Traces of life: using geochemistry, phytoliths and ethnographic analogy

Jenkins, Emma (Bournemouth University), Sarah Elliott (Council for British Research in the Levant), Samantha Allcock (University of Plymouth), Carol Palmer (Council for British Research in the Levant) and John Grattan (Aberystwyth University)

Our understanding of Neolithic sites is often impeded by the lack of preservation of biological evidence. Neolithic sites often consist of a series of structures, the construction and function of which remain elusive. In order to address this problem we conducted a study which used phytoliths and geochemistry from an ethnographic site in Jordan, Al Ma'tan, to determine if certain building construction techniques and anthropogenic activities leave phytolith and elemental signatures. We sampled a range of context categories and our results found that certain categories, for example fire installations and animal penning areas, do have distinct phytolith and elemental concentrations. Other categories, however, were less distinguishable; mainly those constructed using the same local clay sources, for example the make-up of hearths, plastered features and wall plasters.