Phytolith Analysis from the Ethnoarchaeological site of Al Ma’tan, Jordan

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Here we present results from a preliminary analysis of phytolith samples from the Ethnoarchaeological site of Al Ma’tan, Jordan. The aim of this research is to determine if it is possible to identify activity areas and building practices in mud and stone constructed settlements through variations in the phytolith record.

In total, 186 phytolith samples were taken for analysis from a variety of activity areas such as middens, hearths and floors as well as from structural materials such as plasters and roofing deposits. The results from this study will be used to aid interpretation of Neolithic sites which utilise similar building material in their construction, for example stone and pisé.

Work is on-going, but results to date demonstrate that, in contrast to the natural control samples, the anthropogenic samples from Ma’tan are rich in a variety of phytoliths including cereals, reeds and forms from trees and shrubs. Samples from the plaster and roofing contexts are particularly rich, while those from the external and courtyard areas are limited in their range and density.

This research presented here is just one aspect of a wider research project entitled ‘Identifying activity areas in Neolithic sites through ethnographic analysis of phytoliths and geochemical residues (INEA)’. The phytolith results will be combined with those from the geochemical analysis leading to a more robust method for interpreting Neolithic sites.