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CONTENTS

STUDIES

ANCIENT HISTORY

Vasileios SPANOS

HISTORICAL REFERENCE POINTS OF ANCIENT LARISSA.....3

Lucrețiu MIHAILESCU-BÎRLIBA

THE MOBILITY VECTORS OF SOLDIERS RECRUITED FROM THE RURAL MILIEU IN MOESIA INFERIOR. I. THE INSCRIPTIONS FROM CLAUDIUS TO TITUS.....10

Lev Shir COSIJNS

AM I MY CHILDREN'S KEEPER? EVIDENCE FOR INFANTICIDE IN THE ROMAN EMPIRE.....23

Raúl GONZÁLEZ-SALINERO

JEWISH EXEMPTIONS FROM ROMAN MILITARY SERVICE: A REPLY.....40

Noé CONEJO

THE MATERIALIZATION OF IDENTITY: ARCHITECTURE AND CONSUMPTION IN THE LATE ROMAN VILLAS OF LUSITANIA....45

ARCHAEOLOGY

Harun OY

AN IMPORTANT SETTLEMENT RELATED TO YORTAN CULTURE IN CENTRAL WEST ANATOLIA: KIZILKABAĞAÇ, EŞME, UŞAK... 57

Gayane POGHOSYAN

RITUAL SCENES IN THE ARTISTIC DECORATION OF THE URARTIAN BRONZE HELMETS.....73

Arturo SANCHEZ SANZ

GRYPHOMACHIAS. AMAZONS AND GRYPES IN ANCIENT ART.....77

ARCHAEOLOGICAL MATERIAL

Stefanos SPANOS

THE MYCENAEAN POTTERY OF THE TEMPLE-TEMENOS AREA FROM KOUKOUNARIES (PAROS) AND THE CONNECTIONS

WITH THE OTHER CYCLADIC ISLANDS, LEFKANDI AND THE ARGOLID.....87

Ramaz SHENGELIA, Levan GORDEZIANI, Nikoloz TUSHABRAMISHVILI, Nodar POPORADZE, Othar ZOURABICHVILI

DISCOVERY OF UNKNOWN SCRIPT SIGNS IN GEORGIA: THE BASHPLEMI LAKE TABLET.....96

Derviş Ozan Tozluca

WHEEL-MADE TERRACOTTA AND HOLLOW BULL FIGURINES FROM THE KNIDOS TERRITORY.....114

Dávid Petruț, Sorin COCIȘ

DOMESTIC LIGHTING IN ROMAN NAPOCA. THE LAMPS DISCOVERED ON THE SITE AT V. DELEU STREET (CLUJ-NAPOCA, ROMANIA).....131

Sever-Petru BOȚAN, Vitalie BÂRCĂ, Sorin COCIȘ

NOTES ON SOME OF THE GLASS FINDS IN THE VILLA RUSTICA OF DEALUL LOMB – CLUJ-NAPOCA.....161

Vladyslav SHCHEPACHENKO

ROMAN GLASSWARE FROM THE AREA OF THE CHERNIAKHIV/SÂNTANA DE MUREȘ CULTURE: TYPOLOGY, CHRONOLOGY AND DISTRIBUTION.....172

Deniz Berk TOKBUDAK

A LAMP-BEARER (?) IN THE FORM OF DIONYSUS FROM ANATOLIAN CIVILIZATIONS MUSEUM.....214

NUMISMATICS

Nathaniel S. KATZ

THE LEGIONARY COINS OF SEPTIMIUS SEVERUS.....222

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DOMESTIC LIGHTING IN ROMAN NAPOCA. THE LAMPS DISCOVERED ON THE SITE AT V. DELEU STREET (CLUJ-NAPOCA, ROMANIA)

Dávid PETRUȚ

Babeş-Bolyai University, Cluj-Napoca, Romania
petrutdavid@gmail.com

Sorin COCIȘ

Institute of Archaeology and Art
History Cluj-Napoca, Romania
scocis@yahoo.com

Abstract: The paper discusses the lamps discovered during the excavations carried out on the site from V. Deleu Street, a residential area situated in the northern end of Roman Napoca. The excavations brought to light an urban residential area, which was established immediately after the birth of the Roman province and was inhabited until its abandonment in the latter half of the 3rd century AD. A small part of the lychnological material resulting from the excavations was included in C. A. Roman's unpublished thesis on the Roman lighting equipment in Dacia Porolissensis (16 out of the 49 pieces), the greater part of the assemblage being unpublished. The present paper discusses the lighting devices discovered on the site, focusing on their provenance, chronology and aspects related to their use within the site. The changes recorded in the composition of the lighting instrument assemblages throughout the habitation phases of the site outline interesting transformations in the patterns of consumption and perhaps human mobility. The current contribution is part of a wider effort intended to deal with the unpublished lighting devices from the Roman city of Napoca.

Keywords: *Roman Dacia, Napoca, supply, mobility, lamps.*

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1. INTRODUCTION. THE SITE

The research and publication of Roman lighting instruments from the northern part of Roman Dacia (Dacia Porolissensis), has witnessed considerable progress over the last two decades, however the lion's share of publications in the field concerns the auxiliary forts and their subsequent surroundings (mainly the *vici militares*) as well as the legionary base at Potaissa.¹ Napoca, today's Cluj-Napoca (Hu: Kolozsvár) the main civilian settlement of the region,² has been the scene of intense rescue archaeological research over the last two decades, even so, the corpus of published finds is still relatively slim. Thus far, only the pottery vessels have benefited from a proper monographic publication.³ Regarding the lychnological material, C. A. Roman's 2005 PhD thesis included the lighting instruments from the said urban settlement,⁴ although the published version only addressed the finds from the

¹ See ROMAN 2006 (Porolissum, Buciumi, Gilău, Cășeu); GAIU 2010 (Arcobara); PETRUȚ/GUI/TRÎNCĂ 2014 (Potaissa, Buciumi, Arcobara); NEMETI 2017 (Potaissa); PETRUȚ 2018 (Buciumi); CĂȚINAȘ 2002 (Potaissa); PETRUȚ 2021 (Porolissum).

² For the history of Roman Napoca, see ARDEVAN 1998, 61–65.

³ See RUSU-BOLINDEȚ 2007.

⁴ See ROMAN 2005.

main auxiliary bases of Dacia Porolissensis, leaving out the material from Napoca.⁵ Since then, only sporadic archaeological reports have dealt with the newly discovered lighting devices.⁶

The Deleu Street (Hu: Ferencesek utcája) excavations yielded one of the most interesting Roman period sites enclosed within the city walls of Napoca. Situated opposite to the old town's Franciscan (originally Dominican) friary, the site was excavated throughout most of the 90's (1992–2001) under the supervision of Sorin Cociş, being finalised in 2012. They brought to light an urban residential area which was established immediately after the birth of the Roman province and was inhabited until its abandonment in the latter half of the 3rd century AD (Map 1).⁷ Three timber, and two stone phases were identified through the field research: Timber phase I (consisting of hearths and small ovens), approx. 106–110 AD – the arrival of settlers, who based on the finds from these early levels must have come from Noricum and Pannonia; Timber phase II (consisting of multiple rectangular timber structures), approx. 110–120 AD – the period of the *vicus*; Timber phase III (consisting of two aligned timber buildings: A and B), approx. 120–160 AD – the period of the *municipium*, the alignment of the buildings shows the existence of a street pattern; Stone phase I, approx. 160–200 AD – the construction of two large stone houses (C1 and C2); Stone phase II, approx. 200–270 AD – the partial modification of the two houses (Map 2).⁸ Due to the lack of proper archaeological survey at the beginning of the construction works in 1991, the upper layers (corresponding to the later phases) were disturbed which greatly affected the finds' registration on the site.⁹ This hinders the precise plotting of finds pertaining especially to building C1.

Only a small part of the lychnological material resulting from the excavations was included in C. A. Roman's unpublished thesis on the Roman lighting instruments of Dacia Porolissensis (16 out of the 49 pieces), the greater part of the assemblage being unpublished. The present paper discusses the lighting devices discovered on the site, focusing on their provenance, chronology and aspects related to their use within the site. The current contribution is part of a wider effort intended to deal with the unpublished lighting devices from the Roman city of Napoca.

2. THE FINDS: CLASSIFICATION AND CHRONOLOGY

The multiple campaigns have produced a surprisingly low number of lighting instruments, probably due to a certain extent to the lack of proper archaeological survey in the beginning (see above). The identified material consists of 49 artefacts (see catalogue), composed overwhelmingly of pottery lamps and fragments (**1–45**), in addition to one

fragmentary bronze lamp (**46**), two open lamps made of iron (**47, 48**) and what appears to be a fragmentary iron lantern (**49**). Sadly, the iron pieces cannot be located, as such, their inclusion here (based on the drawings and photos preserved) was mostly motivated by the desire to offer a comprehensive picture on the subject. No in-depth evaluation will be thus attempted in their case, hopefully this will be one day remedied when the artefacts eventually do show up.

Furthermore, an interesting hoard consisting of 12 metal objects including four fragments of bronze lighting equipment has emerged during the first campaign held in 1992, and was recently analysed by Silvia Mustață and Sorin Cociş.¹⁰ The assemblage was discovered in room B of building C2 in the vicinity of a monetary hoard consisting of 1269 coins and an unidentified piece of gold.¹¹ Based on the contextual evidence, the assemblage was dated to the second quarter of the 3rd century.¹² The pieces of lighting equipment consist of one lamp base and three candlesticks, all made from bronze.¹³ While the four objects clearly qualify as a lighting instruments, they seem to have been part of a hoard which was created for collecting and refurbishing high quality metal objects, and cannot be clearly connected to the use of the houses. In conclusion, the objects will not be included in the present paper.

The current section will focus on the classification and chronology of the types identified in the assemblage. The classification of the pottery lamps and fragments displays a somewhat low typological variety (Fig. 1). The largest category is unsurprisingly represented by the 1) Firmalampen (**1–28**) which was divided into three subcategories: 1.1) Loeschke type IX, 1.2) Loeschke type X, single nozzle and 1.3) Loeschke type X with multiple nozzles. The quality spectrum is quite wide, the group including poorly made local examples (variant Buchi Xb and Xc), but also some high-quality pieces (variant Buchi Xa) made in Northern Italy's largest lamp-producing centre (Mutina, today's Modena), in addition to some Pannonian lamps (see below).

The category comprising of circular, short-nozzled lamps vaguely referred to as 2) Loeschcke VIII (**29–31**) was split in two, based on the nozzle form and the overall shape of the lamp. The variant termed as 2.1) 'Medallion-shaped Loeschcke VIII, basically a late version of Bailey type O, displays the hallmarks of the 'classical' 1st–2nd century AD lamps with very short and stubby nozzles, and overall well-proportioned and well-executed morphological features.¹⁴ Conversely, the examples termed as 2.2) 'Provincial pear-shaped Loeschcke VIII lamps' have longer nozzles which render the lamps their distinctive pear shapes, paired with an overall low execution quality and general disregard for proportions and decoration. The third category comprises of the 3) 'Iványi type IX square multinozzled lamps' (**32–33**), while the fourth category consists of an enigmatic type labelled here 4) 'Triangular three-nozzled lamp'. The latter comprises a single intact piece (**34**) which can only be described as bulky, with the nozzles, the 'discus' and handle joined together in a

⁵ See ROMAN 2006.

⁶ See DIACONESCU *et alii* 2012 and RUSU-BOLINDEȚ/POPESCU 2012.

⁷ See the excavation reports: COCIȘ *et alii* 1995; COCIȘ *et alii* 2001. See also: RUSU-BOLINDEȚ 2007, 97–98; GĂZDAC *et alii* 2010, 7–8; MUSTAȚĂ/COCIȘ/VOIȘIAN 2012; MUSTAȚĂ/COCIȘ 2024.

⁸ For a more detailed breakdown of the phases and their subphases see COCIȘ *et alii* 1995; RUSU-BOLINDEȚ 2007, 98; OPREANU 2008, 392–393; MUSTAȚĂ/COCIȘ/VOIȘIAN 2012, 235–236.

⁹ See COCIȘ *et alii* 1995, 637.

¹⁰ See MUSTAȚĂ/COCIȘ 2024.

¹¹ For details see GĂZDAC *et alii* 2010.

¹² See GĂZDAC *et alii* 2010.

¹³ See GĂZDAC *et alii* 2010, 15.

¹⁴ See BAILEY 1980, 293–313.

quite compact manner lending the piece a triangular shape. It displays some degree of similarity with the provincial three-nozzled lamps (usually paired with Firmalampen type channels) and triangular palmette handles and could in fact be a late variant of said type. No clear analogies are available, however the context of discovery suggests that we are dealing with a 3rd century find. The remainder of the pottery lamp assemblage (35–45) assemblage consists of fragments that fall outside the range of the abovementioned types. They are mainly discus and base fragments, mostly bearing little information, however in some instances the preserved stamp can indicate the production place of the piece, as is the exceptional case of a Greek lamp from Patras/Corinth bearing the producer's stamp: Preimos (35).

Among the metal lamps, only the open iron lamp (47) can be included in a classification. It is of the typical 'figure of eight shape' (*achtförmigen Lampen*),¹⁵ which is quite common in Roman Dacia, and was most likely intended to work with animal fat rather than olive oil.¹⁶ It does not seem to have a base, as such was probably designed exclusively for hanging. Indeed, it has a long handle curving forward from the rear, also retaining the suspension loop. It was suggested that these lamps were mainly used in workshops and other industrial environments, although this cannot be confirmed statistically through the distribution of finds,¹⁷ indeed the present case seems to be an argument against this thesis.

In terms of the production technology, all pottery lamps featured in this paper were mouldmade, as no wheelthrown examples were identified. In terms of surface treatment most of the lamps display a brick red slip (*engobe*), while four examples are unslipped and burnished (10, 19, 20, 38), which is a trademark of the North Italian lamp production, while a single find displays a green lead-glazed surface (28). Fragment 35 is also unslipped, which in turn is consistent with Greek lamp production.

Keeping in mind the pitfalls of lamp chronology regarding Roman Dacia,¹⁸ some helpful points can be made. Based on the typology and morphological features of the lamps two chronological 'horizons' seem to stand out: 1) a late-1st–early-2nd century group consisting either of imported lamps or lamps brought along by the early settlers, as well as a 2) 3rd century group of locally produced lamps. Loeschcke type IX lamps started to be produced in Mutina, Northern Italy (Regio VIII Aemilia) already during the mid-1st century AD.¹⁹ Loeschcke type X started production in the same centre at the very beginning of the 2nd century AD, exporting to other provinces only for a short while, the local branch workshops subsequently taking over and presumably ending Mutina's export-based production.²⁰ Furthermore, the workshop of Preimos (Πρεϊμος) started production in Patras during the

1st century AD, before moving to Corinth in the mid-2nd century AD.²¹ Coming from an early 2nd century context, the find was most likely produced in Patras (Achaia) during the late 1st or early 2nd centuries AD. It is thus safe to assume that the six pieces belonging to the aforementioned categories (1, 10, 19, 20, 35, 38) must be dated to the very beginning of the 2nd century AD. To this we can also add the only Bailey type O lamp in the assemblage (29), which should be dated to the first quarter of the 2nd century AD.²² Based on typology, only three pieces can be dated with certainty to the 3rd century AD: the pear-shaped variants of Loeschcke type VIII (30, 31) as well as the triangular three-nozzled lamp (34), both stemming from earlier types (see above).

3. THE ORIGIN OF THE LAMPS

Regarding the question of lamp supply on the site from Deleu Street, it must be said that the assessment of the material's origin is rarely straightforward. The identification was based on the macroscopic analysis of the overall forms of the lamps, the various morphological elements that can be relevant in this case (nozzles, channels, lugs), the fabric and the colour coating or other types of surface treatment. The more recent publications containing high quality colour photos are especially helpful in this case, the older monographs and catalogues less so. Unfortunately, no fabric reference base for the local pottery production at Napoca is available. This would indeed represent a great help in identifying both the local and foreign lamps. The producer's stamps also play an important role in this process, however we must bear in mind that stamps were often 'illicitly' reproduced together with the copied lamp through the procedure of over-moulding, this greatly affecting their informational value.²³ A total of ten examples bearing stamps were identified, with FORTIS being the only one that is featured on multiple examples (Table 1). Furthermore, the identification of 'foreign' lamps in the assemblage (i.e. examples produced outside of Napoca) should not be automatically interpreted as instances of commercial activities (i.e. trade). Pottery lamps, because of their reduced size and weight and of course their utility, were surely brought along by individuals or groups who were travelling or relocating. The identification of 'foreign' lamps can indicate therefore instances of human mobility as well as commercial activities. For this reason, the term 'foreign' is preferred instead of 'imports'.

Based on the present inquiry, the assemblage seems to display a quite balanced mix of locally produced pieces and lamps coming from outside of Napoca or indeed the province. The larger than usual share of 'foreign' lamps (Fig. 2) can be partly pinned on the early 2nd century habitation of the site and the arrival of foreign settlers. We can assume that lamp production in the area started only sometime after the creation of the settlement, although some interesting traces of early production can be found in the material (see next section). As such, lamps brought along by the settlers, or indeed imported from foreign production centres played an important role in the daily life of the community at the

¹⁵ See BAILEY 1996, 55–56.

¹⁶ See REGEP-VLASCICI 2008.

¹⁷ REGEP-VLASCICI 2008, 353–355.

¹⁸ See the discussion in PETRUȚ/GUI/TRÎNCĂ 2014, 76–77.

¹⁹ LABATE 2017, 225.

²⁰ LABATE 2017, 225; CHRZANOVSKI 2020, 226–230. Moulds of Modenese producers were found in Northern Italy at Ravenna and Aquileia, but also in Pannonia at Poetovio and Savaria, see BUCHI 1975, 204 and BUORA 2017, 32, Tav. V. The farthest branch workshops seem to have been based at Lugdunum and Augusta Treverorum, see BUCHI 1975, 65–67 and BIONDANI 2014, 364.

²¹ BRUNEAU 1971, 488.

²² See BAILEY 1980, 293–313.

²³ CHRZANOVSKI 2020, 251.

Table 1. The lamps with producer's stamps within the assemblage

No.	Catalogue number	Place of production	Habitation phase	Stamp
1.	8	Pannonia	Timber phase II	FORTIS
2.	10	Mutina, Regio VIII Aemilia	Timber phase II	FORTIS
3.	11	?	Timber phase II	FORTIS
4.	35	Patras, Achaia	Timber phase II	IIPEIM[OY]
5.	3	Pannonia	Stone phase I	CAMPILI
6.	4	Pannonia	Stone phase I	ATIMETI
7.	7	Local	Stone phase I	FORTIS + illegible incuse stamp on discus
8.	14	Pannonia	Stone phase I	VIB[IANI]
9.	32	Ulpia Traiana Sarmizegetusa	Stone phase I	CAI
10.	37	?	?	Illegible

beginning. Some 20 pieces of the 45 pottery lamps can be ascribed as 'foreign'.

The most conspicuous group is that of the Firmalampen made in Mutina, Northern Italy (Regio VIII Aemilia), probably the most important Italian lamp producing centre at that time, and birth place of the Firmalampen.²⁴ Mutina also seems to have been the only Po-valley centre involved in long-distance trade, both directly supplying other provinces, but also establishing branch workshops in several provinces.²⁵ The Mutina lamps were made from non-calcareous clay rich in iron, which resulted in an intense dark red colour, making the use of colour coating superfluous.²⁶ Furthermore, the burnishing and quality of firing rendered these lamps impermeable.²⁷ These characteristics, corroborated with the sharp raised channels and lugs of the pieces make the Mutina lamps fairly straightforward to recognize, as other Italian and Pannonian centres (Poetovio in particular) generally used calcareous clay (resulting in a beige fabric) and colour-coating (often orange-red).²⁸ Four fragments (**10**, **19**, **20**, and **38**) display indeed an outstanding quality and are consistent with the Mutina production. Only one of the fragments (**10**) has preserved the producer's stamp (FORTIS). Considering the dating and contexts of these lamps (see above) we are most likely dealing with lamps brought along by the settlers, rather than imports, as it seems unlikely that the long-distance supply chain could already be set up in a presumably civilian site during the first two decades of the province.

A similarly conspicuous case of 'foreign' lamp was also already mentioned above, i.e. the base fragment bearing the *ante cocturam* incised name of Greek producer Preimos (**35**). The lamp, probably of Loeschcke type VIII form most likely comes from the workshop of Preimos in Patras in the province of Achaia. Lamp production under said name started in Patras on the Peloponnese during the 1st century AD, being subsequently transferred to Corinth probably in the mid-2nd century,²⁹ from where it was relocated to Athens from the beginning of the 3rd century.³⁰ Based on the context of dis-

covery (first two decade of the 2nd century AD), we are most likely dealing with a product of the Patras workshop, which is corroborated by the deeply incised text arranged in a single line, as well as by the pale beige unslipped fabric. The distribution of the Preimos lamps seems to be mostly restricted to continental Greece, but some finds were also reported from Tomis in Moesia Inferior, from Chersonesos, Odessos, and strangely enough from Ulpia Traiana Sarmizegetusa, while the westernmost piece discovered seems to come from Singidunum in Moesia Superior.³¹ While seemingly we are dealing with a relatively wide distribution, the finds outside of continental Greece and the Pontic region are usually restricted to one or two pieces per settlement or province. It seems that we are not dealing with an influx of goods determined by a commercial process, but rather by the presence of certain individuals in these places.

As already mentioned just one other lamp bearing the stamp of Preimos is known from Roman Dacia, and it comes from Ulpia Traiana Sarmizegetusa. The find has an unknown context of discovery but was dated by D. Alicu based on stylistic aspects to the 3rd century.³² If so, we are dealing with an Athenian lamp, as by this time all lamps bearing the Preimos name were produced in Athens, the small and shallow incuse stamp with the inscription spread in two lines (IIPEIM/OY), in addition to the use of the grapevine motif on the lamp's shoulder further corroborating this assertion.³³ Needless to say, the two pieces seem to represent anomalies, as Dacia seems to fall outside the commercial range of Greek pottery producers such as Preimos or other Corinthian or Attic workshops, who readily shipped their products to the Black Sea coast cities of Moesia Inferior, for example Tomis, where it also seems that they were copied.³⁴ As we well know from the epigraphic sources Napoca was home to an important community of Oriental expats, as shown by the attestation of two associations probably consisting of Anatolian merchants: a *collegium Galatarum* ('*Galatae consistentes municipio*', CIL III, 860, dated to the reign of Antoninus Pius).³⁵ Thus, it would not be totally impossible to imagine that the lamps in question were the personal possession of merchants or veterans of Oriental origin.

A relatively large group (11 pieces, see catalogue) was

²⁴ For a general insight on the production centre, see LABATE 2016, LABATE 2017 and BUORA 2017.

²⁵ ISTENIĆ 1999, 149.

²⁶ SCHNEIDER/DASZKIEWICZ 2011, 276. See also BIONDANI 2014, 367; AUER 2016, 39.

²⁷ See CHRZANOVSKI 2020, 250.

²⁸ See BAILEY 1980, 277; SCHNEIDER/DASZKIEWICZ 2011, 271.

²⁹ BRUNEAU 1971, 488.

³⁰ GEORGESCU 2019, 75.

³¹ GEORGESCU 2019, 76.

³² ALICU/NEMEŞ 1977, 83, nr. 331; ALICU 1994, 31, nr. 1032.

³³ PEARLZWEIG 1961, 48–49.

³⁴ GEORGESCU 2019, 76.

³⁵ See the discussion in MATEI-POPESCU 2007.

ascribed to unknown Pannonian workshops. The attribution in this case is hypothetical and was based on the overall production quality of the lamps. The group is evenly spread out along the existence of the site, which could be explained by the strong commercial ties and human mobility between the two provinces (Pannonia and Dacia). The activity of the Pannonian branch workshops of Modenese producers, especially in Poetovio, Savaria and Aquincum is well-known, indeed three of the lamps in the present assemblage, bearing the stamps CAMPILI (3), ATIMETI (4) and FORTIS (8) seems to be consistent with the lamps produced in Poetovio (well-made, beige fabric, orange-red or brick red slip).³⁶

Similarly, only a hypothetical origin could be ascribed to further two pieces. The only example in the present assemblage displaying the 'classical' morphology of Loeschke's type VIII (29) appears to be an imported piece, probably of Central Italian origin. The fabric, the quality of the slip and decoration (the rosette on the discus) and the lamp's morphological features as well as the presence of a handle suggest that we might be dealing with an Italian import.³⁷ Similarly, the three-nozzled Firmalampe example with a palmette handle (26) appears to have been produced outside the province. The high production quality of this complex piece as well as the extremely pale colour of the fabric could indicate that we are dealing with a lamp produced somewhere in the Rhineland, possibly in Germania Inferior.

Further two cases need to be mentioned at this stage, as they seem to provide evidence for inter-provincial trade or mobility. The only intact example of a square multinozzled lamp (32) has a shallow producer's stamp on the base (CAI). It was previously analysed by C. Roman in his unpublished PhD thesis.³⁸ According to the author the lamp was produced in Ulpia Traiana Sarmizegetusa, as clearly there was at least one workshop operating there that produced square multinozzled lamps judging from the large number (314) of such pieces discovered there.³⁹ As noted by the same author, the aforementioned site has also produced multiple lamps bearing the stamp CAI, although they belong to other types of lamps. It also must be mentioned however that multiple moulds for producing lamps of this type were published by D. Iványi from Pannonia almost a century ago, therefore the Pannonian origin cannot be excluded totally.⁴⁰ Furthermore, at least one lamp bearing the producer's mark CAI is also held in the National Museum of Unification at Alba Iulia, and probably coming from Apulum.⁴¹ All in all, it seems quite plausible to ascribe the present lamp to one of the workshops operating in Ulpia Traiana Sarmizegetusa.

Another interesting case is represented by a lead-glazed fragment of a multinozzled Loeschke type X lamp (28). Given that the production of lead-glazed ware in Roman Dacia seems to have been limited to only a couple of production

centres (Apulum, Ampelum, and Micăsasa),⁴² it seems only fair to ascribe this piece to one of these centres, although a more precise identification is impossible at the moment.

Finally, the group identified as 'local' must be addressed in short. It consists of poorly made pieces, mostly coming from contexts later than the mid-2nd century (see next section). It includes two very small intact pieces as well (2, 5) which were probably not fit for daily use. Strangely enough it also includes two pieces coming from the earliest phase of Roman habitation (15, 16), one being apparently a waster (16). These probably should be interpreted as early attempts of local production. Only one example from the group (7) termed as 'local' has a preserved stamp (FORTIS). The overall poor quality of the lamp and the poor rendering of the stamp indicates that we are dealing the product of a local 'copyist workshop', and not a branch establishment.⁴³ A further indication of this is, the incuse stamp on the discus (incised on the mould), which is sadly illegible, but presumably contained the name of the copyist lampmaker.⁴⁴

4. DISCUSSION: LAMP USE IN THE HOUSES FROM DELEU STREET

The present section will discuss the assemblage according to its distribution across the phases of habitation identified during the excavations. The topographical distribution of the finds is only relevant with regard to the two stone phases, as we have no clear picture regarding the planimetry of the timber phase structures. The overwhelming domination of finds attributed to the timber phases (Fig. 3), can be at least partially credited to the peculiarities of the research, which affected the finds collecting from the upper layers of the site (see first section). The earliest phase ('Timber phase I', approx. 106–110 AD) produced 11 lamps. Somewhat surprisingly we find some examples of presumably local lamps (15, 16, 22, 23), including a waster (16), which seems to indicate a quite early horizon of local lamp production. Among the imports we find two examples of high-quality Pannonian pieces (13 and 18). Moreover, three of the four Mutina lamps come from this phase (19, 20, 38), which was to be expected, considering the chronology of the Modenese production (see above).

Timber phase II (approx. 110–120 AD) produced the same number of lamps (11). Beside the 'local' lamps (just two: 21, 24), we find two high-quality Firmalampen, presumably from Pannonia (8 and 17), the latter one displaying an interesting volute motif on the shoulder. The last, and most complete Mutina lamp (10) also comes from this phase, as does the fragment from Patras lamp bearing the stamp of Preimos (35). The overall quality and composition of the lamps seems to be similar to the earlier phase, and no spectacular change in the composition can be noted.

Interestingly enough the number of lamps drops to just six for the last timber phase (Timber phase III, approx. 120–160

³⁶ See ISTENIČ 1999, 152, 155; SCHNEIDER, DASZKIEWICZ 2011, 271.

³⁷ See BAILEY 1980, Q1202 (without handle); Q1331. A similar handle-less version is also known from Pannonia, but probably also came from Italy, see: IVÁNYI 1935, nr. 734, Taf. XXVII, 10.

³⁸ ROMAN 2005, 227, nr. 53, Fig. 65, 66, Pl. 6.

³⁹ ROMAN 2005, 148.

⁴⁰ IVÁNYI 1935, nr. 4450 (Taf. LXXI, 1), nr. 4451 (Taf. LXXI, 6), nr. 4465 (Taf. LXXI, 7).

⁴¹ ANGHEL *et alii*, 2021, 84, no. 84.

⁴² See ANGHEL *et alii*, 2021, 9, Fig. 1.

⁴³ See AUER 2016, 39–40.

⁴⁴ An earlier attempt to decipher the name of the *lucernarius* has put forward the Thracian name Mucapor, see PAKI 1998, 201, nr. 135. This is quite probably incorrect, but no alternative solution will be given here, as the matter needs further investigation, and will be addressed separately later.

AD) during which Napoca started its urban transformation. Among the imports ascribed as ‘Pannonian lamps’ we find the single case of Loeschke type IX (1) which seems to indicate that the Pannonian production of this type was quite prolonged. The same origin was ascribed to an orange-red colour coated high-quality Loeschke type X lamp (12). The most intriguing piece is the only case of Bailey type O lamp from the assemblage (29), which could very well be an Italian product. If this is indeed the case then the piece could be ascribed to the early stages of this phase.

The stone phase is marked by the building of the two adjacent houses (C1 and C2), probably part of an *insula*. There is not much point in the quantitative comparison of the lamps belonging to the two buildings, as there is considerable discrepancy with regard to their research (see the first section). Not surprisingly, the later stone phase (‘Stone phase II’) is underrepresented, for the same reasons. It is impossible thus to render a comprehensive picture regarding the interior lighting of the two houses, although the topographical distribution of the material can lead to some interesting points. Some ten pieces can be attributed to Stone phase I (approx. 160–200 AD). Among them we find what seems to be good quality Pannonian examples (3, 4, and 9), but also two lamps coming presumably from other production centres within the province, i.e. Apulum or Ampelum, and Ulpia Traiana Sarmizegetusa (28 and 32). It is interesting to note that one of the lamps (9) is covered in a thick layer of lime (partially removed during restoration), which would indicate that it might have been disposed of or lost during the construction of the stone houses. Indeed, the presence of a construction phase was noted by the excavators, who also documented a lime pit in building C2.⁴⁵ Furthermore, the spectacular three-nozzled piece probably coming from the Rhineland (26) also belongs to this phase, as does the only bronze lamp fragment from the assemblage (46). Regarding the ‘foreign’ lamps there is probably a change in the supply or mobility tendencies, as the Italian products seem to have phased out (which is understandable, as the Mutina workshops have stopped exporting by then), while other sources (if indeed we are dealing with instances of trade) seem to come into play. Conversely, the Pannonian products seem to remain constant. Regarding the topographical distribution of the lamps: the majority comes from building C1, the southern room with hypocaust heating, i.e. room C4 (3, 4, 7, and 14), while only three lamps can be attributed to building C2, one from room C (32) and two from room D (9, 46). Three pieces cannot be placed on the plan (26, 28, and 44). It might not be totally accidental that all lamps from this phase come from just three rooms with hypocaust heating systems, these probably being the main living quarters of the two houses (see Figure 2).

A total of nine lamps come from the later stone phase of the two houses (approx. 200–270 AD). All pottery lamps (2, 5, 25, 30, 31, and 34) seem to be local products, with no clear indication of ‘foreign’ lamps. These consist of two intact locally made Loeschke type X Firmalampen (2 and 5), two pear-shaped provincial Loeschke type VIII lamps (30 and 31), as well as the enigmatic triangular three-nozzled lamp

(34), which was probably also locally made. In addition to this, two open iron (47, 48) lamps and one iron lantern (49) also belong to this phase. It seems that lamp use changed during the third century, as imports seem to have phased out, pottery lamp supply relying mostly on local production, and iron lamps were also brought in. Regarding the topographic distribution of the lamps, the situation is as follows: only two lamps come from building C1, again from the same room C4 (30 and 31), in building C2 two lamps come from room D (2 and 25), one from room C (5), while the three iron lamps (47, 48, and 49) were discovered in room B, which seems to have been a small chamber that communicated with the main courtyard (A), thus it would not be totally unpalatable to assert that the iron lamps were meant for outdoor use (see Figure 2).

Regarding the question of use, two aspects can be traced on the lamps themselves: 1) the sooting on the nozzle, which is an indication of prolonged use, as the carbonized oil forms a more or less thick deposit on the lamp surface (mostly on the tip of the nozzle or sometimes along the entire nozzle in the case of some Firmalampen). Of course, this is traceable only on intact pieces or fragments preserving the nozzle, as such no relevant quantification can be made in this case. Still, it is interesting to note that some 16 cases of nozzle sooting can be noted in the assemblage (see catalogue). In two cases (7 and 22, both Firmalampen), the sooting seems to run along the entire length of the nozzle, suggesting that a longer wick was used which was embedded horizontally into the nozzle channel to increase the lighting output of the lamps. This method of use was suggested before in the case of Firmalampen, and it seems to have been one of the main innovations of this group of lamps developed in the Po-valley.⁴⁶ It is also interesting to note that on the Iványi type IX square lamp (32), out of the five nozzles just one of the side-nozzles bears signs of use, which could be a sign of saving the olive oil used to fuel the lamp. Reducing costs was probably also the main motive for removing the lamps’ discs. In this way the lamps could be fueled with tallow instead of the much more expensive olive oil. Just two obvious cases can be noted (8 and 9) in the assemblage, although their true number would have been certainly higher.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to Dr. Viorica Rusu-Bolindeț (MNIT) for her help in tracing down the finds from the old excavations as well as for her helpful suggestions concerning some of the lamps, as well as to our younger colleague Krisztina Csibi for the drawings.

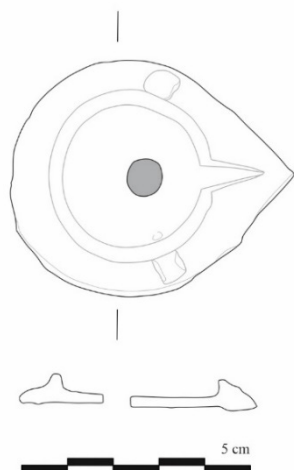
⁴⁵ COCIȘ *et alii* 1995, 637; see also GĂZDAC/COCIȘ 2020, 43.

⁴⁶ See WUNDERLICH 2003, 259–206 and more recently CHRZANOVSKI 2020, 217–218.

CATALOGUE⁴⁷

Firmalampen: Loeschcke type IX

1. Pottery lamp fragment

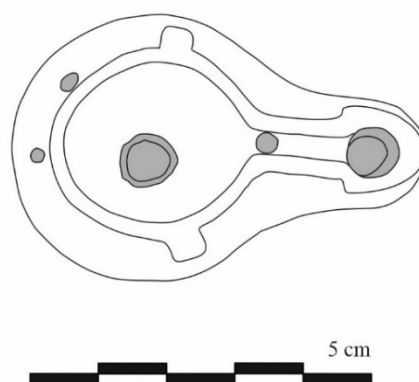


1. Cluj-Napoca, V. Deleu Street, timber phase III; **2.** MNIT, Inv. V 47492; **3.** Dm. 51 mm; **4.** Mouldmade; **5.** Fairly well-made, two lugs are present on the shoulder, the filling hole is off-centre; **6.** Oxidized fine beige fabric, light yellowish-brown coating; **7.** Only the discus and shoulder is preserved, the tip of the nozzle is missing; **10.** Pannonia (?); **11.** First half of the 2nd century (based on contextual and typological data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

⁴⁷ Abbreviations: **1:** contextual data; **2:** storage place, **3:** dimensions (Dm.: diameter of the reservoir, L.: length, H.: height, W.: width), **4:** production technique; **5:** morphological description; **6:** description of fabrics and coating; **7:** state of preservation; **8:** signs of use **9:** Stamp and graffiti; **10:** Possible origin; **11:** Dating (only if detailed assessment is possible, otherwise the general chronological framework is: 2nd–3rd centuries AD); **12:** Bibliography (if previously published). MNIT: Muzeul Național de Istorie a Transilvaniei, Cluj-Napoca (National History Museum of Transylvania, Cluj-Napoca); CXT: context; SF: small find number; Frag.: Fragment; D: depth; Inv: inventory number.

Firmalampen: Loeschcke type X (Buchi type Xa–c, Bailey type N), single nozzle

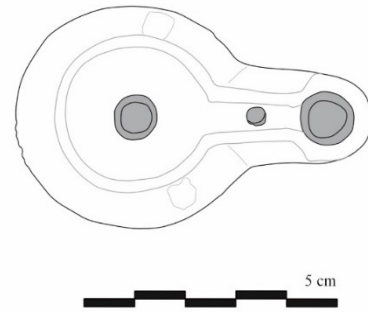
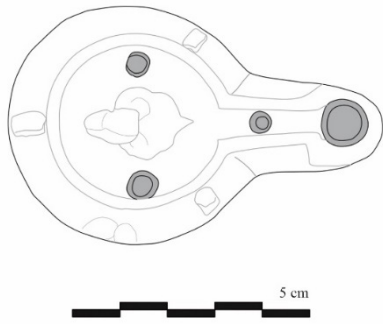
2. Intact miniature pottery lamp (Buchi type Xc)



1. Cluj-Napoca, V. Deleu Street, 2012, SF. 163, trench C 2.4, from the area of the water tank in room D of building C2, stone phase II; **2.** MNIT; **3.** Dm. 38 mm, L. 58 mm, H. 25 mm; **4.** Mouldmade; **5.** Poorly made, the discus is irregular, two lugs are present on the shoulder, the filling hole is off-centre; **6.** Oxidized fine beige fabric, brick red slip; **7.** Signs of secondary burning spread all over the surface; **8.** Sooting on the tip of the nozzle; **9.** No stamp or graffiti; **10.** Local; **11.** First half of the 3rd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

3. Intact pottery lamp (Buchi type Xb)





1. Cluj-Napoca, V. Deleu Street, 1994, trench D4, from the hypocaust channels in building C1, room C4, stone phase I; **2.** MNIT, Inv. V 41374; **3.** Dm. 49 mm, L. 73 mm, H. 24 mm; **4.** Mouldmade; **5.** Well-made, the discus and shoulders display a regular shape, a human bust is present in relief on the discus flanked by two filling holes, three well-defined lugs are present on the shoulders; **6.** Oxidized fine beige fabric, orange-red slip partially worn off; **7.** Intact, the slip has partially eroded from the surface; **8.** Sooting on the tip of the nozzle; **9.** Base stamp: CAMPILI; **10.** Poetovio, Pannonia (?); **11.** Late 2nd century AD (based on contextual data); **12.** ROMAN 2005, 250, nr. 143, Fig. 62, 66 (stamp drawing included here), Pl. 16. Photo: D. Petruț, drawing: Kr. Csibi.

1. Cluj-Napoca, V. Deleu Street, trench D4–D5, from the hypocaust channels in building C1, room C4, stone phase I; **2.** MNIT, Inv. V 41375; **3.** Dm. 42 mm, L. 65 mm, H. 24 mm; **4.** Mouldmade; **5.** Fairly well-made, the discus and shoulders display a regular shape, two poorly defined lugs are displayed on the shoulder; **6.** Oxidized fine beige fabric, orange-red slip; **7.** Intact, the slip has partially eroded from the surface; **8.** Strong sooting on the tip of the nozzle; **9.** Base stamp: ATIMETI; **10.** Local; **11.** Late 2nd century AD (based on contextual data); **12.** ROMAN 2005, 249, Nr. 139, Fig. 66, Pl. 15. Photo: D. Petruț, drawing: Kr. Csibi.

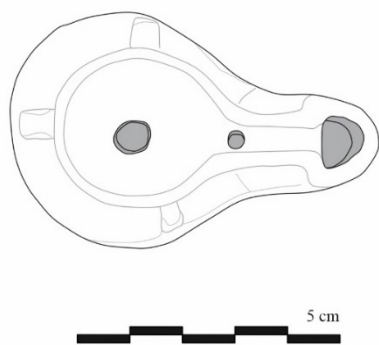


4. Intact pottery lamp (Buchi type Xb)



5. Intact pottery lamp (Buchi type Xc)





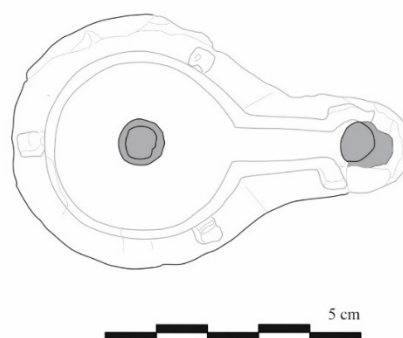
1. Cluj-Napoca, V. Deleu Street, trench D1, from the floor of room C in building C2, stone phase II; **2.** MNIT, Inv. V 41378; **3.** Dm. 42 mm, L. 66 mm, H. 25 mm; **4.** Mouldmade; **5.** Crudely made, the disc and the channel are irregular, three poorly defined lugs are displayed on the shoulder; **6.** Oxidized fine beige fabric, light brick red slip turned brownish black due to exposure to thermic shock; **7.** Intact, the slip has partially eroded from the surface, strong traces of secondary burning; **9.** No stamp or graffiti; **10.** Local; **11.** First half of the 3rd century AD (based on contextual data); **12.** ROMAN 2005, 267, nr. 205, Fig. 35 (drawing included here). Photo: D. Petruț.

6. Intact pottery lamp (Buchi type Xc)

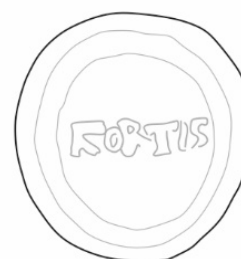


1. Cluj-Napoca, V. Deleu Street, 1996, trench VII, timber phase II; **2.** MNIT, Inv. V 49396; **3.** Dm. 44, L. 74 mm; **4.** Mouldmade; **5.** Fairly well-made, the disc and the channel are raised but slightly irregular, three well-defined lugs are displayed on the shoulder; **6.** Oxidized fine beige fabric, orange-red slip; **7.** Fractured in multiple pieces; **8.** Sooting on the tip of the nozzle; **9.** No stamp or graffiti; **10.** Pannonia (?); **11.** First two decades of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț.

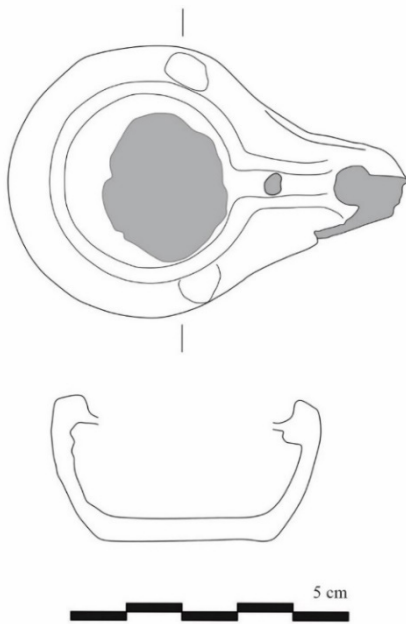
7. Nearly intact pottery lamp (Buchi type Xc)



1. Cluj-Napoca, V. Deleu Street, trench D4-D5, from the hypocaust channels in building C1, room C4, stone phase I; **2.** MNIT, Inv. V 41380; **3.** Dm. 48 mm, L. 73 mm, H. 25 mm; **4.** Mouldmade; **5.** Fairly well-made, the disc and channel are well proportioned, with well-defined edges; **6.** Fine beige fabric, light brick red fabric (partly eroded), poorly fired; **7.** Mostly intact with small pieces broken off and pronounced erosion all-over; **9.** Base stamp: FORTIS; illegible incuse stamp in relief on the disc, applied in cursive on the mould before firing; **10.** Local; **11.** Late 2nd century AD (based on contextual data); **12.** ROMAN 2005, 259, nr. 174, Fig. 68 (stamp drawing included here), Pl. 18. Photo: D. Petruț, drawing: Kr. Csibi.



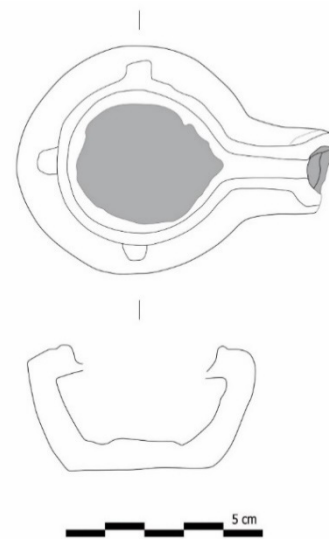
8. Nearly intact pottery lamp (Buchi type Xb)



1. Cluj-Napoca, V. Deleu Street, 2012, SF. 87, trench Cl. 2.4, under the floor, in the southwestern corner of later building C2; D. 2.9 m; 2. MNIT; 3. Dm. 48 mm, H. 24 mm; 4. Moulded; 5. Fairly well-made, the discus and channel display a regular shape, two well-defined lugs on the shoulder, 6. Oxidized beige fabric, light brick red slip poorly applied; 7. Mostly intact, the tip of the nozzle is broken off, the discus was intentionally removed; 8. Intentionally broken discus; 9. Base stamp: FORTIS; 10. Pannonia (?); 11. First two decades of the 2nd century AD (based on contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

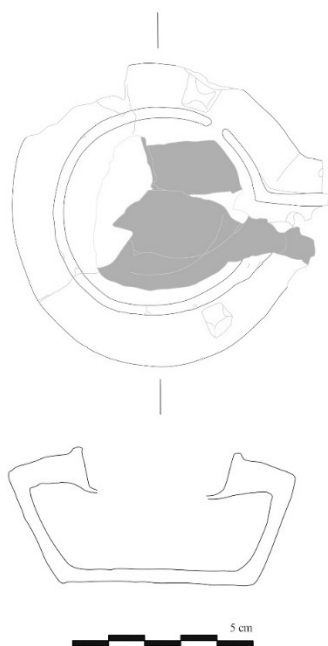


9. Nearly intact pottery lamp (Buchi type Xb)

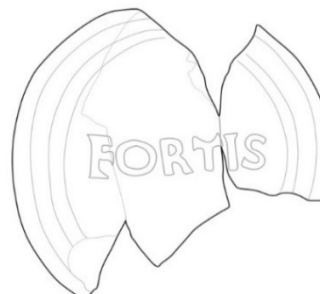
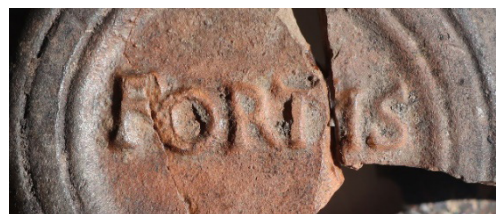


1. Cluj-Napoca, V. Deleu Street, 2012, SF. 68, trench C2, in the southeastern corner of room D in building C2, stone phase I; D. 1.76 m; 2. MNIT; 3. Dm. 55 mm, H. 31 mm; 4. Mouldmade; 5. Well-made piece, the discus and shoulders display a regular shape; three poorly defined lugs are present on the shoulders; 6. Fine dark beige fabric, brick red slip; 7. The tip of the nozzle as well as the discus is missing, the surface is covered by a thick layer of mortar-like residue; 8. The discus was intentionally removed; 9. No stamp or graffiti; 10. Pannonia (?); 11. Second half of the 2nd century AD (based on contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

10. Pottery lamp fragment (Buchi type Xa)

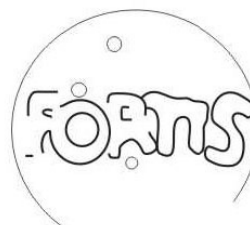


1. Cluj-Napoca, V. Deleu Street, 1996, trench B2, under the courtyard (area A) of later building C2 (near the medieval fountain), timber phase II; **2.** MNIT, Inv. V 47349; **3.** Dm. 79 mm, H. 36 mm; **4.** Mouldmade; **5.** Well-made piece, discus, channel, and shoulder are well proportioned, edges are sharp; Two well-defined lugs are displayed on the shoulder; **6.** Fine brick red fabric, burnished, no slip; **7.** Partially preserved, the nozzle along with most of the discus is missing, the base is also fragmentary; **9.** Base stamp: FORTIS; **10.** Mutina (Modena), Regio VIII Aemilia; **11.** Early 2nd century AD (based on contextual data and morphological features); **12.** Roman 2005, 260, nr. 180, Fig. 68 (stamp drawing included here), Pl. 19. Photo: D. Petruț, drawing: Kr. Csibi.



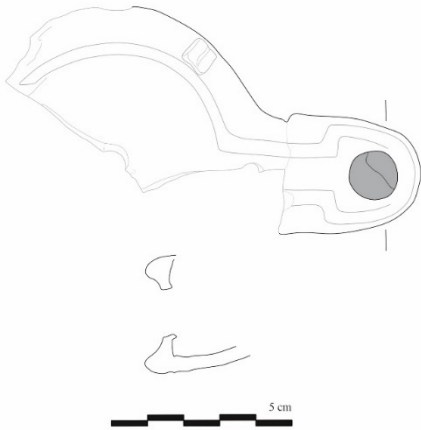
11. Intact pottery lamp

1. Cluj-Napoca, V. Deleu Street, 1996, under the courtyard (area A) of later building C2 (near the medieval fountain), timber phase II; **2.** MNIT, Inv. V 45396 (missing); **3.** Dm. 51 mm, L. 76 mm, H. 27 mm; **4.** Mouldmade; **5.** No assessment possible as the piece cannot be located; **6.** Oxidized, brick red slip; **7.** In multiple fragments; **9.** Base stamp: FORTIS; **10.** Unknown; **11.** Early 2nd century AD (based on contextual data); **12.** ROMAN 2005, 258–259, nr. 173, Fig. 68 (stamp drawing included here), Pl. 18.



12. Pottery lamp fragment (Buchi type Xb)

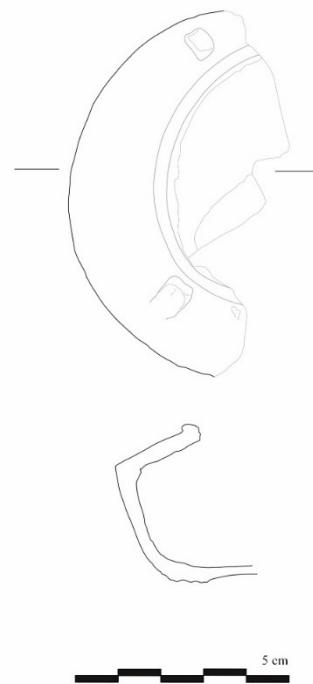




14. Pottery lamp fragment (Buchi type Xb)



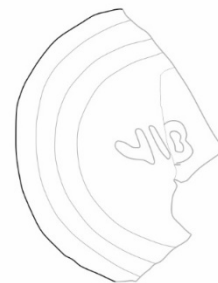
1. Cluj-Napoca, V. Deleu Street, unknown context; 2. MNIT, Inv. V 47597; 4. Mouldmade; 5. Well-made piece, the discus and shoulders display a regular shape, one well-defined lug is preserved on the shoulder; 6. Oxidized fine beige fabric, orange-red slip; 7. Only around half of the lamp's upper part is preserved (a part of the discus and shoulder, as well as the tip of the nozzle, the wick hole being intact); 8. Sooting on the tip of the nozzle; 10. Pannonia (?); 11. First half of the 2nd century AD (based on morphological features); 12. ROMAN 2005, 274, nr. 234. Photo: D. Petruț, drawing: Kr. Csibi.



13. Pottery lamp fragment (Buchi type Xb)



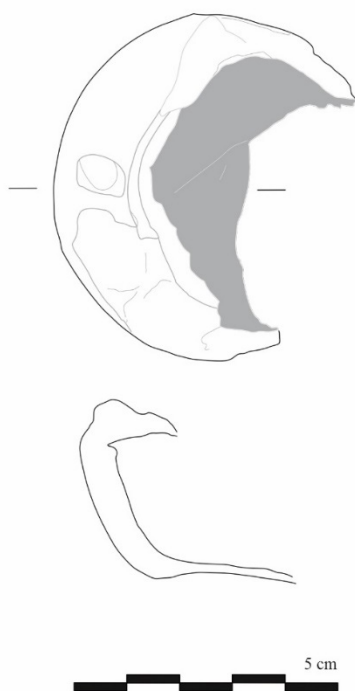
1. Cluj-Napoca, V. Deleu Street, 1994, trench D4, timber phase I; 2. MNIT, Inv. V 41379; 3. Dm. 60 mm, L. 85 mm; 4. Mouldmade; 5. Well-made piece, the discus and shoulders display a regular shape, two well-defined lugs are present on the shoulder; 6. Oxidized fine beige fabric, orange-red slip; 7. Most of the lamp's upper part is preserved, only the tip of the nozzle is broken off, the lower part (the basin) is missing, soot and limescale is spread on the entire surface of the fragment; 8. Sooting on the tip of the nozzle; 10. Pannonia (?); 11. First decade of the 2nd century AD (based on contextual data); 12. Unpublished. Photo: D. Petruț.



1. Cluj-Napoca, V. Deleu Street, trench D4 from the hypocaust channels in building C1, room C4, stone phase I; 2. MNIT, Inv. V 41376; 3. Dm. 78 mm, H. 34 mm; 4. Mouldmade; 5. Well-made piece, the discus and shoulders display a regular shape, two well-defined lugs are preserved on the shoulder;

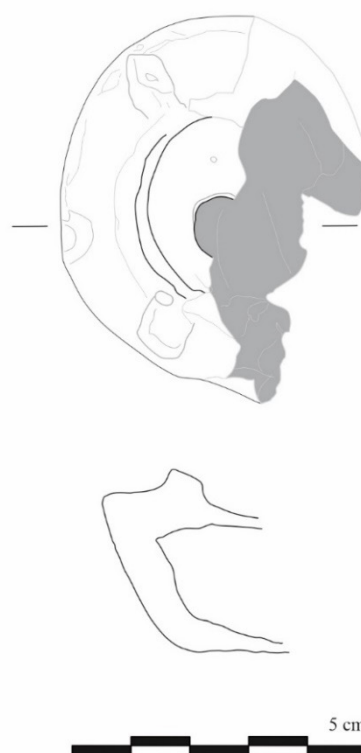
6. Oxidized fine beige fabric, orange-red slip; **7.** Only a part of the shoulder and of the basin is preserved, signs of secondary burning on certain parts of the fragment; **9.** Base stamp: VI[IBIANI]; **10.** Pannonia (?); **11.** Late 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

15. Pottery lamp fragment (Buchi type Xc)



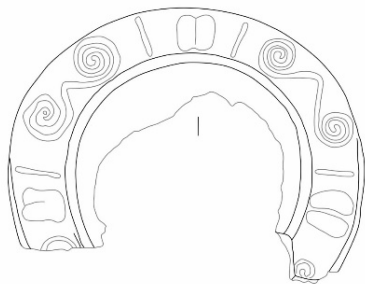
1. Cluj-Napoca, V. Deleu Street, 1994, timber phase I; **2.** MNIT, Inv. V 47471; **3.** H. 28 mm, Dm. 62 mm; **4.** Mouldmade; **5.** Crudely made piece; **6.** Reduced fine grey fabric, brownish olive green slip (probably due to thermic shock); **7.** Only a part of the shoulder and of the basin is preserved; **9.** No stamp or graffiti **10.** Local (?); **11.** First decade of the 2nd century (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

16. Pottery lamp fragment, possible waster (Buchi type Xc)



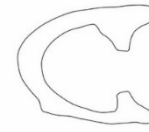
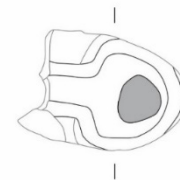
1. Cluj-Napoca, V. Deleu Street, 1994, trench D3 (underneath the small courtyard of building C1), timber phase I; **2.** MNIT, Inv. V 41367; **4.** Mouldmade; **5.** Crudely made piece, displays multiple production flaws; **6.** Oxidized fine fabric, brick red slip; **7.** Only a part of the shoulder and of the basin is preserved; **9.** No stamp or graffiti **10.** Local (?); **11.** First decade of the 2nd century (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

17. Pottery lamp fragment (Buchi type Xb)



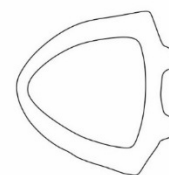
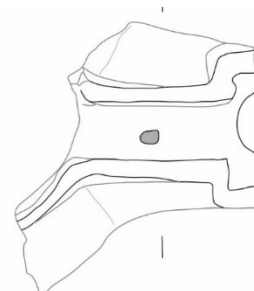
1. Cluj-Napoca, V. Deleu Street, 2012, SF. 191, trench C4-C6 (under the western end of later building C1), D. 3.12 m, timber phase II; 2. MNIT; 3. Dm. 73.5 mm; 4. Mouldmade; 5. Well-made, regular shape, well-defined channel, three low relief incised lugs are present on the shoulder, spiral motifs flanked by vertical lines between each lug probably applied after moulding in the barbotine technique; 6. Fine beige fabric, orange-red slip; 7. Only around two thirds of the shoulder is preserved; 8. The discus appears to have been intentionally removed; 10. Pannonia (?); 11. First two decades of the 2nd century AD (based on typological and contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

18. Pottery lamp fragment (Buchi type Xb)



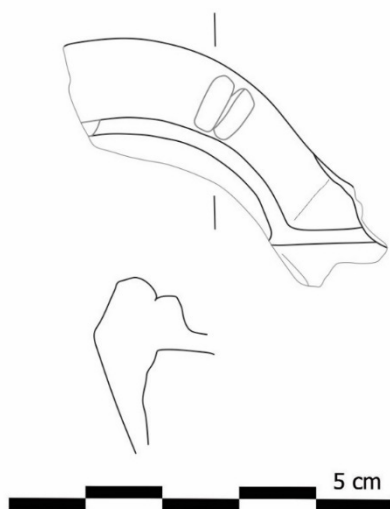
1. Cluj-Napoca, V. Deleu Street, 2012, SF. 176, trench C4 – C6, Cl. 1.4 (under the western end of later building C1), timber phase I (discovered on the walking level), D. 2.57 m; 2. MNIT; 3. H. 32 mm, W. 2.75 mm; 4. Mouldmade; 5. Fairly well-made, well-defined channel and nozzle-tip; 6. Oxidized fine beige fabric, orange-red slip; 7. Only the tip of the nozzle is preserved, the wick hole is intact; 8. Sooting on the tip of the nozzle; 10. Southern Pannonia (?); 11. First decade of the 2nd century AD (based on typological and contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

19. Pottery lamp fragment (Buchi type Xa)



1. Cluj-Napoca, V. Deleu Street, 2012, SF. 38, between trenches C4 and C6, timber phase I (from the levelling layer above the floor), D. 3.15 m; **2.** MNIT; **3.** H. 34.5 mm, W. 34.5; **4.** Mouldmade; **5.** Well-made piece, well-defined channel with sharp, raised edges; **6.** Oxidized, dark brick red fine fabric, reduced on the interior (sandwich), no slip, burnished; **7.** Much of the nozzle is preserved (excluding the tip), together with a small portion of the shoulder; **8.** Sooting on the end of the nozzle; **10.** Mutina (Modena), Regio VIII Aemilia; **11.** First decade of the 2nd century AD (based on typological and contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

20. Pottery lamp fragment (Buchi type Xa)



1. Cluj-Napoca, V. Deleu Street, 2012, SF. 205, trench C6, timber phase I (under the room situated in the northwestern corner of later building C1), D. 3.22 m; **2.** MNIT; **3.** Dm. 60 mm; **4.** Mouldmade; **5.** Well-made, well-defined channel, sharp lines, one raised and incised lug is visible on the shoulder; **6.** Oxidized, dark brick red, fine fabric, no slip, burnished; **7.** Only around one third of the shoulder is preserved; **10.** Mutina (Modena), Regio VIII Aemilia; **11.** First decade of the 2nd century AD (based on typological and contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

21. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street 1996, trench S VII A, timber phase II (to the north of building C1); **2.** MNIT, Inv. V 51021; **4.** Mouldmade; **5.** Fairly well-made, raised sharp lines, compact lugs; **6.** Oxidised fine beige fabric, brick red slip; **7.** Only part of the shoulder and discus are preserved; **10.** Local (?); **11.** First decade of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț.

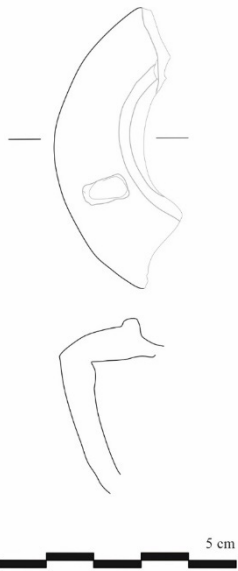
22. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street 1994, timber phase I; **2.** MNIT, Inv. V 47358; **4.** Mouldmade; **5.** Crudely made; **6.** Oxidised fine beige fabric, brick red slip; **7.** Only part of the shoulder and discus are preserved; **8.** Sooting at the base of the nozzle; **10.** Local; **11.** First decade of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț.

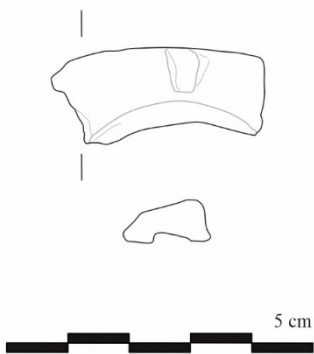
23. Pottery lamp fragment





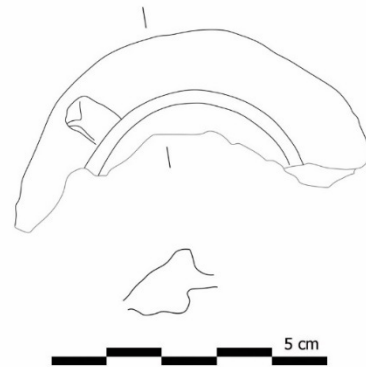
1. Cluj-Napoca, V. Deleu Street 1994, trench D3, timber phase I; **2.** MNIT, Inv. V 41368; **4.** Mouldmade; **6.** Oxidised fine beige fabric, brick red slip (turned brown due to thermic shock); **7.** Only part of the shoulder is preserved; **10.** Local; **11.** First decade of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

24. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street 1996, trench SVII A, timber phase II; **2.** MNIT, Inv. V 51023; **4.** Mouldmade; **6.** Oxidised fine beige fabric, brick red slip (turned brown due to thermic shock); **7.** Only part of the shoulder is preserved; **10.** Local; **11.** First decade of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

25. Pottery lamp fragment (Buchi type Xc)

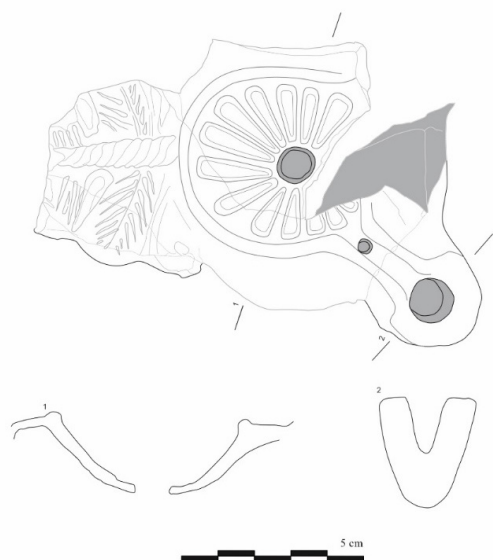


1. Cluj-Napoca, V. Deleu Street, 2012, trench C2, from the rubble covering the water tank in room D, building C2, stone phase II; **2.** MNIT; **3.** Dm. 60 mm; **4.** Mouldmade; **5.** Well-made, well-defined channel, sharp lines, one raised and incised lug is visible on the shoulder; **6.** Oxidised, fine beige fabric, light brick red slip (mostly eroded); **7.** Only a portion of the shoulder is preserved; **10.** Local; **11.** 3rd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

Firmalampen (Loeschcke type X polilychnis) with multiple nozzles

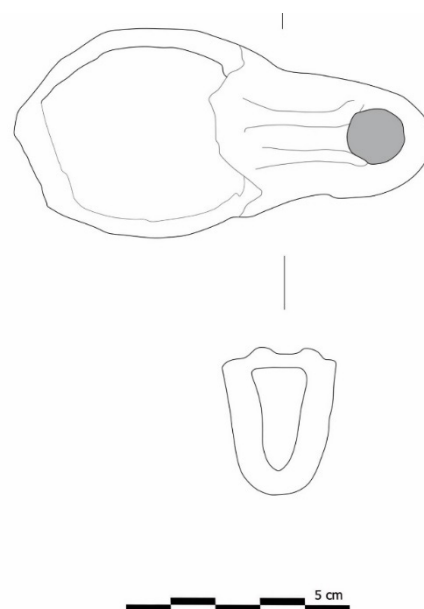
26. Pottery lamp fragment





1. Cluj-Napoca, V. Deleu Street, 1994, stone phase (unspecified); **2.** MNIT, Inv. V 47546; **3.** H. 37 mm; **4.** Mouldmade; **5.** Well-made and richly adorned piece with two nozzles and palmette-decorated ornamental handle and rosette-decorated discus; **6.** Oxidised fine light beige fabric, light brick red slip mostly turned to blackish brown due to exposure to thermic shock; **7.** Most of the discus is preserved together with one of the nozzles, and part of the handle; **10.** Rhineland (?); **11.** Late 2nd–early 3rd century AD (based on typological considerations and contextual data); **12.** ROMAN 2005, 270, nr. 217, Pl. 23. Photo: D. Petruț, drawing: Kr. Csibi.

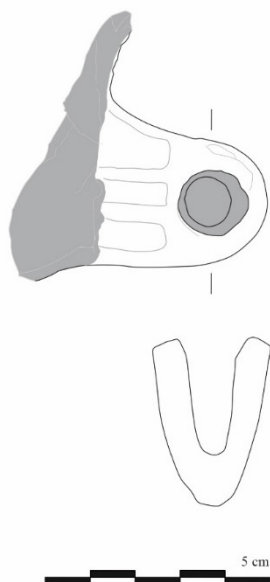
27. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 2012, SF. 122, trench C6, timber phase III (under the room situated in the north-western corner of later building C1), D. 2.4 m; **2.** MNIT; **4.** Mouldmade; **5.** Crudely made two-nozzled piece with poorly defined channels; **6.** Oxidised fine beige fabric, brick-red slip partly turned to blackish brown due to exposure to thermic shock; **7.** Only one of the nozzles and part of the basin is preserved; **9.** No stamp or graffiti; **10.** Local; **11.** Second half of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

28. Pottery lamp fragment

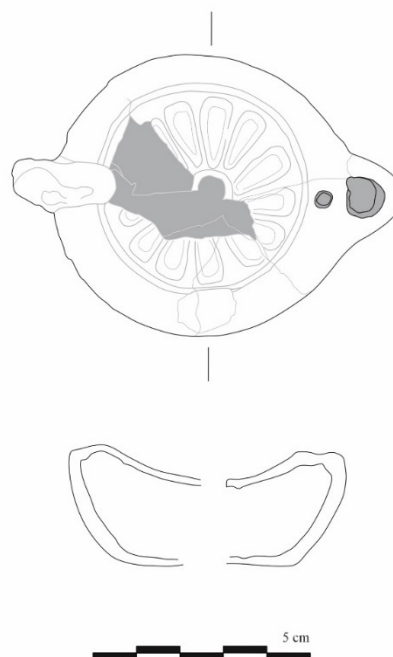




1. Cluj-Napoca, V. Deleu Street, 1994, stone phase (unspecified); **2.** MNIT, Inv. V 47544; **4.** Mouldmade; **6.** Reduced grey fine fabric, green led glaze no the outer surface, mostly cracked due to exposure to thermic shock; **7.** Only one of the nozzles is preserved; **10.** Apulum/Ampelum (?); **11.** Late 2nd–early 3rd century AD (based on typological considerations and contextual data); **12.** ROMAN 2005, 279, nr. 258, Pl. 23. Photo: D. Petruț, drawing: Kr. Csibi.

Medallion-shaped Loeschcke VIII / Bailey type O lamps

29. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 1994, timber phase III; **2.** MNIT, Inv. V 47359; **3.** L. 82 mm, Dm. 61 mm, H. 25 mm (without the handle); **4.** Mouldmade; **5.** Finely made piece with good proportions and sharp lines, the body is round, medallion-shaped, the nozzle is short, having a wide vent hole at the base, the discus is covered by a rosette motif. The lamp is also fitted with a loop handle; **6.** Oxidised fine beige fabric covered by orange-red slip **7.** The lamp is broken in multiple pieces with the base and part of the discus missing; **8.** Sooting on the tip of the nozzle; **9.** No stamp or graffiti; **10.** Italy (?); **11.** Mid-2nd century AD (based on typological and contextual data); **12.** ROMAN 2005, 235, nr. 87, Fig. 64. Pl. 11. Photo: D. Petruț, drawing: Kr. Csibi.

Provincial pear-shaped Loeschcke VIII lamps

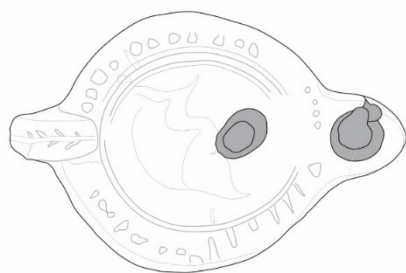
30. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 1996, from the southern room of building C1, stone phase II; **2.** MNIT, Inv. V 49397; **3.** L. 85 mm, Dm. 56 mm, H. 30 mm (without the handle); **4.** Mouldmade; **5.** Crudely made piece with poorly defined lines and edges. The body is elongated (pear-shaped), the nozzle is

also longer than usual, the discus displays the poorly defined relief of an eagle flanked by two filling holes on its lower side (towards the nozzle). The lamp is also fitted with a disc handle; **6**. Fine beige fabric, orange-red slip; **7**. The lamp is intact, one of the filling holes is slightly damaged; **8**. Strong sooting on the edge of the nozzle; **9**. No stamp or graffiti; **10**. Local; **11**. 3rd century AD (based on morphological features); **12**. ROMAN 2005, 236, nr. 91, Fig. 63. Pl. 11. Photo: D. Petruț.

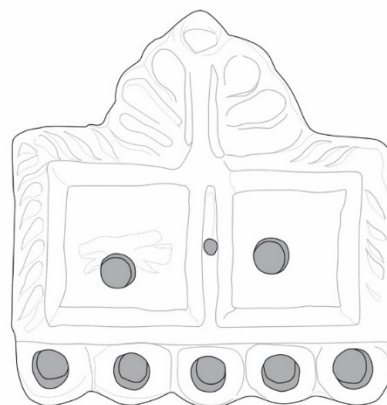
31. Intact pottery lamp



1. Cluj-Napoca, V. Deleu Street, trench D4–D5 from the hypocaust channels in building C1, room C4, stone phase II; **2**. MNIT, Inv. V 41374/41375; **3**. L. 77 mm, Dm. 53 mm, H. 25 mm (without the handle); **4**. Mouldmade; **5**. Crudely made piece, with poorly defined lines and edges. The body is round, almost medallion-shaped, however the nozzle is quite prominent, resulting in a general pear-shaped look. The discus displays a poorly defined dolphin (or some sort of sea creature), while the shoulder is decorated with a string of beads; **6**. Oxidised fine beige fabric covered by brick red slip turned to blackish brown in certain areas due to exposure to thermic shock. The lamp is also fitted with a disc handle decorated with incised lines; **9**. No stamp or graffiti; **11**. 3rd century AD (based on contextual data); **12**. ROMAN 2005, 239, nr. 100, Fig. 64. Pl. 12. Photo: D. Petruț, drawing: Kr. Csibi.

Iványi type IX square lamp with multiple nozzle

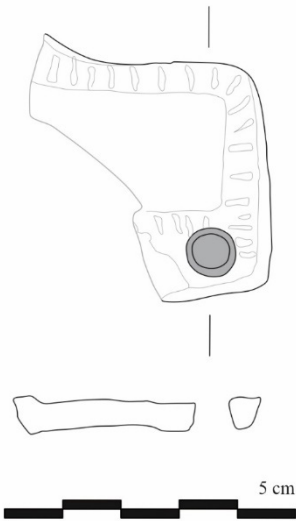
32. Intact pottery lamp



1. Cluj-Napoca, V. Deleu Street, 1994, stone phase (unspecified), room C, building C2; **2**. MNIT, Inv. V 47539; **3**. L. 72 mm, W. 53 mm, H. 24 mm (without the handle); **4**. Mouldmade; **5**. Overall well-made piece, the body is rectangular with five short nozzles on one of the long sides and a palmette handle on the opposite side. The rectangular 'discus' is enclosed by a rope-like line and is divided into two registers, each having one off-centre filling hole. A vent-hole was placed between the two registers; **6**. Oxidised fine beige fabric covered by orange-red slip; **7**. The lamp is intact, the slip is also mostly in place, the surface displays occasional limescale; **8**. Moderate sooting on one of the corner nozzles; **9**. Base stamp: CAI (graffiti, barely visible) alongside a stylised leaf in shallow relief. Four buttons are also displayed on the corners; **10**. Ulpia Traiana Sarmizegetusa (based on the stamp and lamp type); **11**. Late 2nd – early 3rd century AD; **12**. Roman 2005, 227, nr. 53, Fig. 65, 66, Pl. 6 (stamp drawing included here). Photo: D. Petruț, drawing: Kr. Csibi.



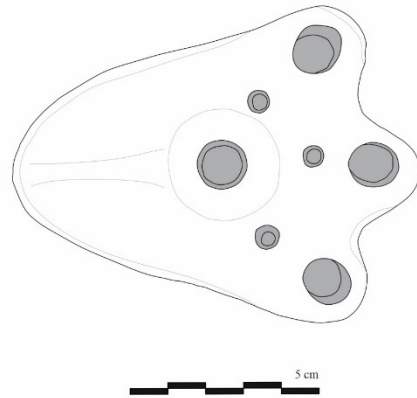
33. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 1994, trench S4, timber phase I; 2. MNIT, Inv. V 41377; 4. Mouldmade; 6. Fine beige fabric, brick red slip (turned brown due to thermic shock); 7. Only a small part of the 'discus' is preserved; 10. Unknown; 11. First decade of the 2nd century (based on contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

Triangular three-nozzled lamp type

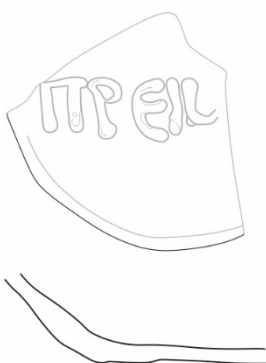
34. Intact pottery lamp



1. Cluj-Napoca, V. Deleu Street, 1992, trench D5, from the portico of the small inner courtyard in building C1, stone phase II; 2. MNIT, Inv. V 41345; 3. H. 33 mm, L. 107 mm; 4. Mouldmade; 5. The lamp can be described as bulky, with the three nozzles, the middle part (the 'discus') and the handle being conjoined. It displays some degree of similarity with the provincial three-nozzled lamps (usually with Firmalampen type channels) and triangular palmette handles. 6. Reduced fine grey fabric, brown slip; 7. Intact; 8. Sooting on the nozzles; 9. No stamp or graffiti; 10. Local (?); 11. 3rd century AD (based on the contextual data and morphological features); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

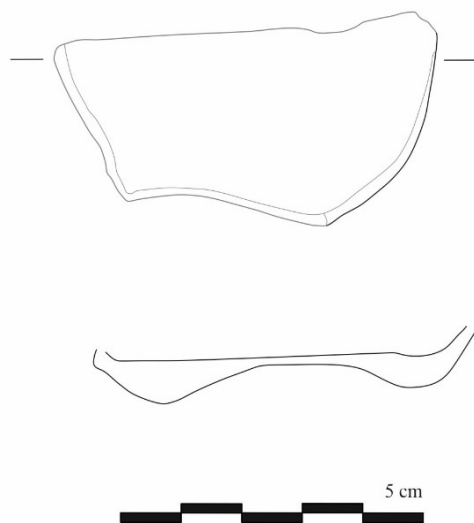
Lamp fragments of uncertain type

35. Stamped lamp base



1. Cluj-Napoca, V. Deleu Street, 1994, timber phase II; 2. MNIT 47454; 4. Mouldmade; 6. Light beige colour fine oxidised fabric, no slip; 9. ΠΡΕΙΛ[ΟΥ]; 10. First two decades of the 2nd century AD; 11. Patras, Achaia; 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

36. Pottery lamp fragment

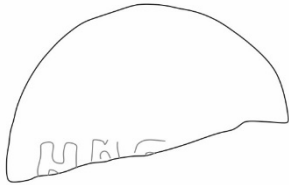


1. Cluj-Napoca, V. Deleu Street, 2012, SF. 253, D. 3.48 m, timber phase I; 2. MNIT; 3. L. 80 mm; 4. Mouldmade; 5. No distinctive features can be identified; 6. Fine beige fabric with traces of brick red slip; 7. Only the lower part of the lamp is preserved; 8. Strong sooting on the interior of the nozzle tip; 9. No stamp or graffiti; 10. Unknown; 11. First decade of the 2nd century AD (based on contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

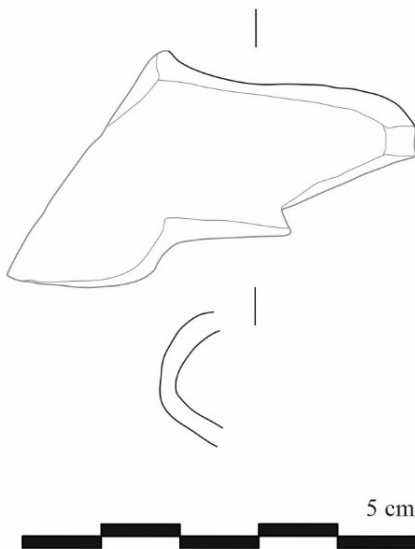
37. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 2012, CL. 1.4; **2.** MNIT; **3.** Dm. of base 46 mm; **4.** Mouldmade; **5.** No distinctive features can be identified; **6.** Fine beige fabric with traces of orange-red slip; **7.** Only around half of the base is preserved; **9.** Base stamp: illegible due to the fragmentary state of the piece; **10.** Unknown; **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

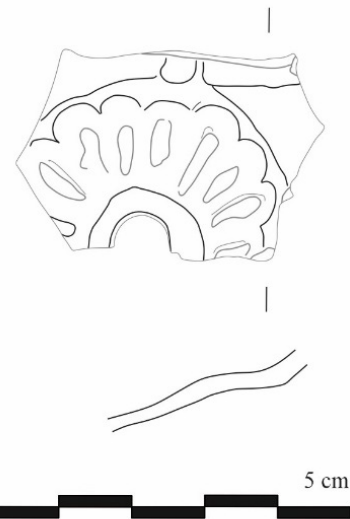


38. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 2012, SF. 112, D. 3.48 m, timber phase I; **2.** MNIT; **4.** Mouldmade; **5.** No distinctive features can be identified; **6.** Fine, well-fired brick red fabric, burnished with no slip; **7.** Only the lower part of the nozzle with a small portion of the base is preserved; **10.** Mutina (Modena), Regio VIII Aemilia; **11.** First decade of the 2nd century AD (based on typological and contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

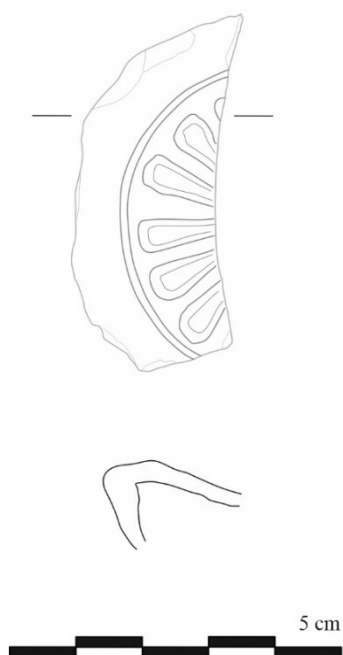
39. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, SF. 94, D. 3.21 m, timber phase II; **2.** MNIT; **4.** Mouldmade; **5.** The discus is decorated with a rosette; **6.** Fine beige well-fired fabric covered with brick red slip, turned brown due to exposure to thermic shock; **7.** Only a portion of the discus is preserved; **10.** Italy (?); **11.** First decades of 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

40. Pottery lamp fragment





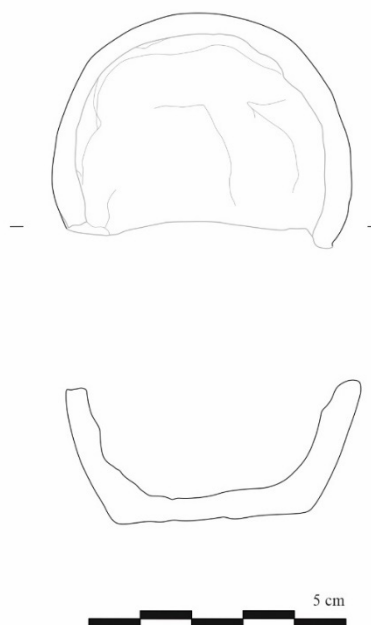
1. Cluj-Napoca, V. Deleu Street, 1996, timber phase III; **2.** MNIT 51045; **4.** Mouldmade; **5.** The discus is decorated with a rosette; **6.** Fine beige well-fired fabric covered with orange-red slip, turned brown due to exposure to thermic shock; **7.** Only a portion of the discus is preserved; **10.** Unknown; **11.** Mid-2nd century AD (based on contextual data); **12.** Roman 2005, 244, nr. 121. Photo: D. Petruț, drawing: Kr. Csibi.

41. Pottery lamp fragment



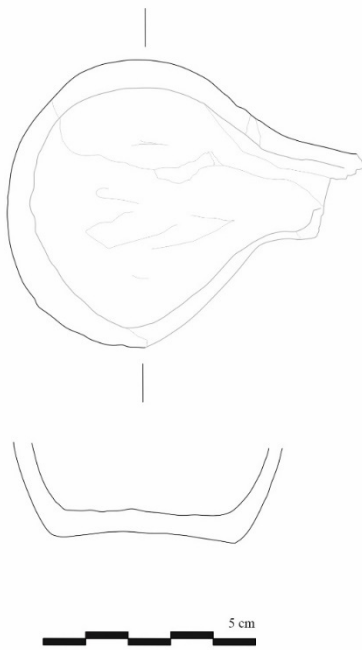
1. Cluj-Napoca, V. Deleu Street, trench B2, timber phase II; **2.** MNIT, Inv. V 47554; **4.** Mouldmade; **5.** The discus is decorated with a human mask; **6.** Fine beige fabric, strongly eroded; **7.** Only a small part of the discus is preserved around the filling hole; **10.** Unknown; **11.** Early-2nd century AD (based on the morphological features); **12.** Roman 2005, 281, nr. 271, Fig. 63, Pl. 24. Photo: D. Petruț.

42. Pottery lamp fragment



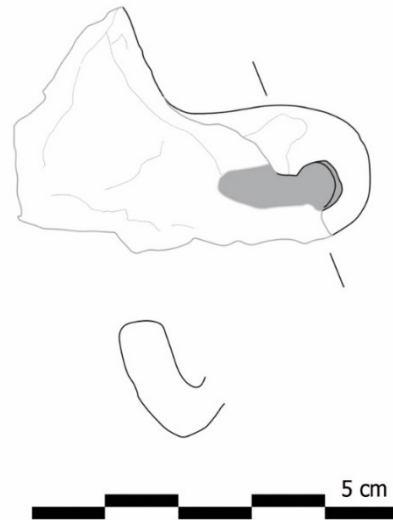
1. Cluj-Napoca, V. Deleu Street; **2.** MNIT, Inv. V 41365; **3.** Dm. 56 mm; **4.** Mouldmade; **5.** No distinctive features can be identified; **6.** Fine, well-fired beige fabric, orange-red slip; **7.** Only part of the base is preserved; **9.** No stamp of graffiti; **10.** Unknown; **12.** Roman 2005, 295, nr. 331. Photo: D. Petruț, drawing: Kr. Csibi.

43. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 1994, timber phase III; 2. MNIT, Inv. V 41366; 4. Mouldmade; 6. Oxidized light brick red fabric, brick red slip; 7. Only the lower part of the lamp is preserved; 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

44. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, 1994, stone phase (unspecified); 2. MNIT, Inv. V 47545; 4. Mouldmade; 6. Oxidised beige fabric, slip applied unevenly; 7. Only the lower part of the nozzle is preserved; 11. Mid-2nd-mid-3rd century AD (based on contextual data); 12. Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

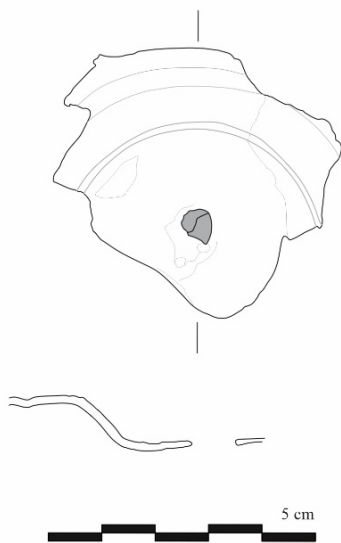
45. Pottery lamp fragment



1. Cluj-Napoca, V. Deleu Street, trench SVII A, timber phase II, 1996; **2.** MNIT, Inv. V 51029; **4.** Mouldmade; **6.** Oxidized beige fabric, orange red slip applied unevenly; **7.** Only the lower part of the lamp is preserved; **12.** Unpublished. Photo: D. Petruț.

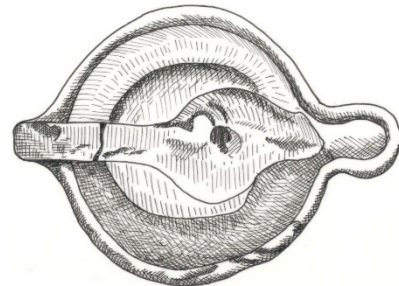
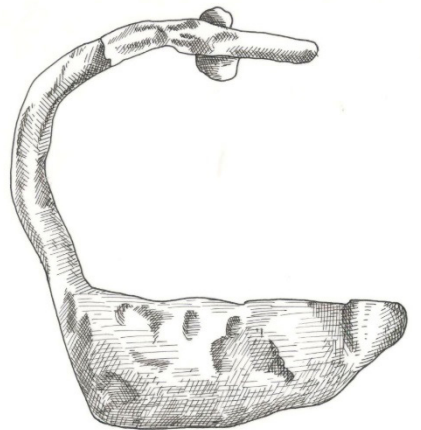
Metal lamps

46. Bronze lamp



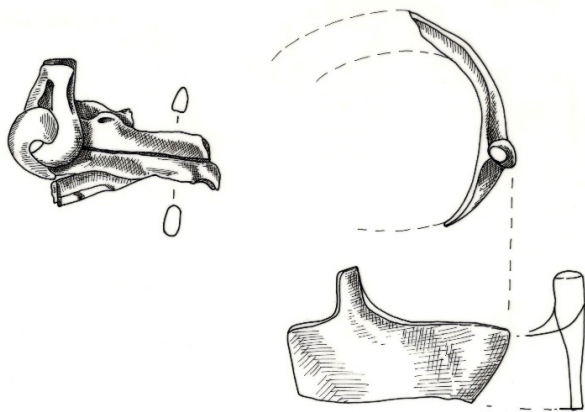
1. Cluj-Napoca, V. Deleu Street, 2012, SF 88, under the *prae-furnium* in the northern part of room D of building C2, stone phase 1; **7.** Only part of the discus and shoulder is preserved; **11.** Second half of the 2nd century AD (based on contextual data); **12.** Unpublished. Photo: D. Petruț, drawing: Kr. Csibi.

47. Iron open hanging lamp



1. Cluj-Napoca, V. Deleu Street, building C2, Room B, stone phase II; **2.** Lost; **4.** Wrought; **5.** Open lamp of the so-called 'figure of eight shape' (*achtförmigen Lampe*) having a circular body and a round protruding wick-rest. The fuel receptacle is quite deep, the lamp has no base, just a flat resting surface. From the side it has the shape of a boat. The handle curves forward from the rear, still preserving the remains of the hook; **7.** Based on the preserved drawing the upper part of the handle is detached, the upper part of the hook missing; **10.** Unknown; **11.** First part of the 3rd century AD; **12.** Unpublished.

48. Iron open hanging lamp



1. Cluj-Napoca, V. Deleu Street, building C2, Room B, stone phase II; 2. Lost; 4. Wrought; 5. Open lamp of the so-called 'figure of eight shape' (*achtförmigen Lampe*) having a circular body 7. Based on the preserved drawing the only the rear part of the basin is preserved with the base of the handle and the suspension hook (preserved separately); 10. Unknown; 11. First part of the 3rd century AD; 12. Unpublished.

49. Possible iron lantern



1. Cluj-Napoca, V. Deleu Street, building C2, Room B, stone phase II; 2. Lost; 4. Wrought; 5. Possible iron lantern 7. Based on the preserved drawing the only the lower part of the lantern is preserved; 10. Unknown; 11. First part of the 3rd century AD; 12. Unpublished.

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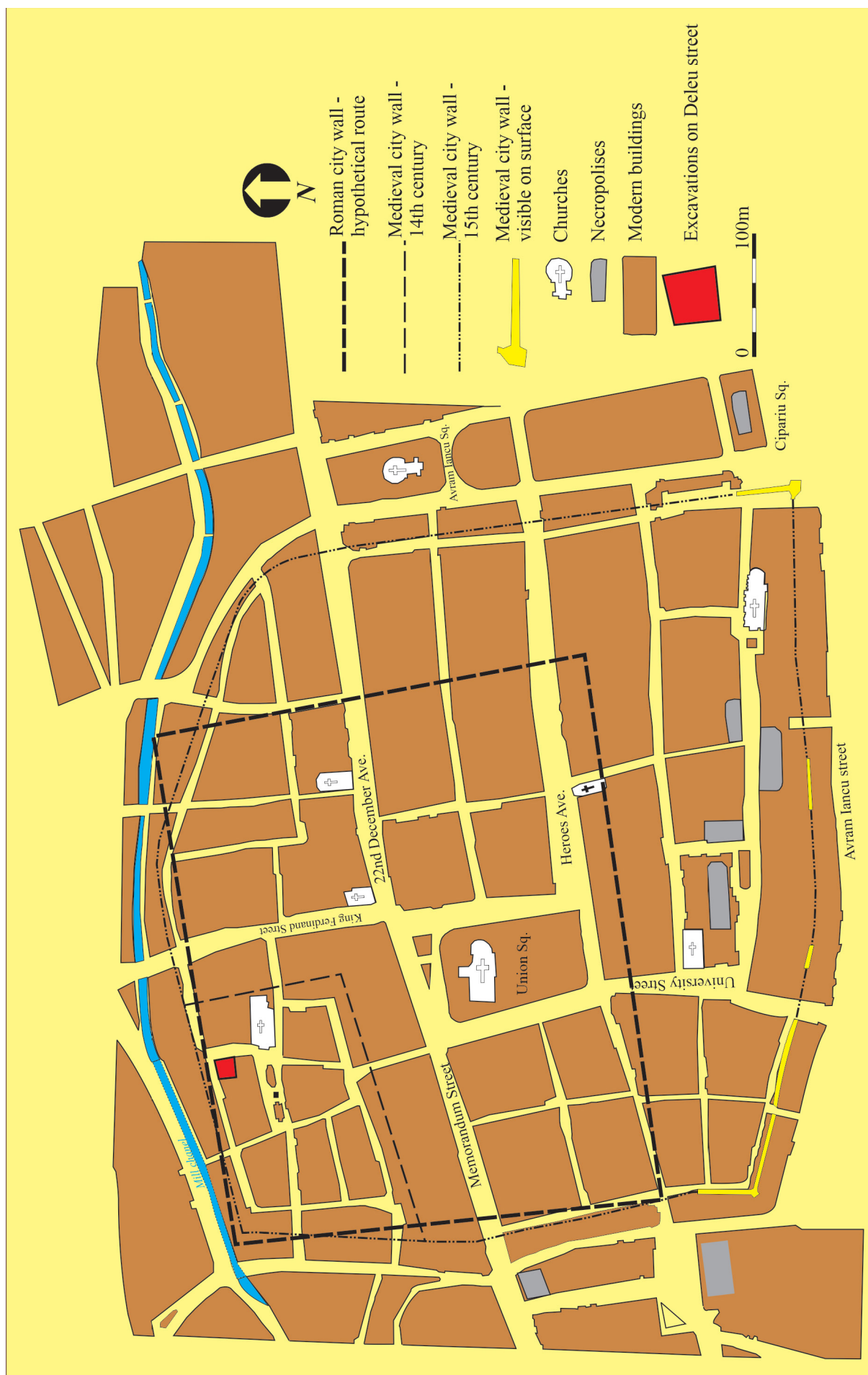
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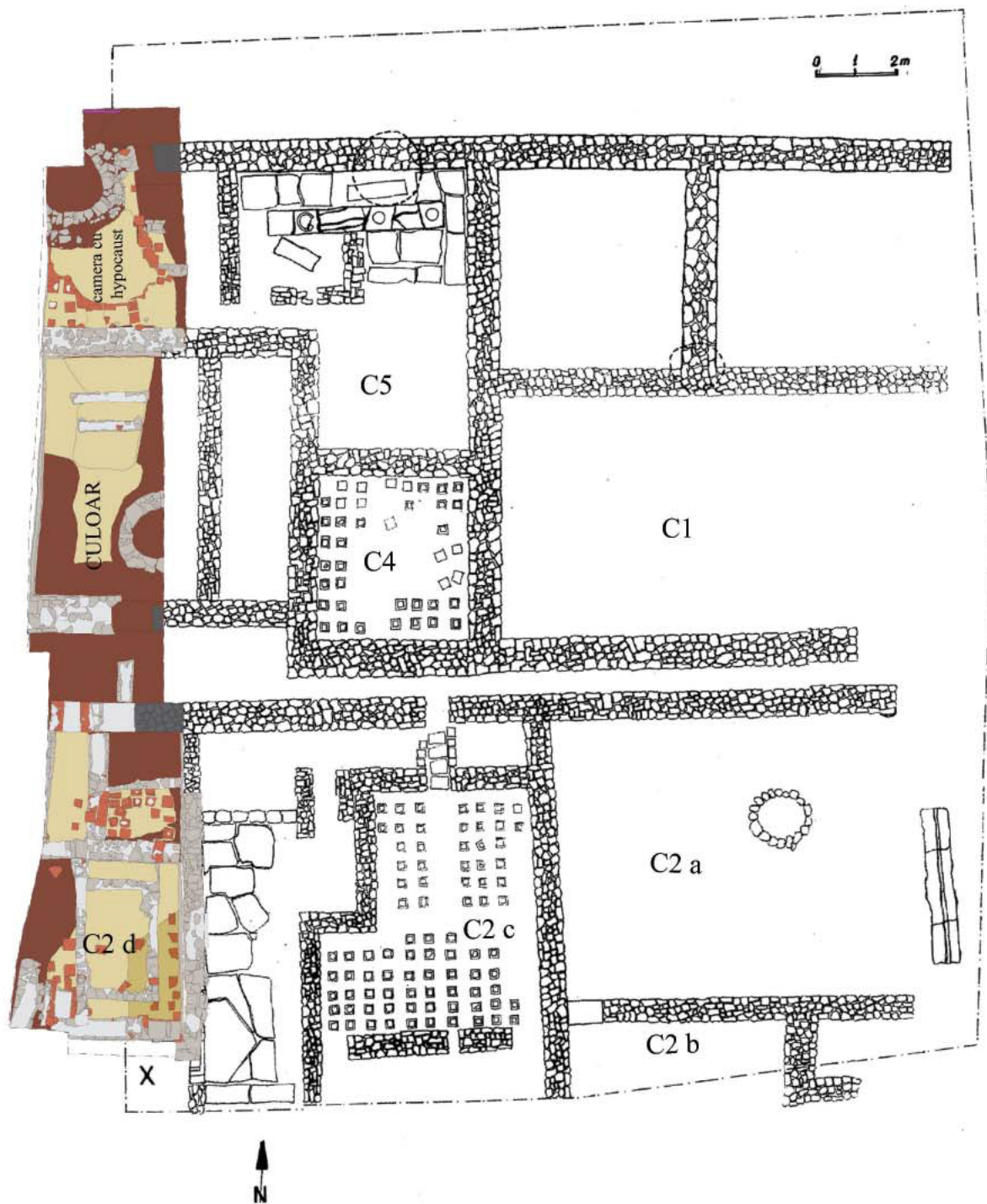
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Map 1. The place of the excavation within the topography of Roman Napoca (after GĂZDAC/COCIȘ 2020, 47, Map 3).



Map 2. The plan of the stone phases based on the 1992–2001 and 2012 campaigns, the latter is displayed in colour.

Fig. 1. The typological classification of the pottery lamps.

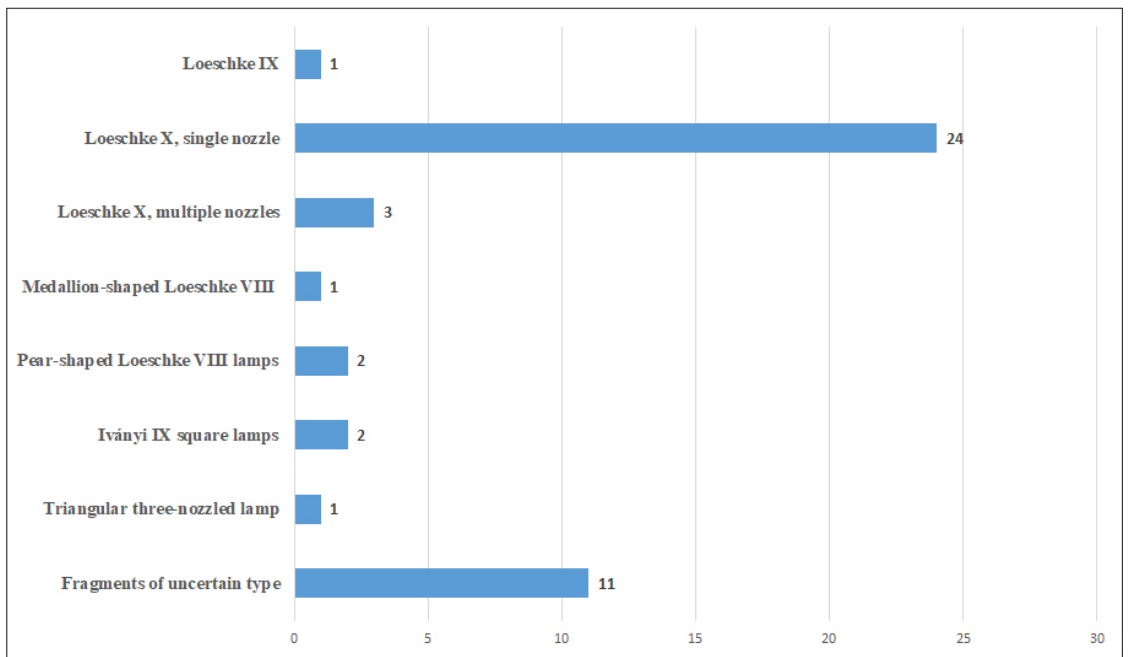


Fig. 2. The presumed production place of the pottery lamps.

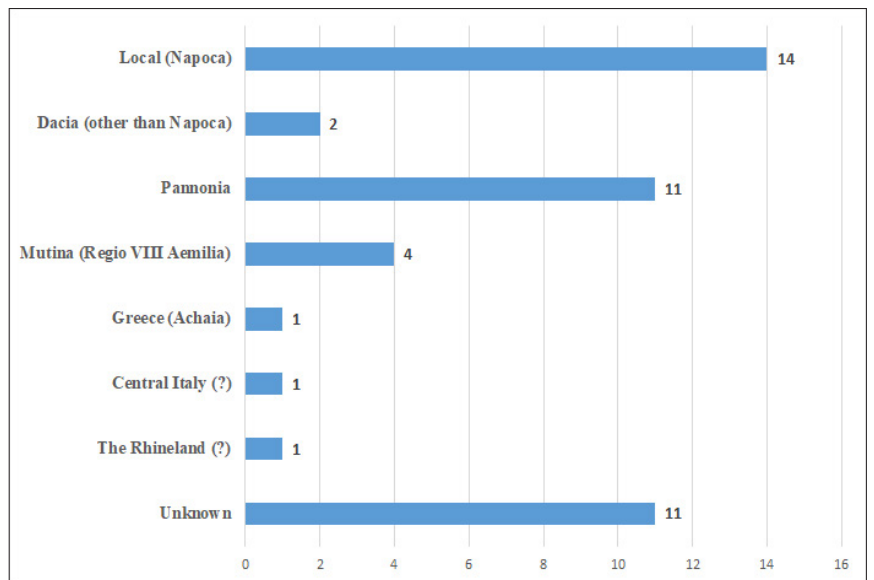


Fig. 3. The distribution of the finds according to the habitation phases.

