

Fauna diversity in pitcher plants at Setiam Hill, Bintulu, Sarawak, Malaysia

ABSTRACT

A study was carried out to determine the diversity and enumerate the fauna species related to five pitcher plant species at a selected area in Bukit Setiam Forest, Tatau, Bintulu, Sarawak, Malaysia. At the end of the study, six insect orders together with nematodes and Araneae were detected with different existence abundances and diversity. From the 901 total fauna trapped, 58.82% belonged to the order Hymenoptera, mainly of the ant species, followed by Nematodes (21.64%), Diptera (15.87%), Coleoptera (1.66%), Hemiptera (0.89%), Blattaria (0.44%) and finally, Lepidoptera (0.33%) and Araneae (0.33%). Significant differences ($p < 0.05$) in the composition of insect trapped in pitcher plants were observed for the order Hymenoptera, Diptera, Lepidoptera, Hemiptera and even Nematodes. Meanwhile, no significant difference was observed for Coleoptera, Blattaria and Araneae. There is a strong relationship between fauna and *Nepenthes* pitcher either as a prey, predator, a mutualistic relationship or parasites or also for a habitat to live or to reproduce.

Keyword: Borneo; Fauna; *Nepenthes*; Relationship; Setiam Hill