## GRAINS AND SEEDS FROM YOUNGER ROMAN IRON AGE EXCAVATIONS IN SPURILA

## MERIA SEPPÄ-HEIKKA

Department of Botany, University of Helsinki, Unioninkatu 44, 00170 Helsinki

In paleoethnobotanical investigations during archeological excavations in Spurila in summer 1983 an attempt was made to find out what information the grains and seeds may give about plants either in use, in general, or which were grown in the fields, or which occurred in the vicinity of the site in prehistoric time. The methods used and the main results are summarized.

Two places in the site near each other were studied: graves dating from 200 to 400 A.D. and dwelling layers from c. 400 A.D. Most of the samples and the paleoethnobotanical material was secured from the graves.

At the excavation site nineteen soil samples, 15 from graves and 4 from dwelling layers, 8 liter each, were taken. In sample spots the soil had not been disturbed and the archeological material found made the dating possible. In addition, the archeologists took 25 soil samples, which were treated in situ with the aim to separate possible bone pieces. At the same time plant remains visible to the naked eye were secured; mostly cereal grains and one seed of *Linum*. The material was sieved using sieve mesh 4 (2) mm.

The nineteen samples from graves and the dwelling layers were brought to the laboratory. Portions of c. 21 in size were separated, slammed in water and stirred vigorously in order to facilitate the separation of plant remains from the soil. The water was then decanted on a series of sieves with mesh sizes of 4, 2, 1 and 0.5 mm. The slamming was repeated until just mineral soil was left and this was disregarded. When the whole of a 8 l sample was treated, the material from each sieve was collected and stored in plastic bags in a cold room. For this presentation whole material is considered except only half of the material originating from sieve 0.5 mm.

The plant remains from graves were well preserved, mostly carbonized. They included grains and seeds of cultivated plants, mainly cereals, but also one seed of Linum usitatissimum. The weed seeds included those of Atriplex patula L., Chenopodium album L., Galium spurium L., Polygonum aviculare L. and Scleranthus annuus L.

The small amount of weed seeds against the large proportion of cereal grains, as well as the presence of pieces of cereal axes, e.g. spikelet forks, may indicate, that the cereals were placed into the graves after their treatment, i.e. treshing. More than half of the grains represented emmer wheat, *Triticum dicoccum*: in one of the samples spikelet parts of emmer were found. Carbonized seeds of *Juniperus communis* L. and carbonized spruce needles were quite common all around in the graves; these both were, obviously, used during the burning of the deceased.

Carbonized tubers and pieces of tuberous roots of *Filipendula vulgaris* Moench, 20 in number, were found in the deepest layers of the graves.

The contents of the four dwelling layer samples, taken in various parts of the dwelling site, vary from 8 % to 94 % of carbonized seeds and fruits. The species spectrum of the carbonized grains is the same as that found in the graves, including Avena sp., Hordeum sp., Triticum aestivum L., T. compactum, T. cf. dicoccum and Secale cereale L. and carbonized seeds of Chenopodiaceae, Galium spurium and Stellaria media (L) Vill. The uncarbonized (recent?) material included seeds and fruits Trifolium repens L., Poaceae and Carex spp., mostly (det. I. Kukkonen) C. pallescens L.