bhau-mik
Botanical Survey of India, Shillong

NEW DISTRIBUTIONAL RECORD OF PTERNOPETALUM TANAKAE
(FRANCH. & SAV.) HAND.-MAZZT. FROM BHUTAN

The genus Pternopetalum with about 27 species is mainly Chinese in distribution, extending to Nepal in the West and Japan in the East. Of the three species recorded so far from India, P. senii Dcb & Dutta is reported from Tirap district in Arunachal Pradesh, P. radiatum (W. W. Smith) P. K. Mukh. grows in Yumtong and Sebu Valley in Sikkim and P. vulgare (Dunn) Hand.-Mazzt. has been collected from Kameng district in Arunachal Pradesh, Manipur and Nepal.

The present authors came across a specimen collected from Bhutan, which on examination against specimens and literatures is identified as Pternopetalum tanakae (Franch. & Sav.) Hand.-Mazzt. This species was earlier reported from Japan, Central China and Korea. A close affinity exists between Umbellifers from China and Himalayas, particularly of Eastern Himalayas.

A brief description of the species is given below: Plants slender, 10-15 cm long, mostly simple, glabrous. Leaves few, basal ones ovate-deltoid in outline, 1-2.5 cm in diam., ternate pinnate; leaflets ovate orbicular, 5-10 mm long and broad, serrate to deeply incised. Cauline leaves pinnately divided. Involucre absent. Rays slender 4-10, 1-3 cm long, spreading. Pedicels mostly 2, very unequal, 0.1-5 mm. Involucel of 1-2 setiform bractlets, to 1.5 mm. Sepals not evident. Petals ovate acuminate but apex not inflexed. Fruit oblong ovoid, 1.5 to 2 mm long, ribs obscure, stylopodium low conic.

A KEY TO THE SPECIES OF *Pter ropetalum* OCCURRING IN INDIA

Plants more than 3 dm tall; leaves ternate decompound, umbels terminal; rays 20-50 in number  
*P. senii*

Plants 5-3 dm tall; leaves pinnate ternate. 
Umbels terminal and lateral, short peduncled, rays 6-8; calyx teeth obsolete  
*P. radiatum*

Umbels strictly terminal, long peduncled.

---

**VANILLA PIIIFERA** HOLTT. (ORCHIDACEAE) IN MIKR 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 Garapami 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* Holt. hitherto known from Malaya.

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


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 x 0.8-2.5 cm; inflorescence an axillary raceme, 5-20-flowered, 3.5 cm long; bracts green, persistent, ovate, obtuse, clawed, 3.7 x 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 x 0.9-1.1 cm, 12-15-veined, laterals 2.9-3 x 0.8-1.3 cm, 10-12-veined; lip white with pale pink veins on the upper surface 2.5-3 x 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 midpart 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 x 3 mm (F.g.s. A-f).

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

*Specimens examined:* Karbi Anglong, Garapami, Hajra 65482, 30.1.1977; Koli-oni, Borthakur 69360, 2.2.1977 (both without flowers, ASSAM); Garapami, 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.