II

EVIDENCE FOR PRE-ROMAN CROPS FROM COXHOE, CO. DURHAM

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IN THE publication of the recent excavations at West House, Coxhoe (Haselgrove and Allon, 1982), it was observed that screening soil samples from the site failed to yield any carbonized remains of the crops grown or consumed by the inhabitants of this pre-Roman farmstead, despite clear artefactual and palynological evidence for first-millennium B.C. cereal cultivation in the region. Subsequent application of simple hand-flotation techniques, using a 0·5 mm sieve to the remaining soil samples has, however allowed the successful extraction of carbonized plant material. As this represents the first direct evidence for pre-Roman cereal cultivation in the Tyne-Tees Lowlands, the results obtained have been incorporated in this short note.

TABLE 1. Carbonized plant remains identified.

	Sample 1 (c. 28 litres)	*Sample 2* (c. 17·5 litres)	*Sample 3* (c. 21 litres)	*Total*
Triticum sp. grains	1	–	–	1
Triticum sp. glume bases	6	–	5	11
Hordeum sp.	–	–	1	1
Cerealea indet.	4	–	1	5
Sieglingia decumbens	–	–	2	2
Gramineae indet.	–	1	–	1
Indet.	1	1	–	2
Total	12	2	9	23

Sample 1: Phase 1 Linear gully (506)
Sample 2: Phase 2 Outer gully of circular central structure (504. etc.)
Sample 3: Phase 3 Enclosure ditch (1013, etc.)

Samples were available from a linear feature, which may well belong to the entrance of what appears to be an earlier palisaded settlement, and from the enclosure ditch and the main structure belonging to the second phase of the site. As will be clear from Table 1, both the number of available samples and the number of identified fragments is very small, which precludes a quantitative analysis of the material. Moreover, the cereal grains were badly preserved and only two could be identified to genus level; one as wheat (*Triticum* sp.) and the other as barley (*Hordeum* sp.).

However, a total of 11 glume bases was recovered, nine of them well enough preserved to be measured. The measurements of the glume-width at the level of spike-

TABLE 2. Glume widths of Triticum sp. measured at the level of spikelet articulation. (the measurements are to the nearest division on the graticule, which could represent an error of ± 0·045 mm.)

Glume width.	*No.*
0·9 mm	3
0·99 mm	2
1·17 mm	3
1·26 mm	1

let articulation are given in Table 2. At least four fall outside the range of *Triticum dicoccum* (emmer); the other five are at the top end of this range or at the bottom end of *Triticum spelta* (spelt), using figures given by Helbaek (1952). The four widest glumes, which fall within the range for spelt, also show the venation characteristic for spelt wheat; three of these came from the Phase 1 gulley, where they were associated with two fragments of saddle querns. The others are either too damaged or show an intermediate venation pattern. Thus, while we can say that *Triticum spelta*, spelt wheat, is definitely present in the samples, there is insufficient evidence to exclude the presence of *Triticum dicoccum*, emmer wheat.

Two grass seeds were identified as *Sieglingia decumbens*, the seeds of which were also found in large quantities at the nearby Iron Age site at Thorpe Thewles in Cleveland (Van der Veen, forthcoming). They were recognized for the first time by Hillman in the samples from Cefn Graenog (Wales) (Hillman 1981: 146). Today *Sieglingia*, heath grass, is not found in Britain as an arable weed. It occurs on sandy and peaty soils in most parts of the British Isles. It is frequent on moorland, heaths, and the poorer types of hill grassland, usually in somewhat moist or wet places. (Hubbard 1968: 353). So far, *Sieglingia* has not been found on any sites from the South of England. Its presence as an arable weed on sites in Wales and the North needs further study.

Considering the lack of crop records for the prehistoric period in the North of England, even a small sample like this one can produce valuable information. The presence of spelt wheat is important in the light of the evidence from the South. There, during the first half of the first millennium B.C. a shift towards previously marginal land occurs, apparently associated with population pressure, and reflected by the introduction of new crop plants like spelt wheat, with its characteristic hardiness and ability to grow well on both light and heavy soils (Jones, 1981). Until recently, the pattern in the North of England has been assumed to be different, i.e. that emmer continued to be the principal wheat, yet the evidence from Coxhoe indicates that spelt wheat was not only present, but is also likely to have been of considerable importance. However, it will only be when the results of the large-scale application of flotation procedures to sites, such as were carried out at Thorpe Thewles (Van der Veen, forthcoming), become available, that there will be sufficiently reliable information concerning the presence or absence of cereal and other carbonized plant remains, and their relative importance, for such ideas to be explored further.

ACKNOWLEDGEMENTS

We should like to thank Gordon Hillman and Martin Jones for their help with the identifications.

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