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PEAT SWAMP FLORA AND CONSERVATION OF MALUDAM NATIONAL PARK, SARAWAK

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Peat swamp forest (PSF) of Sarawak is a unique and interesting ecosystem. The original total of peatland area of Sarawak is estimated at about 1,657,600 hectares, representing 13% of the whole land area of Sarawak. The natural PSFs have a rich floral diversity with several endemic species distributed within the six distinct communities classified by Anderson in 1963. These PSFs are considered very important natural resources and are of economic importance. The flora inventory involved sampling 25 subplots measuring 20 x 20 m at Maludam National Park (NP) in Sarawak. All individual trees of ≥ 5 cm at diameter breast height (dbh) were measured and their height was estimated using a Haga meter. A total of 1,121 individual trees belonging to 76 species in 33 families were recorded. Among the most common tree species identified were *Vatica mangachapoi* Blanco. (Resak), *Madhuca motleyana* J.F. Macbr. (Ketiau paya), *Dactylocladus stenostachys* Oliv. (Jongkong), and *Baccaurea bracteata* Müll.=Arg. (Tampoi). Important peat swamp species of the Dipterocarpaceae family, namely *Shorea albida* Symington (Alan bunga), *Sh. inaequilateralis* Symington (Semayur) and *Sh. teysmanniana* Dyer ex Brandis (Meranti paya) were also recorded but were few in numbers. *Gonystylus bancanus* (Miq.) Kurz (Ramin) used to be dominant in peat swamp forest but only two individual trees were recorded in the sampling area. The remaining floral diversity in Sarawak's PSFs is very important and should be fully conserved. Biomass accumulation from the PSF plays an environmentally important role in carbon storage and sequestration. It is crucial that this should be researched to gain information needed for ecological conservation and to discover its economic potential so that it could be utilized sustainably within the remaining PSFs in Sarawak.

Keywords: Sarawak, peat swamp forest, tree flora, conservation.