



MERSİN ÜNİVERSİTESİ KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ  
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CILICIAN ARCHAEOLOGY



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**KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ**  
**BİLİMSEL SÜRELİ YAYINI 'OLBA'**

**Amaç**

Olba süreli yayını; Küçükasya, Akdeniz bölgesi ve Ortadoğu'ya ilişkin orijinal sonuçlar içeren Arkeolojik çalışmalarda sadece belli bir alan veya bölge ile sınırlı kalmaksızın 'Eski Çağ Bilimleri'ni birbirinden ayırmadan ve bir bütün olarak benimseyerek bilim dünyasına değerli çalışmaları sunmayı amaçlamaktadır.

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Dipnot (kitaplar ve makaleler için)

Richter 1977, 162, res. 217.

Diğer Kısaltmalar

age.	adı geçen eser
ay.	aynı yazar
vd.	ve devamı
yak.	yaklaşık
v.d.	ve diğerleri
y.dn.	yukarı dipnot
dn.	dipnot
a.dn.	aşağı dipnot
bk.	Bakınız

4. Tüm resim, çizim ve haritalar için sadece "fig." kısaltması kullanılmalı ve figürlerin numaralandırılmasında süreklilik olmalıdır. (Levha, Resim, Çizim, Şekil, Harita ya da bir başka ifade veya kısaltma kesinlikle kullanılmamalıdır).



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**‘RESEARCH CENTER OF CILICIAN ARCHAEOLOGY’**  
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**Scope**

Olba is printed once a year in May. Deadline for sending papers is the end of November each year.

The Journal ‘Olba’, being published since 1998 by the ‘Research Center of Cilician Archeology’ of the Mersin University (Turkey), includes original studies done on prehistory, protohistory, classical archaeology, classical philology (and ancient languages and cultures), ancient history, numismatics and early christian archeology of Asia Minor, the Mediterranean region and the Near East.

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  - b. The text should be written in 10 puntos ; the abstract, footnotes, catalogue and bibliography in 9 puntos ‘Times New Roman’ (for PC and for Macintosh).
  - c. Footnotes should take place at the bottom of the page in continuous numbering.
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2. Punctuation (hyphen) Marks:
  - a) One space should be given after the comma in the sentence and after the dot at the end of the sentence.
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  - c) The indication fig.:
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3. The ‘Bibliography’ and ‘Abbreviations’ should take part at the end of the article. The ‘Abbreviations’ used in the footnotes should be explained in the ‘Bibliography’ part. The bibliography used in the footnotes should take place as abbreviations and the following order within the abbreviations should be kept: Name of writer, year of publishment, page (and if used, number of the illustration). This rule should be applied even if a publishment is used only once.

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Footnotes (for books and articles):

Richter 1977, 162, fig. 217.

Miscellaneous Abbreviations:

op. cit.	in the work already cited
idem	an author that has just been mentioned
ff	following pages
et al.	and others
n.	footnote
see	see
infra	see below
supra	see above

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10. Figures should be at least 300 dpi; tif or jpeg format are required.
11. The article, figures and their layout as well as special fonts should be sent by e-mail (We Transfer).

## A GROUP OF ONE-HANDLED “SARDIS TYPE” AMPHORAE FROM THE EXCAVATIONS AT KÜÇÜKÇEKMECE LAKE BASIN (BATHONEA ?)

Ülkü KARA \*

### ÖZ

#### Küçükçekmece Göl Havzası Arkeolojik Kazıları’ndan (Bathonea ?) “Sardis Tip” Olduğu Düşünülen Bir Grup Tek Kulplu Amphora

Antik Çağın sonunda, İstanbul’un Avcılar İlçesinde yer alan Küçükçekmece Gölü, önemli bir Geç Roma - Erken Bizans yerleşimine ev sahipliği yapmıştır. Küçükçekmece Gölünün batı kıyısında gerçekleştirilen Küçükçekmece Göl Havzası Arkeolojik Kazıları (Bathonea?), Constantinopolis’in hinterlandında konumlanmış bir liman yerleşimine dair önemli bulguların açığa çıkmasını sağlamaktadır. “8. Bölge” olarak adlandırılmış alanda, νοσοκομείον (*nosokomeion*) olduğu sanılan bir yapı tespit edilmiş ve yapıyla ilişkili olduğu düşünülen bir mekan açığa çıkarılmıştır. Kazı çalışmaları sonucunda, söz konusu mekanın içindeki eşyalarla birlikte yıkıldığı ve kısmen de bir yangına maruz kaldığı anlaşılmaktadır. Mekanın içerisinde ele geçmiş çok sayıda amphora, toplu unguentarium grubu, mermer mortarium, havan eli, kemik ilaç kutusu ve spatula şu ana kadar tespit edilmiş buluntulardan bazılarıdır. Burada sunulan çalışmada, söz konusu yapıya ait bir mekan içerisinde, *insitu* halde tespit edilmiş bir grup tek kulplu “Sardis Tip” amphorası ele alınmıştır. Amphoralar, morfolojik ve anolojik biçimde incelenmiş ve taşıdığı ürün hakkında değerlendirmeler yapılmıştır. Küçükçekmece’de ele geçen altı amphoranın, morfolojik incelemesi sonucunda, aynı anda üretildikleri ve aynı yerden buraya geldikleri düşünülmektedir. Diğer taraftan, “Sardis Tip” amphora grubuna dahil edilen ve bu gruba ait olduğu düşünülen diğer merkezlerdeki (Pyrgouthi, Sucidava, Tomis, Histria, Capidava, Caesarea ve Sardis) buluntu örnekleri tespit edilmiştir. Bilinen ve tespit edilen amphora örneklerinin kil yapısı ve rengi karşılaştırma unsurlarından biridir. Caesarea örneği haricinde diğer örneklerin kil yapılarının çok benzer olduğu anlaşılmış ve burada incelenen tüm amphoraların hamur renklerinin de birbirine çok yakın oldukları tespit edilmiştir. Formları açısından ise, Küçükçekmece amphoralarına en yakın örnek Pyrgouthi amphorasıdır. Histria ve Tomis amphoralarının form yapısı ise oldukça benzerdir. İncelenen diğer örneklerin de, benzer ve karşılaştırılabilir formlar özellikleri mevcuttur. Güncel veriler ışığında henüz tespit edilmiş bir üretim atölyesi ya da merkezi mevcut değildir. Ancak, söz konusu “Sardis Tip” amphora grubunun üretim yerine dair önerilen ve kabul gören düşünce, Sardis çevresinde aranması gerektiği yönündedir. Sardis’te bilinen örnekler arasında Küçükçekmece amphoralarının net benzeri bulunmamasına karşın, Sardis’in

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kil yapısı ve buradaki tek kulplu amphora yapım geleneğinin bir ürünü olabileceği düşünülmüştür. İncelenen toplam on sekiz amphora örneğinin dönemi ve ürün içerikleri de diğer karşılaştırma unsurlarıdır. Tarihlendirmeler, genellikle yakın tarih aralığına aittir. Çalışmada yapılan değerlendirmeye göre, söz konusu amphoraların genel anlamda, 6. yüzyıl ve 7. yüzyıl başında üretildiği ve kullanıldığı sanılmaktadır. Amphoraların ne taşımak için kullanıldığı ise net biçimde aydınlatılabilmemiş değildir. Şarap taşıdığına dair düşünce genel anlamda benimsenmiş olsa da, bunu söylemek için, tüm gruba dair yeterli düzeyde kanıt bulunmamaktadır. Diğer taraftan, unguent/yağ taşıyor olma ihtimali de oldukça önemlidir.

**Anahtar Kelimeler:** Küçükçekmece, Mika Killi Amphora, LRA 3, Tek Kulplu Amphora, “Sardis Tip”, Unguent.

### ABSTRACT

Küçükçekmece Lake, located in Avcılar district of Istanbul, hosted an important Late Roman-Early Byzantine settlement. Archaeological excavations in the Küçükçekmece Lake Basin (Bathonea ?) carried out on the west coast of Lake Küçükçekmece, have provided important discoveries of a harbor settlement located in the hinterland of Constantinople. In the "8<sup>th</sup> area", a structure which is thought to be a *νοσοκομειον* (*nosokomeion*) and a space, related to the structure came to light. It appears that the space was destroyed by fire and that, in particular, objects in the building were fired. Amphorae, marble mortars, pestles, bone medicine boxes, glasses, spatulas and a large number of unguentaria were recovered inside the space. This paper presents a group of one-handled “Sardis Type” amphorae which were discovered *in-situ* in the space related to the structure. Amphorae and their contents have been examined morphologically and analogically. According to a morphological examination of the six amphorae found in Küçükçekmece, it is thought that they were produced at the same time and were departed from the same center. On the other hand, samples from other centers (Pyrgouthi, Sucidava, Tomis, Histria, Capidava, Caesarea, and Sardis) classified as belonging to “Sardis Type” amphorae were detected and they are outlined in the paper. By comparison with the clay structure and colours of all amphora samples, It seems that the clay characteristics of the samples (except Caesarea amphora) are very similar, and the colours of all the amphorae are very close to each other. In terms of form, the closest example to the Küçükçekmece amphorae is the Pyrgouthi sample. Besides that, the form of the Histria and Tomis amphorae is very close to the Küçükçekmece amphorae, and; the other samples have similar and comparable formal properties. The production site of the “Sardis Type” group is not yet known by archaeologists. The accepted idea is that the origin of the “Sardis Type” amphora group is in the territory of Sardis because of the clay resemblance. In this paper, a total of eighteen amphora samples are compared according to date and content of the amphorae. All of these amphorae were likely produced and used in the middle of the 6<sup>th</sup> – beginning/middle of the 7<sup>th</sup> c. A.D. It is not clear which product these amphorae were used to transport, but the assumption is that they were transporting wine because of the traces of resin found in an amphora from a well at Sardis. On the other hand, the possibility of unguent/lipid transporting is also crucial.

**Keywords:** Küçükçekmece, Amphorae with micaceous clay, LRA 3, One-handled Amphora, “Sardis Type” Amphora, Unguent.

Archaeological excavations undertaken in the Lake of Küçükçekmece Basin (Bathonea ?) in Avcılar district of Istanbul were carried out in the western coast of Lake Küçükçekmece (fig. 1)<sup>1</sup>. Lake Küçükçekmece, once a gulf accessible through the sea in antiquity, was transformed into a lagoon lake due to its connection becoming over time narrower between the lake and the sea. The archaeological excavations here, due to its vicinity to Constantinople and its ancient harbor, provides evidence for the understanding of the hinterland of Constantinople and its commercial life<sup>2</sup>.

The so called (8<sup>th</sup> Area), identified during the excavations, revealed significant findings. *In-situ* findings were recently discovered in a space thought to belong to one of the structures which appears to have been demolished by fire. The archeological findings suggested it to be possibly considered a time capsule. Artifacts recovered include marble mortars (fig. 2), pestles, spatulas, bone medicine boxes, and glasses, as well as 386 unguentaria which were found together<sup>3</sup>. As a result of content analysis in one of the unguentaria "methanone" and "phenanthrene" were; detected, presumably used as medicine<sup>4</sup>. Analysis and archaeological evidence imply that the structure may have been a νοσοκομείον (*nosokomeion*), and this particular space may have served as a storeroom and/or medicine unit<sup>5</sup>.

The one-handled amphorae presented in this study were found in the abovementioned place. They are of the LRA 3 type. A part of these amphorae collection of amphorae was damaged by fire and demolition, as were many other items. These amphorae, which appear to have been placed together or close to one another, have been broken to pieces; while some pieces of amphorae had changed colour due to the fire, whilst others had not. Likely as a result of the collapse of the roof and walls of the structure in the fire, the amphorae were fragmented. Some pieces were exposed to direct fire while the others were just covered with plaster and the remnants of roof and walls. In this space, six amphorae of the so-called "Sardis Type"<sup>6</sup> were found according to the current excavation data. Three of the amphorae were completely repaired through conservation (BA44, BA45 and BA46). The others are incomplete; one amphora consists of a rim, handle, and a part of the neck (BA47); one of them is a fragmented part of

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2 For results of the Excavations at Küçükçekmece Lake Basin (Bathonea ?) see also: Atik 2018, 229ff; Aydıngün et al. 2011, 437ff; Aydıngün 2013, 41ff; Aydıngün 2017a, 1ff.; Aydıngün 2017b, 69ff.; Stanislawski 2017, 445ff: See also [www.bathonea.org](http://www.bathonea.org) for further publications on the excavations.

3 For findings in the space, see also; Atik – Özkılıç 2017, 319-20; Aydıngün 2017a, 3-5; Kara 2016, 48ff; Kara 2017, 277ff; Kaya 2017, 242ff.

4 They were interpreted as psychoactive tranquilizer, antiseptic, immune-enhancing, etc. substances, see Kaya 2017, 242-243.

5 Aydıngün 2017a, 4; Kaya 2017, 243.

6 Opait 2004, 18.

rim (BA48); and the last one is a base part (BA49). It is currently impossible to tell whether the base piece belongs to one of the two rim pieces<sup>7</sup>; thus, it is assumed that a total of six amphorae have been recovered.

## Catalog

### **BA44:** (fig. 3. BA44)

Diameter of rim: 3,8 cm; maximum diameter of body: 14 cm; height: 33,8 cm

Fabric: 5YR 7/8 reddish yellow

Slip: 5YR 7/8 reddish yellow

Inclusions: Intense dark particles, few lime and mica.

Volume: 2,85 litre<sup>8</sup>

Oval form-bodied one-handled amphora. Slightly flaring and rounded rim and slightly expanding neck with cylindrical rounded base. One handle is not preserved. Because of the fire, the colour of the surface is varies between light and dark grey.

### **BA45:** (fig. 3. BA45)

Diameter of rim: 3,8 cm; maximum diameter of body: 12,8 cm; height: 30,7 cm

Fabric: 2.5YR 6/8 light red

Slip: 2.5YR 6/8 light red

Inclusions: Dark particles, few lime and mica.

Volume: 2,5 litre

One-handled amphora with oval body. Slightly flaring and rounded rim and slightly expanding neck with cylindrical rounded base. Handle oval in section. Body is partially broken and missing. Because of the fire, the colour of the surface varies between light and dark grey.

### **BA46:** (fig. 3. BA46)

Diameter of rim: 4,1 cm; maximum diameter of body: 14 cm; height: 36,5 cm

Fabric: 2.5YR 7/8 light red

Slip: 5YR 7/6 reddish yellow

Inclusions: Dark particles, few lime and mica.

Volume: 2,9 litre

One-handled amphora with asymmetric oval body. Slightly flaring and rounded rim and slightly expanding neck with cylindrical rounded base. Handle oval in section. Body and shoulder are partially broken and missing. Because of the fire, the colour of the surface varies between light and dark grey.

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7 Research is ongoing in the excavation area.

8 The volume calculations in this study are done according to the programme on <http://www.amphoralex.org> (20.02.2019) Rigor 1981, 193-194.



**BA47:** (fig. 3. BA47)

Diameter of rim: 4,1 cm; preserved height: 17,15 cm

Fabric: 2.5YR 7/8 light red

Slip: 2.5YR 7/6 light red

Inclusions: Dark particles, few lime and mica.

Slightly flaring and rounded rim, slightly expanding neck. Handle oval in section. Amphora is incomplete. Because of the fire, the colour of the surface varies between light and dark grey.

**BA48:** (fig. 3. BA48)

Preserved height: 4,9 cm

Fabric: 2.5YR 6/8 light red

Slip: 5YR 7/4 pink

Inclusions: Dark particles, few lime and mica.

Amphora with slightly flaring and rounded rim and cylindrical neck. Amphora is incomplete.

**BA49:** (fig. 3. BA49)

Preserved height: 2,4 cm

Fabric: 2.5YR 7/8 light red

Slip: 5YR 7/8 reddish yellow

Inclusions: Dark particles, few lime and mica.

Pointed and slightly rounded base.

All the one-handed Küçükçekmece amphorae mentioned above have the same structural features. They were made of similar pinkish red-coloured clay (2.5YR 6/8 – 2.5YR 7/8 – 5YR 7/8). The fabric was well fired and the fine and nonporous micaceous clay has black, and white inclusions. All of the amphora rims are slightly rounded, and only two different rim diameters (3,8 and 4,1 cm) have been ascertained. In general, the neck section follows the ridge located about 1,7 cm below the rim. The ridge is one of two morphological features that can be examined for differences among the current examples. The ridge on the BA44 amphora is a rounded swelling in form. Above the ridge, there is one concave groove made with a pointed tool (fig. 4. BA44). The form of the ridge structure in the BA45 and BA46 amphorae is just slightly pulled outside, and there is no groove (fig. 4. BA45-BA46). The ridge on the rim of BA47 has a relatively smooth transition, and the one on BA 48 consists of just a thin line (fig. 4. BA48).

Only three of the six amphorae have a preserved handle. The measured distance of the handles from the rim varies between 3 – 4,5 cm; and the height of the handles is in the range of 4,5 – 5,5 cm. The appliqué handle of BA46 is nearly a whole circle (fig. 5. BA46). The handles of BA45 and BA47 are positioned in a way that the upper parts are inclined below (fig. 5. BA45, BA47). The neck of the amphora form slightly expands towards the oval body, and the body narrows towards the base. The surface of

the base has shallow wheel lines, and its underside is rounded. The shallow grooves on the entire neck of the amphora deepen on the body and become shallow again towards the base. Grooves on the body were made with a thick pointed tool. The base height of the amphorae ranges between 2 – 2,4 cm.

The research into the distribution of the abovementioned one-handled amphorae showed that there are few published samples despite the spread of the amphorae to distant centers (fig. 6). In addition, some of the known examples are relatively different from the Küçükçekmece form. An amphora similar to the Küçükçekmece ones was found at Pyrgouthi (Greece) (fig. 7.1a-b) in a farmhouse dating to the second half of the 6<sup>th</sup> c. - middle of 7<sup>th</sup> c. A.D., and was involved in wine production. The fabric is fine and pink in colour, contains a lot of mica and fewer white inclusions (7.5 YR 7/4 pink). The rim is slightly pulled out, and just below the rim there is a ridge line which passes to the neck. The handle is roughly curved and appliquéd to the middle of the neck. The body is rounded and grooved, and ends with a small ridged bottom. The Pyrgouthi amphora is similar to the Küçükçekmece amphorae in dimensions<sup>9</sup> as well as in form<sup>10</sup>.

Another example of a one-handled amphora is from Histria (Romania), which dates to the 5<sup>th</sup> - 6<sup>th</sup> c. A.D., and is quite similar to the Küçükçekmece amphorae in form. It has a pink - red fabric with mica inclusions and cream coloured slip<sup>11</sup> (fig. 7.2a-b). The one-handled amphora form is called the “Sardis Type” by A. Opaît; due both to its similarity to samples found in Sardis, and to its likely production in vicinity of Sardis<sup>12</sup> The Histria amphora is similar to the BA44, BA45 and BA46 amphorae, particularly concerning the rim. With respect to the distance of the handle from the rim, it seems to be parallel with the BA47 amphora.

Another one-handled “Sardis Type” amphora fairly similar to the Küçükçekmece amphorae has been found in Tomis (Romania) near the Black Sea (fig. 7.3). The amphora, dating to the second half of the 6<sup>th</sup> c. A.D., is complete<sup>13</sup>. It has a reddish brown clay with abundant mica and a slip of the same colour<sup>14</sup>.

An amphora found in Capidava (Romania) which is near Histria, has a partially different body form. The amphora, dating to the end of the 5<sup>th</sup> c. A.D. or later, has a thin enlarging neck, a biconical body, and a small base (fig. 7.4a-b). Shallow grooves are visible on the neck and the body. The fabric is fine and dark red-brown, and the slip is of the same colour. In addition to the rim and handle, there are also parts

9 Maximum diameter of body: 14,4 cm; height: 37 cm; Wall: 1 cm.

10 Hjøhlmán 2005, 1, 32, 142-143, 159-160.

11 Maximum diameter of body: c.12 cm, Height: 28 cm.

12 Condurachi et al. 1960, 39-40; Popescu 1976, 171-72, no.154; Opaît 2004, 18.

13 Diameter of rim: 3,6 cm; maximum diameter of body: 14,8 cm; height: 40 cm.

14 Paraschiv 2006, 109-110. Another amphora rim in same clay and slip color dating the same period, was found in Tomis. Since it was incomplete and its form could not be distinguished properly, it was not classified as "Sardis Type". See also, Paraschiv 2006, 110, fig.18.22.

missing from the body of the amphora<sup>15</sup>, and flaking is visible on the surface. The volume of the amphora equals 1,47 liters according to calculation, but according to measure it equals 1,75 liters. Thus, the capacity of amphora is approximately equal to  $\frac{1}{2}$  *congiusa*<sup>16</sup>.

A fifth example is an amphora discovered at Sucidava (Romania), which has been dated to the 5<sup>th</sup> – 6<sup>th</sup> c. A.D. (fig. 7.5)<sup>17</sup>. The amphora has a double ridge rim, a grooved and oval body, a short, concave base, and an appliqué handle. The Sucidava example is different than other “Sardis Type” amphorae in its mouth and base features. The double ridge rim and the concave and expanding base form make it the most different form of the “Sardis Type” amphorae.

Another example is a rim fragment found in Caesarea (Israel) (fig. 7.6a-b) in a context dating to 630-660 A.D. The amphora’s fabric lacks mica and has a wall thickness in the range of c.0,8-1 cm. The clay is “moderate yellowish pink” (5YR 7/6) and the slip is “pale orange yellow” (5YR 8/6 - 10YR 8/4). However, traces of “reddish brown” (10R 4/6) slip are still visible on the surface<sup>18</sup>. This amphora, which is proposed as a different form of LRA 3 type or imitation, is similar to BA47 and BA48 in rim shape. This one-handled amphora, however, differs from the Küçükçekmece examples because the fabric lacks mica, there is a sharp transition from the neck to the body, and the handle has a thin section. The amphora from Caesarea is more similar to the Capidava amphora based on abovementioned features.

The six amphorae that have similar features to the one-handled Küçükçekmece amphorae; were found in two areas in Sardis. The first four examples were found in the Byzantine Shops, which had been out of use since the early 7<sup>th</sup> c. A.D. Mica inclusions were found in the fabric of all four amphorae<sup>19</sup>. First, an amphora found in E 14, which was once used as dye shop<sup>20</sup> (fig. 8.1), is an oval body amphora with a small base, no handle, and no rim part<sup>21</sup>. Likewise, a second example has a missing rim and handle (fig. 8.2). An amphora found in the space E 16, which is thought to be a residence, is pyriform in body and has a small base<sup>22</sup>. Shallow grooves from the neck to the base are visible on the surface, and thin slip had been applied on the surface<sup>23</sup>.

The third example, found in E 5, which is thought to be a jewelry workshop, is an amphora with a preserved body (fig. 8.3). A pyriform amphora does not have a handle

15 Maximum diameter of body: 13,6 cm; height: 35,6 cm.

16 Opriş 2003, 65.

17 Toropu – Tatulea 1987, 134-35.

18 Adan-Bayewitz 1986, 101-02, 121; See also for petrographical definition: Adan-Bayewitz 1986, 130; sample E.

19 Crawford 1990, 13.

20 Maximum diameter of body: 16 cm; preserved height: 30 cm.

21 Crawford 1990, 89, fig. 484.

22 Maximum diameter of body: 17,7 cm; preserved height: 34,5 cm

23 Crawford 1990, 94, fig. 532.

or a rim<sup>24</sup>. The fabric is porous and pink-buff coloured, and it contains lime and mica inclusions. The cream coloured slip turned grey due to heat, as the amphora was found in a burned context. Cloth or sponge marks are visible on grooves on the surface. The fourth example from the Sardis shops is a neck of an amphora<sup>25</sup> from the E8 painting shop (fig. 8.4a-b). The neck part is grooved<sup>26</sup>.

The Well layer dating end of the 6<sup>th</sup> c. A.D. is another location in Sardis where one-handed amphorae were detected. At this layer, two nearly complete amphorae which have identified as “Type B” were found (fig. 8.5a-b ve 8.6a-b)<sup>27</sup>. Neither amphorae have a rim part. The surface colour of the first amphora has colour differs due to firing and is a mid-coarse grained, light red clay (10R 3/6-7.5R 3/4) (fig. 8.5a-b). The fabric contains many golden mica and less lime inclusions. It has a fusiform body, a small base, and one small appliqué handle<sup>28</sup>. The amphora was roughly shaped, internal and external grooves are visible. The surface of the neck is smoother and the grooves on the body are deeper. Inside the amphora was found to be covered with thin resin or mastic<sup>29</sup>.

The second sample from the well is an amphora with mid-coarse grained reddish-yellow clay (5YR 7/6-2.5YR 6/6); the colour of the surface varies between light red-pink and white-yellow due to firing (fig. 8.6a-b). Its fabric contains many mica and less lime inclusions. Similar to the other one from the well, this amphora has a slightly rounded rim, appliqué handle, a tall and thin neck, narrower fusiform body, and a small slightly pointed base<sup>30</sup>. The neck and the upper part of the body have a relatively thin wall and grooves on the body are still visible on the neck. The outer part of the handle is concave. Cracks and splits due to drying are visible on the lower part of the body, and flaking can be detected on the surface<sup>31</sup>.

Few amphorae similar to the “Sardis Type” have been identified since the one-handed amphora found in Histria by Opait<sup>32</sup>. The other three amphorae found in Capidava, Sucidava, and Tomis near Histria have also been defined as “Sardis Type” and thought to have been made in a similar production convention despite the differences in form<sup>33</sup>. The Caesarea amphora is suggested to be produced in Sardis even though its clay does not contain mica<sup>34</sup>, and the amphora found in Pyrgouthi is thought

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24 Maximum diameter of body: 17,5 cm; preserved height: 35 cm

25 Maximum diameter of body: 8 cm; preserved height: 9 cm

26 Crawford 1990, 70, fig.326.

27 For the account of “Type B” amphorae fragments found in the second level of the well, see Rautman 1995, 81, Table 2.

28 Maximum diameter of body: 17 cm; preserved height: 44 cm.

29 Rautman 1995, 51, 64, 66-67, 2.89.

30 Maximum diameter of body: 15,8 cm; height: 48 cm.

31 Rautman 1995, 64, 66-67, 2.90, fig.20/2.90-21/2.90.

32 Opait 2004, 18; Opait 2017, 597.

33 Opait 2017, 597.

34 Adan-Bayewitz 1986, 101-02.

to have been produced in *Hermos* (Ἑρμιος) or *Maiandros* (Μαίανδρος) valley due to the mica content of its fabric<sup>35</sup>. While no production center for the one-handed amphorae could have been detected in Sardis or its vicinity, the assumptions that the amphorae found in the Sardis Byzantine Shops may be local and that two examples found in the Well may be the production of Sardis, are notably important. Considering all the above, it can be argued that all these amphorae contain a micaceous clay structure and also share LRA 3's general, small size form, with a narrow rim and toe structure, and groove features, and therefore that all samples may have the same origin. In this regard, although the one-handed amphorae discovered in the Excavations at Lake Küçükçekmece Basin (Bathonea ?) are exactly the same as the some forms presented here, and in this study it is suggested that the Küçükçekmece amphorae could have been produced in Sardis and/or its vicinity.

On the other hand, as in some of the above examples, there is no clear uniformity in the examples uncovered in Sardis. The examples identified as a result of the works carried out in the Well and the Shops have differences in their form. In particular, all of the examples found in the Shops are partially different in form. No typology was made for amphorae from the Shops but; in the study conducted in the Well, a form distinction was made and the two amphorae presented here were, included in a classification with the name “Type B”<sup>36</sup>.

The amphora from Pyrgouthi (fig. 7.1a-b) is thought to have been produced at the same time or very close in time because of its similarity to the amphorae from Küçükçekmece. However, considering the fact that the amphorae found in Sardis were dated to the late 6<sup>th</sup> c. A.D. - the early of the 7<sup>th</sup> c. A.D., it may be suggested that all the amphorae were produced and used around close dates. Also, it may be asserted that all amphorae presented may have been produced in the same center or the same and/or the close workshops.

As mentioned above, it is thought that the space where the amphorae were found at Küçükçekmece was demolished in the first quarter of the 7<sup>th</sup> c. A.D. in light of current data. It is impossible to know “how long the amphorae were used and/or stored there”, but the archaeological evidence points out that these amphorae belongs to a date later than the end of the 6<sup>th</sup> c. A.D.

The product carried in the one-handed amphora is generally thought to be luxury or semi-luxury consumer goods due to the amphora's volume<sup>37</sup>. The Capidava amphora is thought to have been used to transport a kind of sauce<sup>38</sup>. Another opinion is that the four samples identified in Romania carried wine<sup>39</sup>. Two examples found in the

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35 Hjohlman 2005, 159.

36 The Well classification assumes that two amphorae which were found in the well and a similar form with one-handle dating to the end of the 5<sup>th</sup> c. A.D. are included in the same "Type B". See also for further information on “Type B”: Rautman 1995, 42, 80-81, fig.8/1.32, Table 2.

37 Opreş 2003, 64; Hjohlman 2005, 242.

38 It is described “salted sauce” by Opreş, see Opreş 2003, 64.

39 Opait 2017, 597.

well in Sardis are asserted to have been used for storage or transportation of wine due to the resin residue detected<sup>40</sup>. In addition, it is also important to consider whether the one-handled “Sardis Type” may be “micaceous” amphorae that were used for expensive *Caroenum Maeonium* wine as suggested by Hayes<sup>41</sup>.

In the light of available data, there is no clear information about the content of the one-handled Küçükçekmece amphorae. However, the fact that these amphorae do not have a fermentation hole like other LR 3 amphorae found in the Excavations at Lake Küçükçekmece Basin (Bathonea ?); may indicate a different content than others. In addition to these, the one-handled amphorae may have been used to transport unguent/oil according to an analysis result from LRA 3<sup>42</sup>. The one-handled Küçükçekmece amphorae may also have been containers for an unguent or pharmacological product considering the possible function of the space in which they were found. However, there is no clear evidence that all amphorae presented here transported the same product.

On the other hand, an explanation is needed for why so few examples of “Sardis Type” amphorae have been found. The possibility of carrying a kind of unguent instead of a food product may clarify this situation a little, but can not explain it completely. Regardless of its content, examples of this amphora group can be expected to have been found in greater number in excavations. Accordingly, it is noteworthy that, in the case of a small number of identified samples, the known examples are complete or nearly complete in form. The amphora form can be identified in excavations, most easily if the body part is all or almost complete<sup>43</sup>. Nevertheless, it is very difficult to know whether this amphora form was mass produced or not. If it is presumed that the content of this amphorae was wine, however, it is possible that the amphorae may have come to Constantinople as part of the organization of the food supply (*annona*) in the empire.

In general terms, two temporal intervals can be deduced regarding the production and use-by date of one-handled “Sardis Type” amphorae. Given the information above, the Capidava, Tomis, Sucidava, and Histria examples date to the 5<sup>th</sup> - 6<sup>th</sup> c. A.D. and the Sardis, Pyrgouthi, and Caesarea amphorae date to the 6<sup>th</sup> century-7<sup>th</sup> c. A.D. Therefore, it is important to note that they were produced and used in a narrow time interval. On the basis of the suggestion that the fire at Küçükçekmece occurred in the early 7<sup>th</sup> c. A.D.<sup>44</sup>, and it follows that the one-handled Küçükçekmece amphorae also date to the end of the 6<sup>th</sup> c. – beginning of the 7<sup>th</sup> c. A.D. and that they are parallel with examples mentioned above.

Although one-handled amphorae are generally claimed to have been produced in

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40 Rautman 1995, 42.

41 Hjohlman 2005, 160; Hayes 1992, 63, n.6.

42 Hjohlman 2005, 160; Rothschild-Boros 1981, 83-86.

43 For instance, a similar sample found in the vicinity of Caesarea is not included to this group since it is not described as an amphora. See ‘Ad 2000, 31, fig.59.7.

44 Aydingün 2017a, 4.

the vicinity of Sardis, there is no general typology for the evaluation of them within or outside of the LRA 3<sup>45</sup> group. As a result of the evaluation of the Küçükçekmece amphorae, these one-handed amphorae can be classified as a sub-type of LRA 3, which itself has not yet been fully studied regarding its typology or production centers. After detailed typological and production investigations on the LRA 3 type are made, the typology, chronology and production characteristics of the one-handed “Sardis Type” amphorae should be clarified. It is hoped that the ongoing studies in the Excavations at Lake Küçükçekmece Basin (Bathonea ?) will eventually provide more clear-cut information regarding usage customs and the content of these amphorae.

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45 As is known, LRA 3 involves many groups and expanded into the Black Sea, Aegean and Mediterranean countries. It is accepted that the LRA 3 versions were produced by more than one production center. And it is thought they should be found in the Hermos and Maiandros valleys. See also for more detailed information on LRA 3: Bezeczky et al. 2013, 164-67, Type 55; Peacock – Williams 1991, 188-190; Pieri 2005, 94-101, class 45; Şenol 2009, 250-51.

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Fig. 1 Localisation of the Excavations at Küçükçekmece Lake Basin (Bathonea ?) (KARA 2016, fig.1).

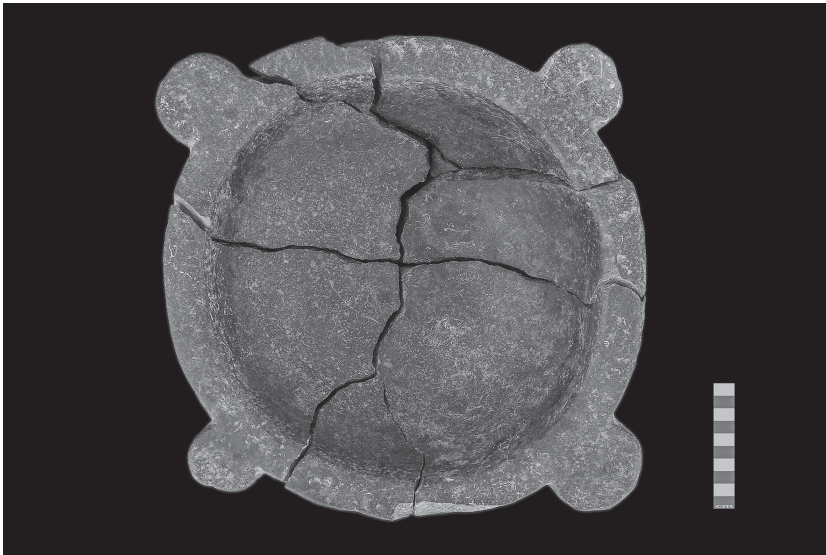


Fig. 2 Porphyry mortarium from the space (Photograph: A.ENEZ)

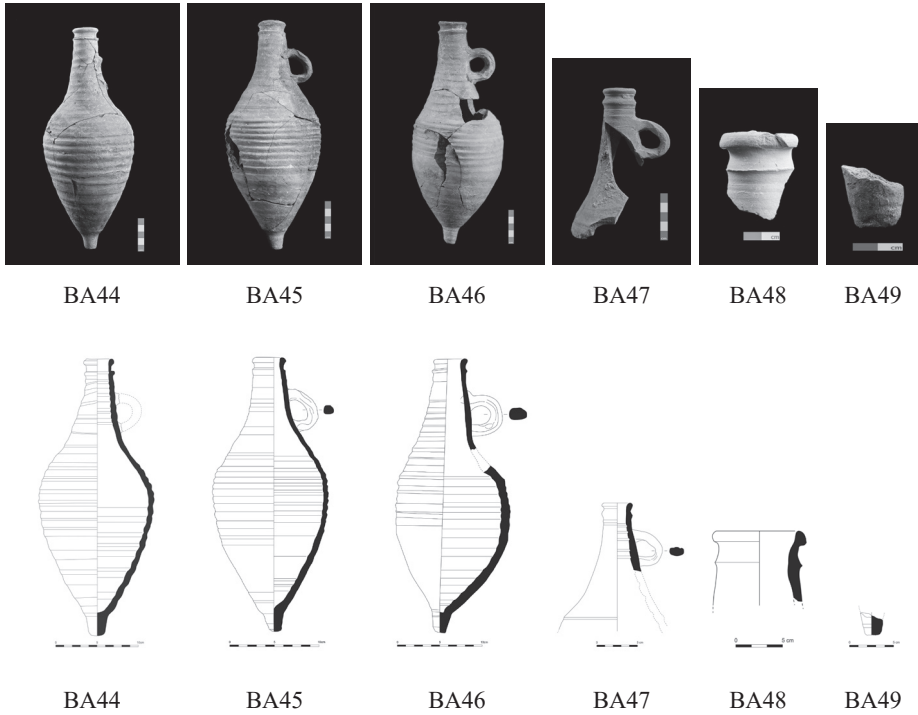


Fig. 3 Photographs and drawings of BA44, BA45, BA46, BA47, BA48 ve BA49 (Photograph: S.KARA - Drawing: B.GÜLKAN)



Fig. 4 The rim details of BA44, BA45, BA46, BA47, BA48 and BA49 amphorae (Photograph: S.KARA)

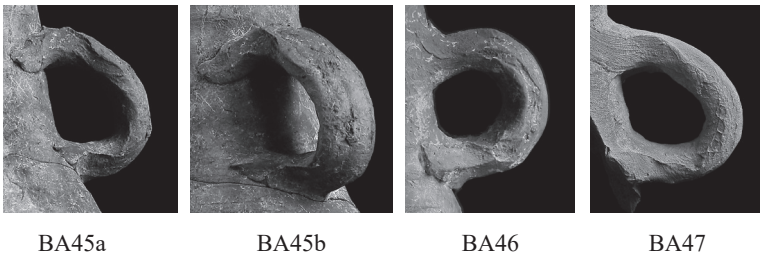


Fig. 5 The handle details of BA45, BA46 ve BA47 amphorae (Photograph: S.KARA)



Fig. 6 Distribution of one-handed "Sardis Type" amphorae (Drawing: M.ÇETİN).

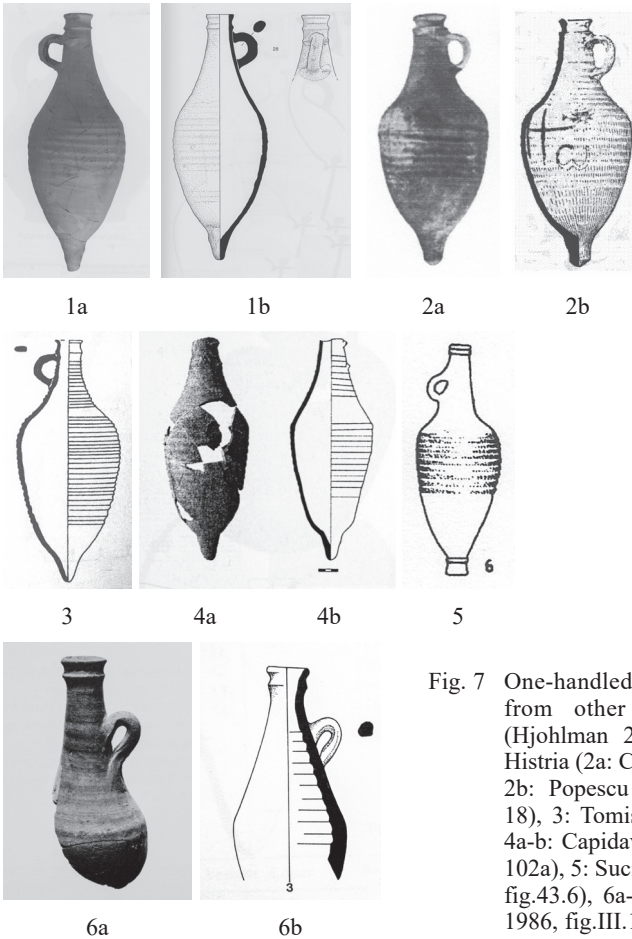


Fig. 7 One-handed "Sardis Type" amphorae from other centers: 1a-b: Pyrgouthi (Hjohlman 2005, fig. 16.28; 32), 2a-b: Histria (2a: Condurachi et alii 1960, fig.11; 2b: Popescu 1976, no.154; Opait 2004, 18), 3: Tomis (Paraschiv 2006, Pl.18.21), 4a-b: Capidava (Opriş 2003, Pl.XXII.102-102a), 5: Sucidava (Toropu – Tatulea 1987, fig.43.6), 6a-b: Caesarea (Adan-Bayewitz 1986, fig.III.102, 2.3).

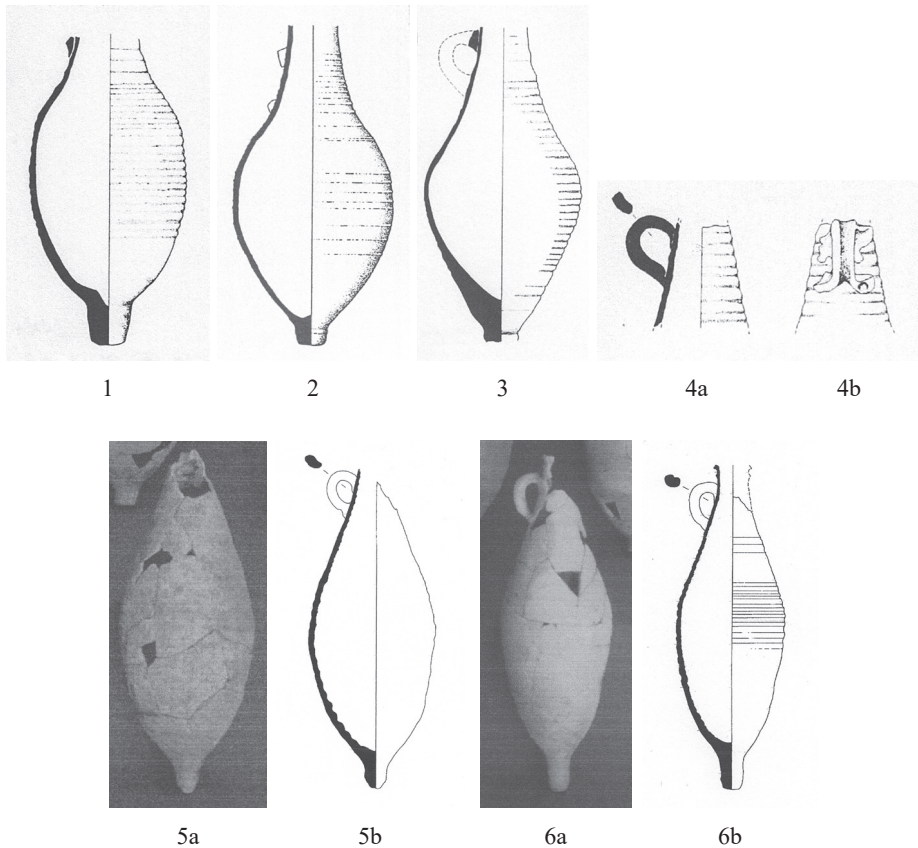


Fig. 8 One-handed "Sardis Type" amphorae from Sardis: 1: From Shop E 14 (Crawford 1990, 89, Fig.484), 2: From Shop E 16 (Crawford 1990, 94, Fig.532), 3: From Shop E 5 (Crawford 1990, 58, Fig.245), 4a-b: From Shop E 8 (Crawford 1990, 70, Fig.326), 5a-b: From Hilltop Well, upper levels (Rautman 1995, fig.20/2.89-21/2.89), 6a-b: From Hilltop Well, upper levels (Rautman 1995, fig.20/2.90-21/2.90).

