Gaziantep Regional Project Occasional Paper 2013:6
<www.orientlab.net/pubs>

ISSN 2284-2780
doi: 10.12877/grpop201306
Version: 30 November 2013

TILMEN HÖYÜK: ARCHAEOBOTANICAL REMAINS FROM AREA E

Marialetizia Carra

Nine samples of sediments for archaeobotanical analyses have been collected from four different loci of Area E (Marchetti 2008; 2009; 2010) (Table 1).[1] The samples have been examined by means of the usual laboratory treatments[2] at ArcheoLaBio, the Research Centre for Bioarchaeology at the Alma Mater Studiorum - University of Bologna.[3]

F.452	F.456	F.463	F.1990
TH.04.E.52*19	TH.04.E.58*18	TH.04.E.56*44	TH.07.E.278*162
TH.04.E.52*20		TH.04.E.56*45	
TH.04.E.52*21		TH.04.E.56*45b	
TH.04.E.52*22			

Table 1 Sample number and stratigraphic unit of each analyzed sample (in sample numbers, the number before the * is the bucket number, that after the * is the sample absolute number of that year).

Microscopic observations outlined the presence of a great amount of mineral concretions in the samples. Such concretions, which have the shape of little dark "spheres," could be mistaken for carpological remains on the field, where it is not possible to use a microscope to analyze the sediments. Generally, in this type of sediments, the presence of such components can cause a partial or total disintegration of botanical elements. Moreover, some samples showed traces of deep and large contact with fire, also confirmed by the observation of other burnt findings such as the osteologic remains. Undoubtedly, fire has further compromised the preservation of botanical remains. While the analysis of the samples from F.452, F.456, and F.463 showed some anthracological remains which were too small and deteriorated to allow a specific determination, F.1990 gave some useful remains. This layer, characterized by

1 Concerning the dating of the contexts from which the samples were collected, F.452 and F.456 gave no pottery finds, but they can be dated to MB II, F.1990 dates from MB II, and F.463 gave a mixed pottery assemblage ranging in date from EB III to the LBA.

2 Manual flotation and sieving in running water, examination through stereomicroscope and determination through specific atlases and comparison collections.

3 I would like to thank the scientific staff of Gaziantep Museum and that of the General Directorate for Cultural Heritage and Museums in Ankara, for the possibility of analyzing the samples in the University of Bologna.

clear marks of fire, has been interpreted as a destruction layer in a room belonging to Building E, the contexts of which, by means of pottery, have been dated to later MB II.

On the one hand, careful microscopic examination of the samples allowed to find some lumps of melted mortar, osteological fragments, malacofauna (fresh water bivalves and gastropods fragments), some anthracological fragments – too small and deteriorated to allow a specific determination – and some carbonized carpological remains (Table 2). On the other hand, analyses did not show any trace of readable vegetal print.

TH.07.E.278*162			
FAMILY	GENERA/SPECIES	REMAINS TYPOLOGY	NUMBER
GRAMINACEAE	*Hordeum vulgare* L.	Grain fragment	5
	Cerealia	Grain fragment	5
LEGUMINOSAE	=	Cotyledon fragment	1
POLYGONACEAE	*Rumex* sp. L.	Fruit	1
TOT.			12

Table 2 Determination of the carpological remains from sample TH.07.E.278*162.

Clearly, such a scarce amount of remains does not allow to draw any reliable statistical analysis, although it is possible to make a few remarks. The typologies of the remains help to put forward some hypotheses about human nourishment, which must have been based mainly on cereals and pulses, as attested by the data from contemporary and earlier sites. In sample TH.07.E.278*162, some grain fragments of barley (*Hordeum vulgare* L.) (Pl. I: 1), together with some cereals fragments, have been identified. These cereals fragments show on their altered and ruined surfaces very deep fire marks. Moreover, the size of the cotyledon fragment did not allow a specific determination of the pulse and we can only suppose it can be a cultivated one.

Agricultural practices are testified by the presence, among collected samples, of a dock fruit (*Rumex* sp. L.) (Pl. I: 2), and a crop weed, although it was impossible to determine its species because of the absence of the bracts wrapping the fruit. The dock leaves, thanks to their astringent properties, can be used as food and medicine. Furthermore, it is interesting to remark the low amount of food waste which has been found in Building E, which has been interpreted by the latest excavators as a temple. In fact, in spite of the typology of the sediment and its depositional history, no food offerings have been found. On the one hand, collected remains could testify only a low amount of daily waste which have accidentally fallen on the ground, on the other hand, this pattern of scarcity of food waste has also been observed in other areas of the site.

BIBLIOGRAPHY

Anderson, P.C. (ed.)
1992 *Préhistoire de l'agriculture: Nouvelles approches expérimentales et ethnographiques*, Centre National de la Recherche Scientifique, Paris.

Butler, A.
1992 Pulse Agronomy: Traditional System and Implications for Early Cultivation: P.C. Anderson (ed.), *Préhistoire de l'agriculture*, pp. 67-78.

Cappers, R.T.J.
1995 A Palaeoecological Model for the Interpretation of Wild Plant Species: *Review of Vegetation History and Archaeobotany* 4, pp. 249-257.

Hubbard, R.N.L.B.
1992 Dichotomous Keys for the Identification of the Major Old World Crops: *Review of Palaeobotany and Palinology* 73, pp. 105-115.

Jacquat, C.
1988 *Hauterive-Champréveyres, 1: les plantes de l'âge du Bronze, catalogue des fruits et graines* (Archéologie Neuchâteloise 7), Editions du Ruau, Saint-Blaise.
1989 *Hauterive-Champréveyres, 2: les plantes de l'âge du Bronze, contribution à l'histoire de l'environnement et de l'alimentation* (Archéologie Neuchâteloise 8), Editions du Ruau, Saint-Blaise.

Kühne, H., Czichon, R., Janoscha Kreppner, F. (eds),
2008 *Proceedings of the 4th International Congress on the Archaeology of the Ancient Near East (29 March – April 3 2004, Freie Universität Berlin)*, II. *Social and Cultural Transformation: The Archaeology of Transitional Periods and Dark Ages, Excavation Reports*, Harrassowitz, Wiesbaden.

Lone, F.A., Khan, M., Buth, G.M.
1993 *Palaeoethnobotany: Plants and Ancient Man in Kashmir*, Balkema, Rotterdam.

Marchetti, N.
2008 A Preliminary Report on the 2003 and 2004 Excavations at Tilmen Höyük: H. Kühne, R. Czichon, F. Janoscha Kreppner (eds), *Proceedings of the 4th International Congress on the Archaeology of the Ancient Near East*, II, pp. 353-360.
2009 The 2007 Joint Turkish-Italian Excavations at Tilmen Höyük: *30. Kazı Sonuçları Toplantısı, 26-30 mayıs 2008, Ankara. 3. cilt*, T.C. Kültür ve Turizm Bakanlığı, Ankara, pp. 387-398.
2010 A Preliminary Report on the 2007 and 2008 Excavations and Restorations at Tilmen Höyük: P. Matthiae *et al.* (eds), *Proceedings of the 6th International Congress of the Archaeology of the Ancient Near East*, II, pp. 369-383.

Matthiae, P., Pinnock, F., Nigro, L., Marchetti, N. (eds),
2010 *Proceedings of the 6th International Congress of the Archaeology of the Ancient Near East, May, 5th-10th 2008, "La Sapienza" - Università di Roma*, II, Harrassowitz, Wiesbaden.

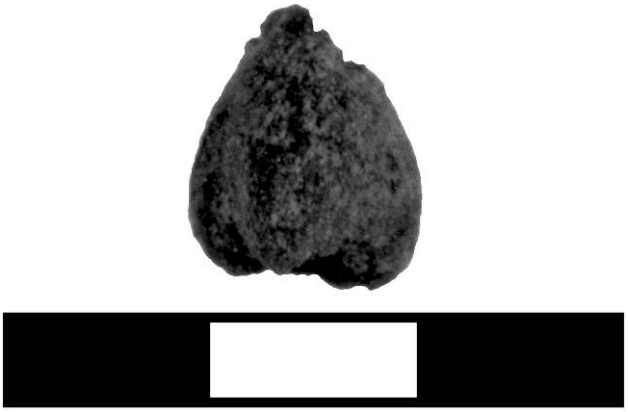
Renfrew, J.M.
1973 *Palaeoethnobotany: the Prehistoric Food Plants of the Near East and Europe*, Methuen, London.

Schoch, W.H., Pawlik, B., Schweingruber, F.H.
1988 *Botanical Macro-Remains*, Paul Haupt, Berne.

van Zeist, W., Wasylikowa, K., Behre, K.E.
1991 *Progress in Old World Palaeoethnobotany*, Balkema, Rotterdam.

Zohari, D., Hopf, M.
1993 *Domestication of Plants in the Old World*, Oxford Science Publication, Oxford.

1 Sample TH.07.E.278*162 from F.1990: *Hordeum vulgare* L. fragments.



2 Sample TH.07.E.278*162 from F.1990: *Rumex* sp. L, dock.