

Ancient Monuments Laboratory  
Report 11/95

PLANT REMAINS FROM ST MARK'S  
CHURCH, (SM76), LINCOLN

L C Moffett

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Summary

Excavations carried out in the 1970s in the suburb of Wigford produced evidence of Roman occupation. A drainage ditch and layers thought to be levelling prior to construction on wet ground were sampled for waterlogged plant remains. The plant remains suggested the presence of plants of disturbed ground, wet ground plants, and a few grassland or heathland plants. Evidence for cultivated plants was sparse though one of the levelling layers indicated the presence of coriander (*Coriandrum sativum*).

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## PLANT REMAINS FROM ST. MARK'S CHURCH (SM76), LINCOLN

Lisa Moffett

### Methods

During excavation samples were taken for plant remains from sixteen contexts. The basis for selection which contexts to sample is not known. All the samples had been processed by flotation and the flots dried when received. The mesh size of sieve used in flotation was 0.5mm. Some of the samples contained only charred material and had presumably come from well-drained contexts. Others contained substantial amounts of organic remains and are assumed to have come from contexts which were originally waterlogged. The charred material was mostly wood charcoal which was not identified. A small amount of other charred material including cereal grains was present but in very low numbers. Since there was little to be gained from sorting through large amounts of wood charcoal for small amounts of cereal remains, it was decided to concentrate on the samples from waterlogged deposits.

Three samples (DBV, DCG and DEA) were selected for analysis on the basis that they contained the most abundant amounts of seeds. The flots were all large and it was necessary to subsample the material in order to complete the analysis within a reasonable length of time. Preservation was fair, although it would undoubtedly have been better if the material had been kept wet. Some of the smaller or more delicate seeds may not have survived being dried out and some material may have become so distorted as to be unrecognisable. Material from DCG superficially resembling bean pod fragments was identified by Mark Robinson as scraps of leather. Results of the analysis are presented in the table.

The samples are from contexts which pre-date the building activity. Sample DCG is from the organic fill of a drainage ditch. Samples DBV and DEA were from layers which sealed DCG and are thought to represent material used for levelling prior to the construction of the first building. DBV was sandy, while DEA was a black, clayey organic material. All of the samples are probably mid second or possibly late second century A.D. (P. Miles pers. comm.).

### Discussion

All three samples produced remains of plants of wet ground, plants of disturbed ground, a few plants that might have grown in grassland although they could probably have grown in disturbed habitats also, and a few hedgerow or woodland plants. The same species were not present in all three samples but the number of species of each group was roughly the same for each sample. The largest groups of plants were those of disturbed ground, and those of wet habitats.

Cultivated plants were scarce and found only in the levelling layers. The most abundant was seeds of coriander (*Coriandrum sativum*) found in DBV. Coriander is an introduced herb commonly found on Roman sites and was apparently popular for its culinary uses. It sometimes grows as a casual in waste places and tips (Stace 1991:593) and probably did so also in the past. It is possible, therefore, that coriander was a component of the disturbed ground vegetation, growing as a garden escape. Equally the disturbed ground assemblage could have derived from a garden in which coriander was being grown.

Many of the disturbed ground/arable plants in the assemblage are cosmopolitan weeds which will grow in a variety of disturbed habitats including waste ground, waysides, crop fields and gardens. Most, though not all, of these plants are annuals. This weedy group, however, did not include many plants usually found primarily in association with crop remains (segetals). Given the paucity of evidence for crop remains it seems safe to conclude that at least most of the weedy plants did not derive from crop fields and are perhaps most likely to have been growing on any areas of reasonably well-drained disturbed soils in the vicinity. Possible exceptions may be the single seeds each of hairy tare (*Vicia hirsuta*) and vetch (*Vicia sativa*), both commonly found in archaeobotanical assemblages associated with cereals, and both in this case charred, suggesting a different origin from the plants whose seeds were waterlogged.

The abundance of plants wet ground is hardly surprising given that the area needed drainage before it could be built on. The presence of plants such as marsh pennywort (*Hydrocotyle vulgaris*), water-crowfoot (*Ranunculus* subgenus *Batrachium*), fine-leaved water-dropwort (*Oenanthe aquatica*), bur-marigold (*Bidens*) and duckweed (*Lemna* sp.) suggests fairly wet conditions with standing water. Some of the plants in DCG may have been growing in the ditch, though they may also have been dumped in if the ditch was backfilled with material that was at least partly marshy in origin.

The small number of grassland species represents plants of both damp and dry soils. Self-heal (*Prunella vulgaris*) and meadowsweet (*Filipendula ulmaria*) are both characteristic of damp grassland, while purging flax (*Linum catharticum*) is a plant of dry, sandy or calcareous soils. All three of these plants were found in the same context (DEA), but it is not necessary to assume they represent mixed grassland material from widely different origins. The difference between damp and dry can be a matter of a few metres, depending on topography and soils. It is perhaps more likely, however, that the purging flax derives from a different source, such as a sandy moorland, and was brought to site along with heather (*Calluna vulgaris*). Heather was common in Roman deposits at York, where it was suggested that it might have been either deliberately collected or brought in incidentally with turf (Hall and Kenward 1990:413)

Although the sample from the ditch (DCG) produced no evidence of cultivated plants it did have possible food remains in the form of fruitstones and a couple of hazel nutshell fragments. The fruitstones were of sloe (*Prunus spinosa*) and bullace or damson (*Prunus domestica* ssp. *insititia*). Alternatively there may have been hedgerows or woodland nearby, and animals other than humans could have dispersed the seeds, though there was no sign of rodent tooth marks. A few seeds of possible ground ivy (cf. *Glechoma hederacea*) and white briony (*Bryonia dioica*) from DBV provide further, if sparse, evidence for a hedgerow/woodland environment not too far away.

For the most part the samples differed little from each other in general character. It could be that the presence of cultivated plants and imported heather from the levelling layers suggests slightly more evidence of anthropogenic influence (on the assemblage - not necessarily the landscape) but it is also possible that this apparent difference is entirely fortuitous. It must also be stressed that due to lack of time only small percentages of the flots were analysed and a more thorough analysis might yield a somewhat different picture.

The plant remains suggest that all three of the contexts represent a mix of material partly derived from wet, marshy ground and partly from better drained soils. The distinction between disturbed ground plants and grassland plants may be artificial in that they may all have been growing in pretty much the same habitat, such as a grassy roadside verge or an area of waste ground. Human influence on the vegetation seems to have been mostly in the form of disturbance, with little evidence of plant use, though it is possible that the presence of coriander indicates that some of the disturbance took the form of horticulture.

## References

Hall, A. R. and Kenward, H. K. 1990. *Environmental Evidence from the Colonia*. The Archaeology of York series, P. V. Addyman (general ed.), The Environment 14/6. London: Council for British Archaeology.

Stace, C. 1991. *New Flora of the British Isles*. Cambridge: Cambridge University Press.

Wigford, St. Mark's Church (sm76) - species list. All items are 'seeds' in the broadest sense unless noted otherwise.  
 + = present but not counted. Identifications by L. Moffett.

Context:	DCG	DBV	DEA
Context type:	Ditch	Levelling	Levelling?
Date:	M/L2C	M/L2C	M/L2C
Total volume of flot (mls.):	2000	320	600
Volume of subsample analysed (mls.):	70	70	25
% of flot analysed:	4	22	4

Species

Common name

Cultivated plants

<i>Ficus carica</i> L.	-	1	-	fig
<i>Coriandrum sativum</i> L.	-	15	-	coriander
<i>Triticum dicoccum/spelta</i> glume bases	-	-	1	emmer/spelt
<i>Triticum spelta</i> L. rachis	-	-	1	spelt
<i>Triticum</i> sp. (charred)	-	3	1	wheat

Arable and disturbed ground

<i>Ranunculus parviflorus</i> L.	-	-	1	small-flowered buttercup
<i>Urtica dioica</i> L.	1	5	2	stinging nettle
<i>Urtica urens</i> L.	-	2	-	small nettle
<i>Chenopodium</i> cf. <i>glaucum/rubrum</i>	-	29	-	? oak-leaved/red goosefoot
<i>Chenopodium</i> cf. <i>album</i> L.	-	5	-	? fat hen
<i>Chenopodium</i> sp.	8	-	10	goosefoot
<i>Atriplex</i> sp.	1	3	1	orache
<i>Stellaria</i> cf. <i>media</i> (L.) Villars	2	5	-	? common chickweed
<i>Stellaria palustris/graminea</i>	1	-	4	marsh/lesser stitchwort
<i>Stellaria</i> cf. <i>palustris/graminea</i>	-	-	1	? marsh/lesser stitchwort
<i>Persicaria maculosa/lapathifolia</i>	5	-	20	redshank/pale persicaria
<i>Polygonum</i> cf. <i>aviculare</i> L.	-	5	1	? knotgrass
<i>Fallopia convolvulus</i> (L.) Á. Löve	2	-	-	black bindweed
<i>Rumex acetosella</i> L.	9	2	3	sheep's sorrel
<i>Rumex</i> cf. <i>crispus</i> L.	-	-	1	? curled dock
<i>Rumex</i> sp(p).	27	2	7	docks
cf. <i>Anagallis</i> sp.	-	1	-	? pimpernel
<i>Potentilla anserina</i> L.	3	20	-	silverweed
<i>Aphanes arvensis</i> L.	2	1	1	parsley-piert
<i>Vicia hirsuta</i> (L.) Grey (charred)	-	1	-	hairy tare
<i>Vicia sativa</i> L. (charred)	-	1	-	vetch
<i>Solanum nigrum</i> L.	1	-	1	black nightshade
cf. <i>Galeopsis</i> sp.	1	1	-	? hemp-nettle
<i>Rhinanthus</i> sp.	-	1	-	yellow-rattle
<i>Carduus/Cirsium</i>	1	-	8	thistle

Damp or wet ground

<i>Ranunculus sceleratus</i> L.	1	-	-	celery-leaved buttercup
<i>Ranunculus flammula/reptans</i>	2	2	1	lesser/creeping spearwort
<i>Ranunculus</i> subgenus <i>Batrachium</i> (DC.) A. Gray	-	4	1	water-crowfoot
<i>Montia fontana</i> ssp. <i>minor</i> Hayw.	1	-	-	blinks
<i>Persicaria</i> cf. <i>laxiflora</i> (Weihe) Opiz	-	-	1	? tasteless water-pepper
<i>Rumex</i> cf. <i>maritimus</i> L.	-	-	21	? golden dock
<i>Salix</i> sp. buds	-	3	-	willow
<i>Rorippa</i> sp.	-	-	2	water/yellow cress

<i>Hydrocotyle vulgaris</i> L.	2	61	4	marsh pennywort
<i>Oenanthe aquatica</i> (L.) Poir.	10	3	-	fine-leaved water-dropwort
cf. <i>Oenanthe aquatica</i> (L.) Poir.	-	1	10	? fine-leaved water-dropwort
<i>Lycopus europaeus</i> L.	1	2	-	gypsywort
cf. <i>Mentha arvensis</i> L.	-	2	-	? corn mint
<i>Bidens cernua</i> L.	3	-	-	nodding bur-marigold
<i>Bidens</i> cf. <i>cernua</i> L.	-	-	1	? nodding bur-marigold
<i>Bidens</i> sp.	-	1	1	bur-marigold
<i>Potamogeton</i> sp.	-	1	-	pondweed
<i>Lemna</i> sp.	23	1	17	duckweed
<i>Eleocharis palustris/uniglumis</i>	13	6	8	spikerush
<i>Isolepis setacea</i> (L.) R. Br.	-	1	1	bristle club-rush
<i>Carex</i> sp(p).	21	9	7	sedges
<u>Grassland and heathland</u>				
<i>Hypericum perforatum</i> L.	-	1	-	perforate St. John's wort
<i>Calluna vulgaris</i> (L.) Hull flowers	-	5	2	heather
<i>Calluna vulgaris</i> (L.) Hull flowers (charred)	-	1	-	heather
<i>Filipendula ulmaria</i> (L.) Maxim.	-	-	1	meadowsweet
<i>Potentilla reptans</i> L.	1	-	-	creeping cinquefoil
cf. <i>Trifolium</i> sp. (charred)	-	1	-	? clover
<i>Linum catharticum</i> L.	-	-	5	purging flax
cf. <i>Daucus carota</i> L.	2	-	-	? (probably wild) carrot
<i>Prunella vulgaris</i> L.	2	1	15	self-heal
<i>Plantago</i> cf. <i>media</i> L.	1	-	-	? hoary plantain
<i>Leontodon</i> sp.	-	-	11	hawkbit
<u>Hedgerow/woodland edge</u>				
<i>Corylus avellana</i> L. nutshell fragments	2	1	1	hazel
<i>Bryonia dioica</i> Jacq.	-	2	-	white briony
<i>Prunus spinosa</i> L.	6	-	-	sloe
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens	16	-	-	bullace/damson
cf. <i>Glechoma hederacea</i> L.	-	5	-	? ground-ivy
<u>Unclassified</u>				
Moss fragments (not counted)	-	+	+	moss
<i>Ranunculus acris/repens/bulbosus</i>	13	6	11	buttercups
cf. CUCURBITACEAE	-	1	-	? white briony family
BRASSICACEAE	-	1	-	cabbage family
<i>Potentilla</i> sp(p).	-	1	3	cinquefoils
FABACEAE pod fragments	-	-	1	pea family
APIACEAE	2	1	-	carrot family
LAMIACEAE	1	-	-	mint family
POACEAE	2	3	1	grass family
POACEAE (charred)	-	12	-	grass family
POACEAE culm bases (charred)	-	1	-	grass family
POACEAE culm nodes (charred)	-	1	-	grass family
cf. Monocotyledon rhizome/root (charred)	1	-	-	
Unidentified	2	7	-	

Total items identified: 630