ABOVE GROUND CARBON STOCK IN SULAMAN LAKE FOREST RESERVE, TUARAN, SABAH

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ABSTRACT

This study quantified the above ground biomass and carbon stock in a *Rhizophora apiculata* dominant area of Sulaman Lake Mangrove Forest Reserve, Tuaran. There are five transect line which consist of 3 subplots per transect, total there are 15 subplots which cover 0.2309 ha were established in the research area. Diameter (DBH) for every tree inside the 7m radius of the subplot was taken by using diameter tape or DBH tape. Above ground biomass was calculated by using a allometric equation $B = 0.1709 (D)^{2.516}$, D is represented at diameter of a tree. Obtaining the biomass of a tree is important because to calculate the carbon stock by divide the value of biomass into half. The overall value of the biomass in the study is 1.97 t ha^{-1}. As for the overall value of carbon stock was 1.03 t C ha^{-1}. Estimated value for the biomass for the whole area of mangrove forest Sulaman Lake which was 22490.51 t ha^{-1} and as for the value for carbon stock was 11790.86 t C ha^{-1}.