Biomass and carbon storage of three virgin jungle reserves in Peninsular Malaysia.

ABSTRACT

A study on biomass and carbon storage was carried out in three virgin jungle reserves (VJRs) in Peninsular Malaysia which represent different geographical zones, namely, northern, eastern and southern zones. The VJRs are located in Mata Ayer, Perus, Bukit Bank, Terengganu and Gunung Pulai, Johor. A single plot of 2 ha (100 m × 200 m) was established in each VJR using purposive sampling design. The plot was further divided into contiguous 50 subplots of 20×20 m2. All trees with ≥5 cm diameter at breast height (dbh) were tagged with numbered aluminium labels, measured and identified. Results indicated that the total biomass for Mata Ayer VJR was 442.86 t/h, Bukit Bauk VJR was 606.32 t/ha and Gunung Pulai VJR estimated at 352.66 t/ha. Carbon storage of Mata Ayer VJR, Bukit Bauk VJR and Gunung Pulai VJR were 221.43 t/ha, 303.16 t/ha dan 176.33 t/ha, respectively.

Keyword: Biomass carbon storage; Virgin jungle reserve; Peninsular Malaysia.