## STUDIES ON SOUTH INDIAN FERNS—I: TECTARIA VASTA (BL.) COPEL. (ASPIDIACEAE)—A NEW RECORD FOR SOUTH INDIA

During the course of scrutiny of fern collections deposited in the Madras Herbarium, Coimbatore, the author came across a specimen collected by R. H. Beddome (Acc. No. 59607) from Nilgiri, labelled as Aspidium polymorphum. After critical study, this proved to be *Tectaria vasta* (Bl.) Copel. (=Aspidium vastum Bl.) a species hitherto known to occur only in "Eastern Bengal upto 1000 feet elevation, Mishmee, Khasia, Chittagong, Malay peninsula" (Beddome 1883). Holttum (1954) records its occurrence in Sikkim, Annam, Siam and Southwards through Malaya to Sumatra, Borneo and Java. Hence the occurrence of this species in Nilgiri hills, South India, is of phytogeographical interest.

Tectaria vasta (Bl.) Copel. is allied to T. decurrens (Pr.) Copel. in general appearance. However, these species can be distinguished as follows:

Lamina deeply pinnatifid ; sori in two rows

between the cross veins ... T. decurrens Lamina deeply pinnatisect; sori in four irregular rows between the cross veins ... T. vasta

Tectaria vasta (Bl.) Copel. Philip. Journ. Sci. 2C. 411. 1907; Holttum Rev. Fl. Mal. 2: 512. 1954. Aspidium vastum Bl. Enum. Pl. Jav. 142. 1828; Hook. Syn. Fil. 296. 1868; Bedd. Handb. Ferns Brit. Ind. 212. t. 108. 1883.

Stock short, erect, stipe densely covered with stiff persistent dark brown scales, winged almost to the base, wing about 1 cm wide on either side and gradually reducing to the base. Lamina subcoriaceous, deeply pinnatisect with pinna-like lobes on each side connected by a narrow wing on either side of the rachis; lowest pinnae sometimes with a long pointed bariscopic lobale. Main lateral veins distinct nearly to the margin, connected by numerous prominent cross veins forming 7-8 areoles between the costa and margin with free included veinlets. Sori in 4 irregular rows on either side of each cross-veins, seated on the secondary crossveins, small, rounded, indusiate; indusia rounded to reniform, brown, entire, persistent.

Specimen examined: SOUTH INDIA: Nilgiri, Beddome s. n. Acc. No. 59607 (MH). Assam: Lushai hills, 23rd Jan. 1963, D. B. Deb 31232 (ASSAM); Gauhati-Jorhat, 16th May, 1957, G. Panigrahi 9297 (ASSAM).

## ACKNOWLEDGEMENTS

I am grateful to Dr. J. Joseph, Regional Botanist, Southern Circle, Botanical Survey of India, Coimbatore for encouragements and facilities; to Dr. S. K. Jain, Jt. Directorin-charge, Botanical Survey of India, for sending specimen on loan and Dr. to A. S. Rao, Deputy Director, Northern Circle, who initiated the interest in the study of ferns.

P. BHARGAVAN

Botanical Survey of India, Coimbatore

## REFERENCES

- BEDDOME, R. H. Handbook of Ferns of British India 212 t. 108. 1883.
- HOLTTUM, R. E. Revised Flora of Malaya 2 : 512. 1954.
- SLEDGE, W. A. The tectarod Ferns of Ceylon. Kew Bull. 27 (3): 420. 1972.

150

Beddome 114 & 1858 represent T. decurrens (Pr.) Copel. in a sterile condition—EDITOR.