Food offerings and feasting in Bronze Age burial contexts from the Körös region, Hungary

Kayla Pio, University of Michigan, and Dr. John Marston, Boston University

Abstract

While the collection and analysis of paleoethnobotanical material is increasingly common in settlement excavations, it still remains rare in burial contexts. Botanical material from cemeteries can provide important insights into mortuary practices and associative beliefs about the afterlife for investigated populations. Charred food remains may indicate food offerings or feasting around the burial site, as well as social inequality or aspects of the deceased's personal identity. In Bronze Age cremations at Békés 103, Hungary, the near-absence of paleoethnobotanical material suggests that the placement of food offerings on the pyre was not customary, though rites involving uncharred food offerings or funerary feasts away from the burial site may have occurred. Taphonomic processes could have affected the archaeobotanical assemblage. This study examines intra-site patterning to address this possibility as well as ritual variation within the cemetery. In addition, this study places Békés 103's paleoethnobotanical material in comparison with similar assemblages from other Hungarian burial and prehistoric settlement contexts.

Background

Békés 103 lies in an agricultural plough-zone in Eastern Hungary. The site has been surveyed and excavated by BAKOTA (Bronze Age Körös Off-Tell Archaeology Project) since 2011. Soil phosphate analysis and surface collection suggest that the cemetery consists of two distinct burial clusters, each 100-150 meters across: **Area B** to the north of the site, and **Area C** to the south (Fig.1).

Survey suggests that **Area A** is an associated "flat" settlement with Sarmatian, Árpád, and Late Medieval ceramics superimposing Bronze Age and Neolithic material. Excavation has focused on **Area C** and the southern part of **Area B.** 68 Bronze Age burials, predominately cremations, have been excavated, the largest portion dated between 1600 and 1200 CalBC (CITE). While the basis of the cemetery's arrangement remains unclear, it is possible that it reflects a temporal or cultural differentiation (Duffy et. al. 2014).

Methodology

Sampling

Flotation samples were retrieved from all excavated contexts between 2011 and 2014, including urn pits, inhumation graves, pit and ditch fills, and paleosoil levels in each excavation unit, as well as a few burial urns fills. Sample size was 10L when possible. Since urn pit borders were usually uncertain, excavators extracted soil samples adjacent to and directly beneath the urn. For non-features and pit fills, excavators collected soil from the middle (by depth) of the layer/fill at a single contiguous locus.

Flotation

The 2011/2013 samples were recovered by flotation from a SMAP-style system (Fig. 2). The light fraction, consisting of charcoal, seeds, and roots, was initially collected with a 0.4 mm sieve, but given these samples' very low botanical return, the sieve's mesh size was decreased to 0.25 mm in 2014. The heavy fraction (ceramic sherds, bone, etc.) was collected with window screen (1.0-2.0 mm) and given to another team member for analysis.

Fig. 1: Map of Békés 103 depicting locations of analyzed flotations samples.

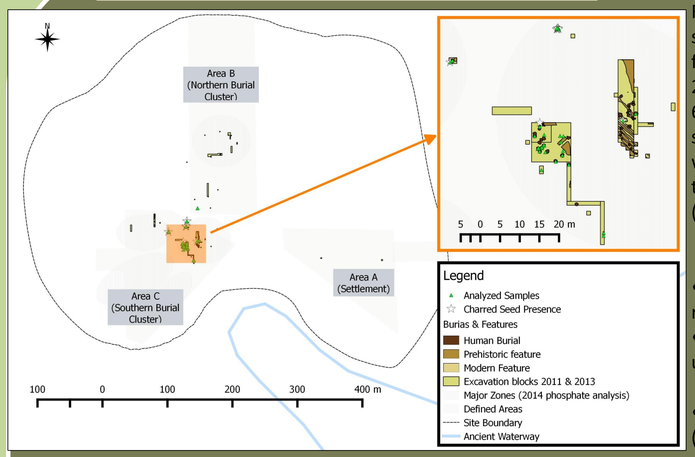


Table 1. BAKOTA Békés 103. Charred Seed Remains 2011 & 2013. Analyzed sample size: 62. *Macroremains with shiny, porous surfaces.

Flotation Sample no.	Location (Excavation Unit)	Context	Poaceae (unident.)	Grasses	Triticum (sp. unident.)	Wheat	Hordeum vulgare	Barley	Triticum aestivum	Bread Wheat	Triticum dicoccum	Emmer Wheat	Solanum nigrum	Black nightshade	Food prep. remains*	Charred (unident.)	
2	10-06	Pit fill (feature no. 2) later layer					5		2								Pit
3	10-07	Pit fill (F2), earlier layer	2		1		1		2				x				Pit
4	13-02	Layer A3 , a few lying sherds, large ditch fill (feature no. 7)	1													x	Ditch
6	13-03	Layer A3 , a few lying sherds, some animal burrows (F7)														x	Ditch
14	13-06	Layer B1 , softer and darker soil, layer contained an intact vessel (F7)	4													4	Ditch
15	13-07	Layer B1, charcoal flecks and higher ceramic density (F7)	4		1						1						Ditch
20	13-09	Layer B1 sloping to south, early ceramics (F7)														x	Ditch
53	29-22	Urn pit fill (human burial no. 9), southern cluster	2														Cremation
72	28-31	Inside and around an urn (HB no. 20), southern cluster														1	Cremation
84	31-02	Possible ditch, modern or Árpád														1	Ditch
164	28-50	Shallow pit fill in subsoil (feature no. 30)														x	Pit
178	29-32	Bottom of burial pit (HB no. 42), southern cluster														x	Cremation

Results

From the 2011/2013 seasons, 62 samples have been sorted (158 samples were floated out of 190 collected) from the southern burial cluster (**Area B**). Samples from 2014 and 2015 are still awaiting analysis. Among these 62 samples, 10 features (representing 22 flotation samples, ca 235 L of soil), 14 human burials, two of which were inhumations (37 samples, ca. 225 L), and three paleosoil levels (3 samples, 30 L) were analyzed (Fig. 1).

Overall in the southern burial cluster (Area C)

- Very few prehistoric botanical remains are being recovered
- What is recovered is often fragmented and unidentifiable

From the 12 urn pits

- Only one produced any identifiable charred seeds (two grasses)
- Two other urn pits had unidentifiable charred remains (Table 1).

Note: In 2015, two identifiable seeds (one *Triticum aestivum* sp./bread wheat) were recovered from an urn pit in the northern burial cluster (**Area B**) during excavation. The flotation sample is unanalyzed.

Within the 2 urns

- No seeds found in the micro-excavated layers

Within the 8 vessels associated with cremations*

- No seeds found

*one grave good from Human burial no. 6, 9, 13, and 28, two from HB 11 and 14

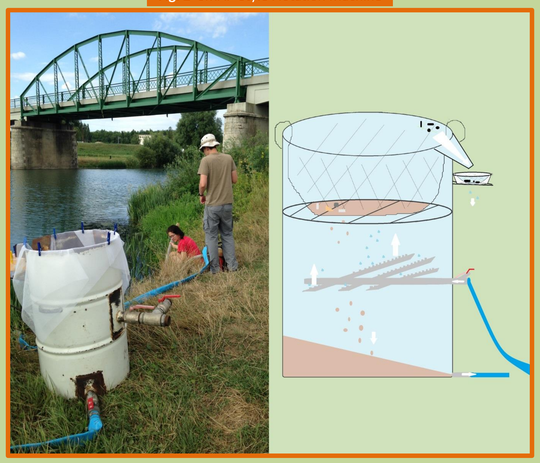
From the 2 inhumations pits

- No seeds were found

From the 10 analyzed features

- 4 contained charred botanical remains (Table 1).
- The two ditches with charred seeds seem non-contemporaneous with the analyzed burials. Black nightshade, as found in feature 7, is a poisonous weed often associated with spring-sewn seeds such as barley and has been found in Bronze Age Hungarian settlements (Gyulai 2010: 130).
- The two pits with charred seeds cannot be accurately dated. Deposited charred seeds are small in quantity, but in the case of feature 2, represent a large portion of the charred seeds found thus far in the cemetery. All these identifiable seeds belong to the grass family.

Fig. 2: SMAP-Style Flotation Machine



Discussion: Preservation

This low-density and high-fragmentation of charred seeds may indicate an issue of preservation. In The Great Hungarian Plain, annual flooding is often cited as a leading cause on "flat" prehistoric sites (Kasper 2003, Boggard 2011). While this may be affecting the assemblage overall, if preservation of charcoal can be used as a gross indicator, there does not appear to be an observable distinction in preservation potential based on elevation (Fig. 2), or proximity to a waterway (Fig. 1).

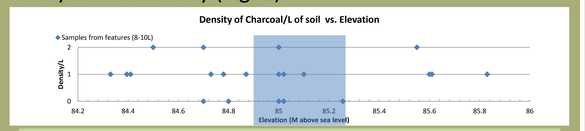


Fig. 2: Scatter plot relating charcoal density (0: no fr.; 1: low density with .1-2.5 fr./L; 2: high with 5+ fr./L) to elevation above sea level. n=21 (all samples from features). Blue area indicates range of elevation where analyzed urns were discovered (84.9-85.25 M). Urns with charred botanical remains were found between 85.16 and 85.2 M.

Conclusions

Although the botanical remains are few, their variable presence within the urn pits must be explained. The most compelling argument is that they represent food offerings. The predominance of grasses in the cemetery's botanical assemblage parallels ritual deposits of cereals in burials in Sweden (Early Bronze Age through the end of the 1st millenium CE) as well as in other prehistoric European cemeteries (Hansson 2002). In this context, cereals may have been deposited for their symbolic association with fertility and life, for sustenance in the afterlife, or to indicate a social identity associated with cooking.

Thus, the variability in the presence of charred seeds may reflect variability in ritual practice across time, space, or social identity. Taphonomic processes could be affecting the data, but differences in preservation potential within the site have not been observed. Both variable employment of this rite and low seed densities are found in the aforementioned Swedish sites (Hansson 2002: 48), as well as in EBA cemeteries in Szigetszenmiklós and Kiskundorozsma in Hungary (Gyulai 2011: 280; Gyulai 2010: 94) (Fig. 3).

The low count of grain products, may indicate that they were sprinkled in the grave (Gyulai 2011), that the food gift is not completely preserved (Hansson 2002:47), or that the ritual only necessitated a small (symbolic?) offering (Gyulai 2010: 94). They do not appear to be placed in accompanying vessels, however, in contrast to findings at Kiskundorozsma, where one grain was found in a cremation's grave good, and at Szigetszenmiklós-Vízmű (Table 2). In addition, they do not appear within urns, so it does not seem that it was customary for food offerings to be placed on the pyre during the cremation process. Moreover, this rite has yet to be observed in inhumation burials.

Fig. 3: (left) Map of referenced cemeteries (orange) in Hungary including Békés 103 (red)

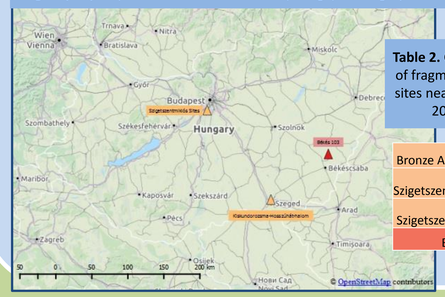


Table 2. Cremation contexts with evidence of fragmented cereals. Bell Beaker-Csepel sites near Budapest with data from Gyulai 2011 compared to Békés 103.

Bronze Age Cemtetery	Urn pits	Vessels
Szigetszenmiklós-Vízmű	1/2	0/4
Szigetszenmiklós-Üdülősor	3/6	3/6
Békés 103	3/12	0/12

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