UISPP 2026 - Archaeology in motion: Past lessons, future responsibilities

New Directions in African Archaeobotany: Building Inter- and Intra-Disciplinary Collaborations

Keywords: Archaeobotany, Africa, Cross disciplinary studies

Main organizer:
Celine Kerfant, Culture Archaeology and Socio-Ecological Dynamics (CASEs), University Pompeu Fabra, Spain. celineemmanuelle.kerfant@upf.edu

Co-organizers:

Sara Scaglia, Culture, Archaeology and Socio-Ecological Dynamics (CASEs), University Pompeu Fabra, Spain sara.scaglia@upf.edu

Giulio Roberto Bartuli, Culture, Archaeology and Socio-Ecological Dynamics (CASEs), University Pompeu Fabra, Spain giulioroberto.bartuli@upf.edu

Paidamoyo Chingono, Department of Archaeology, School of Humanities. University of Glasgow, the UK Paidamoyo.Chingono@glasgow.ac.uk

Thamary Mukuya, Department of Environmental Sciences - University of Botswana & Department of Cultural Heritage - University of Salento, Italy mukuyat@ub.ac.bw

Abstract
Traditional African archaeobotany commonly used carpology and phytolith analysis, among other subdisciplines of archaeobotany, as key methods to reconstruct past plant use and human diet. Recent advances in collaborative work within the discipline, for example, combined macro- and microremains approaches or the building of local reference collections, land use and anthropogenic land cover models to investigate how humans have influenced the shaping of the environment and vice versa.

Greater collaboration among the subdisciplines, such as the combined study of macroremains (seeds, fruits, wood charcoal) and microremains (phytoliths, starch grains, pollen), significantly increases our understanding of the immense archaeological and environmental diversity and its changes on the African continent from a diachronic perspective. Integrating ethnoarchaeology is also helpful to (re)interpret the archaeobotanical data, for a deeper understanding of past environments and future adaptations. In the same way, the construction and use of local reference collections have improved taxonomic identification and interpretation of plant material for specific African ecological zones.

But beyond archaeobotany itself, important interdisciplinary collaborations have developed with other areas of archaeology, such as soil micromorphology, use wear analysis on shell and lithic tools, lipid and crust analysis in ceramic studies, ethnoarchaeology, as well as with fields further afield, including GIS, machine learning, and artificial intelligence. These developments open new possibilities for tracing plant use, agricultural practices, and human–environment interactions in Africa in increasingly efficient and diverse ways.

This session aims to showcase new approaches and methodologies that have demonstrably yielded rich and original information. We invite contributions that highlight innovative protocols, integrative analytical frameworks, or novel proxies, and that assess their potential and limitations for African contexts. The goal is to open discussion and debate across different traditions and perspectives in order to strengthen and improve archaeobotanical research in Africa.