

COMPARISON OF FLORISTIC DIVERSITY OF FOUR WOODLAND TYPES IN THE UPPER HANTANA CAMPUS LAND

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In the Upper Hantana campus land, three broad-leaf woodlands *Peresereanthes falcataria*, *Alstonia macrophylla*, or mixed species woodland and *Pinus caribaea* woodland grow in proximity to one another. The wide range of floristic diversity exhibited by these different woodlands was compared using plot sampling.

The overstorey vegetation of the *Alstonia* woodland showed the highest, i) density, ii) floristic richness, iii) proportion of endemics and iv) plant diversity, followed in decreasing order by that in the *Peresereanthes*-, mixed-, and *Pinus* woodland. In the understorey vegetation, floristic diversity (<10 cm) was highest in *Peresereanthes* woodland, followed in decreasing order by that in *Alstonia*-, mixed species-, and *Pinus* woodlands. Species rank abundance plots of overstorey and understorey species show that over storey vegetation in *Pinus* woodland, fits the geometric series, whereas the others fit the log series or log normal model.

The broad-leaf species woodlands in Upper Hantana also showed better natural regeneration of an array of species. All woodlands showed differences in micro-site conditions. Levels of human disturbance and burning may contribute to differences amongst them. These results provide baseline ecological information on natural regeneration in different woodland types and indicate their relative potential for conservation of biodiversity and water resources.