THE EVOLUTION OF 'COLCHIAN' AMPHORAS FROM ANCIENT APSAROS: THE STATE OF CURRENT RESEARCH AND FUTURE PERSPECTIVES[1]

PAULINA KOMAR

ABSTRACT: This paper presents the evolution of the so-called 'Colchian' amphoras (also known as 'Brown-Clay' or 'East-Pontic') discovered at the Roman fort of Apsaros (modern-day Gonio, Georgia). As suggested by the preliminary statistics, including data from seven excavation seasons (2014-2021), these amphoras were the most common category of transport jars used at the fort during both the Early Roman and Byzantine periods. Unfortunately, the exact origin of the different fabric groups as well as their content is unknown, which stresses the need for archaeometric analyses of 'Colchian' amphora samples.

ABSTRAKT (Ewolucja amfor „kolchidzkich" z Apsaros: stan badań i perspektywy na przyszłość): Artykuł przedstawia ewolucję tzw. amfor „kolchidzkich" (znanych również jako „wschodnio-pontyjskie") odkrytych w rzymskim forcie Apsaros (dzisiejsze Gonio w Gruzji). Jak sugerują wstępne statystyki obejmujące dane z siedmiu sezonów wykopaliskowych (2014–2021), były one najpowszechniejszą kategorią pojemników transportowych w Apsaros zarówno w okresie rzymskim, jak i bizantyjskim. Niestety nie jest znane dokładne pochodzenie poszczególnych grup tych amfor, wyróżnionych na podstawie składu ceramiki, ani ich zawartość, co wskazuje na konieczność przeprowadzenia analiz archeometrycznych próbek amfor „kolchidzkich".

KEYWORDS: Colchian amphoras, Roman and Byzantine pottery, Colchis, Roman forts

SŁOWA KLUCZOWE: amfory kolchidzkie, ceramika rzymska i bizantyjska, fort rzymski

Situated on the south-eastern coast of the Black Sea in Georgia, Apsaros (modern-day Gonio) was one of the most important forts on the border between Cappadocia and Colchis during the Roman period (1st-3rd c. CE). Thanks to its location at the crossroads of sea and land routes, it connected Roman Asia Minor with Caucasian Iberia. During the Late Roman period (between the 4th and 6th c. CE) the fortress was abandoned, but it was restored under Justinian and continued to be in use throughout the Byzantine and Ottoman era until the end of the 19th century.[2] Since 2014 Apsaros has been excavated by the Gonio-Apsaros Polish-Georgian Expedition, directed by Prof. Radosław Karasiewicz-Szczypiorski from the Polish Centre of Mediterranean Archaeology and Prof. Shota Mamuladze from Batumi University and the Cultural Heritage Protection Agency of Ajara. So far, the excavations have uncovered a *Praetorium*, Roman baths (that included the oldest geometric mosaic in the Caucasus), barracks, a ceremonial building, and other unidentified structures that were reused in the Byzantine period.

These structures, especially the baths and *Praetorium*, yielded 1472 diagnostic fragments of transport jars (seasons 2014-2021, Polish trenches only), the most common belonging to the so-called 'Colchian' amphora type, also known as 'Brown-Clay' (classification by Zeest[3]) or 'East-Pontic' (a more appropriate name for this variant proposed by Opait[4]). This paper presents the most recent research conducted on 'Colchian' amphoras, including a history of

[1] This research project was financed by a grant from the National Science Centre in Poland, entitled REM: Roman economy and military (No. 2021/41/B/HS3/01155).
[2] For more about the site see Kakhidze 2003; Karasiewicz-Szczypiorski *et al*. 2016; Mamuladze *et al*. 2016.
[3] Zeest 1960.
[4] Opait 2015.

previous investigations, the typology of 'Colchian' amphoras from Apsaros, and perspectives for the future.

1. 'Colchian' amphoras – history of investigations

Research concerning amphoras discovered in the Black Sea region has for a long time been predominantly the domain of Russian scholars, who distinguished different types using clay colour and morphological features as determinants.[5] Colchian amphoras were classified as 'brown--clay' containers and have been attested in numerous archaeological sites in both the eastern and northern part of the Black Sea area since the 1950s, in layers dated from the 4th c. BCE up to the Middle Ages. Their Colchian origin was proposed by Georgian archaeologists, based on clay similarities to local pottery.[6] It has been established that 'brown-clay' containers were produced in two areas, i.e., the eastern and south-eastern part of the Black Sea region,[7] but the exact places of production are yet to be determined. Petrographic studies of 'Colchian' amphora fabrics and clay samples taken from these areas are likely to provide new data within the next couple of years.[8]

The distribution of both Roman and Byzantine 'Colchian' amphoras is concentrated in the Black Sea region; outside Colchis they have been discovered in Romania, Bulgaria (Ch1D have not however been identified in Novae, a Roman legionary camp situated in Moesia, west of the Pontic region[9]), on the northern coast of Turkey (the so-called Pseudo-Colchian examples from museums in Samsun and Antakya[10]) and in the Bosporan Kingdom (e.g. Tyritake and Panticapaeum).[11] However, discoveries from beyond the Black Sea basin are rare, for example in Syria (although these containers might have also been produced outside of the Pontic region).[12]

Research into 'Colchian' amphoras, as well as transport containers from the Black Sea region in general, has become more readily available to international scholars in the last two decades thanks especially to the series PATABS: *Production and trade of amphorae in the Black Sea*[13]*,* as well as Dominique Kassab Tezgör's corpus of Roman amphoras produced in Black Sea centres[14] and studies by Gocha Tsetskhladze,[15] Sergey Vnukov[16] and Andrei Opait,[17] which present the most up-to date syntheses regarding 'Colchian' amphoras. However, data concerning the findings from Apsaros are based on Merab Khalvashi's *Keramikuli tara Gonio-*

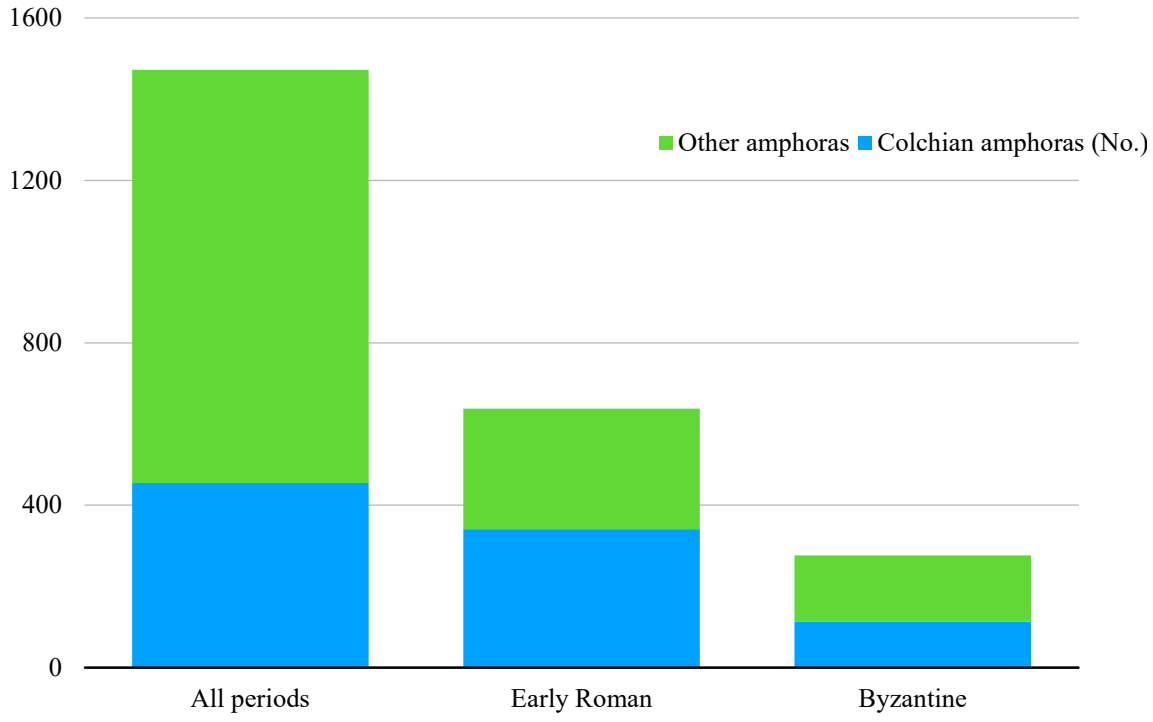
[5] Zeest 1960; Vnukov 2003.
[6] Lordkipanidze 1966, 137–40; Khalvashi 2002, 10–21.
[7] Vnukov 2009, 29; 2013, 33.
[8] The samples have been taken and are being analysed as a part of a PhD project by A. Rogava.
[9] Biernacki, Klenina 2015, 99, 116.
[10] Kassab Tezgör, Akkaya 2000.
[11] Fedoseev *et al.* 2010, 79–81, figs 22–23; Inaishvili, Khalvashi 2013, 351; Smokotina 2016, 715; Erol, Tamer 2020.
[12] Kassab Tezgör, Akkaya 2000, 133; Kassab Tezgör, Touma 2001, 113–114, figs 13–14.
[13] Kassab Tezgör, Inaishvili 2009; Tzochev, Stoyanov, Bozkova 2011; Buzoianu *et al*. 2013.
[14] Kassab Tezgör 2020.
[15] Tsetskhladze, Vnukov 1992; 1993.
[16] Vnukov 2003; 2006; 2009; 2011; 2013.
[17] Opait 2015.

-Afsarosidan, [Ceramic containers of Gonio-Apsaros],[18] which was written over twenty years ago. Therefore, there is a need to publish the most up-to-date data from the more recent Polish--Georgian excavations. It should be mentioned that the author of this paper has already published an article about Roman 'Colchian' amphora fragments discovered in Apsaros, but it was based on a small sample of findings (157 diagnostic parts) from the earlier excavation seasons (2014-2018).[19] However, we now have 455 diagnostic shards (which represents 30,9% of all amphora fragments), which will enable us to trace their evolution, characteristic morphological features, and fabrics.

	Colchian amphoras (No.)	**Colchian amphoras (%)**	**All amphoras**
All periods	455	30,9%	1472 (identified + uncertain)
Early Roman	341	53,45%	638 (only identified)
Byzantine	114	41,30%	276 (only identified)

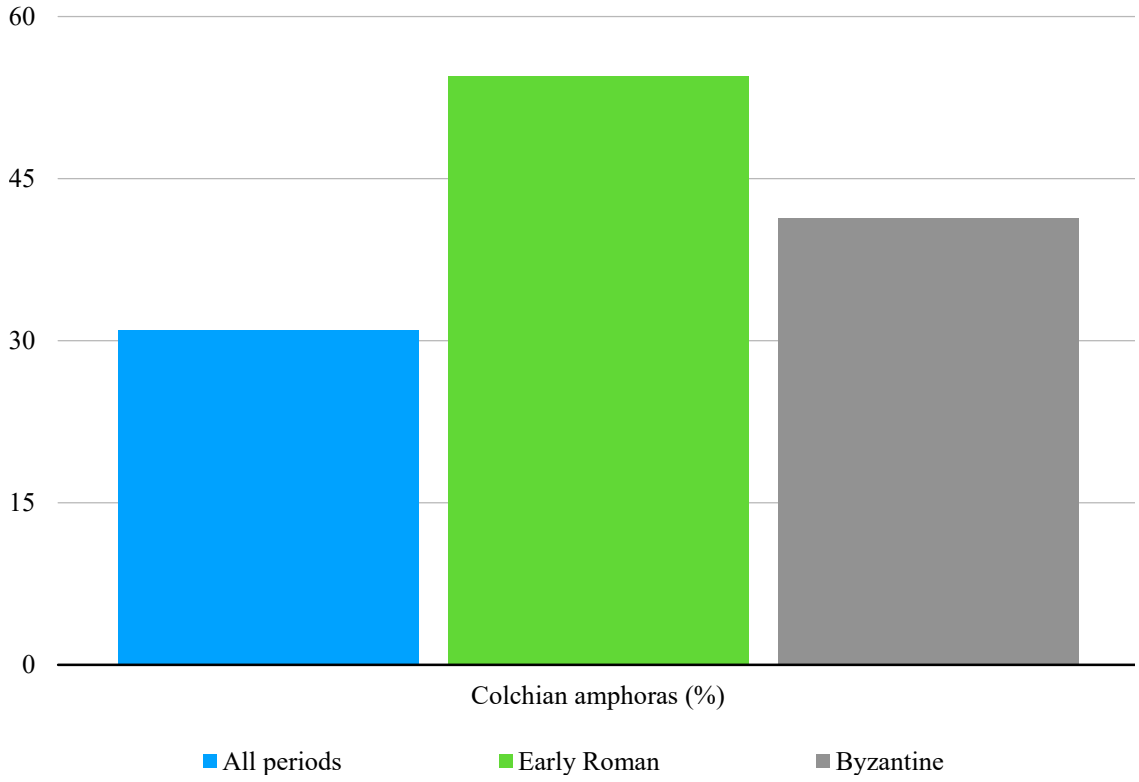
Tab. 1: Colchian amphora fragments from Apsaros – statistics

Fig. 1: Numbers of Colchian amphoras



[18] Khalvashi 2002.
[19] Komar 2019.

Fig. 2: Proportions of Colchian amphoras



2. Colchian amphora fragments from Apsaros – typology

The morphological features of 'Colchian' amphoras suggest they belong to one container type – Ch1, which can be divided into four chronological variants: Ch1A (Hellenistic) Ch1B (Hellenistic and early Roman), Ch1C (1st and 2nd c. CE) and Ch1D (Late Roman and Byzantine). All these variants are egg-shaped or elongated, with a short, cylindrical neck and oval handles, while their volume varies between 15 and 20 litres.[20] In Apsaros three variants of Colchian amphoras have been attested, namely Ch1B (subtype 2), Ch1C and Ch1D. They will be characterised considering their most typical morphological features.

a) Ch1B2

The Ch1B variant of 'Colchian' amphoras appeared during the late Hellenistic age and continued to be produced until at least the late 1st c. CE. This type has a short neck and oval (in cross-section) handles, with two types of bases: 1) a short, conical base with flourishes inside; 2) a flat base with no flourish. A 'waist' in the lower third of the body – a characteristic technological element resulting from the separate shaping of the upper and lower parts, is the most typical feature of late Hellenistic/early Roman variants, which also continues in later periods (Pl. 1).

b) Ch1C

This variant, developed between the 1st and 3rd century CE, has a long cylindrical body with a 'waist' in its lower third, a short cylindrical neck, a curved rim, short handles that resemble

[20] Vnukov 2003, 160–164 and 191–192.

flattened ovals (in cross-section) and a short conical base, often with a flourish inside.[21] Both the smaller (Ch1C1) and larger (Ch1C2) subtypes have been attested at Apsaros, however, in most cases the fragments were so small that their attribution to a particular subtype was impossible. Ch1C amphoras can be easily distinguished from previous variants due to the appearance of a sharp rib under the rim, in line with the upper handle attachment, which appears in almost every example. They also have an indentation that corresponds with the rib inside the neck, while some specimens also possess a groove on the inner surface of the neck corresponding to the rib on the outer surface – these rims are unique and together with the clay colour make 'Colchian' amphoras easily identifiable from other black Sea and Mediterranean transport jars. In addition, some Ch1C containers have two or three circular bulges (c. 1 cm in diameter) on the inner surface of the neck where the upper part of the handle was attached, sometimes organised in two rows (Pl. 2).

c) Ch1D

Late Roman and Byzantine 'brown-clay' amphoras appeared around the mid-4th c. CE and continued to be produced until the 7th c. CE, not only in the south-eastern Pontic region, but maybe also around Heracleia Pontica.[22] They are smaller than Ch1C2 amphoras. This form at Apsaros was classified as Type VII by Khalvashi,[23] but the most detailed description of typological variants of Byzantine Colchian amphoras has been presented by Opait, who classifies them as East-Pontic II and III containers (EP II and III).[24] They are distinguished by their different dimensions and rims, which can be cup- or chalice-shaped. Since Ch1D amphoras discovered at Apsaros are represented mostly by rims, necks and handles, with no complete example discovered so far, they cannot be ascribed to Opait's typology. However, it is worth noting that both rim types have been attested at Apsaros, with diameters varying between 5.7 and 8 cm. These amphoras sometimes contain circular stamps of unknown meaning (Pl. 3).

3. 'Colchian' amphoras from Apsaros – fabrics

Two fabrics of Roman Colchian amphoras have so far been identified definitively:

Fabric 1 – similar to Sinopean pottery, has an admixture of pyroxene and basaltic sand;

Fabric 2 – typical for Ajaria and Abkhazia (similar to the fabric of Colchian *pithoi*[25]), more variegated, containing plutonic, basaltic and sedimentary rocks and minerals.[26]

Macroscopic analyses of fragments from Apsaros allowed Fabrics 1 and 2 to be clearly distinguished. Pyroxene and basaltic sand inclusions are clearly visible in all specimens, though

[21] Tsetskhladze 1992, 91–104; 1999, 109–113; Tsetskhladze, Vnukov 1993, 83–88; Vnukov 2003, 166, 170; 2009, 30.
[22] Vnukov 2011, 276–277; Erol, Tamer 2020, 536.
[23] Khalvashi 2002, 20–21.
[24] Opait 2015.
[25] Tsetskhladze, Vnukov 1993, 91.
[26] Tsetskhladze, Vnukov 1992, 359; Vnukov 2009, 30, with Pl. 6.1 and 6.2; 2011, 271–272. Vnukov (2013, 33) claims that the Abkhazian type contains very little pyroxene.

Fabric 1 has more black inclusions, which are rather coarse-grained, especially in the lower parts of the vessels. Fabric 2 is more variegated and other inclusions appear, while pyroxene and basaltic sand inclusions are less pronounced. The colour of both fabrics usually oscillates between reddish brown, red or light red (Munsell 2.5YR 4/4 4/6, 4/8, 5/4, 5/6, 5/8; 10R 4/6, 5/6, 5/8, 6/8 and 7/8).

However, scholars sometimes mention a third, intermediary variant,[27] while a certain number of fragments from Apsaros could not be ascribed to one of the aforementioned fabrics for certain (Pl. 1). Moreover, some of the examples are similar in colour to orange Sinopean amphoras (C Snp), while others contain more quartz, which is particularly visible on the surface. Based on macroscopic observations it is uncertain whether they should be identified as different fabrics or if this is a result of different firing practices, thus both petrographic and chemical analyses are necessary in order to clarify this issue.

Colchian amphoras of the Ch1D variant discovered in northern Turkey (classified as 'pseudo-colchidiennes') contained predominantly pyroxene and quartz, as well as smaller quantities of grey, gold, and red inclusions, which makes them similar to Sinopean products.[28] However, Byzantine examples from Apsaros, although coarser and containing more quartz and less pyroxene, show a clear continuation in clay matrix and temper with Roman forms. They are usually yellowish red, pink, brown, or light brown in colour (Munsell 5YR 4/6, 6/8, 7/4; 7.5YR 5/8, 6/4, 7/4), and occasionally red or light red (Munsell 2.5YR 5/6, 5/8; and 10R 5/8, 7/8).

The following fabrics may be distinguished:

Fabric 1 – light brown with occasional pinkish/orange hues with variable quantities of quartz, pyroxene, grey and red inclusions (Pl. 3).[29]

Fabric 2 – reddish-brown fabric with small and medium sized white inclusions and occasionally other rock fragments.

Fabric 3 – orange fabric containing high amounts of white inclusions, pyroxene and other indefinite inclusions.

4. Colchian amphoras from Apsaros – contents

The content of Colchian amphoras remains uncertain – various goods have been proposed as the cargo of Ch1B and Ch1C, including wax, honey, linseed oil and wine.[30] Ch1D are usually classified as wine containers,[31] but olive oil might have been an alternative cargo.[32] It should also be mentioned that the insides of Byzantine 'Colchian' jars were sometimes covered with a dark substance, probably petroleum - an example being the fully intact amphora discovered

[27] Tsetskhladze, Vnukov 1993, 91.
[28] Kassab Tezgör, Touma 2001, 113–114.
[29] This matches with one of Opait's fabrics, see Opait 2015, 290–291, figs 19–25.
[30] Kvirkvelia 2009, 129; Opait 2015, 284, 288; Kassab Tezgör 2020, 56.
[31] Vnukov 2011, 276–277, fig. 7; Inaishvili, Khalvashi 2011, 265–266, fig. 1.
[32] Kassab Tezgör 2020, 56.

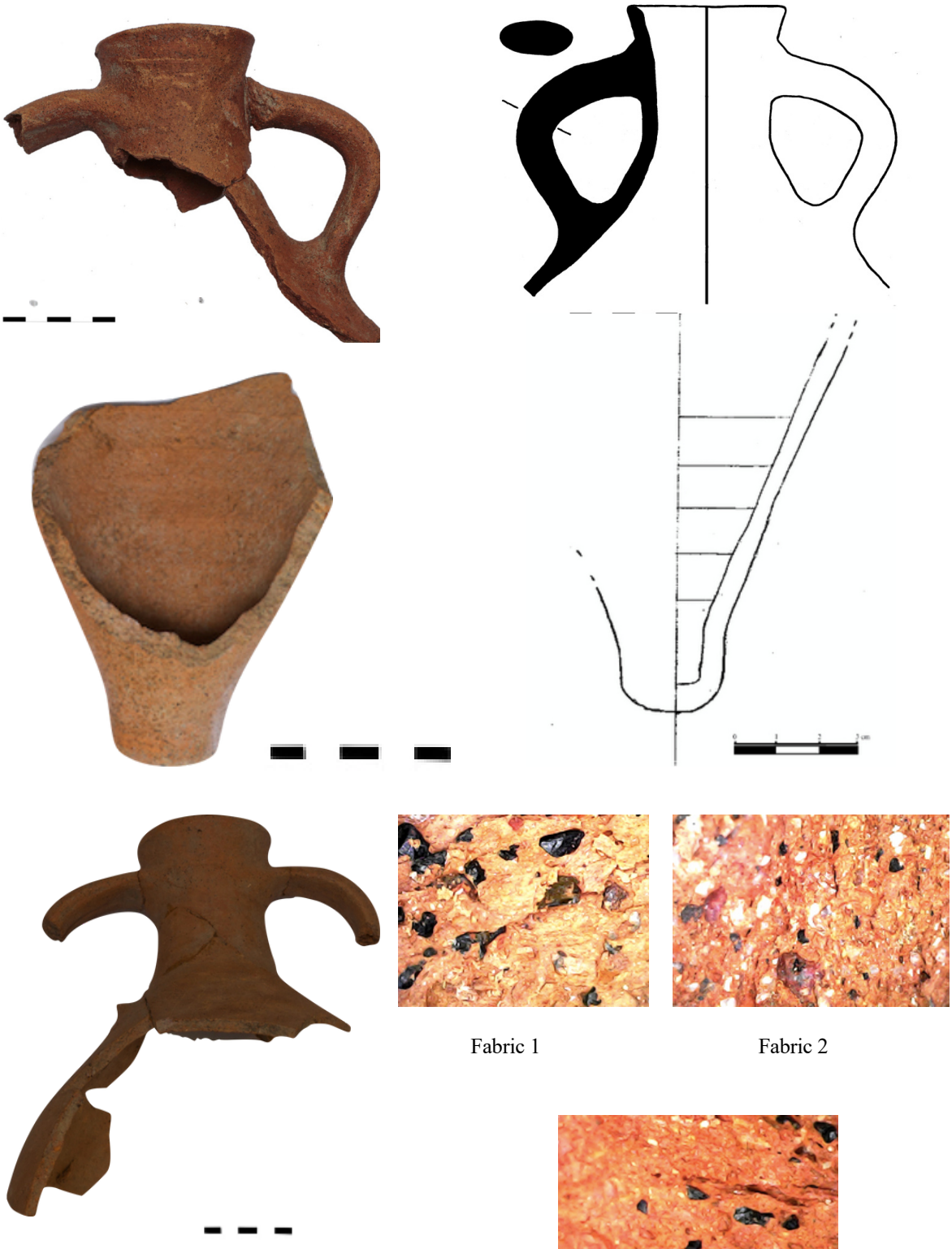
in Tyritake.[33] One specimen of Ch1D from Apsaros also contained a thick layer of a black substance, similar to bitumen, however as this is the only example that contained traces of this substance it probably represents a secondary or extraordinary cargo, and not the original content for which the vessel was designed. A sample from this vessel, as well as from other variants of 'Colchian' amphoras discovered in Apsaros, have been taken for organic residue analyses, which will hopefully provide new data that will shed further light on the contents of this amphora type.

5. Conclusions and future perspectives

Since the mid-20th c., research on 'Colchian' amphoras has developed considerably, as their typological evolution has been traced and the petrological diversities of the fabrics of the Hellenistic and Roman forms have been investigated. Examples from Apsaros provided new evidence regarding typological details, fabric diversity and content. Moreover, considering that these containers were the most common form found at Apsaros it cannot be excluded that they played a significant role in the supply of Roman military settlements in the eastern Black Sea region. Nevertheless, there are still certain gaps in the research concerning 'Colchian' containers. It is particularly important to stress the need for advanced archaeometric analyses in order to clarify certain issues. The first of which regards their local, Ajarian production. Preliminary petrological studies revealed that the fabric of 'brown-clay' amphoras was easily distinguishable from that of other containers due to its micaceous quality and high iron content, which suggests that these containers were produced in one extensive region, i.e. Colchis and probably its neighbouring areas (e.g. Trapezus).[34] Petrographic and chemical analyses of amphora and clay samples taken from the neighbourhood of Apsaros and Trapezus are necessary in order to confirm of reject this hypothesis.

Furthermore, due to the absence of attested *tituli picti* or preserved macro remains in 'Colchian' containers (except for the above-mentioned black bitumen-like substance) and since both the ancient literature and landscape archaeology provide no clues regarding Colchis' agricultural production, organic residues remain the only possible source for determining the contents of these containers. Analyses of samples taken from different variants of this amphora type will shed new light on their content, at the same time providing new input to our knowledge of Black Sea commerce. It is worth emphasising that both organic and inorganic analyses of these amphoras are possible thanks to the research project 'Roman Economy and Military', which is financed by the Polish National Science Centre (No. 2021/41/B/HS3/01155) and directed by the author of this article.

[33] Opait 2015, 284, 288.
[34] Tsetskhladze, Vnukov 1992, 378.



Fabric 1

Fabric 2

Intermiediary
Fabric

Pl. 1: Colchian amphoras from Apsaros variant Ch1B2 and fabrics seen under a microscope (x100) (photo&drawings: P. Komar)

Pl. 2: Colchian amphoras Ch1C (photo&drawings: Paulina Komar)

3: Colchian amphoras Ch1D and the most common Byzantine fabric (photo: Paulina Komar)

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Paulina Komar
Uniwersytet Kardynała Stefana Wyszyńskiego
p.komar@uksw.edu.pl
ORCID 0000-0001-6580-223X