

[Supplementary material]

**Cooking in caves: Palaeolithic carbonised plant food remains from Franchthi and Shanidar**

Ceren Kabukcu<sup>1,\*</sup>[ORCID: 0000-0001-5963-5826], Chris Hunt<sup>2</sup>, Evan Hill<sup>3</sup>, Emma Pomeroy<sup>4</sup>[ORCID: 0000-0001-6251-2165], Tim Reynolds<sup>5</sup>, Graeme Barker<sup>4</sup> & Eleni Asouti<sup>1</sup>

<sup>1</sup> Department of Archaeology, Classics and Egyptology, University of Liverpool, UK

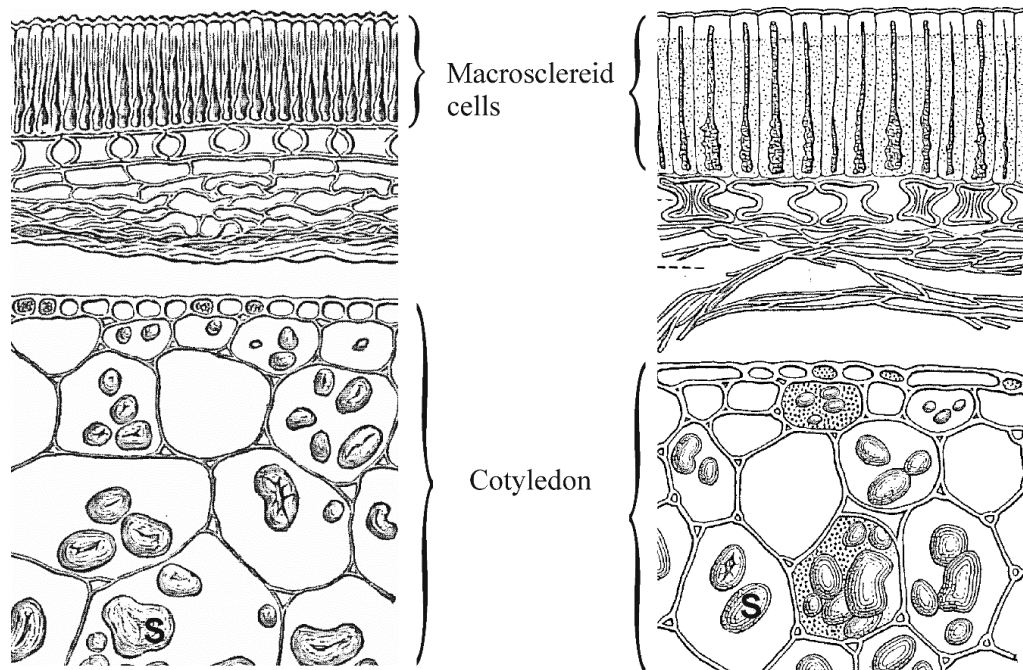
<sup>2</sup> Research Centre in Evolutionary Anthropology and Palaeoecology, Liverpool John Moores University, UK

<sup>3</sup> School of Natural and Built Environment, Queen's University Belfast, UK

<sup>4</sup> Department of Archaeology, University of Cambridge, UK

<sup>5</sup> Department of History, Classics and Archaeology, Birkbeck University of London, UK

\* Author for correspondence ✉ C.Kabukcu@liverpool.ac.uk



*Figure S1. Legume seed cross-section, illustrating the macrosclereid cells of the seed coat (testa) and cotyledon (redrawn by C. Kabukcu after Winton & Winton 1935). Left panel depicts Lens orientalis (Winton & Winton 1935: 312, fig. 89), right panel depicts Pisum sativum (Winton & Winton 1935: 326: fig. 95).*

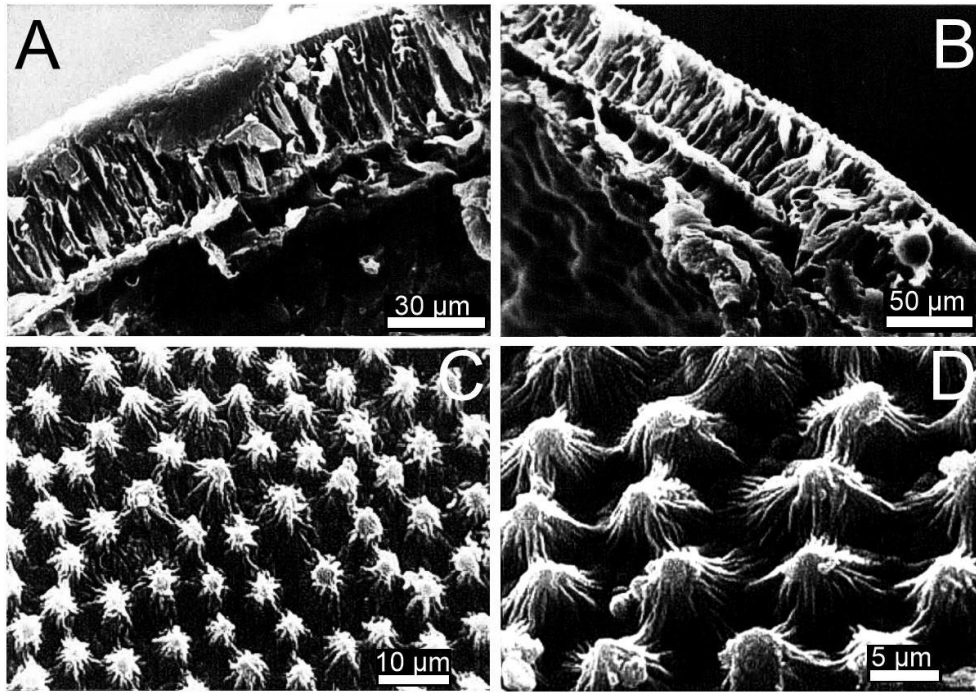


Figure S2. SEM of *Vicia ervilia*: A–B) Macrosclereid cells in testa cross-section (Butler 1990: 494, panels 6 and 7, pl. 6); C–D) details of papillose testa surface (Butler 1990: 493, panels 5 and 6, pl. 5) (reproduced with permission from A. Butler).

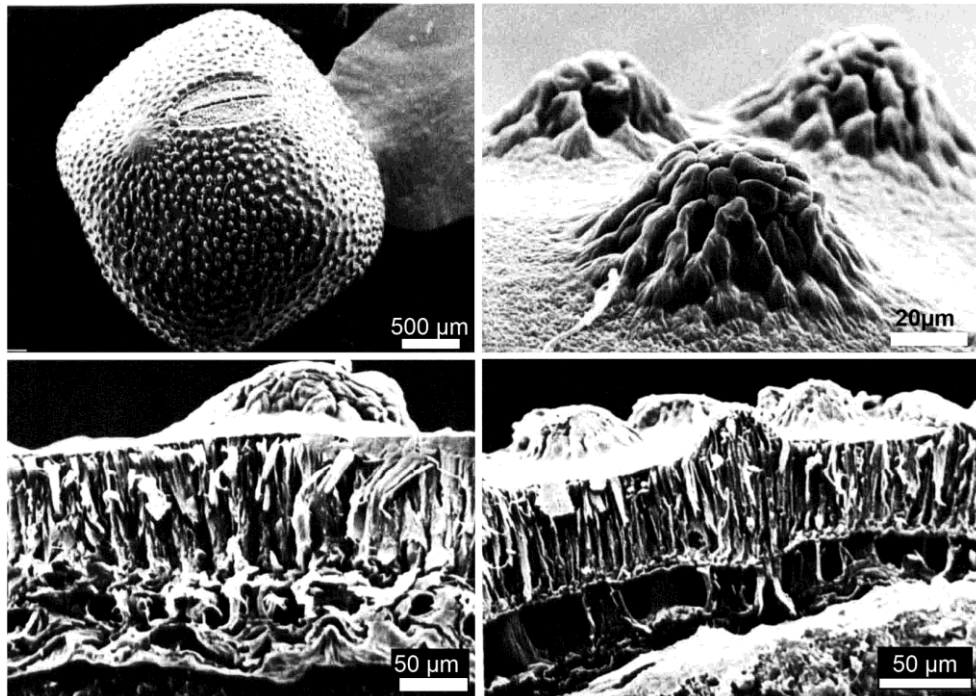


Figure S3. SEM of *Lathyrus nissolia*: A–B) overview and detail of the mounded papillose testa (Butler 1990: 557, panels 1 and 4, pl. 69); C–D) macrosclereid cells in testa cross-section (Butler 1990: 598, panels 6 and 7, pl. 70) (reproduced with permission from A. Butler).

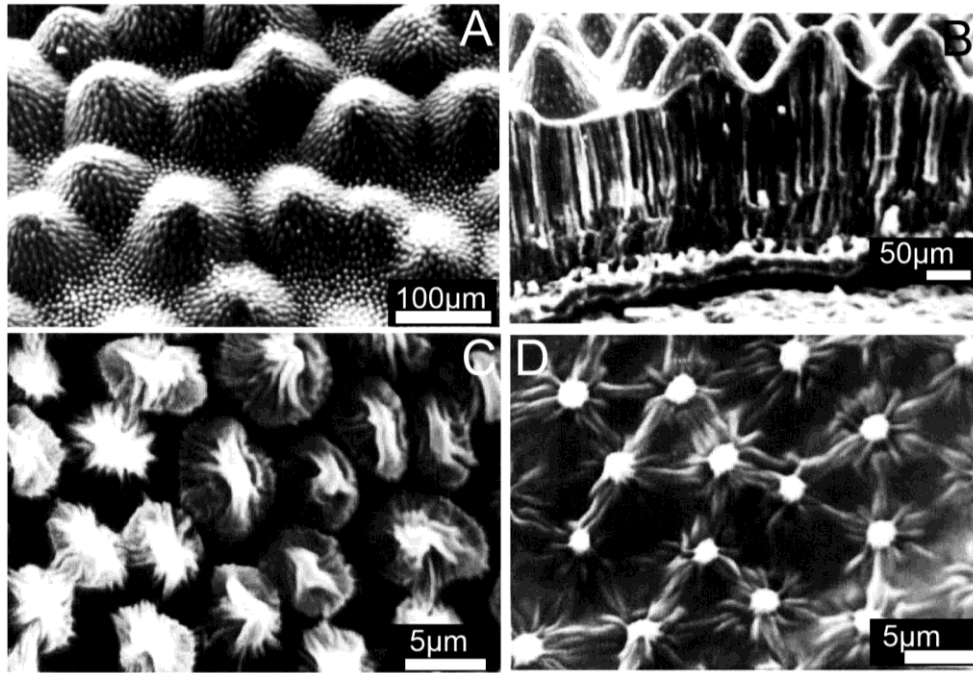


Figure S4. SEM of *Pisum sativum elatius*: A) Mounded papillose testa surface (Butler 1990: 569, panel 3, pl. 81); B) macrosclereid cells in testa cross-section (Butler 1990: 571, panel 8, pl. 83); C) detail of testa surface between the mounds (Butler 1990: 569, panel 4, pl. 81); D) detail of testa surface between the mounds, after charring (Butler 1990: 571, panel 2, pl. 83) (reproduced with permission from A. Butler).

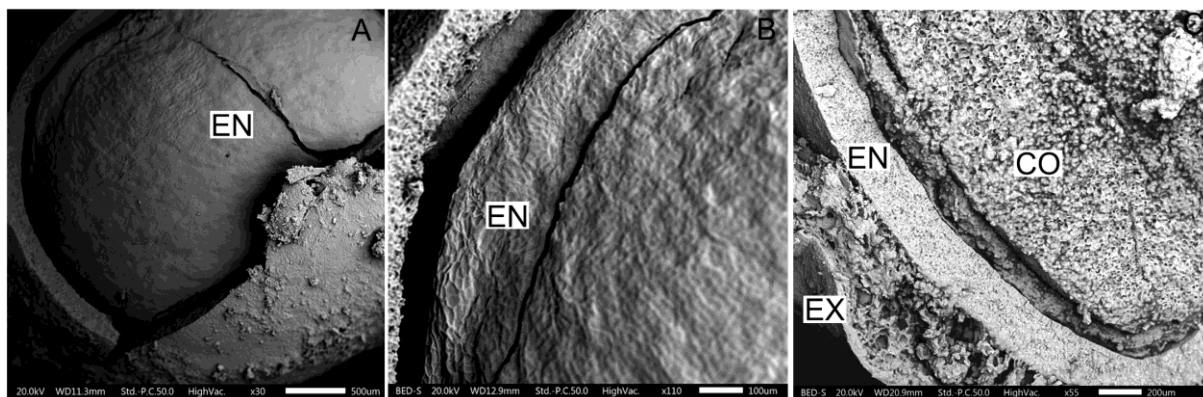


Figure S5. SEM of *Pistacia terebinthus* (UoL modern reference collection): A) overview showing exposed endocarp under pericarp; B) detail of endocarp surface; C) cross-section of pericarp, endocarp and cotyledon. EN = endocarp (nutshell); EX = exocarp (outer skin of the pericarp); CO = cotyledon (SEM micrographs taken by C. Kabukcu).

## References

BUTLER, E.A. 1990. Legumes in antiquity: a micromorphological investigation of seeds of the Viciae. Unpublished PhD dissertation, University of London.

WINTON, A.L. & K.B. WINTON. 1935. *The structure and composition of foods. Volume II: vegetables, legumes, fruits*. New York: Wiley.