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 pauciflorawere 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 heightlife-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.