

Effect of logging on the Ficus community at Batu Timbang research station, Imbak canyon conservation area, Sabah

ABSTRACT

We investigated the effect of logging on Ficus species at a community level in the Imbak Canyon Conservation Area (ICCA) in Sabah, Malaysian Borneo. We made comparisons of species composition, density, fig size, and host-tree size (DBH) between heavily logged and relatively old forests, and assessed factors affecting the size of hemi-epiphytic species. There were no significant differences in species composition, density, and fig size between the two habitats. There were significant differences between the DBH of host and non-host trees in both young and old forests as well as between those of host trees in young and old forests. The DBH of hemiepiphytic species was negatively affected by the DBH of host trees. The results obtained in this study indicate that Ficus species, particularly hemi-epiphytes, can survive in degraded habitats that have recently been logged as well as in undegraded forests, and that their growth is not greatly affected by prior logging activities. Thus, Ficus exhibits both flexibility and adaptability to habitat change. This indicates that Ficus species make ideal plants for the restoration of logged forests considering that figs are an important food resource for numerous animal species, and can promote seed dispersal of other plants by attracting these animals into degraded habitats.