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ANALYTIC SUMMARY

M. DINIES, R. NEEF & H. KUERSCHNER, Holocene vegetational development and the beginning of oasis cultivation in Tayma, North-Western Saudi-Arabia – first results.

SUMMARY: Cores from a large palaeolake, botanical macroremains out of archaeological features and surveys of the actual vegetation in combination with pollen surface samples provide excellent records for the reconstruction of the Holocene development of vegetation, land use and oasis cultivation in the Tayma region in north-western Saudi-Arabia.

The preliminary pollen data suggest a moderately denser vegetation cover during early and mid Holocene. However, fluctuating but high frequencies of desert vegetation throughout the sequence show the persistence of desert ecosystems in the Tayma region and confirm that stable agricultural practices always depended on irrigation. Vine pollen indicates a start of oasis cultivation at least at the beginning of the 3rd millennium BC. Whether the less pronounced, but perhaps economically significant change in vegetation during this period was the main trigger for oasis cultivation or only one among several reasons has to be decided after further investigations.

KEYWORDS: pollen, vegetation, *Vitis vinifera* L., oasis cultivation, Holocene, Tayma, Saudi-Arabia.

N. DE P. SÁ & M. L. ABSY, Pollen record of Holocene sediments in the Central Amazon, Brazil.

SUMMARY: Phases in seasonal fluctuations in rainfall in late Holocene are already known to the Amazonia, especially in the Central Amazon basin. Periods of lower effective rainfall were recorded in the range of 2700-2100 years BP and identified by pollen analysis of sediments of the basins of the Purus, Negro and Solimões rivers. Pollen analysis of Lago Cabaliana confirmed this interval of reduced precipitation, indicated by the establishment of forest terra firme and late successional varzea forest. Since the variations of the flood pulse of large rivers are a direct result of the actual amount of precipitation, it can be stated that there was a minor flood phase in the Central Amazon basin in the late Holocene.

KEYWORDS: varzea, rainfall, Solimões River, flood pulse.