

## ACKNOWLEDGEMENTS

The author is grateful to the Foundation for Revitalization of Local Health Traditions (FRLHT), especially to Sri Vinay Tandon, and G.S. Goraya, Bangalore, for financial assistance during the

botanical survey work, and the Joint director, Botanical Survey of India, Coimbatore, for necessary permission to refer herbarium, and Dr. N. Sukumaran, Professor and Head of our Centre, for constant encouragement and help.

M. B. VISWANATHAN

*Shri Paramakalyani Centre for  
Environmental Science Alwar- kurichi.*

# **NESOPTERIS COPEL. — A NEW GENERIC FERN RECORD FROM THE NICOBAR ISLANDS, INDIA**

*Nesopteris* Copel.- a genus hitherto known from Loochoo and Java to Samoa (cf. Copeland, 1938) and is reported as new generic fern record from the Nicobar Islands in India for the first time.

The genus *Nesopteris* Copel. belongs to the family Hymenophyllaceae is known by six species in world flora (Pichi-Sermolli, 1965). *N. grandis* (Copel.) Copel. is so far known only from the Philippines and Java (Copeland, 1938).

The pteridophytic collections made from the Nicobar Islands, India by Dr. M. Sanjappa in July, 1984 were handed over to the senior author (RDD) in the year 1993 for identification. The herbarium sheet apparently looks like a genus *Sphenomeris* and misidentified as *S. chinensis* (L.) Maxon, which later, on critical study of literature together with the comparison of herbarium specimens from the Philippine Islands housed in CAL, correctly identified as *Nesopteris grandis* (Copel.) Copel. earlier not recorded from the Indian region. It is rare in occurrence.

*Nesopteris* Copel. is a small, well marked genus superficially somewhat like *Selenodesmium* with larger, less rigid, more finely dissected fronds and very different structure. It differs from *Callitopteris*

Copel. in the firmer texture, habit, indumentum and shape of involucre.

The genus *Nesopteris* Copel. may be easily recognised by erect rhizomes; fronds densely tufted, polystichous, pinnately decompose, bearing minute, clavate hairs, margins entire, cell-wall thin but firm in texture, involucre cylindric, winged, extruded. It is so far known only from Malaysia to Indonesia.

*Nesopteris grandis* (Copel.) Copel., has been reported for the first time from Nicobar Islands, India. Hence the detailed description with illustrations of habit and the other diagnostic characters have been provided to facilitate easy identification.

***Nesopteris grandis* (Copel.) Copel.**, Philip. Journ. Sci.67(1): 66.1938. *Trichomanes grande* Copel., Philip. Journ.Sci. C.6: 70.1911; Philip. Journ. Sci.Trich.51(2): 224.t.40.f.1 - 4.1933.

Terrestrial fern; rhizome erect, stipes fascicled, winged, 5 9 cm long; fronds 12 25 × 5 6 cm, quadripinnatifid, rachis sparsely pubescent, ultimate segments distinct, narrow, ca 0.5 mm broad; margins entire, apex obtuse, cell walls thin but firm in texture.

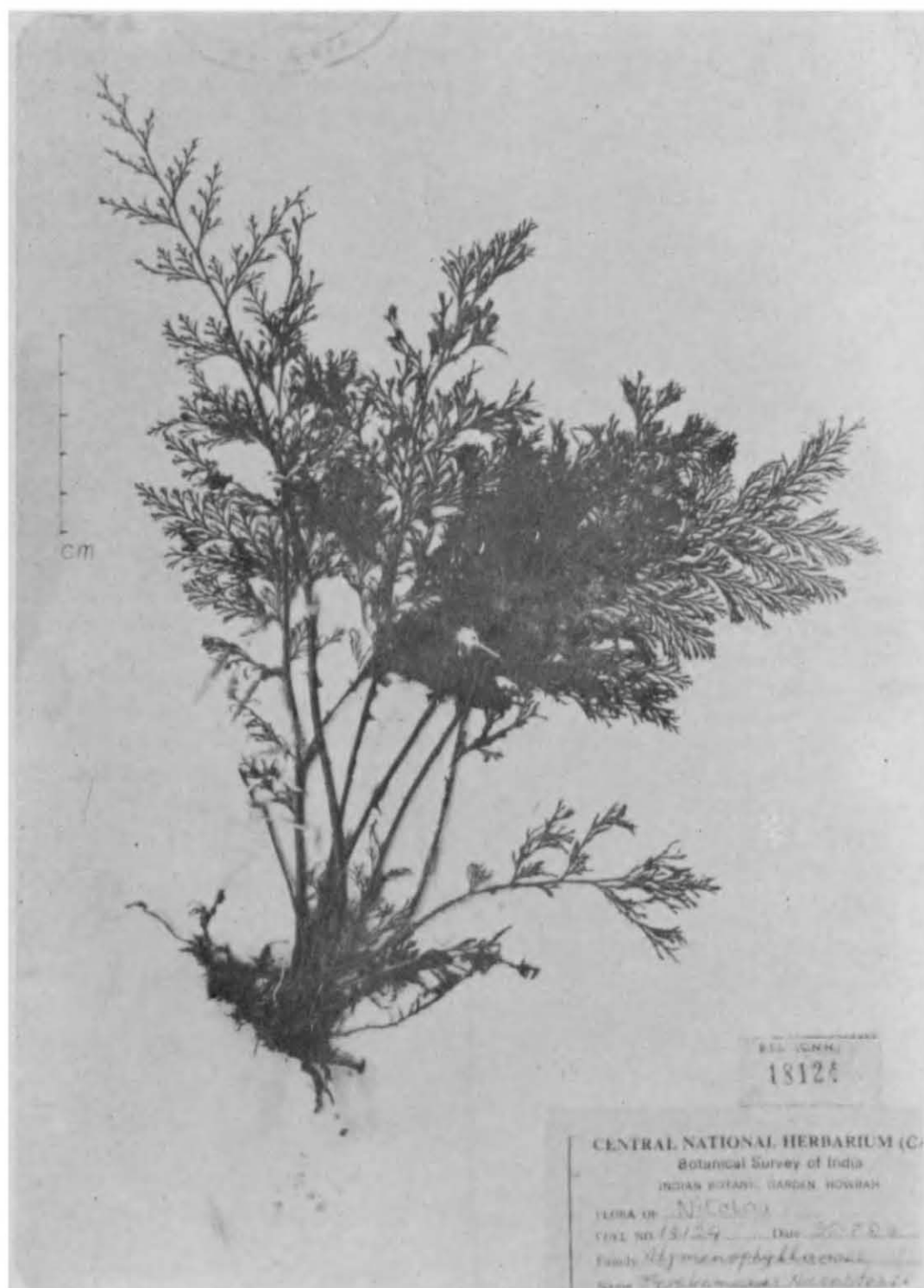


Plate-I. *Nesopteris grandis* (Copel.) Copel. Habit, Sanjappa 18124 (CAL).

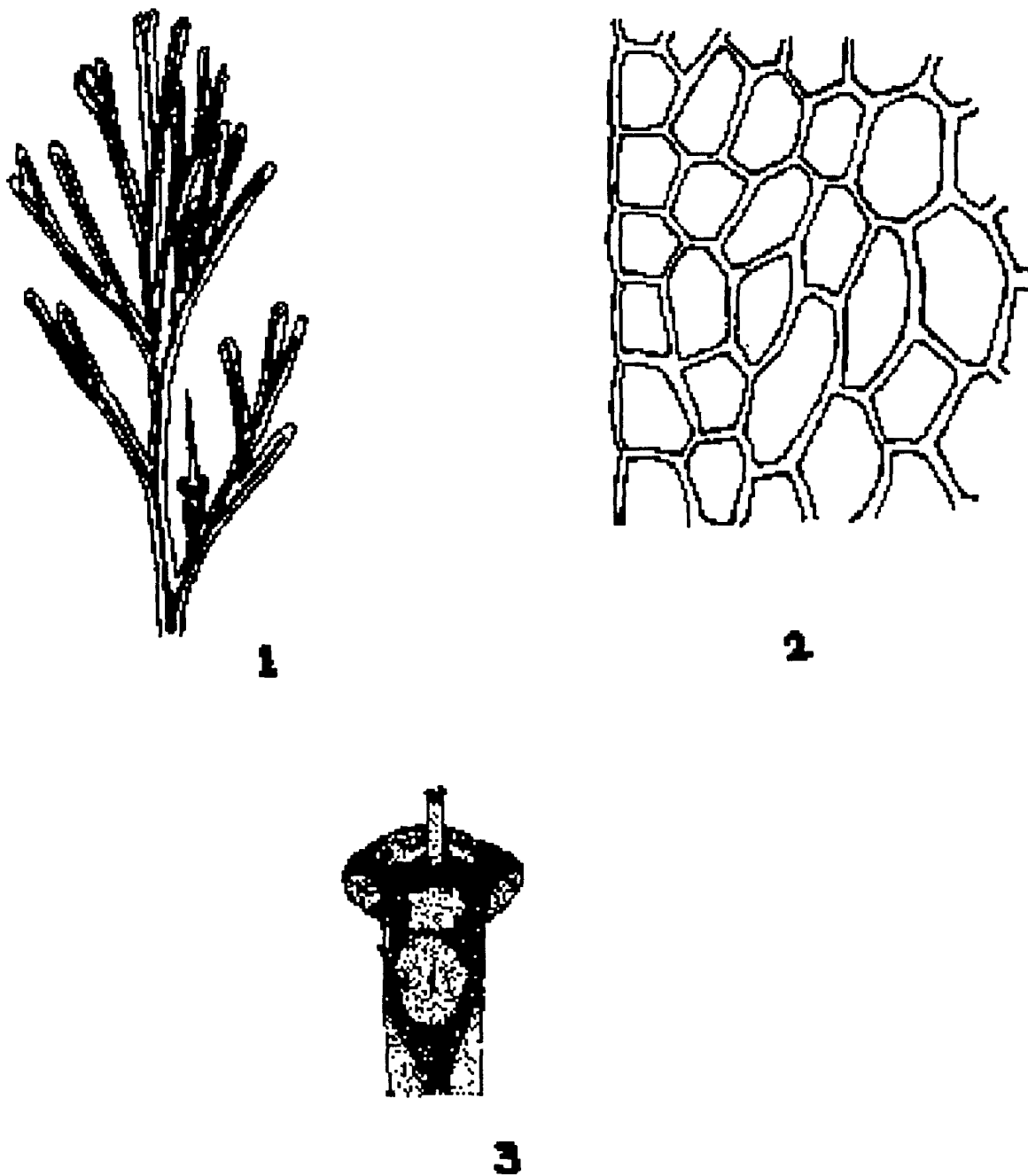


Fig. 1-3. *Nesopteris grandis* (Copel.) Copel. Fig. 1. Apical part of pinna x 5.  
Fig. 2. The detailed structure from part of pinna x 400 Fig. Sorus x 15.

Sori indusiate, broadly subcarinate, infundibuliforme, winged, mouth dilated above and subrevolute in the middle, receptacle extruded (Plate-I. Figs. 1 - 3).

*Specimens examined* : INDIA-SOUTH NICOBAR ISLANDS : GREAT NICOBAR : 41 km N-S, Galathea, 30.7.1984, *Sanjappa et al.* 18124 (CAL). PHILIPPINE ISLANDS - Luzon, May 1916, *s.l.* 16169, distributed by Elmer, Accession No. 3175 (CAL); Catabig river; Samar, Feb.- March, 1916 *G.Edano* 24880 (CAL).

*Earlier records* : Philippines; Java.

The species can be easily distinguished by the presence of distinct, erect rhizome; winged and fascicled stipes, quadripinnatifid lamina, infundibuliform sori and presence of the glandular hairs on the lower surface.

#### ACKNOWLEDGEMENTS

Grateful thanks are due to Dr. P.K. Hajra, Ex-Director, Botanical Survey of India, Calcutta for the encouragement, our thanks are also due to Dr. S.K. Srivastava, Botanist, BSI, CC, Allahabad for the illustrations.

R.D. DIXIT

*Botanical Survey of India, Allahabad*

B.GHOSH AND R.K. GHOSH

*Botanical Survey of India, Howrah*

#### REFERENCES

- COPELAND, E.B. *Genera Hymenophyllacearum*. *Philip.Journ. Sci.* 67(1): 1 110.t.1 -11.1938.
- PICHI-SERMOLLI, R.E.G. *Index Filicum Suppl. IV*. Utrecht, Netherland, 1965.

#### BOOK REVIEW

Saxena, H.O. & M. Brahmam, The flora of Orissa Vol. 1. Ranunculaceae to Fabaceae. Regional Research Laboratory, Bhubaneswar-751 013, Orissa, India and Orissa Forest Development Corporation Ltd., Bhubaneswar-751 001, Orissa, India, April 1994, pp.I-LXIV, 1-633, 1 map and 16 plant drawings (HB). Vol.2. Rosaceae to Martyniaceae. *Ibid.*, April 1995, pp.635-1322, 35 plant drawings (HB). Vol.3. Acanthaceae to Commelinaceae. *Ibid.*, December 1995, pp.1323-2008, 16 plant drawings (HB). Vol.4. Flagellariaceae to Poaceae; Gymnosperms and Pteridophyta; Statistical analysis of the flora; Bibliography; General indices. *Ibid.*, March 1996, pp.2009-2918, 8 plant drawing, (HB). Price Rs.800.00 for complete set of 4 volumes. Available from the Divisional Manager, Plantation (A) Division, Orissa Forest Development Corporation Ltd., Plot No.217/ 218, Satya Nagar, Bhubaneswar, Orissa, India.

The title book running in four volumes, deals with the flora of Orissa State which is endowed with a rich and varied flora due to its diversified topography and other physical features. The need for a comprehensive flora of Orissa has been felt ever since its formation in 1936. Haines' Botany of Bihar and Orissa (1921-25) written some 70-75 years back has not only become nomenclaturally outdated but the entire southern part of Orissa remained outside its territorial boundaries. Mooney (1950) too, did not include this southern part of Orissa in his Supplement to the Botany. Gamble's Flora of the Presidency of Madras (1915-36) made only stray references to the collections from southern Orissa.

Total 2727 species of Angiosperms, Gymnosperms and Pteridophytes, including 166 species of cultivated plants have been described in