

**Channel Tunnel Rail Link
London and Continental Railways
Oxford Wessex Archaeology Joint Venture**

**The charred plant remains from Pepper Hill,
Southfleet, Kent (ARC NBR98)**

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1 INTRODUCTION

Excavation of the Roman cemetery site at Pepper Hill revealed 152 cremation burials, including at least 6 *busta*, as well as dumps of burnt pyre debris. All cremation deposits were subjected to 100% sampling, for the retrieval of botanical and other evidence, and a total of 963 environmental samples were processed. The number was reduced, after a preliminary scan, by approximately two thirds, and the remaining flots were assessed for charred plant remains. A little charred cereal grain and chaff, and occasional pulses were found in eight of the samples, but preservation was poor and only one sample, from cremation grave fill 11728, was recommended for further study.

2 METHODS

Samples were processed by flotation, using a 0.25mm mesh, and assessed for plant macrofossils, by staff at Oxford Archaeology. The flot from grave fill 11728 was subsequently sorted for charred plant remains, also by OA. Recording of the charred plant remains was undertaken by Alys Vaughan-Williams, for MoLAS, before analysis by the author. Identifications and quantities were recorded on the MoLAS ORACLE database, and results are shown in Table 1. Where plant remains could not be quantified precisely because of fragmentation, their abundance was estimated using a scale of + (1-9), ++ (10-50), +++ (over 50).

Table 1: Charred plant remains from ARC NBR98

Site ARC-NBR98	context:	11728
	sample:	399
Latin name	English name	
<i>Cereals</i>		
cf. <i>Avena</i> sp.	oat	1
Cerealia	indet. cereal culm node	1
<i>weed seeds</i>		
Fabaceae indet.	-	1
<i>Polygonum</i> sp.	-	1
<i>Rumex</i> sp.	dock	3
<i>food plants</i>		
<i>Vitis vinifera</i> L.	grape, seed	23
<i>Vitis vinifera</i> L.	grape, fruit	2
<i>Lens culinaris</i> Medicus	lentil	16
cf. <i>Lens culinaris</i>	lentil	2
cf. <i>Vicia faba</i>	horsebean	12
<i>Vicia/Lathyrus/Pisum</i> sp.	vetch/tare/vetchling/pea	++
<i>Ficus carica</i> L.	fig	1
Indeterminate	fruit tissue	+++

3 RESULTS

Occasional charred grains of barley (*Hordeum vulgare*), spelt wheat (*Triticum spelta*) and a short-grained wheat (*Triticum* sp.), probably from a free-threshing species, were identified in five samples from cremation deposits, during the assessment. A little spelt wheat chaff was also seen in two samples, and small numbers of weed seeds, including docks (*Rumex* sp), knotgrass (*Polygonum aviculare*), medick/clover (*Medicago/Trifolium* sp.) and brome grass (*Bromus* sp.) in six. Occasional pulses, only identifiable as bean/pea (*Vicia/Pisum* sp.), were present in two samples, (ARCPHL97 sample 35, context [10436] and ARCNBR98 sample 398, context [11758]), as well as in the sample from grave fill [11728] (ARCNBR98), which was submitted for full analysis (Pelling 2001).

Twelve pulses in sample 398, from unurned cremation burial 11801, were represented by complete cotyledons and larger fragments, and resembled horse bean (*Vicia faba*) in their size and shape, although none retained the hila which would have made identification certain. A group of sixteen small, flattened, circular pulses were identified as lentils (*Lens culinaris*). In addition to the pulses, this sample contained the remains of several charred fruits. A number of grape (*Vitis vinifera*) seeds were found, some with the flesh still attached, as well as one almost complete grape fruit, with pips visible inside it. Fragments of unidentifiable charred plant material were common, and are thought to be mostly fruit tissue, as several of the larger pieces contain parts of seeds, or voids where they have been burnt away. The majority of these are likely to be grapes, but one or two pieces contained small seeds, probably figs (*Ficus carica*), and indeed a single loose fig seed was also found.

4 DISCUSSION

Evidence, in the form of charred plant remains, for ritual food offerings or funerary feasting, was quite rare on this site considering the very large number of cremations recovered. It is inevitable however that the recovered plant remains represent only a small proportion of the total, as most are likely to have been destroyed in the high temperatures of the funeral pyres.

The interesting assemblage of burnt pulses and fruits recovered from cremation grave 11801 however, and occasional remains in other deposits, indicate that these foods did play a part in at least some of the cremations taking place here. Whole grapes, and probably figs, appear to have been burnt during the cremation of grave 11801, as well as lentils and horse beans. The foods seem to have been placed on the funeral pyre, and become charred, while still in their raw state, as they had retained their original shapes, and not broken down as would be the case had they been part of a ready cooked dish.

Finds of fig and grape seeds, and of charred lentils, are not unusual on Roman sites, at least in urban areas. While grapes are known to have been grown in this country during the Roman period however, figs and lentils are more likely to have been imported from the Mediterranean or Near East, so would probably be available only to the relatively affluent, and perhaps indicate that respect for the deceased required offerings of luxurious foods where possible. Beans and cereals are perhaps more widespread in cremations, as the only affordable offering for the majority of people.

Fruits of fig have previously been found from a *bustum* burial at Great Dover Street, Southwark, along with several other exotic fruits, and the remains of stone pine cones (*Pinus pinea*) (Giorgi 2000), and charred pulses, including lentil and horse bean, were common in cremations from the eastern Roman cemetery in London (Davis 2000). A wide variety of charred food plants has been found in Roman cremation deposits from Western Europe, for example in France, where cereals and legumes were the most frequently encountered remains, but fruits and nuts were also relatively common (Marinval 1993).

There are several possible origins for the occasional cereal remains found with cremated material. With the fruits and pulses, they may have been part of the funerary offerings to the dead, or alternatively may derive from crop cleanings or straw used as tinder for the funeral pyres. Thirdly, they may be part of the background assemblage found in all sorts of deposits where there was Roman occupation, and representing a wide variety of domestic accidents and spillages unrelated to burial practices.

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