which has now established itself in Garhwal Himalaya. This species was collected near the water pump house at Lansdowne in Dist. Garhwal growing in moist shady place (J. N. Vohra 10679).

In India *P. malacoides* is known as a garden plant and there are collections from Darjeeling Botanic Garden at DD Herbarium. It's running wild in the N.W. Himalaya hill station has not been reported so far. A short description of the species is given below for locating this handsome *Primula* in other hill stations also.

Primula malacoides Franch. in Bull. Soc. Bot. France 33 : 64.1886. Slender herb 20-30 cm high. *Leaves* cordate, broadly lobed; lobes incise-dentate, petiole exceeding the leaf-blade. *Flowers* in many flowered, 2-6 superimposed umbels. *Calyx* white farinose, accrescent in fruit. *Corolla* bluish ; limb obcordately lobed, upto 1.3 cm across. *Capsule* globose, included.

The specimen is deposited in the BSD herbarium under the above collection number.

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BOTANICAL SURVEY OF INDIA,
NORTHERN CIRCLE,
DEHRA DUN,
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28. NOTE ON AMBEMOHOR PAT (*PANDANUS AMARYLLIFOLIUS* ROXB.) FROM WESTERN INDIA

(*With a photograph*)

Along the coastal districts of Western India, pieces of grass like leaves are often used in cooking to give pleasant flavour to rice. According to local inhabitants, such method of cooking rice has been practised from ancient times. The flavour is very similar to that of the choice variety of *Ambemohor rice* popular in hilly tracts of Maharashtra and hence the local name of the plant is *ambemohor-pat*. It is also known in Ratnagiri and neighbouring districts of Maharashtra as *annapurna-pat*, a name, obviously given after the goddess of food *Annapurna*.

Lot of ambiguity exists about the correct identity of the plant. The plant multiplies by producing suckers and does not flower in spite of various types of environmental conditions provided. Nobody has witnessed or recorded flowering of this particular plant. Fusiform stilt roots at the base and pleat nature of leaves certainly show its affinity with *Pandanus*.

William Roxburgh named this particular plant as *Pandanus amaryllifolius* and published a short description in the flora ' Hortus Bengalensis ' in 1814. He has also mentioned that the plant was introduced from Amboyna (now Indonesia) into the Botanical Garden of Calcutta in the year 1798. Roxburgh was quite confident about the likeness of the relevant plant with the genus *Pandanus* which shows fusiform roots arising from stem and larger branches, descending towards ground. He did not, however, give any information about the flowering of the plant and its scented leaves used for giving fragrance to cooked food. Later on a number of botanists working on the flora of South-east Asia like Voigt (1828), Hasskel (1842, 1844), Rumphious (1844), Merrill

(1917) and Ridley (1925) recognised the above plant by various botanical names.

Uncertainty in confirmation of the plant is mostly due to the unavailability of flowers and occurrence of two distinct ecotypes. Although the plant remains dwarf because of constant pruning, it grows into a shrub, 2.5-3 m in height if allowed to grow as a wild plant under a typical tropical environs. There is a report (Stone 1979) that the plant did flower in Botanic Gardens, Singapore in 1974. Unfortunately it was overlooked and by the time its importance was realised the inflorescence had dried out. Only the staminate flowers could then be collected and preserved. Since then pistillate flowers have not been observed or reported till this date. *Ambemohor-pat* is known by various names in South-Asian countries (Stone 1979) and ' Pundan wangi ' is the most popular name in Malaysia.

Stone (1976) noted that *Pandanus* with musk-odoured leaves occasionally seen planted in the kitchen gardens in Hassan district of Karnataka State, South India was dwarf cultivar of *Pandanus amaryllifolius* Roxb. In 1979, he further elaborated his findings by studying critically morphological diagnostic characters of this species. Electron microscope observations of leaf surface and other relevant literature available from European and Asian Herbaria finally confirmed the identity of the plant as *Pandanus amaryllifolius* Roxb., which had till then dubious recognition from the time of its naming.

Ambemohor-pat popular in Konkan area is a dwarf cultivar, reaching a maximum height of about 100 cm, if proper support is provided in the absence of which it becomes prostrate or procumbent. Constant pruning of the leaves forces the stem to grow erect, bearing tuft of leaves and short branches at the top (See the photograph). Even under this condition, side short branches give stilt roots. If such cultivars



Photo : Ambemohor-Pat (*Pandanus amaryllifolius* Roxb.)

are planted in moist soil they grow vigorously into new plants. Leaves are 60-80 cm long, 4-8 cm broad, linear, lanceolate, dark green above, pale beneath, pleat along the two lateral ribs ; apex acute ; margins minutely prickled. Occurrence of female or male inflorescence has not been recorded or seen.

Fresh leaves are slightly scented but the fragrance becomes stronger when the leaves are crushed or boiled with food.

Reference specimens : RATNAGIRI—Thorla Sada, H-MACS 20860 ; POONA—cultivated H-MACS 21540.

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REFERENCES

ROXBURGH, W. (1814) : Hortus Bengalensis 71, Serampore.

——— (1832) : Flora Indica **3** : 743 (Carey & Wallich edition) Serampore.

STONE, B. C. (1976) : Pandanaceae in the Flora of Hassan District, Karnataka, India, Amerind Publ. New Delhi.

STONE, B.C. (1979) : Studies in Malesian Pandanaceae XVII. On the taxonomy of 'Pandan Wangi' — A *Pandanus* Cultivar with scented leaves. *Economical Botany* **32** (3) : 285-293.

29. *VITTARIA LINEARIFOLIA* CHING—A NEW RECORD FOR INDIA

(*With five text-figures*)

In the course of studies on ferns of the genus *Vittaria* J. Sm. in India, I came across a peculiar specimen, collected from Arunachal Pradesh, characterised by its long linear, flexuose leaves, strongly incurved margins and midrib broader than the soral line. With the help of literature (Ching 1931)[1], the specimen was identified as *V. linearifolia* Ching and the identification was confirmed at Kew by Dr. G. Panigrahi.

V. linearifolia Ching is earlier reported from Tibet, Yunnan, and Burma, therefore, its occurrence in Arunachal Pradesh is a new record for the Indian region.

The species is described in detail with illustrations to facilitate its easy identification.

[1] Ching, R. C. (1931) : The studies of Chinese ferns VI. Genus *Vittaria* of China and Sikkim—Himalaya. *Sinensia* **1** (12) : 175-199.

Vittaria linearifolia Ching, Sinensia **1** (12) : 183, t. 1, figs. 1-3, 1931.

Plants epiphytic on moss covered tree trunks and branches. Rhizome creeping, clothed with many clathrate scales, ovate-lanceolate, 1-1.5 × 0.4-0.6 mm and margins dentate, Fronds tufted, stipes short, 3-5 mm long, leaves linear-lanceolate, 30-35 cm × 2-3 mm; flexuose, texture rigidly coriaceous but fragile on drying, margins strongly involute, midrib flattened and broader than the soral line, upper surface plane, lower surface longitudinally bisulcate. Sori intramarginal, completely filling up the space between midrib and margins ; paraphyses capitate, spores monolete, 30-65 μm, verrucoid (Figs. 1-5).

Specimen examined : Arunachal Pradesh : Kameng district : Bomdila, *R. S. Rao* 7336 (ASSAM).

R. D. DIXIT

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