

A study of community structure and beta diversity of epiphyllous liverwort assemblages in Sabah, Malaysian Borneo

ABSTRACT

We evaluated the species richness and beta diversity of epiphyllous assemblages from three selected localities in Sabah, i.e. Mt. Silam in Sapagaya Forest Reserve, and Ulu Senagang and Mt. Alab in Crocker Range Park. A total of 98 species were found and a phytosociological survey was carried out based on the three study areas. A detailed statistical analysis including standard correlation and regression analyses, ordination of species and leaves using centered principal component analysis, and the SDR simplex method to evaluate the beta diversity, was conducted. Beta diversity is very high in the epiphyllous liverwort assemblages in Sabah, with species replacement as the major component of pattern formation and less pronounced richness difference. The community analysis of the epiphyllous communities in Sabah makes possible their detailed description and comparison with similar communities of other continents.