RADIOCARBON DATING OF SOME PLANT REMAINS IN WEUDA SEDIMENTS FROM SRI LANKA

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A glacial origin had been suggested by earlier workers for the rhythmic silty clay beds of Weuda in the Kurunegala District of Sri Lanka. Based on comparison methods, the pollen collected from these sediments were dated as Permo-Triassic in age (Dahanayake, et al., 1989). However, many geoscientists are skeptical over the glacial origin for these sediments and suggested a local lacustrine origin (Cooray, 2002). Two Kumbuk (*Terminalia arjuna*) seeds, collected at a depth of nearly 2 m below the surface from a silty clay bed in Akade, were dated using radiocarbon method and the samples yielded ages of 435±71 and 176±71 B.P. These ages indicate that interpreting Weuda sediments require careful analysis of available data and field observations. It can be postulated that glacial sediments or ancient soils which contain Permo-Triassic pollens were re-deposited with recent plant remnants, most probably in a lacustrine environment. On the other hand the preexisting sediments/soils could have been subjected to several cycles of erosion and re-deposition before incorporating recent plant remains. On the contrary, the possibility of man induced introduction of these plant remains by way of dug well construction in a former tank-bed should also be considered. To prove the origin of these sediments carefully planned detailed field and laboratory studies are needed.