

ACTA MVSEI APVLENSIS

APULUM LX

series *ARCHAEOLOGICA ET ANTHROPOLOGICA*

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www.revista-apulum.ro; www.mnuai.ro

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ISSN – 1013-428X

ISSN – 2247 – 8701

ISSN-L – 2247 – 8701

ACTA MVSEI APVLENSIS

APVLVM

LX

series *ARCHAEOLOGICA ET ANTHROPOLOGICA*



ALBA IULIA

MMXXIII

Tehnoredactare: RADU OTA

Traducerea și verificarea textelor în limba engleză: ADINA BOGDAN

Corectură: IOANA-DANIELA TRIF

Autorii își asumă întreaga răspundere pentru conținutul studiilor

Materialele nepublicate nu se restituie autorilor

S U M A R

CONTENTS – SOMMAIRE – INHALT

RADU OTA, Fondarea anuarului Apulum/Creation of Apulum Yearbook.....	IX
VOLKER WOLLMANN, RADU OTA, GEORGE VALENTIN BOUNEGRU, La ceas aniversar – Ion Berciu, fondatorul anuarului Apulum. Corespondență Ion Berciu – Volker Wollmann.....	XXI

STUDII ȘI ARTICOLE – STUDIES AND ARTICLES

ARHEOLOGIE & ANTROPOLOGIE

MIHAELA-MARIA BARBU, MIHAI GLIGOR, Materialul litic cioplit eneolitic din situl de la Petrești – <i>Groapa Galbenă</i> (jud. Alba) <i>Eneolithic Carved Lithic Material from Petrești - Groapa Galbenă Site (Alba County)</i>	1
MIHAELA-MARIA BARBU, IOSIF VASILE FERENCZ, Materialul litic cioplit aparținând culturii Coțofeni din situl de la Alun – Terasa Dacică 1 <i>Knapped Lithic Material Belonging to the Coțofeni Culture from Alun Site – Terasa Dacică 1</i>	33
CAROL KACSÓ, Obiective și descoperiri din epoca bronzului de la Călinești - Maramureș <i>Bronzezeitliche Funde und Befunde aus Călinești – Maramureș...</i>	45
ILIE LASCU, Descoperiri din bronzul târziu de la Pianu de Jos – <i>Câmpu de Mijloc</i> <i>Late Bronze Finds from Pianu de Jos – Câmpu de Mijloc</i>	67
NIKOLAUS BOROFFKA, HORIA CIUGUDEAN, SVEND HANSEN, Teleac – 70 Years from the First Discovery. <i>Macedonian Bronzes from the Research in 2010-2011</i> <i>Teleac – la 70 de ani de la prima descoperire. Bronzuri</i>	

	<i>macedonene din cercetările anilor 2010-2011.....</i>	89
GABRIEL BĂLAN, ADRIAN BOLOG, CRISTIAN DIMA, SILVIU POPA, DANIEL TENTIȘ, ANDREI SOFICARU, Morminte din prima epocă a fierului descoperite la Gelmar (jud. Hunedoara)		
	<i>Early Iron Age Burials Discovered at Gelmar (Hunedoara County).....</i>	129
MARIANA EGRI, ANDREEA DRĂGAN, AUREL RUSTOIU, ADRIAN CĂTĂLIN CĂSĂLEAN, MARINA MUSTEAȚĂ, GABRIEL TIBERIU RUSTOIU, Settlement and Land-Use Patterns in the Surroundings of the Iron Age Cemeteries at Sâncraia – Darvas (Alba County)		
	<i>Modele de organizare a așezărilor și de exploatare a teritoriului în arealul necropolelor din epoca fierului de la Sâncraia – Darvas (jud. Alba).....</i>	157
AUREL RUSTOIU, Commentaria archaeologica et historica (VI) 1. Comentarii cu privire la o istorie a Daciei preromane schițată de Karl Strobel 2. Din nou despre „hambarele dacice” de la Grădiștea de Munte (jud. Hunedoara)		
	<i>Commentaria archaeologica et historica (VI) 1. Comments Regarding the History of pre-Roman Dacia that Was Proposed by Karl Strobel 2. Once Again about the Dacian Granaries from Grădiștea de Munte (Hunedoara County).....</i>	193
DAN GEORGE ANGHEL, Olăritul la Apulum - ateliere, inventar tehnologic și produsele ceramice specifice		
	<i>Pottery at Apulum – Workshops, Technological Inventory and Specific Ceramics Products.....</i>	235
LUCIANA NEDELEA, A Statistical Analysis of the Roman Pottery Discovered within the Perimeter of the Porta decumana Pertaining to the Potaissa Legionary Fortress		
	<i>O analiză statistică a ceramicii romane descoperite în perimetrul porții decumana aparținând castrului roman Potaissa.....</i>	299
LIVIU PETCULESCU, Roman Military Equipment from Stolniceni (Râmnicu Vâlcea Town)		
	<i>Echipamentul militar roman de la Stolniceni (orașul Râmnicu Vâlcea).....</i>	319
SORIN COCIȘ, VLAD-ANDREI LĂZĂRESCU, MARIUS-MIHAI CIUTĂ, Fibule pierdute – fibule regăsite. Cazul Alba Iulia		
	<i>Lost Brooches-Found Brooches. Alba Iulia Case</i>	339
ERGÜN LAFLI, MARTIN HENIG, Some Hellenistic and Roman Engraved Gemstones from Nicomedia and Bithynia (North-Western Marmara)		

<i>Câteva geme elenistice și romane din Nicomendia și Bithynia (nord-vestul Mării Marmara).....</i>	387
ANA-CRISTINA HAMAT, HOREA POP, Două inele de bronz cu gemă, descoperite la Șimleu Silvaniei <i>Two Bronze Rings with a Gem, Discovered at Șimleu Silvaniei</i>	405
MARIA NOUSSIS, Late Antique Triconch Churches in the Roman Province of Ancient Epirus <i>Bisericile în plan triconc din epoca antichității târzii din provincia romană a Epirului.....</i>	419
CĂLIN COSMA, Obiect de paradă descoperit în cimitirul avar de la Șpălnaca (jud. Alba). Artefact unicat în arheologia avară din Transilvania <i>A Parade Object Discovered in the Avar Cemetery from Șpălnaca (Alba County). Unique Artifact in Avar Archaeology from Transylvania</i>	433
GEORGE VALENTIN BOUNEGRU, OVIDIU-MAXIM OARGĂ, Un tezaur monetar din secolul al XII-lea descoperit la Cetatea de Baltă (jud. Alba) <i>A Monetary Hoard from the 12th Century Discovered at Cetatea de Baltă (Alba County).....</i>	445

VARIA

FÁBIÁN ISTVÁN, Colecțiile școlilor mureșene din a doua jumătate a secolului al XIX-lea și din secolul al XX-lea <i>The Collections of the Mureș County's Schools in the Second Half of the 19th Century and the 20th Century.....</i>	455
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RESTAURARE – CONSERVARE – INVESTIGAȚII **RESTORATION – CONSERVATION – INVESTIGATIONS**

SORIN ȘERBAN, O nouă tehnică de punere în valoare a unui vas <i>terra sigillata</i> cu decor în relief descoperit la Alba Iulia <i>A New Technique for the Valorisation of a Terra Sigillata Vessel with Relief Decoration Discovered at Alba Iulia.....</i>	465
SIDONIA PETRONELA OLEA, Tehnici de curățare în restaurarea unei statui romane din piatră din colecția Muzeului	

Municipal „Ioan Raica” din Sebeș <i>Cleaning Techniques in the Restoration of a Roman Stone Statue from the Collection of the „Ioan Raica” Municipal Museum in Sebeș.....</i>	473
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RECENZII ȘI NOTE DE LECTURĂ

REVIEWS AND READER’S NOTES

RADU OTA, Rada Varga, <i>Microistorii din Dacia Romană</i> , Ed. Mega, Cluj-Napoca, 2022, 131 pagini, 9 ilustrații alb-negru și color.....	487
GEORGE BOUNEGRU, Oana Tutilă, <i>Bijuterii romane din aur din colecțiile Muzeului Civilizației Dacice și Romane</i> , Ed. Mega, Cluj-Napoca, 2022, 74 pagini.....	491

COMEMORARE

COMMEMORATION

SABIN ADRIAN LUCA, Omagiu regretatului profesor Iuliu Adrian Paul/ Homage to the Late Professor Iuliu Adrian Paul (1930-2009).....	493
Lista autorilor.....	499

**A STATISTICAL ANALYSIS OF THE ROMAN POTTERY
DISCOVERED WITHIN THE PERIMETER OF THE *PORTA
DECUMANA* PERTAINING TO THE POTAISSA LEGIONARY
FORTRESS**

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Cuvinte cheie: producția de ceramică locală, atelier de olărie, *terra sigillata*, Dacia romană, legiunea a V-a Macedonica, echipament militar roman

Key words: local pottery production, pottery workshops, *Samian ware*, Roman Dacia, Legio V Macedonica, Roman military logistics

Introduction¹

It is generally accepted that the fortress of Legio V Macedonica at Potaissa (nowadays Turda; Cluj County, Romania) held its main functionality for approximately one century, during which copious amounts of either imported or locally produced Roman wares have been brought in, consumed and then eventually discarded as waste. Similarly to other military sites², the importation of luxury wares slows down significantly in the first half of the 3rd century AD at Potaissa due to the tumultuous events taking place within the Empire, and thus stimulating the growth of the local pottery workshops³.

Military activity at the Potaissa legionary fortress commenced around the year 170 AD, only to be gradually abandoned in the second half of the 3rd century AD. Its complex layout and internal planning (580 X 408 m; 23.66 ha) have been scientifically *rediscovered* through a series of systematic archaeological campaigns which have been carried out yearly starting with 1971⁴.

The initial research efforts have focused on uncovering the fortification system (*fossa, murus, agger*), the West Gate (*porta decumana*), parts of the

¹ I would like to extend my gratitude to Professor Dr. Mihai Bărbulescu, Member of the Romanian Academy, for trusting me with the ceramic material discovered during the archaeological excavations which he has personally directed in 1976, 1977 and 1979 with the purpose of unearthing the legionary fortresses' West Gate (*porta decumana*).

² Ward 1993, p. 15-22; King 2013, chapters 6-7.

³ Căținaș 2007, p. 123-150; Pișlaru 2007, p. 151-157; Pișlaru 2011, p. 167-182; Pișlaru 2014, p. 95-106; Andone-Rotaru, Nedelea 2018, p. 69-90; Nedelea 2019, p. 182-220; Nedelea 2020a, p. 97-156; Nedelea 2020c, p. 89-99; Flückiger *et alii* 2022, p. 774-810.

⁴ Bărbulescu 2020, p. 421-439.

porta principalis dextra, the curtain and corner bastions, as well as its main roads⁵. Throughout the years, the headquarters building (*principia*)⁶ and the fortress baths (*thermae*)⁷ have been investigated and published. On the other hand, the barracks belonging to *cohors milliaria* and the *cohortes quingenariae*⁸, as well as one complex of granaries (*horrea*) have only been partially researched⁹.

The most numerous category of artefacts discovered and recovered from within the legionary fortress during these excavations is represented by ceramics, totaling by the year 2016¹⁰ to a staggering 10.000 individual Roman wares, a subject which I have tackled in my doctoral thesis¹¹.

This quantity might seem impressive at first, but it does not represent a true reflection of the pervasive use of ceramics associated with this fortress in Antiquity. Of course, this is the result of today's state of research, but if we were to divide the 10.000 vessels to the approximately 100 years of activity, the result would be 100 individual earthenware utilized concomitantly each year. This seems highly unrealistic, considering the fragile nature of pottery and the large number of soldiers in a Roman legion, each one of them (or perhaps each *contubernium*) requiring at least several ceramic vessels at a time for diverse activities (transport, storage, heating, food preparation, cooking, eating, drinking, ritualistic activities etc.). Therefore, it is important to express that the assemblages we handle today represent only a very small percentage of the pottery that was actually once consumed by Legio V Macedonica at Potaissa.

History of research and archaeological context

The Roman ceramic vessels which will be discussed in this study were recovered during the archaeological campaigns carried out in 1976, 1977, and 1979 with the purpose of unearthing the legionary fortresses' West Gate (*porta decumana*)¹².

Out of all the garrison's gates, the *porta decumana* is the only one to have been fully investigated. However, various medieval and modern descriptions regarding the East Gate (*porta praetoria*), South Gate (*porta principalis dextra*), and the North Gate (*porta principalis sinistra*) are available

⁵ Bărbulescu 1987; Bărbulescu 1997.

⁶ Bărbulescu *et alii* 2020.

⁷ Bărbulescu *et alii* 2019.

⁸ Nemeti *et alii* 2017.

⁹ Bărbulescu 2019, p. 52-69; Bărbulescu 2020, p. 421-439.

¹⁰ Nemeti *et alii* 2017.

¹¹ Nedelea 2020b. The doctoral thesis can be consulted at the "Lucian Blaga" Central University Library in Cluj-Napoca.

¹² Bărbulescu 1987, p. 110-114; Bărbulescu 1997, p. 18-21.

to posterity through a series of accounts given by foreign visitors and scholars passing through Turda¹³.

Located on flat and easily accessible terrain, in the middle of the west precinct wall of the fortress, the rear gate was identified as early as June-July 1976, being among the first camp components to be researched (**Pl. I/1**). Further excavations followed in 1977, when the northern gate tower was unearthed (interior measurements: 8.95 x 6.25-6.80 m). Subsequently, the 1979 campaign focused on identifying the southern gate tower (interior measurements: 9.10 x 6.25 m)¹⁴. Built in the *opus incertum* technique, only the foundations of the two rectangular gate towers withstood the test of time, as well as the medieval man's eagerness to scavenge for readily available building materials¹⁵. These foundations were consolidated and conserved through the 1979 intervention. Each tower had been strengthened in Antiquity by two buttresses situated towards the interior of the gate. The main opening of the rear gate measured 12.50 m between the towers, and it was divided in two equal corridors by a 6.30 m long and 2.95 m thick median wall (*spina*). Access towards the fortress was granted through the northern corridor (walled off during Philippus Arabs' Carpic campaign of 245-247 AD, and then subsequently restored, possibly under the reign of emperor Decius)¹⁶. A water-distribution pipe, as well as an overflow channel were identified beneath the southern corridor (only three wall slabs of the overflow channel have survived; **Pl. I/1**)¹⁷, the later yielding very interesting archaeological finds. The material culture recovered from the excavated area of the *porta decumana* (**Pl. I/1**) was in general deemed by researchers as scarce¹⁸. Although Roman pottery is ubiquitous, several other artefact categories which are typical to the activities normally associated with a military garrison were discovered along the overflow channel and within or around the two towers: stamped *tegulae*, *imbrices* and *lateres*, *terracotta* toy wheels¹⁹, paving tiles²⁰, lamps²¹, *amphorae*²², faunal remains, knife blades²³, bronze *fibulae*²⁴, bronze

¹³ Ackner 1856, p. 93-103; Cernovodeanu 1960, pp. 433-462; Cernovodeanu 1970, p. 440-445; Balázs 1984; Bărbulescu 1987, p. 90-95.

¹⁴ Bărbulescu 1987, p. 110-114, fig. 14, Pl. II/3; Bărbulescu 1997, p. 20-23, fig. 8, fig. 30/1.

¹⁵ *Idem* 1980, p. 283-296.

¹⁶ *Idem* 1987, p. 111-112, Pl. III/3; Bărbulescu 2020, p. 422.

¹⁷ *Ibidem*, p. 112, Pl. III/1-2, 4, fig. 14; Ursuț *et alii* 2003, p. 149-152; Groza 2017, p. 6; Bărbulescu, Fodorean 2019, p. 155-167, p. 160, fig. 2.

¹⁸ *Ibidem*, p. 111; Groza 2013, p. 60, regarding the evolution of the collection of Roman artefacts at the History Museum Turda between 1971-1980.

¹⁹ History Museum Turda, Inv. No. 3384.

²⁰ *Ibidem*, Inv. No. 3670.

²¹ *Ibidem*, Inv. No. 5377, 5378, 5506.

²² *Ibidem*, Inv. No. 5698, 5699.

²³ *Ibidem*, Inv. No. 5543 (northern tower, 1976).

belt buckle appliques²⁵, other smaller military equipment components²⁶, iron and bronze keys²⁷, iron needles and spikes²⁸, one circular clay spindle whorl (2-3 cm in diameter)²⁹, and four coins issued under Antoninus Pius, Severus Alexander and Philippus Arabs³⁰. One of the most interesting finds is represented by a bone spoon (*cochlear/ligula*), which was identified within the overflow channel³¹. This type of round-bowled spoon was utilized for a variety of purposes from the first half of the 1st century AD to the end of the 2nd century AD (Crummy Type 1)³², including medical/pharmaceutical³³, grooming, cosmetic, and the consumption of snails, shellfish, or eggs³⁴.

The Roman pottery identified during excavations (**Pl. I/2 - V**) totals to 101 individual vessels (rim count)³⁵, and its analysis allows us insight into the Roman soldier's habits in the 3rd century AD, problems regarding Roman military logistics and army supply, as well as the West Gate's fate after the withdrawal of troops and civilian administration from the Roman province of Dacia.

The statistical analysis and interpretation of the results

The vast majority of the Roman ceramic vessels discovered within the perimeter of the *porta decumana* (**Pl. I/1**) were recovered from a layer situated right above the foundations of the gate's buttresses, as well as its *spina*. Based on the enameled 17th-18th century AD pottery which was broken and abandoned right on top of the foundation of the northern tower, it was concluded that the *porta decumana* of the Potaissa legionary fortress must have been dismantled between the 17th-19th centuries AD³⁶, when much of the Roman building material was repurposed by locals. Therefore, besides the ceramic material that was discovered within the overflow channel, and several finds from within the

²⁴ *Ibidem*, Inv. No. 5562 (1976).

²⁵ *Ibidem*, Inv. No. 5568 (southern tower, 1979).

²⁶ *Ibidem*, Inv. No. 5730 (northern tower, 1979), 5571 (northern tower, 1979).

²⁷ *Ibidem*, Inv. No. 5378, 5759 (northern tower, 1979).

²⁸ *Ibidem*, Inv. No. 5701-5703.

²⁹ Nedelea 2022, p. 335-354; History Museum Turda, Inv. No. 5823; catalogued in 1979 as a ceramic bead.

³⁰ Pişlaru 2009, p. 212, catalogue nos. 636-639; p. 450, Pl. XXVI/638.

³¹ Bărbulescu 1994, p. 120-121, fig. 25/1; History Museum Turda, Inv. No. 6384.

³² Crummy 1983, p. 69-70, Type 1 – fig 73, nos. 2008-2011.

³³ Cociş, Alicu 1993, p. 114/2 - medical instruments; p. 119, catalogue nos. 113-121; p. 137-138, Pl. XII-XIII; Stanciu 2000, p. 464/E – Spoon (*ligula-cochlear*); Varga 2021, p. 98-100, III.1.2. Spoons (*ligula; cochlearium, κοχλιάριον*).

³⁴ Elefterescu 2008, p. 259, cat. no. 228, Inv. 27536, Pl.VIII.

³⁵ Nedelea 2020b – For the detailed catalogue of these vessels.

³⁶ Bărbulescu 1987, p. 94-95, footnotes; Bărbulescu 2015, p. 252.

lower stratigraphical layers of the towers³⁷, 90% of the Roman pottery in discussion was displaced from its initial context through medieval and modern interventions.

Nonetheless, the recovered archaeological material is extremely important for the fortresses' general statistics and pottery quantification (**Pl. III -V**)³⁸. Within pottery studies, statistical methods represent a useful tool in data collection, display, analysis and interpretation, allowing the researcher to obtain a much clearer overview of the investigated material, which, if analyzed correctly, can lead to crucial information regarding the use of pottery types in any assemblages.

Of all the main procedures utilized when „counting pottery in archaeology” (rims count, sherd count, the number of vessels represented/*estimated vessel equivalents* – *eves*, surface and weight measurement, displacement volume), the most effective, reliable and useful method for statistical analysis is the rims count³⁹, which has been applied in the current study as well. This method has been paired with the illustration of distribution frequency based on quality, place of manufacture, functionality and form/type groups, which are best displayed through charts and graphs (**Pl. III -V**). The rim count of the Roman pottery discovered within the perimeter of the *porta decumana* - 101 individual vessels - yielded a surprisingly rich result, if we take into consideration the functionality of this space (**Pl. I/1**).

Based on their quality, the 101 individual vessels can be classified in two large categories (**Pl. III/Chart 1**): a) fine wares, represented by 20 individual vessels; b) common wares, represented by 81 individual vessels (semi-fine and coarse fabric).

Based on their provenience and manufacturing technology, the fine ware category can also be divided in two groups (**Pl. III/Chart 2**): a) Samian imports from Rheinzabern, whose main markets were located in the region along the right bank of the Rhine River, as well as the Danube provinces⁴⁰; b) locally produced pottery (Potaissa civilian and military workshops)⁴¹.

The category of luxury wares is represented by only 61 individual vessels within the entire camp (imports mostly from Westerndorf or

³⁷ *Ibidem*, p. 112.

³⁸ Baxter, Cool 1995, p. 89-98.

³⁹ Orton *et alii* 1993, p. 169-171; Corredor, Vidal 2016, p. 333-346; Bader 2016, p. 47-67.

⁴⁰ Reutti 1983, p. 33-69, Tab. 2; Ricken, Thomas 2005; Brulet 2010, p. 254-256; Mees, Polak 2013, p. 36-48.

⁴¹ Pislaru 2007, p. 151-157; Pislaru 2011, p. 167-182; Pislaru 2014, p. 95-106; Andone-Rotaru, Nedelea 2018, p. 69-90.

Rheinzabern, and very few examples from Lezoux)⁴². The rarity of imported luxury wares and especially those with potters' stamps or relief decoration at the Potaissa legionary fortress⁴³ is most likely a result of its late emergence within the Dacian province (170 AD – c. 271 AD), changes in trade networks, as well as the downfall of Rheinzabern's Samian production centre in the second half of the 3rd century AD⁴⁴. One possibility is also the replacement of Samian ware with other types of luxury vessels, such as glass⁴⁵ or metal⁴⁶. Thus, it is not surprising that within the perimeter of the *porta decumana* (**Pl. I/1**), the only imported vessel that was identified during excavations was a variation of the Gaulish plain form Ritterling 5, which in this case, based on its fabric (Munsell 5 YR 7/4, Pink) and engobe (Munsell 2.5 YR 5/8, Red), was most likely manufactured at Rheinzabern⁴⁷.

On the other hand, the locally produced fine wares seem to have been more popular, with a total of 19 individual vessels being recovered from the perimeter of the *porta decumana* (**Pl. IV/Chart 3**). Within the local fine ware category, two further groups can be distinguished based on the utilized decoration technique, each with its own partition based on firing: a) local plain sigillata (oxidized firing), represented by 17 individual vessels; b) stamped decoration and applied relief technique, represented by only two vessels (reduction and oxidized firing).

Therefore, of all the vessels identified within the perimeter of the West Gate, only two bear decorations, and they were both locally manufactured in Potaissa's civilian or military workshops. The first example is a Dragendorff 37 type bowl, obtained through reduction firing, and ornated with simplistic, stamped triangular geometric motifs. The surface is covered with flaky, black engobe (**Pl. II/2**)⁴⁸. The second vessel is a large *dolium*, obtained through oxidized firing, and ornated on its handles and mouth with relief figures in the shape of snakes. Alternate stamped vegetal motifs and incised, wavy lines were rendered in parallel rows across the body of the vessel, almost in a free-style technique. The outer surface is covered in flaky, red engobe. It is, however, the most intricate ceramic product to have been identified in the perimeter of the

⁴² Cătinaş 1995, p. 463-471; Cătinaş 2004, p. 83-97; Nedelea 2019, p. 182-220; Nedelea 2020a, p. 97-156; Nedelea 2020c, p. 89-99; Nedelea 2020d, p. 39-70.

⁴³ Nedelea 2020d, p. 39-70.

⁴⁴ Rau 1977, p. 47-73; Reutti 1983, p. 33-69.

⁴⁵ István 2019, p. 249-250; István 2020, p. 157-170.

⁴⁶ Cătinaş 1995, p. 463-471; Mustaţă 2017, p. 101, catalogue no. 29, Pl. XXII/29, LXVI/29a, LXVII/29b-c; p. 122, catalogue no. 51, Pl. XXX/51, CI/30; p. 169, catalogue no. 91-92, Pl. XLVI/91-92.

⁴⁷ History Museum Turda, Inv. No. 6002 (1976, northern tower).

⁴⁸ Cătinaş 1984, p. 485, catalogue no. 34; p. 493, fig. 10/34; History Museum Turda, Inv. No. 5641.

porta decumana, and a vessel which is often associated with the cult of Liber Pater (**Pl. II/1a-b**)⁴⁹. Several such vessels (*dolia*, jugs, pitchers, *turibula* etc.) have been identified both in the legionary fortress, as well as the Roman settlement⁵⁰.

Throughout time, the production of local plain sigillata seems to have gained more popularity within the Potaissa fortress, taking over local pottery with stamped decoration, most likely due efficiency and production costs. In fact, recent research shows that local plain sigillata became so popular, that the Dragendorff 44 type bowl was being mass-produced for Legio V Macedonica's soldiers, whose attempts at writing are sometimes discovered on such vessels (of the 10.000 vessels analyzed, 1578 individual vessels pertain to this type; **Pl. V/Chart 6**)⁵¹.

The overwhelming majority of the pottery recovered from the gate's perimeter however, is represented by 81 individual vessels pertaining to the common ware category which was manufactured in Potaissa's civilian and military workshops (**Pl. IV/Chart 4**), in contrast to the one imported luxury ware (**Pl. III/Chart 2**), and the 19 locally manufactured fine wares (**Pl. IV/Chart 4**).

Based on their shape⁵², the analysis of the 101 individual vessels indicates the following numbers (**Pl. IV**): 28 jugs, 17 pitchers, 10 mugs, seven bowls, six cups, six *turibula*, six pots, five jars, four beakers, four *dolia*, three plates, two trays, two lids, and one *unguentarium*.

Based on their functionality, the 101 individual vessels can be classified in six further groups (**Pl. V/Chart 5**), each divided in two categories based on quality: a) *vasa potatoria* (19%; 10 mugs, six cups, and four beakers; seven vessels belong to the fine ware category, and 13 to the common ware category); b) *vasa escaria* (10%; seven bowls and three plates; all the vessels belong to the fine ware category); c) *vasa conquinatoria* (10%; six pots, two lids, and two trays; all the vessels belong to the common ware category); d) vessels utilized for pouring and storing liquids (54%; 28 jugs, 17 pitchers, five jars, and four *dolia*; three vessels belong to the fine ware category, and 51 to the common ware

⁴⁹ *Ibidem*, p. 488, wrongly identified as a "pot", catalogue no. 57; p. 502, fig. 14/57; History Museum Turda, Inv. No. 5375. It should be noted that, although the catalogue description, order and inventory number are correct, the author switched the numbers on page 502/Fig. 14 by mistake when working on the illustration, thus mixing up no. 57 (inv. no. 5365) with no. 58 (inv. no. 5375). In actuality, the *dolium* described in the catalogue at point 57, is graphically represented at Fig. 14/no. 58, and vice-versa.

⁵⁰ *Ibidem*, Fig. 11/48, 52, Fig. 13/55, Fig. 14/56-57, Fig. 15; Nedelea 2017, p. 93, p. 232, Pl. LIII/1-3, p. 106, Pl. LXXXVI/3.

⁵¹ Andone-Rotaru, Nedelea 2018, p. 69-90; Nedelea 2019, p. 182-220; Nedelea 2020a, p. 97-156; Nedelea 2020c, p. 89-99; Nedelea 2020d, p. 39-70.

⁵² Christmas, Pitts 2018, <https://doi.org/10.11141/ia.50.14> - an online publication.

category); e) vessels for hot coals (6%; six *turibula*; they all belong to the common ware category)⁵³; f) vessels with medical use (1%; one *unguentarium*, common ware).

Discussions and conclusions

The statistical analysis regarding the functionality distribution of tableware within the Potaissa legionary fortress has showcased extremely important patterns concerning the daily activity of dining among the Roman army's soldiers. Now, the case study of the *porta decumana* confirms once again pottery patterns previously noted within the legionary baths (*thermae*), the headquarters building (*principia*) and the *centuriae* located in the *praetentura sinistra*⁵⁴.

It seems that when it comes to individual food and drink consumption, Legio V Macedonica favored fine wares, both imported and locally produced plates or bowls, and that the majority of the wares lack decoration (**Pl. IV/Chart 3** - Ludowici Ty and Curle 23 type plates; Ludowici Sp, Dragendorff 37 and Dragendorff 44 type bowls). The second most popular shape within the fine ware category is the drinking cup, especially the Dragendorff 33 type which is the most numerous as an individual shape within this group (**Pl. IV/Chart 3**). The same cannot be said however about the vessels utilized for pouring liquids, the overwhelming majority belonging to the common ware category, which is yet again a pattern observed within the whole fortress⁵⁵.

Based on my observations, luxury or fine tableware was mostly utilized by each legionary for dining or drinking (plates, bowls, cups), and they were not intended for communal use. Some products might have been personally purchased, while others were most likely distributed within the fortress for all the legion's soldiers, as a part of military supply protocols which ensured at least a certain level of comfort for all. And what would be more important for all soldiers to own, than the all-fitting and versatile big bowl from which the famous *puls*⁵⁶ was eaten out of almost daily? In favor of this hypothesis comes the mass manufacture at Potaissa of the Dragendorff 44 type bowl, being the most numerous type of vessel identified within the fortress (**Pl. V/Chart 6**). Therefore, it is my opinion that the ceramic tablewares which were intended to be shared between the *contibemales*⁵⁷ are low-priced products (jugs and pitchers), while the purchase power of the legionary soldiers showed in their personal property. We know for example that plain *sigillata* plates produced at

⁵³ Nedelea 2018, p. 117-139.

⁵⁴ *Idem* 2017, p. 83-106; Nedelea 2019, p. 182-220; Nedelea 2020a, p. 97-156.

⁵⁵ *Idem* 2019, p. 182-220; Nedelea 2020a, p. 97-156; Nedelea 2020b; Nedelea 2020c, p. 89-99.

⁵⁶ Junkelmann 1997, p. 194, Abb. 86.

⁵⁷ Carroll 2005, p. 363-372; *Tab.Vindol.* 346.

Rheinzabern were sold for prices between XII to XX *assēs*⁵⁸, and that the *graffiti* often discovered on valuable wares indicates a desire of personalizing items of this nature in an effort to distinguish them from others, especially plain ceramic products⁵⁹. One such vessel, a Curle 23 type plate inscribed by a soldier with the pseudo-signature “X” was identified even within the perimeter of the *porta decumana* (Pl. I/2a-b; Pl. IV/Chart 3)⁶⁰.

An additional interesting observation is the apparent aggregation of vessels used for pouring liquids in the perimeter of the *porta decumana*. The presence of 45 individual vessels of this type (28 jugs and 17 pitchers) in the same space might be a coincidence and simply the result of intense traffic in the area (Pl. IV/Chart 3-4). However, this situation is noteworthy, as such clusters appear only rarely within the legionary fortress, and they are all in the vicinity of the main roads: Room E’ of the headquarters building (27 table *amphorae*, 15 pitchers and nine flagons), Rooms M and L of Barrack I situated in *latus praetorii dextrum* (37 table *amphorae* and two flagons), Room S of Barrack III situated in *latus praetorii sinistrum*, and the barrack-like building situated west of the *thermae* (44 pitchers and 35 flagons)⁶¹. Even though it is only a supposition for now, the clusters might indicate the use of these spaces as temporary storage rooms for such containers, in order to facilitate the supply and distribution of water or wine from strategic points within the fortress⁶². However, if the *contubernia* of certain *centuriae* within the fortress were utilized as storage spaces towards the end of the fortress, what does that say about the empty rooms?

The presence of vessels utilized for cooking and food storage in this area is also quite curious (two cooking trays, six pots, two lids, four *dolia*, and five jars; Pl. IV/Chart 3-4), indicating the presence of at least one kitchen within the gate towers. A similar situation has been observed within the space of the *porta praetoria* pertaining to the small fort built in stone at Tibiscum. Based on the discovery of large quantities of cooking vessels and a stone mill on the floors of the eastern tower (*porta praetoria*) pertaining to that fort, the authors have concluded that the ground space was utilized as a kitchen⁶³.

The above presented analysis has highlighted several interesting situations: a) the preference of fine wares over common ones when dining and drinking; b) the desire to distinguish personal property through the use of

⁵⁸ Kovacsovics 1987, p. 222-225; Weiß-König 2010, 161, no. cat. 106, XII - Zahlzeichen (Taf. 10); Wending 2012, p. 101-108.

⁵⁹ Nedelea 2020d, p. 39-70.

⁶⁰ *Ibidem*, p. 52, C, Pl. VI/2.

⁶¹ *Idem* 2020e, p. 223-231.

⁶² *Idem* 2017, p. 83-106; Nedelea 2019, p. 182-248; Nedelea 2020, p. 89-99.

⁶³ Benea, Bona 1994, p. 32-33; Benea 2018, p. 40-42, Pl. II/2.

graffiti; c) the possible existence of a military supply protocol, ensuring a basic level of comfort for all its legionaries; d) the preponderance of vessels used for pouring liquids; e) the possible use of certain spaces as temporary storage rooms; f) the possible existence of a kitchen within one of the gate's towers. In conclusion, there is real potential in pottery quantification and statistics, especially when thoroughly applied to large assemblages within well researched archaeological contexts, and it is my hope that the results obtained through this study will clarify at least a few aspects related to regional Roman military logistics and habits.

O ANALIZĂ STATISTICĂ A CERAMICII ROMANE DESCOPERITE ÎN PERIMETRUL *PORTII DECUMANA* APARTINÂND CASTRULUI ROMAN POTAISSA

REZUMAT

Castrul Legiunii a V-a Macedonica de la Potaissa și-a menținut funcționalitatea principală timp de aproximativ un secol, perioadă în care au fost aduse, consumate și apoi aruncate ca deșeuri cantități importante de obiecte romane importate sau produse local.

Vasele ceramice romane care vor fi discutate în acest studiu au fost recuperate în timpul campaniilor arheologice desfășurate în 1976, 1977 și 1979 cu scopul de a dezgropa Poarta de Vest (*porta decumana*) a castrului roman.

Un total de 101 vase individuale (numărătoare buze) au fost identificate pe parcursul acestor săpături, iar analiza lor ne va permite să înțelegem obiceiurile soldatului roman în secolul al III-lea p.Chr., problemele legate de logistica militară romană și aprovizionarea armatei, precum și soarta Porții de Vest după retragerea trupelor și a administrației civile din provincia romană Dacia.

În afară de materialul ceramic care a fost descoperit în canalul de revărsare și de câteva descoperiri din straturile stratigrafice inferioare ale turnurilor, 90% din ceramica romană în discuție a fost deplasată din contextul inițial prin intervenții medievale și moderne. Cu toate acestea, materialul arheologic recuperat este extrem de important pentru statisticile generale ale castrului și pentru cuantificarea ceramicii.

Cea mai eficientă, de încredere și utilă metodă de analiză statistică este numărarea buzelor, care a fost aplicată și în studiul de față. Această metodă a fost cuplată cu ilustrarea frecvenței de distribuție pe baza calității, locului de fabricație, funcționalității și a grupurilor de formă/tip, care sunt cel mai bine prezentate prin diagrame și grafice în cadrul acestui studiu.

Analiza statistică a ceramicii romane descoperite în perimetrul *porta decumana* a scos în evidență câteva situații interesante: a) preferința pentru vasele de foarte bună calitate în detrimentul celor comune la masă și băutură; b) dorința de a distinge bunurile personale prin folosirea *graffitiului*; c) posibila existență a unui protocol de aprovizionare militară, asigurând un nivel de confort de bază pentru toți legionarii săi; d)

preponderența vaselor folosite pentru turnarea lichidelor; e) posibila utilizare a unor spații ca depozite temporare; f) posibila existență a unei bucătării în interiorul unuia dintre turnurile porții.

LIST OF ILLUSTRATIONS:

- Pl. I. Fig. 1 – Plan of the *porta decumana*, Potaissa legionary fortress (after Bărbulescu 1987, and updated by the author); Fig. 2a-b – *Graffito*/"Pseudo-Inschrift" on a Curle 23 type plate (author's own work)
- Pl. II. Fig. 1a-b – *Dolium*, locally manufactured cultic vessel (Photo ©History Museum Turda; author's own drawing) ; Fig. 2 – Dragendorff 37 type bowl, locally manufactured (author's own work)
- Pl. III. Chart 1 – Frequency distribution based on quality; Chart 2 – Frequency distribution of fine wares based on provenience (author's own work)
- Pl. IV. Chart 3 – Locally manufactured fines wares; Chart 4 – Common wares (author's own work)
- Pl. V. Chart 5 – Frequency distribution based on functionality; Chart 6 – Dragendorff 44 type – Frequency distribution within the Potaissa legionary fortress (author's own work)

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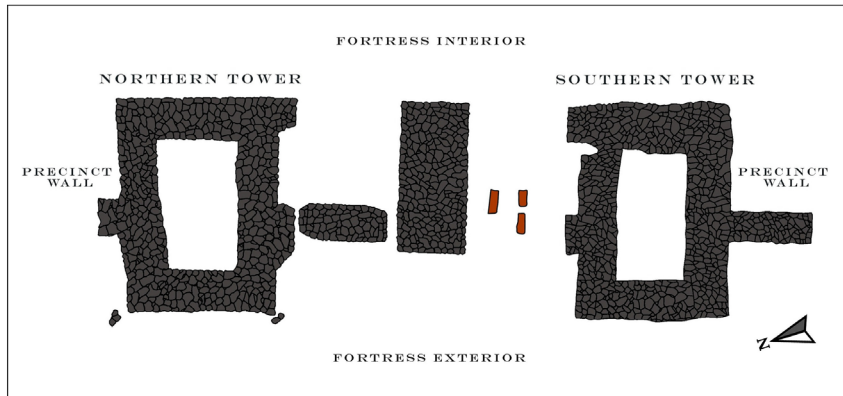
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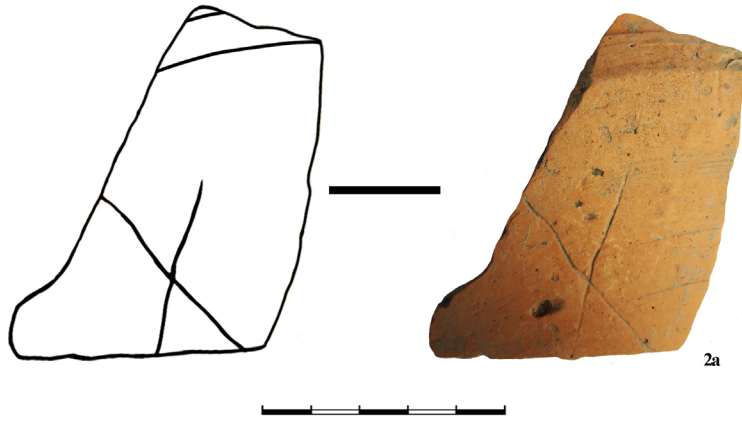
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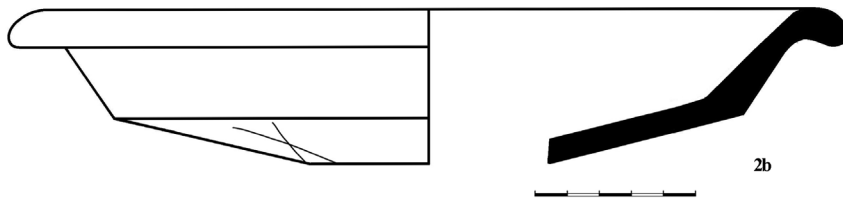
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2a



2b

Plate I

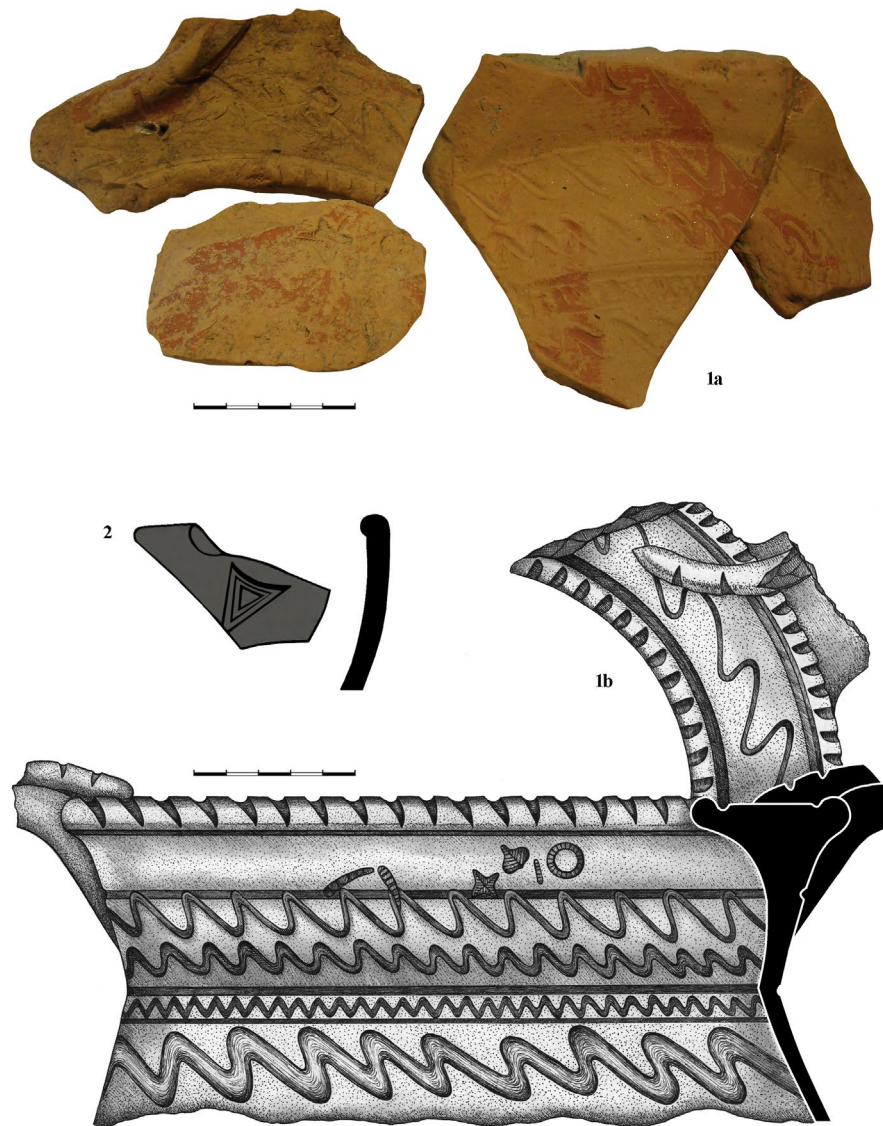


Plate II

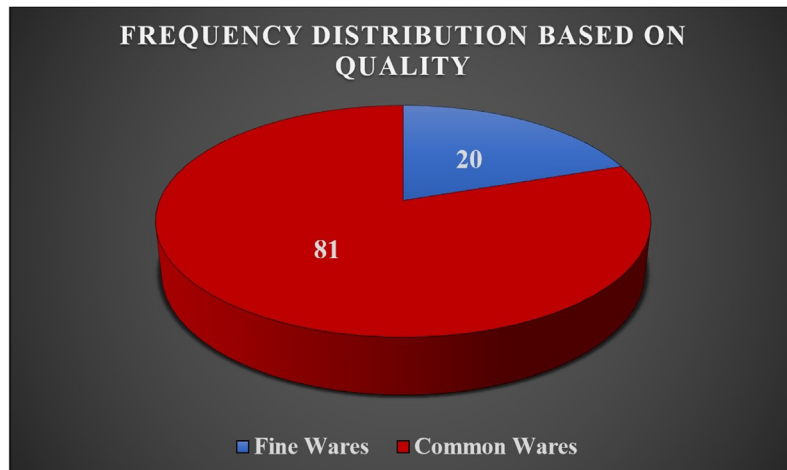


Chart1

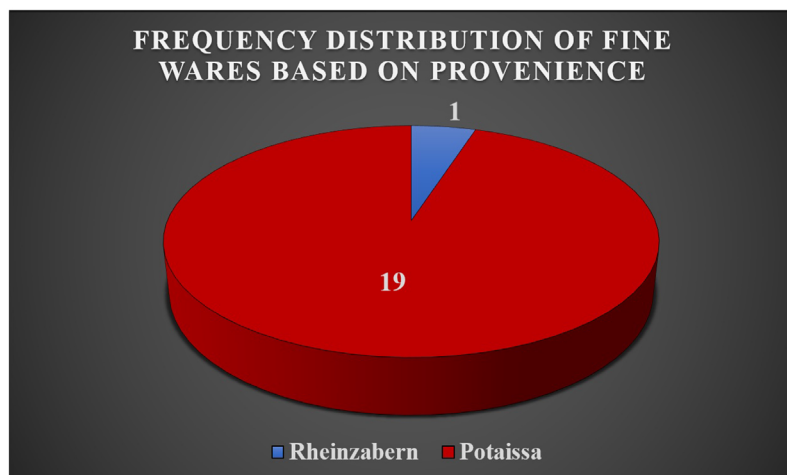


Chart2

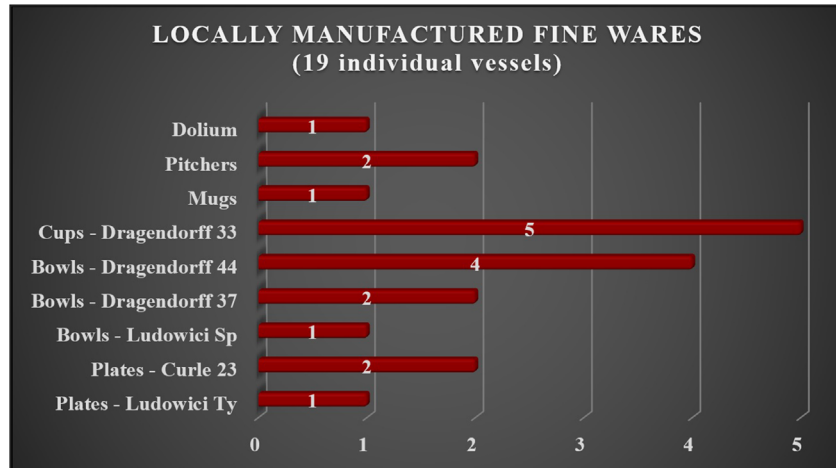


Chart3

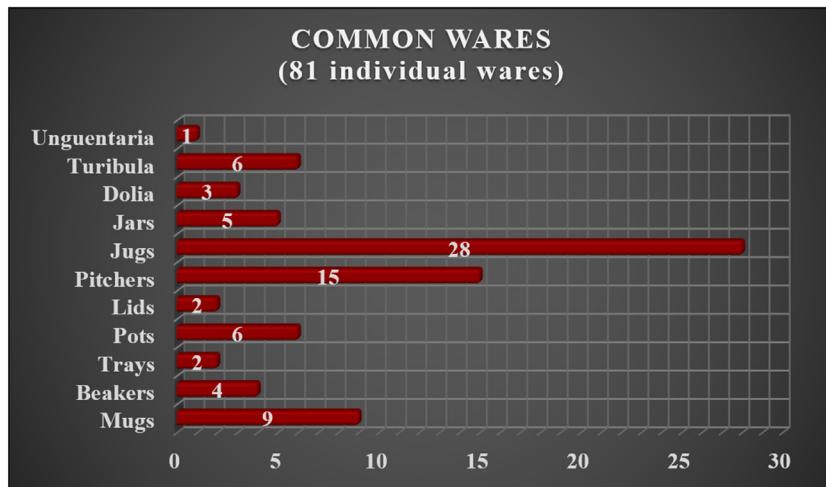


Chart4

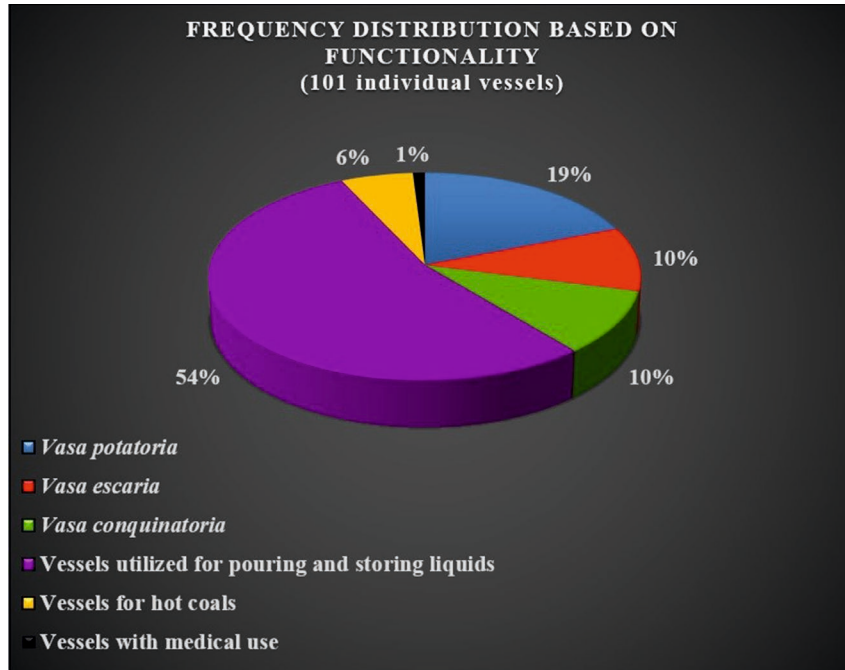


Chart5

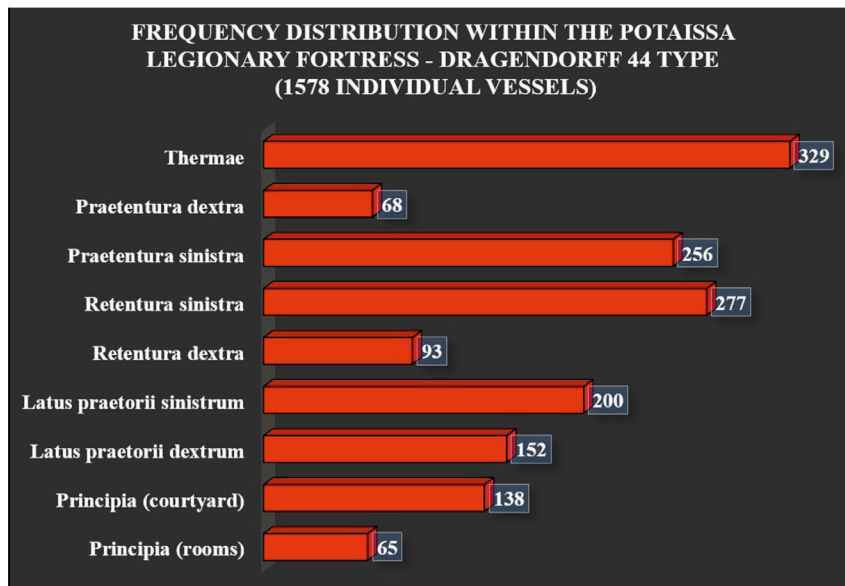


Chart6
Plate V