CONTRIBUTIONS TO THE ECONOMIC LIFE OF THE CITY OF CALLATIS IN LIGHT OF NEW CERAMIC FINDS (2ND – 6TH CENTURIES AD)

BY

ANDREI OPAIȚ*, MIHAI IONESCU**

Abstract

The authors present a small ceramic collection sheltered by the archaeological museum of Mangalia. The large variety of wine, olive oil, and fish product amphorae suggested by this modest pottery collection confirms the extensive trade network established by this city not only with Pontic centres but also with many eastern Mediterranean areas during early and late Roman times. The kitchen ware also displays a large variety of pots, casseroles, and frying pans. They attest to the advanced level in cookery reached by the Callatian society and the diversified trade connections that allowed it to import Aegean and west Anatolian cooking vessels, while others were locally or provincially made.

Keywords: Callatis, amphorae, kitchen ware, diet, trade.

Callatis, the only West Pontic city, considered by Strabo1 as deserving of the name πόλις, unfortunately, has not been systematically studied. We have an adequate culture-historical presentation of the evolution of the city from Archaic to late Roman times due only to a few literary testimonia and a rich corpus of epigraphic discoveries made at this site2. These approaches present only a conventional politico-military history, as the very few excavations undertaken in this city have paid scant attention to ceramic finds3. However, during the last forty years of archaeological research in Romania, pottery studies have intensified, and the ceramics have been used not only for dating archaeological contexts but also as a source of information on ancient economic life. Of course, these studies represent only a beginning as they have dealt with only a few ceramic finds discovered either in a province4 or on a certain site5. The ceramics discovered at Callatis were studied after the First World War by Tafrali6 and Sauciuc Saveanu7, and it was continued in the second half of the 20th century by numerous other scholars8. However, nearly all these studies paid attention only to Hellenistic ceramics,

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** Cultural Complex “Callatis”, Mangalia, Constanta County; ionescumihai2000@yahoo.it.
1 STRABO, Geography 7.6.1.
6 TAFLALI 1925; TAFLALI 1927.
7 SÂVEANU 1924; SÂVEANU 1925; SÂVEANU 1927-1932; SÂVEANU 1935-1936; SÂVEANU 1937-1949; SÂVEANU 1941-1944.

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especially the amphora stamps discovered at Callatis and its territory. The Roman ceramics were almost completely ignored.9

Our study is a first attempt to address this situation, at least partially, by discussing a modest quantity of ceramic fragments sheltered in the archaeological museum of Mangalia. These fragments come from two groups: the first is conventionally named "passim" (KP) as they are stray finds dating mostly to the 5th and 6th centuries AD and have no known context of discovery; the second lot comes from a rescue excavation undertaken in the courtyard of School No. 5, supposedly from an edifice (conventionally named KT) that may have been a large hypocaust (thermae?). Almost all pottery discovered at this latter site can be dated to between the 2nd century and the middle of the third quarter of the 3rd century with some few surviving pieces from Hellenistic layers or intrusions from the late Roman strata. To this fragmentary pottery, we have added some completely preserved vessels from the collection of the museum. Because these two lots complete each other from a chronological point of view, we decided to present them together so we can have a better view of some aspects of the city’s economic life, the diet of its inhabitants, and its trade connections. The lack of any closed archaeological contexts is, of course, a major shortcoming, but, due to the actual level of ceramic studies in the Black Sea and the Mediterranean, the dating of many vessels is quite well-known even if they do not come from a secure archaeological context. Due to the limited number and the fragmentary preservation of this pottery we cannot provide complete answers on the city’s economy. However, the publication of this pottery will give us an important first glimpse on the imports from the Pontic and Mediterranean world as well as on local production. In any case, it is intended to advance the subject in comparison with what we already know on this matter.10

The coarseware has been divided into two large categories – amphorae and kitchenware – to which we have added a few storage and domestic vessels. The amphorae have been divided according to their content (i.e., wine, olive oil, and fish products), while the kitchen vessels have been separated according to their functionality. They will be presented in chronological order from early to late Roman times, and by production centres, if those are more or less known. Where this identification was not possible, they have been included in the unassigned group.

**EARLY ROMAN WINE AMPHORAE**

**Pontic centres**

**Zeest 72/73 type**

We have united types Zeest 72 and 73 into a single type as some morphological differences, such as the shape of the rim or the transition from shoulder to body, have only minor importance.11 The clay matrix is calcareous with a fine texture and regular fracture. It is rich in inclusions of calcareous material varying in size between 0.5 and 1mm, while the brownish iron minerals are less present and much finer (< 0.5mm). The color is light red (10R6/8). They were made in different fractionary sizes of 7 l, 19 l, 63.5 l, and 86 l. These vessels are extremely abundant in the Crimea,12 and less so in the Lower Danube area. Sometimes they penetrate even north of the Danube.13

Catalogue:

<table>
<thead>
<tr>
<th>Type</th>
<th>Rim fragment. RD</th>
<th>Pl.</th>
</tr>
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<tbody>
<tr>
<td>KT 108.</td>
<td>RD 13</td>
<td>1/1</td>
</tr>
<tr>
<td>KP (Mircea cel Bătrân Street)</td>
<td>RD 15</td>
<td>1/2</td>
</tr>
</tbody>
</table>

9 Worth mentioning are only some Pergamene pieces; cf. BOUNEGRU 2004-2005.
10 SUCEVEANU 2010: 336; mentions only “numerous Asia Minor ceramic imports.”
12 ZEEST 1960: 111-112; STRJELETSKIY et al. 2005: Pl. V.2, um 96; KLENINA 2004: Fig. 5.39-47.
13 KOGALNICEANU, MORINTZ 2013: 38, Fig. 35B.
14 The following abbreviations are used in the catalogue: RD = rim diameter; HD = handle diameter; BD = Base diameter; MD = maximum diameter; H = height. All the dimensions are given in centimeters. The Munsell soil color charts, ed. 1994, is used for the color descriptions. The drawings were inked by Efimov Eugenia.
Heracleian type

This traditional wine exporter to the western coast of the Black Sea is well represented at Callatis with eight fragments of bases and six fragments of upper parts; to these fragments, we should add a half amphora of type Shelov IB/Vnukov S IVA2. All are dated to the 2nd century AD except for a base fragment of Heracleian Pseudo-Coan type that belongs to the second half of the 1st c. BC.

The fabric of these types shows some minor differences in terms of color, sorting and quantity of inclusions. This is perhaps to be expected, taking into account the many workshops spread over the Black Sea coast that was part of Heracleia’s territory. In general terms, the fabric composition changed very little from the Classical to Late Roman period. The usual fabric has a reddish-yellow (Munsell 7.5YR 6/6-7/6) to strong brown (7.5YR 5/6) color. Its fracture is irregular to hackly, and not very hard. The temper is ill-sorted with common to abundant rounded and sub-rounded pyroxenes (<0.5mm) and light brownish inclusions, some of them reaching 6-7mm (sandstone with ferruginous cement?), dark brownish inclusions, nuclei (iron ore and minerals, volcanic rocks), and sub-rounded opaque and yellowish quartz.

The presence of Heracleian amphorae in the Pontic and Lower Danube areas is overwhelming, as practically no sites are found without them. However, in spite of the numerous examples discovered in the Lower Danube area, we should be aware of the reduced capacities of these amphorae, which vary between 6-7 litres during the early Roman time. Outside the Pontus area, these amphorae are only rarely found15.

Catalogue:

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<td>Base fragment. RD 3.</td>
<td>Heraclea Pseudo Coan/Vnukov type S I.</td>
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<td>KT 76</td>
<td>Base fragment. RD 4.5.</td>
<td>Shelov B/Vnukov S IVA2.</td>
<td>I/4</td>
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<td>KT 79</td>
<td>Upper part fragment. RD 6.8.</td>
<td>Shelov B/Vnukov S IVA2.</td>
<td>I/5</td>
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<td>KT 80</td>
<td>Upper part fragment. RD 7.4.</td>
<td>Shelov B/Vnukov S IVA2.</td>
<td>I/6</td>
</tr>
<tr>
<td>KT 81</td>
<td>Upper part fragment. RD 8.4.</td>
<td>Shelov C.</td>
<td>II/7</td>
</tr>
<tr>
<td>KT 82</td>
<td>Upper part fragment. RD 9.</td>
<td>Shelov C.</td>
<td>II/8</td>
</tr>
<tr>
<td>KP inv. 241</td>
<td>Preserved the upper half of the amphora. RD 6.8. HD 4.4/2.4; MD 21.</td>
<td></td>
<td>II/9</td>
</tr>
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</table>

Sinopean type

The Sinope amphorae of this period are less abundant than the Heracleian vessels, but they compensate for the shortfall by having large volumes that vary between 72 and 90 litres. The only example presented here is an upper amphora part which, by its morphologic characteristics, suggests a transitional variant from type Vnukov Sin II16, typical for the 1st century AD, to Tezgör type B Sin I17. It is interesting that it lacks the slight swallowing of the neck. It has good parallels at Tanais18. The main inclusions of Sinopean amphora fabrics are of volcanic origin (rock fragments, plagioclase, and pyroxene)19. All these inclusions can be found not only in the so-called “black-sand” present on many beaches of the Pontic shore in the Sinopean area but also in the clay beds. Other inclusions such as quartz (which is usually sub-rounded) are frequently found in different manufacturing places and exhibit a relatively low ratio. Also, rare flakes of gold and silver mica

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15 RIZZO 2014: 563; Figs. 6.1-6.2: Rome; HAYES 1983: 147, type 14; Fig. 21.32: Crete.
16 VNUKOV 2003: 133-141, Fig. 52.220.
17 TEZGÖR 2010: 126, Pl. 15.1.
18 NAUMENKO 2012: 67, Fig. 5.5; 7.6.
sometimes occur, perhaps as inclusions in the clay mass\textsuperscript{20}. The color of our example is light red (2.5YR 6/8-7/8). The Sinopean wine is found not only in the lower Danube area\textsuperscript{21} but also in Crete\textsuperscript{22}, Beirut\textsuperscript{23}, and Rome\textsuperscript{24}.

**Catalogue:**

\textbf{KT 75.} Upper part fragment. RD 11.5; HD 4.6/2.7. 
Traces of dipinti in red on the neck.

\textbf{Aegean centres}

\textbf{Dr 2-4}

This bifid handle fragment perhaps has an Aegean origin as its fabric is not Pontic. The fabric has medium sorted white and brownish inclusions (0.5-1mm), abundant whitish-grayish small particles (quartz?); the color is reddish yellow (7.5YR 7/6-7/8). This example is only one of many Dr 2-4 amphorae manufactured by many Aegean workshops unidentified so far. The fabric is calcareous, hard, smooth to irregular break, compact with common white tiny inclusions (foraminifera?), sparse brownish inclusions.

**Catalogue:**

\textbf{KT 169.} Handle fragment. HD 4.8/2.4. 

\textbf{Pseudo Cretan types}

The following amphorae were called pseudo-Cretan because of their horned handles and tall, cylindrical neck. However, their bodies are not common to Cretan types. Before their workshops are identified we prefer to call them “pseudo-Cretan”.

\textbf{Pseudo Cretan type I}

This type is well known in the Lower Danube area, especially in the military sites, at Viminacium, Singidunum, Pontes, Mala Vrbica, Kurvingrad\textsuperscript{25}, Drobeta\textsuperscript{26}, Sarmizegetusa, Romula\textsuperscript{27}, Cioroiul Nou\textsuperscript{28}, Barboși\textsuperscript{29}, Troesmis, Ibida\textsuperscript{30}, Tomis\textsuperscript{31}, and Tyra\textsuperscript{32}. It seems to imitate a Cretan amphora\textsuperscript{33} as it has horned handles, but it exhibits a narrow, cylindrical neck and an ovoid body that ends in a long, solid spike-peg expanded at its end with a central nipple. The fabric is a very fine, sedimentary clay, compact, smooth fracture, with no inclusions visible to the naked eye; KT 77 still has some elongated voids. The color is reddish-yellow (7.5YR 6/6).

**Catalogue:**

\textbf{KT 70.} Handle fragment. HD 2.7/2. 

\textbf{KT 77.} Base fragment. BD 3.7.
Pseudo-Cretan type II
Related to this type is Zeest 67a. The body is more ovoid with horned handle while the base is hollow and it has a nipple on its exterior. The fabric is similar to the previous two examples, but the fracture is irregular and the color is yellowish-red (5YR 5/8).

Catalogue:
KT 72. Base fragment. BD 3.2. Pl. III/14

Pseudo-Cretan type III
Another similar amphora, also included by Zeest in the same type 67 (but typed as 67б), reaches its maximum diameter on the upper part of the body and ends in a peg spike with a flat base. The fabric is similar to the previous three examples, but it seems to have more silver mica and the fracture is smooth to irregular; the color is reddish-yellow (7.5YR 6/8-7/8).

Catalogue:
KT 71. Base fragment. BD 3.2. Pl. III/15

Agora M 126/Pergamene type (?)
This amphora is well known in the Pontic and Lower Danube areas. Although it shares many morphological characteristics with some amphorae from the Ephesus area, it still has its characteristics both in shape and the external cover. The fabric is also sedimentary, with no inclusions visible to the naked eye, common silver mica, and sparse whitish inclusions (foraminifera?). The color is very pale brown (10YR 7/4). Usually, three-quarter of the exterior of the body is covered by a blackish paint. However, a complete example found at Callatis has a dark red slip. It is known also as Agora M 126, which was quite popular in this area. If this variant was manufactured in the Pergamon area it is possible that it traveled together with Çandarlı tableware, a product found in abundance in this region. The fabric has a smooth to irregular fracture, sparse silver mica, and the color varies between very pale brown (10YR 7/4) and yellow (10YR 7/6).

Catalogue:
KT 59. Mouth fragment. RD 4.6. Pl. III/16
KT 67. Handle and shoulder fragment. HD 2.8/1.6. Pl. III/17
Callatis Inv. 1292. Complete profile, missing handle. It is covered on the exterior by a reddish-orange slip (2.5YR 5/8). RD 3.7; H 24; MD 12; BD 2.8. Pl. IV/18

Kapitän 1 / Peacock & Williams 56 type
This amphora had a modest circulation over a wide area of the Mediterranean, but it is almost unknown in the Black Sea region. The shape of the rim is very similar to the shape of amphora Pompeii 5 type. However, the fabric lacks pyroxene; it is very hard, compact, fine fracture, well-sorted inclusions, with sparse to common, sub-rounded, grayish quartz, sparse brownish inclusions, white inclusions (shell?). The color is reddish yellow (5YR 6/8).

Catalogue:
KT 73. Rim fragment. RD 12.2 Pl. IV/19

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34 Zeest 1960: 110-11, Pl. 29.67a.
36 Tanais: Arsen’eva, Naumenko 1992: 158, Figs. 29.1; 38.3; Gorgipija: Alekseeva 1997: Pl. 156.21; 223.5; Chersonesos: Kovalevskaya 1998: 94, Fig. 3.1; Strjeletskiy et al. 2005: 116, Fig.19.3; Tibiscum: Ardeţ 2006: 126-27, Pl. 26.207; Singidunum and Viminacium: Bješlajac 1996: 45-46, Pl. XIV.61-63.
37 Preda 1980: 28, 100; Pl. LXIX, M 185.
39 J. Hayes, pers. comm.
Kapitán 2 type

At Callatis, in spite of the arbitrary collection of pottery fragments, this is one of the most frequently found amphora types. It is also one of the most frequently found vessels in the Roman Empire from the end of the 2nd to the beginning of the 5th century. The predecessor of Kapitán 2, which may have had a Chian origin, occurs in reduced quantities at Transdierna, Gorsium, Ampelum, Slăveni, Callatis, and Ibida. During the 3rd and the 4th centuries, this amphora could be found from Britain to Iraq and from northern Romania to Nubia. What is worth pointing out is the fabric of KT 18 and KT 61, both of which are irregular with abundant grayish quartz (?) and sparse whitish inclusions; this fabric differs from the typical fine fabric of this predecessor type of Kapitán 2 but is closer to the fabrics of the classical Kapitán 2 of the 3rd and the 4th centuries. Three other bases (KT 56, KT 57, and KT 60) may also belong to this predecessor. At least three fabric types have been identified at Callatis. The first has tiny white inclusions (limestone?), quite abundant gold mica and is an orange-light red (2.5YR 6/8) in color (KP 4). The second has inclusions of iron nuclei and ferruginous cemented sandstone with less common large, whitish particle (limestone?). The color varies between pink (5YR 5/4) and light red (2.5YR 6/8) (KP 5, KP 31, Callatis, Mircea cel Bătrân Street). The third fabric is also rich in iron nodules, some of them larger than 1mm, but it has streaks of quartz rich pellets; also sub-rounded grains of quartz are common to abundant (KP 33). The wide variety of fabrics points up the multitude of workshops that manufactured this type.

Catalogue:

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<th>Code</th>
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<tr>
<td>KT 18</td>
<td>Rim fragment. RD 7</td>
<td>Pl. IV/20</td>
</tr>
<tr>
<td>KT 61</td>
<td>Upper-part amphora fragment. HD 4.8/2.8</td>
<td>Pl. IV/21</td>
</tr>
<tr>
<td>KT 60</td>
<td>Base fragment. BD 8.2.</td>
<td>Pl. IV/22</td>
</tr>
<tr>
<td>KT 56</td>
<td>Base fragment. BD 8.</td>
<td>Pl. IV/23</td>
</tr>
<tr>
<td>KT 57</td>
<td>Base fragment. BD 8.6.</td>
<td>Pl. V/24</td>
</tr>
<tr>
<td>KP 4</td>
<td>Base fragment. BD 9.</td>
<td>Pl. V/26</td>
</tr>
<tr>
<td>KP 33</td>
<td>Preserved only the base. BD 8.</td>
<td>Pl. V/27</td>
</tr>
<tr>
<td>Callatis inv. 2616.</td>
<td>Upper amphora part recovered from the Black Sea. RD 6; HD 4.3/2.2.</td>
<td>Pl. V/29</td>
</tr>
<tr>
<td>KP</td>
<td>Base fragment. BD 5.6.</td>
<td>Pl. VI/30</td>
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</table>

Pontic imitation of Kapitán 2 (?)

This is a rare amphora type that occurred at Odessos, where it was dated to the 4th century AD, and at Romula. Another imitation occurs in Pannonia and is dated to the second half of the 2nd century AD. Our
example confirms an earlier dating for this amphora. The fabric is sedimentary, hard, smooth break, sparse to common tiny, white inclusions (shell?), sparse rounded grayish quartz, and brownish inclusions; the color is light red 2.5YR 6/6-6/8 on the exterior, while the interior is grayish brown (10YR 5/2).

Catalogue:

**KT 14**
Upper amphora part. RD 5; HD 3.4/1.7; PH 17.5. Pl. VI/31

**Cylindrical type II (?)**
This amphora fragment is close to the type discussed in a recent paper. The mouth is slightly flaring with a flat rim, grooved on the top. Although we do not know the shape of the body, we can assume a narrow shoulder and a cylindrical body. The fabric of our examples is very fine, with no inclusions visible to the naked eye. The color is yellow (10YR 7/6). An identical example has been found at Ibida.

Catalogue:

**KT28.** Mouth and handle fragment. RD ?; HD 4.7/2.1. Pl. VI/32

**Troesmis type X**
This type, discussed in a previous study, has a large, rolled rim, cylindrical neck, and massive handles. It is frequently found at Brad, Poiana-Tecuci, Aegyssus, Ibida, Histria, Kalos Liman, and Kara Tobe during the 1st century AD. It continues to be in use in the 2nd century AD, as the discoveries at Troesmis attest. Worth pointing out is its occurrence in Athens. The fabric is rich in ill-sorted quartz, small whitish and brownish inclusions, sparse foraminifera, and voids which may contain calcareous materials. The color is yelllowish red (5YR 5/6-5/8). Our example, discovered in the chora of Callatis, has already been published.

Catalogue:

**KP inv. 2612**
Mouth and handle fragment. RD 16. Pl. VI/33

**KT 90.** Rim fragment. RD 18. Pl. VII/34

**KT 91.** Rim fragment. RD 20.6. Pl. VII/35

**KT 92.** Rim fragment. RD 19. Pl. VII/36

**Unknown types**

1. Amphora conical base. Fabric very fine, sedimentary fabric with abundant silver mica. The color is brownish yellow (10YR 6/8).

Catalogue:

**KT 43.** Base fragment. BD 4.4. Pl. VII/37

2. Amphora rim fragment. Rolled rim, cylindrical neck (?) and handle attached immediately under the rim. The fabric is hard, compact, irregular break, sparse tiny grayish quartz and brownish inclusions, sparse to common silver mica; the color is light red (2.5YR 5/8).

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52 OPAIŢ 2014: 50-52.
53 Unpublished example.
54 OPAIŢ 1987b; this amphora type has traces of pitch inside the walls.
55 URSACHI 1995: Pks. 175.4; 182.1,3; 183. 17; 184.18, 22-23.
56 VULPE, TEODOR 2003: Fig. 243.10.
57 Unpublished material.
58 Unpublished material.
59 Personal observations in the Histria museum’s storeroom.
60 UZHENTSEV 2001: 166, Fig. 6.7-8.
61 VNUKOV 2013: Fig. 11B.
63 OPAIŢ 2015: 328, Pl. I.
64 IONESCU, CHELUTA 1997: 167-168, Fig. 6.20.
ANDREI OPAIŢ, MIHAI IONESCU

Catalogue:

**KT 65.** Rim fragment. RD 11; HD 3/2.8. Pl. VII/38

3. Amphora rim fragment. Rolled rim, cylindrical neck. Fine, sedimentary fabric, calcareous with elongate streaks due to the calcination of the particles. The color is yellow (2.5Y 7/6). It has good parallels at Ibida\(^6\), Novae\(^6\), and Ephesus\(^7\).

Catalogue:

**KT 74** Rim fragment. RD 13.8. Pl. VII/39

4. Amphora rim and base fragment; both examples seem to belong to the same amphora due to its fabric characteristics. It is beveled to the outside rim, underneath which the handles were attached; the base is a massive spike peg. The fabric is quite well levigated but with common tiny white inclusions (calcareous?) and sparse, large red-brownish particles (iron minerals?). The color is orange (reddish yellow 5YR 6/8).

Catalogue:

**KT 99** Rim fragment. RD 13. Pl. VII/40

**KT 101** Base fragment. BD 3. Pl. VIII/41

5. Amphora rim. Cup-shape mouth with a groove on the top. Fine, irregular fracture, well-levigated fabric with only few inclusions of crystalline quartz, quartz sand (?); the color is yellowish red (5YR 5/6).

Catalogue:

**KP 6** Rim fragment. RD 5.5. Pl. VIII/42

6. Amphora rim and handle. Beveled rim at the exterior, massive, flattened handle. The exterior of the vessel is covered by a whitish paint. There are three examples of this type. Their fabric is quite similar; not well-sorted, common, white and brownish inclusions, sparse, angular opaque quartz; color varies between (orange) light red (2.5YR 6/8) to reddish yellow (7.5YR 7/6-7/8).

Catalogue:

**KP 27** Preserved rim, neck, and handles. RD 10, HD 4/2.2. Pl. VIII/43

The fabric is hard, irregular break, ill-sorted inclusions with common, angular quartz and whitish inclusions (calcareous materials, foraminifera?) that left voids, sparse flakes of gold mica visible at the interior. The color on the exterior is light red (2.5YR 6/6), and pink (5YR 7/4) on the interior; a whitish slip with a good adherence is visible on the exterior.

**Troesmis type XIII**

The mouth is flaring and the rim is beveled toward the exterior, with shallow ribbing at its lower part. The ribbed area was intended for better upper attachment of the handle. This is a rare type that occurs in different variants and sizes. A large-size variant dated to the first half of the 3\(^{rd}\) century occurs at Troesmis\(^6\). Similar examples have been found at Tibiscum\(^9\), Drobeta\(^7\), and Durostorum\(^7\). The examples from Tibiscum and Drobeta still preserve groups of dipinti in red on the neck and under the handles, perhaps representing customs notations. The morphology of these amphorae suggests contents of either an olive oil or fish product, which arrived from the eastern Mediterranean. The fabric is fine, sedimentary, with a sub conchoidal break, rich in silver mica and no other inclusions visible to the naked eye; the color is reddish yellow (7.5YR 7/6-6/6); the exterior is covered by a pale yellow (2.5Y 8/4) slip.

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\(^6\) Unpublished example.

\(^6\) KOVALEVSKAYA, pers. comm.

\(^7\) LADSTÄTTER 2010: 246, Pl. 94.K 568.

\(^8\) OPAIŢ 1980: 310, type XIII; Pl. X.1; XV.4 (RD 21!).

\(^9\) ARDEŢ 2006: 141-142, Pls. XXXV.253-254; XXVI, considered as “Africana II grande”.

\(^7\) Personal observation in the storeroom of the local museum.

\(^7\) HONCU, pers. comm.
**Predecessor of Bag-shape amphora**

This is one of the rarest examples known since early Roman times. The rim is flattened on the exterior and set on a short, cylindrical neck, while the handle is ovoid in section with a deep, median groove. The fabric is hard with abundant, semi-rounded translucent quartz and an orange light red (10R 6/8) color. It has good parallels at Tanais where it is dated to the first half of the 3rd century.72

Catalogue:

**KT 11**
Rim, neck, and handle fragment. RD 13; HD 5.3/3.

**Table amphora**

Only one complete example mended from six pieces, was available for our study. The rim is thickened, rectangular, and beveled toward the interior. The neck is cylindrical with shallow grooves; the handles are rectangular in cross section; the globular body rests on a ring foot. The fabric is fine, reddish yellow (7.5YR 7/8). The exterior of the vessel is covered by a light reddish brown slip. The capacity of this amphora is c. 1.6 litres.

Catalogue:

**Callatis,**
6 D, Bolintineanu street.
Inv. 365
Completeness preserved, mended from six pieces. RD 8; H 19.8;
HD 1/1.1; MD 15.5; BD 8.

**Table pitchers**

This type of container reached a considerable popularity between the 1st and 3rd century AD. It was in a strong competition with the table amphora. The pottery discovered at Callatis suggests a certain division of the area of influence. Thus, the rarity of table amphorae and the abundance of table pitchers in this city show that table pitchers were favorite containers for table wine in a Greek environment, while table amphorae were more popular in a Roman milieu. The typical table pitcher has a cylindrical neck, one strap handle, and a bitriconic body ending in a tubular foot with a conical base.73 However, two vessels discovered at Callatis show a different, local “interpretation” of these table pitchers. The first is closer to the canonical shape as it has nearly all the characteristics of this form, but the base is a simple ring foot similar to those found on numerous jugs (Pl. VIII/Fig.48). The second is even further removed from the canonical shape as it has a massive handle, ovoid in cross section, with a central, longitudinal groove. The transition from shoulder to the body is rounded, and it ends in a flaring ring foot with a moulded base, which is also typical of jugs (Pl. VIII/Fig.49). Most likely the former, due to its angularity between shoulder and body, can be dated earlier, perhaps to the 2nd century AD, while the latter might be dated to the 3rd century AD. However, the majority of the examples discovered at Callatis, unfortunately in a very fragmentary form, belong to the canonical type, well-known mainly in the Greek milieu at Histria, Tomis, Olbia and its territory, Chersonesos, Belbek, necropolis Ust'-Alma,80
and Mirmekion\textsuperscript{81}. However, it would be a mistake to consider that this vessel was confined strictly to Greek cities since it occurs not only in other areas of Moesia Inferior at Troesmis\textsuperscript{82}, Ibida territory\textsuperscript{83}, and Tropaeum Traiani\textsuperscript{84}, but also in the countryside at Enisala\textsuperscript{85}, Sarichioi\textsuperscript{86}, and Niculițel\textsuperscript{87}. It is worth pointing out that at Niculițel the presence of table pitchers is extremely modest in comparison with the table amphorae. Also remarkable is the presence of table pitchers north of the Danube, most likely in the territory that continued to be inhabited by the Getian population\textsuperscript{88}. Their rim diameters vary between 10 and 11 and base diameters between 8 and 9.6. The variety of their fabrics also points to the existence of many local or other Pontic workshops. The fabric is fine with well-sorted inclusions, irregular or sub conchoidal breaks, in some cases with abundant, rounded yellowish or grayish quartz and brownish inclusions. The color varies between reddish brown (5YR 5/4), sometimes having a core of gray (GLEY 5) to reddish yellow (5YR 6/6).

Catalogue:

<table>
<thead>
<tr>
<th>Callatis</th>
<th>M. Basarab Street.</th>
</tr>
</thead>
<tbody>
<tr>
<td>inv. 391.</td>
<td>Completely preserved. RD 7.4; H 24.3; HD 2.9/1.3; MD 20.6; BD 7.4. Capacity c. 3 l.</td>
</tr>
<tr>
<td>Callatis</td>
<td>Completely preserved. RD 4.8; H 16.5; HD 2/0.9; MD 13; BD 5.2.</td>
</tr>
<tr>
<td>inv. 1027</td>
<td>Capacity c. 0.800 l</td>
</tr>
<tr>
<td>KT 16</td>
<td>Preserved only the mouth, the neck and the upper handle attachment. RD 10. It has good parallels with the complete example inv. 391</td>
</tr>
<tr>
<td>KT 31</td>
<td>Preserved only part of the mouth. RD 11. Pl. IX/51</td>
</tr>
<tr>
<td>KT 32</td>
<td>Preserved only part of the mouth and the upper handle attachment. RD 10. Pl. X/52</td>
</tr>
<tr>
<td>KT 35</td>
<td>Preserved only part of the mouth. RD 11. Pl. X/53</td>
</tr>
<tr>
<td>KT 36</td>
<td>Rim fragment. RD 11. Pl. X/54</td>
</tr>
<tr>
<td>KT 38</td>
<td>Base fragment. Traces of pitch inside the wall. BD 8.6. Pl. X/55</td>
</tr>
<tr>
<td>KT 40</td>
<td>Preserved only part of the mouth and the upper handle attachment. RD 11. Pl. X/56</td>
</tr>
<tr>
<td>KT 41</td>
<td>Base fragment. BD 10. Pl. X1/57</td>
</tr>
<tr>
<td>KT 47</td>
<td>Base fragment. BD 9.5 Pl. X/58</td>
</tr>
<tr>
<td>KT 52</td>
<td>Preserved only part of the mouth and the upper handle. RD 11.6; HD 5.8/1.6. Pl. X1/59</td>
</tr>
<tr>
<td>KT 53</td>
<td>Preserved only part of the mouth. RD 10; HD 5.2/2. Pl. X1/60</td>
</tr>
<tr>
<td>KT 62</td>
<td>Preserved only a tiny part of the rim and the upper handle attachment. RD 11; HD 5.2/2.1. Pl. X1/61</td>
</tr>
<tr>
<td>KT 63</td>
<td>Preserved only part of the mouth. RD 11.4. Pl. X1/62</td>
</tr>
<tr>
<td>KT 64</td>
<td>Preserved only a tiny part of the rim and the upper handle attachment. RD 12; HD 5.7/1.7. Pl. X1/63</td>
</tr>
<tr>
<td>KT 112</td>
<td>Preserved only the mouth and the upper handle attachment. RD 11; HD 5/1.6. Pl. X1/64</td>
</tr>
</tbody>
</table>

\textsuperscript{81} GAIDUKEVICH 1952: 169, Fig. 61.
\textsuperscript{82} Unpublished material.
\textsuperscript{83} OPAIŢ, PARASCHIV 2013: 320.
\textsuperscript{84} BOGDAN-CĂTĂNĂCIU, BARNEA 1979: 181, N II 3(7), Fig. 146.
\textsuperscript{85} BABEŞ, 1971: 29, Fig. 8/1; MĂNUCU-ADAMEŞTEANU 1984: 32-33, Pl. III.
\textsuperscript{86} BAUMANN 1995: 204, no. 33, Pl. XI.12, XII.11, XVII.12.
\textsuperscript{87} NUŢU, STANC, PARASCHIV 2014: 61, Pl. 15.101-103.
\textsuperscript{88} CROITORU 2011: map 46.
EARLY ROMAN OLIVE OIL AMPHORAE

**Peloponnesian/Aegean centres**

1. Lower amphora base ending in a spike with a mushroom tip. This is a well-known Peloponnesian amphora of late Hellenistic times, well-known at Athens\(^9\), but less so in the Pontic area\(^9\). Most likely it represents a survival in KT context.

   **Catalogue:**
   
   KT 66.
   Preserved only the base. BD 5.

2. Lower part of an ovoid or globular amphora that ends in a cylindrical peg with a massive ring. The shape of this base is quite similar to that of a Peloponnesian Dr 25 type discovered in the Athenian Agora and dated to the late 1st and early 2nd c. AD\(^9\). However, the peg of our example is longer and the fabric is very fine and micaceous; the color is reddish yellow (SYR 6/8-7/8). This fabric suggests production in western Asia Minor.

   **Catalogue:**
   
   KP 50.
   Preserved only the base. BD 3.

**Aegean/Asia Minor centres**

These centres manufactured amphorae of type Dr 24 and Dr 24 similis\(^9\). If the centres of Dr 24 type productions are not known, at least two centres for Dr 24 similis type have been identified at Chios and Erythrai. A good fabric description has been published for both amphora types\(^9\).

**Dr 24 type**

Only two rims and three bases can be included in this type. The rim shows a strong internal concavity while the bases are in the shape of a long spike, both morphological features suggesting a date in the 2nd century AD. At least two fabrics can be identified. One is hard, compact, with a sub conchoidal break, inclusions not visible to the naked eye, common sub-rounded and rounded grayish and yellowish quartz, with a reddish yellow color (7.5YR 6/-7/6) (KT 7 & 21). The second is also hard, compact with an irregular or sub conchoidal break, inclusions not visible to the naked eye, and common white (calcareous material, shells?) inclusions that left elongated streaks. The color is light red (2.5YR 6/-6/8) to reddish yellow (7.5YR 6/-7/6) (KT 8, 20 & 34).

   **Catalogue:**
   
   KP 21.
   Preserved only part of the mouth. RD 16.

   KT 34.
   Preserved only part of the mouth. RD 20.

   KT 7.
   Preserved only the base. BD 2.

   KT 8.
   Preserved only the base. BD 2.

   KT 20.
   Preserved only the base. BD 2.

**Dr 24 similis**

This type is well-represented by one lid, nine rims, and three bases. Some of these examples belong to Chian production (KT 5, 6, 15, 58), others to different centres: KT 19 & 106 have a sub conchoidal break with

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89 GRACE 1961: Fig. 38; OPAIŢ 2010: Pl. 87.1.

90 Olbia: LEJPUŃSKAJA 2010: 68, Pl. 36.6.9; Vani: OPAIŢ 2010: Pl. IX1.1-2; Kara Tobe, pers. comm.VNUKOV.

91 OPAIŢ 2010b: 156, Pl. 88.3.

92 For the distinction between Dr 24 and Dr 24 similis see OPAIŢ 2007b.

93 OPAIŢ 2007; OPAIŢ, TSARAVOPOULOS 2010; OPAIŢ, TSARAVOPOULOS 2011.
sparse to common white inclusions, sparse grayish-yellowish large inclusions (1mm) and a light red color (2.5YR 6/6-6/8); K 24 has a sub conchoidal break and is rich in silver mica with a pink colour (5YR 7/4), while KT 25 is rich in whitish inclusions (foraminifera and shells?) and has a very pale brown (10YR 7/4) color. The variety of fabrics clearly suggests a large area of production for this type.

Catalogue:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP 12</td>
<td>Lid fragment</td>
<td>Pl. XIII/73</td>
</tr>
<tr>
<td>KT 5</td>
<td>Preserved only the base. BD 2.4.</td>
<td>Pl. XIII/74</td>
</tr>
<tr>
<td>KT 6</td>
<td>Preserved only the base. BD 1.7.</td>
<td>Pl. XIII/75</td>
</tr>
<tr>
<td>KT 6-bis</td>
<td>Preserved only part of the mouth. RD 14.</td>
<td>Pl. XIII/76</td>
</tr>
<tr>
<td>KT 10</td>
<td>Preserved only part of the mouth. RD 17.6.</td>
<td>Pl. XIII/77</td>
</tr>
<tr>
<td>KT 58</td>
<td>Preserved only the base. BD 1.6.</td>
<td>Pl. XIII/78</td>
</tr>
<tr>
<td>KT 19</td>
<td>Preserved only part of the mouth. RD 16.</td>
<td>Pl. XIII/79</td>
</tr>
<tr>
<td>KT 24</td>
<td>Preserved only part of the mouth. RD 16.</td>
<td>Pl. XIV/80</td>
</tr>
<tr>
<td>KT 25</td>
<td>Preserved only part of the mouth. RD 16.2.</td>
<td>Pl. XIV/81</td>
</tr>
<tr>
<td>KT 26</td>
<td>Preserved only part of the mouth. RD 17.</td>
<td>Pl. XIV/82</td>
</tr>
<tr>
<td>KP 48</td>
<td>Preserved only part of the mouth. RD 14.</td>
<td>Pl. XIV/83</td>
</tr>
<tr>
<td>KT 106</td>
<td>Preserved only part of the mouth. RD 14.</td>
<td>Pl. XIV/84</td>
</tr>
</tbody>
</table>

The fabric of this fragment is very similar to that of a Kapitän 2 subtype, which suggests that a Chian workshop may have manufactured both amphora types.

**Benghazi 298-299/San Lorenzo 7**

This amphora type occurs in modest but relatively consistent quantities in both urban and rural areas in Roman Dobrudja\(^\text{94}\). Two subtypes are known, one egg-shaped, the other more slender. Both subtypes are present at Callatis. It was manufactured from the 2nd century to the 5th century, becoming smaller during late Roman times. There are at least four fabrics, all of them being compact and hard with an irregular break. The first is very fine, compact, inclusions not visible to the naked eye, sub conchoidal break, tiny back inclusions (pyroxene?), and brownish-reddish particles. The color is creamish, very pale brown (10YR 8/3-8/4) (KT 1). The second is rich in foraminifera and shells while the core has a very pale brown color (10YR 7/3-7/4) and a pinkish exterior (7.5YR 7/4) (KT 4). The third is rich in angular and sub-angular grayish-yellowish quartz, abundant white inclusions, common brownish particles with a light red (2.5YR 6/6-6/8) color (KT 3). Finally, the fourth is rich in white and brownish inclusions and many tiny voids with a creamish buff, reddish yellow (7.5YR 7/6) color (KT 29).

Catalogue:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>KT 1</td>
<td>Preserved the mouth, neck and upper part of the handles. RD 15; HD 5/2.7.</td>
<td>Pl. XIV/85</td>
</tr>
<tr>
<td>KT 2</td>
<td>Preserved only part of the mouth and handle, RD 15; HD 5/2.7.</td>
<td>Pl. XV/86</td>
</tr>
<tr>
<td>KT 3</td>
<td>Preserved only part of the mouth. RD 16.</td>
<td>Pl. XV/87</td>
</tr>
<tr>
<td>KT 4</td>
<td>Preserved only one handle fragment. HD 5/2.7.</td>
<td>Pl. XV/88</td>
</tr>
<tr>
<td>KT 29</td>
<td>Preserved only part of the mouth. RD 15.</td>
<td>Pl. XV/89</td>
</tr>
</tbody>
</table>

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\(^{94}\) Noviodunum and Tomis: OPAIŢ 1987: 251-253, Figs. 7.3; 8.2.; Nufăru: OPAIŢ 1987: Fig. 7.4-5; Murighiol: OPAIŢ 1991: 141, Pl. 10.66; Teliţa: BAUMANN 2003: 204, no. 103.
EARLY ROMAN FISH PRODUCTS AMPHORAE

Piscatorial activity, as literary, epigraphic and archaeological sources inform us, was one of the main sources of income for the Pontic population. The industry thrived during the early Roman period, as attested on the northern shore of the Black Sea by the numerous discoveries of salting factories and amphorae for fish products. Unfortunately, there is as yet no comprehensive typology of these amphorae. As a general rule, they are large, sturdy vessels with ovoid bodies and massive handles. The frequent occurrence of amphorae for fish products at Callatis confirms not only the appetite of this market for a large variety of fish products but also the close commercial relations of this polis with the northern and possibly southern centres that manufactured these fish products.

North Pontic fish products amphorae

Zeest 75-variants (Chersonesan area?)

A complete amphora of this type has already been found at Callatis. Our examples come only to attest to the popularity of this amphora in this city. The rim is almost triangular in section. The frequency of these discoveries suggests perhaps a strong connection with this production centre. The complete amphora has a capacity of c. 114 litres. The fabric of these examples suggests an origin in the Balaklava area. It is hard, compact with irregular break, few whitish, well-sorted inclusions barely visible to the naked eye, and brownish-grayish spots (iron minerals) usually under 0.3 mm. The color is light red (2.5YR 6/8) to reddish yellow (5YR 6/8).

Catalogue:

KT 86 A. Preserved only part of the mouth. RD 20. Pl. XV/90
KT 86 B. Preserved only part of the mouth. RD 22. Pl. XV/91

Bosporan area

The first example (KT 87) has been assigned to the Bosporan area due to its fabric that exhibits a hackly break and rich calcareous lumps disposed in longs streaks combined with small brownish spots. The color varies between light red (2.5YR 6/6) and red (2.5YR 5/6). The fabric of the second (KT 13) is also typical of the Bosporan area: irregular break, abundant tiny quartz-like grits, common foraminifera, red-brownish tiny spots (ferruginous quartz sand?), and sparse flecks of gold mica. The color is dark red (2.5YR 5/6).

Catalogue:

KT 87. Preserved only part of the mouth. RD 24. Pl. XV/92
KT 13. Preserved only part of the mouth, neck and handle attachment. RD 17; HD 4.6/4. Pl. XV/93

South Pontic, Propontis area (?)

We have grouped these amphorae together mainly because their fabrics are well-sorted, with an irregular break, and abundant blackish (iron ore?), tiny inclusions (KT 88, 94), or abundant quartz-like grits (KT 109-110), or ill-sorted whitish and grayish angular quartz. Their color is usually light red (2.5YR 6/8), but KT 97 is brownish, yellowish red (5YR 4/6-5/6).

Catalogue:

KT 88. Preserved only part of the mouth. RD 22. Pl. XVI/94
KT 94. Preserved only part of the mouth. RD 13. Pl. XVI/95

96 OPAIŢ 2007a.
Table fish amphora
This vessel is characterized by hanging rim, and large mouth, a tall and large neck, ovoid in cross section handle, a with a central sharp groove, short, sloppy shoulders, an ovoid body with flaring ring base. It is well-known at Chersonesos98, Tanais99, Gorgippija100, and Mirmekion101.

Catalogue:
KP 51. Preserved the upper part. RD 4.4; HD 1.9/1.7. Pl. XVII/101
KP 38. Preserved mouth, neck and the upper attachment of one handle. RD 10. Pl. XVII/102

Late Roman wine amphorae
The fact that only few centres are represented is due to the inadequate collection of pottery fragments, as all fragments belong to the “passim” category.

South Pontic centres
These amphorae may have a south Pontic origin as evidenced by their fabrics, which is iron rich, and also by their distribution pattern; they have been frequently found not only on the northern and western Pontic shores but also in the interior of the Anatolian plateau at Pompeiopolis.

Böttger II-4/Opaiţ D-II
This amphora is well distributed not only in the Pontic and Lower Danube area but also far inland of Anatolia at Pompeiopolis. It represents a south Pontic imitation of the famous LRA 1 amphora102. The fabric is hard with irregular break, with common nuclei of iron oxides and sparse to common white inclusions, which may leave elongated streaks; the color is red (10R 5/6-5/8). A whitish wash is a common occurrence on the exterior.

Catalogue:
KP 1. Preserved only part of the mouth. RD 4.3. Pl. XVII/104

Uncertain types
Most likely these vessels belong to some south Pontic centres.

Catalogue:
KP 17. Preserved a fragment of the lower part. BD 3. Pl. XVII/105
KP 37. Preserved a fragment of the lower part. BD 3.5. Pl. XVII/106

West Pontic types

98 Personal observations in the Chersonesos archaeological museum.
100 ALEXEEVA 1997: Pl. 131.2.
101 GAJDUKEVICH 1987: 171, Fig. 191.
102 OPAIŢ 2004:29.
Kuzmanov XV/ Böttger III-1

It is a common amphora on the western shores of the Black Sea and it has been well defined by some scholars\(^{103}\). Its main characteristics are a cylindrical, deeply wheel-ridged body ending in a massive knob or empty conical base. Recent discoveries suggest Noviodunum as one of the manufacturing centres. The fabric is dominated by large, brownish-black nuclei and spots of iron minerals (?), and tiny whitish (calcareous?) inclusions, which left voids and elongated streaks. The color varies between red (7.5YR 5/8) and light red (2.5YR 5/8).

Catalogue:

Callatis inv. 1711.

KP 9. Preserved only the conical, empty base. BD 4. Pl. XVIII/108

KP 15. Preserved neck, shoulder and one handle. HD 2.5/1.5 Pl. XVIII/109

Aegean centres

Cilicia/Cyprus- LRA 1

This is one of the well-distributed wine amphorae of the eastern Mediterranean and Black Sea. Its production started in the second half of the 4\(^{th}\) century\(^{104}\) and reached a canonical shape already in the 5\(^{th}\) and the 6\(^{th}\) centuries, being imitated in many other areas with old traditions of wine production, such as Cyprus, Kos, and Rhodes\(^{105}\). It is one of best defined amphora types being included in many amphora typologies\(^{106}\). A large variety of fabrics is mostly hard with a hackly break and harsh surface. The inclusions are composed of well-sorted limestone, sometimes foraminifera, red-brown and red rocks. The colors vary between pinkish-cream (7.5YR 8/2-8/4), pale orange-brown (5YR 6/6), red-brown (2.5YR 6/6), and yellow (10YR 8/3)\(^{107}\). All the fragmentary examples discovered at Callatis are dated to the 5\(^{th}\)(KP 7, KP 8) and 6\(^{th}\) century (KP 2, KP 19, KP 26).

Catalogue:

KP 7. Preserved the upper part with the upper handle attachment; traces of dipinti on shoulder. RD 8. The fabric suggests a Cilician origin Pl. XVIII/110

KP 8. Preserved the upper part with the upper handle attachment; painted cross and traces of dipinti on shoulder. RD 8.5. The fabric suggests a Cypriot origin Pl. XIX/111

KP 2. Preserved the mouth and the part of one handle. RD 9; HD 3.3/2.2. The fabric suggests a Cilician origin Pl. XIX/112

KP 26. Preserved only a fragment of the lower part mended from two pieces. The fabric might be Cilician Pl. XIX/113

Calatis passim.

Ephesus

1. A complete amphora found at Callatis has recently been assigned to Ephesus\(^{108}\). It belongs to a larger group of so-called bag-shaped amphorae. Our example has good parallels in the Athenian Agora\(^{109}\) and at

\(^{104}\) REYNOLDS 2008: 72 ; OPAIŢ 2010a.
\(^{106}\) Among the most well-known typologies we can mention: EGLOFF 1977; RILEY 1979; 1981; PEACOCK, WILLIAMS 1986; PIERI 2005.
\(^{107}\) TOMBER, DORE 1998: 108.
\(^{109}\) P 12695.
The rim is small, separated by an undercut from the slightly bulged neck, small, ear-shaped handle ovoid in cross section, steep shoulder, and bag-shaped body ending in a cylindrical spike. Wheel-turned traces at the exterior. Fine, micaceous, yellow fabric (10YR 7/6) covered by a very pale brown slip (10YR 7/3-7/4). On the upper part of the body is a dipinto in red, IE. These letters do not indicate the capacity because the volume of this vessel is c.16 litres. Maybe the illegible dipinti, also in red, on the opposite side of the vessel indicates the capacity.

Catalogue:
Callatis inv. 2744. Completely preserved, mended from many pieces and partially completed with plaster. RD 7.7; H 57; MD 28; BD 2.6; Capacity c. 16.3 l.

2. A second complete amphora also of Ephesian origin is the 4th century predecessor of LRA 3. The large variety of fabrics seems to support the idea that this type was manufactured in a large geographic area perhaps located mainly in western Asia Minor between Ephesus, Aphrodisias, and Sardis. Two different fabrics have recently been identified at Ephesus. The usual fabric is highly micaceous reddish brown to brown (2.5YR 4/4 to 5YR 4/4), but it can be buff micaceous (7.5YR 5/6-6/6), or dark buff non-micaceous, calcareous (5YR 5/6). Our vessel is fractionary and has a capacity of only c. 0.82 litres. It has good parallels at Salona, Bezymyannaya (Chersonesan territory) and Athens, where it is dated to the end of the 4th century AD.

Catalogue: Callatis inv. 2035. RD 3.3; H 30.5; MD 9.4; BD 3.2. Capacity 0.83 l.

Cretan centres
Cretan amphorae appear to have had a vivid presence in this area, especially after the second half of the 6th century as is shown by recent discoveries made in Dobrudja, Chersonesus, and Panticapaeum. We have identified just one fragmentary upper amphora part that places Callatis on the map of Cretan wine distribution. The fabric is sedimentary, very fine, compact, and calcareous; the color is reddish yellow (5YR 6/8-7/8).

Catalogue: KP 16. PH 8, HD 2.3/1.7

Bag-shaped amphora centres
The evolution of some Aegean amphorae from barrel-shaped to bag-shaped body in late Roman times has been recently presented. These amphorae, although not very numerous, compensate with their volumes of 30-35 litres on average, occasionally even nearly 60 litres. The examples at Callatis are closer to amphorae of Torone III/Opaić CII-2 type. The two amphora fragments from Callatis have quite a similar fabric although one (KP 3) is finer with inclusions less visible to the naked eye; sparse gold mica and grayish-brownish large inclusions (ferruginous quartz sand?), small lamellar brownish inclusions (iron minerals?), sparse to common large white particles, sparse foraminifera. The color is reddish yellow 7.5YR 6/6-7/6. A yellow-whitish...
slip covers the exterior of the body. The beginning of a *dipinto* in red is visible on the shoulder of **KP 14**. These vessels are dated especially to the 4th and 5th centuries AD.

Catalogue:

**KP 3.**  
RD 10.  
Pl. XX/118

**KP 14.**  
RD 12, PH 8, HD 2.8/1.6.  
Pl. XXI/119

**Palestinian centres**

**LRA 4**

This amphora type enjoyed increased popularity in the 5th and 6th centuries in the Lower Danube area\(^{121}\). The fact that we present only one example from Callatis is due to the current stage of research at this site. The fabric has already been well defined\(^ {122}\). It is hard, sandy, varying from irregular to hackly break, well-to ill-sorted quartz and sparse to common limestone. The color is drab brown (5YR 5/6).

Catalogue:

**KP 32.**  
BD 3  
Pl. XXI/120

**Late Roman olive oil amphorae**

During late Roman times, the typical containers for carrying olive oil were amphorae of type LRA 2. Its production in the Argolid (Kounoupi)\(^ {123}\) and Cnidos\(^ {124}\) seems to be attested by some kiln discoveries. Certainly, it is one of the most frequently found amphorae in the border provinces of the Lower Danube area\(^ {125}\). Its presence is connected with the controlled trade exercised by the government in order to keep a constant supply for these garrisons\(^ {126}\). The fabric is very hard, well- to ill-sorted with common limestone that occurs as large grains in Peloponnesian examples and as a groundmass of small limestone on the western coasts of Asia Minor, and mica\(^ {127}\). Occasionally some examples have sparse brownish lenses. The color varies from very pale brown (10YR 8/4), to brownish yellow (10YR 6/6), to light red (2.5YR 6/6).

This type is represented by only a few lids, one rim fragment, and a fragmentary upper part. The latter (inv. 2801) is important for it bears a *dipinto* indicating the amphora capacity, ΔΝ (53 sextarii=29.494 l), which is a typical capacity of LRA 2 at this time\(^ {128}\).

Catalogue

**Callatis inv. 2801.**  
RD 11.7; HD 4/2.6.  
Pl. XXI/121

**KP 47.**  
RD 12, PH 7.  
Pl. XXI/122

**KP 10.**  
RD 8.4.  
Pl. XXI/123

**KP 11.**  
RD 7.6.  
Pl. XXI/124

**KP 13.**  
RD 8.6.  
Pl. XXII/125

**KP 32.**  
RD 8.  
Pl. XXII/126

\(^{121}\) OPAIŢ 2004: 20-22.  
\(^{123}\) ZIMMERMANN MUNN 1985: 342-343.  
\(^{124}\) TUNNA, EMPEREUR, PICON, DÖGER 1987: 49.  
\(^{125}\) OPAIŢ 2004: 11-12.  
\(^{126}\) KARAIOGROU 2001; OPAIŢ 2004: 97.  
\(^{127}\) PEACOCK, WILLIAMS 1986: 184.  
Storage ware

Very few storage vessels were found in the edifice with a hypocaust. Many of them belong to Opaiț type I (KT 158, 159, 161), which are characterized by a large mouth, an almond-shaped rim, and two massive strap handles attached directly to the rim. It is well known in Roman Dobroudja. Another vessel with a “hammer-headed” rim, to borrow a term coined by Riley, is nicely decorated on top with ovoid impressions (KT 102).

Catalogue:

KT 159. RD 14; HD 4.5
KT 102. RD 32.

Kitchen ware

This entire ceramic category, which includes pots, casseroles, and bowls, comes from the edifice with a hypocaust and thus can be dated mostly to the 2nd and the 3rd centuries AD. It sheds light not only on the domestic activities that took place in this city but also on the intensity of linkages with the Aegean world in terms of both diet and trade connections.

Pots

Type I

Type I is characterized by a flaring, thickened rim with an internal concavity to support the lid. The body is ovoid and covered by wheel traces. The base is flat, and one or two small handles are attached under the rim and shoulder. It was manufactured in different centres as shown by its differing fabrics, either red-brownish or whitish kaolin. This is one of the most represented types found not only at Callatis but also at Histria, Tomis, Ibida, Troesmis, and in Oltenia. Some minor morphological differences and the different fabrics compel us to distinguish at least two variants: A with a red-brownish fabric and B with a whitish fabric, kaolin fabric, perhaps imported from Durostorum.

Type IA

Catalogue:

KT 17. Complete profile, missing one third. RD 10.4; HD 1.5/0.9; MD 12.4; BD 5.2; H 11.5.
KT 150. Rim, handle, and body fragment. RD 20.
KT 151. Rim, handle, and body fragment. RD 13.

Type IB

Catalogue:

KT 152. Rim and body fragment. RD 19.
KT 189. Rim and body fragment. RD 15.

129 SUCEVEANU 2000: 122-123, type XXXVIII, Pl. 55; OPAIŢ 2004: 3, type 1, Pl. 2.1.
131 BĂJENARU 2013: 65, Pl. 10.80.
132 Personal observations in the excavation’s store room.
Type II
Type II is represented by two examples, both with a horizontal rim; one has a shallow concavity on top. The body seems to be less “round-bellied,” but more sack-shaped. It shares similarities with some pots discovered at Tomi135 and Tanais136. It might represent a local imitation of an Aegean type137.

Catalogue:

**KT 148.** Rim, handle, and body fragment. RD 11. Pl. XXIII/136

**KT 147.** Rim and body fragment Pl. XXIV/137

Type III
This type is characterized by a flaring rim, rectangular in section, and a wheel-ridged globular body. It has good parallels at Tomi138, Histria139, Telita-Amza140, and Olbia141.

Catalogue:

**KT 143.** Rim, handle, and body fragment. RD 17.5; HD 2.7/1. Pl. XXIV/138

**KT 188.** Rim and body fragment. RD 9. Pl. XXIV/139

**KT 173.** Rim, handle, and body fragment. RD 9; HD 1.2/0.8. Pl. XXIV/140

Varia
Some pots of differing shapes and represented by unique examples could not be included in a precise typology. We, therefore, decided to present them individually.

A. The rim is thickened with an internal ledge close to the top of the internal side of the rim. Handles are attached under the rim.

**KT 142.** Rim, upper handle attachment, and body fragment. RD 18. Pl. XXIV/141

B. The rim is flaring, separated by a pronounced offset from the bag-shaped body.

**KT 181.** Rim and body fragment. RD 17.6. Pl. XXIV/142

C. The rim is flaring, triangular in section while the body seems to be globular. The fabric is rich in kaolin. It has good parallels at Tomis142 and Histria143.

**KT 144.** Rim and body fragment. RD 15. Pl. XXIV/143

D. Heavy rim, beveled externally, and with shallow internal concavity; globular body with large grooves. It has good parallels at Murighiol, Tomis, Beroe, and Argamum144. It is dated to the second half of the 6th c. AD.

**KT 145.** Rim and body fragment. Pl. XXIV/144

**KT 155.** Rim and body fragment of a handmade pot. RD 20. Pl. XXV/145

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135 BĂJENARU 2013: 63, Nos. 60-61, Pl. 8.60-61.  
136 ARSEN’EVA, NAUMENKO 1992: Fig. 61.4, 6.  
137 HAYES 1983: 105, 122, Nos. 56-57, Fig. 5.56-57; WILLIAMS, ZERVOS 1983: 16, Fig. 6; SACKETT 1992: 233, D13, Pl. 174.13 (Hadrianic times); LADSTÄTTER 2005: 251, Fig. 44.K 795 (third quarter of the 3rd century AD).  
138 BĂJENARU 2013: 64-65, Nos. 75-78, Pl. 10.75-78.  
141 KRAPIVINA 1993: 102, Fig. 34.7-8.  
142 BĂJENARU 2013: 65, Pl. 10.79.  
143 SUCEVEANU 2000: 130-133, Pls. 61.18; 62.21, 27.  
144 OPAIŢ 2004: 47-48, type IX 2, Pl. 36.4-10.
Lids
KT 165. Handle and body fragment. PH 4. Pl. XXV/146
KT 166. Body fragment. RD 28. Pl. XXV/147

Casserole
A large variety of casseroles has been found in the same context with the pots and is largely dated between the 2nd and 3rd centuries AD. All of them bear traces of soot. We have identified four types.

Type I
The main characteristic of this type, well-represented by KT 130, is its horizontal rim with a piecrust handle and hemispherical, ribbed body. This type of handle is usually met in the Greek milieu since Hellenistic times. It seems to enjoy the same popularity in the western Pontic Greek cities as it is found not only at Callatis but also at Histria and Tomis.

Two other examples have been included in this type, although they can be considered variants of this main type. However, the shape of the rim and body were close enough to unite them into one type. One example, KT 123, has only small indentations on the exterior of the rim and shallow grooves on the exterior of the body. Its coarser fabric indicates that it is the product of a different workshop. The second example is KT 124, which has a similar shape but the horizontal rim is slightly raised on the interior and separated from the body by a small undercut, while the body is plain. It also has parallels at Histria and Tomis. It is possible that these variants represent either a gradual simplification of the form from the 2nd to mid/second half of the 3rd century, or that KT 123 and 124 were manufactured under the strong influence of KT 130. In the 4th century, this type continued to be manufactured, but the piecrust handles were replaced by two real handles.

Catalogue:
KT 129. Rim and body fragment. RD 40.8. Pl. XXV/148
KT 130. Rim and body fragment. RD 25. Pl. XXV/149
KT 123. Rim and body fragment. RD 41. Pl. XXV/150
KT 124. Rim and body fragment. RD 24. Pl. XXVI/151

Type II
The second type has an everted rim and hemispherical body, but it is shallow in comparison with the first type. One of our fragmentary examples (KT 132) has a lug handle. This form has good parallels not only in the west Pontic Greek cities such as Tomis and Histria, but also at Athens.

Catalogue:
KT 131. Rim and body fragment. RD 22.6. Pl. XXVI/152
KT 132. Rim and body fragment. RD 30. Pl. XXVI/153
KT 179. Rim and body fragment. RD 35. Pl. XXVI/154

146 SUCEVEANU 2000: 50-52, type XIII, Pl. 16-17.
147 BĂJENARU 2013: 66, Pl. 11.82-86.
149 BĂJENARU 2013: 66-67, Pl. 11.87.
150 OPAIŢ 2004: 55, Casseroles type II, Pl. 42.8-9.
151 BĂJENARU 2013: 67, Pl. 11.88.
152 SUCEVEANU 2000: 93, type XXVII, Pl. 37.2.
153 ROBINSON 1959: 67, K 89, Pl. 72 (dated middle of the 3rd century AD).
Type III
This type has a gentle everted rim and hemispherical grooved body. It shares some similarities with a vessel discovered at Troesmis\textsuperscript{154}, which also has a fabric rich in kaolin (?) similar to our example. Therefore we do not exclude an import from a Danubian workshop, either Durostorum or Troesmis.

Catalogue:

\begin{itemize}
\item KT 136. Rim and body fragment. RD 23. Kaolin rich fabric. Pl. XXVI/155
\end{itemize}

Type IV
It has a flat, horizontal rim and slightly carinated body, slightly concave at its upper part. Two flat handles are attached under the rim and above the carination of the body. A smaller variant, maybe of the 3\textsuperscript{rd} century AD, is represented by KT 172. The fabric is gritty, gray with red core. This type is common in the Aegean\textsuperscript{155} but, if the rim of the examples found at Knossos is sloping, our examples do not have such inclined rims. In the Lower Danube and Pontic areas, it occurs not only in an urban milieu at Tomis\textsuperscript{156}, Histria\textsuperscript{157}, and Troesmis\textsuperscript{158}, but also at Niculitel\textsuperscript{159} and Sarichioi\textsuperscript{160}. In the northern Pontic area, it is present at Olbia\textsuperscript{161}, Chersonesos (territory)\textsuperscript{162}, and Tanais\textsuperscript{163}. Most likely it was imported from Phocaea and travelled together with the well-known Phocaean tableware\textsuperscript{164}. It enjoyed an especially massive presence on the western coast of Asia Minor at Ephesus\textsuperscript{165} and Ilion (Troia)\textsuperscript{166}.

Catalogue:

\begin{itemize}
\item KT 117. Rim, handle, and body fragment. RD 21; HD 2.8/0.7. Pl. XXVI/156
\item KT 118. Rim and body fragment. RD 26.2. Pl. XXVI/157
\item KT 119. Rim and body fragment. RD 31; HD 2.5/0.7. Pl. XXVII/158
\item KT 122. Rim and body fragment. RD 20; HD 1.8/0.8. Pl. XXVII/159
\item KT 172. Rim and body fragment. RD 24; HD 2.6/1.2. Pl. XXVII/160
\end{itemize}

\textit{Frying pans}

Type I
The main characteristic of this type is its tronconic, straight-sided body. However, the rim is different and serves to divide it into two variants.

A. The rim is pulled inside and slightly beveled at a high angle. Most likely it represents the late variant of an earlier vessel dated at Knossos during the early-mid 2\textsuperscript{nd} century AD\textsuperscript{167}. Our example may be later

\begin{itemize}
\item \textsuperscript{154} OPAIT 1980: 330, PLII.1.
\item \textsuperscript{155} ROBINSON 1959: 42; G 194, 195, PL 7, 56; J 57, PL 11; 67; K 93, PL 14; HAYES 1983: 106, Casseroles type 2, Fig. 7; SACKETT 1992: 233, D3/12, PL 174.12 (Hadrianic times); 243, R1/4, PL 184; 245; R2/16, PL 185 (late 2\textsuperscript{nd} c. AD); 248, S1/14, PL 188 (Severan times); PULZ 1985: 91, 98; No. 68; Fig. 16.68; GASSNER 1997: 178, PL 59, 742; LADSTÄTTER 2010: 274, A-K 903-908, PL 114; HEATH, TEKKÖK 2006-2009b: Nos. 4-5.
\item \textsuperscript{156} BĂJENARU 2013: 62-63, Nos. 64-65.
\item \textsuperscript{157} ALEXANDRESCU 1966: 208, T XXIV.8, PL 99; SUCEVEANU 2000: 89, type XXIV, PL 35 (some of them might be imitation of the Aegean products).
\item \textsuperscript{158} OPAIT 1980: 330, 351; No. 15; PL III.2.
\item \textsuperscript{159} BAUMANN 1983: 169, No. 2, PL XXXIV.5.
\item \textsuperscript{160} BAUMANN 1995: 202, No. 29, PL XI.3.
\item \textsuperscript{161} KRAPIVINA 1993: 101, Fig. 32.
\item \textsuperscript{162} KLENINA 2004: 75-76, Nos. 258-271, Fig. 28.
\item \textsuperscript{163} ARSEN’EVA, NAUMENKO 1992: Fig. 61.3.
\item \textsuperscript{164} ÖZYIGIT 1991: Fig. 13.
\item \textsuperscript{165} GASSNER 1997: PLs. 58-59,740-742; LADSTÄTTER 2010: 258, A-K 710, Taf. 103.
\item \textsuperscript{166} HEATH, TEKKÖK 2006-2009b: cat. nos. 4-5.
\item \textsuperscript{167} SACKETT 1992: 238, PL 179.43.
\end{itemize}
(3rd–4th century AD?) as it has similarities with a casserole discovered at Cogealac\textsuperscript{168}. A similar casserole occurs at Ivai’lovgrad\textsuperscript{169}.

Catalogue:

**KT 127.** Rim and body fragment. RD 21. Pl. XXVII/161

B. The rim is horizontal and slightly grooved on top. It continued to enjoy certain popularity also during late Roman times\textsuperscript{170}.

Catalogue:

**KT 125.** Rim and body fragment. RD 25. Pl. XXVII/162

**Type II**

The rim is thickened and the body is tronconic with a flat base; wheel marks are evident on the upper part of the body. It is possible that this vessel was equipped with one handle necessary for sautéing or gently “shaking food over the fire.”\textsuperscript{171} This form has good parallels at Histria\textsuperscript{172}, Ephesus\textsuperscript{173}, and in Hellenistic and Roman Gerasia (Laconia)\textsuperscript{174}.

Catalogue:

**KT 128.** Rim and body fragment. RD 20.4. Pl. XXVII/163

**KT 126.** Rim and body fragment. Pl. XXVII/164

**All-purpose bowl (?)**

It has a shallow body and a slightly thickened, inturned rim. The fragment still preserves one flat, flanged lug-handle, but certainly, it had two handles. It is so far a unique example in Moesia Inferior. The best parallel is in Corinth, but the example has a horizontal rim with a convex top surface\textsuperscript{175}. Quite similar vessels have been found at Berenice but in a local fabric and dated to late Roman times\textsuperscript{176}. A well-preserved example found off Skerki Bank might also belong to this type, although it has two wide and thick lug handles; there are patches of slip on the interior of the rim, and traces of fire-blackening on the exterior. According to the authors, this vessel resembles Pompeian Red Ware\textsuperscript{177}. Our example also lacks evidence of secondary firing and soot; this suggests that it was used in the oven, perhaps for roasting legumes. According to some ethnographic studies, such vessels are used today in Cyprus, Sardis and Crete for roasting chickpeas\textsuperscript{178}.

Catalogue:

**KT 133.** Rim, handle, and body fragment. RD 24. Pl. XXVIII/165

The fabric is coarse, rich in grayish coarse, and the color is pale red (10R 6/4) to light red (10R 6/6).

**Bowls**

Two types of bowls have been identified in the edifice with hypocaust. Unfortunately, the fragmentary preservations of these pieces prevent a complete morphological description. They may have had a domestic utility.

\textsuperscript{168} OPAIT 2004: Pl. 42.4.

\textsuperscript{169} KABAKČIEVA 1986: 94, Pl. 41.460.

\textsuperscript{170} OPAIT 2004: Pl. 42.1-3; GASSNER 1997: Pl. 59.743-745.

\textsuperscript{171} LANGRIDGE-NOTI 2015: 152-53.

\textsuperscript{172} SUCEVEANU 2000: 90, type XXV, Pl. 36.4-5.

\textsuperscript{173} LADSTTÄTER 2005: Pl. 206, K 907.

\textsuperscript{174} LANGRIDGE-NOTI 2015: 152, Fig. 13.4.a.

\textsuperscript{175} WILLIAMS AND ZERVOS 1983: 16, Fig. 7.

\textsuperscript{176} RILEY 1979: 269, Fig. 106.540, 543.

\textsuperscript{177} MCCANN, OLESON 2004: 146-147, Figs. 7.33-7.34.

\textsuperscript{178} KYRIAKOPOULOS 2015: 258, Fig. 23.5.c.
Type I

The upper part is vertical and its lower part becomes hemispherical with a small carination at the joining point. According to a Tomitan discovery, it ends in a flaring ring foot\textsuperscript{179}. Massive wheel marks are present on the upper part of the body. There are two types of fabrics: the first is fine with common brownish and black inclusions (iron minerals?), some of them quite large (c. 0.5mm), while the second fabric has sparse to common foraminifera, sparse quartz, and large black nodules. These differences in fabrics point to two different workshops. This type of bowl is known at Troesmis, where it is locally made\textsuperscript{180}, as well as at Histria\textsuperscript{181}, Tomis\textsuperscript{182}, and probably also Ephesus\textsuperscript{183}.

Catalogue:

- **KT 137.** Rim and body fragment. RD 21. Pl. XXVIII/166
- **KT 138.** Rim and body fragment. RD 20. Pl. XXVIII/167
- **KT 139.** Rim and body fragment. RD 22. Pl. XXVIII/168

Type II

The hemispherical body with a slightly incurving rim suggests a use for eating but the coarse fabric and some traces of secondary firing and soot may point toward its use in the kitchen. The fabric is compact, with common, well-sorted, grayish quartz and sparse brownish inclusions; the color is red (2.5YR 4/8-5/8). It is similar to a bowl found at Ilion (Troia)\textsuperscript{184}.

Catalogue:

- **KT 140.** Rim and body fragment. RD 27. Pl. XXVIII/169

Greek caccabé

The presence of this fragment in an early Roman context is certainly residual. This bi-conical shape with flaring rim and internal flange is known at Athens in contexts of 425-400 BC\textsuperscript{185}. Bats considers these vessels to be caccabai and not chytraï\textsuperscript{186}.

Catalogue:

- **KT 116.** Fragment of rim, handle and body. RD 15; HD 2.6/0.9. Pl. XXVIII/170

**CONCLUDING REMARKS**

This brief presentation of a very fragmentary ceramic collection was intended not only to give an indication of the trade connections or dietary and cooking preferences of the Callatians during Roman times, but also to prove that even tiny, stray sherds can become useful if they are correctly published. It is now up to the next generation of scholars to publish the enormous quantity of pottery deposited in the museum’s and institutes’ storerooms.

The large variety of wine, olive oil, and fish product amphorae suggested by this modest pottery collection confirms the extensive trade network established by this city not only with Pontic centres, but also with many eastern Mediterranean areas during early and late Roman times.

\textsuperscript{179} BĂJENARU 2013: Pl. 12.92.

\textsuperscript{180} OPAIŢ 1980: 336, 358; No. 63; Pl. XIII.7.

\textsuperscript{181} SUCEVEANU2000: 42-43, type X, Nos. 7-15, Pl. 12.

\textsuperscript{182} BĂJENARU 2013: 67-68, Nos. 91-92, Pl. 12.91-92.

\textsuperscript{183} LADSTÄTTER 2005: 325, K 594, Taf. 185.

\textsuperscript{184} HEATH, TEKKÖK 2006-2009b:No. 2.

\textsuperscript{185} SPARKES, TALCOTT 1970: 373, No. 1953, Pl. 94, Fig. 18.

\textsuperscript{186} BATS 1988: 46-48.
If the presence of Chersonesan, Sinopean and Heraclean wines were not a novelty for Callatians, as they were accustomed to these wines since the Classical and Hellenistic periods, the variety of Aegean wines that arrived in small amphorae (Cretan, Pergamene, Kapitán 2/Chian (?) or larger vessels (Dr 2-4, Troesmis X) shows not only the sophisticated taste of the local elite, but also its financial possibilities and network connections. The imported wine seems to be successfully supplemented by local or provincial wine, as the table amphorae but mainly the large number and variety of table pitchers suggest. To these vessels, which were customarily used for table wine, we should add other vessels made of perishable materials, such as barrels and skins. The presence of imported and local wine also suggests social differences and financial resources existent in the local market.

Large quantities of olive oil reached Callatis in large vessels of c. 50-75 litres from Aegean centres (Dr 24 similis) and from the Cilician area (Dr 24 and Bengazi 298-299/San Lorenzo 7 types). If we consider that c. 20 olive oil amphorae have been identified, with an average capacity of c. 60 litres, we reach an amount of c. 1200 olive oil litres. It is worth noting that this olive oil reached Callatis from numerous areas, such as the Peloponnes, the Aegean, the western coast of Asia Minor, and Cilicia. In quantitative terms, the olive oil containers that predominate in the archaeological context found at School no. 5 suggest a specific function of this area (thermae?).

The fish products are also well represented by many large Crimean and south Pontic vessels. Their presence in a maritime city such as Callatis demonstrates the local interest in having a large array of fish products able to satisfy the palate of a sophisticated elite through an "haute cuisine."

For late Roman times, the reduced size of the ceramic collection precludes us from making general conclusions. However, the situation seems to be changed in comparison with the early Roman period. The variety of imported wine and olive oil is diminished in the analyzed pottery lot. The north Pontic wine is out of the market by this time, but it seems to be replaced by an unknown south Pontic centre. The Aegean centres (Böttger II-4/Opaţ D-II, LRA 1-Cilicia/Cyprus, LRA 1-Ephesus, Cretan, Bag-shaped) continue on the market, but another Levantine area amphora (LRA 4) arrived in the Callatian market. The local, provincial wine is represented by amphorae of Kuzmanov XV type. The olive oil arrived only in amphorae of LRA 2 type originating in the Aegean and the Peloponnese.

The kitchen ware also displays a large variety of pots (three types), casseroles (four types), and frying pans (three types). Callatian society boasted not only an advanced level in cookery, but also diversified trade connections that allowed it to import Aegean and west Anatolian cooking vessels, while others were locally or provincially made. Of course, one can assume the existence of an advanced level of gastronomy in a city such as Callatis, which presumably inherited the old tradition of Greek cuisine, but only now can we begin to quantify it. The presence of similar, locally made kitchen tools at Callatis, Histria and Tomis suggests common foodways and cuisine that defined a cultural identity. The presence of imported and highly efficient kitchen ware emphasizes the close connections of this koiné with the Greek communities of the Aegean and western Asia Minor. They attest to a purposeful access to food and networks of supplying pottery as well as to the presence of the same dietary habits, thinking toward food, as well as preparing and consuming these foodstuffs.

The presence of some type of pottery, such as those pots of type I or bowls with ridged body, also suggests the attachment of this city to the west Pontic area in terms of diet, food preparation, and consumption. Also, some rare vessels, such as the frying pan (KT 128) and the "all-purpose" vessel (KT 133), represent an important addition to the kitchen inventory in use during early Roman times in the Greek milieu of the province of Moesia Inferior.

As a final remark, we can say that many of these conclusions were to be expected. After all, the literary, epigraphic, and archaeological evidence indicates that Callatis was a cosmopolitan maritime city with a flourishing countryside and a large trade network. However, the ceramic discoveries serve as important factual elements that were missing heretofore. We can only hope that it will be possible to have more, regular and well-planned excavations in this important city of the western Black Sea. If so, then further and more detailed information will be available for reconstructing the ancient history of Callatis.
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