



CHRONOLOGIES OF THE BLACK SEA AREA IN THE PERIOD c. 400–100 BC

*Edited by
Vladimir Stolba and Lise Hannestad*

BLACK SEA STUDIES

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CENTRE FOR BLACK SEA STUDIES

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Bosporan bronze coin with a young Dionysos wearing ivy-wreath.

First half of the first century BC

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Rhodian Amphoras: Developments in Form and Measurements

Sergej Ju. Monachov

Of all categories of finds from Greek sites, the amphora evidence allows the most optimal possibilities for developing a more precise chronology, especially for that of the late Classical and Hellenistic periods, and fortunately a number of factors present us with an opportunity to carry out a very successful chronologization: First and foremost the widespread practice at the time of magistrates and fabricants to stamp amphora, while the shape of the containers from each Greek centre remained peculiar and original.

A special position as an important chronological indicator in the archaeology of the Greek period is held by Rhodian amphoras. Though the stamping of amphoras started on Rhodos considerably later than in Herakleia Pontike, Thasos, or Sinope, it acquired a truly global character, since the practice of stamping every product rather than any particular vessel among a consignment was fairly quickly established. This fact called forth the abundance of finds of Rhodian stamped amphora handles in cultural layers, and hence the special importance of this evidence in terms of chronologization. It is known that samples of Rhodian amphora stamps from both the Mediterranean and Black Sea littoral are several times more common than those from other centres. In turn, this fact has attracted the steadfast attention of several generations of researchers (V. Grace, J.-Y. Empereur, Ju.S. Badal'janc, V.I. Kac, G. Finkielsztejn *et al.*) to various problems of Rhodian chronology and resulted in the development of a number of chronological schemes of Rhodian stamping. During recent decades, new deposits with Rhodian stamped amphoras have been discovered, which allow us to make the existing chronological models more precise, and in some cases also more correct.

However, while certain success is observable in the development of the chronology of Rhodian stamping, our ideas about the dynamics of forms and standards of the amphoras themselves have remained at the level of the 1970s-80s. The objective of this paper is to correct these ideas on the basis of the latest achievements and recently discovered new evidence.

In earlier periods, Rhodos, unlike other East Greek centres such as Knidos, Miletos, Samos, and Klazomenai, did not produce transport amphoras. Research by P. Dupont  has established that there are no signs of such production having taken place during the 5th century BC. It was only in the 4th century BC that Rhodos began to take an active part in the wine trade.

However, it is virtually impossible to reliably identify the Rhodian ceramic vessels produced during that century, since the practice of stamping had not yet been introduced on the island. We can only guess that Rhodian amphorae from the late Classical period may be found among the vast quantity of vessels with mushroom-shaped rims which have thus far been classified as being “of unknown provenance”.

The first series of Rhodian amphorae that can be securely identified dates from the Hellenistic period. The practice of systematically stamping ceramic containers was introduced in the 3rd century BC and continued for two and a half centuries, which allows us to trace successive changes in the shape of the Rhodian amphorae over time. However, since chronological identification is essentially based on ceramic epigraphy, we need to recall, at least briefly, the main developments of the chronology of Rhodian stamping.

Back in the 1930s, B.N. Grakov proposed a general chronological framework for the Rhodian tradition of stamping amphorae. He believed that this practice was limited to the period from 331 to 40 BC.^[1] Virginia Grace, who worked out a classificatory scheme consisting of six (later seven) successive chronological groups of magistrates' stamps,^[2] initially followed Grakov in believing that the practice of stamping on Rhodes was confined to this period. Later on Grace repeatedly modified this scheme, and her second-to-last version^[4] makes good use of all the contemporary research.^[3] In Russia an important contribution to the study of Rhodian ceramic epigraphy over the last few decades has been made by Ju.S. Badal'janc, who in essence proposed a further modification of Grace's scheme, which was elaborated in the 1950s and '60s. Badal'janc keeps the same number of groups, but establishes a more precise chronological framework for them and includes in it his own classification of fabricants' stamps.^[5] The weakness of this system lies in its uncritical approach to the primary sources, since the failure to collate the names of the Rhodian eponyms means that the general list of the latter contains a number of uncertainties and errors. Conceding that eponyms held office for one year each, Ju.S. Badal'janc includes over four hundred names of magistrates in his list, while the tradition of stamping on Rhodes continued for less than three centuries.^[6]

It is interesting that Grace herself, in one of her last works, revised the chronology of the stamps used on amphorae in the Hellenistic period, and came to the conclusion that significantly lower dating of the Rhodian stamps is necessary.^[7] Of particular interest in this connection are the results obtained in recent years by G. Finkielsztejn, whose research is based on new deposits. In his view, the practice of stamping ceramic containers on Rhodes began roughly at the turn of the 4th and 3rd centuries BC. Arguing for the division of Grace's typological periods (groups) into sub-groups, he proposes the following chronology: Period I (with three sub-groups) 304-235 BC; Period II (with three sub-groups) = 234-199 BC; Period III (with five sub-groups) = 198-161 BC; Period IV (with two sub-groups) = 160-146 BC; Period V (with

three sub-groups) = 145-108 BC; Period VI = 107-86 BC; Period VII (with two sub-groups) = from 85 BC to the era of Augustus.⁸

In turn, J.-Y. Empereur, who has studied the Rhodian amphora workshops on the mainland part of the Rhodian *peraia*, has succeeded in establishing precise chronological connections for a number of magistrates and fabricants from the mid-3rd century to the beginning of the 2nd century BC, including reliable absolute dates for the period in which the *ergasteriarchos* Hieroteles held office.¹⁰

In view of these findings, V.I. Kac, working on the basis of a number of quite precisely dated Black Sea deposits, has recently succeeded in drawing some convincing conclusions concerning the date at which Rhodian stamping began, and as a result has managed to construct a sound hypothesis concerning the chronology of the first stages of stamping. According to his reconstruction, Rhodian stamping began with fabricants' stamps in the second half of the second decade of the 3rd century BC. He dates the early magistrate group, 1a, to before the Koroni deposit (280-265 BC), while apart from minor adjustments his dating of the subsequent periods of magistrates' stamps is close to that proposed by Finkielsztein.¹¹

Despite these evident successes in the study of Rhodian stamping, particularly with regard to the initial stages, further work still needs to be done in order to obtain a more precise chronology of the subsequent periods. A recent volume by Börker and Burow on the Pergamon deposit¹² has made clear the importance of a careful re-examination of primary sources.

Whereas Rhodian ceramic epigraphy has been studied in detail, no special analysis has been made of the changing morphology of the Rhodian amphoras from the 4th to the 1st century BC, although descriptions of particular groups have been published, and recently a brief overall scheme was established to demonstrate the basic morphological development of the Rhodian vessels.¹³ In addition we now have a very considerable selection of complete Rhodian amphoras, which allows us to add further nuances to our existing understanding of the changing forms and standards of the vessels produced in Rhodes from the end of the 4th century to the 2nd century BC.

In my opinion, two basic types of Rhodian amphoras were produced throughout the late Classical and Hellenistic period, and they can most conveniently be classified in straightforward morphological terms as *long-necked* (Type 1) and *short-necked* (Type 2) respectively.

Type 1 most probably appeared in the late 4th century BC and for a certain time coexisted with *Type 2*, but by the end of the first quarter of the 3rd century, at the very latest, it had become the only type to be produced on Rhodes, and continued to develop steadily for a period of just over two centuries. During this period it was repeatedly modified, partially changing its morphological characteristics, which allows us to sub-divide this type into six successive variants:

- Variant I-A (*Kyrenia*);
- Variant I-B (*Koroni*);
- Variant I-C (*Myrmekion*);
- Variant I-D (*Pietroiu*);
- Variant I-E (*Villanova*) with two series: *early* (I-E-1) and *late* (I-E-2);
- Variant I-F (*Alexandrian*).

The short-necked *Type-2* amphora (also known as the Benachi type) emerged early in the first third of the 3rd century BC. Its principal characteristics are the generally squat shape that results from its short neck, and the special “beak-shaped” form of its rim. Because few examples of this type have been found, and because production of *Type-2* amphoras was short-lived, it has up to now not been possible to identify different variants within it.

The *Kyrenia* variant (I-A) (named after the shipwreck deposit at Kyrenia on Cyprus,¹⁴ where such jars were first found) may be regarded as the earliest of the *Type-1* variants. I know of only a few published examples. One amphora measuring 92 cm in height that was found in the shipwreck in Kyrenia has been described by M. Katzev (Fig. 1.1).¹⁵ It has a massive mushroom-shaped rim and a peg toe with a conical depression in its base. An amphora of similar shape, but with a more massive toe, was discovered by chance in the bay of Fos (Fig. 1.2).¹⁶ Both vessels are unstamped, and it is therefore almost impossible to synchronise them reliably; however, the shipwreck deposit at Kyrenia has traditionally been dated to roughly the last quarter of the 4th century.

The Black Sea material may shed light on the chronology of the *Kyrenia* variant, for although it has not so far yielded any intact specimens, substantial fragments have been found. In addition there is reason to believe that it was precisely the *Kyrenia* amphoras that bore the circular or rectangular stamps of the fabricant Timarchos. The circular stamps with a two-line legend TI | MAP were identified in the deposit from the Zelenskoj barrow,¹⁷ at Nymphaion,¹⁸ at the settlement of Elizavetovskoe (Fig. 1.3),¹⁹ on the farmstead near the Eupatoria lighthouse²⁰ and at the “Litvinenko estate” settlement in the Dnieper region.²¹ The neck of an amphora of this kind, with an overhanging rim and the stamp of the same die with the name of Timarchos on the handle is preserved in the museum at Kerch.²² The context of the finds, above all at Elizavetovskoe (in the so-called “second *emporion*”), at the Zelenskoj burial mound, and on the farmstead near the Eupatoria lighthouse, provide indirect support for dating the circular stamps of Timarchos to the early 3rd century (most probably to the second half of the second decade).²³ The rectangular stamps of the same fabricant (with the one-line legend TIMAPXOY)²⁴ are approximately synchronous, although they may be a little older. At all events, the well-known find from the fill of the Chertomlyk barrow can hardly be dated to the time of the burial (the 330s BC),²⁵ but probably relates to the latest burial feast at the beginning of the 3rd century.

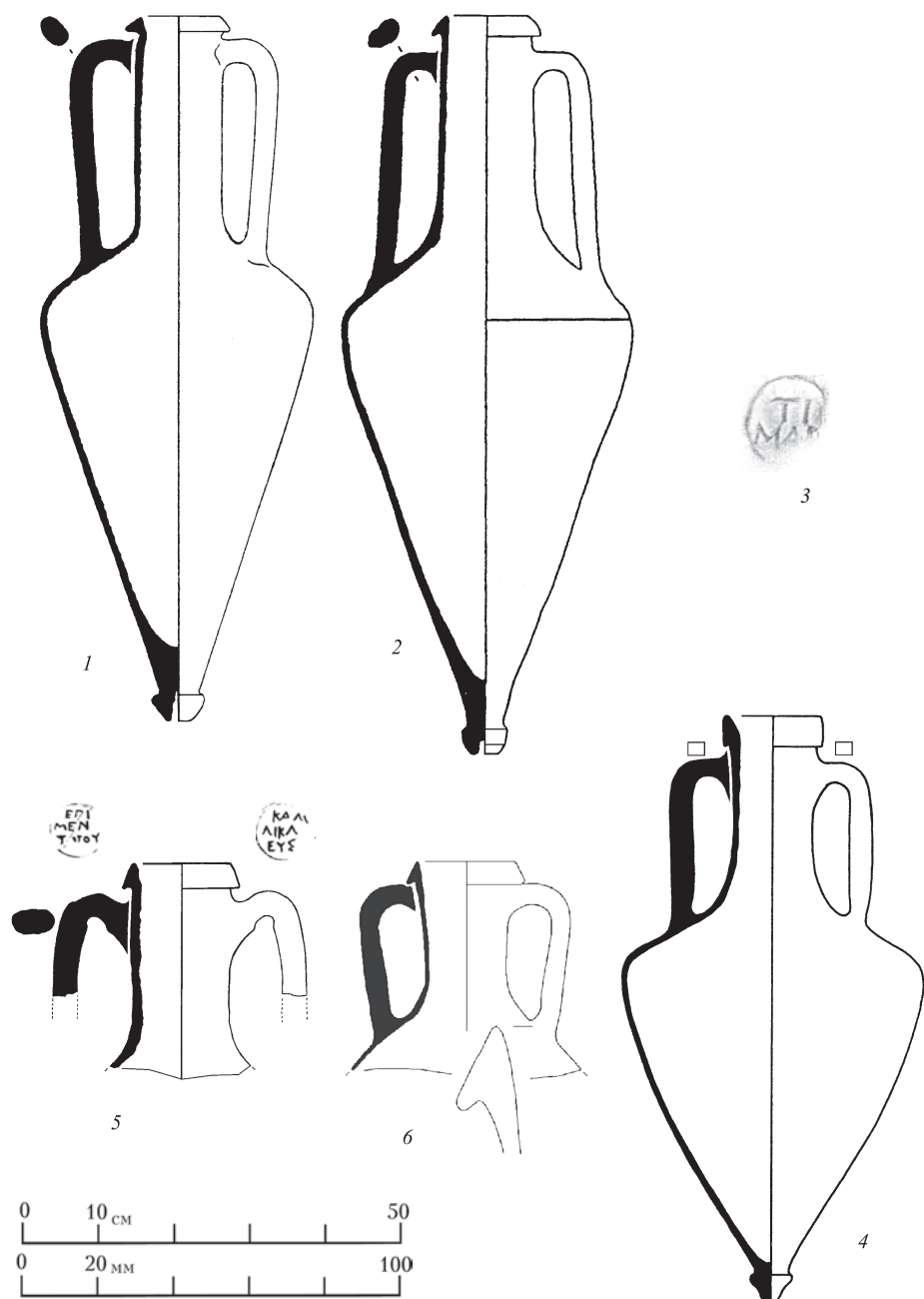


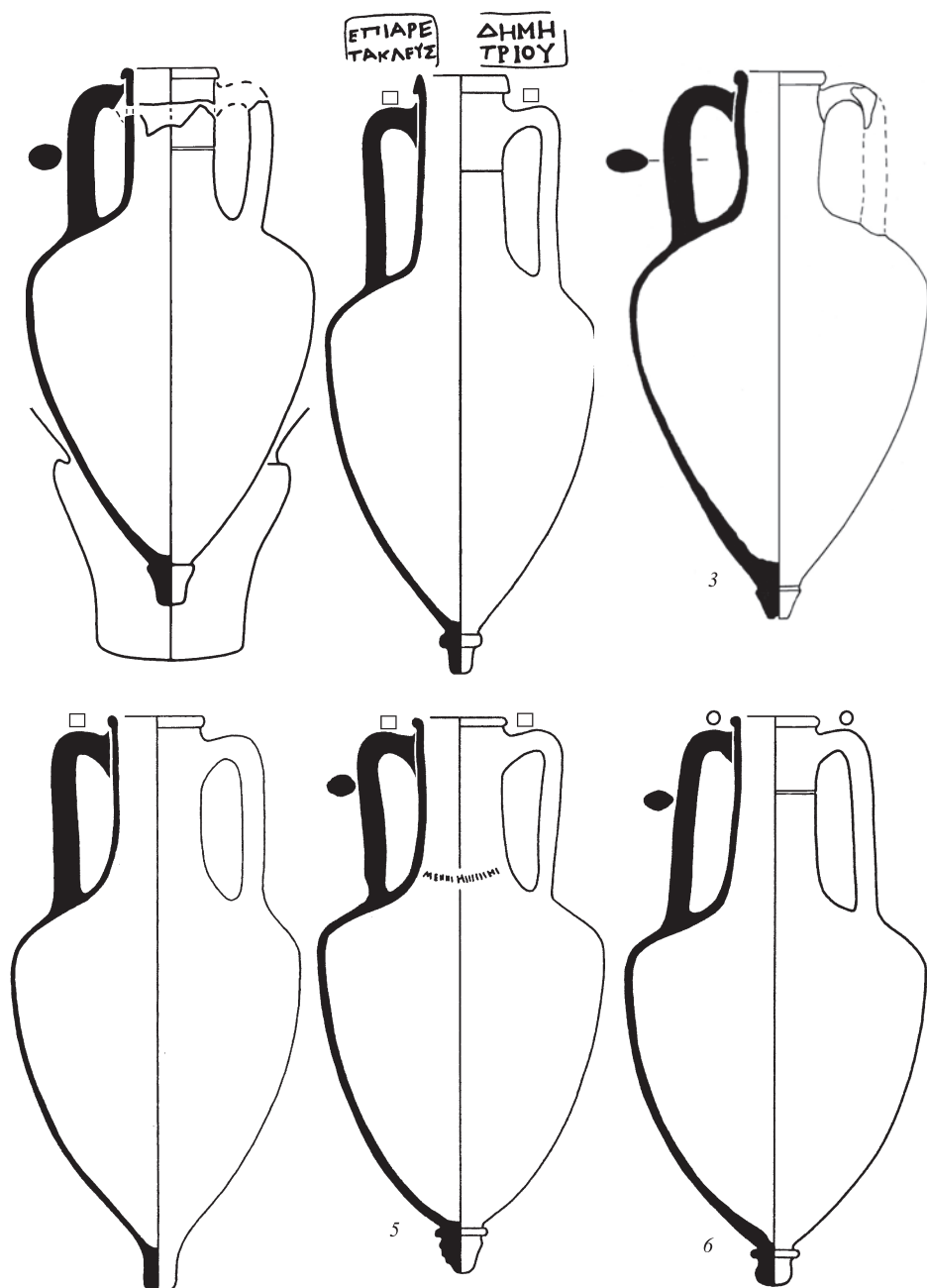
Fig. 1. Rhodian long-necked amphoras of types I-A (nos. 1-3) and I-B (nos. 4-6) from: 1) the Kyrenia wreck (after Empereur & Hesnard 1987); 2) the bay of Fos (after Sciallano & Sibella 1991); 3) Elizavetovskoe settlement (EG-79/XIV-422); 4) the Koroni peninsula (after Grace 1963; eponym Chrysostratos); 5) excavations in Thasos (after Grandjean 1992; eponym Mentaïos); 6) Chersonesos of Strabo (after Ščeglov 2001).

The *Koroni variant* (I-B) replaced the *Kyrenia variant* during the 270s-60s BC at the latest. These amphoras are significantly smaller in height; the mushroom-shaped rim is replaced with a high, overhanging rim, and the toe, while still peg-like in form, no longer has the characteristic depression in the base. The amphora from Koroni, which has been repeatedly described, has two stamps on the handles, one of which contains, in abbreviated form, the name of the eponym Chrysostratos, while the other bears an illegible name of the fabricant (Fig. 1.4).²⁶ This vessel is dated (for historical reasons) to the time of the Chremonidean war (267-262/261 BC).²⁷

An unstamped amphora from room 52 at the Elizavetovskoe settlement (Fig. 2.1), dating from the 270/260s BC, displays similar morphological characteristics.²⁸ The body of the jar from Elizavetovskoe has softer lines and is probably a slightly enlarged version of the denomination of eight Attic *choes* (26.26 litres)²⁹ compared to the vessel from Koroni (seven *choes*?). The upper part of a Koroni amphora, with an overhanging rim and no stamp on the handles, was identified in the collection found in the trench of 1967 on the isthmus of the Mayachny peninsula (Fig. 1.6),³⁰ and another fragmentary amphora with the same overhanging rim and with handles bearing the circular stamps of the Group-1 eponym Mentaïos and of the fabricant Kallikles (Fig. 1.5),³¹ was recently found on Thasos in the area of the Silen Gate. According to Kac' latest calculations, Mentaïos must have held office in the 260s BC.³² A further intact Koroni-type amphora from the same period is preserved at the museum of Rhodes and has on its handles the rectangular stamp of the Group-1 eponym Aretakles, together with that of the fabricant Demetrios (Fig. 2.2).³³ As in the case of the vessel from Elizavetovskoe, its actual capacity (27.54 litres) probably corresponds to the denomination of eight Attic *choes*. The rim of this amphora is beak-shaped³⁴ like that of the jar from Koroni, although it is not as massive. However, it has one new morphological detail: a toe with an applied flange, which would later become a feature of the Pietroiu variant.

What I.B. Brašinskij has termed the *Myrmekion amphoras* (Variant I-C), are distinguished from the *Kyrenia* and *Koroni*-type vessels by the more flowing lines of the body, particularly in the area between the neck and the shoulders; by the rolled rim and, very often, a cylindrical toe rounded at the bottom. One of the first examples of this type was found at *Myrmekion*. The amphora probably belongs to the same denomination of eight Attic *choes* as the preceding types of vessel. One of the handles has a rectangular stamp of

Fig. 2. Rhodian long-necked amphoras of types I-B (nos. 1-2), I-C (nos. 3-4) and I-D (nos. 5-6) from: 1) Elizavetovskoe settlement, room 52; 2) Rhodes (after Grace 1986; eponym Aretakles); 3) *Myrmekion* (after Zin'ko 2003); 4) Rhodes (after Grace 1963; eponym Lysandros, fabricant Sotas I); 5-6) *Pietroiu* (after Museteanu, Conovici & Anastasiu 1978; eponyms Polykles, Timostratos and Agestratos).



the fabricant Axios.³⁵ This amphora was initially dated to the middle of the 3rd century BC,³⁶ but given that stamps of the same fabricant have been found at the settlement of Gruševskoe, it is evident that the jar should in fact be dated to the end of the 250s or the 240s BC.³⁷ However, production of amphoras of this type began significantly earlier, as can be seen from the recent discovery at the Myrmekion necropolis of an unstamped vessel that differs from the first find in only one detail – its toe has a pronounced peg-like form, resembling that found in the Koroni variant (Fig. 2.3).³⁸ The context of the find allows a date around the first third of the 3rd century BC.

In only one instance had the Myrmekion amphora been found with a peg toe; most often the toes in this variant are cylindrical. Thus cylindrical toes are found on an unstamped jar in the museum at Nesebur³⁹ and on an amphora from the excavations at Rhodes (Fig. 2.4). In the latter case one of the handles bears the stamp of the fabricant Sotas I, combined with a monogram, while the second handle bears the name of Lysandros, a magistrate of Group 1. Virginia Grace was inclined to date this amphora to the end of the 4th century,⁴⁰ but according to the recent Finkielsztein's chronology, it probably dates from the 260s BC.⁴¹ Altogether, the available material permits us to limit the period in which the Myrmekion variant was manufactured to between the 280s and the 240s BC.

The *Pietroiu variant* (I-D), coming from the extremely interesting pit-of-1975 deposit at Pietroiu in Romania (Fig. 2.5-6), occupies a special place among the Type-1 amphoras. On this type one of the handles bears the stamp of the fabricant Hieroteles, while the second bears the rectangular or circular eponym stamps of the sub-group 1b: Polykles, Timostratos and Agestratos,⁴² which according to Finkielsztein's scheme date them to the late 250s and the first half of the 240s BC.⁴³ In terms of proportions, the main morphological features of the Pietroiu jars resemble those of the Myrmekion variant. The only exception is the special form of toe, the so-called Knidian type (with an applied flange) that we have already encountered on the Koroni amphora in the Museum of Rhodes (see Fig. 2.2). The evidence suggests that this was a local feature: it can also be observed on amphoras produced in the part of the Rhodian peraia which bordered on the territory of Knidos. It is quite possible that such vessels were manufactured by potters of Knidian origin, and to the buyer such a distinctive morphological detail as the Knidian-type toe would be an indication that the vessel contained the mainland rather than the island variety of Rhodian wine.

Examples of the Pietroiu type are extremely rare: apart from the above-mentioned finds I know of only one other fragmentary amphora (with no neck or toe) found in the trench of 1967 on the Mayachny peninsula, which I provisionally dated to the third quarter of the 3rd century BC,⁴⁴ a dating that I still consider valid.⁴⁵ In general, however, it should be noted that the Pietroiu variant does not represent a stage in the development of Rhodian amphora manufacture, but rather a local series of the Myrmekion variant.

The further evolution of the Type-1 Rhodian vessel continues through the *Villanova* variant (I-E), which represents a natural continuation of the Myrmekion variant. There is no doubt as to the morphological continuity between the two variants, since the basic proportions and the standard remain the same. The innovative features in the Villanova variant are as follows: the neck becomes somewhat narrower and longer, the transition between neck and shoulders becomes more distinct, and the toe is shorter and more distinctly formed. From the end of the second quarter of the 3rd century until the end of the 2nd century these morphological characteristics are fairly uniform. Nevertheless, thanks to stamped examples and certain secondary details in the profile it is possible to distinguish two successive series of ceramic vessels within the Villanova variant.

The *early* series (I-E-1) is characterised by such features as the smooth curve of the handle and a somewhat conical toe with a pronounced edge ridge in the upper part. Amphoras with stamps from the first half of the 2nd chronological group, dating from after c. 235 BC, can be considered part of this series. They include amphora no. SS 370 from the Athenian Agora (Fig. 3.1), which Grace initially dated to around 275^[46] and subsequently to the 240s BC. Its denomination is the same as that of the Myrmekion variant: eight Attic *choes*. On its surviving handle is a circular fabricant stamp with the name Zenon around the emblem of a flower. It is possible that there was a magistrate's stamp on the second handle, which has not survived.^[47] However, we know of the existence of some (albeit extremely rare) unstamped examples of such amphoras, such as the vessel from grave 1/1987 at the Starokorsunskaja burial site (Fig. 3.2).^[48] To this early series belong the jar from the Hôtel de Soleil deposit, which bears the stamp of Pausanias I, a magistrate from the very beginning of Group 2 (Fig. 3.3), who is now believed to have held office in the late 230s-20s BC,^[49] and an amphora from the Anapa Museum bearing illegible stamps (Fig. 3.4).^[50] All the vessels mentioned are smaller versions of the Agora jar and equal seven Attic *choes* (22.98 litres). Amphoras of an earlier series, bearing the stamps of the eponym Kallikratidas I, can be dated to approximately the same time. One such vessel comes from grave 2/1991 of the Eastern necropolis at the Starokorsunskaja settlement no. 2 (Fig. 3.6),^[51] and the second from grave 13/1992 (Fig. 3.5) from the same burial site.^[52] The last two amphoras are the full size jars, equalling eight *choes*.

Altogether, as can be seen from the illustrations, the most distinctive features of the early series I-E-1 of the Villanova variant are the smooth curve of the handles (which is also typical of the earlier variants) and the small conical toe. Judging from the materials available to us today, the significance of the first feature, which Grace identified as one of the most characteristic features of Rhodian vessels up until c. 240 BC, cannot be doubted, although it is possible that the date at which production ended should be set a little later.

The above-mentioned morphological features suggest that a small amphora from Gorgippia, with a capacity of just over four litres (Fig. 6.3), also belongs

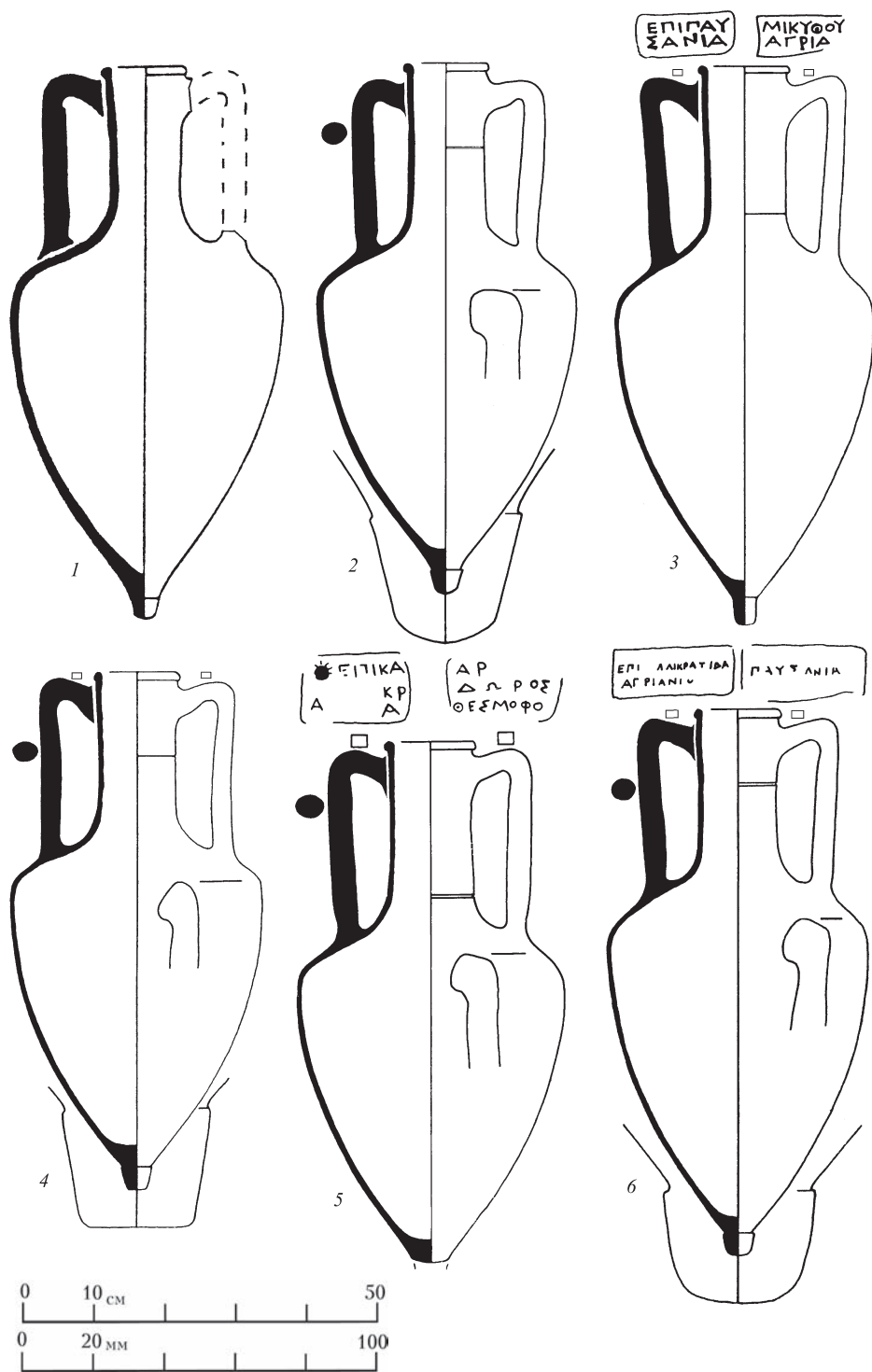
to the early series of the Villanova variant. The intended capacity of this fraction was most probably one *chous* (3.283 litres).⁵³ The small rectangular stamps with indistinct emblems on both double-barrelled handles do not provide sufficient evidence to date the vessel. However, the conical profile of the toe, which was typical of the early series, suggests that it was produced at the end of the third or beginning of the last quarter of the 3rd century BC.

The *late* series (I-E-2) of the Villanova variant displays the same basic morphological features and dimensions, and is distinguished only by certain details in the profile of the toe and handles. The handles are always bent at a sharp angle, and the toe is larger, with clearly defined edges, and in profile appears not so much conical as cylindrical or concave. The series I-E-2 includes several amphoras found on Rhodos (Fig. 4.2; circular stamp of the Group-2 eponym Theuphanes)⁵⁴ and in grave 2/1991 at the Starokorsunskaja necropolis (Fig. 4.1; circular stamp of the Group-3 eponym Aristeidias).⁵⁵ The best examples come from the Villanova deposit,⁵⁶ where we can see the stamps of eponyms Simylinos II, Archokrates II, Hieron I, Kratidas, Xenophon, Pratophanes and Timasagoras, among whom Simylinos belongs to Group 2, and all the others to Group 3. Traditionally this deposit has been dated to the time of the Pergamon deposit.

An amphora of the late series, bearing the stamp of the eponym Thestor from the first decade of the 2nd century BC, comes from the Komos Cistern in Athens.⁵⁷ The magistrate Ainesidamos II, whose stamp is found on an amphora in a private collection on Cyprus (Fig. 4.3), appears to have held office at the beginning of this century.⁵⁸ Fractional (?) vessels equaling seven Attic *choes* from graves 237 and 178 at Tanais bear the stamps of magistrates Archilaidas and Xenophantos (Figs. 5.2-3), and can be dated to the second quarter of the 2nd century.⁵⁹ The same applies to a fractional amphora of 3.5 *choes* bearing the stamp of the magistrate Aristodamos II that was found in grave 261 at the Tanais necropolis (Fig. 5.4).⁶⁰

Amphoras of the eponyms Klenostratos (Fig. 6.2) and Antilochos II (Fig. 6.1) from graves 8/1994 and 44/1995 at the Western Necropolis of settlement no. 2 in Starokorsunskaja⁶¹ are somewhat older, dating according to the latest chronology to the second half of the 2nd century. A number of other northern Black Sea finds can be dated more approximately to the 2nd century. In particular, we know of amphoras of this type from the excavations at Chersonesos (Fig. 4.4), from Kuban (Figs. 4.5 and 5.5) and from Olbia (Fig. 5.1).⁶² Because their stamps are illegible, however, it is impossible to establish more precise chronological connections for these vessels.

Fig. 3. Rhodian long-necked amphoras of type I-E-1 from: 1) Athens, SS370 (after Grace 1963; fabricant Zenon); 2) Starokorsunskaja necropolis (grave 1/1987); 3) Hôtel de Soleil deposit (after Wallace Matheson & Wallace 1982; eponym Pausanias I); 4) the Anapa Museum; 5-6) Starokorsunskaja necropolis (graves 13/1992 and 2/1991; eponym Kallikratidas I). —>

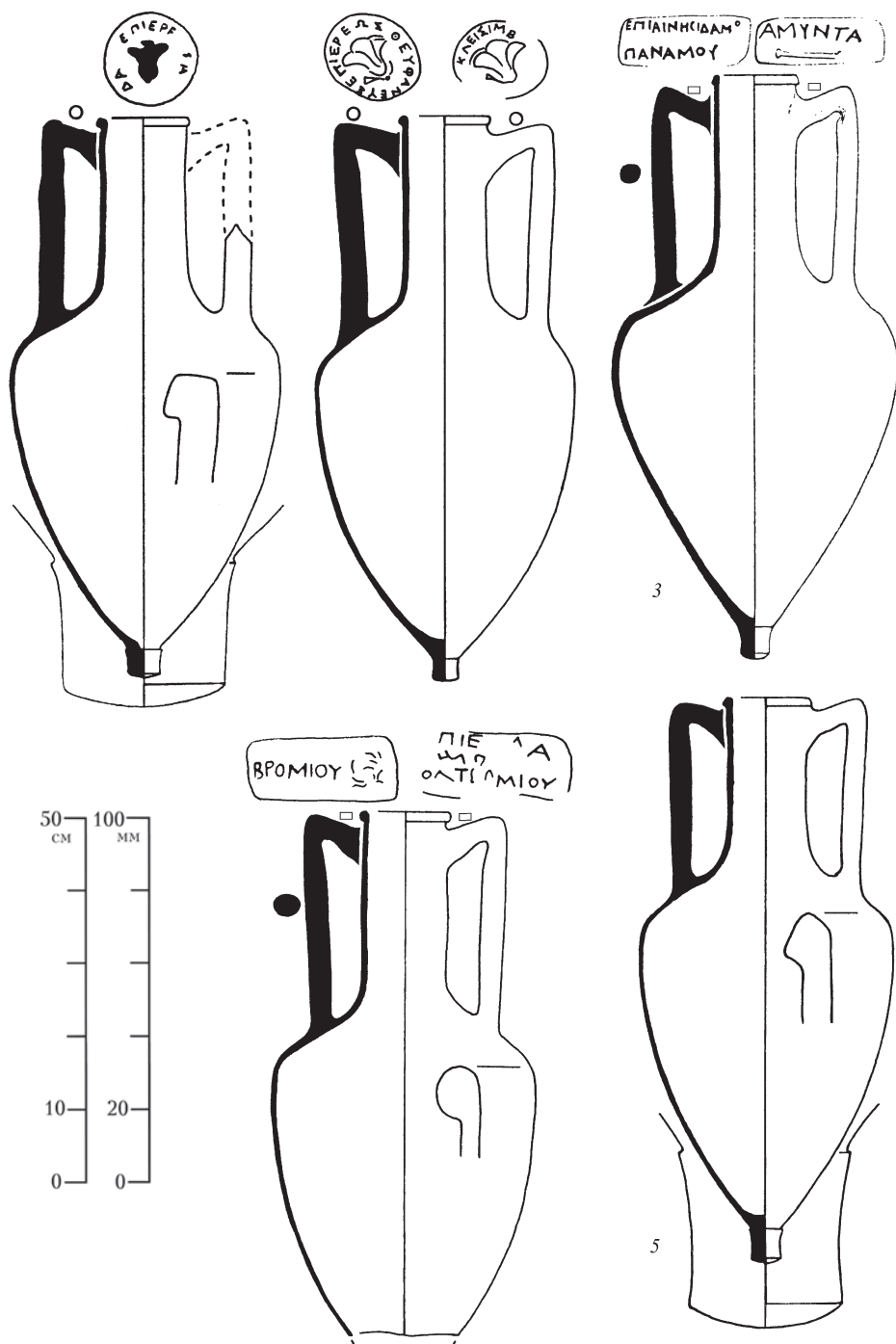


Smaller fractions of the late series of the Villanova variant can be dated to the second half of the 2nd century, and there are two more such fractions. Thus, two unstamped four-litre amphoras (equivalent to one *chous*) are preserved at the Hermitage (Fig. 6.4),⁶³ and a small mini-amphora measuring 1.75 litres (1/2 *chous*) comes from the excavations at Chersonesos (Fig. 6.5).⁶⁴ The latter's handle bears a rectangular stamp with a dot at the centre. The upper part of a similar amphora was found at the settlement of Bol'soj Kastel', but in this case the handles bear anepigraphic stamps with the head of Helios.⁶⁵ A further complete amphora of the same kind comes from layer E¹ at Scythian Neapolis, dating from the time of the fire in the 130s BC.⁶⁶

As can be seen, the Rhodian jars from the first half of the second century do not differ greatly from those produced in the second half of the preceding century. It is only towards the last quarter of the 2nd century BC that one can observe major changes in the morphology of the vessels: the slope of the shoulders becomes more gentle and the toe is shaped very roughly. Later on, this tendency becomes more and more distinct, which gives grounds for distinguishing a particular *Alexandrian* variant (I-F) within the first type of Rhodian vessels, named after the best-known find of this type. This amphora is preserved in the Graeco-Roman museum in Alexandria, and bears on its handles the stamps of the Group-5 eponym Thersandros and of the fabricant Timaratos (Fig. 7.1). Empereur and Hesnard, who published the jar, place this magistrate around 146 BC.⁶⁷ An amphora from an unnumbered grave at the Tanais (Fig. 7.2)⁶⁸ apparently dates from somewhat later, since it bears the stamp of Aristeidias III, an eponym of Group 5 (from the last quarter or even the very end of the 2nd century BC).⁶⁹ Judging from the Tanais jar, the capacity of which is over 27 litres, the standard dimension must by then again have been increased to eight Attic *choes*.

In addition to the above-mentioned vessels, to the second half of the 2nd century can also be ascribed a fragmentary amphora from the "Cholmskoe" burial ground in the Odessa region, which bears the stamp of Gorgon, an eponym of Group 4 (Fig. 7.3),⁷⁰ a chance-find amphora from the necropolis at the Lenin khutor in the Kuban area (Fig. 8.2),⁷¹ and one more vessel from grave 7 in the Western Necropolis of settlement no. 2 at Starokorsunskaja, which bears the eponym stamp of Nikomachos (Fig. 8.1).⁷² We also know of examples of fractional amphoras of the Alexandrian variant, one of which (apparently from the second half of the 2nd century) was found in barrow 3O near the village of Petuchovka in the district of Olbia (Fig. 7.4).⁷³ Later amphoras of the first quarter of the 1st century BC come from the Antikythera

Fig. 4. Rhodian long-necked amphoras of type I-E-2 from: 1) Starokorsunskaja necropolis (grave 2/1991; eponym Aristeidias II); 2) Οικοδομή Παπαγεωργίου "λάκκος", Rhodes (after Wallace Matheson & Wallace 1982; eponym Theuphanes); 3) Cyprus, private collection (after Empereur & Hesnard 1987; eponym Ainesidamos II); 4) Chersonesos, 57/37102 (eponym Eudamos?); 5) Starokorsunskaja necropolis, 1938. —>



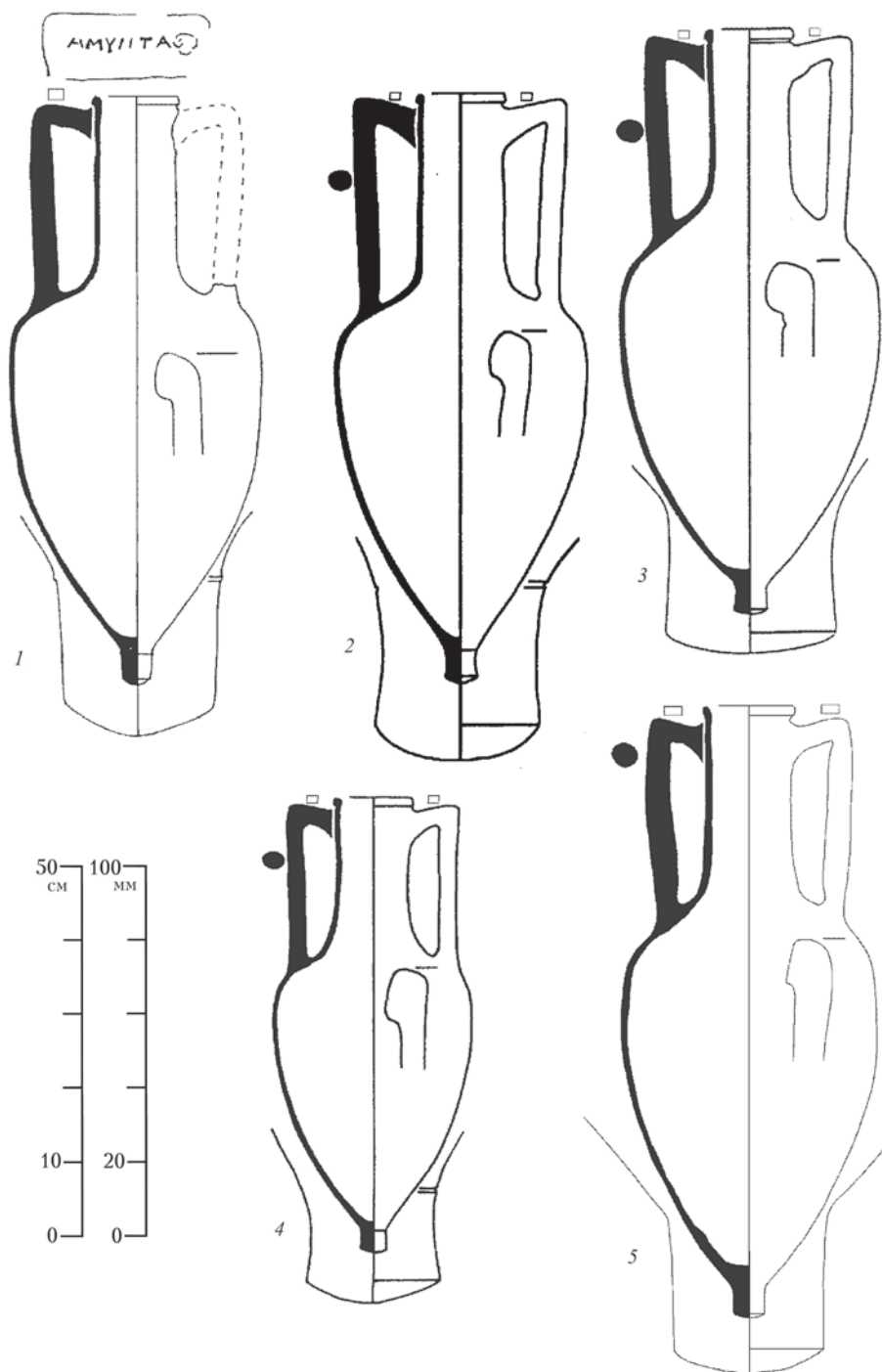


Fig. 5. Rhodian long-necked amphorae of type I-E-2 from: 1) Olbia; 2-4) necropolis of Tanais (2: grave 237; 3: grave 178; 4: grave 261; eponyms Archilaidas, Xenophantos, Aristodamos); 5) Starokorsunskaja necropolis, 2002.

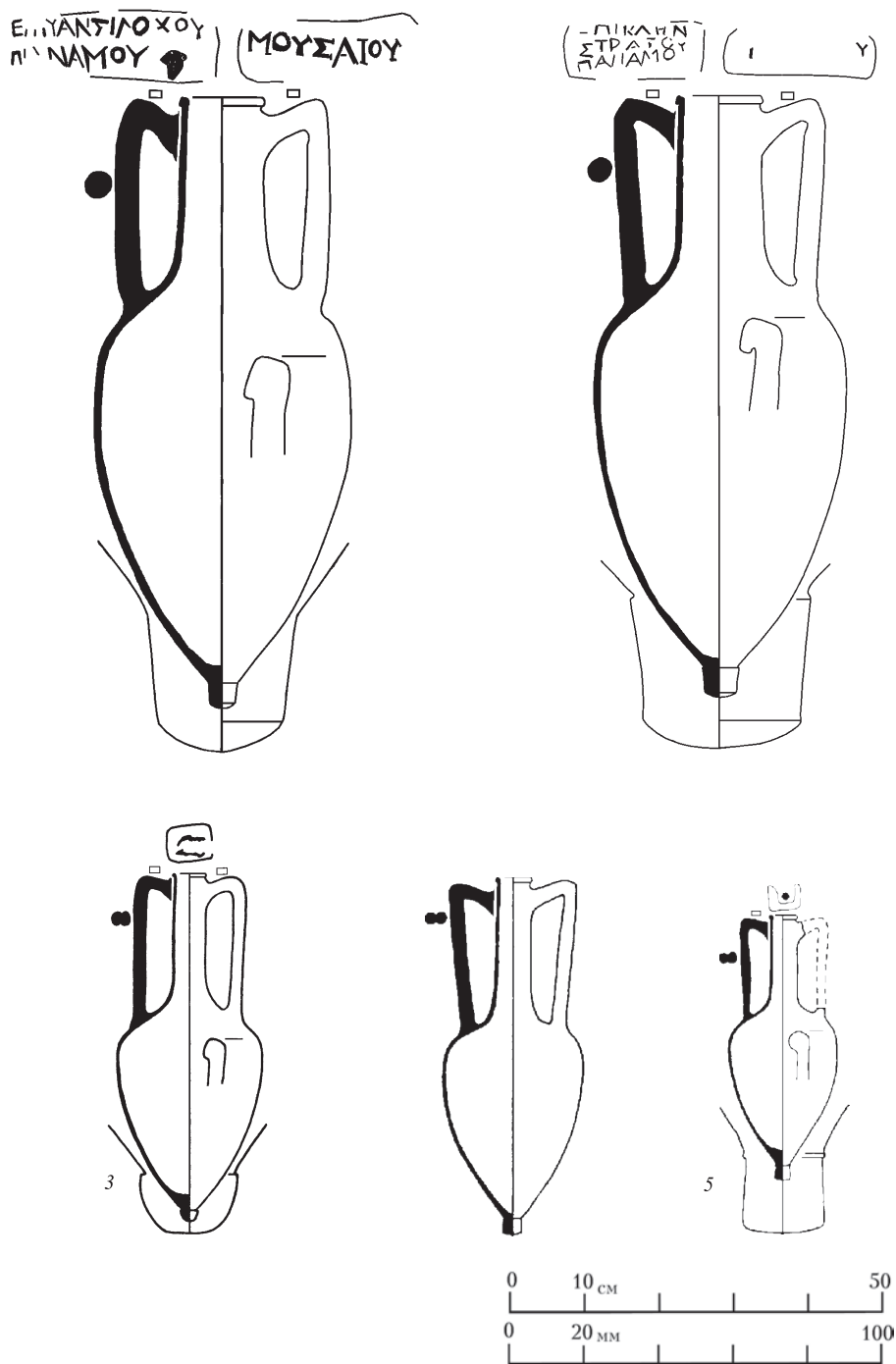


Fig. 6. Rhodian long-necked amphorae of type I-E-2 from: 1-2) Starokorsunskaja necropolis (1: grave 44/1995; 2: grave 8/1994; eponyms Antilochos and Klenostratos); 3) Gorgippia; 4) the Hermitage Museum; 5) Chersonesos.

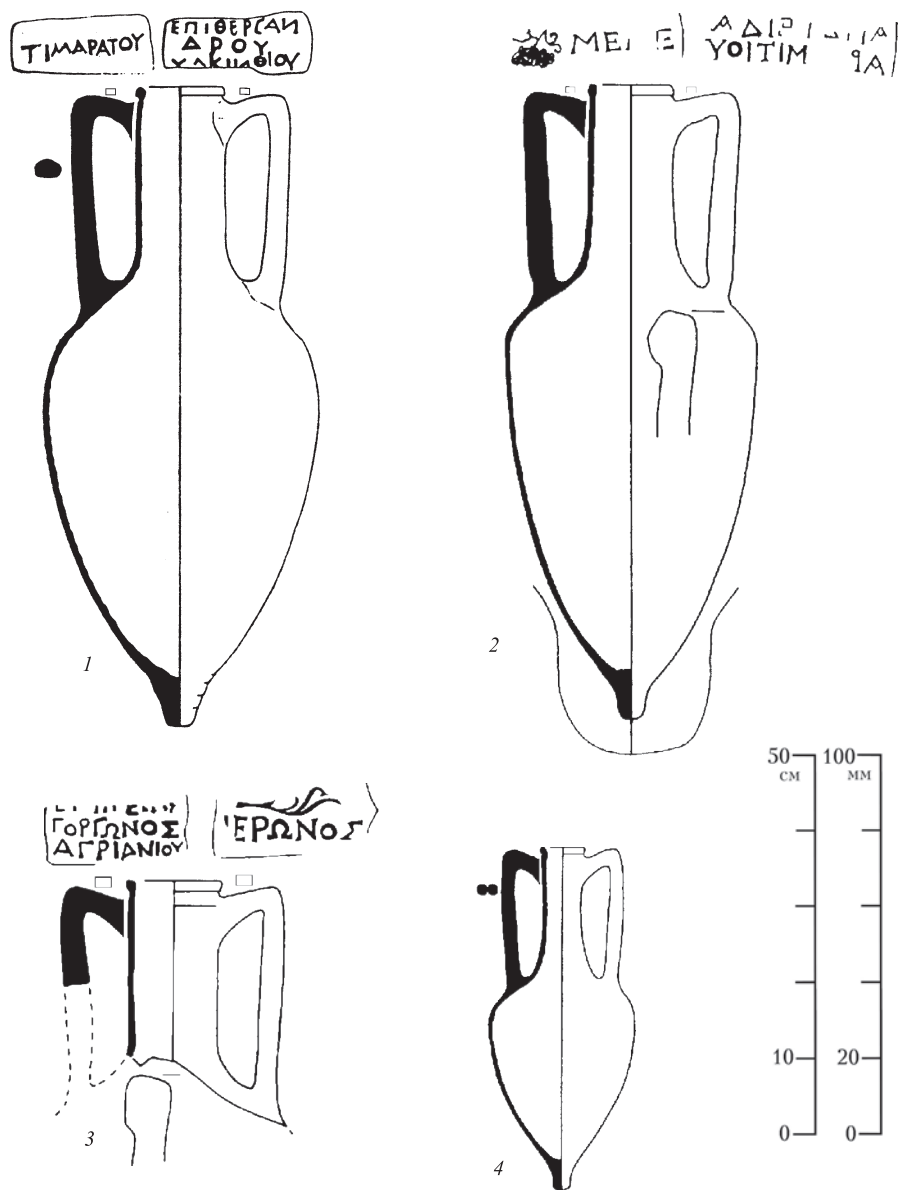


Fig. 7. Rhodian long-necked amphorae of type I-F from: 1) Alexandria (after Empereur & Hesnard 1987; eponym Thersandros); 2) necropolis of Tanais (eponym Aristeidas III); 3) Cholmskoe burial site (eponym Gorgon); 4) tumulus γ O near Petuchovka (after Ebert 1913).

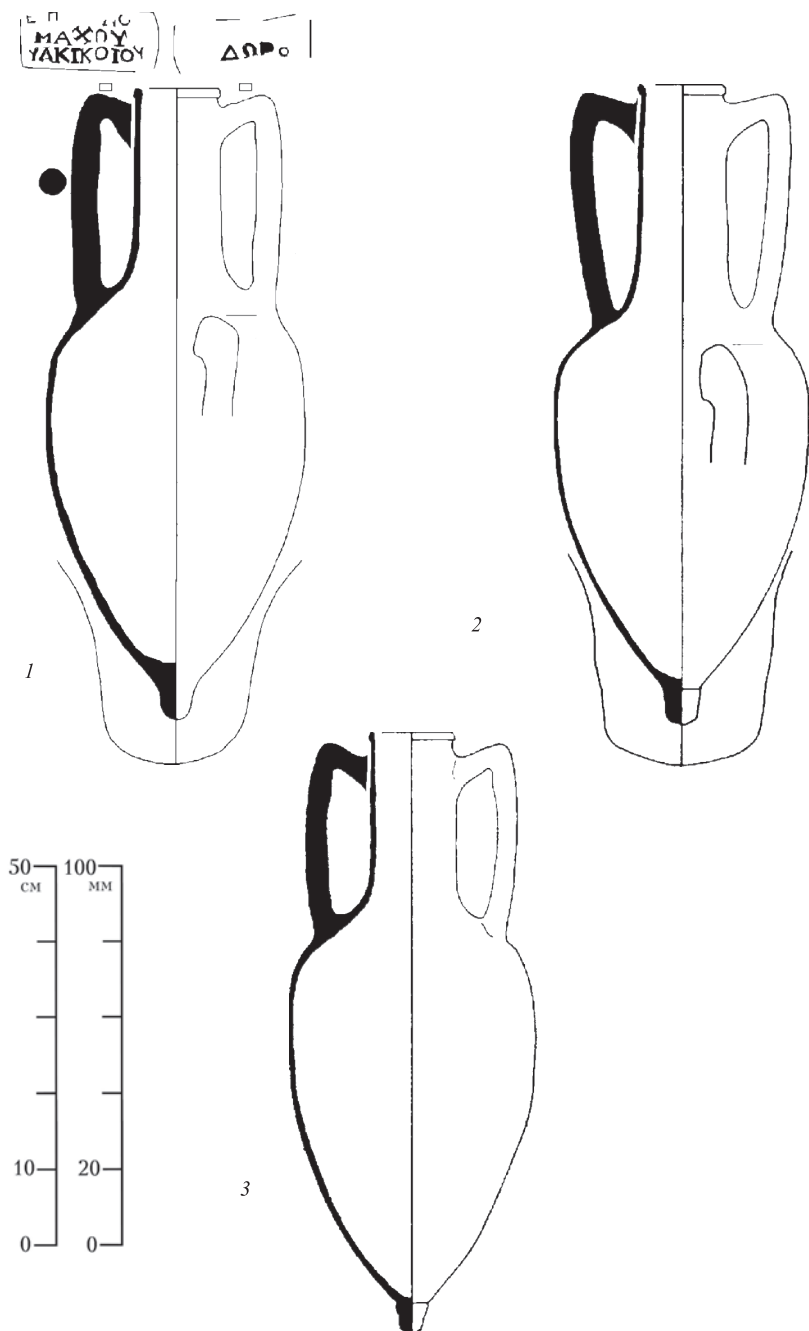


Fig. 8. Rhodian long-necked amphoras of type I-F from: 1) Starokorsunskaja necropolis (grave 7/1994; eponym Nikomachos); 2) Lenin *khutor*; 3) Antikythera shipwreck (after Empereur & Hesnard 1987).

wreck (Fig. 8.3).⁷⁴ It is possible that this form lasted to the end of the magistrate stamping around 30 BC. The handles of the amphora become curved and distinctly raised, and the toes are cruder. Later on, in the period of the Principate and the Empire, Rhodian amphoras would continue to evolve in this direction. However, the morphology during these later periods lies outside the scope of the present study.

Amphoras of *Type 2* (or the Benachi type, with short necks) have several morphological features that are somewhat unusual for Rhodos: a wide pithoid body, a high beak-like rim and a peg toe. The diagnostic parts of the Benachi type in fact follow the lines characteristic of the Kyrenia variant, but the profile of the body is quite different. Unfortunately, only isolated examples of the Benachi-type vessel have been found, and for this reason it is difficult to establish the date at which it emerged. It is noteworthy that Virginia Grace initially dated the amphora from the Benachi collection, which for a long time was a unique example of its kind and the only one described, to the end of the 4th century BC,⁷⁵ despite the fact that it bore the retrograde stamps of the Group-1 eponym Polyaratos, and of the fabricant Mikythos (Fig. 9.1). Recently, however, in connection with the revision of Rhodian chronology, it was correctly re-dated to the end of the first quarter of the 3rd century (around 275 BC).⁷⁶

Today still other finds have come to light. Several fragmented and, unfortunately, unstamped amphoras were found in the deposits from area "B" of the settlement of Kozyrka II, the monumental building U6 (Fig. 9.2)⁷⁷ and complex U7⁷⁸ at Panskoe I. The archeological context suggests that these date from the first quarter of the 3rd century BC, probably from the 270s BC. A small fragment of the neck of a Rhodian amphora, bearing on its handle the stamp of an early fabricant, Sotas I, preserved in the collection of the Anapa museum (Fig. 9.3)⁷⁹ should also be regarded as one of the Benachi type. The rim of this fragment is more massive than that of the amphora in the Benachi collection, and the Sotas stamp gives grounds for dating this example to the 280s-70s. A further fragment of a neck with the stamp API | ΣΤΙ on the handle comes from the settlement of Elizavetovskoe (Fig. 9.4),⁸⁰ the most recent layers of which (or rather – the layers from the late Greek *emporion* on this territory) date to the 260s.⁸¹ An intact amphora from the Kazanlyk barrow (Fig. 9.5),⁸² known to me only from the published description, should also be included in the Benachi type. Judging by its dimensions, it represents a fraction of the denomination of the jars from Alexandria and Panskoe I. Thus it appears that the production of the Benachi type was relatively short-lived, being confined to roughly the first third of the 3rd century BC, after which production ceased, and a long-lasting tradition of manufacturing only the Type-I vessels was established on Rhodos.

The manufacture of Rhodian amphoras appears to have followed the same norms and tendencies observed at a number of other centres. During the initial stages of mass amphora production several morphological traditions co-existed: thus at a certain stage in the first third of the 3rd century BC two

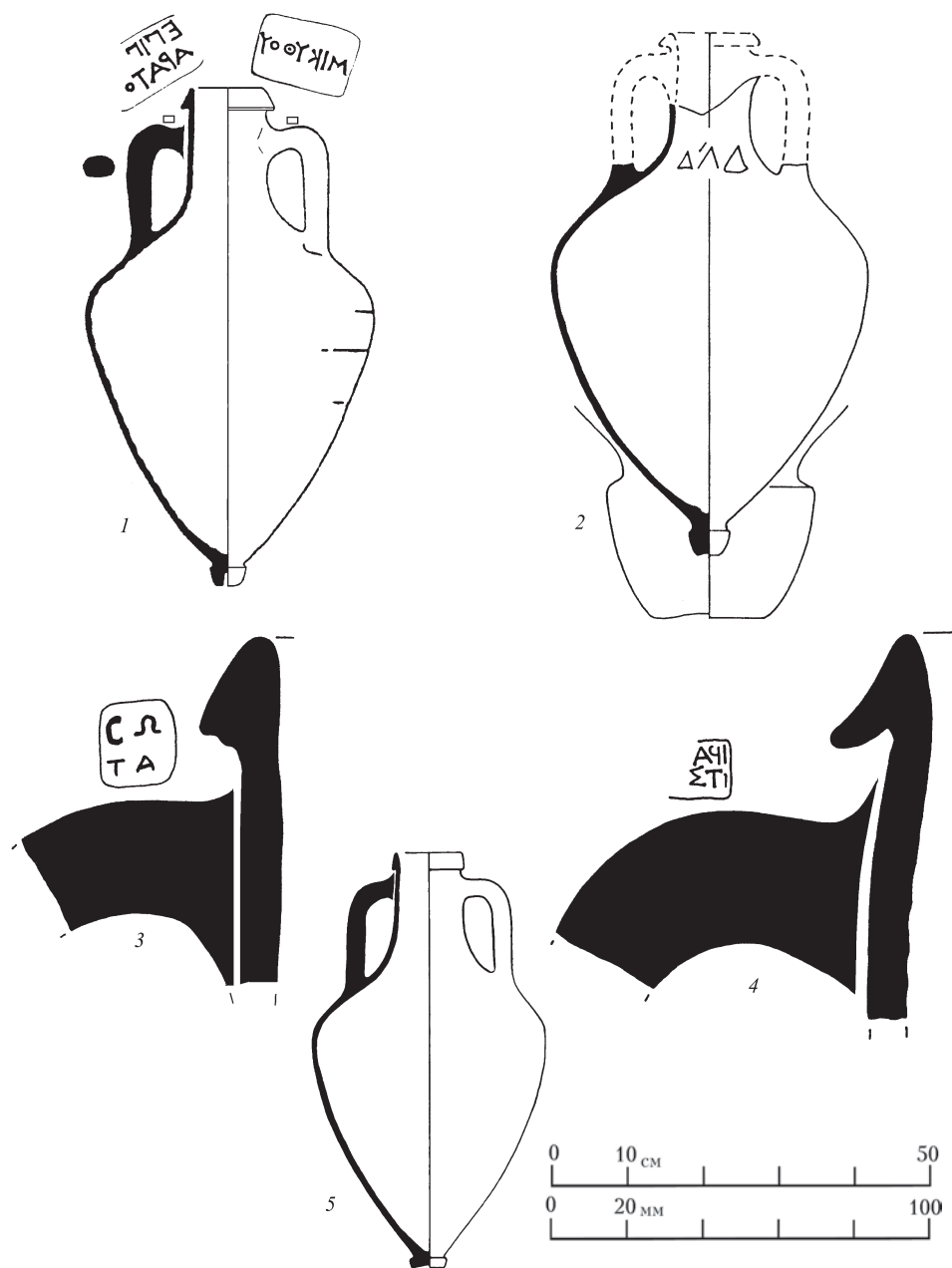


Fig. 9. Rhodian short-necked amphoras of type II from: 1) Benachi collection (after Grace 1963 and Empereur & Hesnard 1987; eponym Polyaratos); 2) building U6 at Panskoe I; 3) the Anapa Museum (fabricant Sotas); 4) Elizavetovskoe (fabricant Aristi()); 5) Kazanlyk barrow (after a photograph).

types of amphoras, which we have designated Type 1 (with the long neck) and Type 2 (with the short neck), were produced simultaneously. At the same time, several smaller versions of both types were also produced.

At the end of the second quarter of the 3rd century BC one model (Type 1) triumphed and became not only the basic but the only type produced, so that for over two centuries afterwards Rhodian amphora production was oriented exclusively towards this type of vessel. Indeed, the standard model was gradually modified and changed. However, these changes affected only the secondary details (the profile of the rim, shoulders, handles, toe etc.), which makes it relatively easy to follow the development of the various forms. It appears that the production of amphoras peaked at around the second half of the 3rd century and the first half of the 2nd century BC, coinciding with the emergence of the Villanova variant, a hypothesis that is well-attested by the stamps.

Unfortunately, we cannot get a clear idea of the dynamics and evolution of the types and standards of the Rhodian amphoras in all instances. In particular, we do not have any data on the capacity of the Kyrenia (variant I-A) amphoras or of the Type-2 (Benachi) vessels. However, the facts known to us can be roughly outlined in the following table:

Table 1.

Type	Variant, series	Standard denomination or fractions, <i>Attic choes</i>	Capacity, litres	Dating, BC
I <i>'long-necked'</i>	I-A <i>Kyrenia</i>	no data	no data	Late 4th – early 3rd cent.
	I-B <i>Koroni</i>	8 7	26,26 19,70	2nd quarter of the 3rd cent.
	I-C <i>Mykmeleon</i>	8	26,26	2nd quarter – middle of the 3rd cent.
	I-D <i>Pietroiu</i>	8	26,26	2nd quarter – middle of the 3rd cent.
	I-E <i>Villanova, early series I-E-1</i>	8 1	26,26 3,28	Middle – 2nd half of the 3rd cent.
	I-E <i>Villanova, late series I-E-2</i>	7 1 0,5	22,98 3,28 1,64	Late 3rd – 2nd cent.
	I-F <i>Alexandrian</i>	8 6 (?)	26,26 19,70	2nd half of the 2nd – 1st cent.
II <i>"short-necked" (Benachi)</i>		no data	no data	1st third of the 3rd cent.

Table 2. Metric characteristics of the Rhodian amphoras. The capacities are measured with water or grain; those marked with an asterisk (*) are calculated on the basis of drawings made on the scale 1:1.

Findspot/Pres- ent location	Dimensions, mm						Capac- ity, litres	Stamps	Fig.
	H	H _o	H ₁	H ₃	D	d			
Typ 1 (<i>long-necked</i>) Variant I-A (<i>Kyrenia</i>)									
Kyrenia ship- wreck	~930	~830	~400	280	360	–	–		1.1
Golfe de Fos	~980	~880	~495	290	375	–	–		1.2
Typ 1 (<i>long-necked</i>) Variant I-B (<i>Koroni</i>)									
Attica, Koroni	~770	725	~345	~250	395	–	–	Chrysostratos, ep.	1.4
Thasos, Silen Gate, no. 84	–	–	–	~230	–	108	–	Mentaïos, ep.	1.5
Elizavetovskoe, room 52/1986	~730	~665	315	185	380	98	28,18*		2.1
Rhodos, A419	796	–	370	260	357	–	27,54	Aretakles, ep.	2.2
Typ 1 (<i>long-necked</i>) Variant I-C (<i>Myrmekion</i>)									
Myrmekion	705	660	325	200	360	95	–	Axios, fab.	2.3
Rhodos, BE-1342	768	710	340	210	380	100	–	Lysandros, ep.	2.4
Typ 1 (<i>long-necked</i>) Variant I-D (<i>Pietroiu</i>)									
Pietroiu, 15107	738	660	310	215	380	98	28,50	Polykles, ep.	2.5
Pietroiu, 15106	720	665	320	225	410	90	26,00	Timostratos, ep.	2.6
NPTCh, 9/36683	–	–	–	–	360	–	–		
Typ 1 (<i>long-necked</i>) Variant I-E (<i>Villanova</i>), Series I-E-1 (<i>early</i>)									
Athens, SS370	757	710	350	230	367		27,00	Kallikratidas, ep.	3.1
KubU, grave 1/1987 Staro- kors. necropolis	755	690	340	240	360	95	24,64*		3.2
KubU, grave 1/1987 Staro- kors. necropolis	772	716	355	235	358	96	25,13*	Pausanias, ep.	
Rhodos Mus., A-64	801	737	360	235	358	100	24,20	Pausanias, ep.	3.3
AAM, 9228	745	676	335	220	358	100	26,00*		3.4

KM, grave 13/1992 Starokors. necropolis	-	700	365	240	365	100	26,00*	Kallikratidas, ep.	3.5
KM, grave 2/1991 Starokors. necropolis	778	725	345	220	370	100	26,00*	Kallikratidas, ep.	3.6
AAM, 10933/70, Gorgippia, 1978	473	235	255	170	195	33	3,90		6.3
Typ 1 (<i>long-necked</i>) Variant I-E (<i>Villanova</i>), Series I-E-2 (late)									
KM, grave 2/1991 Staro- kors. necropolis	768	728	370	235	358	95	25,89*	Aristeididas, ep.	4.1
Athens, SS9991	765	715	340	240	356	-	25,14	Thestor, ep.	
Rhodos, A-33	782	726	380	240	352	96	26,00	Theuphanes, ep.	4.2
Cyprus, private coll.	810~	-	-	-	~385	-	-	Ainesidamos, ep.	4.3
NPTCh, 57/37102	-	-	380	260	360	100		Eudamos, ep.?	4.4
KM, chance find of 1938 near Starokorsuns- kaja	780	714	350	230	350	96	25,71*	illegible	4.5
APO, O-73/140	800	734	365	230	344	94	-	Amyntas, ep.	5.1
RM, 11140, grave 237 from Tanais	798	735	370	260	345	103	27,00	Archilaidas, ep.	5.2
RM, 11134, grave 178 from Tanais	805	743	390	225	355	99	29,30*	Xenophantos, ep.	5.3
RM, 11141, grave 261 from Tanais	618	576	300	190	270	88	12,43	Aristodamos, ep.	5.4
KM, 2002 Starokors. necropolis	832	758	460	254	344	114	-	illegible	5.5
KM, grave 44/1995 Starokors. necropolis	826	768	460	235	344	90	-	Antilochos, ep.	6.1

KM, grave 8/1994 Starokors. necropolis	810	758	400	226	340	94	–	Klenostratos, ep.	6.2
Nicosia Museum	785	735	390	250	336	110	24,00	Archilaidas, ep.	
NPTCh, KP-269	–	–	365	255	365	94	26,20*	illegible	
Rhodos, Villa- nova deposit	784	–	360	–	352	110	26,65	Kratidas, ep.	
SHM, B.7268	480	450	255	190	177	33	3,90		6.4
NPTCh, 137/37050	358	315	190	115	146	28	1,75	Square with a pellet	6.5
Typ 1 (<i>long-necked</i>) Variant I-F (<i>Alexandrian</i>)									
Alexandria, 21703	~840	~770	–	–	~360	–	–	Thersandros, ep.	7.1
RM, unnum- bered grave from Tanais	840	775	350	230	336	92	27,23*	Aristeidias, ep.	7.2
OAM, tumulus 1 near Cholmskoe	–	–	–	245	–	100	–	Gorgon, ep.	7.3
Tumulus ³ O near Petuchovka	448	410	235	170	181	–	–		7.4
KM, grave 7/1994 Starokors. necropolis	834	760	460	235	342	92	–	Nikomachos, ep.	8.1
KM, 5455/1421, Lenin khutor	856	785	450	300	338	91	25,24*	illegible	8.2
Antikythera wreck	~800	~750	–	–	~330	–	–		8.3
Typ 2 (<i>Benachi or short-necked</i>)									
Alexandria Museum, Bena- chi Coll.	663	600	300	170	390	–	–	Polyaratos, ep.	9.1
Panskoe U6/13, find list 8/14	–	~645	~320	~160	420	–	–		9.2
Panskoe U6/14, find list 7/3	–	–	350	170	448	120	–		
Kazanlyk bar- row	543	–	–	–	305	–	–		9.5

Abbreviations to the table

AAM	—	The Anapa Archaeological Museum
APO	—	The Archaeological Preserve “Olbia”, Parutino
NPTCh	—	National Preserve “Taurian Chersonesos”, Sevastopol
SHM	—	The State Hermitage Museum, St Petersburg
KM	—	The Kuban Museum, Krasnodar
KubU	—	Kuban State University
OAM	—	The Odessa Archaeological Museum
RM	—	The Rostov Museum
SarU	—	Saratov State University

Notes

- 1 Dupont 1982, 208.
- 2 Grakov 1939a, 28.
- 3 Grace 1952, 514, 525; Grace 1953; Grace 1956; Grace 1963.
- 4 Grace & Savvatiadou-Petropoulakou 1970, 286.
- 5 See also contributions by Rotroff and Lawall in this volume.
- 6 Badal’janc 1987; Badal’janc 1989, 229; Badal’janc 2000; Badal’janc 1999, 247-253.
- 7 For the criticism of Ju.S. Badal’janc’s view, see Kac 2002a; Kac 2002b; Kac 2003b. At the same time, Badal’janc is right in stating that the fabricant stamping in Rhodos occurs before the magisterial. However, according to his chronological scheme, Group 10 of the fabricant stamps falls into the third quarter of the 4th century BC (Badal’janc 1980, 6; Badal’janc 1999, 250), which certainly is dating it too early.
- 8 Grace 1974, 194-195.
- 9 Finkielsztejn 1995, 279-296; Finkielsztejn 2001; Ariel & Finkielsztejn 2003, 139.
- 10 Empereur & Hesnard 1987, 58-61; Empereur 1988; Empereur & Tuna 1989; Empereur, Hesse & Tuna 1999.
- 11 Kac 2003b, 156-167.
- 12 Börker & Burow 1998.
- 13 Empereur & Hesnard 1987, 58-61, pls. 2 and 3; Sciallano & Sibella 1991, 93-94. For the capacities of the Rhodian amphoras, see Wallace Matheson & Wallace 1982; Wallace 1986.
- 14 Katzev 1970b.
- 15 Katzev 1970b. Along with the first publication, the drawing of this jar can also be found in Empereur & Hesnard 1987, 18, 58, pl. 2, no. 7 and Sciallano & Sibella 1991, 89.
- 16 Sciallano & Sibella 1991, 89 (photo and drawing).
- 17 Monachov 1999a, 477, pl. 205.9.
- 18 Badal’janc 1978, 214, no. 60.
- 19 Brašinskij 1980, 200, no. 769. One more stamp of the same die, which is not listed by Brašinskij, is preserved at the Rostov Museum (inv. no. 5127/190) and originates from excavations of 1979.
- 20 Kolesnikov 1985b, 78, fig. 4, no. 162.
- 21 The Cherson Museum, inv. no. A-6487.

- 22 The Kerch Museum, inv. no. K-8869 (following the old numeration). I owe the information about this neck fragment with a stamp on the handle to V.I. Kac. The find-spot is unknown. The Museum possesses one more amphora handle stamped with the same die (inv. no. 9489).
- 23 Kac 2003b, 157-158, tab. 1.
- 24 One should mention, however, that there is a representative group of non-Rhodian rectangular stamps with the name of Timarchos in one line, which appear on handles of the so-called Kolchian amphoras made of a coarse brown clay. See Vinogradov & Onajko 1975, 88, fig. 6 (photo of a stamp); Cecchladze 1992, 105-106, fig. 8, no. 1. Several stamps of this kind are registered in *IOSPE* III, nos. 2292-2296. One more fragment of the typical Kolchian amphora with Timarchos was found in Porthmion in 1990 (find list 239). It is evident that the Kolchian stamps with Timarchos belong to the much later period: the second half of the 3rd-the 2nd century BC.
- 25 See Monachov 1999a, 362, pls. 159-161.
- 26 Grace 1963, fig. 1, no. 5; Empereur & Hesnard 1987, 58, pl. 2, no. 9.
- 27 Rotroff 1997b, 31-33. See also her contribution in this volume.
- 28 See Monachov 1999a, 491, pls. 209 and 210.
- 29 A similar amphora neck was found in the workshop in the Rhodian peraia, see Empereur & Tuna 1989, 281, fig. 8.
- 30 See Ščeglov 2001, 64, 70, fig. 7.16. A.N. Ščeglov based on the opinions of V. Grace and I.B. Zeest attributed this amphora as the Samian or of the "Ust'-Laba" type. He justly notes that my publication of this deposit (Monachov 1999a, 551, pl. 232) does not take into account all the material found there, including the above-mentioned upper part of the Rhodian (!) amphora. However, I was not able to find any report on the rescue excavations of 1967 in the Archives of the Chersonesean Preserve.
- 31 Grandjean 1992, 569, fig. 14, no. 84. Stamps ΕΠΙ | ΜΕΝ | ΤΑΙΟΥ and ΚΑΑ | ΛΙΚΑ | ΕΥΣ.
- 32 Kac 2003b, 156.
- 33 Grace 1986, 564, fig. 5, nos. 23, 27 and 28. Stamps ΕΠΙ | ΑΡΕ | ΤΑΚΛΕΥΣ and ΔΗΜΗ | ΤΡΠΟΥ.
- 34 Similar rims are recorded from the settlement of Elizavetovskoe. See Brašinskij 1980, pl. 23, no. 3.
- 35 Gajdukevič 1941, 134, fig. 40. The second handle of the Myrmekian amphora must have had an eponym stamp. I cannot prove this, however, since the present location of the jar is unknown.
- 36 Brašinskij 1984a, 119, pl. 25.5.
- 37 Kac 2002b, 252.
- 38 Zin'ko 2003, 171, 173, fig. 5.1. The amphora was accompanied by an unguentarium.
- 39 Lazarov 1973, 42, pl. 19, no. 195. Found in the sea.
- 40 Grace 1963, 323, fig. 1, no. 6.
- 41 Finkielsztejn 2001, 188. He dates Lysandros about 262 BC.
- 42 The reading of one magistrate name now requires correction – the deposit contains the stamp of the Group-Ib magistrate Polykles, not Polykrates, as conjectured in *editio princeps* and accepted uncritically in my publication (see Monachov 1999a, 533, pls. 224 and 225). I am grateful to V.I. Kac for this correction (stamps of

- Polykles reading ΕΠΙ ΙΕΡΕ | ΩΣ ΠΙΟΛ | ΥΚΛΕΥΣ are recorded in *IOSPE* III, nos. 3683-3684).
- 43 Finkielsztejn 2001, 188. On the workshop of Hieroteles, see Empereur & Tuna 1989; Empereur, Hesse & Tuna 1999, 105-110.
 - 44 See Monachov 1999a, 551, pl. 232.3.
 - 45 For the criticism of my dating, see Ščeglov 2001, 64, 70, fig. 7.14.
 - 46 Grace 1963, 323, fig. 1, no. 7.
 - 47 Grace 1974, 197, note 17. This date is accepted by other scholars: Empereur & Hesnard 1987, 60, pl. 3, no. 10; Garlan 2000, fig. 38.b. Both Empereur & Hesnard's publication and Garlan's monograph show the amphora as having both handles preserved. In fact, one handle of the jar is missing.
 - 48 See Monachov 1999a, 547, pl. 229.
 - 49 Wallace-Matheson & Wallace 1982, 320, pl. 80.a. Rectangular stamps with a legend in two lines: ΕΠΙ ΠΑΥ | ΣΑΝΙΑ and ΜΙΚΥΘΟΥ | ΑΓΡΙΑΝΟΥ; the date according to Finkielsztejn 2001. For more amphora with the stamp of Pausanias, see Ariel & Finkielsztejn 2003, 138.
 - 50 Inv. no. 9228. The jar was found in the sea in 1975.
 - 51 See Monachov 1999a, 548, pl. 230. A correction is needed, in that the deposit contained the stamp of Kallikratidas I, not of Kallikratidas II.
 - 52 The Kuban Museum, inv. no. 10048/62. Excavations by N.Ju. Limberis. Stamps on the handles of this amphora read ΕΠΙ ΚΑ | ΛΛΙΚΡ | ΑΤΙΑΔΑ (emblem "head of Helios") and ΑΡΤΕΜΙ | ΔΩΡΟΣ | ΘΕΣΜΟΦΟ(ΡΙΟΥ).
 - 53 The Anapa Archaeological Museum, inv. no. 10933/70. Excavations of 1978.
 - 54 Wallace-Matheson & Wallace 1982, 320, pl. 80.b. Circular stamps ΕΠΙ ΙΕΡΕΩΣ ΘΕΥΦΑΝΕΥΣ and ΚΛΕΙΣΙΜΒΡΟΤΙΑΔΑ.
 - 55 See Monachov 1999a, 548, pl. 230. Should be dated now to the 160s BC.
 - 56 At greater length, see Monachov 1999a, 540, pl. 227, where, however, I gave too early a date for the deposit of Villanova.
 - 57 Grace 1979, fig. 62 (the last on the left); Grace 1963, 325, 334, fig. 1, no. 9.
 - 58 Empereur & Hesnard 1987, 60, pl. 3, no. 11. Stamps ΕΠΙ ΑΙΝΗΚΙΑΔΑΜΟ | ΠΑΝΑΜΟC and ΑΜΥΝΤΑ.
 - 59 On the deposits from Tanais, see Monachov 1999a, 553, pls. 233-234. Grace dated these magistrates to the period 182-176 BC. See Grace 1985, 8, 10. According to Finkielsztejn (2001, 192-193) they belong to the 160s and 150s BC. One more amphora with the stamp of Archilaidas is preserved at the museum of Nicosia on Cyprus, see Grace 1949, 5, pl. 19, no. 5; Grace 1986, 519.
 - 60 Arsen'eva 1977, 79; Šelov 1975, 40, 107.
 - 61 Excavations by N.Ju. Limberis and I.I. Marčenko. Stamps ΕΠΙ ΚΑΗΝΟ | ΣΤΡΑΤΟΥ | ΠΑΝΑΜΟΥ (on the amphora from grave 8) and ΕΠΙ ΑΝΤΙΑΟΧΟΥ | ΠΑΝΑΜΟΥ and ΜΟΥΣΑΙΟΥ (on the amphora from grave 44). It is very likely that the first magisterial stamp was re-engraved. For the similar stamp, see Šelov 1975, 59, no. 136. Among the datable imports, grave 8 (or 250s according to the new numeration) contained a Megarian bowl, see Limberis & Marčenko 2000, 4-6, fig. 4.
 - 62 NPTCh, inv. no. 57/37102. Excavations of 1985 by S.G. Ryžov. The magisterial stamp cannot be reliably read. Most likely it includes the name of Eudamos, the official of Group 3 (a suggestion by Ju.S. Badal'janc). NPTCh, KP, no. 269 (chance find, the stamp is illegible); APO, find list O-73/140 (with the fabricant stamp of Amyntas on the handle preserved); the Kuban' Museum, no inventory number, excavations of 1938 near the village of Starokorsunskaja (the stamps are illegible).

- 63 SHM, inv. nos. B 7268 и 7276. On these amphoras, see Brašinskij 1984a, nos. 22 and 23.
- 64 NPTCh, inv. no. 137/37050. Excavations of 1982 by S.G. Ryžov.
- 65 See Monachov 1999a, 559, pls. 236 and 237.
- 66 Zajcev 1995, 77, 79, 87, fig. 6.22. See also Zajcev's contribution in this volume.
- 67 Empereur & Hesnard 1987, 60, pl. 60, no. 12. Stamps ΕΠΙ ΘΕΡCΑΝ | ΔΡΟΥ | Υ ΑΚΙΝΘΙΟΥ and ΤΙΜΑΡΑΤΟΥ to be dated according to Finkielsztein's 2001 to the middle of the 130s BC.
- 68 See Monachov 1999a, 557, pl. 235.
- 69 Virginia Grace's opinion in her letter from 18.06.1990, which is consistent with the Finkielsztein chronology.
- 70 OAM, find list Izm.-77. Grave 5 of kurgan 20. Stamps ΕΠΙ ΙΕΡΕΩΣ | ΓΟΥΤΩΝΟΣ | ΑΓΡΙΑΝΙΟΥ and ΙΕΡΩΝΟΣ, emblem "branch". See Brujako 1999, 79, no. 3, fig. 2.1.
- 71 Kuban' Muzeum, inv. no. 5455/1421; find of 1980. Stamps are illegible.
- 72 Excavations by N.Ju. Limberis and I.I. Marčenko. The amphora is unpublished; datable to c. 100 BC; stamps ΕΠΙ ΝΙΚΟ | ΜΑΧΟΥ | ΥΑΚΙΝΘΙΟΥ and ΔΩΡΟ | Υ. On a combination of these stamps, see Badal'janc 2000, 300.
- 73 Ebert 1913, 68, Abb. 73.
- 74 Grace 1965, pl. 3; Empereur & Hesnard 1987, 60, pl. 3, no. 13.
- 75 Grace 1963, 324, fig. 1, no. 1.
- 76 Empereur & Hesnard 1987, 58, pl. 2, no. 8.
- 77 Kac, Monachov, Stolba & Ščeglov 2002, 112, pl. 48. Ad 84.
- 78 Monachov 1999a, 475, 497, 509, pls. 204, 211-214, 221.
- 79 Anapa Archaeological Museum, no inventory number.
- 80 RM, inv. no. 4518/ΑЖ. See Brašinskij 1980, 199, pl. 34, no. 764 (enlisted in the group "others").
- 81 Kac 2001, 90. Indeed, this fragment found outside the stratified context may also belong to the slightly earlier period, *e.g.* to the 280s or 270s BC.
- 82 Živkova 1976, 19, photo on p. 18. The drawing of the amphora was made based on the reported dimensions and the photograph. The traditional data of Kazanlyk (the late 4th-first quarter of the 3rd century) seems to me a bit too early.

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