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My present research seeks to explore the use of space at Songo Mnara, a Swahili stonetown on the Kilwa archipelago, southern Tanzania, through the use of phytolith analysis. The project, directed jointly by Dr Stephanie Wynne-Jones at the University of York and Dr Jeff Fleisher at Rice University, seeks to understand the use of interior and exterior, public and private space and as such, my research encompasses themes such as the trade of plant materials, cultivation, crop processing, animal husbandry, use of plant materials for craft and the local environment. Due to limited preservation of plant macrofossils and pollen and taphonomic factors governing the inclusion of plant macro remains into the archaeological record, it is hoped that the application of phytolith analysis will shed further light on the use of botanical resources within the Swahili culture.

This study includes the production of one of the first phytolith reference collections for East Africa, building on existing knowledge of phytolith production as well as extending to explore production in plant families, genus and species which have not yet been investigated. The reference collection will focus on those species which are traded (from across the Indian Ocean region and from the interior of Africa), cultivated, are weeds of cultivation or are used for craft purpose. In addition those taxa which inhabit specific environments will be included, as a means of identifying the environment contemporary with the settlement at Songo Mnara.

The reference collection will be used to conduct the first full scale program of phytolith analysis at an archaeological site in Africa, one of only a few projects worldwide to use phytolith analysis as a tool for spatial analysis. Preliminary investigations carried out by Sulas and Madella (2012) have demonstrated the potential of phytolith analysis at Songo Mnara, a site particularly suitable for this type of study given its short occupation of only 200 years between the late fourteenth and the early sixteenth centuries and its subsequent abandonment.

The Songo Mnara project Urban Space, Social Memory and Materiality is an interdisciplinary project directed by Dr Stephanie Wynne-Jones, University of York and Dr Jeff Fleisher, Rice University, funded by the National Science Foundation (US) and the Arts and Humanities Research Council (UK). For further information see: www.songomnara.rice.edu