

Taxonomical and Palynological Study of Pteridophytes (Ferns) Along Adventist University of the Philippines Creek

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Abstract

Deficiency of references to determine the diversity, taxonomy and palynology of ferns in Adventist University of the Philippines has impelled to investigate the various floras of Pteridophytes along AUP creek near motorpool area. Shannon – Wiener index was used to measure the species richness and diversity, whereas, the palynology of 13 Pteridophytic species belonging to seven families were examined using light microscope (LM). All investigated spores were more or less monolete and trilete in shape. Spore size ranged from 23 to 42 μm . *Pteris ensiformis* Burm. f has the largest spore while *Nephrolepis cordifolia* (L.) C. Presl has the smallest spore. Among the species, *Cyathea* sp. has the largest frequency, followed by *Pneumatopteris laevis* and *Pneumatopteris* sp. while *Bolbitis rhizophylla* has the lowest frequency. Richness and diversity of the species and morphological characteristics like spore type could be a significant identification tool for ecological studies and fern taxonomy.

Keywords: *Pteridophytes, ferns, palynology, monolete, trilete, spore*