**ARCHAEOBOTANICAL RESEARCH AT THE EARLY BRONZE AGE OF AGHIOS ATHANASIOS, THESSALONIKI**

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### The site

Agios Athanassios is located 34 km west of Thessaloniki, next to the industrial site of Sindos. The Early Bronze Age occupation was established on a low mound, which was destroyed partly in the years following, leaving unrecognised only the J of the whole. The site was excavated under the supervision of Dr Maria Pappa and the 16th Prehistoric and Classical Ephorates. The excavation revealed 5 to 8 rectangular houses and two occupational phases dating to 2500-2200 B.C. In several occasions floors were preserved, as well as cyclical or ellipsoid hearths and silos. The pottery assemblage consists of a variety of shapes, while remarkable is the selection of loom weights. The site was destroyed by fire, leveling the remains.

During preliminary research, the site was very close to the sea, however the alluvial deposits of the nearby rivers and the succeding rise of the sea level have changed the landscape significantly.

### Sampling and processing methods

Sampling methods were not based on a pattern but were more or less subject to the excavator's judgment and "naked eye". Most of the samples represent the first occupational phase, while the second was either destroyed or eroded. The samples were collected from floors, post-holes, hearths and pits. Totally 2081 liters of soil were processed using a water separation machine (Akhond type). The flakes were collected in two sieves with mesh sizes 2mm and 100 μm, while the heavy residues were retained in a 1mm nylon mesh.

### The archaeobotanical remains

The archaeobotanical remains were uncovered from four different houses and one outdoor/inner room. Room 1, is located at the west part of the site, and preserved a pit and two silos. Room 2, is about 24 m², a post held the roof in the center. Room 3 is not clear if it is an indoor or outdoor space. It preserved parts of floor along with part of room 4. Room 4 was not excavated in the entirety and was probably part of Room 5.

In general, the assemblage consists of a small variety of species: cereals (barley and emmer) and legumes (bitter vetch and grass pea) are preferred, while fruits (grapes and fig) were of less importance. Emphasis is put on legumes, which predominate over cereals, in particular bitter vetch which seemed to have a significant place in the inhabitants' diet. It is remarkable that bitter vetch seeds are found in two different concentration spots in the same room: whole seeds and cotyledons. Based on experimental research, the split seeds into cotyledons are the result of processing seeds for consumption. Another example of processing seeds in order to be consumed comes from Room 2. In this case, masses of broken seeds (cereals) with irregular surface and intense silkiness were unearthed. It appears that the food repertoire of the inhabitants was enriched by more complex foods than the expected.

### Storage

Storage of agricultural products is a usual practice. In Agios Athanassios, the archaeobotanical assemblage as well as storage vessels unearthed do not suggest large scale storage. Pits are used for the disposal of plants, bones and pottery. As far as the archaeobotanical remains, storage is on a small scale and limited to each household, as products are found on their primary deposit. Storage aims to satisfy the needs of each household, creating a normal surplus, but also to prevent from the occasional hazards, e.g. crop failure. It is remarkable that in every case, crops and grinding tools are stored at the east part of the house whereas vessels are located at the west. Each household is an independent group of social construction which is against communal reciprocity and competes against the other households. Food preparing activities seem to take place indoors, declaring the economical autonomy of the house, which is more clear by the presence of hearths and silos indoors. The presence of food preparing constructions indoors would mean social pressure for sharing cooked food, without excluding food exchange.

### Cultivation

The limited presence of weeds and the representation of seeds as pure crops could be related to crop processing, harvesting methods or weeding out the field. Spring weeds are mostly present, which flourish with weeding out or ploughing prior to sowing.

Cultivation was carried out throughout the year at different sowing periods, in this way agricultural activities were spread throughout the year and crop was ensured in bad years, avoiding the risk of total failure. Long-term cultivation could have exhausted the fields from nitrogen and nutrients, as a result particular groups of weeds (small legumes) were reinforced. The need to refresh the soil could have led to extensive cultivation of legumes, particularly bitter vetch.

### Food preferences

Bitter vetch and grass pea—primary considered fodder crops, consist the main legumes consumed on site. Both of them are toxic and harmful for animals and humans. However, it is not clear if they were cultivated for people or animals.

It seems that an emphasis is put on bitter vetch cultivation at the time (Sithrakos), which continues in Late Bronze age (Aghios Mamas, Kastanas). This stress on bitter vetch might coincide with the fact that the fields were exhausted from the cultivation of cereals. Therefore nutrients needed to be re- stored. Similarly at Mandoé, legumes predominate over cereals. For the past years, legumes were considered to be of less importance, however recently it has been shown that legumes should be regarded of equal importance to cereals or even more significant. The Mediterranean quartet is confirmed by the available data.

Barley's predominance over wheat is encountered at Aghios Athanassios and Kastanas, two proximate sites. This preference could be attributed to the conditions met in the area: barley could be a better candidate for the growing conditions in the area, as it is more salt-tolerant and yields better than wheat in cold conditions. However, the dominance of barley could not be attributed only to its characteristics: it is possible that in the area there was a tradition in cultivating barley that passed from generation to generation, after all, emmer was a rare commodity in Northen Greece, an "east" species exchanged for social status or consumed under special circumstances by "special people".

### Conclusion

To conclude with, Agios Athanassios has provided a glimpse into the Early Bronze Age diet. Even though the crop repertoire is limited confirming the available data, the "processed seeds" of bitter vetch and the masses of cereals make the difference. However, the exploitation of plants at the site could have been more complex than we can imagine. Food preferences express the local, cultural and social choices of people at the time.

### References