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Early Florists

Archaeologists find traces of flowering plants in grave linings that have been dated to 13,700-11,700 BP

Plants in particular flowers are a familiar feature of human ritual in many cultures. Unfortunately understanding the early use of flowers is immensely challenging due to the paucity of remains. Robert Power of the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, has worked as part of a multidisciplinary team in a study published in PNAS led by Dani Nadel at the University of Haifa to understand their use at Raqefet Cave on Mount Carmel in Israel where unusual preservation conditions have allowed the survival of traces of their use.



Figure: Field photograph of an adult (left) and an adolescent (right) skeleton during excavation. Credit: E. Gernstein

Multidisciplinary analyses showed uniquely preserved Late Natufian grave linings made with flowering plants, suggesting that the use of flowers can now be securely dated to at least 13,700-11,700 BP. This period is already known for the earliest cemeteries in the Levant (ca. 15,000-11,500 years ago) in the northern Israel, where dozens of burials in each reflect a wide range of inhumation practices.

The newly discovered flower linings were found in four Natufian graves at the burial. Large identified plant impressions in the graves include stems of sage and other

Lamiaceae (*Labiatae*; mint family) or *Scrophulariaceae* (figwort family) species, and accompanied by a plethora of phytoliths they provide the first direct evidence for such preparation and decoration of graves, adding a new perspective to Natufian funerary rites. Its identification indicates grave preparation was a sophisticated planned process, imbued with social meanings. Grave preparation reflected the profound changes that the complex pre-agricultural Natufian society was undergoing at the end of the Pleistocene.

[RP, SJ]

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Earliest floral grave-lining from 13,700-11,700-year-old Natufian burials at Raqefet Cave, Mt. Carmel, Israel

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