

men he depicted which is now in Herb. Kew".

Detailed description and illustration of this orchid based on living specimens are given below. The specimens are preserved in the Herbarium, Eastern Circle, Botanical Survey of India, Shillong.

Acriopsis indica Wight Ic. 5: 1748. 1851; Hook. f. Fl. Brit. India 6: 79. 1890; Holttum, Rev. Fl. Malaya 1: 557. 1957; Backer & Bakhuizen, Fl. Java 3: 398. 1968.

Epiphytes on *Shorea robusta* Gaertn. *Pseudobulbs* densely tufted, ovoid, covered with scarious fibres, annual rings pinkish. *Roots* white, branched, spreading copiously, spongy. *Leaves* deciduous, $7.3-18.3 \times 5-5.6$ cm, narrowly linear, acute. *Inflorescence* a panicle, dark green, lateral, erect from the base of the pseudobulb, broad and laxly-flowered, 8-14 cm long. *Scape* stout, 3.5-8 cm long (Fig. 1). *Flowers* (Fig. 2) small, greenish-yellow, suberect, pedicelled. *Pedicellate ovary* 7 mm long. *Bracts* small, ovate, acute. *Sepals* and *petals* (Fig. 3) faintly blotched with purple, spathulately obovate, gland-dotted; *dorsal sepal* arched, 4×1.75 mm, 5-nerved; *laterals* connate, incurved, 4×1.75 mm. *Petals* equal, 5×2.5 mm, 3-nerved. *Lip* 4.5×2.5 mm, constricted above the middle, obtuse, adnate to the basal half of the column by a short claw forming a narrow tube (Fig. 4), 3-nerved, blade white with a few violet spots and two erect lamellae on the disc about the middle, gland-dotted, margins undulate; *column* erect (Fig. 5), with two slender decurved proces-

ses on either side of the stigma, 4 mm high; *rostellum* beaked; *anther* oblong (Fig. 6); *Pollinia* 2, with longitudinal furrow (Fig. 7) on a common slender stipe with minute gland; *ovary* pedicelled, *pedicel* 5 mm (Fig. 5); *capsule* oblong, 10 mm long, 6-ridged, sub-erect, smooth, green (Fig. 8).

Flowers and Fruits: March.

Distribution: Northern Thailand, Tenasserim, Malaya (Penang, Kedah, Frasers' Hill), Java, Vietnam and Laos.

Specimens examined: C. L. Malhotra 58109 (Assam), Garjee Forest, South Tripura, March 26, 1974.

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A REPORT ON *MONOGRAMMA PARADOXA* (FÉE) BEDD. IN MALAYA

Beddome (1883) and Christensen (1906) give the distribution of *Monogramma paradoxa* (Fée) Bedd., as Ceylon, Malaysia, Polynesia and tropical Australia. According to Rosenburg (1908) it is distributed from Ceylon to Hawaii and Australia. Again Bed-

dome (1892) mentions its occurrence in Malaya on the authority of Father Scortechini's collections from Perak. Holttum (1954), however, reported the occurrence of only two species of *Monogramma* from Malaya viz. *M. dareicarpa* Hook. and *M.*

trichoidea J. Sm. He further states that "*M. paradoxa* (Fée) Bedd. is a Malesian species, not yet found in Malaya, but it may well exist in this country." It seems Holttum (l.c.) had no access to the collections made by Father Scortechini from Perak. On a critical examination of the Vittariaceae material housed in the Central National Herbarium, Sibpur, Howrah (CAL), the writers have come across two herbarium sheets of *M. paradoxa* collected from Larut range in Perak (Malaya). As a detailed description of the taxon is not available, a report is presented here along with a key to the determination of the Malayan species.

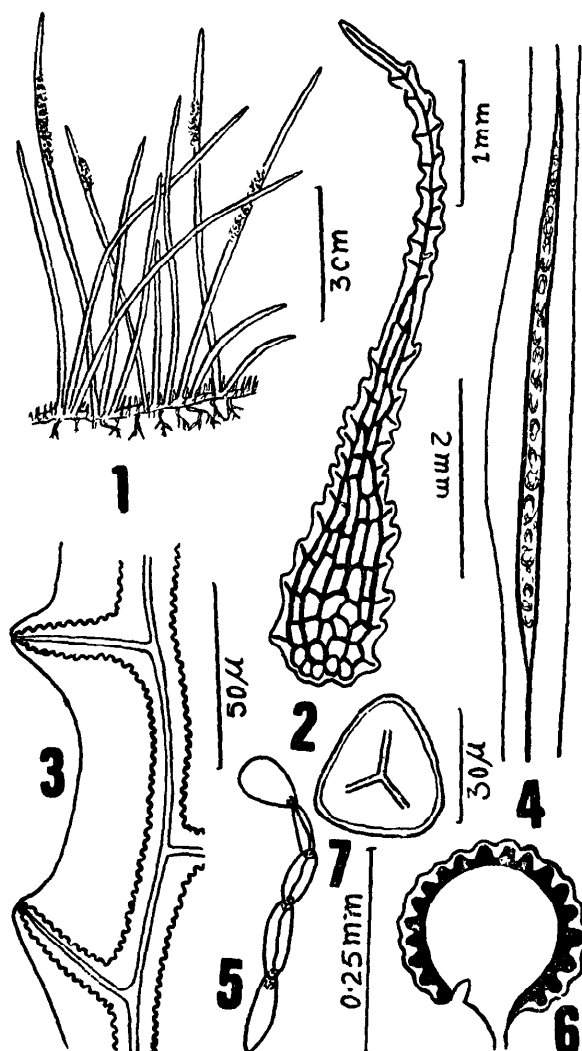
The genus *Monogramma* Schkuhr is an assemblage of simple plants. Some of the species may be the smallest among ferns. Holttum (1954) thinks that *Monogramma* has probably been derived from *Vittaria* J. Sm. although some of its species may well be included in the genus *Vaginularia* Fée. *M. paradoxa* (Fée) Bedd. has been included by Copeland (1947) in *Vaginularia* Fée, whereas Christensen (1906), Rosenburgh (1908) and Holttum (1954) retained it in *Monogramma*. Our critical studies reveal the presence of only one costa without any lateral veins, capitate paraphyses, annulus of about 20 cells and these support the inclusion of this species in *Monogramma*. In contrast *Vaginularia* is characterised by the presence of lateral veins in the laminae, non capitate paraphyses and annulus of 14-16 cells.

KEY TO SPECIES OF *MONOGRAMMA* IN MALAYA

- | | |
|---|----------------------|
| 1. Fronds 1-2 cm × 1-1.5 mm, dilated towards the apex, sorus solitary, close to apex, about 3 mm long ... | <i>M. dareicarpa</i> |
| 1. Fronds 3-12 cm × 0.5-1 mm, not dilated towards the apex | |
| 2. Fronds extremely slender, thread like, sori 1-3, each 4-6 mm long, on short lateral veins ... | <i>M. trichoidea</i> |
| 2. Fronds grass like in appearance, flaccid, costa without any lateral veins, sori in vaginiform expansion of the costa ... | <i>M. paradoxa</i> |

Monogramma paradoxa (Fée) Bedd. Ferns Brit. Suppl. 24. 1876 et Handb. Ferns Brit. India 375. 1883; C. Chr. Index Fil. 430. 1906. *Pleurogramma paradoxa* Fée, Mem. Trios. Mem. 3: 38, t. 4, f. 4, 1851-52. *Vaginularia paradoxa* Mett. Ann. Lungd. Bat. 4: 174. 1868-69. *Monogramma junghunii* Hook. Sp. Fil. 5: 123. t. 289. 1864; Bedd. Ferns South India t. 210. 1866 (Figs. 1-7).

Rhizome slender, creeping, clothed with many small dark-brown clathrate scales and



Figs 1-7: *Monogramma paradoxa*. 1. Habit. 2. Rhizome scale. 3. Lateral walls of the cells. 4. Vaginiform expansion of costa bearing sori. 5. Capitate paraphyses. 6. A sporangium showing 19 annular cells. 7. Proximal part of the spore.

roots; scales lanceolate, subulate, 0.8-1.25 cm $\times$ 0.25-0.5 mm with toothed margin, lateral walls of the cells of scales dark-brown, thick and rugose whereas superficial and marginal walls very thin and translucent; fronds densely tufted, 3-12 cm $\times$ 0.5-1 mm, linear-filiform, shortly acute at apex, uncostate, lateral veins absent; sori narrow, linear-elongate un-interrupted, usually above the middle of the frond borne in vaginiform expansion of costa and dilating the lamina, paraphyses capitate, annular cells 17-19, spores trilete, 28-35 μ in diameter, translucent.

It is apparently a very rare fern in Malaya. Plants are small, grass like in appearance and grow as epiphytes on trees or on rock in damp and shady situations.

Specimens examined: MALAYA: Perak: Larut Range, Feb. 1882, *Kunstler* 2785; *s.l.* 5489, Accession no. 24042 at 3000 ft. elevation. MALAYAN-ARCHIPELAGO-JAVA: *Forbes* s.n., Accession no. 24053; 24055; *Bakhwhthen* 4462; July, 1880, *Kunstler* 339. SRILANKA: Central Province, *Brekett* 110 at 3000-5000 ft. elevation, *s.l.* 1281.

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NEW AND LITTLE KNOWN TAXA FROM ANAIMUDI AND SURROUNDING REGIONS, DEVICOLAM, KERALA—V: A NEW VARIETY OF *POGOSTEMON TRAVANCORICUS* BEDD.

***Pogostemon travancoricus* Bedd. var. *devicolamensis* Shetty & Vivekananthan, var. nov.**

var. *travancorico* affinis, tamen differens dentibus calycis intus hirsutis; corolla arcte venosa, lobis labii superi extus sparse pubescentibus, labio medio apice acuto.

Suffrutices 1-2 m alti, perpurpurei; caules et ramuli obscure quadrangulares, laeves, glabri. Folia 3.8-18.6 cm longa, 1.3-6 cm lata, opposita, ovata usque elliptica, rotundata vel angustata et basi inaequilateralia, apice acuta, duplicato crenato-serrata, sicco nigrescentia, supra sparsim ciliata; nervi 4-6 utro-

que latere, supra impressi, infra vero prominentes; petioli 0.8-8 cm longi. Racemi usque 33 cm longi, sicco nigrescenties; verticilli approximati; bracteae 1-4 mm longae, lineares; bracteolae 1-2 mm longae, lineares; pedicelli $\pm$ 1 mm longi, gracilli. Calyx 4.5-5.5 mm longus, tubularis, ad basim leviter angustatus; dentes 5, subaequales, basi lati, ad apicem vero angustati, intra hirsuti. Corolla 7-8.5 mm longa, luteo-viridis, subbilabata, arcte venosa; labium superum 3-lobatum, lobi laterales rotundati, sparsim ciliata extus; lobus medius vero acutus, extus pubes-