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TYPOLOGY AND CHRONOLOGY OF AKANTHIAN AMPHORAE¹

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Abstract. The amphora stamps of the Chalcidian city-state Akanthos were localized a little over 30 years ago due to discovering of ceramic workshops remains, where defective stamped fragments were found. The complete amphorae forms have come to be known quite recently, with a significant part of the findings being attributed to the Black Sea region. Taking into account materials from the Akanthos amphora workshops and numerous findings of vessels in the Akanthian necropolis, it became possible to develop a container typology used in this center and provide a detailed chronology of ceramic containers of this city-state. However, the findings from the Northern Black Sea region are of special significance. They were recovered in well-dated burial and settlement complexes: the Prikubanskiy necropolis, in Olbia, Phanagoria, Gorgippia, Chersonesos, Luzanovka, a kurgan cemetery near the village settlement Bogachevka, etc. While we only know one Akanthian amphora belonging to the 5th century BC, then, for the following 4th century BC within the first – third quarters, at least 4 types of containers are identified within several variants: I-A, I-B, II, III-A, III-B, IV. There are reasons for considering that some samples of amphorae on a "shot glass-shaped" toe ("Mendean") dating back to the 5th and 4th centuries BC are qualified as Akanthian products. They were manufactured outside of Mende in a number of other centers of Chalkidiki: Scione, Aphytis and Thoron.

Key words: Akanthos, Northern Black Sea region, amphorae, ceramic stamps, ceramic complexes.

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ТИПОЛОГИЯ И ХРОНОЛОГИЯ АКАНФСКИХ АМФОР1

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Аннотация. Амфорные клейма халкидского полиса Аканфа были локализованы чуть более 30 лет назад благодаря тому, что были открыты остатки керамических мастерских, где найдены бракованные клейменые фрагменты. Целые формы амфор стали известны совсем недавно, причем значительная часть находок приходится на Причерноморье. С учетом материалов из амфорных мастерских Аканфа и многочисленных находок сосудов в аканфском некрополе появилась возможность разработать примерную типологию тары этого центра и обосновать детальную хронологию керамической тары этого полиса. Особую значимость имеют находки из Северного Причерноморья, которые обнаружены в хорошо датируемых погребальных и поселенческих комплексах Прикубанского некрополя, в Ольвии, Фанагории, Горгиппии, Херсонесе, Лузановке, кургана у с. Богачевка и др. Если для V в. до н.э. пока известна единственная аканфская амфора, то для следующего столетия в пределах первой – третьей четвертей IV в. до н.э. выделяется по меньшей мере 4 типа тары в рамках нескольких вариантов: I-A, I-B, II, III-A, III-B, IV. Имеются основания предполагать, что к аканфской продукции относятся и некоторые образцы амфор на «рюмкообразной» ножке («мендейские») V и IV вв. до н.э., которые производились, помимо самой Менды, в ряде других центров Халкидики: Скионе, Афитисе, Тороне.

Ключевые слова: Аканф, Причерноморье, амфоры, керамические клейма, керамические комплексы.

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Specific "wheel-shaped" stamps in the form of a circle, divided into several sectors, where separate letters are inscribed in each sector, were identified as early as at the beginning of the 20th century [Pridik, 1917, p. 107–108, pl. XVI; IOSPE III, p. 156-189, Nos. 3259-3700], and then many researchers [Bon A.-M., Bon A., 1957, p. 493 ff.; Brashinskiy, 1980, p. 155] repeatedly referred to their analysis. Such stamps were considered to be Thasian [Bon A.-M., Bon A., 1957, p. 28, 35; Brashinskiy, 1961, p. 294 ff.; Balkanska, 1963, p. 35 ff.; Vinogradov, 1972, p. 41] for some time, although even 70 years ago E.M. Shtaerman supposed that Akanthos, Mesembria or Mende [Shtaerman, 1951, p. 46 ff.] could be the most probable centers. Later, in 1979, V.I. Kats, according to the results of a sampling comparative analysis of Thasian and the "wheelshaped" stamps from the monuments of the Northern Black Sea region, made it clear that the specific weight of both of them for the largest monuments is radically different. In his opinion, this indicates that the "wheel-shaped" stamps have nothing to do with Thasos [Kats, 1979, p. 180 ff.].

The final linking (localization) of "wheelshaped" prints series to the Chalkidian polis of Akanthos took place several years later. The reason for this was the discovery in the neighborhood of Akanthos of several amphora workshops producing containers with such stamps and, as it later turned out, not only the "wheelshaped" ones [Rhomiopoulou, 1986, p. 479 ff.; Trakosopoulou-Salakidou, 2004, p. 167 ff.]). It is also significant that a large number of amphorae with "wheel-shaped" and other Akanthian stamps were found in the necropolis of Akanthos, where they were used as ossuaries. However, most of the issues relevant to amphorae production in this center still remain unresolved. First of all, this concerns the amphorae morphology, the type of the stamping and its chronology.

Nevertheless, these discoveries contributed to the introduction of papers series, where the analysis of ceramic epigraphy materials ("wheelshaped" stamps, as well as prints with names and particular alphabetic characters) was carried out, which since then have been confidently identified

with Akanthos [Empereur, Garlan, 1992a, p. 19; 1992b, p. 178; Garlan, 2000, p. 47, 48, 170, fig. 23; 2004, p. 181 ff.; 2006, p. 263-291; 2014, p. 185 ff.; Filis, 2012a; 2012b; 2013; 2020] products. Y. Garlan managed to do more than anyone else in this area, and suggested his interpretation of the "wheel-shaped" stamps. He assumes that the two abbreviated letters (for example, PO(--)) in the upper sectors are the name as a fabricant, and the sign in the lower sectors (for example, $\tau \rho(i \chi o v) = 3$ hoy, etc.) is an indication of the vessel capacity. And although not all known variants of stamps can be deciphered in a convincing way within the context of this hypothesis, it looks quite acceptable today. At least, the now-known few complete amphorae with "wheel-shaped" stamps seem to be interpreted satisfactorily from their standard point.

The history of the discovery of complete amphorae of this center is as follows. Shortly afterwards the first publication in 1986 of K. Romiopoulou about the excavation of the amphora workshops of Akanthos, in 1988 I discovered the first practically complete amphora at that time with a wheel-shaped stamp in the collection of the Yalta Museum. The reason for this was B.N. Grakov's mentioning in the manuscript of an unpublished corpus of IOSPE III stamps that he had seen a biconical amphora with a wheel-shaped stamp on the handle [IOSPE III, p. 158, 159]² in the Yalta collection. Later I published it in one of the papers (fig. 7,14) [Monakhov, 1999b, p. 137-138, fig. 8,2]. A little later, another Akanthian amphora of a different type with wheel-shaped stamps on both handles was identified in the burial No. 412 of the Prikubanskiy kurgan cemetery (fig. 5). Both of these amphorae were published in a book of 2003 devoted to the general typology of ceramic containers from different centers [Monakhov, 2003, p. 85, pl. 58], and then in the articles by Y. Garlan [Garlan, 2004, p. 181 ff.; 2006, p. 278, fig. 8; 2014, p. 200, fig. 7].

Taking into account that new findings of Akanthian amphorae appeared over some period of time, I had the opportunity to refer to this theme three more times. Thus, it was S.G. Koltukhov who transpired about the finding of an Akanthian

amphora with a "wheel-shaped" stamp from mound No. 4 (1968) near the village settlement Bogachevka in the Krasnoperekopsky region of the Crimea (fig. 6)³. During the preparation of his collection of Scythian monuments in the Crimean Prisivashya region, he asked me for this finding attribution. The ceramic complex from this burial included, in addition to the Akanthian, Sinopean, Peparethian, and Heraklean amphorae, as well as a black-glazed cup-kantharos, which made it possible to date this finding to the second – third quarters of the 4th century BC [Koltukhov, 2012, p. 43, 44, fig. 15; Monakhov, 2013b; 2013c; 2015, p. 111, fig. 2,10].

Later, new complete Akanthian vessels were identified. In particular, an Akanthian amphora with a retrograde stamp "ME" in a rectangular frame (fig. 3,7) was found in *the Luzanovskaya dug-out in 1972*, where an unstamped Heraklean amphora, two Heraklean englyphic fragmented stamps and a Knidos stamp with the name of the magistrate Pasikrates and the emblem "prora" [Diamant, 1984a, p. 83 ff.; 1984b; Monakhov, 1999a, p. 398, 399; 2015, p. 107, fig. 1,4] were discovered as well.

Another Akanthian amphora of exactly the same morphology as in the Luzanovskaya dugout, but not stamped, was found in the placement No. 12 of the Olbian suburb behind the Zajachya Balka in 2008 (fig. 3,8). This amphora has got a good chronological context, in particular, the broken Mendean amphora, two fragmented amphorae of Ikos, the lower parts of the Chian amphorae "with cap toe", the Sinope amphora, the upper part of the Heraklean amphora were found with it. All findings date back from the middle – third quarter of the 4th century BC. The Heraklean stamps of the magistrates Lykon and Spintaros (no later than the 340s BC) [Monakhov, 1999a, p. 635; Kats, 2007, p. 430], as well as stamps, one of which with the retrograde legend KΛEO(-) (stamps analogies: [Badoud, 2013, p. 94, fig. 16; Kats, 2015, p. 28, No. 379–380]), another in the form of the letter " Φ " [Monakhov, 2015, p. 107, fig. 1,5] originate from the same place.

Recently, another couple of fragmented amphorae with "wheel-shaped" stamps have been found. The upper part of one vessel and a fragment of the neck with a handle from another originate from the *underwater excavation in*

2004 in the coastal part of Phanagoria (fig. 7,16,17) [Monakhov, 2015, p. 114, fig. 2,13,14]. It is obvious that despite the fragmentation, they are samples of biconical Akanthian amphorae, similar to the vessel from the Yalta Museum. In both cases, there are "wheel-shaped" stamps from one print on the handles, where the stamp field is divided into three sectors, the name of the fabricant ME(-) is retrogradely marked in two sectors, and the monogram ΠX in the third sector, that according to Y. Garlan, is the indication for capacity: π (έντε) $\chi(\delta \epsilon \zeta)$, that is five hoes. Analogies to this stamp have been fixed previously [IOSPE III, No. 3411; Bon A.-M., Bon A., 1957, No. 2149; Garlan, 2014, p. 194, fig. 5b – from Amphipolis].

Finally, the last findings of Akanthian amphorae known to me originate from burials No. 142, 147 and 171 of the Prikubanskiy necropolis (fig. 3,9,4,10,11). On the first of them there is a round an pigraphic stamp depicting a cup on the handle. Amphorae from burials No. 142 and 147 were published in one of the articles as products of an unidentified center of production [Monakhov et al., 2018, p. 164, fig. 1,5,6]. All these vessels are defined by a certain common feature set. Firstly, they have red-brick or redorange clay, with rare brown inclusions, a small amount of shells and plenty of mica, looking much like the clay of the known stamped Akanthian amphorae. Secondly, these vessels have morphology typical for the containers of this center – a turned outwards trapezium-shaped rim with horizontal, sloping outward profile at the top and a shallow undercutting underneath. The neck is tall, slightly swollen in the upper part, smoothly flaring downward. The body is pithoid, nearly conical; the toe is tall, sharply-ridged with a shallow hollow below. In fact, they are similar to the stamped Akanthian amphora from the Luzanovskaya dugout and the Olbian placement No. 12/2008 in their morphology. It should be noted that the morphology of the amphora from burial No. 171 is, nevertheless, different – its shoulders are more caved in (fig. 4,11).

It was K. Filis who made a quite significant contribution to the study of the Akanthian amphora production during the last decade. Finally, he began to publish a collection of amphorae from various centers, including those of local production, from the excavations of the Akanthian necropolis. He

also published fragmented vessels from the previously discovered pottery workshops of Akanthos. After all, he also outlined an approximate typological scheme of the Akanthian amphora [Filis, 2012a; 2012b; 2013; 2020]. For my part, I tried to summarize the amphora material known by that time in my article in 2015, and put forward an approximate typology and chronology of the containers of that center [Monakhov, 2015]. Since new findings have appeared, it is time to re-summorize all the accumulated material, that is set forward in this article.

So, the entire sample collection of currently known Akanthos amphorae can be divided into four types.

"Early" type 4 (fig. 1).

A big amphora with a round stamp in the form of a large letter "A" on the handle can be attributed to the "Early" type. It was first published by K. Rhomiopoulou, 1986, p. 479 ff., fig. 1], and later by K. Filis. Unfortunately, only a photograph of the vessel is published (fig. 1), the profiling of the rim and toe is unclear. The amphora has got a pithoid body, a short neck, and short handles set at an angle to the rim. Neither parameters of this amphora nor its actual volume are known, but there is no doubt that this is a very large-sized standard. According to K. Filis, many other fragmented amphorae of this morphology having strong manufacturing defects obtained during the drying-firing process indicate that these are containers of local Akanthian production. There are no direct grounds for dating this vessel, since it was used as an ossuary for a children's burial, where there was no any other inventory. Nevertheless, K. Filis rightly believes that the amphora is most likely to be dated back to the second quarter of the 5th century BC [Filis, 2013, p. 71, fig. 15a]. The morphology really seems to indicate that time, when the containers of such large centers of the time as Thasos and Mende were characterized with the pithoid, almost ovoid shape of the body [Monakhov, 2003, p. 62 ff., 90 ff., pl. 36, 37, 61]. Actually, it was during that short time that the practice of unepigraphic stamping appeared in Thasos [Garlan, 1999, p. 54], and evidently, was duplicated in Akanthos in its own way.

As noted by K. Filis, such pithoid amphorae can definitely be classified as local Akanthian production, since they were found not only in the necropolis, but also in the area of ceramic stoves. This suggests that the local amphorae production already existed in the late 6th or the early 5th centuries. There are also amphorae in the Akanthian necropolis: all of them are made of reddish clay with a gray core and noticeable amounts of limestone and mica inclusions, like the later amphorae of the 4th century with "wheel-shaped" stamps. He writes that the preliminary results of the clay chemical analysis confirm the similarity between this group of pithoid amphorae of the 5th century with the vessels of the 4th century.

In the material from the Northern Black Sea region, amphorae of the "early" type are still unknown. And unfortunately, for the present we also do not have materials for the selection of the following series of the Akanthian container of the mid – to-late 5th century BC.

Type I of Akanthian amphorae, within which at least 2 variants can be singled out: **I-A** and **I-B**: all of them date back to the 4th century (fig. 2–4).

The unstamped amphora from the Akanthian necropolis published by K. Filis can apparently be classified as variant I-A (fig. 2,2) [Filis, 2012a, p. 71 ff., fig. 6 – amphora), fig. 2,9– 11 – stamps); 2013, p. 72 ff., fig. 15c]. According to him, this type of container was the most popular. Amphorae usually have "wheel-shaped" stamps on the handle divided into 3 or 4 sectors, that he illustrates with a photograph of the upper part of the identical amphora with a "wheel-shaped" stamp, where there are the following letters A | K | A | N in four sectors (fig. 2,3). He dates both findings to the first half of the 4th century BC [Filis, 2013, p. 72 ff., fig. 15b]. Finally, it seems to me that 3 necks of similar amphorae from the excavations of Amphipolis, which have the same morphological features, can be classified as the same variant I-A of the Akanthian containers (fig. 2,4-6) [Filis 2013, p. 72 ff., fig. 15b].

Variant I-B already includes rather more known vessels. To start with, this is an amphora from the floor of a dugout of 1972 at the Luzanovskoye settlement with a retrograde stamp "ME" in a rectangular frame [Diamant, 1984a, p. 83 ff.; 1984b; Monakhov, 1999a, p. 398, 399; 2015, p. 107, fig. 1,4]. The amphora has got blended body, which is close to biconical shape, a conical neck with a massive trapezium-shaped

rim of the "Thasian" type; the lower part of the toe is chipped off (fig. 3,7). Basically, it is the most similar to the Thasian "protobiconical" amphorae of the late 5th – very early 4th centuries BC (see, for example: [Monakhov, 2003, pl. 40-41]) in terms of its profiling. The clay is dark brown, rather coarse, with sand and mica inclusions. In the first publication, I emphasized that there are no analogies [Monakhov, 1999a, p. 398–399] ⁵ of this vessel, and concerning the stamp, I cited findings of similar prints in the Northern [Vasilenko, 1972, p. 92] ⁶ and Western Black Sea [Canarache, 1957, p. 308, No. 812] regions. Currently, we can state with certainty that this stamp is definitely Akanthian, since several copies of such prints were found in a ceramic workshop (inv. No. 205/206 and 218) ⁷ near the Akanthos settlement. It is possible to expand the analogies of the stamp, the print of such a stamp was found in Gorgippia [Garlan, 2012–2013, p. 334, fig. 17c; Kats, 2015, No. 1546], and the stamps with the direct spelling "ME" from another stamp originate from Amphipolis and Phanagoria [Garlan, 2012–2013, p. 334, fig. 17a,b].

Unfortunately, I failed to find Heraklean amphorae and stamps from the Luzanovskaya dug-out complex in the Odessa Museum collection. It is difficult to say anything definite about the legends of the latter, except that they were two-lined. Judging from the drawing in the manuscript of E.I. Diamant, the Knidos stamp with a "prora" contained the name of the Knidian magistrate Pasicrates [Diamant, 1984b] 8. These stamps affiliation with the products of Knidos was reliably determined as a result of research by K. Börker and J.-Y. Empereur [Börker, 1986, p. 473 ff.; Empereur, Garlan, 1992a, p. 17, fig. 9] 9. Starting from the general historical context and striving to logically link this stage of stamping with the followed ones, N.V. Jefremov expected at first that the first period of Knidian stamping with the city emblem "prora" dates from about the 305-280s BC [Jefremov, 1992, p. 258; 1995, p. 61– 62], and later referred such stamps to the last three decades of the 4th century [Jefremov, 2013, p. 423]. I realize that this is a greatly artifactually high chronology, what V.I. Kats [Monakhov, 2003, p. 105; Kats, 2007, p. 221–222] agrees with. The two of us have repeatedly written that there are several complexes that are in contrast with this scheme. First of all, this refers to the garbage filling of the beam, on top of which the

Chersonesos theater was built. A huge number of stamps of different centers and, first of all, Thasos, Sinope and Heraklea, with the total absence of the Chersonesos stamps proper, makes it possible to reliably determine the time of filling no later than the third quarter of the 4th century. Among other things, it contains several Knidian stamps with "the bow of the ship" 10. The Luzanovskiy complex does not contradict this chronology to any extent, since there is an Akanthian amphora with a massive trapeziumshaped rim (a pattern that is not characteristic of the last quarter of the 4th century), as well as Heraklean stamps of not the latest series. All this makes it possible to consider the most probable date of the complex of the Luzanovskaya dug-out with the Akanthian amphora to be the 330s BC.

Another unstamped Akanthian amphora of exactly the same morphology as in the Luzanovskaya dug-out was found in the placement No. 12 in the suburb of Olbia behind Zavachava Balka in 2008 (fig. 3.8). The clay of the vessel is red-brown, with plenty of mica and limestone. Its affiliation with the Akanthian containers is also practically assured. This amphora has a good chronological context, as described above, which makes it possible to date the complex back within the middle – third quarter of the 4th century 11 by the latest findings. It will be remembered that there was also found a stamp with a retrograde legend KAEO(-) in the dugout, which is classified as Akanthian (fig. 8,21) [Rhomiopoulou, 1986, p. 481, fig. 6, 11; Panágou, 2010, Aκ. εικ. 20]. Exactly the same stamp of the same print is on the handle of a fragmented amphora from Gorgippia (fig. 8,22) [Kuznetsova, 2015, fig. $\Pi 3, I$] ¹², which is morphologically identical to the container vessels of the "Mendean" production of the so-called "portichello" variant of the first third of the 4th century.

As far as I consider, three new amphorae from burials No. 142, 147 and 171 of the Prikubanskiy necropolis (fig. 3,9, 4) can also be classified as the same variant I-B. Two of them have been recently published as amphorae of unidentified centers of production [Monakhov et al., 2018, p. 164, fig. 1,5,6] though, but now there is no doubt about their Akanthian origin. In terms of their metric parameters, these vessels are practically identical to amphorae from the

Luzanovskaya dug-out and the Olbian placement No. 12/2008. They have only slightly caved in shoulders, turned outwards trapezium-shaped rims with horizontal, sloping outwards profile and a swallow undercutting underneath.

The stamp is only on one amphora from burial No. 142 (fig. 3,9); it is round, anepigraphic, with 8 mm in diameter and, seems to have a relief image of a cup framed with pearls. There are analogies, but they are not very informative and cannot even clarify the chronology. As a rule, such stamps have been considered to be Mendean in recent decades [Pridik, 1917, pl. XV,5; Canarache, 1957, p. 306, no. 797; Monakhov, 2003, p. 293, pl. 63,8; Mateevich, 2012, p. 249, pl. 64,7; Mateevici, Samoilova, 2015, p. 86; Kats, 2015, No. 384].

From among the three amphorae of the Prikubanskiy necropolis (from burials No. 142, 147, 171), there is more or less expressive context only for the latter burial (No. 171). Meotian moulded and gray-clay ceramics, armament supplies (spears, sword, knife), a cannon, a bronze cheek-piece, as well as a tray of black-glazed Attic kantharos with turned chipping, which was used as a saltcellar were found there in addition to the amphora. The glaze is reddish brown, the clay is orange, with the finest golden sparkles. The tray is classified as the classical kantharos on a cast toe of the second - third quarter of 4th century; such vessels are known from the materials of the Athenian Agora [Sparkes, Talkott, 1970, p. 286, fig. 7,708], they were also found in burial No. 6453 of Starokorsunskiy settlement No. 2 and in burial No. 91 of the Prikubanskiy kurgan cemetery, where amphorae of Ikos of the specified time were found together with them [Limberis, Marchenko, 2017, p. 183–184, 190– 191, fig. 1, 2, 3, 8,31]. All this makes it possible to determine the chronology of the complex within the broad framework of the second-third quarters of the 4th century BC, which, apparently, should be considered the time of the I-B variant existence.

Type II of Akanthian amphorae (fig. 5).

This type can be illustrated by the only finding from burial No. 412 of the Prikubanskiy Meotian kurgan cemetery in Kuban. This is a large amphora of a completely different shape – with a wide conical body, a roller-shaped rim flattened on the top and relatively small toe with

an expanded base (fig. 5). These morphological characteristics are very much like the Thasian amphorae of the "topraisara" series of the early to mid of 4^{th} century BC [Monakhov, 2003, pl. 48], as well as the Sinope type I amphorae of the same time 13 [Monakhov, 2003, pl. 100, 101], which are made in imitation of the Thasian ones. There are round stamps of one print, divided into 4 sectors on both handles of this amphora. In the upper two sectors, the name of the magistrate is abbreviated as two letters PO(--), and in the lower two there is an indication of the vessel capacity ME(--), which is interpreted by Y. Garlan as $M\epsilon(\tau \rho \eta \tau \eta \varsigma)$ [2004, p. 185; Badoud et al., 2007, p. 175 ff., no. 69] 14 .

The total capacity of amphora from burial No. 412, calculated from the measurement drawing, is close to 35 liters. The capacity of the attic metretes is little more than 39 liters, which greatly exceeds the actual volume of the vessel. If the standard of this amphora is assumed in a local measure, then the Thasian metretes (or 12 Thasian hous) of 34.8 liters [Monakhov, 2003, p. 76] fits here as well as possible. As for the chronology of this finding, for lack of chronological indicators in burial No. 412, one has to start out from analogies to such forms in the amphorae production of Thasos and Sinope. They make it possible to confidently determine the time of release of such containers within the first half no later than the middle of the 4th century.

Type III of Akanthian amphorae. It copies the Thasian biconical amphorae of the first three quarters of the 4th century in the obvious way. At least three variants can be singled out within its frame.

The first of them (variant III-A) is represented with an amphora from the kurgan cemetery No. 4 near the village settlement Bogachevka of Krasnoperekopsky district of Crimea (fig. 6). Currently it is stored in the Central Museum of Taurida. This is a biconical vessel copying the Thasian container of the "early biconical" series, and based upon rather squat proportions, these are the earliest sample copies stamped by Thasian magistrates of the earliest two groups (i.e., within the 390s–380s) [Monakhov, 2003, pl. 42]. However, the Akanthian amphora is larger than these Thasian prototypes in actual parameters, and its capacity is greater. In the middle part of the neck of the amphora

there is a shallow groove, and a strip of red paint below the rim. The rim is similar to the Thasian one, but is not trapezium-shaped that is typical of the latter. The toe, on the other hand, is no different of the Thasian ones in its profiling. The history overview of the complex with this amphora is described in detail in the book by S.G. Koltukhov [Koltukhov, 2012, p. 43, 44, fig. 15] ¹⁵; it was also introduced into scientific use in two of my articles [Monakhov, 2013b, p. 296, fig. 1,6; 2013c, p. 263 ff., fig. 2,2].

On one of the vessel handles there is a fuzzy "wheel-shaped" stamp, divided into 4 sectors. In the two upper sectors, two letters " Λ " and " Λ " are clearly read, i.e. abbreviated as two letters the beginning of a magistrate's (or a fabricant's) name $\Lambda\Lambda$ (-), and there is the numerical designation of the standard fraction in the form of two letters X Π (or ΠX) below.

It was impossible 16 to find a direct analogy to this stamp. However, the magistrate (or fabricant?) name $\Lambda A(-)$ is found in a number (of prints) of wheel-shaped stamps. First of all, the impressions of two stamps are known, where the field of the stamp is also divided into 4 sectors and the same designations appear $\Lambda \mid A \mid X \mid \Pi$ [IOSPE III, No. 3401] 17 . The same name appears in series of stamps without dividing "spokes", discovered in Nikoniya, Panticapaeum, as well as stored in the museums of Amphipolis and Odessa 18 . It is reasonable that there are infinitely many options for reconstructing the name $\Lambda A(-)$.

As for the combination of letters $X\Pi$ (or ΠX), following the hypothesis of Y. Garlan, we should see the most probable reading as $\pi(\epsilon \nu \tau \dot{\epsilon})$ $\chi(\text{ovec})$, i.e. 5 hoes here [IOSPE III, No. 3401] ¹⁹. If a standard is assumed to be 5 hypothetical Thasian hoes (2.94 liters each), then we obtain an unsatisfactory result of 14.7 liters (with a real full amphora capacity of 21.0-21.7 liters). But, 5 Attic hoes (3.28 liters each) also give inappropriate result of 16.4 liters. However, recently Y. Garlan has proposed a new explanation. And what about reading χ (ούες) π (έντε) i.e. 1 hous + 5 hoes! Accordingly, it will make 6 hoes, which in Thasian measuring (2.941×6) is equal to 17.64 liters, and in Attic measuring $(3.281 \times 6) = 19.68$ liters, which is preferred for a full-capacity amphora of 21.0-21.7 liters. During the time of this magistrate (or fabricant) $\Lambda A(-)$, according to the designations in the lower sectors of his other stamps, amphorae of other standards were produced: TP (3 hoes), ME (metretes) and others, judging by the findings in Amphipolis and Abdera [Garlan, 2004, p. 184]. However, it is a point of much controversy.

In this burial near the village settlement Bogachevka 3 more container amphorae were found together with the Akanthian one: Sinopean, Peparethian, and Heraklean, as well as Attic black-glazed cup-kantharos and red clay lekythos. By the analogy with the Athenian Agora, the cup dates back from the middle – third quarter of the 4th century BC, the lekythos gets analogies in the Gaimanova Mogila, which complex dates back to the 365–350s BC [Bidzilya, Polin, 2012, p. 510]. In general, the burial and, accordingly, the Akanthian amphora from the mound near the village settlement Bogachevka, should be dated no later than the end of the second – beginning of the third quarter of the 4th century BC [Koltukhov, 2012, p. 43, 44, fig. 15; Monakhov, 2015, p. 112].

Variant III-B (fig. 7)

Amphorae of *variant III-B* are already known in several copies. As mentioned previously, the first finding was made in the Yalta Museum collection (fig. 7,14). With reference to the previous variant III-A, it is an obvious fraction, and a little later one, since it clearly copies the Thasian not "early biconical", but "late biconical" variant of the container [Monakhov, 2003, pl. 46], and fully meets the standard (the full capacity of the vessel is approximately 8 liters). On the handle of the amphora there is a "wheel-shaped" stamp, divided into four sectors, in each of which one letter is inscribed: "P", "O" in the upper sectors, "T" and "P" in the lower sectors (fig. 7,14)²⁰.

Y. Garlan interprets this stamp as follows. He sees the name of the fabricant PO(--) abbreviated as two letters in the two upper sectors, and an indication of the capacity of the vessel $\tau(\rho i \chi o \upsilon \varsigma)$ (3 hous) in the two lower ones. If it is expected that the Attic hous (3.28 liters) was in use at Thasos at that time, the resulting standard of 9.84 liters for an 8-liter amphora would be unacceptable. However, if we take the point that the local Thasian hous of 2.94 liters [Brashinskiy, 1984, p. 111; Garlan, 2006, p. 273 ff.; 2014, p. 200 ff.] was used in the 4th century, then the theoretical standard of 8.8 liters for this amphora seems more attractive. Thus, it can be stated that amphorae of different types and of different

measuring standard were made in Akanthos in one year (during the time of the fabricant or magistrate PO(--)), and what is more, all of them were crafted by the Thasian prototypes. The amphora is without passport, and therefore its chronology can be specified only approximately (based on the similarity of morphology with the "late biconical" Thasian amphorae), within the middle – third quarter of the 4th century BC at the latest. However, it should be noticed that the postulated standard is highly hypothetical.

Quite the same amphorae as the Yalta ones have been recently introduced into use by K. Filis [Filis, 2012a, p. 73, fig. 6]. A large sample collection of them originates from the Akanthos necropolis. He also selects them into the III biconical type of his classification, assuming that they copy the Thasian biconical amphorae 21 . Many of such amphorae have wheel-shaped stamps (fig. 7). At the same time, he claims that there are also other stamps – rectangular impressions with the image of a dolphin and two letters (abbreviated names) – K-A or Φ -I (fig. 8,23) [Filis, 2012a, p. 73, fig. 2,12] on some amphorae of this type.

Recently I have managed to find a couple more fragmented amphorae of this variant III-B. The upper part of such vessel and a fragment of the neck with a handle originate from an underwater excavation in the coastal part of Phanagoria in 2004 (fig. 7,16,17)²². It is obvious that, despite the fragmentation, they are the same samples of biconical Akanthian amphorae. In both cases, there are "wheel-shaped" stamps of one print on the handles, where the stamp field is divided into three sectors. Analogies to this stamp are known [IOSPE III, No. 3411; Bon A.-M., Bon A., 1957, No. 2149; Garlan, 2014, p. 193, fig. 5b (from Amphipolis)]; Y. Garlan expects that in such case, the name of the fabricant ME(-) is retrogradely marked in two sectors, and the monogram ΠX in the third sector is the designation of capacity: $\pi(έντε)$ $\chi(όες)$ i.e. five hoes. If it is expected by analogy that at that time the same local Thasian hous of 2.94 liters was in use in Akanthos, then the theoretical standard of these amphorae of 14.7 liters is quite possible. Unfortunately, we cannot check this computation, since there is also a lack of clarity regarding the fraction they related to. The chronology of these findings cannot be reliably established. 8 more

stamps of Thasos, Mende, Sinope, Heraklea and Knidos originate from this underwater excavation, which date back within the entire 4th century BC according to modern concepts. This is not surprising, since the cultural layers were strongly mixed as a result of coast abrasion in the flooded part of the Phanagoria ancient settlement.

The final item that requires special consideration is **the chronological framework of the Akanthian stamping**. Hereinabove, taking into account the characteristics of certain types and variants of Akanthian amphorae, I have given the chronological context of the findings, and also noted special morphological characteristics with reference, first of all, to the Thasian analogies of complete forms of containers. In general, it seems as if all Akanthian amphorae of types I, II and III were produced within the 370–330s BC.

The richest materials of the funerary complexes of the Akanthos necropolis have not yet been fully published, while it is possible to figure out that they can provide a reliable chronological support. But it is necessary to proceed from what is available.

Y. Garlan insists that the entire group of "wheel-shaped" stamps is dated within the last third of the 4th century BC [Garlan, 2004; 2006; 2010, p. 382]. Ch. Tzochev and A. Balkanska date these stamps in approximately the same way after revising the stamps collection from the excavations in Sevtopol, where, as it is known, there are 4 "wheel-shaped" impressions [Balkanska, Tzochev, 2008, p. 190, 199, 200]. An analysis of the stamps of Thasos, Sinope, Knidos, Rhodos and Chersonesos found in the same place leads to the conclusion that the sample collection does not provide materials earlier than 315, when, in fact, Sevt III began the construction of his new capital. But the construction of Sevtopol does not exclude the possibility that some earlier settlement could have existed at this place, as A. Balkanska [Balkanska, 1984, p. 125] had assumed earlier, although it is obvious that this requires additional reasoning.

What other complexes with Akanthian stamps give us. As it has already been mentioned many times, the ceramic complex of the beam filling during the construction of the theater in Chersonesos is of serious interest, where, along with dozens of Thasian, Sinopean and Heraklean

stamps and with the complete lack of Chersonesos, several "wheel-shaped" ones are found. Taking into account the chronology of the mentioned groups, it may be assumed that the top bound of the filling under the theater does not go beyond the early – mid-320s [Monakhov, 2003, p. 86; Kats, 2007, p. 311–313]. Though, this does not exclude the possibility that the production of wheel-shaped stamps could have stopped well before.

No less interesting is the filling of the socalled "nymphaeum" (actually a tomb-chest) in the southeastern part of the Chersonesos settlement, which contained an impressive series of early Heraklean, Thasian, one "wheel-shaped", Mendean stamps and not a single Sinopean stamp. Initially, the complex was believed to have been closed no later than the mid-360s, when the Sinopean magistrate stamping began. E.Ya. Rogov, who analyzed the entire ceramic complex of this object [Rogov, 2001, p. 110, 117] in due time, felt that way as well. However, the latest inspection made it clear that other materials were also there and now the chronological boundaries of this complex are wider – from the late 5^{th} century to the early 330s[Ivashchenko, 2014, p. 278].

As it has been already mentioned, the Luzanovskaya dug-out with an Akanthian amphora of type I cannot be dated later than the 330s, as well as the complex from the placement No. 12 in Olbia with a similar amphora. A vessel from a kurgan cemetery near the village settlement Bogachevka of Krasnoperekopsky district of Crimea was found in a good complex with a variety of antique ceramics and is quite reliably dated within the end of the second – beginning of the third quarter of the 4th century ²³.

Finally, one more complex from Chersonesos, which A.V. Bujskikh drew my attention to – the third lower (above rocky) layer in 3rd Poperechnaya Street, which was excavated by M.I. Zolotarev in 1978. Among the various ceramic material from amphora stamps, only two "wheel-shaped" stamps were found in this layer, which is quite symptomatic. The author of the excavations writes in direct manner that "...all materials found in the third layer date back to the first half of the 4th century BC" [Zolotarev, 1978, p. 11, fig. 24].

Thus, it is obvious that Akanthian amphorae of different types, copying the Thasian container samples of the so-called "topraisara", "early

biconical", "developed biconical", and "late biconical" series, were produced for a fairly long time from the first to the third quarter of the 4th century (the 380–330s) [Monakhov, 2003, p. 86, pl. 58] ²⁴ and in different fractions of the standard ²⁵.

There is one last thing I would like to specify. In the work of K. Filis "type II Akanthian amphorae" is also mentioned (fig. 8,18–20). These are vessels that are very well known in the Black Sea (Pontic) complexes, where they got a symbolic notation as amphorae on "short glass-shaped" toes long ago, and for the last 40 years they have been confidently interpreted as containers of the "Melitopol" variant [Monakhov, 2003, p. 92 ff., pl. 63–65], which, by the way, K. Filis also writes about. The maximum height of these vessels is up to 75 cm, the diameter of the body is about 42 cm, the capacity is within 25 liters. The reason for identifying these amphorae as products of Akanthos for K. Filis was the following circumstance. He notes that although there are no standard "wheel-shaped" Akanthos stamps on these amphorae of his type II (from the necropolis of Akanthos), however, they usually have rectangular stamps with the emblem in the form of a "dolphin" and individual letters (fig. 8,23). And as it was mentioned above, such stamps are also common for "biconical" Akanthian amphorae of type III, where they alternate with "wheel-shaped" impressions. Unfortunately, K. Filis shares this information in the most general terms, without documenting it with real artifacts (amphora-stamp). He completes the description of this type of container with the conclusion that it is might be a certain "regional" type of container, produced by different policies of the northern part of Aegean, among which there was Akanthos as well. Currently, there is almost no doubt that some "Mendean" samples of amphorae of the 5^{th} and 4^{th} centuries BC were produced in addition to Mende itself in a number of other centers of Chalcidice (Scione, Aphytis, Torone?) [Filis, 2020, p. 184, fig. 18; Lawall, Tzochev, 2020, p. 123]. Note the fact that many years ago I wrote that the Mendean amphorae of the "Melitopol" variant are surprisingly distinguished by the variety in the rims and toes [Monakhov, 2003, p. 93] profiling. It is likely that this is another argument for the K. Filis's hypothesis.

Thus, judging by the materials of ceramic workshops and the frequency of such amphorae findings in the necropolis, Akanthos most likely produced amphorae of "Promendean" morphology as well; we indicate it in this classification as **type IV**. It bears reminding once again that according to the materials of the Black Sea complexes, such amphorae are reliably dated within the second—third quarters of the 4th century BC, no later.

However, there are two findings that create certain difficulties in determining the chronology of this type IV. This is the upper part of an amphora from Gorgippia, on the handle of which there is the already mentioned stamp KΛEO(-) in an oval frame (fig. 8,22). Such stamps are also found in Akanthos and are considered to be Akanthian [Rhomiopoulou, 1986, p. 481, fig. 6,11; Panágou, 2010, εικ. 20]²⁶. Despite the fragmented nature of the Gorgippian finding, there is no doubt that it is also a typical example of the "Promendean" form in its morphology, and not the "Melitopol" variant, but an earlier variant of the "portichello" of the first third of the 4th century BC [Monakhov, 2003, tabl. 62; Kuznetsova, 2015, fig. $\Pi 3, I$]. The clay of this amphora is yellow, saturated with sand and plenty of mica, like a standard "Mendean" container. The shape of the rim is also standardized "Mendean" - a turned outwards roller with gentle slope inside.

But, another finding – a fragment of a rim with a part of a handle from Olbia with an impression of the same print of KAEO(-) (fig. 8,21) has completely different profiling of the trapezium-shaped rim (imitating Thasos) and with a different characteristic of clay: red color with a plenty of mica, as with amphorae from burials No. 42, 147 and 171 of the Prikubanskiy necropolis. For the present it is difficult to draw any firm conclusion on this issue. As a matter of fact, the differences in rims profiling and the clay type of the amphorae with impressions of the same stamp are not surprising. But if the Akanthian origin of type IV amphorae is reliably confirmed in the future, then the chronology of this type of container should be limited to the first three quarters of the 4th century.

It seems that before the detailed publication of the mass material of the Akantho necropolis and the findings of ceramic waste from the surroundings of the Akantho workshops, it will be too early to draw final conclusions about the general typology and chronology of the container of this center. However, the further study makes it possible to clarify a lot in this exceptionally interesting story about the regional types of amphorae of the Northern Aegean.

NOTES

- ¹ The research was supported by the Russian Science Foundation grant resources (project No. 18-18-00096).
- ² In the IOSPE III manuscript, B.N. Grakov writes that the "wheel-shaped" stamps should be dated back from the first half of the 4th century BC. At the time of the Yalta amphora discovery in 1988, it was missing a toe and one of the handles. Later (in 2016), during work in the Yalta Museum, I discovered the second handle of this amphora with the same stamp divided into four sectors in a box with stamped handles and necks. Thus, the Yalta amphora is now archaeologically complete, it lacks only a toe (fig. 7,14).
- ³ The metric parameters of the vessels known to me are given in Table 1.
- ⁴ In K. Filis's typology, this amphora is without numerical notation.
- ⁵ At that time I noted that this amphora clay "in texture is much like the clay of the South Pontic centers." According to the re-inspection it was a mistake. Such a dark brown clay with limestone inclusions and rare mica is typical for one (of the three) production groups of Akanthian amphorae (as Kostas Filis kindly informed me in his letter).
- ⁶ Specified by B.A. Vasilenko Akanthian stamp also originates from the Luzanovskoye settlement.
- $\,^{7}$ Information from K. Filis in a letter to the author.
- ⁸ Since the Knidos stamp from the Luzanovskaya dug-out was not available to me, the illustration of the complex [Monakhov, 1999a, p. 398, pl. 177] shows a drawing of a similar stamp of the same print.
- ⁹ The only known complete amphora stamped with the "the bow of the ship", published in due time by V. Grace as Samian [Grace, 1971, pl. 15, 15], it was also published by I. Whitbread [Whitbread, 1995, p. 108, 109, pl. 4.25, 4.26].
- ¹⁰ Excavation of 1970. Collection of the Chersonesos Museum, inv. no. 116–118/36785. The complex is not fully published [Zedgenidze, 1976, p. 28 ff.], remains deposited in the Chersonesos preserve, however, the argumentation of its upper range not later than the third quarter of the 4th century is also practically assured (see: [Kats, 2007, p. 222]). Previously, V.I. Kats dated this group of stamps with "prora" back to approximately the middle of the 4th century without associating them with Knidos

- [Kats, 1979, p. 181]. Only in one of these Knidos stamps, the name of the magistrate $\Delta\omega$ ριγένης is read in addition to the emblem, on the others only the emblem "prora" is visible. More information about the complex in the feeling under the theater (see: [Ivashchenko, 2015, p. 159]). More information about the fact that the chronology of Ivashchenko is clearly artifactually high (see: [Badoud, Avram, 2019, no. 65]).
- ¹¹ I am grateful to A.V. Bujskikh for getting to know this complex.
- ¹² It is clearly qualified as the "portichello" variant, i.e. dates back to the first third of the 4th century BC.
- ¹³ Learn more: Monakhov S.Ju., Kuznetsova E.V. Sinopean Amphorae of the First Half of the 4th Century BC from the Prikubanskiy Maeotian Necropolis // PONTICA, vol. 55. (In print).
- ¹⁴ In the first publication of this amphora [Monakhov, 2003, p. 86–87, pl. 58,2], I misread a part of the legend of this stamp, what Y. Garlan drew my attention to in his letter. The vessel was republished several times [Garlan, 2004, p. 187, fig. 1; 2006; 2014, p. 200, fig. 7; Monakhov, 2013a; 2013b; 2015, p. 113, fig. 2,9]. Analogy to the stamps in Gorgippia [Kats, 2015, No. 1546].
- shown in a mirror reflection. Therefore, misreading of this stamp legend (A $|\Delta| X | \Gamma$) was given through my fault. It was made using the sent poor-quality rubbings and a photo before I got the opportunity to work with the vessel de visu in the summer of 2012.
- ¹⁶ Once again I would like to acknowledge my friend Y. Garlan for analyzing this stamp and sending analogies (letters dated 16.11.2012 and 20.02.2013).
- ¹⁷ Tyras (1953, A-248), Olbia, Myrmekion (1957/2328 Kerch Museum, KKK 14195). Information by Y. Garlan.
- ¹⁸ [IOSPE III, No. 3319–3322]; [Pridik, 1917, p. 107, No. 110, 111] (misreading). The second stamp: [Shtaerman, 1951, fig. 7,235,236].
- ¹⁹ According to information from Y. Garlan, the same numerical designation of the standard is fixed on

- a dozen of stamps without division into sectors from Akanthos and Komotini.
- ²⁰ It is stored at the Yalta Museum, inv. no. A4-362. The archaeological context of the finding is unknown; it was received at the museum from the Grand Ducal Palace.
- ²¹ Though, for some reason the author thinks that such biconical Thasian amphorae, used as a prototype for the Akanthian containers, were produced in Thasos until the early 3rd century BC [Filis, 2012a, p. 73], whereas it has been firmly established currently that they were replaced by the "late conical" type no later than the turn of 3–4 quarters of the 4th century (see: [Monakhov, 2003, p. 70 ff.]).
- ²² The vessels are stored in the Voronezh State Pedagogical University, the work was carried out by the Voronezh group of the Phanagoria expedition (headed by V.N. Latartsev, A.O. Amelkin).
- ²³ S.V. Polin dates this complex back even to the 2nd quarter of the 4th century BC [Polin, 2014, p. 420].
- as almost 20 years ago. According to Y. Garlan, for the entire sample collection of Akanthian stamps, there are 21 fabricants (magistrates?), whose names are abbreviated in the upper part of the stamps legend [Garlan, 2004, p. 184]. Therefore, supposing that actually all these are the names of magistrates, as in neighboring Thasos, then the entire period of stamping with "wheel-shaped" stamps covers about a quarter of a century. It remains only to make a clarification (see also [Monakhov, Kuznetsova, 2017, p. 72, fig. 4.4, 4.5]).
- ²⁵ Recently there has been an article about a ceramic complex with an Akanthian "wheel-shaped" stamp from an ash hill near the village Viktorovka in Nizhnee Pobuzhye region, where M.V. Ivashchenko dates the Akanthian stamp back to the last third of the 4th century BC [Bondarenko, Ivashchenko, 2019, p. 637]. It bears repeating that this chronology is artifactually high (see: [Badoud, Avram, 2019, note 65]).
- 26 In both publications, the drawing of the brand KAEO(-) is shown inverted.

APPENDIX

Table 1. Metric parameters of Akanthian amphorae

NI-	Origin	Type/	Linear dimensions, mm					X7 1 1	Di-	
No.		variant	Н	H_0	H_1	H_3	D	d_1	Volume 1	Fig.
7	Luzanovskaya	I-B	ı	643	280	195	345	112 × 116	24,0	3-7
8	Olbia	I-B	1	660	285	168	356	106 × 112	_	3-8
9	Prikubanskiy, burial 142	I-B	785	660	305	190	375	120	28,7	3-9
10	Prikubanskiy, burial 147	I-B	810	700	335	205	346	110	1	4-10
11	Prikubanskiy, burial 171	I-B	-	690	290	155	390	122	_	4-11
12	Prikubanskiy, burial 412	II	790	690	310	194	432	122	37,7	5-12
13	Bogachevka, burial 4	III-A	846	678	350	193	337	108	21,7	6-13
14	Yalta	III-B	1	524	265	165	258	102	8,0	7-14
16	Phanagoria	III-B	1	_	_	200	-	112	_	7-16
22	Gorgippia	IV	-	=	_	_	_	128	=	8-22

Note. H – height; H_0 – depth; H_1 – height of the upper body; H_3 – height of the neck; D – diameter of the body; d_1 – diameter of the rim.



Fig. 1. Amphora of the "early" type from the Akanthos necropolis (after: [Filis, 2013, p. 86, fig. 15a]) – (not to scale)



Fig. 2. Amphorae of variant I-A:

2, 3 – from the Akanthos necropolis (after: [Filis, 2013, 72 ff., fig. 15c; 2020, fig. 5, 10]; 4–6 – from the excavations of Amphipolis (after: [Nicolaidou-Patera, 1986, p. 489]) – (not to scale)

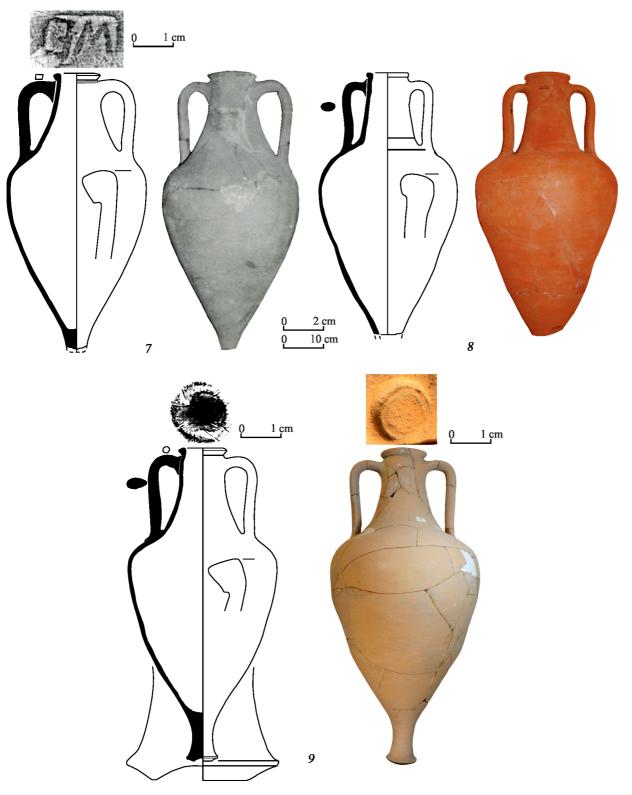


Fig. 3. Amphorae of variant I-B:

7 – from the Luzanovskaya dug-out; 8 – from the placement No. 12/2008 from Olbia; 9 – from burial No. 142 of the Prikubanskiy necropolis

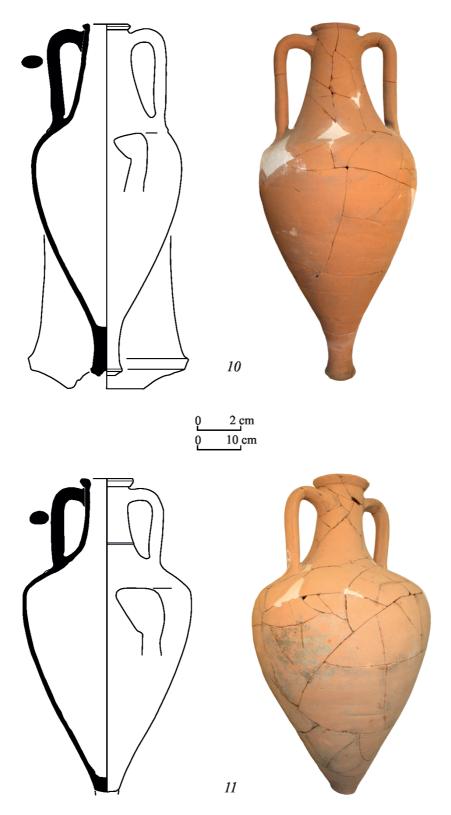


Fig. 4. Amphorae of variant I-B: 10 – from burial No. 147; 11 – from burial No. 171 of the Prikubanskiy necropolis

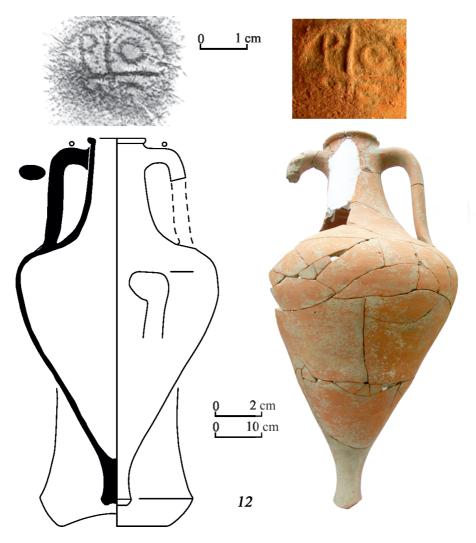


Fig. 5. Type II amphora from burial No. 412 of the Prikubanskiy necropolis

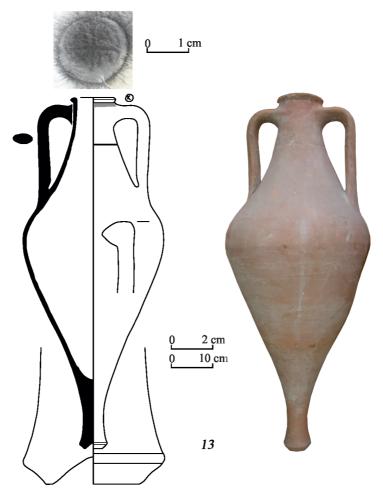


Fig. 6. Amphora of variant III-A from a kurgan cemetery near the village Bogachevka

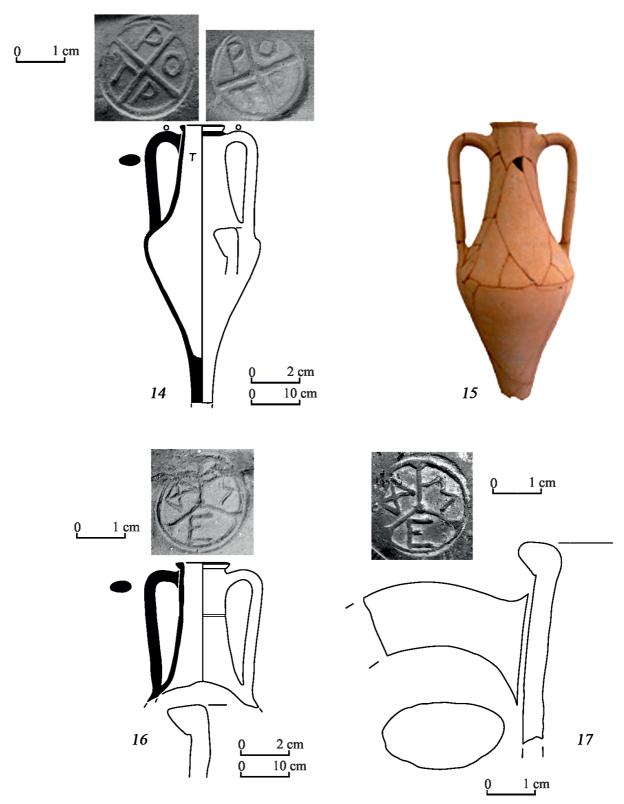


Fig. 7. Amphorae of variant III-B:

14 – from the Yalta Museum; 15 – from the Akanthos necropolis (after: [Filis, 2020, fig. 5]) – (not to scale); 16, 17 – from the underwater excavation in 2004 in Phanagoria

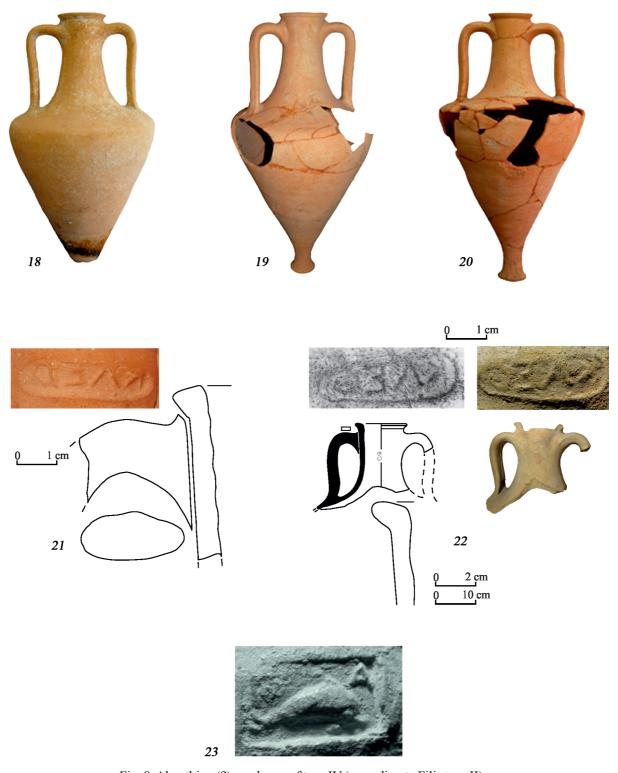


Fig. 8. Akanthian (?) amphorae of type IV (according to Filis type II):

18, 19, 20 – (after: [Filis, 2020, fig. 5]) – (not to scale); 21 – handle of an amphora with the stamp KΛΕΟ(-) from Olbia;
 22 – amphora from Gorgippia with the stamp KΛΕΟ(-) (photo by A.B. Kolesnikov);
 23 – stamp on type IV amphorae [Filis, 2012a, p. 72, fig. 6; 2020, fig. 5] (not to scale)

REFERENCES

- Badoud N., 2013. Timbres amphoriques de Mende et de Cassandreia. *PATABS III. Production and trade of amphorae in the Black sea. Constanța, 2009, October 06-10.* Constanta, National history and archaeology museum, pp. 89-103.
- Badoud N., Avram A., 2019. Bulletin amphorologique. Revue des Études Grecques, 132 (1), pp. 129-246.
- Badoud N., Dupont P., Garlan Y., Marangou-Lerat A., 2007. Bulletin archéologique. Amphores et timbres amphoriques (2002–2007). *Revue des Études Grecques*, 120 (1), pp. 161-264.
- Balkanska A., 1963. Kam vaprosa za koleloobraznite amforni pechati [On the question of wheel-shaped amphorae stamps]. *Izvestiya Varnskogo arkheologicheskogo obshchestva* [Reports of Varna Archaeological Society], book 14, pp. 35-37.
- Balkanska A., 1984. *Amfori i amforni pechati. Balgarskata akademia na naukite* [Amphorae and Amphorae Stamps]. Sofia, Balgarskata akademia na naukite, pp. 115-158.
- Balkanska A., Tzochev Ch., 2008. Amphora Stamps from Seuthopolis Revised. *Phosphorion: Studia in Honorem Mariae Čičikova*. Sofia, Publishing House of the Bulgarian Academy of Sciences, pp. 188-205.
- Bidzilya V.I., Polin S.V., 2012. *Skifskiy carskiy kurgan Gaymanova mogila* [Scythian royal kurgan Gaymanova Mogila]. Kiev, Skif Publ. 752 p.
- Bon A.-M., Bon A., 1957. Les timbres amphoriques de Thasos. Paris, Boccard Publ. 538 p.
- Bondarenko D.V., Ivashchenko M.V., 2019. Amfornye kleyma iz zol'nika № 2 svyatilishcha Viktorovka I v Nizhnem Pobuzh'e [Amphora Stamps from Cinder Heap No. 2 of the Sanctuary Viktorovka I in Lower Bug Region]. *Materialy po arheologii i istorii antichnogo i srednevekovogo Prichernomor'ya* [Proceedings in Archaeology and History of Ancient and Medieval Black Sea Region], no. 11, pp. 635-646. DOI: https://doi.org/10.24411/2713-2021-2019-00020.
- Brashinskiy I.B., 1961. Uspekhi keramicheskoy epigrafiki [Advances in Ceramic Epigraphy]. *Sovetskaya arkheologiya* [Soviet Archaeology], no. 2, pp. 293-306.
- Brashinskiy I.B., 1980. *Grecheskiy keramicheskiy import na nizhnem Donu v V–III vv. do n.e.* [Greek Ceramic Imports on the Lower Don in 5–3 cc. BC]. Leningrad, Nauka Publ. 270 p.
- Brashinskiy I.B., 1984. *Metody issledovaniya antichnoy torgovli (na primere Severnogo Prichernomor'ya)* [Research Methods of Ancient Trade (On the Example of the Northern Black Sea Region)]. Leningrad, Nauka, Leningradskoe otdelenie Publ. 248 p.
- Börker Chr., 1986. Die Herkunft der Schiffsbug-Stempe. Bulletin de correspondence hellénique, suppl. XIII, pp. 473-478.
- Canarache V., 1957. *Importul amforelor stampilate la Istria*. București, Editura Academiei Republicii populare romîne. 447 p.
- Diamant Ae.I., 1984a. O datirovke Luzanovskogo poseleniya [About the Luzanov Settlement's Dating]. *Novye arheologicheskie issledovaniya na Odeschine* [New Archaeological Research in the Odessa Region]. Kiev, Naukova dumka Publ., pp. 83-88.
- Diamant Ae.I., 1984b. Amfornaya tara antichnyh poseleniy Odesskogo zaliva i limanov v IV–III vv. do n. e. [Amphora Containers of Ancient Settlements of the Odessa Bay and Estuaries in the 4–3 Centuries BC]. Manuscript. *Personal archive of Ae.I. Diamant.*
- Empereur J.-Y., Garlan Y., 1992a. Grecheskie amfornye masterskie [Greek Amphorae Workshops]. *Grecheskie amfory* [Greek Amphorae]. Saratov, Saratov State University, pp. 8-31.
- Empereur J.-Y., Garlan Y., 1992b. Bulletin archeologique. Amphores et timbres amphoriques (1987–1991). *Revue des Études Grecques*, CV(1), pp. 176-220.
- Filis K., 2012a. Transport Amphorae Workshops in Macedonia and Thrace during the Late Classical and Hellenistic Times. *Topics on Hellenistic Pottery in Ancient Macedonia*. Athens, pp. 60-85.
- Filis K., 2012b. Ionikoí emporikoí amforeís sto Vóreio Aigaío. *Archaic Pottery of the Northern Aegean and its Periphery (700–480 BC)*. Thessaloniki, pp. 265-280.
- Filis K., 2013. Transport Amphorae from Akanthos. *PATABS III. Production and trade of amphorae in the Black sea. Constanța, 2009, October 06-10.* Constanta, National history and archaeology museum, pp. 67-87.
- Filis K., 2020. The Production of North Aegean Amphorae: Morphology Properties Purpose. *Pottery Workshops Craftsmen and Workshops*. Athens, pp. 156-196.

- Garlan Y., 1999. Les timbres amphoriques de Thasos. Vol. I. Timbres Protothasiens et Thasiens anciens. Paris, de Boccard. 335 p.
- Garlan Y., 2000. *Amphores et timbres amphoriques grecs: entre érudition et ideologie*. Memoires de l'Academie des inscriptions et belles-lettres, NS. XXI. Paris, de Boccard. 209 p.
- Garlan Y., 2004. I anágnosi ton sfragismáton amforéon "me Trochó" apó tin Akantho [The Reading of the Seals of Amphorae "with Wheel" from Akanthos]. *To Archaiologikó Érgo sti Makedonía kai ti Thráki* [The Archaeological Researches in Macedonia and Thrace], T. 18, pp. 181-190.
- Garlan Y., 2006. L'interprétation des timbres amphoriques «à la roue» d'Akanthos». *Bulletin de Correspondence Hellénique*, 130 (1), pp. 263-291.
- Garlan Y., 2010. Poslednie dostizheniya grecheskoy keramicheskoy epigrafiki na Zapade [Recent Developments in Greek Ceramic Epigraphy in the West]. *Antichniy mir i arheologiya* [Ancient World and Archaeology], iss. 14. Saratov, Nauchnaya kniga Publ., pp. 371-395.
- Garlan Y., 2012–2013. La distinction des fabricants homonymes sur les timbres amphoriques grecs. *Bulletin de Correspondence Hellénique*, vol. 136–137, pp. 319-338.
- Garlan Y., 2014. Métrologie et épigraphie amphorique grecque. Le cas des timbres akanthiens «à la roue». *Dialogues d'histoire ancienne supplément*, suppl. 12, pp. 185-200.
- Grace V., 1971. Samian Amphoras. Hesperia, XL, pp. 52-95.
- IOSPE III, Inscriptiones antiquaeorae Septentrionalis Ponti Euxini. Case of Ceramic Stamps of the Northern Black Sea. E.M. Pridik and B.N. Grakov Compillers. *Arkhiv IA RAN*, no. P-2, 2157–21988.
- Ivashchenko M.V., 2014. Keramicheskie kleyma iz hersonesskogo «Nimfeuma» [Ceramic Stamps from Chersonesos "Nymphaeum"]. *Stratum plus*, no. 6, pp. 273-281.
- Ivashchenko M.V., 2015. K voprosu o hronologii akanfskih amfornyh kleym [On the Chronology of the Akanthian Amphora Brands]. *Antiqvitas Ivventae*, iss. 10. Saratov, SSU, pp. 153-160.
- Jefremov N.V., 1992. K istorii torgovyh svyazey Knida s Severnym Prichernomor'em [On the History of Trade Relations Between Cnidus and the Northern Black Sea Region]. *Grecheskie amfory* [Greek Amphorae]. Saratov, SSU, pp. 254-265.
- Jefremow N. 1995. *Die Amphorenstempel des hellenistischen Knidos* (Quellen und Forschungen zur antiken Welt. 19). München, tuduv-Verl.-Ges. 251 p.
- Jefremov N.V., 2013. Keramicheskie kleyma pozdneklassicheskogo-ranneellinisticheskogo Knida. «Protoknidskie» kleyma i kleyma s «nosom korablya» [Die Keramikstempel des spätklassichen-frühhellenistischen Knidos. "Protoknidische-Stempel" und die mit "Schiffsbug"]. *Voprosy epigrafiki* [Epigraphy], iss. VII, part 1. Moscow, Russian Foundation for the Promotion of Education and Science, pp. 404-451.
- Kats V.I., 1979. Ekonomicheskie svyazi pozdneklassicheskogo Hersonesa (po dannym amfornyh kleym) [Economic Relations of the Late Classical Chersonesos]. *Antichniy mir i arheologiya* [Ancient World and Archaeology], iss. 4. Saratov, SSU, pp. 176-191.
- Kats V.I., 2007. *Grecheskie keramicheskie klejma epohi klassiki i ellinizma (opyt kompleksnogo izucheniya)* [Greek Ceramic Stamps of the Classical and Hellenistic Epoch (Complex Research Result)]. Simferopol; Kerch, Centr arheologicheskih issledovaniy BF "Demetra". 478 p.
- Kats V.I., 2015. *Keramicheskie kleyma Aziatskogo Bospora. Gorgippiya i eyo hora, Semibratnee gorodishche* [Ceramic Stamps of Asiatic Bosporus. Gorgippia and its Chora, Semibratnee Settlement]. Saratov, SSU. 177 p.
- Koltukhov S.G., 2012. *Skify krymskogo Prisivash'ya v VII–VI vv. do n. e. Pogrebal'nye pamyatniki* [Scythians of Crimean Prisivashe's region in 7th 4th cent. B.C. Burial mounds]. Simferopol, Predpriyatie Feniks Publ. 140 p.
- Kuznetsova E.V., 2015. Katalog tselyh amfor [Catalog of Whole Amphorae]. *Kats V.I. Keramicheskie kleyma Aziatskogo Bospora. Gorgippiya i eyo hora, Semibratnee gorodishche* [Ceramic Stamps of Asiatic Bosporus. Gorgippia and its Chora, Semibratnee Settlement]. Saratov, SSU, pp. 147-163.
- Lawall M., Tzochev Ch., 2020. New Research on Aegean & Pontic Transport Amphorae of the Ninth to First Century BC, 2010–2020. *Archaeological Reports*, vol. 66, p. 117-144. DOI: https://doi.org/10.1017/S057060842000006X.
- Limberis N.Yu., Marchenko I.I., 2017. Atributsiya i hronologiya chernolakovyh kanfarov iz meotskih pamyatnikov Prikuban'ya [Attribution and Chronology of Black-Glazed Kantharoi from Maeotian Sites of the Kuban Region]. *Stratum Plus*, no. 3, pp. 181-198.

- Mateevich N., 2012. Amfornye kleyma gorodishcha Nadlimanskoe [Amphorae Stamps of the Nadlimanskoe Settlement]. *Dzis-Raiko G.A., Okhotnikov S.B., Redina E.F. Gorodishche Nadlimanskoe IV–III vv. do n.e. v Nizhnem Podnestrov'e* [The Nadlimanskoe Settlement of the IV–III centuries BC in the Lower Transnistria]. Odessa, SMIL, pp. 161-179, 238-249, pl. 53–62.
- Mateevici N., Samoilova T., 2015. Un lot de timbres amphoriques grecs rares de Tyras [A lot of Rare Stamps of Greek Amphora from Tyras]. *Revista arheologică*, т. 11, no. 1-2, pp. 82-88.
- Monakhov S. Yu., 1999a. *Grecheskie amfory v Prichernomor'e: kompleksy keramicheskoy tary* [Greek Amphorae in Black Sea Region. Assemblages of Transport Amphorae]. Saratov, SSU. 679 p.
- Monakhov S.Yu., 1999b. Zametki po lokalizatsii keramicheskoy tary. II: Amfory i amfornye kleyma polisov severnoy Egeidy [Notes on the Localization of Ceramic Containers. II. Amphorae and Amphorae Stamps of the Polis of the Northern Aegena]. *Antichniy mir i arheologiya* [Ancient World and Archaeology], iss. 10. Saratov, SSU, pp. 129-148.
- Monakhov S. Yu., 2003. *Grecheskie amfory v Prichernomor'e: tipologiya amfor vedushchih centrov-eksporterov tovarov v keramicheskoy tare* [Greek Amphorae in Black Sea Region: Typology of Amphorae of the Leading Centers of Exporters of Goods in Ceramic Containers. Catalog-Identifier]. Moscow, Kimmerida Publ.; Saratov, SSU. 350 p.
- Monakhov S.Yu., 2013a. Zametki po lokalizatsii keramicheskoy tary. III. Amfory i amfornye kleyma maloaziyskih Erifr [Notes on Localization of Ceramic Ware. III. Amphorae of Erythrai (Asia Minor) and Their Stamps]. *Vestnik drevney istorii* [Journal of Ancient History], no. 3 (286), pp. 28-51.
- Monakhov S. Yu., 2013b. Amfory Akanfa, novye nahodki i zametki o spetsifike amfornogo proizvodstva v polise [Akanthian Amphorae, New Findings and Notes on the Specifics of Amphora Production in Polis]. *Shestaya Mezhdunarodnaya Kubanskaya arheologicheskaya konferentsiya: materialy konferentsii* [Materials of the Sixth International Kuban Archaeological Conference]. Krasnodar, Ekoinvest Publ., pp. 294-300.
- Monakhov S.Yu., 2013c. Eshche odna nahodka akanfskoy amfory i nekotorye razmyshleniya o haraktere akanfskogo amfornogo proizvodstva [On One More Find of Acanthus Amphorae and on the Character of Acanthus Amphorae Production]. *Drevnosti Bospora* [Antiquities of the Bosporus], vol. 17, pp. 258-269.
- Monakhov S.Yu., 2015. Novye nahodki akanfskih amfor i korrektivy k ih tipologii i hronologii [New Finds of Akanthian Amphorae and Amendments to Their Typology and chronology]. *Problemy istorii, filologii, kul'tury* [Journal of Historical, Philological and Cultural Studies], no. 3 (49), pp. 105-119.
- Monakhov S.Y., Kuznetsova E.V., Limberis N.Yu., Marchenko I.I., 2018. Redkie formy amfor iz Prikubanskogo nekropolya [Rare Amphora's Forms from the Prikubansky Necropolis]. *Arheologiya antichnogo i srednevekovogo goroda* [Archaeology of the Ancient and Medieval City]. Sevastopol; Kaliningrad, ROST-DOAFK Publ., pp. 163-170.
- Monakhov S. Yu., Kuznetsova E. V., 2017. Overseas Trade in the Black Sea Region from the Archaic to the Hellenistic Period. *The Northern Black Sea in Antiquity: Networks, Connectivity, and Cultural Interactions*. Cambridge, Cambridge University Press, pp. 59-99, 294-298, 318-360.
- Nicolaidou-Patera M., 1986. Un nouveau centre de production d'amphores timbrees en Macedoine. *Bulletin de correspondence hellénique*, suppl. XIII, pp. 485-490.
- Panágou T.M., 2010. I sfrágisi ton archaion ellinikón emporikón amforéon: kéntra paragogís kai synthetikí axiológisi' [The Sealing of Ancient Greek Commercial Amphorae: Production Centers and Synthetic Evaluation']. PhD thesis. Athens. 394 p.
- Rhomiopoulou C., 1986. Amphores de la necropole d'Acanthe. *Bulletin de correspondence hellénique*, suppl. XIII, pp. 479-483.
- Polin S.V., 2014. *Skifskiy Zolotobalkovskiy kurgannyy mogil nik V–IV vv. do n. e. na Hersonshchine* [Scythian Burial Mounds of the 5th–4th Century BC near Zolotaya Balka in the Kherson Region]. Kiev, Oleg Filyuk Publ. 776 p.
- Pridik E.M., 1917. *Inventarnyy katalog kleym na amfornyh ruchkah i gorlyshkah i cherepicah ermitazhnogo sobraniya* [Inventory Catalog of Stamps on Amphorae Handles and Necks and on Tiles of the Hermitage Collection]. Petrograd. 192 p.
- Rogov E.Ya., 2001. Obshchestvennyy istochnik v yugo-vostochnoy chasti Hersonesskogo gorodishcha [Public Spring in the South-Eastern Part of the Chersonesos settlement]. *Arheologiya* [Arheologia], no. 4, pp. 106-119.

- Shtaerman E.M., 1951. Keramicheskie kleyma iz Tiry [Ceramic Stamps from Tyra]. *Kratkie soobshcheniya instituta istorii material 'noy kul'tury* [Brief Communications of Institute of the History of Material Culture], iss. XXXVI, pp. 31-49.
- Sparkes B.A., Talcott L., 1970. *Black and Plain Pottery of the 6th, 5th and 4th Centuries B.C. The Athenian Agora*, vol. XII. Princeton, New Jersey, The American School of Classical Studies at Athens. 398 p. DOI: https://doi.org/10.2307/3601975.
- Trakosopoulou-Salakidou E., 2004. Keramikoi klíbanoi Akánthoy [Ceramic Kilns Akanthi]. *To Archaiologikó Érgo sti Makedonía kai ti Thráki* [The Archaeological Research in Macedonia and Thrace], ò. 18, pp. 167-179.
- Vasilenko B.A., 1972. Davn'ogrec'ki keramichni kleyma z Odesi [Ancient Greek Ceramic Brands from Odessa]. *Arheologiya* [Arheologia], no. 5, pp. 87-95.
- Vinogradov Yu.G., 1972. Keramicheskie kleyma ostrova Fasos [Ceramic Stamps of the Thasos Island]. *Numizmatika i epigrafika* [Numismatics and Epigraphy], iss. X, pp. 3-63.
- Whitbread I.K., 1995. *Greek Transport Amphorae*. *A Petrological and Archaeological Study*. Athens, The British School at Athens. 453 p.
- Zedgenidze A.A., 1976. Issledovanie severozapadnogo uchastka antichnogo teatra v Hersonese [Study of the North-Western Section of the Ancient Theater in Chersonesos]. *Kratkie soobshcheniya Instituta arkheologii* [Brief Communications of the Institute of Archaeology], iss. 145, pp. 28-34.
- Zolotarev M.I., 1978. Otchet o raskopkah v severo-vostochnom rayone Hersonesa v 1978 g. [Report on Excavations in the North-Eastern Region of Chersonesos in 1978]. *Arkhiv IA NANU*, no. 8735.

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