NEW ANALYSES ON THE DEVELOPMENT OF EARLY RICE CULTIVATION SYSTEMS IN INDIA

Eleanor KINGWELL-BANHAM¹, Emma HARVEY, Alison WEISSKOPF, Dorian Q. FULLER

Key words: Weeds, Phytoliths, Irrigation

There is a small, but growing, dataset of weed seeds and phytolith assemblages to complement the records of Neolithic, Chalcolithic and Iron Age rice in India. Here we compile evidence for morphological diversity in phytoliths and changes in grain size with an increase that starts after the Neolithic. Weed assemblage data suggests that the earliest cultivation was based on natural flood or rainfall regimes, with increasing evidence for wetland weeds and therefore irrigated rice fields by the Iron Age (from ca. 1000 BC) after which wetfield rice cultivation spread more widely in India, including to the south and Sri Lanka.

¹ Institute of Archaeology UCL, 31-34 Gordon Square, London WC1H 0PY, e-mail: e.kingwell-banham.09@ucl.ac.uk