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A 36,000 Years record of vegetation and sea - level changes from a Quaternary section of Little Andaman, India

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Palynological interpretation of pollen diagram from 25' exposed Quaternary section, R.K.Puram, Little Andaman (BS-1595; 36,550 ± 870 Yrs B.P.) has proved to be a model for mangrove development and sealevel changes in South India in general and Andamans' in particular. In view of the unique biological characteristics of mangroves it is interesting to assess the extent to which these ecosystems have been used as an indicator of coastal change or sea-level rise. Since mangrove assemblages and their zones are closely related to shore profile, soils, habitat stratigraphy and salinity fields, any change in these can lead to alteration of the structure and composition of mangrove eco-system.

Three major palynological zones (**RK-2,** 31,500-27,500; **RK-6,** 18,000-13,500**; RK-8,** 4,500-1,000) identified in R.K.Puram profile exhibited stable sea levels required for the formation of mangrove swamp forest. The occurrence of dense mangrove forests has been recorded only intermittently through the Late Pleistocene and Holocene. The upper part of sediment shows vegetation changes over the last ca. 2,000yrs B.P. exhibiting marsh wetland together with dryland endemic forest species before colonization of South and Little Andamans. Late Quaternary pollen data recording mangrove evolution in Andamans show similarity with the dataset obtained from Asia-Pacific, Eastern Indonesia and Northern Australia.