



# Murat Höyük: A Medieval Rural Settlement on the Upper Euphrates

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## ABSTRACT

Murat Höyük is an important Bronze Age site located in eastern Turkey, in the province of Bingöl, 5km south of Solhan. Murat Höyük is located on the north bank of the Arsanias River in the Upper Euphrates valley. Due to the construction of the Aşağı Kaleköy Dam, the mound there was registered in 2018 and salvage excavations began in 2019. The main intention of the excavations was to study the Early Bronze and Iron Age periods, but some important discoveries on the top of the mound also drew attention to the later phases of occupation. Some architectural remains from these later phases have been brought to light and, additionally, locally produced pottery, together with some objects and tools related to agricultural production and some liturgical metal finds, such as processional crosses, have been recovered from the excavations. The finds give an idea of the nature of the later settlement. The aim of this article is to describe and interpret these architectural remains and small finds, which were found on the highest point of the mound and are most likely medieval in date (between the 9th and 12th centuries), and to attempt to evaluate the nature of the small settlement. This study also helps to understand the relationship between sites in the Euphrates basin during the medieval period.

**Keywords:** Medieval, Euphrates, Eastern Anatolia, Bingöl, Murat Höyük.

## INTRODUCTION

Murat Höyük is one of the most important Bronze Age sites on the north bank of the Arsanias River in the Upper Euphrates basin. The site is located on a natural hill just a few kilometres south of the modern township of Solhan in the province of Bingöl (Figure 1).

The mound is +1088 metres above sea level and has a height of 18.00 metres above the Arsanias alluvial plain. In size, it measures 140.00 x 120.00 metres and has a conical shape. Since the site is part of the Salvage Project of the Kaleköy Dam, the mound was excavated in 2019.

The salvage excavations at the mound were conducted by the Elazığ Museum Directorate and a scientific team from Fırat University. The excavations revealed a sequence of occupation levels, indicating that the site dates back to the 3rd millennium BC, followed by a remarkable stratification of Iron Age material. However, after a prolonged chronological hiatus the mound was inhabited again during the Middle Ages. This medieval settlement, located on the upper levels of the mound was small and modest in size. However, due to the exceptional discoveries made there, it has the potential to provide insights into the nature of medieval society in the Upper Euphrates basin. Especially some architectural remains and locally produced pottery, together with some objects and tools related to agricultural production and some liturgical metal finds, such as processional crosses, have been recovered from the excavations. All these finds give an important idea of the nature of the medieval life in Murat Höyük. And thus the aim of this paper is to describe and interpret all these architectural remains and small finds found at the highest point of the mound, and to attempt to evaluate the nature of this small settlement. It also aims to understand the religious, social, political and economic relationships between the settlements in the Euphrates basin during the medieval period. Unfortunately, such a working has not yet been addressed by scholars in the region, and the multiculturalism of the region during this period has not been

evaluated through archaeological material. In this context, it could be argued that this article will contribute to the field and fill an important gap. Therefore, in this brief article it will try to investigate the medieval settlement in the upper levels of Murat Höyük and the significant archaeological discoveries they contained with the aim of enhancing our understanding of medieval life in eastern Anatolia.

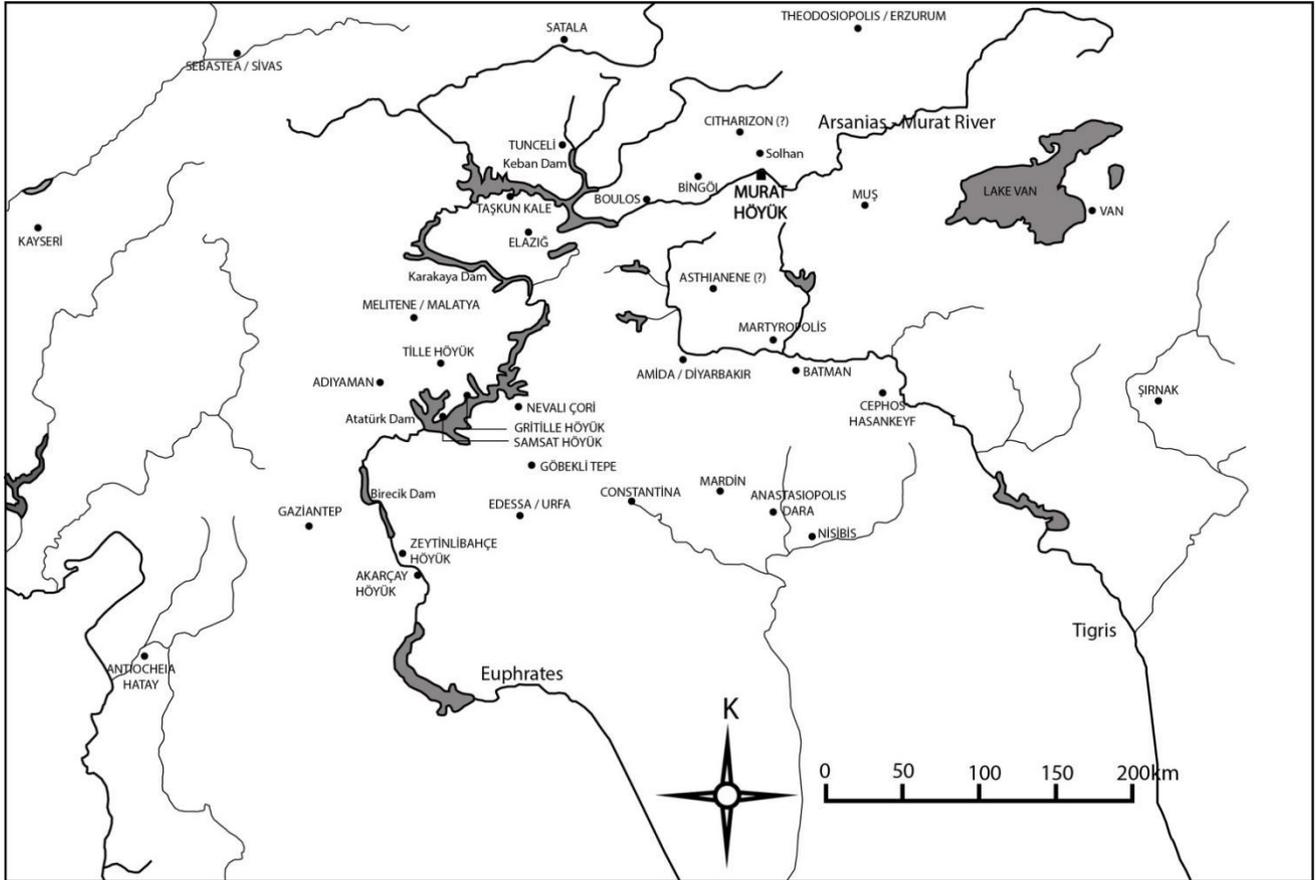


Figure 1. Map of the Euphrates basin and the location of Murat Höyük (map by O. Koçyiğit).

### THE MEDIEVAL SETTLEMENT AT MURAT HÖYÜK

As a result of the salvage excavation carried out at Murat Höyük in 2019, the general sequence of occupation of the mound has been recorded and four major cultural phases have been identified (Table 1). The first occupation dates to the mid-3rd millennium BC, producing Early Bronze Age material, followed by an extraordinary Iron Age stratification that includes an Urartian level (For a detailed information on the excavations at Murat Höyük and its Bronze Age-Iron Age levels see: Özdemir, 2020; Özdemir & Özdemir, 2022) The medieval layer sits on top of the mound but unfortunately because it is closest to the surface it has been severely damaged by modern agricultural activities. For this reason, the medieval occupation does not provide a clear plan, and it is very difficult to understand the settlement pattern (Özdemir & Özdemir, 2021: 33-34).

Table 1. Stratigraphy and chronology of Murat Höyük.

Stratigraphy	Settlement Period	Relative Chronology
Phase I	9 <sup>th</sup> -12 <sup>th</sup> centuries AD	Medieval
Phase II	8 <sup>th</sup> -6 <sup>th</sup> centuries BC	Middle Iron Age – Urartu (MIA)
Phase III	12 <sup>th</sup> -10 <sup>th</sup> centuries BC	Early Iron Age (EIA)
Phase IV	2500-2200 BC	Early Bronze Age III

Although the disturbed medieval occupation extends across the top of the mound, the medieval remains are mainly concentrated along the northern edge (Figure 2). Some of the visible remains, which appear to be independent of each other and be of irregular layout, may belong to domestic buildings with evidence for basic

production activities (Figure 3, yellow in plan).



Figure 2. An aerial view of Murat Höyük on a natural hill after the salvage excavations and Murat river which flows the northern of the mound. (© A. Özdemir).



Figure 3. Stratigraphic plan of Murat Höyük (© A. Özdemir).

According to the available data, it can be deduced that the medieval occupation was part of a small village or hamlet whose existence was based on agricultural production. We are dealing with an agricultural settlement here since some storage pits and a large number of tandırs (baking pits or ovens) were unearthed in this level (Figure

4-Figure 5). They must have served Murat Höyük's medieval inhabitants. It is quite clear that the settlement's agricultural identity and domestic aspect predominate. In the light of all these architectural remains, it is difficult to claim that the settlement had a military or religious character.

Additionally, in this late phase, the settlement seems to have shrunk in size, for there was more open space and less intensive use of the upper part of the mound. There is also no continuous defensive wall at this stage. Rather, there would have been a boundary wall enclosing the site and its inhabitants, both human and animal.



Figure 4. A storage pit from the medieval excavations of Murat Höyük (© A. Özdemir).



Figure 5. A circular shape tandır made by bricks from from the medieval excavations of Murat Höyük (© A. Özdemir).

The agricultural activities took place in large courtyards, and based on the evidence obtained from the excavations these areas were used as workshops for daily life or some basic production processing. Although one of the courtyards, which may have been used as a workshop and formed a wide open space surrounded by buildings has not been fully excavated, the layout of the remaining walls, which appear to be square in plan, with the use of such courtyards in the medieval settlement (Figure 6).

The unearthed remains of the medieval walls are of simple construction, made up of small-sized, irregular local stones, laid in single or sometimes double rows packed with mud mortar. No regular or larger blocks such as spolia from an ancient site were recovered on the walls. The fact that no lime mortar or hydraulic binder was found in the remains of the existing walls proves that these structures were built in the local style and were extremely simple in design, with functionality being the priority. It can be said that the walls, built with double rows of rough masonry stones, were constructed on a large sloping terraced area to the north of the mound.

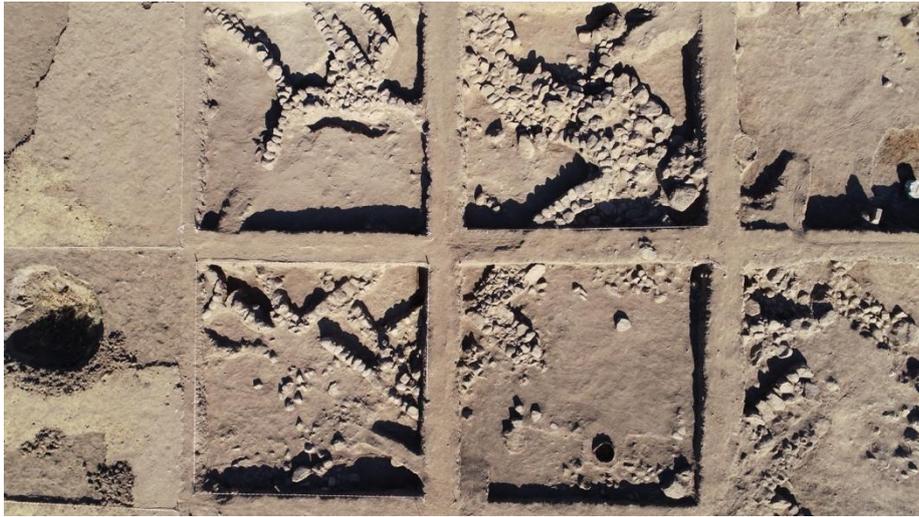


Figure 6. A view of the medieval remains including of large courtyards and the walls of different buildings around it from Murat Höyük (© A. Özdemir).

Just as no defensive structure was found on the mound, no remains related to the burial or funerary practices of the inhabitants of the settlement have been found. Furthermore, the fact that no well or cistern-like structure was found near the settlement or in the vicinity of these remains suggests that the inhabitants of Murat Höyük met their water needs by carrying water from the Murat River, which flows nearby.

In fact, this kind of medieval settlement is well known in the eastern Anatolia. At some of the mounds that have been excavated on the banks of the Euphrates, we can see the existence of numerous medieval settlements with local and regional characteristics, built with similar construction techniques. In the Upper Euphrates region, similar medieval settlements have been identified, especially Aşvan Kale (Mitchell, 1980) near the village of Muratçık and Taşkun Kale (McNicoll, 1983) in the Keban Dam Basin. Both were systematically excavated and are well documented using modern excavation techniques. Gritille Höyük (Redford, 1986: 103-136; Redford et al., 1988) and Tille Höyük (Moore, 1993; French, Moore, & Russel, 1982, 161-187) near Kahta, Adıyaman, and Lidar Höyük (Hauptmann, 1987: 249-264) to the northwest of Urfa were characterised by medieval buildings. Likewise, Samosata or Samsat Höyük (Özgüç, 1988: 291-294; Özgüç, 2009: 7-28) in Adıyaman province, is a very large medieval settlement that is frequently mentioned in sources and was of considerable importance to Byzantium for this the region. Additionally, in the Lower Euphrates region, there are traces of similarly designed and constructed medieval settlements - such as Zeytinlibahçe Höyük (Alvaro, Balossi & Vroom, 2004: 191-213; Frangipane & Bucak, 2001: 65-131; Frangipane, Alvaro, Balossi & Siracusano, 2002: 41-99), Akarçay Höyük (Mergen & Deveci, 1999: 19-44; Mergen & Deveci, 2001: 359-379; Mergen & Deveci, 2002: 319-346) and Mezra Höyük (Yalçıklı & Tekinalp, 2002: 159-210; Yalçıklı & Tekinalp, 2004: 107-138) in Ilısu Dam region. The common characteristic of all these medieval settlements is that they have similar architectural features and are dated between the 10th and 13th centuries AD. It appears that the settlements located along the Euphrates basin, which possessed distinct military, political, or rural characteristics based on their respective regions, shared numerous similarities with regard to their architecture, pottery, tool technology and settlement organization. Specifically, it looks like that they were united in terms of their religious and political affiliations.

But perhaps the most important feature of the settlement at Murat Höyük are the different types of medieval artefacts found during the excavations, especially the unglazed ceramics. A large number of sherds were collected during the excavations and all of these sherds are important finds that give an idea about the nature of the settlement. This is because, according to the evaluation of the ceramics, almost all of the ceramic found in the settlement area, with a few exceptions, can be described as locally produced. Also, it is understood that these ceramics are quite similar to the unglazed pottery found in the medieval or Byzantine settlements along the Euphrates basin, and almost all of them are the same, except for a few features because of locally produced. Therefore, it could be assumed that a unique ceramic style developed in the region and that this style was dominant throughout the Euphrates basin and it could be assumed that these medieval settlements, almost all of which date from the 9th - 10th / 13th - 14th centuries AD, formed a cultural integrity among themselves.

Moreover, in addition to the ceramics, the finds recovered from this level include a number of bronze crosses, iron arrowheads, coins, and some bone objects with various agricultural tools, including grinding and mill stones, are important finds that give an idea of the nature of this small settlement (Özdemir, 2020: 272-287; Özdemir & Özdemir, 2021: 34).

### Ceramic Finds

The bulk of the ceramics found in the medieval settlement at Murat Höyük are unglazed domestic wares belonging to a locally-produced assemblage. Although the majority of them consist of broken sherds, it was possible to reconstruct the shape of some pots. Most of these restored vessels were recovered on the floors of the medieval buildings and help with the dating of the occupation layer (Figure 7-Figure 8). While there is a small number of fine tablewares, consisting of bowls, plates and some mugs, most of the pottery comprised closed vessels such as cooking pots and various types of jars. Single-handled pitchers and jugs are also found in the ceramic assemblage, together with some flat and conical-shaped lids that were used for the cooking pots and a small number of wheel-made oil lamps. In addition to all this locally produced ceramics, there are also a small number of imported samples that are important in showing that the settlement had close relations with the Islamic world.



Figure 7. Medieval ceramic sherds consisting of cooking pots and storage jars found as in-situ on the floors of medieval settlement (© A. Özdemir).



Figure 8. Some flat shaped lids and cooking pots found as in-situ on the floors of medieval settlement (© A. Özdemir).

The most striking features of the medieval ceramics are that the fabric is densely micaceous and the outer surfaces are brown and black in colour. These locally produced unglazed ceramics were shaped by hand and on the potter's wheel. Incised decoration is common on the pottery, but fingerprint decoration is also observed. The presence of a unique unfired glaze on the outer surface of the pottery was also recorded. With very few exceptions, nearly all of the unglazed ceramics have marks on their interior surfaces indicating that they were made on a potter's wheel. Nevertheless, a few of them were molded by hand prior to firing and finished with a glaze applied to the body and, in particular, to the neck. In addition, some of the vessels have deformations on the rims and bodies. The handles were added to the vessels later, and some shaping was done at the joins to increase their

strength (Figure 9).



Figure 9. A group of cooking pots and storage jars after the restoration works from Murat Höyük (© A. Özdemir).

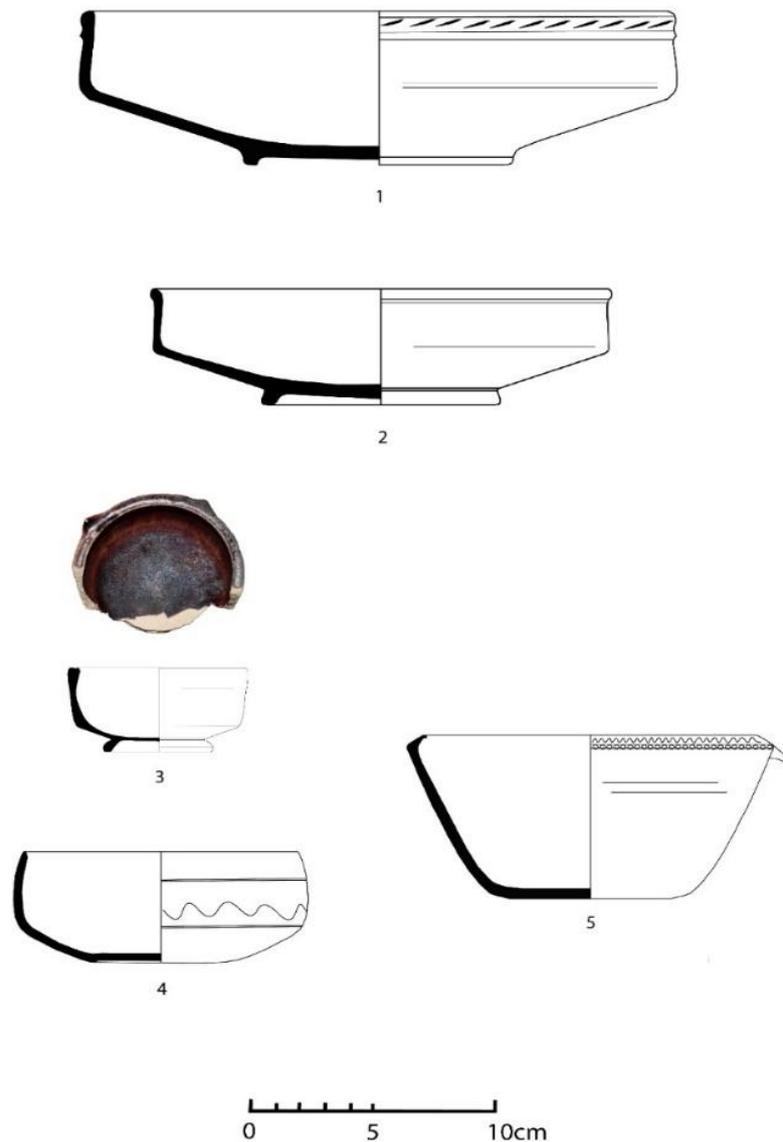
The fabric of the ceramics is often calcereous and includes a significant quantity of sand and stone chippings with mica, resulting in a medium hard but largely porous texture. The colour variations include shades of red (5R 5/6; 5R 5/8; 5R 4/6; 5R 4/8; 7.5R 5/6; 7.5R 5/8; 7.5R 4/6; 7.5R 4/8), dark red (5R 3/6; 5R 3/8; 5R 2.5/6; 7.5R 3/6; 7), grey (5YR 3/8) and, occasionally, creamy white (5Y 7/1; 5Y 6/1), but they are predominantly composed of different shades of brown (5YR 3/2; 5YR 3/3; 5YR 3/4; 5YR 5/6; 7.5YR 5/8; 7.5YR 4/6; 10YR 3/4; 10YR 3/6). Although a number of the ceramics were fired to a high temperature and some of the vessels have a hard texture owing to their homogeneous fabric with few inclusions, the firing quality of the identified unglazed ceramics is notably poor. However, there is also evidence that the pottery used for cooking was exposed to high temperatures during use. The scorch marks on the surfaces of these vessels indicate that they were exposed to intense heat. The surface of these pots is a dark colour in shades of black (10YR 2/2) and brown (10YR 2/1). Their surface is also smoothed and sometimes decorated with incised straight or wavy lines with grooves. These grooves were made while the vessels were still wet, in some cases using a blunt tool but most appear to have been made with the fingertips. The grooves on the rim and body in particular may have been made in this way. In addition, apart from the incised decoration, some of the vessels have impressed decoration using various techniques. This can be observed especially on the cooking pots adorned with a relief decoration of applied rope bands that were incised or impressed.

Fine table wares (Figure 10-Figure 11, cat. nos. 1-11)

This group of vessels, consisting of bowls, plates, and jugs for serving liquids, occupies a small but important place among the medieval ceramics of Murat Höyük.

The plates found in the excavations are unglazed and shallow, generally 11.0-24.0 cm in diameter, with wide rims and high ring bases. Some of them have grooves and incised bands on the rim (Figure 10, nos. 1-2). This kind of plates is seen in Aşvan Kale and Gritille (Mitchell, 1980: 210, figure 94, no. 1063-1083; Redford, 1986: 118, figure 7 A-D).

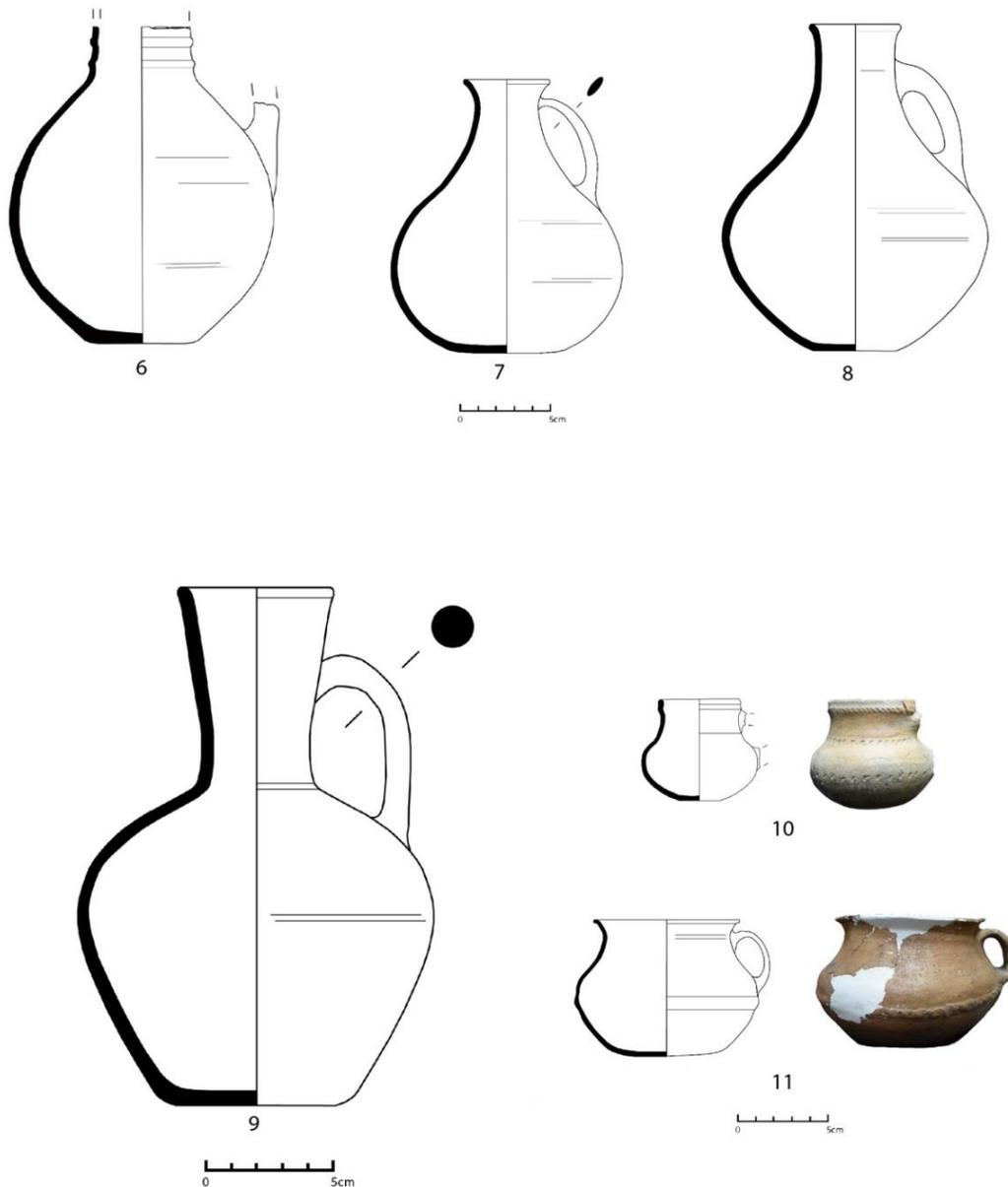
The bowls, on the other hand, appear to be small, deep vessels with a diameter of about 11.0-15.0 cm (Figure 10, nos. 4-5). Their similars were found in Samsat (Redford, 1995: 75, figure 9, LL et. al) and Taşkun Kale's medieval layers (McNicoll, 1983: 145, figure 64). As well as these unglazed bowls, which appear to be of very simple manufacture, there is one important glazed bowl, partially broken, that is very similar to the glazed and luster-covered bowls dated to the 10th century from Samsat (Redford, 1995: 76, figure 10). It stands out for its white fabric (5Y 7/1) and aubergine to dark reddish grey (7.5R 4/1) glaze (Figure 10, no. 3). This small bowl with a rim diameter of approx. 7.5 cm is characterised by a high ring base and an upright rim extending from the body (For another similar examples at Tille Höyük see: French et al., 1982: 166, figure 9/4-6).



**Figure 10.** Plates and bowls: 1-2 wide rims plates; 3 glazed bowl with its straight sided body; 4-5 small and deep bowls (drawing by O. Koçyiğit).

The medieval jugs found at Murat Höyük are mostly single-handled and, like all the other vessels, are unglazed and locally produced. They range in diameter from 18.00 to 21.00 cm and are usually of the globular body type with everted narrow rims (Figure 11, nos. 6-8). For jugs of similar quality and form can be seen in Gritille Höyük (Redford, 1986: 126, figure 8) and Zeytinlibahçe Höyük (Frangipane, Alvaro, Balossi & Siracusano, 2002: 76, figure 33). Another example (Figure 11, no. 9) with a single handle and flared rim is characterised by a tall funnel neck. This form is found at many medieval settlements along the Euphrates valley such as Gritille Höyük (Redford, 1986: 126, figure 9a), Samsat Höyük (Redford, 1995: 69, figure 5f) and Tille Höyük (French et al., 1982: 182, figure 9). Additionally, the surfaces of the jugs are burnished, but there is no decoration other than fine grooves.

The mugs and cups are also mostly small, between 8.00 and 12.00 cm in diameter, and have a single handle (Figure 11, no. 10-11). Unlike the jugs, their partly burnished surfaces are decorated with incised decoration, and some are decorated with bands in relief on the body (For unglazed cups of similar form from Samsat Höyük see: Redford, 1995: 72, figure 7p).



**Figure 11.** Jugs and mugs: 6-8 short necked and single handled jugs; 9 a tall funnel necked and single handled-flared rim jug; 10-11 small and globular shaped mugs with incised decorations on their body (drawing by O. Koçyiğit).

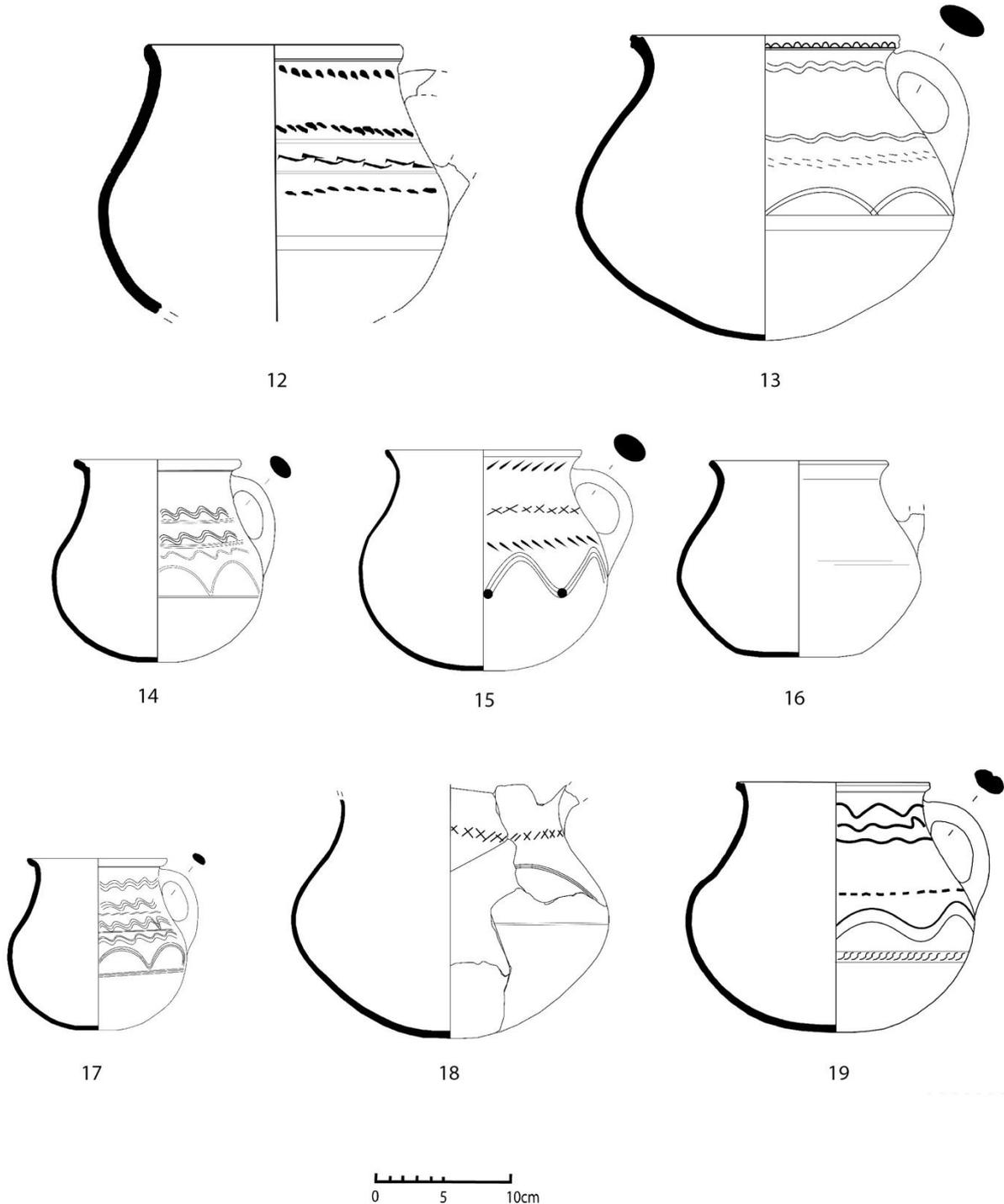
#### Plain wares (Figure 12 - Figure 15, cat. nos. 12-36)

The most abundant group among the ceramics recovered from Murat Höyük comprises simple vessels used for cooking and preserving food, mostly consisting of large jars, casseroles, pots, pans or lids, all of which can be called plain ware. With a few exceptions, these vessels' bodies are wider than their height and the rim is almost as wide as the body. The rim diameter is approximately 14.00-18.00 cm and height 20.00-26.00 cm. All have a flat base with no slip or paint. The surface of some of them is burnished and almost all of them have scorch marks due to prolonged exposure to fire, and blackening is a characteristic feature.

Most of the excavated examples have a single handle, and the handles are usually in the form of a thin, flat stem running from the shoulder to the rim (Figure 12 - Figure 14, nos. 12-23). Some of the handles are decorated with incisions or notches on the back (Figure 13, no. 20). This type of decoration is found in almost every medieval settlement along the Euphrates. Only one cooking vessel with two handles has been found (Figure 14, no. 21). On another example, the handle rises from the rim, forms a ring above, and then ends at the rim again

(Figure 14, no. 22). Also, there are some plain wares of similar shape and features but without handles (Figure 14, nos. 24-27).

In terms of decoration, grooves on the body and neck or some incised and impressed decoration stand out most in this group of vessels. The variety of ornamentation is quite rich, with incisions consisting of spirals, zigzags, wave motifs and circles, sometimes accompanied by notches and small button-shaped appliqués. This decorative diversity must be the result of a common cultural development that began in the Upper Euphrates Basin<sup>1</sup>.



<sup>1</sup> For Aşvan Kale see Mitchell, 1980: 208, figure 92. nos. 1018, 1028; 212, figure 96, no. 1099; 214, fig. 98, no. 1166, and spread southwards to the Middle Euphrates for Samsat Höyük see Redford, 1995: 72, figure 7 p-r; and Gritille Höyük Redford, 1986: 124, figure 6b; 125, figure 7e, and even the Lower Euphrates Basin for Zeytinlibahçe Höyük see Frangipane & Bucak, 2001: 75, figure 22d, 23d; Alvaro et al. 2004: 205, fig. 11; Akarçay Höyük Mergen & Deveci, 1999: 365-369, figure 2-6; Mergen & Deveci, 2000: 324-325, fig. 2-6; Mezra Höyük Yalçıklı & Tekinalp, 2002: 139, figure 9a.

Figure 12. Cooking pots. 12-19 single handled cooking pots with globular body and incised decorations (drawing by O. Koçyiğit).

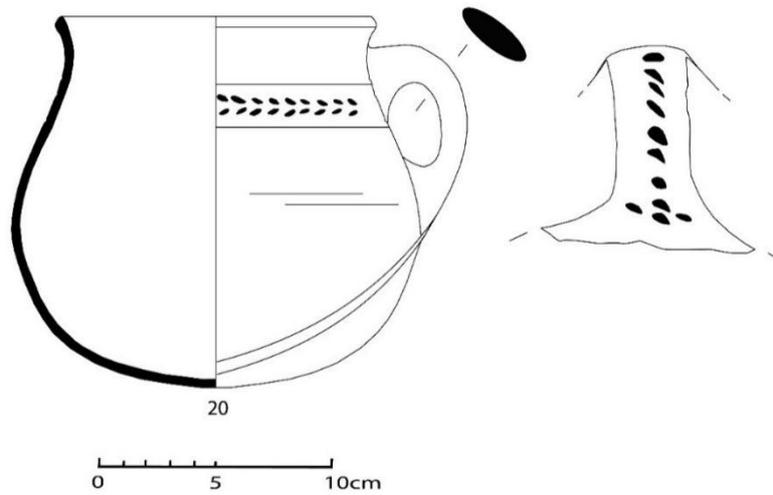


Figure 13. A cooking pot with a single handle and impressed decoration on its handle (drawing by O. Koçyiğit).

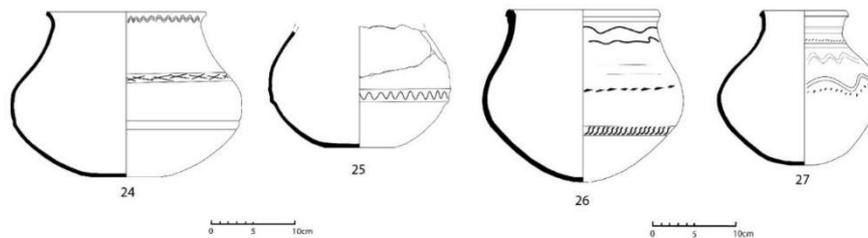
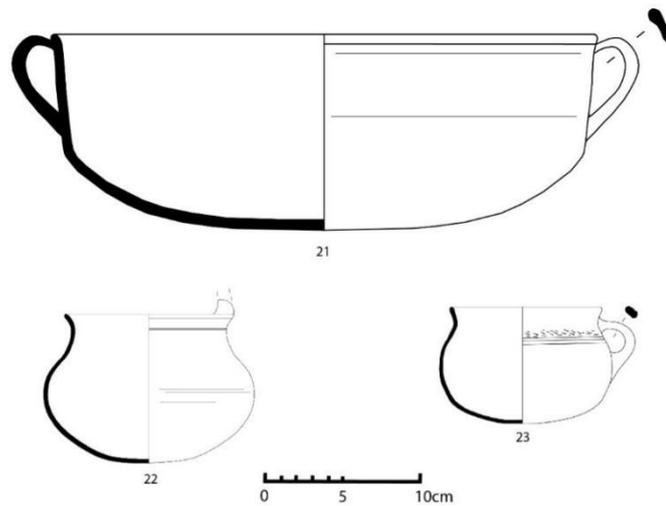


Figure 14. Cooking pots. 21 wide rim and semicircular body cooking pot with two handle; 22-23 single handled cooking pots with globular body; 24-27 incised decorations cooking pots without handles (drawing by O. Koçyiğit).

Lids and lid fragments that belong to cooking pots or jars are in a similar fabric to the other plain wares. They are quite common at Murat Höyük. The lids are generally flat and disc-shaped with one horizontal loop or central knob handle (Figure 15, nos. 28-34). They were undoubtedly used in combination with the many closed pots and jars found on the site. These disc-shaped lids, with very thick walls, were generally formed on the wheel and range in diameter from 12.00 to 26.00 cm. The larger lids have ribbon or band handles, the smaller ones have central knob handles. Many similar handles, as well as unglazed vessels for everyday use, have been found at many medieval settlements throughout the Euphrates Basin<sup>2</sup>.

The lids with a large diameter often have a ribbed top with flat edges, but some of the smaller -diameter examples are shaped with indented and protruding edges in the form of pinched piecrust edges (Figure 15, no. 34). Moreover, because of their exposure to fire, most of these lids' surfaces are covered with a burnt layer. In terms of decoration, we could say that some of lids are grooved with fingertips in parallel and circular patterns, while others are decorated with various incisions. Additionally, a small number of fragments of conical lids with central handles were identified (Figure 15, nos. 35-36).



Figure 15. Lids. 28-31 flat-disc shaped and ribbon handled lids; 32-34 flat-disc shaped and central handled lids; 35-36 conical shaped with central handled lids (drawing by O. Koçyiğit).

<sup>2</sup> For the ribbon handle lids from Aşvan Kale Mitchell, 1980: 221, figure 105, no. 1302; Samsat Höyük Redford, 1995: 75, figure 9/HH; Gritille Höyük Redford, 1986: 119, figure 11; Korucu tepe Griffin, 1980, pl. 72, figure 2 CW17; Zeytinlibahçe Höyük Frangipane & Bucak, 2001: 106, fig. 23b; Frangipane, et al. 2002: 77, figure 36; Alvaro, et. al. 2004: 209, figure 16 d-f; Akarçay Höyük Mergen & Deveci, 2001: 370, fig. 7. For the central handle lids from Aşvan Kale Mitchell, 1980: 214, figure 98, no. 1157; Taşkun Kale McNicoll, 1983: 152-155, figure 71-74; Samsat Höyük Redford, 1995: 75, figure 9/FF; Gritille Höyük Redford, 1986: 119, fig. 11/AD; Tille Höyük Moore, 1993: figure 44, no. 170-171, figure 45, no. 176-180; Zeytinlibahçe Höyük Frangipane & Bucak, 2001: 104, fig. 21a; Mezra Höyük Yalçıklı & Tekinalp, 2002: 187, figure 10a; Yalçıklı & Tekinalp, 2004: 132, figure 8.14-15, 10.4-5.

### Wheel – made oil lamps (Figure 16, cat. nos. 37-38)

There are two wheel-made oil lamps found in the Middle Age layers of Murat Höyük are unglazed and their surface have burn marks due to prolonged exposure to fire (Figure 16, nos. 37-38). It is also known that these oil lamps have a brown (5YR 3/4; 10YR 3/4) fabric with coarse, sand-gravel. They have also wheel marks in some places, with their ribbon handles and a simple bowl shape. Like the other unglazed ceramic vessels, these wheel-made oil lamps, which appear to have been produced locally, have been found in many medieval settlements along the Euphrates basin, and are mostly dated to the 8th-12th centuries AD. Such as Gritille Höyük (Redford, 1986: 130, figure. 12A; French et al., 1982: 182, figure 9/1-2; Moore, 1993: figure 46, 145-189), Zeytinlibahçe Höyük (Frangipane & Bucak, 2001: 104, figure 21b); Akarçay Höyük (Mergen & Deveci, 2002: 333, Figure 6) and Mezraa Höyük (Yalçıklı & Tekinalp, 2002: 187, figure 10b). Also for a good catalogued work on medieval terracotta lamps can see in Amorium (Lightfoot, 2012a: 217-232).

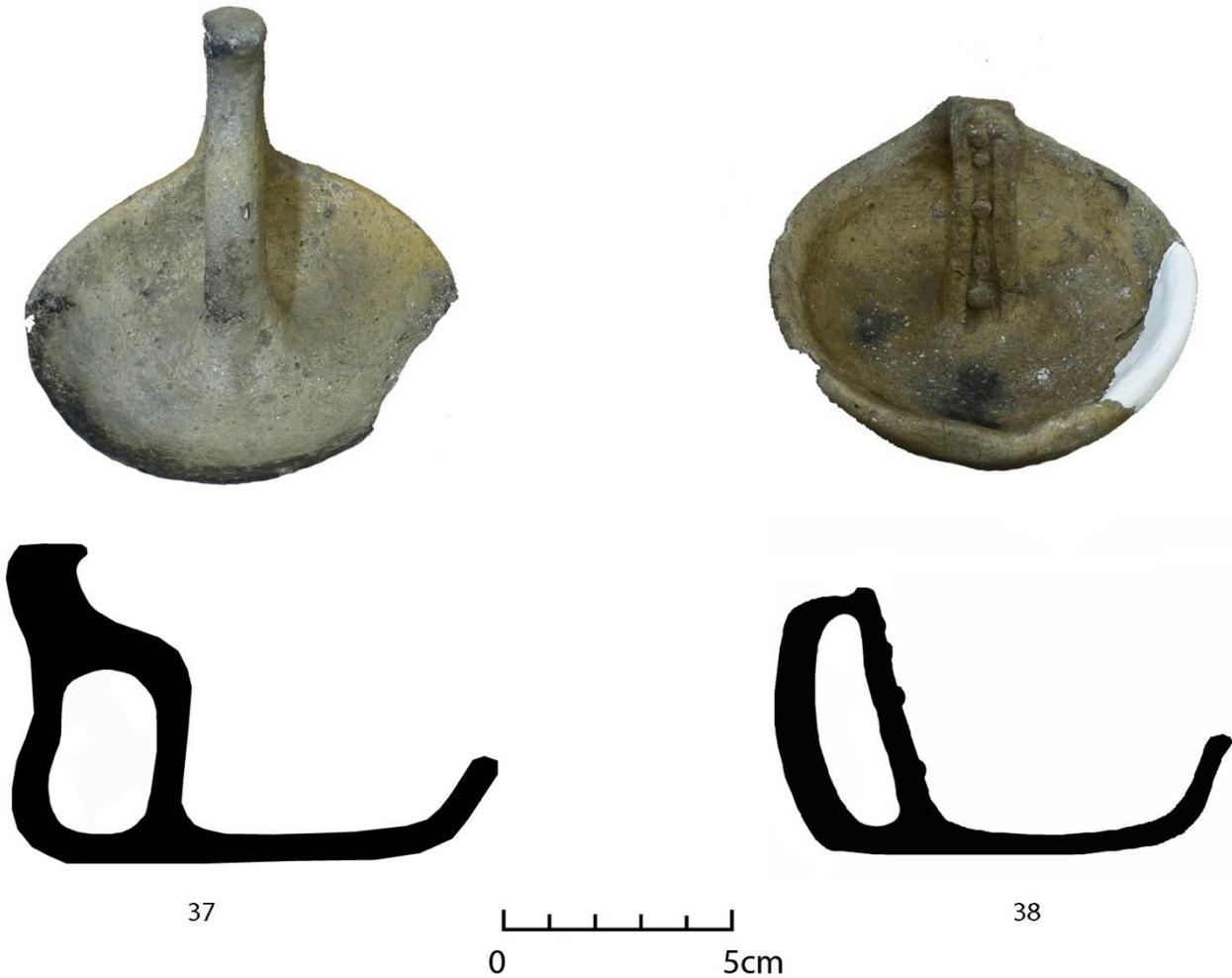


Figure 16. Wheel – made oil lamps (drawing by O. Koçyiğit).

### Small Finds

In addition to ceramic objects, the Murat Höyük excavations unearthed several crosses with distinctive liturgical functions, various types and shapes of arrowheads, and some metal artefacts that appear to have served an agricultural purpose. Also four coins has been recovered with some bone objects. These finds are crucial in identifying the nature of the settlement that existed there between the 9th and 12th centuries AD. It also reveals the possible network of relationships of a rural settlement on the eastern frontier of Byzantium with surrounding cultures and its connection with other settlements along the Euphrates basin.

### Arrowheads (Figure 17, cat. nos. 39-49)

There are 11 arrowheads in the medieval layers of Murat Höyük, all made of iron. These can be grouped into flat, quadrangular, and triangular shapes.

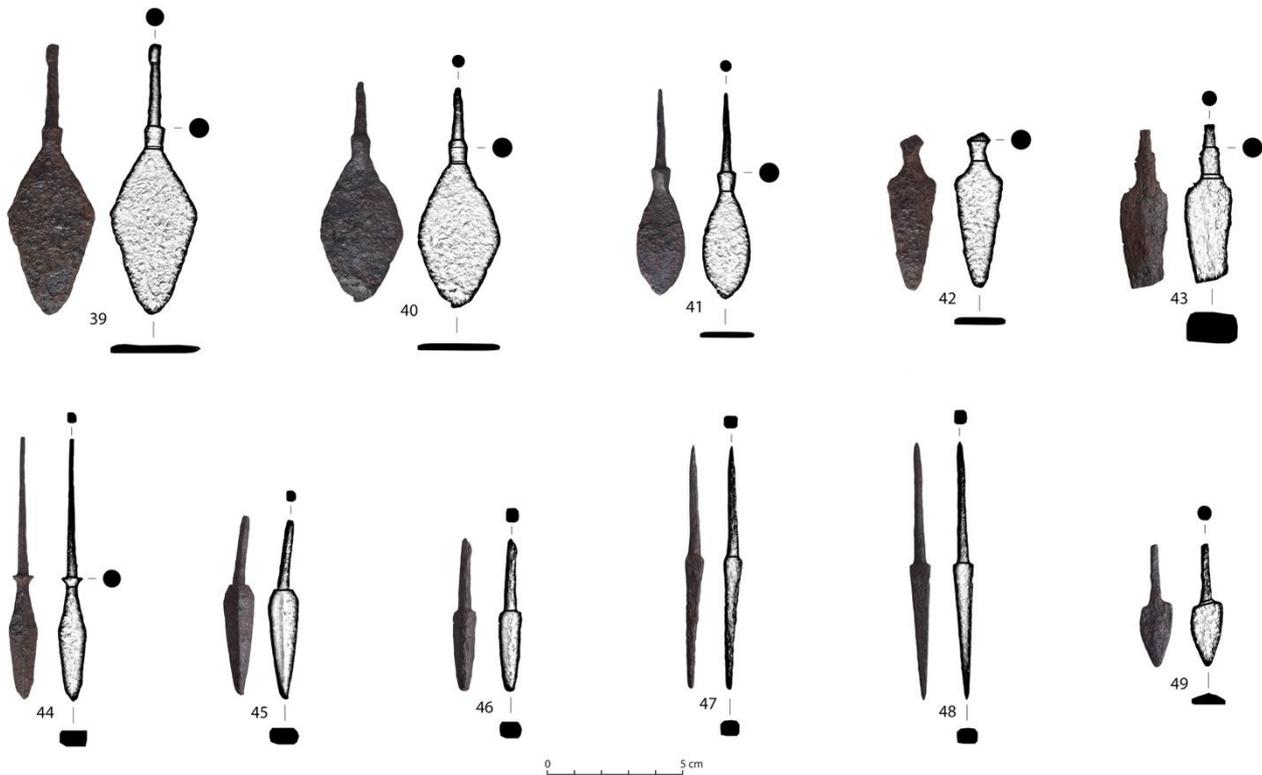


Figure 17. Iron arrowheads (drawing by O. Koçyiğit).

Out of the four flat arrowheads (Figure 17, nos. 39-42), two have an equilateral quadrangular form and the other two have an elongated deltoid shape. Additionally, there are six quadrangular arrowheads (Figure 17, nos. 43-48), three of which have short tangs, and the remaining three have long tangs. One arrowhead with a triangular shape (Figure 17, no. 49) has a short tang.

Based on finds from medieval settlements along the Euphrates valley and other significant medieval sites in Anatolia, such as from Gritille (Redford, 1986: 120, fig. 14 H-K), Tille Höyük (French, et. al. 1982: 183 fig. 10 /7-8) Aşvan Kale (Mitchell, 1980: 246, fig. 119, no. 39-42), Taşkun Kale (McNikoll, 1983: 186, fig. 90, no. 25-32) and Samsat Höyük (Yavaş, 2017: 45-46, fig. 6-8), all these arrowheads are mainly dated between the 9th and 11th/12th centuries AD. (For a detailed work on medieval arrowheads see Yavaş, 2020). Along with these arrowheads, metal pins and sharp piercing artefacts were found in the medieval levels of Murat Höyük. Typologically, all these arrowheads seem to have been used for a variety of purposes, such as military, hunting and training. It should also be stressed that the number of arrowheads is not sufficient to give this small settlement a military identity, and therefore they should be considered as important defensive finds from a small rural settlement.

### Crosses (Figure 18, cat. nos. 50-52)

Among the metal objects found in the medieval layers at Murat Höyük the bronze crosses stand out as remarkable artefacts. They offer insight into religious life and its liturgical aspects at Murat Höyük. Furthermore, the three bronze crosses found during the excavations express the ethno-political and social identity of the people in the settlement. One of them is a pendant cross (Figure 18, no. 50), and the other two (Figure 18, nos. 51-52) are ceremonial or processional crosses (Crosses, which were the most important part of religious rites and rituals, coronation and initiation ceremonies as well as imperial and military ceremonies in the Byzantine period are made of different types of metals and appear in different forms or shapes. They were also frequently used as a popular ornament and an object of sentimental value. See Eser (2010, p. 28)).

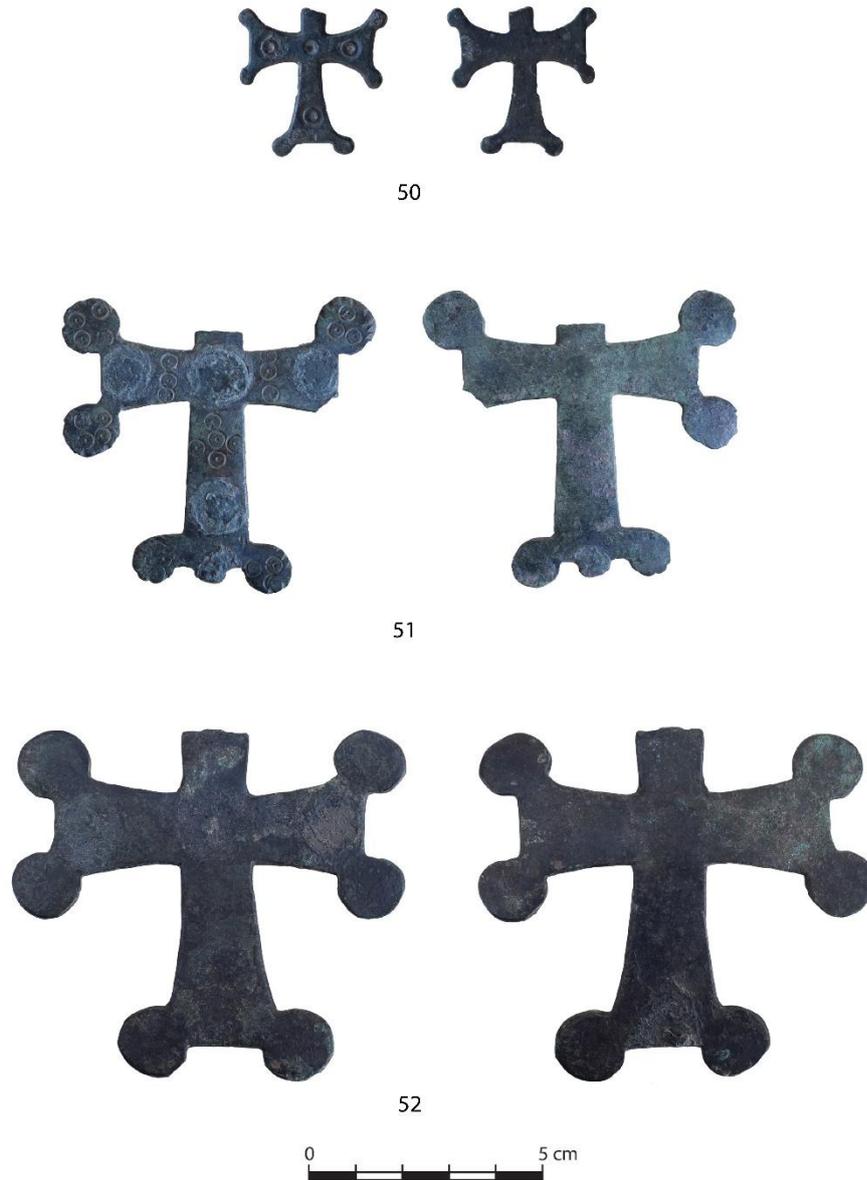


Figure 18. Bronze crosses (© A. Özdemir)

The pendant cross with a broken upper arm is in the shape of a Latin or Maltese cross for which there are many similar examples (Figure 17, no. 50). It is thought to have been made by the casting technique, with each corner of the arms finishing with a droplet. In addition, the obverse is decorated with concentric circles, one in the centre and the others on each arm, while the reverse is left plain without any decoration (Dell’Era, 2012: 404, fig. 12c; Frangipane & Bucak, 2001: 77, fig. 20a).

Although not identical to this skilfully-crafted pendant cross, a similar but smaller and simpler example was found in the upper strata of Gritille, dated as 12th century (Redford, 1986: 134, fig. 13, V).

The two processional crosses (Figure 17, no. 51-52), displaying a marked resemblance to each other, have Latin cross-shaped arms, ending in circles at each corner. One of the crosses has a small handle carved on its lower arm, presumably for holding a wooden staff, while the other only has traces of a rivet. Both crosses were previously adorned with gems or glass inlays, as evidenced by the marks present on them. The front of one cross is decorated with interlocking circles while the rear is plain and unembellished. Based on comparable crosses discovered in Anatolian medieval settlements and museum collections, these crosses can be dated to the period between the 9th and 10th centuries (Acara-Eser, 2005: 58, fig. 5; Acara-Eser, 2010: 38, no. 15; Koçyiğit, 2018: 112, cat. no. 1. Also, for Amorium examples see Schoolman, 2010: 373-386). Both crosses also have two trilobed extensions at the end of each arm, which likely contained a gem in the middle. A line of dotted circles adorns the

cross's perimeter. Similar processional crosses with this shape date to the 11th and 12th centuries (Koçyiğit, 2018: 112-113).

Although no church or similar structure has been identified in the settlement, these finds suggest that religious ceremonies were held there and that the settlement had a religious character for its surroundings. Moreover, the fact that these crosses, all of which are status symbols, were found in the medieval settlement of Murat Höyük leads us to think more broadly about the owners of these objects.

These liturgical metal objects were also analysed by archaeometric methods and some important information about their material properties was obtained. Following the removal of corrosion layers on the surface through mechanical cleaning, the three crosses (cat. nos. 50, 51 and 52) underwent chemical analysis using a Spectro X-Sort Combi handheld X-ray fluorescence spectrometer equipped with an Rh anode and high-resolution silicon drift detector (SDD). A standard metal shutter was measured at regular intervals during the analysis as part of an internal calibration procedure. The analysis method was set up to make successive two analyses (X1 with filter: 50 kV voltage, 0.020 mA current and X2 without filter: 15 kV, 0.068 mA with an average total measurement time 60 seconds). At each cross, a minimum of three locations were selected for analysis. The results (Table 2) reveal the usage in the objects, copper-lead-tin alloys with traces of zinc (1.6% - 3.4%), arsenic (0.6% - 2.1%), and iron (1% - 2.2%). The relatively low tin content (<5%) in cat no. 50 and cat no. 51 suggests a probable origin from recycled bronze, whereas the higher tin content (~11%) in cat no. 52 corresponds to a more traditional bronze composition. Significantly, all the crosses exhibit high concentrations of lead. Addition of high lead to copper alloys serves to reduce alloy costs and facilitates casting processes through lowering the melting temperature and the viscosity of molten metal (Craddock, 1979: 75). The high lead content, considering the challenges of forging high-lead bronzes, strongly indicates that the crosses were exclusively produced through casting techniques.

**Table 2.** Results of pXRF analyses. Data for each artifact was averaged from multiple measurements and then normalized (by Ü. Güder).

Cat.Nos.	Sn	Cu	As	Zn	Fe	Pb
50	4.6	54.5	2.1	2.3	1.0	35.5
51	4.8	69.0	0.6	1.6	1.0	23.1
52	11.1	64.4	1.3	3.4	2.2	17.6

#### Coins (Figure 19, cat. nos. 53-56)

Only four coins have been found during the excavations at Murat Höyük. Three of them are in good condition, but one is corroded. The first coin in good condition (Figure 19, no. 53) is a follis minted in Constantinople for the emperor Mauricius Tiberius (AD 582-602) (DOC 1, 306, no. 31d.1). The second coin (Figure 19, no. 54) is an anonymous follis, struck in Constantinople during the emperor Constantine X's reign (AD 1059-1067) (DOC 3/2, 775, no. 8.2. See also Sear, 2006: 362-63, no. 1853). The third coin (Figure 19, no. 55) belongs to the Artuqid dynasty and was minted in Mardin. It appears to have been struck during the reign of Qutb al-Din Il-Ghazi II (572-580 AH, AD 1176-1184) and is notable for its similarity in type to Byzantine coins, a common feature of Artuqid coins (for a similar example see: <https://www.cngcoins.com/Coin.aspx?CoinID=365795>). The last coin is in poor condition (Figure 19, no. 56) but appears to date from the reign of the emperor Heraclius (AD 610-641) (For similar Heraclius coins see: Sear, 2006: 161 etc.). The image of the emperor is visible on the obverse, but no inscription or legend can be read on the coin.



Figure 19. Bronze coins (© A. Özdemir).

Bone (Figure 20, cat. nos. 57-58)

In addition to ceramic, metal and coin finds, some bone artefacts were also recovered from the medieval levels of Murat Höyük. Among the bone artefacts, a pin or hairpin with a decorative finial (Figure 20, no. 57) and a circular disk (spindle whorl ?) with a central hole and concentric grooves on the upper surface (Figure 20, no. 58) are noteworthy finds (Dell'Era, 2012: 403, fig. 11c-d. Also, see Lightfoot, 2012b: 266-268, esp. no. 38; Köroğlu, 2004: 115, pl. 7, no. 3).



Figure 20. Bone objects (© A. Özdemir).

Millstone (cat. no. 59)

Finally, a basalt millstone found in the medieval levels is recorded as an artefact that underlines the agricultural use of the settlement. It can be assumed that such mills, used to grind agricultural products such as wheat and barley into flour, were produced and used in similar forms throughout Mesopotamia and Anatolia.

## HISTORICAL BACKGROUND IN AND AROUND THE MEDIEVAL MURAT HÖYÜK

The medieval settlement at Murat höyük does not appear in the historical sources but, given its strategic location in the Upper Euphrates basin, it can be assumed that it was often involved in events that shaped the historical course of the region. The Euphrates, the most important river in the region, was not only a natural boundary between East and West, but it also served as the political boundary between the Romans and their eastern neighbours, the Parthians and the Sassanians. So, it is a strategic military region that marked the long-lasting frontier limes of the Eastern Roman Empire. Many Roman forts were located here and important struggles for supremacy between Rome and the Parthia took place in the area. The struggles between the Romans and Parthians continued with the Sassanians, who replaced the Parthians after the mid-3rd century AD and sought to expand westwards (Dignas & Winter, 2007: 18; Alvaro et.al., 2004: 206-208). Although the Romans extended their frontier beyond the Euphrates to the Tigris at this time and won many victories beyond the river in Mesopotamia and Armenia, the Euphrates was always the most permanent and defensible frontier in the East. The castra (fortresses) built along the Euphrates ensured the security of the country for many years, and some of these sites eventually developed into permanent urban settlements Ammianus Marcellinus and Procopius give informations about many border settlement and garrisons as castra established in the eastern frontier (Blockley, 1988: 244-260; Konuk, 2022: 58-134; Greatex & Lieu, 2002).

This settlement policy on the Euphrates border continued increasingly during the Byzantine period with the construction of fortified settlements and fortresses. The strategy of dominating the region behind the natural borders through strong fortified settlements such as Amida (Diyarbakır), Constantina (Viranşehir) and Cepha (Hasankeyf) was started especially during the reign of the emperor Constantius II (AD 337-361) and was continued under the emperor Anastasius (491-518 AD) and later Justinian I (AD 527-565), when settlements in

strategic locations such as Anastasiopolis (Dara), Martyropolis (Silvan), Nisibis (Nusaybin) and Edessa (Urfa) were rebuilt with strong and powerful fortifications (For a detailed list for the Rome's garrisons in the eastern frontier see Konuk, 2022: 58).

These fortified settlements, which were built in order to secure the eastern border and ensure the safety of the Christian population living there, remained the symbols of Byzantine culture and civilisation on the eastern frontier of the Empire for a long time. However, these places all fell to the Muslim Arabs, who began to take their place on the stage of history after the 7th century AD. We can assume that the whole of the Upper Euphrates basin, including Murat Höyük, was conquered by the Arabs and came under Arab domination.

The arrival of the Arabs in the region probably led to the disintegration of Byzantine regional organisation in eastern Anatolia and the collapse of the chain of defensive settlements along the Euphrates. As a consequence of this development, the eastern frontier of Byzantium was withdrawn to the Taurus Mountains, which separated the Arabs and the Byzantines until the middle of the 9th century AD., leaving the lands of eastern Anatolia to be ruled by the Arabs for a long time (For the Arab attacks and its influences on Anatolia in the 7th and 8th centuries AD. see Ostrogorsky, 1968: 140-165).

However, in the 9th century AD, during the reign of the emperor Michael III (AD 842-867), the Byzantines regained control of certain areas within the region after their expeditions into the lands of Amida and Samosata. They also took measures against the Islamic dynasties of Melitene in the east and Aleppo in the South (For a summary of political developments in the 9th century AD and later, see Ostrogorsky, 1968: 210-298; Treadgold, 1997, 446-583). During the reign of the emperor Basil I (AD 867-886), Samosata was captured, an event that held great importance for the Empire. Later, the emperor Constantine VII (AD 913-959) seized control of the region around Theodosiopolis (Erzurum) in the Upper Euphrates basin, which marked the beginning of Byzantine expansion beyond the Euphrates towards the east. During the reign of the emperor Romanus Lecapenus I (AD 920-944), the Byzantines took several strategically significant places including Melitene (Malatya), Martyropolis, Amida, Dara, and Nisibis, while under Romanus II (AD 959-963) Doliche and Germanica (Kahramanmaraş) were captured. Under Nikephoros Phokas (AD 963-969), Tarsus, Edessa (Urfa) and Antiocheia were also taken. During the reign of Ioannes Tzimiskes (AD 969-976), Damascus in Syria and part of the eastern Mediterranean coast were conquered, which further extended the borders to the south and east. The seizure of Edessa (Urfa) in 1032 by Romanos Argyros (AD 1028-1034) is conceivably one of the most significant successes of the Byzantine Empire in the East. The Byzantine eastern frontier during this period has been evaluated briefly by several modern scholars (Redfort, 1986: 113-118; Holmes, 2002: 86-90. Also, for a more detailed chronology of Byzantine-Eastern relations in the 11th century AD see Felix, 1981).

In the early 9th century, the recapture of lands previously lost to Islamic states resulted in the elevation of a select group of small administrative and military units within the Byzantine border in the East to the status of a *thema* (province). Within this framework, the territories between the Euphrates and Tigris, including modern-day Elazığ, Tunceli, and part of Bingöl – known as the Upper Euphrates or Murat Basin – were organized under a newly established administrative region referred to as the theme of Mesopotamia (Kazhdan, 1991: 1348. See also Brandes, 1983: 171-177; Honigman, 1970: 67-70; Sinclair, 1989: 148-149).

Founded in the early 10th century AD, this *thema*, which should not be confused with the Mesopotamian province of the late Roman period, used to be a duchy under the *thema* of Armeniakon. However, after it became a *thema*, it was bordered to the north and west by the *thema* of Coloneia, and to the east and south by the Islamic states. The garrison of Boulos/Palu marked the *thema*'s eastern border, which extended southward to the Arsanias River, south of Palu. The emperor Constantine VII Porphyrogenitus's works, *De Thematis* and *De Administrando Imperio*, are invaluable sources of information regarding the administrative and geographical structure of the Byzantine theme system. The Mesopotamia *thema* was situated within the borders of the Armeniakon *thema*, which was one of the system's earliest themes<sup>3</sup> (See also Güneş, 2021: 323-324).

Before its division in the 9th century AD, the Armeniakon Theme enclosed a vast territory, bounded by the Black Sea to the north, the Opsikion Theme to the west, the Anatolikon Theme to the south-west and the Euphrates and Islamic states to the south. This large territory was divided into two Duchies. One of these dukes (governors) resided at Martyropolis (Silvan), while the other stayed in a castle named Citharizon<sup>4</sup> (See also Güneş, 2021: 109-110). The Citharizon (Howard & Johnston, 1985: 203-229; Tiryaki, 2020: 258-281), the exact whereabouts of which is still disputed, Sinclair asserts that this fortress underwent a Byzantine transformation from Asthianene located in the district of Genç. Asthianene had controlled some of the villages in the fertile and well-watered land of the Bingöl plain since Roman times (Sinclair, 1989: 148-149).

<sup>3</sup> Constantinus Porphyrogenetus, *De Thematis*, IX. 2,5; Constantinus Porphyrogenetus, *De Adminestro Imperium*, 50.

<sup>4</sup> Procopius, *Buildings*, III. 3. 7-8.

The Empire's expansion and administrative organization of its eastern borders persisted until the mid-11th century AD. However, it terminated with the emperor Romanos Diogenes IV's disastrous defeat (AD 1068-1071) by the Seljuk Turks at Malazgirt. Following the defeat of Diogenes's army at Malazgirt, Byzantine rule over Edessa ceased and the area became dominated by several Islamic dynasties, including the Artuqids, Ayyubids, and Seljuk Turks. Subsequently, the Crusaders established at the culmination of the First Crusade the County of Edessa (AD 1098-1144). Although the Byzantine Empire made efforts to regain control of the region during the 12th century AD under the Komnenos dynasty, these were based on an intricate and delicate network of alliances rather than political and military strength. The attempt ultimately failed after the decisive loss inflicted by the Seljuk Turks at the battle of Myriokephalon in 1176 (Ostrogorsky, 1968: 344-350 and 390-394).

## DATING AND CONCLUSIONS

Based on the evidence obtained from Murat Höyük it is clear that the habitation of this medieval settlement is very important for its architectural remains and material finds. First of all, we should underline that the excavations at Murat Höyük provide a case study for a medieval rural settlement located on the banks of the Murat River on the eastern border of the Byzantine Empire. The presence of numerous sites dedicated to agricultural production and storage in the basin, as evidenced by hearths and ovens equipped in a workshop-like manner, is a strong indication that this rural settlement was part of a small, local agricultural organisation that cultivated and utilised the surrounding land due to its highly fertile soil. The excavation finds, comprising medieval unglazed ceramic vessels for the storage or consumption of foods and some agricultural-related metal objects, demonstrate that the residence aspect of the community was the dominant feature.

First of all, the ceramic finds are similar to the unglazed pottery finds from other medieval Byzantine sites in the Euphrates basin and we can accept that almost all of them are the same, apart for some minor regional differences. These artefacts, with a few exceptions, are unglazed medieval locally-produced ceramics. Stratigraphic studies of the medieval settlements in the region show that almost all of them date from the 9th-10th to 13th-14th centuries AD, and the pottery finds from medieval Murat Höyük can, in general, be dated from the 9th to the 12th centuries AD based the analogical assessments.

Additionally, they indicate that the medieval settlement at Murat höyük played a significant role in the Euphrates basin and had close ties to other settlements. The recovered ceramics closely resemble those discovered at other sites in the Middle Euphrates region, including Lidar, Samsat, Gritille and Tille höyük. This cultural geography is notably evident in medieval settlements including Aşvan and Taşkun Kale in the Upper Euphrates region connected to the Murat River, and in the Lower Euphrates region in places such as Zeytinlibahçe, Akarçay and Mezra höyük. In addition, the presence of luster ceramics and an Artuqid coin found during the excavations indicates that the inhabitants of this settlement were also in contact with the Islamic world. Although we cannot estimate the extent of these relations at present, we can assume that the inhabitants of the medieval settlement of Murat höyük were in commercial relations with their Muslim neighbours.

Although we do not know the origins of the inhabitants of this settlement, we can accept that they were living under Byzantine rule. Therefore, we conclude that a Middle Byzantine settlement, probably used for smallscale rural activities, was established on the top of Murat Höyük. The large assemblage of ceramic finds, along with the small finds that belong to the Byzantine artistic group, point to this connection. The metal objects that date from the Middle Byzantine period include Byzantine type arrowheads and several religious artefacts such as a pendant and two processional crosses. So, even though no church was found in the medieval settlement at Murat Höyük, the Christianity of its inhabitants cannot be called into doubt.

Furthermore, a limited quantity of metal objects, especially the arrowheads, are significant elements for the dating of the settlement. The leaf-shaped arrowhead is a long-lasting type of eastern arrowhead, probably disseminated widely by the Byzantine army. It has been discovered in Byzantine contexts since the 7th century. Not only have comparisons for mid and late Byzantine eras been found in eastern contexts but also in Crusader ones. In eastern Turkey, similar arrowheads have been discovered at Arsemeia, south of Malatya, and at Gritille. At Hierapolis and Amorium the type has been associated with the arrival of the Seljuk Turks towards the end of the 11th century AD. The bone objects found in different parts of the settlement are shaped as flattened semi-spheres and decorated with incised lines, points and dotted circles. Similar objects are found in many late medieval settlements.

The four coins also point to a similar date range. In particular, the Byzantine coin from the second half of the 11th century and the Artuqid coin from the 12th century are significant finds for the history of this medieval settlement. These two coin's dates are therefore the terminus ante quem for dating the site. In addition, the fact that the coin with the latest date is an Artuqid coin may be a clue to the historical relations with the surrounding

cultures during the abandonment of the settlement or during its last phase of use. In addition, according to the radiocarbon analysis of a charcoal sample obtained from the medieval layers during the excavations, the remains of the buildings in this phase dated from between the beginning of the 9th century AD and the third quarter of the 10th century AD (According to the radiocarbon date of a coal sample (TÜBİTAK-0679), a date between 801-974 AD was obtained). These chronological methods help to date the medieval settlement in the most accurate way.

And, all the archaeological evidence implies that the medieval occupation on the mound ended abruptly. Some of the finds, such as ceramic finds and metal objects, were made in-situ on the floor surface, indicating that the inhabitants of medieval Murat Höyük had not fled or moved away because of an invasion or sudden attack on the region.

Finally, the architectural similarities and those in the material finds such as ceramics, metal and other small finds at sites between the Keban and Atatürk Dam regions suggest that we need to ask new questions about the network linking these areas in the Euphrates basin during the middle Byzantine period and thereafter.

## CATALOGUE

### Plate

24.2 x 8.0 cm

Wide-mouthed and angular body with low ring base. Brown (7.5YR 5/4) hard fabric with abundant sand, grit and mica. Unglazed, light brown (10YR 3/4) and pale surface.

### Plate

20.0 x 5.1 cm

Wide-mouthed and angular body with a high ring base. Dark brown (7.5 YR 5/6) hard fabric with abundant sand, grit and mica. Unglazed, light brown (10YR 3/4) pale surface.

### Bowl

7.4 x 3.8 cm

Wide-mouthed and straight-sided body, with a ring base. Creamy white (5R 7/1) hard fabric with sand and mica. Bright purple (7.5R 4/1) glazed surface.

### Bowl

11.0 x 4.8 cm

Wide-mouthed and globular body with a flat base. Brown (7.5YR 4/4) hard fabric with abundant sand, grit and mica. Unglazed, brown (7.5YR 4/3) pale surface.

### Bowl

15.2 x 7.6 cm

Wide-mouthed and tapering body with a flat base. Dark red (7.5R 3/8) soft fabric with abundant sand, lime, grit and mica. Unglazed, dark red (7.5R 3/6) pale surface.

### Jug

18.3 x 15.0 cm

Narrow and short-necked with a broken rim. Wide globular body and flat base. Single, now broken handle added to the body. Red (5R 5/6) fabric with sandy, gritty and abundant mica. The fabric is black inside due to firing. There are grooves on the shoulder and neck. The red (5R 4/6) abraded surface is burnished in places.

### Jug

21.6 x 18.4 cm

Narrow and short-necked with a wide splayed mouth. Wide globular body with a single handle and flat base. Dark brown (10YR 3/3) fabric with sandy, gritty and abundant mica. Black and brown (10YR 2/2) surface dulled in places.

### **Jug**

26.1 x 20.2 cm

Narrow and short-necked with a wide mouth flaring outwards. Wide globular body with a single handle and flat base. Light red (5R 5/4) fabric with sandy, gritty and abundant mica. Red (5R 5/8) surface dulled in places.

### **Jug**

22.4 x 12.6 cm

Long funnel neck with a wide mouth. Wide globular body with a single handle and flat base. Brown (5YR 3/2) fabric with sandy, gritty and abundant mica. Brown (5YR 3/4) surface dulled in places.

### **Mug**

8.0 x 8.2 cm

Small, globular body with a wide mouth and flat base. The single handle, which is broken where it joins the body and neck. There are thick impressed and incised decorations under the rim, on the neck and on the body. Light red (5R 6/6) fabric with sandy, gritty and abundant mica. Red (7.5R 5/6) surface dulled in places.

### **Mug**

12.1 x 14.2 cm

Small, globular body with a flaring wide rim and flat base. Single handle. There is a thick band of impressed decoration on the body starting from the junction of the handle. Light red (5R 6/6) fabric with sandy, gritty and abundant mica. Red (5R 4/8) surface.

### **Cooking Pot**

20.6 x 26.2 cm

Flat base with a flat spherical body and wide rim. Small, single handle extending from the body to the shoulder. There are notches and incised decoration on the body. Black (10YR 2/1) fabric with sandy, gritty and abundant mica. Black - brown (10YR 2/2) mat surface.

### **Cooking Pot**

24.4 x 28.6 cm

Flat base with a squat globular body and wide flaring rim. Single handle extending from the body to the shoulder. There is a thick band of impressed decoration around the vessel and incised decoration on the body. Brown (10YR 3/4) fabric with sandy, gritty and abundant mica. Brown (10YR 3/6) mat surface.

### **Cooking Pot**

14.5 x 15.0 cm

Flat base with a squat globular body and wide flaring rim. Single handle extending from the body to the shoulder. There is incised decoration on the body and neck. Brown (7.5YR 5/8) fabric with sandy, gritty and abundant mica. Brown (5YR 3/3) mat surface.

### **Cooking Pot**

16.1 x 17.0 cm

Flat base with a squat globular body and flaring wide rim. Single handle extending from the body to the

shoulder. There is incised decoration on the body and neck. Brown (5YR 3/4) fabric with sandy, gritty and abundant mica. Brown (5YR 3/2) mat surface.

### **Cooking Pot**

12.5 x 18.0 cm

Flat base with a flat spherical body and wide rim. Small, single handle extending from the body to the shoulder. Dark gray (5YR 4/1) fabric with sand, grit, stones and abundant mica. Dark gray (5YR 4/1) mat surface without any decoration.

### **Cooking Pot**

12.3 x 12.0 cm

Flat base with a squat globular body and wide flaring rim. Single handle extending from the body to the shoulder. There is incised decoration on the body and neck. Brown (10YR 3/6) fabric with sandy, gritty and abundant mica. Brown (10YR 3/6) mat surface.

### **Cooking Pot**

19.2 x 24.1 cm

Flat base with a squat globular body and wide flaring rim. Single, broken handle extending from the body to the shoulder. There is incised decoration on the body and neck. Brown (7.5YR 4/6) fabric with sandy, gritty and abundant mica. Brown (10YR 3/6) mat surface.

### **Cooking Pot**

19.2 x 22.0 cm

Flat base with a squat globular body and wide flaring rim. Single handle extending from the body to the shoulder. Starting from the junction of this handle with the body, there is a thick band of impressed decoration around the vessel and incised decoration on the body. Brown (5YR 3/2) fabric with sandy, gritty and abundant mica. Brown (7.5YR 5/6) mat surface.

### **Cooking Pot**

14.1 x 18.4 cm

Flat base with a squat globular body and wide flaring rim. Single handle extending from the body to the shoulder. There is a thick band extending from the junction of the handle with the body to the base around the vessel, and incised decoration on both the handle and the body. Brown (5YR 3/4) fabric with sandy, gritty and abundant mica. Brown (7.5YR 5/6) mat surface.

### **Cooking Pot**

28.4x10.2 cm

Wide rim, semicircular body and flat base. There are two handles extending from the rim to the body. Brown (10YR 3/6) fabric with, sandy, gritty and abundant mica. Brown (7.5YR 5/8) mat surface.

### **Cooking pot**

9.6 x 14.3 cm

Flat base with a squat globular body and wide flaring rim. Single loop handle rising from the rim on one side and ending at the rim on the other. Dark gray (5YR 4/1) fabric with sand, stones, lime and abundant mica. Dark gray (5YR 5/1) mat surface without any decoration.

### **Cooking Pot**

8.0 x 12.4 cm

Round body, wide flaring rim and flat base. Single handle extending from the body to the shoulder. There are notches and incised decoration on the neck. Black (10YR 2/1) fabric with sandy, gritty and abundant mica. Brownish black (10YR 2/2) dull and abraded surface.

### **Cooking Pot**

19.6 x 28.1 cm

Flat base with a squat globular body and wide flaring rim. There is no handle There are incised decorations on the body and neck. Light brown (5YR 6/4) fabric with sandy, gritty and abundant mica. Light brown (5YR 5/4) mat surface.

### **Cooking Pot**

14.8 x 21.4 cm

Flat base with a squat globular body and wide flaring rim. The rim is broken and there is no handle. There is a thick band around the vessel and incised decorations within this band. Light brown (5YR 6/4) fabric with sandy, gritty and abundant mica. Light brown (5YR 6/4) mat surface.

### **Cooking Pot**

20.1 x 22.6 cm

Flat base with a squat globular body and wide flaring rim. There is no handle. There is incised decoration on the body and neck. Light brown (5YR 4/6), sandy, gritty and abundant mica. Light brown (5YR 6/4) mat surface.

### **Cooking Pot**

18.8 x 20.0 cm

Flat base with a squat globular body and wide flaring rim. The vessel was deformed during firing and has no handle. There are incised decorations on the body and neck. Light brown (5YR 6/4) fabric with sandy, gritty and abundant mica. Light brown (5YR 6/4) mat surface.

### **Lid**

Diam. 21.0 cm

Flat, disc-shaped, with a central handle and thick wall. The bottom is flat and the top has intertwined, deep circular grooves. Dark brown (10YR 3/3) fabric with sandy, gritty and abundant mica. Brown (10YR 4/3) mat surface.

### **Lid**

Diam.20.2 cm

Flat, disc-shaped, thick-walled with a wide handle extending from the rim to the centre. The bottom is flat and the top has intertwined, deep circular grooves. Dark brown (10YR 3/3) fabric with sandy, gritty and abundant mica. Brown (10YR 4/3) mat surface.

### **Lid**

Diam. 19.4 cm

Flat, disc-shaped, thick-walled with a wide handle extending from the rim to the center. The bototm is flat and the top has deep circular grooves. Dark brown (10YR 3/3) fabric with sandy, gritty and abundant mica. Brown (5YR 3/4) mat surface.

### **Lid**

Diam.16.2 cm

Flat, disc-shaped, with a central broken handle and thick wall. The bottom is flat and the top has deep circular grooves with incised decoration on the grooves. Dark brown (7.5YR 3/3) fabric with sandy, gritty and abundant mica. Brown (5YR 3/4) mat surface.

### **Lid**

Diam.24.4 cm

Flat, disc-shaped, thick-walled with a wide handle extending from the rim to the center. The bottom is flat and the top has deep circular grooves. Dark brown-black (10YR 2/2) fabric with sandy, gritty and abundant mica. Brown-black (10YR 2/2) mat surface.

### **Lid**

Diam. 15.1 cm

Flat shaped with a central handle and thick wall. There is impressed decoration on the rim and handle rim. Black (10YR 2/1) fabric with sandy, gritty and abundant mica. Black (10YR 2/1) mat surface.

### **Lid**

Diam. 11.4 cm

Flat, disc-shaped, with a central handle and thick wall. The bottom is flat and the top has high circular grooves and impressed decorations on the rim and the edge of the handle. Dark brown (10YR 3/3) fabric with sandy, gritty and abundant mica. Brown (5YR 3/4) mat surface.

### **Lid**

Diam.19.4 cm

Conical, with a broken handle in the center and thick wall. No decoration. Black (10YR 2/1) fabric with, sandy, gritty and abundant mica. Black (10YR 2/1) mat surface.

### **Lid**

Diam. 20.0 cm

Conical, stepped, with a handle in the centre and thick wall. There are notches on the rim and barbotine decoration on the top of the lid. Brown (5YR 3/4) fabric with sandy, gritty and abundant mica. Brown (5YR 3/3) mat surface.

### **Wheel Made I=Lamp**

8.4x5.6cm

Single-handled and shallow-oval in shape. It has a flat base and a handle for finger pressure at the top of the high handle extending up from the body. Brown (5YR 3/4), sandy, gritty and abundant mica tempered paste, brown (5YR 3/3) matt surface.

### **Wheel Made Lamp**

8.9x5.1cm

Single-handled and shallow-oval in shape. It has a flat base and a dot decoration on the handle extending up from the body. Dark brown (10YR 3/3), sandy, gritty and abundant mica tempered paste, brown (5YR 3/4) matt surface.

### **Arrowhead**

10.8x3.6cm

Flat with equilateral edge form. Wide rim tapering towards the tip. It has a short quadrangular tang and a short quadrangular neck.

#### **Arrowhead**

8.6x3.7cm

Flat with equilateral edge form. Wide rim tapering towards the tip. It has a short quadrangular tang and a short quadrangular neck.

#### **Arrowhead**

8.5x2.0cm

Flat with long deltoid edge form. Narrow rim tapering towards the tip. It has a short quadrangular tang and a short quadrangular neck.

#### **Arrowhead**

5.8x2.0cm

Flat with long deltoid edge form. Narrow rim tapering towards the tip. It has a short neck of circular cross-section and the tang is broken.

#### **Arrowhead**

5.8x2.0cm

Quadrangular shape. The piece is broken at the tip and has a quadrangular rim tapering towards the tip. It has a short circular tang and a short circular neck.

#### **Arrowhead**

10.2x1.1cm

Quadrangular shape. It has a pointed, quadrangular rim tapering towards the tip. It has a long tang of circular cross-section and a short neck also of circular cross-section. There is a very prominent collar between the neck and the needle.

#### **Arrowhead**

7.1x1.2cm

Quadrangular shape. It has a pointed, quadrangular rim tapering towards the tip. It has a short circular tang and neck.

#### **Arrowhead**

6.3x1.0cm

Quadrangular shape. It has a pointed, quadrangular rim tapering towards the tip. It has a short circular tang and neck.

#### **Arrowhead**

10.0x0.8cm

Quadrangular shape. It has a pointed, quadrangular rim tapering towards the tip. It has a long circular tang and a short circular neck.

#### **Arrowhead**

10.4x0.8cm

Quadrangular shape. It has a pointed, quadrangular rim tapering towards the tip. It has a long circular tang and a short circular neck.

### Arrowhead

5.4x1.6cm

Triangular shape. It has a triangular rim tapering towards the tip. It has a short circular tang and neck.

### Pendant Cross

3.6x3.4cm

In the shape of a Latin cross (?). The upper arm is missing and each corner of the arms terminates in a circular droplet. The obverse surface of the cross is decorated with concentric circles, and traces in the centre and on the arms suggest that it was once decorated with precious stones (or other inlays such as glass). The reverse is plain and undecorated.

### Processional Cross

5.4x6.7cm

In the shape of a Latin cross. The upper arm is missing and each corner of the arms terminates in a neat circular disk. This circle is missing at the end of one of the horizontal arms, while the lower arm has traces of the small handle for the wooden staff. The obverse surface of the cross is decorated with concentric circles, and traces in the centre and on the arms suggest that it was once decorated with precious stones. The reverse is plain and undecorated.

### Processional Cross

7.6x7.1cm

In the shape of a Latin cross. The upper arm is missing, and each corner of the arms terminates in a neat circular disk. The lower arm is missing the attachment for the wooden staff. The obverse surface of the cross was once been decorated with precious stones, both in the centre and on the arms.

### Bronze Coin

Follis

Mauricius Tiberius (582-602), Constantinople mint .

Obverse: DN [VRC TI €R] PP VI

Bust of emperor facing, wearing crown with feathered sorghum and pendilia, holding a crossed globus in his right hand. Paludamentum on left shoulder.

Reverse: M, ANNO to left, cross above , year numeral to right II, letter of. Δ

### Bronze Coin

Follis, Type 1

Constantine X (1059-1067), Constantinople mint.

Obverse: [+EMMA NOVHA]

Christ standing on square souppedion, bearded head with cross nimbus. Dots on each arm of the nimbus. Dressed in tunic and himation, holding cloak with right hand, book in left hand. IC and XC on left and right.

Reverse: [+KWNTΔK] (right), [€VΔKAVTO] (left), Eodokia standing left, facing front, wearing crown with pendilia and loros. On right, Constantine standing, facing front, wearing crown with pendilia and loros. Between them they hold a labarum. In the centre is a cross. Labarum on three stepped pedestal. Both figures have their hands to their chests.

### **Bronze Coin**

Dirham, Artuqid Coin

Qutb al-Din Il-Ghazi II (AH 572-580/AD 1176-1184), Mardin mint

Obverse: Two crowned and draped busts in Byzantine style, reminiscent of the coins of Heraclius and his son.

Reverse: Date in five lines and in margin on sides / name of Abbasid caliph, partial mint formula and name and pedigree of Qutub al-Din Il-Ghazi, in five lines across field and in margins.

### **Bronze Coin**

Follis

Heraclius (610- 641) ,

Obverse: Heraclius (?) on left, Heraclius Constantinus (?) on right, wearing chlamys and crown.

Reverse: Illegible.

### **Bone Pin**

7.1 x 0.6cm

Small needle-shaped with knob-shaped finial at one end and tapering to a point at the other. The surface is shiny and smooth.

### **Bone Applique**

Diam. 1.8cm

Small scone of circular form with a domed upper surface and flat bottom. There are three decorative concentric circles on the upper surface.

### **Millstone**

Upper stone diam.44.2 cm. Shaft diam. 8.0 cm. Handle hole diam. 4.5 cm. Lower stone diam. 46.4 cm. Shaft Groove diam. 9.0 cm.

Basalt hand mill or grinding stone comprising two circular pieces.

## **AUTHOR CONTRUBITION**

Oğuz Koçyiğit: Conceptualization and establishing the article as well as methodology, comparing the dates of the finds with the analogical methods. Also collecting of resources, writing and original draft preparation of the text. Writing the bulk of the body text (50%).

Abdulkadir Özdemir: Monitoring the excavations in the medieval layers of Murat Höyük as well as coding and evaluating the finds. Formal analysis, project administration and funding. Writing the bulk of the body text (30%).

Ayşe Özdemir: Asisting of the excavations in the medieval layers of Murat Höyük as well as coding and evaluating the finds. Supervision, writing—review and editing of the text. Writing the bulk of the body text (20%).

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