

## An Archaeobotanical Analysis of Macrobotanical Remains at Riwi Cave in the South-Central Kimberley Region, WA

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The study of macrobotanical remains is a significant subdiscipline of archaeology. Despite the known importance of plants in hunter-gatherer economies, few archaeological macrobotanical studies have been conducted in Australia and, as a consequence, little information is available on human-plant interaction in past hunter-gatherer populations. This dissertation presents the analysis of macrobotanical remains from Riwi Cave, one of the oldest archaeological sites in Australia, located in the southern Kimberley on the edge of the Great Sandy Desert. An analysis such as this had not previously been conducted on macrobotanical materials recovered from the site and this work's contribution to the limited scholarship available on macrobotanical analysis in Australia is invaluable.

To identify the use of economic plants and assess changes in plant use over time, two samples of Riwi's macrobotanical

assemblage were analysed. A botanical reference collection was created and a methodology developed to identify the macrobotanical material. Four different types of unmodified macrobotanical remains were identified: bark, uncharred wood, leaves and seeds. Plant materials modified by humans formed a fifth category that included wood shavings, a fire drill, string and a fragment of a wooden artefact. Of the 2034 seeds and other floristic elements, 1998 were identified to varying taxonomic levels. The project investigates post-depositional processes by examining the abundance of plant material and distribution of plant parts within the occupation deposit. Non-cultural and cultural sources of plant materials were distinguished and human contribution, spatial variation and changes in plant use over time assessed. By correlating the macrobotanical evidence with palaeoclimatic records for the Kimberley region, inferences are made regarding environmental change.

The rich macrobotanical assemblage from Riwi Cave provides multiple insights beneficial to Australian hunter-gatherer archaeology as a whole. The results from this study provide a deep understanding of hunter-gatherer lifeways and human-plant interaction in the southern Kimberley over the past 47,000 years. This project promotes the broader aims of archaeobotanical scholarship and encourages a future where macrobotanical analysis in Australian archaeology is considered the norm, not the exception.