Soil pH and carbon at different depth in three zones of Mangrove Forest in Sarawak, Malaysia

ABSTRACT

Mangrove forest is one of the potential areas for the carbon storage. A study on carbon storage in soil was carried out in the mangrove forest at Awat-Awat Mangrove Forest Reserve in Lawas, Sarawak, Malaysia to compare the carbon storage potential among three different zones (seaward, middleward and landward) and two different soil depths (0-20 cm and 20-40 cm). Standard procedures were used to determine soil chemical properties. There are significant differences in the carbon storage between the mangrove zones with the middleward zone being more efficient in storing carbon. However, there are no differences in the percentage of carbon stored at different soil depths.

Keyword: Soil carbon storage; Mangrove zonation; Soil depth; Sarawak