

Liana abundance, diversity and tree infestation in the Imbak Canyon conservation Area, Sabah, Malaysia

Abstract

We investigated the liana diversity and liana–tree relationship in lowland dipterocarp forest at Imbak Canyon, a recently designated conservation area in the heart of Sabah, Malaysia and compared the results with similar studies in the region. In the two 0.1-ha plots, a total of 23 liana species were found growing canopy-ward on trees ≥ 10 cm diameter at breast height (dbh); dipterocarps were less infested by lianas than non-dipterocarps. The liana species belonged to 12 families and 16 genera. Fabaceae followed by Annonaceae and Icacinaceae were the most abundant and species-rich families. The floristic pattern and the stem density of lianas > 1 cm dbh were similar to other studies conducted in Sabah and northern Sarawak at comparable elevation and site conditions but were distinct from other sites in tropical Asia where Annonaceae is the prevalent climber family. The dominance of species of the genus *Spatholobus* (Fabaceae) may be a conspicuous feature of lowland dipterocarp forests in Sabah under mesotrophic conditions.