

AGRICULTURAL AND HISTORY OF NUTRITION RELATED RESEARCH IN THE FOCAL POINT OF NATURAL SCIENCES AND ARCHAEOLOGY

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In the course of human history, the social structure, prosperity in face of different environmental surroundings and the overall quality of everyday life of distinct groups were determined by their agricultural knowledge. Settled peoples of the Carpathian Basin utilized the surrounding flora and fauna, established their settlements and organized their society in different manners.

The cultivation of crops, their use as primary and secondary raw materials, as well as their processing developed in a series of well defined steps in the prehistory of the Carpathian Basin. These formed a hierarchic structure, that founded the knowledge basis for the agriculture of subsequent times. The author propounds that domestic units with functions related to agricultural production play a key role in this series of development history. However, their archaeological interpretation is incomplete due to the often meagre quantity of related findmaterial. (Fig. 1.)



Fig. 1.: Reconstruction of a sunken featured building object with a storage function (penticed storage pit) in the Matrica Museum and Archaeological Park of Százhalombatta (author's photo)¹

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¹ The building presented is the reconstruction of object Nr. 194 of the Iron-Age settlement Sopron-Krautacker excavated by Erzsébet Jerem. Jerem E. – Facsar G. – Kordos L. – Krolopp E.: A Sopron-Krautackeri vaskori telep régészeti és környezetrekonstrukciós vizsgálata II. [The archaeological and environment reconstructional analysis of the Iron-Age settlement at Sopron-Krautacken] *Archaeológiai Értesítő* 112 (1) (1985), 3–24.

In the framework of a triannual post-doctoral research grant provided by the The National Research, Development and Innovation Bureau (Hungarian: NKFIH) the author seeks to answer how did people in the past utilize domestic spaces, namely the interior of edifices and the surrounding areas. What activities took place within the settlement? Where specialized workshops present or did certain buildings serve multiple purposes? Another goal is to propose a 'methodological bundle' of scientific analyses answering these questions, that is also fitting to more accurately uncover the possible function of the examined archaeological features in accordance with international research trends. Hungarian research dealt with the interpretation of building objects and household compounds with a possible agricultural function from many aspects. The examinations of past decades generally relied on the independent application of a single method. Due to the difference in focus and resolution of these methodological approaches, previous results only partially fulfil criteria of comparability and do not reflect the complexity of the subject. The aim of present research is the parallel and joint application of historic/archaeologic interpretation and scientific examination. (Fig. 2.)



Fig. 2.: Field sampling (based on Pető – Kenéz 2015)²

Carefully selected household compounds serving as the research subject of the project are analysed with scientific methods pertaining to archaeobotany and archaeopedology. The author hopes to shed light on the knowledge past people possessed on the application of agricultural technologies and on the processing of plant-based victuals. The unfolding of contemporary agricultural technologies and strategies yields not only a significant complement to our knowledge on agrarian history, but leads to a better understanding of the history of ancient crop species and simplified processing that preserve and conserve values. (Fig. 3.)

² Pető Á. – Kenéz Á.: Geoarchaeological and archaeobotanical methods in activity area analysis. *Hungarian Archaeology*, 2015: Winter.

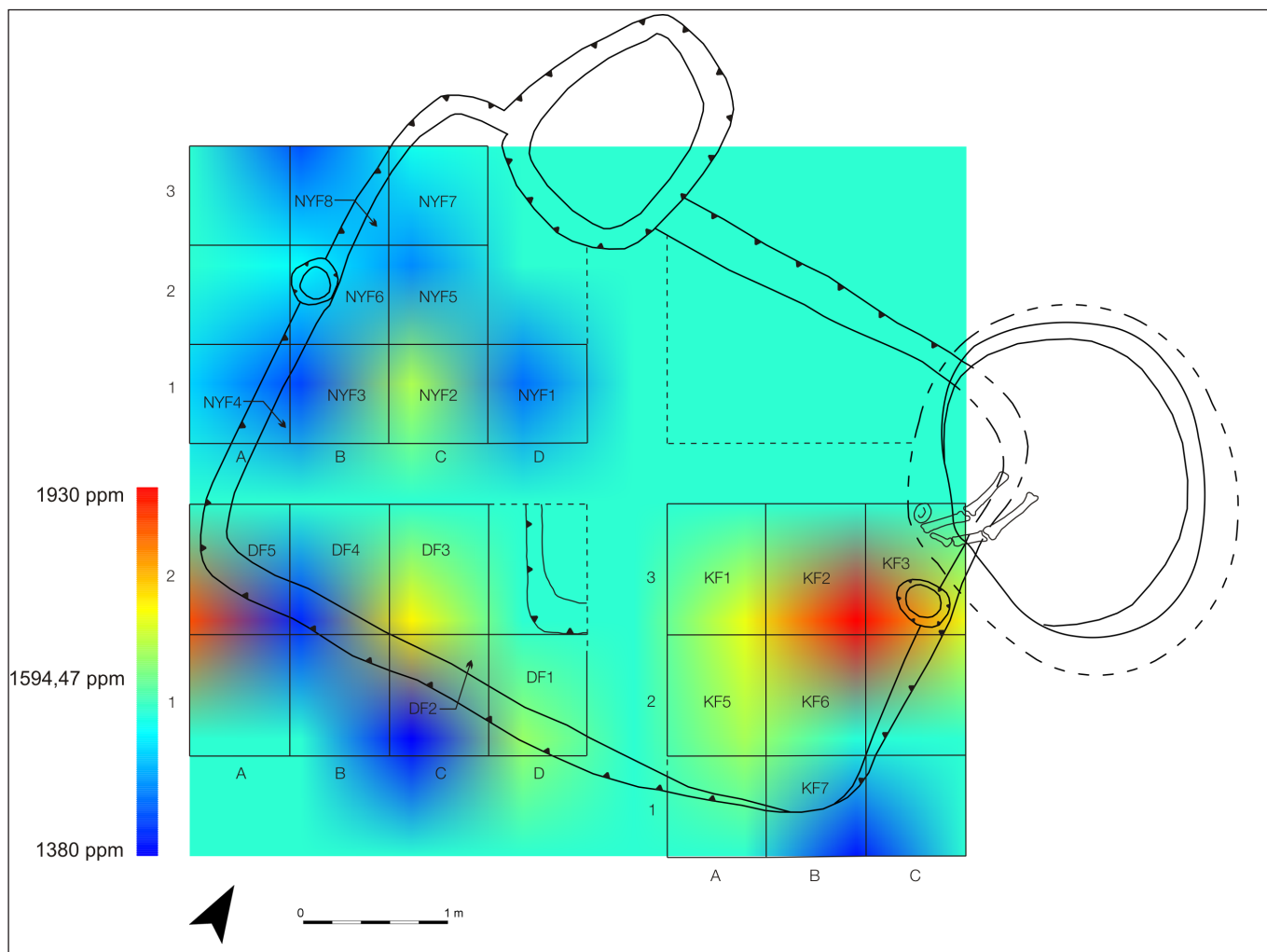


Fig. 3.: A P_{total} dispersion map of all phosphorous substance analyses performed on the floor of a Late Avar age building at Hódmezővásárhely-Kopáncs I. (Olasz ranch) based on Herendi – Pető 2015)³

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³ Herendi O. – Pető Á.: Avar kori településnyom Hódmezővásárhely-Kopáncs I., Olasz-tanya lelőhelyen. Egy félig földbemélyített épület régészeti és természettudományos értékelése. [Remains of an Avar Age settlement at the findspot Hódmezővásárhely-Kopáncs I. Olasz-ranch. The archaeological and scientific evaluation of a pithouse] In: Türk A. (ed.) *Hadak Útján XXIV. A népvándorláskor fiatal kutatóinak XXIV. konferenciája*. Studia ad Archaeologiam Pazmaniensia Vol. 3.1, A PPKE BTK Régészeti Tanszék kiadványai – MTA BTK Magyar Östörténeti Témacsoport Kiadványok (Archaeolingua Kiadó, Budapest–Esztergom 2015), 831–857.