

Tree species composition and Structure of a Coastal Hill Forest in Pulau Pangkor, Malaysia.

ABSTRACT

Tree species composition and structure of a coastal hill forest in Sungai Pinang Permanent Forest Reserve in Pulau Pangkor at Perak was studied based on the data from five 1-hectare plots. All stems with a diameter at breast height (dbh) >5cm enumerated, identified and their height were measured. The mean stem density was 659 (stems ha⁻¹), and a total of 45 families, 102 genera, 181 species, 3319 individuals were presented in the five 1-ha plot; this comprises 6.3% species, 19.2% genera and 42% families of the total tree taxa found in Peninsular Malaysia. Based on IVI, *Vatica maingayi*, *Xanthophyllum affine*, *Vatica pauciflora* were the most dominant tree species. The families of Dipterocarpaceae, Polygalaceae, Guttiferae and Myrtaceae were among the most important families with high FIV. Based on dbh class, nearly 50% of the trees were distributed in the lower diameter class (5-15cm). According to height-life-form categories, 53% of stems were belonged to small trees (7-15m). Species accumulation curve showed an asymptote at the third hectare.

Keyword: Coastal hill forest; Importance value index; Basal area; Malaysia.