

THE USE OF PHYTOLITHS ANALYSIS FOR THE INTERPRETATION OF THE CONTENT OF POTTERY: AN EXPLORATORY STUDY OF AFRICAN ETHNOGRAPHIC SAMPLES

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Because it may be used for storing, transporting, preparing and serving food commodities, pottery represents a key evidence of the food practices of past societies. However, the plant content of archaeological pottery is difficult to track because of (i) the low preservation of their molecular biomarkers in organic residues, (ii) the scarcity of well-preserved botanical remains and (iii) the lack of interpretative references.

This communication aims at presenting the potential and limits of phytoliths as an indicator of plant content of pots, and culinary practices of past societies.

Because of their siliceous structure, phytoliths analysis offers new perspectives for identifying plants remains in organic residue, where other biological and molecular indicators are poorly preserved. Differentiating the parts of plants and Poaceae subfamilies may furthermore supply detailed information about the substances prepared inside pottery (seeds, leaves, roots, etc.).

This preliminary study focuses on the phytoliths analysis of the residues and clay paste from more than 20 ethnographic pots from Senegal used for different purposes.

These were collected in two present day communities in Casamance and Bedik Country representing two regions with different traditional food systems, according to their farming practices (rice farming vs rainfed agriculture). This study has been developed in the framework of an international research program with a wider perspective of establishing an ethnoarchaeological reference of the functions of pottery that combines different proxies (typometry, use-wear, lipids, proteins, phytoliths and starch grains analyses). The first results highlight a contrasted signal of phytolith assemblages according to the content of the pots and reveal the necessity to adopt a salient sampling strategy.

Keywords

Phytolith, Pottery, Food practices, Senegal

Note/comment