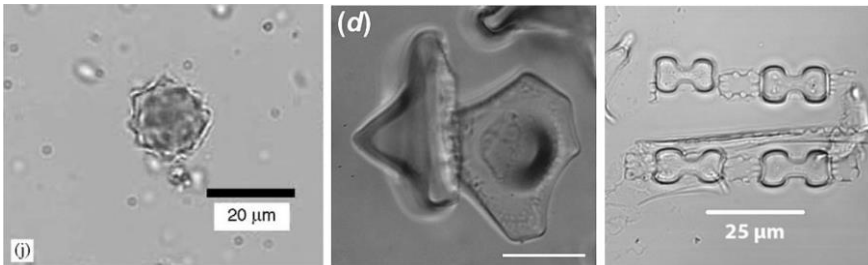


UQ Summer 2018-19 Research Project Description

School of Social Science

Project title:	Archaeology of human-plant interactions using phytolith analysis
Project duration:	6-8 weeks
Description:	<p>Phytoliths (silicified plant remains) commonly preserve in archaeological sites as evidence of human use of plants for food, craft, fuel and other purposes, as well as the palaeoecological setting for these ancient behaviours. In areas where organic preservation is poor, phytoliths are often one of the only sources of evidence of past human-plant interactions. Essential to archaeological and palaeoecological studies of phytoliths is a comprehensive understanding of the production and forms (morphologies) of phytoliths across plant families within a study region. For this project, a student will process and examine modern plant reference material to help develop a phytolith database and classification key, then apply this to the analysis of archaeological samples from either northern Australia or South Asia (this can be negotiated depending on the student's own research interests), dating to the last 500–10,000 years and earlier.</p>  <p><i>Representative phytoliths from (left) palms, (centre) sedges, (right) Panicoid grasses.</i></p>
Expected outcomes and deliverables:	The student will learn phytolith extraction and identification techniques, including using light microscopy and scanning electron microscopy (SEM), and assist with database development. They will be required to produce a report detailing their findings, which has the potential to be published or contribute to a publication.
Suitable for:	Third year and honours level students in archaeology and/or palaeoecology with a high degree of enthusiasm for lab-based research. Some experience in microscopy would be advantageous.
Primary Supervisor:	Dr Alison Crowther (School of Social Science)
Further info:	Please contact Dr Crowther (a.crowther@uq.edu.au) for further information; all enquiries should be accompanied by your CV and academic transcripts.