

Early-Middle Holocene environmental change inferred from grass/non grass pollen, micro-charcoal, thermally mature and fungal spore records on the master core segment 1 in Horton Plains, Central Sri Lanka.

by

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Abstract

Radiocarbon multi-proxy record (pollen, spores, thermally matures, micro-charcoal and plant debris) found from the peat and sediment samples in the Horton Plains, Central Sri Lanka show changes of vegetation, climate and anthropogenic activities during the Early-Middle Holocene (*i.e.* 10,300-5,800 cal yrs BP). 26 pollen types were reported. The most common Upper Montane Rain Forest (UMRF) taxa were Clusiaceae/*Calophyllum* sp., *Syzygium* sp., Ericaceae/*Rhododendron* sp., during the Early Holocene (*i.e.* 10,300-9700 cal yrs BP) in association with humid climate. The UMRF rapidly decrease and grasslands predominated during the Middle Holocene (*i.e.* 9,700-5,800 cal yrs BP) responding to climatic deterioration, *i.e.* increasing trend in aridity. Anthropogenic activities including forest clearance and burning regimes were identified during the Early Holocene.