

Gardening in Roman Alcester

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Summary

Finds of charred macrofossil remains of three species of probable garden plants - Asparagus officinalis (asparagus), Aquilegia cf. vulgaris (columbine) and Beta vulgaris (beet) - provide rare evidence of gardening in the Roman period.

Introduction

Archaeobotanical evidence for field crops is often plentiful on archaeological sites and has contributed greatly to our knowledge of ancient agriculture. By contrast, most of what we know about gardening and garden plants is based on evidence from documentary and iconographic sources. For some periods, notably the medieval period and later, these sources may be relatively abundant and highly informative (e.g. Green 1984; Willerding 1984), while for other periods they are non-existent or limited in scope. Several of the Classical authors, for example, discuss the cultivation and uses of vegetables and herbs in detail but they are primarily referring to plants known and used in the Mediterranean region and it cannot even be assumed that the plants they discuss which are native to Britain were necessarily cultivated in Britain. Archaeobotanical evidence is necessary if we are to understand anything about garden plants in pre-medieval Britain, but such evidence is rarely found.

Problems in identifying the evidence

The reasons for the scarcity of archaeobotanical evidence seem to be threefold. First, there is the problem of survival of the evidence. The vegetative parts of vegetables and herbs are unlikely to survive except in waterlogged deposits. Charring is likely either to destroy the material or render it unrecognisable, at least by current techniques. Seeds survive charring better but, where the vegetative parts of the plant are the parts used, the plants may not be allowed to run to seed except for a few to provide the seed for the next year's planting.

The second problem is one of recognition. In the past vegetative fragments of 'useful' plants have seldom been identified even from richly organic deposits well preserved by waterlogging. Recent work by Tomlinson (1985) has begun to rectify this omission and has resulted in the identification of vegetable remains such as leek (Allium porrum; Tomlinson forthcoming). Other such identifications have begun to follow as archaeobotanists learn to recognise the material (Greig, unpub.).

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The third problem is one of interpretation. Seed remains of possible garden plants have been more frequently identified, usually waterlogged although occasionally charred, but the seeds of most garden plants are indistinguishable from those of their wild relatives; this is also true of their pollen. In this case, cultivated plants with wild relatives native to Britain can only be recognised - albeit tentatively - from the context in which their seeds or pollen are found.

The evidence from Alcester

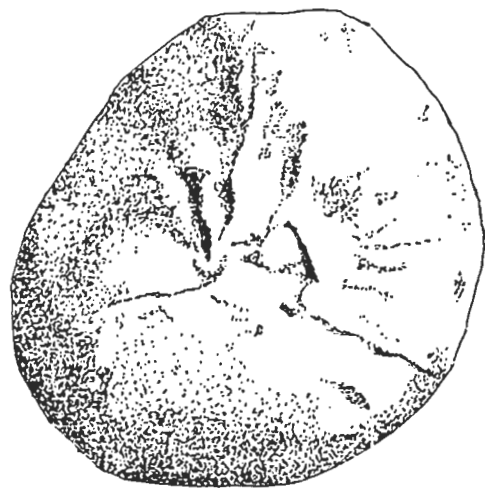
The charred seeds of three species of plants native to Britain, but which are interpreted as garden plants, were found in archaeological deposits from the Roman town of Alcester, Warwickshire, and dated approximately to the third century A.D. Asparagus (Asparagus officinalis L.) and columbine (Aquilegia cf. vulgaris L.) were found during a small excavation of various features inside the Roman defences on the north-east edge of the town at Tibbet's Close (Moffett 1986a), and beet (Beta vulgaris L.) was found in a dump of charred material under the late Roman defences on the south-west side of the town (Moffett 1986b).

Asparagus officinalis L.

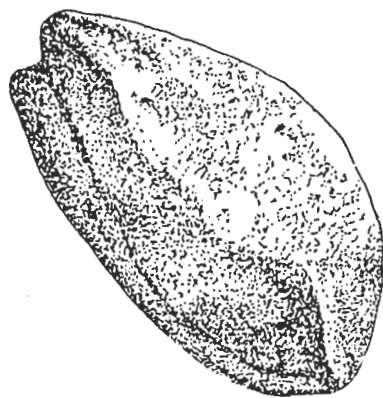
Two subspecies of Asparagus officinalis occur in Britain: the wild, prostrate ssp. prostratus, and the upright, cultivated asparagus, ssp. officinalis. Wild asparagus occurs on dunes and coastal areas, although today ssp. officinalis can also be found inland as a garden escape on waste ground. Although the seeds of the two subspecies are indistinguishable, the presence of asparagus so far from its native coastal habitats is strongly indicative of cultivation.

I have not been able to find any previous archaeobotanical records of asparagus. Oddly, asparagus seeds may have had a higher risk of exposure to fire, and thus a higher probability of being preserved by charring, than many other vegetable seeds. Cato gives careful attention to the cultivation of asparagus and states that the asparagus bed should be burned over in the autumn after the asparagus has gone to seed (Hooper 1936). He does also say that the seed should be collected first, but asparagus is a perennial which is grown in permanent beds, so this need should not arise. Columella, writing roughly three centuries after Cato, gives very similar instructions (Ash 1977). Mediterranean horticultural methods, however well established, were not necessarily practised in Britain, of course, but it happens that the burning over of asparagus beds is also a traditional method of asparagus management in Britain (Mark Robinson pers. comm.). How far back this tradition extends is a matter of speculation.

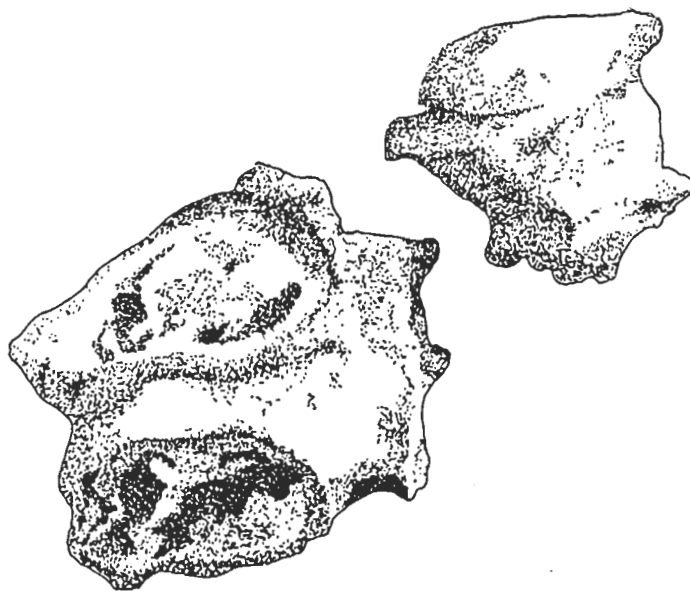
The charred asparagus seeds from Alcester were not apparently found in a cultivated soil, which is where seeds from burning over an asparagus bed might be expected to occur. Three came from a hearth, one from the backfill of the hearth, nine from a ditch pre-dating the hearth, and one from a pit roughly contemporaneous with this ditch (Cracknell forthcoming a). This possibly suggests the burning of garden refuse in the hearth, although there were only a few other charred items found. The ditch, however, was definitely earlier than the hearth and therefore there must have been at least two occasions during the occupation of the site when asparagus seeds were burned.



1 mm



1 mm



1 mm

Figure 6. Plant remains from Alcester: top left, seed of Asparagus officinalis; top right, seed of Aquilegia cf. vulgaris (both from Tippet's Close site); bottom: fruit fragment of Beta vulgaris (Gateway [formerly known as International] Supermarket site).

Aquilegia cf. vulgaris L.

Columbine is a plant of open woodland with a preference for calcareous soils (Fitter 1978). When found away from cultivation today in Warwickshire it is regarded as a garden escape (Cadbury et al. 1971). There are patches of calcareous soil near Alcester, and it is possible that the plant did once grow wild in the county. The presence of columbine seeds in the town suggests either that its seeds were collected or that it was cultivated.

Columbine has been recorded from a late Saxon context at Winchester Cathedral Green where it was interpreted as a garden plant (Monk, as cited in Green 1979, 122). There have been later medieval finds of columbine from three sites in West Germany - Neuss (Knörzer and Müller 1968), Braunschweig, and Göttingen (both Willerding 1984) - where it was also considered to be a garden plant. The single columbine seed recovered from Alcester came from the same site and same hearth as the asparagus, supporting the suggestion that garden waste had been burned in the hearth.

Beta vulgaris L.

Wild beet (Beta vulgaris ssp. maritima) is native to Britain, its natural habitat being sea coasts. The fruits and seeds of the cultivated beet (ssp. vulgaris) are indistinguishable from those of wild beet, but the presence of beet so far from the coast might be taken to indicate its cultivation.

The Roman beet was not the red beetroot with which we are familiar today, but probably something more like spinach beet, cultivated mainly for its leaves. Beet figures as a potherb in the writings of Columella (Forster and Heffner 1955) and Pliny the Elder (Bostock and Riley 1856). We are indebted to Theophrastus for a description of the root, which he says is long and straight, not bulbous, but fleshy, sweet and pleasant to eat, being eaten raw by some people (Hort 1916).

Roman beet fruits are known from urban sites in continental Europe, notably at Neuss (Novaesium; Knörzer 1970) and Butzbach (Knörzer 1973) in West Germany. Beet was also found in the well at the Roman villa at Denton, Lincolnshire (Conolly 1971).

The beet fruit remains from Alcester (about 50 fruit clusters) came from a dump of charred material which was sealed under the late Roman defences (Cracknell forthcoming b) on the opposite side of the town from Tibbet's Close. Although there are a few cereal remains associated with the beet fruits, the two other main components of the sample (by numbers) were flower heads and achenes of stinking mayweed (Anthemis cotula L.), and fruits of hemlock (Conium maculatum L.) (Moffett 1986b). These two ruderals would have grown quite readily in gardens. Hemlock prefers damp ground, and indeed this edge of the town was bordered by marsh (Woodwards, Greig and Girling 1980).

Conclusion

The probable garden plant species most frequently found on Roman sites are the herb and spice plants where the seed is the part of the plant used. Dill and celery are known from Roman sites in Britain, and coriander in particular seems to have been common (Greig 1983). It is easy to recognise cultivated (or imported) plants, such as dill and coriander, when the species are not native to Britain, but interpretation is more difficult when native plants are involved. Difficulties are even greater when the seeds or fruits are not the part used, as the seeds are usually either rarely found or their

presence is ambiguous. Daucus carota L. fruits and Brassica spp. seeds, for example, are frequently found but seldom claimed to represent cultivated plants. The significance of the material from Alcester is that by rare chance the seeds were preserved even though they were not the usable part of the plant, and the species concerned were well outside their natural habitats and were therefore clearly not wild.

Acknowledgements

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