

**Variations in spore and sporangium surface structure of the fern-allies Lycopodiaceae
P. Beauv. ex Mirbel in Malaysia**

ABSTRACT

Thirty-two species, including eleven varieties from three genera of Lycopodiaceae found in Malaysia were examined for their spore's wall morphology using scanning electron microscopy. Different genera showed different spore morphologies and distal face ornamentation. Foveolate and fossulate types of distal face ornamentation were the characteristics of the genus *Huperzia*, while the reticulate types were characteristic of the genus *Lycopodium* and the regulate type of the genus *Lycopodiella*. A preliminary study of the sporangium wall was also carried out in this study and is strongly taxonomically correlated.

Keyword: Spore; Sporangium wall; SEM; Fern-allies; Lycopodiaceae