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SALDVM

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ROMAN AND EARLY BYZANTINE FORTIFICATION

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IN MEMORIAM

Vladislav Popović
Petar Petrović

FOREWORD

This book offered to the reader is somewhat altered and supplemented master's thesis *Saldum, Roman and Early Byzantine Fortification on the Danube Limes* presented on the June 23rd 2003 at the Faculty of Philosophy of the Belgrade University. I am greatly indebted to my mentor Prof. Dr Aleksandar Jovanović and members of the commission Dr Miloje Vasić, Scientific Advisor in the Institute of Archaeology in Belgrade and Dr Mihajlo Milinković, Associate Professor at the Faculty of Philosophy in Belgrade, for useful suggestions and advices in the course of preparation and presentation of this master's thesis. Also I would like to express my gratitude for the final form of this work to Dr Ivana Popović, Scientific Advisor in the Institute of Archaeology in Belgrade and the Director of the Antique Project in Serbia who made this work possible and who supported my investigations of this subject.

This book would have been impossible in this form if I did not have the opportunity to examine archaeological material from Saldum housed in the Iron Gates Archaeological Museum in Kladovo which was at my disposal thanks to the kindness and understanding of the Museum executive Jelena Kondić. Of the great assistance in my work was Ana Premk MA, especially in the sections concerning the pottery material. Special and not insignificant stimulus for my work on this subject was offered to me by other associates of the Institute of Archaeology in Belgrade and especially Dr Gordana Milošević, from the Faculty of Architecture, who was of great help when I decided on this topic for my master's thesis.

The text was prepared for printing in late 2005, and was translated to English in early 2006. However, due to financial difficulties, it is only now being released in its original form. In the meantime, a number of interesting and useful articles on the matter have been published, but were just vaguely mentioned in the Saldum monograph. Unfortunately, due to technical reasons, these articles could not be comprised in the publication.

May 18th 2009

BELGRADE

The Author

I INTRODUCTION

KOŽICA – UŠĆE POTOKA. CAMPING POSSIBLE, BUT THE TERRAIN IS UNINHABITED AND LOOKING UNCULTIVATED AND GRIM. POSSIBILITIES OF SUPPLYING NON-EXISTENT, IT IS NECESSARY TO BRING EVERYTHING, EVEN THE DRINKING WATER. THERE ARE ALSO VENOMOUS LIZARDS SO IT IS DESIRABLE TO HAVE ANTIDOTE SERUM AT HAND IN YOUR BAGGAGE.

IN THE IMMEDIATE VICINITY IS THE PREVIOUS PILOT STATION TRANSFORMED INTO VACANCY RESORT. TAPPED SPRING WITH GOOD DRINKING WATER.¹

THIS IS HOW the authors of the *Nautical Guide* described the terrain in the village Dobra at the location known as Saldum at the site where important Roman military fortification existed in the first centuries AD. The site **Gradac–Saldum** (hereafter Saldum) after archaeological investigations in the 1970s ended at the bottom of the artificial lake of Djerdap I hydroelectric power station and out of the sight of tourists, visitors and experts. So, we are going to try to shed light on its tumultuous past on the basis of the results of the archaeological investigations conducted between 1967 and 1970 under the directorship of Dr Vladislav Popović and Dr Petar Petrović.²

During great campaigns 1966–1970 and 1980–1982 prior to the construction of the hydroelectric power stations Djerdap I and Djerdap II and in the course of investigation after that large number of the sites dating from the prehistory to the Middle Ages have been investigated to the more or less extent. The reports from these excavations were published in the volumes of *Arheološki pregled* (Djerdap I campaign) and *Djerdapske sveske* (Djerdap II). After conclusion of investigations at the sites in the Djerdap I sector the preliminary results were presented in the publication ‘*Stare kulture*

u Djerdapu’ in 1969 and in 1978 was organized an exhibition and the catalogue ‘*Arheološko blago Djerdapu*’ was published where few objects from Saldum were also presented. The more detailed studies about the fortifications in this sector appeared in *Starinar* XXXIII–XXXIV for 1982–1983 when first synthetic work about the remains from the Roman and Early Byzantine period at this site was also published.

The site Saldum is situated immediately before the entering in the Gornja Klisura (Upper Gorge) (Fig. 1) in one of the three Iron Gates canyons in the area of

1| M. Đonić, R. Ječincac, *Dunav. Nautičko–turistički vodič*, Beograd 1991, 76.

2| Director of field investigations Dr Petar Petrović, Project Director Dr Vladislav Popović. In the 1967 campaign took part: V. Popović, P. Petrović, P. Milošević, A. Premk, M. Pindić and architect N. Trifković. Members of 1968 team were: P. Petrović, A. Premk, P. Milošević, M. Pindić, architect N. Trifković and student of architecture D. Radosavljević. Members of 1969 team were: P. Petrović, M. Pindić, J. Milojević, N. Kirsanova, M. Tomić, conservator A. Stojković, archaeology students S. Korda, B. Borić, M. Vukovljak, student of architecture N. Arsenić and draftsman Ž. Jončić. In 1970 members of the team were P. Petrović, P. Milošević, M. Pindić, N. Kirsanova, Lj. Stojković, S. Korda, D. Radosavljević, students of architecture M. Savković, L. Gomez.

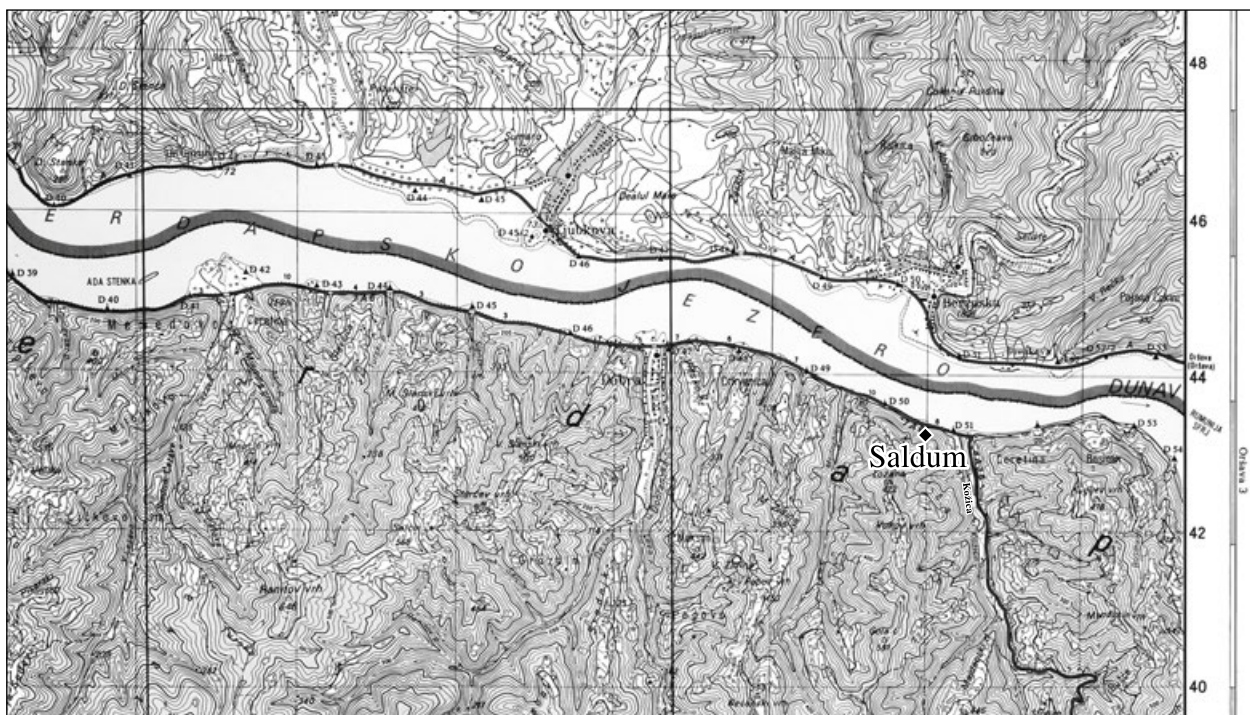


Fig. 1. Section of the Danube by the Djerdap lake and position of Saldum, 1:50.000

the village Dobra, about 4 kilometers downstream from the village center at the Danube bank, at the location where the Danube is very wide and suitable for crossing to the left Dacian bank, where is nowadays the modern settlement Berzasca with the remains of the settlement from the Roman period. In the immediate vicinity of the site, about 300 m downstream from the fortification remains is the mouth of the Kožica brook. In the hinterland are gentle slopes of the Kučaj mountains transversed by the fertile valley of this brook (Fig. 2a, b).

In this book offered to the readers we are following the history of one micro region from the arrival of the Roman troops, most probably in the time of Flavians, with shifting of peaceful and turbulent times until the end of the 6th century, when this site was definitely abandoned and left to oblivion. Out of the scope of our study are left the remains of the prehistoric settlements, dating from the Bronze Age (Dubovac – Žuto Brdo group) and Early Iron Age, recorded in the lowest zones inside the fort and in its surroundings within 1 kilometer distance.³

Considering the administrative organization the Roman settlement, i.e. fortification at Saldum belonged to the Upper Moesia province (*Moesia Superior*) and

in the Late Roman time to the First Moesia (*Moesia Prima*). In the preserved Roman texts and itineraries we did not find the data concerning the name of this settlement. Some authors although having certain reservations tried to identify Saldum with *Gratiana* or *Cantabaza* (Καντοβαζία). The assumption that Saldum is Late Roman *Gratiana* was suggested by P. Petrović on the basis of the information from *Notitia Dignitatum* where the garrison of *auxilium Gratianense* is mentioned somewhere between Golubac (*Cuppae*) and Donji Milanovac (*Taliata*).⁴ The author thinks that only Saldum could be identified with *Gratiana* because it had been completely constructed in the time of Valentinian I and his co-ruler Gratian. Nevertheless, *Gratiana* was mentioned in 528 when the Ostrogoths under Vitiges achieved a victory over the Herules and Gepides and destroyed this settlement on the occasion.⁵ According

3| P. Popović, Kožica I, II – praistorijsko naselje, *Starinar* XXXIII–XXXIV(1982–1983), 1984, 135–136.

4| P. Petrović, Les forteresses du Bas-Empire sur le limes danubien en Serbie, *Roman Frontier Studies* 1979, BAR International Series 71, 1980, 766; Idem, *Starinar* XXXIII–XXXIV(1982–1983), 1984, 133.

5| M. Vasić, Le limes protobyzantin dans la province de Mésie Première, *Starinar* XLV–XLVI (1994–1995), 1995, 41–42, note 9.



Fig. 2. Saldum: a) general view; b) hinterland
(Photo Documentation Institute of Archaeology, Belgrade)

to these data there should be a continuity of living at this site from Valentinian I to Justinian but it has not been confirmed by archaeological investigations. The settlement at Saldum was established in the time of Valentinian I, it was short-lived and perished in the Gothic invasions between 378 and 380. However, it was restored in the time of Justinian I, so there was no settlement at this site in 528, judging by the stratigraphic situation and archaeological finds.

V. Kondić tried to reconstruct the architectural activity of Justinian in this area on the basis of the results of archaeological investigations and the Procopius' text *De Aedificiis*.⁶ On the basis of the itineraries and the text by Procopius it was possible to establish without doubt the location of *Pincum* (Veliko Gradište), *Cuppae* (Golubac) and *Novae* (Čezava).⁷ The location of the Roman *Lederata* was identified with high probability near the present-day Ram.⁸ In the list of Procopius are also mentioned *Cantabaza*, *Smorna* and *Campsa*. V. Kondić started from the premise that these were the camps only restored by Justinian but not built from the ground as it was the case with fortification at Bosman. According to this criterion the camps that should be considered are those at Saldum, Boljetin and Ravna. Thus, according to this author, fortification at Saldum was Κοντοβαζιά and it could have been the toponym taken from the earlier epochs or the new toponym used by Justinian's contemporaries for this site. V. Kondić connects this name with Greek compound word meaning 'shortcut'. He also found an analogy for his thesis in the modern toponymy of Arcadia – the village Κοντοβαζιάινα.

On the basis of literary sources and archaeological data, the intensive building activity of Justinian in the middle Danube basin could be dated between the years 529 and 535 and it had been completed in the First Moesia sometime around 540.⁹ However, something that leaves certain perplexities, concerning the fortification at Saldum, is the time of its construction. The stratigraphic situation suggests that *castellum* was constructed only in the 6th century, while in the 4th century could have eventually been used an earlier stone architecture altered in the time of *praepositus Hermogenes* or the settlement established in the time of Valentinian I was enclosed within wooden palisade.¹⁰

The land road bypassing Saldum is not a shortcut to any other settlement, but the river here is very wide

6| V. Kondić, *Cantabaza*, Smorna, Campsa, *Starinar* XXII, 1971, 53–58.

7| M. Mirković, *Rimski gradovi na Dunavu u Gornjoj Meziji*, Beograd 1968, 101–106, with earlier literature; M. Vasić, Čezava – Castrum Novae, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 91.

8| A. Jovanović, The problem of the location of Lederata, in: *Roman limes on the Middle and Lower Danube*, Belgrade 1996, 69–72.

9| M. Vasić, *Starinar* XLV–XLVI (1994–1995), 1995, 43. It is possible that some fortifications were built even after that period as is probably the case with fortification at Ljubičevac where in the foundation zone was found the follis of Justinian from the year 548. Cf.: M. Korać, Late Roman and Early Byzantine fort of Ljubičevac, in: *Roman Limes on the Middle and Lower Danube*, Belgrade 1996, 108.

10| M. Vasić, *Starinar* XLV–XLVI (1994–1995), 1995, 45, quoting the drawing of the profile published by P. Petrović in *Starinar* XXXIII–XXXIV, 134. Cf.: G. Jeremić, Spätantikes Saldum, in: *Die Archäologie und Geschichte der Region des Eisernen Tores zwischen 275–602 n. Chr.* Kolloquium in Drobeta–Turnu Severin (2.–5. November 2001), București 2003, 37.

and suitable for crossing over to the Dacian territory so the 'shortcut' could be the synonym for crossing. About the suitable place for crossing to the left bank speaks the Turkish toponym Saldum – shallow water, crossing, preserved until today. In addition, until the middle of the last century at this location was the customs station and that could to a certain extent provide the directives for us to follow in our quest for the role and position of Saldum in the Roman and Early Byzantine times.

I.1. HISTORY OF INVESTIGATIONS AND METHODOLOGY OF WORK

The first who visited the site and made plans with description of walls at Saldum were Felix Kanitz and Gyula Neudeck in the end of the 19th century, while archaeological excavations were carried out between 1967 and 1970.

Felix Kanitz who visited the sites along the Danube and recorded 72 of them in the sector from Belgrade to the Timok confluence, mentioned Saldum as one

Medovnica river and at the same distance from the brook Kanitz recorded the mine shaft of the Popović enterprise and it is an important information for the ore exploitation in this part of the Danube valley in the 19th century.

According to the Kanitz' drawing, the fortification at Saldum is of rectangular ground plan, 60 x 30 meters in size and with longer sides parallel to the Danube and with two circular towers within the north rampart. When he visited this site, Kanitz did not notice the remains of the south towers and he noted that as curiosity among the Roman fortifications.

The confusing thing in Kanitz' description is information that fortification Sadum is on the right bank of the Medovnica river while at the site the situation is completely different, as Saldum is situated 350 meters far from the left bank of the Kožica brook on the very bank of the Danube and distance between Medovnica and Kožica is 1,5 kilometers. Whether this mistake happened when the material had been prepared for publishing or possibly Kanitz registered still another fortification next to the Medovnica river remains uncertain. Kanitz visited and made drawings of the

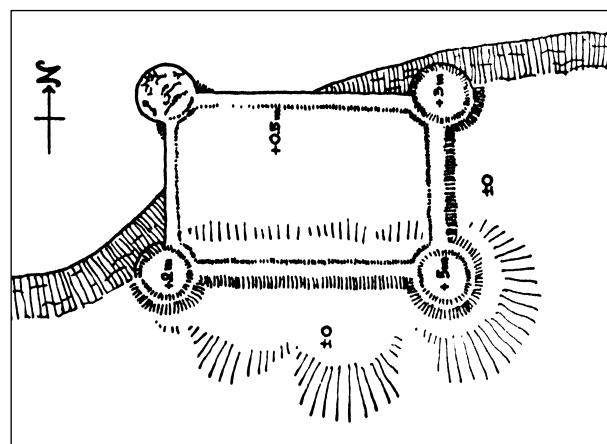
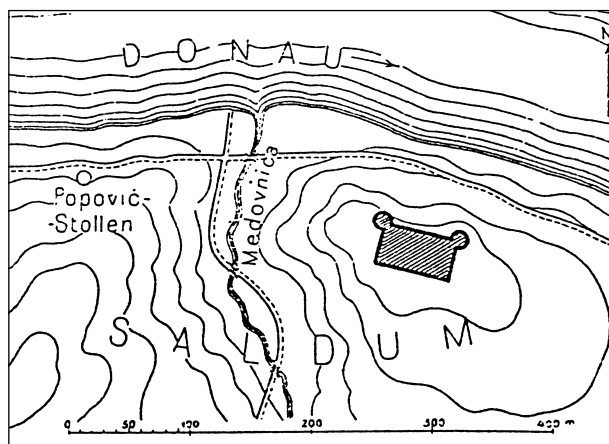


Fig. 3. Saldum: a) site plan after Kanitz (F. Kanitz, *Römische Studien*, Wien 1892, 30, fig. 13.); b) plan of castellum after Neudeck (P. Petrović, 1984, 130, sl. 1)

of the seven fortifications between *Ad Scrofulas* and *Taliata* (Fig. 3a).¹¹ According to his drawing, the fortification at Saldum was around 120 meters to the east of the confluence of the Medovnica river with the Danube and 50 meters inwards from the contemporary Danube bed and separated from it by the vicinal road. Opposite to the fortification on the left bank of the

Kožica brook but he registered there the triangular fortification at Bosman around 50 meters far from the right bank, while on the left bank he registered besides

11| F. Kanitz, *Römische Studien in Serbien*, Wien 1892, 30.

12| F. Kanitz, *op. cit.*, 30, fig. 14.

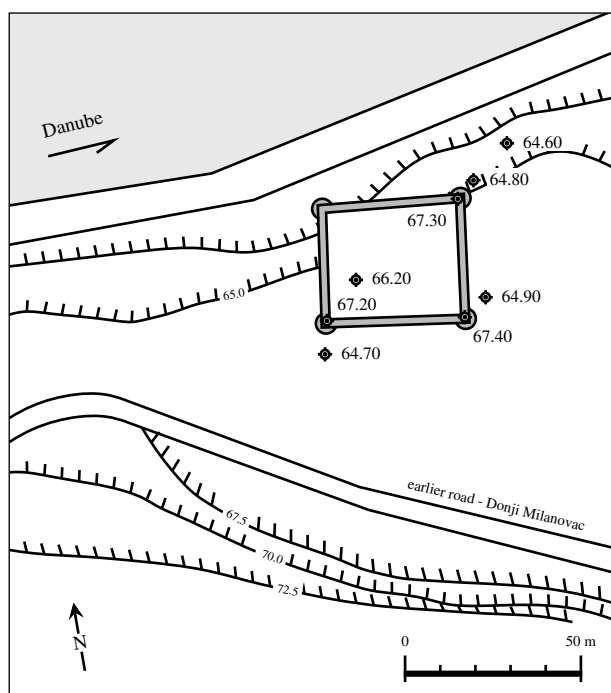


Fig. 4. Saldum: a) site before the excavation in the 1960s; b) northern rampart in 1960s (Photo Documentation Institute of Archaeology, Belgrade)

contemporary buildings and streets of the settlement also the traces of the Roman (?) structures.¹² Against this background we could assume that Kanitz recorded the names of the mentioned brooks wrongly and that instead of Medovnica in his text should be written Kožica.

Another plan of fortification at Saldum made the Hungarian engineer Gyula Neudeck in 1894 (Fig. 3b).¹³ He does not mention the toponym Saldum, but he registered one fortification on the left bank of the Kožica brook, its size being approximately 50 x 30 meters (without towers) and with longer sides parallel to the Danube and northwestern tower protruding into the river. The best preserved was the southeastern tower, up to the 5 meters in height, while northeastern and southwestern towers were preserved up to the 2 meters in height, measured from the surrounding terrain. The fortification interior was 0.50 meters higher in comparison to the outside terrain. Neudeck recorded precise ground plan of the northwestern tower with stone filling in the foundation zone.

All the earlier investigators stated that fortification at Saldum was well preserved. Before the systematic archaeological investigations in 1967, the material from this site had been collected. There are mentioned the bronze coins dating from the 3rd and 4th century, an aureus of Claudius and lower segment of the stone icon of Mithra.¹⁴

Systematic site survey conducted by the scholars of the Institute of Archaeology in Belgrade in the 1950s revealed that there are two archaeological sites in the village Dobra in the area called Saldum. One of them was situated on the left bank of the brook on the estate of Andreja Golubović. It was registered on the slope descending towards the Danube where the foundations of the buildings but without any objects (partition walls) had been discovered in the course of field plowing. Another site is the *castellum* at Saldum on the Danube bank in the vicinity of the left bank of the brook once called Salkov potok and today known as Kožica. The archaeological team surveying the *castellum* concluded that north fortification rampart was damaged by the Danube waters (Fig. 4b). Large quantity of portable archaeological material mostly dating from the Late Roman and Early Byzantine period has been registered. The dimensions of the camp as measured

13| Gy. Neudeck, Tiberius útja az Aldunán, *Magyar Mérnök és Építész Egylet Közlönye* 28, 1894, 28, ábra 12.

14| P. Petrović, Gradac, Saldum, s. Dobra – rimsko utvrđenje, *Arheološki pregled* 9, 1967, 77, note 2; Idem, *Starinar* XXXIII–XXXIV, note 6, the data for coin and icon are in disagreement. In *Arheološki pregled* is mentioned that the material is housed in the National Museum in Požarevac but it was never entered in the inventory book, so it is still unknown where this material is stored. I wish to express my thanks to Dragana Spasić-Đurić from the National Museum in Požarevac for this information.

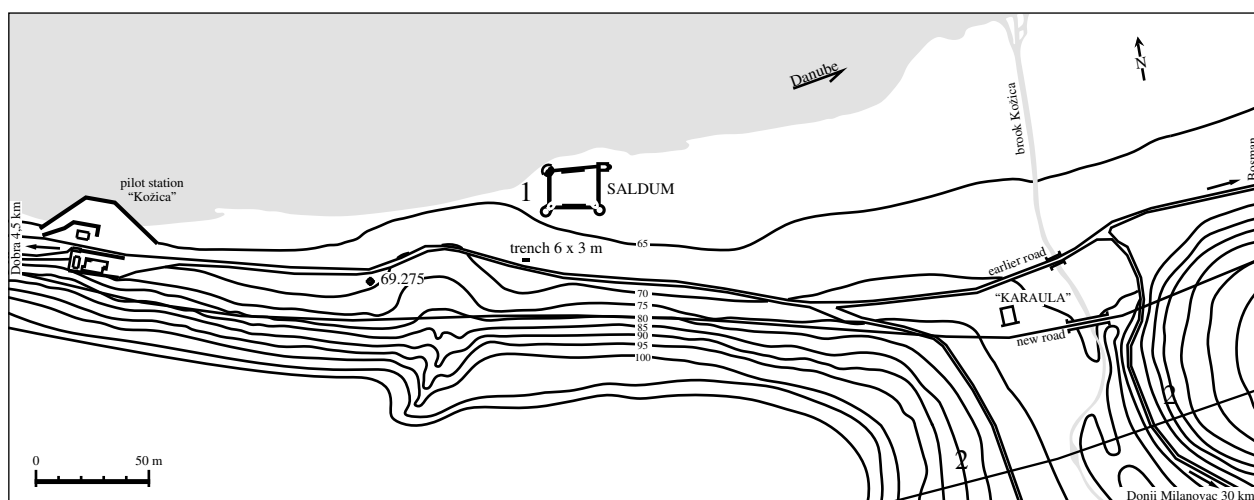


Fig. 5. Saldum, site plan: 1. castellum;
2. partition walls (Photo Documentation Institute of Archaeology, Belgrade)

by them are 45 x 35 m (Fig. 4a). In comparison with the surrounding ground the towers were visible up to the height of 2.50–2.70 m and the interior of the fort was 1.50 m higher than the surrounding ground. Considering the fact that absolute elevations of the terrain were 64.60–67.40 m above sea level, it was concluded that the camp would be flooded after the construction of hydro-electric power station Djerdap I, so a proposal was made to investigate this fortification systematically.¹⁵

Archaeological investigations at the site Saldum were carried out in the four campaigns – from 1967 to 1970.¹⁶ In the course of these works was investigated most of the interior of the fortification, the area of the supposed necropolis was investigated by test trenches and in the same way were investigated the remains of the partition walls in the Kožica valley (Fig. 5). These works encompassed the area of 1,500 square meters and the following results have been achieved:

In 1967 were discovered crowns of the fortification walls and corner towers. In the interior of the fortification were excavated two trenches of 175 square meters in total, one next to the northwestern tower and portion of the northern rampart (Trench 1) and the other next to the northeastern tower (Trench 2). The investigation of the northern rampart was possible because of the extremely low level of the Danube waters. The investigations in both trenches reached the virgin soil so it was possible to achieve the preliminary picture of the sequence of layers and phases at the site.

In 1968 were investigated and partially exposed northwestern (A) and northeastern (B) tower, the northern rampart was also explored and investigations were also carried out in the trenches in the eastern half of the *castellum*. Large quantity of portable archaeological material has been discovered and among other things the hoard of blacksmith's and agricultural tools. In the fort interior were encountered the remains of the timber architecture (4th century) and a surface covered with horizontally laid stone slabs (2nd–3rd century).

Investigations in 1969 were aimed at discovering of the new zones inside the *castellum*, solving of stratigraphic problems and there were also attempts to discover architecture in the lower zones and to solve the relationship between towers and ramparts and the earlier established horizons and layers in the camp. The most important discovery in the campaign was discovering of the portion of the wall (12 meters long) of the earlier fortification and its orientation was deviating to a certain extent from the direction of the northern

15| V. Kondić, Antički i srednjovekovni lokaliteti na Dunavu od Dubravice do Radujevca, *Arheološki pregled* 7, 1965, 77–78.

16| P. Petrović, *Arheološki pregled* 9, 1967, 75–77, T. XXIX/1–2; Idem, Saldum, Gradac, rimsko i paleovizantijsko utvrđenje, *Arheološki pregled* 10, 1968, 106–108; Idem, Gradac, Saldum, antičko utvrđenje, *Arheološki pregled* 11, 1969, 146–148; Idem, Saldum, antičko utvrđenje, *Arheološki pregled* 12, 1970, 84–86, T. XXVI, 1; Idem, Saldum, rimsko i ranovizantijsko utvrđenje na ušću potoka Kožica, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 128–134, T. I–IV.

fortification rampart. The assumed location of the necropolis around 50–100 meters to the southwest and west of the camp was also investigated but two test trenches did not provide satisfactory results.

During 1970 campaign the main objectives were further discovery of the foundation zone of the earlier rampart, while the investigations of the squares in the southwestern part of the *castellum* revealed the remains of the earlier architecture. In the same year were undertaken small-scale excavations to the west of the fortification, near the Medovnica brook and the Dobranska river, but there were no archaeological finds despite earlier information about the Roman sites at these locations. The valley of the Kožica brook was also explored by the test trenches and there were discovered the partition walls (*claustra*).

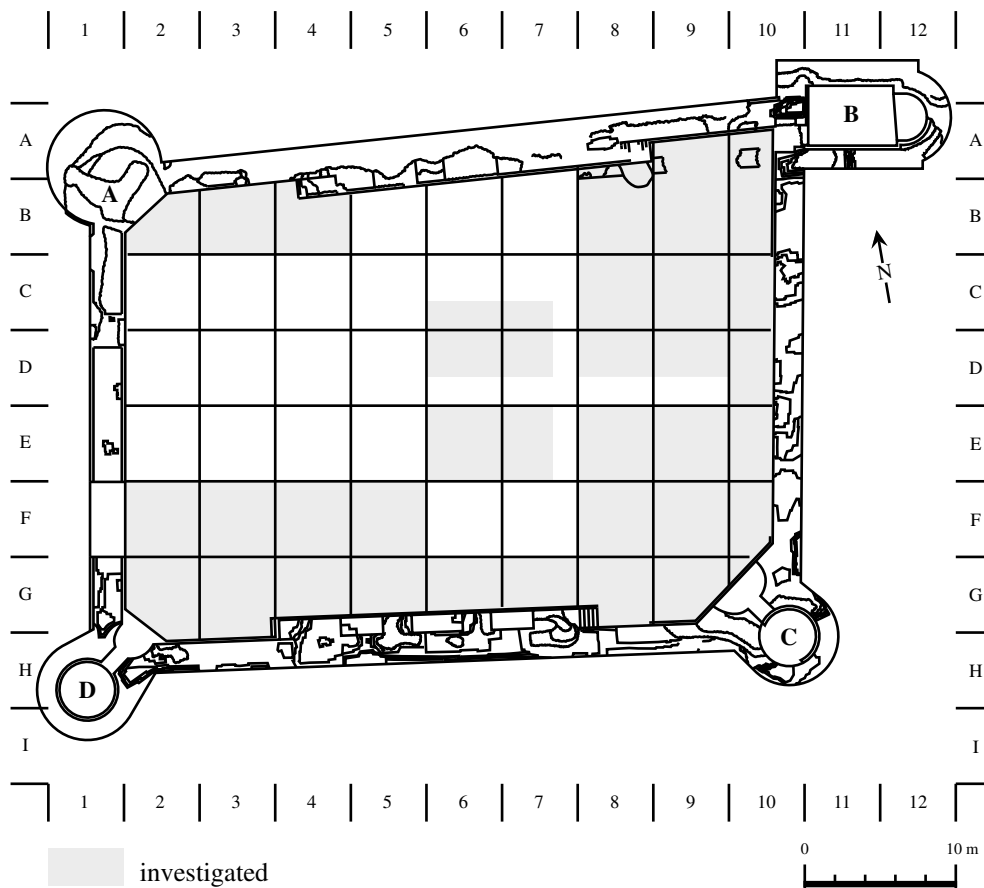
As the remains of the ramparts and towers were visible on the site before systematic investigations, the square grid encompassing the entire *castellum* was established (Fig. 6). The squares were 5 x 5 m in size

and marked 1 to 12 in the west-east direction and A to I in the north-south direction. The square grid was oriented towards the west with a deviation of 14°.

The excavations were conducted according to the cultural layers and horizons and the relative depths were measured. The relative depths were measured during first two campaigns while the absolute altitudes were used during works in 1969 and 1970 when the architectural remains and the levels of conclusion of the excavations inside the *castellum* were measured.

The portable archaeological material was selected according to the cultural layers and horizons and relative depth and square were also recorded, but without precise coordinates, and this made impossible making of precise topography of the finds and solving of some confusions because there were instances when material was incorrectly attributed to the certain horizon because of unnoticed pits, sloping of the terrain and belated discerning of the particular horizon. The material entered in the field inventory books was separated

Fig. 6. Saldum, square grid



from other collected objects. In the inventory books were entered 1250 objects, but the actual number of specimens is much greater, around 2000, because the hoards of coins and groups of objects were usually treated as one inventory number. In the field inventories are mostly fragments of pottery vessels and coins, while in the study collection were gathered also pottery fragments, nails, clamps, amorphous and indiscernible metal objects, tools, slag etc.

When the portable material is concerned, most of the metal objects were conserved. The pottery vessels were not treated and there were no attempts to join

pieces from the inventory and study collection. Also the pottery in the study collection was gathered randomly, so most of the material had been discarded already in the course of excavations, so the reconstruction of many vessels as well as more precise statistic analysis were almost impossible. The complete material from the excavations is housed in the depot of the Archaeological Museum of the Iron Gates in Kladovo. The technical documentation, including field journals, daily logs, level books, plans, photographs and diapositives, is in the possession of the Institute of Archaeology in Belgrade.

II STRATIGRAPHY

THE STRATIGRAPHIC SITUATION AT THE SITE HAS BEEN STUDIED ON THE BASIS OF THE RESULTS OF INVESTIGATIONS OF THE FORTIFICATION INTERIOR, WHILE SMALLER TRENCHES EXPLORED OUTSIDE THE FORT IN THE ASSUMED NECROPOLIS AREA AND IN THE KOZICA VALLEY, WHERE PARTITION WALLS WERE ENCOUNTERED, AND THEIR STRATIGRAPHIC SITUATIONS ARE INCLUDED IN THE GENERAL OVERVIEW ACQUIRED BY INVESTIGATION OF THE *CASTELLUM* INTERIOR

II.1. INTRODUCTORY NOTES

In the process of analyzing the stratigraphy we had at our disposal the drawings of some profiles, map of elevations, level book and field journals. These data were in some instances incomplete. The main problems were the relative levels, i.e. the depths taken particularly during the first two campaigns (1967–1968). Another problems are also profile drawings from these two years of excavation, where layers were marked with certain hatchings, but without explanation and which could have been reconstructed using the journals, but with great reservations. The levels on the drawings from the mentioned years are not clearly marked. When marking the layers we maintained the accepted nomenclature from the field journals and reports published in the volumes of *Arheološki pregled* for the years 1967–1970 but we marked the humus layer, which was not specified in the documentation, as the layer A. All the layers with the same designation are chronologically synchronous, so it is possible to make the necessary concordances.

The following sequence of layers and horizons was registered at Saldum:

layer A – humus, mostly 0.20–0.30 m thick;

horizon 1 – light burnt soil encountered within restricted area in the *castellum* and dating generally from the second half – end of the 6th century. At one location this horizon appeared directly under the humus layer like brick-paved zone but generally it is characterized by the light red burnt soil.

layer B, B1 – intensive building rubble, loose black soil (layer B) or packed gray earth with scarce rubble fragments (layer B1). These two layers should be separated. However, it is not possible at this moment as they and the accompanying material had not been separated in the course of excavations so we are going to treat it as one layer. Middle – second half of the 6th century;

horizon 2 – construction of the Early Byzantine fort. Its characteristics are mortar floor along the interior face of the rampart wall and in one of the towers, brick paving or light red burnt and sporadically packed earth in the *castellum* interior and in the other towers. Time of Justinian (527–565);

layer C – layer consists of intensely red burnt soil mixed with remains of house rubble, soot and ash. On the basis of the finds it is dated in the second half of the 4th century, more precisely in the time of Valens and Valentinian I, from AD 364 to AD 378/380. Thickness of the layer is generally around 0.30 m but at some spots the thickness was even 0.60 –1.00 m;

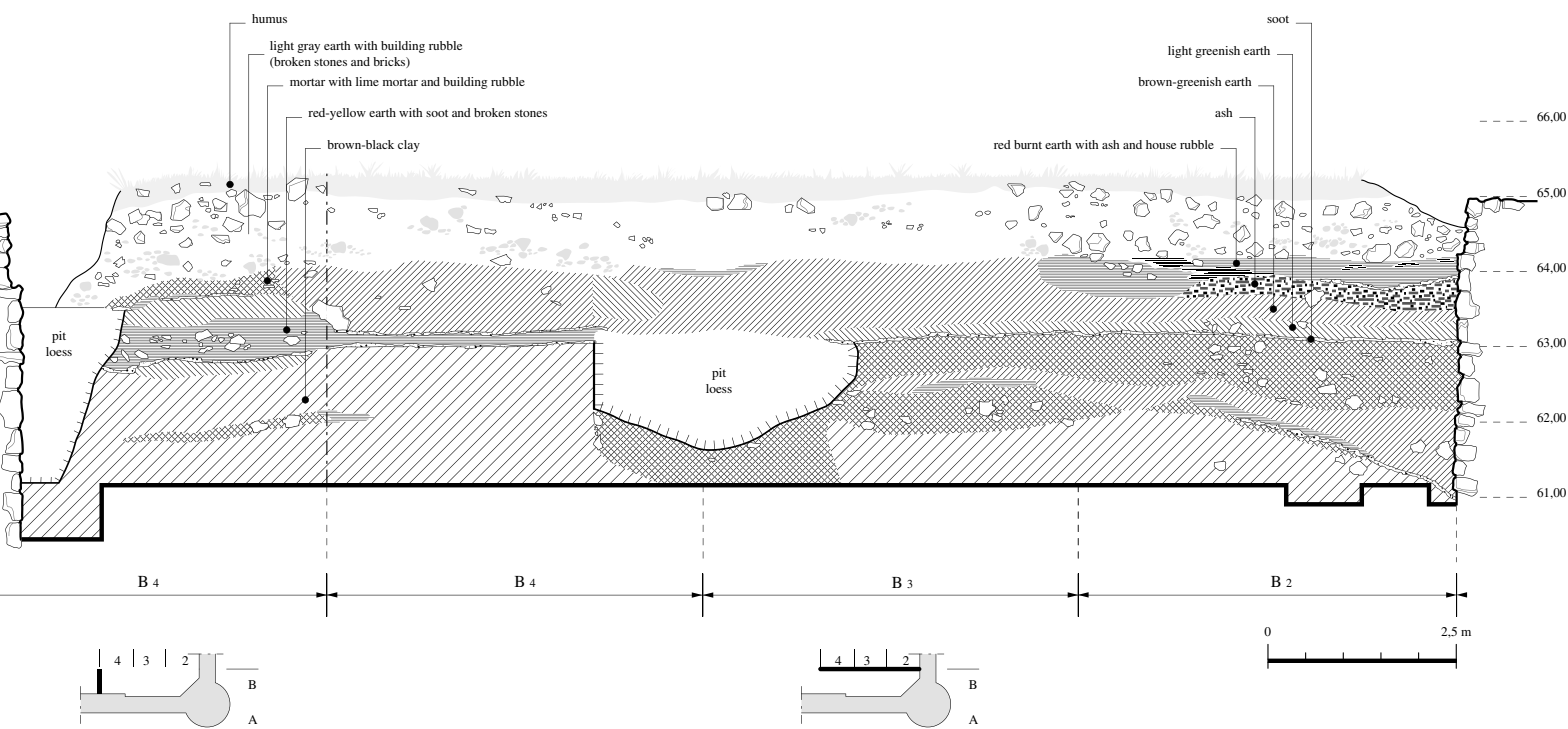


Fig. 7. Squares B2, B3, B4, east and south profile

horizon 3 – horizon of Valentinian's military settlement (with *castellum*?). All the structures according to the finds were short-lived and perished in great conflagration. The postholes, floors of rammed earth, remains of carbonized posts on the floors. AD 364–378/380;

layer D, D1 – generally olive-color loess soil in upper portions with lumps of charcoal or compact black soil with moderate quantity of rubble. Here was also possible to distinguish two layers, which had not been identified in the course of excavations. The layer dates from the middle of the 2nd to the second half of the 3rd century;

horizon 4 – stone paving and light red burnt soil. Middle – second half of the 3rd century;

layer E – green loess with small amount of mortar rubble, generally second half of the 1st – beginning of the 2nd century;

horizon 5 – light red burnt soil, second half of the 1st – beginning of the 2nd century;

layer F – green loess mixed with virgin soil, pre-historic settlement was not explored because of the underground water. Early Iron Age (Ha C);

layer G – virgin soil

II.2. SQUARES B2 B3 B4 (TRENCH 1)

The excavations in these squares in the northwestern corner of the fort started in 1967 and on that occasion the squares were marked as Trench 1, while in 1968–1970 the excavations were carried out separately in each square (Figs. 7, 8). The level of the ground prior to the excavations was between 65.37 and 65.19 m above sea level. The objective of the investigations was discerning the relationship between north and west rampart, investigation of the northwestern tower (tower A), investigation of the rampart damage visible at the site as well as establishing of the stratigraphic situation. The layers in this sector of the site are considerably disturbed due to later excavations and the Danube deposits. All the encountered layers are leaning to the internal edge of the western rampart (square B2).

The humus layer (layer A) is 0.20 m thick and sporadically mixed with building rubble. Layer 1 in this sector of the site was not registered. Building rubble was mixed with light gray earth (layer B) – layer of destruction of the Early Byzantine *castellum*. Horizon 2 is not particularly prominent as is the case also with

layer C consisting of red burnt earth with charcoal and house rubble, which appears only in square B2 and overlies the rather substantial layer of ashes 0.20 – 0.30 m thick. There are impressions of wattle preserved on some lumps of the daub. Horizon 3 is characterized by rammed earth with the remains of burnt timber structure with lumps of iron slag and amorphous iron objects. Traces of destruction were registered also in horizons 4 and 5, according to the drawing of the profile in squares B2 and B3 (Fig. 7).

In square B4 the pit of symmetrical shape tapering towards the bottom was encountered next to the rampart and 0.30 m under the sockle level. The pit was 1.20 m wide near the top and 0.5 m at the bottom and it was 2.30 m deep. Bottom of the pit is in layer of brown-black clay (layer E). The pit was filled with large quantity of mortar, lime and gravel, probably from the wall destroyed in the course of construction of this portion of the northern rampart. Upper level of the pit corresponds according to the absolute altitude to the layer C and horizon 3, but we think that this pit dates from the time of rampart construction as layer B directly overlies the pit.

In squares B3 and B4 under the layer B was encountered substantial layer of brown earth with small lumps of building rubble, pieces of mortar and bricks and on top of this in square B2 was accumulated a layer of red burnt earth with house rubble and soot (layer C). Thickness of this layer is around 1 m.

Under the layer C was a thin layer of silt of greenish color that sealed off the horizon 4, consisting of packed earth floors with the traces of soot. On the basis of the situation encountered in square B4 where a layer of red-yellow earth with soot and broken stones was registered, it is possible to discern two horizons of destruction, which were not specifically recorded in the field journals, but we assume that these destructions took place within rather short time span. In the journals was also not registered the appearance of a large pit from the horizon 4 that partially disturbed layer E (Fig. 7). The pit 1.60 m deep and 3.50 m wide and with half-elliptical bottom, was in squares B3 and B4 and was filled with loess. The absolute altitudes of the pit are 63.20 – 61.60 m.

In squares B2 B3 under horizon 4 is a layer with mortar and building rubble (layer E) and underneath is a layer of silt. This alluvium was deposited after establishing and destruction of floor in horizon 5. Horizon 5

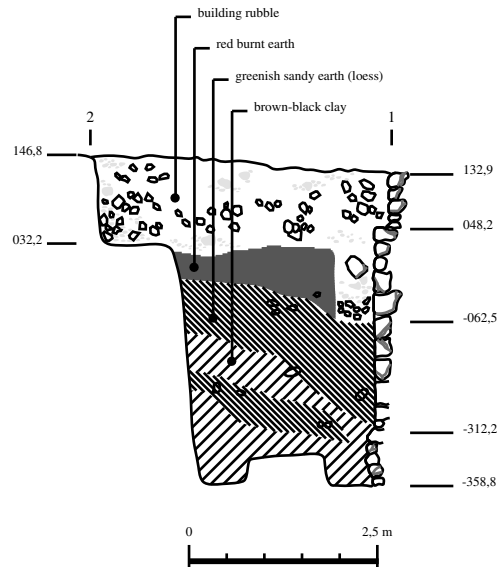


Fig. 8. Square B3, west profile

in square B2 is sloping downward towards the west and it was traversed by the Early Byzantine rampart. Floor 5 as the last, i.e. the earliest investigated horizon, lies over the layer of brown-black clay. The excavations have been concluded at the relative depth of 5.10 m (absolute level 60.50 m) because of the underground waters so all the pits had not been completely investigated.

II.3. SQUARES B8 B9 B10, C8 C9 C10, D8 D9 D10

Investigations in the northeastern section of the fort were conducted during all four campaigns in the years 1967–1970. In the first year the portions of squares B8 B9 C8 C9 comprised the Trench 2 but in the ensuing years the investigations were carried out separately within each square.

The humus layer (A) is of the average thickness of 0.20 m and underneath is the loose black earth with building rubble consisting of larger fragments of bricks and mortar (layer B). At the relative depth of 0.40 m in the Trench 2 was registered reddish burnt earth identified as horizon 1 and under it was gray hard packed earth (layer B1) on top of horizon 2. The building rubble was encountered to the relative depth of 0.90 m in square B10, while gray compact earth without rubble was registered from 0.90–1.00 m. Horizon 2 consists of mortar substructure adjacent to the edge of north and

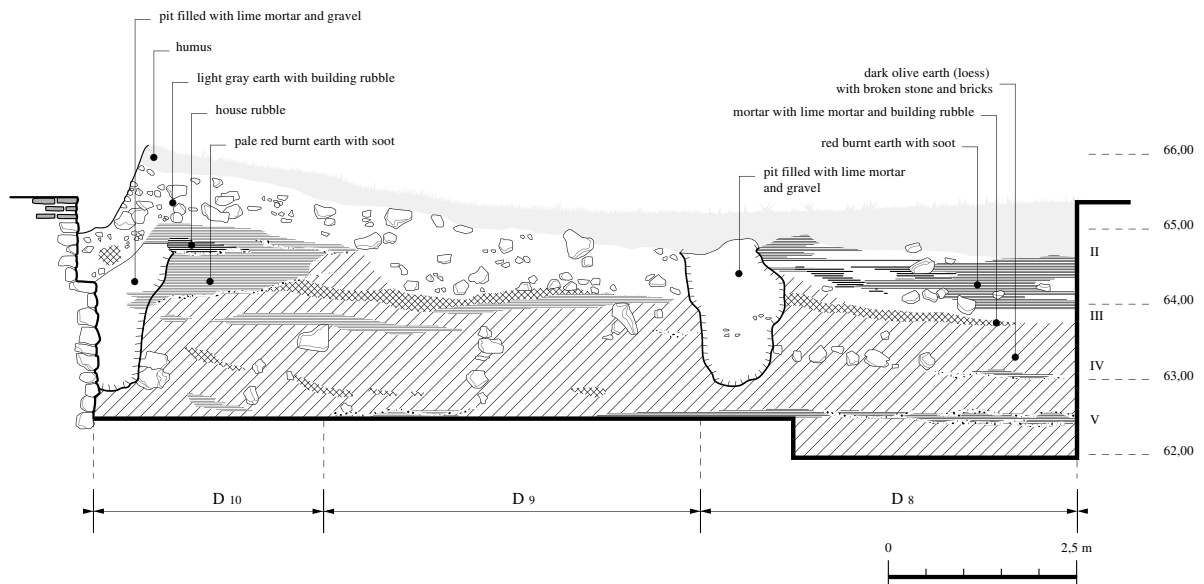


Fig. 9. Squares D8, D9, D10, north profile

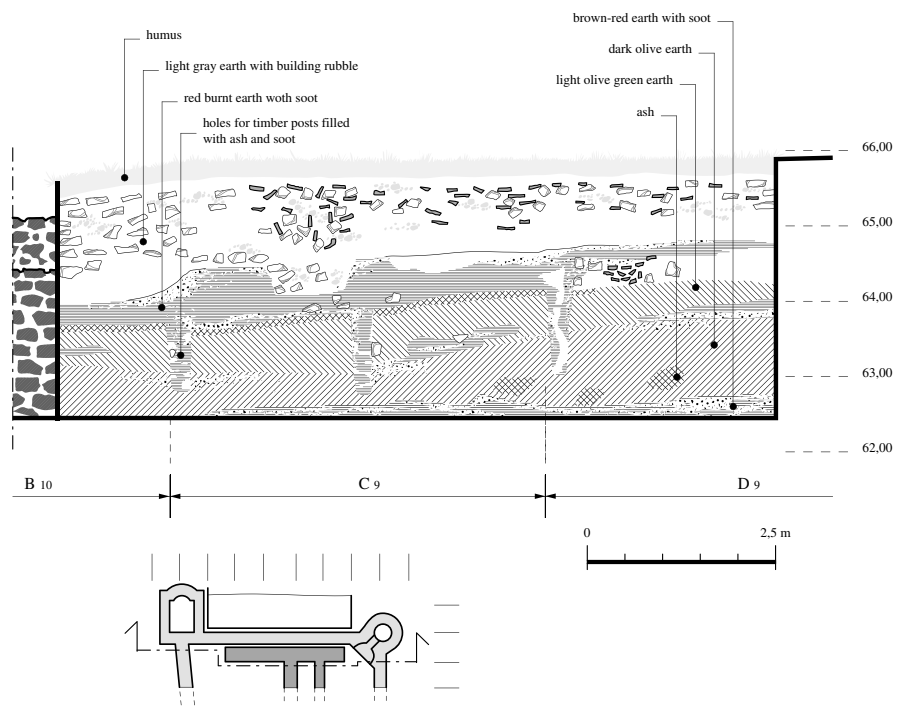


Fig. 10. Squares B10, C9, D9, east profile

east rampart and it was also encountered in the interior of the investigated squares. The absolute altitude of the preserved segment of the substructure of horizon 2 is 63.49 m. This horizon also consists of burnt earth sporadically of the sandy texture.

In squares D8 D9 D10 (Fig. 9) the pits are clearly noticeable on the profile drawings. Under the humus

layer (A) occurs the layer of light gray earth with building rubble (layer B1) and its highest level is next to the east rampart in square D10. This layer is recorded in the field journal as loose black earth with moderate amount of rubble. In this area of the site were encountered two pits immediately under the humus layer with upper level corresponding to the floor 2 while the pit

bottoms are at the level of horizon 4. One pit 1.00 wide and 2.00 m deep was adjacent to the inner face of the east rampart wall and it was filled with lime mortar and gravel. Another pit also filled with lime mortar and gravel is 7.5 meters far from the first one. These are probably the ghost walls, which bases were at the level of horizon 4. Along the western edge of the east pit the remains of house rubble were registered in the upper zone so we have the data about still another structure existing in the interior of the Saldum fort.

The layer C, about 0.50 m thick, consists of burnt earth with rather large lumps of house rubble, large pieces of carbonized timber, soot and ash that are particularly conspicuous in squares B8 C8. The hoard of iron tools was found within an area of approximately 2 x 2 meters in this section of the site. In squares C9 D9 in horizon 3 were registered within a zone 5 meters long/wide the remains of a structure with traces of holes for three timber posts at the equidistance of 2.50 m, depth of the holes was 1 meter and their diameter was 0.20 m. They penetrated the layer D and horizon 4. These posts were destroyed in a fire judging by the considerable amount of soot filling the holes. This situation was not registered in the field journal. One of the most indicative profiles for establishing the time of construction of the *castellum* at Saldum is the profile in square B10 C9 (Fig. 10) where is clearly visible that level of the socle corresponds with the horizon 2 and that horizon 3 is here 0.70 meters under the socle.

Layer D consists of packed greenish/dark olive earth (loess) mixed with broken stone, bricks, lumps of mortar and soot. According to the field journal large quantity of heaped stones without distinct structure and belonging to the horizon 4 was found at the relative depth of 1.60 m in square B9. Horizon 4 also consists of pale reddish burnt earth and soot and in squares D9 D10 (Fig. 9, 10) is registered a floor 3.40 m long and of pale reddish burnt earth up to 0.15 m thick and it occurs at the relative depth of 2.00 m, i.e. at 63.80 m above sea level.

The base of this horizon is the greenish sandy soil without rubble (layer E) while horizon 5 consists of pale red burnt earth and soot at the relative depth of 2.80 m, i.e. at 62.40 m above sea level.

In the squares B8 B9 B10 was encountered foundation trench for the rampart from the latest layer and this resulted in the mixing of the archaeological material from the layers C, D and E.

In the course of investigations of these squares was encountered an earlier wall, 1.10–1.20 m thick and made of broken stone and rather fine mortar, partially parallel to the north rampart and partially incorporated in the east rampart (Figs. 20–21).

It appeared in square at the relative depth of 2.35 m (62.00 m above sea level) meaning that base of the foundations was at 60.80 m. By comparing the available profile drawings and depths we came to the conclusion that this wall had been constructed in the time of existence of layer E and horizon 5. This structure was most probably destroyed by fire as at its crown was found the layer of earth mixed with soot and ash.

In this section of the site excavations did not reach the level of the virgin soil.

II.4. SQUARES C6 D6 C7 D7

We can discuss the stratigraphic situation in these squares only on the basis of the field journal as there are no drawings of the ground plans and profiles. These squares were investigated in 1969 and 1970 and they had not been completely explored. The absolute altitude of the terrain from which the excavations started was 65.14 m.

First layer, the humus (A) is 0.30 m thick. There were found fragments of amphorae and glazed vessels for which the investigators assume to date from the Middle Ages. Under this layer is black loose earth with sparse lumps of house rubble (layer B). The remains of the building rubble were not registered. At the depth of ca 0.70 m is the horizon 2 consisting of pale red burnt earth. Layer C consists of brown loose earth with lumps of house rubble down to the relative depth of 1.50 m where the horizon 3 with many iron nails concentrated in the squares C7D7 was registered.

Layer D consists of greenish clay with sporadic finds of broken stones. Horizon 4, which is approximately 0.10 cm thick appears at the depths 2.00–2.30 m and consists of any rather large broken stones, lumps of soot and red burnt earth. Under this horizon is the green clay without any finds at all.

II.5. SQUARES E6 E7

Squares E6 E7 (Fig. 11, 12) were excavated in 1969 and 1970 and they were explored in order to investigate

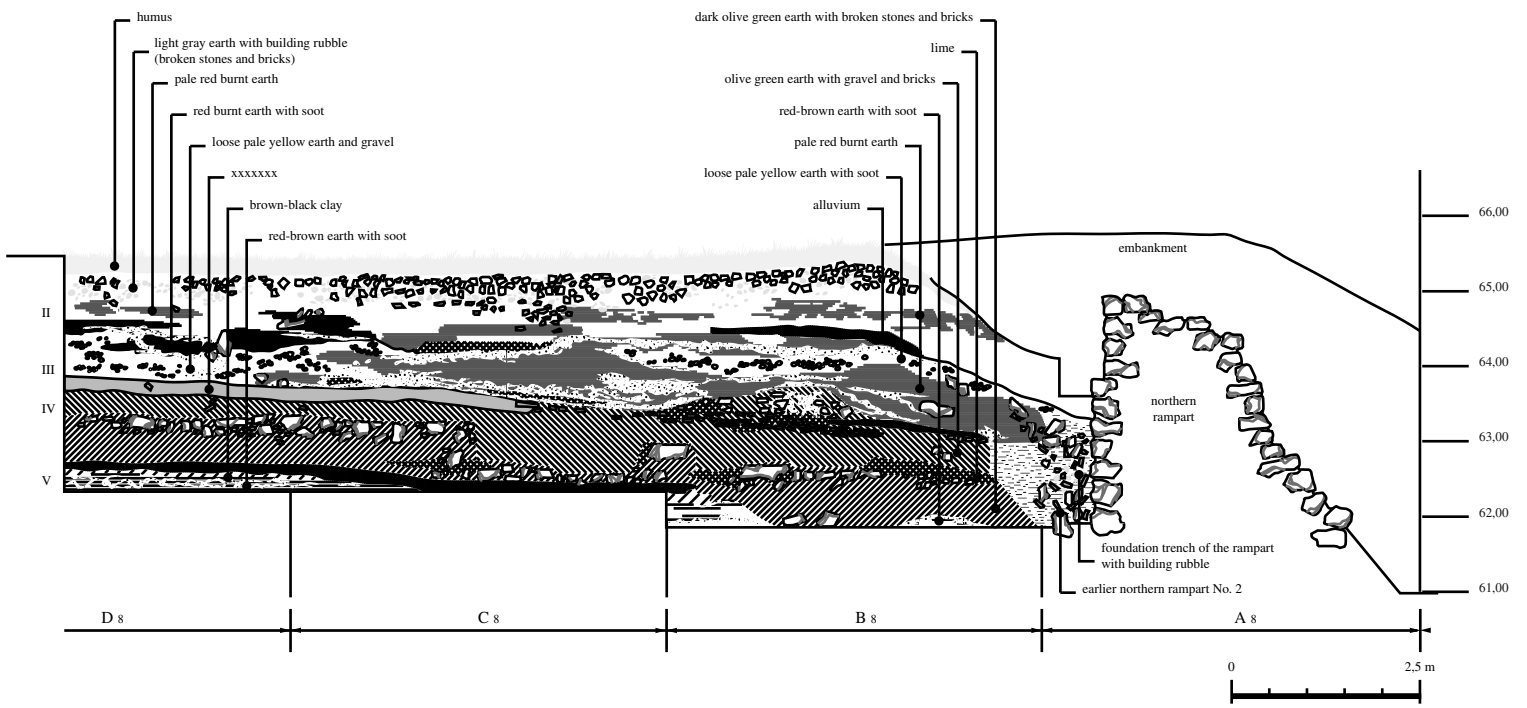


Fig. 11. Squares A8, B8, C8, D8, west profile

the layers and architecture in the central area of the fort. The altitude of the terrain prior to the excavation was at 65.25–66.27 m above sea level.

According to the drawing of the east and south profile (Fig. 11) it could be noticed that under 0.20 m thick humus layer (layer A) there is a thin layer of loose soil with building rubble consisting of broken bricks and

stones (layer B). Near the north profile of square E6 (Fig. 12) could be registered horizon 1, which is in the field journal just mentioned without more precise description so we assume that it was the horizon of pale red burnt earth. The north profile of square E6 indicates that layer of the building rubble damaged in this section segment of the layer C. Horizon 2 consists of

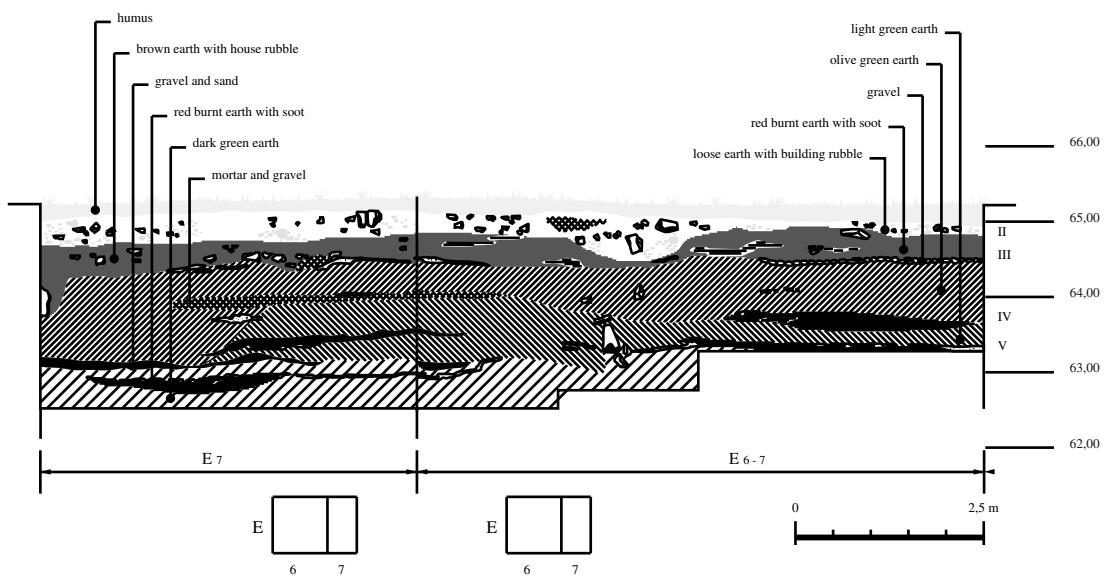


Fig. 12. Squares E6, E7, east and south profile

the pale red burnt earth that is rather uneven in these squares. Layer C consists of brown earth with house rubble, ash and soot and it is 0.30–0.50 m thick. Horizon 3 is characterized by clayey packed earth, which was red burnt and with impressions of logs and beams of different size. At the bottom of horizon 3 occurs thin layer of gravel, which is in square E7 3.00 m long and 0.05–0.10 m thick and is probably the result of structure building or the leveling of the terrain.

This horizon overlies the rather thick layer of olive-colored earth (layer D) of the average thickness of 1.20 m with scarce traces of the building rubble. Horizon 4 was established on top of the light green earth, sand and gravel, which is rather conspicuous in square E7. The remains of timber-framed structures and mortar and gravel substructure also belong to the horizon 4. According to the east profile drawing (Fig. 12) there could be identified the substructure of gravel with mortar, 4.50 m long and 0.10–0.15 m thick, with traces of timber structure destroyed by fire. At the altitude of 63.55 m there is a shallow pit 3.40 m long and 0.20 m thick layer of the reddish burnt earth. At the same level were also encountered the remains of house rubble in square E7 visible on the drawing of the north profile (Fig. 13). If these two agglomerations were the segments of the same feature this structure in that case was oriented southeast-northwest and at least 5.00 meters long. In the field journal is mentioned that number of large half-dressed and broken stones were discovered

in squares E6 E7 at the relative depth of 1.50 m but we do not have at our disposal any technical documentation to help us in possible solving the problem of attribution of the mentioned structure.

Layer E is characterized by dark green earth without building rubble. Horizon 5 is pale red burnt earth with lumps of charcoal. On the drawing of the south profile in square E6 is recorded some structure (?) 0.35 m thick and dug from the horizon 5 – possible remains of the wall?

Archaeological excavations in these squares did not reach the virgin soil.

II.6. SQUARES E8 E9 E10

The squares in the southeastern corner of the *castellum* were excavated in the period from 1968 to 1970. These excavations started from the different altitudes, in square E8 from 65.22–65.48 m; in E9 from 65.81–65.92 m.

First layer is humus (A) of an average thickness of 0.20 m that is lying over the gray earth with building rubble – layer B, in square E8 loose black soil with modest amount of rubble – B1. Horizon 2 is characterized by slightly burnt earth.

Layer C consists of red burnt earth while horizon 3 is characterized by the remains of destroyed timber structures of which are preserved large amount of carbonized posts, soot and ash as well as the lumps of burnt

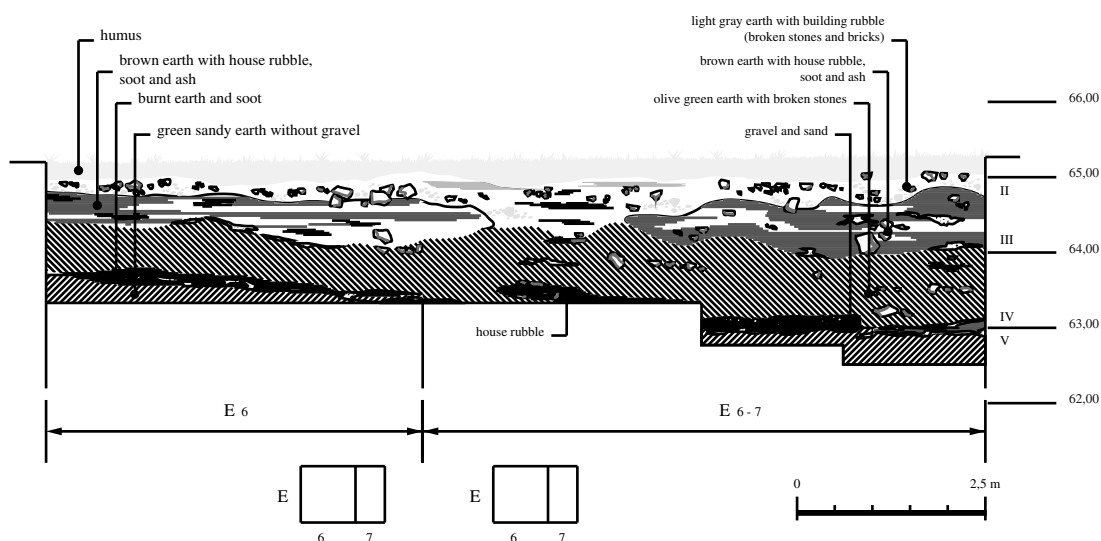


Fig. 13. Squares E6, E7, west and north profile

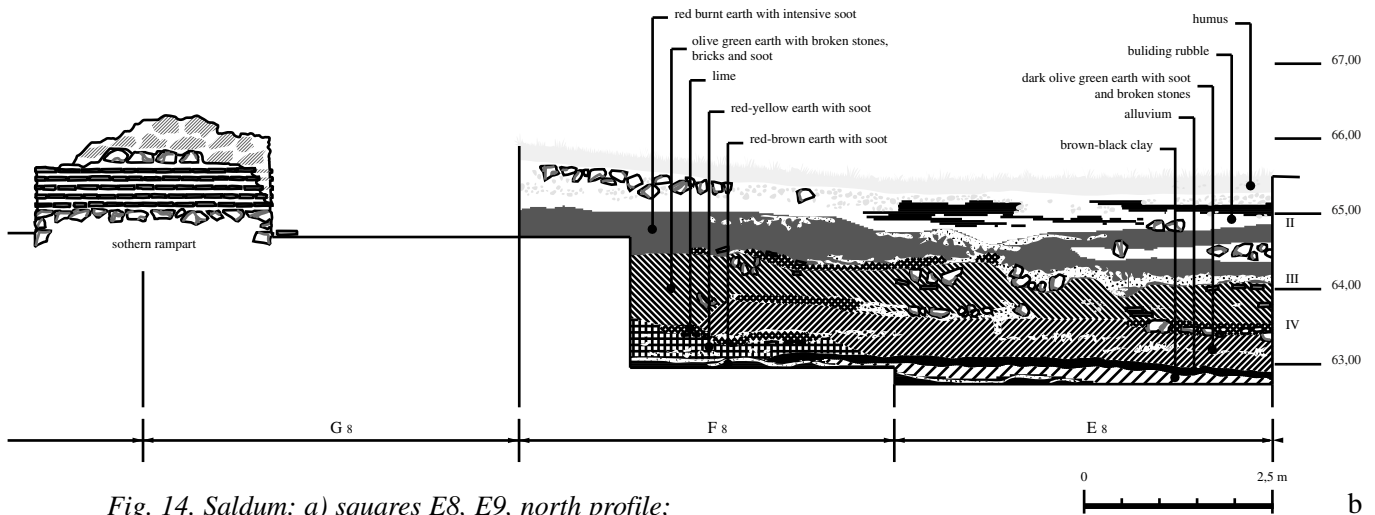
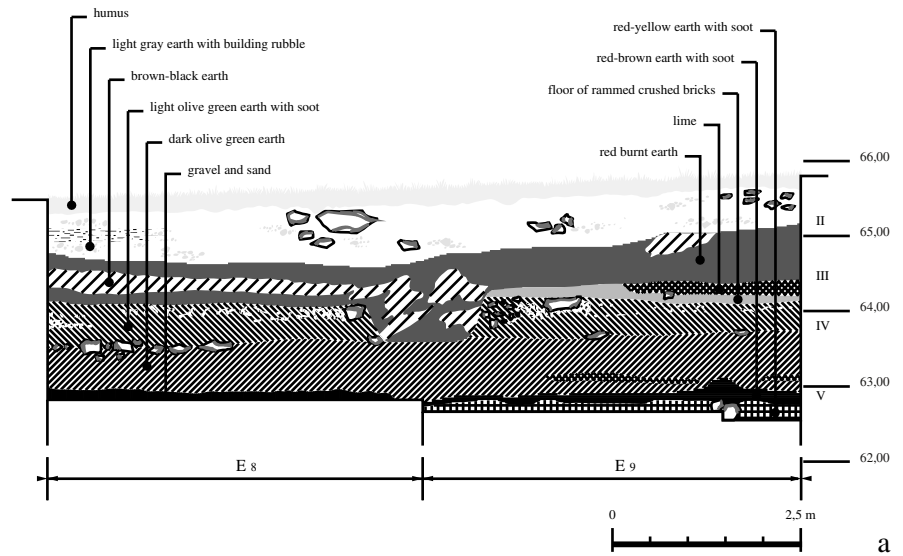
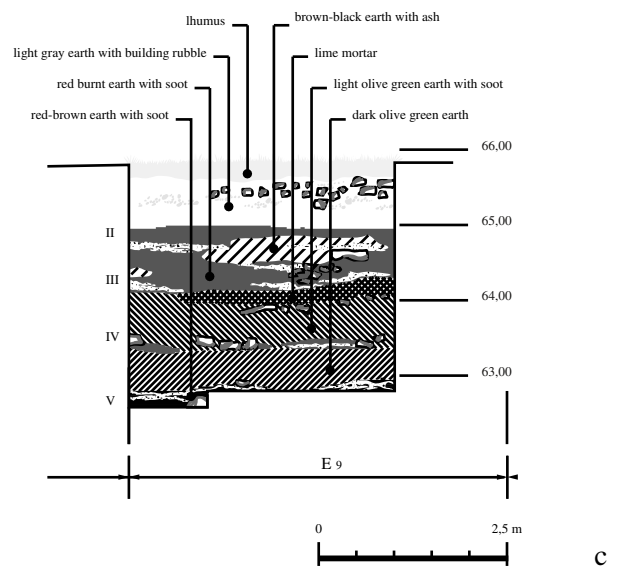


Fig. 14. Saldum: a) squares E8, E9, north profile;
 b) squares E8, F8, west profile;
 c) square E9, east profile

earth and iron slag. From this period also dates the calotte-like pit tapering towards the bottom (Fig. 14a). Its diameter at the top is 1.60 m and at the bottom 1.10 m and the depth is 0.60 m. Layer C is mixed in places with brown-red clay indicating digging down to the earliest Roman layer at Saldum (layer E) that is characterized by this type of soil.

Layer D consists of olive green earth without building rubble. Upper segment of the layer D contains the specks of soot, while the layer of lime 0.10 m thick and 4.70 m long (structure?) was encountered in the lowest zone in squares E9 E10. Horizon 4 consists of pale red burnt earth. The broken stones on the sub-



structure of gravel that are considered to be the remains of the pavement were found in squares E8 E9. Layer E and horizon 5 consists of pebbly or sandy soil of greenish color with lumps of light red burnt earth and ash. Under the horizon 5 is the brown-yellow soil, which had not been completely investigated.

II.7. SQUARES F8 F9 F10

These squares were investigated in 1968–1970 and we have used for the analysis the drawings of west profile of square F8 (Fig. 14b) and east profile of square F9 (Fig. 15)

Under the humus layer of average thickness of 0.20 m there is a layer of gray earth with intensive building rubble up to 1.00 m thick (layer B). Horizon 2 is at the same level as the entrance to the tower on the south wall but something that makes confusion in explanation of the east profile of square F9 is the fact that horizon 3 is at the same level as the socle of the *castellum*. Considering the fact that we do not have the drawing of the profile in square F10 that should interrelate the layers and architecture we can only assume that horizon 3 in square F9 is at somewhat higher level and that it descends eastwards, i.e. towards the *castellum* rampart. In the layer C was recorded rather small quantity of broken stones that is rather rare phenomenon in

this layer. The base of horizon 3 in square F9 consists of 0.15 m thick lime mortar, which was also encountered in the square E9.

The light olive green soil with pieces of charcoal and small amount of broken bricks is the characteristic of layer D. Horizon 4 is marked by the destruction of structures made of timber. Inserting of wooden architectural elements of smaller size in the period of existence of horizon 4 was registered in square F9 at three spots down to the depth of 0.30 m (Fig. 15). The wooden posts were 0.10 m thick and they were placed at a distance of 0.60 m and 0.20 m. According to the field journal there was a concentration of horizontally placed two rows of large stones next to the south profile at the level of horizon 4. The top surface of the stones was dressed so they are probably the remains of a pavement.

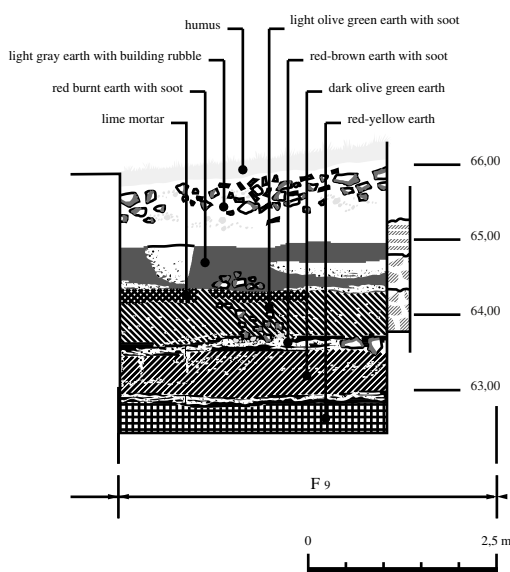
Layer E consists of dark olive earth with traces of soot. Horizon 5 is characterized by red burnt earth including the house rubble, soot and ash and it was clearly noticeable in this square and was covering rather large area. Under the horizon 5 is brown-yellow soil with fragments of the prehistoric pottery.

II.8. SQUARES G/2–7 AND F2–5

In these squares were discovered the northern face of the south rampart, the southwestern corner of the fortification and south portion of the western rampart (Fig. 16). The trench dug for the rampart wall was registered in the squares G4 G5.

The humus layer (A) is 0.20 m thick in all squares. The layer B, which was up to 1 meter thick (in F-series of squares), consists of intensive building rubble including broken stones, mortar and brick fragments. In squares F4 F5 was encountered layer B1 consisting of black loose earth with sporadic finds of building rubble and lumps of house daub. Two rather large masonry blocks, originating from the collapsed vault above the entrance to the southwestern tower (D), were found in the layer of debris in square G2 (Fig. 32). Upper portions of the collapsed rampart wall are overlying the level of charcoal and ash. At the floor level in horizon 2 were the foundations of the counterforts with interspaces paved with bricks. In the west profile of square F2 was, at the level of horizon 2, encountered the layer of intensive mortar and lime up to 0.40 m thick

Fig. 15. Square F9, east profile



(Fig. 16b). This layer with mortar was registered on the entire surface of square F3 and partially in the squares F2 and F4. In the field journal is mentioned 0.10 m thick mortar floor resting on a layer of crushed rubble consisting of small brick fragments, broken stone, lumps of mortar and pieces of the house daub and this could indicate the existence of the structure floor a platform.

The lumps of house daub and 0.05 m thick red burnt earth in squares G2 G3 are leaning against the south wall about 0.20 m below the level of the first step of the western staircase (layer C, horizon 3). Also

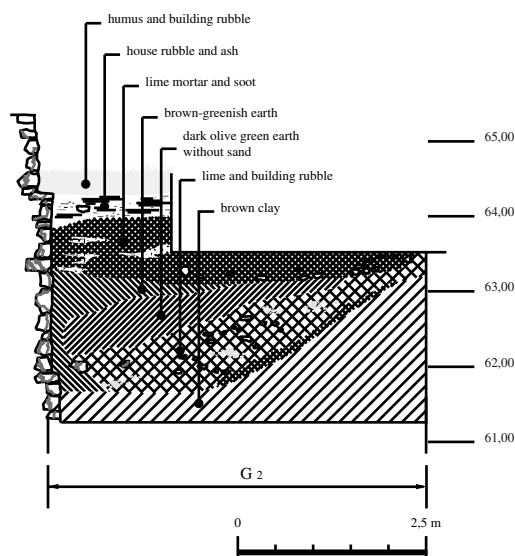
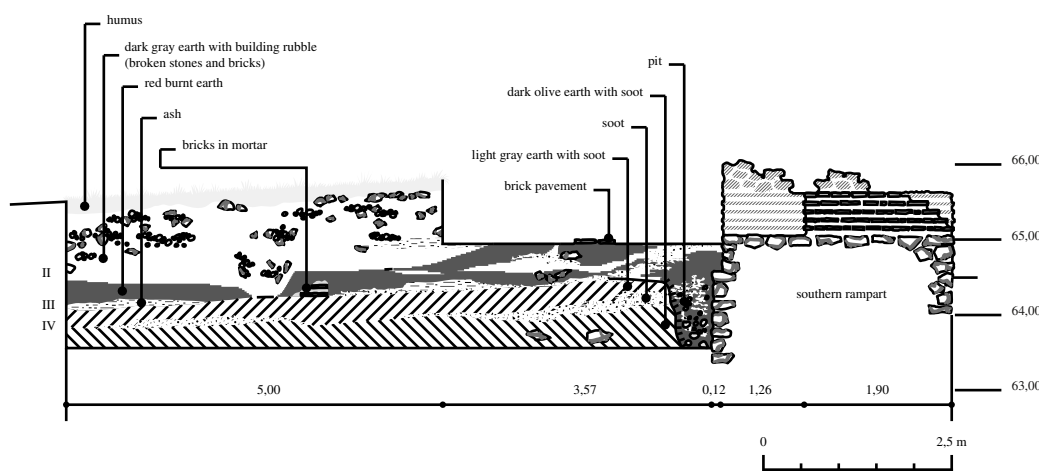
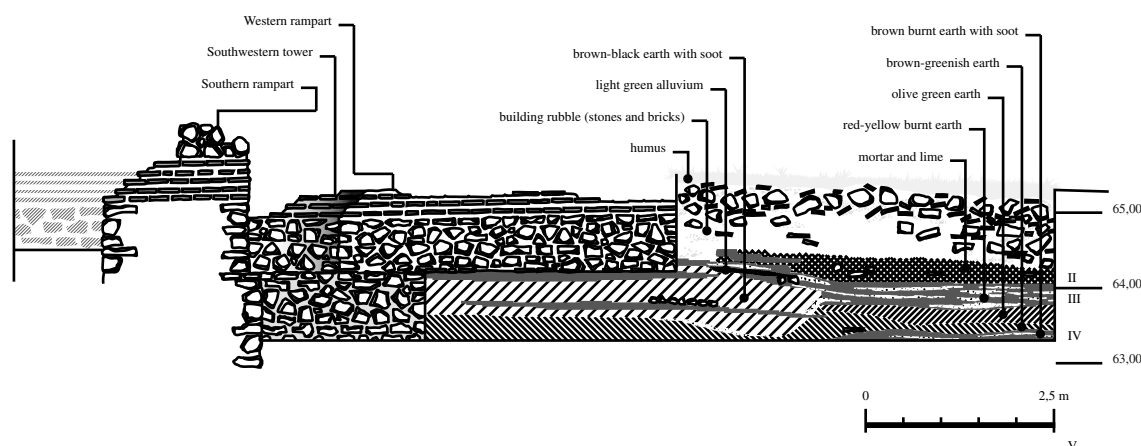


Fig. 16. Saldum: a) square G2, south profile;
 b) squares G2, F2, west profile;
 c) squares G5, F5, east profile



a

b

c

according to the field journal horizon 3 in the square G5 was touching the edge of the south rampart at about 0.20–0.30 m below the socle. According to the drawing of the east profile (Fig. 16c) the foundation trench for the south rampart wall was registered in this square as is also the case in square G4. This trench was filled with red burnt earth with soot suggesting that digging took place after accumulation of layer C. Horizon 2 is also at the socle level of the west and south rampart as could be seen on the profile drawing of squares G2 F2 (Fig. 16b) and it is the relevant information for the chronological determination of the fort construction.

Layer C and horizon 3 are here partially disturbed by later diggings, so in square F5 was encountered 0.40 m deep pit with base diameter being 0.40 m. In the undisturbed segment of layer C in this square were recorded two courses of bricks laid in mortar. The brick length is approximately 0.36 m and thickness of mortar joint is 0.08 m (possibly the remains of a pilaster?). The layers of ash 0.10 m thick and rather thick layer of soot were accumulated on top of horizon 3 in this square.

Horizon 3 lies over 0.25–0.40 m thick layer of gray earth with plenty of soot (layer D) and at the base of this horizon was recorded large amount of carbonized remains of timber structures (horizon 4). Between horizons 3 and 4 was encountered 4.70 m long and 0.08 m thick lense of reddish-yellow burnt earth (floor?). Layer D is characterized by greenish sandy earth with sporadic finds of broken stones, which were not registered in square G5. In square G2 were encountered the brick pavement and loose groups of rather large stones (horizon 4) while this horizon was better identified in squares F2 F4 as a floor made of bricks and packed red burnt earth. At certain spots were registered rather large groups of broken stones of asymmetrical disposition that authors of the excavations connected with the tent structures.

The layer E consists of greenish clay and in this layer in square G3 was encountered the end of the south rampart foundations at the relative depth of 3.00 m. Further excavations revealed brown loose earth with lumps of mortar at the relative depth of 4.20 m but it is possible that these were the pits from the latest, Early Byzantine horizon.

The investigations in this area inside the fortification did not reach the virgin soil.

II.9. SQUARES G8 G9 G10

Within these squares were investigated the corner of the east and south rampart and the segment of the south rampart. For the reconstruction of the stratigraphic situation we have at our disposal only the field journals of the excavations conducted in 1968–1970.

The floor made of symmetrically horizontally laid bricks 0.33 x 0.33 m in size and identified as horizon 1 was discovered in square G9 below the humus layer and at 0.20 m from the preserved top of the south rampart and ca 0.30 from the surface ground (average altitude 65.85 m). Underneath this horizon is the layer of the building rubble (layer B) that could be followed down to the first step on the south wall (horizon 2). The floor level of horizon 2 is characterized by the brick pavement next to the south rampart at an altitude of 64.50 m above sea level. Immediately on top of this floor was a layer of soot, ashes and burnt earth. From this level commences the foundation trench for the south rampart wall encountered in square G9. From the horizon 2 was registered the foundation trench for the south rampart that was filled with debris consisting of lumps of mortar and crashed bricks.

Layer C and horizon 3 are of the same contents as in other squares – red burnt earth with soot, layer D consists of brown loose earth with moderate amount of lumps of mortar and brick fragments. Horizon 4 was identified as stone pavement without any other information in the filed journal. In the course of excavations the remains of the earlier architecture were discovered in squares F10 G10, in a corner established by south and east rampart. They were at the relative depth of ca 2.00 m from the top preserved surface of the east rampart where the remains of ‘the calotte wall’ appeared incorporated into the slanting wall of tower C.¹ This information is unfortunately, impossible to reconstruct in the absolute altitudes, but considering that top preserved level of this earlier wall is beneath the horizon 4, it dates without doubt from the earliest phase at Saldum, i.e. layer E and horizon 5.

Layer E consists of green compact clay with broken stones. Horizon 5 is characterized by the floor of packed red burnt earth with traces of carbonized posts preserved up to the length of 0.50 m. Many freestanding

1| Field journal 29. 09. 1970.

broken stones mentioned in the field journal also belong to this horizon.

II.10. STRATIGRAPHY IN THE NORTHEASTERN TOWER (B)

Tower B is the northeastern corner tower of the fortification that was investigated in 1967–1968 but there is no complete documentation concerning this structure. In the field journal was mentioned that profiles of the layers in the apsidal area and near the tower entrance had been drawn (Fig. 17). The cross-section on Fig. 17a could be the eastern profile near the apse and cross-section at Fig. 17b in that case could represent the layers near the tower entrance looking from the west. When the layers were marked only relative depths were entered so we tried to reconstruct absolute altitudes on the basis of the known parameter – first brick course of the rampart that was at 65.00 m above sea level. We made the reconstruction of the layer sequence on the basis of the field journal and the available technical documentation. It is important to mention that almost entire northern segment of the tower was destroyed by the river erosion.

First layer 0.90 m thick (layer B) consists of collapsed stones, brick and lumps of mortar. Underneath is the layer of red burnt earth, soot and ash with the carbonized cereal grains. This layer of burnt packed

earth was mixed with the building rubble (layer B1). Horizon 2, 0.40 m thick, is characterized by lime mortar with substructure of small pebbles. Layer C and horizon 3 were not recorded in the field journal.

According to the journal the next 0.80–0.90 m thick layer was loess and underneath was hard black earth mixed with lumps of mortar (layer D). The disruption of life in this period is marked by the 0.25 m thick deposit of sterile soil without finds and after that continued the layer of compact black soil.

The earliest layer is consisting of loess with traces of charcoal lumps (layer E), lying over the virgin soil encountered at the relative depth of 4.10 m. The foundations of the tower walls were dug into the virgin soil at the relative depth of 4.86 m, i.e. at 59.90 m above sea level.

II.11. STRATIGRAPHY IN THE SOUTHEASTERN TOWER (C)

The southeastern tower of the *castellum* was designated as tower C. The wall crowns were discovered in 1967 and the interior was investigated in 1968. The relative depths had been measured from the highest fixed point on the preserved circular tower wall and according to the level book it was 66.52 m above sea level. In comparison with this point, the excavations started from the relative depth of 1.25 m.

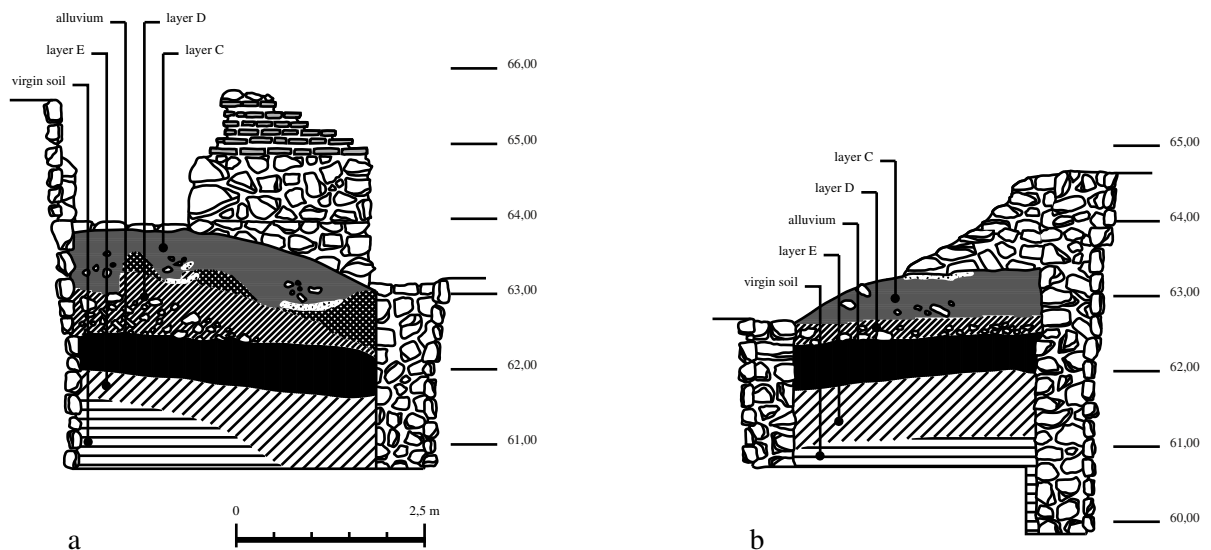


Fig. 17. Northeastern tower (B): a) profile by the apse; b) profile by the entrance

layer/horizon	relative depth	object
B – loose rubble with red burnt earth	1.25 m	Cat. nos. 563–567 weights for fishing net Cat. no. 633 bone comb
B – intensive rubble	1.25–1.35 m 0.50 m	field. inv.119/68 house daub Cat. no. 442 glass vessel Cat. no. 604 stone spindle whorl Cat. no. 605 stone spindle whorl Cat. no. 568 weight for fishing net Cat. no. 502 whetstone Cat. no. 472 spearhead Cat. no. 464 iron armor
D – without rubble	2.80–3.05 m	Cat. no. 445 glass vessel

Table 1. Objects found in tower C

First layer consists of loose soil with building rubble mixed with lumps of red burnt earth, carbonized wood and house daub. Rather small surface of red burnt earth with ashes and soot – hearth? was recorded in the central area of the tower at the relative depth of 1.25 m from the fixed point. Underneath is the layer of intensive building rubble the quantity of which decreases in the lower zones (layers B and B1).

At the relative depth of 2.40–2.77 m is the layer of greenish earth with lumps of charcoal and isolated stones (layer D). The next layer at the depth of 2.80–3.05 m was without the building rubble but there was found large amount of pottery fragments (layer D1).

Layer E at the relative depth of 3.05–3.60 m consists of loess soil without building rubble but with lumps of charcoal and mortar. Because of the excavations for the tower foundations, the layers are disturbed and material was mixed.

The virgin soil was recorded at the relative depth of 4.20 m (absolute altitude 62.60 m) and the foot of

the tower foundations was encountered at the depth of 5.40 m (60.40 m above sea level).

II.12. STRATIGRAPHY IN THE SOUTHWESTERN TOWER (D)

Tower D is the southwestern fortification tower investigated in 1969–1970. As the profile drawings are missing the reconstruction of the layer sequence was possible only on the basis of the field journal. The depths were measured from the fixed point on the tower wall but its absolute altitude is not known.

From the top preserved height of the circular tower wall excavations started in the 0.55 m thick layer of the loose black soil with moderate quantity of building rubble consisting of bricks and stones and sporadic lumps of red burnt earth, soot and ash and the layer beneath also consisted of black loose earth but without rubble. This layer is at the level of the socle

Table 2. Objects found in tower D

layer/horizon	relative depth	object
B – loose black with moderate rubble*	0.80 m	Cat. no. 448 glass vessel
B – loose black without rubble	?	Cat. no. 545 iron knife

* Note in the inventory book: finds from the level of the floor and first step next to the south rampart at the depth of 0.80 m from NW peg of square H1. Absolute altitude of this peg was not recorded in the level book.

and immediately below it (layer B). The next layer consisting of red burnt earth was extending deeper from 1.00 meter down from the top preserved level of the tower wall, i.e. 0.30 m under the socle level. The thickness of this layer (layer C) is 0.40 m. Layer D is characterized by brown loose earth with moderate quantity of building rubble. This layer is 1.30 m deep measuring from the socle level. At the depth of 2.05 m from the socle the black loose soil is mixed with lumps of mortar (layer D?). The excavations were suspended in this layer. Considering that absolute altitude of the socle is 64.11 m, the excavations were concluded at about 62.06–62.14 m.

According to the field journal this section of the site was protected from flooding as the lenses of silt and characteristic greenish loess were not registered.

II.13. TRENCHES OUTSIDE THE *CASTELLUM* RAMPART

The archaeological material from the surface² had been collected during the survey of the immediate surroundings of the *castellum* at Saldum and it was assu-

size were excavated in order to investigate the area but they did not give positive results at least when the location of the necropolis is concerned. Unfortunately, we have for our analysis only the field journal from 1969 without any other technical documentation.

TRENCH I

Trench I (6 x 3 m) oriented in the east-west direction is situated about 50 meters to the southwest of the fortification. First layer consists of 0.40 m thick humus, which was mixed with river deposit in the lower zone. First cultural layer consists of brown loose soil mixed with fragmented bricks in the upper zone, at the relative depth of 0.40–0.90 m, and broken stone in the lower zone down to the relative depth of 1.35 m. The horizon of brick pavement (traces of floor?) was registered in the north, south and west profile of the trench at the relative level of 0.67 m, but it had not been investigated in detail. Next cultural layer consists of brown-black earth mixed with small amount of stones and rather large quantity of the prehistoric pottery. This layer extended to the depth of 2.09 m, where commenced the layer of brown-yellow soil without finds. The virgin soil was registered at the depth of 2.59 m.

layer/horizon	relative depth	object
brown loose soil	0.40–0.90 m	Cat. no. 547 iron knife Cat. no. 258 pot Cat. no. 264 pot Cat. no. 406 lamp
from excavated earth		Cat. no. 680 bronze coin, Licinius

Table 3. Objects found in trench I

med on the basis of the configuration of the terrain that necropolis could be expected on the gentle slope to the north of the road, which before flooding of Saldum was leading to Dobra (Fig. 5). The excavations at this location were recorded in the field documentation under the caption ‘Necropolis’. Two trenches of rather small

TRENCH II

Trench II (3 x 1.5 m) was at the Danube bank at about 100 meters to the west of the fortification. First layer consists of scree and brown-yellow compact earth with the prehistoric pottery to the depth of 1.10 m and at that level the excavations were discontinued.

2| Cf. page 10, note 4, in this volume.

III ARCHITECTURE

THE DATA ABOUT THE EARLIEST ARCHITECTURAL REMAINS AT SILDUM ARE RATHER SCARCE AND WE ALREADY MENTIONED THEM IN THE CHAPTER ON STRATIGRAPHY, SO WE ARE ONLY GOING TO SUMMARIZE THESE DATA HERE.

III.1. EARLIER ARCHITECTURE

The earliest Roman layer E, dating from the second half of the 1st – first half of the 2nd century, contains sporadic remains of the building rubble. In square G9 were registered loose broken stones with the remains of the burnt wooden architecture (Fig. 18). Constructing of timber structures with floors of packed earth is characteristic of this period, i.e. horizon 5 as it was confirmed in the square F8.

The remains of the earliest stone architecture also date from this period (Figs. 19, 20). It concerns the corner of the north and east walls of the fortification (?), that were partially incorporated in the wall mass of the Early Byzantine *castellum*. The walls had been built of the rubble stone and rather fine lime mortar. The thickness of the walls is 1.10–1.30 m, the preserved length of the north wall is 29.00 meters while only 2.50 meters of the east wall were preserved. The foot of the wall foundations is at 60.80 m and the highest preserved point is at 62.00 m. This structure was destroyed by fire, as it could be concluded on the basis of the layer of earth mixed with soot and ash found at its crown, which had not been removed in the course of construction of the Early Byzantine *castellum*.

By comparing the level of the walls of this earlier fortification (?) with stratigraphic situation at the site, it could be concluded that these walls had been in use also in the subsequent period of life at Saldum, i.e.

during the 2nd–3rd century. From this period are preserved the remains of wooden and stone architecture that were not clearly defined during archaeological excavations. The zones of pavement consisting of the horizontally laid broken stones were found in squares E8 and F9, but there are no data about their size and the dimension of the paved area. The features, i.e. zones 0.10 m thick with mortar floors and substructure of pebbles were recorded in squares E6 E7, where their length was 4.50 m and in squares E9 E10, where their length was 4.70 m and they also yielded many portable finds. The traces of the burnt wooden structure were also recorded besides these floors. The remains of a possible 3.40 m long structure were also encountered in the eastern sector of the investigated zone within the *castellum*. The floors of packed earth along with wooden architecture were registered in squares B2 B3 B4. The freestanding broken stones in squares F2 and G4 authors of the investigations connected with the construction of tent-like structures, similar to those found at *castellum* at Boljetin in its phase II.¹

It was possible to reconstruct at Boljetin about seven-eight rows of seven to ten tents 9 x 5 m and 6 x 6 m in size with symmetrically arranged broken stones, which supported the leather structure. The floor was made of packed earth with substructure of pebbles. The

1| Lj. Zotović, Boljetin (Smorna), rimski i ranovizantijski logor, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 221.

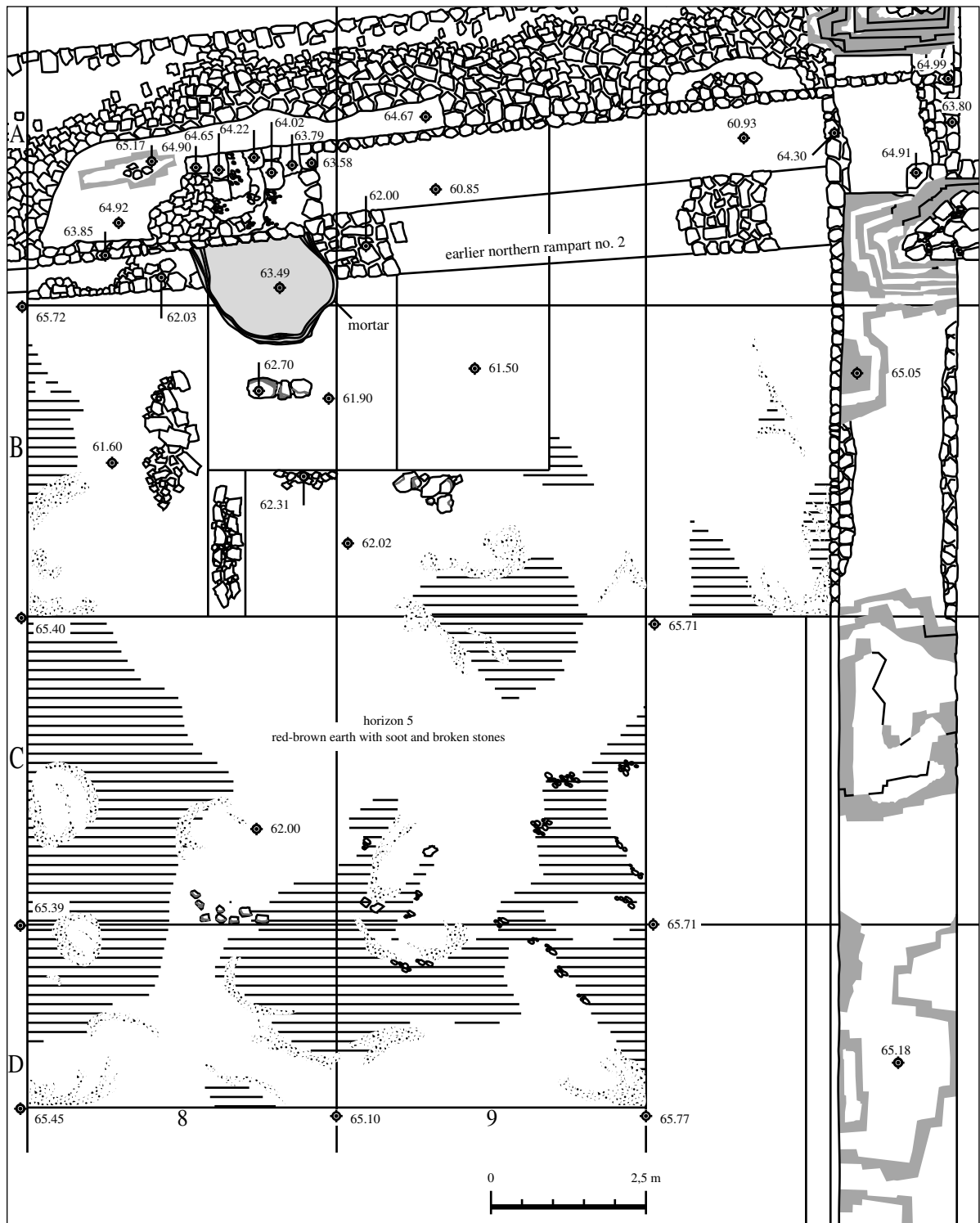


Fig. 18. Northeastern corner of castellum, floor level, horizon 5

circular hearths were in the central area of the structures. It is probable that the structures at Saldum were similar but unfortunately we do not have a single ground plan explored in detail and drawn to support our assumption.

Its final rebuilding in this period Saldum experienced in the time of Aurelian / Probus, when certain building activities took place at this site, judging by the find of a brick with the stamp of *praepositus Hermo-*

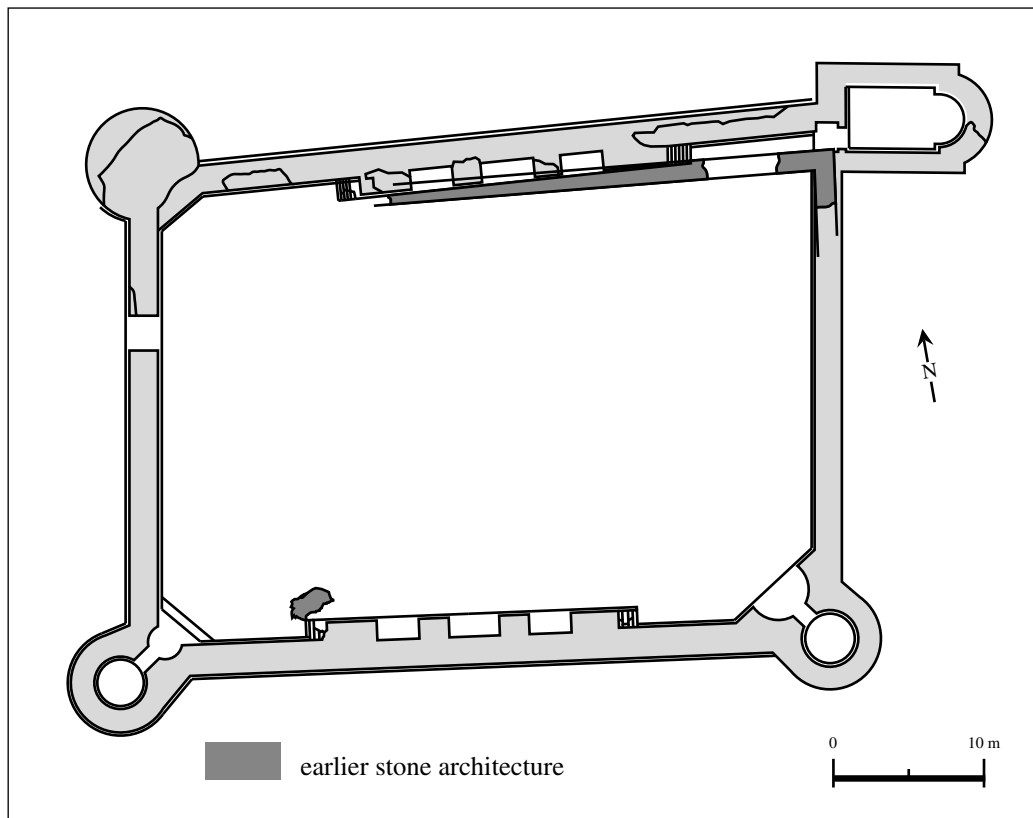


Fig. 19. Plan of Early Byzantine castellum with earlier stone architecture

genes. We are inclined to connect horizon 4 at Saldum with this period.

The burnt wooden structures (posts, logs, wattle) and floors of packed earth are characteristic of the habitation horizons from the time of Valens and Valentinian (364–378/380) (horizon 3). On the basis of the portable finds certain areas could be identified as residential or used for workshops and storehouses. The storehouses and workshops were situated in the area of squares E8 E9 F9 with zones between them covered with pebbles (square E7). Large quantity of nails with the burnt wooden architectural elements clearly indicates the existence of one structure in squares C7 D7. The bricks for the floor pavement in square F9 were the reused bricks from the earlier architecture. Thus could be explained the find of the brick with the stamp of *praepositus Hermogenes* from the preceding layer (layer D, horizon 4).

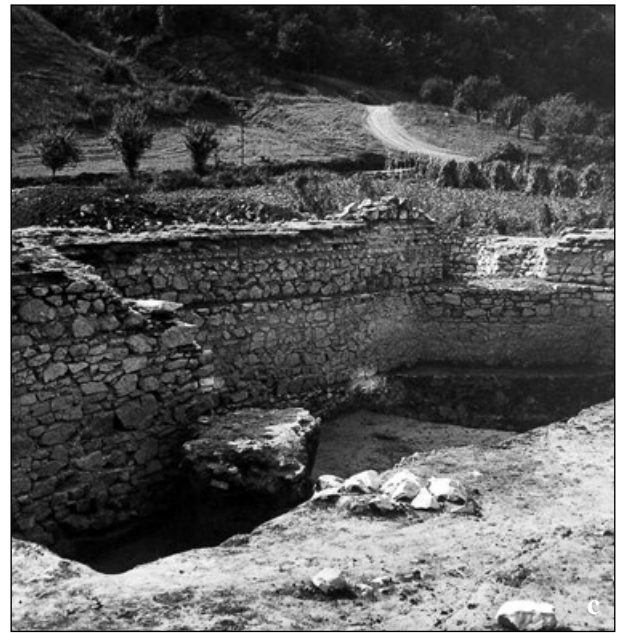
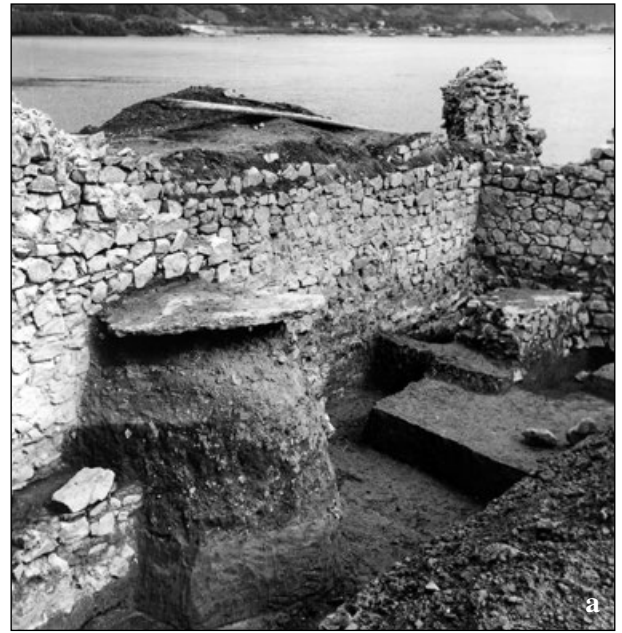
We do not have the data about the existence and character of the fortification from this period. It is possible that military settlement of the open type or the settlement with wooden palisade, which was destroyed by

fire, existed at Saldum in the time of Valens and Valentinian. It is also possible that newly arrived soldiers and their families used the ramparts of the earlier fortification, but only as perimeter for construction of the new settlement as we would like to emphasize that in the layer established on top of the horizon 3 (layer C), there were not found broken stones and remains of building rubble, which should be expected there, because the settlement was destroyed and burned down, but the layer consisted almost exclusively of the remains of burnt wooden structures and house daub.

The settlement of *limitanei* at Saldum in the time of Valentinian (364–378/380) could be compared according to its structure with the settlements of Sîntana de Mureş–Chernyahov culture, that are rather well and thoroughly analyzed and that could be used as a model how this settlement could look like at that time considering the architecture and spatial organization disregarding the portable finds, which suggest the presence of the Roman population (Romaioi).

The settlements of Sîntana de Mureş–Chernyahov culture were established, as a rule, on the gentle slopes

Fig. 20. Earlier architecture:
 a) wall in northeastern corner and along the northern castellum rampart, from the west (Photo documentation of the Institute of Archaeology, Belgrade);
 b) wall along the northern castellum rampart, from the east (Photo documentation of the Institute of Archaeology, Belgrade);
 c) wall remains in south section of castellum, from the northeast (P. Petrović, 1984, T. II, 2)



and were covering an area 0.10–0.20 km wide and up to 2 km long. The most frequent are the small settlements like the settlement at Saldum comprising an area of up to 2.4 ha and 38.1% of the settlements in the home area were of the similar size.² Comparing the thickness of the cultural layer at Saldum with the settlements of the Chernyahov culture Saldum could be included in the most numerous group of settlements with cultural layer of medium thickness, i.e. between 0.30 and 0.60 m and even 47.1% of the settlements of this culture are of this character.³

When types of the houses are concerned, there were registered the houses dug into the ground, semi-dug houses, houses of timber and daub and houses of stone. At Saldum we could speak about the above-ground houses of timber and daub and eventually of

2| R. Šiškin, Zur Siedlungsarchäologie der Černjachov-Kultur, in: *Die Sîntana de Mureş-Černjachov-Kultur*. Akten des Internationalen Kolloquiums in Caputh vom 20. bis 24. Oktober 1995, Hrsg. G. G. Gomolka-Fuchs, Bonn 1999, 87.

3| *Ibid.*, 88.

the semi-dug dwellings. The semi-dug dwellings were dug into the ground to the depth of 0.40–1.00 m with outer walls made of wattle and daub, rarely of wooden posts.⁴ These houses are mostly of rectangular plan enclosing an area of 8–17 square meters. The above-ground houses of wattle and daub were also mostly of rectangular plan with one or two rooms and covering an area of 10–50 square meters. The houses of the *limitanei* at Čezava–Novae from the phase VI (middle – second half of the 4th century)⁵ could be the model houses for those assumed to have been used at Valentinian's Saldum.

III.2. ARCHITECTURE OF THE LATER FORTIFICATION

The fortification at Saldum was built on a plan of asymmetrical trapeze with longer sides parallel to the Danube and internal dimensions were 43.50 x 31.20 m. According to its total area of 0.14 ha it is classified as smaller fortification for stationing the segments of the cohorts, auxiliary troops or *numera*.⁶ In the *castellum* construction was used the module of five Byzantine feet, thus making the ratio of 139:100 feet, i.e. 28:10 modules.⁷ Four towers were erected at the corners, three of them were circular while the fourth, in the northeast, was rectangular with an apse in the eastern wall. On the north and south rampart were the staircases leading to the *chemin-de-ronde* resting on the counterforts. The entrance gate, 2.17 wide, was encountered in the western wall closer to the northwestern tower. The thickness of the rampart is 1.90 m and with a ledge in the socle zone it is 2.20 m and including the *chemin-de-ronde* total thickness of the walls is 3.20 meters. The rampart and towers were built of rubble stone and pebbles laid in the lime mortar. Mostly the rubble stone was used, while the half-dressed stone was used in the lower zones mostly for the funnel-shaped extensions at the tower gates. The bricks laid in five courses were used as leveling layer and also for construction of counterforts, vaults over the tower gates and for floor pavement. The foundation trenches were dug into the virgin soil at the depth of about 3.50 m. The remains of the earlier walls were sporadically reused in the course of construction of the north and east rampart. They were incorporated into the new wall mass, but they had not been completely cleaned

from the deposits of earth and soot covering them. Along the fortification walls, where the counterforts were erected, there was a brick pavement or floor made of rather thick layer of mortar.

NORTHERN RAMPART

The northern rampart is parallel with the Danube (Fig. 21) and as a result of the river erosion most of its outer face is missing. It was concluded before the excavations that this rampart had been damaged and the greatest damage was next to the northwestern tower (A), where 4.00 meters of the wall are missing. The foot of the rampart foundations was not investigated.

The length of the northern rampart between the internal connection of the rampart with the northwestern and northeastern tower is 40.00 m and 41.00 m on the outside. The rampart is 1.90 m thick with the 0.15 m thick foundation ledge, while the total thickness of the rampart with the *chemin-de-ronde* structure 3.20 m. The rampart terminates symmetrically at the eastern end making thus the western border of the tower B while it is slanting at the western end thus making the ground for the anteport of the northwestern tower A.

This rampart was built of gray and light gray rubble stone with lime mortar and plenty of pebbles. The bricks were also used in the upper leveling layers near the exit to the *chemin-de-ronde*. In the course of investigation of the eastern section of the northern rampart was discovered the above mentioned earlier rampart, which was partially parallel to it and partially incorporated in its wall mass (Figs. 19, 20). Because of that there are certain differences in the building method in the lower and upper zones resulting in distinguishing four different zones: first zone, above the socle level is characterized by building with light gray stone and

4| B. Magomedov, Siedlungen der Černjachov–Sintana–Kultur, in: *Die Sintana de Mureș–Černjachov–Kultur*. Akten des Internationalen Kolloquiums in Caputh vom 20. bis 24. Oktober 1995, Hrsg. G. Gomolka-Fuchs, Bonn 1999, 70.

5| M. Vasić, Čezava – Castrum Novae, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 102.

6| P. Petrović, M. Vasić, The Roman frontier in Upper Moesia: archaeological investigations in the Iron Gate area – main results, in: *Roman Limes on the Middle and Lower Danube*, Belgrade 1996, 18.

7| G. Milošević, Modular analysis of Late Roman and Early Byzantine fortifications in the Iron Gate area, in: *Roman Limes on the Middle and Lower Danube*, Belgrade 1996, 252, T. II.

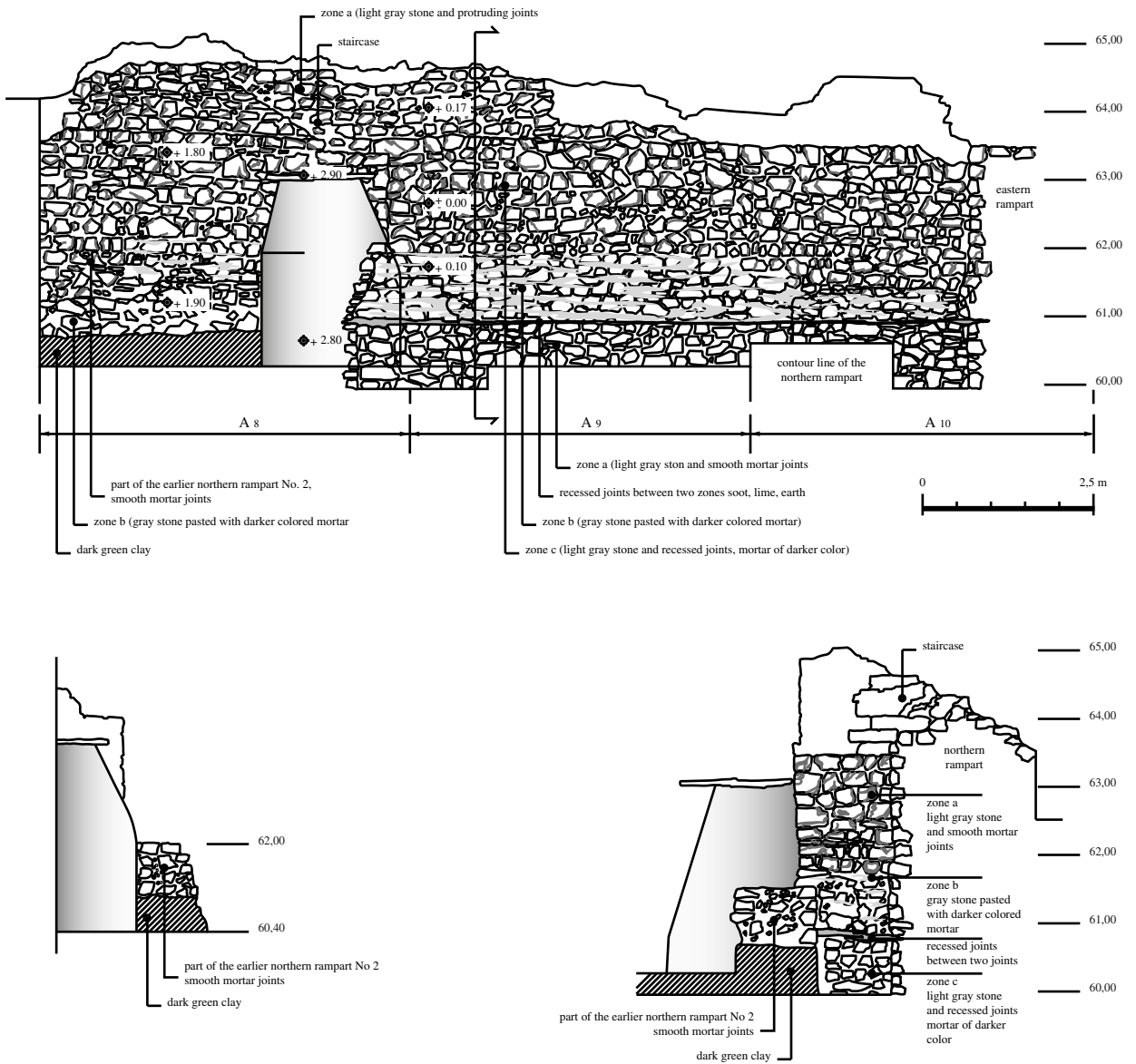


Fig. 21. Northern rampart, elevation

protruding joints, second zone is characterized also by light gray stone, but the joints were recessed and the mortar was of darker color, third zone consists of gray stone with rather thin layers of darker colored mortar and the fourth and lowest zone is characterized by light stones and smooth mortar joints. Third zone corresponds to the level of mentioned earlier rampart and its incorporation into a new wall mass.

At four spots on the inner side of the rampart were constructed the counter-forts (1.30 m thick), which supported the staircase structure. Two internal ones are

1.80 m long and outer counter-forts are 5.00 m long (west one) and the east one 5.40 meters.

STAIRCASE ON THE NORTH WALL

The stone staircase of total length of 22 meters that leading to the chemin-de-ronde from the east and west side was constructed at the same time as the rampart (Figs. 22, 23a). The slope of the staircase on the east side is 36° in relation to the mortar floor while the slope on the western side is 44°. Seven and six steps respectively are preserved at each side. The width of

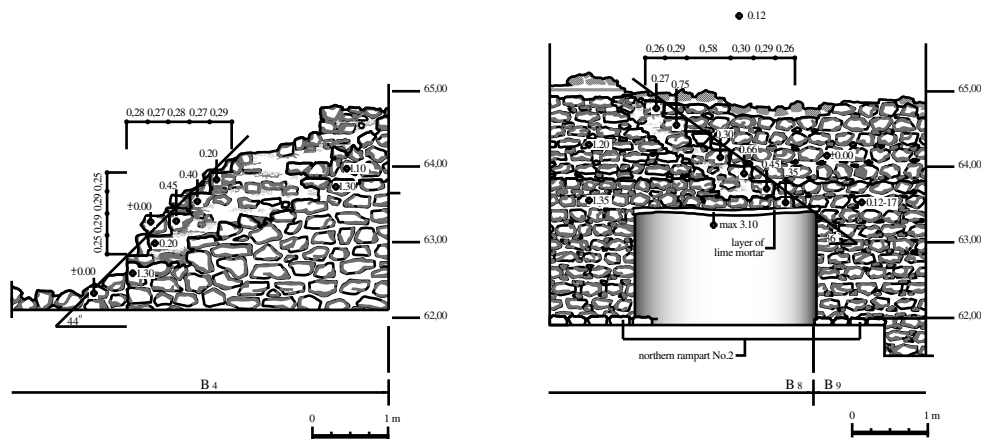


Fig. 22. Staircase on the northern rampart

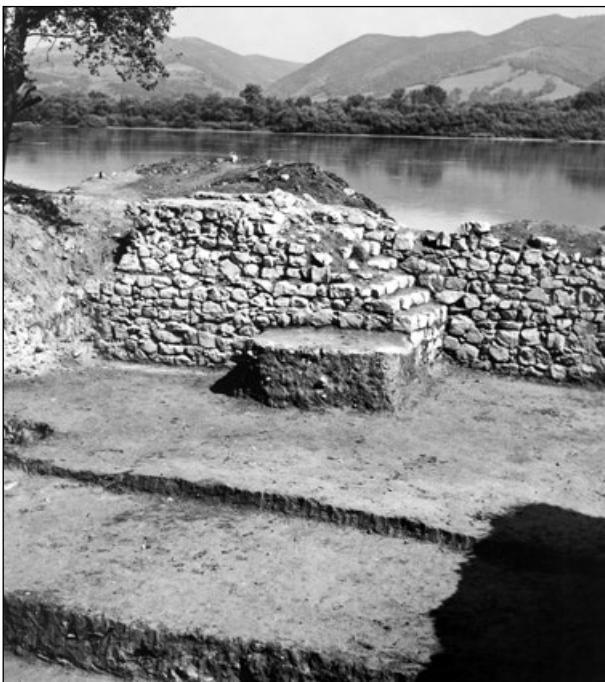
the steps is 1.30 m, height 0.20 and the width of tread is 0.25–0.30 m. They were built of the rubble stone laid in the lime mortar and they had polished edges.

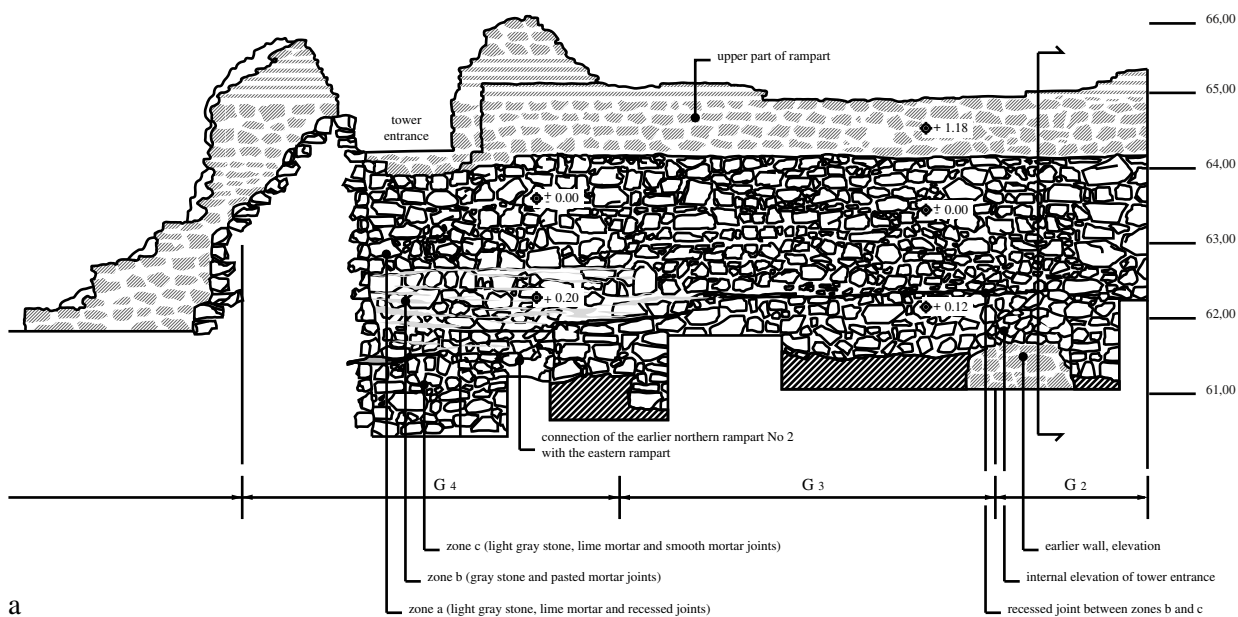
EASTERN RAMPART

The eastern rampart extends between towers B and C and it is 27.40 m long on the outside and 26.40 m on the inside. The socle level is at 64.15 m. It had been constructed at the same time as other ramparts, it is 1.90 m thick and the socle ledge is 0.15–0.20 m. It is

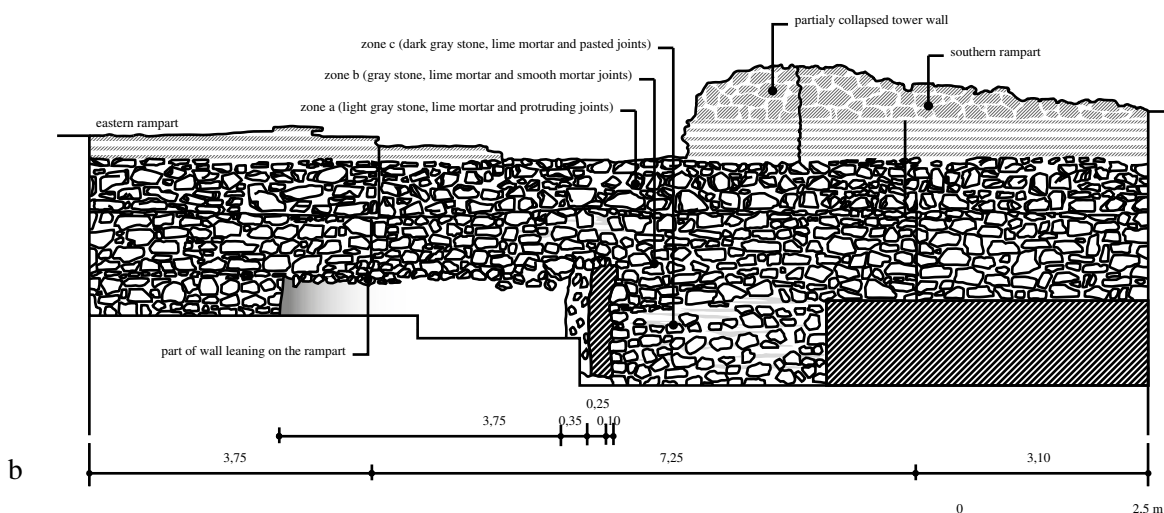
preserved in its complete length up to leveling layer of five courses of brick (Fig. 24a, b). The ratio of the thickness of the bricks and mortar layer is 5.0 : 6.5 cm. The rampart ends regularly at the junction with the north-eastern tower B, whose south wall extends eastwards at the right angle. At the junction with the southeastern tower C, the rampart expands at an angle on the inside thus making anteport for this tower. In the north segment of the rampart were encountered the 1.30 m thick remains of the earlier rampart that were incorporated

Fig. 23. Western staircase: a) on the northern rampart (P. Petrović, 1984, T. III, 2);
b) on the southern rampart (Photo documentation of the Institute of Archaeology, Belgrade)

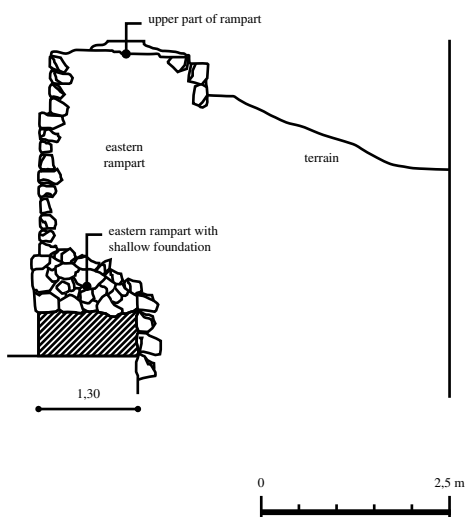




a



b



c

Fig. 24. Saldum: a) eastern rampart, elevation; b) corner of eastern and southern rampart, elevation; c) eastern rampart, cross section

in the mass wall so the rampart foundations were not so deep in these sectors. In the course of *castellum* construction the earlier rampart had not been thoroughly cleaned from the layer of earth with soot that accumulated on its crown.

In the zones above the socle the rampart had been carefully built of half-dressed stone with 0.08 m thick mortar joints, while the lower zones were constructed less carefully of the light stone with recessed joints. The river pebbles were added to the mortar as aggre-

gate. In the zone of the earlier rampart was registered gray stone with more compact mortar backfill of darker color while in the lowest zone was used light stone with polished joints.

SOUTHERN RAMPART

The southern rampart extends between towers C and D and its total length is 38.50 m on the outside and 37.00 m on the inside (Figs. 24b, 25). The level of the socle is at 64.20 m and the highest preserved point of the rampart is at 66.32 m.

It had been constructed of rubble stone and white lime mortar with lot of river pebbles. Internal and external wall face was made of half-dressed stone with flat joints made of rather fine lime mortar with crashed bricks. The leveling layer consists of five courses of bricks alternating with layers of mortar and the ration is 5.0 : 6.5 cm. Three zones of building could be also distinguished on this rampart. Above the socle is light gray stone with protruding joint, the joint below is polished while in the lowest zones where the remains of the earlier architecture were also encountered the stone was covered with mortar.

On the inside of the rampart is a structure with the staircase and supporters of the chemin-de-ronde. The length of the structure is 22.00 m, width is 1.30 m and it has four counterforts. The dimensions of two central counterforts are 1.90 x 1.30 m while the size of the

counterfort nearest to the tower D is 4.80 x 1.25 m and the one nearest to the tower C is 4.40 x 1.25 m. The distance between the counterforts is 2.80 and 3.40 m.

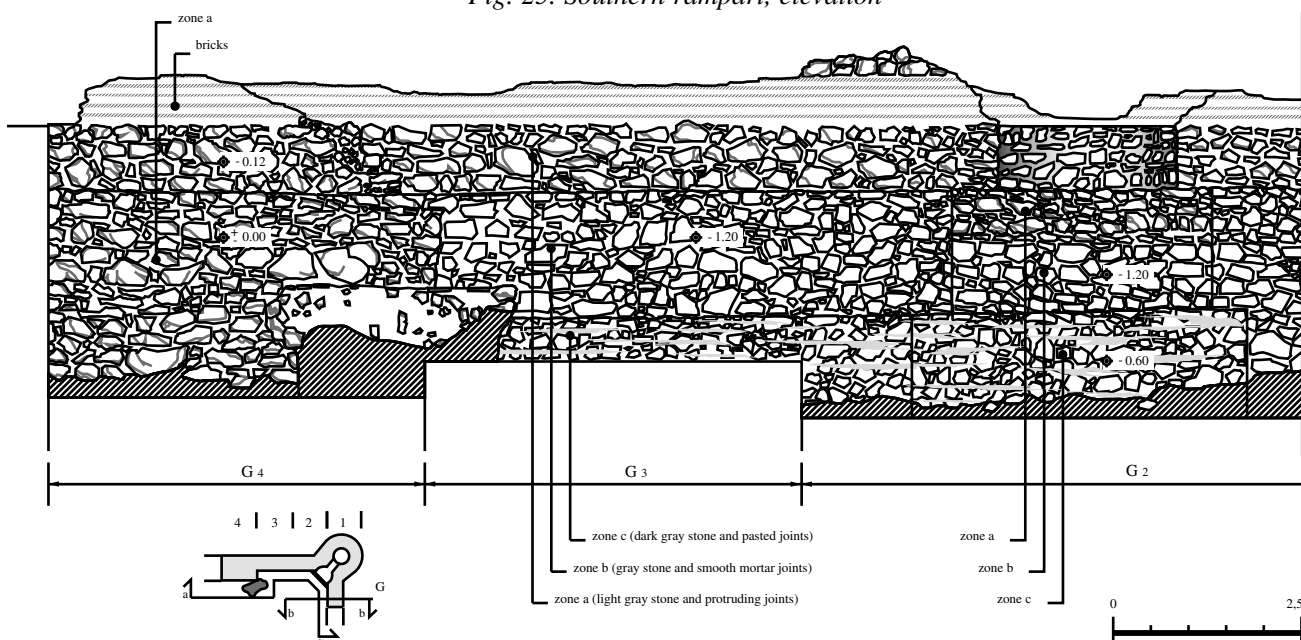
STAIRCASE ON THE SOUTH RAMPART

From the structural point of view they are identical with the staircase on the north rampart (Figs. 23b, 26). They start under the socle level and they ascend at the angle of 45° to the floor. The stair treads are made of half-dressed stone joined with mortar. The height and width of each tread is 0.28 m.

WESTERN RAMPART

Western rampart extends between towers A and D and its total length is 27.00 m (Fig. 27a). The greatest preserved height is 2.85 m, measured from the socle level near the tower A. The thickness of the rampart is 1.95 m, with socle ledge being 0.15 m, thus making the total thickness of 2.25 m. It had been constructed of broken green-brown granite simultaneously with other ramparts and towers. The external and inner faces are of the half-dressed stone. The backfill of the wall consists of small rubble stone, river pebbles, broken bricks and lime mortar with lot of gravel. On the outside the flat joints were made of rather fine lime mortar with pulverized brick. In the south section of the rampart near the southwestern tower is preserved a segment with leveling layer consisting of five courses of bricks joined with mortar.

Fig. 25. Southern rampart, elevation



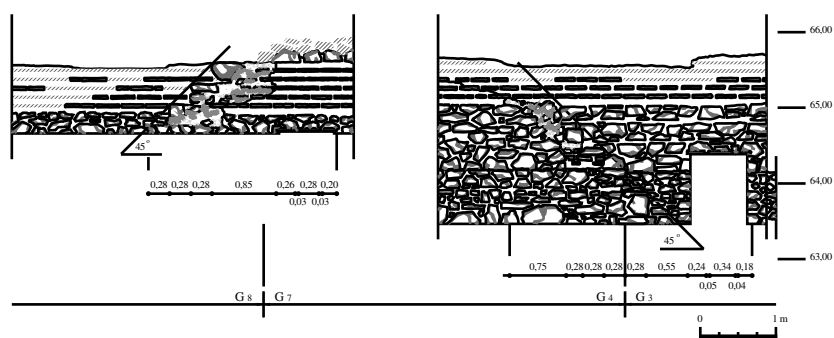


Fig. 26. Staircase on southern rampart

The fortification gate 2.17 m wide with the threshold at the same level as the rampart socle was 5.90 m far from the northwestern tower (A) towards the southwestern tower (D). The doorposts were built of the half-dressed stone.

NORTHWESTERN TOWER (A)

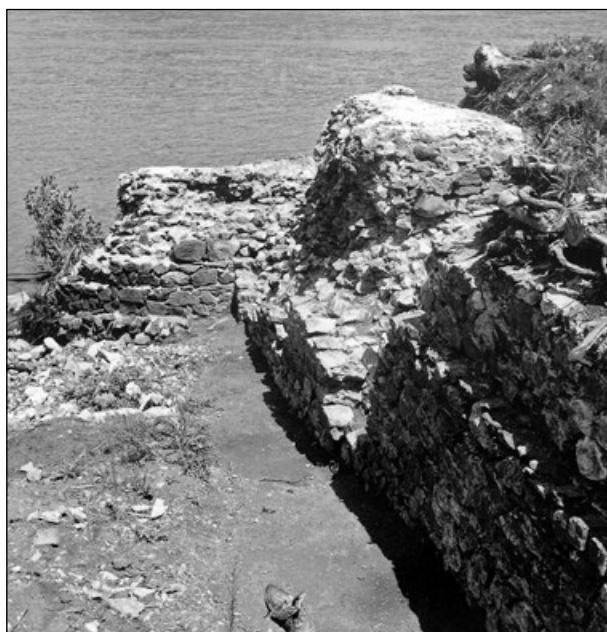
The northwestern tower of the fortification was destroyed to the foundation zone as a result of the river erosion. The highest preserved point is at the absolute altitude of 63.36 m. The radius of the ground plan is 3.70 m while the width of the assumed anteport is 3.80 m. It had been constructed at the same time as the rampart. In contrast to the other fortification towers the founda-

tion zone was built of rubble stone and pebbles laid in lime mortar and this distinguishes it as the strategically most important tower of the fortification that served the purpose of monitoring the river and land routes and controlling the fortification entrance.

NORTHEASTERN TOWER (B)

The northeastern tower of the fortification differs in the shape of its ground plan from three other towers (Figs. 27b, 28a, 29). It is of rectangular plan with longer sides parallel to the Danube, it has a semicircular apse on the east side while in the west is the entrance with rectangular anteport. Internal dimensions of the rectangular section of the tower are 6.00 x 4.30 m and the

Fig. 27. Saldum: a) western rampart and fortification entrance, from the southwest (P. Petrović, 1984, T. II, 4); b) northeastern tower from the west (P. Petrović, 1984, T. IV, 1)



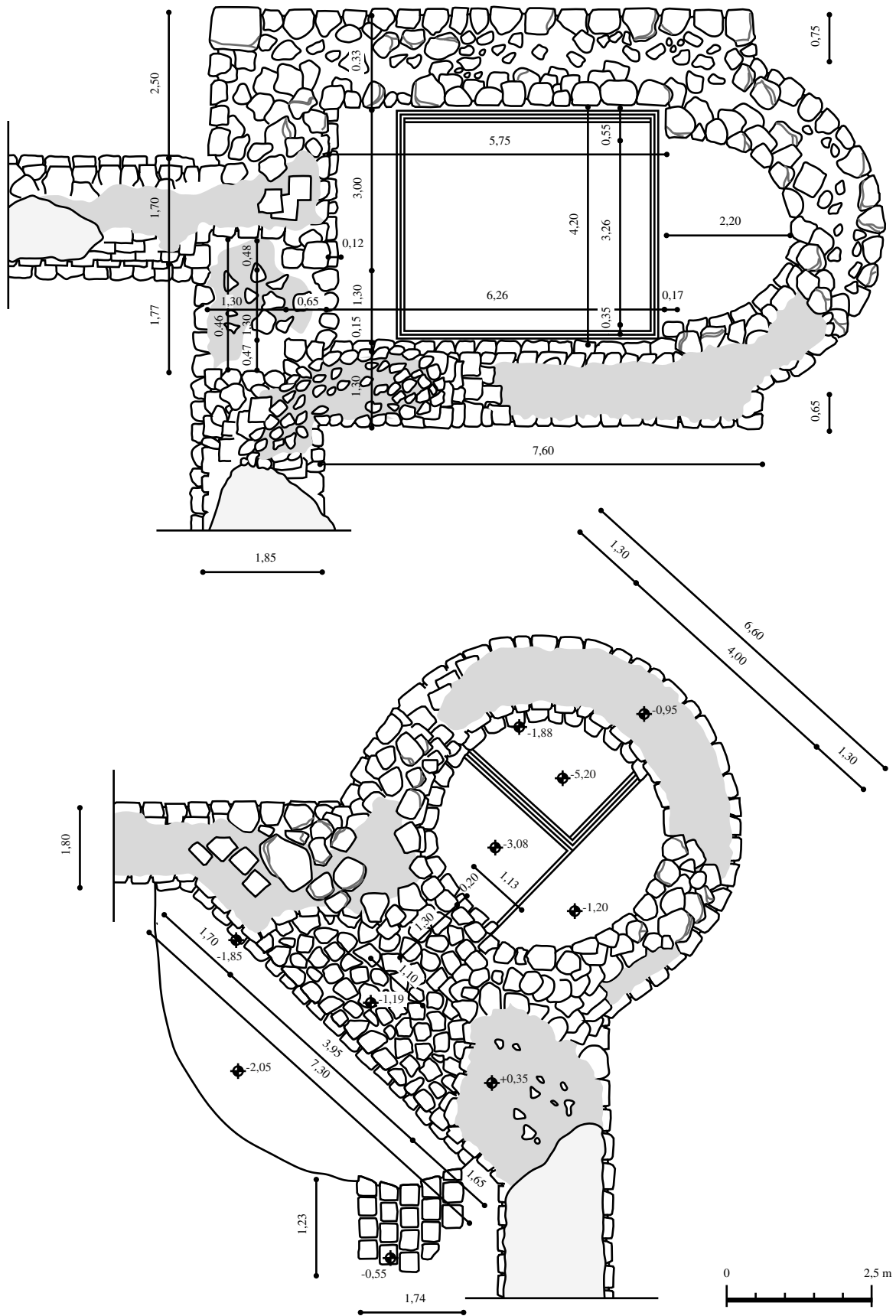


Fig. 28. Saldum: a) northeastern tower, plan; b) southeastern tower, plan

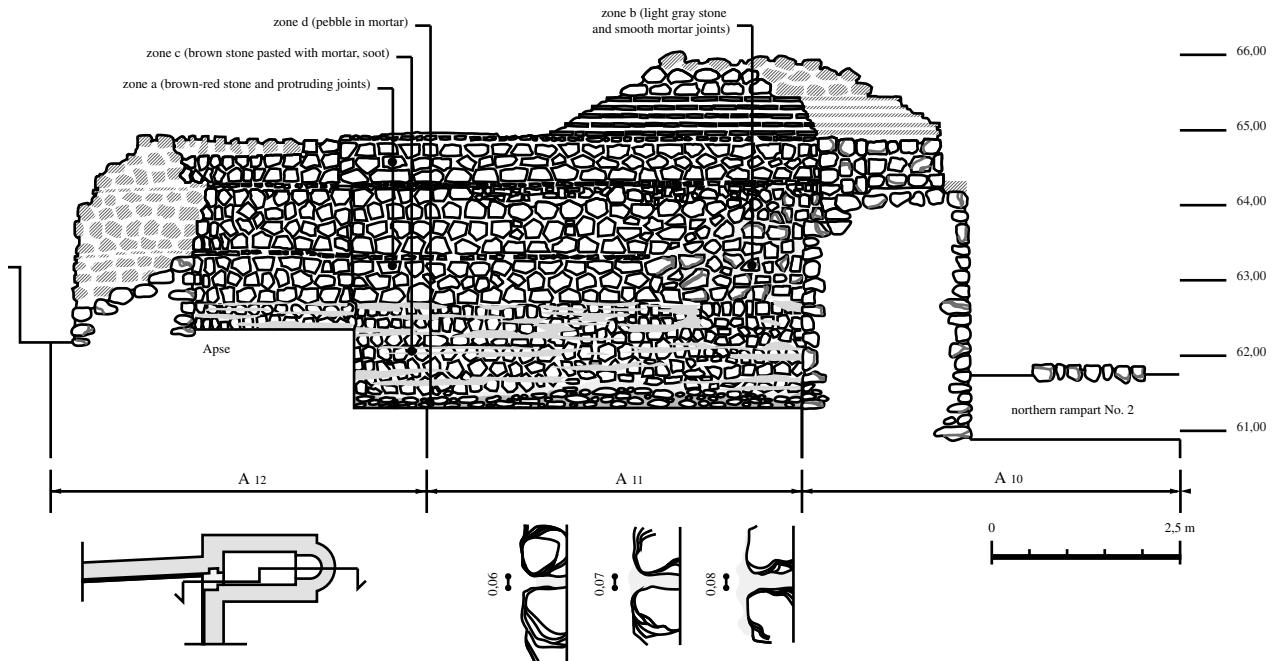


Fig. 29. Northeastern tower, cross section

radius of the apse is 1.60 m. The thickness of the west tower wall corresponds with the thickness of the eastern rampart while the thickness of other walls is 1.60 including the socle ledges. The size of the anteport is 2.30 x 1.30 m and the entrance is 1.40 m wide.

The tower foundation was in the loess virgin soil at the depth of 3.00 m and approximately at 61.15 m above sea level. Few zones could be distinguished considering the building method – in the lowest foundation zone were used pebbles laid in mortar then brown undressed stones were used with rather thin mortar joints – this horizon corresponds with the preserved crown of the earlier wall (northern wall 2°) and on top of it is light gray stone with polished joints in the socle section while above and below was used red-brown stone with protruding 0.07 m thick mortar joint. The leveling layer consists of five courses of bricks joined by the lime mortar.

SOUTHEASTERN TOWER (C)

Tower C is the southeastern tower of the fortification (Figs. 28b, 30a), it is of circular shape and was built simultaneously with east and south rampart. An outer diameter of the ground plan is 6.00 m and the inner diameter is 4.00 m, thickness of the semicircular wall is 1.30 and the socle ledge is 0.20 m. Entrance to the

tower is on the corner at the meeting point of the east and south wall, it is of rectangular shape 1.30 x 1.13 m in size and with anteport of elliptical shape 4.00 m long and the radius being 1.82 m.

The foundation was in the virgin spoil to the depth of 3.00 m. The tower was built of the rubble stone with lime mortar and gravel. There is the reinforcement in the lower zone consisting of the slanting wall. The portion of the earlier wall from the earliest period of life at Saldum (layer E, horizon 5) was incorporated in this wall mass. Outer and inner wall face was built of the half-dressed stone with flat joints of rather fine reddish mortar. The leveling layer consists of five courses of bricks laid in lime mortar.

SOUTHWESTERN TOWER (D)

The southwestern fortification tower (Figs. 30b, 31, 32) built simultaneously with the west and south rampart is of circular shape with outer diameter being 6.66 m and inner diameter 4.10 m. The entrance is in the north-east with semicircular anteport. The thickness of the circular tower wall is 1.30 m. Dimensions of the entrance are 1.40 x 1.13 m with the radius of the anteport being 2.36 m.

The tower was built of rubble stone laid in lime mortar with plenty of gravel and with half-dressed

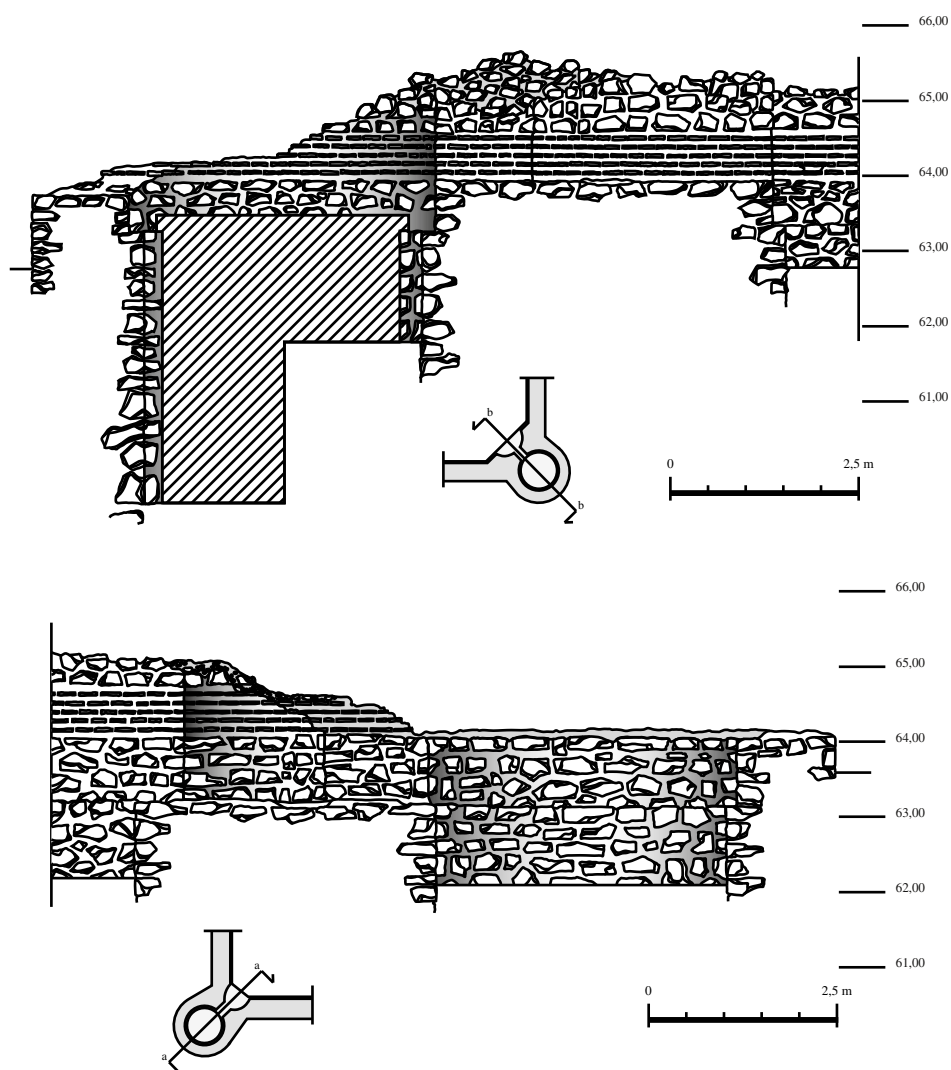


Fig. 30. Saldum: a) southeastern tower, cross section; b) southwestern tower, cross section

stones with flat joints of rather fine mortar used for the outer and inner wall face. The gateway and semicircular anteport were also built of half-dressed stone. The leveling layer consists of five courses of bricks joined by the lime mortar in proportion 5.0 : 6.5 cm. In front of the tower entrance was the brick pavement at the socle level.

The tower gateway was vaulted as it could be concluded on the basis of collapsed structure in the square G2. Only eight bricks joined by wedge-shaped mortar joints are preserved. The width of the vault is 0.42 m and reconstruction of the arch suggests that the external diameter was 2.80 m i.e. the passage was about 1.95 m wide. The remains of such vaults, 1.70 and 1.45 m wide, were preserved over the gateways of the circular towers IV and V at Čezava.⁸

There was a prolonged discussion in the archaeological literature about the construction date of the *castellum* at Saldum. According to the method of building and the known analogies and taking into account the relationship between the level of the socle and floors and the foundation trench of the northern rampart that disturbed the 1st–4th century horizons, the *castellum* at Saldum was constructed in the 6th century. In addition, the upper level sealing off the layer C (layer dating from the time of Valentinian – 364–378/380) is under the rampart socle level which means that it existed before the construction of the *castellum*. The director of excavations P. Petrović was of the opinion that

8| D. Pribaković, D. Piletić, Čezava, Dobra, opština Golubac – rimsko-vizantijsko utvrđenje, *Arheološki pregled* 8, 1966, 105.



Fig. 31. Southwestern tower: a) interior (P. Petrović, 1984, T. III, 4);
b) entrance detail (P. Petrović, 1984, T. III, 3)

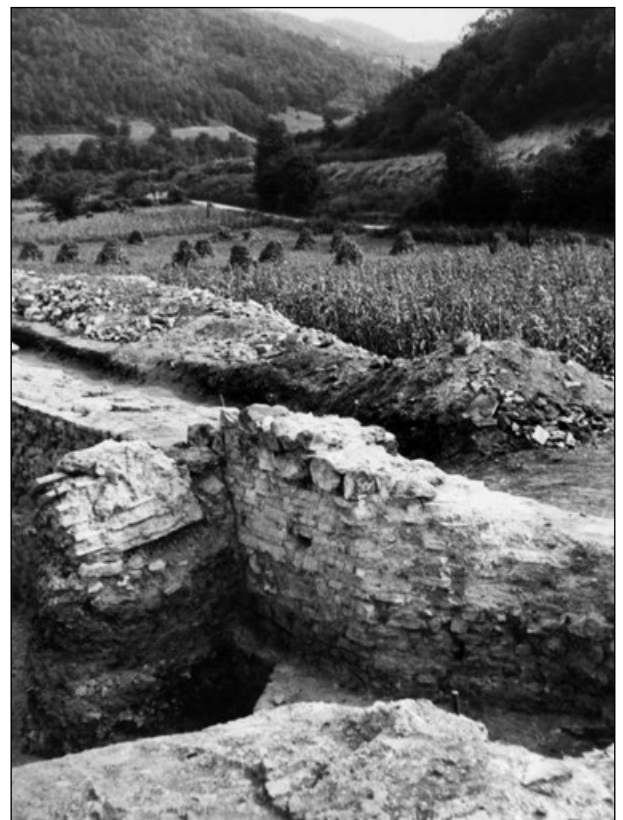
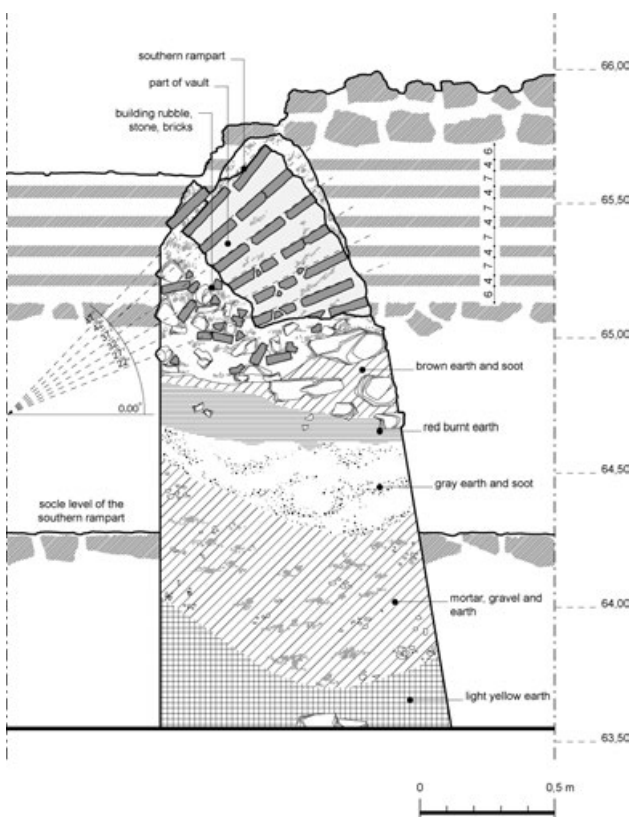


Fig. 32. Square G2, southwestern tower, detail of collapsed vault
(Photo documentation of the Institute of Archaeology, Belgrade)

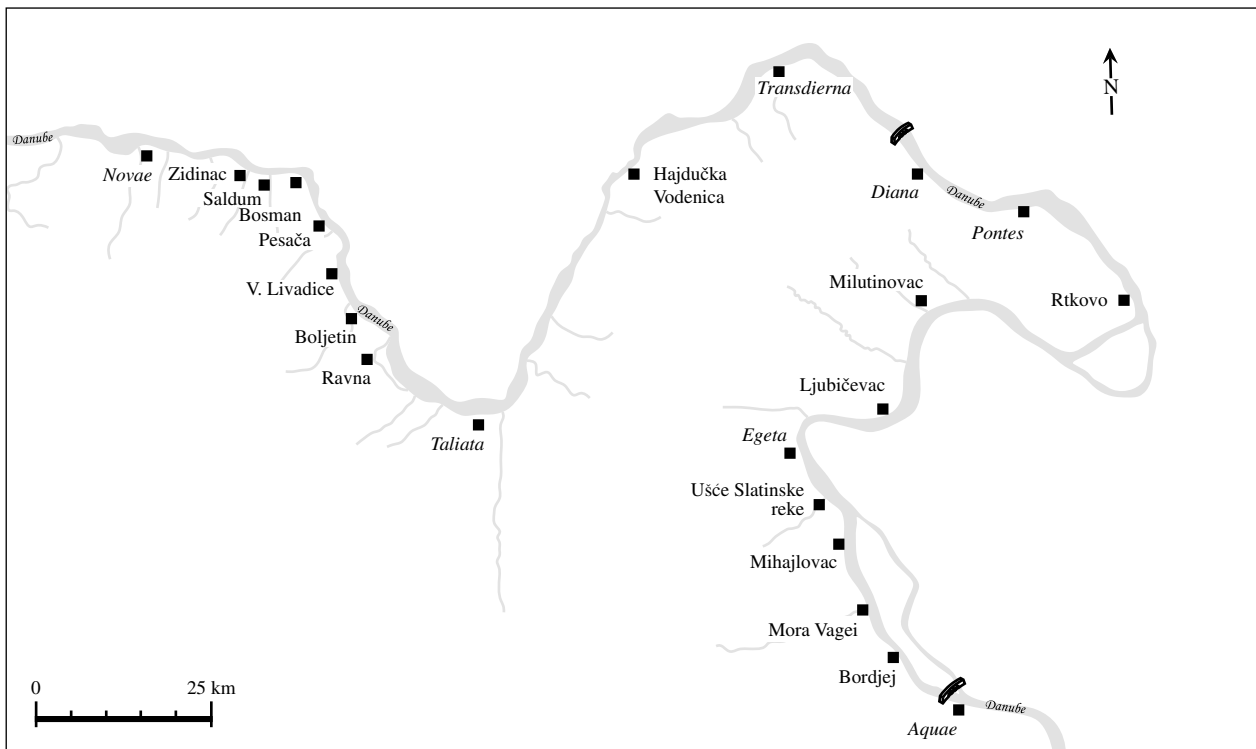


Fig. 33. Section of the Danube from Veliko Gradište to Prahovo (after TIR L-34)

castellum was built in the 4th century while V. Kondić and M. Vasić suggested that it was constructed in the 6th century (Fig. 33).⁹

Archaeological excavations along the Iron Gates limes revealed many fortifications attributed to the Justinian's restoration of the limes and these fortifications were typologically classified into four groups.¹⁰ First group includes the fortifications of rectangular or square ground plan with circular towers at the corners, chemin-de-ronde and possibly another tower, which controlled the river or land communications. As such were identified the fortifications at Saldum, Milutinovac, Ušće Slatinske reke and Malo Golubinje (Fig. 34). Second group includes the fortifications of the same ground plan but they had been constructed around the earlier quadriburgium as is the case at Hajdučka Vodenica, Donje Butorke, Rtkovo and Ljubičevac. Third type includes mostly the forts dating from the earlier period that preserved their earlier shape but with slight alterations. These are the fortifications at Boljetin – *Smorna*, Ravna – *Campsas*, Porečka reka and Tekija – *Transdierna*. The specific type of fortification is the *castellum* at Bosman as it had triangular ground plan and circular towers.

If we compare the *castellum* at Saldum with the fortifications of the first, second and fourth group it is obvious that the architectural method of construction was almost identical. The ramparts were built in the *opus mixtum* technique with leveling layers consisting of five courses of bricks. The depth of the foundation trench is around 3.50 m, the thickness of the ramparts is 1.90–2.75 m with 1.20–1.30 m wide extensions for the chemin-de-ronde. The pilasters supporting these structures were built of bricks and stones. The external diameter of the towers was from 4.00 to 7.00 m. The thickness of the tower walls was generally around 1.25 m. The anteports are of funnel-like or trapeze shape with vaulted gateways. This system of building was recommended also by the unknown Byzantine

9| V. Kondić, Les formes des fortifications protobyzantines dans la région des Portes de Fer, in: *Villes et peuplement dans l'Illyricum protobyzantin*, Rome 1984, 142; M. Vasić, M. Kondić, Le limes romain et paléobyzantin des Portes de Fer, in: *Studien zu den Militärgrenzen Roms III*, 1986, 555; M. Vasić, Le limes protobyzantin dans la province de Mésie Première, *Starinar XLV–XLVI* (1994–1995), 1995, 45.

10| G. Milošević, *op. cit.*, 249 sqq.

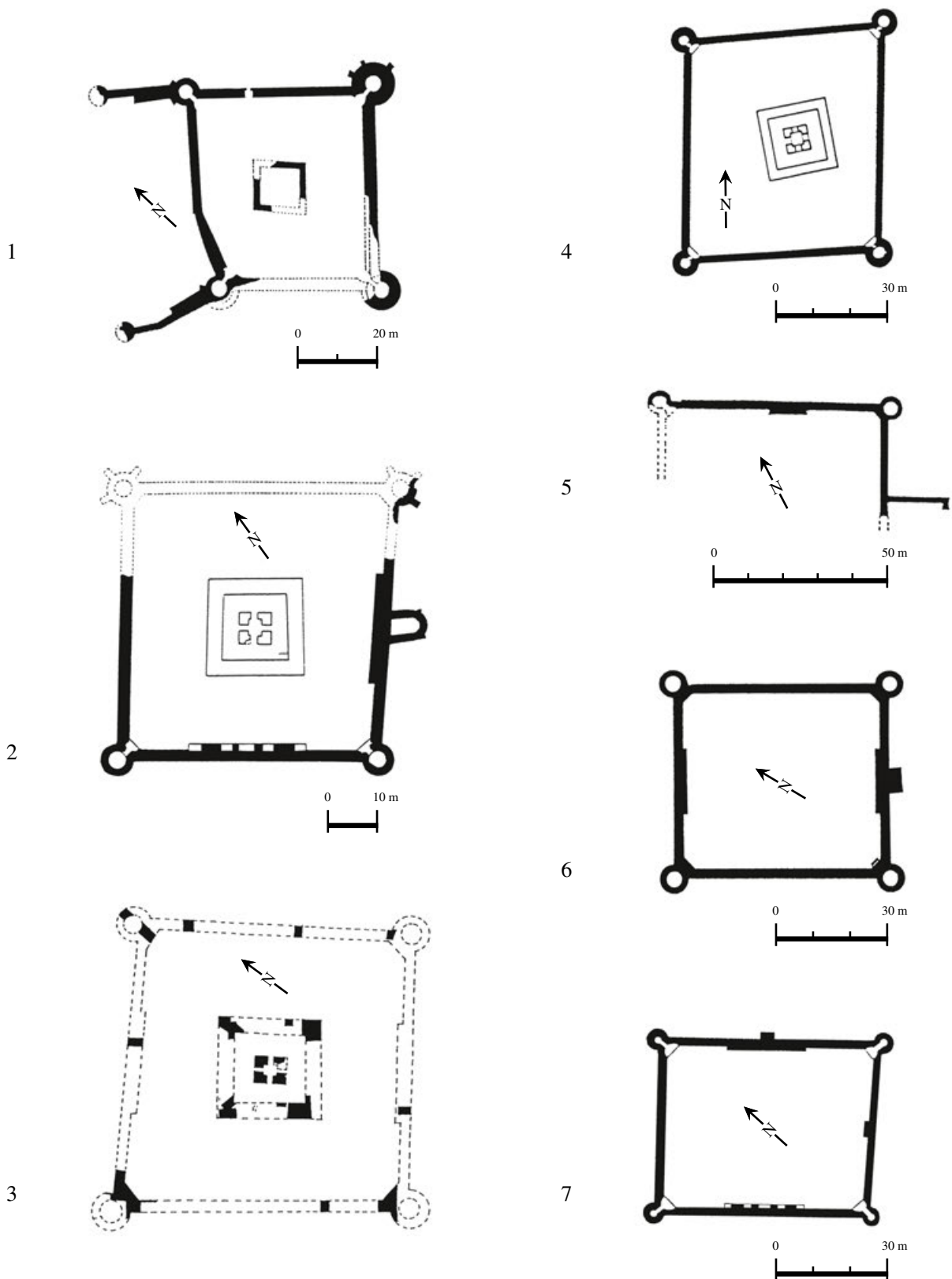


Fig. 34. Early Byzantine fortifications on the middle Danube limes:

1. Hajdučka Vodenica; 2. Donje Butorke; 3. Ljubičevac; 4. Rtkovo; 5. Malo Golubinje; 6. Milutinovac; 7. Ušće Slatinske reke (after: V. Kondić, 1982, fig. 8; V. Kondić–M. Vasić, 1986, fig. 15, 16, 25b (revised), 27–28; M. Korać, 1996, fig. 3)

writer from the 6th century whose information was confirmed by the archaeological excavations on many sites. According to this author the ideal depth of the foundation is 3.50 m, thickness of the rampart around 2.30–3.10 m and height around 9.50 m and all these suggestions were followed when the fortification at Saldum had been built.¹¹

The data concerning the structures for the army units are very scarce. The investigators assume that at Bosman and Ravna–*Camps*a such dwellings had been built of light materials.¹² The tent-like structures asymmetrically arranged were encountered in the camps at Čezava–*Novae*¹³ and at Boljetin–*Smorna* where also the mortar floors had been discovered probably from the headquarters buildings.¹⁴

We could assume that garrison at Saldum was also dwelling in the tents. The mortar floors dating from the 6th century were mostly registered along the rampart. Exploring of these floors brought to light many iron nails, clamps and keys so we suppose that this area could have been used as the storage as well as the dwelling area. The soldiers were also stationed in the towers, which could have been also used as food storages as we conclude on the basis of finds of grains in the northeastern tower. The analysis of stratigraphy in the tower C (southeastern tower) revealed that life continued there after the destruction of the fort because in the layer on top of the building rubble were found the remains of the hearth and the house daub.

The tower used as watchtower for controlling the river and land communications according to its position should have been the northeastern one but it seems that it served entirely different purpose – the sacred one and because of that as the main watching and signaling point was used the northwestern tower (A), which was reinforced in the foundation zone with the filling of rubble stone and pebbles laid in the lime mortar with lot of gravel.

The northeastern tower (tower B) distinguishes in shape from the other fortification towers – it is the single-aisled with the apse in the east and thus resembling the chapel. The archaeological finds are very scarce because of the flooding of the terrain so there was not found a single object, which could attribute this area as sacred. However, building of the churches was not uncommon in the Justinian's fortifications of the 6th century. They could be freestanding structures or they could be leaning on the ramparts or even be incorporated within the walls as it is suggested in the 11th novella and as it is also confirmed by the investigations along the middle ad lower Danube limes and in the hinterlands.¹⁵ From the structural point of few church-towers, at Saldum is similar to the tower at Donje Butorke that had been constructed next to the east rampart and probably dates from the second phase of the Early Byzantine *castellum* as is most probably the case with the Saldum tower renovated and reconstructed in the second half of the 6th century.

11| *Ibid.*, 251–252.

12| V. Kondić, Bosman, ranovizantijsko utvrđenje, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 143; Idem, Ravna (Camps)a, rimsko i ranovizantijsko utvrđenje, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 249.

13| M. Vasić, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 102.

14| Lj. Zotović, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 224.

15| F. Curta, Limes and cross: the religious dimension of the sixth-century Danube frontier of the early Byzantine empire, *Starinar* LI (2001), 2002, 51.

IV ARCHAEOLOGICAL OBJECTS

WE START OUR STUDY OF THE PORTABLE FINDS FROM SALDUM WITH BRICKS AND TEGULAE, AS IT IS CONNECTED WITH THE PRECEDING CHAPTER, BECAUSE THEY COULD BE CONSIDERED AS CONSTRUCTIVE ELEMENTS OF THE ARCHITECTURE. THERE ARE SIX INVENTORIED BRICKS AND THREE OF THEM WITH THE STAMPS.

IV.1. BRICKS AND TEGULAE

During archaeological investigations at Saldum, tegulae and bricks (Fig. 35) were not collected and measured, so we do not have the real information about their dimensions. The bricks used for the leveling layers of the rampart were 5 cm thick. The brick masonry at Saldum is confirmed in the layers from the middle of the 1st to the middle of the 3rd century (layer E and horizon 5, layer D and horizon 4). In the course of *castellum* building in the 6th century the bricks were used as the leveling horizon on top of the foundations, for the floor pavements and for the vaults. Crushed and pulverized bricks were used as an aggregate for the lime mortar as it is confirmed in the rampart walls.

Dimensions of the standard Roman bricks encountered in *Sirmium*, *Bonnonia*, *Viminacium*, Gamzigrad – *Romuliana*, *Mediana* near Niš and Lipljan – *Ulpiana* were 0.41–0.42 x 0.28–0.30 x 0.05–0.07 m.¹ The analysis of the brick formats from the buildings at *Naissus* and *Mediana* revealed twenty-five different sizes.² For the construction of walls were mostly used rectangular bricks 0.35–0.38 x 0.28 x 0.04–0.05 m or 0.41–0.45 x 0.28–0.30 x 0.05–0.07 m in size.³ For the roof were used *tegulae* and *imbrices*. Common format of tegulae in *Mediana* was 0.50 x 0.37 x 0.03 m or 0.54 x 0.385 x 0.03 m with raised edges. Along the longer sides of tegulae were used imbrices as connecting pieces.

As we do not have the data concerning the bricks used in construction of walls and towers of the Saldum fort we could discuss here only the bricks used for construction of contemporary fortifications, which are typologically and geographically close to the Saldum fortification. For the construction of the northwestern tower at Rtkovo were used the bricks, which size was 0.34 x 0.29 x 0.045 m and for the northeastern tower were used the bricks, which size was 0.32 x 0.29 x 0.045 m.⁴ The size of the bricks at Milutinovac are as follows: for the north tower 0.26 x 0.31 x 0.04 m and 0.28 x 0.33 x 0.045 m; for the north rampart 0.29 x 0.33 x 0.04 m and 0.30 x 0.33 x 0.045 m; for the west tower 0.30 x 0.28 x 0.04 m and 0.27 x 0.23 x 0.04 m and for the northeastern rampart 0.33 x 0.25 x 0.045 m.⁵ The bricks of the similar size had been also used for the construction of the Early Byzantine fortifications

1| M. Jeremić, L'évolution du format des briques sur le territoire de la Serbie, de l'Antiquité au Moyen Âge, *MEFRM* 109–1, 1997, 8.

2| A. Radivojević-Mićanović, *Konstruktivni sistemi i tehnike građenja u kasnoj antici na građevinama Naisa*, Faculty of Architecture in Belgrade, Beograd 1997, M.A. thesis, manuscript, 180.

3| M. Jeremić, *MEFRM* 109–1, 1997, 8 and fig 2.

4| M. Gabričević, Rtkovo–Glamija I – une forteresse de la basse époque. Fouilles de 1980–1982, *Djerdapske sveske* III, 1986, 73.

5| P. Milošević, M. Jeremić, Le castellum à Milutinovac, *Djerdapske sveske* III, 1986, 248.

in the hinterland, at Balajnac, Bregovina and Caričin Grad.⁶

Thanks to the finds of stamps on the bricks it is possible to confirm that at Saldum were stationed the detachments of the legion IV Flavia. The bricks with the stamp of this legion were encountered also at Golubac–Cuppae and Boljetin–Smorna.⁷ Certainly the most important is the find of the brick with the stamp of *praepositus Hermogenes*. Despite the fact that it had been found in the layer dating from the time of Valentinian (364–378/380) it is chronologically connected with the earlier period of life at Saldum. On the basis of the bricks with stamp of this commander found at Čezava–Novae, Ravna–Campsae, Boljetin–Smorna, Donji Milanovac–Taliata and Prahovo–Aquae it is assumed that Hermogenes was active in the final decades of the 3rd century or in the beginning of the 4th century.⁸ His name is connected with the restoration of the camps in the time of Aurelian (Čezava) or in the post-Aurelian time (Smorna, Taliata).⁹ It is not impossible that Hermogenes stayed at Saldum in that time as money circulation indicates an intensive life in the time of Aurelian (270–275) and Probus (276–282) when this brick could be dated.

Cat. no. 1

field inv. 100/70

sq. C10 D10, ∇ 2.10 m

layer D

thickness 3.0 cm

Fragment of tegula with engraved parallel lines creating a checkerboard pattern. Made of red fired earth.

Cat. no. 2

field inv. 32/67

Trench 1

layer D

thickness 1.5 cm

Fragmented plate made of brown insufficiently fired clay of sandy fabric decorated with the fretting of slanting channels and bands with impressed motif.

Cat. no. 3

field inv. 853/69

sq. F5

horizon 4

Rather large brick with four ‘feet’. Inscription on the inside *Leg(io) IIII Flavia*.

Cat. no. 4

field inv. 281/70

on the Danube bank

dim. 22.5 x 14.0 x 7.0 cm

Fragmented brick with stamp *Leg(io) IIII Fl(avia)* in *tabula ansata*.

Cat. no. 5

field inv. 308/68

sq. F8

horizon 3

dim. 29.0 x 15.0 x 6.0 cm

Fragment of the brick with negative of stamp, in *tabula ansata*.

[] *Hermogeni p(rae)p(osito) RIPI* []

[] *Cl(audiae) par(tis) ceterior(is)* []

Housed in the National Museum in Belgrade.

Literature: M. Dušanić, *Praepositus ripae legionis u natpisma opeka Prve Mezije, Arheološki vestnik XXV* (1974), 1976, 276, cat. 3, fig. 3.

Cat. no. 6

study material 58 /24. 07. 1968.

sq. F9, ∇ 1.90 m

horizon 4

length 8.2 cm; thickness 3.0 cm

Brick of butterfly shape made of red fired clay of sandy fabric.

IV.2. NAILS

The nails had been widely used as elements of architecture and the wooden furniture.¹⁰ They are generally 7–10 cm long and of square section and they have square or pillow-shaped head. For the beams were used large up to 40 cm long nails of square or rectan-

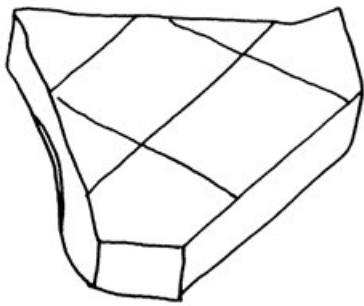
6| M. Jeremić, *MEFRM* 109–1, 1997, 11.

7| M. Mirković, The legionary camps at Singidunum and Viminacium in the defensive system in the fourth-fifth and sixth centuries: Romans and barbarians, in: *Studia Danubiana*, 118.

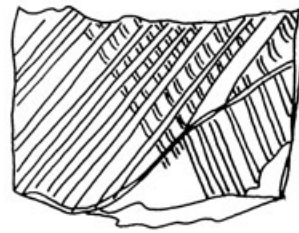
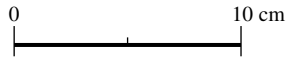
8| At the site Sviņița, in the tower dated in the 4th century was found the brick (20.0 x 11.0 x 0.5 cm), with the inscription *S(ub) C(ura) HERMOGENI / P(rae)P(ositi) LEG(ionis) / VII CL(audiae) PAR(s) CITERIOR*. Cf.: N. Gudea, O contribuție la toponimia limesului bănățean al Dunării, *Tibiscus* 3, 1974, 140–146.

9| M. Mirković, in: *Studia Danubiana*, 118.

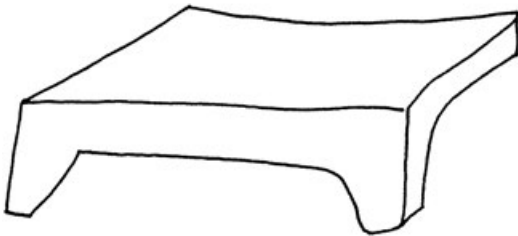
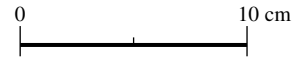
10| G. Jacobi, *Werkzeug und Gerät aus dem Oppidum von Manching*, Die Ausgrabungen in Manching Bd. 5, Wiesbaden 1974, 236–238.



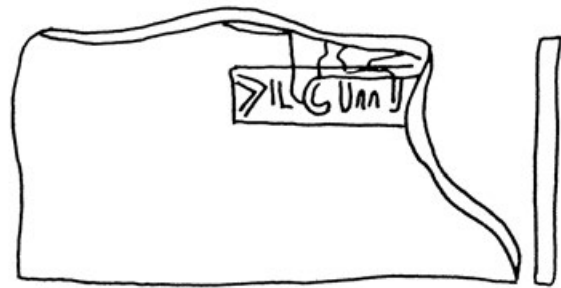
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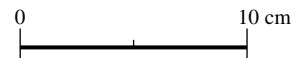
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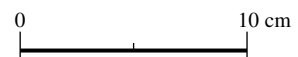


Fig. 35. Bricks and tegulae

gular section and with pyramid, circular or flat head (*clavi trabales*).

In the course of investigation the iron nails from Saldum were collected as the study material without precise topographic recording. In this chapter we are presenting all the nails either used as structural ele-

ments in architecture or for making furniture and similar objects. We are emphasizing that they were not recorded on the drawings but we think that descriptions and analogies will be sufficient for the readers to picture to themselves this very well known and widespread kind of material.

According to the study collection there were found thirty-eight complete and fragmented iron nails of different length and variously modeled head. Most of the iron nails from Saldum are the nails of the type with pillow-shaped hammered head. The most frequent finds are the specimens between 7 and 13 cm long while larger iron nails are relatively rare at Saldum.

On the basis of available evidence it could be noticed that there are no nails from the earliest layer although some specimens ascribed to the layer D and horizon 4 could actually date from this earliest period (layer E, horizon 5), which unfortunately was not sufficiently investigated but which contained considerable remains of the wooden architecture and as we assume also the remains of wooden furniture.

The iron nails of larger size could have been used for the posts supporting roof structure and nails with hook-like head, i.e. with slightly bent head could have been used either as hooks for hanging different objects or as anchors for the military tents.

NAILS WITH SQUARE OR PILLOW-SHAPED HEAD

Cat. no. 7

Trench 2

study mat. bag 20/67

∇ 1.50 m, red burnt earth

layer C

length 3.6 cm

Iron nail with shank of square section and rather massive head.

Cat. no. 8

Trench 2

study mat. bag 17/67

layer B

length 5.5 cm

Fragmented iron nail with shank of square section and hammered pillow-like head.

Cat. no. 9

study mat. bag 20/69

sq. G3

layer B, above horizon 2

length 5.7 cm

Fragmented iron nail with shank of square section and hammered pillow-like head.

Cat. nos. 10–11

27. 09. 1969.

sq. F9 G9

∇ 0.95 m

layer D, horizon 4

length 7.0 cm

Two iron nails with shanks of square section and hammered pillow-like heads.

Cat. no. 12

29. 09. 1969.

sq. E8 F8

layer E and horizon 4

length 7.0 cm

Iron nail with shank of square section and pillow-like head.

Cat. nos. 13–14

28.09.1969.

sq. F8

horizon 4 and underneath

length 8.0 cm

Two identical iron nails with shanks of square section and hammered pillow-like head.

Cat. no. 15

study mat. bag 18/69

sq. E8

layer C

length 8.0 cm

Fragmented iron nail with shank of square section and hammered pillow-like head.

Cat. no. 16

study mat. bag 20/69

sq. G3

layer B, above horizon 2

length 8.0 cm

Fragmented iron nail with shank of square section and hammered pillow-like head.

Cat. no. 17

09. 07. 1968.

sq. B8

∇ 1.50 m in the south profile

length 8.5 cm

Iron nail with shank of square section and pillow-like head.

Cat. no. 18

24. 07. 1968.

sq. F8, ∇ 1.90 m

horizon 4

length 9.0 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 19

study mat. bag 18/69
sq. E8
layer C
length 9.0 cm
Iron nail with shank of square section and hammered pillow-like head.

Cat. no. 20

study mat. bag 16/69
sq. G3
layer B, above horizon 2
length 9.0 cm
Iron nail with shank of square section and hammered pillow-like head.

Cat. no. 21

14. 09. 1970.
sq. G3, ∇ 2.90 m
unreliable stratigraphy
length 9.0 cm
Iron nail with pillow-like head.

Cat. no. 22

study mat. bag 9/67
Trench 2
Damage on the rampart
length 9.4 cm
Nail with shank of square section and massive head, made of iron, now corroded.

Cat. no. 23

study mat. bag 1/70
sq. E10, ∇ 1.00
horizon 2
length 9.5 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 24

24. 07. 1968.
sq. C8 C9 D8 D9, ∇ 1.50–1.70 m
horizon 4
length ca. 10,0 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 25

26. 09. 1969.
sq. F5, ∇ 1.00 m

layer C, horizon 3
length ca. 10.0 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 26

study mat. bag 17/69
sq. G3
layer B, above horizon 2
length 10.0 cm
Iron nail with shank of square section and hammered pillow-like head.

Cat. no. 27

24. 07. 1968.
sq. F9, ∇ 1.90 m
horizon 4
length 10.5 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 28

07. 10. 1969.
sq. G5, ∇ 1.00 m
layer D
length 10.5 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 29

21. 09. 1970.
sq. D6, ∇ 1.20 m
layer C, horizon 3
length 10.5 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 30

study mat. bag 18/67
Trench 2
layer C
length 11.0 cm; thickness 0.7 cm
Nail with shank of square section and pillow-like head, made of iron, corroded.

Cat. no. 31

01. 10. 1970.
sq. C6 D6, ∇ 1,90 m
unreliable stratigraphy
length 11.0 cm
Iron nail with shank of square section and pillow-like head.

Cat. nos. 32–33

27. 09. 1969.
sq. F9 G9, ∇ 0.95 m

layer D, horizon 4
length 12.0 cm
Two iron nails with shanks of square section and pillow-like heads.

Cat. no. 34

sq. E8
28. 09. 1969.
∇ 1.72 m
layer D and horizon 4
length 13.0 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 35

sq. C8 D8
11. 07. 1968.
∇ 0.40–0.60 m
layer B
length 13.0 cm
Iron nail with shank of square section and pillow-like head.

Cat. no. 36

sq. B10
08. 10. 1969.
∇ 1.80 m next to the rampart
length 16.0 cm
Rather large iron nail with shank of square section and pillow-like head.

Cat. no. 37

sq. B10
24. 07. 1968.
∇ 2.50 m
layer C, horizon 3
length 21.0 cm
Iron nail with shank of square section and pillow-like head.

NAILS WITH PYRAMIDAL HEAD

Cat. no. 38

Trench 2
study mat. bag 17/67
layer B
length 12.6 cm
Iron nail with shank of square section and pyramidal head.

Cat. no. 39

sq. C7 D7
1970.
∇ 1.40 m

layer C
length 24.0 cm
Rather large iron nail with shank of square section and tapering pyramidal head.

NAILS WITH HOOK-SHAPED HEAD

Cat. no. 40

sq. D9
24. 07. 1968.
∇ 1.90 m
horizon 4
length 11.,0 cm
Iron nail with shank of square section and hook-shaped head.

Cat. no. 41

sq. E10
study mat. bag 1/1970
∇ 1.50 m
horizon 2
length ca 11.0 cm
Iron nail with head shaped as hammered band set at right angle to the shank.

Cat. no. 42

sq. E10
study mat. bag 1/70
∇ 1.00 m
horizon 2
length ca 11.0 cm
Iron nail with shank of square section and hook-shaped head.

Cat. no. 43

sq. E10
study mat. bag 1/70
∇ 1.00 m
horizon 2
length 16.0 cm
Iron nail with shank of square section and hook-shaped head.

Cat. no. 44

sq. E10
study mat. bag 1/1970
∇ 1.50 m
horizon 2
length 16.0 cm
Iron nail with head shaped as hammered band set at right angle to the shank.

layer, horizon/length	> 5.0 cm	5.0–10.0 cm	10.0–15.0 cm	15.0–20.0 cm	20.0 cm <
E, horizon 5					
D, horizon 4		6 specimens	7 specimens		
C, horizon 3	1 specimen	2 specimens	3 specimens		2 specimens
B, horizon 2		5 specimens	5 specimens	2 specimens	
unreliable		3 specimens	2 specimens		
Total	1	16	17	2	2
					Total 38

Table 4. Nails found at Saldum

IV.3. CLAMPS

The clamps had been used to bind together wooden elements. The most frequent specimens found at Roman sites are 7–20 cm long while specimens over 30 cm are the scarcest.

All iron clamps from Saldum have the body of square or rectangular section and hammered tapering tips. When taking their measure we considered the distance between two tips.

The clamps are relatively scarce elements, which indicate the existence of wooden architectural elements and wooden furniture. The clamp **Cat. no. 49** with long tips and short body could have been used for securing the door hinge as it was the case in the *castellum* Manching.¹¹

Cat. no. 45

09. 07. 1968.
sq. B9 C9, ∇ 1.60 m
layer D
length 3.0 cm

Cat. no. 46

study mat. bag 14/1967.
∇ 1.50 m
on the red burnt earth (horizon 3)
length 5.0 cm

Cat. no. 47

study mat. bag 23/1969.
sq. E8, ∇ 0.90 m
layer C
length 5.5 cm

Cat. no. 48

study mat. bag 25/1969.

sq. G3, ∇ 0.50 m
layer B, above horizon 2, in debris
length 5.5 cm

Cat. no. 49

26. 09. 1969.
sq. F5, ∇ 1.00 m
layer C, horizon 3
length 6.0 cm, length of tip 6.0 cm

Cat. no. 50

study mat. bag 14/1967.
Trench 2
layer B
length 6.0 cm

Cat. no. 51

12. 08. 1967.
Trench 1, ∇ 0.60 m
layer B
length 8.0 cm

IV.4. POTTERY VESSELS

During four years of investigating at the site Gradac–Saldum and in its immediate vicinity (trenches outside the walls) pottery vessels, which illustrate the life, economic standards, commercial connections, interrelationship with local autochthonous population have been found in the great quantity. There are also many other aspects of life that could be studied on the basis of the pottery evidence.

11| G. Jacobi, *Werkzeug und Gerät aus dem Oppidum von Manching*, 235, Nr. 1206–1210.

In the course of investigation the pottery vessels have been attributed to the inventory collection (mostly rim fragments, body fragments, bases and handles of more luxurious pottery), to the study collection (fragments of rims, bodies, bases and handles that are not the representative sample) while certain amount of pottery fragments have been discarded immediately after the excavation and preliminary examination (mostly the body fragments of pots and amphorae from the Early Byzantine horizon dating from the 6th century). This routine denied the investigators and ceramic experts the possibility to comprehend completely the pottery material, hence the results of the study of pottery vessels from Saldum could reflect only partially an accurate picture of the distribution and use of distinct pottery forms at this site.

The pottery material analyzed here (inventories and study collection) is classified into three basic groups:

- A. autochthonous pottery
- B. luxurious pottery (*terra sigillata*, *terra nigra*, marbled pottery, Early Imperial glazed pottery and pottery with slip and vessels with thin walls),
- C. pottery for everyday use that is classified according to the categories and types of vessels. This group also includes the painted pottery and although the investigators classify it as the luxurious pottery we decided to present it within this group because of its great quantity.

IV.4.A. AUTOCHTHONOUS POTTERY

In the course of investigation of the earliest Roman layer within Saldum there were encountered together with Early Roman mostly luxurious imported pottery also the complete or fragmented vessels of local, autochthonous production (Fig. 36). This pottery is represented by few types of pots and the so-called Dacian cups.

All the autochthonous vessels were handmade of unrefined brown poorly fired clay. They are part of the Dacian autochthonous production as we know it from many sites in the middle and lower Danube basin and that is synchronous with the Roman pottery forms. These forms of the Dacian pottery existed from the La Tène period until the beginning of the 3rd century AD. These finds indicate the cohabitation of the autochtho-

nous population and the Romans, i.e. the Romanized newcomers and the influence they had on each other.

On the basis of the large amount of pots of so-called Dacian type found at *Singidunum* two chronologically distinct variants have been identified that differ according to the fabric and surface treatment.¹² From the end of 1st and the beginning of the 2nd century date the pots of rather coarse fabric and lavishly decorated under the rim while later specimens (end of 2nd – beginning of 3rd century) are made mostly of brown-red fired clay, they are of finer fabric and undecorated or decorated with button-like protrusions. Such classification could not be employed on the Saldum specimens as the button-like protrusions appear in the layer dating from the end of 1st and the beginning of the 2nd century. From this period also date two types of Dacian pots from Karataš–*Diana*¹³ and the specimens from Tekija – *Transdierna*.¹⁴

There are close parallels for our pots especially for the **Cat. no. 63** in the material from the Daco-Roman habitation layer at Korbovo (site Zbradila-Fund) dated in the 1st century on the basis of the early Roman pottery and one bronze fibula found there.¹⁵

The conical cups (**Cat. nos. 69–71**) with unprofiled rim, flat base and usually with one handle that were made by hand of the sandy clay fired to the brown or light brown color and known in literature as Dacian cups did appear also in the Roman times at the sites dating from the 1st to the 3rd century.¹⁶ Besides being used for drinking they could have been used for other purposes, for instance as lamps for lighting the rooms as the interior of some specimens revealed the traces of fire

All the Dacian pottery at Saldum is dated from the Flavian period to the beginning of the 2nd century, according to the finding circumstances and the mentioned analogies.

12| S. Nikolić-Đorđević, *Antička keramika Singidunuma*, *Singidunum* 2, 2000, 79–80, type II/34.

13| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana–Karataš*, *Djerdapske sveske* IV, 1986, 50, T. VI, type II/7 and II/9.

14| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 187–188.

15| Lj. Babović, *Zbradila-Fund, Korbovo*. *Compte-rendu des fouilles*, *Djerdapske sveske* III, 1984, 116–117, fig. 8, 17–90.

16| J. Todorović, *Jedan tip dačkih šolja*, *Rad Vojvodjanskih muzeja* 11, 1962, 147.

Cat. no. 52

field inv. 781/69 and 785/69

sq. C8, ∇ 2.74 m

horizon 5

diameter of rim 20.0 cm

Slightly everted rim and neck of the pot handmade made of light brown fired unrefined clay with grains of sand. Under the rim are molded rings.

Cat. no. 53

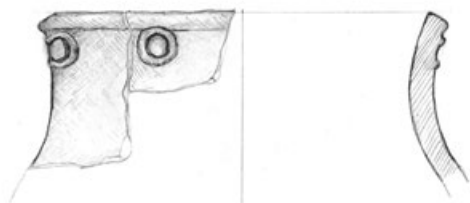
field. inv. 789/69

sq. C9

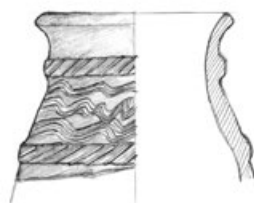
horizon 5

diameter of rim 17.0 cm

Slightly everted rim and neck of the handmade pot made of brown clay, of rather coarse fabric with sand grains. Under the rim are molded circular ornaments.



Cat. no. 52



Cat. no. 56



Cat. no. 53



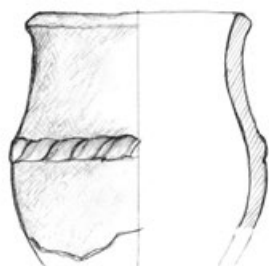
Cat. no. 57



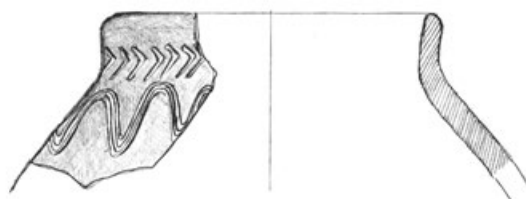
Cat. no. 54



Cat. no. 58



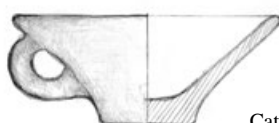
Cat. no. 55



Cat. no. 63



Cat. no. 69



Cat. no. 70



Cat. no. 71

Fig. 36. Autochthonous pottery (R 1:4)

Cat. no. 54

field inv. 784/69

sq. C8, ∇ 2.74 m

horizon 5

diameter of rim 12.0 cm

Slanting everted rim and shoulder of the handmade pot with circular ornament. Made of brown fired unrefined clay with sand grains. Traces of burning on both sides of the pot.

Cat. no. 55

field inv. 782/69

sq. C8, ∇ 2.74 m

horizon 5

diameter of rim 11.0 cm

Slightly everted rim and body of the pot handmade of light brown fired unrefined clay with sand grains. On the body is molded band with pinches.

Cat. no. 56

field inv. 783/69

sq. C8, ∇ 2.74 m

horizon 5

diameter of rim 10.0 cm

Everted rim and body of the pot decorated with molded twisted bands enclosing the series of wavy lines. Handmade of light brown fired unrefined clay with sand grains.

Cat. no. 57

field inv. 765/69

sq. D8

horizon 5

diameter of rim 20.0 cm

Slightly everted rim and neck of the pot decorated with molded band. Handmade of light brown fired unrefined clay with sand grains.

Cat. no. 58

field inv. 403/68

sq. C8 D8, ∇ 1.50 m

layer D

diameter of rim 15.0 cm

Slightly everted rim and body of the pot with impressed ornament. Handmade of brown fired unrefined sandy clay.

Cat. no. 59

field inv. 807/69

sq. E9, ∇ 2.75 m

horizon 5, on the floor

Fragment of everted rim and ovoid body of the pot handmade of brown fired unrefined clay.

Cat. no. 60

field inv. 787/69

sq. C9

horizon 5

Fragment of rather large pot with slanting everted rim and ovoid body, handmade of brown-red unrefined fired clay of sandy fabric.

Cat. no. 61

field inv. 823/69

sq. E9, ∇ 2.75 m

horizon 5

Slightly everted rim of the pot handmade of light brown insufficiently fired clay, unrefined and with sand grains. Under the rim are molded circular ornaments and impressed oblique incisions.

Cat. no. 62

field inv. 822/69

sq. E9, ∇ 2.75 m

horizon 5

Fragment of the pot body with molded band. Made of light brown fired clay of rather coarse fabric with sand grains. Decorated with impressed wavy lines.

Cat. no. 63

field inv. 806/69

sq. E9, ∇ 2.75 m

horizon 5

diameter of rim 17.0 cm

Fragment of rim and neck of the pot made of reddish-brown fired clay of sandy fabric. Decorated under the rim with the herringbone motif and wavy lines.

Cat. no. 64

field inv. 786/69

sq. C9

horizon 5

Fragment of the body of a pot handmade of brown fired clay, of coarse fabric. The vessel is decorated with pinched molded band.

Cat. no. 65

field inv. 791/69

sq. C9

horizon 5

Body of the pot handmade of the light brown fired unrefined clay and with sand grains. Decorated with the impressed parallel and wavy lines.

Cat. no. 66

field inv. 788/69

sq. C9

horizon 5

Flat base and fragment of the body of a vessel of insufficiently fired clay of light brown color, poorly refined and with sand grains.

Cat. no. 67

field inv. 790/69

sq. C9

horizon 5

Flat base and conical body of a vessel handmade of light brown fired unrefined clay with sand grains.

Cat. no. 68

Study collection, no number

sq. F9/69

horizon 5

Fragment of the rim of a bowl with slightly slanting walls, made of brown fired insufficiently refined clay. Under the rim 'V' incisions and on the flat straight rim deep oblique incisions.

Cat. no. 69

field inv. 255/70

sq. F10 G10, ▽ 2.00 m

layer E

diameter of rim 12.0 cm; diameter of base 5.5 cm; height 6.0 cm

Dacian cup made of unrefined poorly fired clay of brown color.

Cat. no. 70

field inv. 239/70

sq. G9 G10, ▽ 2.35 m

layer E

diameter of rim 14.0 cm; diameter of base 5.0 cm; height 6.0 cm

Dacian cup made of unrefined poorly fired clay of brown color.

Cat. no. 71

field inv. 792/69

sq. C9

horizon 5

diameter of base 5.5 cm; height 8.0 cm

Dacian cup made of unrefined poorly fired clay of brown color.

IV.4.B. LUXURIOUS POTTERY

IV.4.B.1. TERRA SIGILLATA
AND TERRA SIGILLATA IMITATIONS

Among the luxurious ceramic products the most outstanding are the vessels made in the *terra sigillata* technique and there are 69 fragments of them at Saldum, making about 23 vessels (Figs. 37–39). Nine vessels date from the earliest period (middle of the 1st–beginning of the 2nd century) while the others come from the layer dating from the middle of the 2nd – middle/end of the 3rd century when their import in Saldum died out.

Among the earliest imported specimens is the calotte-shaped bowl-*mortarium* (**Cat. no. 72**) made of plain terra sigillata, form Curle 11, which is quite infrequent in the Upper Moesia material. These vessels had been produced from the seventies of the 1st century until the middle of the 2nd century in the south Gaulish workshops¹⁷ as well as in Rheinzabern where they were produced as bowls of Drag. 35 and 36 type with lanceolate leaves and volute-shaped stems¹⁸ and the same motif was most probably on the Saldum specimen. The only published bowls from Upper Moesia come from *Singidunum*¹⁹ and from *Diana*²⁰ from the layers dating from the end of 1st – beginning of the 2nd century.

The bowl **Cat. no. 73** of Drag. 29 form most probably is the product of the south Gaulish workshop La Graufesenque. According to the selection and organization of the motifs it could be attributed to the workshop of master *Iustus* or *MAS*.²¹ The bowls **Cat. nos. 74–75** made in the form Drag. 37 are also the south Gaulish products.

On the basis of the terra sigillata vessels published so far most of those imported to Upper Moesia from the south Gaulish workshops were the bowls of Drag. 37 form and slightly less those of Drag. 29 form.²² The Drag. 29 form had been produced from the time of

17| Lj. Bjelajac, *Terra sigillata u Gornjoj Meziji*, Beograd 1990, 128.

18| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 61, T. 12/7.

19| S. Nikolić-Dorđević, *Singidunum 2*, 2000, 62, type I/121.

20| J. Kondić, T. Cvjetičanin, Terra sigillata from castrum Diana (part I), *Starinar XLII* (1991), 1993, 50–51, T. II/3–10.

21| A. W. Mees, *Modellsignierte Dekorationen auf südgallischer Terra Sigillata*, Stuttgart 1995, Taf. 95/1 sqq; Taf. 116.

22| Lj. Bjelajac, *Terra sigillata*, 12.

Tiberius (AD 14–37) until AD 85 while Drag. 37 had been produced from the end of Nero's reign (AD 54–68) until the end of the eighties of the 1st century AD. The south Gaulish terra sigillata is the most numerous group at Karataš–*Diana* making almost half of the complete amount of vessels produced in this technique discovered at this site and most of them had been produced in the La Graufesenque workshop.²³ These vessels are dated in the time of Vespasian–Domitian or Domitian. The vessels from Saldum could be generally dated according to these analogies in the time of Flavians.

In the layer dating from the middle of the 2nd – middle/end of the 3rd century have been found vessels of Drag. 37 type that reached the Saldum market from Westerndorf (**Cat. nos. 82–85**) or the local workshop center *Viminacium–Margum* (**Cat. nos. 87–88**). The workshop in Westerndorf was active from the last quarter of the 2nd century until AD 233 when the import from this workshop center discontinued. Specimens of Drag. 37 type from Saldum were produced in the workshops of *Comitalis* and his circle that to the considerable extent supplied the Upper Moesian market in the end of 2nd and in the beginning of the 3rd century.²⁴

Just one specimen of the terra sigillata of Drag. 46 type (**Cat. no. 91**) that was produced in the Gaulish workshops and in Rheinzabern from the beginning of the 2nd century to the end of 2nd – beginning of 3rd century has been found at Saldum. Rather small amount of the vessels of this type has been found in Upper Moesia and they mostly originated from Rheinzabern.²⁵

The bowl **Cat. no. 92** is the local provincial product and it is an imitation of the Padanian forms of plain sigillata Drag. 35 that according to the finds from Upper Moesia could be dated into the 2nd century.²⁶

Two specimens of the Drag. 33 type of bowl of the plain terra sigillata is represented at Saldum (**Cat. nos. 93–94**) and they originate from different workshop centers judging by the method and quality of manufacture. Both vessels have been found in the layer dating from the middle of the 2nd – middle of the 3rd century when their production had been most intensive in the western imperial workshops as well as in the local ones.²⁷

Cat. no. 72

field inv. 165/70
sq. E6 E7, ▽ 1.95 m
horizon 5

Fragment of calotte-shaped bowl with vertical rim and horizontal flange. On the flange is the motif of a lanceolate leaf executed in the barbotine technique.

Cat. no. 73

field inv. 137, 159/70
sq. D10, ▽ 3.20 m
horizon 5
diameter of rim 18.0 cm

Biconical bowl with slightly everted molded rim and flat ring-like base made in the terra sigillata technique. Under the rim is the network of rhombs and below it a series of wavy lines. On the vessel neck is a series of egg and dart motifs consisting of the rosettes in the center separated by the motif of hanging lilies. Relief on the body is separated from the neck by the bead ornament.

Cat. no. 74

field inv. 520, 522, 532, 533/68
sq. C9 E9 G9, under horizon 4
layer E

Many fragments of a bowl with vertical rim and calotte-shaped body with flat base and ring-shaped foot made in the terra sigillata technique. Ornament is organized in four zones, first with egg and dart motif encircled with beading while in the other zones are alternating floral and zoomorphic motifs.

Cat. no. 75

field inv. 519, 522/68
sq. G9, under horizon 4
layer E

Fragment of the neck and body of a vessel made in terra sigillata technique with preserved two zones of the relief ornament separated by beading. In the first zone is the egg and dart motif while only floral motifs are preserved in the second zone.

Cat. no. 76

field inv. 534a/68
sq. C8 C9 D8 D9, under horizon 4
layer E
diameter of base 9.0 cm

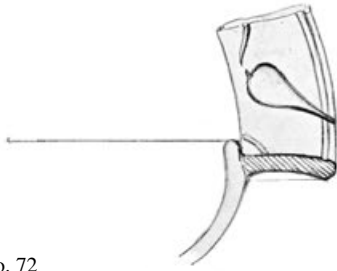
23| J. Kondić, T. Cvjetičanin, *Starinar* XLII (1991), 1993, 60.

24| Lj. Bjelajac, *Terra sigillata*, 77–78; J. Kondić, T. Cvjetičanin, *Terra sigillata from castrum Diana* (part II), *Starinar* XLIII–XLIV (1992–1993), 1994, 152–153, 159, cat. 33–44.

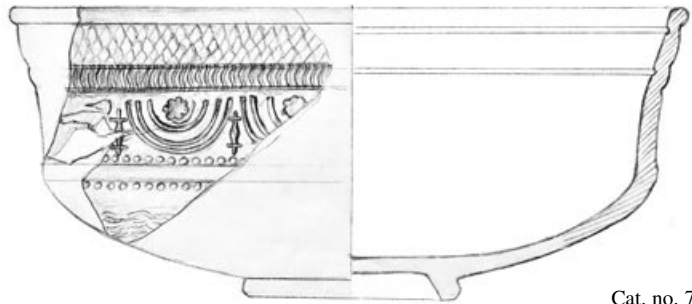
25| Lj. Bjelajac, *Terra sigillata*, 128, T. 60.

26| Lj. Bjelajac, *Terra sigillata*, 121, T. 58.

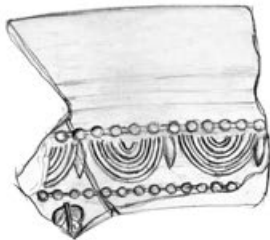
27| Lj. Bjelajac, *Terra sigillata*, 126, T. 59.



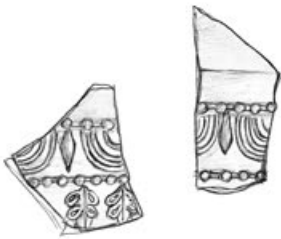
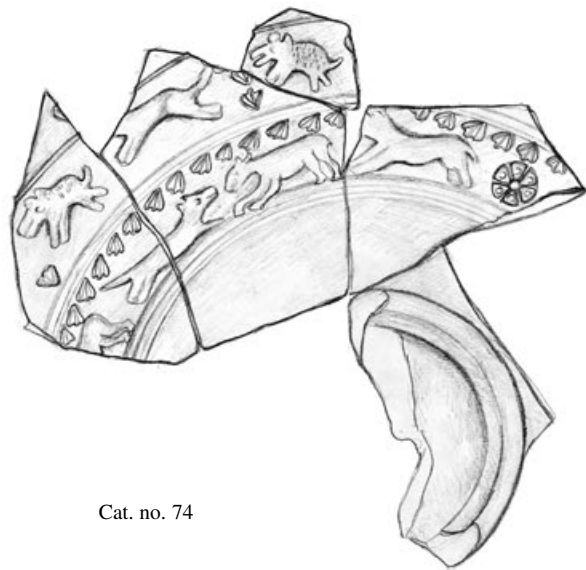
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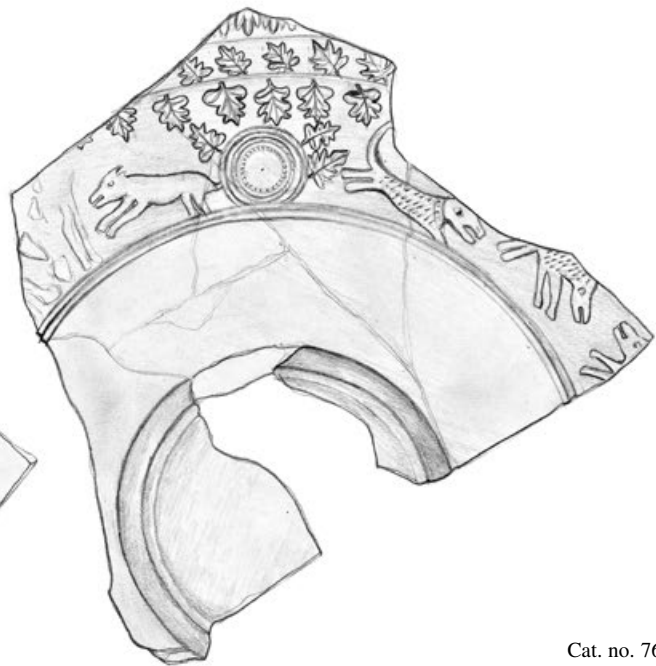
Cat. no. 73



Cat. no. 74



Cat. no. 75



Cat. no. 76

Fig. 37. Terra sigillata and terra sigillata imitations (R 1:2)



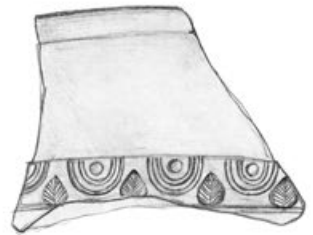
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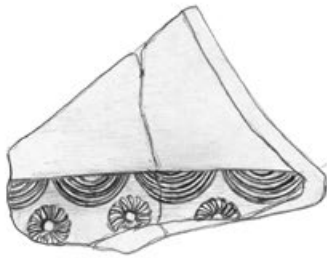
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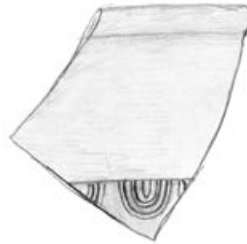
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Cat. no. 80



Cat. no. 81



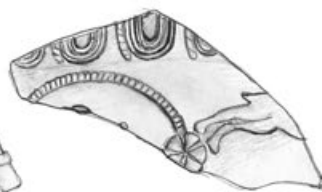
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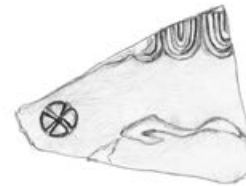
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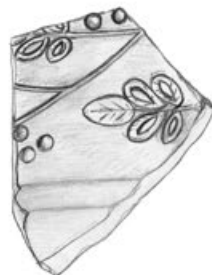
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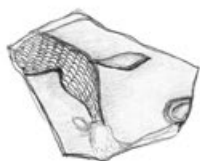
Cat. no. 85



Cat. no. 86



Cat. no. 87



Cat. no. 88



Cat. no. 89



Cat. no. 90

Fig. 38. Terra sigillata and terra sigillata imitations (R 1:2)

Fragment of the body, flat base and ring-like foot of a vessel made in the terra sigillata technique with relief representations of leaves, running animals and concentric circles.

Cat. no. 77

field inv. 246/70
sq. G9 G10, ▽ 2.60 m

Fragment of the rim of a bowl made in the terra sigillata technique with preserved series of egg and dart motifs.

Cat. no. 78

field inv. 145/70
sq. G3, under horizon 4
layer E

Fragment of the rim of the terra sigillata bowl with egg and dart motif in the upper and floral ornament in the bottom zone.

Cat. no. 79

field inv. 536/68
sq. C8 C9 D8 D9, ▽ ca 2.20 m
layer E

Fragment of the body of the terra sigillata vessel with representation of the wild boar's head (?) and a fir tree branch.

Cat. no. 80

field inv. 168, 169/70
sq. E6 E7, ▽ 1.95 m
horizon 5

Fragment of the rim and body of the terra sigillata vessel with the frieze of egg and dart motif.

Cat. no. 81

field inv. 147/70
sq. E6 E7, ▽ 1.75–1.90 m
horizon 4

Fragment of the body of the terra sigillata bowl decorated with egg and dart motif and vegetal ornament.

Cat. no. 82

field inv. 459a/68
sq. C9 D9
layer D

Fragment of the rim of the terra sigillata bowl decorated with egg and dart motif.

Cat. no. 83

field inv. 723/69
sq. B9, ▽ 2.02–2.20 m
layer D

Fragment of the neck of the terra sigillata bowl decorated with egg and dart motif.

Cat. no. 84

field inv. 400, 405/68
sq. C8 C9, ▽ 1.50–1.60 m
layer D

Fragment of the body of the terra sigillata bowl decorated with the egg and dart motif and below are depicted running animals and rosettes joined by the notched bands.

Cat. no. 85

field inv. 667/69
sq. F8, ▽ 1.55 m
layer D

Fragment of the body of the terra sigillata bowl with preserved ornaments including egg and dart motif, rosette and part of an animal (?).

Cat. no. 86

field inv. 697, 742/69
sq. F9
layer D

Fragments of the body of the terra sigillata bowl decorated with egg and dart motif in a frieze and below is the floral motif.

Cat. no. 87

field inv. 76/70
sq. C10 D10, under horizon 3
layer D

Fragment of the body of the terra sigillata bowl with representation of two dogs and rosette between them.

Cat. no. 88

field inv. 844/69
sq. B10, ▽ 1.60 m
pit

Fragment of the body of the terra sigillata bowl with representation of hind legs and tail of an animal.

Cat. no. 89

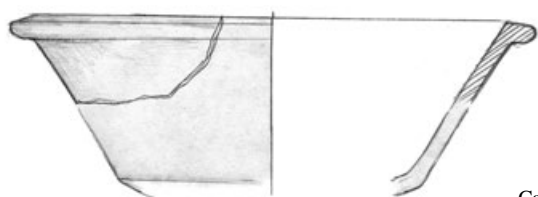
field inv. 500/68
sq. C9 D9, ▽ 2.00 m

Fragment of the body of the terra sigillata bowl decorated with the rosette motif.

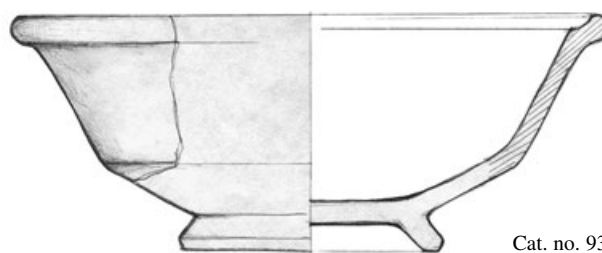
Cat. no. 90

field inv. 748/69
sq. F8, ▽ 1.80 m
pit

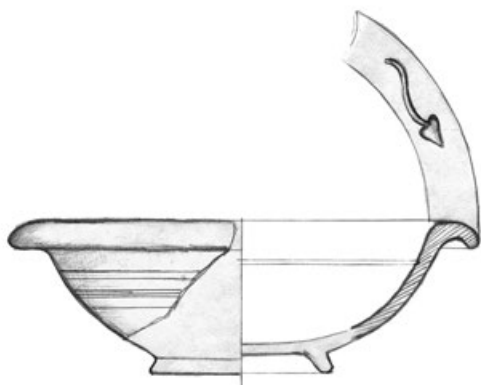
Fragment of the body of the terra sigillata bowl decorated with rosettes and grains.



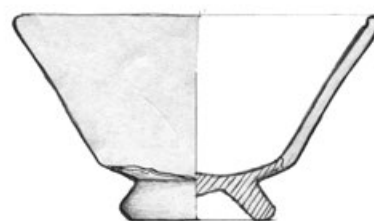
Cat. no. 91



Cat. no. 93



Cat. no. 92



Cat. no. 94

Fig. 39. *Terra sigillata* and *terra sigillata* imitations (R 1:2)

Cat. no. 91

field inv. 455/68, K-22

sq. C9 D9, ∇ ca 1.90 m; sq. E8, ∇ 1.96 m

layer D

Fragment of horizontally everted rim and conical body of a bowl made of the plain *terra sigillata*.

Cat. no. 92

K-20 (bag 91/69)

sq. F4, ∇ 0.95 m

layer D

Fragment of S profiled rim and calotte-shaped body of a small bowl made of orange fired clay with dark red slip; imitation of *terra sigillata*. On the rim is the heart-shaped leaf with long stem.

Cat. no. 93

field inv. 497/68

sq. C9 D9, ∇ 2.00 m

horizon 4

Fragment of slanting everted and grooved rim and biconical body of the *terra sigillata* bowl.

Cat. no. 94

field inv. 454/68

sq. C9 D9, ∇ ca 1.90 m

layer D

Fragment of base and short conical foot of the *terra sigillata* bowl.

IV.4.B.2. TERRA NIGRA

Rather small amount of vessels made in the *terra nigra* technique were found at Saldum and they were discovered in two earliest layers (layer E – horizon 5 and layer D – horizon 4) (Fig. 40). The bowl **Cat. no. 95** and vessel **Cat. no. 98** were modeled after the *terra sigillata* bowls of Drag. 35 type,²⁸ while the calotte-shaped bowl **Cat. no. 96** corresponds to the Curle 11 form and had been produced from the time of Flavians until the middle of the 2nd century, when the provincial production also started.

The body fragments with flange **Cat. nos. 99–100** belong to the type of calotte-shaped bowls with flat base usually on a ring-like foot. The bowls of this type appear as provincial products widely distributed during the 2nd–3rd century and they are made of red fired clay of better quality and coated with red slip or red/brown glossy slip.²⁹

28| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 88, T. 72/28–34, dates the specimens in the second half of the 1st century.

29| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum 2*, 2000, 34, type I/38; A. Suceveanu, *La céramique romaine des I^{er}–III^e siècle ap. J.–C., Histria X. Les résultats des fouilles*, Bucarest 2000, 60–62, type XVI, Pl. 22.

The vessels made in the *terra nigra* technique were discovered in *Singidunum*, *Čezava–Novae*, *Karataš–Diana*, *Kostol–Pontes* and *Kusjak* in the layers dating from the end of 1st – beginning of the 2nd century and the forms discovered include Drag. 35, Drag. 37 and Curle 15.³⁰ They were imported most probably from some of the north Italic centers.

Cat. no. 95

field inv. 280/70 and 699/69

sq. F9 F10, ∇ 1.55 m

layer D

diameter of rim 16.0 cm

The bowl with S profiled rim decorated with the motif of droplets. Gray fired well refined clay with dark slip.



Cat. no. 95

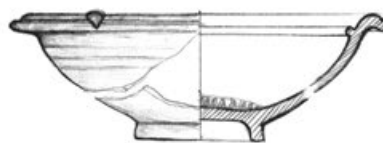
Cat. no. 96

field inv. 266/70

sq. E9

horizon 4

The calotte-shaped bowl with short inverted neck with flange and barbotine ornament of droplets. The base is flat on a ring-like foot and decorated with rouletting on the inside. Gray fired clay, well refined, with dark burnished slip.



Cat. no. 96

Cat. no. 97

field inv. no number

Fragment of the calotte-shaped body of a bowl (?) made of gray fired clay with dark burnished slip.



Cat. no. 98

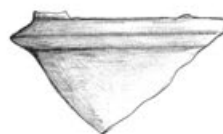
Cat. no. 98

field inv. 124/70

sq. D10, ∇ to 2.80 m

layer E

The calotte-shaped bowl with S shaped rim with a groove; made of brown-gray fired clay with black glossy slip.



Cat. no. 99

Cat. no. 99

field inv. 427/68

sq. C9 D9, ∇ 1.70 m

layer D

The calotte-shaped bowl with vertical rim with small flange made of gray fired clay with black slip having metallic luster.



Cat. no. 100

Cat. no. 100

field inv. 279/70

sq. G10 F10

layer D

The calotte-shaped bowl with damaged rim with flange on which are applied leaves in the barbotine technique. Gray fired clay with dark slip.



Cat. no. 102



Cat. no. 103

Fig. 40. *Terra nigra* (R 1:2)

30| T. Cvjetičanin, Trajanic limes in Upper Moesia, a ceramic viewpoint, *Novensia* 15, 2004, 118, T. I/1a, 1b.

Cat. no. 101

field inv. no number

layer E?

Fragment of the body of a vessel made of gray fired clay with dark slip.

Cat. no. 102

field inv. 129/70

sq. E10, ▽ 2.60 m

horizon 4 and layer E

Fragment of the base of a vessel made of gray fired well refined clay; on the inside is a leaf-shaped stamp.

Cat. no. 103

K-37

sq. G9 G10, ▽ 2.34–2.40 m

layer E

Fragment of the vessel base with rosette-shaped stamp. Gray fired refined clay with black slip.

IV. 4. B. 3. MARBLED POTTERY

Fragments of four vessels made in the marble-like technique have been found at Saldum (Fig. 41). This technique in pottery production appeared amongst the South Gaulish terra sigillata from the time of Claudius and some time later it was also used for the fine red fired pottery.³¹ Different types of vessels had been produced until the middle of the 3rd century but the quality was decreasing from the middle of the 2nd century onwards.

There were many discussions in the academic literature about the origin and distribution of these vessels. It had been considered that they were the products of the army pottery workshops or that they had been produced for the army market as it could be assumed for the vessels of the Flavian period from *Vindonissa*, *Argentorate*, *Brigetio*, *Aquincum* and other sites.³² An interesting hypothesis about their origin and arrival to *Diana* was introduced on the basis of the analysis of the marbled vessels from *Karataš–Diana* dating from the time of Domitian and on the basis of written evidence (military diplomas). One of possible solutions according to T. Cvjetičanin is that these vessels brought with them as personal property the soldiers of *cohors VI Thracum* who were stationed in Pannonia from AD 84 and who are mentioned as veterans in AD 96 and 100.³³ Since the first quarter of the 2nd century the marbled

vessels, however, had been produced in the civilian workshops under the influence of the forms of the Flavian period but also with conspicuous elements of local tradition (*Ulpia Noviomagus*, *Sirmium*, *Diana* – finds from the time of Hadrian).³⁴

Calotte-shaped marbled bowls with flange **Cat. nos. 104–105** made as the types of mortaria appeared in *Tekija–Transdierna* in the time of Flavians,³⁵ in *Karataš–Diana* in the time of Trajan³⁶ while in the *Singidunum* pottery material they appear in the layers dating from the 2nd–3rd century.³⁷ Specimens from *Sirmium*, *Rittium* and *Vukovar* with diameter of the rim being 25.0–30.0 cm are dated from the end of 1st to the middle of the 2nd century.³⁸

Hemispherical bowl **Cat. no. 106** was made in the Drag. 40/Ritterling 8 form. The find from *Karataš–Diana* that is analogous to our specimen is dated in the late Flavian period (Domitian),³⁹ the find from *Tekija–Transdierna* is dated in the time of Flavians⁴⁰ while the finds from *Lipljan–Ulpiana*⁴¹ and from Lower Pannonia (*Sirmium* and *Gomolava*) are dated in the 2nd–3rd century.⁴²

The plate **Cat. no. 107** made of red fired clay with marbled inner surface and polished outer surface that is dating from the first half-middle of the 3rd century (horizon 4) reveals parallels with the 2nd–3rd century plates from *Singidunum* that were made of well or medium refined and red fired clay with mostly polished or painted surface.⁴³

31| T. Cvjetičanin, Early Roman marbled vessels from Diana (Serbia), *Archaeologia Bulgarica* 2003–1, 59.

32| T. Cvjetičanin, *Archaeologia Bulgarica* 2003–1, 67.

33| T. Cvjetičanin, *Archaeologia Bulgarica* 2003–1, 67.

34| T. Cvjetičanin, *Archaeologia Bulgarica* 2003–1, 67.

35| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 91.

36| T. Cvjetičanin, *Archaeologia Bulgarica* 2003–1, 62, fig. 14.

37| S. Nikolić-Đorđević, Antička keramika Singidunuma, *Singidunum* 2, 2000, 53, type I/95.

38| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 84, mortarium type 6, T. 61/19–23.

39| T. Cvjetičanin, *Archaeologia Bulgarica* 2003–1, 62, fig. 5.

40| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, 91.

41| S. Fidanovski, *Rimska keramika Ulpijane*, Beograd 1990, 38, bowl type 12, T. 9/6.

42| O. Brukner, *Rimska keramika*, 91, bowl type 26, T. 76/87.

43| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 107, type III/32.

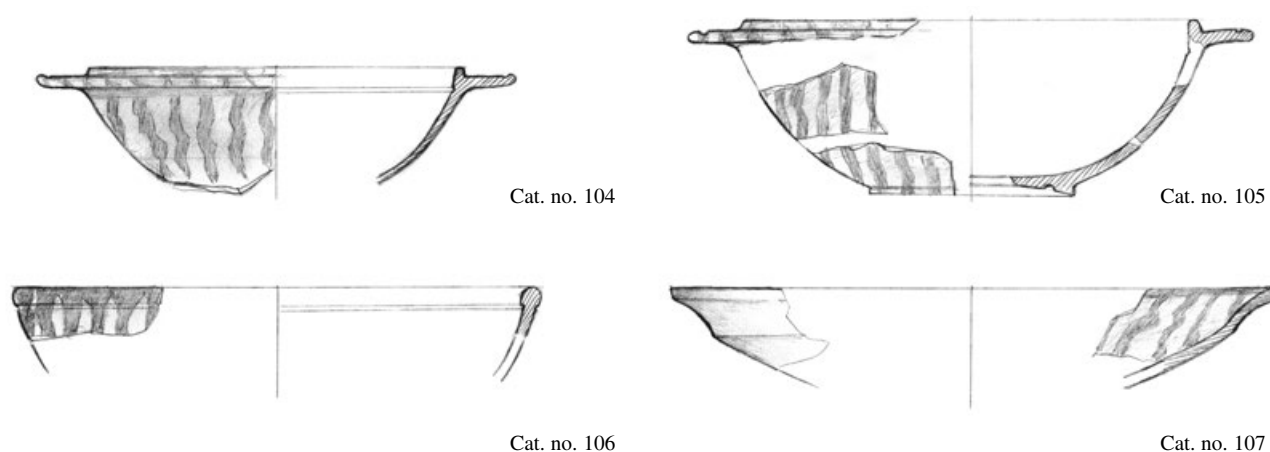


Fig. 41. Marbled pottery (R 1:4)

Cat. no. 104

field inv. 818, 824/69

sq. E9, ▽ 2. 75 m

horizon 5 and under horizon 5

diameter of rim 25.0 cm

Marbled calotte-shaped bowl with vertical short rim and horizontally protruding flange.

Cat. no. 105

field inv. 152, 154/70, 772/69

sq. E10, ▽ 2. 80–3.00 m

sq. E8, ▽ 2. 20 m

layer E

diameter of rim 30.0 cm

The calotte-shaped bowl with flange made in the marbled technique. Base is flat with slightly ring-shaped foot.

Cat. no. 106

field inv. 773/69

sq. E10, ▽ 2. 80–3.00 m

layer E

diameter of rim 28.0 cm

The rim with ring-like molding on the inside and calotte-shaped body of the marbled bowl.

Cat. no. 107

field inv. 501/68

sq. C9 D9, ▽ 2.00 m

horizon 4

diameter of rim 32.0 cm

Plate with broad slanting everted rim with faceted edge and conical body made of red fired clay, marbled on the inside and polished on the outside.

IV.4.B.4. EARLY IMPERIAL
GLAZED VESSELS

The glazed vessels from the early imperial stratum at Saldum despite their scarcity indicate the presence of the luxurious pottery vessels in this area (Fig. 42). While investigating two earliest layers within the settlement (layers E and D) many fragments of the glazed vessels were discovered. It was possible to determine the type for four specimens while the others were very small fragments of bodies and rims (**Cat. no. 115**).

The glazed vessels dating from the end of 1st – beginning of the 2nd century are present in a considerably smaller quantity in the area of middle Danube limes and were recorded at *Singidunum*, *Viminacium*, *Čezava–Novae*, *Ravna–Camps*, *Karataš–Diana*.⁴⁴

From *Tekija–Transdierna* come fragments of vessels decorated as our specimens **Cat. nos. 112** and **113** – fragments of beakers with horseshoe-shaped ornament.⁴⁵

The bowl **Cat. no. 109** resembles in form similar slip-coated bowls from *Singidunum* that were found in the layers dating from the second half of the 2nd century.⁴⁶ Small bowl **Cat. no. 110** also resembles in shape

44| T. Cvjetičanin, Trajanic limes in Upper Moesia, a ceramic viewpoint, *Novaensia* 15, 2004, 119–120, Table II.

45| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 109, cat. 2, 4.

46| S. Nikolić-Đorđević, *Antička keramika Singidunuma*, *Singidunum* 2, 2000, 44–45, type I/65.

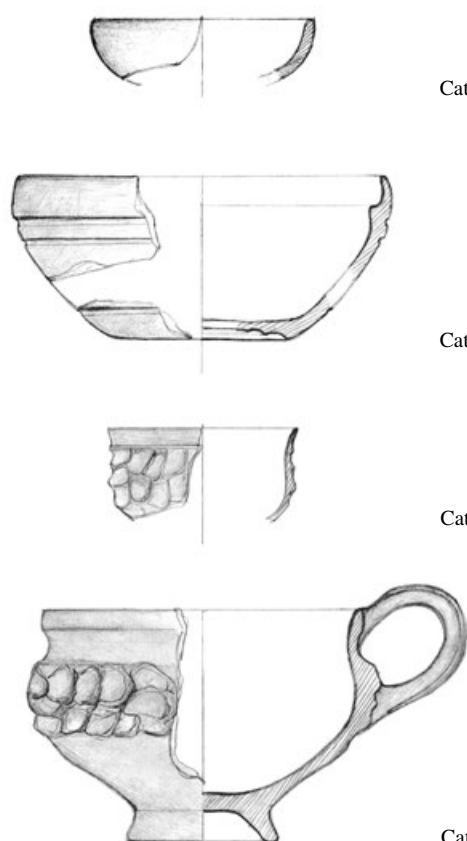


Fig. 42. Early imperial glazed pottery (R 1:4)

the type of slip-coated small biconical bowls. The style of decoration, fabric and glaze color possibly indicate that it had been produced in the same center as the single-handled cup **Cat. no. 111**.

Cat. no. 108

field inv. 820/69

sq. E9, ▽ 2.75 m

horizon 5

diameter of rim 6.0 cm

Small calotte-shaped bowl with vertical rim made of red fired clay; brown-olive glazed on the outside and brown glazed on the inside.

Cat. no. 109

field inv. 804/69

sq. E8, ▽ 2.35 m

horizon 5

diameter of rim 10.0 cm

Bowl with tapering rim, calotte-shaped body and the base grooved on the outside. Made of brown fired clay, glazed dark green on the outside and brown on the inside.

Cat. no. 108

Cat. no. 109

Cat. no. 110

Cat. no. 111

Cat. no. 110

field inv. 836/69

sq. B8, ▽ 1.95 m

horizon 5

diameter of rim 10.0 cm

Small bowl with vertical rim and calotte-shaped body, red fired and olive-brown glazed with barbotine ornament of square scales.

Cat. no. 111

field inv. 250/70

sq. C10, ▽ 3.90 m

horizon 5

diameter of rim 8.5 cm; diameter of base 4.0 cm; height 6.0 cm
Single-handled cup with molded rim and prominent high belly and base on ring-like foot. Handle is of the band type with deep groove. Red fired clay brown-olive glazed. On the upper portion of the body is barbotine decoration of square scales.

Cat. no. 112

field inv. 496/68

sq. C9 D9, ▽ 2.00 m

horizon 4

Fragment of the body of a beaker made of brown fired clay, brown glazed on the inside and on the outside and on the outside is decorated with series of crescent motifs in the barbotine technique.

Cat. no. 113

field inv. 829/69

sq. F5, ▽ 0.70 m

layers C, D

Fragment of the body of a beaker made of brown fired clay and brown glazed on the outside. Horseshoe-shaped ornament in the barbotine technique and parallel fluting on the outside.

Cat. no. 114

field inv. 164/70

sq. E6 E7, ▽ to 1.95 m

horizon 5

Fragment of the beaker body made of gray fired clay and olive glazed with crescent ornament and series of dots glazed yellow.

Cat. no. 115

field inv. 797/69

sq. C9, ▽ 0.20 m

horizon 5

Molded rim and slanting wall of a body of the vessel made of brown fired insufficiently refined clay with sand grains. Both sides dark brown glazed.

IV.4.B.5. VESSELS WITH GLOSSY SLIP AND VESSELS WITH THIN WALLS

About thirty mostly fragmented vessels with thin walls and glossy slip-coated surfaces were found among the luxurious pottery from the earliest layer at Saldum (Fig. 43). These are mostly small biconical cups and ovoid and conical beakers. It was not possible to determine the type of all specimens because of the fragmentary state of the material. In addition there were also found two fragments of bowl bodies with relief representations of the Centaur and running animals (**Cat. nos. 145–146**).

The largest number (twenty-one specimens) are cups with thin walls. They were made of red, brown, gray and rarely yellow fired clay coated with red, brown, red-brown or black glossy slip. The ornament, mostly floral, was executed in the barbotine technique but there are series of simple notches produced by rouletting. The interior of few vessels was gritted.

The repertoire of the glossy slip-coated vessels with thin walls is relatively modest and sparse judging by the finds known so far from Upper Moesia.⁴⁷ Most of the specimens were imported but their precise origin is impossible to determine at this moment. The early specimens probably come from the Po river valley and the centers in the north Adriatic area (*Cremona, Ravenna*, possibly *Aquileia*) and from the Flavian times they had also been produced in Pannonia.⁴⁸

CUPS

Cat. no. 116

field inv. 764/69

sq. F8, ∇ 2.23 m

layer E

diameter of rim 12.0 cm

Cup of hemispherical shape with vertical rim. Made of yellowish fired clay with red slip. Barbotine decoration executed as small snail shells.

Cat. no. 117

field inv. 811/69

sq. B8, ∇ 2.76 m

pit

Fragment of the vertical rim of a cup made of light brown fired clay with glossy red slip having metallic luster and gritted on the inside.

Cat. no. 118

field inv. 798/69

sq. C9

horizon 5

Hemispherical cup with vertical rim made of red fired clay and with red glossy slip. Barbotine decoration on the outside and gritted on the inside.

Cat. no. 119

K-8 (bag 110/69)

sq. E8, ∇ ca 2.35 m

horizon 5 – on the floor

Vertical rim and portion of the body of a cup made of red fired clay with brown-red glossy slip. Barbotine decoration on the outside and gritted on the inside.

Cat. no. 120

K-61 (01.10.1970)

sq. C6 D6, ∇ 1.40 m

layer E

Fragment of the upper part of the body of a cup made of red fired clay with brown-red glossy slip and barbotine decoration on the outside.

Cat. no. 121

K-5 (bag 127/69)

sq. E9, ∇ 2.82 m

horizon 5

Fragment of the body and flat base of biconical cup made of red fired clay with brown-red glossy slip and the traces of barbotine ornament on the outside.

Cat. no. 122

field inv. 856/69

sq. G5, ∇ 1.50 m

pit

Fragment of the biconical body of a cup made of red fired clay with brown glossy slip on the outside and light brown on the inside. On the upper cone is crescent-shaped barbotine and on the lower cone decoration executed by rouletting and gritted on the inside.

47| T. Cvjetičanin, Trajanic limes in Upper Moesia, a ceramic viewpoint, *Novaensia* 15, 2004, 121, T. I/2a–d.

48| T. Cvjetičanin, *Novaensia* 15, 2004, 121; O. Brukner, *Rimska keramika u u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 30, 78–83, T. 55–59; A. Premk, *Proizvodnja ranorimske keramike u Sirmijumu*, *ZNMB* XIV–1, 1987, 363–368, fig. 1–3.

Cat. no. 123

K-44 (22.09.1970)

sq. C6 D6, to ▽ 1.30 m

Fragment of the lower part of the body of biconical cup made of red clay and with brown glossy slip. Decoration on the outside executed by rouletting and gritted on the inside.

Cat. no. 124

K-6 (bag 127/69)

sq. E9, ▽ 2.82 m

horizon 5

Fragment of the body of the biconical cup made of red fired clay with red glossy slip and decorated with rouletting on the outside.

Cat. no. 125

field inv. 149/70

sq. E10, ▽ 2.80–3.00 m

layer E

Fragment of the biconical body of a cup made of red fired clay with red glossy slip having metallic luster. Lower cone decorated with radial rows of rouletting.

Cat. no. 126

K-10 (bag 86/69)

sq. E8, ▽ 1.96 m

layer E

Fragment of the body of a cup made of red fired clay with brown glossy slip and barbotine decoration.

Cat. no. 127

field inv. 287/70

sq. D8, ▽ 2.50 m

horizon 5

Fragment of the body of a cup made of red fired clay with brown glossy slip having metallic luster. On the outside is barbotine created leaf motif.

Cat. no. 128

field inv. 153/70

sq. E10, ▽ 3.00–3.10 m

layer E

Fragment of the lower part of the body and flat base with ring-like foot of biconical cup made of red fired clay and with red glossy slip. Decorated on the outside with the rows of rouletting.

Cat. no. 129

K-60 (01.10.1970)

sq. C6 D6, ▽ 1.40 m

layer E

Fragment of the lower part of biconical cup with thin walls made of red fired clay and with brown glossy slip having metallic luster. Decorated on the outside with the rows of rouletting.

Cat. no. 130

field inv. 776/69

sq. C8, ▽ 2.74 m

horizon 5

Fragment of the body and flat base of a cup with prominent ring-like foot made of red fired clay and with brown-red glossy slip. The interior is gritted.

Cat. no. 131

K-12 (bag 144/69)

sq. G5, ▽ 1.45 m

Fragment of the body of a cup made of ochre fired clay with brown glossy slip having metallic luster. Decorated with the rows of rouletting.

Cat. no. 132

field inv. 810/69

sq. F9, ▽ 2.97 m

horizon 5

Biconical body and flat base of a cup with ring-shaped foot made of light brown fired clay with brown glossy slip having metallic luster. Decorated with rouletting in the herring-bone pattern.

Cat. no. 133

field inv. 808, 812/69

sq. F9, ▽ 2.97 m

horizon 5

diameter of base 3.0 cm

Fragment of the body and base of a cup with thin walls made of gray fired clay with black glossy slip. Decorated with bands of rouletting.

Cat. no. 134

field inv. 779/69

sq. C8, ▽ 2.74 m

horizon 5

Fragment of the body of a cup made of gray fired clay with black glossy slip and decorated on the outside with the bands of rouletting.

Cat. no. 135

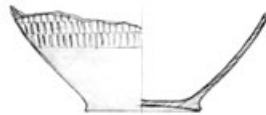
K-34 (01.10.1970)

sq. G9, ▽ 1.00 m from socle

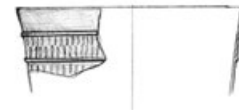
above horizon 5



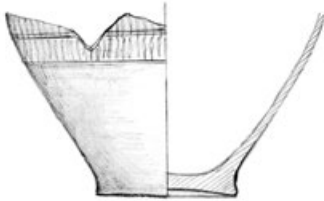
Cat. no. 116



Cat. no. 133



Cat. no. 138



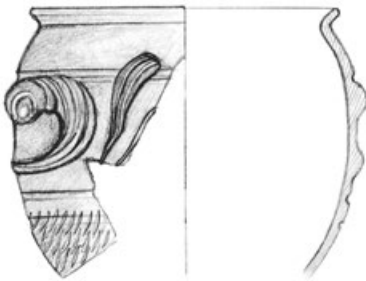
Cat. no. 130



Cat. no. 142



Cat. no. 144



Cat. no. 136



Cat. no. 145



Cat. no. 146

Fig. 43. Vessels with glossy slip and vessels with thin walls (R 1:2; Cat. nos. 116 and 138 R 1:4)

Fragment of calotte-shaped body and flat base of a cup made of light brown fired clay with light brown-brown glossy slip. Outer surface roughened by gritting in the broom stroke pattern.

BEAKERS

Cat. no. 136

field inv. 172/70
sq. E10, to ∇ 3.50 m
layer E

diameter of rim 8.0 cm

Beaker with everted rim and ovoid body made of red fired clay with brown glossy slip. On the upper part of the body is barbotine ornament shaped as leaves and below is rouletted decoration.

Cat. no. 137

field inv. 775/69
sq. C8, ∇ 2.74 m
horizon 5

Fragment of the body of a beaker made of red fired clay with brown glossy slip. Decorated with leaf-motifs in the barbotine technique.

Cat. no. 138

field inv. 774/69
sq. C8, ∇ 2.74 m
horizon 5
diameter of rim 12.0 cm

Fragment of the rim and conical body of a beaker made of gray fired clay with dark gray glossy slip. Under the rim are molded bands between which are the bands of rouletting.

Cat. no. 139

field inv. 835/69
sq. F9, ∇ 3.16 m
horizon 5

Fragment of the body of a beaker made of light brown fired clay with brown glossy slip. Decorated with symmetrical rows of notches on the outside.

Cat. no. 140

K-40 (15.09.1970)
sq. E9 E10, ∇ 2.40 m
layer D, horizon 4

Fragment of the body and ring-like base of a beaker made of red fired clay with glossy brown slip.

Cat. no. 141

K-1 (bag 122/69)

sq. F9, ▽ 2.90 m

horizon 5 and under

Fragment of the body and base of brown glossy slipped beaker with gray core at the fracture.

Cat. no. 142

field inv. 771/69

sq. C9, ▽ 2.71 m

horizon 5

diameter of base 3.6 cm

Fragment of the ovoid body and ring-shaped base of a beaker made of gray fired clay with glossy dark gray slip having metallic luster. Outer surface decorated with rows of parallel and horizontal channels.

Cat. no. 143

field inv. 770/69

sq. C9, ▽ 2.71 m

horizon 5

The ovoid body and flat base with ring-shaped foot of a beaker made of red fired clay with glossy brown slip. The body is decorated with rouletting.

Cat. no. 144

K-72 (bag 2/67)

Trench 2, ▽ 0.40 m

Unreliable stratigraphy

The ovoid body and base of a beaker made of fired clay with gray core and brown glossy slip. The rows of symmetrical notches create the trapeze motif.

FRAGMENTS OF THE VESSELS WITH RELIEF DECORATION

Cat. no. 145

field inv. 459/68

sq. C9 D9, ▽ ca 1.90 m

layer D

Fragment of the body of a vessel made of light red fired medium refined clay with light brown glossy slip on the outside surface. The relief representation of Centaur in motion.

Cat. no. 146

field inv. 458/68

sq. C9 D9, ▽ ca 1.90 m

layer D

Fragment of the body of a vessel made of light red fired medium refined clay with brown-red glossy slip on the outside and relief representation of a pair of animals.

IV.4.C. POTTERY FOR EVERYDAY USE

Tableware, kitchenware and storage vessels made of fired clay that according to the archaeological evidence had been used by the inhabitants of Saldum in the period from the middle-end of the 1st century to the end of the 6th century has been classified into the main types according to the established standards recommended and applied on the material from the investigated sites in the Djerdap II sector (cf. *Djerdapske sveske* II, 1984, instructions with codes for the pottery vessels):

1. bowls
2. pots
3. plates
4. amphorae
5. pithoi
6. flagons
7. lids
8. beakers
9. censers

IV.4.C.1. BOWLS

Around eighty complete or fragmented bowls classified into twenty-seven main types have been inventoried (Figs. 44–49). Most of the vessels come from the chronologically determined entities. The typology was established mainly on the basis of the known classifications of the pottery vessels from *Singidunum*, *Tekija–Transdierna*, *Karataš–Diana*, *Kostol–Pontes* and the sites in the Yugoslav part of the Lower Pannonia province that at the same time were used as good comparative material for the Saldum specimens.

Type I/1 (Cat. no. 147) – Deep hemispherical bowl with ring-like molded rim and with prominent ring-like foot. Made of gray fired clay with burnished surface and with dark slip and stamped ornament on the body. Second half of the 1st – first half of the 2nd century.

This bowl type was created after the terra sigillata bowls of the Drag. 37 form. The specimen from *Burgenae* that is analogous to our vessels has ring-like and grooved rim and was made of gray fired clay. It has burnished surface with stamped ornament and was identified as local product dating from the 2nd century.⁴⁹ The

49| O. Brukner, *Rimska keramika u u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 76, bowl type 33, T. 50/13.

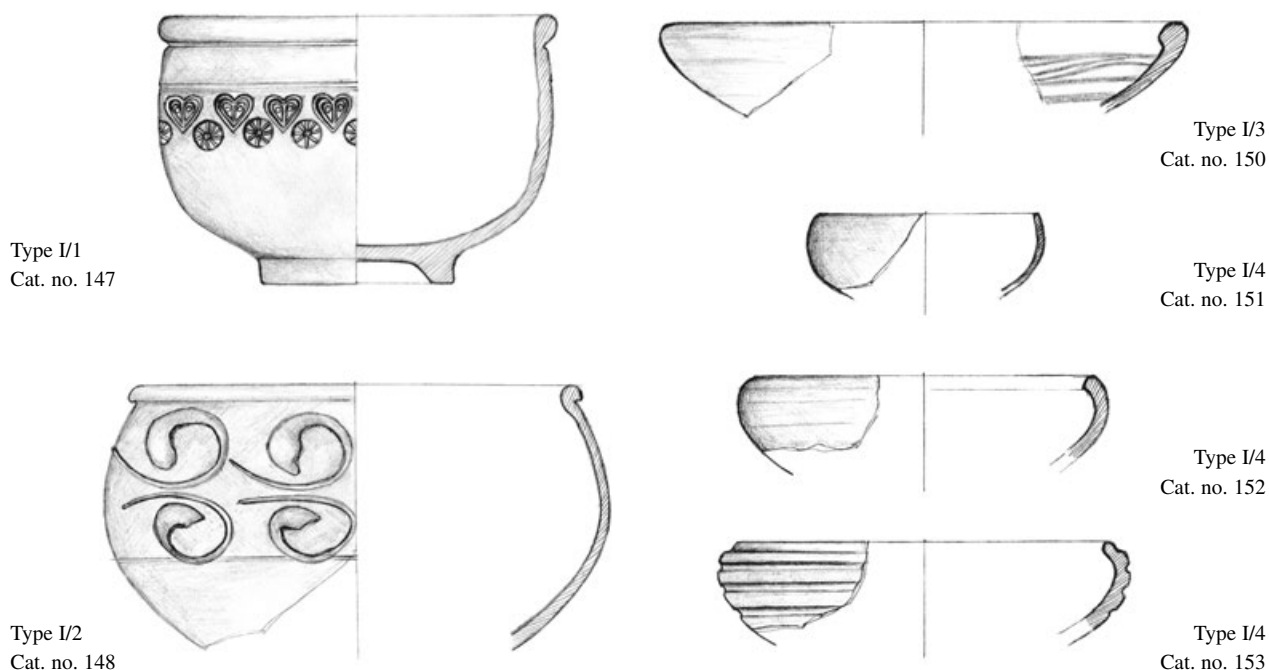


Fig. 44. Bowls (R 1:4)

stamped ornament on the upper portion of the vessel body and consisting of stylized leaves, rosettes and circles was also encountered on the bowls from *Singidunum* dating from the layers of the middle and second half of the 2nd century that were made of orange-red fired clay.⁵⁰

Type I/2 (Cat. nos. 148–149) – Deep bowl with inverted ring-shaped rim, prominent spherical body and flat base on the ring-like foot. Made of red or gray fired refined clay with red or black coated surfaces. The barbotine ornament on the body. Second half of the 1st – first half of the 2nd century.

Type I/3 (Cat. no. 150) – Bowl of La Tène resembling form with inverted rim and slanting walls made of light brown fired refined clay with slip on both surfaces, which were burnished in bands. Second half of the 1st – first half of the 2nd century.

Type I/4 (Cat. nos. 151–153) – Rather small calotte-shaped bowl with vertical or slightly inverted rim and base on ring-like foot. They were made of red or brown fired clay of good or medium quality. Second half of the 1st – first half of the 2nd century. Rather widely distributed bowl type throughout the provinces

in the early imperial time and produced in many centers in the East as well as in the West. The form is Greek and mostly encountered in the material from the 2nd century BC⁵¹ and was adopted in the Roman world from the 1st century AD. Their Latin name was most probably *catinus* (*acetabulum*, *paropsis*, *discus* or *lanx*). These bowls are particularly frequent in the layers dating from the 2nd and 3rd century. In *Singidunum* was discovered a pottery workshop, which produced among other forms also the bowls of this type. The earlier specimens of the calotte-shaped bowls from the *Singidunum* territory (2nd century) that are analogous with the Saldum ones have inverted rim, while later specimens have profiled rim and are mostly reddish painted or slipped.⁵² Considerably large amount of the bowls of this type was discovered at *Histria* and there are variations in the quality of clay and color of firing. These vessels are dated from the second half of the 1st century to the 3rd century.⁵³

50| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum* 2, 2000, 49–50, type I/82.

51| A. Suceveanu, *La céramique romaine des Ier–IIIe siècle ap. J.-C., Histria X. Les résultats des fouilles*, Bucarest 2000, 19.

52| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 23, type I/15.

53| A. Suceveanu, *Histria X*, 15–18, type IV, Pl. 2.

Type I/5 (Cat. no. 154) – Calotte-shaped bowl with thickened and slanting rim made of gray or brown fired clay and surfaces could be matte, burnished, color-coated or marbled. Second half of the 1st – first half of the 2nd century.

Specimens of many related types classified as the bowls with flange from the southern area of the Lower Pannonia province are dated in the end of 1st and in the 2nd century.⁵⁴

Type I/6 (Cat. nos. 155–157) – Bowl of the S profilation. Brow-gray or gray fired and made of well refined clay with burnished surfaces. Second half of the 1st – first half of the 2nd century.

This bowl type was made after the native Celtic pottery. Few variants could be distinguished on the basis of the rim profilation and the shape of a base, which could be flat or ring-shaped.

The earlier specimens from *Singidunum* have been found within the settlements or necropolis and mostly date from the first half of the 2nd century. They have carinated shape, ring-like foot and were made of gray fired clay with surfaces mostly covered with slip or burnished.⁵⁵ The bowls from *Sirmium* made of brown or red fired clay are dated in the 1st century, according to finding circumstances.⁵⁶

Type I/7 (Cat. no. 158) – Calotte-shaped bowl with vertical rim, which has many grooves on the outside. Body is decorated with rouletting. Made of red fired clay with orange-red slip. Dating from the 3rd century.

These are the bowls of local manufacture classified as the luxurious ware. The vessels of similar form, technological characteristics and style of decoration but of different rim shapes (band or ring-like rims) have been found at many locations in *Singidunum* and it was confirmed that they had been produced in the workshop located at the site of the present-day National Theatre.⁵⁷

Type I/8 (Cat. no. 159) – Rather deep bowl with vertical rim with flange and slanting walls made of gray fired clay burnished on the outside.

Such bowl form was encountered in the 3rd–4th century layers at *Diana*,⁵⁸ so our specimen should be dated in the 3rd century on the basis of the finding circumstances.

Type I/9 (Cat. no. 160) – The bowl-*mortarium* with flange, hemispherical body and flat base. The interior as well as the flange and lip are color-coated. Red fired insufficiently refined clay. Dating from the 2nd–3rd century.

The identical mortaria in a slightly smaller quantity were found in *Singidunum* in the layers dating from the end of 2nd and first half of the 3rd century.⁵⁹ They are the local products made after the terra sigillata mortaria of Drag. 43 type. Such mortaria are dated at *Karataš–Diana* in the 3rd century.⁶⁰

Type I/10 (Cat. no. 161) – Rather large calotte-shaped bowl with triangular molded rim made of red fired clay and with brown painted surfaces. It dates from the 2nd–3rd century.

The analogous specimens were found at *Karataš–Diana* and dated in the 2nd–3rd century.⁶¹ Somewhat earlier is the specimen from Gomolava (end of 1st – middle of the 2nd century) that was made of gray fired clay with burnished surfaces.⁶²

Type I/11 (Cat. nos. 162–163) – The bowl with horizontally everted and flattened rim and carinated body tapering towards the base on the ring-like foot. Red fired clay, red painted or slipped. Dating from the 2nd–3rd century.

This bowl type is known as *catinus*, the form of Greek origin that was spread throughout the Roman Empire, in the East as well as in the West. In *Singidunum* were found specimens dated from the end of 2nd to the second half of the 3rd century⁶³ and in *Histria* this type was mostly encountered in the 2nd–3rd century layers and this corresponds to the dating of our specimens.⁶⁴

54| O. Brukner, *Rimska keramika*, 90, bowl type 22, T. 75.

55| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 25–26, type I/19.

56| O. Brukner, *Rimska keramika*, 91, bowl type 38, T. 77/1–2.

57| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 18–19, type I/4, note 40.

58| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana – Karataš, Djerdapske sveske* IV, 1987, T. III, type I/43.

59| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 53, type I/95.

60| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/13.

61| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/27.

62| O. Brukner, *Rimska keramika*, 90, variant of type 52, T. 79/31.

63| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 38, type I/47.

64| A. Suceveanu, *Histria* X, 43–46, type XI, Pl. 13/2–5.

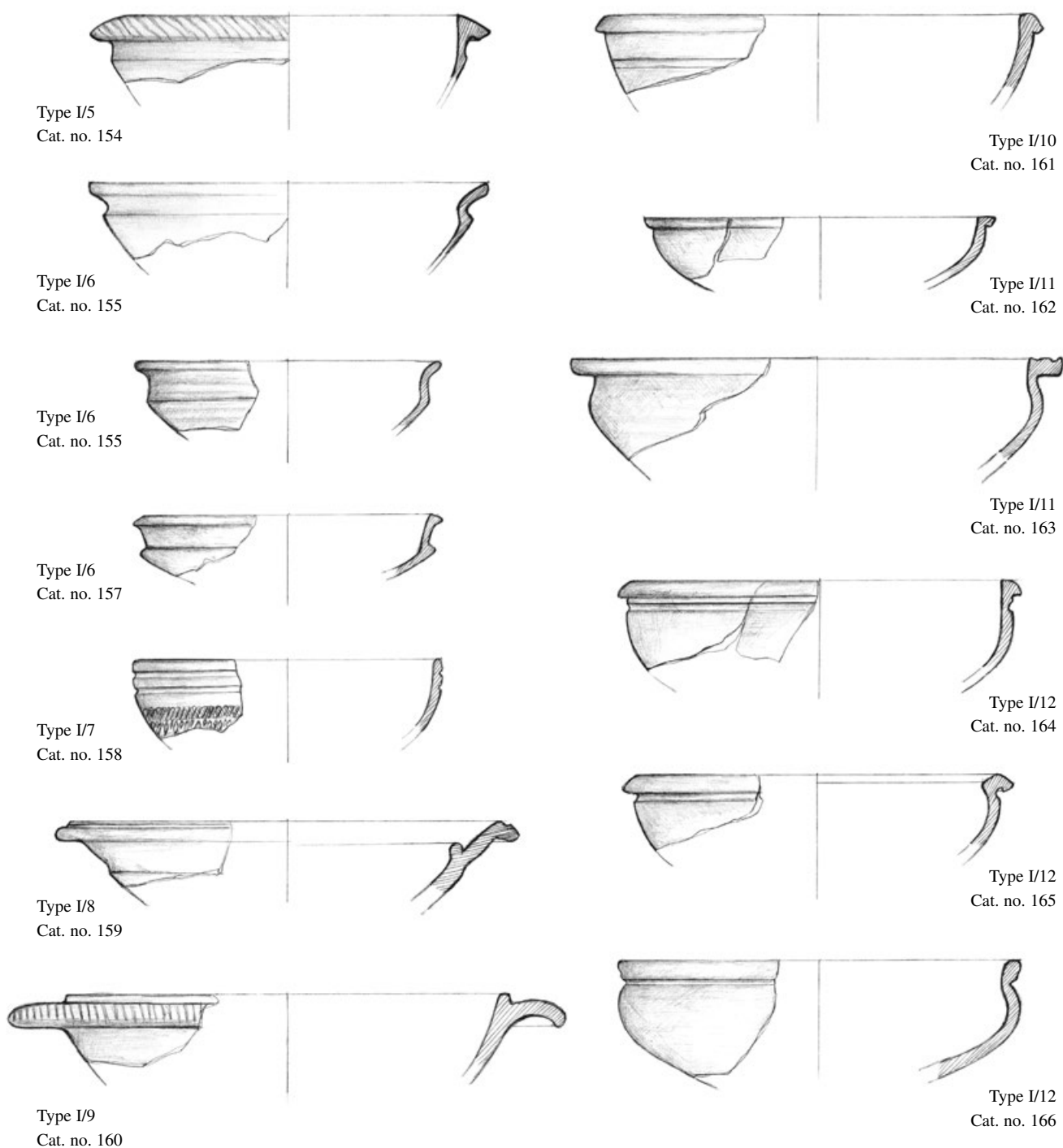


Fig. 45. Bowls (R 1:4)

Type I/12 (Cat. nos. 164–166) – The calotte-shaped bowl with variously molded rim, prominent belly tapering towards the ring-like foot. Red fired clay with surfaces painted in red nuances. Dating from the 2nd–3rd century.

This is widely distributed locally produced bowl type with variations in the rim molding. Most of the

parallels come from the 2nd–3rd century layers,⁶⁵ in particular from the first half of the 3rd century as it has been registered in *Histria*.⁶⁶

65| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 18–19, type I/4.

66| A. Suceveanu, *Histria* X, 36–38, type VIII, Pl. 10/7–9.

Type I/13 (Cat. nos. 167–169) – The calotte-shaped bowl with short slanting rim, high body and ring-like foot. Red fired clay painted or slipped in the similar nuances. Sometimes there is stamped ornament on the body. Dating from the 2nd–3rd century.

The provincial form of the bowls characteristic of the 2nd–3rd century layers that occur in many variants depending on the shape of rim and body and the surface treatment. From *Singidunum* comes large amount of undecorated specimens, painted red or brown that had possibly been produced in some of the workshops in *Viminacium* whence also come many such vessels.⁶⁷ The two-handled bowls from *Karataš–Diana* are also dated in the 2nd–3rd century.⁶⁸

Type I/14 (Cat. no. 170) – Shallow bowl with everted rim with grooves, ribbed spherical body and flat base has two strap handles. It is made of yellowish-white sandy clay. Dating from the 2nd–3rd century.

The bowls of this type are relatively few and they were encountered in the territories of *Singidunum* and *Viminacium* in the layers dating from the second half of the 2nd and the first half of the 3rd century⁶⁹ as well as at *Diana*⁷⁰ and it corresponds to the dating of our find.

Type I/15 (Cat. no. 171) – Rather small biconical bowl with vertical rim made of red fired clay and with brown slip. Dating from the 2nd–3rd century.

The small bowl of this type was found in the 2nd–3rd century layer. It is typologically close to the specimens from *Histria* that are dated in the period from the 2nd to the 4th century because of the unreliable stratigraphy. The bowls from *Histria* are of somewhat larger size and more carelessly executed and they are local provincial products.⁷¹

Type I/16 (Cat. nos. 172–174) – Rather deep biconical bowls with ring-molded rim and with rib on the body at the junction of the cones. The base is resting on a ring-like foot. They were made of medium refined clay, red fired and color-coated or slipped in the similar nuances. Dating from the 2nd–3rd century.

The specimens from *Singidunum* are dated from the beginning of the 2nd to the end of the 3rd century. They are rather numerous and encountered in many variants of the basic profilation and they were initially imported but from the middle of the 2nd to the end of the 3rd century they had been produced in the local

workshops and certainly in the one discovered at the site of the National Theater.⁷²

Type I/17 (Cat. no. 175) – Deep bowl with everted slanting and grooved rim, prominent body with ribs, flat base and two strap handles with grooves. Made of sandy clay yellowish-whitish fired. Dating from the 2nd–3rd century.

According to its form this bowl is analogous to the specimen from *Singidunum* dated in the end of 2nd – first decades of the 3rd century and which has ribs on the upper segment of the body made of reddish fired sandy clay⁷³ while from the same period also date many deep bowls made of yellowish-whitish fired sandy clay that differ in profilation from our specimen.⁷⁴ Four bowls of this type were found in *Tekija–Transdierna* but without precise chronological parameters.⁷⁵

Type I/18 (Cat. nos. 176–181) – Rather deep biconical bowl with horizontally, rarely slanting, everted rim, carinated and with high belly and flat base. It is made of brown or gray insufficiently refined clay with large sand grains. Dating from the second half of the 4th–6th century.

As this type are classified many related vessels of similar technological characteristics that differ only in the rim profilation. Rather large quantity of vessels of this type has been found at Saldum. Some of them come from stratigraphically unreliable associations but on the basis of fabric, form and analogies they could be attributed to the Valentinian's layer (layer C, horizon 3).

Many variants of the biconical bowls were found in *Singidunum* in the layers dating from the 4th – beginning of the 5th century and they are typical representatives of the kitchenware produced in many workshop

67| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 31, type I/31.

68| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/44.

69| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 30–31, type I/30.

70| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/64.

71| A. Suceveanu, *Histria* X, 18–27, type V, Pl. 3/24, 4/25.

72| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 30–31, type I/30. T. Cvjetičanin, Grnčarska radionica u Singidunumu, *Singidunum* 2, 2000, fig. 9/3.

73| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 30–31, type I/92.

74| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 30–31, type I/40.

75| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 117, type I/11, cat. 29.

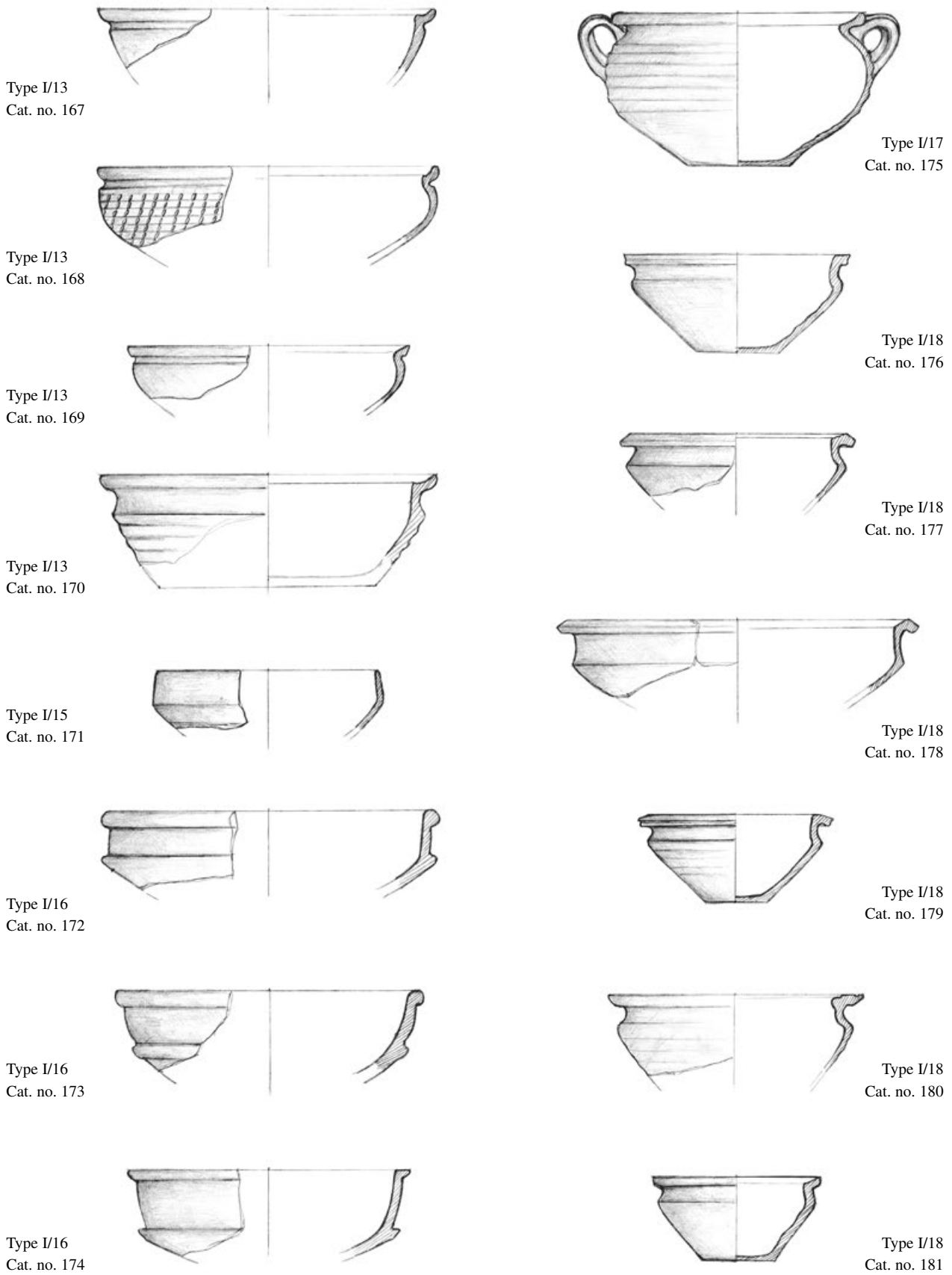


Fig. 46. Bowls (R 1:4)

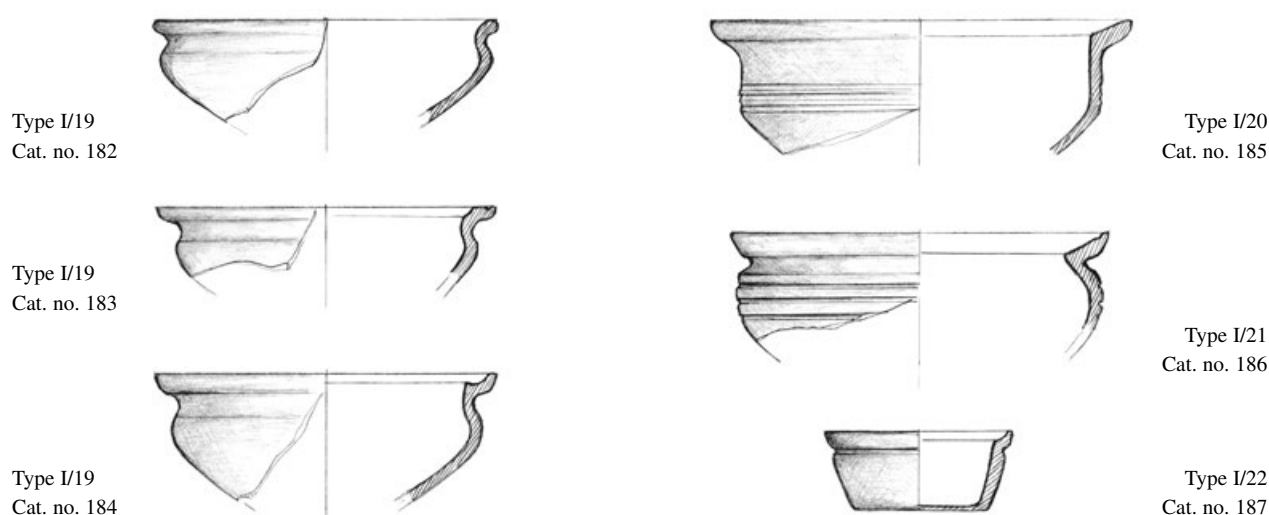


Fig. 47. Bowls (R 1:4)

centers.⁷⁶ Specimens from Karataš–Diana are generally dated in the 4th–6th century⁷⁷ and are analogous with the bowl **Cat. no. 180** dated in the 4th century⁷⁸ as is the case with the finds from *Sirmium*, *Dumbova* and *Burgenae*⁷⁹ and many specimens from Sadovec.⁸⁰ There are many specimens from the site Mihajlovac–Blato dated according to the analogies in the second half of the 4th – first half of the 5th century.⁸¹

Type I/19 (Cat. nos. 182–184) – The calotte-shaped rather deep bowl with everted rim of diverse profilation, with prominent body and flat base. It is made of gray medium to inferior refined clay with admixture of coarse sand or tiny gravel. Second half of the 4th century.

This is the type of Late Roman bowls, which occur in few variants depending on the basic profilation. This type has been registered at few locations in *Singidunum* in the layers dating from the second half of 3rd – 4th century.⁸² It also occurs in rather large quantity at Sadovec⁸³ and is typologically related to our previous type.

Type I/20 (Cat. no. 185) – Biconical bowl with wide mouth, everted slanting rim and flat base. Three parallel grooves at the junction of the cones. Gray fired clay of sandy texture. Second half of the 4th century.

This bowl type is classified by the scholars as late provincial product that occurs in *Singidunum* in the layers dating from the first half of the 4th century⁸⁴ and it was also encountered at Sadovec in the 4th century

layers, i.e. especially the end of the 4th and the beginning of the 5th century.⁸⁵

Type I/21 (Cat. no. 186) – The calotte-shaped bowl with slanting everted and grooved rim, prominent body with parallel grooves and flat base. Made of brown fired clay of sandy fabric. Second half of the 4th century.

The bowl of this type dates from the Valentinian's layer at Saldum and according to its shape it is close to the gray fired bowls of our type I/19.

Type I/22 (Cat. no. 187) – Rather small bowl with everted slanting and grooved tapering rim, slanting walls and flat base. Made of gray fired clay of sandy fabric. Second half of the 4th century.

76| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 36–37, type I/42.

77| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/3.

78| N. Jevremović, *Djerdapske sveske* IV, 1987, T. I, type I/71.

79| O. Brukner, *Rimska keramika*, 98, bowl type 62, T. 95.

80| G. Kuzmanov, Die lokale Gefäßkeramik in: S. Uenze, *Die spätantiken Befestigungen von Sadovec (Bulgarien)*, München 1992, 210, type 3, T. 62–63.

81| M. Tomović, Mihajlovac – „Blato“ – une forteresse de la Basse antiquité, *Djerdapske sveske* III, 1986, 408, fig. 25/1, 2, 5.

82| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 28, type I/25.

83| G. Kuzmanov, in: S. Uenze, *Die spätantiken Befestigungen von Sadovec*, T. 62–63, T. 64/9, type 3.

84| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 28, type I/56.

85| G. Kuzmanov, in: S. Uenze, *Die spätantiken Befestigungen von Sadovec*, 210, T.63/11.

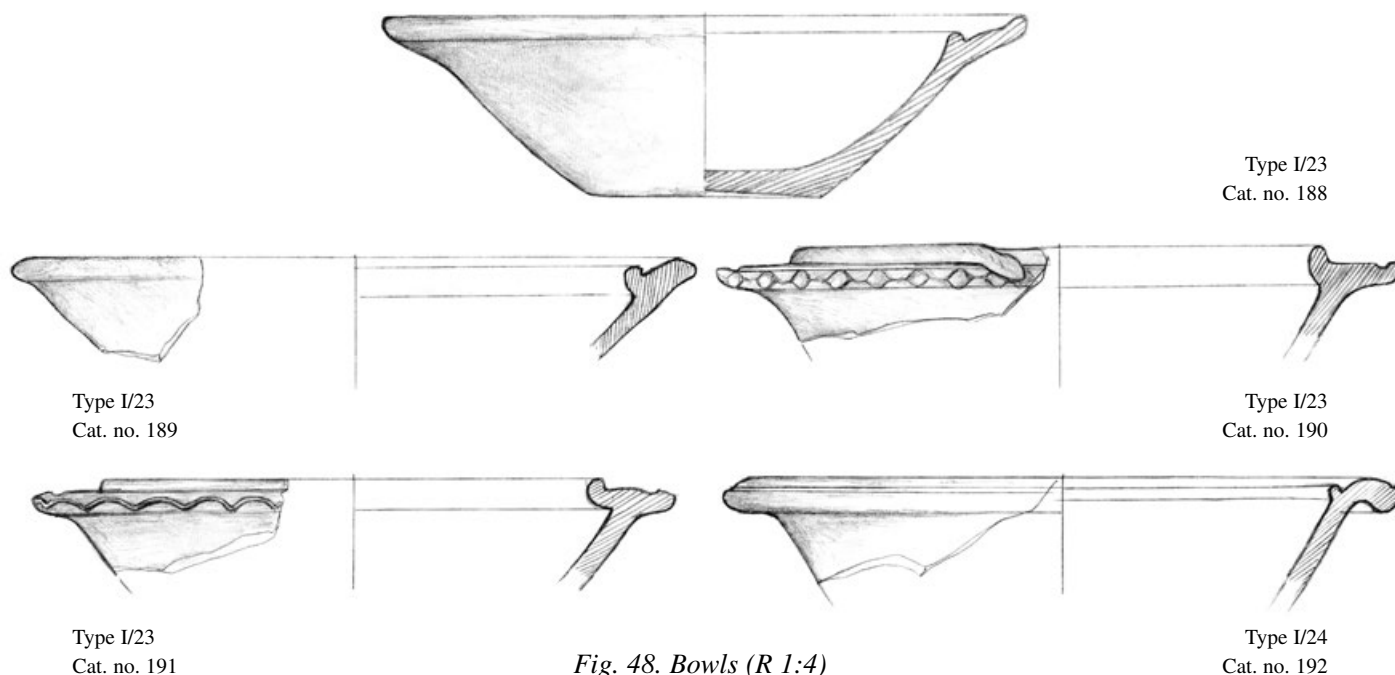


Fig. 48. Bowls (R 1:4)

Type I/23 (Cat. nos. 188–191) – The bowl – *mortarium* with horizontal or slanting rim with a spout, with slanting walls and flat base. The rim edge could be decorated with wavy or impressed motifs. Made of brown fired clay of rather coarse fabric. Interior of the vessel glazed in the nuances of olive color and sometimes gritted. Second half of the 4th – 6th century.

One of the most frequent forms of the Late Roman mortaria, which occurs in few variants. It had been produced in many local workshops. This type was recorded in the layers dating from the 4th – beginning of the 5th century in *Singidunum*⁸⁶ as well as at *Diana*.⁸⁷ It is worth mentioning that it was also encountered in the 4th century layer at the site Mihajlovac–Blato (layer III).⁸⁸

Type I/24 (Cat. no. 192) – The bowl-*mortarium* with arched everted rim with molded band on the inside, with slanting body walls and flat base. Made of red fired medium refined clay. Interior surface was glazed. Second half of the 4th century.

As the previous type of mortaria this one is also characteristic of the Late Roman period and was produced in many workshop centers. First specimens of this type appeared in *Singidunum* at the end of the 3rd century and have the stamp of the workshop of the master *Iustinianus* and later they reached the market also from other local centers.⁸⁹

Type I/25 (Cat. nos. 193–223) – The calotte-shaped or conical bowl with horizontal everted rim, which is frequently grooved, decorated with stamped motifs or the wavy edge. The base is flat and usually not prominent. These vessels were made of clay in the nuances of brown, red, ochre or gray. The interior of most of these vessels was olive, brown or yellow-green glazed. Second half of the 4th – 6th century.

This is the most frequent type of bowls, which occur in the pottery material from Saldum. There were thirty-one vessels registered, mostly in the layer dating from the second half of the 4th century, while somewhat fewer specimens were encountered in the 6th century layer. They were mostly made of sandy clay fired brown and olive glazed. The distinct group comprise the calotte-shaped bowls made of ochre fired clay and as a rule yellowish-green glazed. The brown glaze is usually typical for the specimens made of red fired clay.

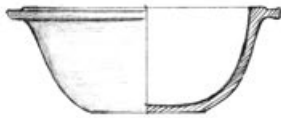
The analogies for this type are very numerous as we encounter the calotte-shaped bowls at many Late Roman sites. They occur from the end of the 3rd century with

86| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 41, type I/55.

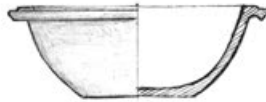
87| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/29.

88| M. Tomović, *Djerdapske sveske* III, 1986, 408, fig. 26/1.

89| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 16–17, type I/1.



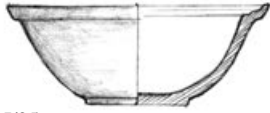
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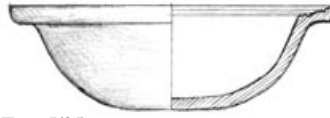
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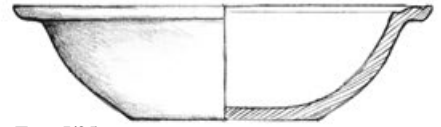
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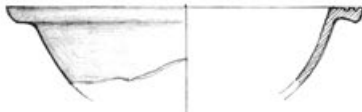
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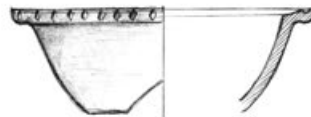
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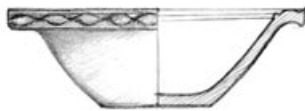
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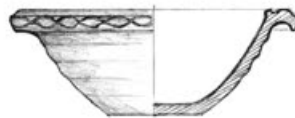
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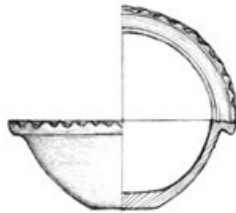
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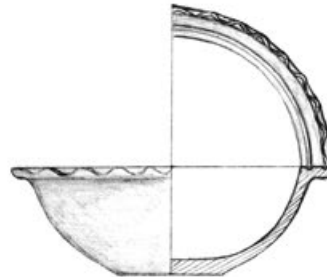
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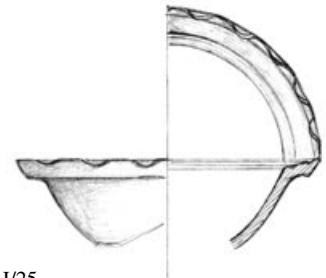
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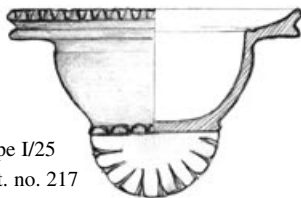
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Type I/25
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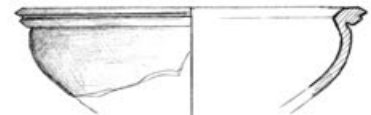
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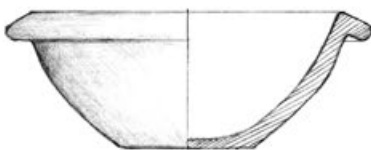
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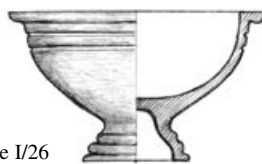
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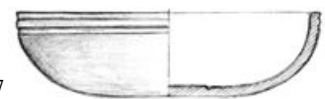
Type I/25
Cat. no. 219



Type I/25
Cat. no. 223



Type I/26
Cat. no. 224



Type I/27
Cat. no. 225

Fig. 49. Bowls (R 1:4)

date	bowl types	number of vessels
1 st –2 nd c. (E, horizon 5)	I/1–I/6	9
2 nd –3 rd c. (D, horizon 4)	I/7–I/17, I/26	27
364–378/380 (C, horizon 3)	I/18–I/25, I/27	36
6 th c. (B, horizon 2)	I/18, I/23, I/25	5
Unreliable stratigraphy	I/13, I/18, I/25	4
		TOTAL 81

Table 5. Distribution of bowl types

introduction of the glazing technique. In *Singidunum* they are most numerous in the layers dating from the second half of the 4th and first half of the 5th century⁹⁰ as is also the case at *Diana*.⁹¹ There are also many variants identified at *Kostol–Pontes*.⁹² Rather small amount (six specimens) has been found in the earlier fortification at *Tekija–Transdierna*.⁹³ Considerable quantity of calotte-shaped bowls also come from the earlier layer of the fortification at *Rtkovo–Glamija* dated by the coins in the period from Valentinian I to Honorius and Arcadius and most interesting of them is the specimen with the base shaped as ‘blooming flower’⁹⁴ as is also our specimen **Cat. no. 217**.

Type I/26 (Cat. no. 224) – The bowl on a conical hollow foot with horizontally everted rim and calotte-shaped body. There are three parallel grooves on the upper segment of the body. Unevenly fired in the nuances of gray and brown and with burnished surfaces. Dating from the 3rd century?

The single specimen of this vessel type, which we attributed as bowl is closely analogous, considering the form and color, with the beaker from *Singidunum* that was found in the inhumation burial with the coin of Caracalla (211–217)⁹⁵ and this corresponds with the dating of our specimen.

Type I/27 (Cat. no. 225) – Shallow bowl with unprofiled rim with grooves on the outside and flat base ring-shaped on the inside. Made of light brown fired clay and the interior was olive green glazed. Second half of the 4th century.

The bowl of this type was found in a layer of the earlier fortification debris at *Rtkovo–Glamija* and dated in the end of 4th – first half of the 5th century⁹⁶ and was also discovered within the 4th century fortification at *Ušće Slatinske reke*.⁹⁷

CATALOGUE OF BOWLS

TYPE I/1

Cat. no. 147

field inv. 71/70

sq. G4, ∇ 2.50 m

layer E

diameter of rim 21.0 cm; diameter of base 10.0 cm; height 14.0 cm

Deep hemispherical bowl with ring-like molded rim and ring-like foot. Gray fired clay, burnished and with dark slip. Stamped ornament of series of hearts and rosettes.

TYPE I/2

Cat. no. 148

field inv. 825/69

sq. F9, ∇ 2.90 m

horizon 5

diameter of rim 24.0 cm

Fragmented rather deep bowl with prominent globular body. Red fired clay and red slip on the outside. Ornament

90| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 27–28, type I/24.91| N. Jevremović, *Djerdapske sveske* IV, 1987, 59, T. I, type I/5.92| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Trajanov most – Castrum Pontes*, *Djerdapske sveske* II, 1984, T. I, type I/3.93| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, 119–120, type I/22, cat. 58–60.94| M. Gabričević, *Rtkovo–Glamija I – une forteresse de la basse époque*. Fouilles de 1980–1982, *Djerdapske sveske* III, 1986, fig. 6, 6.95| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 177, type IX/55.96| M. Gabričević, *Djerdapske sveske* III, 1986, fig. 8, 6.97| A. Jovanović, M. Korać, Đ. Janković, L'Embouchure de la rivière Slatinska reka, *Djerdapske sveske* III, 1986, fig. 10.

consisting of two rows of rather large notches in the barbotine technique.

Cat. no. 149

field inv. 738/69, 268, 276/70

sq. E9 F9, ▽ 1.55 m

layer E and horizon 4

Many fragments of the body of spherical deep bowl made of gray fired refined clay with dark slip. Ornament of circles and semicircles in the barbotine technique. Precise size reconstruction is not possible.

TYPE I/3

Cat. no. 150

field inv. 803/69

sq. E8, ▽ 2.35 m

horizon 5, on the floor

diameter of rim 13.0 cm

Fragment of the ring-like molded inverted rim and slanting walls of the bowl made of light brown fired well refined clay with burnished gray slip on both surfaces.

TYPE I/4

Cat. no. 151

field inv. 796/69

sq. C9, ▽ 0.20 m

horizon 5

diameter of rim 12.0 cm

Fragment of vertical rim and calotte-shaped body of the bowl made of red fired clay of sandy fabric.

Cat. no. 152

field inv. 516/68

sq. E9

horizon 5

diameter of rim 18.0 cm

Calotte-shaped bowl with inverted unprofiled rim made of red fired medium refined clay painted red and with outer surface burnished.

Cat. no. 153

field inv. 544/68

sq. D8 D9, ▽ 2.42 m

layer E?

diameter of rim 20.0 cm

Rather shallow calotte-shaped bowl with unprofiled inverted rim. Outer surface decorated with parallel grooves. Made of gray-brown fired clay with tiny sand grains.

TYPE I/5

Cat. no. 154

field inv. 543/68

sq. D8 D9, ▽ 2.42 m

layer E

diameter of rim 13.0 cm

Bowl with everted rim and prominent shoulder made of gray fired sandy clay and decorated with burnished parallel lines on the rim.

TYPE I/6

Cat. no. 155

field inv. 253/70

sq. F10 G10, ▽ 2.00 m

layer E

diameter of rim 13.0 cm

Bowl resembling La Tène form, carinated and with everted slanting rim. Made of light brown insufficiently fired well refined clay with gray burnished slip.

Cat. no. 156

K-32

sq. F9, ▽ 1.70 m

layer D, next to the southeastern tower and southern rampart

Bowl of S profilation made of gray fired clay with parallel burnished lines.

Cat. no. 157

K-26 (bag 62/1969)

sq. E9, ▽ 2.32 m

horizon 4 and layer E

Fragment of the rim and biconical body emphasized by the ridge, made of gray fired refined clay with burnished surfaces.

TYPE I/7

Cat. no. 158

field inv. 507/68

sq. F9

horizon 4

diameter of rim 20,0 cm

The calotte-shaped bowl with vertical rim emphasized on the outside by two parallel grooves. Body decorated with rouletting. Made of red fired refined clay with orange-red slip.

TYPE I/8

Cat. no. 159

field inv. 763/69

sq. E9, ▽ 1.90 m

horizon 4

diameter rim 30,0 cm

Fragment of vertical rim with high flange and calotte-shaped body of the bowl made of gray fired clay with dark burnished slip.

TYPE I/9

Cat. no. 160

field inv. 486/68

sq. C8 D8, ▽ 1.73–1.92 m

layer D

diameter of rim 36.0 cm

Fragment of a rim with flange and calotte-shaped receptacle of a mortarium made of red fired poorly refined clay. Upper surface of a flange as well as the rim edge and the interior painted with thin red radial lines.

TYPE I/10

Cat. no. 161

field inv. 696/69

sq. F8, ▽ 1.55 m

layer D

diameter of rim 28.0 cm

Fragment of the rim of triangular section and calotte-shaped body of a bowl made of red fired clay with both surfaces painted brown.

TYPE I/11

Cat. no. 162

K-56/1970

sq. G9 G10, ▽ 1.92 m from socle

pit

layer D?

diameter of rim 23.0 cm

Two fragments of everted and flattened rim and body of the bowl made of red fired clay with red slip.

Cat. no. 163

field inv. 721/69

sq. E8, ▽ 1.60 m

layer D

diameter of rim 32.0 cm

Bowl with horizontally everted grooved rim and prominent calotte-shaped body. Made of red fired medium refined clay, red painted and burnished.

TYPE I/12

Cat. no. 164

K-21 (bag 146/1969)

sq. G5, ▽ 1.50 m

layer D

diameter of rim 25.0 cm

Bowl with lid of triangular section and with two grooves at the junction with calotte-shaped body. Made of red fired clay and painted red.

Cat. no. 165

field inv. 443/68

sq.

layer D

diameter of rim 24.0 cm

Bowl with everted rim accentuated on the outside by a groove and with calotte-shaped body. Made of red fired clay light red painted on the inside and on the outside of the rim.

Cat. no. 166

field inv. 448/68

sq. C9 D9, ▽ 1.90 m

layer D

diameter of rim 26.0 cm

The calotte-shaped bowl with ring-like rim made of red fired clay, painted red.

TYPE I/13

Cat. no. 167

field inv. 450/68

sq. C9 D9, ▽ 1.90 m

layer D

diameter of rim 24.0 cm

Bowl with everted slanting rim deeply grooved and calotte shaped body. Made of red fired sandy clay and brown-red painted.

Cat. no. 168

field inv. 747/69

sq. F8, ▽ 1.80 m

layer D

diameter of rim 24.0 cm

Bowl with everted slanting grooved rim and calotte-shaped body made of red fired refined clay with brown slip. On the body rows of shallow and deep rouletting.

Cat. no. 169

K-57

sq. G9 G10, ∇ 1.92 m from socle

pit

layer D?

diameter of rim 20.0 cm

The calotte-shaped bowl with everted slanting rim, made of red fired clay with orange-red slip.

TYPE I/14

Cat. no. 170

field inv. 449/68

sq. C9 D9, ∇ 1.90 m

layer D

diameter of rim 24.0 cm

Shallow bowl-dish with everted slanting grooved rim and ribbed body. Made of yellowish-whitish sandy clay.

TYPE I/15

Cat. no. 171

field inv. 490/68

sq. C8 D8, ∇ 1.73–1.92 m

layer D

diameter of rim 16.0 cm

Bowl with vertical rim and biconical body made of red fired clay with brown slip.

TYPE I/16

Cat. no. 172

field inv. 511/68

sq. C8 D8

horizon 4

diameter of rim 23.0 cm

Bowl with ring-like molded rim, biconical body with horizontal rib, made of red fired clay and red painted.

Cat. no. 173

field inv. 512/68

sq. C8 D8

horizon 4

diameter of rim 22.0 cm

Bowl with ring-like molded rim, biconical body with horizontal rib, made of red fired clay and brown-red painted.

Cat. no. 174

field inv. 269/70

sq. E9

horizon 4

diameter of rim 20.0 cm

Bowl with everted rim, biconical body with horizontal rib, made of red fired clay, with brown slip and slip of metallic luster on the inside.

TYPE I/17

Cat. no. 175

field inv. 854/69

sq. B4, ∇ 1.42 m

layer D

diameter of rim 18.0 cm; diameter of base 7.2 cm; height 11.0 cm

Deep bowl with everted slanting and grooved rim, prominent body with ribs, flat base and two antithetically placed centrally grooved handles joining the rim and the upper part of the body. Yellowish-whitish fired sandy clay.

TYPE I/18

Cat. no. 176

field inv. 658/69

sq. B8, ∇ 2.02 m

layer D and horizon 4?

diameter of rim 16.0 cm; diameter of base 6.0 cm; height 7.0 cm

Biconical body with horizontal everted rim, high body and flat base, made of brown fired insufficiently refined clay.

Cat. no. 177

field inv. 439/68

sq. F9, ∇ 1.90 m

horizon 4?

diameter of rim 15.5 cm

Rather deep biconical bowl with everted rim and high body, made of dark gray fired unrefined clay with coarse-grained sand.

Cat. no. 178

field inv. 563/69

sq. G3

layer B

diameter of rim 24.5 cm

Biconical bowl with everted rim and carinated body made of dark gray insufficiently refined clay.

Cat. no. 179

field inv. 678/69

sq. F5, ∇ 0.65 m

horizon 3, on the floor

diameter of rim 13.0 cm; diameter of base 5.0 cm; height 6.0 cm

Rather deep biconical bowl with horizontally everted rim, carinated and high body and narrow flat base. Made of brown fired poorly refined clay with admixture of coarse-grained sand.

Cat. no. 180

field inv. 681/69

sq. F5, ∇ 0.65 m

horizon 3, on the floor

diameter of rim 18.0 cm

Deep bowl with prominent horizontally everted rim and carinated body with ribs. Made of brown insufficiently refined clay with admixture of coarse sand.

Cat. no. 181

field inv. 391/68?

sq. F8

horizon 3

diameter of rim 12.0 cm; diameter of base 5.5 cm; height 6.0 cm

Rather deep bowl with everted slanting rim, carinated body and flat base made of gray fired medium refined clay.

TYPE I/19

Cat. no. 182

field inv. 586/69

sq. E9, ∇ 0.90 m

horizon 3

diameter of rim 18.0 cm

Fragment of everted slanting rim and high body of a bowl, made of gray insufficiently fired and rather poorly refined clay.

Cat. no. 183

K-66

without data

diameter of rim 18.0 cm

Fragment horizontally everted rim with two grooves and high body of a bowl, made of gray fired medium refined clay.

Cat. no. 184

field inv. 417/68

sq. G10

horizon 3

diameter of rim 18.0 cm

Bowl with everted slanting grooved rim and high body, made of gray fired clay with coarse-grained sand.

TYPE I/20

Cat. no. 185

K-36

sq. G10, ∇ 1.90 m

horizon 3

diameter of rim 23.0 cm

Biconical bowl with everted slanting rim. Three grooves at the junction of cones. Made of dark gray fired clay of sandy fabric.

TYPE I/21

Cat. no. 186

field inv. 84/67

Trench 2, ∇ 1.40 m in the south profile

horizon 3

diameter of rim 20.0 cm

Everted slanting tapering rim with one groove and ribbed spherical body of a bowl, made of brown fired clay of sandy fabric.

TYPE I/22

Cat. no. 187

field inv. 725/69

sq. F4, ∇ 1.00 m

horizon 3

diameter of rim 10 cm; diameter of base 7.0 cm; height 4.4 cm

Rather small bowl with everted slanting rim, which is tapering and has an inside groove; body walls are slanting and the base is flat. Made of gray fired clay of sandy fabric.

TYPE I/23

Cat. no. 188

field inv. 390/68

sq. F8

horizon 3

diameter of rim 34.0 cm; diameter of base 12.0 cm; height 10.0 cm

Bowl-mortarium with everted slanting rim and slanting body walls made of light red fired; olive green glazed and gritted on the inside.

Cat. no. 189

field inv. 583/69

sq. G6

layer B

diameter of rim 36.0 cm

Bowl-mortarium with inverted rim and slanting body walls, made of brown fired clay of coarse fabric. The inner surface olive green glazed.

Cat. no. 190

field inv. 409/68

sq. B10, ▽ 1.70 m

layer B, C

diameter of rim 28.0 cm

Bowl-mortarium with horizontally everted rim, which extends inwards with impressed motif along the edge and part of spout and slanting body walls. Made of red-brown insufficiently fired and poorly refined clay. The inner surface olive green glazed (glaze destroyed).

Cat. no. 191

field inv. 580, 637/69

sq. G6 E8

layer B, C

diameter of rim 27.0 cm

Bowl-mortarium with horizontally everted rim, which extends inwards and has wavy edge. The body is of conical shape. Made of brown fired insufficiently refined clay and olive glazed on the inside.

TYPE I/24

Cat. no. 192

field inv. 407/68

sq. E8, ▽ 1.40 m

horizon 3

diameter of rim 34.0 cm

Bowl-mortarium with straight slightly inverted rim with flange and with slanting walls, made of red fired clay and olive green glazed interior and top surface of the flange.

TYPE I/25

Cat. no. 193

field inv. 22/70

sq. E7, ▽ 1.15 m

horizon 3

diameter of rim 14.5 cm; diameter of base 6.0 cm; height 5.5 cm

Calotte-shaped bowl with horizontally everted rim, made of light brown fired clay of sandy fabric. Traces of destroyed glaze on the inside.

Cat. no. 194

field inv. no number.

diameter of rim 14.0 cm; diameter of base 6.0 cm; height 5.0 cm

Calotte-shaped bowl with horizontally everted rim, made of reddish-brown fired clay of sandy fabric and olive glazed on the inside.

Cat. no. 195

field inv. 146/70

sq. G3

unreliable stratigraphy

diameter of rim 14.0 cm; diameter of base 5.0 cm; height 4.8 cm

Calotte-shaped bowl with horizontally everted rim, made of ochre fired clay of rather good fabric and yellowish-green glazed on the inside. On the outside of the base is engraved a cross sign.

Cat. no. 196

field inv. 591/69

sq. E8

horizon 3

diameter of rim 13.0 cm

Calotte-shaped bowl with horizontally everted rim, made of ochre fired clay of rather good fabric and yellowish-green glazed on the inside.

Cat. no. 197

field inv. 34/67

Trench 1

layer D

diameter of rim 16.0 cm

Calotte-shaped bowl with slightly arched everted rim with grooves. Made of ochre fired clay of rather good fabric and greenish-yellow glazed on the inside.

Cat. no. 198

field inv. 312/68

sq. F8

horizon 3

diameter of rim 14.5 cm; diameter of base 6.6 cm; height 5.0 cm

Calotte-shaped bowl with horizontally everted rim, made of light brown fired clay of sandy fabric and glazed on the inside. Glaze destroyed.

Cat. no. 199

field inv. 10/70

sq. E9 E10, ▽ 1.00–1.30 m

horizon 3

diameter of rim 16.0 cm; height 5.0 cm

Calotte-shaped bowl with horizontally everted rim, made of light brown clay of sandy fabric and green glazed on the inside.

Cat. no. 200

field inv. 592/69

sq. E8, ▽ 0.90 m

horizon 3

diameter of rim 14.0 cm; diameter of base 5.5 cm; height 5.5 cm

Calotte-shaped bowl with horizontally everted rim with upward turned edge. The base is slightly protruding and there are three engraved concentric circles. Made of light brown fired clay and light green glazed on the inside.

Cat. no. 201

field inv. 58, 81/70

sq. C10 D10, ▽ ca 2.00 m

horizon 3

diameter of rim 17.0 cm; diameter of base 5.0 cm; height 5.5 cm

Calotte-shaped bowl with horizontally everted and grooved rim and flat base. Made of red insufficiently fired and poorly refined clay with small gravel and quartzite grains and olive green glazed on the inside.

Cat. no. 202

field inv. 176/70

sq. C6 D6, ▽ 1.30 m

horizon 3

Calotte-shaped bowl with horizontally everted and grooved rim and flat base, which is of ring-shape on the inside. Made of red fired medium refined clay.

Cat. no. 203

field inv. 60/70

sq. C10, D10, ▽ ca 2.00 m

layer C, horizon 3

diameter of rim 22.0 cm; diameter of base 10.0 cm; height 6.0 cm

Calotte-shaped bowl with horizontally everted and grooved rim, massive walls and flat base. Made of red-brown fired clay and olive green glazed.

Cat. no. 204

field inv. 59/70

sq. C10, D10, ▽ ca 2.00 m

layer C, horizon 3

diameter of rim 19.0 cm

Calotte-shaped bowl with horizontally everted and grooved rim, made of ochre fired clay and yellowish-green glazed on the inside.

Cat. no. 205

field inv. 313/68

sq. F9, ▽ 0.80 m

horizon 3

diameter of rim 14.0 cm

Calotte-shaped bowl with horizontally everted rim, made of red fired clay of sandy fabric and brown glazed on the inner side.

Cat. no. 206

field inv. 636/69

sq. E8, ▽ 1.20 m

horizon 3

diameter of rim 16.0 cm

Calotte-shaped bowl with horizontally everted rim with ornamental motif impressed along the rim. Made of dark brown fired clay of coarse fabric and brown glazed on the inside.

Cat. no. 207

field inv. 20/70

sq. E7, ▽ 1.15 m

layer C, horizon 3

diameter of rim 16.0 cm; diameter of base 6.0 cm; height 5.0 cm

Calotte-shaped bowl with horizontally everted rim with wavy edge, made of brown fired clay and olive glazed on the inside.

Cat. no. 208

field inv. 21/70

sq. E7, ▽ 1.15 m

layer C, horizon 3

diameter of rim 15.0 cm; diameter of base 5.0 cm; height 5.8 cm

Calotte-shaped bowl with horizontally everted rim with wavy edge, made of brown fired clay and olive glazed on the inside.

Cat. no. 209

field inv. 684/69

sq. F5, ▽ 0.65 m

horizon 3

diameter of rim 24.0 cm

Fragment of horizontally everted and grooved rim with wavy edge and the impressed motif on the top. Made of red-brown fired clay and with olive green glaze interior.

Cat. no. 210

field inv. 671/69

sq. F8, ▽ 1.55 m

layer C

diameter of rim 12.0 cm; diameter of base 3.5 cm; height 4.8 cm

Rather small calotte-shaped bowl with horizontally everted rim with wavy edge. Made of brown fired clay and with olive green glazed interior.

Cat. no. 211

field inv. 677/69

sq. F5, ▽ 0.65 m

horizon 3

diameter of rim 17.0 cm; diameter of base 5.5 cm; height 5.8 cm

Calotte-shaped bowl with horizontally everted rim with wavy edge. Made of red-brown clay and olive glazed but the glazed is destroyed.

Cat. no. 212

field inv. 612/69

sq. F4, ▽ 0.25 m

layer B

diameter of rim 22.0 cm

Calotte-shaped bowl with horizontally everted grooved rim with wavy edge, made of brown fired clay and dark glazed on the inside (glaze destroyed).

Cat. no. 213

field inv. 589/69

sq. E8, ▽ 0.90 m

horizon 3

diameter of rim 18.0 cm

Calotte-shaped bowl with horizontally everted grooved rim with wavy edge. Made of brown insufficiently fired clay of coarse fabric and olive green glazed on the inside.

Cat. no. 214

field inv. 548/68

sq. B8

horizon 3

diameter of rim 15.0 cm; diameter of base 5.4 cm; height 5.8 cm

Calotte-shaped bowl with horizontally everted rim with wavy edge. Made of brown fired clay and with brown-olive glazed interior.

Cat. no. 215

field inv. 683/69

sq. C9 F5, ▽ 0.65 m

horizon 3, on the floor

diameter of rim 17.0 cm

Calotte-shaped bowl with horizontally everted rim with wavy edge. Made of brown fired clay with glazed interior (glaze destroyed).

Cat. no. 216

K-23

sq. C10 D10, ▽ 1.70 m

bag 4/1970

horizon 3

diameter of rim 16.0 cm

Calotte-shaped bowl with horizontally everted rim with wavy edge. Made of dark gray fired clay.

Cat. no. 217

field inv. 671/69

sq. F8, ▽ 1.55 m

layer C?

diameter of rim 12.0 cm; diameter of base 3.5 cm; height 4.8 cm

Rather small calotte-shaped bowl with horizontally everted rim with grooved edge on the outside and impressed ornament. The base is flat with edge shaped as stylized rosette. Made of red-brown fired clay with glazed interior (glaze destroyed).

Cat. no. 218

field inv. 42/70

sq. E6 E7, ▽ 0.80–1.10 m

layer C, horizon 3

diameter of rim 15.0 cm; diameter of base 8.0 cm; height 5.5 cm

Calotte-shaped bowl with horizontally everted rim with prominent and wavy edge. Made of brown fired medium refined clay.

Cat. no. 219

field inv. 680/69

sq. F5, ▽ 0.65 m

horizon 3

diameter of rim 18.0 cm

Calotte-shaped bowl with horizontally everted rim with ring-like molding under the rim. Made of red-brown fired clay and olive green glazed on the inside.

Cat. no. 220

field inv. 382/68

sq. D8, ▽ 1.35 m

horizon 3

diameter of rim 19.0 cm

Calotte-shaped bowl with horizontally everted grooved rim with wavy edge. Made of ochre fired clay and yellowish-green glazed on the inside.

Cat. no. 221

field inv. 582/69

sq. G6

layer B

diameter of rim 18.0 cm

Fragment of horizontally everted rim with wavy edge. Red fired clay and with olive green glazed interior.

Cat. no. 222

field inv. 513/68

sq. C8 D8

horizon 3

diameter of rim 28.0 cm

Rather large calotte-shaped bowl with horizontally everted grooved rim with wavy edge. Made of red insufficiently fired clay and brown glazed.

Cat. no. 223

field inv. 867/69

sq. E7, ▽ 0.72 m

layer B

diameter of rim 16.0 cm; diameter of base 7.0 cm; height 7.5 cm

Calotte-shaped bowl with horizontally everted rim. The walls of the body and base are of uneven thickness, rather carelessly, made of dark gray fired clay with quartzite grains.

TYPE I/26

Cat. no. 224

field inv. 832/69

sq. F4, ▽ 1.00 m, sq. G5, ▽ 0.80 m

layer C?

diameter of rim 13.5 cm; diameter of foot 5.5 cm; height 8.0 cm

Calotte-shaped bowl with horizontally everted rim with two parallel grooves underneath. Flat base rests on conical triple ring-shaped foot. Made of brown to gray fired clay with traces of burnishing on the outside and on the inside.

TYPE I/27

Cat. no. 225

field inv. 590/69

sq. E8, ▽ 0.90 m

layer D

diameter of rim 16.0 cm; diameter of base 7.0 cm; height 4.5 cm

Rather shallow calotte-shaped bowl-plate with straight rim with a groove and flat base with ring molding on the inside. Made of light brown clay and olive green glazed on the inside.

IV.4.C.2. POTS

Around fifty pots classified into twenty-three main types have been inventoried in the course of investigations of the *castellum* and assumed necropolis area at Saldum (Figs. 50–53).

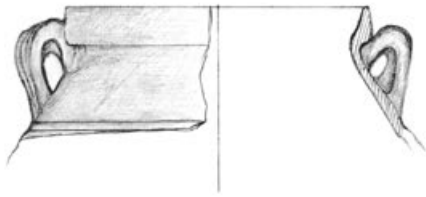
Type II/1 (Cat. no. 226) – Pot with rim of triangular section and with groove for the lid. On the prominent shoulder are two strap handles. Second half of the 1st – beginning of the 2nd century.

This pot type is known as *aula (olla)* when larger specimens are concerned and *aulula* for the smaller specimens. It has been encountered in the pottery material in the eastern and western provinces from the 1st century and it is most frequent in the layers dating from the middle of the 2nd to the middle of the 3rd century. This type was registered in Histria in two variants depending on size, in the layers dating from the first three quarters of the 2nd century and in the 2nd–3rd century layers as the local product.⁹⁸ According to the rim profilation our specimen is close to the specimens from Kostol–Pontes dated in the 2nd century.⁹⁹

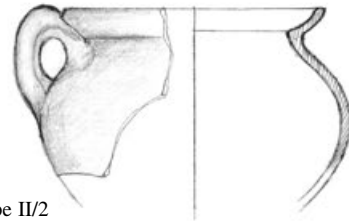
Type II/2 (Cat. nos. 227–230) – Main features of this type are everted rim with groove, spherical or ovoid body mostly ribbed, flat base with prominent edge, one or two rather small handles ribbed in the middle. They were made of whitish or yellowish fired clay of sandy fabric. They had been used during rather long period of time, from the middle of the 2nd to the beginning of the 5th century. The substantial quantity of rim and body fragments of this pot type were found at Saldum in a layer dated to the 2nd–3rd century (layer D, horizon 4).

98| A. Suceveanu, La céramique romaine des I^{er}–III^e siècle ap. J.-C., *Histria X. Les résultats des fouilles*, Bucarest 2000, type XXVI, 117–118, Pl. 51/1–5.

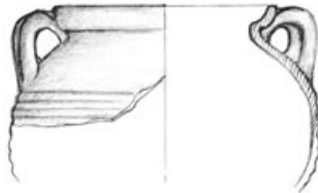
99| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, Trajanov most – Castrum Pontes, *Djerdapske sveske* II, 1984, T. III, type 31a.



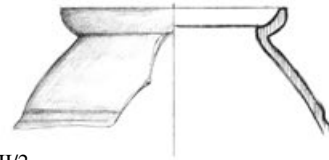
Type II/1
Cat. no. 226



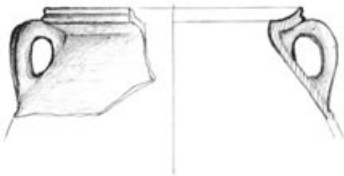
Type II/2
Cat. no. 227



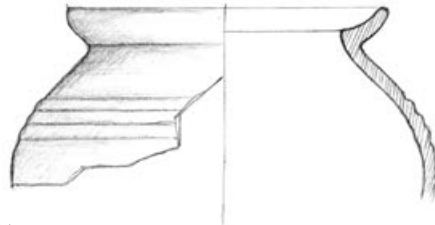
Type II/2
Cat. no. 228



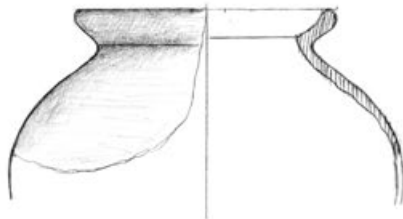
Type II/2
Cat. no. 229



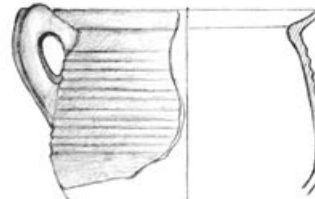
Type II/2
Cat. no. 230



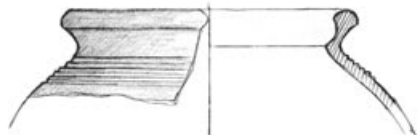
Type II/3
Cat. no. 231



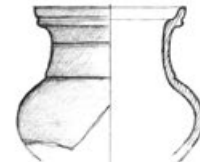
Type II/3
Cat. no. 232



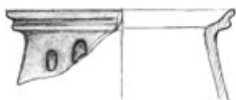
Type II/3
Cat. no. 234



Type II/4
Cat. no. 235



Type II/5
Cat. no. 236



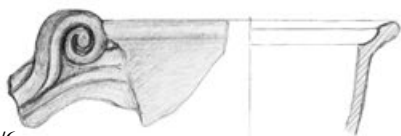
Type II/5
Cat. no. 237



Type II/5
Cat. no. 238



Type II/5
Cat. no. 239



Type II/6
Cat. no. 240



Type II/7
Cat. no. 241

Fig. 50. Pots (R 1:4)

The pots made of whitish or yellowish sandy clay were frequently found within the settlements as well as at the necropoles in the layers dating from the middle of the 2nd – end of 3rd century. Many variants of this type mostly differing in the body shape were registered in *Singidunum*. They were found in the settlement layers although they were found some pots of this type used as urns.¹⁰⁰

Type II/3 (Cat. nos. 231–234) – They resemble in form the pots of the previous type but they differ in the sort of clay of which they had been made. The rim is everted, grooved, the body is of ovoid shape, high or low, ribbed or smooth and they could have one or two strap handles. The colors of firing are in the nuances of brown, brown-gray and gray rarely of red color. They are characteristic of the 2nd–3rd century layers although this form was in use until the middle of the 4th century.

This pot type is a frequent find in the settlement layers in *Singidunum*¹⁰¹ and they were also registered at *Kostol–Pontes*.¹⁰²

Type II/4 (Cat. no. 235) – The pot with everted slanting and grooved rim, spherical body and flat base. Made of gray fired clay with sand grains. Dating from the 2nd–3rd century.

The pots of this type were found in *Singidunum* in the layers dated to the 2nd–3rd century¹⁰³ as is the case with our specimen.

Type II/5 (Cat. nos. 236–239) – This type includes many related variants of the pots with one or two handles, variously shaped rim, prominent neck, spherical body and flat base with prominent edge. The clay is medium refined rarely with admixture of sand and fired red or brown. The outer surface could be painted or with slip and decorated with channels, engravings and burnishing. Dating from the 2nd–3rd century.

Rather large number of pots of small size and lavishly decorated was found in *Singidunum* in the layers dating from the end of 2nd and the beginning of the 3rd century. The investigators noticed that this was the period of their mass and high quality production, which declines around the middle of the 3rd century.¹⁰⁴ Many types, depending on profilation, of these pots were identified at *Karataš–Diana* and they are all dated in the 2nd–3rd century.¹⁰⁵

Type II/6 (Cat. no. 240) – The pot with everted slanting and prominently grooved rim and funnel-shaped neck with large strap handle onto which was added smaller fluted strap handle terminating in a loop under the rim. It has spherical body and flat base, which could be resting on the ring-like foot. The clay of sandy fabric and dark ochre fired.

The fragment of rim, neck and handle of this distinct pot type was found at *Saldum* in a layer dated to the time of Valentinian but according to its shape and clay of which it was made it certainly dates from the earlier horizon of the 2nd–3rd century. We could not find direct analogies in the published material for this type of pot.

Type II/7 (Cat. no. 241) – The pot with everted slanting rim with inside groove, with cylindrical neck, spherical body and two channeled strap handles. Yellowish fired clay of sandy fabric. Dating from the 2nd–3rd century.

There are few types of kaolin-made pots at *Saldum* and this one is among them and it has parallels at *Tekija–Transdierna* within the earlier fortification where six pots of this type were found¹⁰⁶ and at *Diana* in the 3rd century layer.¹⁰⁷

Type II/8 (Cat. nos. 242–248) – This type includes many related variants of the pots dated from the middle of the 2nd to the end of the 4th century. These are pots with two, rarely three handles, variously shaped rim, cylindrical neck and spherical body on the ring-like foot. The clay of which they were made is medium refined rarely sandy and red, brown or rarely gray fired. The outer surface could be painted in the nuances similar to the color of firing or color-coated and on

100| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum 2*, 2000, 69–70, type II/9.

101| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 70, type II/10.

102| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Djerdapske sveske II*, 1984, T. III, type 9c.

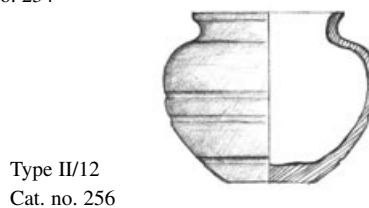
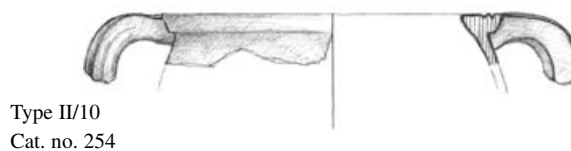
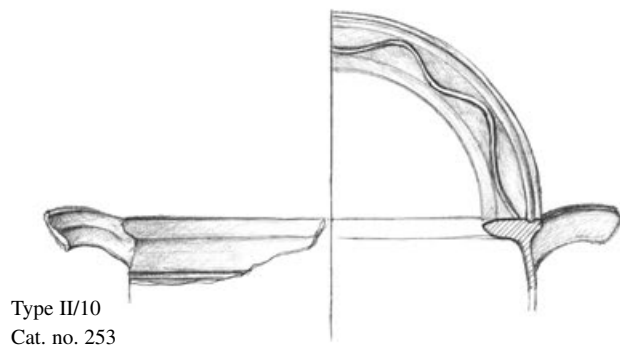
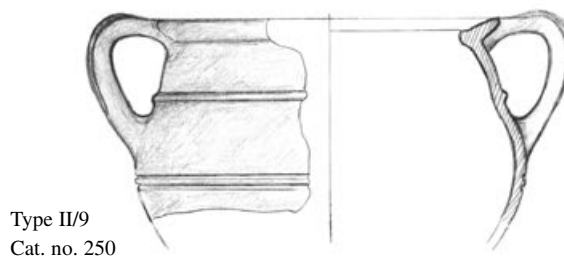
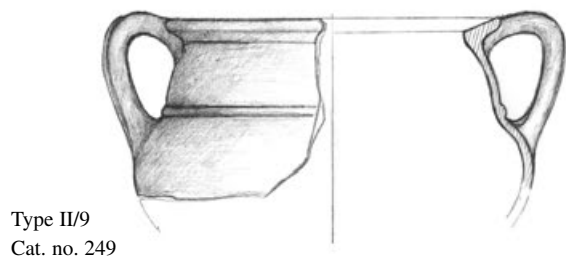
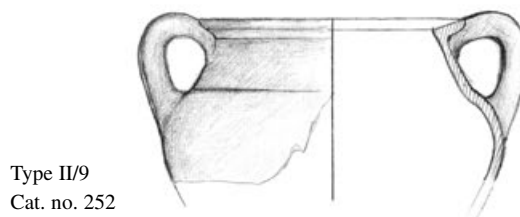
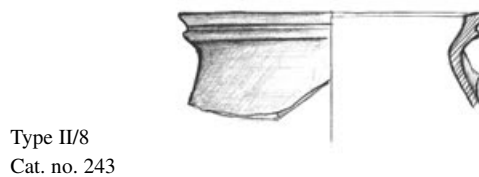
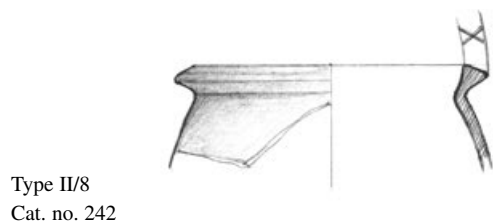
103| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 70, type II/51.

104| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 78–79, type II/31.

105| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana–Karataš, Djerdapske sveske IV*, 1987, T. XIX, type XI/8–10.

106| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 130, type II/6, cat. 10.

107| N. Jevremović, *Djerdapske sveske IV*, 1987, T. VIII, type II/26.



Type II/11
Cat. no. 255

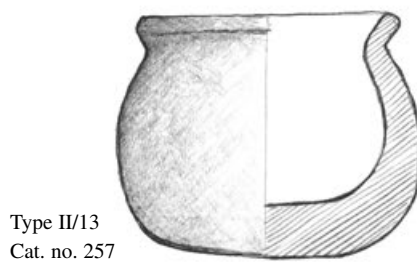


Fig. 51. Pots (R 1:4)

later specimens glazed with traces of burnishing, stamp ornament or with engraved signs.

The most pots of this type at Saldum come from the layers of the 2nd–3rd century and they are mostly red fired with surface red or brown coated or painted. The engraved letters are preserved on two specimens. The latest specimen is the pot **Cat. no. 248** dating from the Valentinian's layer and its form is the continuation of the 2nd–3rd century specimens.

Rather large quantity of pots varying in their basic profilation was found in *Singidunum* in the layers dating from the 2nd to the middle of the 4th century and they are particularly frequent in the second half of the 2nd and first half of the 3rd century.¹⁰⁸ The pots from the second half of the 3rd century horizon have engraved letters on the body or neck as is the case with specimens from Saldum and this dates our finds more precisely. The pots of this type from Tekija–*Transdier-na* are classified into six basic variants and mostly on the basis of parallels they are dated from the 1st–2nd to the middle of the 3rd century.¹⁰⁹ Many variants of this pot type dated in the 2nd–3rd century were identified at Kostol–*Pontes*.¹¹⁰ The pot **Cat. no. 247** is analogous with the specimen made of brown fired clay from Histria, local product from the 2nd–3rd century layer.¹¹¹

Type II/9 (Cat. nos. 249–252) – Pot with two or three handles, wide mouth and everted slanting rim, cylindrical or slightly rounded neck and spherical body. It is made of brown or gray fired clay and some specimens were olive glazed on the outside.

According to the finding circumstances, three specimens belong the 2nd–3rd century layer while one dates from the Valentinian's horizon. The appearance of the pots of this form is recorded at *Diana* in the 3rd and 4th century, thus corresponding to the dating of our specimens.¹¹²

Type II/10 (Cat. nos. 253–254) – The pot with horizontally everted and inward protruding rim, multi-grooved, with slightly convex neck and spherical body. The grooved strap handles join the rim and body. Made of gray or ochre fired clay of sandy fabric and yellow-green glazed. Second half of the 4th century.

The pots with wide mouth and handles and most probably with a spout were registered in the 4th century layers in *Singidunum*.¹¹³ From the layer of tower destruction at the site Mihajlovac–Blato dated in the

second half of the 4th century (layer II) comes the analogous vessel with two handles.¹¹⁴

Type II/11 (Cat. no. 255) – The pot with horizontally everted rim and prominent inner edge, long cylindrical neck and spherical body. Made of gray fired clay of rather good fabric with dark coating and burnished surface. The ornament resembling a wheat grain impressed on the rim while the neck is decorated with parallel and zigzag grooves. Dating from the 6th century.

Type II/12 (Cat. no. 256) – Rather small pot with slightly arched everted rim, prominent shoulder, spherical body and flat base. Made of brown fired medium refined clay, olive green glazed. Two parallel grooves on the body. Second half of the 4th century.

The pots of smaller size made of gray fired sandy clay and with unworked surface were registered in the layers dating from the second half of the 3rd and the 4th century in *Singidunum*.¹¹⁵ We did not find direct analogies for this specimen.

Type II/13 (Cat. no. 257) – Rather small pot-cup with slightly arched everted rim, calotte-shaped body and flat base with rounded edges. It has thick walls and it is handmade of brown fired medium refined clay. Second half of the 4th century.

Type II/14 (Cat. no. 258) – The pot of rather small size with rim of triangular section and with prominent neck and body, made of brown fired clay with admixture of lime and mica.

The small-sized pots of similar form as our specimen and assumed to have been locally produced in the pottery workshops were found in the pit in *Singidunum*

108| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 85–87, type II/52.

109| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, 131–132, type II/10.

110| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Djerdapske sveske* II, 1984, T. III, type 13, 13a, 13b, 13c.

111| A. Suceveanu, *Histria* X, 138, type XLII, pl. 64/7.

112| N. Jevremović, *Djerdapske sveske* IV, 1987, T. XIX, type XI/12.

113| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 88–89, type II/59.

114| M. Tomović, M., Mihajlovac – „Blato“ – une forteresse de la Basse antiquité, *Djerdapske sveske* III, 1986, 410, fig. 29/4.

115| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 67, type II/4.

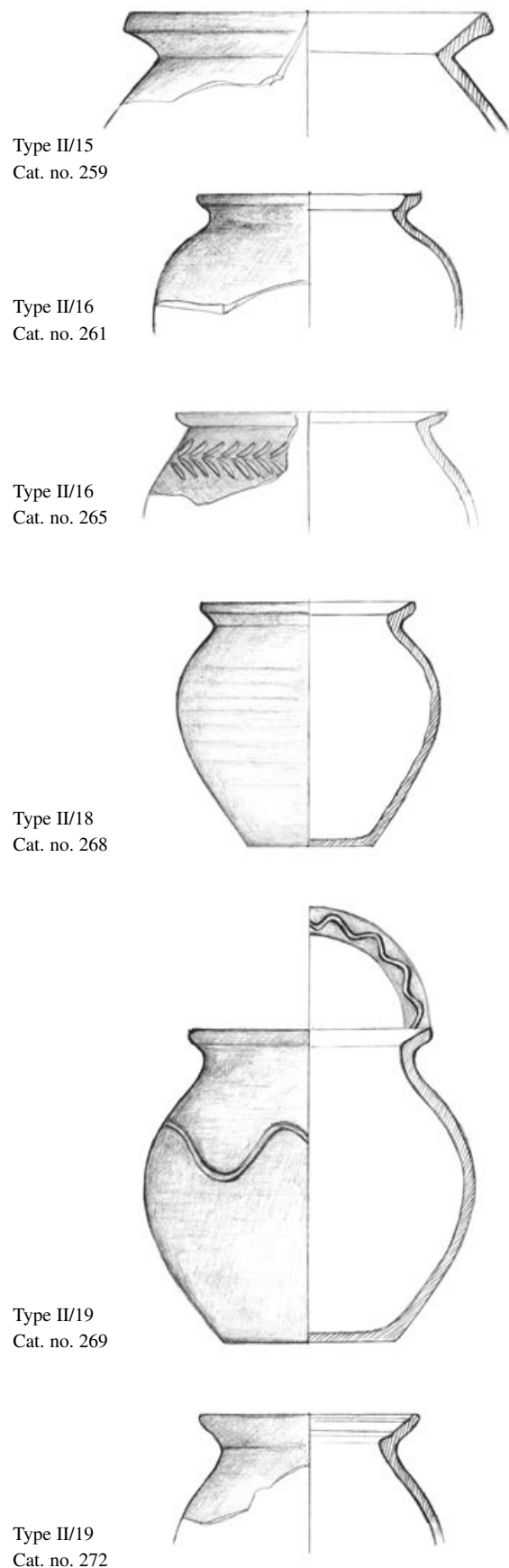
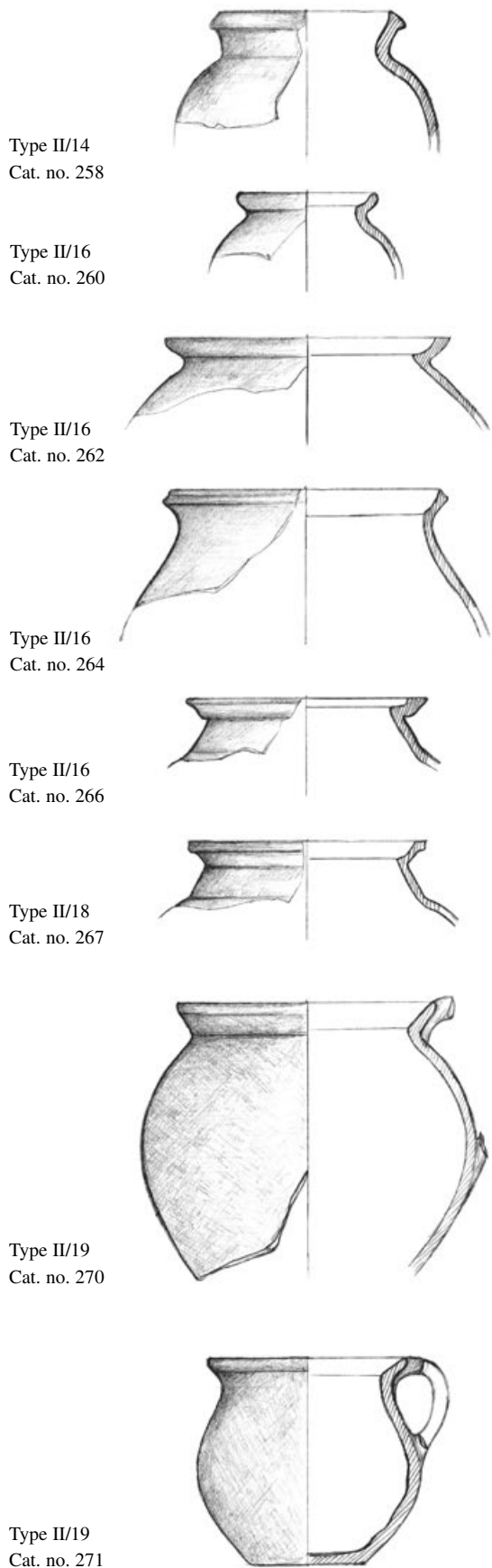


Fig. 52. Pots (R 1:4)

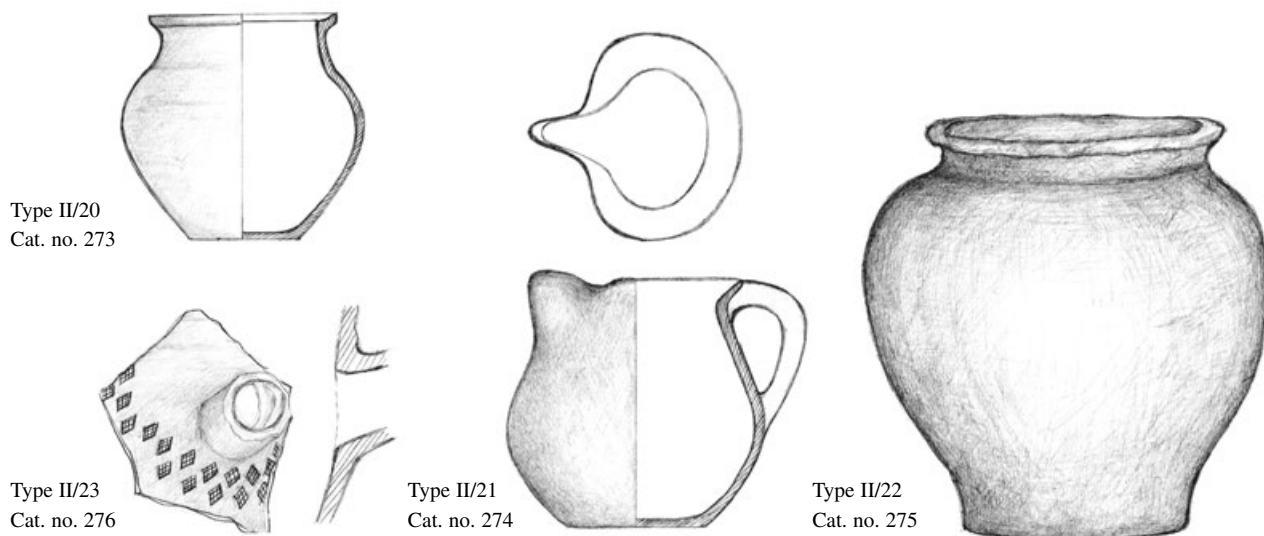


Fig. 53. Pots (R 1:4; Cat. no 276 R 1:2)

dating from first half of the 2nd century.¹¹⁶ Such pots were made in *Singidunum* of red fired clay with admixture of the tiniest sand grains.

Type II/15 (Cat. no. 259) – The pot of rather large size with everted slanting rim, ovoid body and flat base. It is made of brown insufficiently fired clay of sandy fabric. Dating from the 2nd–3rd century?

This pot type also appears in *Singidunum* in the close association dated by the coins in the middle of the 4th century.¹¹⁷ The form is typical of the 6th century layers. The single specimen of this type was found in Saldum in the 2nd–3rd century layer so it is possible that it had been buried from the upper layers or the material is mixed.

Type II/16 (Cat. nos. 260–264) – The pot of small or medium size with everted slanting and grooved rim with flat or ring-like lip and spherical body. Made of clay of sandy fabric and fired in the nuances of gray, brown-gray and brown color. Second half of the 4th century.

It is possible to distinguish two variants of this type depending on the size of a vessel and basic rim profilation as it has been done with the material from *Singidunum* and Ras–Podgradje.¹¹⁸

Type II/17 (Cat. no. 265) – The pot with everted slanting rim, tapering edge and spherical body. Dark brown fired clay with mica. Under the rim is impressed the fir branch motif. Second half of the 4th century.

Type II/18 (Cat. nos. 266–267) – The pot with everted extremely profiled and grooved rim, prominent neck and shoulder. Made of gray fired clay with sand grains. Second half of the 4th century.

This was the characteristic pot shape in the Late Roman period. They have been found in *Singidunum* in the layers dating from the 2nd to the 4th century but the 2nd–3rd century pots were made of red fired clay with mica and the 4th century specimens were made of gray fired clay of sandy fabric.¹¹⁹ This type of pots made of gray fired clay is known from many sites in Vojvodina dating from the 2nd–4th century.¹²⁰

Type II/19 (Cat. nos. 268–272) – The pot with everted slanting rim, spherical body and flat base, sometimes with a handle joining the rim and body. Made of brown or gray fired clay of sandy fabric. Second half of the 4th–6th century.

There are five pots from Saldum attributed to this type, one of which belongs according to the finding circumstances to the Valentinian's layer while remaining four come from the 6th century layer. There are parallels

116| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 93, type II/74.

117| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 81, type II/38.

118| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 66, type II/1, II/2; M. Popović, *Tvrđava Ras*, Beograd 1999, 310, type II/2.

119| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 72, type II/15.

120| O. Brukner, *Rimska keramika*, 107, pot type 28, T. 122.

date	types of pots	number of vessels
1 st –2 nd c. (E, horizon 5)	II/1	1
2 nd –3 rd c. (D, horizon 4)	II/2–II/5, II/7–II/9	19
364–378/380 (C, horizon 3)	II/3, II/8–II/10, II/12, II/13, II/16–II/20	17
6 th c. (B, horizon 2)	II/11, II/19, II/21, II/22, II/23	7
Necropolis	II/14, II/16	2
Unreliable stratigraphy	II/3, II/6, II/8, II/15	5
		TOTAL 51

Table 6. Distribution of pot types

for this type of pots among the pottery from the Early Byzantine layers at Sadovec and Kaliakra.¹²¹

Type II/20 (Cat. no. 273) – The pot of rather small size similar to the previous type with everted slanting and grooved rim, prominent neck, ovoid body and flat base. Made of dark fired clay of sandy fabric. Second half of the 4th century.

Type II/21 (Cat. no. 274) – Rather small pot-jug, with wide mouth and a spout, ovoid body, flat base and the handle of semicircular section. Made of gray-brown sandy clay. Dating from the 6th century.

There are analogies for this type of vessels among the material from the Early Byzantine layer at Kaliakra, Bulgaria.¹²²

Type II/22 (Cat. no. 275) – The pot of crude manufacture, with slightly arched everted rim, prominent short neck, ovoid asymmetrically shaped body tapering towards the flat base. Made of brown fired insufficiently refined clay with sand grains. Dating from the 6th century.

Type II/23 (Cat. no. 276) – Fragment of the spouted pot made of gray fired medium refined clay with dark slip and decorated with impressed network of rhombs. Dating from the 6th century.

Fragment of the spouted pot comes from stratigraphically unreliable association discovered in the zone of the damaged rampart. Thanks to the analogous material from the Early Byzantine *Viminacium*, site Svetinja (house 4) it is possible to define it more precisely regarding chronology and ethnic character.¹²³ The fragment of spouted pot from *Viminacium* is made of sandy clay fired red-brown and it is most probably

the product of the local workshop producing goods to satisfy the need and taste of the Gepidean population.¹²⁴ The specimen from Saldum resembles according to the fabric the Gepidean pottery tradition but occurrence of the spout could indicate that the vessel was made after the Byzantine model.

CATALOGUE OF POTS

TYPE II/1

Cat. no. 226

field inv. 843/69

sq. B10, ▽ 1.60 m next to the rampart

horizon 5

diameter of rim 16.0 cm

Pot with ring-like rim of triangular section and shoulder with triple channeled strap handle. The body is ribbed. Made of brown-gray fired clay of sandy fabric.

TYPE II/2

Cat. no. 227

K-52

sq. E8 F8/69

horizon 4 and layer E

diameter of rim 14.0 cm

121| S. Uenze, *Die spätantiken Befestigungen von Sadovec* (Nordbulgarien), München 1992, type 2; G. Kuzmanov, *Rannovizantiiska keramika ot kastela na nos Kaliakra*, *Arheologija* 1978–2, fig. 5.

122| G. Kuzmanov, *Arheologija* 1978–2, fig. 6/a.

123| M. Popović, Svetinja, novi podaci o ranovizantijskom *Viminacijumu*, *Starinar* XXXVIII (1987), 1988, fig. 17/11.

124| M. Popović, *Starinar* XXXVIII (1987), 1988, 23.

Fragment of everted slanting rim, spherical body and handle of the small pot made of whitish fired clay of sandy fabric.

Cat. no. 228

field inv. 426/68
sq. C9 D9, ▽ 1.70 m
layer D

diameter of rim 12.0 cm

Pot with everted slanting rim with internal groove, ribbed spherical body and strap channeled handle. Yellowish fired clay of sandy fabric.

Cat. no. 229

field inv. 509/68
sq. C8 D8
horizon 4

diameter of rim 12.0 cm

Pot with everted slanting rim with internal groove and ribbed body. Made of yellowish-whitish fired clay of sandy fabric.

Cat. no. 230

field inv. 471/68
sq. F9, ▽ 1.65 m
horizon 4

diameter of rim 14.0 cm

Pot with everted slanting rim with groove along the edge and on the inside, spherical body and strap handle with a deep groove. Made of yellowish fired clay of sandy fabric.

TYPE II/3

Cat. no. 231

K-27
sq. C7 D7/70, ▽ to 2.05 m
layer D (?)

diameter of rim 17.0 cm

Pot with everted slanting rim and spherical ribbed body, made of brown fired clay with admixture of coarse sand.

Cat. no. 232

K-28
sq. E9/69, control profile
horizon 4?

diameter of rim 14.0 cm

The everted molded slanting rim with a groove on the inside, neck and prominent shoulder of the pot of brown fired clay with sand grains.

Cat. no. 233

field inv. 416/68
sq. G10

layer C, horizon 3

diameter of rim 18.0 cm

Pot with everted slanting and grooved rim and spherical body, made of brown fired clay with sand grains.

Cat. no. 234

field inv. 669/69
sq. F8, ▽ 1.55 m
layer D

diameter of rim 14.0 cm

Rather small pot with wide everted slanting rim slightly grooved on the inside, ovoid ribbed body and strap handle with a groove. Made of gray sandy clay.

TYPE II/4

Cat. no. 235

field inv. 438/68
sq. F9, ▽ 1.90 m
horizon 4

diameter of rim 15.0 cm

Pot with everted slanting rim with internal groove and spherical body with parallel channels. Made of gray fired clay with sand grains.

TYPE II/5

Cat. no. 236

field inv. 320/68
sq. C9, ▽ 1.27 m
horizon 4

diameter of rim 8.0 cm

Rather small pot with funnel-shaped rim, cylindrical neck and low modeled body. Made of brown-gray fired clay with sand grains.

Cat. no. 237

field inv. 499/68
sq. C9 D9, ▽ 2.00 m
layer D, horizon 4

diameter of rim 12.0 cm

Pot with slanting everted rim with the groove on the inside and on the outside of the lip and cylindrical neck with impressed ornament. Made of red fired clay of sandy fabric with red slip.

Cat. no. 238

field inv. 420/68
sq. C8 D8, ▽ 1.60 m
layer D

diameter of rim 13.0 cm

Pot with grooved rim and cylindrical ribbed neck. Made of red fired refined clay with brown slip.

Cat. no. 239

field inv. 402/68

sq. C8 D8, ∇ 1.50 m

layer D

diameter of rim 16.0 cm

Pot with slightly arched and everted rim grooved on the inside and cylindrical neck. Under the rim is grooved vertical ornament. Made of red fired clay of sandy fabric and painted red on the outside.

TYPE II/6

Cat. no. 240

field inv. 663/69

sq. E8 F9, ∇ 1.45 m

layer D?

diameter of rim 13.0 cm

Pot with everted slanting and distinctly grooved rim and funnel-shaped neck with rather large strap handle with applied smaller strap channeled handle, which ends in a volute under the rim. Made of dark ochre fired clay of sandy fabric.

TYPE II/7

Cat. no. 241

field inv. 694/69

sq. F8, ∇ 1.55 m

layer D

diameter of rim 14.0 cm

Pot with everted slanting rim with internal groove, cylindrical neck and strap handle with triple fluting. Made of yellowish fired clay of sandy fabric.

TYPE II/8

Cat. no. 242

K-25

bag 9/1970

sq. E6 E7, ∇ 1.35 m

layer D

diameter of rim 16.5 cm

Pot with everted rim of triangular section grooved on the inside, made of red fired refined clay with red slip. Sign 'X' is engraved on the rim.

Cat. no. 243

field inv. 488/68

sq. C8, ∇ 1.73 m; sq. D8 ∇ 1.92 m

layer D

diameter of rim 16.0 cm

Pot with ring-like molded rim with a groove and fragment of the neck with traces of a handle. Made of light brown fired refined clay and brown painted.

Cat. no. 244

field inv. 441/68

sq. F9, ∇ 1.90 m

layer D

diameter of rim 14.5 cm

Fragment of the everted slanting rim and neck of a pot, made of gray fired medium refined clay with dark slip.

Cat. no. 245

field inv. 444/68

sq. C8 D8, ∇ 1.50–1.70 m

horizon 4

Pot with strap profiled rim with flat edges and conical neck with fraction of a handle starting under the rim. Made of red fired refined clay with brown slip. Type identical to the preceding one.

Cat. no. 246

field inv. 487/68

sq. C8, ∇ 1.73 m; D8, ∇ 1.92 m

layer D

Pot with everted slanting rim of triangular section and cylindrical neck, made of brown fired refined clay with brown slip.

Cat. no. 247

field inv. 672/69

sq. F4 G4, ∇ 0.60 m

layer B, C

diameter of rim 16.0 cm

Pot with everted slanting rim, cylindrical neck with grooves and spherical body, made of red fired refined clay with red slip on the on the outside. Under the rim are traces of the engraved inscription MAP[A?].

Cat. no. 248

K-65

07.09.1970.

sq. E6 E7, ∇ 1.15 m

layer C, horizon 3

diameter of rim 13.0 cm

Fragment of everted slanting rim with grooved outer edge and cylindrical neck of the pot, made of gray fired refined clay glazed dark green on the outside. On the neck is a wavy line.

TYPE II/9

Cat. no. 249

field inv. 29/67

Trench 1, ▽ 3.30 m

layer D

diameter of rim 18.0 cm

Pot with everted slanting rim, cylindrical neck, spherical body and double channeled strap handle. Made of gray-brown fired clay of sandy fabric with burnished outer surface.

Cat. no. 250

field inv. 52/70

sq. B2 B3 B4, ▽ 2.60–2.90 m

layer D

diameter of rim 18.0 cm

Pot with everted slanting rim, cylindrical neck and spherical body with two parallel grooves. The strap handle has two channels. Made of gray fired medium refined clay.

Cat. no. 251

field inv. 616/69

sq. F5, ▽ 0.30 m

layer D

Pot identical to the previous one. Made of brown-gray fired medium refined clay and with burnished rim and handle.

Cat. no. 252

field inv. 415/68

sq. G10

horizon 3

diameter of rim 14.0 cm

Pot with everted slanting rim, conical neck, prominent body and solid channeled handle. Made of brown fired clay of sandy fabric, olive green glazed on the outside.

TYPE II/10

Cat. no. 253

field inv. 841/69

sq. B8, ▽ 2.30 m

horizon 3?

diameter of rim 22.0 cm

Fragment of horizontally everted and inward protruding rim, neck and handle of the pot made of gray-brown fired clay of sandy fabric. The grooved wavy line on the rim.

Cat. no. 254

field inv. 411/68

sq. B10, ▽ ca 1.70 m

layer C, horizon 3

diameter of rim 18.0 cm

Pot with horizontally everted and inward protruding rim, slightly convex neck and fragment of channeled strap handle. Made of ochre fired clay, yellowish-green glazed.

TYPE II/11

Cat. no. 255

field inv. 802/69

sq. G4, ▽ 1.20 m

layer B

diameter of rim 13.5 cm

Fragment of horizontally everted rim with ring-like molded internal edge and cylindrical neck of a pot made of gray fired refined clay with dark burnished slip on the outside. On the rim is the impressed ornament, on the neck parallel grooves and zigzag lines.

TYPE II/12

Cat. no. 256

field inv. 702/69

sq. B4, ▽ 1.30 m

layer C, horizon 3

diameter of rim 8.0 cm; diameter of base 4.5 cm; height 9.0 cm
Rather small pot with slightly arched everted rim, high body with two grooves and flat base. Made of brown fired medium refined clay and olive glazed on the outside.

TYPE II/13

Cat. no. 257

field inv. 703/69

sq. B4, ▽ 1.30 m

layer C, horizon 3

diameter of rim 13.5 cm; height 13 cm

Rather small pot-beaker having thick walls, with everted rim, calotte-shaped body and flat base. Handmade of brown fired medium refined clay.

TYPE II/14

Cat. no. 258

field inv. 846/69

Necropolis

diameter of rim 10.0 cm

Fragment of everted slanting and flat rim and high body of a pot, made of brown fired clay with mica and limestone.

TYPE II/15

Cat. no. 259

field inv. 445, 446/68

sq. C8 D8, ∇ 1.50–1.70 m

layer D?

diameter of rim 21.0 cm

Fragment of everted slanting rim with flat edge and shoulder of a pot, made of brown fired clay of sandy fabric.

TYPE II/16

Cat. no. 260

K-17

sq. C10 D10, ∇ 1.70 m

horizon 3

diameter of rim 8.0 cm

Rather small spherical pot with everted slanting and grooved rim, made of gray fired sandy clay.

Cat. no. 261

field inv. 588/69

sq. E9, ∇ 0.90 m

horizon 3

diameter of rim 13.0 cm

Pot with everted slanting rim with flat top surface and grooved on the inside and spherical body, made of gray fired clay of sandy fabric.

Cat. no. 262

field inv. 615/69

sq. F5, ∇ 0.30 m

horizon 3?

diameter of rim 16.8 cm

Pot with everted slanting rim and flat top surface and grooved on the inside and high body. Made of gray clay of sandy fabric.

Cat. no. 263

field inv. 103/67

sq. B8, ∇ 1.50 m

horizon 3

diameter of rim 16.0 cm

Pot with everted slanting and grooved rim with prominent inside edge and high ribbed body. Made of light brown clay of sandy fabric.

Cat. no. 264

field inv. 847/69

Necropolis

diameter of rim 13.0 cm

Fragment of everted slanting and slightly grooved rim and ovoid body of a pot, made of brown-gray fired clay with gravel.

TYPE II/17

Cat. no. 265

field inv. 662/69

sq. E8 F9, ∇ 1.45 m

horizon 3

diameter of rim 16.0 cm

Fragment of everted slanting rim with tapering edge and high body. Made of dark brown fired clay with plenty of mica. Under the rim is impressed ornament of the stylized fir branch.

TYPE II/18

Cat. no. 266

field inv. 102/67

sq. B8, ∇ 1.50 m

horizon 3

diameter of rim 14.0 cm

Fragment of extremely profiled rim and prominent neck of the pot, made of light gray fired clay with sand grains.

Cat. no. 267

K-18

sq. C10 D10, ∇ 1.70 m

layer C, horizon 3

diameter of rim 14.0 cm

Fragment of slanting everted and extremely profiled, prominent neck and high body of a pot, made of gray fired clay with sand grains.

TYPE II/19

Cat. no. 268

field inv. 634/69

sq. E8, ∇ 1.20 m

layer C, horizon 3

diameter of rim 13.5 cm; diameter of base 7.5 cm; height 14.5 cm

Pot with everted slanting rim, slightly ribbed body and flat base. Made of gray fired clay of sandy fabric.

Cat. no. 269

field inv. 675/69

sq. C5, ∇ 0.20/0.30–0.65 m

horizon 3

diameter of rim 14.0 cm; diameter of base 10.0 cm; height 18.0 cm

Pot with everted slanting rim, spherical slightly ribbed body and flat base. Made of brown fired insufficiently refined clay. On the rim and upper segment of the body is an ornament of wavy lines.

Cat. no. 270

field inv. 553/69

sq. G7

layer B

diameter of rim 15.0 cm

Pot with everted slanting rim, spherical body and handle of elliptical section joining rim and body. Made of brown-gray fired clay with sand grains.

Cat. no. 271

field inv. 647/69

sq. G4, ∇ 0.70 m

layer B

diameter of rim 11.5 cm

Pot with everted slanting rim, spherical body, flat base and handle of elliptical section. Made of brown fired clay of sandy fabric.

Cat. no. 272

field inv. 597/69

sq. G2

horizon 2

diameter of rim 13.0 cm

The everted slanting rim and ovoid body of a pot, made of dark gray fired clay of sandy fabric.

TYPE II/20

Cat. no. 273

field inv. 75/67

Trench 2, ∇ 1.40 m

horizon 3

diameter of rim 10.0 cm; diameter of base 5.6 cm; height 12.0 cm

Pot with everted slanting and grooved rim, prominent neck, ovoid body and flat base. Made of brown fired clay of sandy fabric.

TYPE II/21

Cat. no. 274

field inv. 554/69

sq. G7

layer B

diameter of rim 11.0 cm; height 13.0 cm; diameter of base 7.5 cm

Rather small pot-jug with wide trifoliate mouth, ovoid body, flat base and handle of semicircular section. Made of gray-brown fired clay of sandy fabric.

TYPE II/22

Cat. no. 275

field inv. 20/67

Trench 2, ∇ 0.40 m

horizon 2

diameter of rim 16.0 cm; height 21.0 cm; diameter of base 12.0 cm

Pot with slightly arched everted rim, prominent neck, asymmetrical ovoid body and flat base. Made of brown fired insufficiently refined clay.

TYPE II/23

Cat. no. 276

field inv. 24/67

Trench 1, ∇ 2.00 m

Fragment of a spout of the pot, made of gray fired medium refined clay with dark slip on the outside. Ornament consists of impressed rhombs with network pattern.

IV.4.C.3. PLATES

Thirty-one plate fragments classified into six basic types have been discovered at Saldum (Fig. 54). They were mostly found in the 2nd–3rd century layer (layer D and horizon 4) and only one specimen dates from the earliest period of life at Saldum, i.e. middle of the 1st – first half of the 2nd century.

Type III/1 (Cat. no. 277) – Plate with everted and grooved rim, biconical body and flat base on the ring-like foot. Made of red fired clay painted red, black or ochre/red and sometimes with stamped ornament on the rim.

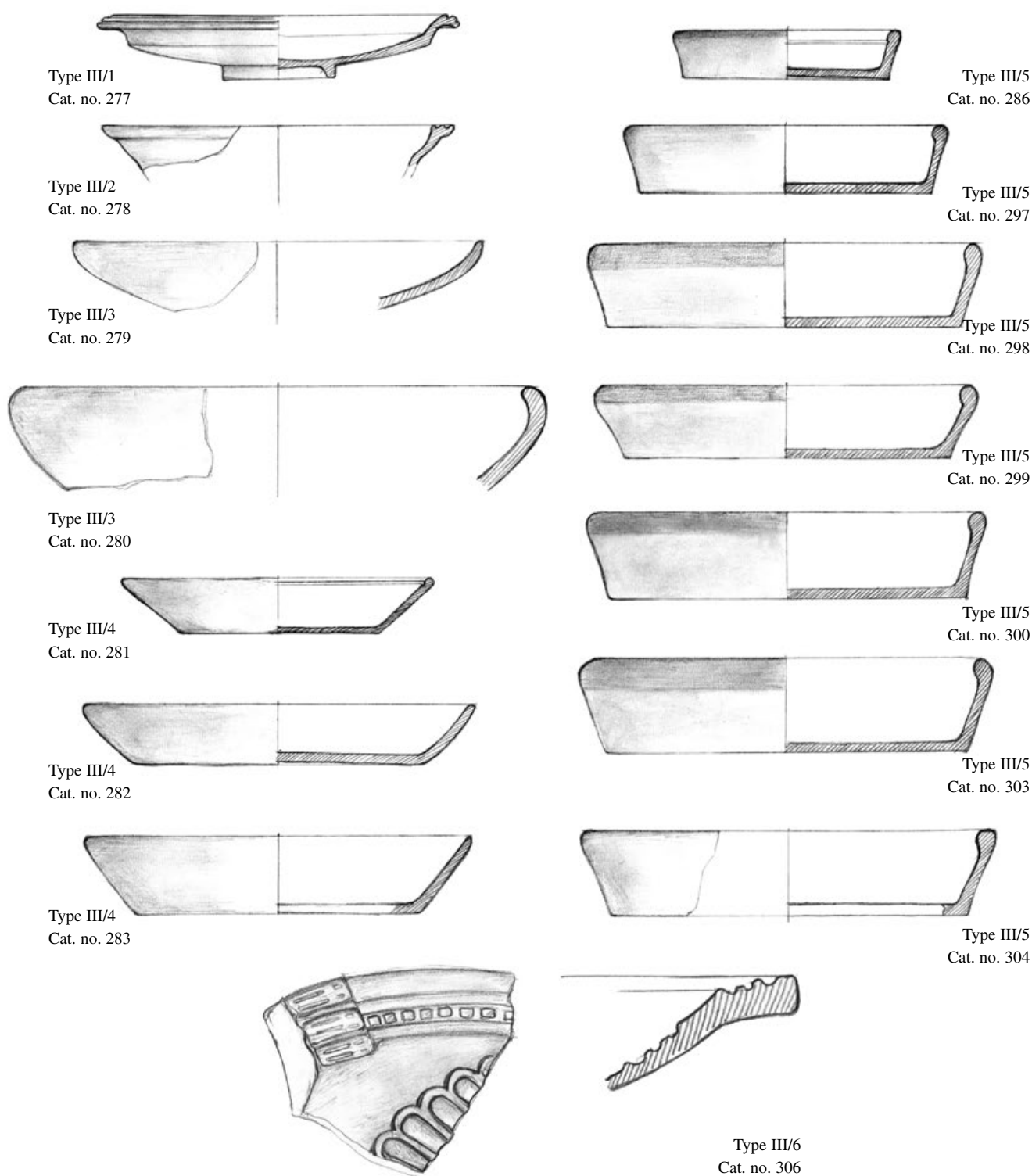


Fig. 54. Plates (R 1:4; Cat. no. 306 R 1:2)

This form was made after the Drag. 36 terra sigillata plates and was particularly numerous in the layers dating from the middle and second half of the 2nd century and was used until the first half of the 3rd cen-

tury. In *Singidunum* were encountered many variants depending on the rim profilation, depth of the receptacle, color of firing and treatment of the surface.¹²⁵ This type was also registered at *Karataš–Diana* where it is

dated in the 1st–2nd century.¹²⁶ The plates from *Sirmium* and Gomolava, brown-red or gray fired are dated on the basis of the analogies from *Poetovio* and western imperial sites in the end of 1st – beginning of the 2nd century.¹²⁷

Type III/2 (Cat. no. 278) – The calotte-shaped plate with horizontally everted and grooved rim made of red fired clay and red painted.

The specimens of this plate type were registered in the pottery material from Ravna–*Timacum minus*.¹²⁸ Similar form made of yellowish-white fired sandy clay occurs in *Singidunum* where it is dated in the 2nd–3rd century.¹²⁹

Type III/3 (Cat. nos. 279–280) – This type is characterized by inverted rim, calotte-shaped or biconical body and ring-like foot. It is made of red fired refined clay painted red and burnished. Two specimens of this type were found at Saldum.

This form was modeled after the terra sigillata vessels of Drag. 32 type. The plates of this type are characteristic of the local production in the second half of the 2nd and the first half of the 3rd century. Pottery workshop, where among other vessels this type of plate was also produced, was discovered in *Singidunum*.¹³⁰ Few specimens of this type from the southern part of Lower Pannonia (*Sirmium*, *Burgenae*, Vojka) are also dated in the 2nd–3rd century.¹³¹

Type III/4 (Cat. nos. 281–285) – Shallow plate with unmolded, faceted or inverted rim, slanting body walls and flat base. Made of red or brown fired medium refined clay with painted or unworked surface.

Four plates of this type were found at Saldum. They are red fired and one of them dating from the horizon 5 (end of 1st – beginning of 2nd century) has orange-ochre slip on the inside (**Cat. no. 284**)

Plates of this type occur from the end of 1st to the end of 3rd century. In Tekija–*Transdierna* were found few specimens within the earlier fortification¹³² and substantial number of these vessels was found in the civilian settlement and the military camp in *Singidunum*.¹³³ Some specimens were also registered in *Sirmium*, *Mursa* and *Cibalae*.¹³⁴

Type III/5 (Cat. nos. 286–305) – The plates with ring-like molded and slightly inverted rim, slanting

walls and flat base. They were made of yellowish-whitish or gray fired well refined clay. Usually the inside of the vessel and the outside of the rim were color-coated red or brown.

Such plates are elements of the standard tableware repertoire at the 2nd–3rd century sites. This is the provincial production of the so-called Pompeian type of plates introduced from the mid 2nd century. The peak of the production was in the 3rd century and then gradually declines in the 4th century. Many specimens were registered in *Singidunum*¹³⁵ but also in *Sirmium* where they are of somewhat smaller size (diameter of rim 10.0–13.5 cm) and dated in the 3rd century.¹³⁶

Type III/6 (Cat. no. 306) – The plate with horizontally everted and grooved rim and calotte-shaped body. On the rim is an ornament of impressed squares and in the vessel interior is preserved the part of a rosette. Produced in the mold of red fired medium refined clay.

We find this vessel fragment rather exceptional and it could be classified as shallow bowls-plates with ornament in the interior. Numerous variants of the plates with stamped ornament on the rim and in the interior were found in *Singidunum* and are dated from the middle of the 2nd to the end of the 3rd century.¹³⁷

125| S. Nikolić-Đorđević, *Antička keramika Singidunuma*, *Singidunum* 2, 2000, 97, type III/5.

126| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana – Karataš, Djerdapske sveske* IV, 1987, T. X, type III/6.

127| O. Brukner, *Rimska keramika u u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 86, plate type 4, T. 66/18–20.

128| I wish to express my thanks to Ana Premk MA for this information.

129| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 115, type III/52.

130| T. Cvjetičanin, *Grnčarska radionica u Singidunumu (lokalitet Narodno pozorište)*, *Singidunum* 2, 2000, fig. 9/5.

131| O. Brukner, *Rimska keramika*, 88, plate type 14, T. 71/19–23.

132| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 148, type III/4, cat. 8.

133| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 98–99, type III/8.

134| O. Brukner, *Rimska keramika*, 85, plate type 1, T. 65/1–2, 6–11.

135| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 112, type III/43.

136| O. Brukner, *Rimska keramika*, 85, plate type 10, T. 68/46–53.

137| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 100–101, type III/13.

CATALOGUE OF PLATES

TYPE III/1

Cat. no. 277

field inv. 816/69

sq. F4, ▽ 1.30 m

layer D

diameter of rim 24.0 cm

Shallow plate with everted and grooved rim and prominent conical body. The flat base is resting on the ring-like foot. Made of red fired clay of sandy fabric and painted red.

TYPE III/2

Cat. no. 278

field inv. 461/68

sq. E9, ▽ 1.65 m

horizon 4

diameter of rim 24.0 cm

Plate with everted and grooved rim and calotte-shaped body, made of red fired and red painted clay.

TYPE III/32

Cat. no. 279

field inv. 858/69

sq. B9, ▽ 2.00 m

pit

diameter of rim 28.0 cm

Plate with inverted rim, made of red fired and red painted clay.

Cat. no. 280

field inv. 425/68

sq. D8

layer D

diameter of rim 36.4 cm

Rather deep plate-bowl with unprofiled inverted rim and slanting walls. Made of ochre/red fired clay of sandy fabric.

TYPE III/4

Cat. no. 281

field inv. 117a/70

sq. B2, ▽ 4.10 m

pit, layer D

diameter of rim 21.0 cm

Plate with unprofiled rim with groove on the inside, slanting walls and flat base. Made of red fired and red painted clay.

Cat. no. 282

field inv. 724/69

sq. F4, ▽ 1.00 m

horizon 3

diameter of rim 26.0 cm

Plate with unprofiled rim, conical body and flat base. Made of red fired medium refined clay painted red.

Cat. no. 283

field inv. 628/69

sq. C8, ▽ 2.10 m

layer D

diameter of rim 26.0 cm

The unprofiled rim, slanting walls and flat base of the plate, made of red fired medium refined clay, painted red.

Cat. no. 284

field inv. 819/69

sq. E9, ▽ 2.75 m

horizon 5?

diameter of rim 24.0 cm; height 5.5 cm

Plate with unprofiled rim, slanting walls and flat base. Made of red fired clay and with orange/ochre slip in the interior.

Cat. no. 285

field inv. 695/69

sq. F8, ▽ 1.55 m

layer D

diameter of rim 28.0 cm

Rather deep plate with unprofiled inverted rim and slanting walls. Made of yellowish-whitish fired medium refined clay of sandy fabric.

TYPE III/5

Cat. no. 286

field inv. 740a, b/69

sq. B8, ▽ 2.02 m

horizon 4

diameter of rim 15.6 cm

Rather shallow plate with unprofiled and inverted rim, slanting walls and flat base. Made of orange-red fired clay, interior and outer surface of the rim painted red.

Cat. no. 287

field inv. 451/68

sq. C9 D9, ▽ 1.90 m

layer D

height 4.0 cm

Same as the previous one.

Cat. no. 288

field inv. 432/68
sq. E9, ▽ 1.50 m
layer D
diameter of rim 23.0 cm; height 3.8 cm
Same as the previous one.

Cat. no. 289

field inv. 423/68
sq. C8 D8, ▽ 1.60 m
layer D
diameter of rim 20.0 cm; height 3.8 cm
Same as the previous one.

Cat. no. 290

field inv. 422/68
sq. C8 D8, ▽ 1.60 m
layer D
diameter of rim 27.0 cm
Same as the previous one.

Cat. no. 291

field inv. 35/67
Trench 1
layer D
diameter of rim 21.0 cm
Same as the previous one.

Cat. no. 292

field inv. 421/68
sq. C8 D8, ▽ 1.60 m
layer D
diameter of rim 24.0 cm; height 4.6 cm
Same as the previous one.

Cat. no. 293

field inv. 406/68
sq. C9 D9, ▽ 1.50–1.60 m
layer D
diameter of rim 28.0 cm
Same as the previous one.

Cat. no. 294

field inv. 538/68
sq. F8, ▽ 2.70 m
layer D?
diameter of rim 21.0 cm
Same the previous one.

Cat. no. 295

field inv. 555/69
sq. G8, layer B, above horizon 2, in debris
layer D
diameter of rim 24.0 cm
Same as the previous one.

Cat. no. 296

field inv. 118/70
sq. C10, ▽ to 2.70 m
horizon 4
diameter of rim 25.0 cm; diameter of base 20.0 cm; height 5.0 cm
Same as the previous one.

Cat. no. 297

field inv. 740d/69
sq. B8, ▽ 2.02 m
horizon 4
diameter of rim 22.0 cm
Plate with ring-like molded slightly inverted rim, slanting walls and flat base. Made of red fired clay painted red on the inside and on the external side of the rim.

Cat. no. 298

field inv. 659/69
sq. C9, ▽ 2.02 m
layer D, horizon 4
diameter of rim 26.0 cm
Plate with unmolded everted rim, slanting walls and flat base. Made of red fired clay painted red on the inside and on the external side of the rim.

Cat. no. 299

field inv. 503/68
sq. E9, ▽ 1.90 m
horizon 4
diameter of rim 26.0 cm
Plate with extremely inverted rim and slanting walls. Made of red fired clay painted red on the inside and on the external side of the rim.

Cat. no. 300

field inv. 108/70
sq. C10 D10, ▽ 2.40 m
layer D
diameter of rim 27.0 cm; diameter of base 24.0 cm; height 6.0 cm
Rather deep plate-bowl with ring-like molded and inverted rim, slanting walls and flat base. Made of red fired clay painted red on the inside and on the external side of the rim.

Cat. no. 301

field inv. 587/69
sq. E9, ▽ 0.90 m
horizon 3
diameter of rim 24.0 cm; height 5.5 cm
Same as the previous one.

Cat. no. 302

field inv. 489/68
sq. C8, ▽ 1.73 m
layer D
diameter of rim 23.0 cm
Plate with unprofiled tapering and slightly inverted rim, slanting walls. Made of red fired clay painted red on the inside and on the external side of the rim.

Cat. no. 303

field inv. 83/70
sq. E6 E7, ▽ 1.80 m
layer D
diameter of rim 28.0 cm
Rather deep plate with unprofiled inverted rim, slanting walls and flat base. Made of light red fired clay painted red on the inside and on the external side of the rim.

Cat. no. 304

field inv. 465/68
sq. E9, ▽ 1.65 m
horizon 4
Plate with ring-like molded and inverted rim and slanting walls. Made of gray fired clay of sandy fabric and with traces of burning.

Cat. no. 305

field inv. 447/68
sq. C8 D8, ▽ 1.50–1.70 m
layer D
diameter of rim 24.0 cm
The ring-like molded and inverted rim and slanting walls of a plate made of yellowish-whitish fired clay of sandy fabric and with traces of burning.

TYPE III/6

Cat. no. 306

field inv. 428/68
sq. C9 D9, ▽ 1.70 m
layer D
Fragment of horizontally everted and grooved rim and calotte-shaped body of a plate made of red fired medium refined clay. Rosette motif preserved in the interior.

IV.4.C.4. AMPHORAE

Considerable amount of amphorae classified in the eight types were found at Saldum (Figs. 55–57). During excavations conducted between 1967 and 1970 fragments of the amphorae were selected in such a way that some ‘typical’ pieces were gathered for the study collection while most of the fragments were discarded. Our analysis of the study material revealed that most of the fragments come from the 6th century layer and that these were the specimens of amphorae with combed or ribbed decoration. Some fragments were rather large and very sharp at the fracture so it could indicate the violent end of Saldum at the end of the 6th century as other finds also suggest.

Type V/1 (Cat. no. 307) – Amphora of ovoid shape with strap molded rim under which is ring-like reinforcement, cylindrical neck and flat or ring-like base and strap handles. Made of red-brown fired clay. Dated in the 1st – beginning of the 2nd century.

This type of amphorae encountered in the southern part of Lower Pannonia is classified as provincial form produced during the 1st century.¹³⁸ Eleven specimens from Tekija–*Transdierna* were according to the parallels from *Singidunum* and *Viminacium* dated in the end of 1st and the beginning of the 2nd century.¹³⁹ The finds from Karataš–*Diana* date from the same period.¹⁴⁰ The specimens from Kostol–*Pontes* that were made of red fired and red painted clay have been found in the layer dated in the 2nd–3rd century.¹⁴¹

Type V/2 (Cat. no. 308) – Amphorae of oval form and variously molded rim, have cylindrical neck, flat base and strap handles. They were usually made of medium refined red fired clay or to the smaller extent of the gray fired clay with painted or unworked surface. They were products of the local workshops and

138| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 125, amphora type 20, T. 165–167.

139| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 156–157, type V/6, cat. 12–15.

140| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana – Karataš, Djerdapske sveske IV*, 1987, T. XI, type IV/8.

141| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Trajanov most – Castrum Pontes. Izveštaj o arheološkim istraživanjima u 1980. godini, Djerdapske sveske II*, 1984, T. XI, type VII/6a.

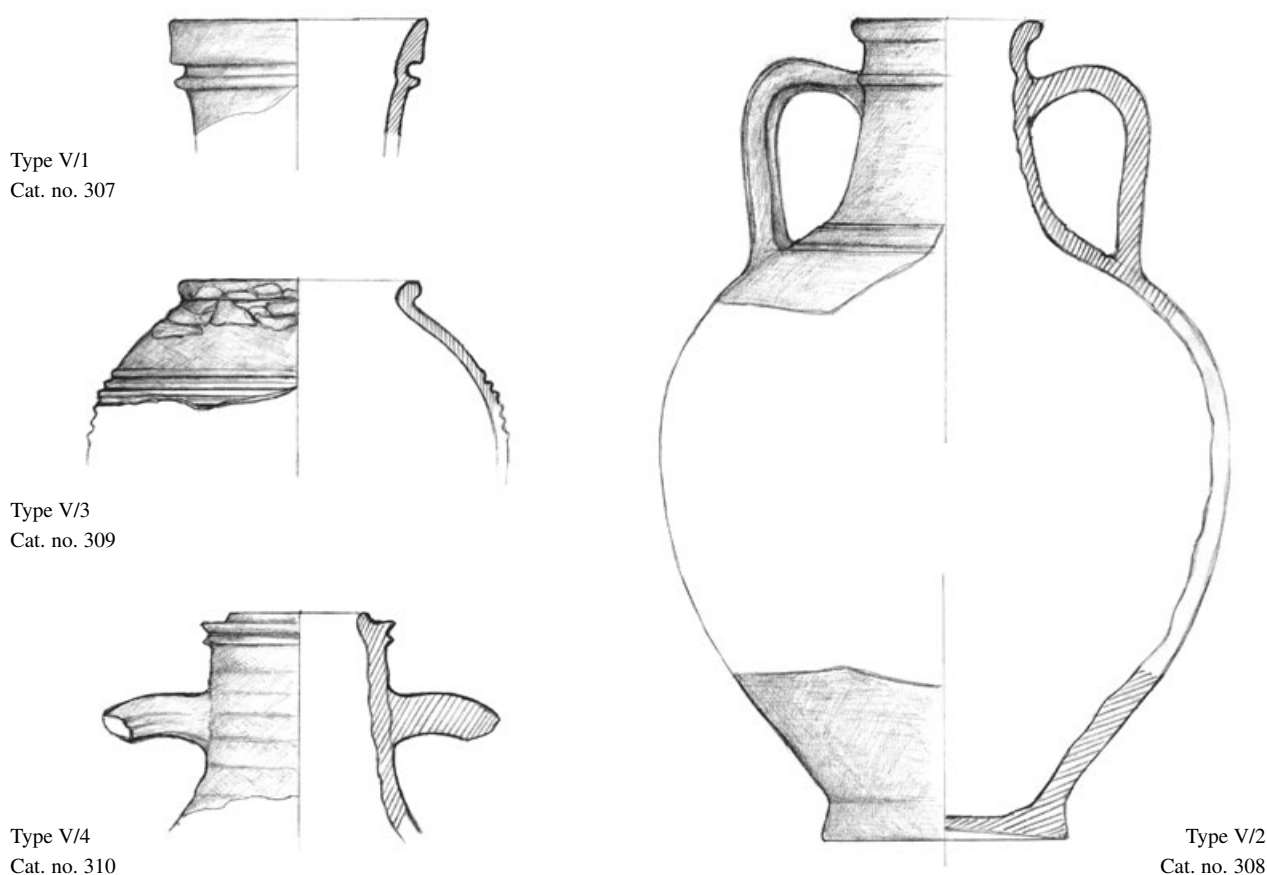


Fig. 55. Amphorae (R 1:4)

have been encountered in the layers dating from the 2nd – first half of the 3rd century.

The amphorae of this type occur in larger quantity at the sites along the Danube in the 2nd–3rd century layers.¹⁴² It is assumed that they were produced in the Viminacium workshops where they have been found in great quantities.¹⁴³

Type V/3 (Cat. no. 309) – The amphorae known as Syrian–Palestinian type or Gaza-amphorae have slightly rounded rim and broader belly with irregular barbotine ornament, pointed base and lug-like handles of circular or ellipsoid section and they were made of sandy clay red to brown fired often with engobe on the outer surface.¹⁴⁴ Centers of production of these amphorae were in the Negev region from the middle of the 4th to the 6th century and they were used for transportation of vine, sesame oil and for food storage. The barbotine helped to keep cool the food in the container.¹⁴⁵ Stephanos Byzantinus mentions κέραμοι Γαζῆται that most probably relates to this type of vessels.¹⁴⁶

In the middle Danube basin these amphorae occur in the layers of the 4th–6th century. One specimen of this amphora type found in *Singidunum* is dated in the end of 4th – beginning of the 5th century on the basis of the finding context.¹⁴⁷ Most of the analogous specimens from the middle Danube basin are dated in the 6th century: finds from the site Svetinja (AD 567–584),¹⁴⁸

142| Lj. Bjelajac, *Amfore gornjomezijskog Podunavlja*, Beograd 1996, 99, type XXXI.

143| Lj. Bjelajac, *Amfore*, 100.

144| Lj. Bjelajac, *Amfore*, 49, type XV.

145| Lj. Bjelajac, *Amfore*, 50.

146| After P. Turnovsky, Fundbericht, in: *Mosaikenforschung im Kaiserpalast von Konstantinopel*. Vorbericht über das Forschungs- und Restaurierungsprojekt am Palastmosaik in den Jahren 1983–1988, Hrsgg. W. Jobst, H. Vetter, Wien 1992, Anm. 5.

147| S. Nikolić-Dorđević, *Antička keramika Singidunuma*, *Singidunum* 2, 2000, 125–126, type V/16.

148| M. Popović, Svetinja, novi podaci o ranovizantijskom Viminacijumu, *Starinar* XXXVIII (1987), 1988, 17–18, type VI, fig. 14/3–4.

Bosman, Karataš–*Diana* and Kostol–*Pontes*.¹⁴⁹ They were in use in Dobrudja in the 6th–7th century¹⁵⁰ and at Kaliakra in Scythia Minor they were found together with the coins of Maurice (AD 582–602).¹⁵¹ Large quantity of amphorae of this type was discovered in the course of investigation of the floor mosaics in the zone of imperial palace in Constantinople. They are dated on the basis of other finds around the middle of the 5th century and it is important for the dating of the imperial complex and the mosaic floors.¹⁵²

Type V/4 (Cat. no. 310) – Amphora of ovoid shape with strap molded rim, narrow neck, prominent shoulder, ring-like base and handles joining the middle of the neck and shoulder.¹⁵³ The outer surface could be glazed or coated with the engobe. They had been produced in the Bosphorus region from the beginning of the 4th to the end of the 6th century and they were widely used for transportation of vine.

In the southern part of Lower Pannonia was recorded one specimen from *Sirmium* dated in the 4th–5th century.¹⁵⁴ For three amphorae found at Ravna we do not have information concerning the fabric and color of firing as well as the more precise date while they had not been registered at the other sites judging by the published material.¹⁵⁵

Type V/5 (Cat. nos. 311–313) – This type comprises two variants of amphorae known as *spatha* or *spatheion* that have in common narrow cylindrical body ending in a pointed base.¹⁵⁶ The inverted rim is ring-shaped or of triangular section and two small handles are pressed against the cylindrical neck. They were made of well refined red fired clay or of yellowish fired sandy clay. They have the engobe on the outside. Some specimens have the inscription in red paint on the neck and belly. They are dated from the 4th–5th century and in the 6th – first half of the 7th century. They are of north African and west Mediterranean (early type) origin while the later specimens were most probably produced in a few east Mediterranean centers.¹⁵⁷ The *spatheia* were used as containers for vine, fish-sauce (*garum*), honey, oil, olives and other products.

Two fragments of the *spatheia* rims were found at Saldum and they differ in profilation, color of firing and the finding circumstances. One specimen comes from the Valentinian's layer while the other dates from the 6th century.

The direct analogy for our amphora **Cat. no. 311** is the specimen from Kostol–*Pontes* made of reddish fired clay with yellowish-whitish engobe on the outer surface.¹⁵⁸ The body and base of the amphora **Cat. no. 312** most probably belongs to this amphora type and it was probably a specimen similar to the **Cat. no. 313**.

There are many analogies for the *spatheia* made of yellowish-whitish fired clay. The finds from *Viminacium* are dated in the period AD 567–596.¹⁵⁹ In the later fortification at Tekija–*Transdierna* were found eleven specimens and some of them with the inscriptions on the body.¹⁶⁰ The amphorae from Hajdučka Vodenica were also dated in the 6th century.¹⁶¹ There were also finds registered at Boljetin–*Smorna*, Ravna–*Campsas*, Karataš–*Diana* (3rd–6th century),¹⁶² Kostol–*Pontes*¹⁶³ and Milutinovac.¹⁶⁴ In the interior of the province small *spatheia* were found at Gradina on the Jelica mountain near Čačak¹⁶⁵ and at Caričin Grad. The specimens from Caričin Grad are dated as well as the entire complex in the period between AD 530/540

149| Lj. Bjelajac, *Amfore*, 51–52.

150| C. Scorpan, Contribution à la connaissance de certains types céramiques romano-byzantins (IV^e–VII^e siècles) dans l'espace istro-pontique, *Dacia* n.s. XXI, 1977, 280–281, type XIV, fig. 19–20.

151| G. Kuzmanov, Rannovizantijska keramika ot kastela na nos Kaliakra, *Arheologija* 1978–2, 23, fig. 3/ž, z.

152| P. Turnovsky, in: *Mosaikenforschung im Kaiserpalast von Konstantinopel*, 43–48, Taf. 1–3.

153| Lj. Bjelajac, *Amfore*, type XXIII.

154| O. Brukner, *Rimska keramika*, 125, amphora type 18, T. 165/18.

155| Lj. Bjelajac, *Amfore*, 79.

156| Lj. Bjelajac, *Amfore*, 87, type XXVII.

157| M. Mackensen, Amphoren und Spatheia von Golemanovo Kale, in: S. Uenze, *Die spätantiken Befestigungen von Sadovec (Bulgarien)*, München 1992, 250.

158| Lj. Bjelajac, *Amfore*, 88, cat. 163, fig. XXXI/163.

159| M. Popović, *Starinar* XXXVIII (1987), 1988, 15–17, fig. 13/8–10.

160| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, 159, type V/13, cat. 44–46.

161| A. Jovanović, Hajdučka Vodenica, kasnoantičko i ranovizantijsko utvrđenje, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 331.

162| N. Jevremović, *Djerdapske sveske* IV, 1987, T. XII, type IV/13.

163| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Djerdapske sveske* II, 1984, type V/7.

164| P. Milošević, M. Jeremić, Le castellum à Milutinovac, *Djerdapske sveske* III, 1986, 245–251, fig. 9/a.

165| T. Cvjetičanin, Kasnoantička i ranovizantijska keramika sa gradina iz okoline Čačka, *ZNMČ* XVIII, 1988, T. 1/V, 2.

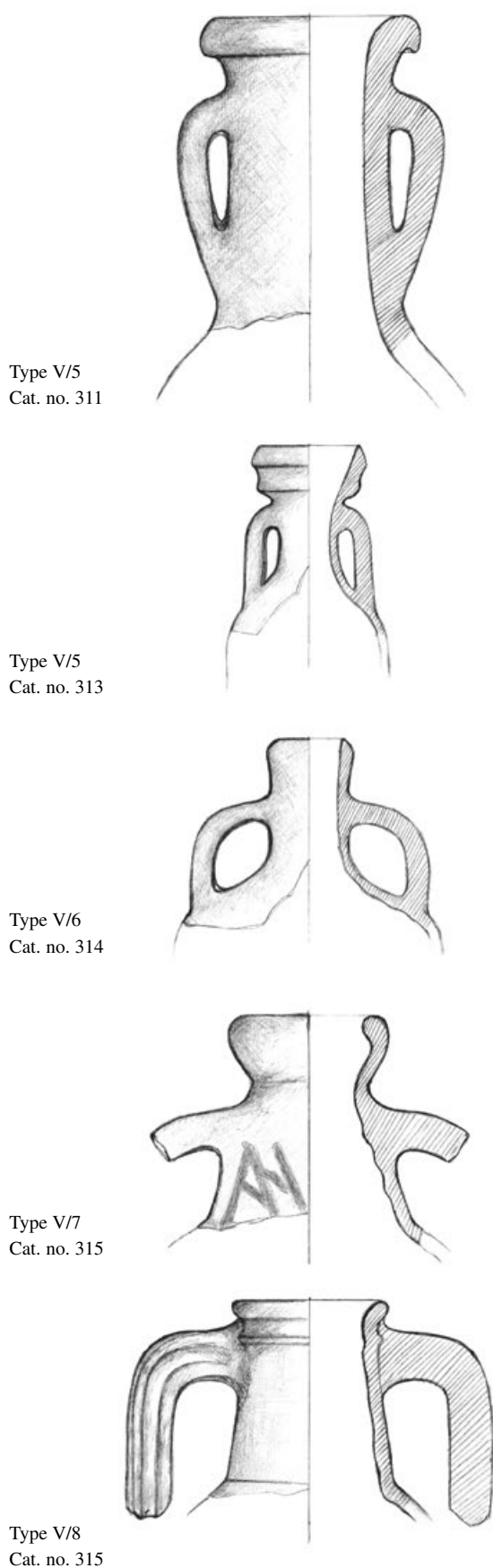


Fig. 56. Amphorae (R 1:4)

and AD 613/616.¹⁶⁶ Among the *spathea* discovered at Golemanovo Kale near Sadovec in Bulgaria was confirmed exceptionally small percentage of the north African specimens in comparison with the specimens of the eastern Mediterranean origin.¹⁶⁷

Type V/6 (Cat. no. 314) – The spindle-shaped amphora with unmolded rim, cylindrical or slanting neck, prominent shoulder, pointed base and rather small handles joining the middle of neck and shoulder. It is made of reddish fired sandy clay with engobe on the outer surface.¹⁶⁸ This type of amphorae was the product of the Egyptian workshops in the period from the late 4th century and the highest intensity of production and distribution was during the 5th and 6th century.

The spindle-shaped amphorae are relatively scarce at the sites in the middle Danube basin and it was the consequence of the limited workshop production. The specimens of this type have been registered in *Singidunum*,¹⁶⁹ *Viminacium* – site Svetinja where they are dated around AD 584,¹⁷⁰ at Donji Milanovac–*Taliata*, Bosman, Hajdučka Vodenica, Karataš–*Diana*, Kostol–*Pontes*¹⁷¹ and Ušće Slatinske reke.¹⁷²

Type V/7 (Cat. no. 315) – This type is characterized by campaniform mouth, conical neck, globular body, pointed base and slanting handles of oval section on the shoulder. These amphorae are made of refined, sandy clay, yellowish to reddish fired and with yellowish-whitish engobe.¹⁷³ The upper segment of the body is ribbed and on the neck is frequently registered the inscription executed in red paint. They are dated in the period of the 4th–6th century and produced in the region of the Black Sea and they were used for transportation of oil, wheat and vine.

166| V. Kondić, V. Popović, *Caričin Grad*, Beograd 1977, 371–373.

167| M. Mackensen, in: S. Uenze, *Die spätantiken Befestigungen von Sadovec*, 245–252, Taf. 53.

168| Lj. Bjelajac, *Amfore*, 85, type XXVI.

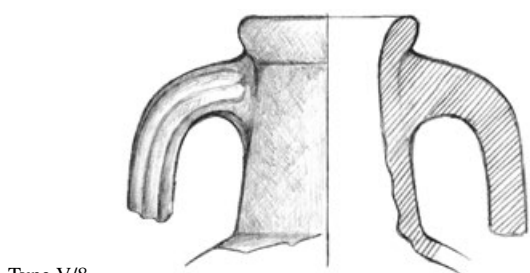
169| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 126, type V/16.

170| M. Popović, *Starinar* XXXVIII (1987), 1988, 18, type V, fig. 14/1–2.

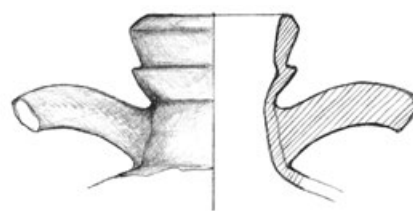
171| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Djerdapske sveske* II, 1984, type V/32, T. IX.

172| A. Jovanović, M. Korać, Đ. Janković, L'Embouchure de la rivière Slatinska reka, *Djerdapske sveske* III, 1986, fig. 14/4.

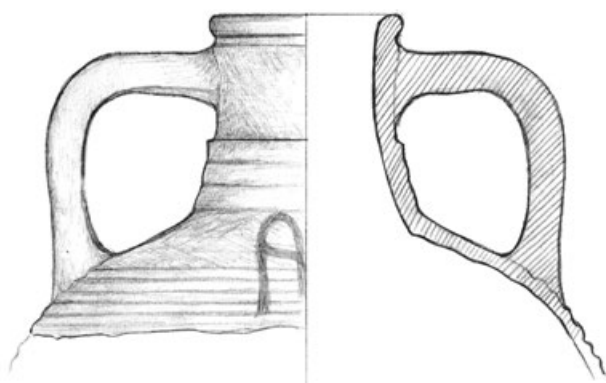
173| Lj. Bjelajac, *Amfore*, 67 sqq, type XX.



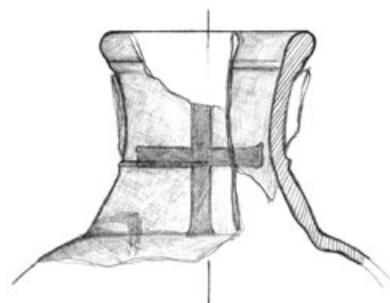
Type V/8
Cat. no. 317



Type V/8
Cat. no. 322



Type V/8
Cat. no. 318



Type V/8
Cat. no. 319



Cat. no. 323



Cat. no. 324

Fig. 57. Amphorae (R 1:4; Cat. no. 323 and 324 R 1:2; Cat. no. 324 – photo V. Pecikoza)

This type is rather widely distributed at the many Late Roman sites. Our specimen is of Early Byzantine manufacture and analogous to the finds from *Viminacium*–Svetinja that are very numerous in the period between AD 567 and 596.¹⁷⁴ Few specimens found at Tekija–*Transdierna* are dated according to the analogies in the 5th–6th century.¹⁷⁵ We added to this type also the earlier specimens with similar profilation of the rim and body but chronologically much earlier. They usually had stamps on the rim representing the abbreviations of alphabet letters combined with hедера and we think that it is an entirely distinct type (type I in typology of Lj. Bjelajac) produced in the west Mediterranean workshops while later specimens of our type with the bell-shaped mouth are of the Pontus origin. The amphora of identical profilation as the specimen from

Saldum was found at Prahovo–*Aquae* and it is made of well refined yellowish fired clay.¹⁷⁶

Type V/8 (Cat. nos. 316–322) – Amphora with ring-like molded rim, cylindrical neck, globular ribbed body and rounded or slightly pointed base with handles joining neck and shoulder. This type was made of sandy clay, red or yellow fired with yellowish engobe on the

174| M. Popović, *Starinar* XXXVIII (1987), 1988, 13–14, type II, fig. 13/6.

175| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, 158, type V/10.

176| Đ. Janković, *Podunavski deo oblasti Akvisa u VI i početkom VII veka*, Beograd 1981, 147, fig. 62; Lj. Bjelajac, *Amfore*, 72, cat. 130, fig. XXIV/130.

date	types	number of vessels
1 st –2 nd c. (E, horizon 5)	V/1	1
2 nd –3 rd c. (D, horizon 4)	V/2	1
364–378/380 (C, horizon 3)	V/3, V/4, V/5	4
6 th c. (B, horizon 2)	V/5, V/6, V/7, V/8	10

Table 7. Distribution of amphorae types

outer surface. Some specimens have red-color letters inscribed on the neck. It is assumed that there were few centers for their production in the eastern Mediterranean (Greek island, Cyprus, Syria, Black Sea coast).¹⁷⁷ They appeared in the second half of the 4th century and their production ended in the 7th century.

The ribbed amphorae are one of the most widely distributed amphora type at the sites from the 4th–6th century and they frequently represent 50–60% of pottery at the sites from the mentioned period as it has been confirmed at Svetinja–*Viminacium* and at Bosman.¹⁷⁸ The closest analogy for our specimens **Cat. nos. 316, 317** comes from Svetinja¹⁷⁹ while the amphora from Prahovo–*Aquae*¹⁸⁰ is the most similar in form with our specimen **Cat. no. 322**. The inscriptions on these amphorae – *tituli picti* are rather frequent as well as the pictorial representations of symbols, including the cross as is the case on our specimen **Cat. no. 319**.

Stamp of the potter – On the handle of one amphora (**Cat. no. 324**) made of red fired clay with yellowish-whitish engobe is impressed the potter's stamp consisting of capital letters of the Greek alphabet: **COZON**.

COZON was the potter who had the workshop in the Pontus region and who was active in the time of the potter **HPKAAA**. The amphorae with these stamps belong to the type XVI of the classification of Lj. Bjelajac¹⁸¹ and their characteristics are campaniform mouth, broad body, pointed base and longer or shorter handles. They were made of compact well refined clay or clay with sand admixture and fired in the nuances of red color with yellowish-whitish engobe. This type of amphorae had been produced during rather long period, from the beginning of the 2nd to the 6th century, possibly even later with slight changes.

Our handle is slightly arched what was the characteristic of the amphorae from the first decades-middle of the 3rd century when also started to occur the stamp

of master **COZON**. The import of these amphorae in our regions came to an end in the end of 3rd – beginning of the 4th century.¹⁸² They were most probably used for the transportation of vine judging by the find of resinous coating on the inside of some amphorae found in the Upper Moesia Danube basin. Two stamps with Sozon's name were found on the handles of amphorae made of red fired clay and with yellowish-white engobe found at the sites Pecine and Više grobalja in *Viminacium*.¹⁸³ The stamp of master Sozon was encountered also on amphorae from *Romula* and *Sucidava* and is also confirmed on the finds from *Apulum* and *Tyras*.¹⁸⁴

CATALOGUE OF AMPHORAE

TYPE V/1

Cat. no. 307

field inv. 795/69

sq. C9

horizon 5

diameter of rim 14.0 cm

Fragment of tapering rim with strap molding and horizontal rib of red fired clay with little admixture of ground limestone.

177| Lj. Bjelajac, *Amfore*, 72–73, type XXI.

178| Lj. Bjelajac, *Amfore*, 74.

179| M. Popović, *Starinar XXXVIII* (1987), 1988, 13, type I, fig. 13/4.

180| Đ. Janković, *Podunavski deo oblasti Akvisa*, 149, fig. 63/A.

181| Lj. Bjelajac, *Amfore*, 53.

182| Lj. Bjelajac, *Amfore*, 54.

183| Lj. Bjelajac, *Amfore*, 58, cat. 91–92, fig. XVIII/91–92.

184| G. Popilian, Contribution à la typologie des amphores romaines découvertes en Olténie (II^e–III^e siècles de n.è.), *Dacia* n. s. XVIII, 1974, 139, pl. 3/1; D. Tudor, Importul de vin și untdelemn în provincia Dacia, *Apulum* VII, 1968, 393–394.

TYPE V/2

Cat. no. 308

field inv. 466/68

sq. E9, ▽ 1.65 m

layer D

diameter of rim 10.0 cm; diameter of base 13.0 cm

Amphora with slightly everted rim, cylindrical neck, prominent shoulder, flat base protruding outward and grooved strap handles. Made of gray fired refined clay, gray painted.

TYPE V/3

Cat. no. 309

field inv. 418/68, 624/69

sq. G9 G10, ▽ 0.90 m

layer C, horizon 3

diameter of rim 13.0 cm

Fragment of molded rim and body with traces of applied clay. Made of brown fired clay with engobe.

TYPE V/4

Cat. no. 310

field inv. 408/68

layer B, C

diameter of rim 10.0 cm

Fragment of strap molded rim, ribbed cylindrical neck and strap handle of the amphora, made of light brown fired clay of sandy fabric with yellowish-whitish engobe.

TYPE V/5

Cat. no. 311

field inv. 594/69

horizon 3

diameter of rim 13.0 cm

Fragment of ring-shaped everted rim and cylindrical neck with tightly fitted handles. Made of red fired well refined clay with engobe.

Cat. no. 312

field inv. 380/68

sq. C8, ▽ 1.35 m

horizon 3

width of body 12.0 cm

Fragment of narrow cylindrical ribbed body and pointed base of an amphora, made of brown fired clay of sandy fabric with engobe.

Cat. no. 313

field inv. 584/69

sq. G6

layer B, above horizon 2

diameter of rim 7.0 cm

Fragment of ring-like molded rim, short neck with tightly fitted handles and shoulder of an amphora, made of ochre fired clay of rather good fabric and with whitish engobe.

TYPE V/6

Cat. no. 314

field inv. 599/69

sq. G5, ▽ 0.65 m

horizon 2

diameter of rim 5.0 cm

Fragment of unmolded rim, cylindrical neck, shoulder and handles of an amphora, made of reddish fired refined clay with engobe.

TYPE V/7

Cat. no. 315

field inv. 483/68

tower B, control profile

layer B

diameter of rim 8.0 cm

Fragment of bell-shaped mouth, conical neck and handles of oval section of an amphora, made of red fired refined clay with yellowish-whitish engobe. On the neck is preserved portion of an inscription in red paint: ligated AN.

TYPE V/8

Cat. no. 316

field inv. 623a/69

sq. G8, ▽ 0.80 m

horizon 2

diameter of rim 9.0 cm

Fragment of everted unmolded rim with the rib underneath, cylindrical neck and strap handles of an amphora, made of yellow fired clay with yellowish-whitish engobe.

Cat. no. 317

field inv. 585/69

sq. G6

layer B, above horizon 2

diameter of rim 10.0 cm

Fragment of amphora with slightly everted rim and cylindrical neck from which commence the strap handles. Made of red fired clay of sandy fabric with yellowish-white engobe. Traces of red color coating on the shoulder.

Cat. no. 318

field inv. 596/69

sq. G2

layer B

diameter of rim 10.0 cm

Fragment of molded rim, cylindrical neck with two strap handles, shoulder and ribbed body of an amphora, made of yellow fired clay of sandy fabric and with yellowish-white engobe. On the shoulder is red painted letter A in italic.

Cat. no. 319

field inv. 558a/69

sq. G9

layer B

diameter of rim 9.0 cm

Fragmented thickened rim, slightly funnel-shaped neck and shoulder of an amphora, made of reddish fired clay of sandy fabric with whitish engobe. On the neck is the red-brown painted cross.

Cat. no. 320

field inv. 551/69

sq. G4

layer B, above horizon 2

diameter of rim 9.5 cm

The ring-like molded rim, slightly funnel-shaped neck of an amphora, made of reddish fired clay of sandy fabric with whitish engobe.

Cat. no. 321

field inv. 558a2/69

sq. G9

layer B

width of body 26.5 cm, reconstructed height ca 60.0 cm

The oval body with randomly arranged ribs and slightly rounded base of an amphora, made of ochre fired clay of sandy fabric with whitish engobe.

Cat. no. 322

K-24

sq. G3, bag of study material 93/1969.

layer B

diameter of rim 10.0 cm

Fragment of slightly faceted rim, funnel-shaped neck with prominent rib and ellipsoid handles of an amphora, made of ochre fired clay with yellowish-white engobe.

Cat. no. 323

field inv. no number.

layer B

Fragment of the shoulder of an amphora, made of yellow fired clay with whitish engobe. Traces of red painted letters: hKB.

AMPHORA HANDLE WITH STAMP

Cat. no. 324

field inv. 837/69

sq. F5, ▽ 0.90 m

layer D

length 10.0 cm

Fragment of the handle of an amphora, made of red fired clay with yellowish-whitish engobe and the stamp consisting of capital letters of the Greek alphabet: CΩZΩN.

IV.4.C.5. PITHOI (*DOLIA*)

Rather small amount of pithoi, the vessels for storing and preserving food and liquids have been found at Saldum (Fig. 58). Only five such vessels dating from the 2nd–3rd century to the 6th century were registered in the course of investigations.

Type VI/1 (Cat. no. 325) – Pithos of the ovoid shape with horizontally everted grooved rim and black resinous coating on the outside. Dating from the 2nd–3rd century.

Such pithoi are characteristic of the 2nd century layers in *Singidunum* although they have also been found in the closed associations from the 3rd century but then they did not have the resinous coating.¹⁸⁵ Thirteen pithoi from Tekija–*Transdierna* are generally dated in the 1st–2nd century on the basis of the Pannonian analogies quoted by the author.¹⁸⁶ Our specimen corresponds to the type 2 of typology of O. Brukner and which is represented by just one piece from *Sirmium*.¹⁸⁷

185| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum* 2, 2000, 131, type VI/6.

186| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 165, type VI/1.

187| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 109, T. 127/2.

Type VI/2 (Cat. no. 326) – Pithos having similarly profiled rim as the previous one but of different technological characteristics and with globular body. Characteristic of this type is black painting and burnishing of the outer surface.

The pithoi decorated in this manner are characteristic of the layers dating from second half-end of the 4th – beginning of the 5th century in *Singidunum* and are connected with the so-called Germanic pottery or the pottery of the foederati.¹⁸⁸ Considering the fact that our specimen has been found in the unreliable stratigraphic context we attributed it on the basis of form, fabric and decoration to the Valentinian's layer at Saldum (layer C, horizon 3).

Type VI/3 (Cat. nos. 327–329) – Pithos with horizontally everted rim of triangular profilation that is slightly protruding inwards and globular body made of the clay of rather coarse fabric.

Three such pithoi of similar form and technological characteristics were found at Saldum and ascribed to this type. Two of them come from the Valentinian's layer while the third one was found in the layer dating from the middle-second half of the 6th century. The analogous specimens dated into the 6th century have been found in rather large quantity at Sadovec.¹⁸⁹

CATALOGUE OF PITHOI

TYPE VI/1

Cat. no. 325

K-16 (bag 13/1970)

sq. B4, ∇ 3.60 m

unreliable stratigraphy

diameter of rim 28.0 cm

Fragment of horizontally everted grooved rim slightly protruding inwards and high body of a pithos made of red fired clay with gray core. Under the rim is black resinous coating.

TYPE VI/2

Cat. no. 326

field inv. 828, 859/69

sq. F5, ∇ 0.70 m

pit

diameter of rim 20.0 cm

Pithos with horizontally everted and inward protruding grooved rim, ribbed neck and high body. Made of gray/brown fired medium refined clay. Outer rim surface is brown painted and burnished and on the body are dark painted wavy lines and vertical and horizontal bands. Surface is partially burnished.

TYPE VI/3

Cat. no. 327

K-15 (bag 4/1970)

sq. C10 D10, ∇ 1.70 m

horizon 3

diameter of rim 21.0 cm

Fragment of horizontally everted rim and slanting neck of a pithos made of brown insufficiently fired clay with large sand grains.

Cat. no. 328

field inv. 661/69

sq. E8 F9, ∇ 1.45 m

horizon 3

diameter of rim 28.0 cm

Fragment of horizontally everted rim protruding inwards of a pithos made of gray fired clay of coarse fabric.

Cat. no. 329

K-62

sq. CDE/ 6, 7, ∇ 0.70–0.80 m

layer B, horizon 2

diameter of rim 28.0 cm

Fragment of horizontally everted grooved rim and high body of the pithos made of brown-gray fired clay with grains of sand and limestone.

IV. 4. C. 6. FLAGONS

Seven flagons, which could be classified into six basic types, were found at Saldum (Fig. 59). We would like to emphasize that there is not a single complete specimen, because of random pottery collecting during excavations. The type identification was carried out mostly on the basis of the shape of rim and neck as the preserved vessel bodies are rather rare. In addition to these basic

188| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 133, types VI/9.

189| S. Uenze, *Die spätantiken Befestigungen von Sadovec (Bulgarien)*, München 1992, Taf. 107.

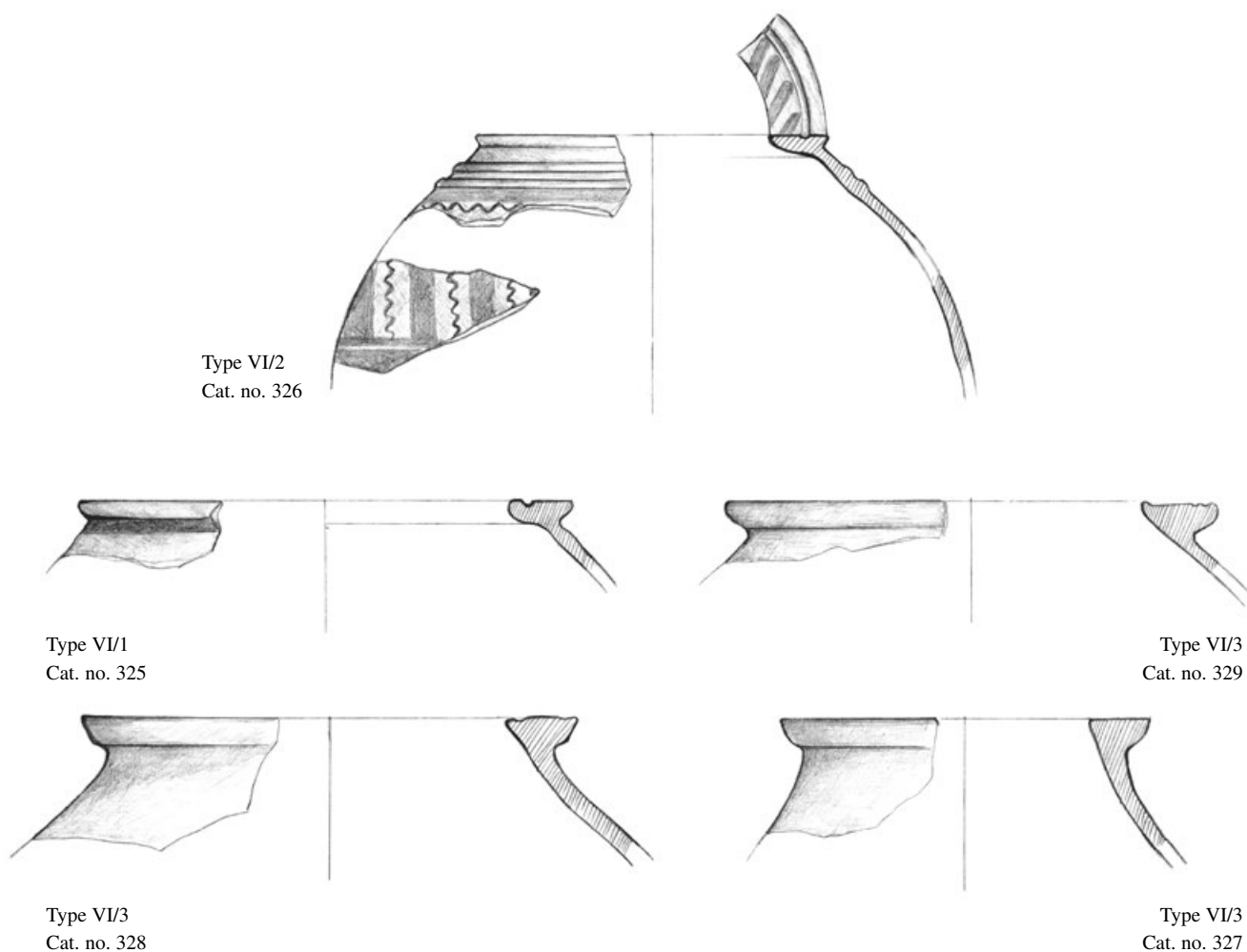


Fig. 58. *Pithoi* (R 1:4)

types there was also found a base fragment most probably of a flagon with symmetrically engraved Christogram on the base (Cat. no. 337) and we included this fragment in this chapter as well.

Type VII/1 (Cat. no. 330) – Flagon of oval form with funnel-shaped rim and many grooves on the outside. Dating from the 3rd century.

The oval flagons with funnel-shaped rim were found within earlier fortification at Tekija–*Transdierna* and dated according to the analogies in the end of 1st and in the 2nd century.¹⁹⁰ The fragment of rim and neck of a flagon of this type was found in the pottery kiln in *Singidunum*.¹⁹¹

Type VII/2 (Cat. no. 331) – Spherical flagon of the amphora shape with funnel-shaped rim. The handle of elliptical section is arched and channeled. This flagon

type was made of gray-brown fired clay and some specimens were glazed. Second half of the 4th century.

This type of flagon occurred in the pottery material of Lower Pannonia in the 4th century.¹⁹² Many specimens were found in the graves of the Late Roman necropolis at Sviloš in Srem, dated until the third third of the 4th century.¹⁹³ In the Lower Danube basin it was encountered in the layers dating from the 4th–6th

190| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 174, type VII/4, Cat. 6–8.

191| T. Cvjetičanin, *Grnčarska radionica u Singidunumu. Lokalitet Narodno pozorište, Singidunum 2*, 2000, 252, fig. 9/6.

192| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 117, flagon type 42, T. 144/25–131.

193| V. Dautova-Ruševljan, *Kasnoantička nekropola kod Sviloša u Sremu*, Novi Sad 2003, 159, T. 13.

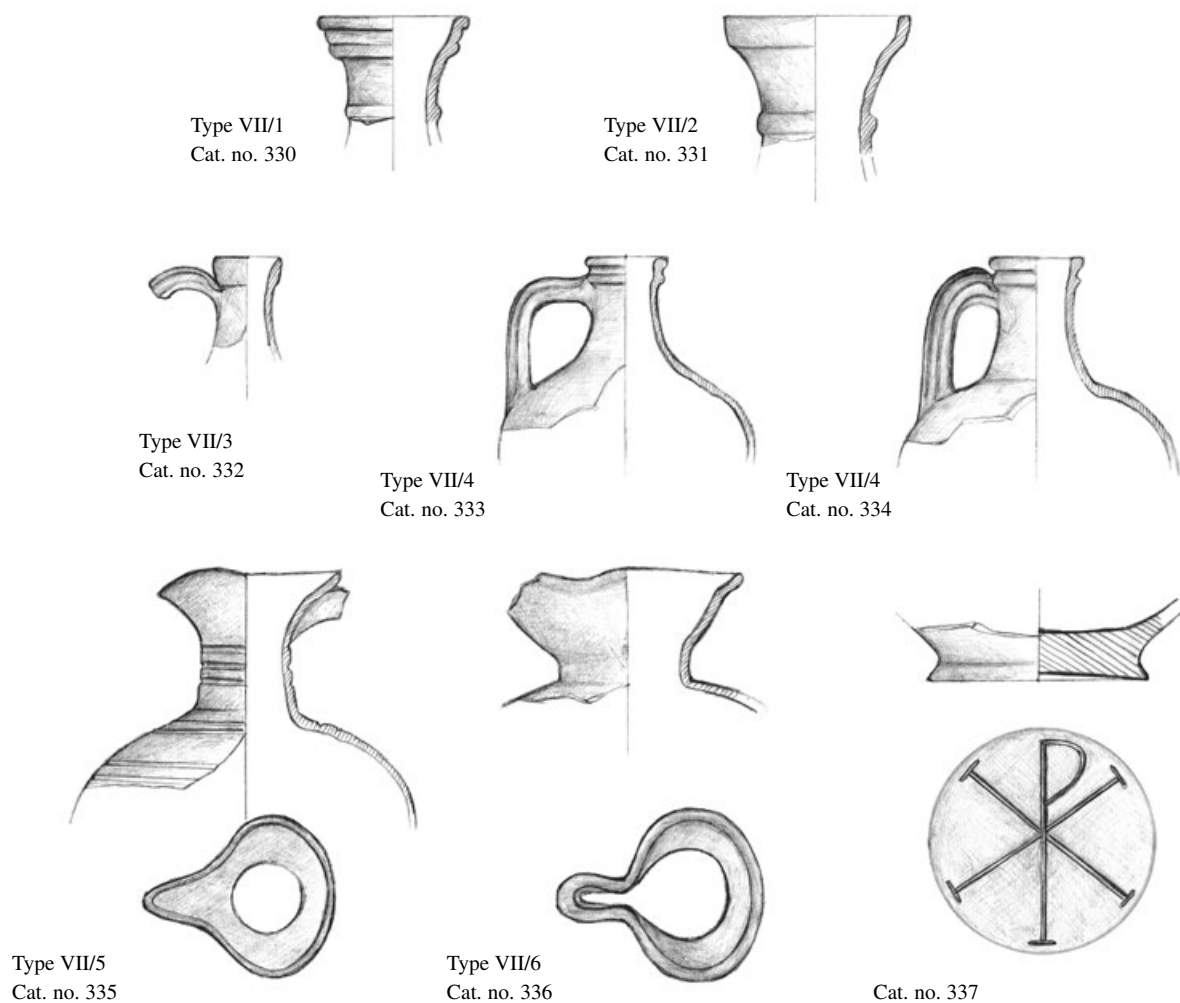


Fig. 59. Flagons (R 1:4; Cat. no. 337 R 1:2)

century.¹⁹⁴ The flagon of smaller size made of gray fired sandy clay and identical to our specimen comes from the Early Byzantine layer at the site Svetinja–Viminacium.¹⁹⁵

Type VII/3 (Cat. no. 332) – Small-sized flagon of ovoid shape with ring-like molded rim, funnel-shaped cylindrical neck, outward protruding flat base. It was made of brown and red fired clay and some specimens were glazed. Second half of the 4th century.

This flagon type is analogous to the specimen from *Sirmium*, dated in the 4th century.¹⁹⁶ Identical but olive glazed specimen was found in the layer dating from the second half of the 4th century at Čezava–Novae.¹⁹⁷ This type is rather widely distributed in the provinces along the middle and lower Danube in the 4th and in the beginning of the 5th century.¹⁹⁸

Type VII/4 (Cat. nos. 333–334) – The flagon with ring-like molded rim grooved on the outside, cylindrical neck, high ovoid body and grooved strap handle. It is made of red or gray-brown fired clay and some specimens were glazed.

The flagon **Cat. no. 333** was found at the level of the earliest layer but according to its form and fabric

194| G. Kuzmanov, in: S. Uenze, *Die spätantiken Befestigungen von Sadovec (Nordbulgarien)*, München 1992, 212, Taf. 69/1–4.

195| M. Popović, Svetinja, novi podaci o ranovizantijskom Viminacijumu, *Starinar XXXVIII* (1987), 1988, 23, fig. 16/10.

196| O. Brukner, *Rimska keramika*, 117, flagon type 38, T. 143/111.

197| M. Vasić, Čezava – Castrum Novae, *Starinar XXXIII–XXXIV* (1982–1983), 1984, 106, type VII/17, fig. 12/4.

198| G. Kuzmanov, in: S. Uenze, *Die spätantiken Befestigungen von Sadovec*, 212, flagon type 1, T. 68/5–6.

it probably dates from the Valentinian's period at Saldum (layer C, horizon 3).

Type VII/5 (Cat. no. 335) – Rather small-sized flagon with funnel-shaped rim with beaked spout, grooved cylindrical neck and globular body. Strap handle joins the rim and high shoulder. The refined clay is gray fired and with brown-reddish slip on both sides. Dating from the 3rd century.

The fragmented flagon of this type made of red fired clay with brown slip was found in *Singidunum* and dated in the 2nd century.¹⁹⁹ Author considers this type to be imported from the Italic workshops because of technological characteristics and lack of analogies.²⁰⁰

Type VII/6 (Cat. no. 336) – Flagon with trifoliate mouth, short cylindrical neck, high body with ribbed surface and flat base. The grooved strap handle begins under the rim and ends on the shoulder. It is made of yellowish-white fired sandy clay. Dating from the 2nd–3rd century.

The flagons of this type were used in the period from the 2nd to the 4th century but the greatest concentration of the local production was in the second half of the 2nd – first half of the 3rd century. Large number of fragmented flagons with trifoliate mouth and made of kaolin are dated from the 2nd to the middle of the 4th century.²⁰¹

CATALOGUE OF FLAGONS

TYPE VII/1

Cat. no. 330

field inv. 510/68

horizon 4

Funnel-shaped grooved rim and neck with ring-like molding of a flagon made of gray fired well refined clay and with burnished surfaces.

TYPE VII/2

Cat. no. 331

field inv. 577/69

horizon 3

Flagon with funnel-shaped rim and neck with ring-like molding. Made of gray fired refined clay, olive green glazed.

TYPE VII/3

Cat. no. 332

inv. K-13

layer C, horizon 3

Ring-like molded rim with tapering lip, narrow neck and grooved handle of semielliptical shape of a flagon made of light brown fired clay, olive green glazed.

TYPE VII/4

Cat. no. 333

field inv. 840/69

pit

Ring-like molded grooved rim, cylindrical neck and grooved strap handle of a flagon made of red fired refined clay.

Cat. no. 334

field inv. 649/69

layer C, horizon 3

Ring-like molded grooved rim, cylindrical neck and grooved strap handle. Gray-brown fired clay, brown-olive glazed.

TYPE VII/5

Cat. no. 335

field inv. 111/70

horizon 4

Fragment of the funnel-shaped rim, beaked spout, grooved cylindrical neck, shoulder and strap handle of a flagon made of gray fired clay and with reddish-brown slip on both sides.

TYPE VII/6

Cat. no. 336

field inv. 821/69

layer D, horizon 4

Fragment of trifoliate mouth, short cylindrical neck and high shoulders of a flagon made of sandy yellowish-whitish clay.

FLAGON BASE

Cat. no. 337

field inv. 650/69

layer C, horizon 3

diameter of base 12.0 cm

Flat outward protruding base of a flagon made of red-brown fired clay of sandy fabric. Christogram was symmetrically engraved on the base before firing.

IV. 4. C. 7. LIDS

We selected here for our study seventeen lids, which were mostly found in the two latest layers at Saldum (Figs. 60–61). Ten main types were identified according to the shape and method of manufacture.

Type VIII/1 (Cat. no. 338) – Lid-bowl with vertical rim slanting walls and flat base. Handmade of insufficiently refined clay, brown or gray fired.

The lids of similar shape from *Singidunum* also handmade are dated according to the finding circumstances mostly in the 3rd century²⁰² thus corresponding to the dating of the Saldum specimen.

Type VIII/2 (Cat. nos. 339–341) – Bowl-lid with everted rim, conical body and flat base. Made of brown, gray or brown-gray fired medium to inferior refined clay. Specimens from Saldum are dated in the 4th and 6th century.

The lids-bowls of this type are rather abundant in the Late Roman horizons at many fortifications and settlements. They had been produced in many local workshops. Rather numerous specimens from *Singidunum* are dated according to the finding circumstances from the end of 3rd to the beginning of the 5th century.²⁰³ This form of lids made of gray fired sandy clay is according to the finding context dated in the end of 4th and the beginning of the 5th century at Čezava–*Novae*.²⁰⁴ The published specimens from Tekija–*Transdierna* were not stratigraphically nor chronologically determined except the statement that ‘sixteen specimens come from the earlier and two from the later fortification’.²⁰⁵ Such lids from Karataš–*Diana* are dated in the 3rd–4th century. We think that types V/13 and V/15 in the typology of lids from the excavation of the south and west rampart of *Diana* are in fact one type with slight difference of the rim shapes so in that case our specimen **Cat. no. 339** corresponds to the type *Diana* V/15 and **Cat. no. 340** to the type *Diana* V/13.²⁰⁶ The lids from *Sirmium* and Beška made of gray-brown fired sandy clay are dated in the 4th century.²⁰⁷

Type VIII/3 (Cat. no. 342) – The lid of considerably large size faceted edge with groove and slightly slanting body walls. Made of brown fired clay of sandy fabric. It was found in the 6th century layer at Saldum.

Similar form of the lid but with button-shaped handle was encountered in the 6th century layer at *Diana*.²⁰⁸

Type VIII/4 (Cat. nos. 343–344) – The calotte-shaped lid with rim turned inwards and with button-like handle. Made of sandy clay fired gray or brown.

Both lids of this type were found in the Early Byzantine 6th century layer at Saldum. The analogous specimens mostly gray fired have been found in the 3rd–4th century layers in *Singidunum* while they have not been registered in the later layers.²⁰⁹ The finds from Karataš–*Diana* are dated to the same period.²¹⁰ The specimens from the southern part of Lower Pannonia are generally dated in the 2nd–4th century.²¹¹ Considerable number of calotte-shaped lids, gray and brown fired and with diameter of opening between 10 and 18 cm found in the 6th century layer at Sadovec is also attributed to this type.²¹²

Type VIII/5 (Cat. no. 345) – Rather small-sized lid with slanting rim and conical body with thick walls and cylindrical handle. It is made of brown insuffi-

199| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum 2*, 2000, 143, type VII/21.

200| S. Nikolić-Đorđević, *Singidunum 2*, 2000, *loc. cit.*

201| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 135, type VII/2.

202| V. Ivanišević, S. Nikolić-Đorđević, Novi tragovi antičkih fortifikacija u Singidunumu, *Singidunum 1*, 1997, fig. 37/2; S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum 2*, 2000, 158, type VIII/16.

203| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 154, type VIII/2.

204| M. Vasić, Čezava – Castrum Novae, *Starinar XXXIII–XXXIV* (1982–1983), 1984, 106, type VIII/11, fig. 11/10.

205| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 179, type VIII/14, cat. 23. Type is described with button-like handle.

206| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana – Karataš, Djerdapske sveske IV*, 1987, 65, T. XIV, types V/13 and V/15.

207| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 111, lid type 14, T. 131/30, 32–34.

208| N. Jevremović, *op. cit.*, 65, T. XIV, type V/6.

209| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 154–155, type VIII/3.

210| N. Jevremović, *Djerdapske sveske IV*, 1987, 65, T. XIV, type V/7.

211| O. Brukner, *Rimska keramika*, 111, lid type 9, T. 131/24, 28.

212| S. Uenze, *Die spätantiken Befestigungen von Sadovec (Nordbulgarien)*, München 1992, 216, type 2, T. 108/11–20.

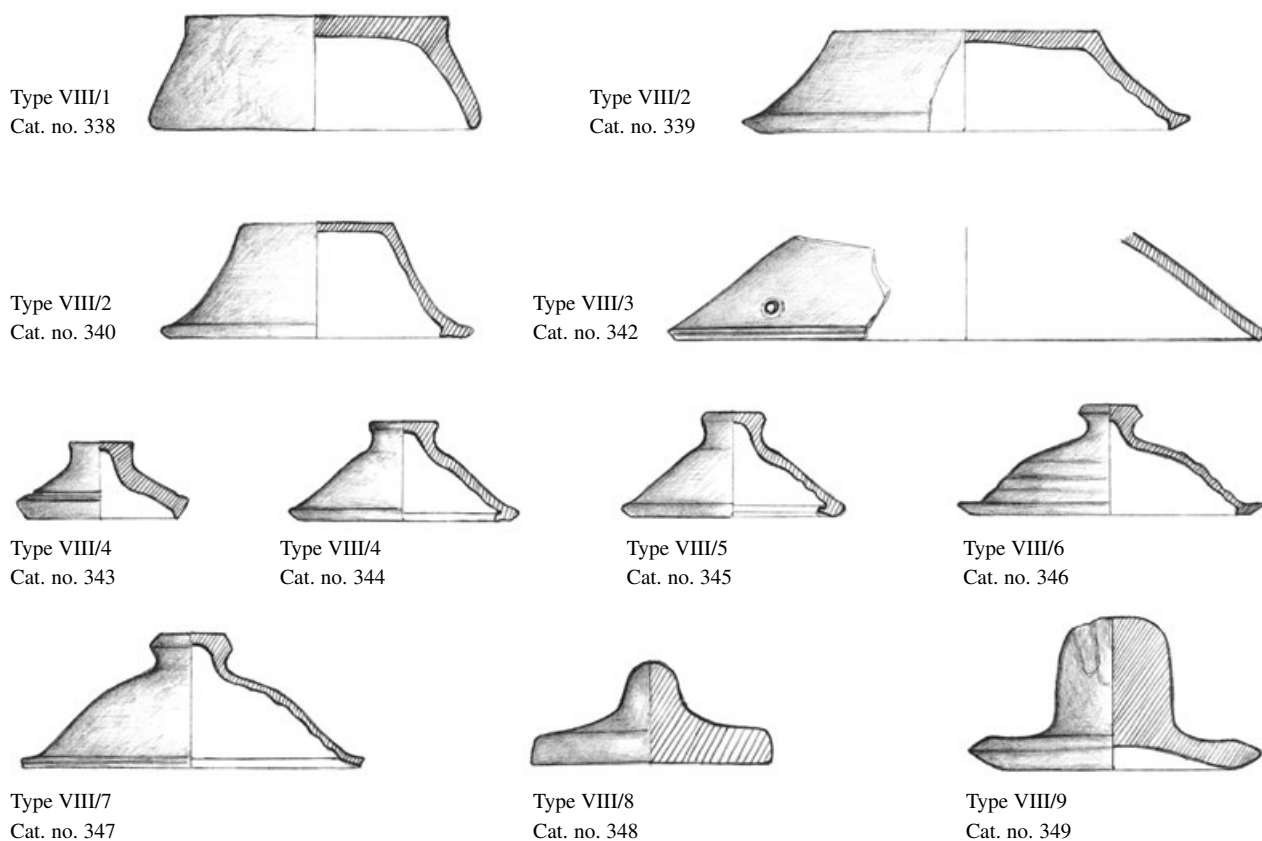


Fig. 60. Lids (R 1:4)

ciently fired clay of coarse fabric. This lid was not found in the stratigraphically reliable association.

This lid shape could be considered as the variant of the previous type but we classified it as distinct type because it resembles in shape certain specimens of the so-called *Muffendeckel* type. Analogous specimens from *Singidunum* (see previous type) and from Sadovec determine this type as the Late Roman–Early Byzantine product.²¹³

Type VIII/6 (Cat. no. 346) – The calotte-shaped lid with everted slanting rim, ribbed body and button-like handle. It is made of gray fired clay of sandy fabric.

The lid of similar shape made of sandy brown fired clay and found in *Singidunum* was not chronologically determined because of the lack of data concerning the finding circumstances and because the author could not find direct analogies.²¹⁴ Our specimen comes from the Justinian’s horizon within the *castellum*.

Type VIII/7 (Cat. no. 347) – The lid with unmolded and slightly grooved rim, calotte-shaped body

and button-like handle. Made of gray fired insufficiently refined clay.

This form of lid is analogous to the specimen found in the Justinian’s fort at Ušće Slatinske reke.²¹⁵

Type VIII/8 (Cat. no. 348) – The amphora lid, solid and bell-shaped made of red fired clay was found in the 6th century layer at Saldum.

The analogous specimens come from locality 31 in *Sirmium* but they were dated with certain reservation into the 4th century.²¹⁶

Type VIII/9 (Cat. nos. 349–353) – The amphora lids of smaller size, calotte-shaped and with rim curved outwards and button-like or cylindrical handle. They

213| S. Uenze, *Die spätantiken Befestigungen von Sadovec*, Taf. 109/23.

214| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 158, type VIII/13.

215| A. Jovanović, M. Korać, Đ. Janković, L’Embouchure de la rivière Slatinska reka, *Djerdapske sveske* III, 1986, fig. 17/3.

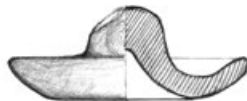
216| O. Brukner, *Rimska keramika*, 127, lid type 6, T. 169/12–13.

CATALOGUE OF LIDS

Type VIII/9
Cat. no. 350



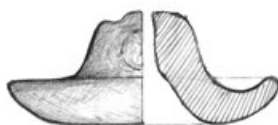
Type VIII/9
Cat. no. 351



Type VIII/9
Cat. no. 352



Type VIII/9
Cat. no. 353



Type VIII/10
Cat. no. 354

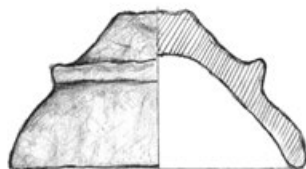


Fig. 61. Lids (R 1:2)

were made of reddish fired clay without additional working of the surface or with yellowish-whitish engobe.

Such lids did not appear in *Singidunum* before the middle of the 3rd century so on the basis of these analogies²¹⁷ we have dated our specimen **Cat. no. 349** in that period. From this period also date the finds from *Tekija–Transdierna*.²¹⁸ The other specimens from *Singidunum* appear before the beginning of the 5th century while according to the finding circumstances all other specimens from Saldum date from the 6th century. The finds from *Sirmium* and *Cornacum* are according to the analogies dated extensively from the 1st to the 4th century²¹⁹ as well as the lids from *Karataš–Diana*.²²⁰ The finds from *Milutinovac*²²¹ and *Ušće Slatinske reke*²²² also date from the 6th century.

Type VIII/10 (Cat. no. 354) – The bell-shaped lid with prominent flange is handmade of brown-gray medium refined clay.

This lid from Saldum dating from the Early Byzantine layer is absolutely unique and we could not find any parallels in the available literature.

TYPE VIII/1

Cat. no. 338

field inv. 27/67

Trench 1, ∇ 2.00 m

damage of the rampart

diameter of rim 18.0 cm; diameter of base 14.0 cm; height 6.0 cm

Bowl-lid of conical shape with unmolded rim and flat base with prominent edge. Handmade of gray fired insufficiently refined clay. Traces of soot on the inside.

TYPE VIII/2

Cat. no. 339

field inv. 80/70

sq. C10

layer C, horizon 3

diameter of rim 24.0 cm; diameter of base 14.0 cm; height 5.4 cm

Rather large lid shaped as a bowl with slanting rim, conical body and flat base. Made of gray fired sandy clay.

Cat. no. 340

field inv. 611/69

sq. F4, ∇ 0.25 m

layer C, horizon 3

diameter of rim 16.6 cm; diameter of base 8.0; height 6.0 cm

Lid-bowl of conical shape with horizontally everted rim and flat base. Made of dark gray fired unrefined clay.

Cat. no. 341

field inv. 635/69

sq. E8, ∇ 1.20 m

layer B

diameter of rim 16.6 cm

217| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 155–156, type VIII/5.

218| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, 178, type VIII/9.

219| O. Brukner, *Rimska keramika*, 127, lid type 6, T. 169/8–10

220| N. Jevremović, *Djerdapske sveske* IV, 1987, 65, T. XIV, type V/5.

221| P. Milošević, M. Jeremić, Le castellum à Milutinovac, *Djerdapske sveske* III, 1986, fig. 11.

222| A. Jovanović, M. Korać, Đ. Janković, *Djerdapske sveske* III, 1986, fig. 17/2.

Lid-bowl with horizontally everted rim and conical body. Made of gray-brown fired rather poorly refined clay.

TYPE VIII/3

Cat. no. 342

field inv. 556/69

sq. G9

layer B, debris

diameter of rim 16.0 cm

Fragment of faceted rim with groove and slanting body walls of a lid, made of brown fired clay of sandy fabric. Small circular perforation near the rim.

TYPE VIII/4

Cat. no. 343

field inv. K-64

sq. C D E/ 6, 7, ∇ 0.70 (0.80) m

layer B, horizon 2

diameter of rim 12.0 cm; of base 3.6 cm; height 5.0 cm

The calotte-shaped lid with inverted rim and button-like handle. Made of brown fired clay of sandy fabric.

Cat. no. 344

field inv. K-63

sq. C DE/ 6, 7, ∇ 0.70 (0.80) m

layer B, horizon 2

diameter of rim 12.0 cm; of base 3.2 cm; height 5.6 cm

The calotte-shaped lid resembling the previous one, made of gray insufficiently fired clay of sandy fabric.

TYPE VIII/5

Cat. no. 345

field inv. K-38

without data

diameter of rim 9.0 cm; height 4.0 cm

Rather small calotte-shaped lid with faceted rim, protruding edges and cylindrical handle. Made of brown, insufficiently fired and refined clay.

TYPE VIII/6

Cat. no. 346

field inv. 621/69

sq. G8, ∇ 0.80 m

horizon 2

diameter of rim 16.0 cm; height 6.0 cm

The calotte-shaped lid with everted slanting rim, ribbed body and button-like handle. Made of gray fired clay with admixture of sand.

TYPE VIII/7

Cat. no. 347

field inv. 378/68

sq. B 10, ∇ 0.90–1.00 m

layer B

diameter of rim 18.0 cm; height 7.0 cm

Completely preserved calotte-shaped lid with unmolded rim and button-like handle. Made of gray fired clay with coarse-grained sand.

TYPE VIII/8

Cat. no. 348

K-41

Trench 1, ∇ 0.60 m

layer B

12.08.1967.

diameter of rim 6.0 cm

Circular, bell-shaped amphora lid with flat base and solid cylindrical handle. Made of red fired clay of sandy fabric.

TYPE VIII/9

Cat. no. 349

K-43

without data

layer D?

diameter of rim 7.5 cm

The amphora lid with slightly curved and tapering rim and massive solid cylindrical handle. Made of yellowish-whitish fired clay.

Cat. no. 350

field inv. 483a/68

tower B, control profile

layer B

diameter of rim 5.8 cm

The amphora lid with cylindrical pinched handle, made of red fired clay.

Cat. no. 351

field inv. 43/67

Trench 2, ∇ 1.20 m

horizon 2

diameter of rim 6.4 cm

The amphora lid with cylindrical pinched handle, made of red fired clay with whitish engobe.

Cat. no. 352

field inv. 552/69

sq. C6

layer B

diameter of rim 6.4 cm

The amphora lid with extremely outwards curved rim and hollow cylindrical pinched handle. Made of brown fired clay.

Cat. no. 353

K-42

sq. F3 F4, ▽ 1.00 m

layer B, horizon 2

29.09.1969.

diameter of rim 7.2 cm

The amphora lid, made of red fired clay with whitish engobe, subsequently burned.

TYPE VIII/10

Cat. no. 354

field inv. 598/69

sq. G4, ▽ 0.50 m

layer B

diameter of rim 8.0 cm

Rather small calotte-shaped lid with wavy flange in the middle of the body. Handmade of brown-gray fired clay.

IV.4.C.8. BEAKERS

We have already discussed the beakers from the early imperial layer (Flavians–Trajan) in the chapter concerning the slip-coated vessels with thin walls (Fig. 43), that have been registered in larger quantity while somewhat less abundant are the specimens, which most probably originate from the local workshop centers and which have been found at Saldum in the layers dating from the 1st–2nd and 2nd–3rd century (layers E and D) (Fig. 62).

The beaker-cup **Cat. no. 355** was made after the Drag. 35 terra sigillata form. Rather small amount of these vessels was found in *Singidunum* in the chronologically and stratigraphically unreliable associations and layers.²²³

In the pit in *Singidunum* dated in the first half of the 2nd century were found two high pouch-like beakers²²⁴

of the identical technological characteristics as the Saldum specimen **Cat. no. 356**. Analogous to the beaker of this type is the vessel from the inhumation burial at the necropolis Više grobalja in *Viminacium* dated into the 1st or 2nd century²²⁵ and it corresponds to the dating of our specimen.

Two ovoid beakers (**Cat. nos. 357–358**) with everted slanting rim, made of red fired medium refined clay were found in the layer dating from the middle of the 2nd –middle of the 3rd century and they are parallel with somewhat earlier specimens from the layer dating from first half of the 2nd or 2nd century in *Singidunum*²²⁶ as well as with the finds from the earlier fortification at Tekija–Transdierna.²²⁷

The gray fired and burnished beaker from Saldum, **Cat. no. 359**, found on the floor in horizon 4 is parallel with the specimen from *Singidunum* that suggests its dating in the period of middle-second half of the 3rd century²²⁸ if only we could date this horizon more precisely and connect it with the sojourn and building activity of *praepositus Hermogenes*.

Cat. no. 355

K-7 (bag 127/69)

sq. E9, ▽ 2.82 m

horizon 5

diameter of rim 8.0 cm

The everted rim and calotte-shaped body of rather small vessel made of red fired poorly refined clay.

Cat. no. 356

field inv. 273/70

sq. G9, ▽ 0.60 m

layer E

diameter of rim 6.0 cm

Fragment of straight rim and slanting neck of a tall beaker made of medium refined red fired clay also red painted. Under the rim many molded bands of semicircular section.

223| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum 2*, 2000, 28–29, type I/26.

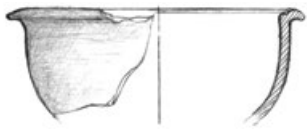
224| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 174, type IX/45.

225| Lj. Zotović, Č. Jordović, *Viminacium. Nekropola „Više grobalja“*, Beograd 1990, 73, T. XLVI/5.

226| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 161, type IX/3.

227| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrad 2004, 151, type IV/3, cat. 7.

228| S. Nikolić-Đorđević, *Singidunum 2*, 2000, 160, type IX/1.



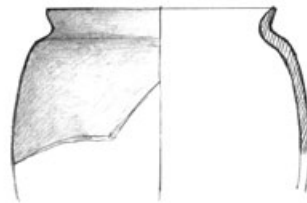
Cat. no. 355



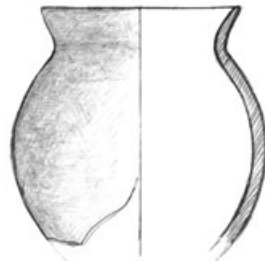
Cat. no. 356



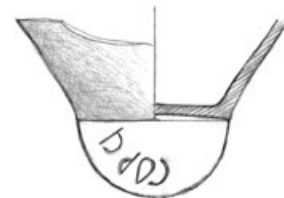
Cat. no. 357



Cat. no. 358



Cat. no. 359



Cat. no. 360

Fig. 62. Beakers (R 1:2)

Cat. no. 357

K-50 (25.09.1979)

sq. C6 D6, ▽ 2.00 m

layer D

diameter of rim 6.0 cm

The everted slanting rim and globular body of a beaker, made of red fired clay.

Cat. no. 358

field inv. 495/68

sq. C9 D9, ▽ 2.00 m

horizon 4

diameter of rim 6.0 cm

The everted slanting rim and globular body of a beaker, made of red fired medium refined clay with red slip.

Cat. no. 359

field inv. 494/68

sq. C9 D9, ▽ 2.00 m

horizon 4

diameter of rim 5.2 cm

The everted slanting rim and globular body of a beaker, made of gray fired well refined clay, burnished on the outside.

Cat. no. 360

field inv. 630/69

sq. C9, ▽ 2.80 m

layer E, horizon 5

diameter of base 4.0 cm

Fragment of the body and flat base of a vessel, made of orange-red fired clay of fine fabric and with slip of the same color. On the base is engraved the inscription COPЧ.

IV.4.C.9. CENSERS

The censers of which just two specimens were found are the smallest group of pottery vessels found at Saldum (Fig. 63).

Type X/1 (Cat. no. 361) – The censer with horizontally everted rim with wavy band and calotte-shaped body resting on the hollow foot.

The censers of this type have been found in the 2nd century assemblages in *Singidunum*.²²⁹ One specimen analogous to our censer comes from *Sirmium* and is dated in the end of 1st–2nd century²³⁰ thus corresponding with the dating of our specimen. This form continued to be used in the 2nd–3rd centuries as it is confirmed by the specimen found at *Kostol–Pontes*.²³¹

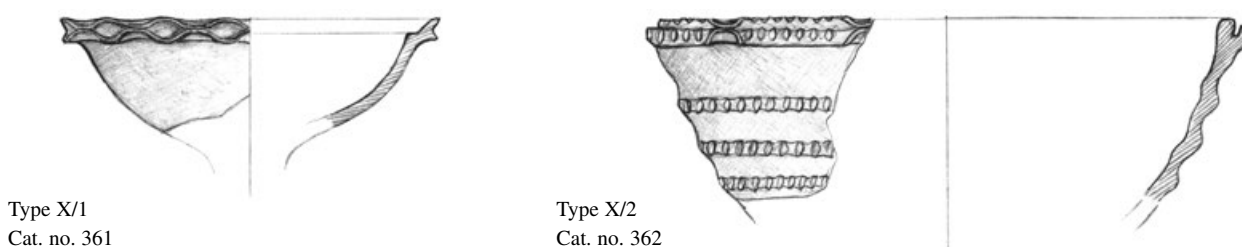
Type X/2 (Cat. no. 362) – The censer with slightly rounded body decorated with bands with impressed ornament.

The later censer from the 2nd–3rd century layer at Saldum is analogous with the finds from *Singidunum*

229| S. Nikolić-Đorđević, *Antička keramika Singidunuma, Singidunum 2*, 2000, 179, type X/4.

230| O. Brukner, *Rimska keramika u jugoslovenskom delu provincije Donje Panonije*, Beograd 1981, 84, censer type 1, T. 62/2.

231| M. Garašanin, M. R. Vasić, G. Marjanović-Vujović, *Trajanov most – Castrum Pontes. Izveštaj o arheološkim istraživanjima u 1980. godini, Djerdapske sveske II*, 1984, T. XVII, type X/3.



Type X/1
Cat. no. 361

Type X/2
Cat. no. 362

Fig. 63. *Censers* (R 1:4)

that are very numerous there from the first half of the 2nd century until the middle of the 4th century.²³² Conical and slightly calotte-shaped censers from *Diana* come from the 2nd–3rd century layers.²³³ From *Sirmium* also come few similar censers but the author, however, did not distinguish them more precisely in regard to their typology.²³⁴

Cat. no. 361

field inv. 793/69

sq. C9

horizon 5

diameter of rim 10.0 cm

Censer with horizontally everted rim with pinched edge and calotte-shaped body. Made of red fired clay with matt white engobe.

Cat. no. 362

field inv. 469, 491/68

sq. F9/ ∇ 1.70 m; sq. C8 D8/ ∇ 1.73–1.92 m

horizon 4

diameter of rim 16.0 cm

Censer with grooved rim and slightly rounded body decorated with bands with pinched and impressed ornament. Made of red-brown fired clay with matt white engobe.

IV. 4.A–C. POTTERY VESSELS
– CONCLUDING REMARKS

The site Gradac–Saldum although the investigated area was not large has yielded many data concerning pottery forms dating from the period beginning at the time of Flavians and lasting to the end of the 6th century and which could be easily studied on the basis of these finds. We typologically studied and cataloged three hundred and ten vessels, which offer valuable data

not only about the character of eating habits of the Saldum inhabitants but also about significant chronological parameters related to foundation, existence and end of the certain phases of life at this location.

POTTERY VESSELS FROM THE MIDDLE
OF THE 1ST – BEGINNING OF THE
2ND CENTURY (LAYER E, HORIZON 5)

On the basis of pottery evidence and rather small number of other finds it is possible to date the foundation of the Saldum military camp (?), i.e. the settlement in the time of Flavians. The pottery finds are not abundant and they could be roughly classified as autochthonous, of the Dacian origin, of La Tène character (discovered in exceptionally small quantity) and as imported luxurious pottery, which reached Saldum with its owners or by means of the commercial connections.

The autochthonous pottery (**Cat. nos. 52–71**) characterized mostly by the types of pouch-shaped pots and conical beakers (so-called Dacian cups) appeared from the Flavian period and continued until the time of Trajan–Hadrian when it gradually disappeared.

The La Tène type pottery is represented in the pottery material from Saldum only by two types of bowls (calotte-shaped bowls with slanting and thickened rim and bowls of S profilation) – our types I/5 and I/6.

The earliest vessels at Saldum made in the *terra sigillata* technique are the bowl-mortarium of the form Curle 11 (**Cat. no. 72**) and bowl of Drag. 29 type (**Cat. no. 73**) that could date from the Flavian period and which arrived here most probably from some of the

232| S. Nikolić-Đorđević, *Singidunum* 2, 2000, 178, type X/1.

233| N. Jevremović, *Keramika južnog i zapadnog bedema lokaliteta Diana – Karataš, Djerdapske sveske* IV, 1987, T. XVIII, type X/1.

234| O. Brukner, *Rimska keramika*, T. 64/24–25.

Central Gaulish or South Gaulish (La Graufesenque) workshops.

The *terra nigra* bowls are scarce (**Cat. nos. 95–102**) not only at Saldum but also at other Moesian sites and most probably arrived in these regions from some of the North Italic centers in the end of 1st – beginning of 2nd century.

Four vessels made in the marbled technique (**Cat. nos. 104–107**) are registered in the earliest layer at Saldum and most probably were personal belongings of the soldiers brought to Saldum in the period from the time of Flavians – to the beginning of the 2nd century.

The repertoire of luxurious pottery from the early Imperial time complete small glazed bowls (**Cat. nos. 108–110**) and cup (**Cat. no. 111**) as well as small bowls and beakers with slip (**Cat. nos. 116–144**) that could have reached Saldum from the North Italy or South Pannonia.

The finds of Roman kitchenware and storage ware for everyday use are very rare. Just nine bowls classified into six types (see table, p. 78) were inventoried and their main characteristics are deep or shallow calotte-shaped body and flat base on the ring-like foot. These are the vessels made of rather high quality clay and fired red, gray and brown. Their surface was treated in various ways, the La Tène shapes were burnished (types I/3, I/5 and I/6) and types I/1 and I/2 were coated with red or dark gray slip. The ornament on the outer surface could be of barbotine character (type I/1) or stamped motifs could be used (I/2).

The most of inventoried pots from this period are of autochthonous production while just one specimen of typically Roman form was discovered in this layer (type II/1). Also there are just one plate (type III/4) and one amphora, which is possibly the Pannonian, provincial product from the end of 1st – beginning of the 2nd century.

POTTERY VESSELS FROM THE MIDDLE OF THE 2ND – MIDDLE/SECOND HALF OF THE 3RD CENTURY (LAYER D, HORIZON 4)

The characteristic of this period is the absence of the autochthonous pottery but also the heterogeneity and diversity of forms of the local pottery production.

The luxurious pottery is represented by the vessels in the *terra sigillata* technique that arrived to Saldum from Westerndorf (**Cat. nos. 82–85**), local workshop

center *Viminacium–Margum* (**Cat. nos. 87–88**) and to the smaller extent from Rheinzabern (**Cat. no. 91**). The number of slipped vessels diminished in this period but occurred at the same time the vessels with relief decoration of which only body fragments are preserved (**Cat. nos. 145–146**).

The repertoire of the bowl shapes is increasing and our analysis included twenty-seven vessels classified into twelve types (types I/7–I/17 and I/26). The prevailing types are calotte-shaped and biconical bowls on the ring-like foot and with different rim profilation made of medium refined clay and fired in the nuances of red, brown and rarely gray color. The surfaces were variously finished – with slip, color-coated (mostly in the nuances of firing color), decorated with grooves, ribs, rouletting. This is the beginning of the mass occurrence of the bowls made of sandy clay, fired yellowish-white, that are characteristic of the local provincial production.

The pots, nineteen specimens in total, classified into seven types (II/2, II/3, II/4, II/5, II/7, II/8, II/9), were mostly made of medium refined, medium to good fired clay. The characteristic are spherical or ovoid specimens with slanting grooved rim (types II/2–II/7) or pots mostly painted and with rather high neck and two to three handles (types II/5 and II/8). Particularly interesting for our investigation are the pots of the II/9 type that could be related to the period of restoration of Saldum in the time of Hermogenes, probably in the post-Aurelian time.

Thirty plates classified into five types (III/1, III/2, III/3, III/5 and III/6) come from the layer dating from the middle of 2nd–3rd century. These are provincial products, which were mass produced for the local market. The clay of which they were made is generally of good quality and they were orange, red and brown fired. Most of the specimens were color-coated in the nuances of red, brown and orange. The largest number of the plates, twenty specimens, was made after the so-called ‘Pompeian’ plates (type III/5) that were encountered at many other contemporary sites.

The storage vessels of the 2nd–3rd century were discovered at Saldum in considerably smaller quantity. It concerns the amphora (type V/2), which was most probably the product of the Viminacium workshop and amphora handle with the stamp of master CΩZΩN who was active in the Black Sea area in the first decades-middle of the 3rd century (**Cat. no. 324**) The

amphora stoppers are not confirmed at Saldum in this period. The pithoi are of characteristic ovoid shape with horizontally everted rim with resinous coating underneath (type VI/1) what was the characteristic of these vessels in the 2nd century. The flagon shapes fit into the standard repertoire of the local, provincial production (types VII/1, VII/5 and VII/6). They were made of gray, red-brown or yellowish-whitish fired clay while outer surfaces were grooved or color-coated.

Few beakers date from this period. The chronologically most distinctive is the specimen **Cat. no. 359**, which is on the basis of precisely dated parallel also dated in the middle-second half of the 3rd century, i.e. in the time when *praepositus Hermogenes* could have been residing at Saldum.

POTTERY VESSELS FROM THE TIME OF VALENS–VALENTINIAN I (364–378/380)

The pottery vessels from this period are very abundant although the time span when they were produced and used covered just about fifteen years. Further analysis of these vessels should take into account the number of inhabitants living at Saldum at that time as well as the existence of the local workshop producing certain vessel types at that time.

The luxurious pottery has not been encountered at Saldum at that time. The population was using practical, simple vessel forms mostly produced in the local workshops while imported vessels were generally used for transportation of goods mostly acquired from the East Mediterranean regions.

From this period come the largest number of the studied bowls, thirty-six in total, but in comparison with the preceding period the repertoire of shapes was rather restricted (types I/18–I/25, I/27). In addition to the glazed mortaria there were also used simple conical, biconical or calotte-shaped bowls with horizontal or slanting everted rim made of sandy clay fired in the nuances of red, brown and gray. The interior of most vessels was olive green, yellow-green or brown glazed. The ornament consisting of wavy or pinched edges was employed mostly on the rim.

The pots, nineteen specimens classified in eleven types (see table p. 99) are the standard forms encountered also at other sites in the Middle Danube basin. They are of ovoid or spherical shape with slanting or horizontally everted rim with or without a groove,

without handles or with one-two handles. Their surface was either glazed or was not additionally treated. They were made of brown or gray fired clay of sandy fabric.

Four amphorae were registered that were produced in different workshop centers: from the region of Negev–Gaza (type V/3), Bosphorus region (type V/4) and from one of the East Mediterranean center (type V/5). These vessels were used as containers for transportation of wine, fish-sauce, oil or olives.

In the course of investigations at Saldum have been found three pithoi, one with spherical body, black painted and burnished on the outside (type VI/2) and two specimens with rims of triangular section and made of the low quality clay (type VI/3). The discovered flagons had funnel-shaped or horizontal mouth and high spherical body (types VII/2, VII/3, VII/4). One base from this layer (probably of a flagon) has Christogram carefully engraved on the base (**Cat. no. 337**)

POTTERY VESSELS FROM THE 6TH CENTURY (LAYER B, HORIZON 2)

The greatest amount of pottery fragments, mostly amphora bodies decorated with combed and ribbed ornament, rims and bodies of the pots were discarded after preliminary field analysis so only the representative sample has been inventoried. This sample though imperfect provides satisfactory results in the analysis of the pottery shapes used at Saldum from the time of Justinian (527–565) until the end of the 6th century.

From the 6th century layer come just five bowls, which represent the continuity of production of the types known from the Valentinian's layer. These are well-known calotte-shaped, conical or biconical bowls (types I/18, I/23, I/25) with horizontally everted rim and they are in comparison with the specimens from the preceding period generally of more simple and careless manufacture and made of medium or poorly refined sandy clay, brown or gray fired and generally with undecorated surfaces.

The pots were found in somewhat larger quantity (types II/11, II/19, II/21, II/22, II/23) and they were made of gray or brown fired clay. These pots are of spherical shape with everted slanting and grooved rim and prominent neck. Most of the pots have thin walls.

Most of the vessels are containers for transportation of various goods. These are amphorae (types V/5, V/6,

V/7, V/8) of larger or smaller size made of yellowish or red fired clay with yellowish-whitish engobe and in few instances with inscription in red paint. One specimen had carefully drawn cross on the neck (**Cat. no. 319**). Most of the amphorae were decorated with ribbed ornament while the combed ornament is somewhat less frequent. They originate from the East Mediterranean or the Pontus region. Large quantity of these amphorae found at Saldum in the layer dated by the coins of Justinian I (527–565) and Justin II (565–578) indicates regular supplying of the army with necessary food by the river, i.e. the Danube route.

IV.5. POTTERY AND BRONZE LAMPS

Forty-eight complete and fragmented lamps have been found in the course of archaeological investigations at Saldum (Figs. 64–71). Out of this number three are made of bronze and the other are made of baked clay and classified into the main groups:

1. lamps with volutes and relief representation (*Bildlampen*)
2. lamp with glossy slip
3. lamps with stamps (*Firmalampen*)
4. oval lamps with integrated spout
5. lamps of the small bowl shape
6. pyriform-oval lamps
7. lamps on high stem and
8. lamps of bronze

IV.5.1. LAMPS WITH VOLUTES AND RELIEF REPRESENTATION (BIDLAMPEN)

Four lamps with the volutes were discovered at Saldum, but all of them are fragmented so the precise determination of their type within the existing classifications is not possible. They were made of refined well fired clay of reddish or ochre color with slip of metallic luster on the outer surface.

The comparative material is generally encountered in the urban settlements. Considerable number of the lamps with volutes and representations on a disc found in Tekija–*Transdierna* are mostly of the Loeschcke type I C.²³⁵ These lamps made of high quality clay, fired light brown and coated with brown or orange-red

slip of metal luster correspond to the characteristics of the Saldum specimens. They are considered to be the Italic import.²³⁶

The lamps with volutes from Saldum date from the earliest layer (second half of the 1st – beginning of the 2nd century) and undoubtedly indicate the presence of luxurious Italic products in this area. The analogy for the erotic scene on the lamp **Cat. no. 363** is found on the specimen from the museum collection in Trier for which the author assumes to originate from Lyon or some of the South Gaulish workshops.²³⁷ It is the lamp of Loeschcke I B type, without handle, made of light yellow clay with brown slip and dated in the second half of the 1st century. Similar scenes with loving couple on a *lectus* could be found also on the lamps of Loeschcke type IV. In Trier were found six specimens with such scene – rather widely distributed throughout the Roman Empire – and they all belong to the production of some of the Rhenish workshops. They are dated in the third quarter of the 1st century and analogous to the lamps from the museum collections in London (lamps produced in Italy) and *Aquileia*.²³⁸

Fragment of the lamp with volutes **Cat. no. 365** was found together with the scabbard of the Pompeian type sword (**Cat. nos. 467–468**) and could be dated in the time of Flavians as the scabbard itself.

Cat. no. 363

field inv. 202/70
sq. E 10, ▽ 3.00 m
horizon 5

length 9.0 cm; height 2.8 cm; diameter of rim 4.5 cm
Fragmented rather shallow lamp with volutes. Disc is concave with molded ring-like channels. In the center is relief composition of the coitus. On the bed (*lectus*) with mattress is represented kneeling male figure having sexual intercourse with a female figure whose right leg he is holding. Towards the nozzle are two opposing volutes. The nozzle is damaged. The lamp is made of fine well refined reddish-ochre fired clay with the glossy brown slip having metallic luster on the outside.

235| A. Cermanović-Kuzmanović, *Antičke svetiljke iz Tekije (Transdierna)*, *Zbornik Filozofskog fakulteta* XVII–A, 1991, 171–178.

236| A. Cermanović-Kuzmanović, *Zbornik Filozofskog fakulteta* XVII–A, 1991, 172.

237| K. Goethert, *Römische Lampen und Leuchter*. Auswahlkatalog des Rheinischen Landesmuseums Trier, Trier 1997, 62.

238| K. Goethert, *Römische Lampen und Leuchter*, 85, with parallels.

Cat. no. 364

field inv. 290/70
sq. E5, ▽ 1.40 m
under horizon 4

Fragment of the shoulder, disc with segment of the relief representation and the volute of a lamp, made of light red fired well refined clay with brown glossy slip.

Cat. no. 365

field inv. 277/70
sq. G9, ▽ 0.60 m
layer E, under horizon 4

Fragment of the disc of a lamp with volutes. On the fragment are conspicuous molded rings surrounding the opening for oil. Between the disc and nozzle is the molded volute. Made of refined red fired clay with red glossy slip having metallic luster.

Cat. no. 366

field inv. 260/70
sq. F10 G10, ▽ 2.00 m
layer E, under horizon 4

Fragment of the concave disc, calotte-shaped container and flat base of a lamp with volute near the nozzle. Made of well refined clay, yellow fired and with brown glossy slip.

IV.5.2. LAMP WITH GLOSSY SLIP

Fragment of the nozzle of a lamp with red glossy slip for which we do not have enough elements for the

typological determination was also discovered together with the Dacian pots and glossy slip-coated vessels with thin walls in the course of excavation of the earliest layer at Saldum.

Cat. no. 367

field inv. 809/69
sq. F9, ▽ 2.97 m
horizon 5

Fragment of the nozzle of a lamp, made of red fired clay with red glossy slip.

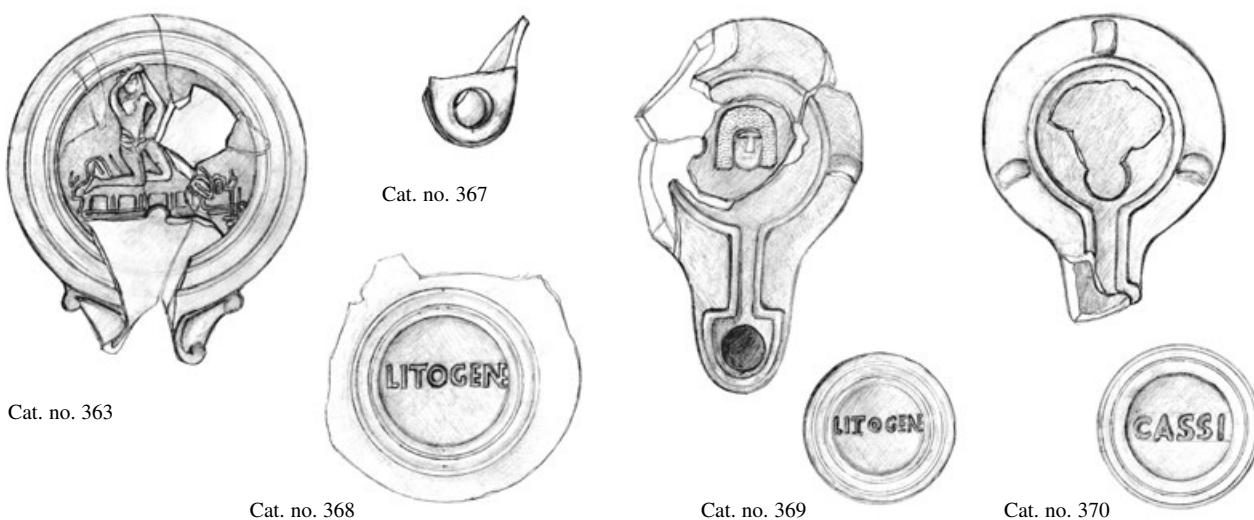
IV.5.3. LAMPS WITH STAMPS
(FIRMALAMPEN)

Loeschcke IX, X; Iványi XV–XVII; Kuzmanov XXIV–XXVI

Fragments of at least nine lamps with stamps (*Firmalampen*) with five stamps of the potters were found at Saldum. They are chronologically related to the first two phases of life in the settlement (second half of the 1st – beginning of the 2nd century and middle of the 2nd–3rd century). The earliest are the finds with the stamp of master *Litogenes*, from the layer dating from the end of 1st – beginning of the 2nd century while other specimens date from the later period (*Cassius*, *Fortis*, *Sextus*).

Litogenes (Cat. nos. 368–369) belongs to the older generation of the masters from the north Italy. According to Loeschcke his workshops were active

Fig. 64. Pottery lamps (R 1:2)



from the early Flavian period until the reign of Trajan.²³⁹ The Roman Collection of the museum in Zagreb houses five lamps of this master dating from the period of Domitian–Trajan.²⁴⁰ The signature of the master appears only as LITOGENE with ligated NE or as LITOGEN. Such lamps were found in Split and Nin.²⁴¹ We encountered close analogy among the material from *Potaissa*, with combination of the mask in relief and the stamp of Litogenes.²⁴²

Cassius (Cat. no. 370) belongs to the younger generation of the masters and from his north Italic workshops had been imported only the lamps of Iványi XVII type. The period of their production and distribution is the time from Trajan to the end of the Antonine period.²⁴³ Context of the finding of this lamp type at Saldum dates it in the second half of the 2nd century. The analogous specimens from Sisak, Osijek and Surduk have the stamp of the potter in variants CAS and CASSI and are also dated in the 2nd century.²⁴⁴ Two lamps with stamp CASSI come from the graves of the *Singidunum* necropolis, but, we do not have precise dating for them although they come from the closed associations.²⁴⁵ At Mora Vagei was found the lamp with stamp CASSI with a lamp from the workshop Octavi and the coins from the 1st century and it dates this find to some extent earlier than Dora Iványi suggested.²⁴⁶ From *Durostorum* come eighteen lamps of this master that the author date in the first half of the 2nd century and many lamps were also found in the territory of *Dinogetia* and *Tomis*.²⁴⁷

Fortis (Cat. no. 371) is the name of the potter that was most frequently encountered on the Roman lamps and his name was found on the specimens of the Iványi XV–XVII types. As Litogenes he also belongs to the older generation of potters (Domitian–Antonine period) and in the course of time he became a role model, whom many local workshops imitated and distributed products under his name as the guarantee of quality. Therefore, it is small wonder that there is such an amount of these lamps in the 2nd–3rd century layers and they were also encountered among the material from the 4th century. Although the Saldum specimen is very fragmented we think on the basis of the technological qualities that it is a local provincial work. The analogies for this type are rather frequent, e.g. in the archaeological collection of the museum in Zagreb there are 109 specimens with his name being almost one third of the total amount of the *Firmalampen* in the

collection.²⁴⁸ These lamps were also found in 13 graves at the *Viminacium* necropolis „Više globalja“.²⁴⁹ In the cremation burial and in its vicinity at the necropolis of *Aquincum* (Pannonia) were discovered three lamps of local production with the stamp of Fortis and one with the stamp CASSI.²⁵⁰

In the course of investigation of the graves in the northern necropolis of *Emona* the lamps with Fortis' stamp were found together with coins of Tiberius, Claudius, Vespasian (2 specimens), Domitian (2 specimens) and Magnentius.²⁵¹

Sextus (Cat. no. 371) belongs to the younger generation of masters (Hadrian–Antonine period) whose workshop in north Italy was active from the first decades of the 2nd to the beginning of the 3rd century. For this master are characteristic the lamps with open ring leading to the channel (Loeschcke X, Iványi XVII). We think, considering the quality of manufacture, that our specimen could belong to the earlier production of this workshop and it is analogous to the specimens from Sisak and Vinkovci.²⁵² From the *Singidunum* necropolis

239| S. Loeschcke, *Lampen aus Vindonissa*. Ein Beitrag zur Geschichte von Vindonissa und des antiken Beleuchtungswesens, Zürich 1919, 295–297.

240| B. Vikić-Belančić, *Antičke svjetiljke u Arheološkom muzeju u Zagrebu II*, VAMZ IX, serija 3, 1975, 57 annex III. (hereafter B. Vikić-Belančić, VAMZ IX–3)

241| B. Vikić-Belančić, VAMZ IX–3, cat. 730–732.

242| M. Barbulescu, *Das Legionslager von Potaissa (Turda)*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 7, Zalău 1997, 43, Abb. 22.

243| B. Vikić-Belančić, VAMZ IX–3, 56.

244| B. Vikić-Belančić, VAMZ IX–3, cat. 501, 510–512.

245| S. Pop-Lazić, *Nekropole rimskog Singidunuma, Singidunum 3*, 2002, 61, fig. 18, 3.

246| A. Cermanović-Kuzmanović, S. Stanković, *La forteresse antique Mora Vagei près de Mihajlovac*. Fouilles de 1981, *Djerdapske sveske* III, 1984, 454–455, fig. 9.

247| C. Muşeteanu, V. Culica, D. Elefterescu, *Lampes à estampille de Durostorum, Dacia* n.s. XXIV, 1980, 283, 289, note 20.

248| B. Vikić-Belančić, VAMZ IX–3, 56–58.

249| Lj. Zotović, Č. Jorodović, *Viminacium*. Nekropola „Više globalja“, Beograd 1990, *passim*.

250| J. Topál, *Roman Cemeteries of Aquincum, Pannonia*. The Western Cemetery (Bécsi Road) II, Budapest 2003, 77, cat. 14–17, Pl. 84.

251| S. Petru, *Severno emonsko grobišče*, Ljubljana 1972, graves 105, 106, 513, 765, 766, 914 and site Lenarčičev travnik, grave 17, T. LXXX, 4.

252| B. Vikić-Belančić, VAMZ IX–3, kat. 809–811.

comes one specimen without the precise chronological indicators.²⁵³ Five specimens originate from the location of the earliest *Singidunum* fortification (in-fill of the trench) from the site Knez Mihailova 30.²⁵⁴ Two lamps with stamps SEXTI and SEXTVS F were found in the graves of the northern *Emona* necropolis together with coins of Hadrian and Antoninus Pius.²⁵⁵

Cat. no. 368

field inv. 293/70

sq. G9 G10

horizon 5

diameter of base 5.0 cm

Fragment of the conical container of the stamped lamp made of red fired well refined and well fired clay. On the base is the stamp LITOGENE with ligated NE.

Cat. no. 369

field inv. 284/70

sq. C6 D6, ▽ 1.40 m

horizon 5

length 10.5 cm; height 3.0 cm

Fragmented lamp with stamp with part of the disc and handle missing. On the disc is represented tragic mask in relief. On the shoulder is molded ornament. Transition from disc to nozzle is broad and bordered with molded band. The base is concave with the stamp LITOGENE having ligated NE. Made of red fired well refined clay.

Cat. no. 370

field inv. 135/70

sq. E6 E7, ▽ 1.80 m

horizon 4

height 3.0 cm; diameter of opening 4.3 cm; diameter of base 4.0 cm

Fragmented lamp with stamp and with substantial portion of the nozzle missing. On the disc rather broad opening for oil is bordered with molded band opening towards the nozzle. On the shoulder three molded protrusions. On the base is the stamp of master CASS. Made of well refined red fired clay of fine fabric and painted dark brown on the outside.

Cat. no. 371

field inv. 458/68

sq. C9 D9, ▽ 1.90 m

layer D

diameter of base 4.5 cm

Fragment of the base and lower segment of the lamp container, made of red fired and red painted clay with the stamp [FOR]TIS in double ring molding.

Cat. no. 372

st. 9/69

sq. F4, ▽ 2.97 m

horizon 4

Fragment of the disc shoulder with molded ornament of a lamp with name stamp. Made of red fired refined clay with red glossy slip.

Cat. no. 373

field inv. no number

sq. F4, ▽ 2.97 m

horizon 4

Fragment of base, nozzle and shoulder with two protuberances of a lamp, made of red fired clay, with brown-red glossy slip. On the base is preserved segment of the stamp [SE]XTI ?.

Cat. no. 374

st. 38

sq. E9, ▽ 1.65 m, 28.07.1968.

horizon 4

Fragment of container and base of a lamp, made of reddish fired refined clay red-brown glazed on the outside (like **Cat. no. 370**). Probably the fragment of the lamp with stamp.

Cat. no. 375

st. 39/1970

sq. G9 G10, ▽ 1.92 m from the socle, pit next to the tower wall 1. 10. 1970.

Fragment of the shoulder with molded ornament and segment of shallow disc with ring-like molding. Made of red fired clay, red painted.

Cat. no. 376

st. 40

sq. C6 D6, ▽ 1.40 m

under horizon 4 – mixed material

Fragment of the disc shoulder with molded ornament. Made of red fired sandy clay.

IV. 5.4. OVAL LAMPS WITH INTEGRATED NOZZLE

Broneer XXVIII, Iványi XI, Kuzmanov XXIII

This is widely distributed provincial-local type of the lamps characterized by oval container joined to the nozzle, rather broad shoulders with ornament and rather small oval disc with ornaments. These oval specimens are particularly frequent in the layers dating from the middle of the 2nd to the 4th century. According

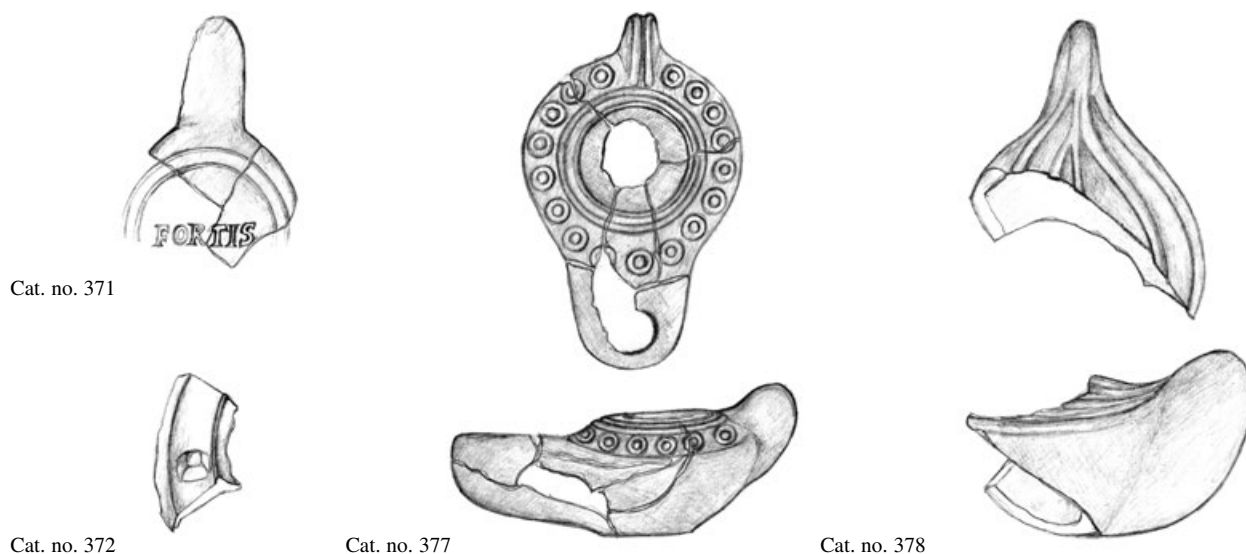


Fig. 65. Pottery lamps (R 1:2)

to Loeschke their prototypes were made in the Gaulish workshops in the end of 1st – beginning of the 2nd century.²⁵⁶

From Saldum come one complete and one fragment most probably of this type of lamp. The method of manufacture and treatment of the surface date the specimen **Cat. no. 377** in the 2nd–3rd century. Specimen **Cat. no. 378** is more precisely dated by the coins of Aurelian (270–275). The analogies for these lamps are encountered in the material from the settlements and necropoles of *Singidunum*²⁵⁷ and *Viminacium*.²⁵⁸

Cat. no. 377

field inv. 838/69

sq. F5, ∇ 0.95 m

between horizons 3 and 4 (layer D)

length 9.2 cm; height 2.8 cm; diameter of disc 3.8 cm

Biconical lamp with slightly concave disc. On the low shoulder is stamped ornament of concentric circles. The nozzle is broad, the handle solid and vertical and the flat base is of ring-like shape. Made of light brown-reddish fired clay with upper surface of the lamp painted red.

Cat. no. 378

field inv. 84/70

sq. E6 E7, to ∇ 1.80 m

layer D (Aurelian 270–275)

height 3.5 cm

Fragment of solid handle and concave disc with molded ribs of a lamp, made of light red fired refined clay, red painted.

IV. 5.5. LAMPS SHAPED AS SMALL BOWLS
Iványi XXII, Kuzmanov XXXIX–XLII.

The largest group at Saldum consisting of twenty specimens are lamps shaped as small bowls and classified into two basic groups: conical (A) and biconical (B). Conical lamps appear in number of variants:

VARIANT 1 – the ring surrounding the opening turns into solid handle while the nozzle is more or less protruding;

VARIANT 2 – rather shallow lamps with concave disc, protruding nozzle and prominent foot;

VARIANT 3 – lamps with prominent low shoulder, which is sometimes decorated;

VARIANT 4 – ovoid lamp with prominent oil opening, which is connected with the strap handle.

253| S. Pop-Lazić, *Singidunum* 3, 2002, 61.

254| V. Ivanišević, S. Nikolić-Đorđević, Novi tragovi antičkih fortifikacija u Singidunumu – lokalitet Knez Mihailova 30, *Singidunum* 1, 1997, 122.

255| S. Petru, *Severno emonsko grobišče*, graves 653 and 917.

256| S. Loeschke, *Lampen aus Vindonissa*, 235.

257| Z. Simić, Rezultati zaštitnih arheoloških istraživanja na prostoru jugoistočne nekropole Singidunuma, *Singidunum* 1, 1997, T. I, G–11, G–72, G–76; S. Pop-Lazić, *Singidunum* 3, 2002, 61, fig. 17.

258| Lj. Zotović, Č. Jorodović, *Viminacium*, T. CXXXIII, 6 (dated by the coins of Hadrian).

The lamps shaped as small bowls appear at Saldum in the Valentinian's layer and in the 6th century layer. They are made of red, brown and exceptionally of gray-yellow and yellowish-red clay sometimes with admixture of sand. Few specimens were glazed in the nuances of green color (olive green, green, yellow-green).

The molds for the lamps of bowl shape were found in the pottery kilns in *Sirmium*, *Siscia* and in villa in Tac-Fövenypuszta and this confirms their intensive provincial production in the end of 3rd and during the 4th century.²⁵⁹ The differences in the method of manufacture and their distribution suggest that they had not been objects of intensive trade even between the neighboring provinces. It has been concluded on the basis of the Pannonian material that there are certain regional differences between the lamps produced in the Sava valley and in the northern part of the province and that there are no imported specimens from the Moesian and Dacian provinces.²⁶⁰

The lamps shaped as small bowls are rather numerous in the fortifications and settlements on the Moesian section of the limes. Considerable amount was found in the earlier fortification at Rtkovo in the horizon of destruction dated by the coins of Theodosius, Honorius and Arcadius.²⁶¹ Four olive green glazed specimens dated in the 4th century were found at Mihajlovac-Blato and two of them could be more precisely dated in the second half of the 4th century.²⁶² Two lamps shaped as small bowls come from Čezava-Novae, one is from the tower II (layer B) dated in the second half of the 4th century²⁶³ and the other is from tower III dated in the end of 4th-5th century.²⁶⁴ Eight lamps of this type from the fortification at Tekija-Transdierna are generally dated in the 4th century.²⁶⁵

The specimens from Saldum could be considered as local products. Substantial number of lamps of almost identical characteristics and their abundance in the Valentinian's layer at Saldum could probably indicate that the center for production of the lamps of this type was at Saldum itself or at some very close, nearby location.

The lamp **Cat. no. 396**, the only one of this variant found at Saldum has the close analogy in the specimen found in the layer dating from the 4th – second half of the 4th century within fortification at Hajdučka Vodenica.²⁶⁶

IV.5.5.A. CONICAL LAMPS

VARIANT 1

Cat. no. 379

field inv. 1/70

sq. F10, ▽ 1.00 m

layer B

height 3.5 cm; diameter of base 3.6 cm

Oval lamp with broad nozzle horizontally protruding and damaged. Disc is concave with broad oil opening and circular perforation. The container is conical, base flat on slightly protruding cylindrical foot. The handle is solid and vertical. Made of brown fired clay and olive green glazed.

Cat. no. 380

field inv. 65/70

sq. E10 F10, ▽ 2.00 m

pit

height 3.8 cm; diameter of opening 3.0 cm; diameter of base 3.2 cm

Oval lamp with damaged nozzle. Disc is slightly concave with broad opening for oil. The base is flat and cylindrical foot is slightly protruding. The handle is solid and vertical. Made of brown fired refined clay and olive green glazed.

Cat. no. 381

field inv. 866/69

sq. E7, ▽ 0.72 m

layer B

height 4.0 cm; diameter of base 3.4 cm

259| D. Iványi, *Die pannonischen Lampen*. Eine typologisch-chronologische Übersicht, Diss. Pann. ser. 2 N° 2, Budapest 1935, 20–21; E. Thomas, Die römische Villa von Tac-Fövenypuszta, *Acta ArchHung* VI/1–4, 1955, 120; B. Vikić-Belančić, *VAMZ* IX–3, 62.

260| B. Vikić-Belančić, *VAMZ* IX–3, *loc. cit.*

261| M. Gabričević, Rtkovo-Glamija I. Une forteresse de la basse époque, *Djerdapske sveske* III, 1986, fig. 20/1, 2, 4.

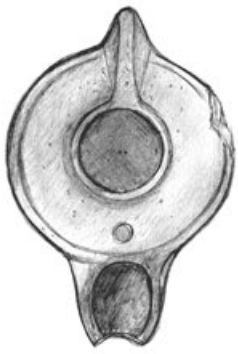
262| M. Tomović, Mihajlovac-Blato. Une forteresse de la basse antiquité, *Djerdapske sveske* III, 1986, fig. 24/3, 5.

263| M. Vasić, Čezava – Castrum Novae, *Starinar* XXXIII–XXXIV (1982–1983), 1984, fig. 17, no. 9.

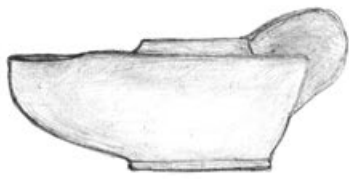
264| M. Vasić, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 115, fig. 17, no. 16.

265| A. Cermanović-Kuzmanović, *Zbornik Filozofskog fakulteta* XVII–A, 1991, 175.

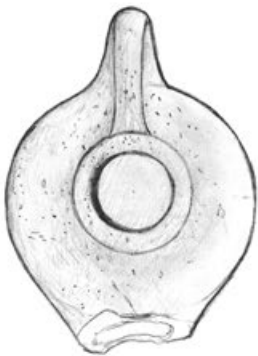
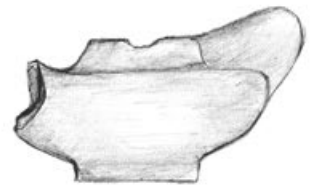
266| A. Jovanović, Hajdučka Vodenica, kasnoantičko i ranovizantijsko utvrđenje, *Starinar* XXXIII–XXXIV (1982–1983), 1984, T. III, 5.



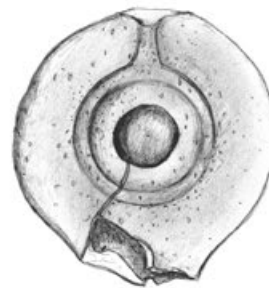
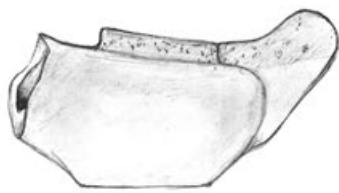
Cat. no. 379



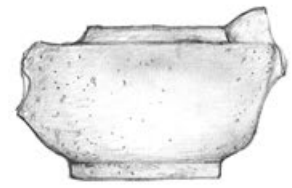
Cat. no. 380



Cat. no. 381



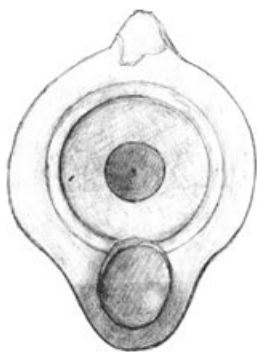
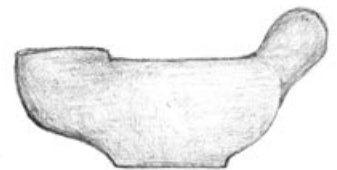
Cat. no. 382



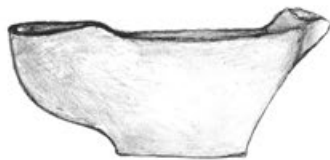
Cat. no. 383



Cat. no. 384



Cat. no. 385



Cat. no. 386

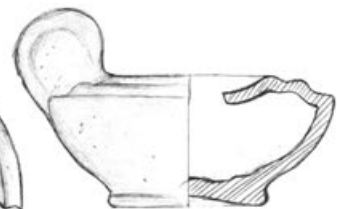


Fig. 66. Pottery lamps (R 1:2)

Oval lamp with horizontally protruding nozzle, which is damaged. Disc is flat and around the opening is molded band connected to the handle. The handle is solid and vertical. Made of red fired clay with traces of destroyed glaze on the disc and handle.

Cat. no. 382

field inv. 726/69

sq. F9 G9, ∇ 0.95 m

horizon 3

height 4.0 cm; diameter of base 4.0 cm

Oval lamp with damaged nozzle and handle. Disc is concave and around the opening for oil is molded bank connected to the solid and vertical handle. The base is of ring-like shape. Made of gray fired clay and olive green glazed.

Cat. no. 383

field inv. 249/68

sq. C8, ∇ 1.80 m

horizon 3

length 10.6 cm; height 3.4 cm

Lamp of oval shape with horizontally protruding broad nozzle with rather broad wick opening. The container is concave and shallow. On the disc around the opening for oil is the molded ring, which transforms into the solid vertical handle horizontally perforated. The base is flat. Made of brown fired refined clay and olive green glazed on the outside.

VARIANT 2

Cat. no. 384

field inv. 50/70

sq. E6 E7, ∇ 0.80–1.10 m

layer C, horizon 3

height 2.8 cm; diameter of base 3.0 cm

Oval lamp with horizontally protruding broad nozzle. Disc is slightly concave with the opening for oil, the handle is solid and base flat. Made of brown fired clay and olive green glazed.

Cat. no. 385

field inv. 208/70

sq. C7 D7, ∇ 1.10 m

horizon 3

height 3.0 cm; diameter of base 3.5 cm

Oval lamp with horizontally protruding broad nozzle with broad wick opening. Disc is concave with rather large opening for oil. The container is conical and resting on the cylindrical foot. The base is flat. Solid vertical handle is partially damaged. Made of brown fired insufficiently refined clay and olive green glazed.

VARIANT 3

Cat. no. 386

field inv. 94/70

sq. B2 B3 B4, ∇ 3.20–3.60 m

damage on the north rampart

height 3.5 cm; diameter of base 4.0 cm

Oval lamp with segments of disc, container and nozzle missing. Disc is concave with prominent shoulder and handle is solid and vertical. The base is slightly concave. Made of brown fired clay and greenish-brown glazed on the outside.

Cat. no. 387

field inv. 570/69

sq. E8

horizon 3

height 2.8 cm; diameter of base 4.1 cm

Oval lamp with damaged handle. The nozzle with broad wick opening is horizontally protruding. The disc is concave and with the opening for oil. The shoulder is emphasized by deep groove. The base is flat. Made of gray fired clay and olive green glazed on the outside.

Cat. no. 388

field inv. 211/70

sq. C7 D7, ∇ 1.10 m

horizon 3

length 8.5 cm; height 2.8 cm; diameter of opening 2.0 cm

Shallow oval lamp with broad nozzle. The disc is of funnel shape with large opening for oil. The shoulder is emphasized by ring-like molding. The base is flat. The handle is damaged. Made of brown-gray unrefined and insufficiently fired clay with traces of destroyed glaze on the outside.

Cat. no. 389

field inv. 618/69

sq. G7, ∇ 0.55 m

horizon 2

height 3.5 cm

Fragment of horizontal nozzle, slightly concave disc with prominent shoulder, conical container and flat base of an oval lamp. Made of red insufficiently fired clay with small sand grains and olive green glazed on the outside.

Cat. no. 390

field inv. 151/68

Trench 2

sq. B8, ∇ 1.50 m

horizon 3

length 9.2 cm; height 3.2 cm

Oval lamp with horizontally protruding nozzle with wide wick opening. The container is conical and disc slightly concave. The opening for oil is emphasized by molded band, which forms vertical solid handle. The base is flat. Made of poorly refined brown fired clay and green glazed on the outside.

Cat. no. 391

field inv. 319/68
sq. C8 D8
horizon 3
height 3.2 cm; diameter of base 3.0 cm

Oval lamp with horizontally protruding broad nozzle with wide wick opening. The receptacle is conical, disc slightly concave and shoulder terminates in the wavy line ornament. The base is flat and of ring-like shape. The handle is damaged. Made of gray fired clay with sand grains and green glazed.

Cat. no. 392

field inv. 572/69
sq. E8
horizon 3
length 9.7 cm; diameter of base 3.8 cm

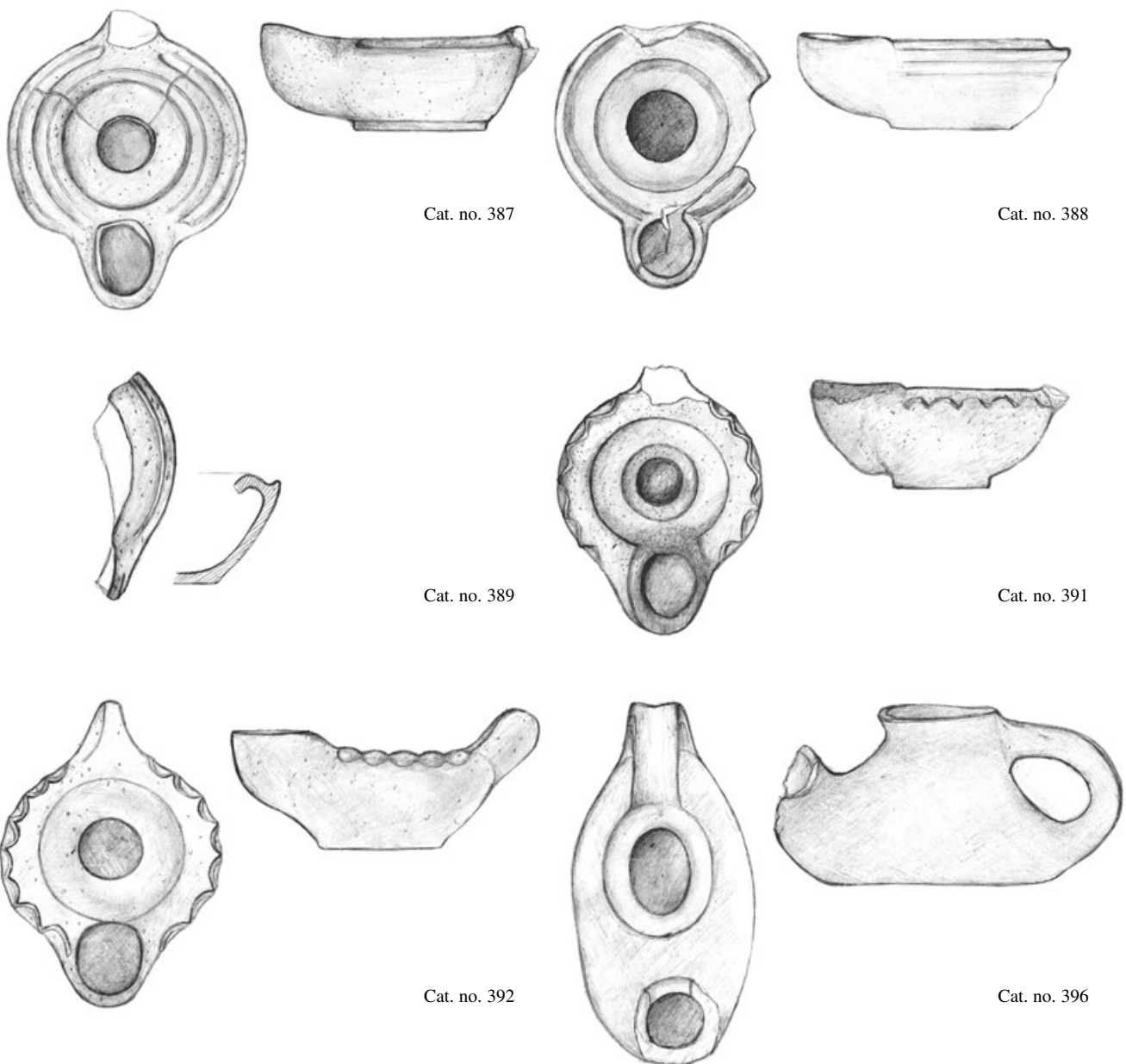


Fig. 67. Pottery lamps (R 1:2)

Oval lamp with horizontally protruding broad nozzle with wide wick opening. The container is shallow and conical, disc concave and on the shoulder is molded band with pinched edge. The base is flat. The handle solid and vertical. Made of gray fired clay and olive green glazed.

Cat. no. 393

field inv. 41/70

sq. E10 F10, ∇ 1.60 m

horizon 3

height 3.5 cm; diameter of opening 2.0 cm

Oval lamp with horizontally protruding broad nozzle. The disc is concave with wide opening for oil. The handle is solid and vertical. Made of red fired refined clay and olive green glazed on the outside.

Cat. no. 394

field inv. 76/67

Trench 2, ∇ 1.40 m in the south profile

horizon 3

height 3.5 cm; diameter of disc 6.0 cm

Oval lamp with horizontally protruding broad nozzle with wide wick opening. Disc is slightly concave with the opening for oil. The container of conical shape rests on slightly emphasized cylindrical foot. The base is flat and handle is solid

and vertical. Made of poorly fired yellowish-reddish clay of coarse fabric (with sand grains).

Cat. no. 395

field inv. 48/67

Trench 2, sq. B8 C8, ∇ 1.20–1.30 m

horizon 3

length 9.0 cm; height 4.0 cm; diameter of disc 6.0 cm

Oval lamp with horizontally protruding broad nozzle with wide wick opening. The disc is concave with large opening for oil. The container is conical and rests on slightly emphasized cylindrical foot. The base is flat. The handle is missing. Made of reddish fired refined clay.

VARIANT 4

Cat. no. 396

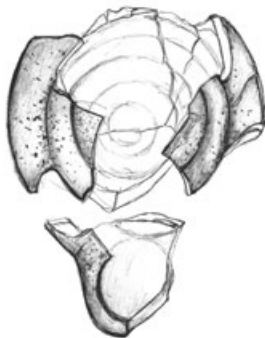
field inv. 562/69

sq. G3

layer B, debris above horizon 2

height 5.5 cm; diameter of opening 4.0 cm

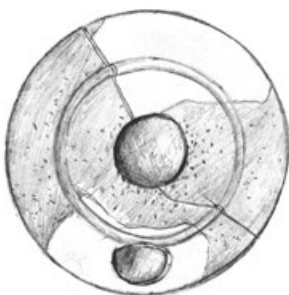
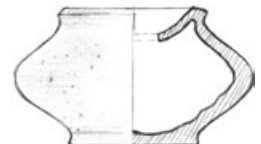
Lamp of boat shape with nozzle protruding upward and opening for oil. The base is flat. The strap handle joins the opening for oil and the lamp shoulder. Made of poorly fired reddish-brown clay of coarse fabric with sand grains.



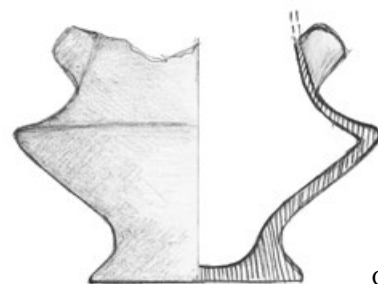
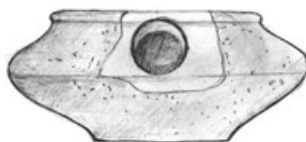
Cat. no. 397



Cat. no. 398



Cat. no. 399



Cat. no. 400

Fig. 68. Pottery lamps (R 1:2)

IV. 5.5.B. BICONICAL LAMPS

Cat. no. 397

field inv. 631/69
sq. C9, ▽ 2.80 m
red burned earth
layer C, D
height 3.5 cm

Fragmented biconical lamp with handle and portions of disc and nozzle missing. The disc is concave and base flat. Made of light red fired well refined clay; disc and shoulder dark yellow glazed.

Cat. no. 398

field inv. 209/70
sq. C7 D7, ▽ 1.10 m
horizon 3
height 3.7 cm; diameter of base 3.5 cm

Biconical circular lamp with nozzle and handle missing. The disc is concave and base flat. Made of red fired clay and light brown glazed on the outside.

Cat. no. 399

field inv. 645/69
sq. G4, ▽ 0.70 m
layer B
height 3.5 cm; diameter 7.5 cm

Biconical lamp with wick opening on the upper cone. Disc is concave with the opening for oil. Made of yellowish-reddish fired clay and olive green glazed on the outside.

FRAGMENTED LAMP
SHAPED AS SMALL BOWL**Cat. no. 400**

field inv. 210/70
sq. C7 D7, ▽ 1.10 m
layer C, horizon 3
diameter of base 5.0 cm

Fragmented biconical lamp with flat protruding base. Two solid handles on the shoulder. Made of gray fired medium refined clay.

IV. 5.6. LAMPS OF PYRIFORM-OVAL SHAPE
Kuzmanov XXXVII–XXXVIII, Iconomu XXXI–XXXIII

Lamps of this type are not abundant in the Saldum material, but they are related to the latest layer within

the *castellum*. They occur in two variants depending on the shape of the molded ring on the disc. It could be closed around the opening for oil (**Cat. no. 401**) or it could be shaped as channel opening towards the wick opening (**Cat. nos. 402–403**).

These lamps are the examples of the local production of the so-called „Asia Minor type“. They appear in the middle and lower Danube basin and in the hinterland, but they are particularly characteristic of the west Pontus region where had probably been the center of their production.²⁶⁷

The closest parallels for the Saldum specimens are the finds from the fortification at Hajdučka Vodenica dated in the third third of the 6th century.²⁶⁸ The close analogy for **Cat. no. 403** discernible in the representation of a cross on a disc and heart-shaped handle with volutes is the specimen from the 6th century layer at the site Sadovsko Kale.²⁶⁹ The lamps made in a single mold and found at *Oescus* (6th century) resemble in form, manner of decoration and color of firing the specimen **Cat. no. 402** from Saldum.²⁷⁰

Cat. no. 401

field inv. 709/69
sq. F4, ▽ 0.80 m
layer B
length 9.0 cm; diameter of base 4.5 cm

Lamp of pyriform-oval shape with horizontally protruding broad nozzle with wide wick opening. The container is biconical, disc concave, shoulder is broad and decorated with radial plastic lines. On the disc are two ring-like reinforcements surrounding the opening for oil. The outer ring is linked to the solid vertical handle, which has deep and broad groove. Between the disc and nozzle is molded ornament within triangular frame. The base is flat. Made of brown-gray fired clay of sandy fabric.

267| G. Tončeva, Keramična rabotilnica kraj s. Kranevo, *Izvestija NMB* 9, 1953, 87; C. Iconomu, *Opaițe greco-romane*, Constanța 1967, 185–186; Đ. Janković, *Podunavski deo oblasti Akvisa*, Beograd 1981, 163.

268| A. Jovanović, *Starinar* XXXIII–XXXIV (1982–1983), 1984, 325, T. IV, 3–4.

269| S. Uenze, *Die spätantiken Befestigungen von Sadovec (Nordbulgarien)*. Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen 1934–1937, München 1992, 535, SK 212, Taf. 144/3.

270| G. Kuzmanov, *Antični lampi*. Kolekcija na Nacionalnija arheološki muzej, Sofija 1992, cat. 315–316.

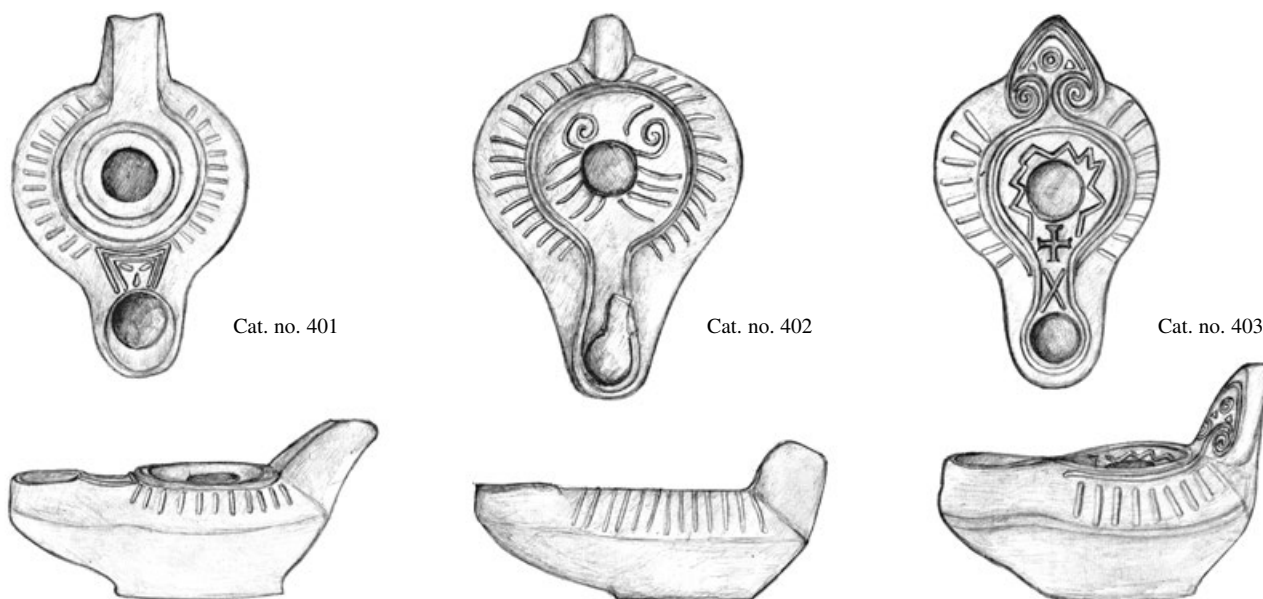


Fig. 69. Pottery lamps (R 1:2)

Cat. no. 402

field inv. 565/69

sq. G7, debris above horizon 2

layer B

length 10.2 cm; diameter of base 3.5 cm

Pyriform lamp with elongated nozzle with wide wick opening. It has rather broad shoulders decorated with radial plastic lines, slightly concave disc with engraved radial ornament. The base is flat. The flat handle is solid and vertical. Made of brown fired refined clay.

Cat. no. 403

field inv. 42/67

Trench 2, ∇ 1.20 m

horizon 2

height 9.0 cm; length 9.0 cm

Pyriform lamp with elongated nozzle with rather large openings for oil and wick. The disc is concave with channel opening towards the nozzle. Around the opening is molded zigzag band, cross with prominent ends and sign 'X'. On the broad shoulders is ribbed ornament. The base is flat. The handle is heart-shaped and decorated with molded volutes and concentric circle. Made of brown fired clay of sandy fabric.

IV.5.7. LAMPS ON HIGH STEM

Four lamps of this type were found at Saldum, three inside the *castellum* and one in its immediate vicinity,

in the area of the assumed necropolis. All specimens date from the second half of the 4th century and the 6th century.

The analogies for these lamps are not numerous and the closest one comes from the site Rtkovo–Glamija. It is an oval lamp on the hollow stem found in the layer of the earlier fortification and dated by the coins in the end of 4th – first half of the 5th century.²⁷¹ Fragment of high stem with grooved outer surface that was most probably supporting the body of an oval lamp was found within the fortification at Bordjej (4th–6th century).²⁷² Rather interesting lamp with oval container with four nozzles on the high hollow stem comes from the layer of the later fortification at Mora Vagei.²⁷³ The lamp with high stem similar to our specimen **Cat. no. 405** was found in the village Proslav in Bulgaria in the grave dated by the coin of Gordian III (238–244).²⁷⁴

271| M. Gabričević, *Djerdapske sveske* III, 1986, fig. 20/1.

272| A. Cermanović-Kuzmanović, S. Stanković, Bordej. Kasnoantičko utvrđenje. Izveštaj o arheološkim istraživanjima u 1980. godini, *Djerdapske sveske* II, 1984, fig. 211, 1.

273| A. Cermanović-Kuzmanović, S. Stanković, La forteresse antique Mora Vagei près de Mihajlovac. Fouilles de 1981, *Djerdapske sveske* II, 1984, fig. 8/1.

274| R. Moreva, P. Angelova, Mogilni grobni nahodki ot Asenovgradsko, *Arheologija* 1968–3, 30, fig. 4; G. Kuzmanov, *Antični lampi*, cat. 408.

Cat. no. 404

field inv. 197/70
 sq. C7 D7, ∇ 0.85 m
 layer C, horizon 3
 height 10.0 cm; diameter of opening 2.8 cm; diameter of base 7.3 cm
 Figural lamp on high stem. The disc is slightly concave with emphasized opening for oil surrounded with three circular perforations. Broad horizontal nozzle is damaged. The container is calotte-shaped and flat base rests on hollow stem with two ring-like protuberances and conical foot with channels. The handle is shaped as ram's head. Made of gray fired and burnished clay.

Cat. no. 405

field inv. 727/69
 sq. F9 G9, ∇ 0.95 m
 horizon 3
 height 23.0 cm
 Fragmented lamp on the high hollow cylindrical stem. Parts of the disc, nozzle and foot are missing. The container is shaped as small bowl with emphasized opening for oil. The nozzle is horizontally protruding. Made of brown fired

clay with additional layers of clay added on the outside of the foot.

Cat. no. 406

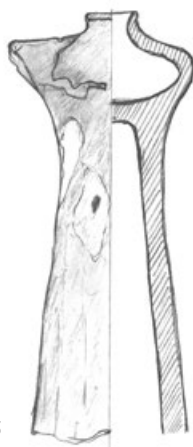
inv. 851/69
 Necropolis
 Trench 1, ∇ 0.90 m, layer II
 height 17.0 cm
 Fragment of the lamp on high hollow stem. Biconical container is fragmented and cylindrical stem rests on a foot. Made of brown fired clay of coarse fabric.

Cat. no. 407

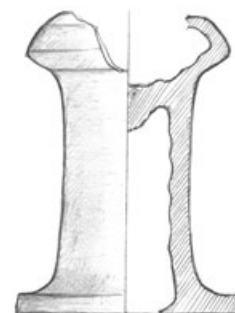
field inv. 82/70
 sq. C10
 layer C, horizon 3
 length 10.8 cm; diameter of disc 8.5 cm
 Oval lamp with broad partially damaged horizontally protruding nozzle. The disc is slightly concave with wide opening for oil. The container is conical, base is flat with conspicuous traces of the stem and thickness of the container wall is 1 cm. Made of insufficiently fired clay of uneven red color with admixture of sand.



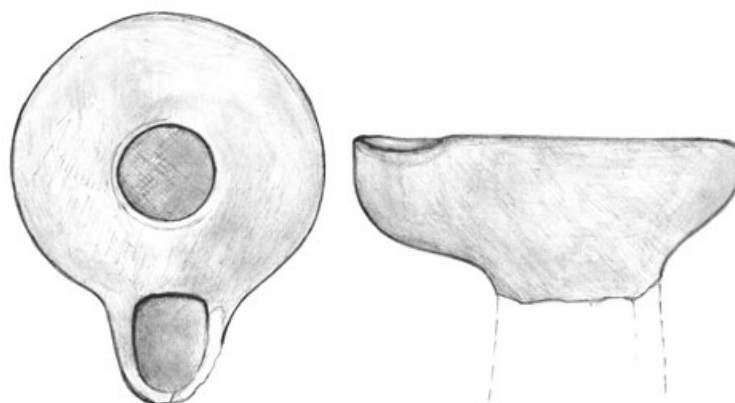
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Cat. no. 405

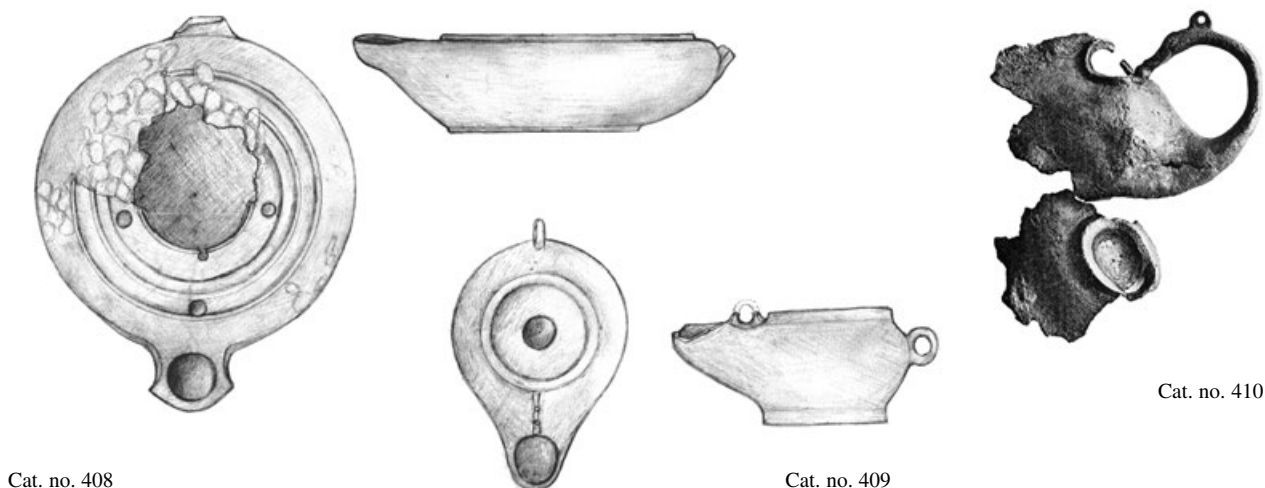


Cat. no. 406



Cat. no. 407

Fig. 70. Pottery lamps (R 1:4; Cat. no. 407 R 1:2)



Cat. no. 408

Cat. no. 409

Cat. no. 410

Fig. 71. Bronze lamps (R 1:2)

IV. 5.8. BRONZE LAMPS

Specimens analogous to the bronze lamps shaped as small bowls are numerous among the pottery specimens. Of the bronze ones we would like to mention the lamp from Ohrid, now in the National Museum in Belgrade and generally dated in the 3rd–4th century.²⁷⁵ The lamp **Cat. no. 408** was modeled after the pottery lamps with short angular nozzle.

Quite special is the lamp **Cat. no. 410** that was deformed by fire but whose appearance could be reconstructed. It is the lamp with elongated ovoid container and probably emphasized and protruding wick opening. Handles shaped as heads of goose, gryphon and ram are relatively frequent on the bronze lamps. Two bronze lamps in the National Archaeological Museum in Sophia have the handles shaped as swan's head but also the containers shaped as the bodies of these birds with feather and wings depicted in relief.²⁷⁶

Cat. no. 408

field inv. 108/67

Trench 2, sq. B9, ▽ 1.60 m

horizon 3

length 10.0 cm; height 2.5 cm; diameter of disc 6.7 cm

Bronze massive lamp shaped as small bowl, of oval shape with horizontally protruding angular nozzle. The disc is slightly concave with opening for oil decorated with molded concentric circles. On the shoulder are holes for suspension. The handle is missing. The flat base rests on the ring-like foot.

Literature: *Arheološko blago Djerdapa*, 81, cat. 240.

Cat. no. 409

field inv. 188/70

sq. B8 B9 B10, ▽ 4.50 m

pit

length 7.2 cm; height 3.2 cm; diameter of disc 3.2 cm; diameter of base 3.2 cm

Bronze lamp shaped as small bowl of oval shape with broad horizontally protruding nozzle. The disc is slightly concave with rather small opening for oil. The container is resting on short cylindrical foot. Rather small ring-like handle on the shoulder and another handle (damaged) for attaching to the chain placed between the disc and nozzle. The base is flat.

Cat. no. 410

field inv. 282/70

sq. E5

horizon 3

Fragmented and deformed bronze lamp with nozzle and portion of disc missing. The container is of oval shape with base hammered into the ring-like foot. The handle stylized as swan's head with prominent beak eyes and nostrils. Between the nozzle and disc shoulder is solid cast ball. At the top of the handle is horizontal perforation for the suspension chain.

The earliest specimens are lamps with volutes and relief representation on a disc. They were made of high quality clay with brown or red slip. They have all been

275| B. Jeličić, *Bronzani žišci u Narodnom muzeju, ZNMB II* (1958–1959), 1959, 79, cat. 11, T. III, 11.

276| G. Kuzmanov, *Antični lampi*, cat. 446, 447.

found in the early imperial layer (layer E, horizon 5). In the provinces they are dated from the time of Tiberius to the middle of the 1st century and in our territory they are dated from the second half of the 1st century, more precisely from the time of Flavians to the beginning of the 2nd century. Simultaneously with this type also appear the lamps with stamps (*Firmalampen*). On two specimens was found the stamp of *Litogenes*, the north Italic master of older generation, who was active according to the investigators in the Flavian times until the reign of Trajan. In the layer dating from this period have been found the Dacian cups, which could also have been used as lamps.²⁷⁷

From the 2nd–3rd century are preserved lamps with stamps of masters *Cassius*, *Fortis* and *Sextus*. Their characteristic is relatively careful manufacture of the high quality clay.

The most numerous are lamps shaped as small bowls found in two latest layers (Valentinian's layer – 364–378/380 and 6th century layer). They are local provincial products made of more or less well refined clay, reddish or brown fired and often olive green glazed on the outside. They appear in many variants and they are mostly around 3 cm high and 8 to 10 cm long.

Distinctive group of Late Roman lamps are specimens with high hollow conical stem that are also characteristic of this time. Particularly interesting is the specimen **Cat. no. 404** because of its interesting appearance, i.e. the handle shaped as ram's head and it had most probably been made after the metal lamps. That there was the need for more luxurious house equipment among the inhabitants of the Late Roman Saldum is confirmed by the find of three bronze lamps, which imitate in shape the actual pottery models.

Characteristic of the 6th century are pyriform-oval lamps, which have their predecessors in the specimens from Asia Minor. One lamp has cross in relief on the disc (**Cat. no. 403**).

And finally we could draw the following conclusion – the study of the lamp types from Saldum made possible perceiving of the evolution of social, economic and commercial relations from the middle of the 1st to the end of the 6th century using as example one entity, i.e. the settlement at Saldum. The earliest specimens were imported mostly from the north Italic workshops (1st–2nd century) but autochthonous types (Dacian cups) were used alongside. In the 2nd–3rd century we can notice the increase in the local provincial production

and appearance of new types or more often imitations of earlier well-known types like for instance were the *Firmalampen*. The characteristic of the Late Roman period is the restricted repertoire of types from the local workshops, while in the Early Byzantine times prevailed the eastern types either as import or as local imitations.

IV.6. GLASS VESSELS

Fifty glass vessels mostly fragmented found in the layers dating from the 1st to the 6th century have been inventoried in the course of archaeological investigations at Saldum (Figs. 72–76). Segment of this material was published in the monograph of M. A. Ružić in 1994²⁷⁸ but in the catalogue were not quoted field inventory numbers of the vessels so it was not possible to link them precisely to the specimens published in this work.

We classified all specimens in three main groups and identified distinct types and their variants.

A. Bowls (Fig. 72)

A.1. *Shallow bowl with horizontally everted rim*

A.2. *Rather deep bowl with slanting everted rim*

A.3. *Hemispherical bowls*

– *Hemispherical bowls with funnel-like rim*

– *Hemispherical bowls with cut ornament*

– *Hemispherical bowls with indentations*

B. Beakers (Figs. 73–75)

B.1. *Hemispherical beakers*

– *Hemispherical beakers without ornament*

– *Hemispherical beakers with dark blue drops*

– *Hemispherical beaker with cut ornament*

B.2. *Conical beakers*

– *Conical beakers with pointed base*

– *Conical beaker with high ring-like foot*

– *Deep conical beakers with funnel-like rim*

– *Deep conical beakers with hollow ring-like foot*

B.3. *Beakers with high stem and conical foot*

B.4. *Short cylindrical beakers with ring-like foot*

B.5. *Beaker with two handles*

C. Bottles (Fig. 76)

D. Fragments of glass vessels (Fig. 76)

277| About Dacian cups see page 56.

278| M. A. Ružić, *Rimsko staklo u Srbiji*, Beograd 1994.

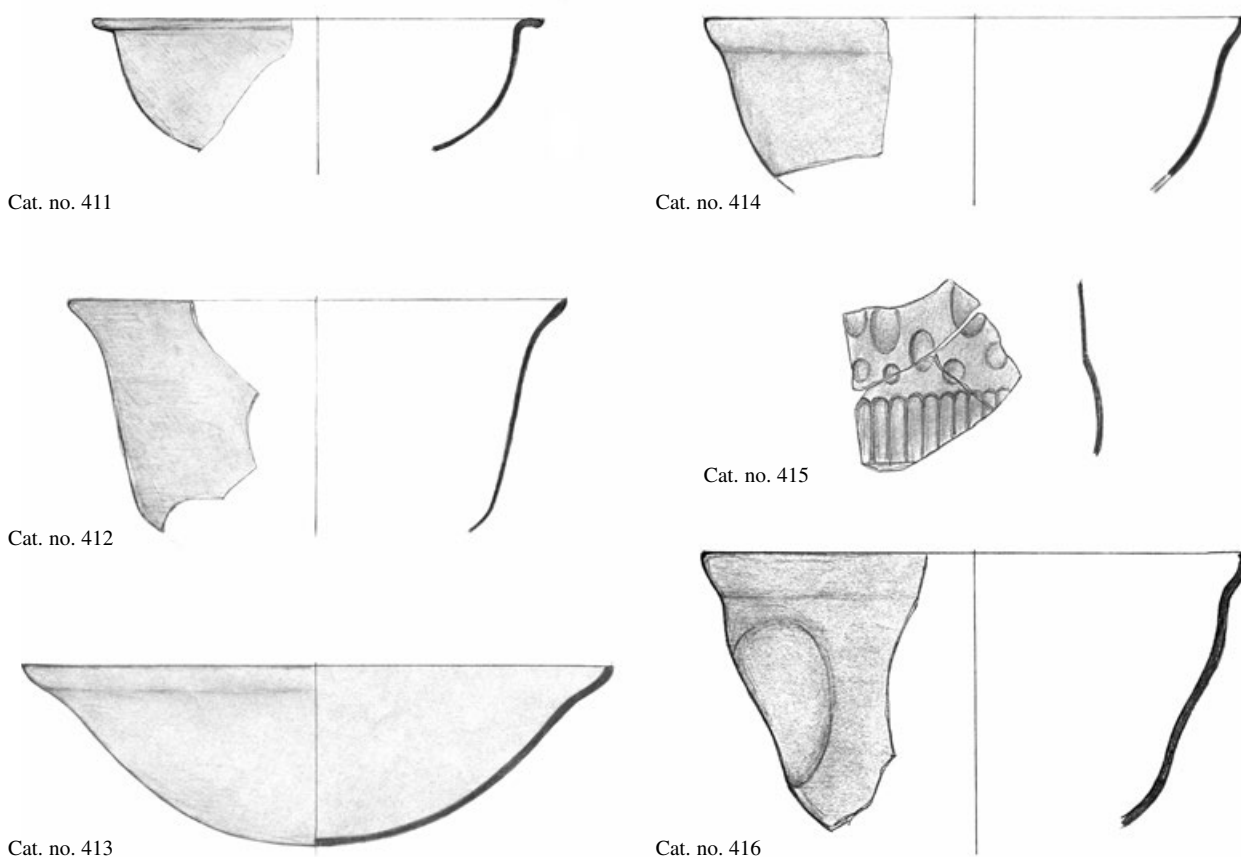


Fig. 72. Glass vessels (R 1:2)

IV. 6.A. BOWLS

IV. 6.A.1. SHALLOW BOWL WITH HORIZONTALLY EVERTED RIM

The bowl with horizontally everted rim and shallow hemispherical body resting on a ring-like foot. They were made of bluish-greenish or tinted glass and they are dated from the middle of the 1st to the 2nd century. They were most probably imported from Italy.

Such vessel form was not encountered in the material from Upper Moesia while two specimens are known from Pannonia, one comes from Győr, from the grave dated in the second half-end of the 1st century,²⁷⁹ while the other specimen made of greenish glass is dated in the second half of the 1st – beginning of the 2nd century.²⁸⁰

Cat. no. 411
field inv. 291/70
sq. G9, ▽ 1.00 m,
horizon 5

diameter of rim 12.0 cm

Fragment of horizontally everted rim and body of the calotte-shaped bowl made of greenish glass.

IV. 6.A.2. RATHER DEEP BOWL WITH SLANTING EVERTED RIM

The bowl of this type with concave base on a ring-like foot and made of bluish glass dates from the early period of life at Saldum.

From Slovenia come few specimens dated in the second half of the 1st – beginning of the 2nd century and one bowl is dated in the time of Flavians.²⁸¹ The bowls of this type are frequent finds at the sites in Italy and in the areas that had commercial contacts with Italy, so

279| L. Barkóczy, *Pannonische Glasfunde in Ungarn*, Budapest 1988, 52, Kat. 5.

280| L. Barkóczy, *Pannonische Glasfunde in Ungarn*, 52, Kat. 6.

281| I. Lazar, *Rimsko steklo Slovenije*, Ljubljana 2003, 73.

they are considered to be the Italic import. They have been found in Pompeii and *Herculanum*, while specimens from Ostia are dated in the time of Domitian and Trajan and that corresponds with the dating of the Saldum specimens.²⁸²

Cat. no. 412

field inv. 294/70

sq. G9 G10

horizon 5

diameter of rim 11.0 cm

Everted rim and conical body of the vessel made of bluish glass.

IV.6.A.3. HEMISPHERICAL BOWLS

HEMISPHERICAL BOWLS WITH FUNNEL-SHAPED RIM

Main characteristics of this bowl type are funnel-shaped rim, more or less deep body and flat or concave base (Isings form 116; Ružić type IV/8; Lazar form 2.6.4). They were made of the glass of green color. They were produced from the end of the 3rd century and they are characteristic of the layers dating from the second half of the 4th – first half of the 5th century and were also in use during the 6th century. Two bowls of this type have been found at Saldum in the 6th century layer. They were made of the greenish glass.

Cat. no. 413

field inv. 640/69

sq. G4, ▽ 0.70 m

layer B

diameter of rim 15.5 cm; height 4.9 cm

Shallow calotte-shaped bowl with funnel-like rim made of light green glass.

Literature: M. A. Ružić, *Rimsko staklo u Srbiji*, cat. 563–565.

Cat. no. 414

field inv. 643/69

sq. G4, ▽ 0.70 m

layer B

diameter of rim 12.0 cm

Calotte-shaped bowl with funnel-like rim made of light green glass.

Literature: M. A. Ružić, *Rimsko staklo u Srbiji*, cat. 563–565.

HEMISPHERICAL BOWLS WITH CUT ORNAMENT

This bowl type has molded rim, hemispherical body and flat or concave base. On the outer surface they have characteristic ornament consisting of cut circles, ellipses and engraved grooved. They were produced from the 3rd century onward most probably simultaneously in the eastern and western provinces and the workshops are confirmed in *Dura Europos*, in Crete and in Cologne. The fragment of this type of bowl has been registered in the Valentinian's layer (364–378/380) at Saldum.

Rather small amount of these bowls has been found at the sites in Moesia Prima and in the neighboring provinces: in *Singidunum*,²⁸³ *Margum*,²⁸⁴ *Ravna-Timacum minus* and *Ulpiana*,²⁸⁵ *Sirmium*²⁸⁶ and *Aquincum*.²⁸⁷ These specimens are generally dated in the first half – middle of the 4th century.

Cat. no. 415

field inv. 347/68

sq. F8

horizon 3

Fragment of hemispherical body of a vessel made of greenish glass. The outer surface is decorated with band-like indentations and cut circles.

HEMISPHERICAL BOWLS WITH INDENTATIONS

Typical Late Roman shape of bowls with funnel-like rim, rounded body and slightly concave base. Ovoid indentations were used as decoration on pottery and glassware already from the early Imperial period.

282| I. Lazar, *Rimsko staklo Slovenije*, 73.

283| S. Nikolić-Đorđević, Rimske staklene posude sa Beogradske tvrđave, *Godišnjak grada Beograda XXXVII*, 1990, T. II, 18, 19; V. Ivanišević, S. Nikolić-Đorđević, Novi tragovi antičkih fortifikacija u Singidunumu – lokalitet Knez Mihailova 30, *Singidunum* 1, 1997, figs. 53, 10–12, 14–17.

284| G. Karović, Rimsko staklo Marguma, *Viminacium* 10 (1995–1996), 1996, 87, T. VI, 5–7.

285| M. A. Ružić, *Rimsko staklo u Srbiji*, cat. 538–540.

286| M. Parović-Pešikan, Excavations of a late Roman villa at Sirmium. Part II, *Sirmium* III, 1973, pl. XXI, 14, pl. XXIV, 2; V. Šaranović-Svetek, *Antičko staklo u jugoslovenskom delu provincije Donje Panonije*, Novi Sad 1986, T. I, 4.

287| L. Barkóczi, *Pannonische Glasfunde*, 65, Nr. 43–44.

Specimen from Saldum resembles in its characteristics the bowl found in a grave of the Csákvár necropolis dated in the end of 4th – beginning of the 5th century, i.e. as L. Bárkóczy thinks after AD 380 and could be the product of the local Pannonian workshop.²⁸⁸ Two specimens of this bowl type were found at Karataš–*Diana* and at Ravna–*Timacum minus* in the layers dating from the end of 4th – beginning of the 5th century.²⁸⁹

Cat. no. 416

field inv. 865a/69

sq. E7, ▽ 0.72 m

layer B

diameter of rim 12.0 cm

Deep bowl with funnel-like rim and rounded body, made of greenish glass.

IV. 6. B. BEAKERS

IV. 6. B. 1. HEMISPHERICAL BEAKERS

This is very widely distributed beaker type whose main characteristics are funnel-shaped rim, hemispherical body and slightly concave base. We encountered at Saldum specimens without ornament or specimens decorated with blue drops, cut ellipses and circles and incisions. They are mostly made of green or olive green glass. They are characteristic of the second half of the 4th and the beginning of the 5th century but they were also produced during the 6th century.

HEMISPHERICAL BEAKERS WITHOUT ORNAMENT

The beakers of this type that are in literature often classified as drinking glasses have funnel-shaped rim, deep or shallow body and flat or concave base and were mostly made of the greenish or green glass. They were produced synchronously with the hemispherical bowls from the end of the 3rd century and they are most frequent in the layers dating from the second half of the 4th – first half of the 5th century with gradual decline in production during the 6th century. At least five such beakers have been found at Saldum and four of them date from the period between AD 364 and AD 378/380 and one is from the period of Justinian's restoration of the limes. The diameter of rim is 8 to 9 cm.

There are numerous analogies mostly from the Late Roman settlements. The shallow bowl from *Singidunum* dates from the second half of the 4th century²⁹⁰ and finds from *Pontes* and *Timacum minus* date from the end of 4th – beginning of the 5th century²⁹¹ while finds from *Diana* date from the 6th century.²⁹² They were in use in Pannonia from the beginning of the 4th century (find from Halimba dated by the coin of Licinius) until the beginning of the 5th century.²⁹³ They have been found as grave goods at the necropoles in *Intercisa*, *Ságvár* and *Csákvár*.²⁹⁴ The grave find of such bowl from Čalma is dated by the coins of Licinius, Constantine I and Constantius II (337–341).²⁹⁵ The bowls from the closed associations dated in the end of the 4th century are confirmed in *Poetovio*.²⁹⁶ The bowls from the layers at *Nicopolis ad Istrum* are generally dated in the end of 3rd–4th century,²⁹⁷ while the deep bowl classified in the catalogue as beaker from the area of the church *extra muros* at Golemanovo Kale is dated in the 6th century.²⁹⁸

Cat. no. 417

field inv. 384/68

sq. C9 D9, ▽ 1.50 m

layer C

diameter of rim 9.0 cm

Funnel-like rim and calotte-shaped body of a bowl made of light green glass.

288| L. Barkóczy, *Pannonische Glasfunde*, 60–61, Kat. 30, Taf. III, 30.

289| M. A. Ružić, *Rimsko staklo u Srbiji*, 39–40, type IV/9, cat. 585–588, T. XXVIII, 1.

290| V. Bikić, Rezultati zaštitnih arheoloških iskopavanja u Knez Mihailovoj ulici br. 46–48, *Singidunum* 1, 1997, 162–163, fig. 5, 2.

291| M.A. Ružić, *Rimsko staklo u Srbiji*, 39, cat. 568–570, 576–581.

292| M.A. Ružić, *Rimsko staklo u Srbiji*, 39, cat. 566–567.

293| L. Barkóczy, *Pannonische Glasfunde*, 57; M. Parović-Pešikan, Excavations of a late Roman villa at Sirmium. Part I, *Sirmium* II, 1971, pl. XXVII, 82, 1.

294| L. Barkóczy, *Pannonische Glasfunde*, loc. cit., Kat. 17–19, Taf. II, 17–19.

295| V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 13, T. II, 4.

296| Z. Šubić, Tipološki in kronološki pregled rimskega stekla v Poetovionu, *Arheološki vestnik* XV (1974), 1976, cat. 56, T. II, 56.

297| J. D. Shepherd, The glass, in: *Nicopolis ad Istrum*. A Roman to Early Byzantine City. Pottery and Glass, Leicester, London 1999, 334, nos. 238–240, T. 11.10.

298| S. Uenze, *Die spätantiken Befestigungen von Sadovec (Bulgarien)*. Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen 1934–1937, München 1992, 438, Kat. A18, Taf. 50, 30.

Cat. no. 418

field inv. 574/69
sq. E8, under horizon 2
layer C
diameter of rim 9.0 cm
Funnel-like rim, calotte-shaped body and slightly concave base of a bowl made of greenish glass.

Cat. no. 419

field inv. 45/70
sq. E6 E7, ▽ 0.80–1.00 m
layer C
diameter of rim 10.0 cm
Funnel-like rim and calotte-shaped body of a bowl made of greenish glass.

Cat. no. 420

field inv. 865/69
sq. E7, ▽ 0.72 m
layer B
diameter of rim 9.0 cm
Funnel-like rim and calotte-shaped body of a bowl made of whitish glass.

Cat. no. 421

field inv. 594a1/69
layer C
diameter of rim 8.0 cm
Funnel-like rim and calotte-shaped body of a bowl made of greenish glass.

HEMISPHERICAL BEAKERS WITH DARK BLUE DROPS

From the Valentinian's layer at Saldum (364–378/380) comes large amount of the beakers of this type made of rather thin greenish or olive green glass with dark blue drops arranged in rows or bunches. They appear as shallow and deep specimens with more or less everted funnel-like rim, which is 10 to 12 cm in diameter.

There are many analogies from the military camps, towns, *villae rusticae* and necropoles so we are going to mention just a few: from the Moesia Prima *Singidunum*,²⁹⁹ *Čezava–Novae* and *Ćuprija–Horreum Margi*; from Dacia Ripensis: *Tekija–Transdierna*, *Karataš–Diana*, *Kostol–Pontes*, *Rtkovo–Glamija*,³⁰⁰ *Brza Palanka–Egeta*, *Mora Vagei*, *Gamzigrad–Romuliana*; from Dacia Mediterranea: *Naissus* – sites *Gradsko polje* and *Jagodin Mala*; *Mediana* – *thermae*³⁰¹ and area between the granary and the barracks.³⁰² From the site *Kljanc* near *Majdanpek* come three beakers of this type

(chance finds) and the traces of glass slag, which indicate local manufacture of such vessels.³⁰³ From the frontier region between Moesia Prima and Dalmatia come the beakers from *Prijedor* and from the *Jelica Mt.* near *Čačak*.³⁰⁴ Few such beakers were also found at the necropolis of *Doclea*.³⁰⁵ There are also many parallels from Pannonia. This beaker type has been registered at many localities in *Sirmium*³⁰⁶ and also at *Banoštor–Bononia*,³⁰⁷ at *Brigetio*, at the necropolis at *Csákvár*, etc.³⁰⁸ Such beakers were dated at *Nicopolis ad Istrum* in the AD 450.³⁰⁹

The finds of such beakers from the necropoles and residential and public structures in *Emona* are also dated in the end of 4th and the beginning of the 5th century. On the basis of the discovery of a glass kiln in one section of the *insulae* in *Emona*, Lj. Plesničar-Gec assumed that here had been manufactured vessels to satisfy the needs of the urban population.³¹⁰

Cat. no. 422

field inv. 633/69
sq. E8, ▽ 1.20 m
horizon 3
diameter of rim 12.0 cm
Funnel-like rim and calotte-shaped body of a tumbler made of greenish glass with dark blue drops.

299| S. Nikolić-Đorđević, *Godišnjak grada Beograda XXXVII*, 1990, T. III, 25–26.

300| V. Han, *Objects en verre. Rtkovo–Glamija I, Djerdapske sveske III*, 1986, fig. 25, 1–6.

301| S. Drča, *Rimsko staklo u Niškom muzeju, Glasnik SAD 15–16* (1999–2000), 2000, cat. 4, fig. 4.

302| Excavations in 1995–1996, unpublished.

303| M. Ružić, *Slučajni nalazi kasnoantičkog perioda sa lokaliteta Kljanc–Majdanpek, Glasnik SAD 10*, 1995, 141, 148–9, T. IV/1–3.

304| E. Gavrilović, *Nalazi stakla sa gradine na Jelici, ZNMČ XVIII*, 1988, T. I, 8.

305| A. Cermanović-Kuzmanović, *Late Roman glass from Doclea, Archaeologia Iugoslavica IX*, 1968, pl. I, 25–27.

306| M. Parović-Pešikan, *Sirmium II*, 1971, 38; V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 59–60; A. Cermanović-Kuzmanović, *Antičko staklo iz Sirmijuma, Grada X* (1980–1981), 1981, 17.

307| V. Dautova-Rušeavljan, *Zanatski proizvodi i numizmatički nalazi*, in: *Fruška gora u antičko doba. Prilozi za staru istoriju i arheologiju*, ed. N. Tasić, Novi Sad 1995, T. XVII, 6.

308| L. Barkóczi, *Pannonische Glasfunde*, Nr. 150–156.

309| J. D. Shepherd, in: *Nicopolis ad Istrum*. 348, nos. 548–550.

310| Lj. Plesničar-Gec, *The production of glass at Emona, Archaeologia Iugoslavica XX–XXI* (1980–1981), 136–142.

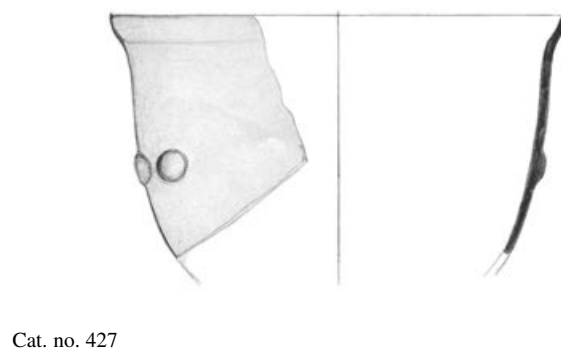
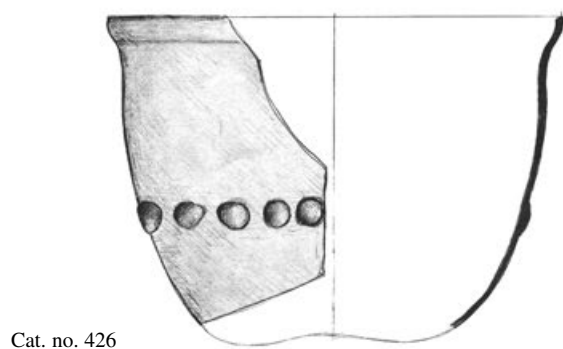
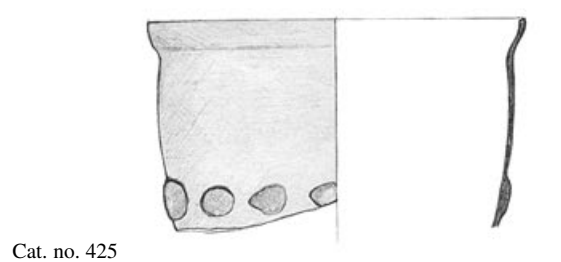
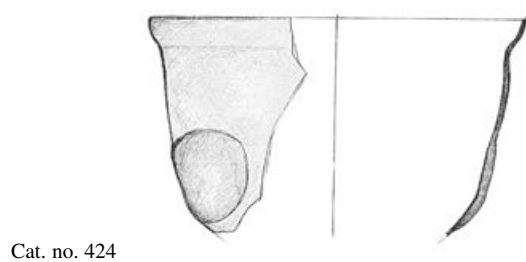
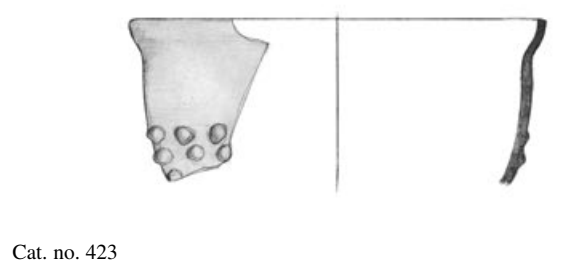
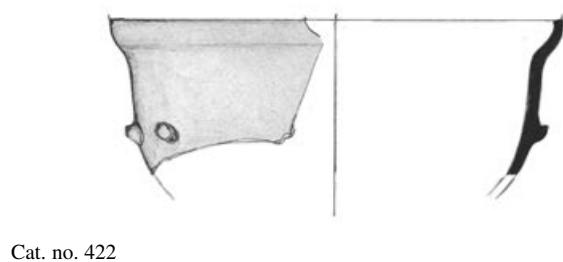
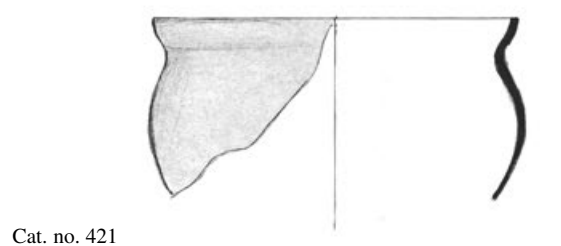
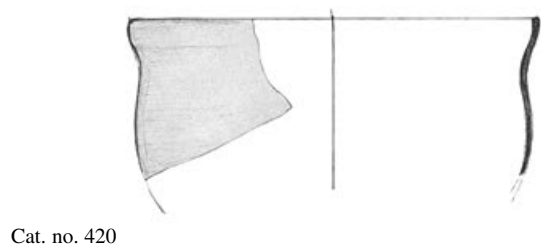
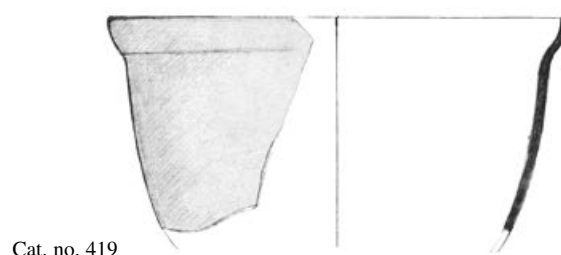
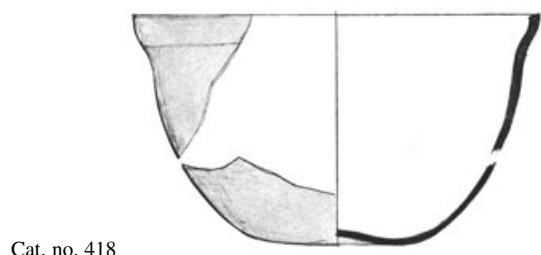


Fig. 73. Glass vessels (R 1:2)

Cat. no. 423

field inv. 857/69
sq. F3, ▽ 1.35 m
horizon 3
diameter of rim 11.0 cm
Funnel-like rim and calotte-shaped body of a tumbler made of green glass with dark blue drops on the outside.

Cat. no. 424

field inv. 664c/69
sq. E8 F9, ▽ 1.45 m
horizon 3
diameter of rim 10.0 cm
Beaker with funnel-like rim and calotte-shaped body with large dark blue drop-like ornament. Made of greenish glass.

Cat. no. 425

field inv. 664a/69
sq. E8 F9, ▽ 1.45 m
horizon 3
diameter of rim 10.0 cm
Funnel-like rim and calotte-shaped body of a beaker made of olive green glass with dark blue drops.

Cat. no. 426

field inv. 664b/69
sq. E8 F9, ▽ 1.45 m
horizon 3
diameter of rim 12.0 cm; height ca 9.0 cm
Beaker with funnel-like rim and calotte-shaped body made of green glass with dark blue drops.

Cat. no. 427

field inv. 594a2/69
sq. E8, ▽ 0.90–1.20 m
layer C
diameter of rim 12.0 cm
Beaker with funnel-like rim and calotte-shaped body made of greenish glass and decorated with dark blue drops.

Cat. no. 428

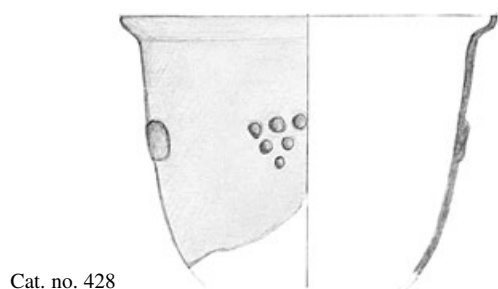
field inv. 265/68
sq. C8 C9, ▽ 1.10 m
horizon 3
diameter of rim 10.0 cm
Beaker with funnel-like rim and calotte-shaped body made of greenish glass. Bunches of dark blue drops on the outside.

Cat. no. 429

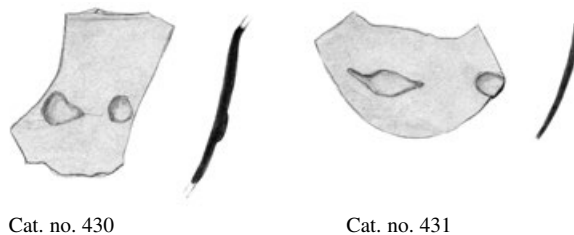
field inv. 171/70
sq. C6 D6, ▽ 1.20 m
horizon 3
diameter of rim 7.5 cm
Slightly funnel-shaped rim and calotte-shaped body of a beaker made of greenish glass with dark blue drops.

Cat. no. 430

field inv. 705/69
sq. F5, ▽ 1.00 m
horizon 3
Fragment of the funnel-like rim and calotte-shaped body of a beaker made of the greenish glass with dark blue drops.



Cat. no. 428



Cat. no. 430

Cat. no. 431



Cat. no. 429



Cat. no. 432

Fig. 74. Glass vessels (R 1:2)

Cat. no. 431

field inv. 665/69

sq. E8 F9, ▽ 1.45 m

horizon 3

Fragment of the body of calotte-shaped beaker made of greenish glass with dark blue drops.

HEMISPHERICAL BEAKER WITH CUT ORNAMENT

Fragment of the body of an oval vessel with cut ornament has been found at Saldum and we assume that it belongs to the group of hemispherical beakers with funnel-shaped rim.

The beakers with cut ornament are less frequently encountered in the glassware of the Late Roman period in comparison with the beakers with dark blue drops and the undecorated specimens. There are close parallels from *Singidunum*³¹¹ where have been found ten complete or fragmented specimens of this type made of whitish or light green glass and with various cut ornaments (circular, oval, leaf-like). All the published specimens come from the assemblages and layers dating from the end of 3rd and the beginning of the 4th century.

Cat. no. 432

field inv. 685/69

sq. F5, ▽ 0.65 m

horizon 3

Fragment of the body of a vessel made of whitish glass and with cut oval indentations on the outer surface.

IV. 6. B. 2. CONICAL BEAKERS

CONICAL BEAKERS WITH POINTED BASE

Main characteristics of this type are funnel-shaped or ring-like molded rim, conical body and rounded or pointed base (Isings form 106a, d; Ružić, type VII/12c). They are decorated with grooves, facets or blue drops. They are characteristic of the second half of the 4th and the beginning of the 5th century and are considered to be the products of the workshops in the eastern provinces.

The beakers of this type are rather frequent material in the Late Roman settlements, necropolises and fortifications³¹² and there are well-known specimens found at *Ćuprija–Horreum Margi*, *Karataš–Diana*, *Ravna–Timacum minus*, *Niš–Naissus* (necropolis in Jagodin Mala),³¹³ Late Roman settlement with villas

at *Mediana–Brzi Brod* near Niš where the beakers are dated by the coins of Constantine I and Constantius II, according to the field documentation³¹⁴ and in *Kuršumlija – Ad Fines*.³¹⁵ From Dalmatia is known the specimen from the necropolis of *Municipium S*³¹⁶ and in Pannonia there are finds from the imperial palace in *Sirmium*,³¹⁷ from the Roman layer at *Gomolava*³¹⁸ and from *Intercisa*.³¹⁹

Cat. no. 433

field inv. 369, 370/68

sq. F9, ▽ 1.18 m

horizon 3

diameter of rim 12.2 cm; height 16.4 cm

Conical beaker with slightly funnel-shaped rim and pointed base made of greenish glass. On the outer surface is a row of dark blue drops framed with two parallel grooves.

CONICAL BEAKER WITH HIGH RING-LIKE FOOT

This is the beaker with slightly everted rim, conical body and base resting on the high ring-like foot (Isings type 21). This type occurs in two variants, as undecorated and with body decorated with the honeycomb motif. They were produced since the time of Flavians until the beginning of the 2nd century³²⁰ although there are scholars who date such beakers until the beginning of the 3rd century.³²¹ The honeycomb motif is considered to be the product of the eastern workshops.³²²

311| S. Nikolić-Đorđević, *Godišnjak grada Beograda XXXVII*, 1990, 45, T. II/18–19, T. III/20–24.

312| M. A. Ružić, *Rimsko staklo u Srbiji*, cat. 1015–1047.

313| National Museum Niš, inventory book, VIZ/224.

314| S. Drča, *Medijana – objekat B*, *ZNM Niš* 9, 2000, T. I, 7, 9.

315| J. Kondić, *Kasnonatičko staklo iz nekropole kod crkve sv. Nikole (Kuršumlija)*, *ZNMB XIV–1*, 1992, fig. 5, field inv. 192.

316| A. Cermanović-Kuzmanović, *Oblici i hronologija rimskog staklenog materijala iz nekropole Municipia S...*, *Živa antika XXI–1*, 1971, 290, T. II, 8; Eadem, *Komini – Municipium S...*: nekropole, Beograd 1998, necropolis II, without grave number and inv. no. of the object, photograph.

317| V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 60, 46.

318| V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 60, 47.

319| L. Barkóczy, *Pannonische Glasfunde*, 101, Nr. 158.

320| I. Lazar, *Rimsko staklo Slovenije*, Ljubljana 2003, 94.

321| M. A. Ružić, *Rimsko staklo u Srbiji*, 42.

322| A. Oliver, *Early Roman faceted glass*, *Journal of Glass Studies* 26, 1984, 38.

Two beakers of this type and of different technological characteristics were found at Saldum. The beakers of this type were encountered at few sites along the Middle Danube – at Čezava–*Novae*, Karataš–*Diana* and Kostol–*Pontes*, where they are mostly dated in the second half of the 2nd century.³²³ Fragment of the beaker body from *Singidunum* is dated in the 1st–2nd century.³²⁴ Specimen from *Sirmium* found in the unknown circumstances is generally dated in the 2nd century.³²⁵

The beaker from a grave in the necropolis of Ptuj – *Poetovio* is dated in the Flavian period – until the beginning of the 2nd century.³²⁶ All the mentioned specimens are decorated with the honeycomb motif.

Cat. no. 434

study material 24/69
sq. F8, ∇ 2.23 m
horizon 4 and layer E
diameter of rim 6.5 cm
Conical body and knee-like stem of a beaker with thin walls made of bluish glass.

Cat. no. 435

field inv. 534/68
sq. C8 D8
layer E
Fragment of a beaker body decorated with cut honeycomb ornament. The glass is of white color.

DEEP CONICAL BEAKERS WITH FUNNEL-LIKE RIM

This type is characterized by the funnel-like rim, deep conical body with almost vertical walls and base resting on the ring-like foot. They have been produced in the period from the middle of the 4th to the middle of the 5th century using the blowing technique.

Two specimens of this type were found at Saldum, one dates from the Valentinian's layer while the other found in the layer of debris with bronze coins of Justin II dates from middle-second half of the 6th century.

The published material from the territory of Serbia includes the beakers from *Teutoburgium*,³²⁷ *Sirmium*, *Singidunum* and Late Roman graves at Kolovrat.³²⁸ All specimens are dated in the 4th century while the beaker from Karataš–*Diana* is generally dated in the second half of the 4th century.³²⁹

Cat. no. 436

field inv. 686/69
sq. F5, ∇ 0.65 m
horizon 3
diameter of rim 6.0 cm
Beaker with funnel-shaped rim and hemispherical body. Undecorated and made of greenish glass.

Cat. no. 437

field inv. 641/69
sq. G4, ∇ 0.70 m
layer B
diameter of rim 7.0 cm
Wide funnel-shaped rim and conical body of a beaker made of greenish glass.

DEEP CONICAL BEAKER ON HOLLOW RING-LIKE FOOT

Main characteristics of this type of beakers is funnel-shaped, everted slanting or molded rim, conical body and base resting on the hollow ring-like foot. In the Early Imperial times they had been cast in a mold and had creased body. They appear from the 1st to the 4th century but specimens with funnel-shaped rim date from the 3rd–4th century.

In the earliest layer at Saldum have been found two fragments of the body on hollow ring-like foot for which we assume to be the parts of this type and to have either ring-like molded or everted slanting rim.

The known parallels are usually related to the Late Roman sites, including the finds from *Sirmium*, *Singidunum*, Karataš–*Diana* and necropolis at Kolovrat.³³⁰ In *Margum* were found ten beakers of this type but without stratigraphic data, so they are on the basis of analogies generally dated in the 3rd–4th century, but assuming

323| M. A. Ružić, *Rimsko staklo u Srbiji*, 42–43, cat. 616–626.

324| S. Nikolić-Đorđević, *Godišnjak grada Beograda XXXVII*, 1990, 46, T. III, 27.

325| V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 16, T. III, 1.

326| I. Lazar, *Rimsko staklo Slovenije*, 94.

327| V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 60, cat. 43, T. III, 5.

328| M. A. Ružić, *Rimsko staklo u Srbiji*, 50, cat. 959–962, 964–967.

329| *Ibid.*, cat. 963.

330| M. A. Ružić, *Rimsko staklo u Srbiji*, type VII/12a, cat. 959–967, T. XXXVII/1–8.

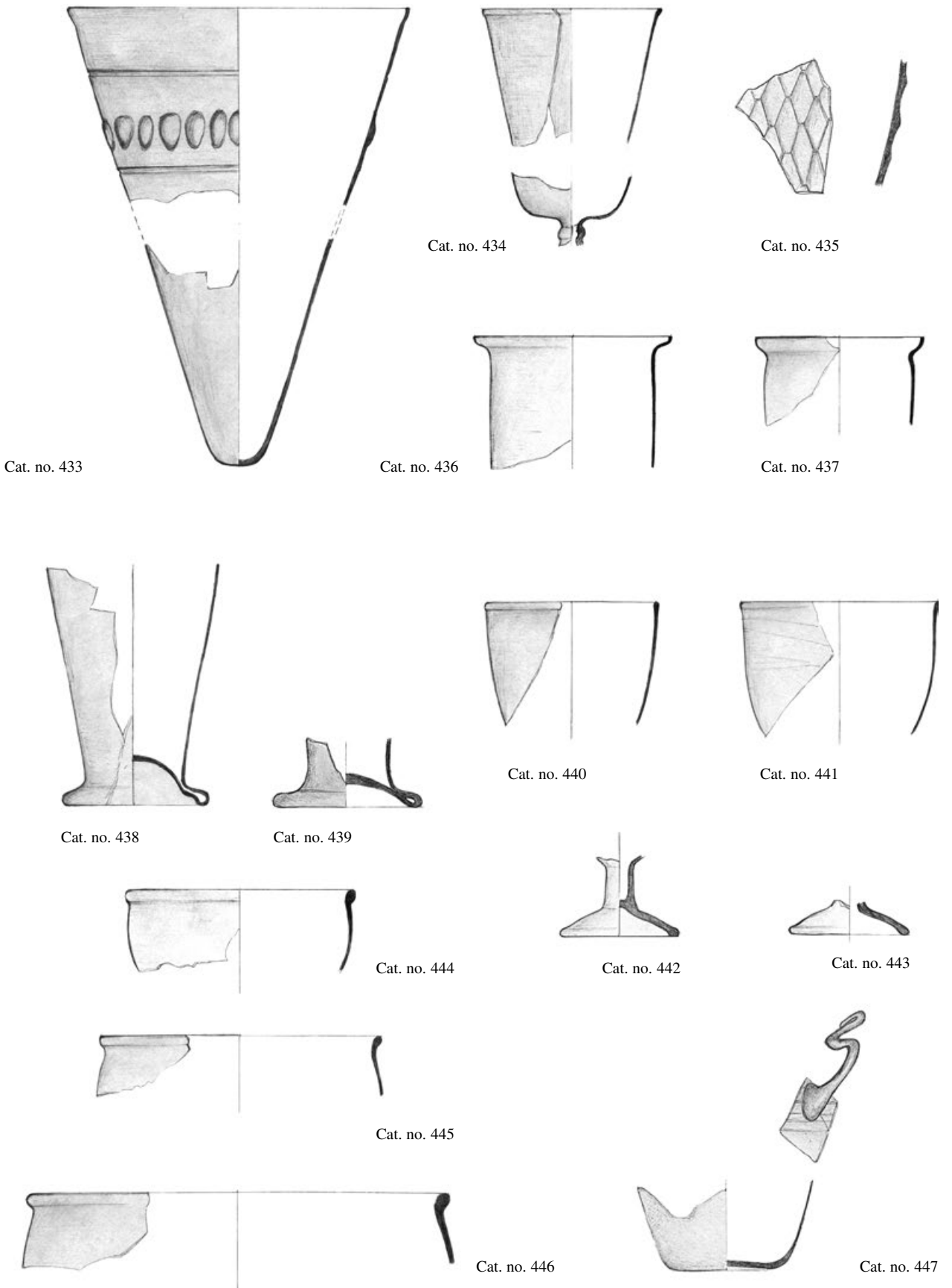


Fig. 75. Glass vessels (R 1:2)

that seven beakers with everted slanting rim date from somewhat earlier period.³³¹

The beaker **Cat. no. 438** is close to the campaniform beakers with everted rim and dated from the middle – second half of the 1st century or more precisely in the Flavian period.³³²

Cat. no. 438

field inv. 539/68

sq. F8, ▽ 2.70 m

layer E

diameter of base 5.2 cm

Cylindrical body and calotte-shaped concave base on the ring-like hollow foot made of greenish glass.

Cat. no. 439

field inv. 294a/70

sq. G9 G10

horizon 5

diameter of foot 5.5 cm

The concave base on ring-like hollow foot and portion of the body of a vessel made of bluish glass.

IV. 6. B. 3. BEAKERS WITHIN HIGH STEM AND CONICAL FOOT

Their characteristics are slightly everted ring-like rim, cylindrical or ovoid body, high or low stem and conical foot (Isings form 111; Ružić, type VII/13b). They are dated from the 4th to the 6th century and they are particularly frequent at the 5th–6th century sites.

Fragment of rim and body and two fragments each of the conical foot and stem were found respectively in the 4th and 6th century layer at Saldum and we assume that these are the fragments of this type of beaker.

Specimens of this beaker type have been found at few sites along the Iron Gates limes: at Dubravica–Margum (made of olive green and yellow-green glass),³³³ at Čezava–Novae, Kostol–Pontes, Mora Vagei. These beakers were registered in the hinterland at Gamzigrad–Romuliana, at Gradina on the Jelica Mt,³³⁴ at Caričin Grad³³⁵ and at *Ulpiana*.³³⁶

Cat. no. 440

field inv. 642/69

sq. G4, ▽ 0.70 m

layer B

diameter of rim 7.0 cm

Rim and ovoid body of a beaker made of greenish glass. Outer surface is polished.

Cat. no. 441

field inv. 594a6/69

sq. E8, ▽ 0.90–1.20 m

layer C

diameter of rim 6.2 cm

Vertical rim and ovoid body of a vessel made of greenish glass.

Cat. no. 442

field inv. 120/68

layer B

diameter of base 4.3 cm

Conical foot and hollow cylindrical stem of a beaker made of greenish glass.

Cat. no. 443

field inv. 567/69

sq. G8

layer B, above horizon 2

diameter of base 4.4 cm

Conical foot of a beaker made of greenish glass.

IV. 6. B. 4. SHORT CYLINDRICAL BEAKERS WITH THE RING-LIKE FOOT

Short cylindrical beaker with variously shaped rim (everted, ring-like molded or inverted), slightly rounded or cylindrical body with short ring-like foot and produced using the blowing technique are characteristic material of the 2nd–3rd century, that was frequently registered at many sites. Fragments of at least three

331| G. Karović, Rimsko staklo Marguma, *Viminacium* 10 (1995–1996), 1996, 83–84 (type IV/2).

332| L. Barkóczy, *Pannonische Glasfunde*, 71, Kat. 65.

333| G. Karović, *Viminacium* 10 (1995–1996), 1996, 85, type IV/5, T. V, 3–4.

334| M. Milinković, Die byzantinische Höhenanlage auf der Jelica in Serbien – ein Beispiel aus dem nördlichen Illyricum des 6. Jh., *Starinar* LI (2001), 2002, Abb. 36.

335| In the course of investigation of single-aisled basilica „J“ extra muros, in the portico, cf. N. Duval, M. Jeremić, L'eglise J au sud de la ville, dite „basilique à une nef“, in: *Caričin Grad* I, Collection de l'École française de Rome 75, Belgrade, Rome 1984, 142, fig. 145, 4; 148, a; 150, a.

336| M. A. Ružić, *Rimsko staklo u Srbiji*, 53.

beakers of this type and of various dimensions were found at Saldum.

The beakers of this type were found in the course of investigation of the civilian settlement at *Singidunum*,³³⁷ military camps at Ravna–*Timacum minus*³³⁸, Čezava–*Novae* and necropoles at Mala Kopašnica, Zaskok and Kolovrat.³³⁹ V. Šaranović-Svetek classified these beakers as type of campaniform drinking glasses with ring-like molded rim and ring-like foot. This author also mentions the find of this vessel type in the sarcophagus from Kuzmin.³⁴⁰

Cat. no. 444

field inv. 493/68

sq. C9 D9, ∇ 2.00 m

horizon 4

diameter of rim 8.0 cm

Ring-like molded rim and calotte-shaped body of a beaker made of whitish glass.

Cat. no. 445

field inv. 216/68

tower C, ∇ 2.80–3.05 m

layer D

diameter of rim 10.0 cm

Fragment of slightly molded and thickened rim and hemispherical body of a beaker made of whitish glass.

Cat. no. 446

field inv. 755/69

sq. E8, ∇ 1.75 m

layer D

diameter of rim 15.0 cm

Slightly thickened and everted rim and hemispherical body of rather large beaker made of whitish glass.

IV. 6. B. 5. BEAKER WITH TWO HANDLES

Short beaker with molded rim, prominent neck, ovoid body, flat base and two opposing handles.

The beakers of similar typological characteristics were encountered in the layers dating from the second half of the 1st century (Flavian period) at Celje–*Celeia* but without known analogies.³⁴¹ This type of vessels has not been registered in the material from Upper Moesia and Pannonia.

Cat. no. 447

field inv. 191/70

sq. G9, ∇ 1.90 m

layer D

diameter of base 4.0 cm

Fragment of conical body with horizontal molded bands, flat base and looped handle of a vessel made of whitish glass.

IV. 6. C. BOTTLES

Fragmentary state of the glass vessel **Cat. no. 448** makes impossible precise determination of the type. It was most probably spherical bottle with short neck and funnel-shaped mouth. This form, which is known from the 2nd century, is most frequent in the 4th century layers in Pannonia and usually decorated with glass paste band on the neck.³⁴²

The spherical bottles with funnel-shaped rim were in use during the long period of time, from the 1st to the 4th–5th century; hence the Saldum specimen is the latest considering the finding circumstances. This bottle type is confirmed in Upper Moesia in the grave assemblage at the *Viminacium* necropolis „Više grobalja“.³⁴³ In Pannonia the finds of these bottles in the period between the third third of the 3rd century and the end of the 4th century are concentrated in the areas of larger towns – *Intercisa*, *Brigetio* and *Aquincum* and there are also finds from *Sirmium*³⁴⁴ and *Ulpiana*.³⁴⁵ L. Barkóczy emphasizes that these bottles do not have direct connections with the bottles from the Cologne workshops but that they are in connection with the trade contacts with regions to the south and southeast of Pannonia or they were imported from the Pontus region.³⁴⁶

337| V. Ivanišević, S. Nikolić-Đorđević, *Singidunum* 1, 1997, fig. 52, 15–17; S. Nikolić-Đorđević, *Godišnjak grada Beograda XXXVII*, 1990, T. II, 9, 12.

338| M. A. Ružić, *Rimsko staklo u Srbiji*.

339| M. A. Ružić, *Rimsko staklo u Srbiji*, 43, cat. 658–662, 663, 673.

340| V. Šaranović-Svetek, *Antičko staklo Donje Panonije*, 14, T. II, 9.

341| I. Lazar, *Rimsko staklo Slovenije*, 108, type 3.7.2, fig. 33.

342| L. Barkóczy, *Pannonische Glasfunde*, 141.

343| Lj. Zotović, Č. Jordović, *Viminacium*. Nekropola „Više grobalja“, Beograd 1990, G1–155.

344| A. Cermanović-Kuzmanović, *Grada X* (1980–1981), 1981, 16.

345| M. A. Ružić, *Rimsko staklo u Srbiji*, cat. 37–50.

346| L. Barkóczy, *Pannonische Glasfunde*, loc. cit.

Cat. no. 448

field inv. 626/69
 tower D, sq. H1, ∇ 0.80 m
 layer B, horizon 2
 level of the floor and first step next to the south rampart
 diameter of rim 4.6 cm
 Funnel-shaped and slightly ring-like molded rim, neck and shoulder of a bottle made of greenish glass.

Pointed concave base with the hollow ring-like foot of a vessel made of greenish glass.

Cat. no. 451

field inv. 191a/70
 sq. G9, ∇ 1.90 m
 layer D?
 diameter of base 4.0 cm
 Calotte-shaped body and slightly concave base of a vessel made of greenish glass.

IV. 6. D. FRAGMENTS OF GLASS VESSELS

Many fragments of the vessels mostly parts of the body, base and foot have been found at Saldum but it was impossible to determine them typologically. We are just going to catalogue them according to the layers and starting from the earliest specimens.

Cat. no. 449

field inv. 754/69
 sq. E8, ∇ 1.75 m
 layer E
 diameter of base 4.0 cm
 Ring-like foot and flat base of a vessel made of whitish glass.

Cat. no. 452

field inv. 87/70
 sq. E6 E7, ∇ to 1.80 m
 layer D
 diameter of base 4.3 cm
 Fragment of the prominent base of a vessel made of whitish glass.

Cat. no. 453

sq. C7 D7, ∇ 1.40 m
 layer D
 diameter of base 3.2 cm
 Fragment of the flat base with ring-like foot of a vessel made of whitish glass.

Cat. no. 450

field inv. 253/70
 sq. F10 G10 ∇ 2.00 m
 layer E
 diameter of base 5.5 cm

Cat. no. 454

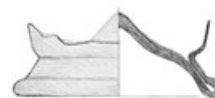
sq. C6 D6, ∇ 2.00 m /25.09.70.
 layer D
 diameter of base 3.8 cm
 Fragment of the concave base and hollow ring-like foot of a vessel made of light green glass.



Cat. no. 448



Cat. no. 449



Cat. no. 450



Cat. no. 451



Cat. no. 452



Cat. no. 453

Fig. 76. Glass vessels (R 1:2)

Cat. no. 456

sq. G9 G10, ▽ 2.00 m, 25.9.70.

layer D

diameter of base 8.0 cm

Fragment of the hollow ring-like foot of a vessel made of bluish glass.

Cat. no. 457

sq. G9 G10, ▽ 2.00 m

layer D

Fragment of the concave base of a vessel made of bluish glass.

Cat. no. 458

sq. D9, ▽ 1.90 m, 24.7.68.

horizon 4

diameter of base 5.0 cm

Fragment of the body, flat base and solid ring-like foot of a vessel made of whitish glass.

Cat. no. 459

field inv. 594a4/69

sq. E8, ▽ 0.90–1.20 m

layer C

Fragment of the calotte-shaped body and funnel-like foot of a vessel made of greenish glass.

Cat. no. 460

sq. D6/70, ▽ 1.20 m

layer C

Fragment of the flat base of a vessel with thick walls made of yellowish-green glass.

Fifty glass vessels dating from all periods of life at Saldum have been inventoried and typologically identified. They have been classified into three basic groups: bowls, beakers and bottles.

In the archaeological literature still does not exist clearly defined terminology for the glass material so the greatest problem is the distinguishing between deep bowl and drinking glass and tumbler and beaker. We have opted for the compromise, i.e. we identified as bowls only the vessels with shallow receptacle while specimens with deeper receptacle that some authors classify as drinking glasses/tumblers we attributed as beakers, although, they could have been used as bowls.

From the statistical point of view there are six bowls classified into five types and they were not encountered only in the 2nd–3rd century layer. The beakers are the most numerous group of glass vessel with thirty-one specimen classified into ten types. The single bottle comes from the 6th century layer while it was impossible to distinguish typologically twelve fragments of bodies and bases of the glass vessels.

The glass bowls occur as shallow, deep and hemispherical specimens. From the second half of the 1st – beginning of the 2nd century originate just two specimens made of light green and bluish glass with shallow and deep receptacle, which as a rule rests on the ring-like foot (types A.1 and A.2) and most probably had been imported from the Italic workshops.

There are only four specimens of the hemispherical bowls (type A.3 with variants) in the Saldum material

types/layer	layer E, horizon 5	layer D, horizon 4	layer C, horizon 3	layer B, horizon 2	Total
bowls	A.1. – 1 sp.		A.3.2 – 1 sp.	A.3.1. – 2 sp.	
	A.2. – 1 sp.			A.3.3. – 1 sp.	6
beakers	B.2.2. – 2 sp.	B.4. – 3 sp.	B.1.1. – 4 sp.	B.1.1. – 1 sp.	
	B.2.4. – 2 sp.	B.5. – 1 sp.	B.1.2. – 10 sp.		
			B.1.3. – 1 sp.		
			B.2.1. – 1 sp.		
			B.2.3. – 1 sp.	B.2.3. – 1 sp.	
		B.3. – 1 sp.	B.3. – 3 sp.		31
bottles				C. – 1 sp.	1
fragments	2	8	2	/	12
TOTAL	8	12	21	9	Σ = 50

Table 8. Glass vessel types from Saldum

and one of them dates from the second half of the 4th century (specimen with cut ornament) and the remaining three date from the 6th century. They were most probably the products of the local workshops, which supplied the markets within the restricted territory.

The beakers are the most numerous group and they could be of hemispherical, conical and cylindrical shape with vertical, slightly inverted, ring-like or funnel-shaped rim and their base could be flat, pointed, rounded or could be resting on a conical or ring-like foot. From the earliest period (second half of the 1st – beginning of the 2nd century) date conical beakers with high ring-like foot and decorated with the honeycomb motif (type B.2.2) and deep beaker on hollow ring-like foot (type B.2.4) Short cylindrical beakers (type B.3) and fragmented beaker, which most probably had two opposing loop handles (type B.5) are characteristic of the 2nd–3rd century at Saldum.

From the time of Valens and Valentinian, when the life at Saldum was very intensive date eighteen beakers of hemispherical and conical shape with straight or funnel-shaped rim and mostly made of glass in the green nuances. Some specimens were decorated with dark blue drops arranged in rows or bunches.

The repertoire of beakers is somewhat less diversified in the 6th century. At that time were in use hemispherical and conical beakers with funnel-shaped rim and also characteristic is the form of beakers-drinking glasses on the conical stem and ring-like foot. From this period also dates one rim and neck of the bottle, which according to the analogous material could have had the spherical body. All the Late Roman glass vessels were produced in Moesia Prima or in the neighboring provinces judging by many finds of glass kilns and glass slag and it corresponds with the general picture of supplying the markets with specific goods in the Late Roman times.

IV.7. METAL VESSELS

Metal vessels were also used by soldiers and civilians to satisfy their everyday needs. The most frequent finds are buckets (*situla*) and casseroles (*patera*, *trulla*). The buckets were used for cooking food, transport of liquids and grains, fetching water and the like while casseroles were used for cooking and baking, drinking and distribution of the rations.

Relatively small number of metal vessels mostly in a very poor state of preservation was found at Saldum so the reconstruction of shape of certain specimens was impossible. These were fragments of rims, bodies, bases or handles of the vessels made of bronze or iron.

An interesting find among metal vessels is the casserole with handle perforated in the form of a clover leaf (*Kasserollen mit kleeblattförmigem Griffloch*), Eggers' type 146³⁴⁷ that is characterized by the flat base without foot, conical body and handle with rounded end a stamp of master in addition to the leaf-like perforation as it is also confirmed on our specimen. After studying of some casseroles of this type with stamp we were not able to identify its origin. Such casseroles are rather frequent in the material of the Eggers' period B2, between AD 72–142 as Italic or Gaulish import.³⁴⁸

The closest analogies for our specimen **Cat. no. 461** are casseroles from Ravna–*Camps*a and Boljetin–*Smorna*.³⁴⁹ The Boljetin specimen also has trifoliate perforation and it is dated in the 1st–2nd century. Also analogous to our specimen is the casserole from a grave from Visoka pri Morave near Bratislava (Slovakia) dating from the first half of the 2nd century that has on the handle the stamp of master Polibius, one of the most highly esteemed masters whose products were widely recognized and distributed.³⁵⁰ Two specimens are known from Britain, one from the Housesteads fort from the time of Hadrian and the other was found in the hoard from Glyn Dyfrdwy in Wales dating from the end of 1st – beginning of the 2nd century.³⁵¹

The casserole **Cat. no. 462** found in the Valentinian's layer also dates from this period. The analogies for this vessel type are relatively abundant and we mention here the specimen from *Sarmizegetusa* dated by the coins in the period between AD 89 and 103/111.³⁵²

347| Cf.: Z. Karasová, *Die römischen Bronzegefäße in Böhmen*, *Fontes Archaeologici Pragenses* 22, Pragae 1998, 36–37.

348| H. J. Eggers, *Römische Bronzegefäße in Britannien*, *Jahrbuch des RGZM* 13, 1966, 86 with table.

349| M. B. Vujović, *Naoružanje i oprema rimskog vojnika u Gornjoj Meziji i jugoistočnom delu Panonije*, Beograd 1998, master's thesis, manuscript, T. LXV/2–3.

350| L'. Kraskovská, *Roman Bronze Vessels from Slovakia*, *BAR International Series (Supplementary)* 44, Oxford 1978, 11, pl. VI, 1–3.

351| H. J. Eggers, *Jahrbuch des RGZM* 13, 1966, Abb. 11, 20.

352| R. Étienne, I. Piso, A. Diaconescu, *Les fouilles du forum vetus de Sarmizegetusa*. Rapport général, *Acta Musei Napocensis* 39–40/I (2002–2003), 2004, 75.

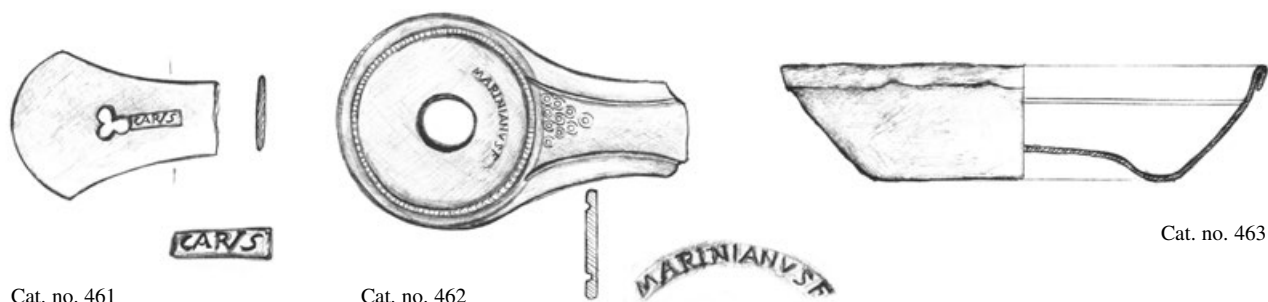


Fig. 77. Metal vessels (R 1:2)

Cat. no. 461

field inv. 800/69

sq. C9, ▽ 0.20 m

horizon 5

bronze

length 5.4 cm

Fragment of the handle of bronze casserole with trifoliate perforation and stamp CARVS having letters RV ligated.

Cat. no. 462

field inv. 385/68

sq. C9 D9, ▽ 1.50 m

horizon 3

diameter of circular part of handle 5.7 cm; thickness 0.3 cm

Bronze casserole handle with circular perforation. Circular ring-like reinforcement along the rim edge with notched ornament. Stamp of the master [M? V?] ARINIANVS F(ecit). On the handle are also impressed the circles creating a bunch of grapes.

Cat. no. 463

field inv. 197/68

sq. E8, ▽ 0.40 m

layer B

diameter of rim 12.5 cm; height 3.0 cm; diameter of base 7.5 cm

Rather shallow dish of sheet bronze with rim bent outwards, conical body and concave base.

collections of which the collection from Sisak–*Siscia* offered most of the data³⁵³ as well as MA thesis of M. B. Vujović about weapons and equipment of the Roman soldiers in the Yugoslav part of Upper Moesia and Lower Pannonia.³⁵⁴ The important addition to these works is the published material from the museum collections³⁵⁵ and from excavations (Rtkovo–Glamija, Milutinovac, Ušće Slatinske reke etc.). We also used as comparative material the works of P. Milošević, O. Brukner and others concerning the finds from the Yugoslav part of Lower Pannonia.³⁵⁶

Finds of the defensive military equipment and weapons from Saldum come from all horizons and indicate the presence of different military units in this area from the second half of the 1st century, most probably from the time of Flavians, until the end of the 6th century. Interesting finds include the fragment of chain mail armor, shield boss, sword with scabbard, spearheads and arrowheads.

CHAIN ARMOR (LORICA HAMMATA)

Part of the chain armor made of iron links was found in the 6th century layer in the southeastern tower of the fortification at Saldum.

The chain armor as an element of equipment of the Roman soldiers was made of entwined iron or bronze links. According to the analysis of the relief represen-

IV. 8. MILITARY EQUIPMENT AND WEAPONRY

The basis for typological determination of weaponry and military equipment found at Saldum was provided by the article of V. Hoffiler about the weapons of Roman soldiers in Lower Pannonia with material from museum

353| V. Hoffiler, *Oprema rimskog vojnika u prvo doba carstva II*, *VHAD* XII, 1912.

354| M. B. Vujović, *Naoružanje i oprema rimskog vojnika u Gornjoj Mezi i jugoistočnom delu Panonije*, Beograd 1998, master's thesis, manuscript; hereafter M. B. Vujović, *Naoružanje i oprema*.

355| D. Piletić, *Rimsko oružje sa teritorije Gornje Mezijske, Vesnik Vojnog muzeja* 17, 1971, 7–24, T. I–XXXII.

356| O. Brukner, V. Dautova–Ruševljan, P. Milošević, *Počeci romanizacije u jugoistočnom delu provincije Panonije*, Novi Sad 1987.

tations and written sources it is considered that this type of armor is of the Celtic origin and accepted by the Romans, but they had been mostly produced in the Gaulish provinces. The main characteristic of the chain armors are circular or elliptic links intertwined in such a manner that four metal rings are joined with one link. Thickness of the links is ca 0.1–0.2 cm and diameter is 0.6–1.2 cm. The complete armor of this type was weighing over 10 kg as V. Hoffiler calculated on the basis of the find of such armor type from Sotin.³⁵⁷

The finds of chain armors are relatively rare in the camps and military graves in the Roman provinces. The remains of these armors were found at Savska Rača (1st century),³⁵⁸ *Sirmium*,³⁵⁹ Sotin, Stari Jankovci and Sisak–*Siscia*.³⁶⁰ These are mostly finds from the end of the 19th and the beginning of the 20th century so the finding circumstances are mostly unknown but for the armor from Sotin is assumed to have originated from the soldier's burial.³⁶¹

Cat. no. 464

field inv. 298/70

tower C, ∇ 0.50 m

layer B

Fragment of the iron chain armor with circular links.

Literature: *Arheološko blago Djerdapa*, 81, cat. 237.

SHIELD BOSS

The boss is the segment of a shield intended to sustain the blows inflicted by sword, spear or projectile. One specimen with conical protuberance in the middle was found at Saldum. Main characteristics of this type are circular base, three to four metal rivets for fixing it to the wooden board and prominent shoulder.

The boss of this type was found in the course of site surveying of the hinterlands of Zapadna Morava valley at the site Gradište in the village Puhovac, where have been registered the remains of the 6th century fortification.³⁶²

Cat. no. 465

field inv. 619/69

sq. G8, ∇ 0.80 m

horizon 2

Shield boss with circular base, cylindrical neck and conical central part with protuberance.

Unpublished.

SWORD (GLADIUS, SPATHA)

Fragment of an iron sword was found in the course of investigation of the earliest Roman layer within north-eastern tower (tower B) at Saldum, but this sword fragment was not found after the revision of the material. Considering that the sword was found in the earliest layer at Saldum and on the basis of the field drawing we think that it was the sword of the Pompeii type. Besides the sword the metal fragments of a scabbard were found about 20 meters to the south of tower B, in squares F8 G9, on the floor level of the earliest horizon (horizon 5). We could assume with greatest caution that this was the scabbard of the above mentioned sword.

The sword as an offensive weapon of the Roman soldier is known in two variants, as short sword (*gladius*), used in the 1st–2nd century and abandoned by the end of 2nd and in the 3rd century for tactical reasons, when it was substituted with the long sword (*spatha*), more suitable for the cavalry use. The long swords remained characteristic weapon of the Late Roman soldiers.

The swords of Pompeii type, named after the finding place of couple of specimens, but having no implications on their origin and place of manufacture, have been encountered at about twenty sites throughout the Empire. E. Künzl mapped in his comprehensive article the finds from eighteen sites³⁶³ and to them should be added finds from Upper Moesia and Lower Pannonia.³⁶⁴ In the western part of the Empire the finds are concentrated in the Lower Rhine valley, Lower Germania and Raetia, at *Novaesium*, Mainz–*Mogontiacum*, Rottweil–*Arae Flaviae*, *Vindonissa*, *Carnuntum* to mention just a few sites. From Upper Moesia are known swords dated in

357| V. Hoffiler, *VHAD* XII, 1912, 43.

358| M. B. Vujović, *Naoružaje i oprema*, 32.

359| O. Brukner, V. Dautova-Ruševljan, P. Milošević, *Počeci romanizacije*, 16.

360| V. Hoffiler, *VHAD* XII, 1912, 41–43.

361| V. Hoffiler, *VHAD* XII, 1912, *loc. cit.*

362| D. Rašković, N. Berić, Rezultati rekognosciranja antičkih i srednjovekovnih nalazišta trsteničke opštine i susjednih oblasti, *Glasnik SAD*18, 2002, 151, fig. 7, 2.

363| E. Künzl, Gladiusdekorationen der frühen Kaiserzeit. Dynastische Legitimation, Victoria und Aurea Aetas, *Jahrbuch des RGZM* 43–2 (1996), 1998, Abb. 18.

364| V. Hoffiler, *VHAD* XII, 1912, 111, fig. 42; M. B. Vujović, A Contribution to the Study of Roman Swords on the territory of Serbia, in: *Vestigatio vetustatis*, Beograd 2001, 119–133.

the 2nd–3rd century from the territory of *Viminacium* (Požarevac, site Bolnica),³⁶⁵ from Niš–*Naissus* and its surrounding (*spatha* from Donja Toponica),³⁶⁶ specimen from the Roman Collection of the National Museum in Belgrade³⁶⁷ and from Lower Pannonia, from *Sirmium*, Sremska Rača, Nikinci³⁶⁸ and Sisak–*Siscia*.³⁶⁹

Cat. no. 466

field inv. 314/68

tower B

layer E

length 18.5 cm, width 5.0 cm

iron, forging

Fragmented sword without visible longitudinal rib or groove. Tang of rectangular section transforms at right angle into the blade.

Unpublished

PLATING OF THE OPENING
AND TIP OF SWORD SCABBARD

The bronze fragments of the plating of the opening and tip of the scabbard of the sword of Pompeii type were found in the earliest layer (layer E, horizon 5). As they were relatively close to each other we think, with certain reservation, that these were the fragments of the single scabbard.

The swords were carried in the sheath made of thin plywood covered with leather. The edges of the sheath were reinforced with metal plating. The swords of Pompeii type had characteristic scabbard ends shaped as letter V with a button-like protuberance on the tip while on the arms they had cast palmette motif.³⁷⁰ The swords with V endings are characteristic of the end of 1st and the 2nd century as it is confirmed in the scenes on the Trajan's column while the scabbards with rounded ends were in use in the time of Marcus Aurelius.³⁷¹ The metal parts of the scabbards of the Pompeii type swords were usually decorated with mythological scenes and prevailing were the representations of Mars and Victoria.³⁷²

The closest analogy for the plating of the opening of the scabbard from Saldum was found in the nearby Čezava–*Castrum Novae* in the layer dating from the second half of the 1st century.³⁷³ This dating corresponds to the Saldum finds as well as the similar specimens from Pompeii and Ptuj–*Poetovio*.³⁷⁴ The bottom part of the scabbard plating has the closest analogy with the specimen from Ljubičevac–Ostrvo. Similar specimens

were encountered in *Siscia*, *Virunum*,³⁷⁵ *Vindonissa*, *Novaesium*³⁷⁶ and Mainz.³⁷⁷

Cat. no. 467

field inv. 768/69

sq. F8, ▽ 2.23 m

layer E

bronze, casting, bending, silver-plating

length 7.0 cm

Plating of the scabbard opening made of sheet bronze with traces of silver-plating decorated with two molded ribs at the ends. Two circular perforations for the rivets are 2.6 cm apart. The ends are of triangular shape. Piece of a sheet bronze bent to the funnel shape with a hook at one end is also part of the plating.

Unpublished

Cat. no. 468

field inv. 272/70

sq. G9, ▽ 0.60 m

layer E

length 12.2 cm

bronze, casting, hammering, silver-plating

Fragment of bottom part of the bronze plating of a sword scabbard shaped as letter V. The plating terminates with one spherical button, one arm has the motif of stylized palmette while the other is damaged. The rivet for attaching plating to the sheath is also preserved.

Literature: M. B. Vujović, *Naoružanje i oprema*, 66, kat. 3, T. XVI; Idem, *Gladii* from Dubravica, in: *Vestigatio vetustatis*, 128, pl. 18.

365| D. Piletić, *Vesnik Vojnog muzeja* 17, 1971, 8, T. IV, 14.

366| D. Piletić, *Vesnik Vojnog muzeja* 17, 1971, T. XII, 54, T. XIX, 87.

367| V. Savinova, *Oružje iz Rimske zbirke Narodnog muzeja u Beogradu*, *ZNMB XVI*–1, 1996, 257, T. II, 1.

368| O. Brukner, V. Dautova-Ruševljan, P. Milošević, *Počeci romanizacije*, T. II/1–6.

369| V. Hoffiler, *VHAD XII*, 1912, 104, fig. 38.

370| G. Ulbert, *Gladii aus Pompei. Verarbeiten zu einem Corpus römischer Gladii*, *Germania* 47/1–2 (1969), 1970, 111–115.

371| E. Künzl, *Jahrbuch des RGZM* 43–2 (1996), 1998, 434.

372| E. Künzl, *Jahrbuch des RGZM* 43–2 (1996), 1998, *loc. cit.*

373| M. B. Vujović, *Naoružanje i oprema*, 127–128, pl. 16.

374| G. Ulbert, *Germania* 47/1–2 (1969), 1970, Taf. 19/1a, 2a; Taf. 28/ a, b.

375| V. Hoffiler, *VHAD XII*, 1912, *loc. cit.*

376| G. Ulbert, *Germania* 47/1–2 (1969), 1970, Taf. 26–27.

377| Römisch-germanisches Zentralmuseum Mainz, Inv. O 32784.

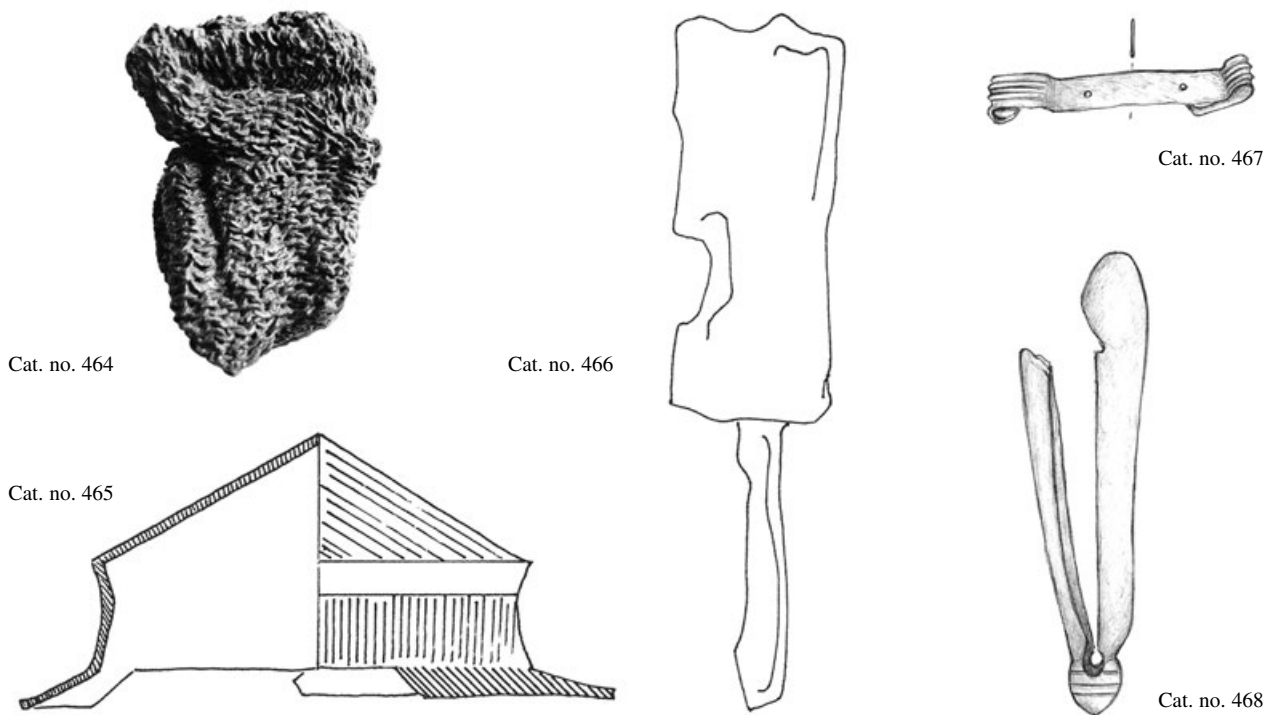


Fig. 78. Military equipment and weaponry (R 1:2; Cat. no. 465 R 1:5)

DAGGER (PUGIO)

The dagger is an element of the offensive weaponry. The specimens 25 to 35 cm long could have been used in everyday life as eating utensil, in the hunt but also in battles with the enemy. The daggers of the Roman soldiers had the blade 20 to 35 cm long and 5 to 8 cm wide with central longitudinal rib. They were attached to the belt on the opposite side of the sword.

One knife from Saldum we could classify as dagger because of its length, so we included it in the chapter on the military equipment.

Cat. no. 469

field inv. 2/70

sq. F10, V 1.00 m

layer C, horizon 3

length 34.2 cm

Long knife or dagger of the leaf shape with a tang of rectangular cross-section.

SPEAR (HASTA, LANCEA)

Seven spearheads between 18.5 cm and 47 cm long have been found at Saldum.

The spear is an offensive weapon used in the infantry as well as in the cavalry units. This weapon consists of

metal point (head), wooden shaft and butt (*spiculum*) – the metal cone at the end of the shaft. Two main types of spears could be distinguished depending on their use – the throwing spear (*lancea*) and thrusting spear (*hasta*), which was mostly used by the auxiliary troops. The spears were widely used in the Roman army from the time of Marcus Aurelius. Because of their functionality they had been used for a long time and their shape did not change substantially, so they are chronologically irrelevant material.

The metal spearheads as kind of heavyweight or semi heavyweight weapons appear in various shapes and sizes. There are many typologies based on the shape of a blade or the ratio between the length and width. According to the position of the shoulder are distinguished the spearheads with medium or low shoulder. Within this typology are included also the hunting spears of a distinct shape.

The spearheads with narrow blade could have more easily penetrate the intended surface and could easily be removed so they were initially used as throwing spears. Typical thrusting spears for the close combat could have had more massive heads often over 30 cm long.

The spearheads with medium and low shoulder as are the Saldum specimens have been rather frequently

found at many Moesian, Dacian, Pannonian and other sites. The type of spearhead with medium shoulder (three specimens) was found at Čezava–*Novae* and extensively dated from the 1st to the 4th century. Such spearheads were also found at Kostol–*Pontes* (end of 4th century),³⁷⁸ at Rtkovo–Glamija,³⁷⁹ Bela Palanka–*Remesiana*,³⁸⁰ Gornea,³⁸¹ Romica–*Certiae*³⁸² and Moigrad–Porolissum.³⁸³ The type of low shoulder spearhead was encountered at Ritopek–*Castra Tricornia*, Tekija–*Transdierna* (1st–2nd c.), Boljetin–*Smorna* (3rd–4th century)³⁸⁴ and in *Sirmium*.³⁸⁵

Cat. no. 470

field inv. 55/70

sq. B2 B3 B4, ∇ 2.60–2.90 m

layer D (with coins of Claudius Gothicus)

length 23.0 cm

The leaf-shaped spearhead with broad socket with visible perforation for the rivet.

Unpublished

Cat. no. 471

field inv. 68/70

sq. E10 F10, ∇ 2.00 m

layer D

length 18.5 cm

The leaf-shaped spearhead with fragmented socket.

Unpublished

Cat. no. 472

field inv. 297/70

tower C, ∇ 0.50 m

layer B, horizon 2

length 25.0 cm

The leaf-shaped spearhead with conical socket.

Unpublished

Cat. no. 473

field inv. 3/70

sq. F10, ∇ 1.00 m

layer C, horizon 3

length 47.0 cm

The leaf-shaped spearhead with emphasized transition from blade into a socket of cylindrical shape.

Unpublished

Cat. no. 474

field inv. 13/67

Trench 2, ∇ 1.20 m

layer B, horizon 2

length 10.5 cm; diameter of socket 1.0 cm

Fragmented leaf-shaped spearhead with cylindrical socket.
Unpublished**Cat. no. 475**

field inv. 604/69

sq. G9, ∇ 1.30 m

horizon 3

length 27.3 cm

The leaf-shaped spearhead with low shoulder and conical socket.

Unpublished

Cat. no. 476

field inv. 605/69

sq. G9, ∇ 1.30 m

horizon 3

length 23.0 cm

Partially damaged leaf-shaped spearhead with low shoulder and conical socket and with circular perforation for riveting to the shaft.

Unpublished

SPEAR BUTT (SPICULUM)

The spear butt is conical hollow part into which is inserted the end of spear shaft. It was used to plant the spear into the ground or it could have been used in battles as thrusting weapon. It had been mainly made of iron. From Saldum comes one spear butt found in the Valentinian's layer.

The spear butts are relatively frequent finds at the Roman sites. Their length varies from 14 to 20 cm. The finds from Tekija–*Transdierna*,³⁸⁶ Čezava–*Novae*,

378| M. B. Vujović, *Naoružanje i oprema*, 89–90.379| M. Gabričević, Rtkovo–Glamija I. Une forteresse de la Basse époque, *Djerdapske sveske* III, 1986, fig. 21, 7.380| D. Piletić, *Vesnik Vojnog muzeja* 17, 1971, T. XVIII, 57.381| N. Gudea, Gornea. Asezari din epoca romana si romana tarzie, *Banatica*. Studii si cercetari arheologice, Resița 1977, fig. 48, 22.382| A. V. Matei, I. Bajusz, *Castrul roman de la Romita–Certiae*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 4, Zalău 1997, Taf. LXXII.383| N. Gudea, *Das Römergrenzkastell von Moigrad – Pomet. Porolissum I*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 5, Zalău 1997, Abb. 34.384| M. B. Vujović, *Naoružanje i oprema*, 87–88, T. XXIX.385| O. Brukner, V. Dautova-Ruševljan, P. Milošević, *Počeci romanizacije*, T. III, 7.386| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 240, cat. 14–15.

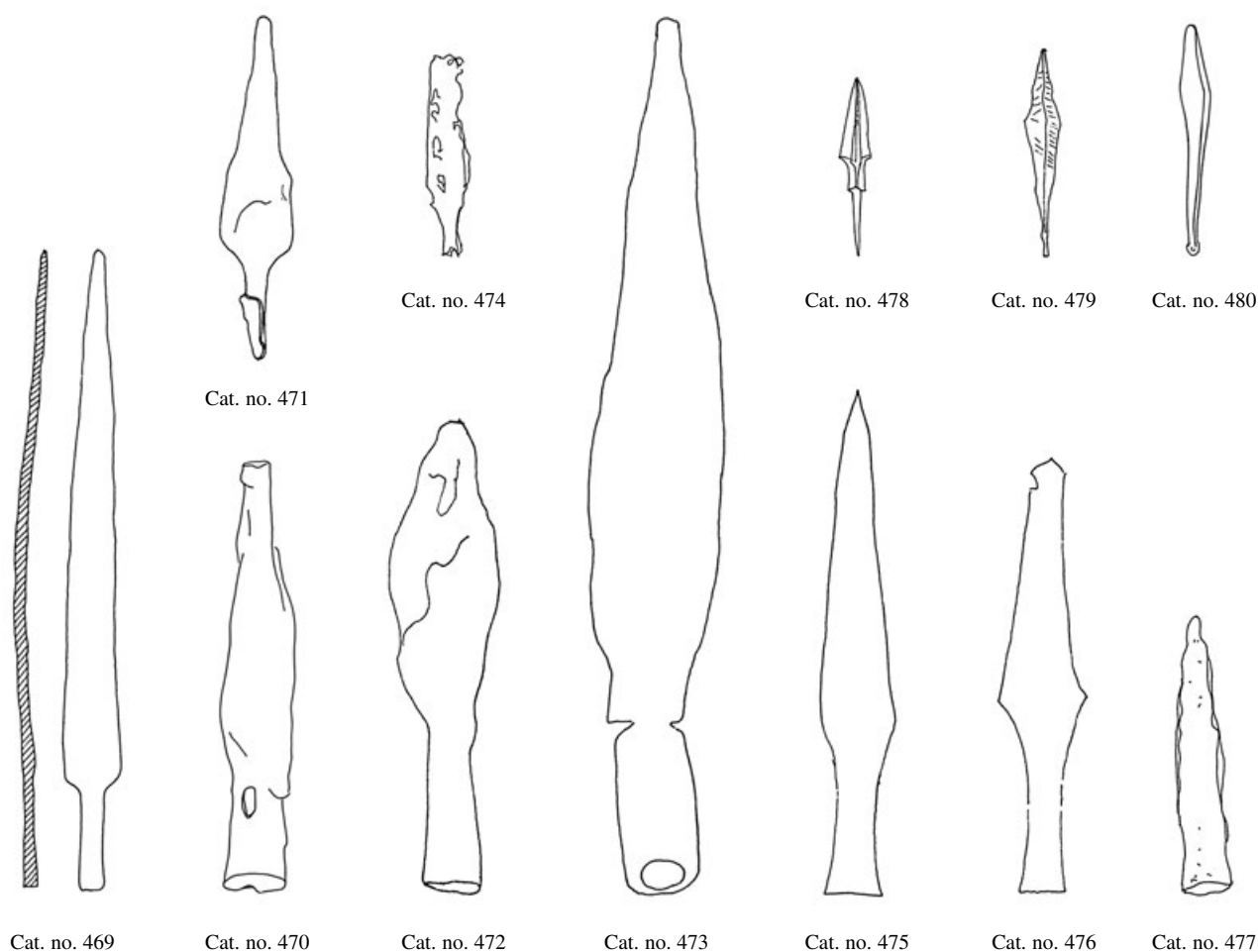


Fig. 79. Military equipment and weaponry (R 1:4)

Boljetin–Smorna and *Singidunum (canabae)*³⁸⁷ come from the layers dating from 2nd–3rd century while from the 3rd–4th century date the specimens from Rtkovo–Glamija³⁸⁸ and Ušće Slatinske reke.³⁸⁹ In the central area of the fortification at Milutinovac was found one butt together with other weapons and tools dated by the coins of Constantine the Great (305–337).³⁹⁰ In Dacia the spear butts were found at *Tibiscum* within the *principium* of the camp (second half of the 2nd–end of 3rd century)³⁹¹ at Romica–*Certiae*³⁹² and at Moigrad–Pomet³⁹³ where was found the butt of rectangular opening.

Cat. no. 477

field inv. 109/67
Trench 2
sq. B9, ▽ 1.60 m
horizon 3

length 14.6 cm; width 2.0 cm
iron, forging

Iron spear butt of conical shape.

Literature: M. B. Vujović, *Naoružanje i oprema*, 1998, 94, cat. 1, T. XXXI, 1.

387| M. B. Vujović, *Naoružanje i oprema*, 94, T. XXXI.

388| M. Gabričević, *Djerdapske sveske* III, 1986, fig. 22, 1.

389| M. Korać, *Kasnoantičke i ranovizantijske fortifikacije kod Ljubičevca i Ušća Slatinske reke*, Beograd 1990, master's thesis, manuscript, 99.

390| P. Milošević, M. Jeremić, Le castellum à Milutinovac, *Djerdapske sveske* III, 1986, 250, fig. 14, f.

391| M. S. Petrescu, P. Rogozea, Tibiscum – principia castrului mare di piatră I, *Banatica* 10, 1990, 119, Nr. 12, T. VI, 6.

392| A. V. Matei, I. Bajusz, *Castrul roman de la Romita–Certiae*, Taf. LXXIII, 6.

393| N. Gudea, *Das Römergrenzkastell von Moigrad–Pomet. Porolissum I*, Abb. 34.

ARROWHEADS

The finds of metal arrowheads bear witness to the military and hunting activities of the Roman soldiers. They are classified as light weaponry. The archers (*sagittarii*) as distinct military units of the Roman army gained in importance especially from the time of the Antonines and frequent wars in the East. Particularly highly esteemed were the archers from Crete and Syria who were organized in special units within the auxiliary troops. After frequent intrusions of the barbarian tribes that intensified after the battle of Adrianople in 378 the use of the units of archers increased because of the intensification of the activities of the Roman army.

On the basis of the arrowhead found at fortification in Upper Moesia, particularly those along the limes, M. B. Vujović made a typology, which includes:³⁹⁴

1. three-ridged arrowheads,
2. leaf-shaped arrowheads,
3. four-ridged arrowheads and
4. arrowheads with back barbs.

Six arrowheads were found at Saldum in the layers dating from the 2nd–3rd century to the end of the 6th century. Using the mentioned typology for the Saldum material, we distinguished two specimens of the three-ridged arrowheads from the 6th century (**Cat. nos. 478–479**), two examples of the 4th century four-ridged arrowheads (**Cat. nos. 480–481**), while the earliest specimens of the leaf-shaped arrowheads date from the 2nd–3rd century layers (**Cat. nos. 482–483**).

The three-ridged arrowheads appear at almost all military camps along the limes. The tip of arrowheads could be triangular, rhomboid or leaf-shaped. Specimen (**Cat. no. 478**) with triangular head has the analogy with somewhat later specimens from Ravna–*Timacum minus* (4th–5th century), Boljetin–*Smorna* (1st–4th century) and Ravna–*Campsas* (3rd–4th century). The length of these arrowheads varies between 5 and 6.5 cm. The three-ridged arrowheads of the rhomboid shape (**Cat. no. 479**) were found at Ravna–*Campsas* and Ravna–*Timacum minus* in the 3rd–4th century layers and at Čezava–*Castrum Novae*³⁹⁵ in the mid 4th century layer. The length of these arrowheads is between 7 and 7.4 cm. Characteristic of the Saldum type of three-ridged arrowheads is the flange at the base of the tang.

The four-ridged arrowheads with tang have massive and narrow iron tips of square section. Such specimens were not suitable for use with the artillery weapons.³⁹⁶ Few arrows of this type were found at Boljetin–*Smorna*

and Ravna–*Timacum minus*, in the 3rd–4th century layers and at Ravna–*Campsas* (1st–4th century).³⁹⁷

The leaf-shaped arrowheads appear at many sites. Different variants could be distinguished – with tang or socket, with head of triangular, rhomboid or leaf shape, with or without rib. The specimens from Boljetin–*Smorna*, Čezava–*Novae* and Ravna–*Timacum minus* have been found in the reliable stratigraphic assemblages, mostly in the 3rd–4th century layers.³⁹⁸

Cat. no. 478

field inv. 15/67

Trench 2, ∇ 1.20 m

horizon 2

length 9.0 cm; width 1.5 cm

Three-ridged arrowhead with triangular tip. The tang is of circular section and flange is of square section.

Literature: M. B. Vujović, *Naoružanje i oprema*, 109, cat. 10, T. XXXIII/10.

Cat. no. 479

field inv. 23/67

Trench 2, ∇ 0.40 m

horizon 2

length 10.5 cm; width 2.0 cm

Three-ridged arrowhead with long rhomboid tip. The tang is of circular section.

Literature: M. B. Vujović, *Naoružanje i oprema*, 108, cat. 6, T. XXXIII/6.

Cat. no. 480

field inv. 62/67

Trench 2, ∇ 1.40 m

horizon 3

length 11.5 cm

The four-ridged arrowhead with a tang for hafting.

Unpublished

Cat. no. 481

field inv. 606/69

sq. G9, ∇ 1.30 m

horizon 3

length 11.0 cm

394| M. B. Vujović, *Naoružanje i oprema*, 106.

395| M. B. Vujović, *Naoružanje i oprema*, T. XXXII–XXXIII.

396| M. B. Vujović, *Naoružanje i oprema*, 106.

397| M. B. Vujović, *Naoružanje i oprema*, T. XXXVI, 5–10.

398| M. B. Vujović, *Naoružanje i oprema*, 112.

The four-ridged arrowhead of rhomboid section and fragmented tang for hafting.

Unpublished

Cat. no. 482

field inv. 85/70

sq. E6 E7, ▽ 1.80 m

layer D

length 13.0 cm; blade width 2.5 cm

The leaf-shaped arrowhead with tang for hafting.

Unpublished

Cat. no. 483

study material 50

layer B–C

without data

dimensions 5.0 x 1.8 cm

Fragmented leaf-shaped arrowhead with central rib and socket.

Unpublished

The types of weapons and equipment found at Saldum indicate the heterogeneity of the armament used by the military garrison at this fortification. The earliest finds are fragmented sword and scabbard fragments of the Pompeii type sword, coming from the layer dated in the period from the times of Flavians until the end the 2nd century. In the 2nd–3rd century, especially after the Marcomanic wars, more widely used were the longer swords, spears for close combat or throwing and the arrowheads for the battle at a distance and it has been confirmed by the finds at Saldum.

Judging by the total amount of finds rather large army forces have been concentrated at Saldum in the time of Valentinian's restoration of the limes and from that period date the spearheads and arrowheads as well as one spear butt. During the entire 6th century, in the Early Byzantine times, the character of weaponry did not change and military garrison continued to use spears and arrows and there were also found fragments of the chain armor and shield boss with conical central segment. The weapons from this camp, considering its form and function, fit into the general picture of the armament of the auxiliary troops of the Roman army, from the moment of its deployment along the limes until its fall under the attacks of barbarian nomads in the end of the 6th century, as it is confirmed by the find of the three-ridged arrowhead.

The topographic analysis of the weapon finds within the Saldum fortification suggests that eastern

part of the camp was the most intensely used in all epochs. The concentration of finds is particularly conspicuous in the southeastern and northeastern areas of the fort, near the towers.

IV.9. TOOLS, IMPLEMENTS AND OBJECTS FOR EVERYDAY USE

The Roman–Early Byzantine fortification at Saldum was constructed at rather favorable location. The natural resources – the Danube river, the Kožica brook, fertile valley, rolling terrain, forests, proximity of water and land communications and mining regions, provided ideal conditions for practicing various economic activities. Direct evidence for these activities are finds of the most diversified types of tools, implements and objects used in everyday life. Some of these implements have been published in the monograph by I. Popović on the Roman iron tools from Serbia.³⁹⁹

The main economic activities were agriculture, stock-breeding, fishing, crafts (masonry, wood-working, leather-working, blacksmithing and forging), handicrafts and trade. The finds from Saldum are grouped according to their main purpose as tools for agriculture, for working wood, metal, fishing equipment, tools for making clothes and other utilitarian objects, but there were also certain multipurpose tools (Figs. 80–89).

IV.9.A. AGRICULTURAL TOOLS

IV.9.A.1. PLOWSHARE

Four symmetrical plowshares were found at Saldum in the layers dating from the 4th and 6th century. Three variants of this implement could be distinguished: a) triangular plowshares with pointed blade and socket (**Cat. nos. 484–485**); b) triangular plowshare with rounded tip (**Cat. no. 486**) and c) arrow-shaped plowshare (**Cat. no. 487**).

Symmetrical triangular plowshares with pointed blade (variant 1) have analogies among the specimens found at the sites along the Iron Gates section of the

399| I. Popović, *Antičko oruđe od gvožđa u Srbiji*, Beograd 1988. Hereafter I. Popović, *Antičko oruđe*.

Roman limes.⁴⁰⁰ They were found in the layers or hoards mostly dating from the end of the 4th century at Boljetin–Smorna (three specimens), Karataš–Diana and Kostol–Pontes. When neighboring areas are concerned they were discovered at *castellum* Racari in Oltenia (2nd–3rd century) at *Iatrus*–Krivina in the layer dating from the end of 4th – beginning of the 5th century and in the 6th century habitation horizon at Sadovec in Bulgaria.

The plowshare with rounded tip (**Cat. no. 486**) has the closest analogy with the plowshare from Kostol–Pontes dated in the 4th–6th century. Similar plowshares have been found in Hungary – in the 4th century layer in the fortification *Gorsium*, in the vicinity of *Aquincum* and in a channel of the 3rd century villa in Nemesvámos–Balácapusza. They have been also found in the tool hoards discovered near the foundation zone of the Roman 3rd–4th century villa at Stup near Sarajevo and at Tinj in Slovenia in the 5th–6th century layer.

The latest one among the Saldum specimens is the arrow-shape plowshare (**Cat. no. 487**). It was found in a layer accumulated on top of horizon 2 and could generally be dated in the middle or second half of the 6th century. Similar specimens come from Ravna–Campsa (4th century), Kostol–Pontes (4th–6th century) and from *Mediana* near Niš (4th century).⁴⁰¹

Cat. no. 484

field inv. 266/68

sq. C8 C9 D8 D9, ∇ 1.10 m

horizon 3

hoard of tools

length 40.0 cm

Symmetrical plowshare with elongated triangular blade, which has a rib on the outer side. The tip is pointed and socket of rectangular section, open on the external side.

Literature: I. Popović, *Starinar* XXXVII, 1986, type Aa, 76; Eadem, *Antičko oruđe*, type XXIII Aa, 101, cat. 3.

Cat. no. 485

field inv. 323/68

sq. E9, ∇ 0.90 m

horizon 3

length 47.0 cm

Symmetrical plowshare with elongated lanceolate blade and long socket of rectangular section open at one side. The molded rib along the middle of the blade.

Unpublished

Cat. no. 486

field inv. 226/68

sq. D9, ∇ 0.90 m

horizon 3

hoard of tools

length 20.5 cm

Symmetrical plowshare with triangular blade, which has rounded tip and molded rib along the middle of internal side. The socket is short with bent wings

Literature: I. Popović, *Starinar* XXXVII, 1986, type B, 76; Eadem, *Antičko oruđe*, type XXIII B, 102, cat. 3

Cat. no. 487

field inv. 559/69

sq. G5

layer B, above horizon 2

length 63.0 cm, length of plow 22.0 cm, thickness of handle 3.5 cm

Plowshare of arrow shape with triangular blade with molded rib and long socket of rectangular section.

Literature: I. Popović, *Starinar* XXXVII, 1986, type E, 78; Eadem, *Antičko oruđe*, type XXIII E, 103, cat. 2, T. XIX, 2, T. XLVIII, 2 (photo).

IV.9.A.2. HOE

At Saldum have been also found three hoes, an implement used for loosening the soil around cereals and garden plants, crashing lumps of earth, weeding, digging trenches and foundations. All three specimens come from the hoard dating from the reign of Valens and Valentinian (364–378/380).

The first type of hoe with trapezoid blade (**Cat. nos. 488–489**) was distributed along the Iron Gates limes and in the hinterland. Similar specimens have been found at Čezava–*Novae* (end of 4th–5th century), at Karataš–*Diana* (hoard of tools from the 6th century), in the hoard of tools from the end of 4th – first half of the 5th century at Gamzigrad–*Romuliana*,⁴⁰² within farming estate at Poskurice (second half of the 4th century)⁴⁰³ and in the hoard of tools from somewhat earlier Lower

400| I. Popović, *Antičko oruđe*, 103–104.

401| D. Piletić, Rimsko oruđe sa teritorije Gornje Mezije, *Vesnig Vojnog muzeja* 17, 1971, 10, T. X, 45.

402| I. Popović, *Antičko oruđe*, type IVAa, 40.

403| D. Petrović, Ostaci rimske građevine u Poskuricama, *Starinar* XV–XVI (1964–1965), 1966, 253–256.

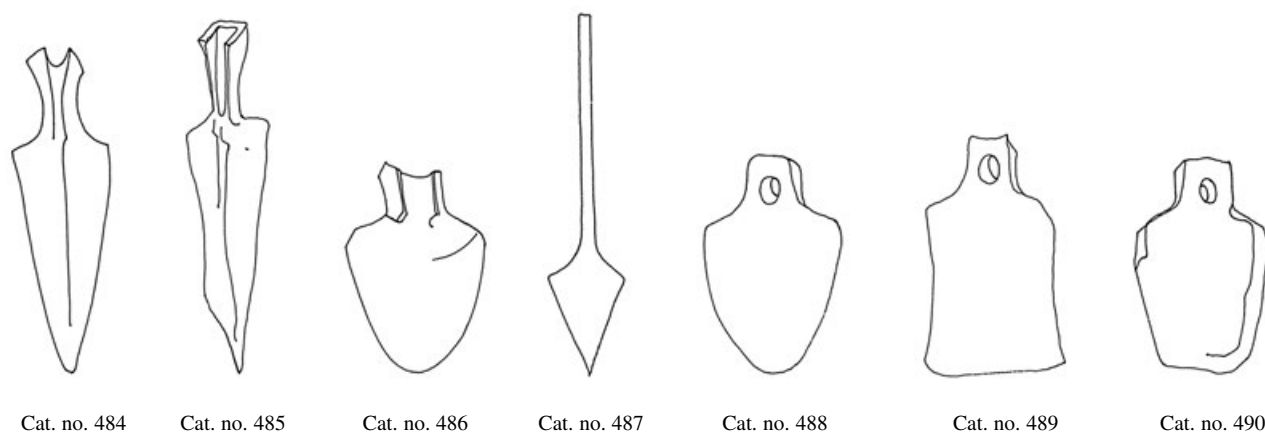


Fig. 80. Tools, implements and objects for everyday use (R 1:10)

Pannonian villa in Brović near Obrenovac (3rd – first half of the 4th century).⁴⁰⁴

The hoe type with rounded tip (**Cat. no. 490**) is not so frequent find among agricultural tools and it has been registered at Boljetin–*Smorna* in the hoard of tools found in an amphora (hoard no. 5) and dated in the 4th century, at Ravna–*Campsa* (4th century) and at Karataš–*Diana* in the 6th century layer.⁴⁰⁵ Both these hoe types are massive specimens with hammer-like butt that were used for tilling larger areas in comparison to the smaller specimens, which could have been used for gardening.

Cat. no. 488

field inv. 268/68

sq. C8 C9 D8 D9, ∇ 1.10 m

horizon 3

hoard of tools

length 30.0 cm

Hoe with trapezoid angular blade with molded rib on the inner surface. The butt is of prismatic shape resembling a hammer. Circular shaft for the handle is at an angle to the blade.

Literature: I. Popović, *Antičko oruđe*, type IVAa, 40, cat. 12.

Cat. no. 489

field inv. 270/68

sq. C8 C9 D8 D9, ∇ 1.10 m

horizon 3

hoard of tools

length 24.0 cm

Hoe with trapezoid blade expanded near the tip and with molded rib on the inner side. The butt is of prismatic shape

resembling a hammer, while circular shaft for the handle is at an angle to the blade.

Literature: I. Popović, *Antičko oruđe*, type IVAa, 40, cat. 11.

Cat. no. 490

field inv. 269/68

sq. C8 C9 D8 D9, ∇ 1.10 m

horizon 3

hoard of tools

length 26.0 cm

Hoe with triangular blade, emphasized shoulders and rounded tip. The blade has molded rib on the inside. Hammer-like butt has circular shaft for the handle at an angle to the blade.

Literature: I. Popović, *Antičko oruđe*, type IVBb, 42, cat. 4.

IV.9.A.3. PICKAXE – HAMMER

The pickaxe-hammer is combined tool consisting of a pickaxe with arched blade and a hammer at the opposite end. If the pickaxe consisted of two narrow prongs it was used for stone working while the combined type was farming tool for crashing lumps of earth, raking and weeding and it could have also been used for other similar activities.⁴⁰⁶

404| D. Bojović, Ostava rimskog poljoprivrednog alata iz sela Brović kod Obrenovca, *Godišnjak grada Beograda* XXV, 1978, 188, fig. 1, 11–13.

405| I. Popović, *Antičko oruđe*, type IVBb, 41–42.

406| I. Popović, *Antičko oruđe*, 49

Both specimens of this type of farming tool from Saldum have the closest analogies in a specimen from the vicinity of Zaječar.⁴⁰⁷ According to the finding circumstances one specimen from Saldum dates from the second half of the 2nd – middle of the 3rd century while the other dates from the Valentinian's period (364–378/380).

Cat. no. 491

field inv. 109/70

sq. C10 D10, ▽ 2.40 m

layer D, down to horizon 4

length 17.5 cm

Pickaxe-hammer consisting of fan-shaped slightly arched prong at one end and of hammer of rectangular section on the opposite end. Between them is a circular shaft reinforced by triangular trunnions. The pick-axe part is longer than the hammer.

Literature: I. Popović, *Antičko oruđe*, type VIII B, 49, cat. 2, T. V, 4.

Cat. no. 492

field inv. 713/69

sq. F9 G9, ▽ 0.95 m

layer C, horizon 3

length 25.0 cm

Massive pickaxe-hammer with slightly trapezoid blade, circular shaft for the handle and hammer-shaped other end.

Unpublished

IV.9.A.4. MATTOCK, PICK

The mattocks-picks are multipurpose tools used for earth digging, excavating foundation trenches, tilling, work on the rocky ground, stripping and excavating ore, rough working of stone and the like.⁴⁰⁸ Five specimens of this implement found at Saldum are classified into two main types – with single working blade (**Cat. nos. 493–495**) and with two opposite working blades (**Cat. nos. 496–497**).

Specimens **Cat. nos. 496–497** resemble the pick from Caričin Grad, from the hoard of tools dating from the end of 6th and first decades of the 7th century.⁴⁰⁹ The pick **Cat. no. 496** is mentioned in literature as pickaxe-hammer, but as it has two arched blades at both ends, probably could be classified as double-blade pick.⁴¹⁰

The mattocks, particularly the more massive ones as is the **Cat. no. 493** have been usually found at the

sites connected with the mining activity: Kraku lu Jordan, Bor, Krivelj, Rudna Glava.⁴¹¹ Specimens from Kraku lu Jordan are dated in the 4th–5th century on the basis of the find of coin hoard,⁴¹² while the villa from Krivelj as well as the pick are dated in the middle-second half of the 4th century.⁴¹³ The single-blade picks were also found at Boljetin–Smorna in the hoard of tools (hoard no. 4) dated in the 4th century⁴¹⁴ and also in the Late Roman layer in the fortification Gornea in the Romanian Banat.⁴¹⁵

Cat. no. 493

field inv. 267/68

sq. C8 C9 D8 D9, ▽ 1.10 m

horizon 3

hoard of tools

length 31.0 cm

Single-blade mattock-pick with leaf-like blade with bottom surface flat and top surface with prominent rib. The rectangular head transforms into the massive shaft at right angle to the blade.

Literature: I. Popović, *Antičko oruđe*, type X Ca, 56, cat. 14.

Cat. no. 494

field inv. 35/70

sq. C10 D10, ▽ 1.70 m

horizon 3

Single-blade pick with leaf-like blade. The rectangular butt transforms into the massive tang for mounting into the wooden handle. The tang is of rectangular section and set at right angle to the blade.

Literature: I. Popović, *Antičko oruđe*, type X Ca, 56, cat. 8.

Cat. no. 495

field inv. 729/69

sq. F9 G9, ▽ 0.95 m, removing of profile

407| D. Piletić, *Vesnik Vojnog muzeja* 17, 1971, 14, T. XXII, 100.

408| I. Popović, *Antičko oruđe*, 53.

409| I. Popović, *Antičko oruđe*, 59, type XAb, cat. 1.

410| I. Popović, *Antičko oruđe*, 49, type VIIIA, cat. 2.

411| I. Popović, *Antičko oruđe*, 55–56, type XCa.

412| I. Popović, *Antičko oruđe*, 55, cat. 3.

413| M. Jevtić, *Keramika starijeg i mlađeg gvozdenog doba sa nalazišta „Staro groblje“ u Krivelju kod Bora*, *ZNMB XVI–1*, 1996, 129–134, fig. 1–2.

414| I. Popović, *Antičko oruđe*, 56, cat. 13.

415| N. Gudea, *Gornea. Asezari din epoca romana si romana tarzie, Banatica. Studii si cercetari arheologice*, Resica 1977, fig. 56.3.

layer C, horizon 3
length 23.0 cm

Single-blade pick with leaf-like blade with bottom surface flat and top surface reinforced with an elongated rib. The rectangular head transforms into massive tang for mounting in the wooden handle. The tang is of rectangular section and set at right angle to the blade.

Literature: I. Popović, *Antičko oruđe*, type VIII Ca, 56, cat. 9.

Cat. no. 496

field inv. 232/68
sq. E9, ∇ 0.60–0.70 m
horizon 3

length 30.0 cm

Mattock with two narrow arched blades and with circular shaft of slightly oval shape in the middle.

Literature: I. Popović, *Antičko oruđe*, type VIII A, 49, cat. 2.

Cat. no. 497

field inv. 412/68
sq. B10, ∇ ca 1.70 m
horizon 3
length 22.0 cm

Double-blade mattock with two narrow arched blades and circular shaft for hafting the handle.

Unpublished

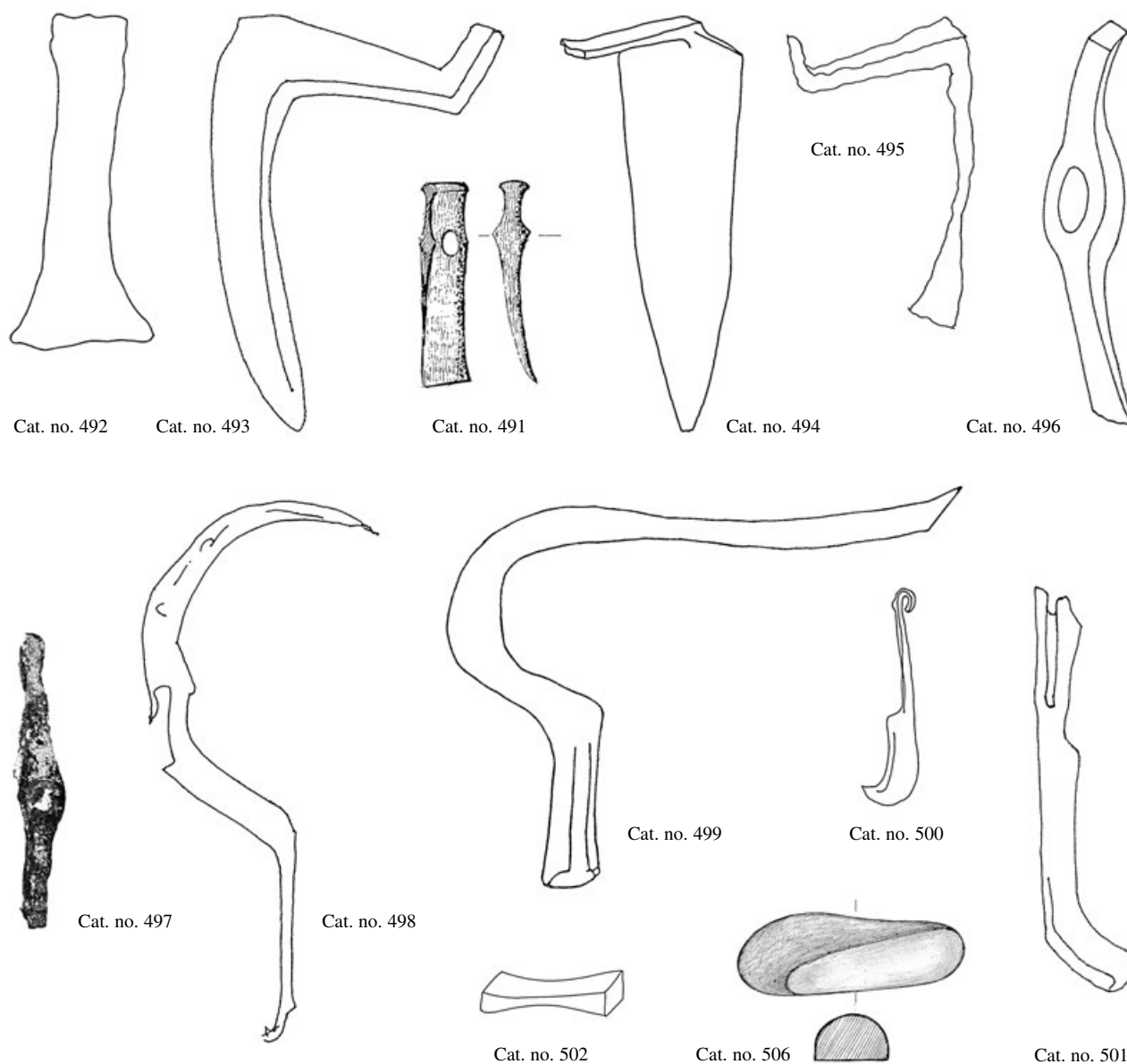


Fig. 81. Tools, implements and objects for everyday use (R 1:5)

IV.9.A.5. SICKLE

The sickles are farming tools frequently found at many sites. Two iron sickles with variously shaped blades and different handles were found at Saldum.

Type of a sickle with arched blade as is our specimen **Cat. no. 498** has been found in the course of investigation of the 3rd–4th century building complex at Ušće near Obrenovac (4 specimens), at Čezava–*Novae*, Kostol–*Pontes*, in the 4th–6th century layers and many specimens were also found at Caričin Grad.⁴¹⁶ Three sickles of the type with circular socket (**Cat. no. 499**) were found in the 4th century hoard of tools at Boljetin–*Smorna*.⁴¹⁷

Cat. no. 498

field inv. 51/67

Trench 2

horizon 3

length 54.0 cm

Sickle with semielliptical blade and tang of rectangular section for mounting into the handle.

Literature: I. Popović, *Antičko oruđe*, type XIX Aa, cat. 11.

Cat. no. 499

field inv. 529/68

sq. B9 C9

layer C, horizon 3

length 67.0 cm

Sickle with long slightly arched blade with a socket of circular section.

Unpublished

IV.9.A.6. PRUNING HOOK

The repertoire of farming tools is completed at Saldum with two pruning hooks, the tools widely used and similar to sickles and scythes, that were used for cutting and pruning of reed, thorns, shrubs, vineyards, for picking crops and the like.

Specimens from Saldum are classified into two types according to the method of handle attachment. First variant (**Cat. no. 500**) has a tang and the second has a socket (**Cat. no. 501**). Both these implements date from the Valentinian's period (364–378/380) and have many analogies either among the material from the Iron Gates limes or from the hinterland.

The examples of the first variant, which is rather abundant, include the specimens from the 3rd–4th century from Donji Milanovac–*Taliata*, from the 4th century from Ravna–*Camps*, Boljetin–*Smorna*, Beograd–*Singidunum* and *Mediana*, from the 4th–5th century from Čezava–*Novae*, Krakul Jordan and Gamzigrad–*Romuliana*, while specimens from the 6th century were found at Karataš–*Diana* (hoard of tools), Hajdučka Vodenica and Gamzigrad.⁴¹⁸ Second specimen from Saldum is analogous to the pruning hooks found in the 4th century layers at Boljetin–*Smorna*, Ravna–*Camps*, Porečka Reka and Karataš–*Diana*.⁴¹⁹

Cat. no. 500

field inv. 399/68

sq. F8, to ∇ 1.34 m

horizon 3

length 16.0 cm

Pruning hook with broad and arched blade and tang for mounting into the wooden handle. The tang is bent like a loop.

Literature: I. Popović, *Antičko oruđe*, type XVIII A, 77, cat. 1.

Cat. no. 501

field inv. 272/68

sq. D8 D9

horizon 3

hoard of tools

length 30.0 cm

Pruning hook with broad arched blade and a socket of circular section that is open at one side.

Literature: I. Popović, *Antičko oruđe*, type XVIII B, 79, cat. 5.

IV.9.A.7. WHETSTONES

The whetstones are attributed to the group of chronologically irrelevant material made of local stone and used for sharpening the tools with cutting edge. Some specimens could have been of rectangular shape carefully executed but mostly used specimens were just the amorphous pieces of stone.

The whetstones have analogies not only in the antique but also in the medieval material. There are

416| I. Popović, *Antičko oruđe*, 83–84, type XIX Aa.417| I. Popović, *Antičko oruđe*, 85–86, type XIX B.418| I. Popović, *Antičko oruđe*, type XVIII A, 77–79.419| I. Popović, *Antičko oruđe*, 79–80.

many specimens as semifinished articles or blanks in the Late Roman–Early Byzantine layer at Sadovec.⁴²⁰ Five specimens were found at Ras–Podgradje, three in the house 13 dated in the end of the 4th century, one is from the 6th century layer, while one is generally dated in the 4th–6th century.⁴²¹

Cat. no. 502

field inv. 128/68
tower C, ∇ 1.35 m
layer B
length 10.6 cm
Whetstone made of brown-gray stone of slab shape and with central part concave on both sides.

Cat. no. 503

S–35
sq. G10/1970 ∇ 1.90 m, under horizon 3
dim. 6.0 x 2.0 x 1.6 cm
Whetstone of rectangular shape made of reddish stone.

Cat. no. 504

S–36
sq. C8 /1969 ∇ 2.74 m, under horizon 5
dim. 14.3 x 3.0 x 1.2 cm
Whetstone of rectangular shape made of gray stone, with slightly concave central part due to the prolonged use.

Cat. no. 505

S–37
sq. C8/1969 ∇ 2.74 m, under horizon 5
dim. 13.5 x 3.5 cm
Pebble of elongated shape with one side polished. Whetstone.

Cat. no. 506

S–11
Trench 2/1967.
without data
Whetstone made of light brown pebble with flattened one side and tapering end.

IV. 9. B. TOOLS FOR WOODWORKING

IV. 9. B.1. AXES

Ten complete or fragmented axes of different shape of cutting edge and butt were found at Saldum. There are specimens with straight edge and reinforced butt (**Cat.**

nos. 507–508), with arched cutting edge and hammer-shaped butt without reinforcement (**Cat. nos. 509–510**), with arched cutting edge and plain butt (**Cat. nos. 511–512**) and there was also found one stone specimen (**Cat. no. 513**). They were of different size and mostly used for chopping wood, more massive were used for felling trees, although they could have been used as military equipment – battle axes.

The axe **Cat. no. 507** had the closest analogies among the finds from the 4th century layer at Boljetin–Smorna,⁴²² while somewhat later is the example from Caričin Grad.⁴²³ Specimen from Saldum is dated by the coins of Valentinian I (364–375) and Gratian (367–383) as well as the axe with rather big rectangular plate **Cat. no. 510**, that is analogous to the specimens from Lower Pannonia, from the vicinity of *Sirmium*.⁴²⁴

The axe type with arched cutting edge and hammer-like butt, **Cat. no. 508** also has the analogies among the axes from Lower Pannonia and is analogous to the specimens from Ritopek and Jelašnica near Niš.⁴²⁵ The Saldum specimen is reliably dated in the Valentinian's epoch (364–378/380) thanks to the large monetary hoard. Typologically related is also the axe **Cat. no. 509** that resembles the finds from Karataš–Diana (2nd–3rd century) and the civilian settlement in Belgrade–*Singidunum* (4th century).⁴²⁶

The axe of the *Bartaxt* type (**Cat. no. 511**) comes from a disturbed layer at Saldum and as the same type is classified also the axe (**Cat. no. 512**) from the Valentinian's layer (364–378/380), for which there are analogies in the nearby Ravna–*Campsä*.⁴²⁷

The stone axe-hammer, similar to the type of iron axes with straight edge and rounded butt,⁴²⁸ comes from the layer dated into the first half-middle of the 3rd century.

420| S. Uenze, *Die spätantiken Befestigungen von Sadovec (Nordbulgarien)*. Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen 1934–1937, München 1992, Taf. 131.

421| M. Popović, *Tvrđava Ras*, Beograd 1999, 114, fig. 71/1–5; 322–323, cat. 184–188.

422| I. Popović, *Antičko oruđe*, 65, cat. 5–7.

423| I. Popović, *Antičko oruđe*, 65, cat. 3.

424| I. Popović, *Antičko oruđe*, 66, cat. 1 and 3.

425| I. Popović, *Antičko oruđe*, 65, cat. 2–3.

426| I. Popović, *Antičko oruđe*, type XIIcB, 66, cat. 1–2.

427| I. Popović, *Antičko oruđe*, type XIIHa, 68, cat. 4.

428| I. Popović, *Antičko oruđe*, 64, type XIIAa.

Cat. no. 507

inv. 324/68

sq. E9, ▽ 0.90 m

horizon 3

length 20.0 cm

Axe with straight edge which symmetrically expands downwards from the butt. Butt shaped as hammer has reinforcements of triangular shape on both sides.

Literature: I. Popović, *Antičko oruđe*, type XII B, 65, cat. 1, T. IX, 1.

Cat. no. 508

field inv. 691/69

sq. F5, ▽ 0.65 m

horizon 3, on the floor

length 20.0 cm; width of edge 5.5 cm; R of shaft 3.7 cm

Axe with narrow arched blade, which expands symmetrically from the butt. Shaft is circular and butt is reinforced with wings on both sides.

Literature: I. Popović, *Antičko oruđe*, type XII Ca, 65, cat. 5, T. IX, 2.

Cat. no. 509

field inv. 571/69

sq. E8

layer C, horizon 3

length 19.0 cm

Axe with narrow arched blade, which expands symmetrically from the hammer-shaped butt and with circular shaft without reinforcements.

Unpublished

Cat. no. 510

field inv. 325/68

sq. E9, ▽ 0.90 m

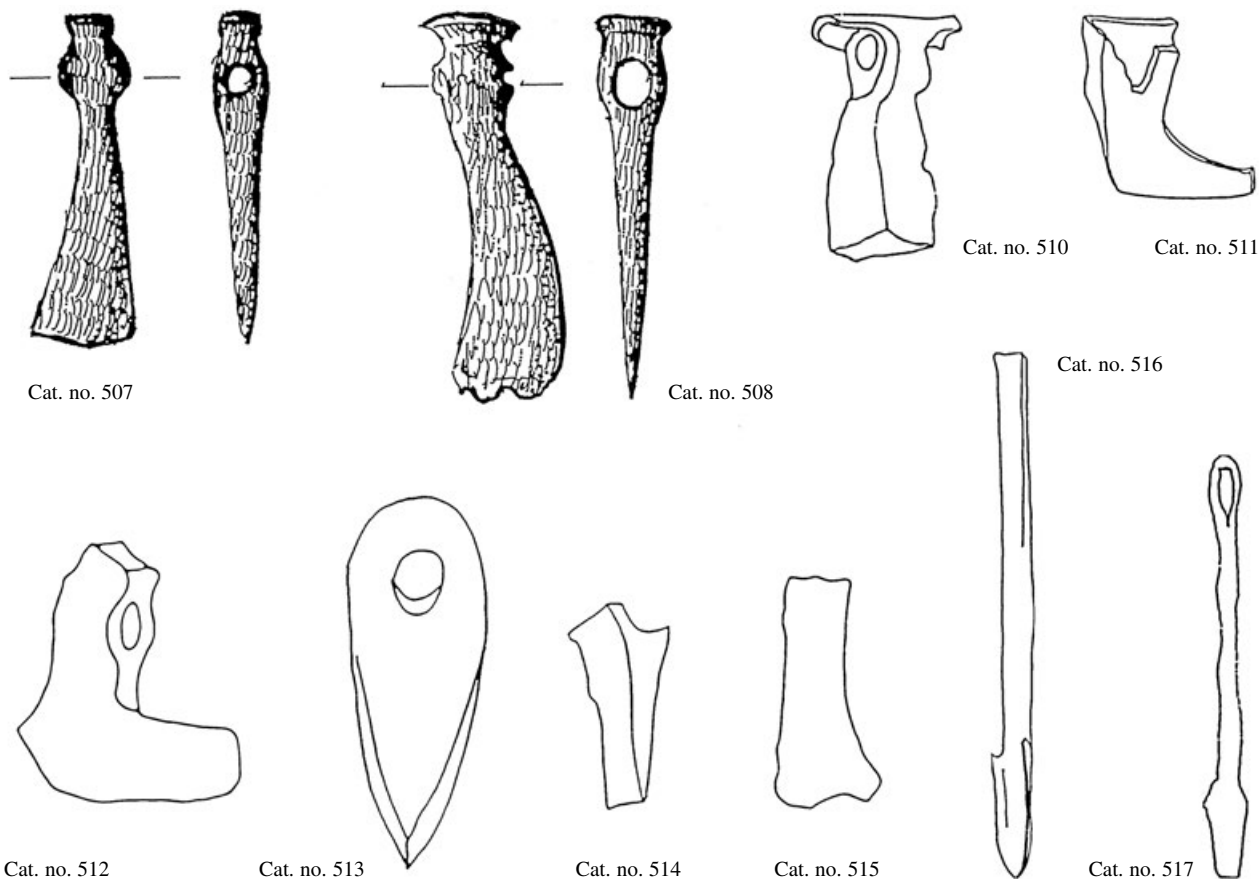
horizon 3

length 12.5 cm

Axe with straight blade symmetrically expanding downwards from the butt. The butt terminates in elongated rectangular plate whose length exceeds the maximum width of the blade.

Literature: I. Popović, *Antičko oruđe*, type XII D, 66, cat. 2.

Fig. 82. Axes and drills (R 1:5)



Cat. no. 511

field inv. 67/70

sq. E10 F10, ▽ 2.00 m

pit

Axe with arched blade, which abruptly expands downwards and with rectangular not reinforced butt. It is damaged near the butt.

Literature: I. Popović, *Antičko oruđe*, type XII Ha, 68, cat. 3.**Cat. no. 512**

field inv. 318/68

sq. C8 D8

layer C

length 16.0 cm

Axe with oval not reinforced butt with circular shaft for the handle. The arched blade expands abruptly downwards from the butt.

Literature: I. Popović, *Antičko oruđe*, type XII Ha, 68, cat. 2.**Cat. no. 513**

field inv. 717/69

sq. E8

layer D

Stone axe with oval butt and circular shaft for the handle.

Unpublished

Cat. no. 514

field inv. 47/70

sq. E6 E7, ▽ 0.80–1.10 m

layer C, horizon 3

length 13.6 cm

Fragment of the cutting edge of an iron axe.

Unpublished

Cat. no. 515

field inv. 839/69

sq. F5, ▽ 0.90

layer D and C

length 15.5 cm

Rather small axe with damaged shaft for the handle. The blade expands in the trapeze shape.

Unpublished

IV. 9. B.2. DRILL

Two spoon-shaped iron drills (**Cat. nos. 516–517**), type of woodworking tool, intended for drilling wood or hollow wooden containers, but it was also used in carpentry and wagon making. Both specimens date from the Valentinian's period (364–378/380).

The analogies for the spoon-like drills were registered in the nearby Boljetin–*Smorna* (4th century),⁴²⁹ while drills from the fortification at Kladovo and Caričin Grad date from the 6th century,⁴³⁰ as well as the finds from Ras–Podgradje.⁴³¹

Cat. no. 516

field inv. 63/70

sq. C10D10, ▽ 2.00 m

layer C, horizon 3

length 34.6 cm

Drill with the spoon-shaped blade. The long handle is of rectangular section and has a tapering end, which made possible easier attachment of the bar for turning the drill.

Literature: I. Popović, *Antičko oruđe*, type XXXI Aa, 120, cat. 2, T. XXII, 3.**Cat. no. 517**

field inv. 673/69

sq. G4 F4, ▽ 0.60 m

layer B

length 28.0 cm

Iron tool – drill with spoon-like tip.

Unpublished

IV. 9. B.3. HAMMERS

Among many different tools found at Saldum there were also two hammers (**Cat. nos. 518–519**), implements intended for pounding, punching, joining and the like. They were widely used in carpentry, woodworking, forging, stone carving, masonry and other activities.

The type of massive hammer with two blunt ends (**Cat. no. 519**) was found at few sites including Caričin Grad where it was dated in 535–615, while in the National Museum in Belgrade is housed a specimen without information about origin and finding circumstances.⁴³² Such types of hammers were often found in the hoards of mining tools.

Cat. no. 518

field inv. 115/70

sq. E6 E7, to ▽ 1.50 m

429| I. Popović, *Antičko oruđe*, type XXXIA, 120, cat. 1.430| I. Popović, *Antičko oruđe*, 120, cat. 3–4.431| M. Popović, *Tvrđava Ras*, 318, cat. 110–111, fig. 61, 10–11.432| I. Popović, *Antičko oruđe*, type XXVIII, 142.

horizon 4
length 20.0 cm
Hammer with both ends pointed while bottom side is flat.
Unpublished

Cat. no. 519

field inv. 273/68
sq. C8 C9 D8 D9, ▽ 1.10 m
horizon 3
length 10.0 cm
Hammer with two massive blunt ends slightly expanded close to the circular shaft.
Literature: I. Popović, *Antičko oruđe*, type XXXVII Ab, 140, cat. 2, T. XXVII, 3.

IV. 9. B.4. CHISELS

Chisels are multipurpose tools intended for working of wood, stone or metal, for splintering smaller pieces, chipping, cutting, hollowing and piercing.

Fourteen iron chisels were found in the course of investigations at Saldum and they were classified into five types:

- 1) chisels-cutters with fan-like blade (**Cat. nos. 520–521**);
- 2) chisels of trapeze cross-section for drilling holes (**Cat. nos. 522–525**);
- 3) chisels – blades for the plane (**Cat. nos. 526–527**);
- 4) flat chisels of wedge shape with tapering blade (**Cat. nos. 528–529**);
- 5) chisels-borers (**Cat. nos. 530–533**).

The chisels-cutters with socket are registered at few sites in the Serbian Danube valley and in the hinterland.⁴³³ The specimen **Cat. no. 521** is classified in literature as adze but after the inspection of material we found out that it was the type of chisel-cutter identical in shape to the specimen **Cat. no. 520**, with which it is also of the same date. Relatively large group of chisels from Saldum comprises the specimens with obliquely cut back side of the blade (**Cat. nos. 522–525**) that were used for hollowing out wooden containers. The examples of this chisel type are not numerous judging by the published material, as only two known analogies come from the 4th century layer at the nearby fort at Boljetin–*Smorna*.⁴³⁴ Similar in shape are chisels

Cat. nos. 526–527, which could be identified as blades for the plane.⁴³⁵

The type of flat wedge-shaped chisel with tapering blade, our type 4 (**Cat. nos. 528–529**) has been found at the greatest number of sites. There are many analogies, as they were found in the 4th century hoards of tools at Boljetin–*Smorna*, in the mining regions – Kraku lu Jordan (together with monetary hoard from the end of 4th–5th century) and in the 6th century layers at Karataš–*Diana*, Hajdučka Vodenica and at Caričin Grad.⁴³⁶

The chisels-borers with the body of square section and expanded in the upper segment were found at many sites but most of the material is not published so at this point we are mentioning the finds from Boljetin–*Smorna* (in the 4th century hoard of tools), from Karataš–*Diana* and Sremska Mitrovica–*Sirmium*.⁴³⁷

Cat. no. 520

field inv. 542/68
sq. C8, ▽ 2.38 m
layer C, horizon 3
length 14.0 cm
Chisel-cutter with fan-like blade turning into a socket of square section open on the opposite end of the blade.
Unpublished

Cat. no. 521

field inv. 419/68
sq. G10
horizon 3
length 9.5 cm
Chisel-cutter with narrow fan-shaped blade and socket of square section.
Literature: I. Popović, *Antičko oruđe*, type XIVA, 73, cat. 1.

Cat. no. 522

S-42
tower C/1968, ▽ to 2.40 m
layer B?
length 14.6 cm
An iron chisel with slightly trapeze-like expanding blade and long tang of square section for mounting into the handle.
Unpublished

433| I. Popović, *Antičko oruđe*, 133, type XXXVBa, T. XXV, 4.

434| I. Popović, *Antičko oruđe*, 134, type XXXVC, T. XXVI, 1.

435| I. Popović, *Antičko oruđe*, 118, T. XXII, 1.

436| I. Popović, *Antičko oruđe*, 130–132, type XXXVAa, T. XXV, 1.

437| I. Popović, *Antičko oruđe*, 134–135, type XXXVDb, T. XXVI, 3.

Cat. no. 523

S-43
tower C/1968, ▽ to 2.40 m
layer B?
length 11.2 cm
Fragmented iron chisel with portion of the blade missing. Tang for mounting into the handle is long and of square section.
Unpublished

Cat. no. 524

S-45
sq. F9/1968, ▽ 1.90 m
horizon 4
length 15.5 cm
Iron tool – chisel with slightly trapeze-like expanded blade, thickened central segment and long tang for mounting into the handle.
Unpublished

Cat. no. 525

S-46
sq. D6/1970, ▽ 1.20 m
layer C, down to horizon 3
length 10.0 cm
Fragmented iron tool – chisel with slightly trapeze-like expanded blade, thickened central segment and long tang for mounting into the handle.
Unpublished

Cat. no. 526

S-5
Trench 2/1967
layer C, horizon 3
length 12.0 cm
Iron tool – chisel with slightly trapeze-like expanded blade and thickened central segment.
Unpublished



Cat. no. 518



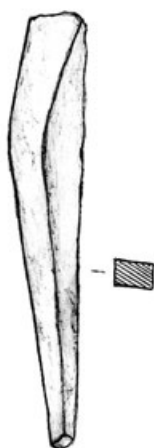
Cat. no. 519



Cat. no. 520



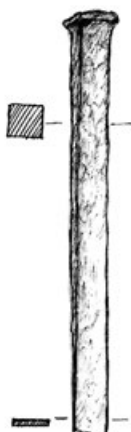
Cat. no. 521



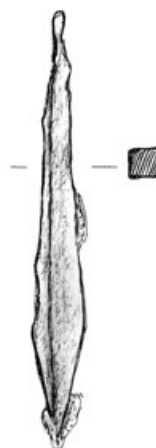
Cat. no. 526



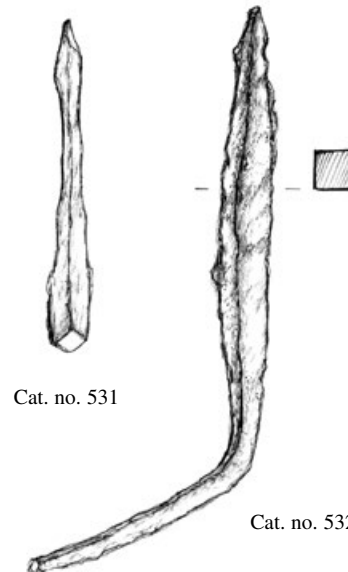
Cat. no. 528



Cat. no. 529



Cat. no. 530



Cat. no. 531

Cat. no. 532

Fig. 83. Hammers and chisels (R 1:4; Cat. nos. 526, 528, 530, 531 R 1:2)

Cat. no. 527

S-44

sq. G9/1970.

layer E?

length 11.8 cm

Iron tool – chisel, identical to the previous one with slightly trapeze-like expanded blade, thickened central segment, flat bottom side and tang of square section.

Unpublished

Cat. no. 528

field inv. 53/70

sq. B2 B3 B4, ∇ 2.60–2.90 m

layer D

length 11.5 cm; width 2.0 cm

Iron chisel with handle of square section and straight blade slightly expanded and tapered.

Literature: I. Popović, *Antičko oruđe*, 131, type XXXV Aa, cat. 9, T. XXV, 1.

Cat. no. 529

S-19

without data

length 22 cm

Iron chisel with hammered pillow-shaped head and body of square section that turns into tapering flat blade.

Unpublished

Cat. nos. 530–531

S-4

Trench 2/1967

length 11.7 cm; 8.6 cm

Two iron borers with shanks of square section, thickened in the middle.

Unpublished

Cat. no. 532

S-17

sq. C10 D10/1970, ∇ 2.40 m

horizon 4

Iron borer with shank of square section with thickened middle and pointed ends.

Unpublished

Cat. no. 533

no number, bag 11/1970.

sq. E6 E7, ∇ 1.30–1.40 m

layer D

length 5.5 cm

Fragmented iron borer with shank of square section and massive upper segment.

Unpublished

IV.9.C. TOOLS FOR FORGING AND SMELTING, MOLDS

TONGS AND MOLDS

Tongs intended for forging, cutting and bending, holding and fixing objects were used in the process of metal working. According to the shape of jaws few types of this tool could be distinguished.⁴³⁸

From Saldum come two tongs with straight-ending jaws and one of them belongs to the composite tools, most probably type of a mold for casting lead sling projectiles⁴³⁹ and it was identified in the earlier literature as smelting tongs (P. Petrović, I. Popović, see below). We are adding to this tool group also the stone mold, which could have been used for working molten metal.

The tongs are not frequent finds at the Moesian and Dacian sites. The mold with spout of amphora shape (**Cat. no. 534**) is the unique find in our territory. Rather interesting is the find of blacksmith's tongs at the site Obala at Korbovo where two domed kilns, floor of rammed earth and tongs were found in one trench and this indicates the existence of the smithy within the settlement.⁴⁴⁰ Similar tongs were found at Karataš–*Diana* together with the material from the end of 4th–5th century.⁴⁴¹

Cat. no. 534

field inv. 40/70

sq. E10 F10, ∇ 1.60 m

horizon 3

iron, bronze

length 13.1 cm, width at joint 1.5 cm

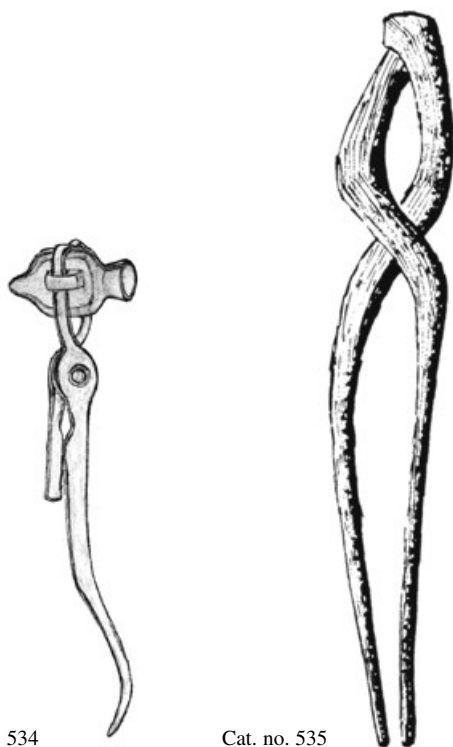
Iron tongs with straight ended jaws, which are touching when closed. Between the jaws is fixed small bronze vessel of

438| W. Gaitsch, *Römische Werkzeuge*, Kleine Schriften zur Kenntnis der römischen Besetzungsgeschichte Südwestdeutschlands 19, Stuttgart 1978, Abb. 9–11.

439| I wish to express my thanks to Dr Miloje Vasić for this suggestion.

440| D. Krstić, Obala–Korbovo. Izveštaj o sondažnim iskopavanjima u 1980. godini, *Djerdapske sveske* II, 1984, 101–2, fig. 82, 4.

441| I. Popović, *Antičko oruđe*, 144, type XXXVIII Aa, cat. 1.



Cat. no. 534

Cat. no. 535

Fig. 84. Tongs (Cat. no. 534 R 1:2; Cat. no. 535 R 1:5)

amphora shape consisting of two parts, which split apart when the tongs are opened.

Literature: *Arheološko blago Djerdapa*, 81, cat. 236; I. Popović, *Antičko oruđe*, type XXXVIII Ba, 145, cat. 1, T. LIV, 7 (photo).

Cat. no. 535

field inv. 256/68

sq. C9, ∇ 1.00 m

horizon 3

length 49.0 cm

Tongs with straight ended jaws, which overlap when the tongs are closed.

Literature: I. Popović, *Antičko oruđe*, type XXXVIII Bb, 145, cat. 1, T. XXIX, 2.

IV.9.D. KNIVES

The knives (*cullteli*) are the most widely distributed kind of utilitarian objects and depending on their shape and size they were used in everyday life or as specialized tools for certain activities: preparing and taking food, striping and hollowing wooden containers, cutting

leather or fleece. Rather large single-edged knives up to 30 cm long could have been used for butchering domestic or wild animals or as battle knives. Specimens found in the military camps were generally personal property of the soldiers.

All the knives found at Saldum we classified into two groups – knives for everyday use and special knives.

IV.9.D.1. KNIVES FOR EVERYDAY USE

The knives for everyday use usually have single edge and tang for mounting the handle of organic material or they have some kind of hilt onto which the handle was added. There had been produced specimens with different shape of blade and back so there are knives with straight back and arched blade, arched back and straight blade or arched back and curved blade.

Only the knives with a tang for handle mounting were found at Saldum. This kind of material is chronologically irrelevant but according to the context of the finds we could date more precisely most of the Saldum specimens. The most of them – seven in total, date from the Valentinian's period (364–378/380), one comes from the early Roman layer, middle of the 1st – beginning of the 2nd century, two are from the 2nd–3rd century layer, three specimens are from the 6th century layers and for the two specimens we do not have precise stratigraphic data. It was not possible to date more precisely the knife found in the necropolis area.

Cat. no. 536

field inv. 61/67

trench 2, ∇ 1.40 m

horizon 3

length 11,0 cm

Single-edged iron knife with blade having straight back and arched edge and with tang for mounting into the handle.

Unpublished

Cat. no. 537

field inv. 275/68

sq. C8 C9 D8 D9, ∇ 1.10 m

horizon 3 (hoard of tools)

length 16.0 cm

Fragmented single-edged iron knife with arched back and straight edge and with tang for mounting into the handle.

Unpublished

Cat. no. 538

field inv. 482/68

sq. B10, ▽ 2.51 m

horizon 3

length 25.0 cm

Single-edged iron knife with arched back and straight edge and with tang for mounting into the handle.

Unpublished

Cat. no. 539

field inv. 31/70

sq. C10 D10, ▽ 1.70 m

layer C, horizon 3

length 18.5 cm

Iron knife with arched back and straight edge and with tang for mounting into the handle.

Unpublished

Cat. no. 540

field inv. 32/70

sq. C10 D10, ▽ 1.70 m

layer C, horizon 3

length 23.0 cm

Massive iron knife with arched back, straight edge and tang of rectangular section for mounting into the handle.

Unpublished

Cat. no. 541

field inv. 30/70

sq. C10 D10, ▽ 1.70 m

layer C, horizon 3

length 12.5 cm

Single-edged iron knife with arched back and straight edge and with tang for mounting into the handle.

Unpublished

Cat. no. 542

field inv. 69/70

sq. E10 F10, ▽ 2.00 m

pit

length 18.0 cm

Single-edged iron knife with straight back and straight edge and with tang for mounting into the handle.

Unpublished

Cat. no. 543

field inv. 291/68

sq. F9, ▽ 0.80 m

layer B

length 21.5 cm

Single-edged iron knife with straight back and straight edge and with rather broad tang of rectangular section for mounting into the handle.

Unpublished

Cat. no. 544

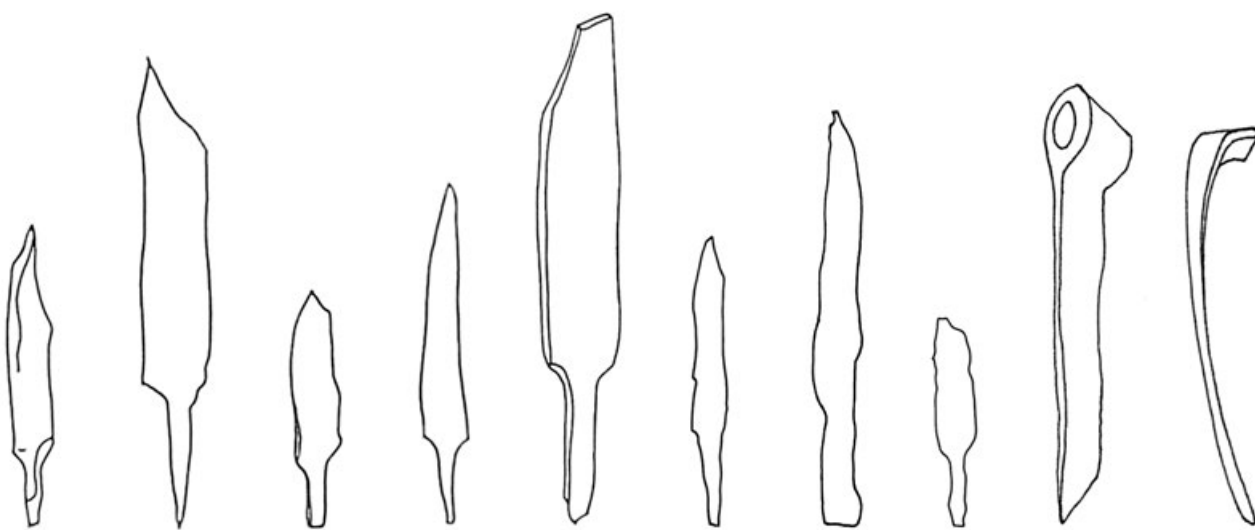
field inv. 186/70

sq. F10, to ▽ 1.70 m

layer D

length 27.0 cm

Rather large single-edged iron knife or dagger with arched back and straight edge and with tang for mounting into the handle.



Cat. no. 537 Cat. no. 538 Cat. no. 541 Cat. no. 542 Cat. no. 544 Cat. no. 545 Cat. no. 546 Cat. no. 547 Cat. no. 552 Cat. no. 553

Fig. 85. Knives (R 1:4)

Cat. no. 545

field inv. 656/69
sq. H1, tower D
layer B
length 15.2 cm
Single-edged iron knife with straight back and arched edge and with tang for mounting into the handle.
Unpublished

Cat. no. 546

field inv. 834/69
sq. E9, ∇ 2.82 m
horizon 5
length 22.0 cm
Single-edged iron knife with arched back and straight edge and with massive tang for mounting into the handle.
Unpublished

Cat. no. 547

field inv. 852/69
Necropolis
trench I, ∇ 0.90 m
layer II
length 11.0 cm
Fragmented single-edged iron knife with straight back and arched edge and with tang for mounting into the handle.
Unpublished

Cat. no. 548

field inv. 531/68
sq. B9 C9
horizon 3
length 19.0 cm
Iron knife-razor with straight blade and slightly arched back extending into elongated handle of rectangular section.
Unpublished

Cat. no. 549

st. 47/1969
sq. G2
length of blade 8.8 cm; width of blade 3.0 cm
Fragment of rather large knife with slightly curved back and arched edge. Strap handle of rectangular section.
Unpublished

Cat. no. 550

st. 48/1970
sq. G9 G10, ∇ 2.00 m
layer D
preserved length 9.5 cm; width 2.5 cm

Fragmented knife with arched back, straight edge and with tang for mounting into the handle.
Unpublished

Cat. no. 551

st. 49/1967.
∇ 0.00–0.20 m
layer A–B, horizon 1–2
dim. 15.0 x 1.7 cm
Iron knife with narrow blade, arched edge and straight back and strap tang for mounting into the handle.
Unpublished

IV.9.D.2. SPECIAL KNIVES

KNIFE FOR CUTTING AND STRIPING WOOD
Within the *castellum* at Saldum was found the knife (**Cat. no. 552**), which had been used for cutting and striping wood. It was found in the hoard of tools as well as the analogous specimen from Boljetin–*Smorna* that is of larger size.⁴⁴²

Cat. no. 552

field inv. 271/68
sq. C8 C9 D8 D9
horizon 3
hoard of tools
length 26.0 cm
Knife for cutting and striping wood. Long straight blade extends into massive tang of circular cross-section.
Literature: I. Popović, *Antičko oruđe*, type XXI A, 90, cat. 2.

KNIVES FOR HOLLOWING WOODEN CONTAINERS

From Saldum comes the knife (**Cat. no. 553**) whose main characteristic is arched blade extended in the trapeze form and with a long tang.

Two knives of the same type from Gamzigrad–*Romuliana* were found in the hoard of tools dating from the end of 4th – beginning of the 5th century and from the same period date two such knives from Sremska Mitrovica–*Sirmium* found in the grave of craftsman-woodworker.⁴⁴³ Few similar specimens were found at Caričin Grad.⁴⁴⁴

442| I. Popović, *Antičko oruđe*, 90, type XXIA, cat. 1.

443| I. Popović, *Antičko oruđe*, 91, T. XV, 6.

444| I. Popović, *Antičko oruđe*, 91, cat. 1–3.

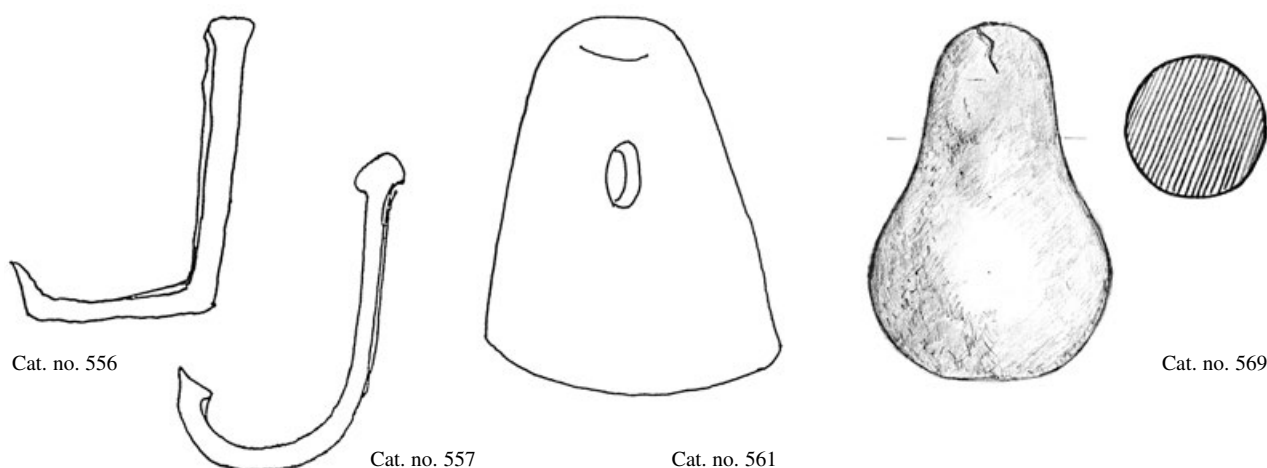


Fig. 86. Fishing equipment (R 1:2)

Cat. no. 553

field inv. 292/68

sq. F9, ▽ 0.80 m

layer B

length 21.0 cm; width of blade 4.0 cm

Knife for hollowing wooden containers consists of trapeze-shaped blade bent at the end and on the other end it converts at right angle into a tang ending in a point.

Literature: I. Popović, *Antičko oruđe*, type XXI Cb, 91, cat. 4.

KNIFE FOR LEATHER WORKING

The special knife for cutting leather or hide consists of crescent-shaped blade with the end bent towards the handle. Two knives for leather working, of the type with crescent-shaped blade and handle of rectangular section were found at Saldum.

The specimen analogous to **Cat. no. 554** was found in the 4th century layer at Boljetin–Smorna.⁴⁴⁵ Similar specimens were found at Karataš–Diana (second half of the 4th century), as well as in the 6th century layers at Gamzigrad–Romuliana, Mokranjske stene and Caričin Grad.⁴⁴⁶ Few knives for working leather, similar to the specimen **Cat. no. 555**, were found in the course of investigations at *Mediana* near Niš, but this material is not published.

Cat. no. 554

field inv. 54/70

sq. B2 B3 B4, ▽ 2.60–2.90 m

layer D

dim. 19.0 x 2.0 cm

Knife for working leather with arched blade of crescent shape and ends bent towards the handle. The blade transforms into the handle of rectangular section from the middle of the blunt segment.

Literature: I. Popović, *Antičko oruđe*, type XXI Da, 93, cat. 6.

Cat. no. 555

S–3

Trench 2/1967

length of tang 3.2 cm

Iron tool-knife for leather working, bent at right angle. It consists of fan-shaped blade and tang of rectangular section tapering towards the end.

Unpublished

IV.9.E. FISHING EQUIPMENT

IV.9.E.1. FISHHOOKS

Iron fishhooks and weights for fishing nets found at Saldum indicate favorable conditions for fishing on the Danube. These are characteristic finds in the settlements and fortifications alongside rivers and by the lakes and sea. The forms and technique of manufacture of the fishhooks have not changed for ages. The fishhook consists of tip, barb on a tip, arch, neck-shank

445| I. Popović, *Antičko oruđe*, type XXIDa, 93, cat. 5.

446| I. Popović, *Antičko oruđe*, loc. cit., cat. 1–3, 7, 9–10.

and head. The arch is of rectangular or oval section and the head could be shaped as loop or it could have grooves for fixing the fishing rod.

Four iron fishhooks of different form were found in the northern part of the Saldum fortification, close to the Danube and near the northeastern and north-western tower.

The fishhooks are very frequent finds at the sites along the Danube. Rather interesting is the specimen **Cat. no. 557**, which judging by its careful execution could be compared with bronze specimens from the territory of *Singidunum* (1st–4th century).⁴⁴⁷ Analogous fishhooks were encountered among the published material from the earlier fortification at Rtkovo–Glamija⁴⁴⁸ but also among the finds from the medieval dugout at the site Zbradila–Korbovo.⁴⁴⁹ Within the 6th century house at Podgradje near Ras was found an iron fishhook of rather large size that could have been used for fishing rather large fish.⁴⁵⁰ From this period also date the fishhooks found at *Iatrus–Krivina*⁴⁵¹ and *Corinth*.⁴⁵²

Cat. no. 556

field inv. 66/67

Trench 2, ∇ 1.40 m

horizon 3

length 16.0 cm

Fishhook with a shank of square section and hammered tip.

Unpublished

Cat. no. 557

field inv. 41/67

Trench 2, ∇ 1.20 m

horizon 2

length 13.0 cm

Fishhook of rectangular section with hammered tip and protuberance on the head.

Unpublished

Cat. no. 558

field inv. 73/70

sq. B4, ∇ 2.60 m

pit

height 7.5 cm

Fragmented iron fishhook with shank of rectangular section and with flat expanded head. The tip is missing.

Unpublished

Cat. no. 559

field inv. 731/69

sq. F9 G9, ∇ 0.95 m

layer c, horizon 3

length 21.0 cm

Massive iron tool – fishhook for catching large fish that consists of two tips and conical socket with perforation for attaching to the handle.

Unpublished

IV.9.E.2. WEIGHTS FOR FISHING NET

The weights for fishing nets were discovered in two latest layers at Saldum. All weights were made of rather poorly refined clay of yellowish to brown color and they are of conical shape, except the specimen **Cat. no. 569**, that is of a pear shape. Their height varies from 10 to 13 cm and diameter of base is from 7 to 9 cm. All of them were found in the south section of the fortification, mostly in the debris of southeastern tower and the pyriform specimen was found near the southwestern tower.

The weights for fishing nets are frequent finds at the Danube sites. They are chronologically irrelevant material, but we would like to mention here the analogy for the pyriform weight as similar specimen was found in the medieval dugout at Zbradila–Korbovo and this weight was made of the Roman brick.⁴⁵³

Cat. no. 560

S–56

tower C/1968.

∇ to 2.40 m

height 7.3 cm

Fragmented rather small conical weight made of brown fired clay of sandy fabric.

447| S. Krunic, Upotrebni predmeti, in: *Antička bronza Singidunuma*, Beograd 1997, 214–215, cat. 327–329.

448| M. Gabričević, Rtkovo–Glamija. Une forteresse de la basse époque. Fouilles de 1980–1982, *Djerdapske sveske* III, 1986, fig. 22, 9.

449| Lj. Babović, Zbradila, Korbovo. Izveštaj o arheološkim istraživanjima u 1980. godini, *Djerdapske sveske* II, 1984, fig. 64, 2.

450| M. Popović, *Tvrđava Ras*, 114, fig. 61, 16; 318, cat. 116.

451| G. Gomolka, Die Kleinfunde vom 4. bis 6. Jh. aus Iatrus, in: *Iatrus–Krivina* II, Berlin 1982, 127, Taf. 59, 131.

452| G. Davidson, The minor objects, *Corinth* XII, Princeton, New Jersey 1952, 193, pl. 88, 1448.

453| Lj. Babović, *Djerdapske sveske* II, 1984, 94, fig. 64, 6.

Cat. no. 561

field inv. 12/70
sq. E9 E10, ▽ 1.00–1.30 m
horizon 3
height 10.0 cm; diameter of base 8.0 cm
The fishing weight of conical shape with horizontal perforation. Insufficiently refined clay.

Cat. no. 562

field inv. 13/70
sq. E9 E10, ▽ 1.00–1.30 m
horizon 3
height 9.5 cm; diameter of base 9.3 cm
The perforated fishing weight of conical shape. Unrefined baked clay.

Cat. no. 563

field inv. 110/68
tower C, debris
layer B
height 12.2 cm; diameter of base 7.5 cm
Weight of conical shape with horizontal perforation. Baked clay of brown-yellow color.

Cat. no. 564

field inv. 111/68
The same as the previous specimen.

Cat. no. 565

field inv. 112/68
tower C, debris
layer B
height 12.0 cm; diameter of base 9.0 cm
Weight for fishing net of asymmetrical conical shape with horizontal perforation. Brown fired clay.

Cat. no. 566

field inv. 113/68
tower C, debris
layer B
height 11.0 cm; diameter of base 7.0 cm
Conical weight for fishing net with horizontal perforation. Brown-reddish fired clay.

Cat. no. 567

field inv. 114/68
tower C, debris
layer B
height 13., cm; diameter of base 8.0 cm
Fragmented weight for fishing net, of conical shape and with horizontal perforation. Brown-red fired clay.

Cat. no. 568

field inv. 124/68
tower C, ▽ 1.35 m
layer B
height 11.0 cm; diameter of base 7.2 cm
Fishing weight of conical shape with horizontal perforation. Baked clay of brown-reddish color.

Cat. no. 569

field inv. 639/69
sq. G3, ▽ 0.80 m
horizon 2
length 9.5 cm
Pyriform weight with small cavity on top. Baked clay of yellow-brown color.

IV. 9. F. TOOLS FOR MAKING CLOTHES

IV. 9. F. 1. AWL

The awls are tools the shape of which because of its functionality has remained unchanged from prehistory until the modern times. They have been made of metal, bone, horn or fish bone. At one end is pointed tip while opposite end is broader and used for pulling the thread or mounting into the handle. They are multi-purpose tools as they can be used for sewing, weaving or repairing fishing nets, they could also be used as borers in leather working or for making pottery.⁴⁵⁴

The specimen from Saldum comes from unreliable stratigraphic entity. Among fish bones registered at Saldum, mostly in the layers dating from the 4th and 6th century, there were certainly some pieces, which could have been used as this type of tools. The awls are, however, frequent finds in the 4th–6th century layers in the territory of Northern Illyricum and it is considered as reflection of barbarization and impoverishment of the population inhabiting those areas.⁴⁵⁵

Cat. no. 570

field inv. 869/69
sq. F9, ▽ 2.32 m

454| S. Petković, *Rimski predmeti od kosti i roga sa teritorije Gornje Mezije*, Beograd 1995, 47. Hereafter S. Petković, *Predmeti od kosti i roga*.

455| S. Petković, *Predmeti od kosti i roga*, 48.

pit
length 8.4 cm
Fragmented bone awl-needle.

IV.9.F.2. NEEDLE

The rather large group of finds from the Roman settlements and necropoles are needles, which are chronologically irrelevant material.⁴⁵⁶ They were made of metal or bone. Two basic types could be distinguished depending on the shape of eye – type with flat and type with pointed eye and this also has certain functional implications.⁴⁵⁷ Needles with flat eye because of the massive heads could not have been used for sewing but they were used for stitching up through already awl-perforated holes while the needles with pointed head were used for sewing leather and thick materials.

One bronze needle with flat head was found at Saldum in the stratigraphically unreliable association. As parallels could be quoted the specimens from *Singidunum*, Ritopek–*Castra Tricornia*, Kosmaj, Ušće near Obrenovac that are dated in the 2nd–3rd century although they are mostly chance finds.⁴⁵⁸ There are many needles found in the graves in the necropoles of Sisak–*Siscia*, Ptuj–*Poetovio*, Ljubljane–*Emona*, dated on the basis of the coin finds in the 1st – beginning of the 2nd century. One needle was found in the grave from the first half of the 4th century at Beška while the needle from Dumbovo is dated in the Flavian period.⁴⁵⁹ The bone needles were found in quantities in *Singidunum*, *Margum*, *Viminacium*, Čezava–*Novae*, Ravna–*Campsae* and at Ušće Porečke reke.⁴⁶⁰

Cat. no. 571

field inv. 744/69
sq. F9
pit
length 17.6 cm
Rather large needle with rectangular eye.
Unpublished

IV.9.F.3. SPINDLE WHORLS

The spindle whorls of conical or biconical shape made of stone, bronze, pottery, bone or antler were used to rotate the spindle and twist the yarn in hand spinning.

The thickness of the yarn depended on their shape and size. Over thirty spindle whorls of different shapes have been found at Saldum and we classified them according to the material they were made of. The spindle whorls could be drum-shaped, conical and biconical, calotte-shaped, polished or engraved and also as spindle whorls were used additionally worked fragments of bricks or vessels. These finds indicate that womenfolk were present in the settlement.

From the earliest period of life at Saldum date the bronze calotte-shaped spindle whorl (Cat. no. 572), that is the only specimen made of metal. We also encountered calotte-shaped and biconical spindle whorls made of baked clay (Cat. nos. 573–582), dated in the Valentinian's period (364–378/380). The most numerous are stone spindle whorls (Cat. nos. 583–606), which could be drum-shaped, conical and calotte-shaped and which are registered in the layers from the 2nd–3rd century until the end of the 6th century, but the drum-shaped specimens are most numerous in the Valentinian's layer (364–378/380).

The bone spindle whorls (Cat. nos. 607–610) calotte- and drum-shaped were encountered in the Valentinian's layer and in the 6th century layer. Their diameter varies from 2.4 to 4.5 cm and height from 0.7 to 1.8 cm. According to S. Petković the decorated bone spindle whorls appear in *Dacia Ripensis* in the layers from the middle of the 4th to the end of the 6th century, while in *Moesia Prima* they were registered only in the 6th century layers,⁴⁶¹ and this corresponds with the finding circumstances of the Saldum specimens. We think, however, that we should be cautious with such conclusions as it should be taken into consideration that

456| E. M. Ruprechtsberger, *Die römischen Bein- und Bronzenadeln aus den Museen Enns und Linz*, Linzer archäologische Forschungen 9, Linz 1979, 35; M. Kohlert–Némethy, *Fundsachen aus dem Hausrat, Archäologische Reihe. Römische Bronze II aus Nida–Hedderheim*, Auswahlkatalog Band 14, Museum für Vor- und Frühgeschichte, Archäologisches Museum, Frankfurt am Main 1990, 90; S. Krunic, in: *Antička bronza Singidunuma*, 193.

457| S. Petković, *Predmeti od kosti i roga*, 46.

458| S. Krunic, in: *Antička bronza Singidunuma*, 215–216, cat. 330–335.

459| V. Dautova–Ruševljan, *Zanatski proizvodi i numizmatički nalazi*, in: *Fruška gora u antičko doba*. Prilozi za staru istoriju i arheologiju, ed. N. Tasić, Novi Sad 1995, T. IV, 20; XXI, 8.

460| S. Petković, *Predmeti od kosti i roga*, cat. 509–551.

461| S. Petković, *Predmeti od kosti i roga*, 122–123

many settlements and camps along the limes in both mentioned provinces are not sufficiently investigated so this could be the reason why these spindle whorls were not registered in *Moesia Prima* in the layers dating from the middle of the 4th–5th century and not because they had not been produced in this province.

The spindle whorls made of bone are very numerous at Sadovec in Bulgaria.⁴⁶² These spindle whorls were not found in Late Roman settlement at Ras–Podgradje, but there are many stone and pottery specimens.⁴⁶³ The pottery spindle whorls are very popular in the Late Roman and medieval period, so they are sometimes difficult to date without distinct archaeological context.

BRONZE SPINDLE WHORL

Cat. no. 572

field inv. 827/69
sq. B8, ∇ 1.93 m
horizon 5
diameter 1.6 cm; height 1.2 cm
Small bronze spindle whorl of conical shape.

POTTERY SPINDLE WHORLS

Cat. no. 573

no number, bag 2/1970.
sq. E10, ∇ 2.20 m
layer D, horizon 4
dim. 5.5 x 4.7 x 0.7 cm
Pottery spindle whorl of rectangular shape with slightly rounded edges, produced of the base of a vessel, made of red fired clay with red slip on one side.

Cat. no. 574

S–32
sq. E8/1968, ∇ 0.40 m
layer B
diameter 4.0 cm; height 1.6 cm
Drum-shaped spindle whorl, made of red fired clay of sandy fabric.

Cat. no. 575

S–30
sq. G9 G10/1970, ∇ 2.60 m
above horizon 5
diameter 4.2 cm; height 0.8 cm
Drum-shaped spindle whorl, with raised top edge. Gray fired clay of sandy fabric.

Cat. no. 576

field inv. 14/67
trench 2, ∇ 1.40 m
horizon 2
diameter 2.2 cm; height 1.0 cm
Calotte-shaped spindle whorl, made of gray fired clay. Two engraved concentric circles on the bottom side.

Cat. no. 577

field inv. 198/70
sq. C7 D7, ∇ 0.85 m
layer C, horizon 3
diameter 4 cm
Calotte-shaped spindle whorl, made of gray fired insufficiently refined clay with admixture of sand.

Cat. no. 578

S–21
sq. B8, ∇ 1.95 m from socle
horizon 5?
diameter 7.5 cm; height ca. 2.0 cm
Rather large calotte-shaped spindle whorl, made of red fired clay of sandy fabric.

Cat. no. 579

S–14
sq. E7/1970.
layer C, D, horizon 3
diameter 3.3 cm; height 1.8 cm
Conical spindle whorl, made of light brown fired clay of sandy fabric.

Cat. no. 580

S–33
sq. C8 D8/1968, ∇ 0.40–0.60 m
layer B
diameter 3.2 cm; height 1.6 cm
Biconical spindle whorl with engravings at the junction of cones. Made of gray fired clay.

Cat. no. 581

S–34
sq. E9/1969, ∇ 2.32 m from NW peg
horizon 4 and under
diameter 4.8 cm; height 2.4 cm
Biconical spindle whorl made of brown fired clay.

462| S. Uenze, *Die spätantiken Befestigungen von Sadovec*, Taf. 14, Taf. 133–135.

463| M. Popović, *Tvrđava Ras*, 116 and fig. 70.

Cat. no. 582

field inv. 603/69
sq. G9, ▽ 1.30 m
layer C, horizon 3
diameter 5 cm; height 2.5 cm;
Biconical spindle whorl, made of brown-yellow fired clay
of sandy fabric.

STONE SPINDLE WHORLS

Cat. no. 583

S-13
sq. E10/1970, ▽ 1.00 m
horizon 3
Drum-shaped spindle whorl, made of light gray stone.

Cat. no. 584

field inv. 21/67
trench 2, ▽ 1.20–1.40 m
horizon 2
diameter 4.0 cm; height 1.3 cm
Drum-shaped spindle whorl, made of pale yellow stone.

Cat. no. 585

S-7
trench 2/1967
bag 19
Drum-shaped spindle whorl with one grooved concentric
circle surrounding the perforation, made of whitish-brownish
stone.

Cat. no. 586

field inv. 92/67
trench 2, sq. B9
pit next to the east profile
horizon 3
diameter 4.0 cm; height 0.8 cm
Drum-shaped spindle whorl with engraved concentric cir-
cles. Made of reddish stone.

Cat. no. 587

S-7
trench 2/1967
Drum-shaped spindle whorl with one grooved concentric
circle surrounding the perforation, made of whitish-brown-
ish stone.

Cat. no. 588

field inv. 394/68
sq. F8, to ▽ 1.34 m
horizon 3

diameter 3.5 cm
Calotte-shaped spindle whorl, made of dark gray stone. On
the bottom side two asymmetrically engraved concentric
circles.

Cat. no. 589

field inv. 321/68
sq. C9, ▽ 1.27 m
horizon 3
diameter 3.5 cm; height 0.7 cm
Drum-shaped spindle whorl, made of gray stone. On the
bottom side asymmetrically engraved concentric circle.

Cat. no. 590

field inv. 374/68
sq. F9, ▽ 1.18 m
horizon 3
diameter 4 cm; height 0.8 cm
Spindle whorl of the calotte shape with two asymmetrically
engraved concentric circles on the bottom. Made of yellowish
stone.

Cat. no. 591

S-8
trench 2/1967
without data
diameter 2.8 cm; height 0.9 cm
Calotte-shaped spindle whorl with concentric circles, made
of whitish stone.

Cat. no. 592

S-8
trench 2/1967
bag 17
Calotte-shaped spindle whorl with concentric circles, made
of whitish stone.

Cat. no. 593

field inv. 393/68
sq. F8, to ▽ 1.34 m
horizon 3
diameter 3.6 cm; height 1.2 cm
Calotte-shaped spindle whorl with two grooved concentric
circles on the calotte. Made of the gray stone.

Cat. no. 594

field inv. 398/68
sq. F8, to ▽ 1.34 m
horizon 3
diameter 3.5 cm; height 1.8 cm
Spindle whorl of the calotte shape, made of black stone.

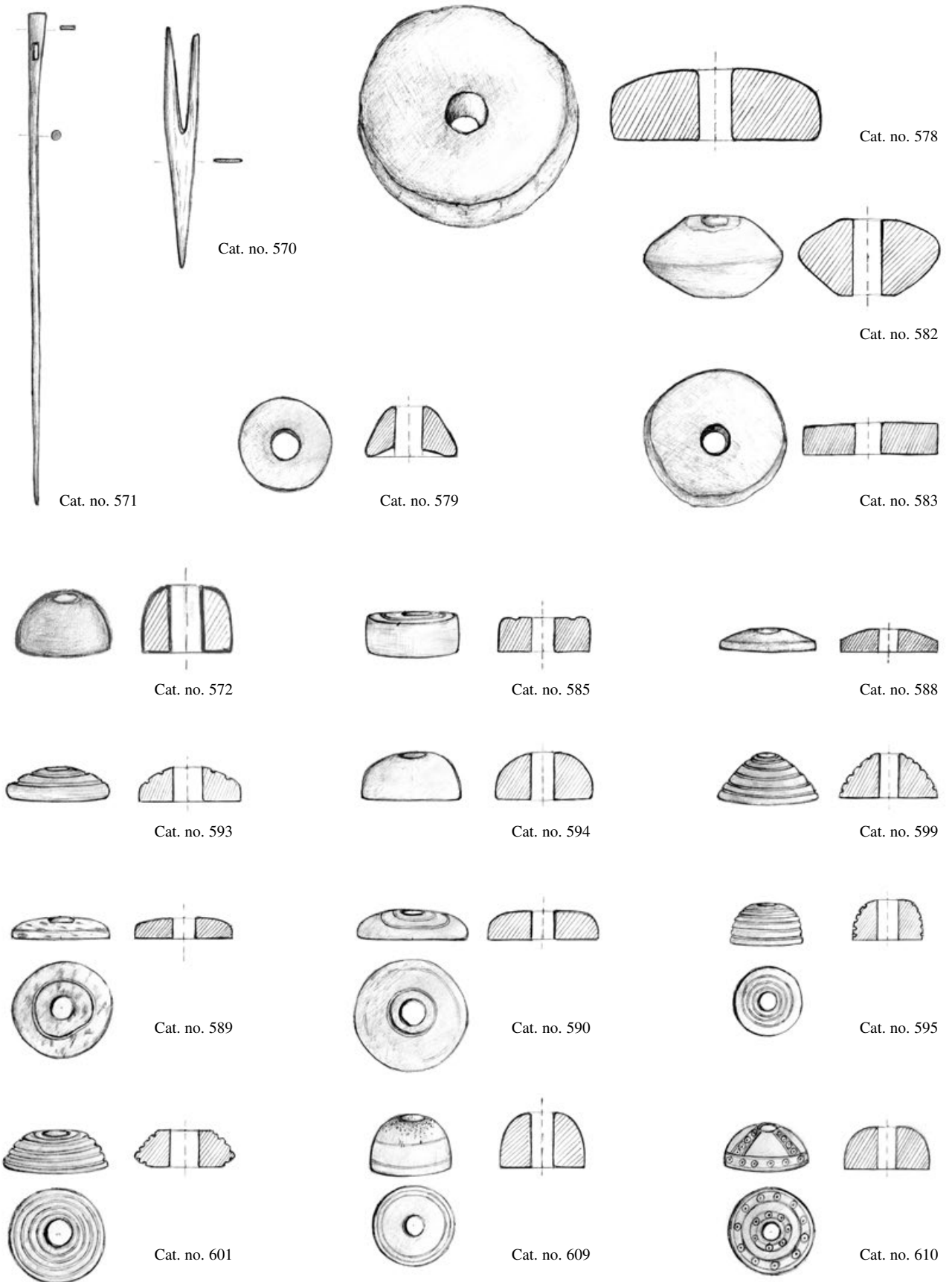


Fig. 87. Tools for making clothes (R 1:2)

Cat. no. 595

field inv. 830/69
sq. G5, ∇ 0.80 m, layer D, C
diameter 2.5 cm; height 1.5 cm
Calotte-shaped spindle whorl with engraved concentric circles on the bottom, made of gray stone.

Cat. no. 596

S-27
sq. C6 C7 D6 D7 E6 E7/1969.
∇ 0,70 (0.80) m, layer B, horizon 2
diameter 2.3 cm; height 0.9 cm
Calotte-shaped spindle whorl with concentric circles on the flat surface, made of gray stone. On the edge are visible notches made by the rope.

Cat. no. 597

S-28
sq. C6 C7 D6 D7 E6 E7/1969.
∇ 0.70 (0.80) m, layer B, horizon 2
diameter 3.4 cm; height 1.1 cm
Calotte-shaped spindle whorl with concave bottom side and concentric circles on both surfaces. Made of gray stone.

Cat. no. 598

S-29
sq. C7 D7/1970.
∇ 1.10 m, layer C
diameter 3.0 cm; height 1.2 cm
Fragmented calotte-shaped spindle whorl with grooved decoration. Made of gray stone.

Cat. no. 599

field inv. 395/68
sq. F8, to ∇ 1.34 m
horizon 3
diameter 3.5 cm; height 1.6 cm
Damaged stone spindle whorl of conical shape with grooved concentric circles. Made of gray stone.

Cat. no. 600

field inv. 22/67
trench 2, ∇ 1.20–1.40 m
horizon 3
diameter 3.6 cm; height 1.5 cm
Conical spindle whorl made of light gray stone. On top and bottom side are engraved concentric circles.

Cat. no. 601

field inv. 394/68
sq. F8, ∇ 1.34 m

diameter 3.6 cm
Conical spindle whorl with deep grooves on top and bottom side. Made of dark gray stone.

Cat. no. 602

S-26
sq. B9 B10/1969.
∇ 2.32 m, space between the early and late rampart
diameter 3.6 cm; height 1.3 cm
Conical spindle whorl with deep grooves on top and bottom side. Made of dark gray stone.

Cat. no. 603

field inv. 396/68
sq. F8, to ∇ 1.34 m
horizon 3
diameter 3.1 cm
Spindle whorl with engraved concentric circles, made of light gray stone.

Cat. no. 604

field inv. 121/68
tower C, ∇ 1.35 m
layer B
diameter 3.9 cm; height 1.1 cm
Fragmented calotte-shaped stone spindle whorl with engraved concentric circles.

Cat. no. 605

field inv. 122/68
tower C, ∇ 1.35 m
layer B
diameter 4.0 cm; height 1.5 cm
Fragmented calotte-shaped stone spindle whorl with engraved concentric circles around the perforation.

Cat. no. 606

field inv. 198/68
sq. E8, ∇ 0.40 m
layer B
diameter 4.0 cm; height 1.0 cm
Spindle whorl of drum shape, made of gray stone.

BONE SPINDLE WHORLS

Cat. no. 607

field inv. 91/67
trench 2, sq. B9, ∇ 1.60 m
layer C
diameter 3.5 cm; height 1.0 cm
Drum-shaped spindle whorl with grooves on top and bottom side, made of yellowish colored bone.

Cat. no. 608

S-31

sq. G10/1970.

∇ 1.90 m, under horizon 3, next to SE tower and south rampart
diameter 4.2 cm; height 1.2 cm

Drum-shaped spindle whorl rather carelessly, made of yellowish colored bone.

Cat. no. 609

field inv. 561/69

sq. G3

layer B, debris above horizon 2

diameter 3.1 cm; height 2.0 cm

Calotte-shaped vertically perforated spindle whorl. Two concentric circles engraved on the bottom side.

Literature: S. Petković, *Predmeti od kosti i roga*, 90, cat. 455, T. XXIX, 2.

Cat. no. 610

field inv. 602/69

sq. G7, ∇ 0.65 m

layer B

diameter 3.1 cm; height 1.6 cm

Calotte-shaped bone spindle whorl with engraved concentric circles on the bottom side and between the circles are 'eyelets' arranged in two friezes. Top side of the calotte is also decorated with 'eyelets' within the bands.

Unpublished

IV.9.G. OTHER UTILITARIAN OBJECTS

IV.9.G.1. SPOON

The only spoon found at Saldum comes from horizon 4, which is dated in the 3rd century. Bone spoons with smaller bowl could have been used as eating utensils or for cosmetic purposes. Our specimen is of the type, which is chronologically rather irrelevant as it had been in use from the 1st to the 6th century although most of the finds from Upper Moesia come from the 2nd-3rd century layers (*Singidunum*, *Viminacium*).⁴⁶⁴ The spoons from *Apulum*-Alba Iulia that author identified as medical instruments are also dated in the 2nd-3rd century on the basis of the finding context and analogies.⁴⁶⁵

Cat. no. 611

field inv. 288/70

sq. E5, ∇ 1.40 m

horizon 4

preserved length 9.2 cm; diameter of bowl 2.4 cm

Fragmented bone spoon with a handle of circular section and shallow circular bowl with prominent edge.

IV.9.G.2. KEYS, LOCKS, ESCUTCHEONS

In this chapter we are going to discuss the keys, locks and escutcheons that were found in a considerably small quantity during excavations but they are an important indicator for determination of the purpose of certain rooms and structures.

The keys (*clavis*) are the integral element of the inventory of any structure. Depending on their size they were used for locking gates, passages, house doors, warehouses, cupboards, trunks and chests. They were made of iron and bronze and could be classified as turning keys and traction keys. Both these types have been found at Saldum. The turning keys were mostly made of iron, rarely of bronze and they mostly had trapeze-shaped body tapering towards the foot and with circular hoop on the top at the right angle to the foot. As the keys are numerous group of finds we would like to draw attention to the analogies and systematization of the finds from FYR Macedonia published by V. Lilčić in *Macedonia acta archaeologica* and that could be used as good foundation for further investigation of this group of finds.⁴⁶⁶

At Saldum was found fragmented circular bronze hoop with small plates (**Cat. no. 619**) for which we have analogies in the grave assemblage from Demir Kapija dated by the coin of Probus (276-282). It is identified as part of a bronze toilet box and that eventually could be also the purpose of the Saldum find.⁴⁶⁷

Bronze lock (**Cat. no. 620**) and fragment of the lock cover (**Cat. no. 621**) are dated by the coins of Valens and Valentinian (364-378/380). Together with the locks made of bronze and iron were usually pre-

464| S. Petković, *Predmeti od kosti i roga*, 36, cat. 358, 359, T. XIX/1-2, with quoted analogies.

465| D. Ciugudean, *Obiectele din os, corn și fildeș de la Apulum*, Alba Iulia 1997, 80-81, Pl. XXVI-XXVII.

466| V. Lilčić, Prilog kon antičkiot kluč, *Macedoniae acta archaeologica* 13 (1992), 1993, 203-204.

467| V. Sokolovska, Novija arheološka iskopavanja u Demir Kapiji, *Starinar* XXIV-XXV (1973-1974), 1975, T. VII, 3.

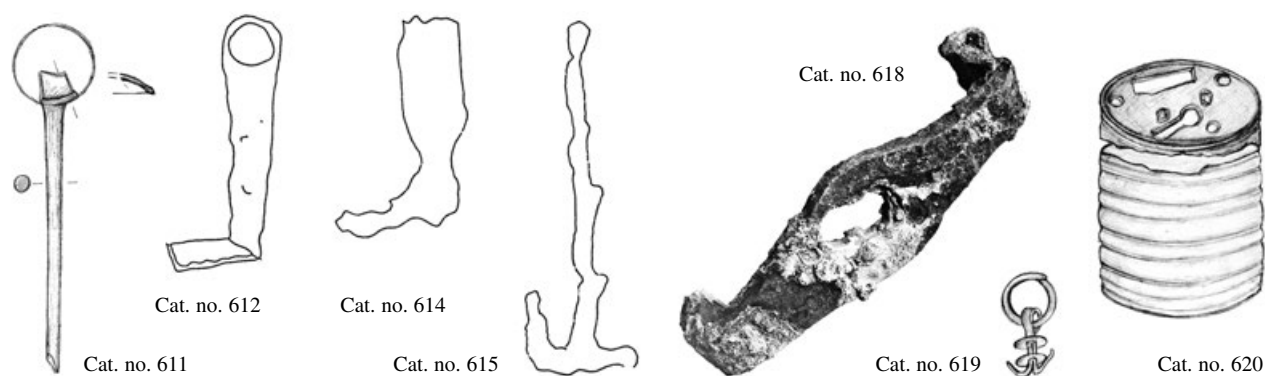


Fig. 88. Other utilitarian objects (R 1:2)

served also the chains used for locking the room, trunk or cupboard. The analogies were found at *Mediana* (4th century), where the specimen with preserved chain is of polygonal shape,⁴⁶⁸ at Bregovina (6th century)⁴⁶⁹ and among the finds from the church 'C' at Gradina on the Jelica mountain.⁴⁷⁰

Cat. no. 612

field inv. 60/67
trench 2, ∇ 1.40 m
horizon 3
iron
length 6.5 cm
Iron turning key with body slightly expanding in a trapeze form towards the head with circular opening. The foot bent at right angle, straight.

Cat. no. 613

study material, bag 33/1968.
sq. F8, ∇ 1.27 m
layer C, horizon 3
iron
preserved length 6.7 cm
Fragmented turning key of iron, same as the previous one. The body of slightly trapeze shape is expanding towards the head with fragmented circular opening. The foot is missing.

Cat. no. 614

field inv. 601/69
sq. G2, ∇ 0.65 m
horizon 2
iron
length 6.0 cm
Fragmented iron turning key with body of rectangular section and foot bent at the right angle.

Cat. no. 615

field inv. 674/69
sq. G4 F4, ∇ 0.60 m
layer B
length 18.7 cm
iron
Fragmented traction key with lower segment bent into a hook.

Cat. no. 616

S-51
26.09.1970.
sq. C6 D6, ∇ to 2.20 m
horizon 4
iron
Fragmented traction key with lower segment bent into a hook.

Cat. no. 617

tower D
sq. H1, ∇ 0.40 m
red burned earth below the socle level
iron
total length 12.0 cm
Iron padlock of rectangular shape with iron bar arched and welded to the lateral sides.

Cat. no. 618

field inv. 532/68
sq. B9 C9
horizon 3

468| Excavations in 1961–1962, unpublished.

469| M. Jeremić, M. Milinković, Die Byzantinische Festung von Bregovina (Südserbien), *Antiquité tardive* 3, 1995, 226.

470| M. Milinković, Die byzantinische Höhenanlage auf der Jelica in Serbien – ein Beispiel aus dem nördlichen Illyricum des 6. Jh., *Starinar* LI (2001), 2002, Abb. 27, 2.

iron
length 24.0 cm
Iron escutcheon of elongated elliptical shape with bent ends. In the center is rather large elliptical perforation.

Cat. no. 619

field inv. 63/67
trench 2, ▽ 1.40 m, near the south profile
horizon 3
bronze
diameter of hoop 1.4 cm
Bronze pendant consisting of circular open-ended hoop from which are suspended two small polygonal plates of sheet bronze via the bronze strap.

Cat. no. 620

field inv. 481/68
sq. B10, ▽ 2.51 m
horizon 3
bronze
diameter 4.5 cm; height 5.0 cm
Fragmented bronze lock with missing base. The circular body is of sheet bronze with grooves and on the lid are key-hole and perforations for the rivets.

Cat. no. 621

field inv. 701/69
sq. E9, ▽ 2.00 m
layer C, horizon 3
bronze
diameter 4.5 cm
Circular lid of sheet bronze with ring-like reinforcement on the rim. On the lid are openings for the key and the pulling through chain.

IV.9.G.3. BOXES, LIDS, APPLIQUÉS

In this group we included the finds used for storing small objects, medicines, cosmetics, ointments, aromatic oils and coins. These are complete and fragmented pyxides and chests made of metal or bone and of which are preserved receptacles, lids or handles.

Metal parts, mostly platings of the chests and boxes are not rare and isolated finds on the Roman sites. The handles shaped as facing heads of fish, dolphins, birds and snakes could also be encountered in the archaeological material from the settlements and fortifications.⁴⁷¹ Rather interesting is the lid with relief representation of

the head of a youth, probably Attis with the Phrygian cap. It was probably the lid of a pyxis and similar relief representation was found in the *castellum* at Bologa–*Resculum*, where it is dated in the Severan epoch.⁴⁷²

Cat. no. 622

field inv. 801/69
sq. C9
horizon 5
bone
diameter 3.0 cm
Flat lid of a pyxis with molded edge and a hole with ring-like molding for inserting the handle. The lid is decorated with three concentric grooves and on the bottom side are two concentric circles.
Literature: S. Petković, *Predmeti od kosti i roga*, 84, cat. 384, T. XXI, 12.

Cat. no. 623

field inv. 654/69
sq. C5, ▽ 0.90 m
layer C, horizon 3
bone
diameter 4.2 cm; height 4.0 cm
Bone pyxis of cylindrical shape. Grooved decoration on the outside.
Unpublished

Cat. no. 624

field inv. 799/69
sq. C9
horizon 5
bronze
diameter 4.5 cm
Bronze appliqué consisting of circular lid with perforation with inserted rivet. On the plate is cast representation of the youth with Phrygian cap under which are modeled thick locks. The face of the youth is oval with joint eyebrows, symmetrically modeled nose and rather small tightly closed lips.
Unpublished

471| A. V. Matei, I., Bajusz, I., *Castrul roman de la Romita–Certia*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 4, Zalău 1997, Taf. LXXXI, 8; D. Isac, *Castrele de cohortă și ală de la Gilău*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 6, Zalău 1997, Taf. XXIII, 5.

472| N. Gudea, *Das Römergrenzkastell von Bologa – Resculvm*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 1, Zalău 1997, 11.

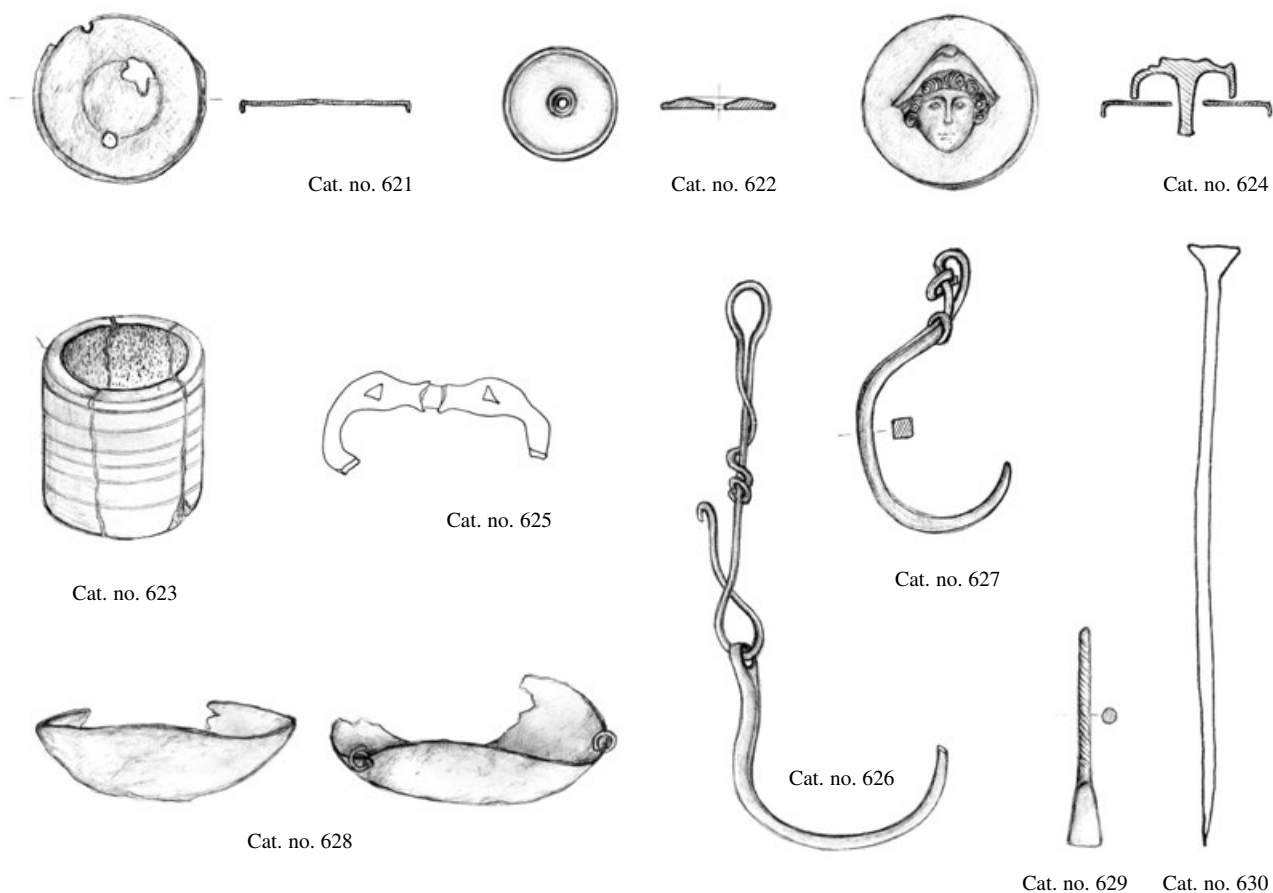


Fig. 89. Other utilitarian objects (R 1:2)

Cat. no. 625

field inv. 38/70
 E10 F10, ▽ 1.60 m
 layer C, horizon 3
 bronze
 length 6.0 cm
 Bronze appliqué – handle modeled as two snake's heads facing each other.
 Unpublished

IV.9.G.4. METRIC INSTRUMENTS

The remains of the metric instruments – steelyards of which are preserved pans and levers should be added to the rich repertoire of finds from Saldum (Fig. 89). Such miniature pans were probably used for weighing small objects, medicines or precious metals like gold and silver.

Metric instruments, particularly those for weighing small objects are rather frequently encountered on the

Late Roman and Early Byzantine sites. If the found parts belong to a single steelyard, then this was the type of the isosceles balances as those that we know from Ras–Podgradje (found on the floor of the 6th century basilica),⁴⁷³ Caričin Grad⁴⁷⁴ and Sadovec.⁴⁷⁵

Cat. no. 626

field inv. 375/68
 sq. F9, ▽ 1.18 m
 bronze
 length 15,0 cm

Bronze handle of a steelyard that was suspended from the horizontal lever. Semicircular hook of square section with horizontal perforation in the top section and with bent bronze wire pulled through.

473| M. Popović, *Tvrđava Ras*, 116, cat. 160, fig. 67.

474| B. Bavant, Les petits objets, in: *Caričin Grad II*, Belgrade–Rome 1990, 244–245, Pl. LIV, 300.

475| S. Uenze, *Die spätantiken Befestigungen von Sadovec*, 442, Taf. 33, 9.

Cat. no. 627

field inv. 689/69
sq. F5, ▽ 0.65 m
horizon 3, on the floor
bronze
height 7.6 cm

Bronze steelyard handle of square section. One end is pointed and the other is of loop shape with preserved chain link.

Cat. no. 628

field inv. 690/69
sq. F5, ▽ 0.65 m
horizon 3, on the floor
bronze
diameter 7.8 cm

Two fragmented pans made of sheet bronze with reinforcements on the rim and base. One pan has small bronze loop on the rim used to attach the pan via the chain to the lever.

IV.9.G.5. STYLUSES

The styluses used to write on wax-coated wooden tablets were also encountered among the utilitarian objects from Saldum. The pointed end was used for writing while the opposite flat and trapeze end was used for erasing the texts. Styluses were usually made of bronze although some iron specimens have also been found.

Cat. no. 629

field inv. 569/69
sq. E8, under horizon 2
layer C, horizon 3
length 16.0 cm
Bronze stylus with hammered trapeze head.

Cat. no. 630

S-25
sq. F8, ▽ 1.18 m
layer C, horizon 3
preserved length 5.8 cm
Fragmented iron stylus with trapeze expanded end and twisted handle.

IV.9.G.6. PARTS OF HORSE HARNESS

The fragmented bridle bits were found among the material from the stratigraphically unreliable layers.

Iron bridle bits are certainly an indicator of horse riding at Saldum in a distinct period but unfortunately it is impossible to determine the time precisely. The bridle bits are confirmed on two 6th century Early Byzantine site, Caričin Grad⁴⁷⁶ and Ras–Podgradje.⁴⁷⁷

Cat. no. 631

field inv. 750/69
pit
length 17.0 cm
iron

Bridle bits consisting of two connected segments with partially preserved circular opening for the cheek pieces.

IV.9.A–G. CONCLUSION

The agriculture played very important role in the life of the Saldum population particularly in the second half of the 4th century. Using their own hands and power of animals, inhabitants were able to cultivate considerable plots of land to satisfy their own needs. Using of the plow is confirmed in the material from the second half of the 4th century and second half of the 6th century. The plows found at Saldum are typical finds also in other Late Roman fortifications along the limes in Moesia Prima and Dacia Ripensis.

The hoard of tools containing three plowshares dates from the time of Valens–Valentinian (364–378/380) and it suggests that organized agriculture was practiced on considerably large scale in the surrounding area. For tilling the fields and gardens were used hoes and picks while branches and shrubs were trimmed with the pruning hooks.

The woodworking in the forest rich region was one of the important activities when the life at Saldum is concerned. As the remains of charcoal, soot, ash and fragments of carbonized timber from all epochs were encountered it is certain that buildings in this settlement were made of timber. The timber was used as structural element, to support roof structure or staircases. The furniture was also made of wood as well as some elements of weaponry. The wood had been obtained from the local resources and worked using tools, which were

476| B. Bavant, in: *Caričin Grad II*, 241–242.

477| M. Popović, *Tvrđava Ras*, Beograd 1999, cat. 92, fig. 59, 7.

probably produced at Saldum or in some neighboring center.

The trees had been cut down by the axes and depending on purpose the wood was worked with carpentry tools including chisels, spoon-like drills, hammers, adzes and special knives.

The ore processing was also one of the economic activities in the Late Roman Saldum. The lumps of iron and lead slag were encountered in the squares E9 F9 at the location of assumed workshop-ward. The ore had been brought from some of the nearby mines by land or by the river. Smelting of ore and casting was also taking place at Saldum, judging by the exceptional find of the mold shaped as bronze funnel fixed to the tongs.

The importance of fish in the population diet is indicated by the finds of fishhooks and weights for fishing nets that have been found in the considerable quantity at Saldum.

The knives as objects for everyday use or as specialized tools make one of the most numerous groups among the iron tools. They had been used in woodworking and leather working as the finds from Saldum suggest. The tanned hide while still damp was cut by sharp leather working knives, the holes were perforated using sharp awls and using the needles and threads of animal origin the clothes, footwear, tents, elements of furniture, shields, segments of armors and many other things had been made.

The woolen garments and other objects of wool had also been manufactured at Saldum, judging by the finds of pottery, metal and stone spindle whorls. As some authors assume even the bronze rod with bird-shaped head could have been used as a spindle. The needles with flat eyes were used for sewing fabrics made of vegetable or animal yarns.

Certainly the most important find from Saldum is the hoard of tools found in the squares in the eastern section of the fortification (squares D9 E9) on the floor dating from the Valentinian's period (364–378/380). This hoard contained plowshares, hoes, garden hoe, pickaxe-hammer, mattocks, axes, hammer and mold.⁴⁷⁸ It is obvious that this was a heterogeneous hoard, which together with lumps of iron and lead slag indicates the existence of a storehouse and workshop at this location. The hoard contained farming tools, woodworking tools and tools for smelting and processing metal and it is similar in contents to the hoards from the fortification at Boljetin–Smorna (end of 4th – first half of the 5th

century), Karataš–Diana (6th century), Gamzigrad–Romuliana (period of ruralization) and from Caričin Grad (6th century).⁴⁷⁹

If we analyze the chronological sequence of distribution of certain types and forms of tools at Saldum some conclusions beg to be made. First, the tools and implements have not been found in the earliest layer but it could be the result of insufficiently investigated layers of that date. In the 2nd–3rd century were used the tools for woodworking (axe, chisel) and for leather working and clothes making (knife and needle). The farming tools are missing. This may suggest that agriculture was practiced outside the archaeologically investigated area.

The largest quantity of tools dates from the Valentinian's period (364–378/380). Besides the hoard other tools primarily for woodworking have also been found.

The garrison in the fort used in the 6th century the woodworking tools (chisel and knife for hollowing wooden containers) while the farming tools are lacking and it conforms the hypothesis that garrison was regularly supplied with food from the distribution centers and that soldiers had been no more also farmers and stock breeders as it was the case with *limitanei* in the preceding period. Certain ruralization and probably slowdown in supplying the army happened in the second half of the 6th century when the soldiers at Saldum once again took up the farming tools. Namely, one symmetrical plowshare was found in the layer dating from the time of Justin II (565–578) to the end of the 6th century. It is, however, possible that it reached this layer from the earlier Valentinian's layer and that such incidence has not been recorded during excavations.

Other interesting finds including metric instruments, writing kit and the like also speak about everyday life at Saldum. The inhabitants, particularly those living in the reign of Valentinian used various types of boxes and chests for storing their valuables and money. The thesis that the customs office (*portorium*) existed at Saldum could be supported by finds of this type.

478| Cat. nos. 484, 488, 489, 490, 493, 501, 519, 535, 537, 552. Cf.: I. Popović, *Antičko oruđe*, 253. Author mentions two hoards of tools but according to the field journal we think that it was one structure – workshop/storehouse where these objects could have been hoarded.

479| I. Popović, *Antičko oruđe*, 252–253.

IV.10. OBJECTS FOR PERSONAL USE

IV.10.A. COMB (*PECTEN*)

Five fragmented combs made of antler were found at Saldum (Fig. 90). They are of the type of tripartite combs with one or two files of teeth. Three specimens were discovered in the Valentinian's layer (364–378/380) while two were found in the 6th century layer.

Specimens **Cat. nos. 632–635** are rectangular types of combs with lateral sides shorter and straight. Their covers are rectangular and fixed with the rivets. The covers of one specimen are undecorated while other two have the ornament of running spirals or the motif of connected concentric circles.⁴⁸⁰

The statistical analysis carried out by S. Petković that included around fifty specimens revealed that combs of this type had been used from the middle of the 4th to the end of the 6th century.⁴⁸¹ Few specimens were found in *Singidunum* in the civilian settlement and the military camp.⁴⁸² At the site 'Burdelj' in *Viminacium* they have been found in graves dating from the period of Great Migration. Two specimens were found at *Čezava–Novae* in the layer dated between AD 378 and AD 441, and another two come from the layer generally dated in the 6th century. Six tripartite rectangular combs were found at Ravna and dated on the basis of the finding context into the 4th – second half of the 4th century. Fourteen specimens were found in the military camp at *Karataš–Diana* and they mostly date from the 6th century although they were also registered in the layers dating from the second half of the 4th or the 5th century. Thirteen combs come from the camp at *Kostol–Pontes* and most of them date from the period between AD 381 and AD 441, while just few specimens date from the 6th century. From the fortification at *Milutinovac* comes the comb of this type dated in the 6th century,⁴⁸³ while in the course of investigations at *Mora Vagei* five combs dated in the 4th–6th century have been found. These combs are somewhat less frequent in the hinterland but it is primarily the consequence of insufficiently investigated sites than the actual absence of this material. There are the 6th century finds from *Caričin Grad*⁴⁸⁴ and *Gradina* on the *Jelica* mountain.⁴⁸⁵ In the later Late Roman layer at *Podgradje* in *Ras* was found one semifinished comb for which M. Popović assumed that it had been produced on the spot.⁴⁸⁶

Second type is the comb with arched handle, rectangular cover and single file of teeth (**Cat. no. 636**). It is the specimen with decoration typical of this kind of objects – the fretting ornament running along the curve of the handle and the edge of the cover. This type was encountered in the layers dating from the second half of the 4th – first half of the 5th century⁴⁸⁷ and it was established that they originate from the time of settling of the Gothic tribes in area of the Danube limes.⁴⁸⁸

The combs with arched handle are relatively numerous and they have been found in *Singidunum*, within the civilian settlement (final quarter of the 4th – first half of the 5th century), in *Viminacium* (chance find), at *Sapaja* were found three fragmented specimens dated in the 4th–5th century, specimen from *Čezava–Novae* was found in the layer dating from the end of 4th – first half of the 5th century and they were also found at *Ravna–Camps* (4th century), at *Karataš–Diana* (end of 4th – first half of the 5th century) and of same date are the specimens from *Kostol–Pontes*, *Korbovo–Obala*, *Bordje* and *Gamzigrad–Romuliana*.⁴⁸⁹ Similar specimen was found as grave offering in the 4th century burial at *Intercisa*.⁴⁹⁰

Cat. no. 632

field inv. 392/68

sq. F8

horizon 3

dim. 6.1 x 2.5 x 0.8 cm

Fragmented antler-made tripartite comb of rectangular shape with two files of teeth. The cover is decorated with

480| S. Petković, *Rimski predmeti od kosti i roga*, Beograd 1995, 22, motifs 3 and 4. Hereafter S. Petković, *Predmeti od kosti i roga*.

481| S. Petković, *Predmeti od kosti i roga*, 109, table 3, type I.

482| S. Petković, *Predmeti od kosti i roga*, 57, combs type I, cat. 1–5.

483| P. Milošević, M. Jeremić, *Le castellum à Milutinovac, Dježdapske sveske* III, 1986, fig. 14, g.

484| B. Bavant, *Les petits objets*, in: *Caričin grad II, ????*

485| M. Milinković, *Die byzantinische Höhenanlage auf der Jelica in Serbien. Ein Beispiel aus dem Nördlichen Illyricum des 6. Jh.*, *Starinar* LI (2001), 2002, Abb. 35/1–5.

486| M. Popović, *Tvrđava Ras*, Beograd 1999, 119, cat. 164, fig. 68, 4.

487| S. Petković, *Predmeti od kosti i roga*, 27–28, type VII, variant 3.

488| S. Petković, *Predmeti od kosti i roga*, 28.

489| S. Petković, *Predmeti od kosti i roga*, 64–65, cat. 100–113.

490| E. Vágo, I. Bóna, *Intercisa, der spätrömische Südfriedhof*, Budapest 1976, Grab 1308, T. 27, T. XLV, 2.

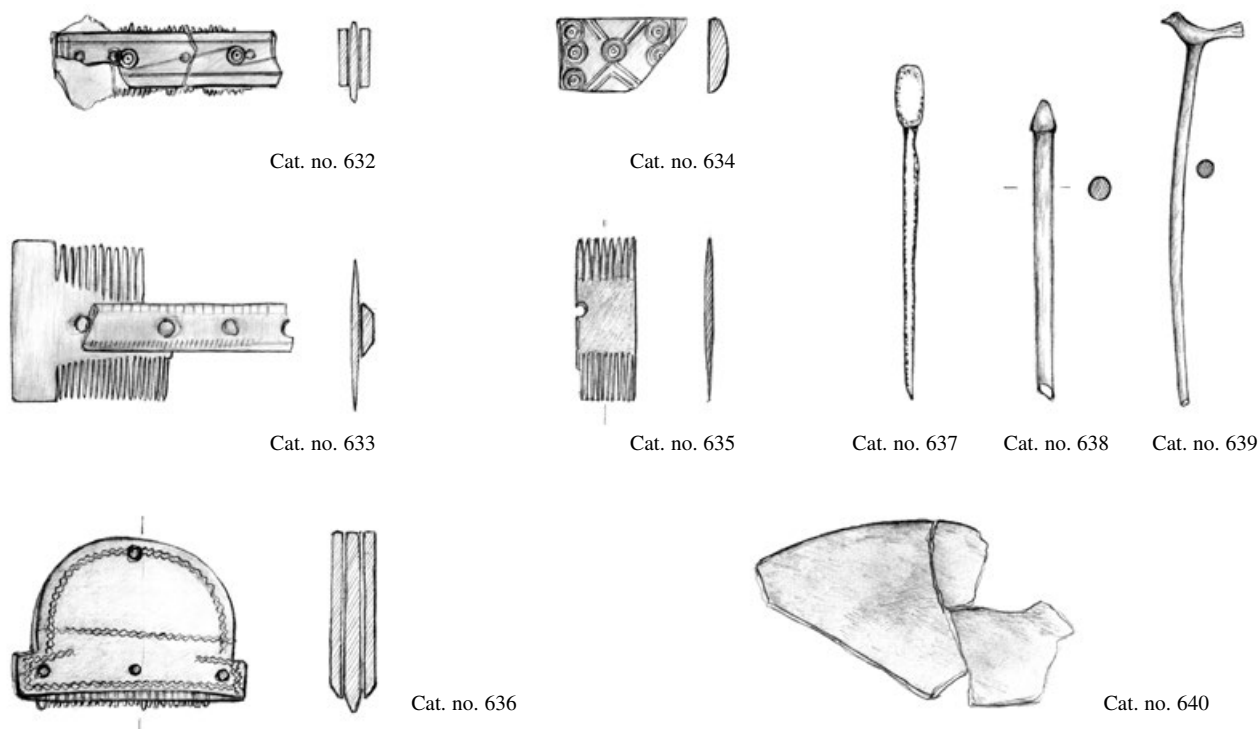


Fig. 90. Objects for personal use (R 1:2)

concentric circles connected with tangent lines. Four bronze rivets are preserved.
Literature: S. Petković, *Predmeti od kosti i roga*, type I, 58, cat. 18, T. II, 1.

Cat. no. 633

field inv. 115/68
tower C
layer B, horizon 2
dim. 7.5 x 4.3 x 0.6 cm

Tripartite antler-made comb of rectangular shape with two files of teeth. The rectangular cover is fixed with iron rivets and along the edges are notches following the line of teeth.
Literature: S. Petković, *Predmeti od kosti i roga*, type I, 58, cat. 17.

Cat. no. 634

S-23
sq. F8/68, ∇ 1.34–1.36 m
horizon 3
width 2.0 cm

Fragment of bone cover of a tripartite comb showing the traces of burning. The bone of semielliptical section decorated with two rows of three 'eyelets' each and between them is an 'eyelet' with radial parallel incisions.
Unpublished

Cat. no. 635

S-22
sq. G8/69
above horizon 2
width 4.3 cm
Fragment of a tripartite comb with two files of teeth.
Unpublished

Cat. no. 636

field inv. 33/70
sq. C10 D10, ∇ 1.70 m
layer C, horizon 3
dim. 6.2 x 4.3 cm
Tripartite single-filed bone comb. Top part of the handle is arched and bottom is of rectangular shape tapering towards the teeth and decorated by engraving. On the arch is one and on the rectangular segment are three bronze rivets. Fretting motif along the handle edge.
Literature: S. Petković, *Predmeti od kosti i roga*, type VII, 65, cat. 107, T. IX, 6.

IV.10. B. DECORATIVE PIN (ACUS)

The decorative pins as objects for personal use were often made of bone (Fig. 90). They were used as hairpins

for making the coiffure, they were also used for medical or cosmetic purpose or for attaching the garment. Their emergence should most probably be associated with the presence of the womenfolk in the camp. Two fragmented pins-hairpins dating from 2nd–3rd century layer have been found at Saldum.

Pins-hairpins from Saldum are simple specimens with heads modeled in a different way; one head is oval (**Cat. no. 637**) the other is button-shaped (**Cat. no. 638**).

The pins with oval head as the female toilette accessories were encountered during the entire antique period.⁴⁹¹ They were found in the area of *canabae* in *Singidunum* but without precise information about the finding context, at Dubravica–*Margum* where they are extensively dated from the 1st to the 4th century.⁴⁹² From Karataš–*Diana* come thirteen pins found in the layers from the second half of the 3rd to the first half of the 5th century while two specimens from Kostol–*Pontes* are dated in the end of the 4th – beginning of the 5th century and in the 6th century.⁴⁹³

Simple pins-hairpins with button-like head although chronologically rather insignificant material are most frequently found in the layers of the 2nd–3rd century. Specimens analogous to the **Cat. no. 638** were found within *canabae* in *Singidunum* (2nd–3rd century)⁴⁹⁴ while one pin was found at the site in Knez Mihailova 30.⁴⁹⁵ The pin from *Viminacium* comes from the sacrificial trench at the site ‘Više grobalja’ and is dated in the second half of the 2nd – first half of the 3rd century and of the same date is one specimen from Karataš–*Diana*.⁴⁹⁶ One of the earliest dated specimens is the pin found at Lipljan–*Ulpiana* dating from the end of 1st – first half of the second century.⁴⁹⁷

In this chapter we would like to mention one completely different group of pins with the head shaped as stylized bird and the use of which was variously explained by many scholars (**Cat. no. 639**). In literature are used terms pin, hairpin, ornamental pin, baton, spindle, etc. Considering the fact that this specimen is of rather small size we think that it was used as pin for fastening the garment.

This type of pins usually has the ring on the other end, but it is missing on the Saldum specimen. The investigators (G. König) have noticed that diameter of ring match the thickness of the finger and called it a spindle for the finger.⁴⁹⁸ Such objects, which had been made of bone, rarely of glass, are encountered in the Roman world in the 2nd–3rd century and they some-

times have the representation of *Venus pudica*. They had been mass produced and used in the household activities. Chemical analyses of the pins found in Zurzach revealed the traces of the greasy substances on the rings that originated from the human palms.⁴⁹⁹

The metal cast pins were usually found in the 4th–5th century layers at the settlements and fortifications along the Danube including Kladovo, Donje Butorke, Mokranjske stene, Prahovo, Gornea, Oršava, *Drobeta*, Dobrogea, Pernik etc.⁵⁰⁰ The scholars think that these pins were actually spindles with representation of dove often in combination with cast cross and that they not were only of practical purpose but that they also had certain broader symbolic meaning from ‘the domain of folk tradition and expressing the hopes of the simple people like amulets’.⁵⁰¹ As they have been found in the area of the Danube limes same author assumed the existence of the workshop for mass production of these pins-spindles, ‘intended for the women who accepted new religion’, i.e. Christianity.⁵⁰²

Cat. no. 637

field inv. 715/69

sq. E8, V 1.60 m

layer D, under horizon 3

bone

length 8.9 cm

Bone hairpin with oval head.

Literature: S. Petković, *Predmeti od kosti i roga*, 73, cat. 234, T. XII, 17, pin type IV.

491| S. Petković, *Predmeti od kosti i roga*, 30.

492| S. Petković, *Predmeti od kosti i roga*, 73, cat. 229–233.

493| S. Petković, *Predmeti od kosti i roga*, 73, cat. 235–249.

494| S. Petković, *Predmeti od kosti i roga*, 76, cat. 278.

495| V. Ivanišević, S. Nikolić-Đorđević, Novi tragovi antičkih fortifikacija u Singidunumu – lokalitet Knez Mihailova 30, *Singidunum* 1, 1997, fig. 59, 12.

496| S. Petković, *Predmeti od kosti i roga*, 77, cat. 281–282.

497| S. Petković, *Predmeti od kosti i roga*, 77, cat. 283.

498| O. Bozu, Bemerkungen über weniger bekannten altchristlichen Bronzegegenstände im 4–5. Jahrhundert datiert: die Fingerkunkeln, *Banatica* 12/I, 1993, 220.

499| O. Bozu, *Banatica* 12/I, 1993, *loc. cit.*

500| O. Bozu, *Banatica* 12/I, 1993, Abb. 3–4; M. Rusu, Paleocreătimismul din Dacia romană, *Ephemeris Napocensis* I, 1991, pl. XIV.

501| O. Bozu, *Banatica* 12/I, 1993, 222.

502| O. Bozu, *Banatica* 12/I, 1993, 223.

Cat. no. 638

field inv. 831/69

sq. G5, ▽ 0.80 m

layer C, D

bone

length 8.0 cm

Fragmented hairpin with conical head.

Literature: S. Petković, *Predmeti od kosti i roga*, 77, cat. 280, T. XIV, 5, type IX.**Cat. no. 639**

field inv. 670/69

sq. F8

layer C, D

bronze

length 10.5 cm

Bronze pin with head shaped as a bird.

IV.10.C. MIRROR

One bronze mirror found in the early Imperial layer at Saldum was also classified as object for personal use. It is of the type of simple bronze mirrors with handle and was in a very poor state of preservation.

Cat. no. 640

field inv. 241/70

sq. G9 G10, ▽ 2.35 m

layer E

Fragment of an arched segment of bronze mirror.

IV.11. JEWELRY
AND COSTUME ELEMENTS

IV.11.A. FIBULAE

Nine bronze fibulae were recorded in the field inventory in the course of excavations of the Saldum fort interior, but the revision of the material in 2003 revealed that there are only five specimens in the collection (Fig. 91).

TYPE 1 – FIBULA WITH HINGE,
AUCISSA TYPE

The main characteristics of the type are hinge, rather broad bow with molded and usually decorated middle

section and a button at the end of a catchplate. The type was distributed from Britain to the Euphrates.⁵⁰³ The earlier specimens of the Aucissa fibulae have the bow shaped as strap with longitudinal rib while the bow of the later specimens is of semicircular section. Our specimen has the bow shaped as strap, so it belongs to the group of the early Aucissa fibulae.

The Aucissa fibulae were in use during the entire 1st century particularly in the time of Flavians although they were also used in the first half of the 2nd century.⁵⁰⁴ The examples of this type were found at Ritopek, but unfortunately not in the stratified associations, so they were dated on the basis of the analogous specimens from other sites and from other provinces.⁵⁰⁵ The analogous Aucissa fibula generally dated in the 1st century was found in the vicinity of *Zemun–Taurunum*.⁵⁰⁶ One fibula of this type was found together with native and north Italic imported pottery and lamps with volutes in the early Roman layer in *Sirmium*.⁵⁰⁷ The fibulae of this type are confirmed also at the site Gomolava and in the closed association – early Roman house at Dumbovo near Beočin, that is dated in the time of Flavians.⁵⁰⁸

The well-preserved Aucissa fibula, dated according to the finding circumstances in the 1st–2nd century, was found in the course of investigation of the fortification interior at Ravna–*Timacum minus*.⁵⁰⁹ Specimen from Hajdučka Vodenica was found in the cultural layer of the necropolis and was dated from the middle of the 1st to the beginning of the 2nd century.⁵¹⁰

503| T. Bechert, *Römische Fibeln des 1. und 2. Jahrhunderts n. Chr.*, Funde aus Asciburgium 1, Duisburg 1973, 12–13.

504| W. Jobst, *Die römischen Fibeln aus Lauriacum*, Forschungen in Lauriacum 10, Linz 1975, 26.

505| D. Bojović, *Rimske fibule Singidunuma*, Beograd 1983, 21, type 2, variant, cat. 10–13, T. II/10–13.

506| B. Petrović, Nakit, in: *Antička bronza Singidunuma*, ed. S. Krunic, Beograd 1997, 136, cat. 173.

507| V. Dautova-Ruševljan, Numizmatički nalazi i trgovački promet, in: O. Brukner, V. Dautova-Ruševljan, P. Milošević, *Počeci romanizacije u jugoistočnom delu provincije Panonije*, Novi Sad 1987, 58.

508| V. Dautova-Ruševljan, in: *Počeci romanizacije*, 58.

509| P. Petrović, S. Jovanović, *Kulturno blago knjaževačkog kraja*, Arheologija, Beograd 1997, 86, cat. 1.

510| A. Jovanović, Hajdučka Vodenica, kasnoantičko i ranovizantij-sko utvrđenje, *Starinar XXXIII–XXXIV* (1982–1983), 1984, 322.

Cat. no. 641

field inv. 534/68

sq. C8 D8 C9 D9

layer E

bronze

length 4.0 cm

Bronze bipartite *Aucissa* fibula with hinge. The head is tubular and along the middle of strap bow are two longitudinal ribs decorated with transversal incisions. The catchplate is of triangular shape and pin holder is trough-shaped and damaged.

TYPE 2 – MOLDED FIBULA
(KRÄFTIGPROFILIERTE FIBELN)

Fibula of this type was found in the interior of the fortification at Saldum in the course of cleaning the site prior to the new excavations. In the field journal is recorded that it dates from the Valentinian layer (364–378/380), but we are leaving open the possibility that the material was mixed or layers disturbed as this find certainly dates from the earlier phase.

The molded fibulae are widely distributed in the provinces and they are very frequent in the Upper Moesia. They are characteristic of the layers and assemblages of the 1st–2nd century, although they appear also in the first half of the 3rd century.

The authors do not agree about the workshops, which produced this type of fibulae. D. Bojović thinks that they had been produced in some of the bigger centers – *Singidunum*, *Viminacium*,⁵¹¹ while A. Jovanović suggests that workshops were in Turnu Severin–*Drobeta*, *Kostol–Pontes*, *Lederata*, *Oršava–Dierna*.⁵¹² One of the indicators for the existence of local workshops are the finds of semifinished articles. It is most probable, for instance, that at *Karataš–Diana* was active the workshop producing fibulae, which were the derivatives of the *Aucissa* type and molded fibulae and this workshop supplied the neighboring markets in the second half of the 1st and in the 2nd century.⁵¹³

The analogous specimens of the molded fibulae are numerous. The one most similar to our specimen comes from *Sirmium* and was dated according to the finding circumstances in the first half of the 1st century.⁵¹⁴ From *Singidunum* and its vicinity come large amount of molded fibulae, which D. Bojović classified into 14 types, which correspond to the accepted chronological scheme.⁵¹⁵ The molded fibula from Kurvingrad analo-

gous to our specimen is dated by the coins in the first half of the 2nd century.⁵¹⁶

Cat. no. 642

field inv. 568/69

sq. E8

bronze

length 5.0 cm

Fragmented molded bronze fibula with knee-like protuberance on the bow. The spring and pin are missing. The narrow catchplate with button protrusion at the end extends into the flat pin holder, which is fragmented.

TYPE 3 – FIBULA WITH
BACKWARD TURNED FOOT

There were many discussions among the archaeologists about the genesis of this type of fibulae. It is considered that they originated from the Middle La Tène type in the regions of the Black Sea and southeast Baltic in the 1st–2nd century.⁵¹⁷ It is possible that they reached Upper Moesia during the migration of the Goths.

Fibulae of this type are numerous at the sites in Upper Moesia and they are dated, depending on variant from the 3rd to the 6th century. They have been found in *Singidunum*, *Čezava–Novae*, *Boljetin–Smorna*, *Donji Milanovac–Taliata*, *Niš–Naissus*. Two fibulae of this type have been found together with the Gepidean pottery and bone combs at Sapaja in the layers dating from the late 5th –early 6th century and they are connected to the German army units at this location.⁵¹⁸

According to the typology of D. Bojović the Saldum specimen belongs to the type 32 – variant 3,

511| D. Bojović, *Rimske fibule Singidunuma*, 41.512| A. Jovanović, *Nakit u rimskoj Dardaniji*, Beograd 1978, 52.513| D. Grbić, *Fibulae as products of local workshops at Diana*, in: *Roman limes on the Middle and Lower Danube*, Belgrade 1996, 89.514| V. Dautova-Rušeavljan, in: *Počeci romanizacije*, 60, T. 44, 2.515| D. Bojović, *Rimske fibule*, 31–38, type 9, cat. 40–94.516| L. Trbuhović, *Kurvingrad, compte rendu des fouilles, Djerdapske sveske III*, 1986, 60, fig. 6, A–B.517| A. K. Ambroz, *Fibuli juga evropejskoj časti SSSR. II v. do n.e – IV v. n. e.*, Svod arheoloških istočnikov D 1–30, Moskva 1966, 94.518| D. Dimitrijević, *Sapaja, rimsko i srednjovekovno utvrđenje na ostrvu kod Stare Palanke, Starinar XXXIII–XXXIV (1982–1983)*, 1984, 50, T. VIII.

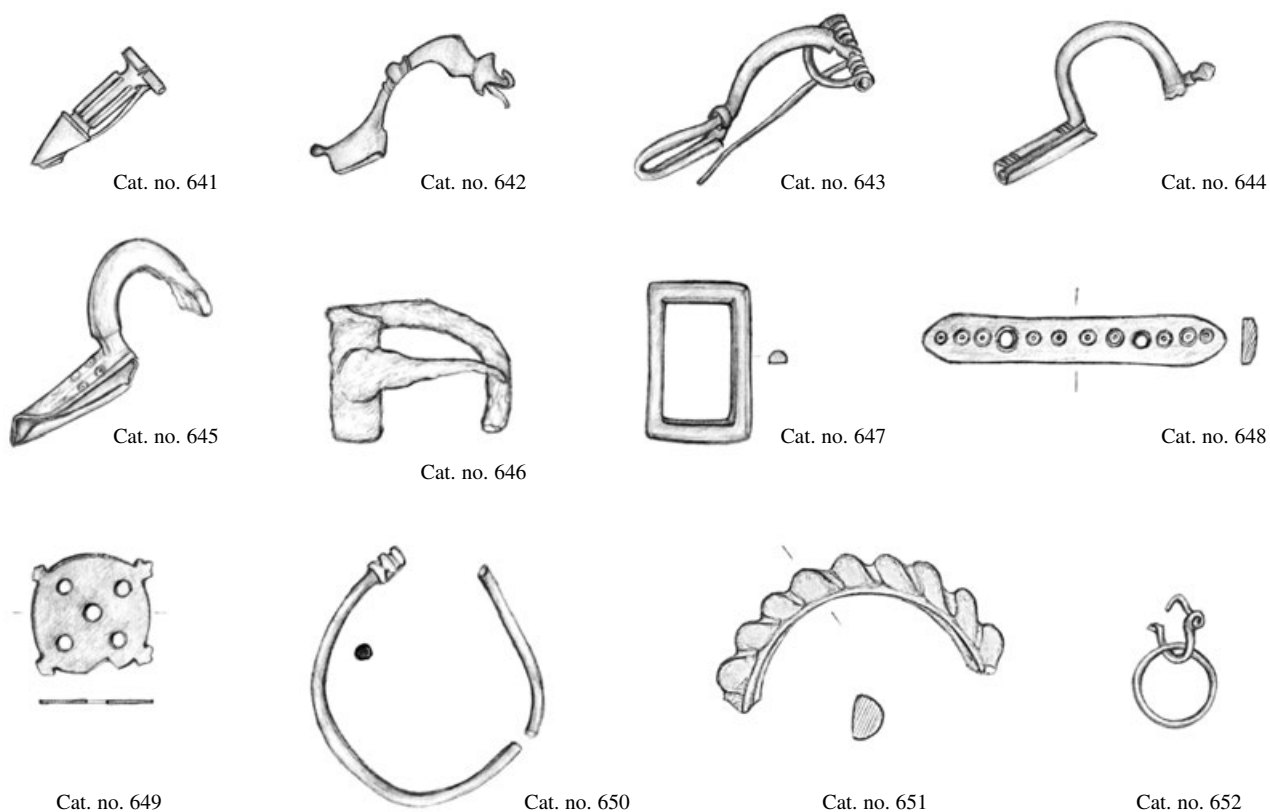


Fig. 91. Jewelry and costume elements (R 1:2)

which has a bow curved inside or outside, making thus an opening for pulling through the pivot of a spring.⁵¹⁹

Cat. no. 643

field inv. 711/69
sq. F9 G9, V 0.95 m
layer C, horizon 3
bronze
length 6.8 cm

Bronze fibula with backwards turned foot. The head is made of coiled wire, which extends into a pin. The bow is strap-like as well as the foot which winds in one coil around the bow.

almost non-existent. They are mostly dated in the 4th century. We found the closest analogies in Tekija–Transdierna that are dated in the 3rd century on the basis of their typological features and not the context of the find.⁵²⁰ There are also some specimens from Mokranjske stene from the 3rd–4th century layer⁵²¹ and from Velesnica from the 4th century.⁵²² There is an important find of the fibula with hinge mechanism from the closed association of the house 13 at Podgradje in Ras, dated according to the finding context into the end of the 4th century.⁵²³

TYPE 4 – T-FIBULA WITH SPRING

This type of fibula is also known as fibula of the crossbow type or two-piece military fibula. As their prototypes are identified the fibulae with backward turned foot or early Roman provincial types.

T-fibulae are not particularly frequent on the sites in Upper Moesia. They appear sporadically along the right Danube bank, but in the hinterland they are

519| D. Bojović, *Rimske fibule*, 72–73, cat. 319–322.

520| A. Cermanović-Kuzmanović, A. Jovanović, *Tekija*, Belgrade 2004, 221, Kat. 8, 9.

521| M. Sretenović, Mokranjske stene. Višeslojno naselje. Izveštaj o arheološkim istraživanjima u 1980. godini, *Djerdapske sveske* II, 1984, fig. 217, 3.

522| R. Vasić, S. Ercegović–Pavlović, D. Minić, Velesnica. Izveštaj o sondažnim rekognosciranjima u 1980. godini, *Djerdapske sveske* II, 1984, fig. 112, 2.

523| M. Popović, *Tvrđava Ras*, Beograd 1999, 109, fig. 58, 1.

Cat. no. 644

field inv. 547/68

sq. F8, ▽ 0.60 m

horizon 3

bronze

length 6.5 cm

Fragmented T-fibula with pin and transversal bar missing. At the beginning of the bow is the ring-like protrusion with small biconical bulb. The bow decorated with two grooves is of trapeze section. The foot of the same width as the bow is decorated with parallel grooves and triangular notches between them. The pin holder is of trough shape and damaged.

TYPE 5 – CRUCIFORM FIBULA

It is the most widely distributed type of Roman fibulae, which have been encountered in camps, settlements and necropolises. The workshops producing these fibulae are confirmed at *Brigetio* and *Siscia*.

This fibula type is characterized by the semicircular bow and transversal bar ending in the protuberances shaped as onion bulbs. Hence, they are also known as 'onion bulb fibulae'. There is also one protuberance on the head of the fibula at the beginning of the bow. The bulbs could be round, oval, decorated with facets. The catchplate is sometimes decorated with engraving. The pin holder is usually of tubular shape.

According to the typology of fibulae from *Singidunum* this specimen could be classified as type 37, variant 5.⁵²⁴ The fibulae of this type found in the closed associations – graves from the necropolis at Svi- loš in Pannonia are dated by the coins of Constantine, Magnentius and Constantius II,⁵²⁵ meaning that they are generally dated between AD 340 and 360, although they have been used even later, as it is suggested by the find from Saldum. The cruciform (onion bulb) fibulae were often found on the sites along the Iron Gates limes and in the hinterland, but listing of all possible analogies would not make much sense at this moment because of the fragmentary state of our specimen and impossibility to compare it with other registered specimens.

Cat. no. 645

field inv. 712/69

sq. F9 G9, ▽ 0.95 m

layer C, horizon 3

bronze

length 6.5 cm

Fragmented cruciform fibula with pin and segment of transversal bar missing. On the shoulder of the bar are notched lines. The bow is of trapeze section and shorter than the rectangular catchplate, which is decorated with band with incised oblique lines. Two pairs of two eyelets each are in the corners of the top surface of the catchplate and emphasized with molded ribs. The pin holder is of through shape and made of bent sheet bronze.

IV. 11. B. BELT BUCKLES

Buckles made of bronze, iron or bone as belt elements are the components of the attire of Roman soldiers and civilians. Two specimens, dated according to the finding circumstances in the Valentinian's epoch (364–378/380), were found at Saldum (Fig. 91).

The buckles of D shape were very frequent elements of the belt garnitures and could have been worn by soldiers and civilians alike. The analogies from Pannonia are dated in the 4th –second half of the 4th century.⁵²⁶ The buckle of this type made of bone was found at Mora Vagei and dated in the 6th century, but the dating was altered to the 4th – first half of the 5th century on the basis of the metal analogies.⁵²⁷ Few such buckles come from the closed associations found in *Emona* and dated in the end of 4th – beginning of the 5th century. M. Sagadin connects them with the German-Visigothic mercenaries in the Roman army.⁵²⁸

The buckles of rectangular shape are not so frequent and they were somewhat less popular type of buckles. They are of different construction and decoration. One-piece square buckles of symmetrical shape and mostly decorated are dated in the second half of the 3rd and in the 4th century. Some specimens are even of a later date. We found analogies for our specimen at Boljetin-*Smorna* where they are dated in the second half of the 2nd century and at Čezava-*Novae* dated in

524| D. Bojović, *Rimske fibule*, 85, cat. 414–421.525| V. Dautova-Ruševljan, *Kasnoantička nekropola kod Svi- loša u Sremu*, Novi Sad 2003, 98, T. 2–3.526| R. Košćević, *Antički brončani predmeti sa jugoslovenskog dijela provincije Gornje Panonije*, Zagreb-Beograd 1988, doktorska teza, rukopis, T. LXXV, 1029–1036.527| S. Petković, *Predmeti od kosti i roga*, 39.528| M. Sagadin, Antične pasne spone in garniture v Sloveniji, *Arheološki vestnik* XXX, 1979, 311.

the 3rd–4th century. Also worth mentioning are two grave finds from the 4th – first half of the 5th century from Zemun–*Taurunum* and from the site Ciglana in Kovačica.⁵²⁹

Cat. no. 646

field inv. 153/68
trench 2, sq. B8, ▽ 1.50 m
horizon 3
iron
length 5.0 cm
Clasp of a two-piece buckle. The frame is shaped as Latin letter D, with pin.

Cat. no. 647

field inv. 373/68
sq. F9, ▽ 1.18 m
horizon 3
bronze
dim. 4.0 x 2.7 cm
Bronze rectangular frame of a two-piece buckle.

IV.11.C. APPLIQUÉS AND PLATINGS

Appliqués and platings were used as functional or aesthetic details, which were attached to the clothes made of leather or textile. One bone appliqué of elliptic shape and one bronze specimen with five circular perforations were found at Saldum (Fig. 91).

The bone appliqué **Cat. no. 648**, most probably dates from the Valentinian's period at Saldum (364–378/380), but in the field journal was noted that it comes from the earlier layer (layer D), dated in the 2nd–3rd century, so we leave open the possibility that material from these two layers was mixed. The appliqués of this shape and type of decoration are widely distributed in the Danube basin.⁵³⁰

Four specimens analogous to our example come from Ravna–*Camps*, from the layer dated in the period 378–441, while the specimens from Karataš–*Diana*, Kostol–*Pontes*, Momčilov grad on the Juhor mountain and Caričin Grad are dated in the 6th century.⁵³¹ Such appliqués were most probably used for fixing the leather pouches, as on some specimens were discovered traces of use on the inside edges of the circular perforations.⁵³²

Cat. no. 648

field inv. 106/70
sq. E6 E7, ▽ 1.30–1.40 m
length 8.0 cm
Appliqué of elliptical shape with circular perforations for attaching to the leather strap and series of 'eyelets' – concentric circles.
Literature: S. Petković, *Predmeti od kosti i roga*, 85, cat. 389, T. XXII, 1.

Cat. no. 649

field inv. 271/70
sq. G9, ▽ 0.60 m
layer E
bronze
diameter 3.2 cm
Bronze plating (appliqué) of oval shape with four symmetrically protruding extensions and five circular perforations in the central area.

IV.11.D. BRACELETS

The bracelets are kind of jewelry made of various materials. Just two specimens made of bronze and glass paste were found at Saldum (Fig. 91).

Bronze bracelets with open ends are typical Late Roman jewelry. There are close analogies from the earlier fortification layer at Rtkovo–Glamija, dated by the coins of Theodosius, Honorius and Arcadius.⁵³³ In the graves of the Late Roman necropolis in Ptuj, site Rabelčja vas–Dijaški dom, have been found many bronze bracelets with ends decorated in the identical way as our specimen. The finds from Ptuj–*Poetovio* are generally dated by the coins of Valens and Valentinian I and as obligatory offer were encountered hemispherical drinking glasses,⁵³⁴ of the type found also in the Valentinian's layer at Saldum (364–378/380).

529| M. Janković, Seoba naroda, in: *Antička bronza Singidunuma*, ed. S. Krunić, Beograd 1997, cat. 558 et 580.

530| S. Petković, *Predmeti od kosti i roga*, 38.

531| S. Petković, *Predmeti od kosti i roga*, 85, cat. 390–398.

532| S. Uenze, *Die spätantiken Befestigungen von Sadovec*, 194.

533| M. Gabričević, Rtkovo–Glamija I – une forteresse de la basse époque. Fouilles de 1980–1982, *Djerdapske sveske* III, 1986, 72, fig. 23.

534| M. Vomer-Gojkovič, Poznorimski grobovi z grobišča pri Dijaškem domu v Rabelčji vasi na Ptuj, *Arheološki vestnik* 48, 1997, T. 2/24–4, 5; T. 4/42–1; T. 5/45–2, T. 7/54–2, 3, 4, 5.

The glass paste bracelets are also frequent finds on the Late Roman sites. At *Margum* were found 24 specimens, undecorated, twisted or with appliqués and of black, blue and green color but without precise information about the finding circumstances.⁵³⁵ The bracelet made of black glass paste from the child's burial at Sviloš is dated by the coin of Constantine I (305–337) and Constantius II (337–361).⁵³⁶ The other bracelets from the necropoles in Pannonia are dated by the coin finds in the first half of the 4th century.⁵³⁷

Cat. no. 650

field inv. 739/69

sq. B8, ▽ 2.02 m

horizon 4

bronze

diameter 6.2 cm

Bronze open-ended bracelet of circular section, with thickened one end with triple grooves while other end is missing.

Cat. no. 651

field inv. 27/70

sq. B4, ▽ 2.00 m

layer D

glass paste

diameter 7.5 cm

Fragment of a bracelet made of green-black glass paste. It is of semicircular section with obliquely twisted ribs on the outside.

IV.11. E. EARRING

Just one bronze bipartite earring of modest manufacture was found at Saldum. The analogy for this earring is the specimen from Rtkovo–Glamija found in the layer dated by the coins of Theodosius, Honorius and Arcadius, but the specimen from Rtkovo has just S loop without hoop.⁵³⁸ The earlier specimens of similar earrings usually have soldered head of various form and they are characteristic of the 2nd–3rd century jewelry although they were in use also in the 4th century.

Cat. no. 652

field inv. 679/69

sq. F5, ▽ 0.65 m

horizon 3, on the floor

bronze

diameter of hoop 2.2 cm

Bronze earring with loop shaped as letter S and circular hoop.

IV.12. OBJECTS OF APPLIED ART

STATUETTE OF *VENUS PUDICA*

Ceramic statuette of Venus from Saldum has been sculptured after the masculine model (Fig. 92). She has long vertebral part, high buttocks with emphasized muscles and narrow hips. According to the technological characteristics it could be dated in the middle – second half of the 2nd century.

This is for the time being the single specimen of glazed statuette of Venus found in the Upper Moesia. The terra-cotta figurines analogous to our specimen were registered in *Apulum* in Dacia, where the pottery workshop was active in the second half of the 2nd century and where the terra-cottas of similar technological characteristics have been found. T. Cvjetičanin is of the opinion that our specimen has been produced in some local center, perhaps *Viminacium*, although she does not rule out the possibility that this figurine was produced in *Apulum* considering the similarity of the finds.⁵³⁹

Rather large number of the terra-cotta figurines was found in *Viminacium* and one of them was glazed. It is a fragment of the male statuette of which just the torso is preserved. It is made of brown-gray fired clay of rather good fabric and brown-green glazed. It has been found in the sacrificial layer above the graves and dated in 2nd–3rd century.⁵⁴⁰

Venus pudica made of baked clay and dating from the Severan epoch has also been found in the military camp Buciumi. Her torso is naked and she is holding the veil on the head with her left hand and with right hand she is holding the drapery around the hips.⁵⁴¹ Forty-five terra-cottas representing Venus are known from Dacia and they differ according to the classic models, appearance, quality and technique of manu-

535| G. Karović, *Rimsko staklo Marguma, Viminacium* 10 (1995–1996), 1996, 94, T. VIII.

536| V. Dautova-Ruševljan, *Kasnoantička nekropola kod Sviloša*, 102, T. 4, 5.

537| V. Dautova-Ruševljan, *Kasnoantička nekropola kod Sviloša*, note 24.

538| M. Gabričević, *Djerdapske sveske* III, 1986, fig. 23.

539| T. B. Cvjetičanin, *Gledosana keramika Mezije, Dakije Ripensis, Dakije Mediteraneje i Dardanije*, Beograd 1997, Ph.D. thesis, manuscript, 62, type RC 62.

540| Lj. Zotović, Č. Jordović, *Viminacium. Nekropola „Više grobalja“*, Beograd 1990, 11, fig. 4.

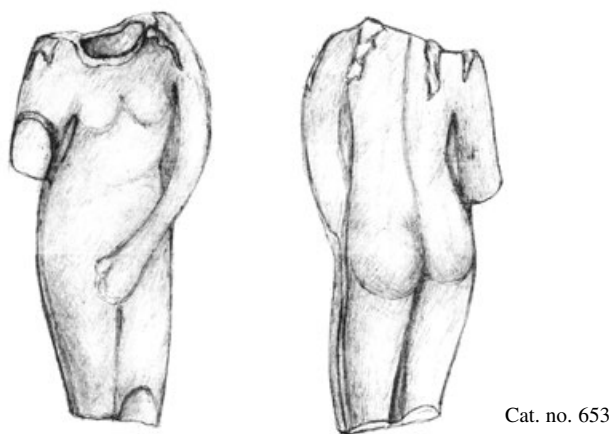


Fig. 92. Objects of applied art (R 1:2)

facture. Fifteen were found in *Potaissa*, seven in *Sarmizegetusa*, four in *Romula* and three in *Cluj* and *Apulum* respectively, etc.⁵⁴² However, there are no direct analogies for our specimen among them. Nevertheless, it is worth mentioning at this place one marble statuette of Venus from the unknown site in *Oltenia*, now in the National Museum in Bucharest that has identical stylistic characteristics and was made after the same model as our specimen.⁵⁴³

Cat. no. 653

field inv. 128/70

sq. E10, V 2.60 m

horizon 4 and layer E

height 11.0 cm

Ceramic figurine of naked Venus (*Venus pudica*) with head and legs below the knees missing. Locks of hair are falling over the shoulders and down the back. It was made of red fired refined clay and dark green glazed.

Literature: *Arheološko blago Djerdapa*, 1978, cat. 241

IV.13. NUMISMATIC FINDS

In the course of systematic investigations at Saldum 664 pieces of bronze coins have been registered.

From the period of the settlement foundation that dates, judging by portable material (pottery, military equipment), from the time of the Flavians there are no coin finds, but that could be the consequence of insufficiently investigated the lowest layers at the site. The earliest coins date from the end of 1st – beginning and

middle of the 2nd century (Hadrian, Antoninus Pius and coinage of Nicea from the 1st–2nd century – **Cat. nos. 654–656**) and this corresponds with the dating of layer E and horizon 5.

Next period is characterized by the coins of Alexander Severus (222–235) and Philip the Arab (244–249) (**Cat. nos. 657–659**), while the life was most intensive in the period between the years 253 and 282 (**Cat. nos. 660–673**), when floodings and destructions of the smaller scale were registered within the fortification that were most probably restored in the time of *praepositus Hermogenes*. The period of tetrarchy was not registered at Saldum.

The coins from the first half of the 4th century (**Cat. nos. 681–684**) have been discovered in a small quantity and they were found either in hoards or as individual pieces in the layers and associations dating from the time of Valentinian I (364–375), Valens (364–378) and Gratian (367–383). The hoards and groups are characteristic of the Valentinian's layer at Saldum (layer C and horizon 3). During the four years of investigation 526 specimens in total were found within sixteen groups. These groups are provisional as excavations were not carried out observing the closed associations so we do not have real picture about their connections with distinct architectural features. Only group 14 (**Cat. nos. 839–1105**) from square F5 and group 17 (**Cat. nos. 1142–1217**) from square F9 could eventually be associated with distinct architectural structures (houses). Most of the coins from this layer reveal the traces of fire as a consequence of a conflagration. The latest specimen is the coin of Theodosius I (378–395) (**Cat. no. 809**), which if it had been minted in the first two-three years of his rule could fit in the general scheme of dating of the destruction of the military settlement in the time of invasion of the Visigoths in 378/380. Most of the coins, more than half of total amount, was minted in *Siscia*, while in smaller quantities the coins

541| N. Gudea, *Das Römergrenzkastell von Buciumi*, Führer zu archäologischen Denkmälern in Dacia Porolissensis Nr. 2, Zaláu 1997, Abb. 26.

542| A. Bador, Die griechisch-römischen Kulte in Dacia, *Aufstieg und Niedergang der römischen Welt* II, Prinzipat 18. 2, Berlin godina ???, 1109–1110.

543| D. Tudor, Monuments de pierre de la collection Cezar Bolliac au Musée National des Antiquités de București, *Dacia* IX–X (1941–1944), 1945, 421, fig. 16, 3.

	R	Aq	Sis	Sir	Thes	Her	Cons	Total
351–354						1		1
355–361				1				1
361–363							2	2
364–367	1	2	14		3			20
364–375			3					3
364–378		2	7		3			12
365–366							1	1
366–367						1		1
367–375	2	5	40		18	1	1	67
375–378	1							1
378–383			6		1			7
Total	4	9	70	1	25	3	4	116

Table 9. Money circulation at Saldum

arrived from Thessalonica, *Aquileia*, *Herakleia*, Constantinople and Rome (see table 9).⁵⁴⁴

On the basis of the numismatic data there was a hiatus between the Gothic destruction in 378–380 and Justinian’s restoration of the limes as the coins from that period were not encountered at Saldum. From the

latest period (layer B, horizon 2) come nine pieces of large and medium bronzes of Justinian I (527–565) and Justin II (565–578) (**Cat. nos. 710–718**), while the very latest coin is the follis of Maurice, minted in Constantinople in 592/593,⁵⁴⁵ suggesting that life at Saldum died out at this time or couple of years later.

544| G. Jeremić, Spätantikes Saldum, in: *Archäologie und Geschichte der Region des Eisernen Tores zwischen 275–602 n. Chr.* Kolloquium in Drobeta–Turnu Severin (2.–5. November 2001), București 2003, 40, Tabelle 1.

545| V. Popović, Les témoins archéologiques des invasions avaro-slaves dans l’Illyricum byzantin, *MEFRA* 87–1, 1971, 482, fig. 7.

IV. 13.1. CATALOGUE OF COINS – SINGLE FINDS

Cat. no.	field. inv.	square	layer, horizon	date	ruler	reverse, mint	state	weight	note
654	240/68	C9	horizon 3	117–138 1 st –2 nd cent.	Hadrian	Nicaea	worn-out	l.b.	
655	833/69	E9	horizon 5					l.b.	
656	173/70	B10	layer E	138–161	Antoninus Pius	three standards, Nicaea	good	l.b.	
657	627/69	C8	layer D	222–235	Alex. Severus		good	m.b.	
658	736/69	E8	pit	222–235	Alex. Severus		good	m.b.	
659	434/68	F9	horizon 4	245–246	Filip I the Arab	Viminacium AN VII	good	l.b.	
660	25/70	B 4	layer D	253–268	Gallienus		good	m.b.	
661	660/69	B9,	layer D	253–268	Gallienus		good	m.b.	
662	733/69	F9 G9	layer C	253–268	Gallienus		worn-out	m.b.	
663	26/70	B4	layer D	268–270	Claudius II		good	m.b.	
664	56/70	B2 B3 B4	layer D	268–270	Claudius II		good	m.b.	
665	718/69	E8	layer D	268–270	Claudius II		good	m.b.	
666	386/68	D8	horizon 3	268–270	Claudius II		good	m.b.	
667	64/70	E10	pit	268–270	Claudius II		good	m.b.	
668	751/69	E9	layer D	270–275	Aurelianus		medium	m.b.	
669	189/70	F10 G9	layer D	270–275	Aurelianus	Fortuna Redux	good	m.b.	
670	88/70	E6 E7	layer D	270–275	Aurelianus		destroyed	m.b.	
671	180/70	C6	layer C	276–282	Probus	Concordia militum	good	m.b.	
672	257/68	F8	layer B	276–282	Probus		good	m.b.	
673	718/69	E8	layer D	276–282	Probus		medium	m.b.	
674	718/69	E8	layer D	3 rd cent.	radiate crown		medium	s.b.	
675	718/69	E8	layer D	3 rd cent.	radiate crown		medium	s.b.	
676	179/70	E6 E7	horizon 4	3 rd cent.	radiate crown		bad	m.b.	
677	752/69	E8,	layer D	3 rd cent.	radiate crown		fragm.	m.b.	
678	203/70	E10	layer D	3 rd cent.	radiate crown		fragm.	m.b.	
679	258/68	D9	layer B	3 rd cent.	radiate crown		fragm.	m.b.	
680	855/69	Necropolis	discarded earth	308–324	Licinius	Iovi Conservatori / B // SIS	excellent	m.b.	
681	36/70	E10 F10	layer C	306–337	Constantinus I	Soli In-v-icto Comiti PA /* C (?) //	excellent	m.b.	
682	504/68	E9 F9	horizon 3	337–340	Constantinus II	2 standards	corrod.	Ae 3	
683	653/69	G5	horizon 3	351–361	Constantinus II	FH3	worn-out	Ae 3	

684	546/68	F9	horizon 3	361–363	Julian	Sec. Reipublicae CONSPA	worn-out	Ae 1	LRBC 2056
685	322/68	C9	horizon 3	364–367	Valens	Sec. Reipublicae °ASISC	good	Ae 3	LRBC 1278
686	207/70	C7 D7	layer C	364–367	Valentinian I	Gloria Rom. 8 °AISIC	good	Ae3	LRBC 1275–1278
687	736/69	E8	pit	364–367	Valentinian I	Sec. Reipublicae *A // °ASISC	good	Ae 3	LRBC 1288
688	725/69	F5	horizon 3	364–375	Valentinian I	Sec. Reipublicae [.] SI [.]	good, corrod.	Ae 3	
689	387/68	D8	horizon 3	364–375	Valentinian I	Gloria Rom. 8 illegible	corrod.	Ae 3	
690	868/69	B8	horizon 3	364–375	Valens, Valentinian I, Gratian	Sec. Reipublicae SMKB	corrod.	Ae 3	
691	244/70	C7 D7	layer C	364–378	Valens	Sec. Reipublicae – J SIS [–	worn-out, corrod.	Ae 3	
692	64/70	E10	pit	364–378	Valens	Sec. Reipublicae [.] / Δ // SIS	corrod.	Ae 3	
693	813/69	B8	pit	364–378	Valens	Sec. Reipublicae –	corrod.	Ae 3	
694	505/68	E9 F9	horizon 3	364–378	Valens	Gloria Rom. 8 SI [.]	corrod.	Ae 3	
695	295/70	G9	pit	364–378	Valens	Gloria Rom. 8	corrod.	Ae 3	
696	632/69	E8	layer C	367–375	Valens	Sec. Reipublicae V / A // TES	good	Ae 3	LRBC 1795–1797
697	326/68	E9	horizon 3	367–375	Valentinian I	Sec. Reipublicae A / P // GSISC	good, corrod.	Ae 3	LRBC 1476 (var.)
698	745/69	F8	horizon 3	367–375	Valentinian I	Sec. Reipublicae R / F // [.] SIS [.]	good, fragm.	Ae 3	LRBC 1393–1394
699	693/69	F8	horizon 3	367–375	Valentinian I	Sec. Reipublicae * K / Q // GSISCV	good	Ae 3	LRBC 1365
700	285/70	C6 D6	horizon 3	367–375	Valens, Valentinian I, Gratian	Gloria Rom. 8 / ° Γ // TES	medium, corrod.	Ae 3	LRBC 1738–1739
701	174/70	C6 D6	layer C	367–375	Gratian	Gloria Rom. 8 V / Γ // TES	worn-out	Ae 3	LRBC 1800
702	181/70	C6 D6	layer C	367–375	Gratian	Gloria Rom. 8 * / * A // TES	worn-out	Ae 3	LRBC 1751
703	327/68	E9	horizon 3	367–378	Gratian	Sec. Reipublicae –	corrod.	Ae 3	
704	241/68	C9	horizon 3	378–383	Gratian	Reparatio Reipublicae * B SIS [C]	worn-out	Ae 2	LRBC 1525–1531
705	379/68	C8 D8	horizon 3	4 th cent.	–	Sec. Reipublicae	corrod.	Ae 3	
706	380/68	C8 D8	horizon 3	4 th cent.	–	–	corrod.	Ae 3	

707	174/70	C6 D6	layer C	4 th cent.	–	–	–	corrod.	Ae 4
708	506/68	E9 F9	horizon 3	4 th cent.	–	–	–	corrod.	Ae 4
709	171/70	C6 D6	layer C	4 th –5 th c.	–	–	illegible	corrod.	Ae 4
710	38/67	Trench 2	horizon 2	527–565	Justinian	–	–	–	l.b.
711	136/68	C8 C9	layer B	527–565	Justinian	–	–	–	l.b.
712	845/69	C7 D7	layer B	527–565	Justinian	–	–	–	l.b.
713	609/69	F4	layer B	527–565	Justinian	–	–	–	l.b.
714	610/69	F4	layer B	565–578	Justin II	–	–	–	l.b.
715	137/68	C8 C9	layer B	565–578	Justin II	–	–	–	s.b.
716	515/68	C8, D8	profile	565–578	Justin II	–	–	–	l.b.
717	648/69	G4	layer B	565–578	Justin II	–	–	–	m.b.
718	19/70	E6 E7	horizon 2	6 th cent.	–	–	–	–	l.b.

IV. 13.2. CATALOGUE OF COINS – GROUPS/HOARDS OF COINS*

Group 1 – Cat. nos. 719–723

field inv. 54–59/67 (field group 14)

Trench 2, v. 1.40 m from the south profile

horizon 3

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
719	330–335	Constantinus II	ASIS	Gloria Exercitus 2 stand.	good corrod.	3	
720	364–378	–	–	Gloria Rom. 8	corrod.	3	
721	378–383	Gratian	ASIS[]	Reparatio Reipublicae	good, corrod.	2	LRBC 1512
722	4 th cent.	–	–	illegible	corrod.	4	
723	4 th cent.	–	–	illegible	corrod.	4	

*| We are presenting groups and hoards of coins according to the topographic principle within the fort, according to trenches and squares from the north towards the south and from the west towards the east.

Group 2 – Cat. nos. 724–748
field inv. 156–170/68 (field group 6)
sq. B8, v. 1.50 m
horizon 3

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
724	351–361	Constantius II / Gallus	FH	–	good / corrod.	3	
725	355–361	Constantius II	Siscia	Spes Reipublicae	“	4	
726	367–375	Valentinian I	/ // RPRIMA (Roma)	Spes Reipublicae	“	3	LRBC 712
727	364–375	Valens	/ // SMAQ[.]	Spes Reipublicae	“	3	LRBC 995, 1015
728	364–367	Valentinian I	/ B // SMAQS	Spes Reipublicae	“	3	LRBC 971
729	364–367	Valens / Valentinian I	? / ? // [.]ONST[.] (Arles)	Spes Reipublicae	good / corrod.	3	
730	364–367	Valentinian I	* A // DASIS	Spes Reipublicae	“	3	LRBC 1294
731	367–375	Valens	R / F // ASISCV	Spes Reipublicae	“	3	LRBC 1428 var.
732	364–367	Valens	·ASIS	Sec. Reipublicae	“	3	LRBC 1278
733	367–375	Gratian	R // ·ΔSIS	Sec. Reipublicae	“	3	LRBC 1304
734	364–375	Valens	A // [.] [.] Thes./Agn.	Sec. Reipublicae	“	3	
735	364–367	Valens	* // TES[.]	Sec. Reipublicae	“	3	LRBC 1714
736	367–378	Gratian	V [.] // TES	Sec. Reipublicae	“	3	
737	367–378	Valens	. / * Γ // ΔTES	Sec. Reipublicae	“	3	
738	364–375	Valentinian I	/ // SMAQ[.]	Gloria Rom. 8	“	3	LRBC 992, 1011
739	367–375	Valens	RTERTIA (Rome)	Sec. Reipublicae	“	3	LRBC 713
740	367–375	Valentinian I	* P / M // ΔSIS	Sec. Reipublicae	“	3	LRBC 1333
741	367–375	Gratian	M / * P // ΔSIS	Gloria Rom. 8	“	3	LRBC 1335
742	367–375	Valens / Valentinian I	/ R // ·TSIS	Gloria Rom. 8	“	3	LRBC 1299–1300
743	364–367	Valens	·BSIS	Gloria Rom. 8	“	3	LRBC 1276
744	367–375	Valentinian I	B / P // TES·	Gloria Rom. 8	“	3	LRBC 1755 (Grat.) var.
745	367–375	Valens	Ⱬ / B / TES	Gloria Rom. 8	“	3	LRBC 1758
746	364–375	Valens	/ // ANTN(or K)	Gloria Rom. 8	good / corrod.	3	
747	364–378	Valens	–	Sec. Reipublicae	“	3	
748	4 th cent.	–	–	–	“	3–4	

Group 3 – cat. nos. 749–756
field inv. 473–480/68 (field group 11)
sq. B9 B10, v. 2.51 m

cat. no.	date	mint	ruler	reverse	state	Ae	reference
749	367–375	· A / · // TES	Valens	Sec. Reipublicae	burnt	3	LRBC 1743
750	367–375	*RO / Q // ASISCR	Valens	Sec. Reipublicae	burnt	3	LRBC 1363
751	364–378	–	–	Sec. Reipublicae	burnt	3	
752	364–367	// TESΓ	Valens	Gloria Rom. 8	burnt	3	LRBC 1705
753	364–367	// ·TSIS[]	Valentinian I	Gloria Rom. 8	burnt	3	LRBC 1275
754	364–375		Valentinian I	Gloria Rom. 8	burnt	3	
755	378–383	ASISC	Gratian	Reparatio Reipublicae	burnt	2	LRBC 1512
756	378–383	A(?) Siscia	Gratian	Reparatio Reipublicae	burnt	2	LRBC 1512

Group 4 – cat. nos. 757–762
field inv. 93–98/67 (field group 21)
Trench 2

cat. no.	date	ruler	mint	reverse	state	Ae	reference
757	3 rd cent.	Faustina ?	–	–	burnt	3	
758	375–378	Valentinian II	· F / D P // BSISCꜥ	Gloria Rom. 8	burnt	3	LRBC 1494 var.
759	367–375	Valentinian I	F / A ꝛ // BSISC[?]	Gloria Rom. 8	burnt	3	LRBC 1390–1391
760	364–378	Valens	–	Gloria Rom. 8	burnt	3	
761	367–375	Valens	D / S // ASIS[–]	Sec. Reipublicae	burnt	3	
762	383–395	–	· P / // [–]	Salus Reipublicae	burnt	4	after V. Popović

Group 5 – cat. nos. 763–768
field inv. 57/70 (field group 15)
sq. C10 D10

cat. no.	date	ruler	mint	reverse	state	Ae	reference
763	364–375	Valentinian I	BSI[–] Siscia	Gloria Rom. 8	worn-out	3	
764	364–367	Valentinian I	·TSISC	Gloria Rom. 8	worn-out	3	LRBC 1275
765	378–383	Gratian	ASISC·	Reparatio Reipublicae	good	2	LRBC 1519
766	4 th cent.	–	–	–		4	
767	4 th cent.	–	–	–		4	
768	4 th cent.	–	–	–		4	

Group 6 – Cat. nos. 769–771
field inv. 34/70 (field group 3)
sq. C10 D10, horizon 3

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
769	355–361	–	–	Spes Reipublicae	burnt	3	
770	4 th cent.	–	–	–	burnt	3	
771	378–383	Valentinian II	ASISC	Reparatio Reipublicae	burnt	2	LRBC 1513

Group 7 – Cat. nos. 772–774
field inv. 49/70 (field group 20)
sq. E7

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
772	367–375	Valens	Z / * B // TES	Gloria Rom. 8	burnt	3	LRBC 1793
773	364–375	Valentinian I	Siscia	Sec. Reipublicae	“	3	
774	364–378	–	Valens / Val. I	–	“	3	

Group 8– Cat. nos. 775–780
field inv. 24/70 (field group 2)
sq. E7

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
775	364–378	–	SMAQ[]	Gloria Rom. 8	medium	3	
776	364–378	Valens	–	Sec. Reipublicae	medium	3	
777	367–375	Valentinian I	[] / Γ // TES	Sec. Reipublicae	medium	3	
778–779	364–378	–	2 spec. –	Sec. Reipublicae	medium	3	
780	364–378	–	–	Gloria Rom. 8	medium	3	

Group 9 – Cat. nos. 781–810
field inv. 666/69 (group 12)
sq. E8, in the burnt earth

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
781	335–341	–	–	Gloria exercitus	corrod.	4	
782	365–366	Procopius	CONS []	Fel. Temp. Rep.	corrod. fragm.	3	LRBC 2079–2080

783	367–375	Gratian	Z / *B // TES	Gloria Rom. 8	good	3	LRBC 1794
784	364–367	Valens	BSISC	Gloria Rom. 8	good	3	LRBC 1272
785	364–367	Valens	/ * [] // BSISC	Gloria Rom. 8	good	3	LRBC 1396
786	367–375	Valentinian I	F / A $\bar{\kappa}$ // BSISC ζ	Gloria Rom. 8	good	3	LRBC 1396
787	367–375	Valent. I	S / D // BSISC	Gloria Rom. 8	corrod.	3	LRBC 1315
788	367–375	Valens	/ R // Γ SISC	Gloria Rom. 8	worn-out.	3	LRBC 1300
789	364–367	Valentinian I	· Γ SISC	Gloria Rom. 8	good corrod.	3	LRBC 1275
790	364–375	Valentinian I / Valens / Gratian	· Γ SISC	Gloria Rom. 8	corrod.	3	
791	367–375	Gratian	Q / A $\bar{\kappa}$ // Δ SIS[]	Gloria Rom. 8	good corrod.	3	LRBC 1381
792	364–375	Valentinian I / Valens / Gratian	[] Γ SISC	Gloria Rom. 8	corrod.	3	
793	367–375	Gratian	Q / * R O // Δ SISCR	Gloria Rom. 8	good corrod.	3	LRBC 1360
794	364–378	Valentinian I / Valens	[]SIS[]	Gloria Rom. 8	corrod.	3	
795	364–378	Gratian	–	Gloria Rom. 8	corrod.	3	
796	364–378			Gloria Rom. 8	corrod.	3	
797	367–375	Valentinian I	R // //L·SIS[]	Sec. Reipublicae	corrod.	3	LRBC 1302
798	367–375	Valens	R // //·ASISC	Sec. Reipublicae	good corrod.	3	LRBC 1303
799	367–375	Valens	R // //· Δ SIS[]	Sec. Reipublicae	good corrod.	3	LRBC 1303
800	367–375	Gratian	R // //·ASIS[]	Sec. Reipublicae	corrod.	3	LRBC 1304
801	364–367	Valentinian I / Valens	* A / //DASISC	Sec. Reipublicae	corrod.	3	LRBC 1296–7
802	364–367	Valentinian I	* A / // DASISC	Sec. Reipublicae	corrod.	3	LRBC 1296
803	367–375	Valentinian I	* R O / Q // Γ SISC ζ	Sec. Reipublicae	corrod.	3	LRBC 1361
804	364–367	Valens	TESA	Sec. Reipublicae	corrod.	3	LRBC 1707
805	367–375	Valens	* B / * // TES	Sec. Reipublicae	good	3	LRBC 1753
806	367–375	Gratian	Γ // TES	Sec. Reipublicae	corrod.	3	LRBC 1733
807	364–378	Valentinian I / Valens / Gratian I Valentinian II	–	Sec. Reipublicae	corrod.	3	
808	364–378	Valentinian I / Valens		Sec. Reipublicae	corrod.	3	
809	378–395	Theodosius I	illegible		corrod. frag.	3/4	
810	4 th cent.	–	–		corrod. and frag.		

Group 10 – Cat. nos. 811–818
field inv. 632/69 (group 9)
sq. E8

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
811	355–361	Constantius II	[?]SIRM	Spes Reipublicae	good corrod.	3	
812	367–378	Valens	SMϷRT	Sec. Reipublicae	corrod.	3	LRBC 725/730
813	364–367	Valentinian I	·ΔSISC	Sec. Reipublicae	good corrod.	3	LRBC 1277
814	367–375	Valens / Valentinian I	R·PRIMA	Sec. Reipublicae	good corrod.	3	LRBC 718–719
815	364–378	–	–	Sec. Reipublicae	good corrod.	3	
816	367–375	Valens	/R//·ΓSISC	Gloria Rom. 8	good corrod.	3	LRBC 1300
817	367–375	Valens / Valentinian I	* / Q // Heraclea	Gloria Rom. 8	good corrod.	3	LRBC 1936–7
818	4 th cent.	–	–	–	good corrod.	3	

Group 11 – Cat. nos. 819–823
field inv. 735/69 (field group 17)
sq. E8

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
819	361–364	Iulianus / Iovianus	–	vota-type	burnt	3	larger
820	364–378	av. glued	SMAQ[·]	Gloria. Rom. 8	“	3	
821	364–378	–	–	Sec. Reipublicae	“	3	
822	364–378	–	–	Sec. Reipublicae	“	3	
823	4 th cent.	–	–	–	glued	3	

Group 12 – Cat. nos. 824–826
field inv. 700/69 (field group 18)
sq. E9

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
824	361–363	Julianus	CONSI[]	Sec. Reipublicae	corrod.	1	LRBC 2056–2059
825	364–375	Valentinian I	–	Gloria Rom. 8	corrod.	3	
826	4 th cent.	–	–	–	burnt glued	3	

Group 13 – Cat. nos. 827–838
field inv. 18/70 (field group 1)
sq. E10, horizon 3

Cat. no.	date	mint	ruler	reverse	state	Ae	reference
827	364–367	*A // ASISC	Valentinian I	Sec. Reipublicae	burnt	3	LRBC 1294
828	364–375	–	Valentinian I	Sec. Reipublicae	burnt	3	
829	367–375	D / ? // ASiscia	Valentinian I	Sec. Reipublicae	burnt	3	
830	367–375	*[] / Q // A Siscia	Valens	Sec. Reipublicae	burnt	3	
831	367–375	[] / [] // Siscia	Valentinian I	Sec. Reipublicae	burnt	3	
832	364–378	–	Valens	Sec. Reipublicae	burnt	3	
833	364–378	–	–	Sec. Reipublicae	burnt	3	
834	367–375	[] / [] * // Siscia	Gratian	Gloria Rom. 8	burnt	3	
835	367–378	V / * [] // TES	Gratian	Gloria Rom. 8	burnt	3	
836	367–378	[] / ? A // TES	Gratian	Gloria Rom. 8	burnt	3	
837	364–378	–	–	Gloria Rom. 8	burnt	3	
838	4 th cent.	–	–	–	burnt	3	

Group 14 – Cat. nos. 839–1105
 field inv. 676/69 (field group 4)
 field inv. 706/69 (field group 7)
 sq. F5

Cat. no.	date	ruler	mint	reverse	state	Ae	reference	note
839	355–361	Constantius II / Julian Caes.	[–]K [–] Cyzicus	Spes Reipubl.	burnt	4		
840	355–361	Constantius II	–	Spes Reipubl.	“	3		
841–847	355–361	Constantius II / Julian Caes.	–	Spes Reipubl.	“	3		7 specimens
848–849	355–361	Julian Caes.	–	Spes Reipubl.	“	3		2 specimens
850	367–378	Valens	SMϢR[–]	Sec. Reipublicae	“	3	LRBC 725, 730	
851	367–375	Valentinian I	RPR[–] Roma	Sec. Reipublicae	“	3	LRBC 712	
852	364–375	Valentinian I / Gratian	ALE[–]	Sec. Reipublicae	“	3		
853	367–375	Valens	·SMAQS	Sec. Reipublicae	“	3	LRBC 1021	
854	367–378	Gratian	SMϢRB	Sec. Reipublicae	“	3	LRBC 726, 731	
855	364–367	Valens	⚡ / // SMAQS	Sec. Reipublicae	“	3	LRBC 991	
856	364–375	Valentinian I	SMAQS	Sec. Reipublicae	“	3	LRBC 994, 1014	
857	367–375	Valentinian I	* / · // SMAQS	Sec. Reipublicae	“	3	LRBC 1041	
858–860	367–375	Valens	⚡ / // SMAQS	Sec. Reipublicae	“	3	LRBC 1030	3 specimens
861–863	364–375	Valentinian I / Valens	SMAQ[–]	Sec. Reipublicae	“	3		2 specimens
864	367–375	Valens	SMϢRB	Gloria Rom. 8	“	3	LRBC 722	1 specimen
865	364–375	Valens	OF / H // [–] Arles / Lyons	Sec. Reipublicae	“	3		
866	367–375	Valentinian I	A ⚡ / F // ⚡SISC[–]	Sec. Reipublicae	“	3	LRBC 1393– 1394	
867	367–375	Valens	[–] / F // ASISC[–]	Sec. Reipublicae	“	3		
868	367–375	Valens	A ⚡ / F // ASISC[–]	Sec. Reipublicae	“	3	LRBC 1395	
869	367–375	Valentinian I	A ⚡ / F // ⚡Siscia	Sec. Reipublicae	“	3	LRBC 1393– 1394	
870	367–375	Valentinian I	R ⚡ / F // ⚡SISC⚡	Sec. Reipublicae	“	3	LRBC 1414– 1415 var.	
871	367–375	Valens	C ⚡ / S · // ASISCA	Sec. Reipublicae	“	3	LRBC 1455	

872	367–375	Valens	* K / Q // ASISCE	Sec. Reipublicae	burnt	3	LRBC 1374	
873	367–375	Valens	* F / M // ASISC	Sec. Reipublicae	“	3	LRBC 1330	
874–875	367–375	Valens	K P / Q // ASISCR	Sec. Reipublicae	“	3	LRBC 1379	2 specimens
876	367–375	Valens	* F / [·] // ASISC	Sec. Reipublicae	“	3		
877	367–375	Valens	* P / [·] // ? Siscia	Sec. Reipublicae	“	3		
878	367–375	Valens	A K̄ / Q // ASISCE	Sec. Reipublicae	“	3	LRBC 1383	
879	367–375	Valens	K̄ [·] / Q // ASISCE	Sec. Reipublicae	“	3	LRBC 1389	
880	367–375	Valens	K̄ K / Q // [ASiscia]	Sec. Reipublicae	“	3	LRBC 1389	
881	367–375	Valentinian I	R / // [·]SISC	Sec. Reipublicae	“	3	LRBC 1302	
882	367–375	Gratian	R / // ΔSISC	Sec. Reipublicae	“	3	LRBC 1304	
883	375–378	Gratian	S P / P // ASISC[·]	Sec. Reipublicae	“	3	LRBC 1506–1508	
884	367–375	Valens	* R O / [·] // ASISCR	Sec. Reipublicae	“	3	LRBC 1354, 1363	
885	364–367	Valentinian I	* A / // D[ASISC]	Sec. Reipublicae	“	3	LRBC 1296	
886	364–367	Valens	* A / // [DASISC]	Sec. Reipublicae	“	3	LRBC 1297	
887	364–367	Valentinian I	* A / // [DASISC]	Sec. Reipublicae	“	3	LRBC 1296	
888	364–367	Valens	/ // DASISC	Sec. Reipublicae	“	3	LRBC 1293	
889	367–375	Valentinian I	D / // *ASISC	Sec. Reipublicae	“	3	LRBC 1308	
890	367–375	Valens	D / S // ASISC	Sec. Reipublicae	“	3	LRBC 1318	
891	367–375	Valens / Valentinian I	D / // [·]SISC	Sec. Reipublicae	“	3		
892	367–375	Valentinian I	* P / ? M // [·]SISC	Sec. Reipublicae	“	3		
893	364–367	Valens	* A / // DASISC	Sec. Reipublicae	“	3	LRBC 1297	
894	364–375	Valentinian I	? / ? // ASISC	Sec. Reipublicae	“	3		
895	364–375	Valentinian I	Siscia	Sec. Reipublicae	“	3		
896	367–375	Valens	A [·] / [·] // ASISC[·]	Sec. Reipublicae	“	3		
897	364–367	Valentinian I	/ // ΔSISC	Sec. Reipublicae	“	3	LRBC 1277	
898	364–367	Valentinian I	/ // [·]SISC	Sec. Reipublicae	“	3		
899	364–378	Valens	? / ? // ASISC	Sec. Reipublicae	“	3		
900	364–375	Valentinian I	? / // ΔSISC	Sec. Reipublicae	“	3		
901	367–375	Valens / Valentinian I	[D] / // U[·]SISC	Sec. Reipublicae	“	3	LRBC 1317–1318	
902	364–367	Valentinian I	* A / // [ASiscia]	Sec. Reipublicae	“	3		
903–904	364–378	Valens	Siscia	Sec. Reipublicae	“	3		2 specimens
905	367–375	Valens	* A / * // TES	Sec. Reipublicae	“	3	LRBC 1753	
906	364–367	Valens	/ // TES A	Sec. Reipublicae	“	3	LRBC 1710	
907	364–367	Valentinian I	/ // TES A	Sec. Reipublicae	“	3	LRBC 1706	

908	364–367	Valens / Valentinian I	/ // TES	Sec. Reipublicae	burnt	3	LRBC 1807, 1811	
909	367–378	Valens	* V / Γ // TES	Sec. Reipublicae	“	3	LRBC 1806	3 specimens
910–912	367–375	Valentinian I	* V / [·] // TES	Sec. Reipublicae	“	3		
913	367–378	Valens	? V / [·] // TES	Sec. Reipublicae	“	3		
914	367–375	Valentinian I	· A / D // TES	Sec. Reipublicae	“	3		
915	367–378	Gratian / Valentinian II	* Γ / [·] // TES	Sec. Reipublicae	“	3		
916	367–375	Valentinian I	* Γ / [·] // TES	Sec. Reipublicae	“	3		
917–918	367–375	Valens	A / // TES	Sec. Reipublicae	“	3	LRBC 1732	2 specimens
919	364–367	Valentinian I	TESA	Sec. Reipublicae	“	3	LRBC 1706	
920	364–367	Valentinian I	* / // TE[-]	Sec. Reipublicae	“	3	LRBC 1713	
921	364–367	Valens / Valentinian I	* / // TESA	Sec. Reipublicae	“	3	LRBC 1713– 1714	
922	367–375	Gratian	* M / A // TES	Sec. Reipublicae	“	3	LRBC 1779	
923–925	364–375	Valentinian I	Thess.	Sec. Reipublicae	“	3		3 specimens
926–928	364–378	Valens	Thess.	Sec. Reipublicae	“	3		3 specimens
929–936	364–375	Valentinian I	–	Sec. Reipublicae	“	3		8 specimens
937–939	364–378	Valens	–	Sec. Reipublicae	“	3		3 specimens
940	367–378	Gratian	–	Sec. Reipublicae	“	3		
941–966	364–378	Valentinian I / Valentinian II	–	Sec. Reipublicae	“	3		26 specimens
967	364–378	–	–	Sec. Reipublicae	“	3		
968	364–367	Valens	/ A // SMAQ[·]	Gloria Rom. 8	“	3	LRBC 966	
969	367–375	Valens	* / R // CONSA Constantinople	Gloria Rom. 8	“	3	LRBC 2091	
970	364–367	Valens	/ * // SMAQP	Gloria Rom. 8	“	3	LRBC 989	
971	364–367	Valens	SMAQP	Gloria Rom. 8	“	3		
972	364–367	Valens / Valentinian I	SMRS (Roma)	Gloria Rom. 8	“	3	LRBC 702– 703	
973	364–367	Valens	·BSISC	Gloria Rom. 8	“	3	LRBC 1276	
974	364–367	Valentinian I	[·]FSISC	Gloria Rom. 8	“	3		
975	367–375	Gratian	Q / * R O // BSISCR	Gloria Rom. 8	“	3	LRBC 1360	
976	364–367	Valentinian I	DFISISC	Gloria Rom. 8	“	3	LRBC 1290	
977	367–375	Valentinian I	F / R Á // BSISC[-]	Gloria Rom. 8	“	3	LRBC 1408– 1410 var.	
978	364–367	Valens	/ * A // ·BSISC	Gloria Rom. 8	“	3	LRBC 1287	
979	367–375	Gratian	/ D // *FSISC	Gloria Rom. 8	“	3	LRBC 1307	

980	367–375	Gratian	F / R \bar{A} // Δ SISC[.]	Gloria Rom. 8	burnt	3	LRBC 411–413 var.
980'	364–367	Valens	/ * A // DBSISC	Gloria Rom. 8	“	3	LRBC 1295
981	367–375	Valentinian I	A / A \bar{R} // BSISC ζ	Gloria Rom. 8	“	3	LRBC 1390
982	367–375	Gratian	S / D // Γ SISC	Gloria Rom. 8	“	3	LRBC 1316
983	367–375	Valentinian I	Q / \bar{R} A // BSISC[.]	Gloria Rom. 8	“	3	LRBC 1384
984	367–375	Valentinian I	/ R // BSISC	Gloria Rom. 8	“	3	LRBC 1299
985	367–375	Valentinian I	F / R \bar{A} // BSISCP	Gloria Rom. 8	“	3	LRBC 1408 var.
986	364–367	Valentinian I	/ * A // \cdot Γ SISC	Gloria Rom. 8	“	3	LRBC 1286
987	364–367	Valens	/ * A // DBSISC	Gloria Rom. 8	“	3	LRBC 1295
988	367–375	Valentinian I	M / * F // BSISC	Gloria Rom. 8	“	3	LRBC 1327
989	367–375	Valentinian I	M / * P // BSISC	Gloria Rom. 8	“	3	LRBC 1331
990	364–367	Valens	/ * A // \cdot BSISC	Gloria Rom. 8	“	3	LRBC 1287
991	367–375	Gratian	S / * F // Γ SISC	Gloria Rom. 8	“	3	LRBC 1324
992	367–375	Valentinian I	P / * K // BSISCV	Gloria Rom. 8	“	3	LRBC 1364
993	367–375	Valentinian I	/ D // \cdot BSISC	Gloria Rom. 8	“	3	LRBC 1305, 1311
994	367–375	Gratian	Q / R P // Δ SICR	Gloria Rom. 8	“	3	LRBC 1377
995	367–375	Gratian	Q / R \bar{R} // Δ Siscia	Gloria Rom. 8	“	3	LRBC 1387
996	367–375	Gratian	M / * P // Γ Siscia	Gloria Rom. 8	“	3	LRBC 1332
997	367–375	Valens	/ R // \cdot Γ SISC	Gloria Rom. 8	“	3	LRBC 1300
998	364–367	Valentinian I	/ // D Γ SISC	Gloria Rom. 8	“	3	LRBC 1290
999	367–375	Valentinian I	[.] / * [.] // BSiscia	Gloria Rom. 8	“	3	
1000	367–375	Valentinian I	[S] / C \bar{A} // BSISC ζ	Gloria Rom. 8	“	3	LRBC 1450
1001	367–375	Valentinian I	F / [.] // BSISC ζ	Gloria Rom. 8	“	3	
1002	367–375	Gratian	M / * F // Γ SISC	Gloria Rom. 8	“	3	LRBC 1328
1003	367–375	Gratian	Q / [.] // Δ Siscia	Gloria Rom. 8	“	3	
1004	367–375	Gratian	Q / K P // Δ Siscia	Gloria Rom. 8	“	3	LRBC 1377
1005	367–375	Valentinian I	Q / A \bar{R} // BSISCV	Gloria Rom. 8	“	3	LRBC 1380
1006	364–375	Valentinian I	Siscia	Gloria Rom. 8	“	3	
1007	364–375	Valens	/ [.] // Siscia	Gloria Rom. 8	“	3	
1008	364–367	Valens	/ // BSiscia	Gloria Rom. 8	“	3	
1009	367–375	Valentinian I	[.] / * B // TES	Gloria Rom. 8	“	3	
1010	367–375	Valens	V / \cdot Δ // TES	Gloria Rom. 8	“	3	LRBC 1799
1011–1012	364–367	Valens	/ // \cdot TES Γ	Gloria Rom. 8	“	3	LRBC 1709
1013	364–367	Valens	/ // TESB	Gloria Rom. 8	“	3	LRBC 1705
1014	367–375	Valens	\cdot / \cdot A // TES	Gloria Rom. 8	“	3	LRBC 1742
1015	367–375	Valens	/ Δ // \cdot TES	Gloria Rom. 8	“	3	LRBC 1735

2 specimens

1016	367–375	Valentinian I	V / * B // TES	Gloria Rom. 8	burnt	3	LRBC 1803
1017	367–378	Valens	V / * [·] // TES	Gloria Rom. 8	“	3	LRBC 1804, 1809
1018	367–375	Valens	/ * Γ // TES	Gloria Rom. 8	“	3	LRBC 1745
1019	367–375	Gratian	A / * B // TES	Gloria Rom. 8	“	3	LRBC 1771
1020	364–367	Valens	·TES[·]	Gloria Rom. 8	“	3	LRBC 1709
1021	367–378	Valens	V / [·] // TES	Gloria Rom. 8	“	3	
1022	364–367	Valens	·TESΓ	Gloria Rom. 8	“	3	LRBC 1705
1023	367–375	Valens	? / Γ // TES	Gloria Rom. 8	“	3	
1024	367–375	Valentinian I	[·] / A // TES	Gloria Rom. 8	“	3	
1025	367–378	Gratian	V / * B // TES	Gloria Rom. 8	“	3	LRBC 1805, 1810
1026	367–375	Gratian	/ B // ?TES?	Gloria Rom. 8	“	3	
1027	367–375	Valentinian I	[·] / * Γ // TES	Gloria Rom. 8	“	3	
1028	367–378	Valens	[·] / * Δ // TES	Gloria Rom. 8	“	3	
1029	367–378	Gratian	[·] / ? Γ // TES	Gloria Rom. 8	“	3	
1030	367–378	Valens	? / * Γ // TES	Gloria Rom. 8	“	3	
1031	367–378	Valens	O / · B // TES	Gloria Rom. 8	“	3	LRBC 1786 LRBC 1805, 1810
1032	367–378	Gratian	V / * B // TES	Gloria Rom. 8	“	3	
1033–1034	364–375	Valentinian I	B Thess.	Gloria Rom. 8	“	3	2 specimens
1035–1036	364–375	Valens / Valentinian I	Γ Thess.	Gloria Rom. 8	“	3	2 specimens
1037	364–375	Valens / Valentinian I	Thess.	Gloria Rom. 8	“	3	
1038	364–378	Valens / Valentinian I	B Thess.	Gloria Rom. 8	“	3	
1039–1040	367–375	Valentinian I	Thess.	Gloria Rom. 8	“	3	2 specimens
1041	367–378	Valens / Valentinian I	Thess.	Gloria Rom. 8	“	3	
1042	364–367	Valentinian I	Thess.	Gloria Rom. 8	“	3	
1043	363–364	Iovian (?)	FH	‘vota’ type	“	3	
1044–1046	351–361	Constantius II / Julian	FH	FH	“	3	3 specimens
1047	351–361	Constantius II	FH	FH	“	3	
1048	355–361	Constantius II / Julian	M // BSIRM*	FH	“	3	LRBC 1613– 1614
1049	364–365	Valens / Valentinian I	SMHB	Restitutio Reip.	“	4	LRBC 1916– 1918
1050–1075	4 th cent.	–	–	–	“	3	26 specimens
1076–1078	364–375	Valentinian I	–	Gloria Rom. 8	“	3	3 specimens

1079–1086	364–378	Valens	–	Gloria Rom. 8	burnt	3	8 specimens
1087–1088	367–378	Gratian	–	Gloria Rom. 8	“	3	2 specimens
1089–1097	364–378	–	–	Gloria Rom. 8	“	3	9 specimens
1098	367–375	Valentinian I	M / * F // [B]SISC	Gloria Rom. 8	good / corrod.	3	field inv. 706/69 field group 7
1099	367–375	Gratian	Q / K P // ΔSISCR	Gloria Rom. 8	“	3	“
110	364–378	Valens / Valentinian I / Gratian	/ ? // SMAQP	Gloria Rom. 8	“	3	“
1101	364–367	Valens	SMHB	Gloria Rom. 8	“	3	“
1102	364–367	Valens	* A / // ·ASISC	Sec. Reipublicae		3	“
1103	364–378	Valens	–	Sec. Reipublicae		3	“
1104	367–378	Gratian	–	–		3	“
1105	4 th –5 th c.	–	–	–		3/4	“

Group 15 – Cat. nos. 1106–1129

field inv. 329–346/68 (field group 8)

field inv. 297–307/68 (field group 16)

sq. F8

Cat. no.	Date	ruler	mint	reverse	state	Ae	reference
1106	351–354	Constantius II	F S / + // [–] Heraklea?		corrod.	2	LRBC 1898–9 (9)
1107	364–375	Valentinian I	// [–]	Sec. Reipublicae	corrod.	3	
1108	364–367	Valentinian I	ASISC	Gloria Rom. 8	good	3	LRBC 1271
1109	364–367	Valentinian I	* A / // ·ASISC	Sec. Reipublicae	corrod.	3	LRBC 1288
1110	367–375	Valentinian I	* K / Q // ΓSISCV	Sec. Reipublicae	corrod.	3	LRBC 1370
1111	364–375	Valens	SM[–]	Gloria Rom. 8	good	3	field inv. 297–307
1112	364–367	Valens / Valentinian I	TESA	Sec. Reipublicae	frag.	3	field inv. 297–307
1113	364–378	Valens / Valentinian I	Siscia	Sec. Reipublicae	corrod.	3	
1114	367–378	Gratian	* Γ / (?) A // TES	Sec. Reipublicae	corrod.	3	
1115	367–378	Gratian	–	Sec. Reipublicae	corrod.	3	
1116	364–378	–	Siscia	Gloria Rom. 8	corrod.	3	
1117–1128	4 th cent.	–	–		corrod.	3	12 specimens
1129	4 th cent.	–	–	–	worn-out	3	field inv. 297–307

Group 16 – Cat. nos. 1130–1141
field inv. 354–368/68 (field group 10)
sq. F9

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
1130	355–361	Constantius II / Iulian	–	Sec. Reipublicae	medium	3	
1131	367–375	Valens	·SMAQP	Gloria Rom. 8	medium	3	LRBC 1018
1132	367–375	Valens	V/* Δ//TES	Gloria Rom. 8	medium	3	LRBC 1804
1133	367–375	Valens	/ * A // TES	Gloria Rom. 8	medium	3	LRBC 1745
1134	364–375	Valentinian I	–	Gloria Rom. 8	medium	3	LRBC 1798
1135	367–375	Valentinian I	V / Γ // TES	Sec. Reipublicae	medium	3	LRBC 2099
1136	367–375	Valens (?)	𐌆 / 𐌆 // Const.	Sec. Reipublicae	medium	3	
1137	364–378	Valens/Valent.I	? / ? // [-]AQ[-]	Sec. Reipublicae	medium	3	
1138	364–378	–	–	Sec. Reipublicae	medium	3	
1139	375/378/ 383/402	Valentinian II (1)	–	Victoria Auggg (378/83: Ae3) Roma 378:Ae4	medium	4	possibly small Ae3 ?
1140–1141	4 th cent.	–	2 specimens —		medium	3	

Group 17 – Cat. nos. 1142–1217
field inv. 710/69 (field group 5)
sq. F9

Cat. no.	date	ruler	mint	reverse	state	Ae	reference
1142	367–375	Valentinian I	* / * [-] // TES	Gloria Rom. 8	burnt (all)	3	LRBC 1749
1143	367–378	Valens	V / * [-] // TES	Gloria Rom. 8	“	3	LRBC 1804
1144	367–375	Valens	· / A // TES	Gloria Rom. 8	“	3	LRBC 1742
1145	367–375	Valens	/ Δ // · TES	Gloria Rom. 8	“	3	LRBC 1734
1146	367–378	Valens	[·] / · B // TES	Gloria Rom. 8	“	3	
1147	367–378	Gratianus	[·] / [-] // TES	Gloria Rom. 8	“	3	
1148	367–378	Gratianus	[·] / [-] // TES	Gloria Rom. 8	“	3	
1149	367–378	–	[·] / [-] // TES	Gloria Rom. 8	“	3	
1150	364–378	Valens	/ [-] // TES [-]	Gloria Rom. 8	“	3	
1151	367–378	Valens	[?] / [-] // TES	Gloria Rom. 8	“	3	

1152	364–378	Valens / Valentinian I	/ ? // TE[-]			3	
1153	364–378	Valentinian I / Valens / Gratian / Valentinian II	? / ? // TE[-]			3	
1154	324–330	Constantinus I	/ · // SMTSB	Prov. Augg.		3	LRBC 829–830
1155	367–375	Valentinian I	A R̄ / F // ΓSISC	Sec. Reipublicae		3	LRBC 1393 var.
1156	367–375	Valentinian I	* P / M // ΔSISC	Sec. Reipublicae		3	LRBC 1333
1157	367–375	Valentinian I	* P / M // ΔSISC	Sec. Reipublicae		3	LRBC 1333
1158	367–375	Valens	* P / [-] // ASISC	Sec. Reipublicae		3	
1159	367–375	Valentinian I	* RO / M · // ΓSISC	Sec. Reipublicae		3	LRBC 1350
1160	364–367	Valens	* A / // DASISC	Sec. Reipublicae		3	LRBC 1297
1161	367–375	Valentinian I	* R? / Q // [-]SI[-]	Sec. Reipublicae		3	
1162	367–375	Valentinian I	A R̄ / F // ΓSISC	Sec. Reipublicae		3	LRBC 1393 var.
1163	367–375	Gratian	D / ? // [-]SISC	Sec. Reipublicae		3	
1164	364–367	Valens	* A / // DASISC	Sec. Reipublicae		3	LRBC 1297
1165	364–367	Valens	* A / // DASISC	Sec. Reipublicae		3	LRBC 1297
1166	367–375	Valens	R A / F (?) // Siscia	Sec. Reipublicae		3	
1167	367–375	Gratian	[-] / // [-]ΔSISC	Sec. Reipublicae		3	
1168	367–375	Valens / Valentinian I / Gratian	D / // Siscia	Sec. Reipublicae		3	
1169	367–375?	Valens	* M / Γ // [-]R Siscia?	Sec. Reipublicae		3	
1170	364–378	Valens	Sisc. / Sirm.	Sec. Reipublicae		3	
1171	364–375	Valentinian I	? A / ? // [-] Sisc. / Thes.	Sec. Reipublicae		3	
1172	367–375	Valentinian I	? P / ? // [-] Sisc. / Thes.	Sec. Reipublicae		3	
1173	364–378	Valens / Valentinian I	Siscia	Sec. Reipublicae		3	
1174	364–375	Valentinian I	–	Sec. Reipublicae		3	
1175	364–378	Valens	–	Sec. Reipublicae		3	
1176	364–378	Valens / Valentinian I	–	Sec. Reipublicae		3	
1177	367–378	Gratian	–	Sec. Reipublicae		3	
1178	364–378	Valens / Valentinian I, II / Gratian	–	Sec. Reipublicae		3	
1179	330–335	Constantinus I	–	Gloria ex. 2 standards		3	

1210	364-367	Valens / Valentinian I	/ [·] // SMAQP	Sec. Reipublicae	burnt	3	
1211	364-367	Valentinian I	/ [*?] // ·TESA	Sec. Reipublicae	“	3	LRBC 1713
1212	367-375	Valens	·A / [·] // TES	Sec. Reipublicae	“	3	
1213	364-378	Valens / Valentinian I / Valentinian II / Gratian	? / ? // TES	Sec. Reipublicae	“ frag.	3	
1214	364-367	Valens	/ // [?]TESA[?]	Sec. Reipublicae	burnt	3	
1215	367-378	Valens / Valentinian I / Valentinian II / Gratian	*A / [?] // TES	Sec. Reipublicae	“	3	
1216	367-378	Valens	*B / [?] // ·TE[-]	Sec. Reipublicae	“	3	
1217	367-375	Valens	*P / M // ASISC	Sec. Reipublicae	“	3	LRBC 1334

V CONCLUSION

THE LARGE PROJECT OF RESCUE AND SYSTEMATIC ARCHAEOLOGICAL EXCAVATIONS THAT PRECEDED THE CONSTRUCTION OF HYDROENERGETIC PLANT DJERDAP I AND II INCLUDED MANY SITES DATING FROM THE EARLY PREHISTORIC PERIODS TO THE LATE MEDIEVAL TIMES, BUT MOST OF THEM DATED FROM THE ROMAN AND EARLY BYZANTINE PERIOD, AS IS THE CASE WITH THE SITE GRADAC-SALDUM IN THE VILLAGE DOBRA AT THE MOUTH OF THE KOŽICA BROOK.

AFTER the construction of hydroelectric power station Djerdap I Saldum was covered with waters of the accumulation lake. It has been systematically investigated for four years 1969–1970 and the results were published so far in the professional literature merely as annual excavation reports, while the portion of archaeological material was included in three catalogues and masters' and doctoral theses concerning the glass vessels, bone objects, tools and military equipment.

The objective of archaeological investigations at Saldum was the exploration of the area enclosed within the ramparts of the Early Byzantine fortification, so the data concerning the complete area of this site in all its phases remained unknown to the investigators. The zone of the assumed necropoles (indications for its location were established on the basis of site survey and chance finds) was investigated to the smaller extent, but the results were negative. The investigations also included the partition walls (*claustra*) near the place where the Kožica brook enters the Danube, about 400 meters far from the ramparts of the Early Byzantine fortification, but the parameters for their dating have not been obtained.

This work is an attempt to reconstruct the life within certain micro plan that includes the analyses of

all available data obtained during archaeological excavations, which comprised the area of around 1,500 m² and where large amount of portable archaeological material included in this publication (over 1,200 catalogue entries) has been collected.

The antique name of Saldum remained unknown, because of the absence of the written data. The author of investigations, Dr P. Petrović, as well as the scholars interested in the topography of the neighboring sites have been inclined to identify Saldum with Late Roman *Gratiana*, i.e. with Early Byzantine Κονταβαζά (V. Kondić) that was mentioned by Procopius. The fact is that Saldum had been established in the time of Valentinian I and his co-ruler Gratian, but *Gratiana* was also mentioned in 528 in connection with the conflict of the Ostrogoths with the Herules and the Gepides when this settlement was destroyed. The analysis of the material revealed with certainty that Saldum had not been inhabited in the period between the Gothic destruction in 378/380 and Justinian's restoration of the limes in the 6th century and it is possible that the settlement name was preserved in the memory of the inhabitants for one and half century.

The analysis of stratigraphy, portable finds and architectural remains provided certain conclusions,

which revise in some way the previously suggested assumptions. It was possible to distinguish five horizons of life at Saldum, from the 1st to the end of the 6th century.

PHASE I – Foundation of the settlement at Saldum is related to the period of the Flavians (68–96). The earliest layers at the site have not been investigated completely and neither the size of the settlements nor the structures in it were defined. The analysis of the layer contents and the contemporary horizons it is possible to assume the existence of timber structures with floors of rammed earth and mortar. The portable finds indicate heterogeneous ethnic and social status of the inhabitants living at Saldum at that time. The coexistence of native population and bearers of the early Roman culture is confirmed by the pottery finds where we encountered parallel appearance of autochthonous Dacian pottery, to a small degree the La Tène (Celtic) pottery forms, while to a greater extent were encountered the luxurious early Roman vessels (*terra sigillata*, *terra nigra*, small bowls and beakers with thin walls, marbled and glazed early Imperial pottery), which had been most probably imported from north Italic and central and south Gaulish centers. From the north Italic workshop of the master *LITOGENES* lamps with his stamp also reached Saldum. From this period also date the finds of personal equipment of the soldiers – casseroles with trifoliate mouth and with stamp probably of the Gaulish master *CARVS* and fragments of the scabbard of the sword of Pompeii type. These finds as well as the finds from the immediately ensuing phase, which could not be clearly distinguished in the stratigraphy indicate by its heterogeneity the possibility of existence of a *vicus* next to the military camp? (*Kastellvicus*?).

The time of Flavians on the Middle Danube is a period characterized by fortification of the Danube frontier. The horizons with material and architectural remains from this period are confirmed at Čezava–*Novae*, Gospodjin Vir, Boljetin–*Smorna*, Donji Milanovac–*Taliata*, Tekija–*Transdierna* (remains of residential architecture – *insulae*, with luxurious imported material), Karataš–*Diana*, Kostol–*Pontes*, Brza Palanka–*Egeta* and Mora Vagei. Saldum as strategic point before the entrance into the Upper Gorge situated between Čezava–*Novae* and Gospodjin Vir, i.e. Boljetin–*Smorna* certainly played an important part in the line of defen-

se, logistics and control of the river and land route at that time.

PHASE II – Period from Trajan until the middle of the 2nd century, when the first stone fortification was erected. However, the fortification type (wall thickness between 1 and 1.30 m, without corner towers typical of the Trajan's fortifications) does not suggest the military character of the structure but it is possible that military *vicus* from the Flavian period got the encompassing walls because of another entirely practical reason. In other words, it is possible that the customs office – *portorium* was established at Saldum at that time. It could be explained by the fact that the result of Trajan's Dacian wars and opening of the Dacian frontier towards Moesia was the intensive arrival of civilians and goods and that Saldum was an ideal place for crossing the Danube. Archaeological finds, which confirm the continuity of the military *vicus* are very abundant and include a continuous presence of luxurious imported vessels from the western imperial and Pannonian workshops (*terra sigillata*, fine pottery, pottery lamps, glass vessels, military equipment and so on). The money, which confirms this phase includes the coins minted in the reign of Hadrian (117–138) and Antoninus Pius (138–161).

On a general level this stage is determined in the middle Danube from the reign of Trajan and his Dacian wars and Hadrian until the end of the Antonine dynasty. In connection with the Trajan's Dacian wars *castra* were constructed at Karataš–*Diana* and Kostol–*Pontes* and also *horrea* and harbors were built at Konopište and Kurvingrad.¹ It is possible that fortifications in *Viminacium*, at Golubac–*Cuppae*, Čezava–*Novae*, Boljetin–*Smorna* and Donji Milanovac–*Taliata* were also constructed during and after the Dacian wars.

PHASE III – The continuity of life at Saldum could be followed also during the 2nd and 3rd centuries and from this period come many archaeological finds. Stone fortification (?) was still in use while the interior got more solid infrastructure (paved streets). This phase could be divided into two subphases, which could be distinguished in the archaeological material.

1| P. Petrović, M. Vasić, The Roman frontier in Upper Moesia: archaeological investigations in the Iron Gate area – main results, in: *Roman Limes on the Middle and Lower Danube*, Belgrade 1996, 21.

The flooding of the terrain of considerable intensity (substantial layer of the river deposit) is confirmed during the entire period and certain traces of destruction including remains of burnt down timber structures, collapsed stones and sporadically burnt soil have also been encountered.

PHASE IIIA – the time of the Severi (193–235) confirmed primarily by the coin finds and many pottery finds.

PHASE IIIB – the time of Gallienus (253–268), Claudius II (268–270), Aurelianus (270–275) and Probus (276–282) that is, judging by the finds, the period of the greatest rebuilding at Saldum. At that time the detachments of the legion IV Flavia were stationed at Saldum, as it is confirmed by bricks with stamps. Reconstruction, building activities and strengthening of the defensive structure were probably carried out under the supervision of *praepositus Hermogenes*.

After abandonment of Dacia in 271/272 Saldum obviously did not lose its strategic and functional importance, judging by the finds, which suggest the presence of soldiers and civilians also in the following decade of that century. The function of Saldum continued to be the control of the land and river traffic – towing of ships, control of the crossing and certainly the *portorium*? was still functioning for some time.

Among the pottery finds prevailing are the vessels of provincial manufacture, particularly bowls and plates and, to a smaller amount, the vessels for preparing, storing and transportation of food. Among the luxurious ware still popular were the *terra sigillata* bowls, which reached the Saldum market from Westerdorf, Rheinzabern and the workshop center *Viminacium–Margum*. Vessels used for storage and transportation (amphorae and pithoi) arrived from the Black Sea area or from the western workshops and this testify to the dynamic commercial connections with different parts of the Empire. As western imports are also considered cylindrical glass beakers and lamps with stamps of masters *Cassius*, *Fortis* and *Sextus*.

The intensive life in the middle Danube basin from the time of the Severan dynasty to the end of reign of Aurelianus could be encountered except at Saldum also at many other sites. The restorations of fortifications are confirmed in *Singidunum*, *Viminacium*, at *Čezava–Novae*, *Boljetin–Smorna*, *Donji Milanovac–Taliata*, *Karataš–Diana*, *Kostol–Pontes*, *Brza Palanka–Egeta*, while an entirely new camp was erected at *Ravna–Campsa*.

The time of tetrarchy, the reign of Constantine the Great and his successors, characterized by construction of *quadriburgia* at Sapaja, Porečka Reka, Tekija–*Transdierna* and Sip and also the building of new military camps at *Čezava–Novae* and *Karataš–Diana* and reconstruction of those at *Boljetin–Smorna*, *Ravna–Campsa* and *Donji Milanovac–Taliata* did not reflect on the situation at Saldum. Saldum was at that time a desert and uninhabited place, which remained as such for almost over 80 years.

PHASE IV – New although short-lived but very intensive period (364–378/380) commenced with the restoration of limes by Valentinian and Valens and settling of considerable army forces. Saldum was of the type of small open settlements covering an area of around 2 hectares eventually defended by the timber palisades. The residential and economic structures (aboveground and semi dug out houses, workshops and storehouses) had been constructed of timber and daub with floors of rammed earth. The newly arrived inhabitants were Romanized population – *limitanei* with their families and their activities besides defending of this section of the limes also included economic activities directed at satisfying their own needs. The analysis of archaeological finds revealed that they were engaged in agriculture, stock-breeding, fishing, working of wood, leather and hide, clothes manufacturing and in production of the metal (iron and lead) objects. The archaeological finds (pottery, glass vessels, lamps) suggest that this Romanized population arrived at Saldum from some of neighboring areas, more likely Pannonia than the Lower Danube basin where the influences of the Chernyahov culture are conspicuous and such elements are lacking at Saldum.

Settlement at Saldum was most probably established around AD 365, it existed for only about fifteen years and was destroyed in the Gothic attacks in 378–380, judging by the hoards of coins fused together, as a result of great conflagration. In the layer of destruction were found around twenty coin hoards and many scattered coin pieces (about 550 specimens in total) that indicate regular paying off of the Saldum military garrison with the coins minted mostly in Siscia and Thessalonica.

PHASE V – Phase V dates from the 6th century and it is possible to distinguish two subphases – time of Justinian and second half of the 6th century. The

analysis of relationship between the stratigraphy and architectural remains revealed that fortification was constructed in the time of Justinian I (527–565) and that earlier architecture (stone walls from phase II–III) was only partially incorporated in the new structure. The *castellum* was built according to the principles and recommendations for construction of the Early Byzantine fortifications. According to its total area of 0.14 ha it is classified among smaller fortifications for accommodation of the auxiliary units or *numeri*. Four towers were erected at the corners and three of them were circular while the fourth one, in the northeast, is rectangular with the apse within the eastern wall. It is possible that this tower had been used as church because of its distinct shape and orientation. The identical tower with the apse in the east was encountered at the *castellum* Donje Butorke, where the tower shaped as the church was additionally built next to the fortification in the second half of the 6th century.

The land and river routes had been supervised from the walkways on the north and east rampart that were approached via the stone-built staircases. Only one entrance to the fortification have been encountered, it was in the west wall and 2.17 m wide. The ramparts and towers had been simultaneously built of rubble stone, lime mortar and bricks. The tower gateways were vaulted as well as the areas between counterforts supporting the walkway. The foundations were built into the virgin soil at the depth of 3.50 m. The height of the ramparts could have been around 9.00–9.50 m as it was recommended by the anonymous Byzantine writer (*Anonymus Byzantinus*) from the 6th century. The garrison could have been stationed in the towers and interspaces of the counterforts (judging by the remains of mortar floors and wedges, clamps, keys discovered

there), as well as in the tents in the fort interior. About 100 soldiers could have been stationed at Saldum at one time. The Saldum *castellum* considering its form and method of construction has analogies among the fortifications in the neighboring province Dacia Ripensis: Malo Golubinje, Hajdučka Vodenica, Donje Butorke, Rtkovo–Glamija, Milutinovac, Ljubičevac and Ušće Slatinske reke.

In a sense it is possible, on the basis of the portable finds, to make a distinction between the garrisons at Saldum in the time of its construction and in the second half of the 6th century. The reason for this could be found in the general situation in the state and in the army in particular as well as in the strength and organization of the limes defense. The garrison in the time of Justinian was engaged exclusively in the military activities and was regularly supplied from the distribution centers while certain degree of ruralization is conspicuous in the material from the second half/end of the 6th century when supplying of the army was more difficult, because of permanent barbarian invasions so the soldiers besides their regular activities had to take care of their sustenance and to provide food by hunting and fishing.

The repertoire of the 6th century pottery vessels is very modest and is based on the local 4th century traditions with addition of the amphorae from the Pontus region, that were present in great quantities on the sites in the Middle Danube provinces. The coin finds include the issues of Justinian I and Justin II, while the latest specimen is the follis of Maurice from 592/3 minted in Constantinople and this could be taken as approximate date of the end of life at Saldum as also at most other fortifications as a consequence of the Avarian–Slavic attacks probably in 595/6 and it was the end of life at this place.

VI BIBLIOGRAPHY

ABBREVIATIONS

<i>ActaArchHung</i>	Acta archaeologica Academiae Scientiarum Hungaricae
<i>Bericht der RGK</i>	Bericht der Römisch-germanischen Kommission des Deutschen archäologischen Instituts
<i>CRAI</i>	Comptes rendus de l'Académie des inscriptions et belles-lettres
<i>Glasnik SAD</i>	Glasnik Srpskog arheološkog društva
<i>Građa</i>	Građa za proučavanje spomenika kulture Vojvodine, Novi Sad
<i>Jahrbuch des RGZM</i>	Jahrbuch des römisch-germanischen Zentralmuseums Mainz
<i>MEFRA</i>	Mélanges de l'École française de Rome. Antiquité
<i>MEFRM</i>	Mélanges de l'École française de Rome. Moyen âge
<i>VAMZ</i>	Vjesnik Arheološkog muzeja u Zagrebu
<i>VHAD</i>	Vjesnik hrvatskoga arheološkoga društva
<i>VVM</i>	Vesnik Vojnog muzeja
<i>ZNMB</i>	Zbornik Narodnog muzeja Beograd
<i>ZNM Niš</i>	Zbornik Narodnog muzeja Niš
<i>ZNMČ</i>	Zbornik Narodnog muzeja Čačak

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