## BEDDING LAYERS FROM BORDER CAVE, SOUTH AFRICA: A PHYTOLITH AND FTIR INVESTIGATION

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Border Cave is a well-known South African Middle and Later Stone Age archaeological site located in KwaZulu-Natal, that has provided exceptional plant preservation, probably unparalleled in South African archaeology. The site preserves multiple bedding structures in numerous layers, some survived as visually ephemeral fragments of silicified plant material while in others desiccated plant is preserved. We recently reported the discovery of grass bedding used to create comfortable areas for sleeping and working by people who lived in Border Cave at least 200,000 years ago. The complexity and distinctiveness of these deposits provide an excellent opportunity to study the relationship between plant exploitation strategies and sleeping behaviours of the ancient inhabitants of Border Cave. This study presents ongoing research on the phytolith and chemical composition of sediments from bedding layers dating from ~227 to 24 ka. The results here presented are further investigated from a taphonomical perspective, that is critical to conducting a more reliable interpretation of plant-human behaviours in the cave.

## Keywords

Phytoliths, FTIR, Bedding, Early complex behaviours, Border Cave, South Africa

Note/comment