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Beginnings – New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin

Papers of the International Workshop

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Organized by Dan Ciobotaru, Barbara Horejs and Raiko Krauß

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Yeşilova Höyük

by Zafer Derin

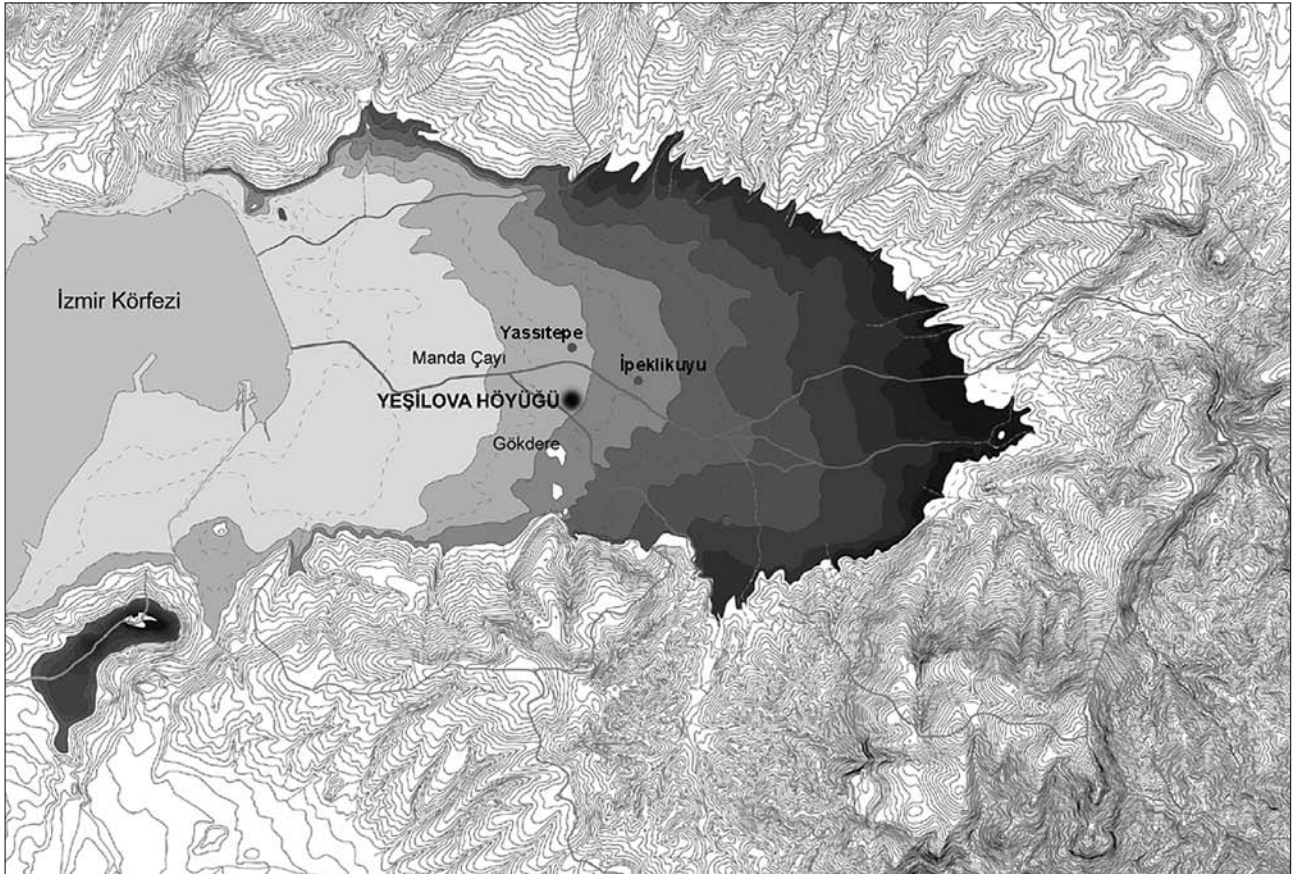
Yeşilova Höyük is situated in the middle of the Bornova Plain, at the meeting point of the Gökdere and Manda rivers. The settlement area is located 80 cm below the plain surface, 4 km from the present-day coastline.

Bornova Plain, which had similar geographical boundaries in prehistory, became home to the first settlers of the İzmir region. There are five prehistoric mounds on the plain¹, including Yeşilova Höyük (Map).

Yeşilova Höyük is the oldest settlement centre within the city of İzmir. This centre, together with Yassitepe and İpeklikuyu Höyük makes up 'İzmir's Prehistoric Settlement Area' (Fig. 1).



Fig. 1 Prehistoric area of İzmir.



Map of the Bornova plain.

¹ During the excavations carried out in the years 1948–1949 at Bayraklı Höyük, located north of the coastal strip, cultural levels belonging to the Early and Middle Bronze Ages were uncovered (Akurgal 1950). Recent surveys (Derin – Batmaz 2004, 79; Derin 2006, 1–4) have

shown that there are other settlement areas dating to the Bronze Age on the Bornova Plain (İpeklikuyu Höyük, Pınarbaşı-Tepebağ and Yassitepe Höyük).

The Excavations

Excavations began in 2005 but were followed by a break. Work resumed in 2008 under the auspices of the Culture and Tourism Ministry and the Ege University².

The settlement area is thought to be some 70,000 m² in size. In prehistoric times, the Bornova plain, with its easy topography, rich flora and animal resources, was the perfect place to settle for its first inhabitants (Fig. 2).

Yeşilova is a höyük, or mound, type settlement that is now lower than the present day level of the plain. Apart from a

very small amount of Late Roman pottery on the surface, no other settlement evidence was visible.

Yeşilova Höyük consisted of three cultural levels. These levels can be listed as follows:

- Level III: Neolithic Period
- Level II: Chalcolithic Period
- Level I: Early Bronze Age – Roman Period

Level III (Neolithic Period)

The Neolithic settlement takes the form of eight cultural layers on top of the virgin soil. Here it is possible to follow the whole Neolithic development in the Aegean Region. Almost every layer contains a deposit of mud-clay, evidence there had been a flood.

Due to the high clay content of the soil, some of the layers that were established immediately after a flood had dried up were almost as hard as concrete.

The Neolithic layers were only researched in a restricted area, where the remains of stone foundations were found (Fig. 3). However, mud floors covered with ashes and with pottery pieces on them were uncovered on every layer.

The most important elements that characterise the Neolithic settlement levels are the pottery and the small finds. These finds show that the Neolithic at Yeşilova Höyük developed in three phases; levels III 8–6, 5–3 and 2–1.

Levels III 8–6

The finds from the first settlement of the höyük were uncovered on virgin soil approximately 4 m below the present day level of the plain. This level's pottery group is handmade and monochrome (Fig. 6).

The pots are well fired. Greyish, light/very light yellowish and reddish brown tones are the dominant paste and surface colours. However, one pottery group is cream in colour.

The following forms have been identified: some of them are spherical in shape and neckless, narrowing at the mouth; bowls with everted rims and flaring shallow bowls are seen for the first time in this phase.

Among the other forms there are necked jars with everted mouth rims, bowls with straight sides, semi-spherical bowls and >S< profile bowls.

Tube handles are frequently seen on the jars. These are usually on the tall jars; there are also a small number of broad jars with this handle type.

Vertically attached round handles are seen on the large jars and short broad ones. The bases of the pots are flat or slightly raised.

The finds show that the industry of stone tools, implements and other items was well developed. Stone vessels make up a significant find group in levels III 6–8.

The finds from Yeşilova Höyük level III 6–8 show close parallels with those of the Early Neolithic levels of the Lakes District settlements, Höyücek (ESP), Bademağacı (EN), Ulucak (Vd–f) and Kuruçay (13)³. On this basis, these levels can be dated to around 6,500 BC⁴.

Levels III 5–3

Along with the red tones, brown shades are also apparent in the paste and surface colours of the pottery from this period. Most of the pots are reddish-brown in colour, while some of them are covered with a layer of fine reddish-yellow slip.

The most common forms are jars that narrow at the mouth. Some of these are spherical in shape and have no neck. >S< profile bowls also increase in number. The other forms include bowls with straight sides and flaring shallow bowls, necked jars with everted and flattened rims, conical necked jars and jars that narrow at the mouth, >S< profile, semi-spherical bowls and very shallow bowls with everted rims.

In these levels, some decoration is seen on some of the pottery pieces. Examples of pieces with reddish-brown paint on a reddish yellow slip were found. These levels can be dated to around 6,250 BC.

Although the Neolithic people raised some large and small animals for food, they also hunted and ate animals such as wild pigs and deer that lived in the surrounding area. In levels III 4 and 3, cattle make up the largest number of animals.

Levels III 2–1

This level is the richest of the Neolithic levels. It must have begun around 6,000 BC; the same cultural development continued without interruption until 5,700 BC.

New technology and innovations came to the area around this time. The traditional round houses, made of

2 Derin – Batmaz 2004, 75–100; Derin 2007a, 125–127; Derin 2007b, 377–384; Derin 2008a, 217–230; Derin forthcoming; Derin et al. 2010, 7–58.

3 For comparison see Duru 2002, 403 f.

4 The C-14 and thermoluminescence dating of Yeşilova Höyük, carried out in laboratories in Turkey, America and Germany, show that the Yeşilova levels could date to earlier than 6,500 BC.



Fig. 2 Sketch of the neolithic settlement.



Fig. 3 The Neolithic settlement of Yeşilova.



Fig. 4 The Chalcolithic settlement of Yeşilova.

mud bricks, wattle and daub and rushes, were exchanged for rectangular houses with stone foundations (Fig. 3), indicating social change, as well as alterations in building techniques and spatial organisation. Other innovations were red-polished pottery, painted pottery, stamp seals and improvements in agriculture.

The colours of the paste of the pottery from this period are light brown and red. The colour of the slip is reddish-brown and becomes redder towards the surface.

The shape repertoire of the pots includes jars with long necks and everted rims, which are the most common form. Among the bowl shapes are shallow flaring bowls, bowls plain in shape with straight sides and >S< profile bowls (Fig. 5–6). This phase can be seen as the Neolithic renaissance period. The finds are very rich and greater in number. The number of settlements in the İzmir region also increased during this period.

Around 6,000 BC there was a dramatic shift in the climate that brought drought to Anatolia. Many farmers were forced to move to find better-suited areas to live in. People coming from eastern Anatolia started to settle down in the more rainy and fruitful areas of the west. Villages in the coastal region, such as Barbaros, Küçük Yamanlar, Çukuriçi, Yassitepe, Araptepe, and Ege Gübre had populations swollen by new arrivals and became more crowded⁵.

At the same time there were changes in society, social and economic transformations towards a more structured society with social differences.

The sea level was much lower than today and the little mound of Yeşilova was situated on a green plain between two rivers. The people of Yeşilova were farmers and grew wheat, barley and lentils. They had large herds of sheep, goats and cattle in the green fields surrounding the settlement. The economy was diverse as they also fished in the rivers, collected seashells, hunted game and gathered wild herbs.

The consumption of seafood increased especially towards the end of the Neolithic Period. (III 1–3). Almost all of the seafood remains consist of univalves (e.g. screw shells) and bivalves (e.g. mussels) that live in sandy environments in the bays and shallow waters near the shore.⁶

The next-biggest group is the smaller animals such as sheep and goats, and then pigs. It appears that in levels III 2 and I the smaller pastoral animals, sheep and goats, increased in importance; remains of cattle and pigs show a distinct decrease.

Most of the stone tools and weapons are made of flint and consist of different types including arrowheads, blades, cutters, scrapers, piercers and borers (Fig. 9–10). The cores and chips show that the production of flint tools was carried out at Yeşilova. Some stones had been cut to make them square so they could be used to make necklaces. Among the clay items there is a miniature table (Fig. 11) that had been shaped in a similar way to those found in Ulucak IV. It is understood from the pintadera seals with labyrinth and spiral motifs (Fig. 8), similar to those found in level Vb at Ulucak and Bademağacı EN II⁷, that the Yeşilova Neolithic community had an organised social structure.



Fig. 5 Neolithic pot from Yeşilova.

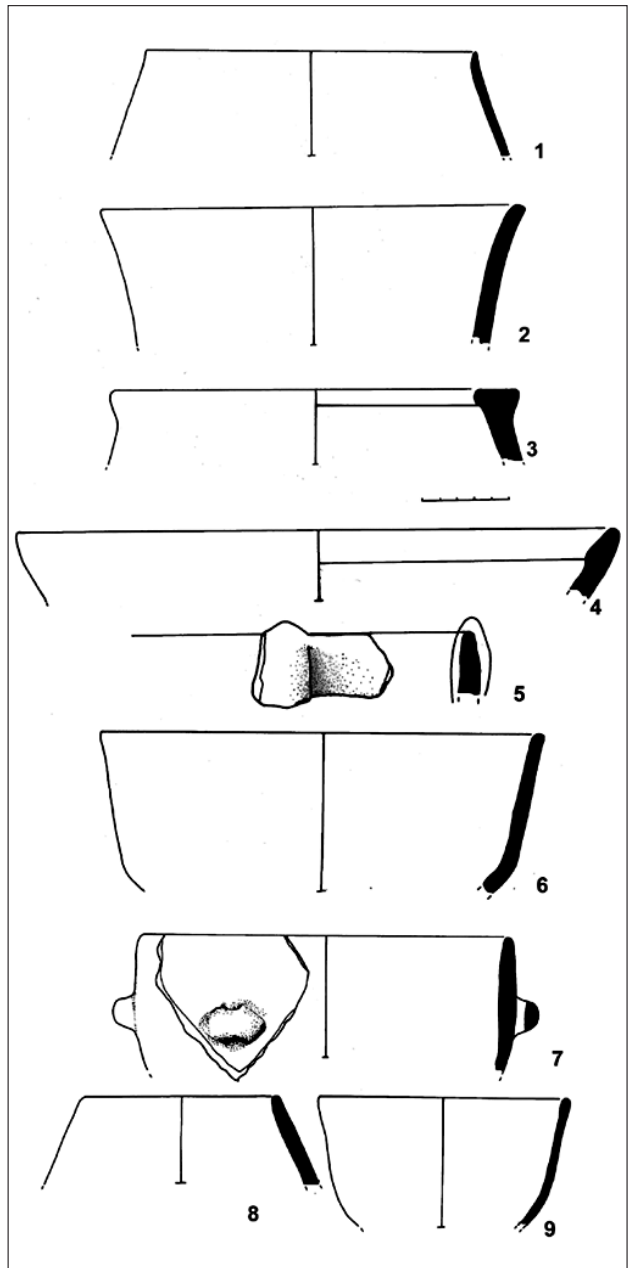


Fig. 6 Neolithic pottery from Yeşilova.

5 Derin 2006, 5 f.–6.

6 Derin 2008, 45–57.

7 Çilingiroğlu – Çilingiroğlu 2007, 367, fig. 27; Duru 2008, fig. 76.



Fig. 7 Fragments of Neolithic pottery from Yeşilova.

It is possible to compare the Yeşilova finds with finds from other excavations around the city of İzmir, primarily Ulucak Höyük followed by Aegean settlements such as Ege Gübre, Çukuriçi and Dedecik-Heybelitepe. The finds parallel those of the nearest settlement to Yeşilova Höyük, Ulucak Höyük level IV, and the pottery from Çukuriçi, Dedecik-Heybelitepe⁸. In addition, the pottery from the level that had architecture with stone foundations at the Aegean Gübre settlement, which had at least a three-phase settlement in the Neolithic Period, red-slipped pottery roughened on the outside and decorated with fingernail impression designs was found in levels III 1–2 of Yeşilova Höyük (Fig. 7). While fingernail impression decorated pieces completely vanish in the lower levels, red slipped pieces decrease towards the lower levels and their surfaces become matte in appearance.

The Yeşilova finds show that the origins of İzmir go back as far as an Early Neolithic community. The Yeşilova Neolithic community in the central-western Anatolia region underwent their own cultural development and must have had links with both the Lakes Region and with the islands and the Marmara region. These people, who probably came to İzmir from a region further east, were the first here to combine hunter-gathering with stockbreeding and farming, and when they settled in the vicinity of İzmir, the community established its own culture and society; this was not merely a transitional region.

This development process, that includes the end of the level III 1 Neolithic, shows that the Neolithic settlement was abandoned, like Ulucak IV and Ege Gübre III, around 5,800–5,700 BC⁹. There may have been a new, dramatic shift in the climate, which brought drought to West Anatolia.

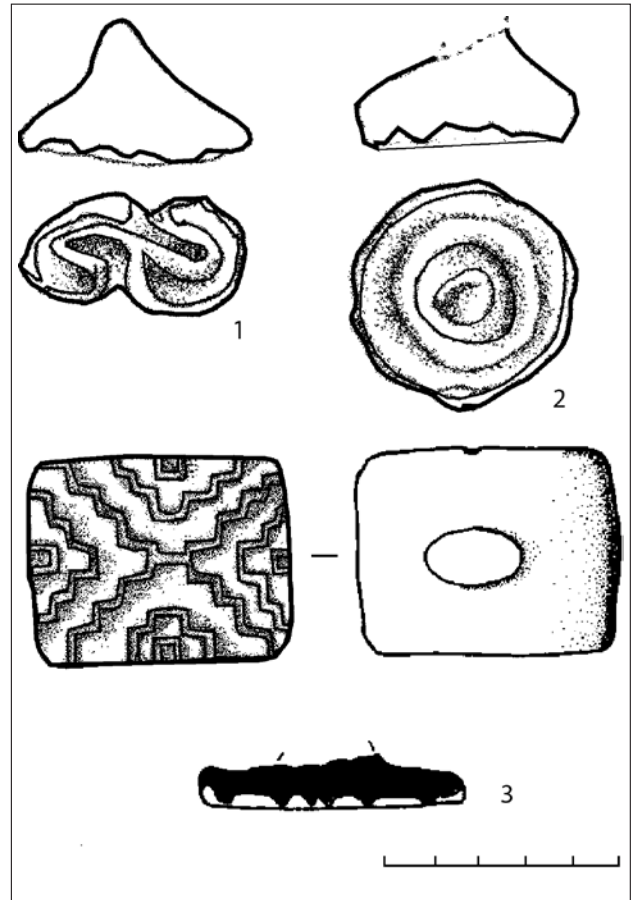


Fig. 8 Neolithic pintadera seals.

8 Horejs 2008; Herling et al. 2008, 20–26.

9 Derin 2005, 87; Sağlamtimur 2007, 376.



Fig. 9 Neolithic stone axes.

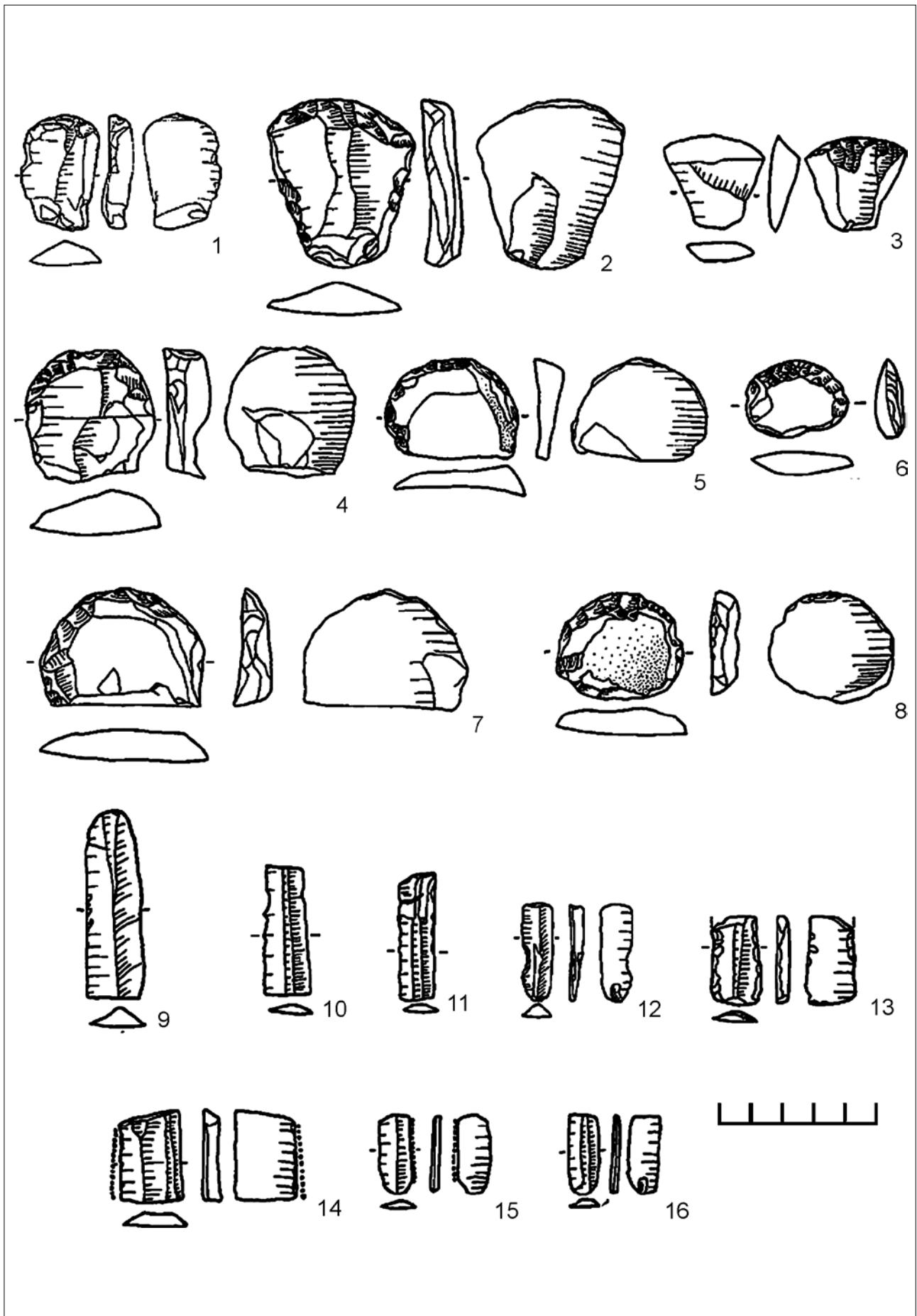


Fig. 10 Neolithic stone tools.



Fig. 11 Small tablet.

Yeşilova Level II (Chalcolithic Period) – a New Settlement and New Community

A two-phase settlement extending across the whole mound was identified at this level. A hole, or hollow, 1 m in depth and at least 6–8 m in diameter had been opened up in the Neolithic levels, and appears to have been lived in as a hut-type dwelling in two separate periods (Fig. 4). Apart from this hole, the Chalcolithic settlement seems to have continued with other such hollowed out dwellings¹⁰.

Although no architecturally rich finds were found, there was a piece of floor belonging to the last phase of the Chalcolithic settlement at the mound (II 1). In the lower levels of this hollowed-out section there were heaps of debris approximately 16–10 cm in thickness consisting of stones of various sizes, pieces of burnt kerpiç (mud brick) and pots belonged to the second level of the Chalcolithic Period (II 2). Some whole pots and other finds were found in situ on the top of this floor.

The Chalcolithic pottery was generally roughly made. The paste was tempered with small stones and mica, varying in size according to the size of the pots. Some of the pieces of larger vessels were plant-tempered (Fig. 12–13).

Most of the pots were grey and blackish grey in colour, sometimes in shades of brown and brownish-red and burnishing marks are seen on some of them.

There are a variety of vessel types; bowls with rims inverted at the mouth, sharply carinated bowls with inverted rims, bowls with sharp profiles; semi-spherical bowls of which some have vertical handles rounded or oval in shape with spur type protrusions on them and flat lugs; flaring bowls with rims thickened on the inside at the mouth; thick-rimmed, roughly-made, poorly-fired pots with flat bases and straight sides or slightly everted simple mouth rims, with

There was a thick pebble layer on the level III 1 at Yeşilova (Fig. 14).

Neolithic settlements around İzmir were entirely abandoned, leaving behind ashes and ruins (Fig. 15). The settlements remained deserted until the arrival of new and different communities of the Chalcolithic culture at least 500 years later.



Fig. 12 Chalcolithic bowl.

irregular, roughly-pierced steam holes arranged in a single row under the rim; one-handled jars with long necks narrowing at the mouth, some with spurs. Basket handles are very common, and mushroom-shaped handles are seen on some of them (Fig. 13).

Most of the pots have hollow bases, while a smaller number have flat bases. Decorated pieces are very rare. From the aspect of pottery profile characteristics, these pots show close similarity to those from Emporio levels X–VII, Kumtepe la and Ilipinar levels VIII–VI and are therefore dated to the Chalcolithic Period¹¹.

10 As in: Menteşe, Aktopraklık, Fikirtepe and Pendik in the Marmara Region; Karul 2009; Bittel 1969, 19; Harmankaya 1983, 27.

11 Sperling 1976, fig. 9–11; Hood 1981, 165 f.; Thissen 2001, 82, fig. 77.3–4.

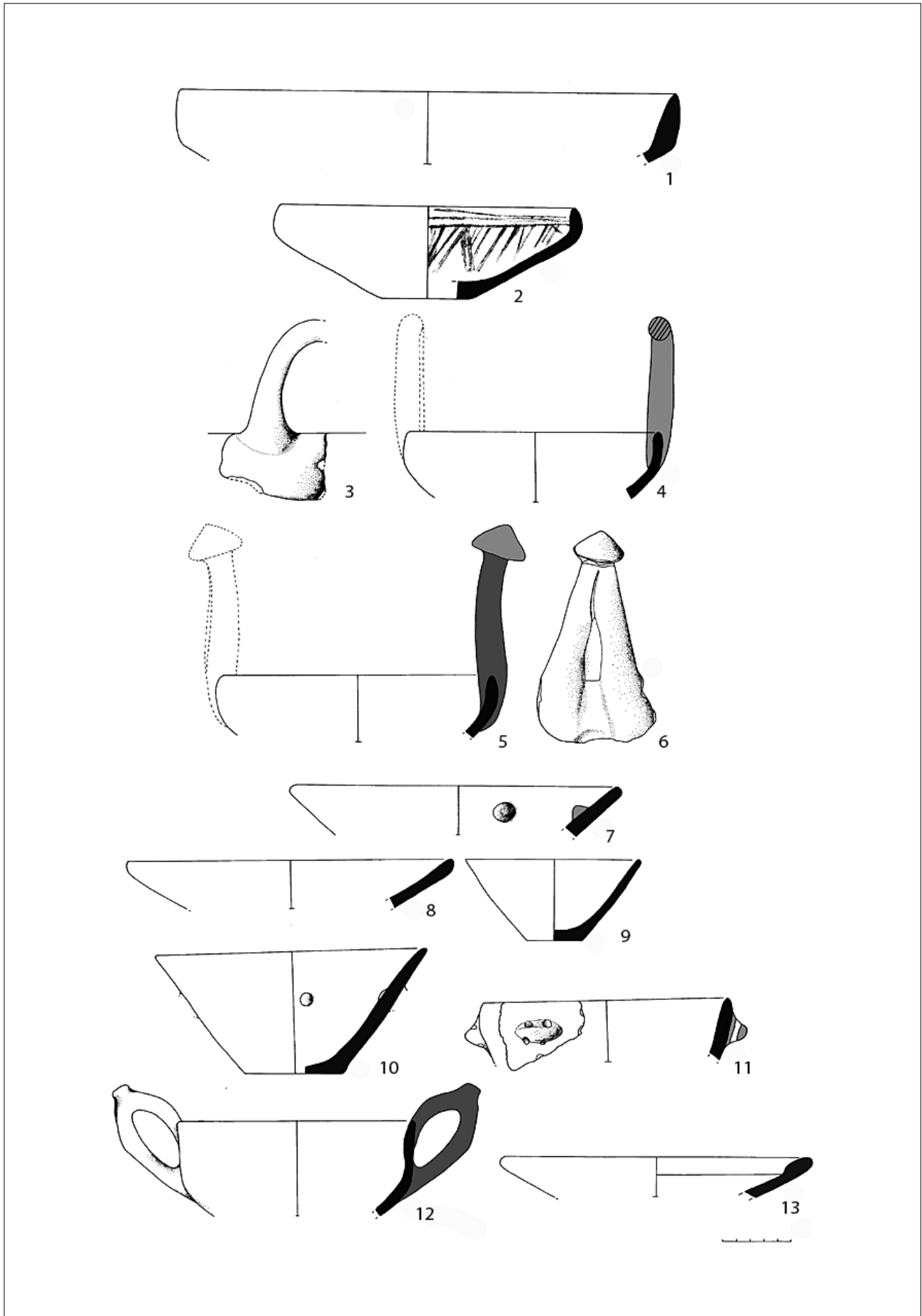


Fig. 13 Chalcolithic pottery from Yeşilova.

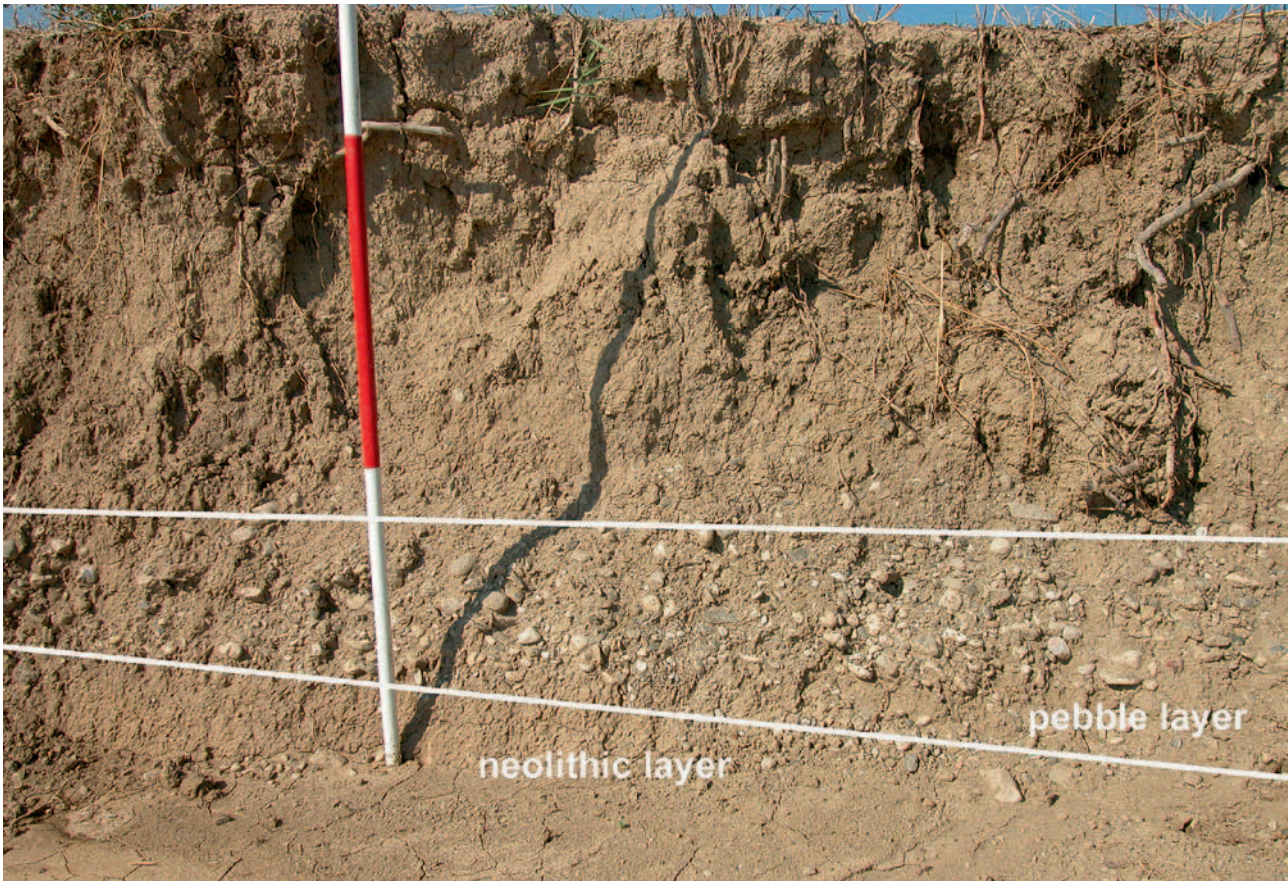


Fig. 14 Pebble layer.



Fig. 15 Neolithic level III.1.

Bibliography

- Akurgal 1950
E. Akurgal, Bayraklı Kazısı Önrapor, Dil ve Tarih-Coğrafya Fakültesi Dergisi, 8.1, 1950, 3–8
- Bittel 1969
K. Bittel, Bemerkungen über die Prähistorische Ansiedlung auf dem Fikirtepe bei Kadıköy, *IstMitt* 19, 1969, 1–20
- Çilingiroğlu – Çilingiroğlu 2007
A. Çilingiroğlu/Ç. Çilingiroğlu, Ulucak, in: M. Özdoğan – N. Başgelen (eds.), *Türkiye’de Neolitik Dönem. Yeni kazılar, yeni bulgular* (İstanbul 2007) 361–372
- Derin 2005
Z. Derin, The Neolithic Architecture of Ulucak Höyük, in: C. Lichter (ed.), *How did Farming Reach Europe? Anatolian-European Relations from the Second Half of the Seventh Through the First Half of the Sixth Millennium cal BC. International Workshop, İstanbul, 20–22 May 2004, Byzas 2* (İstanbul 2005) 85–94
- Derin 2006
Z. Derin, İzmir’den iki yeni prehistorik yerleşim yeri. Yassitepe Höyüğü, Çakallar Tepesi Höyüğü, *ADerg* 7.1, 2006, 1–16
- Derin 2007a
Z. Derin, Türkiye’de 2006 yılında yapılan araştırma ve Kazılar. Yeşilova Höyüğü, *TüBA-Ar* 10, 2007, 125–127
- Derin 2007b
Z. Derin, Yeşilova Höyüğü, in: M. Özdoğan – N. Başgelen (eds.), *Türkiye’de Neolitik Dönem. Yeni kazılar, yeni bulgular* (İstanbul 2007) 377–384
- Derin 2008a
Z. Derin, İzmir Yeşilova Höyüğü, in: B. Can (ed), *Doğudan Yükselen Işık. Anadolu Arkeolojisine Katkıları. Atatürk Üniversitesi 50. Yıl Armağan Kitabı* (İstanbul 2008) 217–230
- Derin 2008b
Z. Derin, Neolithic Shellfish Gathering at Yeşilova Höyüğü: An Ethnoarchaeological View. In: T. Takaoğlu (ed.), *Ethnoarchaeolog. Investigations in Rural Anatolia 4* (İstanbul 2004) 45–57.
- Derin forthcoming
Z. Derin, Yeşilova Höyüğü, in: M. Özdoğan – N. Başgelen (eds.), *Neolithic in Turkey. New Excavations, New Discoveries* (İstanbul forthcoming)
- Derin et al. 2010
Z. Derin – F. Ay – T. Caymaz, İzmir’in Prehistorik Yerleşimi-Yeşilova Höyüğü 2005–2006 yılı Çalışmaları, *ADerg* 13, 2009/1 (2010), 7–58
- Derin – Batmaz 2004
Z. Derin – A. Batmaz, Bornova-Kemalpaşa (İzmir) Arkeolojik Envanteri 2003, *Kültür Envanteri Dergisi* 2, 2004, 75–100
- Duru 2002
R. Duru, Some Observations On the Early Stages of Pottery Production in the Lake District (Ancient Psidia), in: R. Aslan – S. Blum – G. Kastl – F. Schweizer – D. Thum (eds), *Mauerschau. Festschrift für Manfred Korfmann I* (Remshalden-Grunbach 2002) 403–419
- Duru 2008
R. Duru, MÖ.8000’den MÖ.2000’e Burdur-Antalya Bölgesi’nin Altıbin Yılı, *Suna-Inan Kiraç Akdeniz Medeniyetleri Araştırma Enstitüsü* (Antalya 2008)
- Felsch 1988
R.C.S. Felsch, *Das Kastro Tigani. Die spätneolithische und chalkolithische Siedlung* (Bonn 1988)
- Harmankaya 1983
S. Harmankaya, *Pendik Kazısı* 1981, *KST* 4, 1983, 27–28
- Herling et al. 2008
L. Herling – C. Lichter – K. Kasper – R. Meriç, *Im Westen nichts Neues? Ergebnisse der Grabungen 2003 und 2004 in Dedecik-Heybelitepe*, *IstMitt* 58, 2008, 13–65
- Hood 1981
S. Hood, *Excavations in Chios, 1938–1955. Prehistoric Emporio and Ayio Gala I*, *BSA Suppl.* 15 (London 1981)
- Horejs 2008
B. Horejs, Çukuriçi Höyük. A New Excavation Project in the Eastern Aegean, 4. Feb. 2008, <http://www.aegeobalkanprehistory.net/article.php?id_art=9> (December 2009)
- Karul 2009
N. Karul, Bursa Aktopraklık Höyük’te Tarih Öncesi’nin İlk Tarımcıları Keşfediliyor, *Aktüel Arkeoloji* 10, 2009, 54–67
- Sağlamtimur 2007
H. Sağlamtimur, Ege Gübre Neolitik Yerleşimi, in: M. Özdoğan – N. Başgelen (eds.), *Türkiye’de Neolitik Dönem. Yeni kazılar, yeni bulgular* (İstanbul 2007) 373–376
- Sperling 1976
J. W. Sperling, Kumtepe in the Road. Trial Excavation 1934, *Hesperia* 45.4, 1976, 305–364
- Thissen 2001
L. C. Thissen, The Pottery of Ilipınar, Phases X to VA, in: J. J. Roodenberg – L. C. Thissen (eds.), *The Ilipınar Excavations II, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul* 93 (İstanbul 2001) 3–154

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