

# THE POTTERY KILNS FROM POROLISSUM-SĂRATA AND THE PROBLEM OF THE SETTLEMENT'S INNER DEFENSIVE LINE

LUCIANA NEDELEA,\* HORĂȚIU COCIȘ,\*\* DAN BĂCUEȚ-CRIȘAN\*\*\*

*In memoriam Alexandri V. Matei  
(1950–2010)*

**ABSTRACT:** Located in the spot called Sărata, in the north-eastern vicinity of the Porolissum-Pomet auxiliary fort, the archaeological excavation carried out by Alexandru V. Matei and his team (Dan Băcuet-Crișan, Phd. and Sanda Băcuet-Crișan, Phd.) in 1998, brought to light two pottery kilns (conventionally called Kiln no. 1 and Kiln no. 2), together with the remains of a linear fortification, a part of the so-called inner defense line of Porolissum. Never published in this manner before, as they were only briefly mentioned in diverse articles, the results are of major importance due to the fact that they clarify both the problems regarding the pottery production center from Porolissum and the structure-functionality-chronology scheme of the settlement's inner defense line. Based on our analyses, the kilns were producing ceramic vessels most probably within the middle of the 2<sup>nd</sup> century AD, up to the 3<sup>rd</sup> century AD. Based on the general stratigraphy, combined with datable finds, it is quite clear that Kiln no. 1, located on the bottom of the defensive ditch indicates the fact that the linear fortification of the civilian and military core was disaffected in the first half of the 2<sup>nd</sup> century AD, altogether with the famous fortlets of Brebi. We observed a landscape transformation, due to the fact that after the linear fortification was disaffected, a new one appeared several hundred meters north, extending the distribution pattern of the settlement's inner defense, thus making room at the same time for the pottery kilns at Sărata.

**KEYWORDS:** pottery kilns; linear fortification; pottery production; chronology; older excavation.

**REZUMAT:** Localizată în punctul numit Sărata, în vecinătatea nord-estică a castrului auxiliar de la Porolissum-Pomet, săpătura arheologică realizată de Alexandru V. Matei și echipa sa (dr. Dan Băcuet-Crișan și dr. Sanda Băcuet-Crișan) în 1998, a adus la lumină două cuptoare de produs ceramică (numite convențional Cuptorul nr. 1 și Cuptorul nr. 2) împreună cu rămășițele unei fortificații liniare, parte a așa-numitei linii interioare de apărare a Porolissum-ului. Niciodată publicate în maniera aceasta și fiind doar parțial menționate în diverse articole în trecut, rezultatele sunt de o importanță majoră datorită faptului că ele clarifică atât problemele legate de centrul de producție a ceramicii de la Porolissum cât și schema structură-funcționalitate-cronologie a liniei defensive interioare, aparținătoare așezării. Potrivit analizelor noastre, cuptoarele produceau vase ceramice începând cel mai probabil cu mijlocul secolului al II-lea d. Chr., până în secolul III d. Chr.. După stratigrafia generală, combinată cu artefactele databile, este destul de clar că Cuptorul nr. 1, amplasat pe fundul șanțului defensiv, indică faptul că fortificația liniară a centrului civil și militar de la Porolissum a fost dezafectată în prima jumătate a secolului II d. Chr., împreună cu celebrele structuri de tip burgus de la Brebi. Observăm o schimbare în peisaj, datorită faptului că, după ce fortificația liniară este dezafectată, una nouă a apărut câteva sute de metri nord, extinzând modelul distribuției defensive a așezării, făcând în același timp spațiu pentru cuptoarele de produs ceramică de la Sărata.

**CUVINTE-CHEIE:** cuptoare de produs ceramică; fortificație liniară; producție ceramică; cronologie; săpături vechi.

\* Babeș-Bolyai University of Cluj Napoca, e-mail: nedelealuciana753@yahoo.com.

\*\* Zalău County Museum of History and Art, e-mail: hcocis12@gmail.com.

\*\*\* Zalău County Museum of History and Art, e-mail: bacuetz@yahoo.com.

## I. THE STRUCTURE, PHASES AND DATING OF THE POTTERY WORKSHOP

To this day, the existence of pottery workshops at *Porolissum* was only deduced from the large quantities of stamped pottery/*terra sigillata porolissensia* discovered not only here but in various sites of Roman Dacia<sup>1</sup>. Next to stamped pottery, it was suggested that these workshops produced other ceramic categories, like *en-barbotine* decorated earthenware and other groups of plain *sigillata*, lamps, *patera*, various moulds, common ware, beads, construction materials<sup>2</sup>, as well as Aragonne type vessels (bowls with roller-stamped decoration)<sup>3</sup>. However, despite the wide-ranging variety of earthenware available and clearly locally manufactured, the hypothesis that *Porolissum* was once one of the most important pottery production centers in Roman Dacia has never been proven through archaeological evidence, such as clear structures pertaining to workshops<sup>4</sup>.

The following analysis will focus on presenting the particularities of the two pottery kilns and waste pit discovered very close together at Moigrad-*Porolissum* in 1998, in the geographic point called *Sărata* (Sălaj County/Pl. I.). The kilns have never been published in detail before, even though they are mentioned in several publications in the past<sup>5</sup>.

Talking about issues related to the restoration of pottery discarded in antiquity, Emanoil Pripon is the first to signal through a scientific publication the existence of two pottery kilns at *Sărata*, namely *Kiln no. 1* and *Kiln no. 2*, five years after their discovery. In his article, he briefly describes the type of vessels unearthed during the 1998 excavation (wrongly published 1997), however without the proper terminology and knowledge of a roman pottery specialist regarding typology and class, and without going into further detail about these discoveries. Based on those finds, in 2008, the author Cristian-Claudiu Filip comes to the conclusion that those must have been the kilns that produced stamped pottery as well. This supposition remains to be proven, as no stamped pottery shards or vessels have been identified during the 1998 campaign. In the years to follow, the publications which mention these two kilns rely only on Pripon's observations, the most recent one from 2018 thoroughly discussing the characteristics of the ceramic production center from *Porolissum* and its possible workshops<sup>6</sup>.

Due to their imminent proximity, we believe that the structures indicate the existence of at least one *officina* in this area, which was created after the abandonment of the fort on Citera Hill<sup>7</sup> and the expansion of the civilian settlement.

Unfortunately, information regarding the integral structures of this *officina* are not available to this date, for now hindering the possibility of understanding the full process as well as the organization of the pottery production of this workshop, as is often the case with most provincial centers<sup>8</sup>. However, it is very clear that we are finally faced with one of the very elusive pottery workshops which have sparked discussions and intrigued scientists throughout the decades regarding pottery production at *Porolissum*.

According to Roman law, cemeteries and ceramic kilns had to be placed outside urban centers, due to aesthetic reasons, as well as high risk of fire and air pollution resulted in these activities<sup>9</sup>. This law

<sup>1</sup> Gudea 1989, p. 196–197; Filip 2008, p. 51–77; the author analyzed 1651 stamped earthenware produced at *Porolissum* and discovered in the two roman forts and the civilian settlement through campaigns up to the year 1998.

<sup>2</sup> Gudea 1989, p. 194–198; Tamba, Matei 1991, p. 221–233; Gudea 1998, p. 145–213; Filip 2008, p. 53–56, V.8. and VII.1.d.

<sup>3</sup> Popular in the 3<sup>rd</sup> century A.D, in the Aragonne region of nowadays northern France, east of Rheims.

<sup>4</sup> Pripon 2003, p. 709; Rusu-Bolindeț 2007, p. 26; Rusu-Bolindeț 2011, p. 107–108; Lăzărescu, Sido 2018, p. 31–53.

<sup>5</sup> Pripon 2003, p. 709–714; Filip 2008, p. 53; Tamba 2008, p. 52; Lăzărescu, Sido 2018, p. 31–53.

<sup>6</sup> Lăzărescu, Sido 2018, p. 31–53.

<sup>7</sup> Gudea 1989, p. 91; Matei 2003, p. 277–298.

<sup>8</sup> Rusu-Bolindeț 2018, p. 11–15.

<sup>9</sup> Fülle 1997, p. 129; Goodman 2007, 106; Tamba 2008, p. 31 – through *leges XII tabularum*, a necropolis was always placed *extra muros*.

comes into fruition not just in Italy, but in the provinces as well, even though exceptions always appear, as potters' kilns have been discovered in various town areas of the Empire<sup>10</sup>. For example, in the 2<sup>nd</sup> century AD, emperor Hadrian forbade cremations and burials in their entirety within three kilometers of the city walls<sup>11</sup>.

Based on the finds at *Porolissum*, the *Sărata* area represented the periphery and industrial part of the civilian settlement<sup>12</sup>. Through the 1987 archaeological campaign, Al. V Matei and D. Tamba discovered the remains of a rectangular tile kiln in the point *Ciorgăul Zmăului*, underlining the importance of the area for such activities, as they were rich in clay deposits and natural water sources. Expanding their investigations in a near location at *Dâmbul Ciobenului* through another smaller section, on the slopes of the hill they identified large amounts of earthenware shards which they interpreted as the waste of a Roman pottery workshop. The same authors also mention that during the 30s, in the region called *Grajdurile Pometului*, several lamps and a lamp mould with the stamp *FORTIS* had been identified<sup>13</sup>. However, we do not know how much of what was written in the 80s is actual fact, and should be taken with a grain of salt (Pl. II).

Usually, artisans respond to not only commercial and economic, but also manufacture-related issues when deciding where to locate their *officinae*. The area of the Citera Hill fort (101.10 × 66.65 m)<sup>14</sup> was definitely an interesting choice as far as pottery activities are involved, as the highest altitude measures 502 m, turning this into an isolated region surrounded by three abrupt slopes. The apparition of these two kilns (possibly not the only ones) on the more gentle slopes of Citera Hill, at approximatively 430–440 m altitude, is undoubtedly related to the fact that the area itself constituted an essential raw material source, primarily clay deposits and fuel/fire wood which are found here in abundance<sup>15</sup>. We know now that in Sălaj County, clay is being quarried to this day at Moigrad, Băbeni (gray-brown clay), Crasna, Cuciulat (Loess-clay), Nuşfalău, Panic, Surduc, Şimleu Silvaniei, Zalău, Tihău, Zăuan (marl clay)<sup>16</sup>.

One must also take into consideration the fact that the terrain must be slightly sloping to allow the drainage of rain water. Circa 100 m west, at the foot of the Citera Hill, strong springs constitute an essential water supply required in these activities. No knowledge of wells being discovered in the vicinity of the kilns is available, even though in Roman Dacia as well as other Roman provinces we know of wells being discovered near workshops despite the fact that they were placed close to rivers<sup>17</sup>. However, their presence cannot be dismissed, and further archaeological investigations in this area will surely bring more light into this issue in the near future. Also, besides the two kilns and waste pit, as far as other structures pertaining to a workshop are concerned, elements like foundation stone walls, drainage ditches, or clay extraction pits are unknown to us.

### A. Kilns/Pl. III.

Both Roman kilns present characteristics compatible with the most popular and widely spread structures of this kind in Roman Dacia during the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD, namely circular kilns with one firing chamber, a perforated floor sustained by a central pillar and a domed superstructure. Similar

<sup>10</sup> Carroll 2018, p. 56; Webster 1940, p. 109–116.

<sup>11</sup> Lindsay 2000, p. 170; Retief 2005, p. 128–146.

<sup>12</sup> Matei, Tamba 1988, p. 156–158; Gudea 1989, p. 55–56; Lăzărescu, Sido 2018, p. 31–53.

<sup>13</sup> Matei, Tamba 1988, p. 156–158, Fig. 13–14.

<sup>14</sup> Macrea *et al.* 1961, p. 361–390; Gudea 1989, p. 90; Matei 2003, p. 277–298; Opreanu, Lăzărescu 2016, p. 49–111.

<sup>15</sup> Tamba 2008, p. 41.

<sup>16</sup> Filip 2008, p. 69.

<sup>17</sup> Popilian 1976, p. 144 (*Romula*) and p. 145 (Slăveni); Floca *et al.* 1970, p. 82 (*Pannonia – Aquincum*); Benea 1982, p. 39, note 42 (Vrşac); Bichir 1989, p. 52 (Stolniceni-Buridava); Muşţeanu 2003, p. 30, note 36; 31 (*Moesia Inferior – Durostorum*); Nedelea, Andone-Rotaru 2018, p. 69–90.

kilns have been discovered at *Potaissa* – Turda (Cluj County), *Micăsasa* (Sibiu County), *Romula-Reșca* (Olt County), *Cristești* (Mureș County), *Ampelum-Zlatna* (Alba County), *Apulum* – Alba Iulia (Alba County), etc.<sup>18</sup>. The two kilns from *Sărata* were identified at 10.8 m distance from each other, and they clearly belong to the same workshop. *Kiln no. 2*, which is the better preserved of the two, also presents an adjacent pit which yielded surprisingly interesting ceramic content which will be discussed below. *Kiln no. 1* was badly preserved, overlapping and cutting into the defensive ditch of the settlement's *inner* linear fortification, proving once again that the workshop appeared and flourished after the abandonment of this early defensive structure.

### 1. Kiln no. 1/Pl. IV, VI.

The investigated kiln presents a circular plan, with walls built from a mixture of bricks, stones and other ceramic material, all held together with adobe and lining on the inside (circa 6 cm thickness). The maximum diameter of the oven is 1.5 × 2 m, but unfortunately most of the structure had been discovered in an advanced state of degradation, with only 20% of the kiln being intact, the rest being completely destroyed. The superstructure of the oven or its remains had not been identified, indicating that *Kiln no. 1* was dismantled while the workshop was still active at the end of the 2<sup>nd</sup> century AD, with *Kiln no. 2* still in use. The oven was researched and unearthed at a depth of 1.10 m, reaching the chamber floor. The height of the walls (what was preserved of it) started coming to light at 0.90 m depth, with only 10% of the perforated floor being preserved, at a depth of 0.68 m. The grill was found resting on a central pillar (the most common type of kiln in Dacia<sup>19</sup>).

A total of 60 products (Pl. XI-Pl. XVII) have been unearthed from this kiln (Chart 1), bearing the following ceramic categories: common ware (35 products), fine ware (plain *sigillata* – 24 products). Imported *terra sigillata* from Lezoux (2 products dated in the second half of the 2<sup>nd</sup> century AD) and Rheinzabern (5 products dated at the end of the 2<sup>nd</sup> century and beginning of the 3<sup>rd</sup> century AD) was also present among the fine ware products (Chart 2), which, paired with the fact that the structure had been badly preserved, comes to indicate that the kiln had been dismantled at an earlier point than *Kiln no. 2*, most likely towards the end of the 2<sup>nd</sup> century AD, as the chronology of most of the finds seems to indicate.

Therefore, out of the 24 fine ware products identified here, 18 are locally produced and 7 come from workshops located in Central and Eastern Gaul (Chart 3). The fine ware category (except the Lezoux products, with only the bottom parts of the vessels being preserved) is comprised of plain *sigillata* and can be divided in the following groups: local and imported plain-surfaced *sigillata* (4 products), local *sigillata* decorated in the “cut-glass” technique (1 product), and local *sigillata* decorated in the barbotine technique (18 products, mostly “atypical” shards).

The *vasa usus communis* products identified in this kiln (Chart 4) are comprised of three main groups, based on the functionality of the earthenware: *vasa escaria* (5 products; bowls), *vasa conquinatoria* (22 products; big mixing bowls and pots), and earthenware used for pouring, storing and transporting liquids and aliments (8 products; jugs and pitchers).

Due to the advanced stage of breakage, the material identified in *Kiln no. 1* represents waste created in this workshop during the second half of the 2<sup>nd</sup> century and beginning of the 3<sup>rd</sup> century AD. The ceramic waste had been discarded here after the kiln was no longer useful for the potters, and therefore turned into a “recycle bin”. Most likely, some of the products identified in *Kiln no. 1* had been fired in *Kiln*

<sup>18</sup> Filimon 1940, p. 89–95; Berciu 1947–1949, p. 180–187; Lipovan 1983–1984, p. 301–317; Mitrofan 1990, p. 129–138; Popilian 1997, p. 7–21; Rațiu 2009, p. 165–186; Nedelea, Andone-Rotaru 2018, p. 69–90;

<sup>19</sup> Floca *et al.* 1970, p. 40 and fig. 18; Popilian 1976, p. 140–141; Bichir 1989, p. 48; Stângă 1997, p. 622; Mitrofan 1999, p. 170; Gaiu 2002, p. 162–165.



no. 2, due to their characteristics and the difference in the stages of preservation between the finds from both kilns.

With the exception of three pitchers that were almost entirely restored in 2003<sup>20</sup>, most of the vessels were discovered in an advance state of fragmentation and only partly preserved. The rim of some of these vessels seemed to have been slightly oval, most likely constituting a reason for selection and elimination. The kiln seems to have produced both oxidized as well as reduced firing goods.

## 2. Kiln no. 2/Pl. V, VI.

The investigated kiln presents a circular plan, with walls built from a mixture of bricks, stones and other ceramic material, all held together with adobe and lining on the inside (circa 6 cm thickness). The maximum diameter of the oven is 2 × 2 m, and the entire structure was still intact when it was abandoned, suggesting that it was still active in the first half of the 3<sup>rd</sup> century AD. The domed superstructure of the oven had collapsed over the entire pottery batch, the vessels being therefore discovered almost fully preserved. Most of the pottery discovered inside the oven, even though broken, can be restored in its entirety<sup>21</sup>. The oven was researched and unearthed until the depth of 1.02 m, reaching the perforated floor. The chamber of the oven continued at another 0.50 m depth. The height of the walls started showing at 0.13 m depth, and the perforated floor was fully preserved, at a depth of 0,80 – 0,90 m. The perforated floor was found resting on a central pillar. The walls of the oven measured 1.60 m in height, while the furnace measured 0.65 m. The fire-tunnel, with a diameter of 0.30 – 0.60 m, had been observed in the western side of the oven, under the oven floor, and continues at a depth of 1.9 m. The diameter of the oven chambers varies between 1 m and 1.50 m. The preserved height of the superstructure ranges between 0.50 m and 0.70 m.

A total of 86 products (Pl. XVIII-XXIV) have been identified in *Kiln no. 2*, presenting the most products out of the 3 structures identified here (Chart 1). It bears the following ceramic categories: common ware (67 products), fine ware (plain *sigillata* – 19 products). The fine ware category is comprised of plain *sigillata* (Chart 5) and can be divided in the following groups: local plain-surfaced *sigillata* (11 products), and local *sigillata* decorated in the barbotine technique (8 products, mostly “typical” shards).

The *vasa usus communis* products identified in this kiln are the most numerous and form four main groups based on the functionality of the earthenware (Chart 6): *vasa escaria* (17 products; small bowls, plates, bowls), *vasa conquinatoria* (23 products; pots), earthenware used for pouring, storing and transporting liquids and aliments (27 products; jugs, pitchers, amforettes, and *dolia*), and *vasa potatoria* (1 product; mug). Some of the vessels discovered in the oven seemed to be deformed and the barbotine decoration slightly compromised.

## 3. Waste pit to Kiln no. 2/Pl. III, VI.

The waste pit can be found in the continuation of the fuel tunnel pertaining to *Kiln no. 2*, and it was dug out to a depth of 2.13 m. The bottom of the pit stops at 1.84 m depth. The walls of the pit had turned red, indicating that they had been burned. Numerous granite stones had been retrieved from this pit as well as a very rich and diverse ceramic repertoire. In total, 9 earthenware products had been recovered from it (Chart 1): a small Drag. 35 type bowl (Lezoux) bearing the stamp *ALBUCI[VS]* on the inner surface (170 to the beginning of the 3<sup>rd</sup> century AD), a Loeschcke X Type lamp, bearing the stamp *OCTAVI[VS, – ANVS]* (2<sup>nd</sup> century AD; it could be both an import or locally produced, as this type of lamp is very wide spread and imitated), and 7 common ware lids (Pl. XXVI/1–7). These are the only

<sup>20</sup> Pripon 2003, p. 709–714, Photos 6–8.

<sup>21</sup> Pripon 2003, p. 709–714, Photos 3–4; the author had already restored eleven of the products at that point: three pitchers with two handles and eight bowls (6 of them decorated in the barbotine technique). Their whereabouts are unknown to us.

lids recovered from this campaign, and no such forms had been observed or recovered from the material pertaining to the two kilns during the archaeological campaign.

### **B. Names of potters attested epigraphically**

The only names of potters attested in this workshop come in the form of two stamps identified on imported (*Drag. 35* type cup) or possibly locally manufactured ware (Loeschcke X type lamp). Both of the products were discovered in the waste pit pertaining to *Kiln no.2*.

#### **1. ALBVCI[VS]**

The stamp appears on the inner surface of a *Drag. 35* type cup produced in Central Gaul, at Lezoux (Pl. XXV/1). The name of the potter, *Albucius ii*, should be differentiated from the potter *Albucius I*, who activated in a workshop at Les Martres-de-Veyre at a much earlier period. It is known that *Albucius ii* activated at Lezoux, where most of his products were manufactured<sup>22</sup>. Several other potters are known to have worked here in the second half of the 2<sup>nd</sup> century AD: *Pateratus*, *Burdo*, *Cintusmus i*, *Sennius*, *Censorinus ii*, *Aduocisus*, *Paternus ii*, *Iullinus ii*, *Casurius ii*, *Mercator ii*<sup>23</sup>. His repertoire is very vast, with forms such as *Drag. 18/31*, *18/31R*, *27*, *30*, *31*, *31R*, *33*, *35*, *37*, *38*, *42*, *44*, *46*, *79*, *79R*, *80*, *Lu Tg*, *Tx* and *Tf*. Regarding the distribution of his work, a preference for Upper Germany and the Danube provinces seems to emerge at this time. Generally, his activity is situated between 145–180 AD, and most likely his products appear in the Danube provinces only towards the end of the second century AD<sup>24</sup>. From a chronological point of view, the *Drag. 35* type cup discovered in the waste pit pertaining to *Kiln no. 2* should be dated between 170 AD and the beginning of the 3<sup>rd</sup> century AD<sup>25</sup>.

#### **2. OCTAVI[VS, -ANVS]**

The second stamp discovered in the waste pit pertaining to *Kiln no. 2* has been identified on a Loeschcke type X lamp (XV/2).

The lamp is fully preserved (l. = 8.5 cm; w. = 6 cm; h. = 3 cm), the round discus presenting a centered filling hole. An elegant, raised border surrounds the shape of the discus (in the shape of a rib), forming a channel towards the elongated, round nozzle. The channel/*Schnauzenkanal* was provided with a small air hole/*Rinne*. The nozzle presents a large wick hole, the reservoir comes in a conical shape with a concave base, delimited by two concentric circles which indicate the manufacturer through the centered stamp reading *OCTAVI*. The shoulder of the lamp is decorated with vine spindles and *Öse/gelochte Knubbe*. From a chronological point of view, this type of *firmalampen* can be dated between the beginning of the 2<sup>nd</sup> century AD and no longer than the first decades of the 3<sup>rd</sup> century AD, being one of the most widely spread lamps in Roman Dacia. Lamps with this stamp have been discovered at *Apulum*, *Alburnus Maior*, *Potaissa*, *Tibiscum*, *Ulpia Traiana Sarmizegetusa*, etc<sup>26</sup>. In *Moesia Inferior*, over 60 products of this kind were identified at *Durostorum-Ostrov*<sup>27</sup>. For now, we cannot tell if our lamp was locally produced or imported, even though there is clear evidence of lamps (imitating well known types) being manufactured at *Porolissum*<sup>28</sup>.

<sup>22</sup> Polak 2000, p. 59–64.

<sup>23</sup> Petruț 2018, p. 65.

<sup>24</sup> Polak 2000, p. 59–64.

<sup>25</sup> Rogers 1999, p. 39–41.

<sup>26</sup> Băluță 2003, p. 152; Ota, Bounegru 2009, p. 65–107 (*Apulum*); Rusu-Bolindeț et al. 2018, p. 74, cat. no. 181 (*Alburnus Maior*).

<sup>27</sup> Elefterescu 2016, p. 159–185.

<sup>28</sup> Petruț 2012, p. 233–240.

### C. Implements and tools used for decorating pottery

The only archaeological material available to us from the 1998 campaign is the pottery identified in the two kilns. There is no knowledge about other implements or tools used for decorating pottery being discovered in this particular workshop at *Sărata* so far, even though various such discoveries have been made throughout the decades in other areas pertaining *Porolissum*<sup>29</sup>. If we interpret the finds from these two kilns, we are inclined to believe that this workshop produced common ware in large quantities, as well as luxury products decorated in barbotine technique and plain-surfaced *sigillata*, which did not require elaborated or very diverse tools. For the common ware products, brushes would have been used to apply the painted decor which has been identified on the upper surface of some of the pitchers and jugs discovered here. Regarding the type of technique used for barbotine decorated vessels or relief decoration in barbotine (wet-slip) technique, this implied the use of several tools, the most important being the horn, quill or any other type of nozzle utilized in applying the liquid. Barbotine represents a mixture of water with clay, which was then applied on the surface of the vessels through piping (slip-trailing), resulting in raised ornamental motifs once dried and fired. Such tools however are very hard to identify as they are prone to biodegradation.

## II. CATEGORIES OF EARTHENWARE PRODUCED IN THE WORKSHOP

A large quantity of pottery fragments and even numerous almost complete vessels were extracted from inside the kilns<sup>30</sup>. These have been identified on the oven floor and from different levels of the debris situated above it. *Kiln no. 1* produced both reduced and oxidized firing products, while *Kiln no. 2* produced only oxidized firing products. Also, the waste pit yielded highly interesting and chronologically important ceramic material. The two pottery kilns present similar quantities of earthenware, with *Kiln no. 2* taking the lead (86 products), followed by *Kiln no. 1* (60 products) and the waste pit adjacent to *Kiln no. 2* (9 products). Based on the particularities of the earthenware discovered here, from a chronological point of view, the two ceramic kilns seem to have flourished and peaked during the second half of the 2<sup>nd</sup> century AD, declining at the beginning of the 3<sup>rd</sup> century AD. Having in mind that some imported plain *sigillata* has been discovered in *Kiln no. 1*, it is possible that by the first half of the 3<sup>rd</sup> century AD these kilns were no longer in use, and thus the material found here represented Roman waste.

In total, a number of 155 earthenware have been uncovered during the 1998 archaeological campaign, offering therefore a very good glimpse into the demand, preferences and needs of the individuals residing in the near vicinity at that time. Out of the 155 earthenware (Chart 7), the most numerous is the group used for serving food, *vasa escaria*, with 60 such products. The next largest group is that of earthenware utilized in cooking activities, *vasa conquinatoria*, with 52 such products. This was followed in number by those pertaining to the group of vessels used for pouring and storing liquids and aliments, with 35 vessels. The less numerous groups of pottery belong to *vasa potatoria*, with only 7 vessels, and one roman lamp. The large variety of imported products comes to indicate a very healthy economic and commercial connection to outside sources (products manufactured in Central and Eastern Gaul), as well as a very healthy and intense local production (Dacian *sigillata* and common ware in large quantities). The presence of imported fine ware (*terra sigillata*) indicates that the local potters were well aware of the prices, quality, beauty and importance of this type of goods, which determined the development of fine ware manufacture in this location. This also suggests that there was a strong local demand for such goods and people who could afford to acquire such expensive earthenware.

<sup>29</sup> Gudea 1980, p. 105–190; Gudea 1989, p. 195, 509–510, p. 658, p. 731, p. 827, 829–830; Tamba, Matei 1990–1991, p. 221–223; Gudea 1996, p. 273; Cociș 1996, p. 112; Rusu-Bolindeț 1997, p. 325–388; Filip 2008, p. 54; Regep 2008, p. 90–91; Tamba 2008, p. 51; Lăzărescu, Sido 2018, p. 31–53.

<sup>30</sup> Pripon 2003, p. 709–714.

Next to the fine ware category, the common ware products prove that this workshop focused on manufacturing goods intended for local use as well, suiting the pockets and needs of any individual, and not just the upper class. The ceramic finds recovered from these structures are comprised of both imported and local Roman products, with the largest part of these discoveries presenting elements which undoubtedly suggest that they were locally produced.

Surprisingly, the star of *Porolissum*, stamped pottery/*terra sigillata porolissensis*<sup>31</sup>, has not been discovered in this location at all. The most frequent categories of pottery unearthed here are vessels decorated in barbotine technique, as well as common ware produced in large quantities, followed by very small numbers of local plain *sigillata* products and the occasional “cut-glass” decorated vessel. In the scientific literature related to this subject and as far as stamped pottery in the Citera Hill fort is concerned, the majority of the finds were unfortunately generally dated in the II-III centuries AD<sup>32</sup>. If we were to judge purely by the total number of earthenware discovered in the two kilns at this point in time to determine what was produced here on a larger scale, the situation is the following: 109 common ware products, 26 *en barbotine* decorated *sigillata* vessels and 15 plain-surfaced *sigillata* vessels. The rest of the types identified here are only scarcely found or represent imported ware and therefore cannot be taken into consideration (5 other products).

Therefore, based only on these finds, we could conclude that this workshop was focused towards producing considerable quantities of good quality common ware, as well as imitations of luxury products, but on a smaller scale. It is very possible that local imitations of barbotine decorated and plain-surfaced *sigillata* were only produced in *Kiln no. 2* which remains in use longer than *Kiln no. 1*, as the majority of intact finds come from its oven.

#### a. Fine ware produced in the workshop from *Sărata*

##### 1. Barbotine decorated pottery

This type of pottery becomes very popular around the middle of the 2<sup>nd</sup> century AD especially in Eastern Gaul, as manufacturers of *terra sigillata* began to decorate different types of cups and dishes in this technique. It flourishes in the workshops of the Aragonne area and especially Rheinzabern, with popular forms such as *Drag. 35* and *Drag. 36*<sup>33</sup>. Around the 3<sup>rd</sup> century AD it starts to become more and more popular in the Danubian provinces as well, which would coincide with the chronology of *Kiln no. 2* from *Sărata*<sup>34</sup>. In 1998, N. Gudea was signaling the large quantities of barbotine decorated vessels at *Porolissum* in comparison to other settlements of *Dacia Porolissensis*, and considered the existence of a workshop or workshops that locally produced this type of earthenware<sup>35</sup>. Similar to stamped pottery, barbotine decorated vessels seemed to have been sold as earthenware sets intended for serving drinks and food. Out of the total of 26 such vessels, the forms identified at *Sărata* are only bowls which seem to imitate various well known types of that time: *Drag. 29*, *Drag. 30*, *Drag. 37*. The decorative motifs present on this type of pottery consist of raised slip, applied in a similar manner as icing a cake. The ornamental elements can be divided in two main groups: vegetal (18) and geometric (8). Even though elegant, the motifs are usually very simplistic and repetitive, depicting stylized leaves or elongated buds, intertwined with pearled lines and vine swirls and curls of rudimentary execution<sup>36</sup>. They usually take up the entire

<sup>31</sup> Gudea 1989, p. 196–197.

<sup>32</sup> Filip 2008, cat. nos. 520 (Western Gate/1958), 724 (S. I, G 8–9/1958), 774 (G9/1959), 932 (S. I/1958). Unfortunately no exact data is available regarding these finds.

<sup>33</sup> Oswald, Price 1920, Pl. 53; Thoen, De Swaef 1996, p. 165–173; the production starts to decline at Rheinzabern around the years 260–270 A.D, but the same technique continues to be popular at Trier.

<sup>34</sup> Gudea, Filip 1997, p. 71; Gudea 1998, p. 158–160; Lăzărescu, Sido 2018, p. 31–53.

<sup>35</sup> Gudea 1989, p. 159, III.2. “about the production location of barbotine decorated pottery”; general chronology: middle of the 2<sup>nd</sup> century A.D – to the Roman retreat, or even past 271 A.D.

<sup>36</sup> Gudea 1982, p. 167–208; Gudea 1998, p. 151–153.



space of the basin, and only in very few cases there was an attempt at separating the registers of the body for a more elaborated design.

Based on the large variety of finds identified on this site, this workshop could have supplied an extended regional area with their earthenware, as similar products have been discovered in various other sites in the Citera-Pomăt-Ferice Hill area<sup>37</sup>. Surprising is however the presence of large quantities of barbotine decorated pottery in the Roman *amphiteatrum* and their striking similarities (decoration and shape) with the finds from the two kilns discovered at Sărata<sup>38</sup>. Due to their excellent quality, and based on the fact that these products were found in smaller quantities in the military *vicus*, some authors debated the idea that this type of pottery could have been produced only for people pertaining to the upper class<sup>39</sup>. However, we also need to take into consideration the possibility that some of these products make their way towards other urban and military centers of Roman Dacia, in the same fashion as stamped pottery produced in the *officinae* from Porolissum<sup>40</sup>.

## 2. Plain-surfaced *sigillata*

Regarding the local production of plain-surfaced *terra sigillata* at Sărata, we notice that the most commonly imitated forms are cups, plates, bowls and *mortaria*, copying renowned types such as *Drag. 33*, *Drag. 32*, *Drag. 37*, *Drag. 44* and *Curle 11*. Compared to barbotine decorated vessels, this type of pottery appears in slightly less quantities, with a total of 15 products. It is very possible that *Kiln no. 2* produced this kind of luxury goods together with barbotine decorated pottery for either the civilian settlement or export<sup>41</sup>. *Kiln no. 1* presented two plain-surfaced vessels (*Drag. 32* and *Drag. 31* type plates), and *Kiln no. 2* eleven plain-surfaced vessels (two *Drag. 33* type cups, four *Drag. 32* type plates, two *Drag. 37* type bowls, one *Drag. 44* type bowl, and two *Curle 11* type *mortaria*).

### b. Common ware produced in the workshop from Sărata.

From all the finds identified in the two kilns, common ware seems to have been the most numerous, being produced here on a larger scale than luxury earthenware. *Kiln no. 1* presented 35 such vessels, while *Kiln no. 2* had 70 earthenware of this kind trapped under the collapsed domed superstructure. *Kiln no. 1* has therefore a very small variation of forms, with 5 bowls, 1 big mixing bowl, 4 jugs, and 4 pitchers. The highest quantity of common ware discovered in this kiln comes in the form of pots, with 21 such products. *Kiln no. 2* presents a rather large variation of shapes, with 13 bowls, 4 jugs, 17 pitchers, 1 mug, 3 small bowls, 2 plates, 2 amforettes, 5 *dolia*. Again, the highest quantity of common ware discovered in this kiln comes in the form of pots, with 23 such products. It is very surprising that no lids were discovered in any of the kilns, however 7 of them appear in the waste pit pertaining to *Kiln no. 2*, being also the only common ware shapes that were discovered in this pit. In past articles, it was noticed that the quantities of lids at Porolissum do not come anywhere close to those of pots, which are the most numerous as far as common earthenware is concerned, together with pitchers<sup>42</sup>. This was explained through the fact that one lid could have been used for more than one pot in the same household, and indeed the situation identified at Sărata comes to confirm the same observations made for the military *vicus*<sup>43</sup>. Pots and pitchers seemed to represent a

<sup>37</sup> Gudea 1989, p. 145–213; Tamba 2008, p. 104–105, OL 6; 177, LM1, Fig. VI.3.16; 222, LM1S, Fig. VI.4.16; LM3, Fig. VI.5.9; 323, OL2, Fig. VII.2.2.

<sup>38</sup> Gudea 1989, p. 145–213, Pl. IX.40–45, Pl. X/46–51, Pl. XIV/64–75.

<sup>39</sup> Tamba 2008, p. 68.

<sup>40</sup> Cătiș 1982, p. 41–51; Cătiș 1984, p. 481–503; Nemeti, Gindele 1997, p. 639; Matei 1997, p. 385; Cătiș 1997, p. 21–30; Cătiș 2007, p. 124–129, pl. II/1, pl. III–IV; Filip 2008, p. 75;

<sup>41</sup> Gudea 1989, p. 140–145.

<sup>42</sup> Tamba 2008, p. 66, Fig. VI.1.8, VI.1.10, VI.1.11, VI.2.19, VI.3.11, VI.3.16, VI.4.10.

<sup>43</sup> Tamba 2008, p. 66–67.

priority in the pottery manufacture of this workshop, while other shapes play a secondary role, such as mugs, cups, or lids. Also, it is very interesting to notice that the common ware repertoire did not focus on plates or bowls, an opposite situation being however observed when it comes to fine ware manufacture, which offered mostly these shapes.

### III. THE LINEAR FORTIFICATIONS FROM THE *POROLISSUM* AREA. STATE OF RESEARCH AND OLDER ACCOUNTS

The second major objective excavated by Al. V. Matei and his team was the linear fortification. The segment from *Sărata* is naturally integrated within the larger frame of the linear fortifications of the *Porolissum* area<sup>44</sup>, being connected with the defensive system which begins at *Sub Druia-Poiana Moigrădanilor* and ends at *Brebi*<sup>45</sup> (Pl. VII). First of all, we must see how the results of the excavations are contextualized within other excavations of the linear fortifications.

The defensive work has drawn a particular attention over the past decades, being connected with the evolution of the key concept of *limes Dacicus*<sup>46</sup>, a concept created and popularized by the Hungarian scholar Torma Károly<sup>47</sup>. The linear fortifications of the *Porolissum* area were the subject of several surveys and archaeological excavations during the past 150 years<sup>48</sup>, currently an interpretation of its functionality and chronology being relatively possible. The first written accounts belong to Carl Goos and Torma Károly, being the first ones to identify and describe the segments from *Dealul Porcarului*<sup>49</sup>, *Sărata* and *Sub Citeră*<sup>50</sup>, *Brebi*<sup>51</sup>, *Dealul Banului* and *Dealul Goroniște*<sup>52</sup>. Later, at the beginning of the second decade of the 20<sup>th</sup> century, Buday Árpád surveys anew the north-wester frontier and the *Porolissum* area, describing the linear fortifications in a more accurate manner. Thus, we have important data (including altimetric profiles and photos<sup>53</sup>), most of all from *Sub Citeră* and *Brebi*<sup>54</sup>. A short episode occurred in 1920–1921, when Iulian Marțian described, in a rather fanciful way, the linear system of the *Porolissum* area<sup>55</sup>.

The first excavation of a linear segment took place in 1933, when C. Daicoviciu tried to demonstrate that the only linear system from *Porolissum* is located within *Brebi* area and we cannot talk about a continuous linear fortification on the Meseș Mountains<sup>56</sup>. Unfortunately, there are no excavation plans left, only some scarce data about the stratigraphy of the ditch and *vallum*<sup>57</sup>. Probably the first complete mapping of the whole linear fortification discussed here was provided by István Ferenczi in 1941<sup>58</sup>, even if some key ideas about chronology and functionality were outdated<sup>59</sup>. Beside that, he achieved the first topographic plans of the linear fortification from *Dealul Curmătura* and *Brebi*, altogether with the ground

<sup>44</sup> See especially Gudea 1989, p. 105–115.

<sup>45</sup> Cociș 2016, p. 75, Pl. XXI.a.

<sup>46</sup> Torma 1880; See also Ferenczi 1968, p. 75–98; Ferenczi 1971, p. 599–625; Gudea 1999, p. 209–230; Cociș 2016, p. 41–46.

<sup>47</sup> See especially Torma 1880.

<sup>48</sup> See the history of research on the linear fortifications from Dacia Porolissensis in Gudea 1989, 108–113; Cociș 2016, p. 41–75.

<sup>49</sup> Goos 1876, p. 218–226.

<sup>50</sup> Torma 1880, p. 82.

<sup>51</sup> Torma 1864, p. 35.

<sup>52</sup> Torma 1864, p. 35.

<sup>53</sup> See for example Buday 1912, p. 112, p. 114–116; Buday 1914, p. 98–101.

<sup>54</sup> Buday 1914, p. 96–105.

<sup>55</sup> Marțian 1920, p. 27, p. 29; Marțian 1921, p. 10.

<sup>56</sup> Daicoviciu 1935, p. 254–255; Ghergariu 1980, p. 79.

<sup>57</sup> Daicoviciu 1935, p. 255.

<sup>58</sup> Ferenczi 1941, p. 192, Fig. 1.

<sup>59</sup> See the commentaries in Radnóti 1945, p. 161–162.

plans of the fortlets from *Brebi 1* and *Brebi 2*<sup>60</sup>, thus, correcting the earlier erroneous plans and maps of Buday A.<sup>61</sup>

În 1943, a turning point in the archaeological survey methodology was recorded. Radnóti Aladár, a pioneer of the archaeological research of the auxiliary fort at *Porolissum-Pomet*<sup>62</sup>, utilized, as a novelty for this area, with the help of the Hungarian aviation, the first aerial photos, in order to identify and map the physical structures of the north-western frontier of *Dacia Porolissensis*, including some parts of the linear fortification discussed here, especially the *Sub Druia-Poiana Moigrădanilor-Dealul Porcarului* segment<sup>63</sup>, *Valul Dublu* segment<sup>64</sup>, and the *Sub Citeră-Brebi* segment<sup>65</sup>.

From 1949 onwards, the researchers of the *Porolissum* archaeological complex changed the strategy, focusing mainly on archaeological excavations rather than on speculative theoretical interpretations. Thus, in the aforementioned year, Marius Moga excavated the linear system from *Ferice Hill* altogether with the rectangular watchtower from the same spot, only a short report on the situation being published<sup>66</sup>. Several other trenches were carried out in 1958, on the linear fortification from the *Terrace of the sanctuaries*, *Sub Citeră*, *Dealul Banului* and *Dealul Goroniște*<sup>67</sup>, all these places being relatively close to *Sărata*.

Starting with 1977, Al. V. Matei, firstly as a collateral objective and later as a main one, excavated several segments of the *Porolissum* linear fortifications. The first archaeological trenches were carried out on the *Terrace of the sanctuaries*<sup>68</sup>, and later, between 1997–1998, at *Poiana Moigrădanilor*<sup>69</sup> and *Sărata*. It is highly necessary to mention here his excavations from the so-called *Valul dublu* sector, excavations that took place between 1994–1998, and where he demonstrated the existence of two aqueducts, one of them overlapping a *murus caespiticius* from an earlier phase<sup>70</sup>. His last research on the linear fortifications of *Porolissum* was carried out in 2003, within the area of *Ferice*, close to the archaeological trench of M. Moga. The results from 2003 are still unpublished. As a last research episode, we mention here the newly non-invasive surveys carried out by C. H. Opreanu and his team, surveys based on LiDAR scanning and geophysics that outlined for the first time the real extent of the linear fortifications from the *Porolissum* area<sup>71</sup>.

#### IV. THE STRUCTURES, PHASES, CHRONOLOGY AND FUNCTIONALITY OF POROLISSUM'S INNER DEFENSIVE LINE

From an archaeological point of view, the linear fortification excavated at *Sărata* confirms some of the particularities of the linear defense installations of the *Porolissum* area. To this date, we can distinguish between several construction techniques applied on the various segments of the same linear fortification. In the segment from *Poiana Moigrădanilor*, the linear fortification is composed of an earthen rampart, with several compact layers. At the bottom of the structure, Al. V. Matei identified the post holes that were used for fixing the palisade sole. A packed brown soil mixed with pebbles had been laid

<sup>60</sup> Ferenczi 1941, p. 194–199. For the last surveys and interpretations on the fortlets of *Brebi*, see Cociș 2018, p. 39–41, 69, Pl. V, 70, Pl. VI; Cociș 2021, *forthcoming*.

<sup>61</sup> Buday 1912, p. 103.

<sup>62</sup> The results of the excavations in Tóth 1978.

<sup>63</sup> Radnóti 1945, p. 161, Pl. LXVI.2.

<sup>64</sup> Radnóti 1945, p. 162, Pl. LXVII.2.3.

<sup>65</sup> Radnóti 1945, p. 165, Pl. LXVIII. 1.3.4.

<sup>66</sup> Moga 1950, p. 131–135.

<sup>67</sup> Macrea *et al.* 1962, p. 493–495.

<sup>68</sup> Matei 1980, p. 90–97.

<sup>69</sup> Cociș 2019, p. 45–59.

<sup>70</sup> Matei 1995, p. 56; Matei 2005, p. 293–311.

<sup>71</sup> See especially Opreanu *et al.* 2014, p. 78, Fig.2, 79, Fig. 3; Opreanu, Lăzărescu 2016, p. 107–109, p. 265–268.

down over the sole. Overlaying this layer, a heavily packed dark grey clay mixed with pebbles was discovered. The post holes belonging to a wooden palisade were identified on top of it. The earthen rampart was recorded as having a width of 6.4 m and height of 2.9 m<sup>72</sup>.

Two defensive ditches were found in front of the palisade. The ditch from the first phase was located at a distance of 2.3 m in front of the earthen rampart, with a width of 2.2 m, a depth of –1.8 m (U-shaped profile). The second phase ditch is cutting through the first one, being located near the palisade. It has a width of 3.4 m and a depth of –1.3 m (U-shaped profile)<sup>73</sup>. Behind this fortification, a circular stone watchtower had also been excavated<sup>74</sup>, as well as several post holes and wooden beams belonging to an earlier wooden phase<sup>75</sup> (attested also through the discovery of two military stamps of *legio XIII Gemina*<sup>76</sup>, their early presence being confirmed also within the auxiliary fort at *Porolissum*<sup>77</sup>), most probably destroyed by the construction of the palisade and the stone watchtower.

Several hundred meters east, at the *Valul Dublu* sector, the archaeological situation is quite different. The first excavators from 1959 considered that the pillar bases of the aqueducts were watchtowers, organized in a *defensive system unknown by us*<sup>78</sup>. After several archaeological campaigns, Al. V. Matei correctly identified the structures, belonging to two aqueducts from different phases. Regarding the linear fortification, Matei advanced the hypothesis according to which the linear fortification which connects the segment from *Dealul Porcarului* with the segment from *Dealul Comară* is overlapping the aqueduct from the first (wooden) phase and is destroyed (?) or disaffected (?) by the stone aqueduct from the second phase<sup>79</sup>. The *murus caespiticius* linear fortification presents a width of 6 m with the adjacent defensive ditch<sup>80</sup>.

Starting with *Dealul Comoară*, up to *Ferice Hill*, *Terrace of the sanctuaries* and *Sărata*, the excavations recored similar archaeological situation. The first researcher to investigate the linear fortification on *Ferice Hill* was M. Moga, in 1949. He identified an earthen rampart with an *opus incertum* wall and a ditch in front of it<sup>81</sup>. According to the unpublished excavations carried out in 2003, the rampart has a width of 5–6 m and a preserved height of 0.8 m. The *incertum* wall has a width of 0.9–1 m and a preserved height of 1.2 m (Pl. VIII). Following the research carried out on the *Terrace of the sanctuaries*, a similar situation was encountered. Here, an earthen rampart of 5–4 m width and a preserved height of 0.9 m had been identified. A destroyed *incertum* wall was located in front of this rampart, having a width of 1.2 m, with a 2 m wide defensive ditch in front of it<sup>82</sup>. The same general observations were made later, based on another two trenches<sup>83</sup>.

Not too far from this point, Al. V. Matei obtained the archaeological data capitalized for the first time in this study. The situation of the linear fortification identified at *Sărata* is following the same construction pattern. The defensive system is composed of an earthen rampart and an *incertum* wall. The rampart has a preserved height of 1.25 m and width of 3.5 m, and the fixing post holes were identified as well. The stone wall, quite damaged in fact, has a width of 0.9–1 m and only a preserved height of 0.5 m.

<sup>72</sup> Cociș 2019, p. 47.

<sup>73</sup> See especially Cociș 2019, p. 54, Pl. IV.

<sup>74</sup> Buday 1912, p. 114; Radnóti 1945, Pl. LXVI.

<sup>75</sup> Gudea 1985, p. 175–176; Gudea 1997, p. 70–71; Gudea, Luca 2010, p. 122, nr. 3; Cociș 2019, p. 45–59.

<sup>76</sup> Cociș 2018a, p. 402–403; Cociș 2019, p. 47–48, 58, Pl. VIII.a-b.

<sup>77</sup> See especially the discussion about the stamps from 13<sup>th</sup> legion in the wider context of the north-western frontier in Piso, Deac 2016, p. 31.

<sup>78</sup> Macrea *et al.* 1962, p. 496.

<sup>79</sup> Matei 2005, p. 296.

<sup>80</sup> Matei 2005, p. 296.

<sup>81</sup> Moga 1950, p. 134. See also Gudea 1989, Fig. 35; Cociș 2016, p. 64, Pl. X.a.

<sup>82</sup> Macrea *et al.* 1960, p. 376–377; Tudor 1969, p. 244–245.

<sup>83</sup> Matei 1980, p. 90–91.



The defensive ditch, on the bottom of which *Kiln no. 1* was discovered, presents a depth of –1 m and a width of 1.9 m, having also a U-shaped profile (Pl. III, Pl. IX).

Further north-east, under the auxiliary fort at *Citera Hill*, the linear fortification is basically the natural bedrock, with no further improvements<sup>84</sup>. The last available archaeological date is based on several excavations carried out at the linear fortification from *Brebi*, between the two known fortlets. The construction *technique* did not involve a wall, being much more similar with the palisade system from *Poiana Moigrădanilor*. Based on the excavations from 1959, the fortification is composed of earthen rampart of 8.5 m width and a preserved height of 1.5 m. In front of it, only a single phase defensive ditch was identified, having a width of 3.5 m and depth of –1.4 m<sup>85</sup>.

As we can see up to now, there are several different construction techniques applied on the same linear fortification of 7.3 km length: rampart and wooden palisade with defensive ditches belonging to two phases (*Sub Druia*, *Poiana Moigrădanilor*, *Dealul Porcarului*), *murus caespiticius* with defensive ditch (*Valul Dublu*), earthen rampart with wall and defensive ditch (*Dealul Comoară*, *Ferice*, *Cota 430*, *Terasa Sanctuarelor*, *Sărata*), natural bedrock (*Sub Citeră*) and rampart and wooden palisade with a single defensive ditch (*Dealul Goroniște*, *Dealul Curmătura*, *Brebi*). In front of *Porolissum's* civil settlement and fort, there is another linear fortification, with a distinct construction technique and a dissimilar chronology. It is a wall built without having *fossa* or *agger*, with a length of 1.33 km, 1.2 m width and a preserved height of 1.3 m<sup>86</sup> (Pl. VII). As we will argue later, based on its setup in relation with the other linear fortification, the structure is a defensive work belonging to a later period.

We do not necessarily believe that our studied point from *Sărata*, and the rest of the defensive works with the same construction pattern from *Dealul Comoară*, *Ferice* and *Terrace of the sanctuaries* are indicating two distinct phases, first with a palisade and second with a wall, as it was argued<sup>87</sup>. Our opinion is that, based on all the available archaeological information, we are rather dealing with a system composed of an *agger* fixed with wooden beams, a wall built in the *opus incertum* technique and a defensive ditch in front of them, all of the elements being visible in their archaeological context, with the mention that, in some cases, only the *super aggerum* was preserved. On the strength of the datable finds found within the two kilns that are overlapping the defensive elements of the linear fortification, we can outline when the fortification, at least in this area, lost its defense purpose. The finds consist of four coins and one brooch (to which we add the stamped pottery of *ALBVCIUS*, dated starting with 170 AD<sup>88</sup> and the *firmalampen* dated also in the 2<sup>nd</sup> century AD:

### 1. Coins.<sup>89</sup>

a. Denomination: *denarius* (Pl. X/1).

Mint: Rome.

Date: 101–102 AD.

Find spot: *Porolissum-Sărata*, S1/1998, Kiln no. 2, –1 m.

Obv: IMP. [C]AES. NERVA TRA[IAN.] [AVG.] [G]ERM. – laureate head, right

Rv: [P.] [M.] [TR.] P. [C]OS. IIII [P.] [P.] – Victory standing right on prow, holding wreath and palm.

Reference: RIC II, 59.

<sup>84</sup> Macrea *et al.* 1960, p. 377.

<sup>85</sup> Macrea *et al.* 1962, 494; See also Daicoviciu 1935, p. 255.

<sup>86</sup> For this linear fortification see Torma 1864, p. 35; Marțian 1921, p. 10; Ghergariu 1980, p. 79; Macrea *et al.* 1960, p. 376–377; Gudea 1989, p. 108; Opreanu, Lăzărescu 2016, p. 265–268; Cociș 2016, p. 43.

<sup>87</sup> Moga 1950, p. 134; Gudea 1989, p. 107–108.

<sup>88</sup> See Rogers 1999, p. 39–41.

<sup>89</sup> MJIAZ = Muzeul Județean de Istorie și Artă Zalău / County Museum of History and Art, Zalău.

MJIAZ, Inv. no: CC 798/2005.  
State of preservation: bad condition.

**b. Denomination:** *denarius* (Pl. X/2).

Mint: Rome.

Date: 117–135 AD.

Find spot: *Porolissum-Sărata*, S1/1998, the waste pit of Kiln no. 2, -0.9 m.

Obv: SABINA AUGUSTA HADRIANI AVG. P. P. – diademed bust right, draped.

Rv: PVDICITIA AUG. – *Pudicitia* standing left, veiled, pulling out fold of dress.

Reference: RIC II, 406D.

MJIAZ, Inv. no: CC 799/2005.

State of preservation: good condition.

**c. Denomination:** *denarius* (Pl. X/3).

Mint: Rome.

Date: 161–175 AD.

Find spot: *Porolissum-Sărata*, S1/1998, Kiln no. 1, -0.9 m.

Obv: FAVSTINA AUGUSTA AUG. PII F. – draped bust, right.

Rv: PVUDICITIA – *Pudicitia* standing left, sacrificing over altar.

Reference: RIC 508A.

MJIAZ, Inv. no: CC 799/2005.

State of preservation: easily corroded.

**d. Denomination:** *denarius* (Pl. X/4).

Mint: Rome.

Date: 203 AD?.

Find spot: *Porolissum-Sărata*, S1/1998, without a clear context.

Obv: SEVERVS PIUS AVG – laureate bust, right.

Rv: [P.] [M.] [TR.] [P.] [X]I COS. III P. P. – *Fortuna* standing left on throne, holding cornucopia and rudder; wheel under throne.

Reference: RSC 461.

MJIAZ, Inv. no: CC 798/2005.

State of preservation: corroded.

## **2. Fibula/Pl. X/5.**

Noricum-Pannonian brooch with little wings – type Cociș 12d1<sup>90</sup>

The brooch is in a good state of preservation but the pin is missing. The spring is made of eight windings-small head. Short foot, catchplate type Cociș 4.<sup>91</sup> It has two notches onto the bow with *two wings* on the upper part. Made of two parts. L = 3.6 cm.

Analogies: *Porolissum*,<sup>92</sup> Gherla,<sup>93</sup> *Napoca*,<sup>94</sup> Feldioara.<sup>95</sup>

Dating: first half of the 2<sup>nd</sup> century AD.

<sup>90</sup> Cociș 2004, p. 74.

<sup>91</sup> Cociș 2004, p. 31.

<sup>92</sup> Gudea, Lucăcel 1979, p. 322, Pl. IV, nr. 37.

<sup>93</sup> Cociș *et al.* 1992, p. 326, Pl. I, nr. 12.

<sup>94</sup> Cociș 2004, p. 183, nr. 639.

<sup>95</sup> Cociș 2004, p. 183, nr. 640.

Find spot: *Porolissum-Sărata*, S1/1998, the waste pit of Kiln no. 2, -0.9 m.  
 MJIAZ, inv. no: CC 800/2005.  
 State of preservation: good condition.

## CONCLUSIONS

Based on the *terminus post quem* of the datable finds (to which we add the pottery analyses discussed above), we believe that the linear fortification from Sărata lost its defense purpose in the first half of the 2<sup>nd</sup> century AD, the segment being reused in this particular case as a kiln area for pottery production, the process starting most probably in the late Hadrianic-early Antonine period, continuing until the second half of the 3<sup>rd</sup> century AD and after. The early demolition of the studied linear fortification was recorded elsewhere too. Al. V. Matei identified that the *agger* and the wall were superimposed by the first stone phase of the religious and civilian buildings from the *Terrace of the sanctuaries*<sup>96</sup>, this phenomenon underlining again the hypothesis according to which the linear fortification from *Cota 430-Terrace of the Sanctuaries-Sărata* (at least) were abandoned in the first half of the 2<sup>nd</sup> century AD.

Due to this stratigraphic sequence and based on the fact that its eastern end overlaps the defensive ditch of the previously discussed linear installations, the wall from *Cota 430-Dealul Banului-Dealul Urosoaiei-Dealul Goroniște* (Fig. 2) can be considered a later improvement, dating *grosso modo* from the second half of the 2<sup>nd</sup> century AD<sup>97</sup>. The hypothesis according to which the wall it is of later date than the *agger-wall-ditch* system was also supported by C. H. Opreanu and Vl.-A. Lăzărescu, based on the archaeological excavation carried out at the *ballistarium* of the auxiliary fort at *Porolissum-Pomet*<sup>98</sup> and the chronology of the auxiliary fort at *Citera Hill*<sup>99</sup>. In their opinion, the stone wall was built toward the middle of the 2<sup>nd</sup> century AD, in the late Antonine period, with the established blocking purpose of a secondary access valley to *Porolissum*, being later than the first defensive works (from Sărata and the *Terrace of the sanctuaries*)<sup>100</sup>.

One last issue that we want to discuss here is the functionality of these linear fortifications, within the larger frame of the Roman frontier and of the layout of *Porolissum*. N. Gudea split the linear fortifications from the *Porolissum* area in three distinct lines of defense<sup>101</sup>: the outer line is basically the linear fortification from the Meseș Gate pass<sup>102</sup> (Pl. II/a) and the continuation from *Făjiște-Vișinel-Pârâu Lupilor*, reidentified during the 90's<sup>103</sup>; the intermediate line is a stone wall (now completely destroyed), blocking a secondary valley toward *Porolissum*, between *Dealul Corniștea* and *Dealul Măgurice*<sup>104</sup>; the inner line of defense is represented by the linear fortification from *Poiana Moigrădanilor* to *Brebi*<sup>105</sup>, thus, also the segment from *Sărata*.

We agree with the opinion that the so-called *inner line of defense* (as defined by N. Gudea) is not a

<sup>96</sup> For a detailed discussion see Matei 1980, p. 90–97.

<sup>97</sup> The first attempt to date this particular wall segment based on the spatial relation with the previously discussed linear installation, in Gudea 1989, p. 114.

<sup>98</sup> Opreanu et al. 2013, p. 83–106.

<sup>99</sup> See the larger context in Macrea et al. 1961, p. 361–390; Matei 2007, p. 151–183; Opreanu et al. 2014, p. 71–86.

<sup>100</sup> Opreanu, Lăzărescu 2016, p. 266.

<sup>101</sup> See mainly Gudea 1989, p. 106–108.

<sup>102</sup> Gudea 1989, p. 106. See also Torma 1880, p. 72; Marțian 1921, p. 10; Radnóti 1945, p. 146; Matei, Lako 1976, p. 129; Gudea 1989, p. 105–106; Matei 1996, p. 64; Gudea 1997, p. 73–74; Matei 2007a, p. 251–252; Opreanu, Lăzărescu 2016, p. 109; Cociș 2016, *passim*.

<sup>103</sup> Finály 1904, p. 15; Gudea 1989, p. 106; Matei 1996, p. 63–73; Gudea 1997, p. 75–76, p. 77–78; Matei 2007, p. 250–269; Opreanu, Lăzărescu 2016, p. 109–111; Cociș 2018a, p. 21–24.

<sup>104</sup> Ferenczi 1941, p. 208; Radnóti 1945, p. 146; Gudea 1985, p. 177; Gudea 1989, p. 106–107; Gudea 1997, p. 73; Roman et al. 2016, p. 238–248; Cociș 2016, p. 46.

<sup>105</sup> Gudea 1989, p. 107–108.

part of the frontier's physical structure but a proper linear defense built for the military and civilian core of *Porolisum*<sup>106</sup>, a distinct feature in the studied landscape. The contextualized archaeological excavation and finds from *Sărata*, beside the fact that it brings forward new data about the pottery production at *Porolisum* strengthens the view of a changing defensive landscape that occurred somewhere in the second half of the 2<sup>nd</sup> century AD, by moving the settlement's first defensive line on new coordinates, mostly on the strength of a fast development of the civilian core combined with micro-zonal political factors and proper logistic needs for pottery production.

## CATALOGUE<sup>107</sup>

### POTTERY KILN No. 1

#### I. IMPORTED FINE WARE. PLAIN FORMS.

##### a. Central Gaulish *sigillata* – Lezoux:

##### • Plain-surfaced *sigillata*

#### CURLE 15

Curle 15 type dish = fragmentary; preserved: one section including the bottom ring, giving much of the lower profile and diameter; oxidized firing (7.5 R, 6/6 light red); b.d. = 8 cm; metallic firnis covering the whole surface of the dish in a thick layer (10 R, 4/8 red); the body of the dish does not present any decoration, with the exception of a small groove surrounding the body right above the bottom ring; workshop: Lezoux; chronology: second half of the 2<sup>nd</sup> century AD; place of discovery: *Porolisum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XV/1).

#### DRAGENDORFF 30

Drag. 30 type bowl = fragmentary; preserved: one large section including the bottom ring, giving much of the lower profile and diameter; oxidized firing (7.5 R, 6/6 light red); b.d. = 10 cm; metallic firnis covering the whole surface of the dish in a thick layer (10 R, 4/8 red); the body of the dish does not present any decoration, with the exception of a shallow groove situated in the lower part of the body; workshop: Lezoux; chronology: AD 40–230; place of discovery: *Porolisum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XV/2).

##### b. East Gaulish *sigillata* – Rheinzabern:

##### • Plain-surfaced *sigillata*

#### DRAGENDORFF 54/27

Drag. 54/27 type beaker = fragmentary; preserved: two large sections of the wavy upper body, including the rim which is giving much of the profile and diameter; oxidized firing (2.5 YR, 6/6 light red); r.d. = 8 cm; matte firnis covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body of the cup does not present any decoration, with the exception of three shallow grooves which divide the registers of the body; workshop: Rheinzabern; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolisum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XV/3).

<sup>106</sup> See Moga 1950, p. 134; Gudea 1989, p. 114.

<sup>107</sup> MJIAZ = Muzeul Județean de Istorie și Artă Zalău/The County Museum of History and Art, Zalău; n.i.n. = no inventory number; b.d. = bottom diameter; r.d. = rim diameter; l. = length; w. = width; h. = height.



**LUDOWICI Tq**

Lu Tq type dish = fragmentary; preserved: one section including the bottom ring, giving much of the lower profile and diameter; oxidized firing (2.5 YR, 6/6 light red); b.d. = 10 cm; matte firnis covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body of the dish does not present any decoration, with the exception of a small groove surrounding the body right above the bottom ring; workshop: Rheinzabern; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XV/4).

**DRAGENDORFF 31**

Drag. 31 type dish = fragmentary; preserved: one small section including the rim, giving much of the upper profile and the diameter of the dish; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; matte firnis covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body of the dish does not present any decoration; the rim is well defined, presenting a circular profile; a large groove can be observed right under the rim; workshop: Rheinzabern; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XV/5).

**DRAGENDORFF 32**

Drag. 32 type dish = fragmentary; preserved: two sections, including the rim, giving much of the upper profile and the diameter of the dish; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 18 cm; matte firnis covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body of the dish does not present any decoration, with the exception of a series of shallow grooves which appear on the surface of the dish; the rim was not defined and it continues from the wall of the dish; workshop: Rheinzabern; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XV/6).

**• Cut-glass decoration****ISINGS 21**

Isings 21 type beaker = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the beaker; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 11 cm; matte firnis covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the beaker is suggested with the help of two shallow grooves; the body was decorated in the 'cut-glass' incised technique, the oval motifs being organized in paralel rows across the entire body of the beaker; workshop: Rheinzabern; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XVI/1).

**II. LOCAL FINE WARE. PLAIN FORMS.****Dacian sigillata – Porolissum:****• Barbotine decoration**

1. Bowl/Drag. 29 imitation/Gudea type 6 (1998/Fig. 1)<sup>108</sup> = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body

<sup>108</sup> Gudea 1998, 149/Fig. 1.

is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XVI/2**).

**2.** Bowl/Drag. 37 imitation/Gudea type 3 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined and accentuated by a shallow groove right underneath the rim; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998); the lower part of the groove is also decorated with a horizontal row of round pearls; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XVI/3**).

**3.** Bowl/Drag. 30 imitation/Gudea type 4 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 22 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined and accentuated by a small groove right underneath it; the body is decorated in the barbotine technique, depicting garlands in the shape of arches which shelter pearls arranged in horizontal rows; round pearls decorate the lower part of the groove situated underneath the rim; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XVI/4**).

**4.** Bowl/Drag. 37 imitation/Gudea type 3 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the dish; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) arranged horizontally, similar to type FL8 (Gudea 1998/Fig. 3); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. VIII/36–39; Pl. XXIII/158–161; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**5.** Bowl/Drag. 29 imitation/Gudea type 6 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined, accentuated by two small grooves right underneath it; the body is decorated in the barbotine technique, depicting singular vertical and pearled lines, similar to type P1–13 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XVII/1**).

**6.** Bowl/Drag. 37 imitation/Gudea type 3 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); a horizontal pearled line was placed

right underneath the rim; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**7.** Bowl/Drag. 37 imitation/Gudea type 3 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked obliquely by elongated pearled lines, similar to type FL P5- FL P13 (Gudea 1998/Fig. 7–8); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. III/13; Pl. IX/40–45; Pl. X/46–51; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. **(Pl. XVII/2).**

**8.** Bowl/Gudea type 4 (1998/Fig. 2) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked obliquely by lines formed out of three pearls, similar to type FL P5- FL P13 (Gudea 1998/Fig. 7–8); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. III/13; Pl. IX/40–45; Pl. X/46–51; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. **(Pl. XVII/3).**

**9.** Bowl/Drag. 29 imitation/Gudea type 5 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked obliquely by lines formed out of four pearls, similar to type FL P5- FL P13 (Gudea 1998/Fig. 7–8); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. III/13; Pl. IX/40–45; Pl. X/46–51; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. **(Pl. XVII/4).**

**10.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**11.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**12.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction

of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**13.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**14.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) and pearls; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**15.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) and pearls; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**16.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) and pearls; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**17.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) and pearls; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

**18.** Bowl = fragmentary; preserved: one small section of the body, which did not allow the reconstruction of the height, shape or diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting pearls; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n.

### III. LOCAL COMMON WARE:

#### A. *Vasa escaria*

##### Bowls (*catini*)

**1.** Bowl = fragmentary; preserved: one large section of the tall body, including the oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. =



18 cm; thick walls; light brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XI/1).

2. Bowl = fragmentary; preserved: one large section of the body, including the wide and oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 22 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XI/2).

3. Bowl = fragmentary; preserved: one large section of the body, including the wide and oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XI/3).

4. Bowl = fragmentary; preserved: one large section, including the long, oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 22 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XI/4).

5. Bowl = fragmentary; preserved: one large section of the body, including the rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 18 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XI/5).

## B. *Vasa conquinatoria*

### Large mixing bowls (*patinae*)

Bowl = fragmentary; preserved: one large section of the body, including the long horizontal rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 30 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XII/1).

### Pots (*ollae*)

1. Pot = fragmentary; preserved: one large section of the body, including the round, vertical rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XII/2).

2. Pot = fragmentary; preserved: one large section of the body, including the round and very well defined rim, giving much of the upper profile and the diameter of the pot; the rim is accentuated by a shallow groove right underneath it; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XII/3).

3. Pot = fragmentary; preserved: one large section of the body, including the well-defined and vertical rim, giving much of the upper profile and the diameter of the pot; the only decoration comes in the shape of a small groove placed on the shoulder of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XII/4).

4. Pot = fragmentary; preserved: one large section of the body, including the well-defined and vertical rim, giving much of the upper profile and the diameter of the pot; the only decoration comes in the shape of a small groove placed on the neck of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XII/5).

5. Pot = fragmentary; preserved: one large section of the body, including the well-defined rim, giving

much of the upper profile and the diameter of the pot; the rim is accentuated by a shallow groove right underneath it; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/6**).

**6.** Pot = fragmentary; preserved: one large section of the body, including the well-defined and oblique rim, giving much of the upper profile and the diameter of the pot; the only decoration comes in the shape of a small groove placed on the neck of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/7**).

**7.** Pot = fragmentary; preserved: one large section of the body, including the well-defined rim, giving much of the upper profile and the diameter of the pot; the only decoration comes in the shape of a small groove placed on the shoulder of the pot; oxidized firing (10 R, 6/4 pale red); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/8**).

**8.** Pot = fragmentary; preserved: one large section of the body, including the well-defined rim, giving much of the upper profile and the diameter of the pot; the only decoration comes in the shape of three small grooves placed on the shoulder of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/9**).

**9.** Pot = fragmentary; preserved: one large section of the body, including the well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/10**).

**10.** Pot = fragmentary; preserved: one large section of the body, including the well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/11**).

**11.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (10 R, 5/4 light weak red); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/12**).

**12.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (10 R, 5/4 light weak red); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/13**).

**13.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/14**).

**14.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XII/15**).

**15.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XIII/1**).

**16.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the large,

well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/2).

17. Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 19 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/3).

18. Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/4).

19. Pot = fragmentary; preserved: one large section of the hemispherical body, including the oblique, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/5).

20. Pot = fragmentary; preserved: one large section of the hemispherical body, including the horizontal, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; small groove right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/6).

21. Pot = fragmentary; preserved: one large section of the hemispherical body, including the large, well-defined rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/7).

### C. Earthenware used for pouring, storing and transporting liquids and aliments

#### Jugs (*urcei*)

1. Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 6 cm; the rim is vertical, decorated with one large groove; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/1).

2. Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 6 cm; the rim is vertical, decorated with one large groove; it presents one handle which was glued on the rim and the shoulder of the vessel; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/3).

3. Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 6 cm; the rim is vertical, decorated with one large groove; two handles were glued to the rim and the shoulder of the jug; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/4).

4. Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 4 cm; the rim is vertical, decorated with one small groove; it presents one handle which was glued on the rim and the shoulder of the vessel; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (Pl. XIII/2).

**Pitchers (*flascones*)**

1. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 10 cm; the rim is vertical, decorated with one large groove; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XIII/5**).
2. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 10 cm; the rim is vertical, decorated with one large groove; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XIII/6**).
3. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one small groove; two handles were glued to the rim and the shoulder of the pitcher; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XIII/7**).
4. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one small groove; two handles were glued right underneath the rim and on the shoulder of the pitcher; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XIII/8**).

**POTTERY KILN No. 2****I. LOCAL FINE WARE. PLAIN FORMS.****Dacian *sigillata* – *Porolissum*:****A. *Plain-surfaced sigillata*****DRAGENDORFF 33**

1. Drag. 33 type cup = fragmentary; preserved: one section including the rim, giving much of the lower profile and diameter; oxidized firing (7.5 R, 6/6 light red); r.d. = 10 cm; matte engobe covering the whole surface of the cup in a thick layer (10 R, 4/8 red); the body of the cup does not present any decoration, with the exception of a small groove surrounding the body right underneath the rim; workshop: *Porolissum*; chronology: end of the 2nd century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 1; place of storage: MJIAZ; n.i.n. (**Pl. XXII/4**).
2. Drag. 33 type cup = fragmentary; preserved: one section including the rim, giving much of the lower profile and diameter; oxidized firing (7.5 R, 6/6 light red); r.d. = 10 cm; matte engobe covering the whole surface of the cup in a thick layer (10 R, 4/8 red); the body of the cup does not present any decoration, with the exception of a small groove surrounding the body right underneath the rim; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXII/5**).

**DRAGENDORFF 32**

1. Drag. 32 type dish = fragmentary; preserved: one large section including the rim, body and bottom, giving much of the profile and diameters; oxidized firing (7.5 R, 6/6 light red); r.d. = 20 cm; b.d. = 18 cm; matte engobe covering the whole surface of the dish in a thick layer (10 R, 4/8 red); the body of the dish does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXII/6**).
2. Drag. 32 type dish = fragmentary; preserved: one large section including the rim, body and bottom, giving much of the profile and diameters; oxidized firing (7.5 R, 6/6 light red); r.d. = 22 cm; b.d. = 20 cm; matte engobe covering the whole surface of the dish in a thick layer (10 R, 4/8 red); the body of



the dish does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXII/7).

3. Drag. 32 type dish = fragmentary; preserved: one large section including the rim, body and bottom, giving much of the profile and diameters; oxidized firing (7.5 R, 6/6 light red); r. d. = 20; b.d. = 18 cm; matte engobe covering the whole surface of the dish in a thick layer (10 R, 4/8 red); the body of the dish does not present any decoration, with the exception of a shallow groove on the inner surface of the dish; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

### DRAGENDORFF 37

1. Drag. 37 type bowl = fragmentary; preserved: one large section including the rim and body, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r. d. = 20; b.d. = 18 cm; matte engobe covering the whole surface of the bowl in a thick layer (10 R, 4/8 red); the body of the bowl does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXIII/1).

2. Drag. 37 type bowl = fragmentary; preserved: one large section including the rim and body, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r. d. = 20; b.d. = 18 cm; matte engobe covering the whole surface of the bowl in a thick layer (10 R, 4/8 red); the body of the bowl does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

### DRAGENDORFF 44

Drag. 44 type bowl = fragmentary; preserved: one large section including the rim and body, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r. d. = 20; b.d. = 18 cm; matte engobe covering the whole surface of the bowl in a thick layer (10 R, 4/8 red); the body of the bowl does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXIII/2).

### CURLE 11

1. Curle 11 type *mortarium* = fragmentary; preserved: one large section including the rim and body, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r. d. = 18; b.d. = 16 cm; the rim is very well defined; the rib has a round profile; matte engobe covering the whole surface of the *mortarium* in a thick layer (10 R, 4/8 red); the body does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXIII/3).

2. Curle 11 type *mortarium* = fragmentary; preserved: one large section including the rim and body, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r. d. = 18; b.d. = 16 cm; the rim is very well defined; the rib has a round profile; matte engobe covering the whole surface of the *mortarium* in a thick layer (10 R, 4/8 red); the body does not present any decoration; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

### B. Barbotine decoration

#### Bowls

1. Bowl/Drag. 30 *imitation*/Gudea type 4 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and bottom, giving much of the profile, height and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; b. d. 10 cm; matte engobe covering the

outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXIII/4**).

**2.** Bowl/Drag. 30 *imitation*/Gudea type 4 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and bottom, giving much of the profile, height and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; b. d. 10 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXIII/5**).

**3.** Bowl/Drag. 30 *imitation*/Gudea type 4 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and bottom, giving much of the profile, height and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 21 cm; b. d. 10 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXIV/1**).

**4.** Bowl/Drag. 30 *imitation*/Gudea type 4 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and bottom, giving much of the profile, height and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r. d. = 21 cm; b. d. 10 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked vertically by elongated pearled lines, similar to type P1–13, P-B 2 (Gudea 1998/Fig. 11); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. I/1; Pl. III/11–12; Pl. V/ 20–22, Pl. XV/84; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXIV/2**).

**5.** Bowl/Drag. 29 *imitation*/Gudea type 6 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and the bottom giving much of the profile and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; b. d. 10 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked obliquely by elongated pearled lines, similar to type FL P5- FL P13 (Gudea 1998/Fig. 7–8); workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; analogies: Gudea 1998, Pl. III/13; Pl. IX/40–45; Pl. X/46–51; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXIV/3**).

**6.** Bowl/Drag. 29 *imitation*/Gudea type 6 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and the bottom giving much of the profile and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; b. d. 10 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves)

flanked obliquely by elongated pearled lines, similar to type FL P5- FL P13 (Gudea 1998/Fig. 7–8); small groove on the lower part of the body; workshop: *Porolissum*; chronology: end of the 2nd century, beginning of the 3rd century AD; analogies: Gudea 1998, Pl. III/13; Pl. IX/40–45; Pl. X/46–51; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXIV/4).

7. Bowl/Drag. 29 *imitation*/Gudea type 6 (1998/Fig. 1) = fragmentary; preserved: one large section, including the rim, body and the bottom giving much of the profile and the diameters of the bowl; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; b. d. 10 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the rim of the bowl is very well defined; the body is decorated in the barbotine technique, depicting vegetal motifs (leaves) flanked obliquely by elongated pearled lines, similar to type FL P5- FL P13 (Gudea 1998/Fig. 7–8); workshop: *Porolissum*; chronology: end of the 2nd century, beginning of the 3rd century AD; analogies: Gudea 1998, Pl. III/13; Pl. IX/40–45; Pl. X/46–51; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXIV/5).

### Beakers (*pocula*)

Poppyhead beaker = fragmentary; preserved: one large section of the body, including the rim, giving much of the profile and the diameter of the beaker; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; matte engobe covering the outer surface in a thin layer, and the inner surface in a thicker layer (2.5 YR, 4/6 red); the body is decorated in the barbotine technique, depicting pearled lines; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXIV/6).

## II. LOCAL COMMON WARE:

### A. *Vasa potatoria*

#### Beakers (*pocula*)

Beaker = fragmentary; preserved: one section of the body, including the rim, giving much of the profile and the diameter of the beaker; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 8 cm; the body is decorated with three shallow grooves on the shoulder of the beaker; workshop: *Porolissum*; chronology: end of the 2<sup>nd</sup> century, beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XVIII/1).

### B. *Vasa escaria*

#### Small bowls

1. Bowl = fragmentary; preserved: one large section of the tall body, including the oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 11 cm; light brown slip; small groove in the lower part of the body; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XVIII/2).

2. Bowl = fragmentary; preserved: one large section of the tall body, including the oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 11 cm; light brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XVIII/3).

3. Bowl = fragmentary; preserved: one large section of the tall body, including the oblique rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 11 cm; light brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XVIII/4).

**Plates (*catilli*)**

1. Plate = fragmentary; preserved: one large section of the body, including the oblique rim, giving much of the upper profile and the diameter of the plate; oxidized firing (10 R, 6/6 light red); r.d. = 18 cm; light red slip; small rib on the lower part of the body; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XVIII/5**).

2. Plate = fragmentary; preserved: one large section of the body, including the round rim, giving much of the upper profile and the diameter of the plate; oxidized firing (10 R, 6/6 light red); r.d. = 18 cm; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XVIII/6**).

**Bowls (*catina*)**

1. Bowl = fragmentary; preserved: one small section of the body, including the round rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XVIII/7**).

2. Bowl = fragmentary; preserved: one small section of the body, including the round rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 18 cm; thick walls; two shallow grooves underneath the rim; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XVIII/8**).

3. Bowl = fragmentary; preserved: one large section of the body, including the round and well-defined rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; two grooves on the body of the bowl; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XVIII/9**).

4. Bowl = fragmentary; preserved: one large section of the body, including the round and well-defined rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; two grooves on the body of the bowl; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XIX/1**).

5. Bowl = fragmentary; preserved: one large section of the body, including the round and well-defined rim and one handle, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; one groove on the shoulder of the bowl; two handles start right underneath the rim and are glued to the shoulder of the body; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XIX/2**).

6. Bowl = fragmentary; preserved: one large section of the body, including the round and well-defined rim and one handle, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; one groove on the shoulder of the bowl; two handles start right underneath the rim and are glued to the shoulder of the body; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XIX/3**).

7. Bowl = fragmentary; preserved: one large section of the body, including the round and well-defined rim and one handle, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; one groove on the shoulder of the bowl; two handles start right underneath the rim and are glued to the shoulder of the body; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XIX/4**).

8. Bowl = fragmentary; preserved: one large section of the body, including the horizontal and well-defined rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 18 cm; thick walls; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XIX/5**).



9. Bowl = fragmentary; preserved: one large section of the body, including the horizontal and well-defined rim and one handle, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 20 cm; thick walls; two grooves on the surface of the rim; one groove on the shoulder of the bowl; two handles start right underneath the rim and are glued underneath the shoulder of the body; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XX/1).

10. Bowl = fragmentary; preserved: one large section of the body, including the oblique and well-defined rim, giving much of the upper profile and the diameter of the bowl; oxidized firing (10 R, 6/6 light red); r.d. = 18 cm; thick walls; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XX/2).

11. Bowl = fragmentary; preserved: one small section of the body, including the ring of the bottom, giving much of the lower profile and diameter; oxidized firing (10 R, 6/6 light red); b.d. = 7 cm; thick walls; light red slip; one small groove on the foot; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XX/3).

12. Bowl = fragmentary; preserved: one small section of the body, including the ring of the bottom, giving much of the lower profile and diameter; oxidized firing (10 R, 6/6 light red); b.d. = 7 cm; thick walls; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

### C. *Vasa coquinatoria*

#### Pots (*ollae*)

1. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; one large groove underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XX/4).

2. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

3. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

4. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

5. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; one large groove underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

6. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; one large groove underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XX/5).

7. Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4

light reddish brown); r.d. = 16 cm; one large groove underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**8.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the round, oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; one large groove underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XX/6**).

**9.** Pot = fragmentary; preserved: one small section of the body, including the vertical rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; three grooves decorate the shoulder of the pot; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XX/7**).

**10.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**11.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; light brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**12.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**13.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique, double rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**14.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 18 cm; dark brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**15.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the large oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; light red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**16.** Pot = fragmentary; preserved: one large section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; dark brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**17.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 18 cm; red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**18.** Pot = fragmentary; preserved: one small section of the hemispherical body, including the oblique rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; dark brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**19.** Pot = fragmentary; preserved: one small section of the body, including the horizontal rim, giving

much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; dark brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**20.** Pot = fragmentary; preserved: one small section of the body, including the horizontal rim, giving much of the upper profile and the diameter of the pot; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 18 cm; dark brown slip; two handles start from the rim and were glued to the shoulder of the pot; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**21.** Pot = fragmentary; preserved: one small section of the body, including the vertical rim, giving much of the upper profile and the diameter of the pot; rim is decorated with one large groove; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**22.** Pot = fragmentary; preserved: one small section of the bottom, giving much of the lower profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); b.d. = 8 cm; dark brown slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**23.** Pot = fragmentary; preserved: one small section of the bottom, giving much of the lower profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); b.d. = 10 cm; red slip; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

#### **D. Earthenware used for pouring, storing and transporting liquids and aliments**

##### **Jugs (*urcei*)**

**1.** Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 5 cm; the rim is vertical, decorated with one large groove; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XX/8**).

**2.** Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 8 cm; the rim is vertical, decorated with one small groove; one small groove on the neck; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XX/9**).

**3.** Jug = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the jug; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 8 cm; the rim is vertical, decorated with one small groove; one small groove on the neck; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. X/10**).

##### **Pitchers (*flascones*)**

**1.** Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one small groove; small groove on the neck; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XX/11**).

**2.** Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one small groove; small groove on the neck; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXI/1**).

**3.** Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 10 cm; the rim is vertical, decorated with one small groove; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXI/2**).



4. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 10 cm; the rim is vertical, decorated with one small groove; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/3).

5. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one large groove; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/4).

6. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one large groove; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/5).

7. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one small groove; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/6).

8. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one large groove; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/7).

9. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one large groove; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/8).

10. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with one large groove; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/9).

11. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is vertical, decorated with two small grooves; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/10).

12. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is horizontal, decorated with two grooves; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/11).

13. Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is horizontal, decorated with two small grooves; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (Pl. XXI/12).



**14.** Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is horizontal, decorated with three small grooves; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**15.** Pitcher = fragmentary; preserved: one smaller section of the neck and rim, giving much of the upper profile and the diameter of the pitcher; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 12 cm; the rim is horizontal, decorated with three small grooves; two handles start right underneath the rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**16.** Pitcher = fragmentary; preserved: one small section of the bottom, giving much of the lower profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); flat bottom; b.d. = 8 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**17.** Pitcher = fragmentary; preserved: one small section of the bottom, giving much of the lower profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); b.d. = 8 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

### Amforettes

**1.** Amforette = fragmentary; preserved: one small section of the rim, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; horizontal rim, decorated with three grooves; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**2.** Amforette = fragmentary; preserved: one small section of the rim, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 14 cm; horizontal rim, decorated with three grooves; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXII/1**).

### Dolia

**1.** *Dolium* = fragmentary; preserved: one small section of the oblique rim, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; horizontal rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXII/2**).

**2.** *Dolium* = fragmentary; preserved: one small section of the oblique rim, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; horizontal rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n. (**Pl. XXII/3**).

**3.** *Dolium* = fragmentary; preserved: one small section of the oblique rim, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; horizontal rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**4.** *Dolium* = fragmentary; preserved: one small section of the oblique rim, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 20 cm; horizontal rim; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**5.** *Dolium* = fragmentary; preserved: one small section of the bottom, giving much of the upper profile and the diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); b.d. = 10 cm; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, pottery kiln 2; place of storage: MJIAZ; n.i.n.

**WASTE PIT****I. IMPORTED WARE.****Central Gaulish *sigillata* – Lezoux:****• Plain-surfaced *sigillata*****DRAGENDORFF 35**

Drag. 35 type cup = fragmentary; preserved: one section of the body, giving much of the lower and upper profile, as well as the diameter; oxidized firing (7.5 R, 6/6 light red); b.d. = 5 cm; r.d. = 10 cm; metallic firmis covering the whole surface of the cup in a thick layer (10 R, 4/8 red); the body of the cup does not present any decoration, with the exception of a three small grooves surrounding the body; one small groove on the foot; potter stamp: *ALBVCI[VS]*; workshop: Lezoux; chronology: 170 AD – beginning of the 3<sup>rd</sup> century AD; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXV/1**).

**• Firmalampen (most likely manufactured in Dacia)****LOESCHCKE X**

Lamp = fully preserved; smooth, round discus with a centered filling hole; an elegant, raised border surrounds the shape of the discus (in the shape of a rib), forming a channel towards the elongated, round nozzle; the channel/*Schnauzenkanal* was provided with a small air hole/*Rinne*; the nozzle presents a large wick hole; the reservoir comes in a conical shape; concave base, delimited by two concentric circles which indicate the manufacturer through the centered stamp reading *OCTAVI*; the shoulder of the lamp is decorated with wine spindles and *Öse/gelochte Knubbe*; l. = 8.5 cm; w. = 6 cm; h. = 3. cm; local workshop (Dacia?); chronology = 2<sup>nd</sup> century AD; analogies: Alburnus Maior/Rusu-Bolindeț *et al.* 2018, 74, cat. no. 181; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXV/2**).

**II. LOCAL COMMON WARE:*****Vasa conquinatoria*****Lids (*opercula*)**

1. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; round handle; hemispherical shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXVI/1**).

2. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r.d. = 18 cm; round handle; hemispherical shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXVI/2**).

3. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; round handle; hemispherical shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXVI/3**).

4. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (2.5 YR, 6/4 light reddish brown); r.d. = 16 cm; round handle; grooves decorating the inner surface of the body; flat shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXVI/4**).

5. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r.d. = 16 cm; round handle; grooves decorating the outer surface of the body; flat shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (**Pl. XXVI/5**).

6. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r.d. = 16 cm; round handle; grooves decorating the outer surface of the body; flat shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (Pl. XXVI/6).

7. Lid = fragmentary; preserved: one section of the rim, giving much of the profile and diameter; oxidized firing (7.5 R, 6/6 light red); r.d. = 16 cm; round handle; hemispherical shape; workshop: *Porolissum*; place of discovery: *Porolissum-Sărata*, 1998, waste pit; place of storage: MJIAZ; n.i.n. (Pl. XVI/7).

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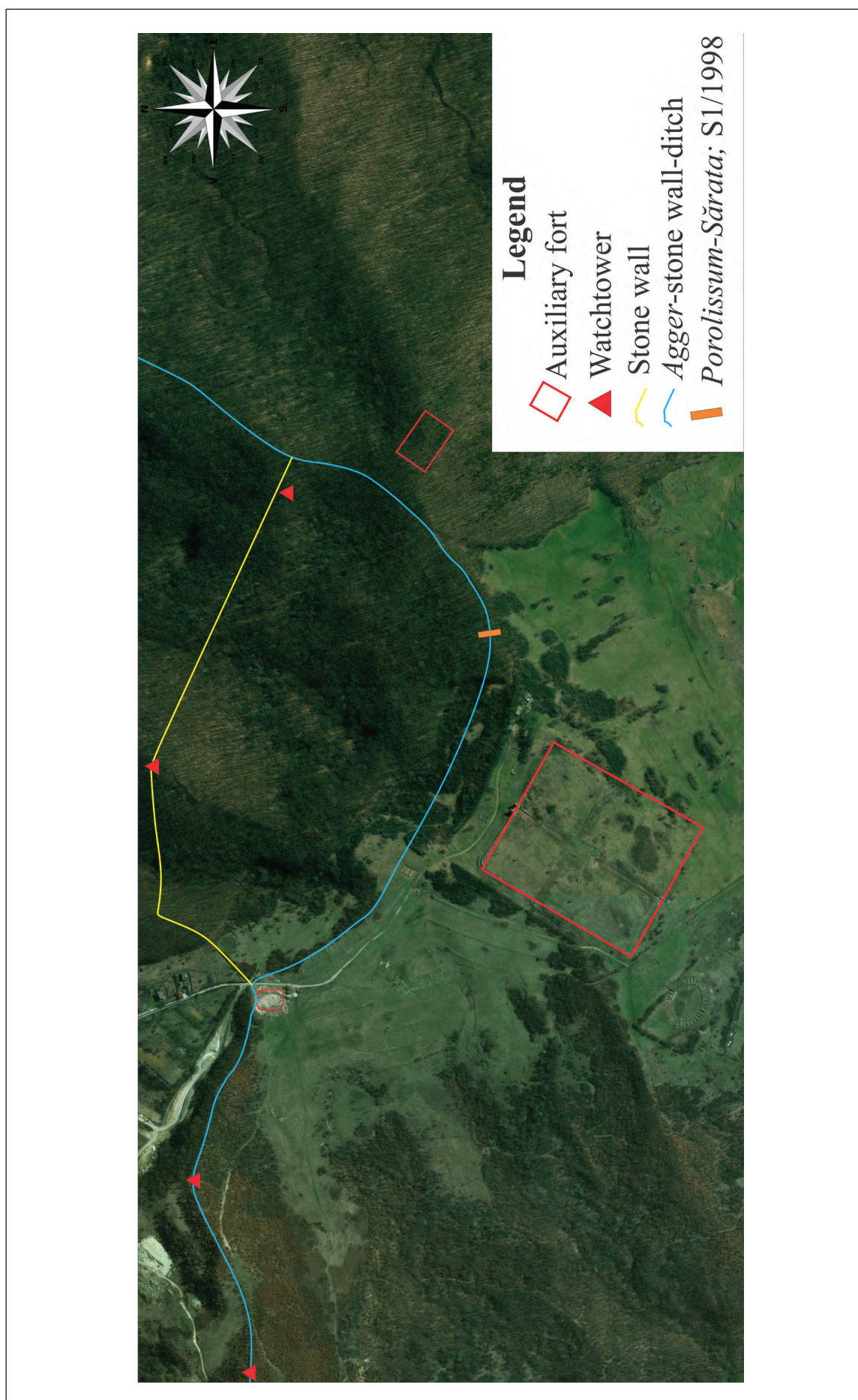


Plate I. *Porolissum-Sărata*. Location of the archaeological excavation.



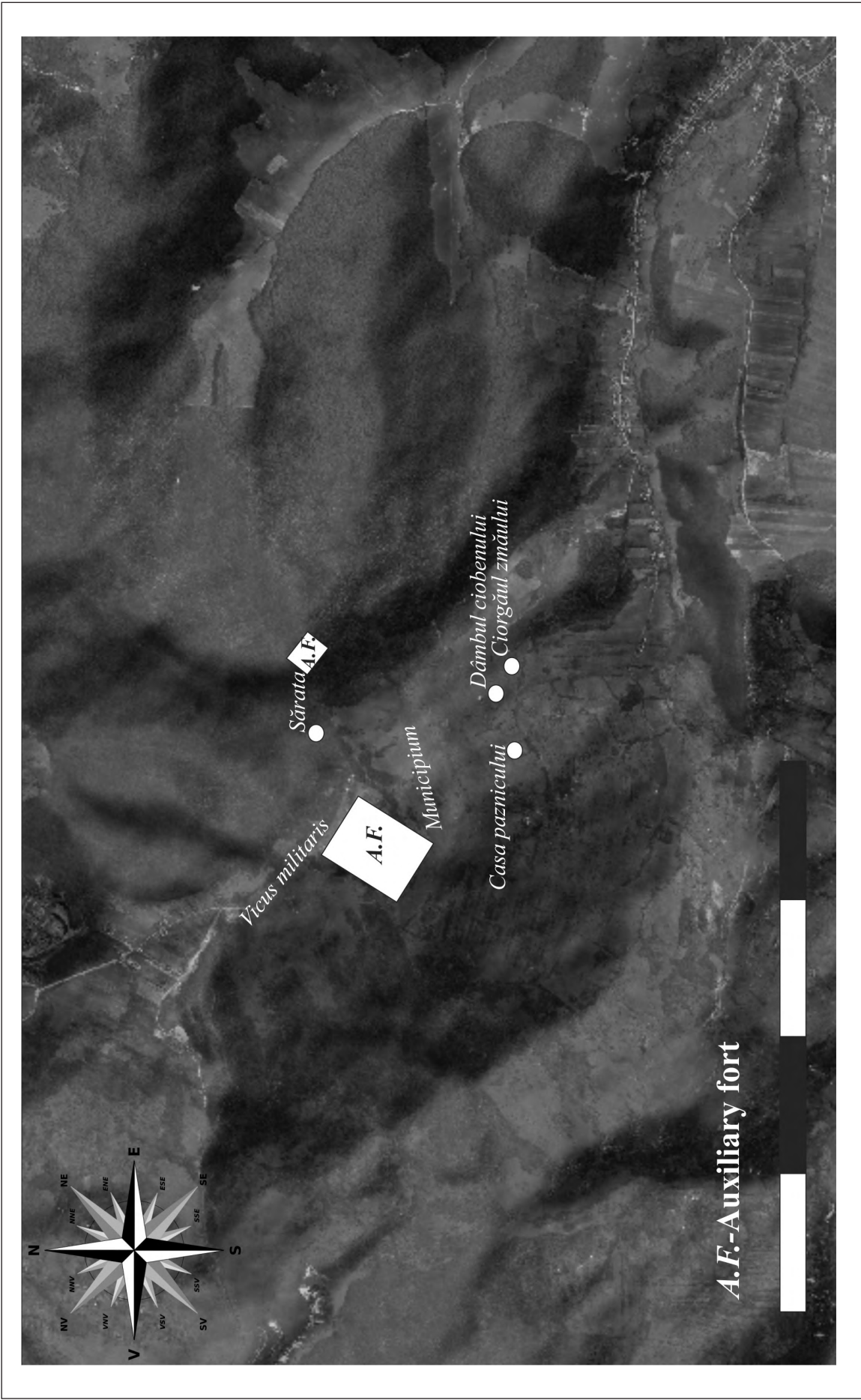


Plate II. The industrial part of the civilian settlement at *Porolissum*.



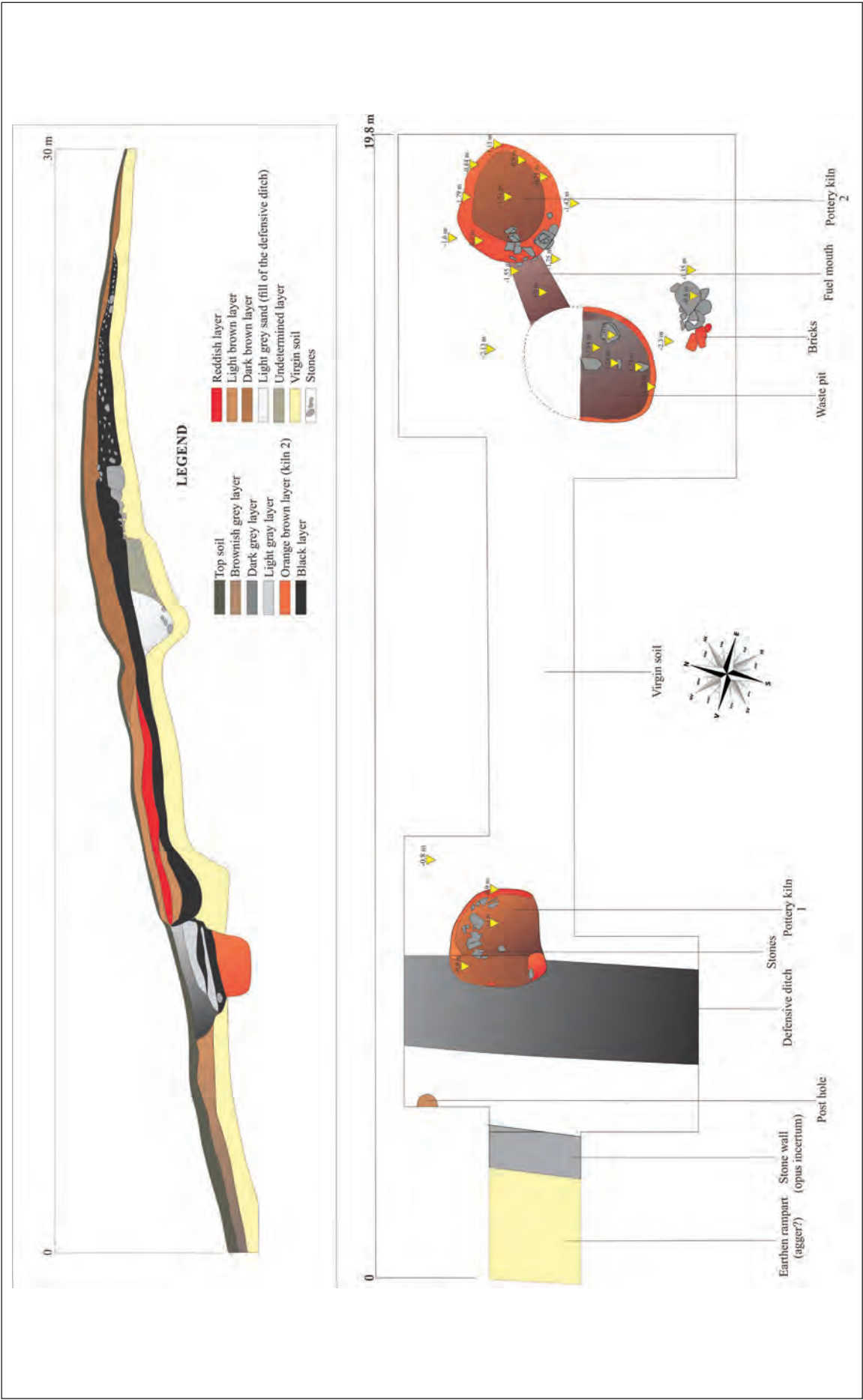
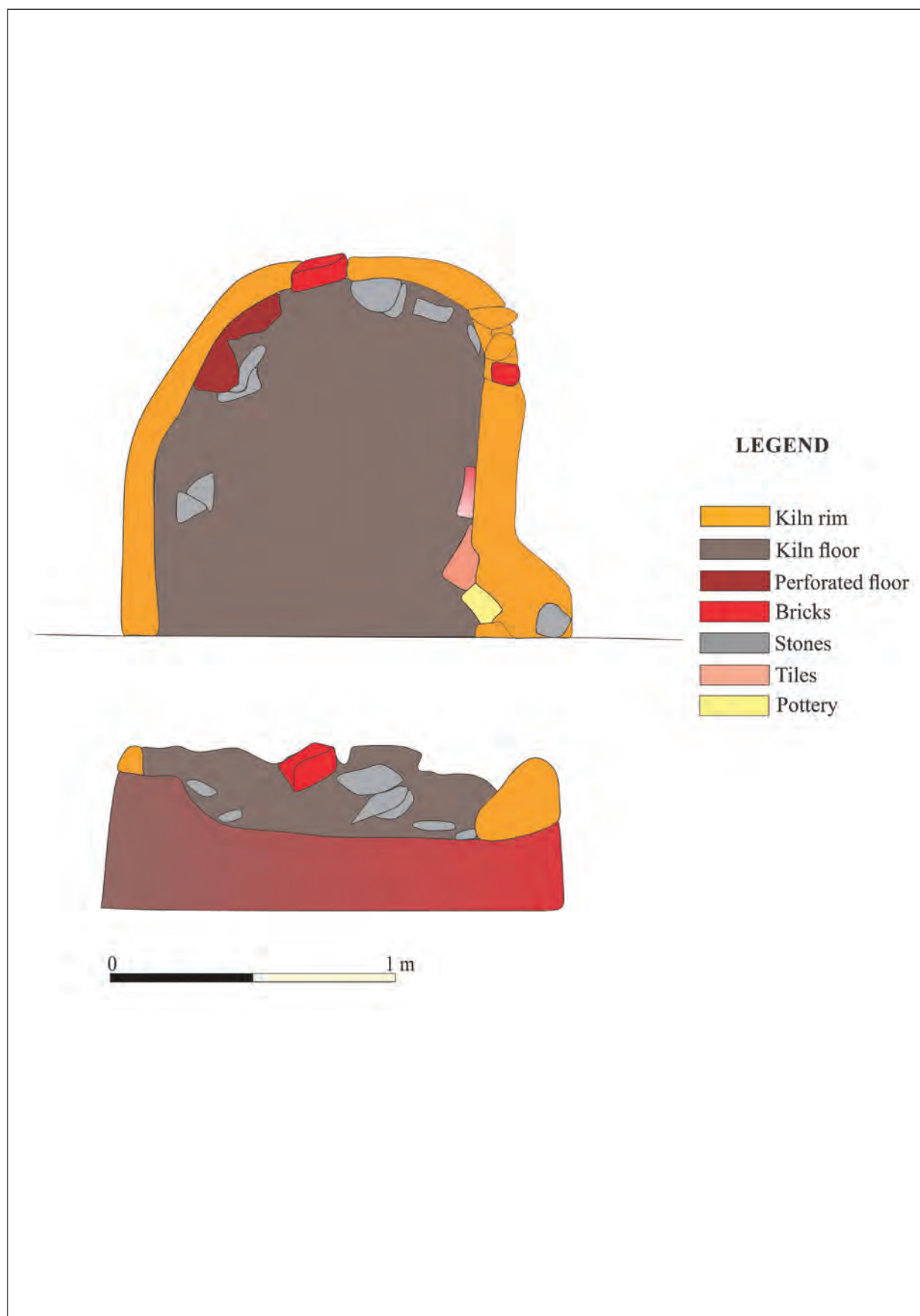
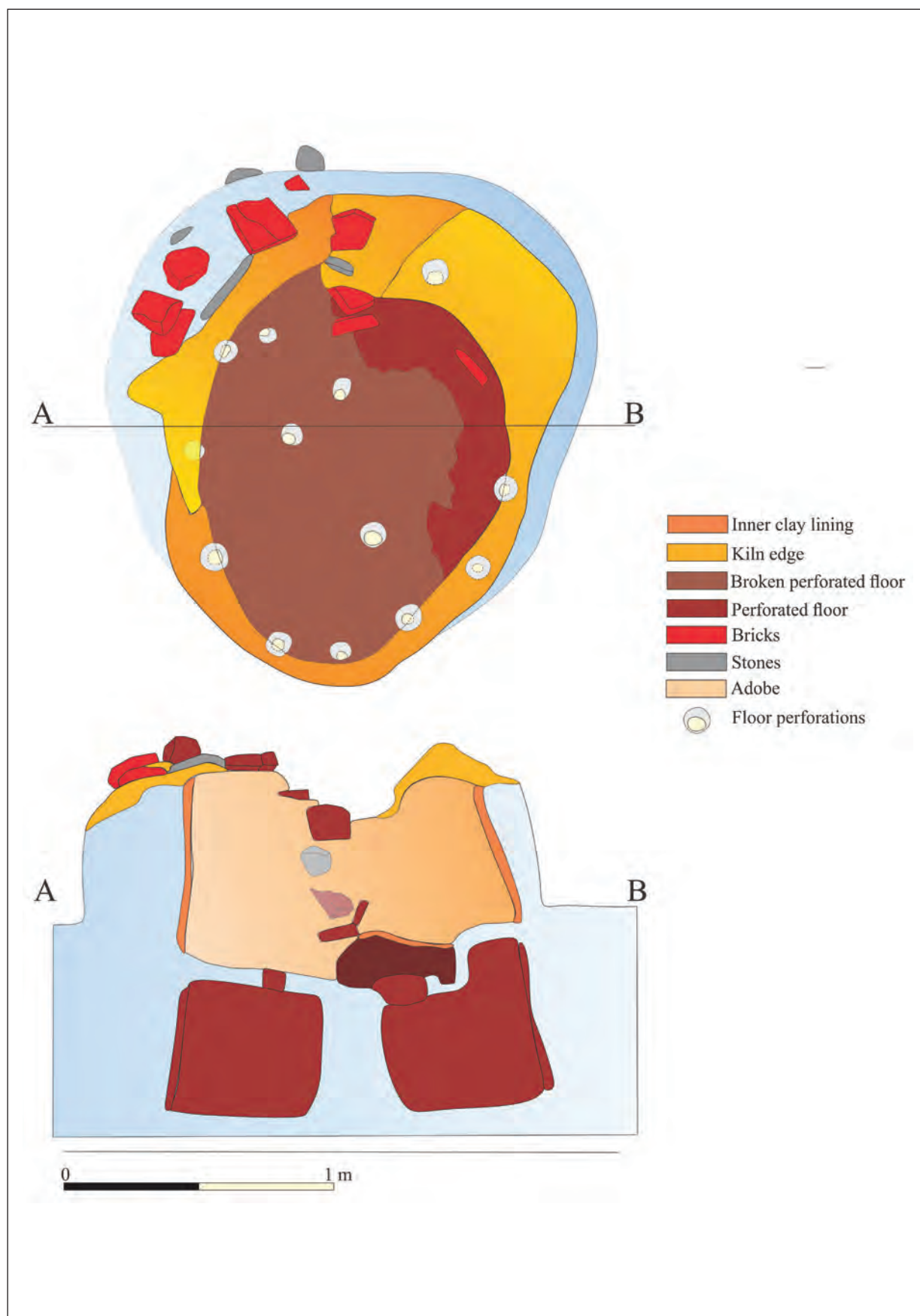


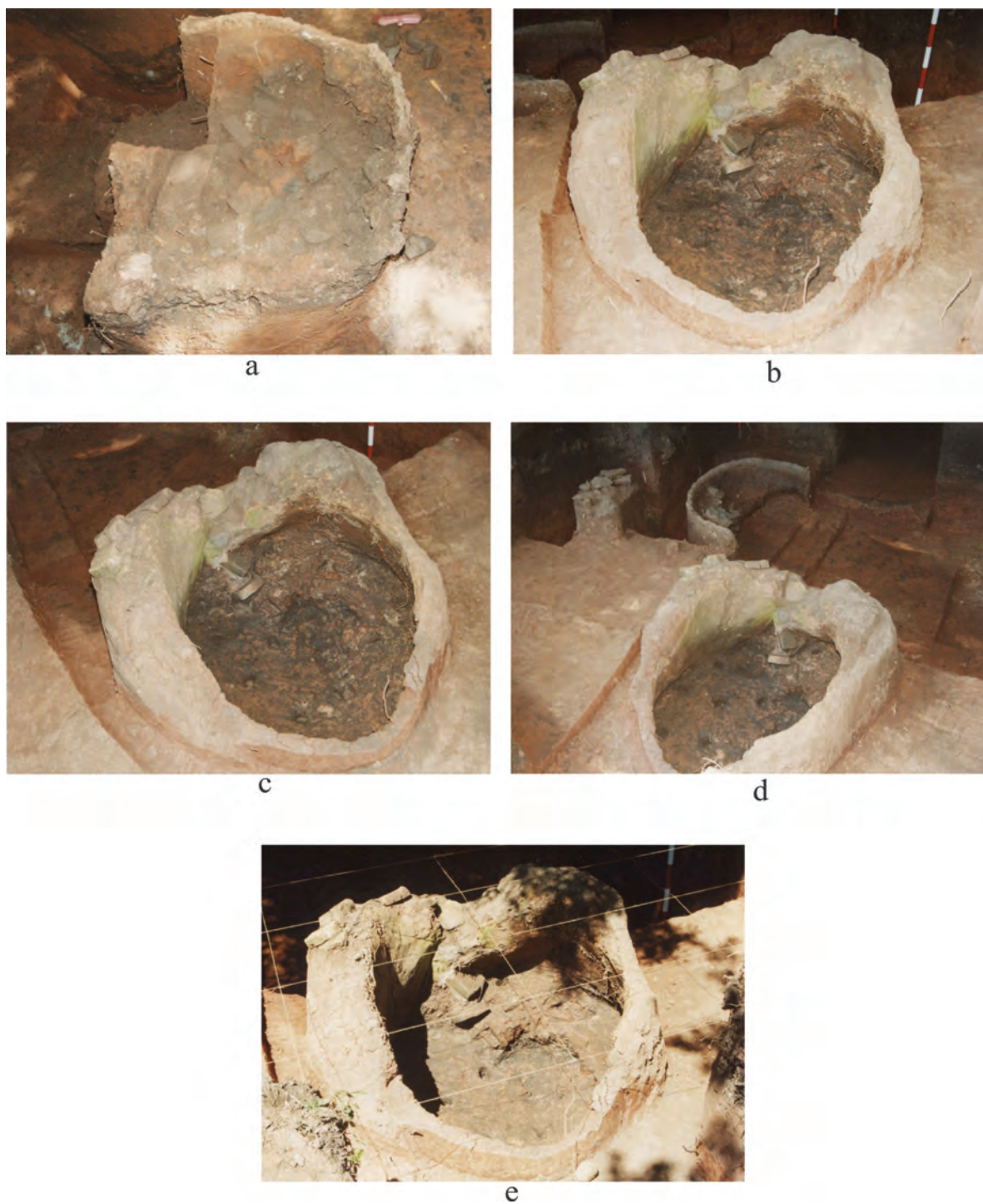
Plate III. *Sărata-S1* / 1998. Profile and ground plan.



Pl. IV. *Porolissum-Sărata*. Kiln no. 1.

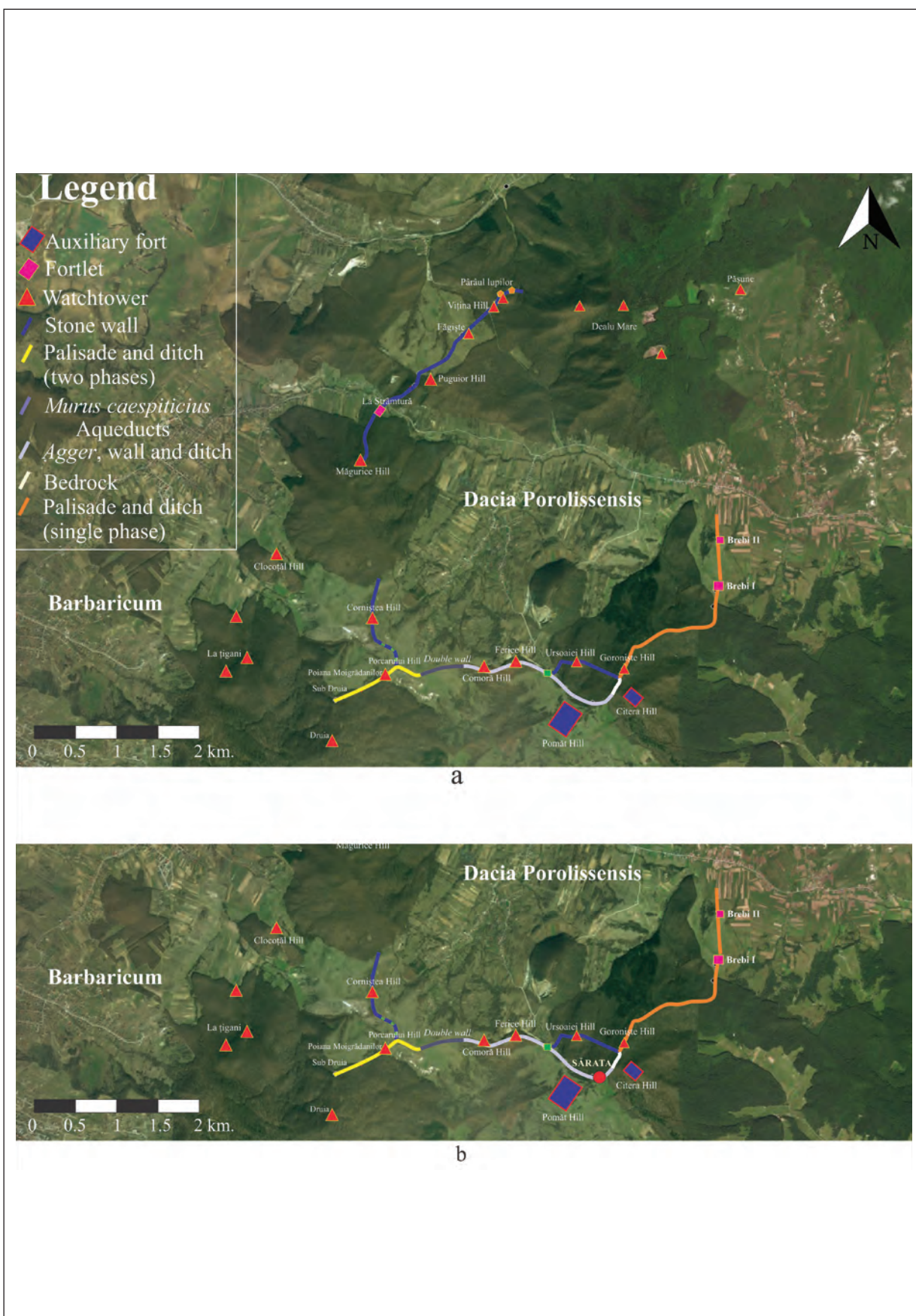


Pl. V. Porolissum-Sărata. Kiln no. 2.



Pl. VI. a-Kiln no. 1; b, c, e-Kiln no. 2; d-Kiln no. 2 and the waste pit. Original photos by Alexandru. V. Matei (Zalău County Museum of History and Art archive).



Pl. VII. The linear fortifications from *Porolissum* in their landscape settings.

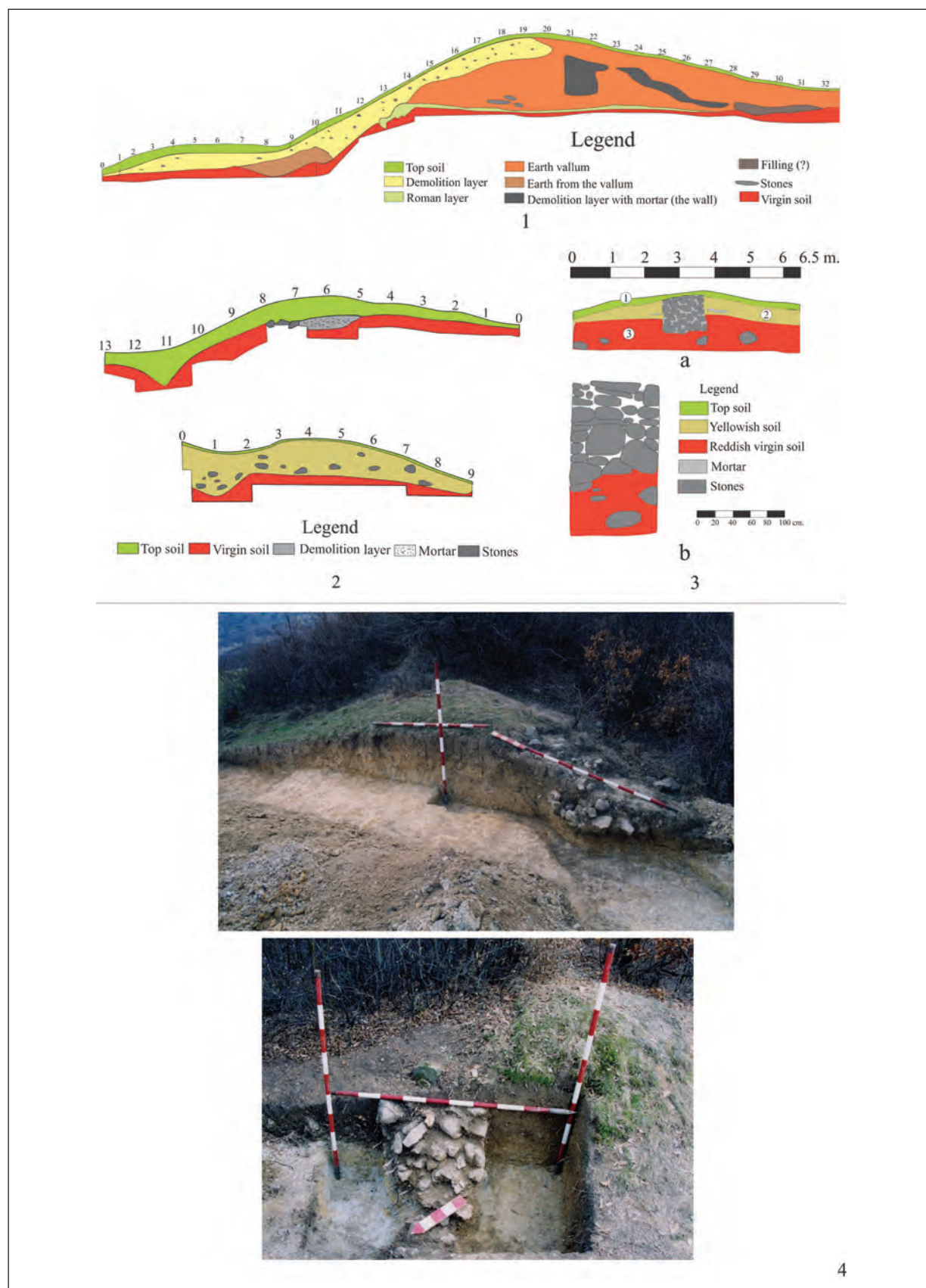


Plate VIII. 1-the linear fortification from *Ferice* based on Moga's excavation from 1949 (redrawn after Gudea 1989, 380, fig. 35); 2-the linear fortification from the *Terrace of the sanctuaries* based on the excavations from 1959 (redrawn after Gudea 1989, 382, fig. 37, 1-2); 3-the stone wall from *Dealul Banului* based on the excavations from 1958 (redrawn after Macrea *et al.* 1950, 377, fig. 14); 4-photos of the excavation from *Ferice* carried out by Alexandru V. Matei in 2003 (Zalău County Museum of History and Art archive).



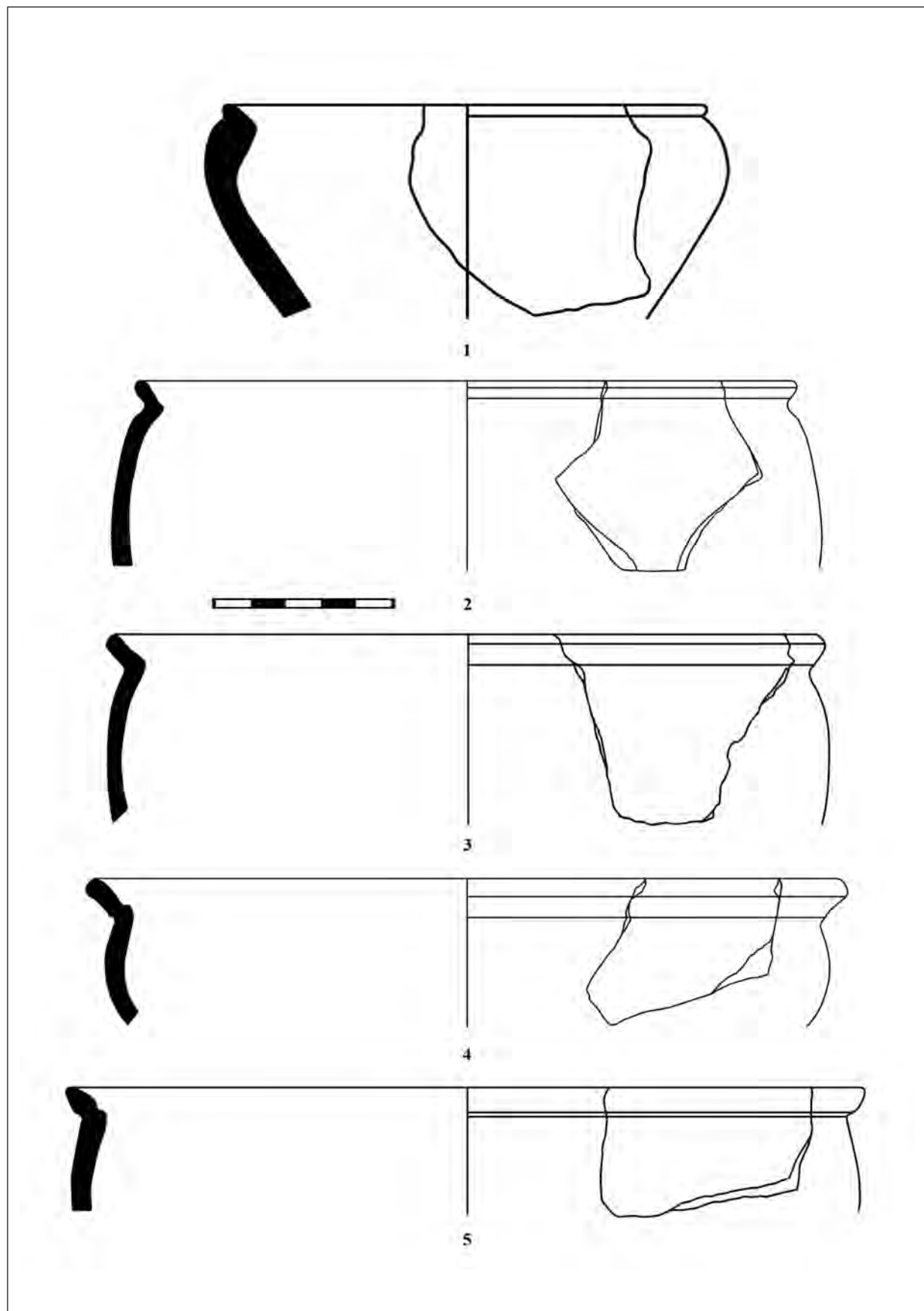


Plate IX. a, d-the stone wall; b-the wooden sole of the *agger*; c-the *agger*. Original photos by Alexandru. V. Matei (Zalău County Museum of History and Art archive).

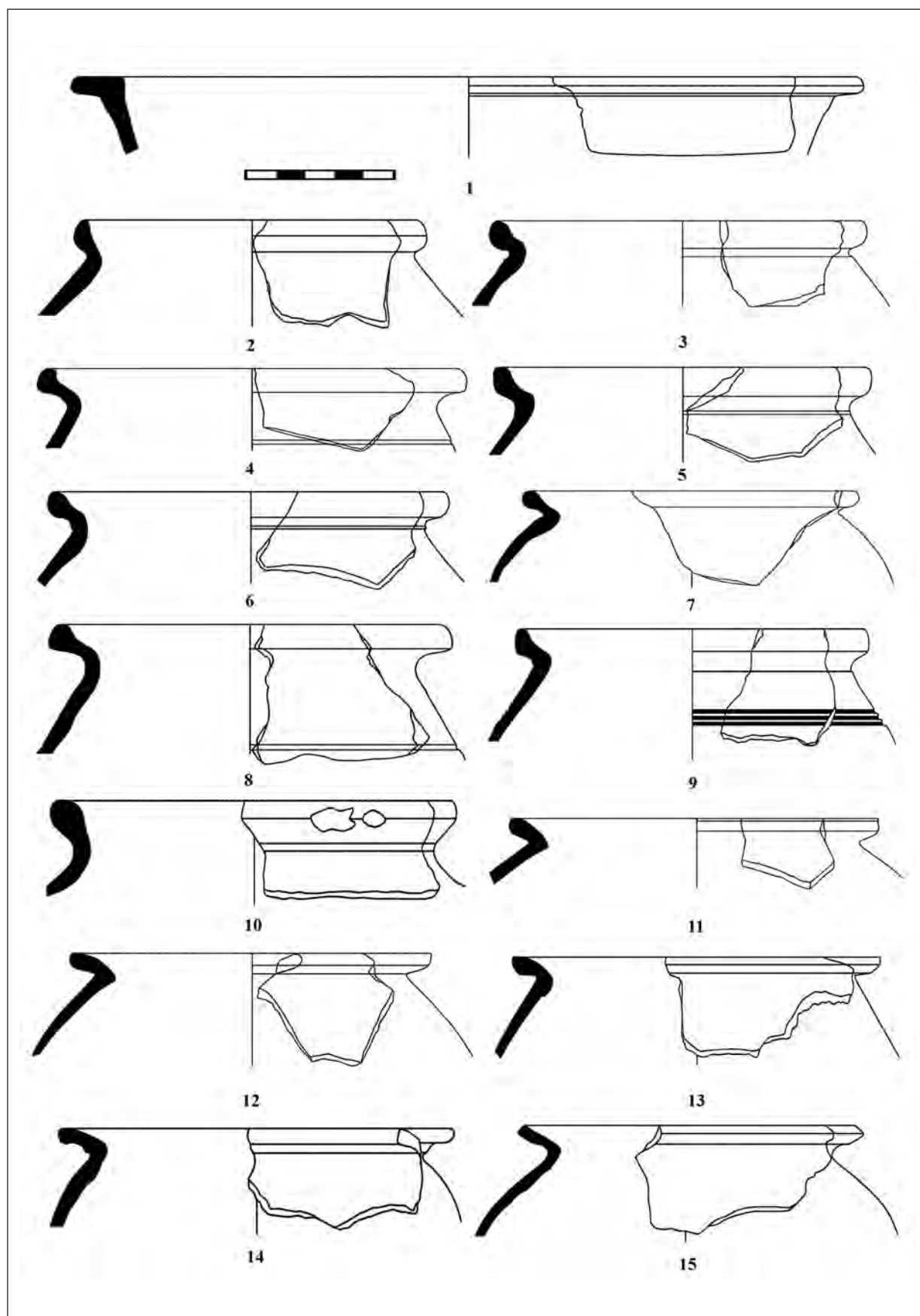


Plate X. Datable finds from *Porolissum-Sărata*.

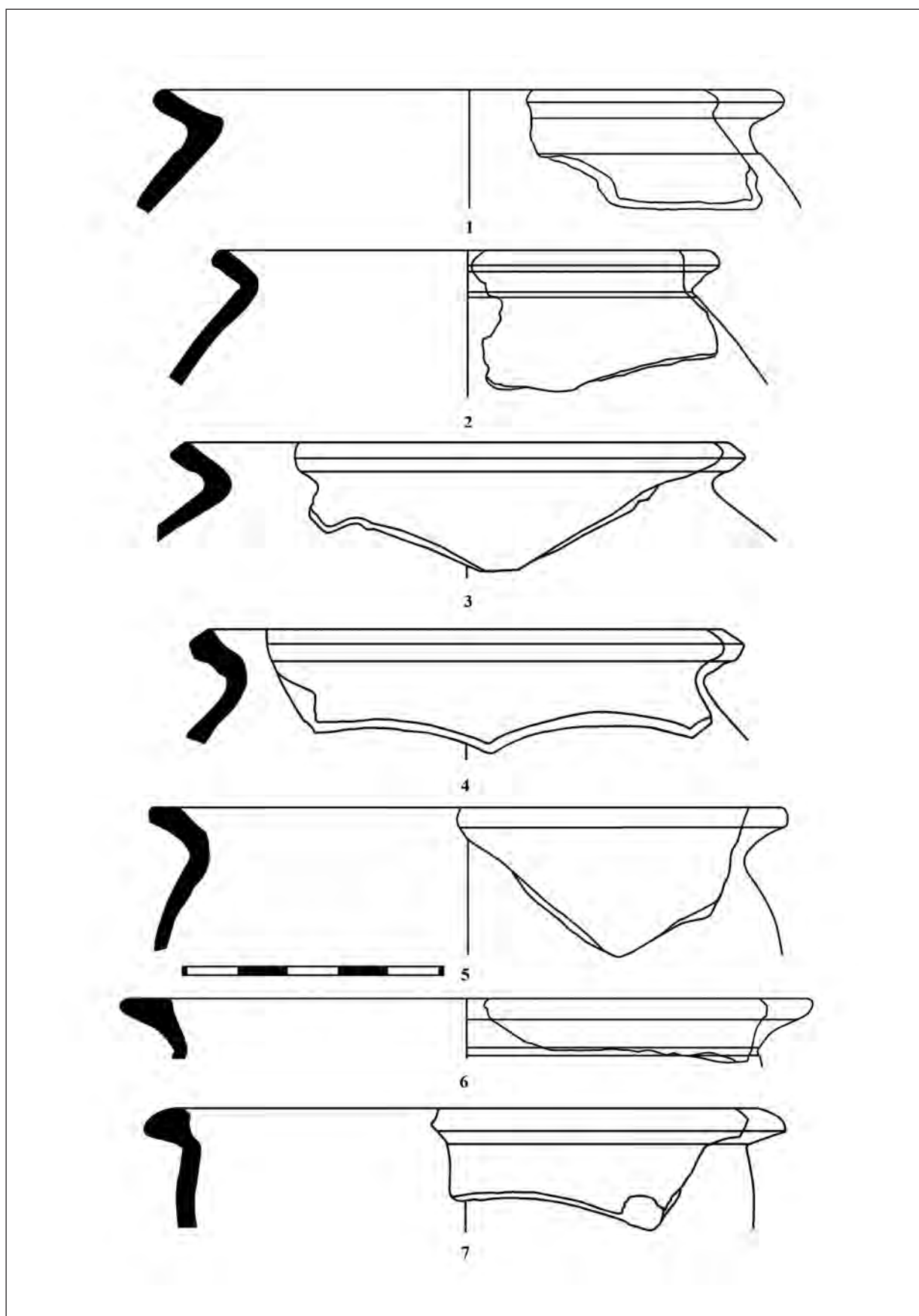




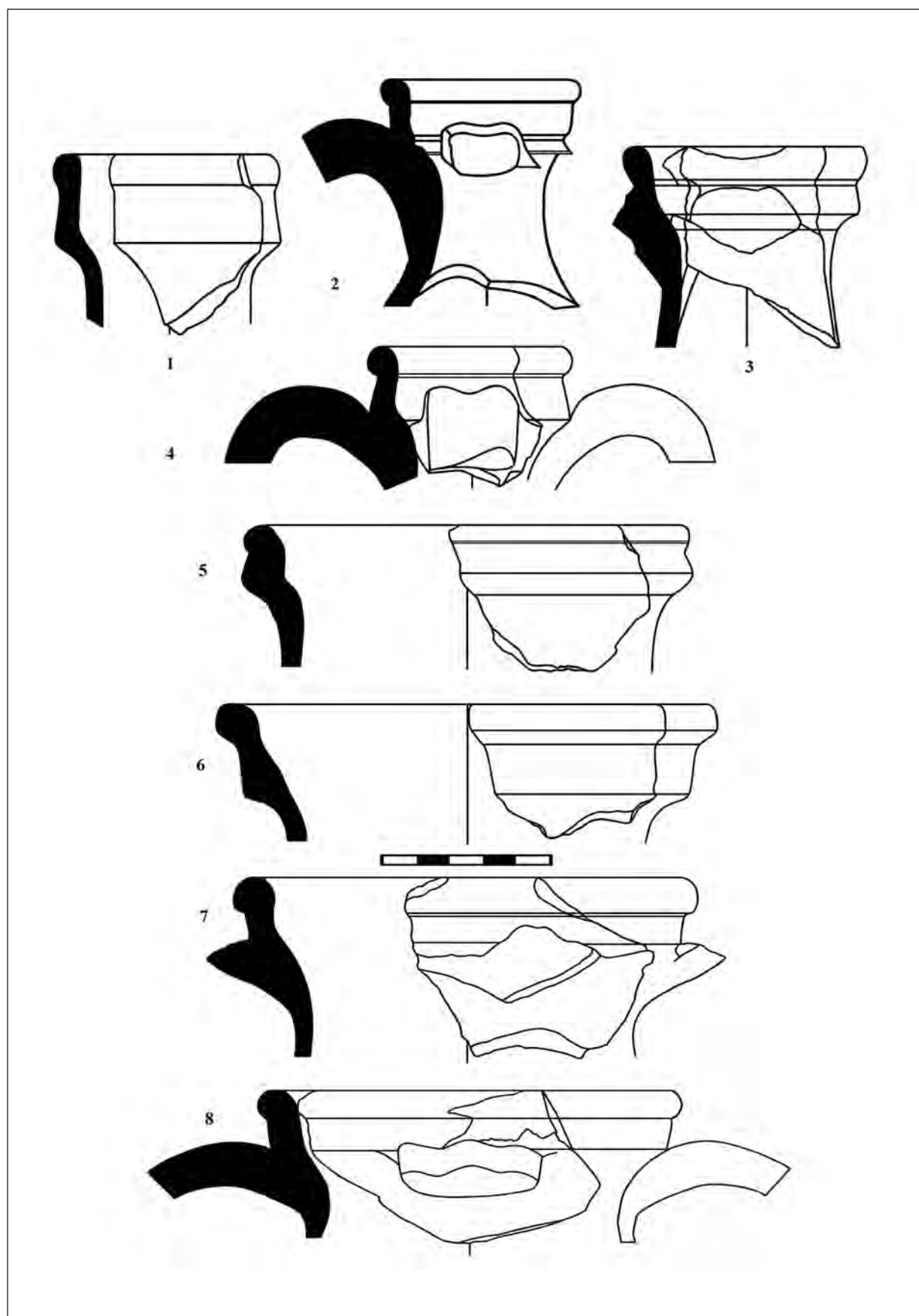
Pl. XI. Kiln no. 1 – Common ware. 1–5 Bowls.



Pl. XII. Kiln no. 1 – Common ware. 1 – Big Bowl; 2–15 Pots.

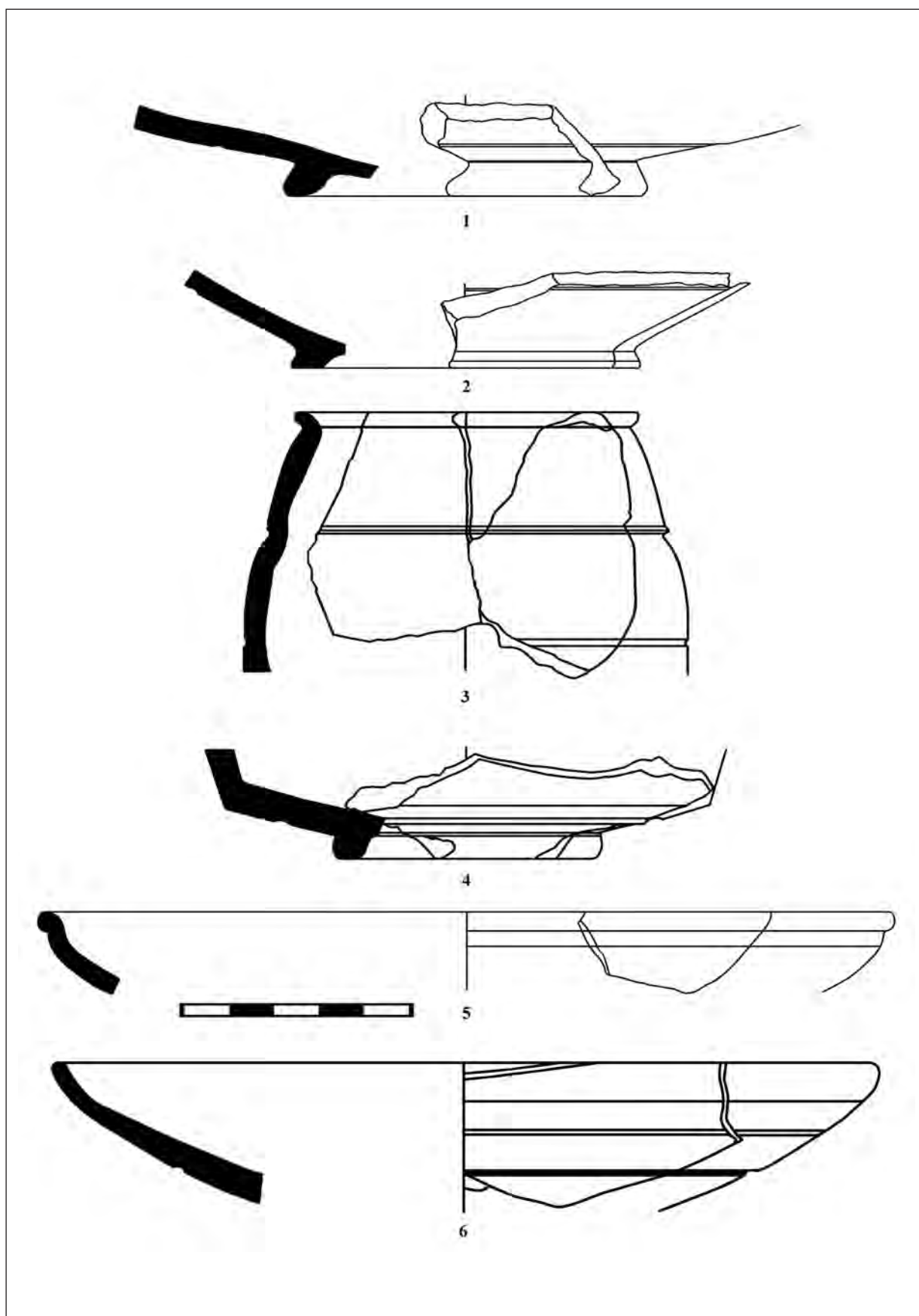


Pl. XIII. Kiln no. 1 – Common ware. 1–7 Pots.

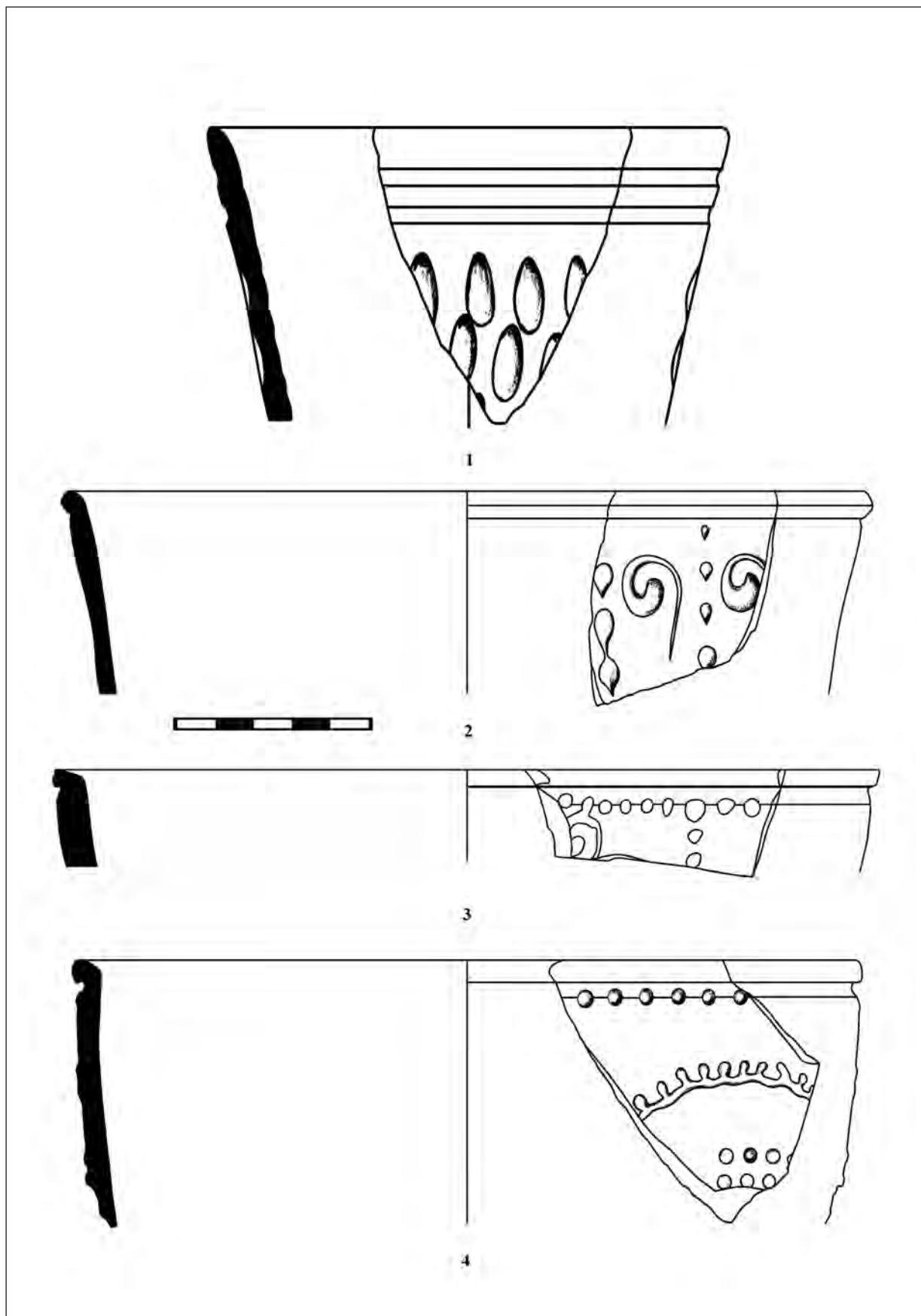


Pl. XIV. Kiln no. 1 – Common ware. 1–4 Jugs; 5–8 Pitchers.

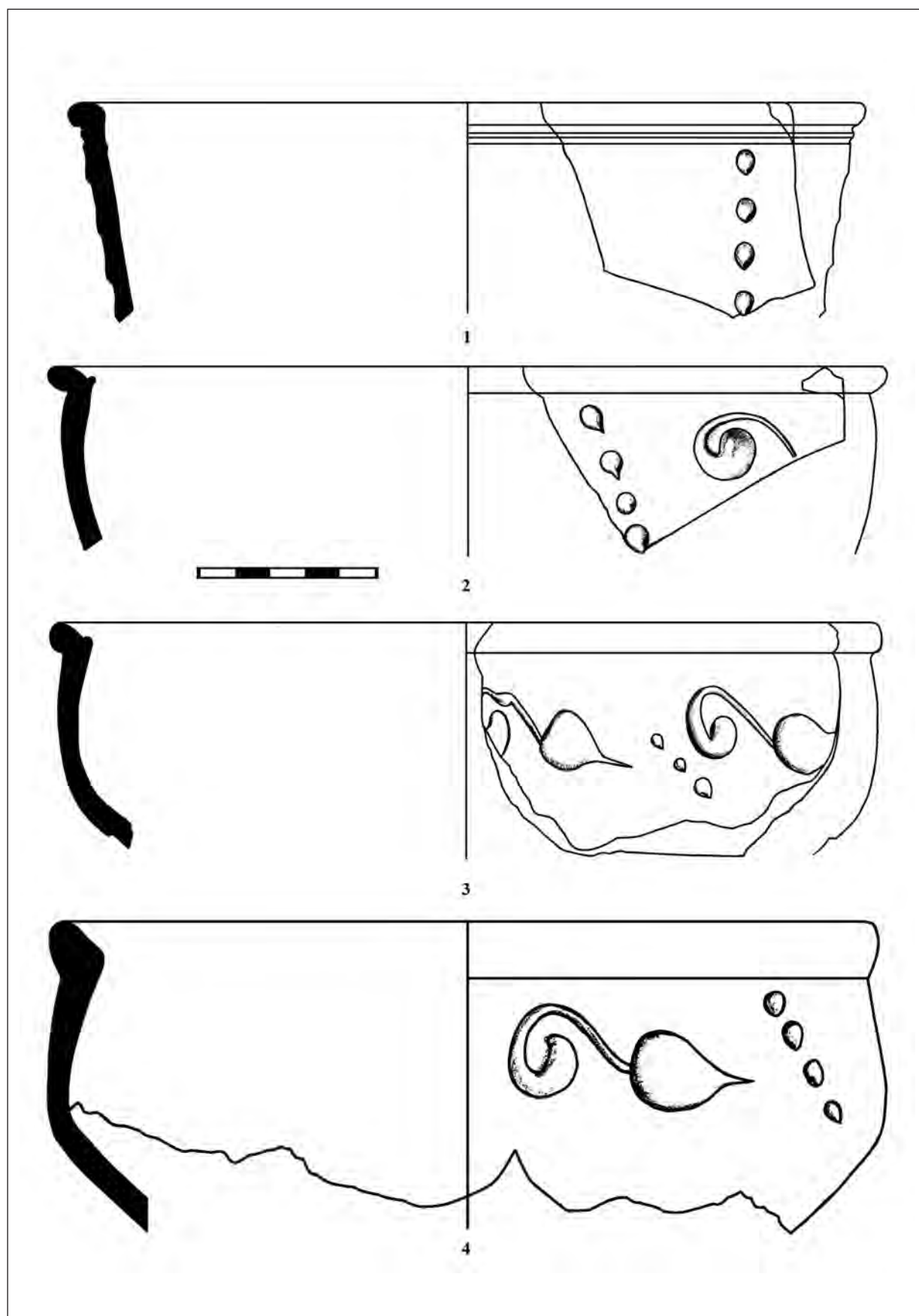




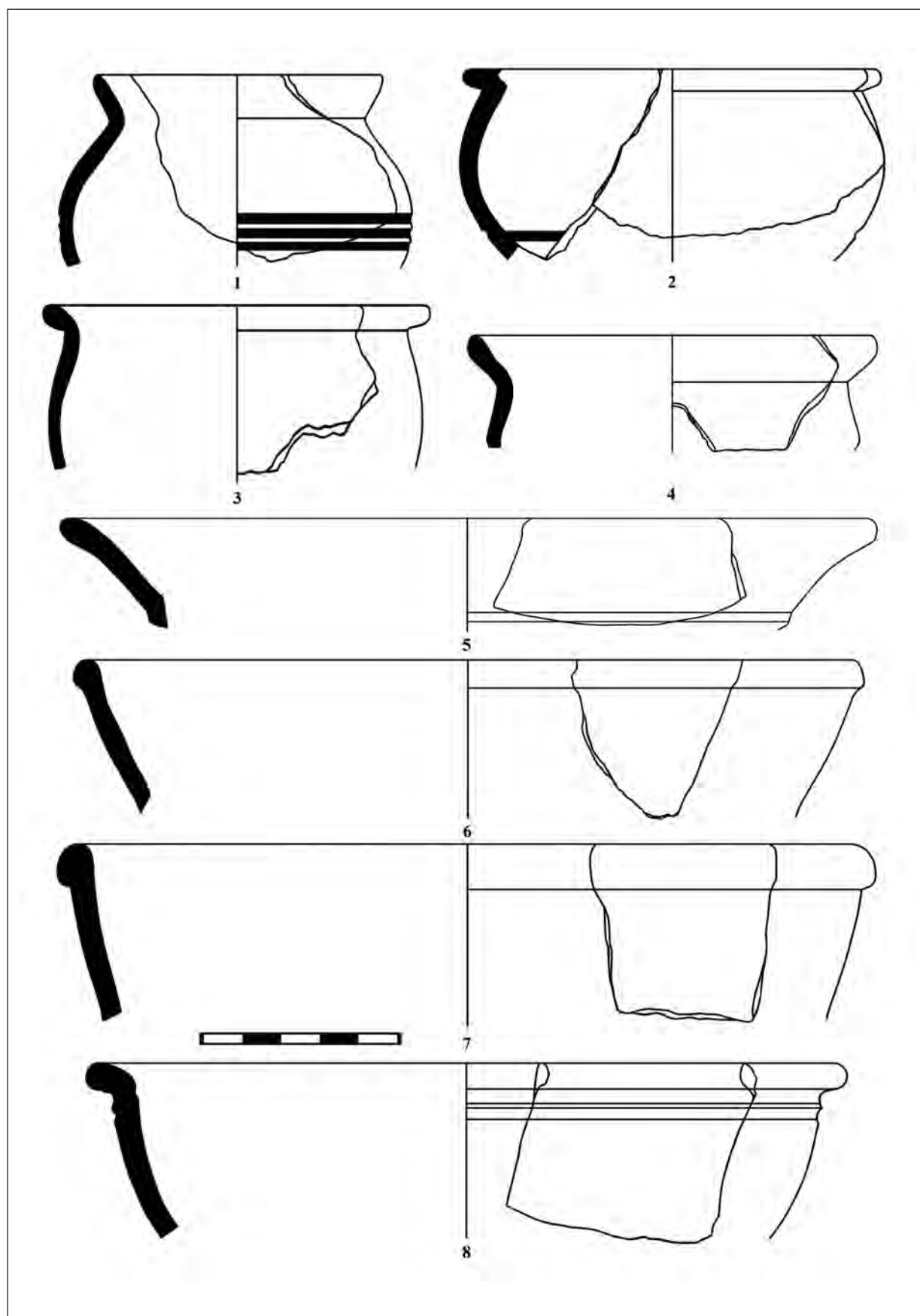
Pl. XV. Kiln no. 1 – Fine ware. Plain *sigillata*. 1- Curle 15 Type Dish (Lezoux); 2 – Drag. 30 Type Dish (Lezoux); 3 – Cup; 4 – Lu Tq Type Plate (Rheinzabern); 5 – Drag. 31 Type Plate (local); 6 – Drag. 32 Type Plate (local).



Pl. XVI. Kiln no. 1 – Fine ware. Plain *sigillata* (cut-glass). 1 – Isings 21 Type Cup (local). Plain *sigillata* (barbotine decoration). 2–4 Bowls.

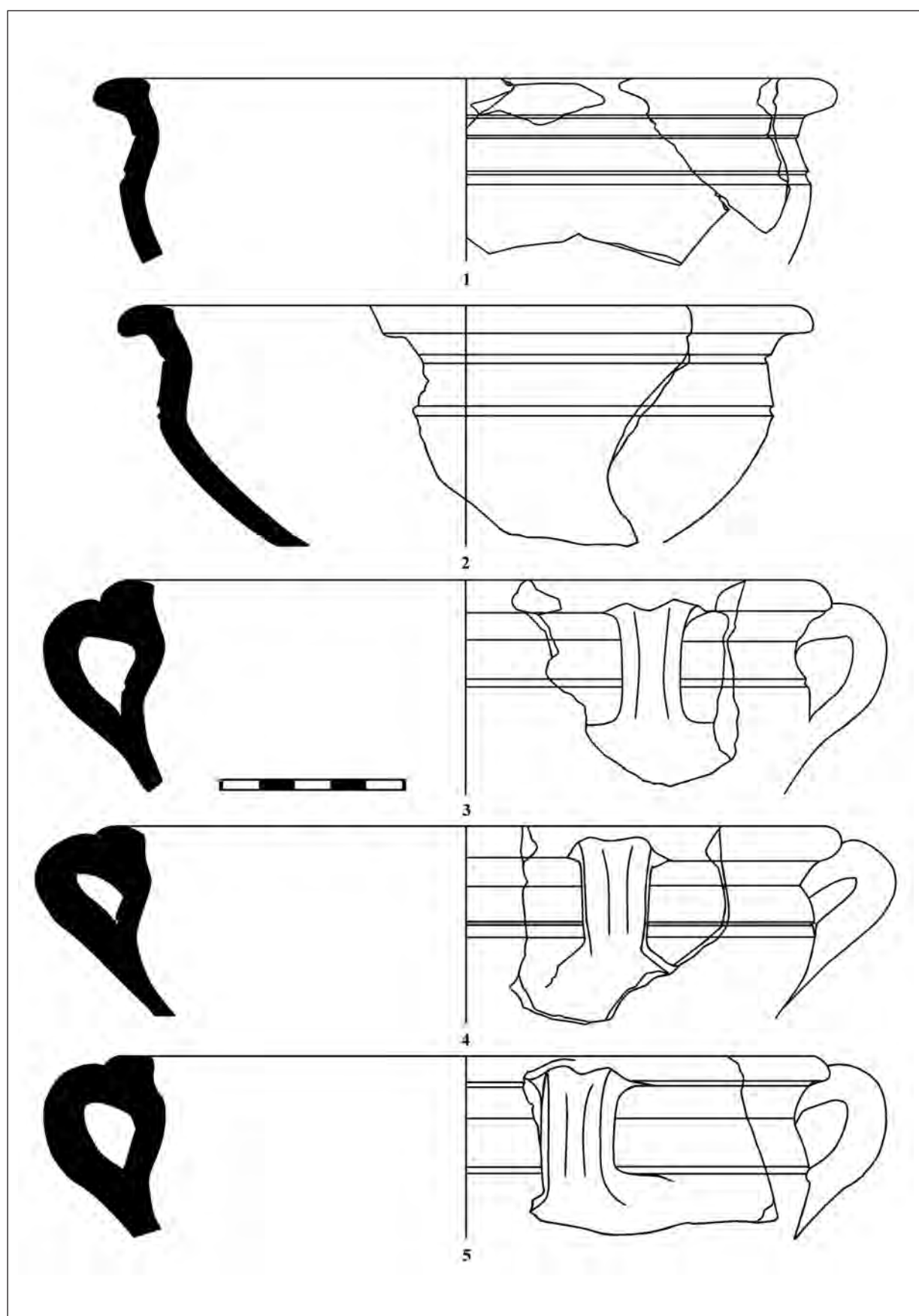


Pl. XVII. Kiln no. 1 – Fine ware. Plain *sigillata* (barbotine decoration). 1- 4 Bowls.

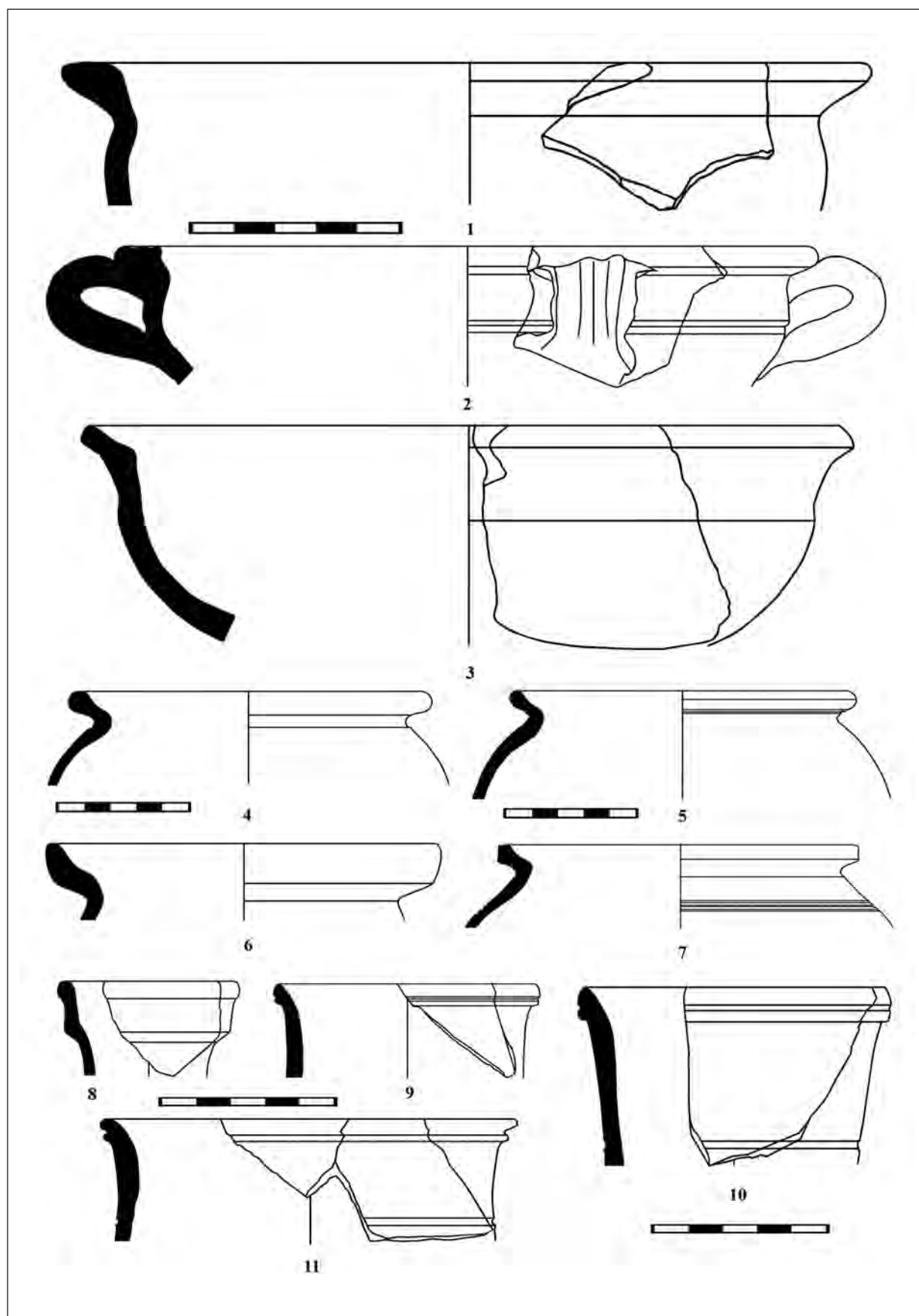


Pl. XVIII. Kiln no. 2 – Common ware. 1 – Beaker; 2–4 Small bowls; 5–6 Plates; 7–9 Bowls.

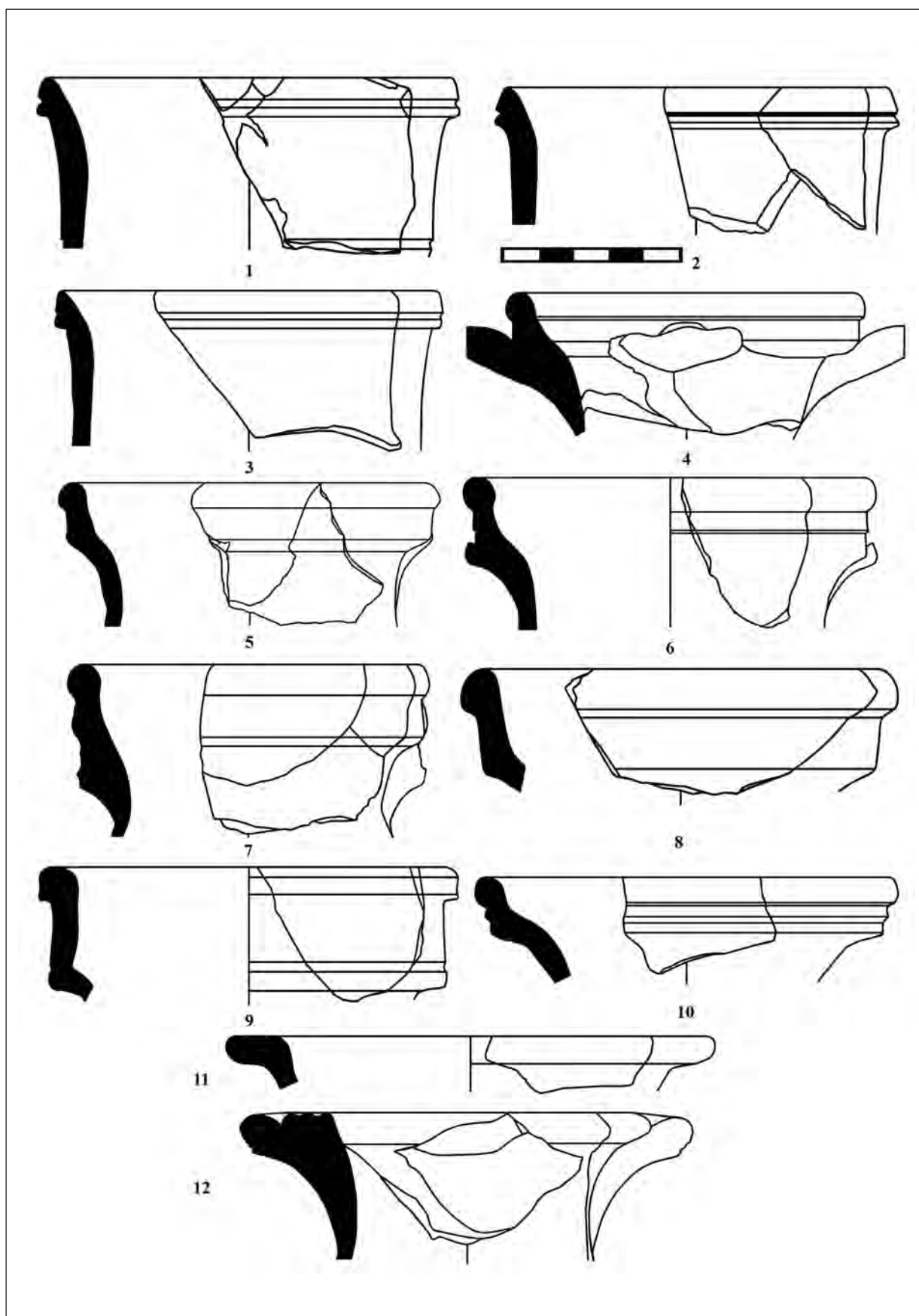




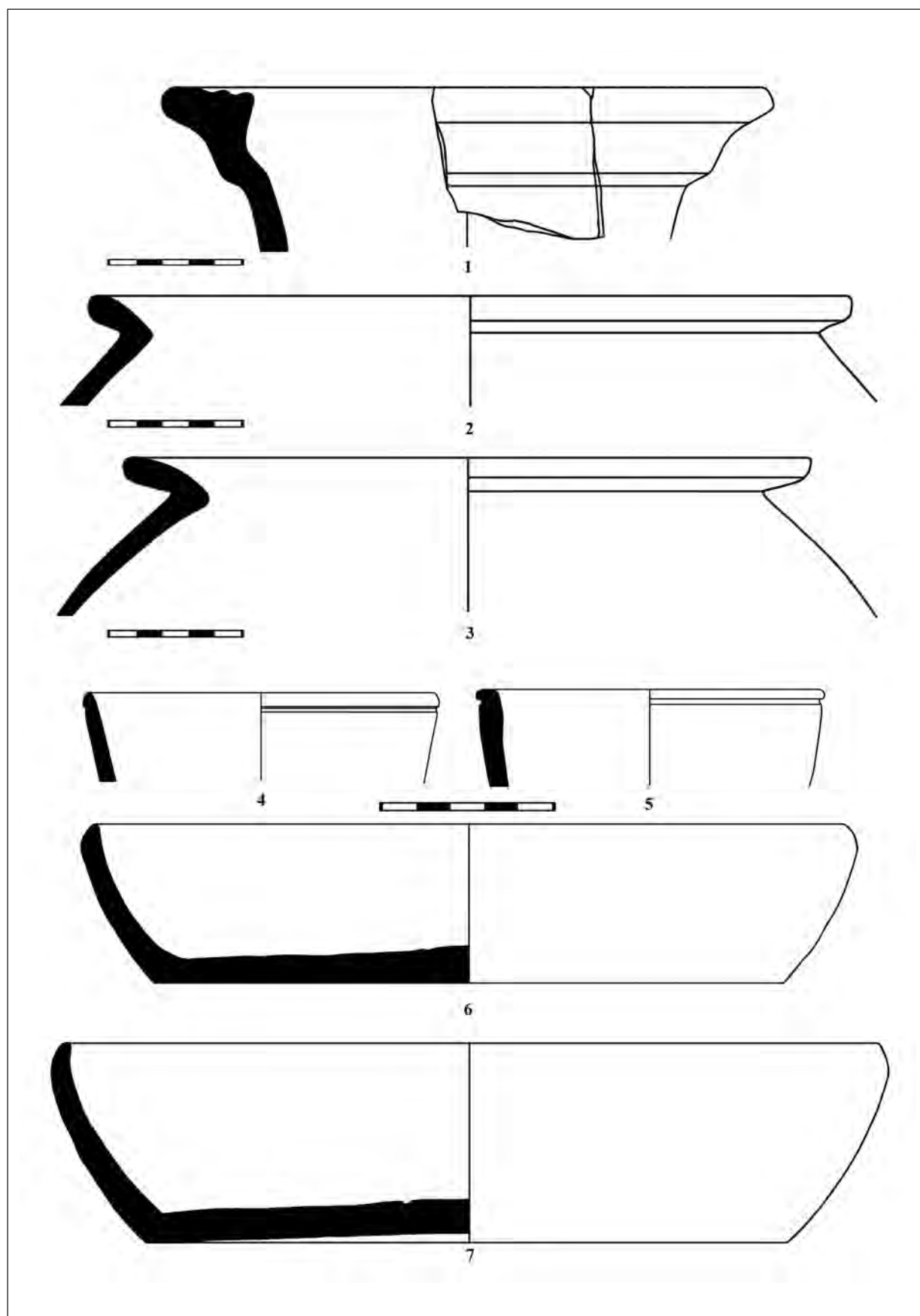
Pl. XIX. Kiln no. 2 – Common ware. 1–5 Bowls.



Pl. XX. Kiln no. 2– Common ware. 1–3 Bowls; 4–7 Pots; 8–10 Jugs; 11 – Pitcher.

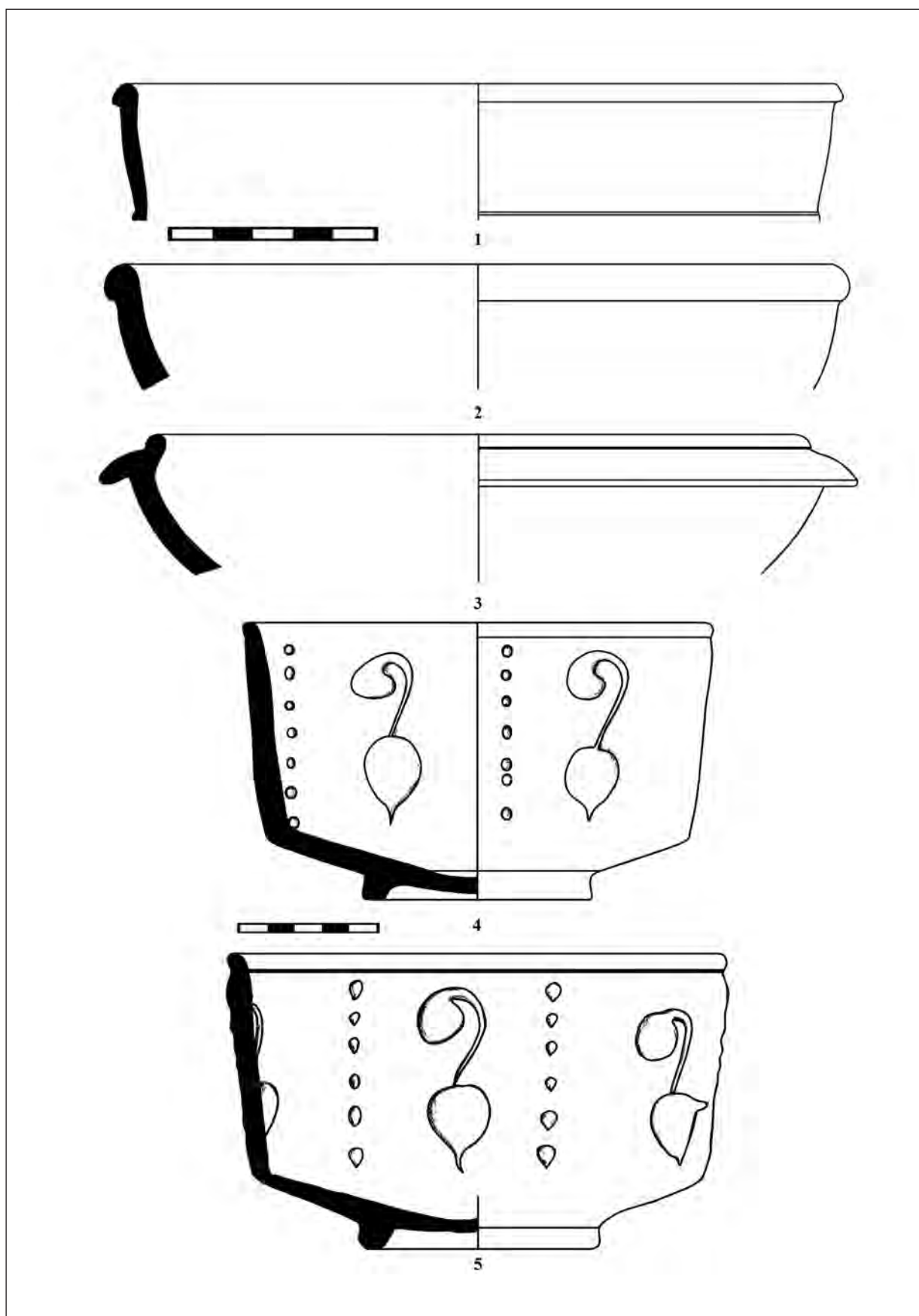


Pl. XXI. Kiln no. 2 – Common ware.1–12 Pitchers.

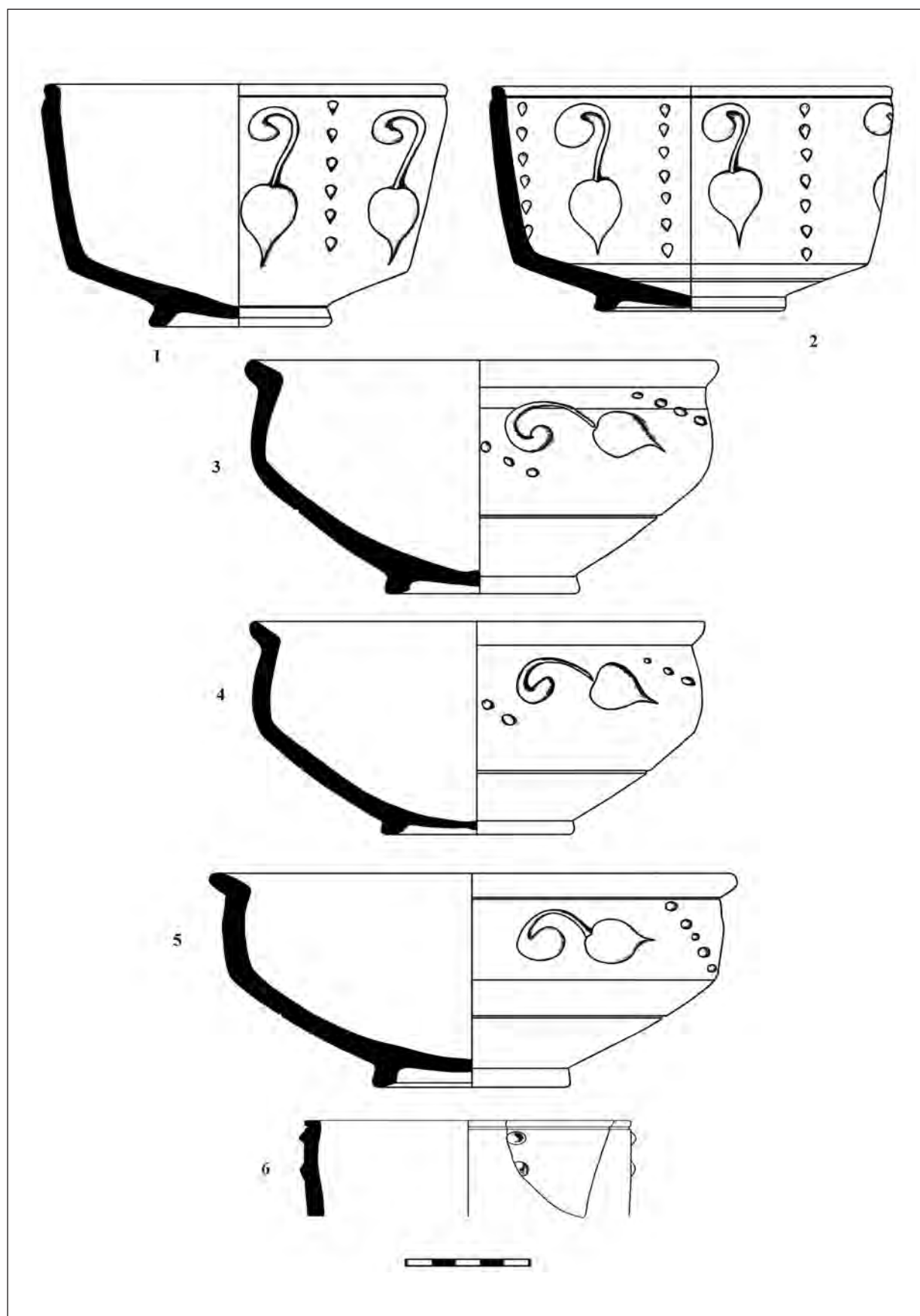


Pl. XXII. Kiln no. 2 – Common ware. 1 – Amforette; 2–3 *Dolia*; Plain local *sigillata*. 4–5 Drag.33 Type Cups; 6–7 Drag. 32 Type Plate.

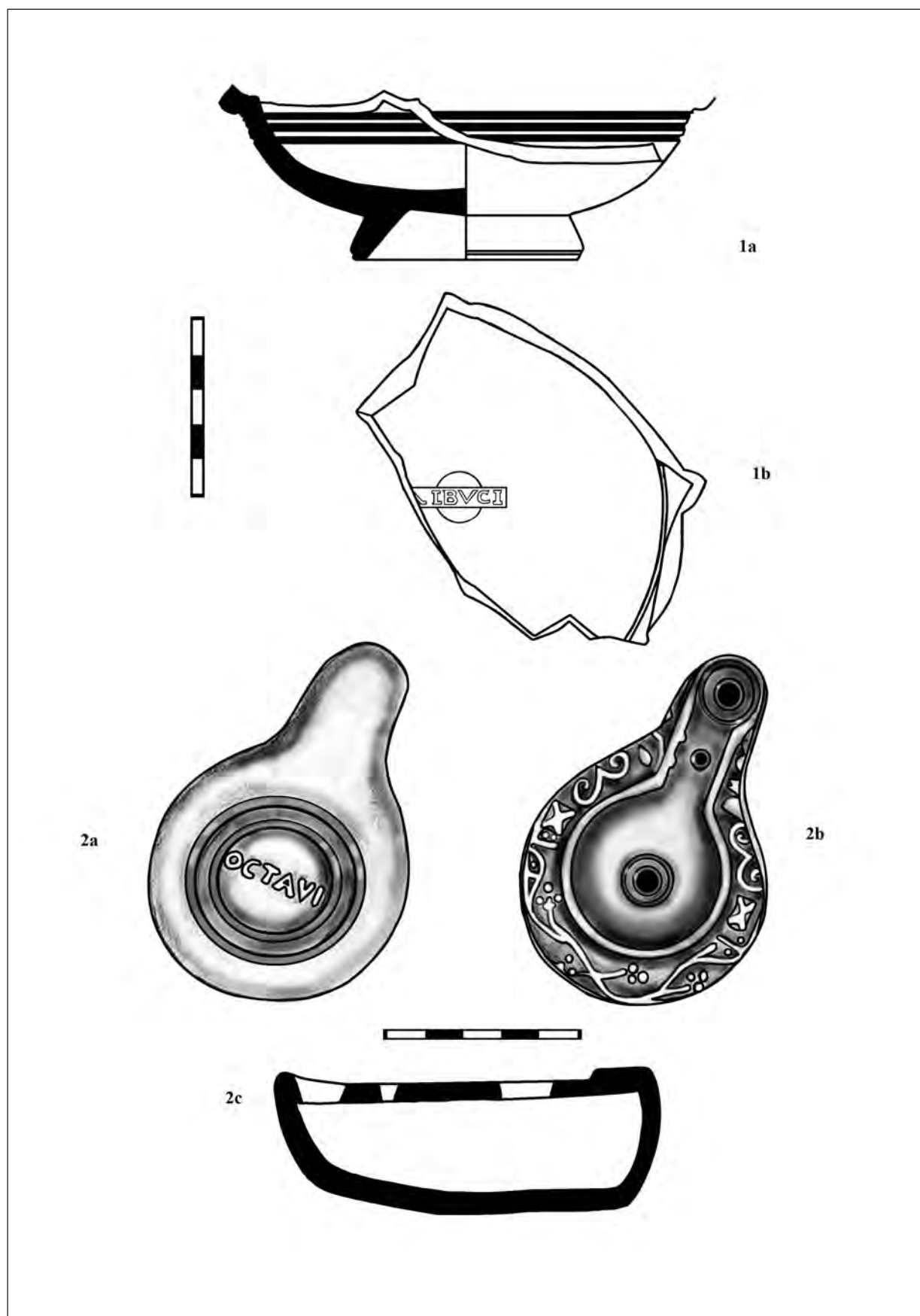




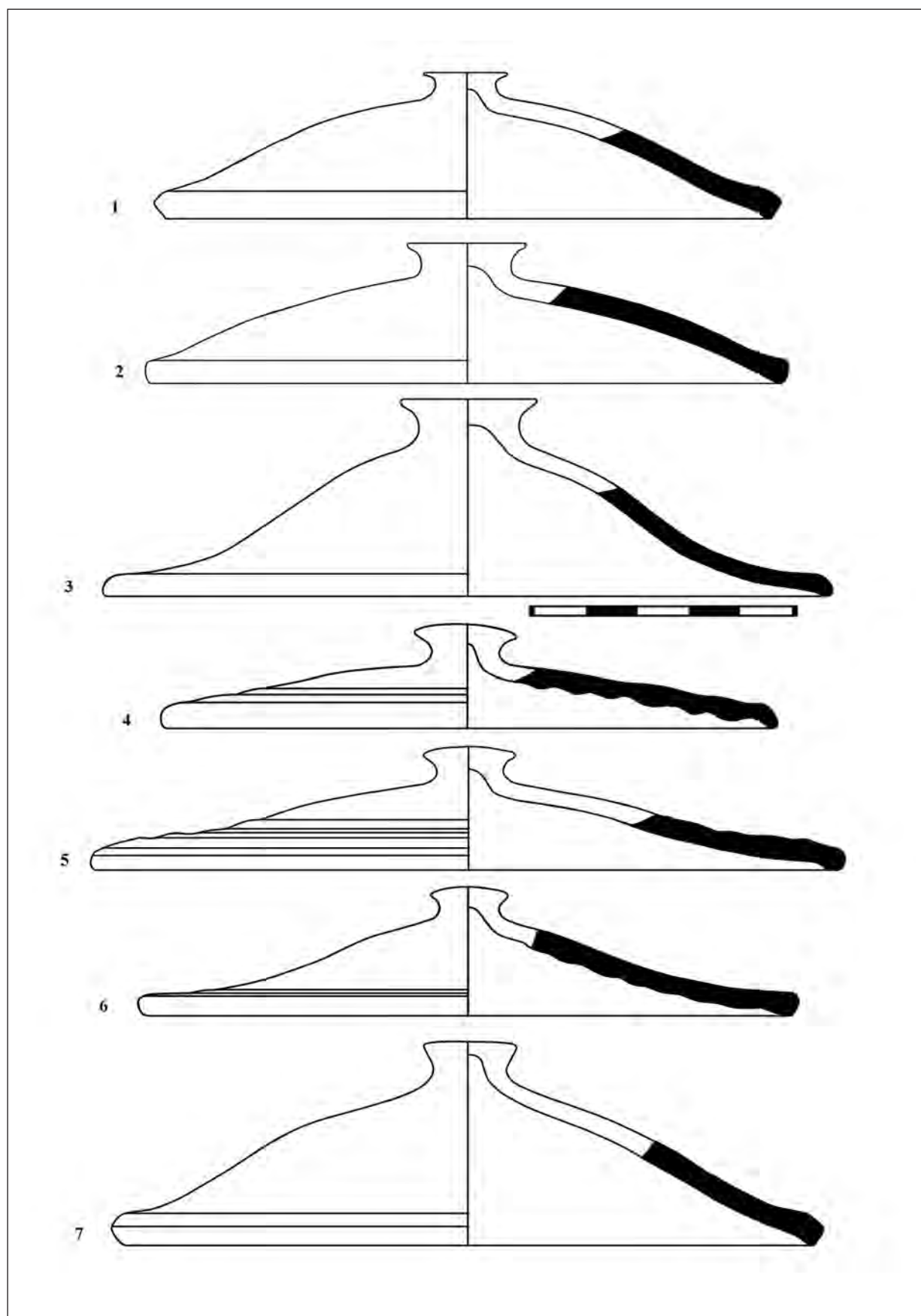
Pl. XXIII. Kiln no. 2 – Plain local *sigillata*. 1 – Drag. 37 Type Bowl; 2 – Drag. 44 Type 44; 3 Curle 11 Type *Mortarium*; Barbotine decorated *sigillata*. 4–5 Bowls.



Pl. XXIV. Kiln no. 2 – Barbotine decorated sigillata. 1–6 Bowls.



Pl. XXV. Waste Pit. Fine ware. 1- Drag. 35 Type Cup (Lezoux); 2 – Loeschcke X (possibly local workshop).



Pl. XXVI. Waste Pit. Common ware. 1–7 Lids.



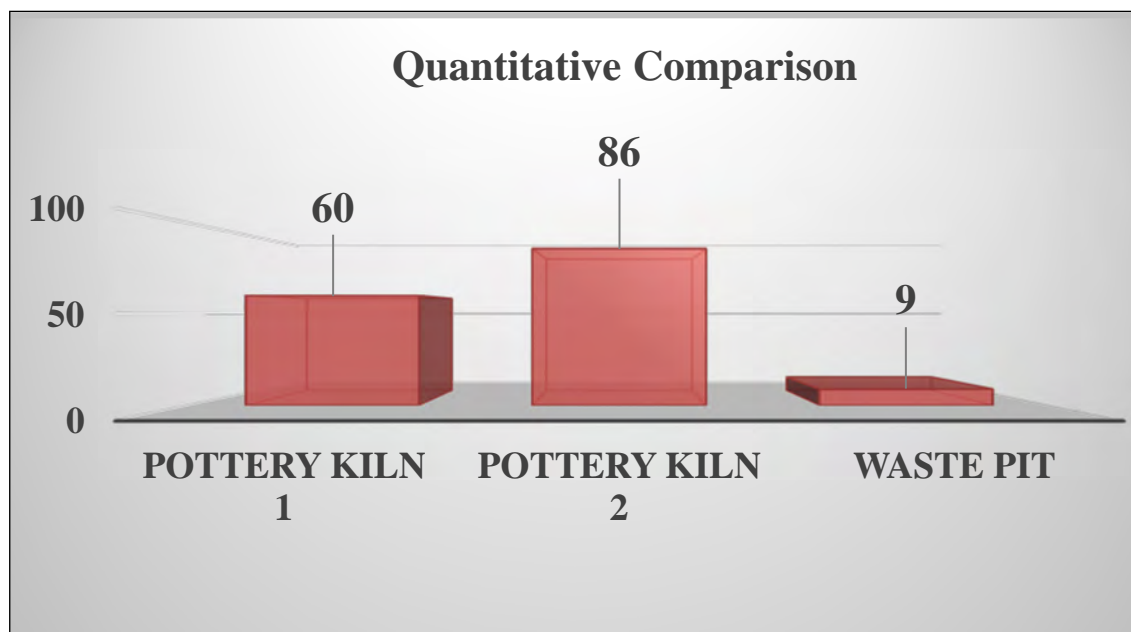


Chart 1.

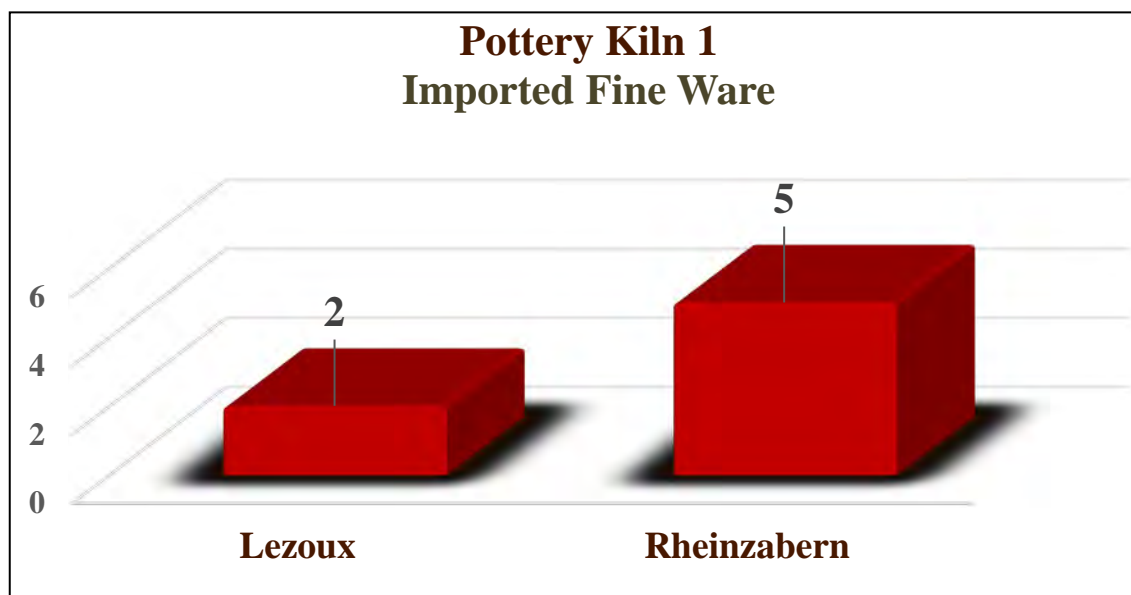


Chart 2.

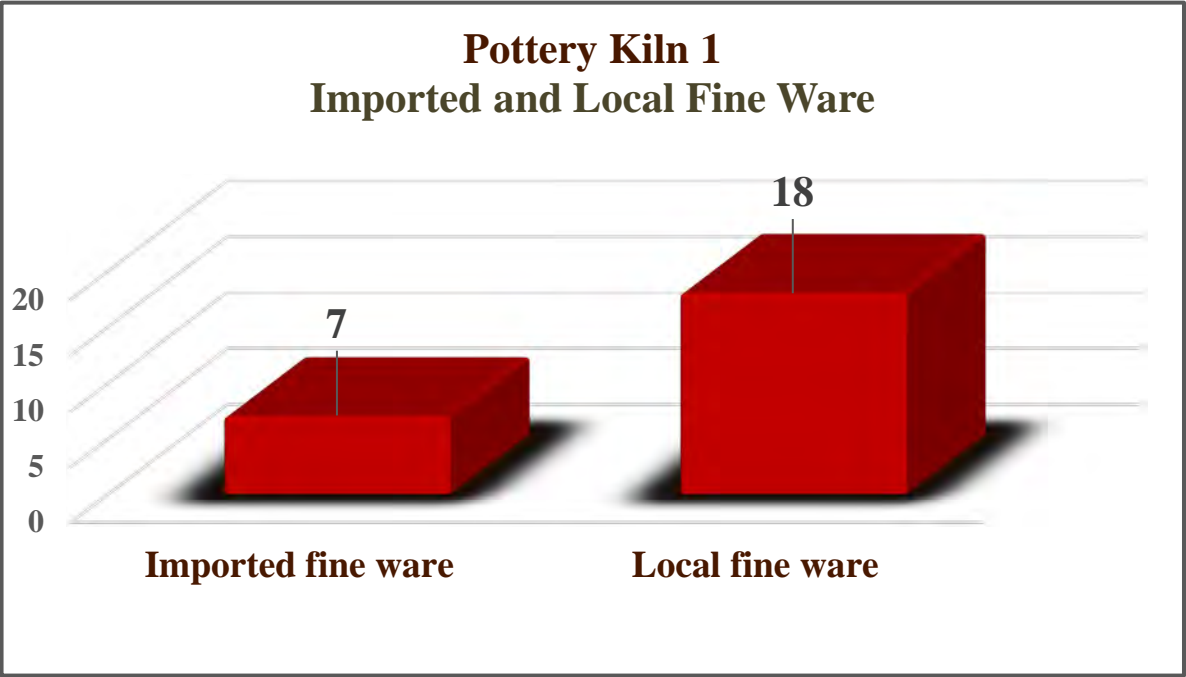


Chart 3.

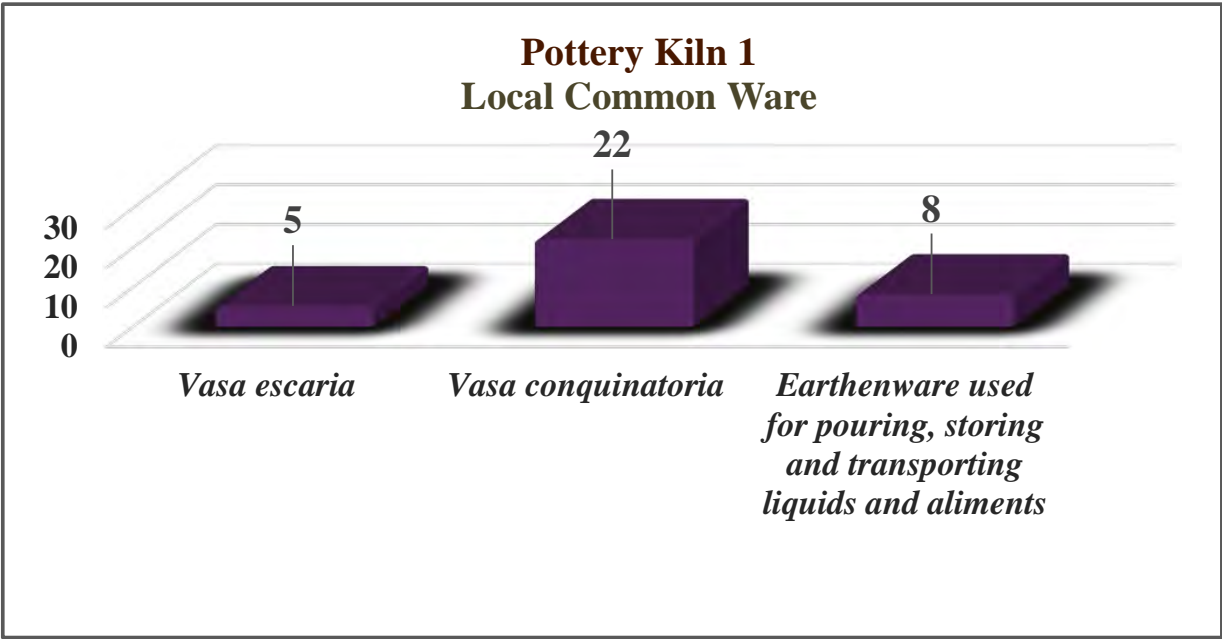


Chart 4.

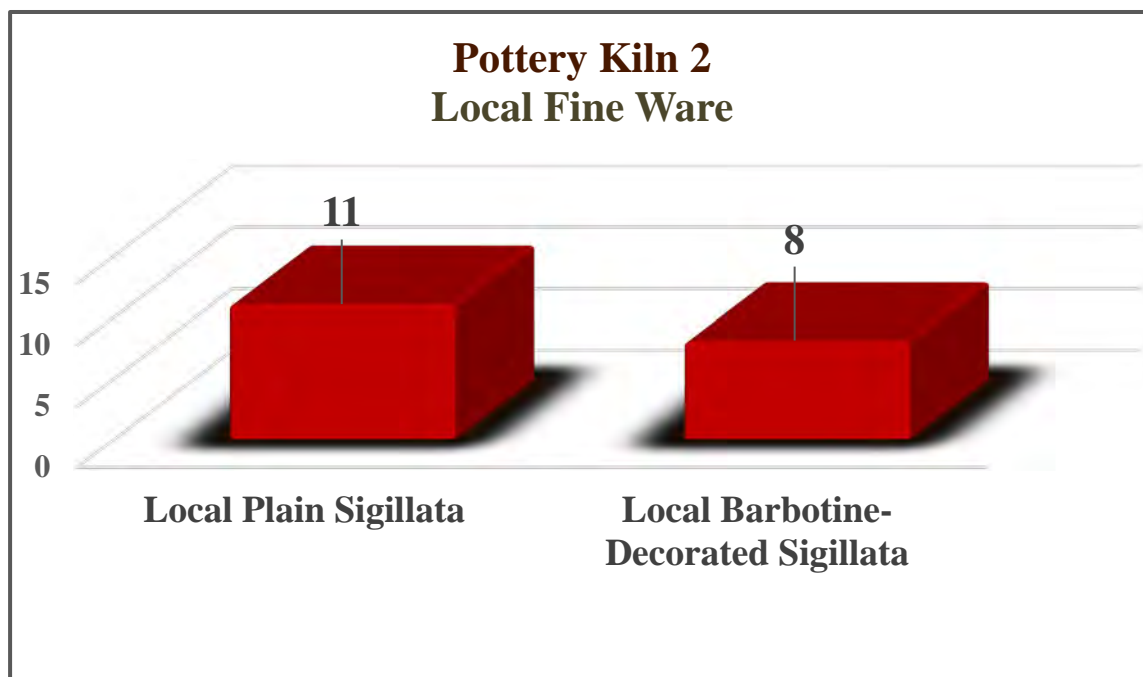


Chart 5.

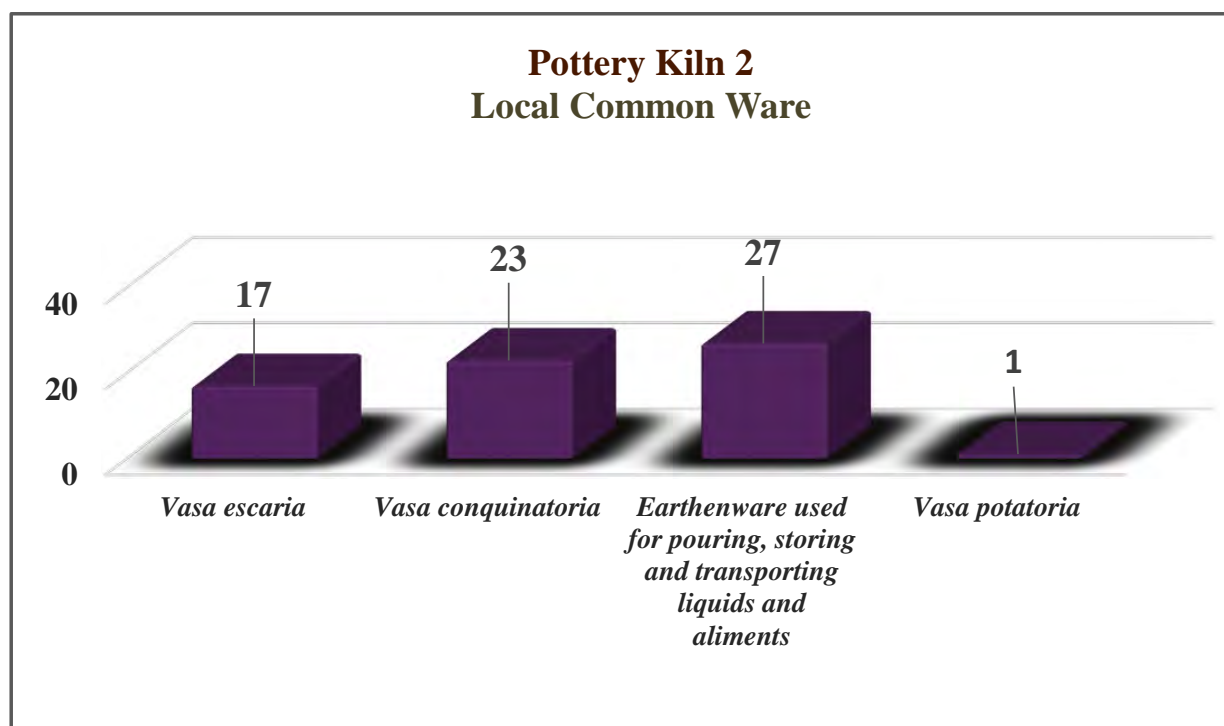


Chart 6.

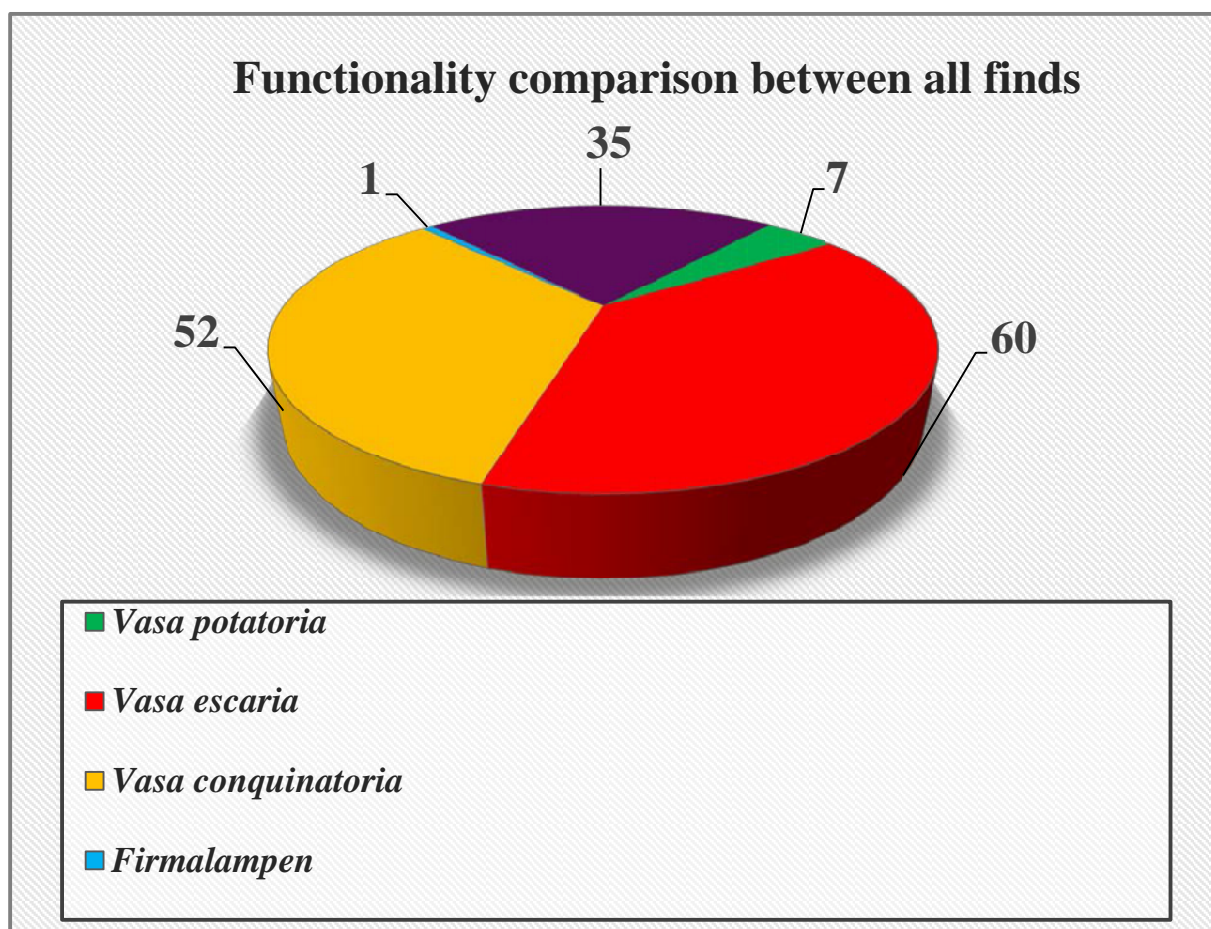


Chart 7.