

The Leica MZ6 Sheds Light on 5,600 Year Old Mummies

Sydney/Cairo. Recent findings made by the Australian Macquarie University Egyptologist and textile analyst Jana Jones have led to a review of the current educated opinion on Egyptian mummification practices. Originally it was thought that mummification was used to preserve the bodies of Pharaohs from c.2600 BC. With this latest discovery however, Egyptian history will have to be rewritten. Evidence discovered by Jones now shows that artificial mummification was used to preserve the dead from as early as c.3500 BC.

The German Institute of Archaeology, based in Cairo, employed Jones to uncover the mysteries held within the 100 or so textile fragments from a First Dynasty (c. 3000 BC) royal cemetery at Abydos. Exciting discoveries from Abydos, suggesting mummification practices previously seen only much later, led to another site at Hierakonpolis, 60m km south of Luxor. Here, at a working class cemetery dating back to the Predynastic period, the British Museum Heagy Research Curator, Dr Renee Friedman, had earlier discovered three 5,600-year-old female bodies with padded heads and hands. Jones offered her expertise to analyze the textile samples and for the first time, fabric used in binding these bodies was analyzed microscopically using a Leica MZ6 Stereomicroscope, which Jones dutifully took with her during her expeditions.

“For me the great advantage of the MZ6 is its portability. The Leica Stereomicroscope makes observation easier, as I spend 8-10 hours per day peering down it under less than ideal conditions, often balanced on a rickety chair”. Throughout her travels Jana impressed onlookers with her skills at operating the impressive microscope, although she does admit: “The microscope really is so easy to use”.

Jones found that the bindings on the mummified working class were composed of layers of linen soaked in resin and bound with care, anticipating methods used some 500 years later in the First Dynasty royal tombs at Abydos. The similarities were striking, particularly the order in which the linen was used in the bindings around the bodies. Up to 100 layers were used, with the finest linen against the skin and coarser bindings in the outer layers.

This concrete proof of Egyptian funerary practices from the Predynastic period and the First Dynasty will no doubt affect the current opinion on the evolution of mummification. Jones states “there is absolutely no doubt that the presence of the resin and the sequence of wrappings would not have been established without this microscope”. > Alex Newfield



The resin-coated textile sample from the royal cemetery at Abydos as imaged in the Leica MZ6.

Textile analyst Jana Jones with her Leica MZ6

