

## AMPHORAE ASSEMBLAGES OF THE SECOND QUARTER - MID-6<sup>TH</sup> CENTURY BC FROM THE NORTH-EASTERN PART OF THE BEREZAN ISLAND SITE\*

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**Keywords:** *Greek transport amphorae, archaic period, Berezan, Borysthene, trade in antiquity.*

**Abstract:** *In this article we analyze joint finds of the transport amphorae, belonging to the different types and different centers of production, found in the filling of several structures of the archaic Berezan settlement, including dugouts and storage pits. Most of these structures are dated to the second quarter or to the beginning of the third quarter of the 6<sup>th</sup> century BC, i.e. to the time shortly before the beginning of the phase of rapid urbanization of Berezan settlement. Since the Berezan island site is well stratified, these assemblages give an essential data for establishing relative chronologies for various types of transport amphorae.*

Archaic Greek transport amphorae studies have made very significant progress in recent decades. Several synthesis books devoted to the amphorae containers of this time<sup>1</sup> have been published, but the insufficient number of archaic assemblages, containing completely preserved vessels still leaves numerous gaps in our knowledge<sup>2</sup>. For example, the study of S. Yu. Monakhov (1999) used only six ceramic assemblages from the North Pontic sites in order to synchronize certain types of archaic amphorae<sup>3</sup>. Archaic contexts of the Berezan settlement, namely - the filling of premises, semi-dugouts and storage pits due to their multiplicity have a great potential as a source of data in order to establish

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<sup>1</sup> BÎRZESCU 2012; SEZGIN 2012.

<sup>2</sup> MONAKHOV & KUSNETSOVA 2017, p. 63-65.

<sup>3</sup> MONAKHOV 1999, p. 33.

relative chronologies for on various types of archaic amphorae. The Berezan island site is well stratified: the investigated structures in the vast majority of cases can be confidently assigned to stratigraphic periods and phases lasting 20-50 years. Therefore, the distribution of finds within these phases gives an opportunity to trace the evolution of certain types and series of vessels over the time.

On the other hand, the peculiarity of Berezan island site is a small number of contexts of the 6<sup>th</sup> century BC, containing truly representative assemblages of completely preserved vessels. Thus, for example, during the period of 2004-2017, in the course of State Hermitage museum mission excavations of „O-Western” sector, only 16 complete or partly complete archaic amphorae were found, although the big fragments (e. g. complete neck with some part of the shoulders), which allow determining the type of vessel, were much more numerous. In this paper, we will focus on the finds from several contexts, dated to the 2<sup>nd</sup> – beginning of the 3<sup>rd</sup> quarters of the 6<sup>th</sup> century BC. These assemblages contained numerous amphorae finds, allowing establishing their relative chronology. Among them – storage pits Nos. 234 and 254, as well as a rectangular semi-dugout No. 73. In addition, we will take into account amphorae of similar types, found in the filling of two more structures (circular semi-dugout No. 63 and storage pit 162), dated according to the finds of east Greek pottery more widely - within the whole first half of the 6<sup>th</sup> century BC.

The contexts we are interested in are related to the boundary between the two first stratigraphic periods of the Berezan settlement’ existence. The earliest period, dating from late 7<sup>th</sup> to the beginning of the second half of the 6<sup>th</sup> century BC, is represented exclusively by the structures, partially or fully set into the soil – dugouts or pit houses and storage pits. No any structures dated before the late 7<sup>th</sup> century BC has yet been found<sup>4</sup>. Although some earlier and later objects can be often identified within the framework of the first period<sup>5</sup>, it still cannot be divided into separate stratigraphic phases due to the fact that layers corresponding to the first period of occupation are difficult to identify. For the time being one can speak only of the mutual chronology of individual structures in the cases when it is determined by stratigraphy. The second period covers the time of an urbanized colony existence lasting approximately from the 540's BC up to the 480's - 460's BC<sup>6</sup>. It was during this period that the cultural layers of the Berezan settlement were formed most intensively due to the erection of mudbrick and stone houses, their destruction and rebuilding.

### **„Proto-Thasian” amphorae**

A significant share of the amphorae imports on Berezan starting approximately from the middle of the 6<sup>th</sup> century BC, make up I. B. Zeest’s „proto-Thasian” or „Samian” amphorae<sup>7</sup>, also known as „amphorae of uncertain provenance with profiled toe”, or Ionia β, Ionia I. The place of their production

<sup>4</sup> SOLOVYOV 1999, p. 3-4.

<sup>5</sup> CHISTOV *et al.*, 2012, p. 15-18.

<sup>6</sup> CHISTOV *et al.* 2012, p. 72, 106-108, 120-121.

<sup>7</sup> ZEEST 1960, p. 137-142, tab. I. 3, V. 15, VI.15.

was suggested as Northern Aegean<sup>8</sup>, but also East Greece<sup>9</sup>. The North Ionian localization of these amphorae' place of production seems most likely nowadays, although some of their series may have different origins<sup>10</sup>. New finds of amphorae of the earliest series of this type in the Berezan' contexts allow specifying the chronological framework of their circulation in the North Pontic region. These vessels differ from the later ones by a characteristic ovoid body with a smooth transition from the neck to the shoulders.

Complete amphora of this group (**Fig. 1.1**) and the upper part of the same one (**Fig. 1.2**) was discovered in the filling of the storage pit No. 234, dated to the second quarter - middle of the 6<sup>th</sup> century BC. In addition, upper parts of two similar vessels were found in the filling of the rectangular dugout No. 73, dated to the same or a bit later time (**Fig. 1.3-4**).

S.Yu. Monakhov attributed such vessels to the I-st group of amphorae on profiled toes<sup>11</sup> and dated them to the middle - third quarter of the 6<sup>th</sup> century BC (based on the find of the neck of such vessel in the well No. 5 of the North-Western sector of the Berezan settlement). Y. Sezgin attributes them to the third type of Ionia  $\beta$  group<sup>12</sup>, and dates to a rather later time - the last quarter of the 6<sup>th</sup> century BC. It seems that the finds from the dugout 73 and pit 234 unequivocally testify to an earlier date of this type, more consistent with the assumption of S. Monakhov (close the end of the second quarter, or around the middle of the 6<sup>th</sup> century BC). Since in the strata of the phase II-A, i.e. in the layers associated with an earliest stone-and-mudbrick houses of Berezan, such amphorae are rare, the dating of this series, definitely, does not go far beyond the middle of the century.

However, other fragmented „proto-Thasian” amphora (**Fig.1.5**), belonging to the later series<sup>13</sup>, widespread in the third quarter of the 6<sup>th</sup> century BC, also was found in the filling of the dugout 73. The body of such amphorae has slightly different proportions with a sharper fracture from the neck to the shoulders. Consequently, the vessels of both series were produced simultaneously for a while, or the beginning of the production of amphorae of the later series coincides literally with the arrival of a new large group of colonists, and the appearance of the street grid and urban quarters of Borysthene.

### **Klazomenian and „Klazomenian circle” amphorae**

Among the finds of Klazomenian amphorae in the assemblages of the I period, the vessels of the so-called type "Lebedi V" has to be mentioned (according to the find in burial No.8 of mound No.11 of the Lebedi V necropolis in the Prikubanje region)<sup>14</sup>. These vessels have a short neck and bulbous body with a sharp transition from a neck to shoulders, a wide middle part of the body

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<sup>8</sup> DUPONT 1999, p. 153; MONACHOV 2003, p. 37; MONAKHOV 2003a, p. 247.

<sup>9</sup> BÎRZESCU 2012, S. 124; SEZGIN 2012, p. 259-271, 325.

<sup>10</sup> LAWALL *et al.* 2010, p. 357; DUPONT & LUNGU 2010.

<sup>11</sup> MONAKHOV 2003, p. 39, tab. 23.1-2; MONAKHOV 2003a, p. 247-248, fig. 1.1-3.

<sup>12</sup> SEZGIN 2012, p.270-272, 280-281, 3.01-3.05

<sup>13</sup> MONAKHOV 2003, tab. 23.4-6.

<sup>14</sup> MONAKHOV 2003, p. 51-52, tab. 32.1.

and elongated proportions in the lower part, passing to the toe<sup>15</sup>. Klazomenian origin of this type of amphorae is debated, as well as the chronological frame work of its production. S. Monakhov attributes the vessel from the necropolis of Lebedi V to the earliest variants of the Klazomenian transport amphorae dated to the end of the 7<sup>th</sup> - early 6<sup>th</sup> century BC; and the amphorae of similar form, however devoid of ornamentation with stripes of paint, made of clay visually different from „classical Klazomenian” vessels - to the production of unknown Ionian centers of „Klazomenian circle”<sup>16</sup>. I. Bîrzescu attributes these amphorae to the type 4 of the Klazomenian amphora, several variants of which he dates back to the first two quarters of the 6<sup>th</sup> century BC<sup>17</sup>. Y. Sezgin previously distinguished amphorae with similar morphological characteristics in a special group of „Ionia γ”, suggesting that they were produced in the workshops of some center located near Klazomenai and under its influence<sup>18</sup>. Recently, Teos was suggested for this role<sup>19</sup>.

Chronology for the amphorae with „bulbous” body can be specified due to the finds of several complete vessels in the well-dated contexts of the Berezan island site. Big fragments of such amphorae definitely do not occur in the structures of the second half of the 6<sup>th</sup> century BC. Finds at our disposal represents different variants of this type. To the early series it is possible to attribute the amphora (**Fig. 2.3**) found in the circular semi-dugout No. 63 dated to the first half of the 6<sup>th</sup> century BC (**Fig. 7**). It is similar in its size and proportions to the vessel previously found on Berezan in the dugout No. 39 of the Northwestern sector „B”<sup>20</sup>, the filling of which was dated by the first quarter - beginning of the second quarter of the 6<sup>th</sup> century BC. It differs from the more typical examples of Klazomenian containers of the same period (compare with **Fig. 2.1**) by the elongated proportions of the lower part. The second, later series is represented by two vessels (**Fig. 2.4-5**): they are smaller in size, and have more expressed bulbous proportions of the body. These amphorae originate from the filling of storage pits Nos. 162 and 234, dating by the other finds within the second quarter and the middle of the 6<sup>th</sup> century BC respectively, i.e. close to the end of the I stratigraphic period.

This type of amphorae is not always possible to identify in separate fragments, since the shape of rims and toes, ornamentation of the body with wide bands of red paint, and the visual characteristics of the clay do not differ significantly from the other Klazomenian vessels of the late 7<sup>th</sup> - first half of the 6<sup>th</sup> centuries BC. Thus, the amphorae of Teos (if they did belong to this center), are taken into account during excavations as Klazomenian. No reliable statistics on the matter are available, but these amphorae constitute a significant part of the whole Klazomenian imports on the Berezan settlement in the first half of the 6<sup>th</sup> century BC. Also, it can be noted that the absence of amphorae of this type in the

<sup>15</sup> COOK & DUPONT 1998 , p. 155, notes 78-79.

<sup>16</sup> MONAKHOV 2003, p. 54, 263, tab. 33.5-6.

<sup>17</sup> BÎRZESCU 2012, p. 98-100.

<sup>18</sup> SEZGIN 2012, p. 289-292, 326.

<sup>19</sup> SEZGIN 2017.

<sup>20</sup> DUPONT 2005, p. 63, cat. 23.

contexts of the second half of the same century could correspond to the mass exodus of the Teos citizens from their native city to Abdera after it was captured by Harpagus in 546 BC (Herodotus 1. 168). The sharp decline in the total amount of Klazomenian and „Klazomenian circle” amphorae from the third quarter of the 6<sup>th</sup> century BC (during the phase II-A)<sup>21</sup> apparently could also correlate with these events.

The upper part of the amphora (**Fig. 2.2**) found in the dugout No. 73, as well as the complete amphora (**Fig. 2.1**), from the storage pit No.186 of the first half of the 6<sup>th</sup> century BC belong to the same, 5-th type of Klazomenian ceramic containers, dated by Y. Sezgin according to the vessels from the burials of the Klazomenai necropolis to the first quarter of the 6<sup>th</sup> century BC<sup>22</sup>. The amphora from the pit No. 186, rather, corresponds to the earlier variants of this type<sup>23</sup>. Nevertheless, the find of the same type amphora in the filling of the dugout No. 73 forces us to assume a somewhat later upper date for this type production – the second quarter or even closer to the middle of the 6<sup>th</sup> century BC.

### **Amphorae of the Sozopol 477 / Pabuç Burnu / Histria 1388 type**

Another fairly rare amphorae, the chronology of which can be clarified due to the well-dated contexts from the excavations of Berezan settlement, are the ones of an unidentified (probably South Ionian) production center, of the type known as „Sozopol 477” or „Pabuç Burnu” or „Histria 1388”<sup>24</sup>. The profile fragments of these amphorae are regularly found in the layers of the Berezan settlement of the 6<sup>th</sup> century BC, but in rather small quantities.

Fragments of amphorae of this type are easily distinguished due to a very specific shapes: they have subtriangular in section rim, high-raised flat handles, swollen neck with characteristic bends at the level, where the upper parts of the handles were stuck to the neck and at the transition from the neck to the shoulders; high toe, usually with the deep hole in the flat bottom surface. In recent years of excavations, one complete and one fragmented vessel of this type has been found, which make it possible to examine their morphology. These finds come from the filling of the storage pit No. 254 of the second quarter - middle 6<sup>th</sup> century BC (**Fig. 3.1**), and also from the big rectangular dugout No. 73 dated to the middle of the 6<sup>th</sup> century BC (**Fig. 3.2**). Profiled fragments of this type of amphorae, previously were found in Berezan contexts dated mainly the second quarter of the 6<sup>th</sup> century BC.<sup>25</sup> The shipwreck near the coast of the Pabuç Burnu

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<sup>21</sup> CHISTOV 2017, p. 613.

<sup>22</sup> SEZGIN 2012, p. 76, K1a 5.01, 5.03.

<sup>23</sup> This vessel was found broken in the filling of the small storage pit of the I stratigraphic period (**Fig. 8**) together with the neck of the Milesian amphora (**Fig. 4.4**) of the 1<sup>st</sup> half of the 6<sup>th</sup> century BC (SEZGIN 2012 p. 171, MONAKHOV 2003, p. 31-32).

<sup>24</sup> DUPONT 2005, p. 44, 60, 69, No.83; GREENE, LAWALL & POLZER 2008, p. 693-694, fig. 8-9; BÎRZESCU 2012, p. 347, pl. 72, cat. 1388.

<sup>25</sup> See: DUPONT 2005, p. 44, 60, 69 No.83; CHISTOV *et al.* 2012, p. 24, tab. 14.1. Toes belonging to amphorae of the same type from the excavations of 1960-is – 1970-is of V.V. Lapin were erroneously attributed to Samian production (BUJSKIKH 2014, p. c. 95-96, fig. 10.11-13); also the same mistake was made in our earlier publications (CHISTOV *et al.* 2012 p. 159, tab.2.7).

to the southeast of Bodrum (the ancient Halicarnassus), which cargo contained a fractional amphora of the same type, is also dated to the same time<sup>26</sup>. Since the greatest number of toes of such amphorae were found in the layers of phase II-A, correlated with the rapid urbanization of the Berezan settlement from the 540's BC<sup>27</sup>, the chronological framework of their production likely does not exceed the second quarter and the beginning of the third quarter of the 6<sup>th</sup> century BC.

### Lesbian amphorae

Fragments of Lesbian red and gray clayed vessels constitute a significant part of amphora imports to Berezan settlement in the first half of the 6<sup>th</sup> century BC. The total share of Lesbian amphorae imports reaches 25%<sup>28</sup>. On the other hand, no complete Lesbian amphorae were found during our excavations of last decades, so the forms can be judged only by large fragments.

The upper part of the Lesbian gray-clay amphora (**Fig. 4.1**) from the dugout 73 has a massive, expanding downward neck, with a ledge under the rim. The placement of this ledge and the profiling of the rim, which does not have a horizontal platform from above, are more typical for the earliest variants of Lesbian red-clay containers of the first half of the 6<sup>th</sup> century BC<sup>29</sup>. In this case, gray color, as well as an appreciable deformation of the body, could be the result of technological deviations of firing in the kiln. A large fragment of the red-clay amphora of the similar type was found in the storage pit No. 254 (**Fig. 4.2**)<sup>30</sup>.

### Amphorae assemblages in the contexts of the second quarter - beginning of the third quarter of the 6<sup>th</sup> century BC

The filling of the storage pit No. 234 gives a rare possibility of reliable synchronization of the earliest „proto-Thasian” amphorae (**Fig. 1.1-2**) with Klazomenian (Teos?) amphorae with „bulbous” body (**Fig. 2.5**), as well as with South Ionian amphorae of the Sozopol 477 / Pabuç Burnu / Histria 1388 type (**Fig. 3.3**). In addition, in the filling of the same pit, the lower part of the Chian amphora with whitish slip was found (**Fig. 4.3**). This vessel, obviously, belonged to the series of the Chian transport amphorae, the production of which ceased around the middle of the 6<sup>th</sup> century BC<sup>31</sup>. In the structures of the phase II-A of Berezan, dated after the middle of 6<sup>th</sup> century BC, these amphorae rarely occur. Pit No.234 definitely refers to the end of the I stratigraphic period. It is associated with a group of three oval semi-dugouts, one of which (No. 68) it has cut through, and has been cut, in turn, by the other one (No. 39). Finds from these dugouts, especially East Greek pottery, indicate the cessation of their existence around the middle of the 6<sup>th</sup> century BC<sup>32</sup>.

<sup>26</sup> GREENE, LAWALL & POLZER 2008, p. 693-694, fig. 8-9.

<sup>27</sup> CHISTOV 2017, p. 618, fig. 1.

<sup>28</sup> CHISTOV 2017, p. 618, fig. 1.

<sup>29</sup> Compare: SEZGIN 2012, p. 242, Kles 1.04.

<sup>30</sup> There is a big dipinto “Θ” on the body of this vessel near the shoulders, as well as graffito ‘Λ’ carved on the unburned clay on one of the handles.

<sup>31</sup> COOK & DUPONT fig. 23.1g-h; MONAKHOV 2003, p. 14-15, 232, tab. 2, SEZGIN 2012, p. 100-101, 120, Khi 3.03-3.05.

<sup>32</sup> CHISTOV *et al.* 2012, p. 16.

Another important context, which makes it possible to synchronize the types described above, is the filling of dugout No. 73. This structure, cut into the soil, had the traces of post (wattle-and-daub) constructions along the perimeter of the walls. It obviously belongs to the group of dwellings of the so-called „colonist's house" type. Such dugouts, dated mostly to the second quarter or to the middle of the 6<sup>th</sup> century BC, probably belonged to the vanguard of the second wave of colonists, or even served as temporary dwellings for colonists of the second wave immediately after their landing in the 540's BC<sup>33</sup>.

In the filling of this dugout large fragments of amphorae of various production centers were found. The assortment of vessels in this assemblage is very close to the finds from the above described storage pit No. 234, but, may be, somewhat later. Stratigraphic observations indicate that the vessels of this assemblage were thrown on the floor of dugout directly before its levelling and the subsequent construction of a multi-chamber house from stone and mudbricks at the same place (Fig. 5). Among the finds from the filling of dugout No. 73 is a fragmented amphora of the type Sozopol 477 / Pabuç Burnu / Histria 1388 (Fig. 3.2), the upper part of the Lesbian amphora (Fig. 4. 1), the upper parts of the Klazomenian (Fig. 2.2) and „proto-Thasian" (Ionia B / Ionia I) amphorae (Fig. 1.3-5). Two of them belong to the same early series as the amphorae from the pit No. 234. Meanwhile, the same assemblage contains fragmented „proto-Thasian" amphora (Fig. 1.5) of the later series.

An assemblage of the pit No. 254 (Fig. 6) allows synchronizing amphorae of „Pabuç Burnu" type with an early version of the red-clay amphorae of Lesbos. Amphora of the „Pabuç Burnu" type (Fig. 3.1) was dropped under the wall of this pit broken into two parts. Next to it, the upper part of Lesbian amphora was found (Fig. 4.2). Therefore, these vessels were surely thrown into the pit simultaneously. The area of the excavation where this pit was located is characterized by a high concentration of dugouts and storage pits of the first half of the 6<sup>th</sup> century BC. However, the remains of structures of the second half of the 6<sup>th</sup> - beginning of the 5<sup>th</sup> century BC preserved very fragmentarily. For this reason, it is difficult to determine the phase this object belongs to, using formal stratigraphic observations. Since the fragments of the East Greek tableware from its filling date to the late 7<sup>th</sup> - mid-6<sup>th</sup> centuries BC, these amphorae finds, apparently, also date back not later than mid-sixth century BC.

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<sup>33</sup> CHISTOV 2017a, p. 133-137; CHISTOV 2016, p. 10-14.

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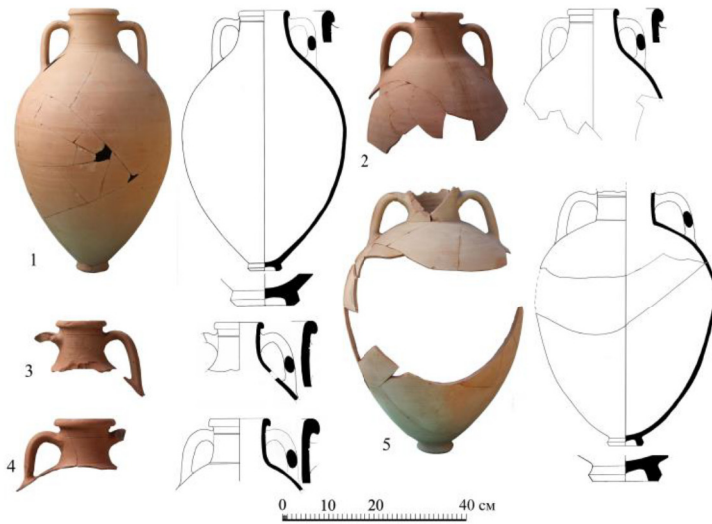


Fig. 1. 1-4 - „Proto-Thasian” amphorae of the first series (1-2 – storage pit No. 234, 3-4 – dugout No. 73. 5 – „Proto-Thasian” amphorae of the second series (dugout No. 73).

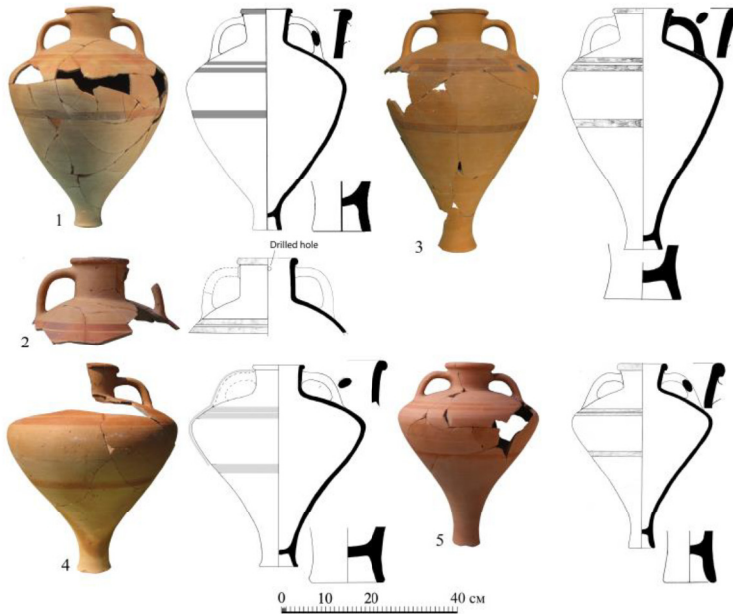


Fig. 2. 1-2 – Klazomenian amphorae of the first half of the 6<sup>th</sup> century BC (1 – storage pit No. 186, 2 – dugout No. 73). 3 - 5 – Amphorae with bulbous body, produced in Klazomenai or Teos (?) (3 – dugout No. 63, 4 – storage pit No. 162, 5 - storage pit No. 234).

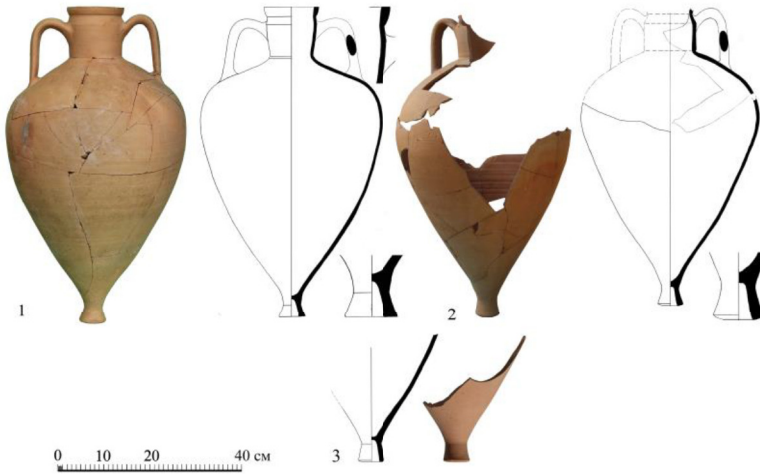


Fig. 3. Amphorae of the Sozopol 477 / Pabuç Burnu / Histria 1388 type (1 – storage pit No. 254, 2 – dugout No. 73, 3 – storage pit No. 234).



Fig 4. 1-2 – Lesbian amphorae (1 – dugout No. 73; 2 – storage pit 254); 3 – lower part of the Chian whitish slipped amphora (storage pit 234); 4- neck of Milesian amphora (storage pit No. 186).



Fig. 5. Dugout No. 73 with the remains of the later building. View from the west.



Fig. 6. Amphorae in the filling of storage pit No. 254. View from the north.



Fig. 7. Klazomenian amphora on the floor of dugout 63, view from the east.



Fig. 8. Amphorae in the storage pit No. 186. View from the south.