

A COMPARATIVE ASSESSMENT OF STROBILUS OF *S. DELICATULA* OF KERALA, WAYANAD

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ABSTRACT

*Based upon the typed description of Dixit (1992), Manickam & Irudayaraj (1992) have mentioned the description of 12 species of the genus Selaginella occurring in the south of Palghat in the Western Ghats region of India. Mukhopadhyay (1997) studied the sporangial arrangement in the cones of 28 species of Selaginella belonging to India and added two more patterns to Horner and Arnott (1963) Viz "Mixture of patterns I & III & II and III" and "haphazard arrangement of micro and megasporangia" in the strobilus. He also discussed the possible evolutionary relationships among the total five patterns. It is therefore the sporangial arrangement of about 37 Indian species that are yet to be discovered. The cone morphology of *S. delicatula* has been studied on the parameters viz. no. per plant, no. of per branch, position, stalked or sessile, shape, colour, appearance & range. Similarly, sporophylls have also been studied on the parameters viz. form, shape, tip, margin, and range. Various aspects of strobilus, sporophyll arrangements, sporangial arrangement, heterospory, spore dispersal, variations in no. of megaspores within sporangia and spore morphology and ultrastructure of both megaspores and microspores have been reviewed. This study helps in finding the lacunas in Selaginella's reproductive biology and spore morphology, which also points out the significance of this study.*

KEYWORDS: *Strobilus, Sporangia, Microsporophylls, Megasporophylls, Heterospory*

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