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## LATE ROMAN GLAZED POTTERY FROM AQUINCUM: PRELIMINARY TYPOLOGICAL CLASSIFICATION

Bettina KÖLCZE\* 

*This study aims to present a part of the already evaluated Late Roman glazed pottery record from Aquincum and, thus, provide a typological classification based on our current knowledge. It is important to note that the present study does not include the complete – mostly fragmentary – ceramic record, comprising thousands of objects, but focuses only on eighty artefacts representing traditional types. The current evaluation concerns vessel types used on a daily basis: containers (jugs, pitchers, and bottles), serving (bowls) and drinking vessels (mugs, cups, drinking cups), mortaria, and simple lamp variants. In addition to presenting the finds, the study provides a brief general survey of glazed pottery and other Late Roman ceramic vessel types with lead glazing.*

*A tanulmány célja az Aquincum területéről előkerült késő római mázas kerámiák egy részének bemutatása, tipológiai rendszerezése. A tanulmány nem ismerteti a teljes, több ezres, nagyrészt töredékes leletanyagot. A dolgozatban 80 darab tárgy, a hagyományosabbnak mondható típusok kerülnek górcső alá. A feldolgozás a mindennapi életben sűrűn használt tároló- (korsó, kancsó, palack), tálaló- (tál) és ivóedényekre (bögre, csésze, pohár), mortariumokra és az egyszerűbb mécses típusok egy részére helyezi a hangsúlyt. A leletanyag bemutatása mellett röviden áttekinti a mázas kerámia tárgycsoportját, illetve a késő római időszak ólommázas edényformáit.*

Keywords: Pannonia, Aquincum, Late Roman glazed pottery, typology

Kulcsszavak: Pannonia, Aquincum, késő római mázas kerámia, tipológia

### Introduction

This paper surveys the current results of the typological evaluation of Late Roman glazed pottery from *Aquincum* through a selection of finds. Glazed pottery appeared in Pannonia first in the 1<sup>st</sup> century AD. In the beginning, all vessels were imported, while local production only started probably in the second half of the 1<sup>st</sup>–early 2<sup>nd</sup> centuries AD (Bónis 1990, 24).

The manufacturing of glazed pottery really took off during the Late Roman period (Bónis 1990, 29–35), when Pannonian ware was produced in substantial quantities (Krekovič 2010, 87–91). The term “Pannonian ware” – as scholars used to name this find group (Bónis 1990, 24, footnote 2) – refers only to glazed pottery from the territory of Pannonia Provincia and cannot be held as equal to all glazed ware in the period, even if related finds are also known in

relative abundance from the territory of other Roman provinces (Cvjetičanin 2006) and outside the Roman Empire (Vári 2011; Olgyay 2017).

A catalogue published by the Szent István Király Museum in 1992 presented finds from the collection of several museums, along with studies about glazed pottery finds from the Early to the Late Roman period (Bánki, Cserményi 1992). Late Roman glazed pottery was surveyed by Gabriella Nádorfi, who also provided a preliminary typo-chronological classification based on coeval grave finds (Nádorfi 1992, 46–49). As graves represent a closed archaeological context, the easiest way to determine a type’s chronological position is to find its earliest appearance in a coeval (in this case, mainly 4<sup>th</sup>-century AD) burial (Krekovič 2010, 87–91). Besides, glazed pottery in *Aquincum* was also found in contexts different from burials (Lányi 1972, 53–213). As the survey map in *Fig. 1* shows, most finds were recovered from

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the area of the military town and its surroundings (the relevant mark on the map includes grave finds). Field documentation does not necessarily provide sufficient information to evaluate pottery finds. Therefore, it may be overlooked, especially as the description of the character and relative position of layers, where most fragmented pottery comes from, is also usually unsuitable.

Typological evaluation requires creating a classification system to include all finds, whether complete or fragmentary. Obviously, it is easy to classify and find analogies to complete ones as their morphological and technological characteristics are apparent, while with fragments, we cannot determine in every case with certainty what kind of an item it belonged to. Some types are less difficult to determine: for example, *mortaria*<sup>1</sup> always come with grit or coarse sand brushed on their inside. This trait facilitates the identification of such vessels even in the fragmented part of the ceramic record but not the development of a typological set. Conclusively, a typological framework may be created based on the shape of the rim, the handle(s), the vessel body, and the base. To develop a relevant system, however, the current archaeological approach requires these data to be completed by results of scientific analyses.

#### *On the production of glazed pottery*

In *Aquincum* and its close area, Oligocene Kiscell clay was the primary raw material used for pottery-making. Its geological deposits were easily available and abundant, providing an ideal setting for pottery workshops in the vicinity (Vámos 2014, 13).

A glazed pottery workshop operated in the area of the Gas Factory (Gázgyár) in the Early Roman period, 1<sup>st</sup>–2<sup>nd</sup> centuries AD. The related record

comprises fragments of locally produced pans (or *pateras*), including panhandles and faulty pieces (Bugán 2002, 93–95). Éva Bónis published earlier a survey of Late Roman glazed pottery production in *Pannonia*, including the workshops in *Aquincum* that probably manufactured the pans discussed above (Bónis 1990, 29–33). She mentions a faulty jug with brown glaze from *Aquincum-Téglavető* (Bónis 1990, 26) – an interesting find as no glazed pottery workshop has yet been identified in that area. The lack of Late Roman centres of pottery production might be a consequence of an administrative reform in 294 AD when *Aquincum* lost its central status in the province. The town became part of *Pannonia Valeria* and has remained an essential hub in the area, flourishing once more in the early 4<sup>th</sup> century AD (Zsidi et al. 2009, 28).

In his Ph.D. dissertation, Péter Vámos discussed Late Roman pottery workshops in the territory of the military town (Vámos 2014, 155–156). The two pottery kilns discovered in Laktanya Street and under 4–10 Harrer Pál Street might have been involved in the production of Late Roman ware, but no findings indicating such activities (save for the faulty jug mentioned above) have been found in the area. Currently, we know of more Late Roman glazed pottery finds from the area of the military town and its immediate surroundings than the civilian town and the fringes of the settlement.<sup>2</sup>

One cannot stop examining an object's morphological and technological characteristics but, ideally, must also outline (even identify, whenever possible) its place of production. That, however, is a lengthy process, and the available information is not necessarily enough in every case to complete it. Outlining the character of local pottery production is a future goal that can only be reached by involving scientific

*Fig. 1* Find spots of the presented Late Roman glazed ceramic objects from Aquincum. 1: *Thermae Maiores*; 2: Flórián Square; 3: 24 Szőlő Street; 4: 21 Beszterce Street; 5: Föld Street; 6: Solymár Street; 7: 66 San Marco Street; 8: 98 Lajos Street – Vidocq; 9: 118 Lajos Street; 10: 1 Vályog Street; 11: 24–26 Dévai Bíró Mátyás Street; 12: 3–11 Pacsirtamező Street; 13: Bécsi Street – Farkastorki Street; 14: 111–117 Vörösvári Street; 15: 6–12 Kórház Street; 16: 34 Laktanya Street; 17: Hévízi Street; 18: 21 Hunor Street; 19: 14–16 Folyamőr Street; 20: 13–17 Dugovics Square; 21: 7 Bécsi Street; 22: 38–42 Bécsi Street; 23: 62 Bécsi Street; 24: 166 Bécsi Street; 25: 271 Bécsi Street; 26: Bécsi Street – Perényi Street; 27: 118 Rupp Imre (Árpád fejedelem) Street; 28: Vihar Street; 29: 135 Szentendrei Street; 30: Anikó Street – Czetz János Street; 31: Mocsárosdűlő (map by Zsuzsa Görög-Szabó, BHM)

1. kép Az eddig feldolgozásra került, késő római mázas kerámiák egy részének területi elhelyezkedése Aquincum területéről. 1: *Thermae Maiores*; 2: Flórián tér; 3: Szőlő u. 24.; 4: Beszterce u. 21.; 5: Föld u.; 6: Solymár u.; 7: San Marco u. 66.; 8: Lajos u. 98. – Vidocq; 9: Lajos u. 118.; 10: Vályog u. 1.; 11: Dévai Bíró Mátyás tér 24–26.; 12: Pacsirtamező u. 3–11.; 13: Bécsi út – Farkastorki út; 14: Vörösvári út 111–117.; 15: Kórház u. 6–12.; 16: Laktanya u. 34.; 17: Hévízi út 18.; Hunor u. 21.; 19: Folyamőr u. 14–16.; 20: Dugovics tér 13–17.; 21: Bécsi út 7.; 22: Bécsi út 38–42.; 23: Bécsi út 62.; 24: Bécsi út 166.; 25: Bécsi út 271.; 26: Bécsi út – Perényi u.; 27: Rupp Imre u. 118. (Árpád fejedelem útja); 28: Vihar u.; 29: Szentendrei út 135.; 30: Anikó u. – Czetz János u.; 31: Mocsáros-dűlő (a térképet készítette: Görög-Szabó Zsuzsa, BTM)



Fig. 2 Cat. 1: Type I.1, jug without handle; Cat. 2–8: Type I.2, one-handed jugs (photos by Péter Komjáthy)  
 2. kép 1: Kat.1, I.1. típus, fül nélküli korsó; Kat.2–Kat.8, I.2. típus, egyfülű korsók (fotó: Komjáthy Péter)

analyses to gain data on the material composition of applied raw materials and glazes and firing temperature. Glaze colour is determined by the colorants added to the glaze (manganese-, iron- or copper oxide) and firing conditions, while the colour of the base, bisqueware pottery, is a result of firing the clay in oxidative (shades of red) or reductive environ-

ment (shades of gray and black). Katalin Ottományi discussed earlier the colour variants of final pottery products and their relation with firing conditions (Ottományi 2015, 32–34). One has to involve scientific analyses – especially regarding the material composition of lead glazes – to confirm her observations in the Late Roman record.

As mentioned, the firing method affects the colour of the unglazed pottery product, therefore, the final shade of the translucent lead glaze as well. While glazed pottery, in general, was fired at higher temperatures (about 900–1000 °C), some pieces collected from the territory of *Barbaricum* seem to have been fired at only about 700 °C (Olgay 2017, 348, footnote 24).

Some glazed pottery finds from *Aquincum* are currently subject to scientific analyses. The results will provide material for another study on this find group and the topic of lead glazes in general.

#### *Typological framework*

The current typological framework was developed based on the finds presented in the catalogue part of this study; therefore, it may change and expand in the future as the processing of the related record progresses. The selected set only contains types used in daily life.

As the primary function of the few included types was clear (tableware, containers, and lamps), this set did not require a functional classification on a separate level (for examples of that, see Kölczé 2018, 12–15; Kölczé 2019, 55).<sup>3</sup> Several pieces were



Fig. 3 Cat. 9–13: Type I.2, one-handed jugs (photos by Nóra Szilágyi and Péter Komjáthy)  
3. kép Kat. 9–13, I.2. típus, egyfülű korsók (fotó: Szilágyi Nóra, Komjáthy Péter)



heavily fragmented and not suitable for typological classification. The rest were classified into types and sub-types, advancing the development of a complex typo-chronological framework.

Our starting point was G. Nádorfi's typo-chronological framework (Nádorfi 1992, 46, Taf. I; Nádorfi 1992, 49, Taf. II), built upon grave finds which are easy to date through other grave goods in the same closed find context, including coins. However, her system does not comprise every type present in the current selection (Cat. 1–80). Moreover, she classified jugs according to the shape of their rim; while this information is important, the approach has become outdated by today. Typological classification must start with complete vessels.<sup>4</sup> Our selection comprised the following types:

#### *Typological terminology of the evaluated material<sup>5</sup>*

*Jugs*: liquid containers with a narrow neck and diverse rims (including those with a spout). The vessels stand on a flat base or base ring and have one or two handles or none.

*Pitchers*: liquid containers akin to narrow-neck jugs; their body is more curved and the neck wider. Usually, come with one handle.

*Bottles*: liquid containers with a cylindrical body and a pair of band handles connecting the thick rib around the middle of the collar and the shoulder.

*Mortaria*: large bowls for pounding or grinding spices or ingredients of other meals and preparing spicy sauces. Most *mortaria* have a spout on the rim.

*Bowls*: deep serving vessels, usually with a thick rim; minor variants are also present. The vessels stand on a flat base or base ring.

*Mugs*: usually 10–15 cm high drinking vessels with usually biconical body and one handle. The type has a glazed variant, mug-like vessels<sup>6</sup> with three to two handles or none at all.

*Cups*: minor drinking vessels with a wide mouth, usually a conical body, a base ring, and a small ring handle. The type also has a two-handled variant that resembles small bowls. The height of the usual cup does not exceed 10 cm.

*Beakers without handle*: drinking vessels with conical or dented body and no handle.<sup>7</sup>

#### *Typological framework*

The selected eighty vessels were classified into nine types (marked with Roman numbers I–IX) and sub-

types (marked with Arabic numbers); each item is referred to in the typological part by its catalogue number. While glaze colour might be characteristic of a type or sub-type, it has no chronological value; therefore, neither glaze colour nor any other types of decoration were considered here.

#### *I. Jugs (I.1–3)*

Most vessel fragments in the ceramic record of Aquincum come from jugs. The type may be divided into three sub-types: jugs without handles (I.1), one-handled jugs (I.2), and two-handled jugs (I.3). Although each sub-type has several variants, these do not necessitate the defined categories to be broken up into even smaller units; their description is given in that of the sub-type.

##### *I.1 Jugs without handle (Cat. 1, Fig. 2, 1)*

Jugs with no handle usually have a spherical body, cylindrical, often ribbed neck, and outcurving rim. The selected material only contains a single complete vessel of this sub-type (Cat. 1), analogies to which are known from the records of Intercisa<sup>8</sup> and Brigetio. By shape and size, the jug from Intercisa (Kölcze 2019, 42, Type 56, 1b) is almost identical to the piece from Aquincum.

Some specimens come with a scale pattern decoration (Barkóczi 1992, 31, Abb. 54, Cat.229).

Another similar vessel is known from the Lázár Collection in Szombathely.<sup>9</sup> That, however, had perhaps other uses than containing liquids: while the jugs of this sub-type are usually coated in a continuous brown (Cat. 1) or dark green glaze (Barkóczi 1992, 31, Abb. 54, Kat. 229), it featured a characteristic Late Roman holed glaze.

Currently, the available analogies and related data (including the find context of the few known specimens) do not enable us to specify the chronological position of this sub-type within the Late Roman period. It was certainly in use during the 4<sup>th</sup> century AD.

##### *I.2 One-handled jugs (Cat. 2–14, 16–31, 33–38, Figs 2–5)*

One-handled jugs are a flagship type in the record, and the number of related vessels and sherds in the current selection is accordingly high. Various rim, handle, and base solutions mark several variants within the sub-type, which might be worth elaborating upon later. Unique specimens might also indicate further variants.



Fig. 4 Cat. 14–27: Type I.2, one-handed jug fragments (photos by the author)  
 4. kép Kat. 14–27, I.2. típus, egyfülű korsók töredékei (a szerző fényképei)



Fig. 5 Cat. 28–31, 33–38: Type I.2, one-handed jug fragments; Cat. 39–40: Type I.3, two-handed jugs; Cat. 32: Type II, one-handed pitcher; Cat. 41: Type III, bottle (photos by Péter Komjáthy and the author)

5. kép Kat. 28–38: I.2 típus, egyfülű korsók töredékei; 39–40: Kat. 39–40, I.3. típus, kétfülű korsó; 32: Kat. 32, II. típus, kancsó töredéke; 41: Kat. 41, III. típus, palack (fotó: Komjáthy Péter, Kölcze Bettina)





Fig. 6 Cat. 42: Type IV, glazed pounding bowl (*mortarium*) (photo by Nóra Szilágyi, drawing by Alfred Falchetto)

6. kép Kat. 42: IV. típus, mázas dörzstál (fotó: Szilágyi Nóra, rajz: Falchetto Alfred)

Most one-handed jugs have a simple rim and a band handle with an oval or B-shaped profile (Cat. 18–22; Figs. 4, 18–22).

Shamrock-shaped spouted jugs with a glossy glaze, resembling metal vessels, are amongst the most interesting pieces (Cat. 2, 13; Fig. 2, 2, Fig. 3, 13); Late Roman specimens of this sub-type are frequently glazed. The variant represented by Cat. 2 (Fig. 2, with an analogy at Fig. 14, 3) appears first in the 380s (Nádorfői 1992, Taf. II, 1c); further analogies are known from Csákvár (Bánki, Cserményi 1992, 80, Kat. 98) and Dunaújváros (Fig. 14, 3).<sup>10</sup>

The selection also contains two almost identical simple jugs with slightly thickened rims, and a band handle attached to under the rim (Cat. 10, 12, Fig. 3). Jugs of this variant are usually coated in green lead glaze; they appear first around the mid of the 4<sup>th</sup> century AD (see Nádorfői 1992, Taf. I, 6.a).

Three one-handed jugs in our selection feature finger support (Cat. 3, 9, 17). Cat. 3 (Fig. 2, 3) has a horizontally ribbed rim, narrow, ribbed neck, and lean body, largely like Cat. 9 (Fig. 3, 9). The analogies to Cat. 17 (Fig. 4) come from farther away: the Dionysos jug in the Seuso treasure might be a good example (Dági, Mráv 2019, 118–119) as well as an impressive artefact from an unknown site in the Hungarian National Museum's collection (Fig. 14, 2).<sup>11</sup> According to my current hypothesis, this vessel might be dated to the late 4<sup>th</sup> century AD – however, to prove that requires further information. In her typo-chronological system, G. Nádorfői dated the first appearance of the jug variant with a hand support to the first decades of the 4<sup>th</sup> century AD (Nádorfői 1992, 46, Taf. I, 2a–b) (To the jug variant see an analogy in Ottományi 2011, 289, Table 4).

Due to its colour, a yellow jug handle with yellow glaze (Cat. 19, Fig. 4) might be dated to the final phase of the Late Roman period (Ottományi 2015, 27).

The remaining jug fragments are not suitable for typological classification.

### 1.3 Two-handed jugs (Cat. 39–40, Fig. 5)

Roman jugs often come with a pair of handles, and the related Late Roman variants are frequently lead-glazed. They usually have a narrow neck with a rib to which the handles are attached, a round body, and a slightly profiled ring base. The body is decorated with horizontal lines, waves, dot lines, and grooves. This sub-type resembles amphoras. Analogies to the vessels in our selection (Cat. 39 and 40) are known from grave no. 45 in the south-eastern cemetery of

Intercisa (Kölcze 2019, 32); they were also classified as jugs by other scholars earlier (see Pirling 1986, 92).

Analogies confirm the dating of Cat. 39, a grave find, to the 4<sup>th</sup> century AD. Other burials in the area also contained Late Roman finds, including simple shamrock-shaped-spouted jugs (e.g., Topál 1993, 40, grave no. 86.1), the glazed variant of which appears in the late-4<sup>th</sup>-century record of several sites.

The two-handled jug fragment in our selection (Cat. 40) was found in a layer together with Constantinian and Valentinian<sup>12</sup> coins; its chronological status might be specified by determining when the coins were minted (although one cannot exclude that the ceramic vessels had been made some time – even decades – earlier than the coins were minted). However, the find context fits the tendencies outlined by similar features in Late Roman *Pannonia* (concluding with the coins issued by members of the Valentinian dynasty, see Lányi 1972, 91–92).

The glazed variants of two-handled jugs first appeared probably in the second half of the 4<sup>th</sup> century AD (Cvjetičanin 2006, 74–79, Typ. LRG 113–122; Nádorfi 1992, 49).

## II. Pitchers (Cat. 15, 32; Figs. 4–5)

In the case of non-characteristic sherds, it cannot be determined whether they belonged to a jug or a pitcher. Pitchers usually have a wide mouth, and most feature a three-lobed (shamrock-shaped) spout; the type was present among metal vessels and in the inventory of simple grey houseware, while glazed variants first emerged in the 360s AD (Nádorfi 1992, 49). Pitchers are also frequent finds in the ceramic record of settlements not only in Pannonia but in other provinces as well; the dating in all cases is similar (Cvjetičanin 2006, 73–74, Typ. LRG 111, 112).

As the research of Aquincum progresses, the number of finds related to this type will undoubtedly grow. Currently, the two available specimens are unsuitable for drawing more conclusions; therefore, we do not separate them from jugs.

## III. Bottles (Cat. 41, Fig. 5)

Cylindrical vessel with a pair of band handles attached to the thick rib around the neck. The body, like that of jugs, is often decorated with horizontal grooves or dot lines. No fragment in our selection could be classified into this type.

As currently, we have identified only one glazed bottle in the ceramic record of Aquincum, no subtypes have been distinguished. The type was probably

more frequent: several pieces are known from Intercisa (Kölcze 2019, 62–63, Type 3) and Moesia outside Pannonia Provincia (Cvjetičanin 2006, 78, Typ. LRG 120). The analogies enable us to specify the dating of the bottle from Aquincum within the 4<sup>th</sup> century AD to its early decades (Cvjetičanin 2006, 78).

## IV. Mortaria (Cat. 42–53, Figs. 6–8)

The appearance of pounding bowls in the ceramic record has been linked to the romanisation of the related area (Gátfalvi-Delbó 2019, 166). These vessels were important tools of daily life, both in food preparation and, later, serving.

Late Imperial period *mortaria* – mainly the inner side and rim of the vessels (Bru Calderon 2011, Abb. 15; Cat. I.3) – were first painted and then glazed; our selection also includes such a specimen (Cat. 69, Fig. 11).

*Mortaria* usually have flared, horizontal rims, sometimes with a spout (Cat. 45–46, Fig. 7). K. Ottományi believes white or pale yellow pounding bowls to belong to a late variant (Ottományi 2015, 27). Her hypothesis is supported by the emergence of a glazed variant, probably in sync with a change in function from food preparation to serving (Ottományi 2015, 26). We have recognised variants in the current selection based on the rim's shape but have not yet distinguished them. The most frequent glazed variants are grey with dark or olive green glaze (e.g., Cat. 43–44, 46, 49–51, Figs. 7–8); these seem to have been in use until the end of the 4<sup>th</sup> century AD, maybe even later. Several variants are known from other provinces (Cvjetičanin 2006, Typ. LRG 1–15) and the territory of the Barbaricum as well (Olgyay 2017, 6, 8. t.).

## V. Bowls (Cat. 54–69, Figs. 9–11)

The current selection comprises bigger and smaller bowls with flared horizontal rims. G. Nádorfi's typological framework does not contain bowls as the type rarely occurs in graves (in contrast to liquid containers, including narrow-neck and one-handled jugs).<sup>13</sup> Their absence might be linked to a mortuary practice involving drink offerings (Fülep 1969; H. Kelemen 2008, 167; Kölcze 2019, 48).

A vessel classified as a bowl (Cat. 59, Fig. 10) resembles incense burners; its wavy rim and the weak secondary burn marks inside the body indicate that it was used as a *turibulum*. We have not yet identified another similar vessel in the record under evaluation.

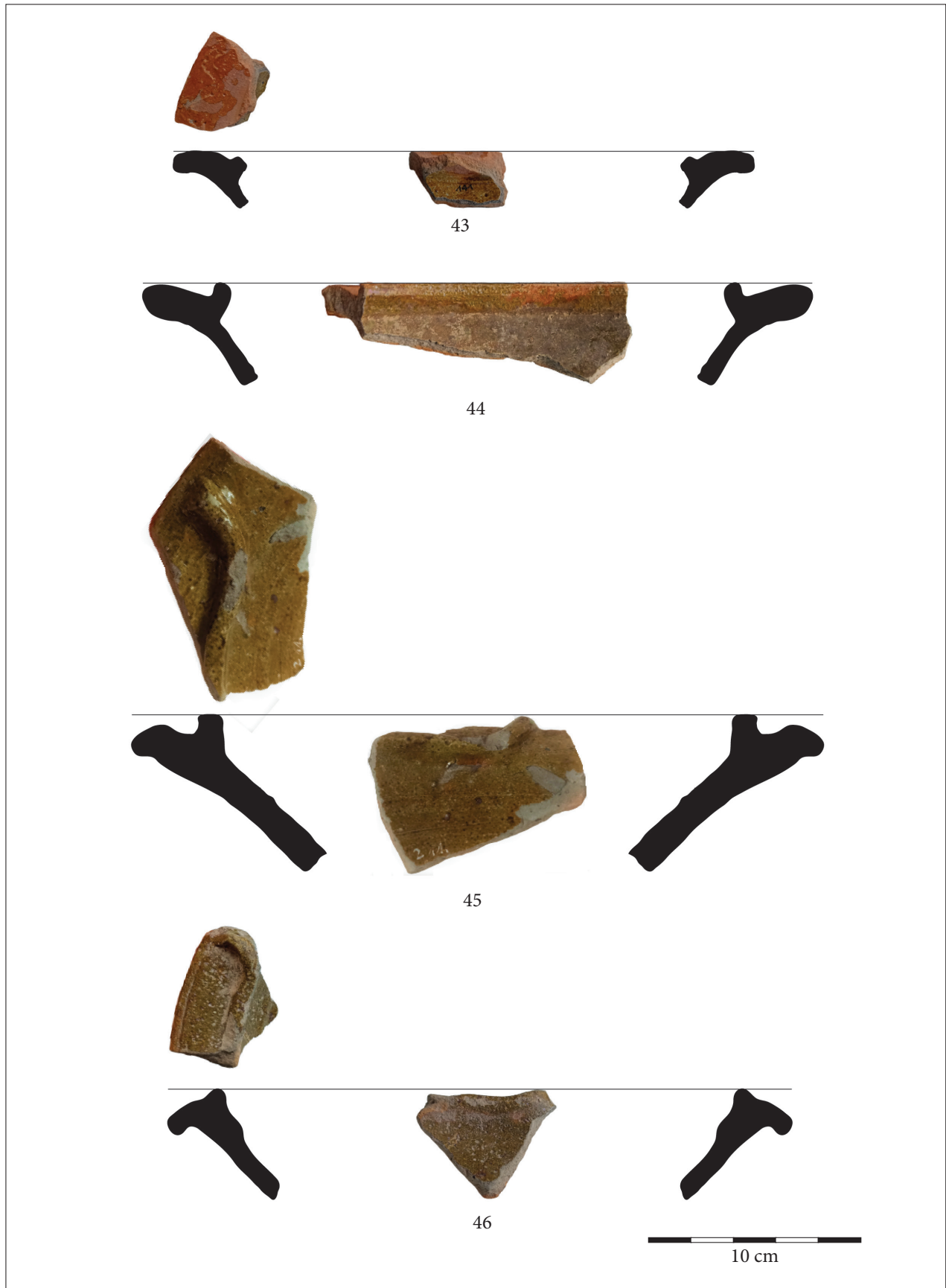


Fig. 7 Cat. 43–46: Type IV, glazed pounding bowl (*mortarium*) fragments (Photos by the author)  
7. kép Kat. 43–46: IV. típus, mázas dörzstálak töredékei (a szerző fotói)





Fig. 8 Cat. 47–53: Type IV, glazed pounding bowl (*mortarium*) fragments (photos by the author)  
 8. kép Kat. 47–53: IV. típus, mázas dörzstálak töredékei (a szerző fotói)



Fig. 9 Cat. 54–58: Type IV, glazed bowl fragments (photos by the author)  
9. kép Kat. 54–58: V. típus, mázas tálak töredékei (a szerző fotói)

The rims of bowls have been decorated in diverse ways (including wavy rims; Ottományi 2019, 74. t. 1). Based on rim decoration and available analogies, currently, we can date the bowls in our selection to the 4<sup>th</sup>–5<sup>th</sup> centuries AD (Cvjetičanin 2006, 43, Typ. LRG 42; Ottományi 2019, 160).

VI–VIII. *Mugs, cups, and beakers* (Cat. 70–77, Figs. 12–13)

Our selection comprises only a few drinking vessels; therefore, the related types are discussed jointly. Simple variants are more frequent in all cases.

The record contains a completed (Cat. 70, Fig. 12) and a fragmentary mug (Cat. 71, Fig. 12). The simple one-handled variant may be dated to the 4<sup>th</sup>–5<sup>th</sup> centuries; based on the earliest occurrence, G. Nádorfi put its emergence to the 360s (Nádorfi 1992, 49, Taf. II).

Fragmentary cups and small bowls cannot be distinguished in many cases,<sup>14</sup> although the rim shape might give a hint. We have two fragments, Cat. 72 and 73 (Fig. 12) that may belong to a cup, mug, or small bowl.

The selection also comprises two *Faltenbechers*, cups with dented bodies, and no handle. One is complete (Cat. 75, Fig. 12), the other, a side fragment (Cat. 76, Fig. 12). The grey unglazed variants of this sub-type first appeared in the Early Roman period (Gátfalvi-Delbó 2019, 51).

The glazed variants of all types discussed above first appeared at the end of the 4<sup>th</sup> century AD and probably remained in use throughout the 5<sup>th</sup> century AD. Undecorated and decorated analogies are known from Dunaújváros/Intercisa and the Hungarian National Museum's collection (Figs. 14, 1, 4).<sup>15</sup> Cat. 75 and 77 (Fig. 12), also glazed cups, were recovered from graves in the western cemetery of the military town; the finds in the same find assemblages (including coins), as well as the strata and features of their find context, date them to the 4<sup>th</sup> century AD (Budai-Balogh 2007, 99).

IX. *Lamps* (Cat. 78–80, Fig. 13)

The already processed part of *Aquincum's* ceramic record is poor in oil lamps. The selected set comprises some glazed examples of the most simple (usually terracotta) oil lamp variant: an almost complete piece (Cat. 78), a *discus* and side fragment (Cat. 79), and two seemingly deformed sherds in the shape of

an animal, perhaps from a lamp decorated with an animal figurine (Cat. 80). In most cases, the figurine depicts a horse (see, e.g., Bánki, Cserményi 1992, Cat. 139, 145, Zsidi et al. 2009, Cat. 1364–1365). The evaluation of the zoomorphic variant exceeds the frames of the present paper but provides an excellent basis, together with other unique lamp variants, for a future study.

Glazed variants of simple and more common lamp types first appeared in the 4<sup>th</sup> century AD (Bánki, Cserményi 1992, Cat. 139–168). Cvjetičanin even developed a typological framework based mainly on finds from the Balkans (Cvjetičanin 2006, 100–103). Glazed oil lamps are also known from other Roman sites in Pannonia: the associated coins seemingly date the one from Tokod-Várberek (Bónis 1991, 121, Abb. 19, 1a–b) to the second half of the 4<sup>th</sup> century AD, but one must keep in mind that coin-based dating is not necessarily reliable for several reasons. Furthermore, XXII-type (in Iványi's system) glazed oil lamp is known from Dunaújváros (Kölcze 2019, 67).

In my opinion, glazed oil lamps may be dated to the 4<sup>th</sup> century AD, but the currently available data are insufficient for specifying their chronological position within that period.

In summary, the currently available data and a typology built exclusively on morphological characteristics are insufficient to develop a reliable typo-chronological framework that would enable dating the related finds within 10–30 years. Such a framework should also consider each item's find context, material composition, and place of production. Analogies, however, provide invaluable help in drawing conclusions. The earliest types in the selected set of glazed pottery finds from Aquincum were the pounding bowls with painted sides and rims, present in the records of Roman settlements from the mid-3<sup>rd</sup> century AD. Based on analogies, the latest glazed object variation is the one-handled jug with a three-lobed spout, first appearing in graves in the late 4<sup>th</sup> century AD. Besides, the clarification of the *Faltenbechers* chronological position might bring about surprises.

*Catalogue*<sup>16</sup>

The colours of the ceramic core, the surface, and the glaze were described using the Munsell colour chart (Munsell-Soil-Color Charts. 2009 Year Revised Edition, 2015), completed by the author's terms.



Fig. 10 Cat. 59–62: Type V, glazed bowl fragments (photos by the author)  
10. kép Kat. 59–62: V. típus, mázas tálak töredékei (a szerző fotói)

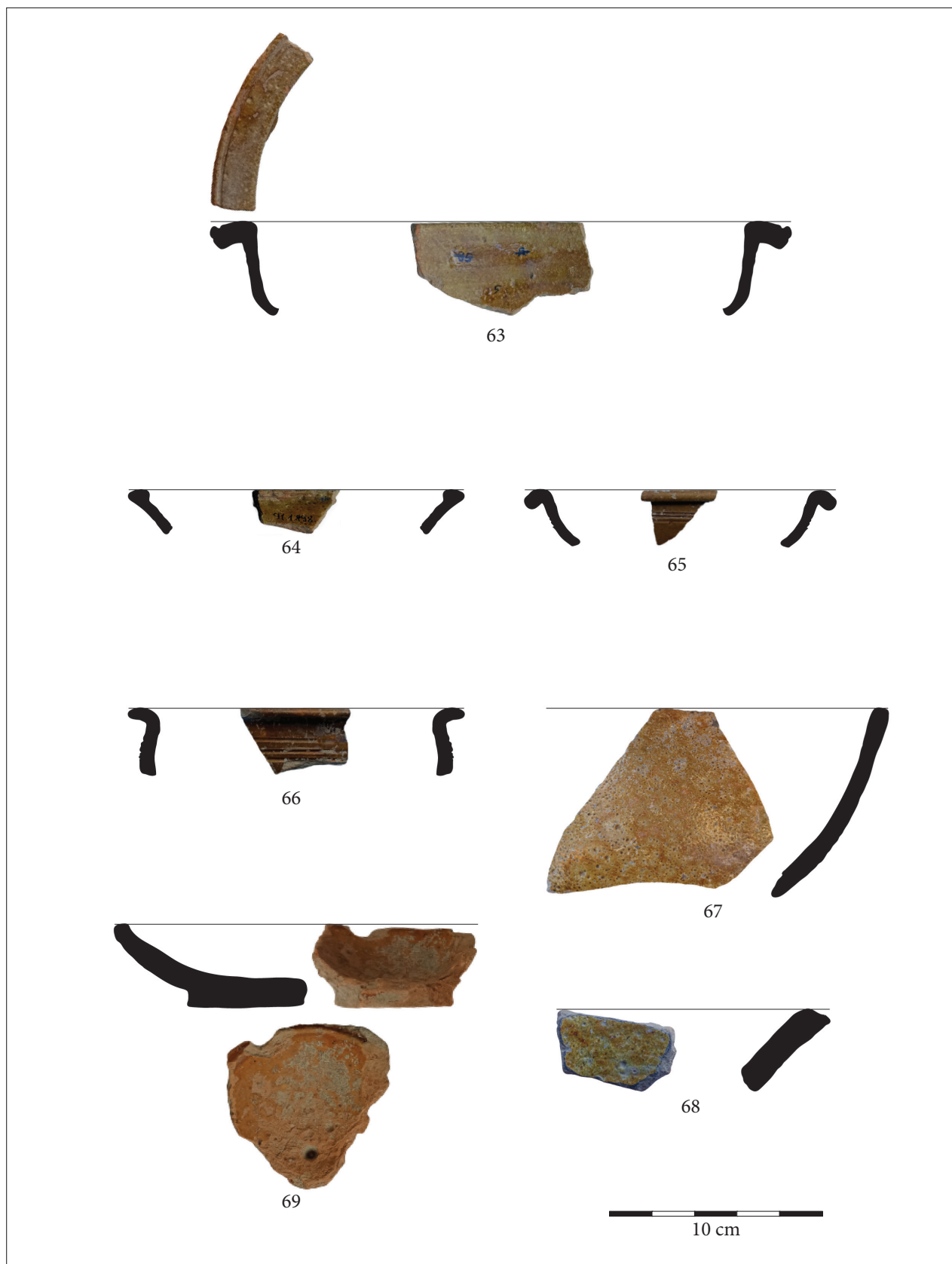


Fig. 11 Cat. 63–64, 68–69: Type V, glazed bowl or *mortarium* fragments; Cat. 65–66: unidentifiable vessel fragments (photos by the author)

11. kép 63–64, 68–69: V. típus, mázas tál- vagy *mortarium*töredékek; 65–66: Kat. 65–Kat. 66, bizonytalan töredékek (a szerző fotói)

The final surface colour of Late Roman glazed pottery varies between olive yellow (5Y 6/6; 2.5YR 6/6), dark olive green (5Y 6/4), brown (7.5 YR 5/6–4/4), pale orange (5YR 6/8) and sometimes pale/yellowish brick colour (7.5 YR 5/8; 10 YR 5/8).

The colour of the ceramic (unglazed) pottery ranges between grey and a shade of brick (7.5 YR 5/1–6/1; 5R 7/8; 7/6), sometimes dark grey (7.5 YR 4/1), light grey (5Y 7/1), yellowish (5Y 8.5/3), brown (7.5 YR 5/6; 7.5 YR 5/8), and pale/yellowish brick colour (2.5 YR 7/6; 2.5YR 7/8).

The catalogue only contains eighty pieces from the already processed record. These were selected to provide a view of the glazed pottery types in Aquincum. Jugs and one-handled pitchers are presented in a joint list in the catalogue part.

The descriptions include the Munsell codes of the related colours besides their names. For the extensions, the following abbreviations were used: *h*: height; *hf*: fragment height, *dr*: rim diameter, *dm*: mouth diameter, *db*: base diameter, *dn*: neck diameter, *dd*: *discus* diameter, *w*: width, *th*: wall thickness

Late Roman glazed pottery finds from Aquincum, mentioned in the study:<sup>17</sup>

#### Jugs and pitchers

- 1 *Jug, complete* (Fig. 2, 1). Jug with a spherical body and no handle, covered with homogenous brown (10YR 5/4) glaze. Inv. no. 2000.20.23795.1.  
H=19, dr=7.6, db=6.5 cm  
Budapest District III, 6 Vályog Street (O. Madarassy 2000)  
*Reference*: Zsidi et al. 2009, Cat. 1353
- 2 *Jug, complete* (Fig. 2, 2). One-handled jug with three-lobed spout and ring base, covered with yellowish-brown (7.5YR 5/8) glaze. The shoulder is decorated with a circular groove. Inv. no. R 2297.  
H=26, dr=7, db=8 cm  
Budapest, District III, Farkastorki Street, western cemetery of the military town (1974)  
*Reference*: Zsidi et al. 2009, Cat. 1356
- 3 *Jug, complete* (Fig. 2, 3). Jug with a handle with finger support, outcurving rim, and a rib around the neck, covered with yellow-green (2.5YR 6/6) lead glaze. The handle broke off. Inv. no. R 2498.  
H=33, dr=9.4, db=9.6 cm  
Budapest District III, 8 Vályog Street (O. Madarassy 2000)  
*Reference*: Zsidi et al. 2009, Cat. 1351
- 4 *Jug, complete* (Fig. 2, 4). One-handled narrow-neck jug covered with moss green / light olive brown (2.5Y 5/6) glaze. Inv. no. 50042.  
H=17, dr=4, db=5.2 cm  
Budapest District III, Föld Street, Late Roman burial in the military town (1925)  
*Reference*: Zsidi et al. 2009, Cat. 1359
- 5 *Jug fragment* (Fig. 2, 5). The handle and rim broke off; it was a one-handled variant, coated with moss green / light olive brown (2.5Y 5/6) glaze. Inv. no. 50166.  
H=15.6, db=4.6 cm  
Budapest District III, 118 Rupp Imre Street (today: Árpád fejedelem Street) (1937)  
*Reference*: Zsidi et al. 2009, Cat. 1348
- 6 *Jug, complete* (Fig. 2, 6). One-handled jug with a short neck and round belly, coated with moss green / light olive brown (2.5Y 5/6) glaze. The ceramic surface is grey (7.5YR 4/1). Inv. no. 50209.  
H=15, dr=3.8, db=11 cm  
Budapest District III, 179 Lajos Street (1937)  
*Reference*: Zsidi et al. 2009, Cat. 1357
- 7 *Jug fragment* (Fig. 2, 7). One-handled jug with a pear-shaped body, coated with brick-yellow (7.5YR 6/8) lead glaze. Inv. no. 55.34.9.1.  
H=25, db=9 cm  
Budapest District III, Vihar Street (1935)  
*Reference*: Zsidi et al. 2009, Cat. 1358
- 8 *Jug, complete* (Fig. 2, 8). One-handled jug with a rib around the neck and bulging rim, coated with grey / green (5Y6/2–6/3) glaze. The ceramic surface is brick red (5YR 6/6). Inv. no. 64.9.1.  
H=31, dr=4.5, db=8 cm  
Budapest District III 7 Bécsi Street (1964)  
*Reference*: Zsidi et al. 2009, Cat. 1349
- 9 *Jug, reconstructed* (Fig. 3, 9). One-handled jug with finger support on the handle, a rib around the neck, and an elongated body; decorated with very fine horizontal grooves, coated with yellow-green (2.5Y 6/6) glaze. The ceramic surface is brick yellow (5YR 6/6). Inv. no. 88.4.175.1.  
H=34.2, dr=7.8, db=8.5 cm  
Budapest District III, Perényi Street, western cemetery of the military town (1985)  
*References*: Topál 2003, 19, grave no. 39/4; Zsidi et al. 2009, Cat. 1354
- 10 *Jug, complete* (Fig. 3, 10). One-handled jug with an ovoid body, a cylindrical neck, and a ribbed rim. The belly and neck are decorated with fine circular horizontal grooves; coated with olive green (2.5YR 5/6) lead glaze. Inv. no. 97.26.6.1.  
H=24, dr=4.5, db=6.2 cm  
Budapest District III, Bécsi Street-Farkastorki Street, grave no. 7 (A. Facsády 1999)
- 11 *Jug, almost complete* (Fig. 3, 11). One-handled jug with collared rim, coated with olive shade (2.5Y 6/8) glaze. The handle broke off. Inv. no. 98.36.3927.1.  
H=30, dr=7, db=7.3 cm



- Budapest District III, Folyamőr Street, Late Roman burial in the military town (1978–81)  
Reference: Zsidi et al. 2009, Cat. 1361.
- 12 *Jug, complete* (Fig. 3, 12). Jug with a band handle, somewhat bulging rim, short neck, and round belly; coated with olive (5Y 5/6) glaze. Inv. no. 2000.20.23798.1. H=19, dr=4.2, db=7 cm  
Budapest District III, 6 Vályog Street (O. Madarassy 2000)  
Reference: Zsidi et al. 2009, Cat. 1362.
- 13 *Jug complete* (Fig. 3, 13). One-handed jug/pitcher with a cylindrical body, narrow, sharply ribbed neck, collared mouth, and three-lobed (shamrock-shaped) spout, covered with yellow-brown (mud-colour, 2.5Y 6/3–6/4) glaze. Inv. no. 2007.11.2.1. H=18.5, w=8 cm  
Budapest District III, 271 Bécsi Street (T. Budai-Balogh)  
Reference: Budai-Balogh 2009, 93–100
- 14 *Jug fragments* (Fig. 4, 14). Rim and side fragments of a jug with fine circular horizontal grooves under the rim, covered with olive green (5Y 6/3.5) glaze. The ceramic surface is brick red (5Y 6/6). Inv. no. 89.1.991.1. Dr=9 cm; 4.5 × 3.7 × 0.5 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 15 *Jug/pitcher fragment* (Fig. 4, 15). Rim and side fragment of a jug or pitcher with slightly outcurving rim and fine circular horizontal grooves beneath, a rib around the neck, coated with pale olive (5Y 6/6–6/8) glaze. The ceramic surface is pale brown-grey (7.5Y 6/3). By its size, the vessel was probably a pitcher or other liquid container with a relatively wide mouth. Inv. no. 91.1.1138.1. Db=14 cm; 4.5 × 2.4 × 0.7–1 cm  
Budapest District III, Mocsáros-dűlő (E. Máriy 1987–88)<sup>18</sup>
- 16 *Jug handle* (Fig. 4, 16). Handle of a one-handed jug coated with yellow-brown (7.5YR 5/8) glaze. The ceramic material is mica-tempered, and the surface brick red (7.5YR 5/8). Inv. no. 86.2.90.1. 5.5 × 3 × 0.8 cm  
Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)<sup>19</sup>
- 17 *Jug handle* (Fig. 4, 17). Handle fragment of a one-handed jug with finger support and a star-shaped collared mouth resembling metal vessels. Coated with olive (5Y 5/6) lead glaze. The ceramic surface is brownish/pale brick red (5YR 6/4), and the core grey (5YR 6/1). Inv. no. 86.2.205.1. 9.5 × 6.3 × 0.6–1.5 cm  
Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)<sup>20</sup>
- 18 *Jug handle* (Fig. 4, 18). B-profile band handle fragment of a jug, coated with green-yellow (5Y 6/6) glaze. The ceramic surface is grey (5YR 6/1) under the glaze, and pale brown (7.5YR 6/3). Inv. no. 89.1.1017.1. 14.5 × 5.1 × 0.8–1 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 19 *Jug handle* (Fig. 4, 19). Band handle fragment of probably a small jug, coated with pale yellow (10YR 8/6) glaze that had partially worn off. The ceramic surface is also pale yellow (10YR 8/4). Inv. no. 91.1.1564.1. 5.2 × 2.1 × 0.7 cm  
Budapest District III, Mocsárosdűlő, probing trench no. XIII layer J, brown soil layer above an occupation level (E. Máriy 1987–88)
- 20 *Jug or patera fragment* (Fig. 4, 20). Handle fragment from a one-handed jug with finger support on the handle or a *patera*, covered with homogenous dark olive (5Y 5/6) glaze. The ceramic surface is grey (5Y 7/1). Inv. no. 94.1.34144.1=94.1.34145.1. 4.5 × 4.3 × 1 cm  
Budapest District III 7–11 Korvin Ottó (today: Pacsirtamező) Street, probing trench II Feature 9 (? northern *taberna*), stray find from a layer comprising the debris of demolished medieval buildings (O. Madarassy, date incomplete: 1989–90)<sup>21</sup>  
Note: there is a difference between the object and the inventory as the description of 94.1.34144.1, the ID written on the object, clearly belongs to another finding
- 21 *Jug handle* (Fig. 4, 21). B-profile band handle fragment of a grey (10YR 6/1) and pale brick-colour (5YR 6/4) jug covered with dark olive (5Y 5/6) glaze. Inv. no. 98.95.434.1. 4 × 3.5 × 1 cm  
Budapest District III 38–42 Bécsi Street, from the top of the yellow soil layer beneath the road base in the southern zone of the plot (E. Máriy 1993)
- 22 *Jug fragment* (Fig. 4, 22) Rim fragment with band handle stump of a one-handed jug; the mouth is collared, the handle starts under the rim. Covered with olive green (5Y 5/6) glaze; the ceramic surface is grey (7.5YR 7/1), under the glaze, pale brick-colour (5YR 5/8). Inv. no. 98.95.434.1. Dr=8 cm, 5.5 × 4.6 × 0.7–1 cm  
Budapest District III Solymár Street (L. Kocsis 1980)
- 23 *Jug fragment* (Fig. 4, 23). Neck fragment with an applied circular rib of a probably one-handed jug coated with olive green (5Y 5/4) glaze. The ceramic surface is grey (5Y 5/1), under the glaze, brick yellow (5YR 5/8). Inv. no. 86.2.135.1. 5 × 3 × 0.3–0.5 cm  
Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)



Fig. 12 Cat. 70–71: Type VI, glazed mugs; Cat. 72–74: Type VII, glazed mug or cup fragments  
(photos by Péter Komjáthy and the author)

12. kép Kat. 70–71: VI. típus, mázas bögre; Kat. 72–74: VII. típus, mázas csésze/bögre töredékek  
(fotó: Komjáthy Péter, Kölcze Bettina)

- 24 *Jug (?) fragment (Fig. 4, 24)*. Conical neck fragment of a vessel, perhaps a jug, decorated with a pattern comprising impressed circles and incised horizontal lines and covered with olive (2.5Y 6/6) glaze. The ceramic surface is brick-yellow (5YR 7/8), the core, grey (5YR 6/1). Inv. no. 91.1.1142.1.  
Dn=2 cm, 7.7 × 7 × 0.8 cm  
Budapest District III, Mocsárosdűlő (E. Máriy 1987–88)  
Note: matches 91.1.1143
- 25 *Jug (?) fragment (no image)*. Conical neck fragment of a vessel, perhaps a jug, decorated with a pattern comprising impressed circles and incised horizontal lines and covered with olive (2.5Y 6/6) glaze. The ceramic surface is brick-yellow (5YR 7/8), the core, grey (5YR 6/1). Inv. no. 91.1.1143.1.  
5 × 3.3 × 0.8 cm  
Budapest District III, Mocsárosdűlő (E. Máriy 1987–88)  
Note: matches 91.1.1142
- 26 *Jug fragment (Fig. 4, 26)*. Side fragment of a brick-yellow (5YR 7/8) jug made of fine clay, covered with yellow-red/brown (7.5YR 6/8) glaze. Inv. no. 86.2.47.1.  
10.2 × 8.5 × 0.7–1 cm  
Budapest District III, Thermae Maiores (M. Kaba 1981–83)



Fig. 13 Cat. 75–77: Type VIII, glazed *Faltenbechers* and beakers; Cat. 78–80: Type IX, glazed oil lamps  
(photos by Nóra Szilágyi and the author)

13. kép Kat. 75–77: VIII. típus, mázas *Faltenbecher*, pohár; 78–80: Kat. 78–80: IX. típus, mázas mécsesek  
(fotó: Szilágyi Nóra, Kölcze Bettina)

- 27 *Jug fragment (Fig. 4, 27)*. Side fragment of a one-handled grey (5Y 7/1) jug made of fine clay, decorated with horizontal, circular grooves, and covered with green (5Y 6/3.5) lead glaze. Inv. no. 86.2.64.1.  
6.7 × 5.5 × 0.7 cm  
Budapest District III, Thermae Maiores (M. Kaba 1981–83)
- 28 *Jug fragment (Fig. 5, 28)*. Side fragment of a grey (5YR 6/1) jug covered with green (5Y 4/3) glaze. Inv. no. 89.1.997.1.  
8.6 × 6 × 0.6 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 29 *Jug fragment (Fig. 5, 29)*. Side fragment of a light brown (2.5Y 7/4) jug decorated with a horizontal row of drop-shaped stamped motifs, made of slightly mica-tempered clay, and covered with olive green (5Y 6/4) glaze. Inv. no. 91.1.206.1.  
4 × 2.5 × 0.5 cm  
Budapest District III, Mocsárosdűlő (E. Máriy 1987–88)
- 30 *Jug fragment (Fig. 5, 30)*. Side fragment of a light grey/brown (2.5Y 7/1, 3) jug made of clay that had been fired into hard ceramic and coated with green (2.5Y 5/6) and brown-yellow (2.5Y 7/8) glaze. Inv. no. 94.1.17852.1.  
3.7 × 2.8 × 0.5 cm  
Budapest District III, 7–11 Korvin Ottó (today: Pacsirtamező) Street, from the infill of grave no. 7 in Section A/1, northern building (O. Madarassy 1989–91)
- 31 *Jug fragment (Fig. 5, 31)*. Side fragment of a light grey (5Y 7/1) jug coated with olive green (5Y 5/6) glaze. Inv. no. 94.1.33104.1.  
5.7 × 4.8 × 0.8 cm  
Budapest District III, 7–11 Korvin Ottó (today: Pacsirtamező) Street (O. Madarassy 1989–91)
- 32 *Jug / pitcher fragment (Fig. 5, 32)*. Side fragment of a brick-yellow (5Y 5/6) jug or pitcher made of fine clay, covered with yellow-brown (7.5YR 6/4) glaze. Inv. no. 98.76.3477.1.  
6.7 × 4 × 0.6 cm  
Budapest District III, Flórián Square, Atrium House / New Toilet (Átriumos Ház / Új WC; L. Kocsis 1984)
- 33 *Jug fragment (Fig. 5, 33)*. Side fragment with handle stub, probably the flat band handle of a one-handled brick red (5YR 6/4) and grey (5YR 5/1) jug covered with olive-brown (2.5Y 5/6) glaze, with marks of secondary burning. Inv. no. 98.76.3479.1.  
4.5 × 2 × 0.8–1.2 cm  
Budapest District III, Flórián Square, Atrium House / New Toilet (Átriumos Ház / Új WC; L. Kocsis 1984)
- 34 *Jug fragment (Fig. 5, 34)*. Side fragment of a grey (2.5Y 7/1) and pale brown (2.5Y 7/3) jug covered with olive green (5Y 5/6) glaze. Inv. no. 98.76.3480.1.  
3.6 × 2.8 × 0.7 cm  
Budapest District III, Flórián Square, Atrium House / New Toilet (Átriumos Ház / Új WC; L. Kocsis 1984)
- 35 *Jug fragment (Fig. 5, 35)*. Side fragment of a grey (5Y 6/1) jug made of clay fired into hard ceramic and covered with dark olive green (5Y 5/4) glaze. With marks of secondary burning. Inv. no. 98.76.3481.1.  
7.3 × 6.8 × 0.7 cm  
Budapest District III, Flórián Square, Atrium House / New Toilet (Átriumos Ház / Új WC; L. Kocsis 1984)
- 36 *Jug fragment (Fig. 5, 36)*. Side and base fragment of a flat-bottomed brick-yellow (7.5YR 6/8) jug made of slightly mica-tempered clay and partially covered with olive (5Y 6/8) glaze. Inv. no. 86.2.93.1.  
Hf=6.5, db=11, th=0.7–1 cm  
Budapest District III, Thermae Maiores (M. Kaba 1981–83)
- 37 *Jug fragment (Fig. 5, 37)*. Side and base fragment of a flat-bottomed brick-yellow (2.5YR 6/6) sandwich-profile jug with grey (5Y 6/1) core, covered with patchy olive green (5Y 5/6) and red-yellow (5YR 7/8) glaze. Inv. no. 89.1.1014.1.  
Hf=4.8, db=11 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 38 *Jug fragment (Fig. 5, 38)*. Side and base fragment of a flat-based yellow (5Y 8/3) jug. The external surface is painted brownish red (5YR 5/4) and coated with olive-yellow (5Y 6/6) glaze. Inv. no. 91.1.747.1.  
6.7 × 3.2 × 0.5 cm  
Budapest District III, Mocsárosdűlő, trench no. XIII, section H, from the infill of a well at 0.39 m relative depth (E. Máriy 1987–88)
- 39 *Two-handled jug, complete (Fig. 5, 39)*. Two-handled jug with collared rim, narrow neck, and spherical body, covered with yellow-green 85Y 6/8 lead glaze. The ceramic surface under the glaze has a pale brick shade (5YR 6/8). Inv. no. 86.7.52.1.  
H=24.2, dp=4.6, db=7 cm  
Budapest District III, 166 Bécsi Street, western cemetery of the military town (J. Topál 1983)  
*References:* Topál 1993, 40, grave no. 85/1; Zsidi et al. 2009, Cat. 1360
- 40 *Jug fragment (Fig. 5, 40)*. Rim fragment with handle stubs of a two-handled brick-yellow (2.5YR 6/6) jug with a slightly outcurving rim; the handles start from under the rim. Coated with green (5Y 6.5/3.5) lead glaze. Inv. no. 2018.7.1812.1.  
4.3 × 3.3 × 0.9 cm  
Budapest District III, 66 San Marco Street, STR 14 (P. Vámos 2018)



*Bottles*

- 41 *Bottle, complete* (Fig. 5, 41). Two-handled bottle with cylindrical body. Inv. no. 50049  
H=20, dr=4.7, db=9.3 cm  
Aquincum (not specified area)  
Reference: Zsidi et al. 2009, Cat. 1346

*Mortaria*

- 42 *Mortarium, reconstructed* (Fig. 6, 42). Pale brick red (7.5YR 6/3) *mortarium* made of fine clay. The inner side is brushed with grit and covered with yellow (10 YR 8/8) glaze. Inv. no. 2006.20.11555.1.  
H=12, dr=44, db=17.5 cm  
Budapest District III, 111–117 Vörösvári Street, Remiz, Feature no. 1124, a furnace (A. Kirchhof 2006)
- 43 *Mortarium fragment* (Fig. 7, 43). Rim and side fragment of a *mortarium* with a flared, horizontal rim decorated with wave pattern. The external ceramic surface is brick-yellow (7.5YR 6/8); inside, under the glaze, grey (7.5YR 6/1); the inside is covered with olive (5Y 6/8) glaze, while the rim with a reddish yellow one that runs down the external surface. Inv. no. 86.2.40.1.  
Dr=29 cm, 5 × 4 × 0.5–0.7 cm  
Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)
- 44 *Mortarium fragment* (Fig. 7, 44). Rim and side fragment of a *mortarium* with a flared, horizontal rim, made of mica- and fine gravel-tempered clay. It has a sandwich profile with pale brick-colour (5YR 5/8) surfaces and a grey (5YR 6/1) core. The inside under the glaze was painted red (5R 4/8); both sides are coated in olive green (5Y 5/3) lead glaze that is stained with red-yellow (7.5YR 6/8) at the rim. Inv. no. 86.2.92.1.  
Dr=30 cm, 16 × 5 × 0.7–2.2 cm  
Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)
- 45 *Mortarium fragment* (Fig. 7, 45). Rim and side fragment of a sandwich-profile spouted *mortarium* with brown-yellow (7.5YR 5/6) surfaces and grey (7.5YR 5/1) core. The inside is covered with a homogenous grey (5Y 6/3.5), the outside is sprinkled with a yellow (10YR 6/8) glaze. Inv. no. 86.2.133.1.  
10 × 6.7 × 1.3 cm  
Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)
- 46 *Mortarium fragment* (Fig. 7, 46). Rim and side fragment of a sandwich-profile spouted *mortarium* with yellow (7.5YR 7/8) surfaces and grey (2.5YR 7/1) core. The inside is covered with dark green (5Y 6/3), the rim, and partially, the outside with yellow (7.5YR 7/8) glaze. Inv. no. 89.1.1012.1.

- Dr=28 cm, 6.3 × 6.2 × 0.8–1.1 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 47 *Mortarium fragment* (Fig. 8, 47). Rim and side fragment of a sandwich-profile *mortarium* with yellow (7.5YR 7/4) surfaces and grey (10YR 6/1) core. The rim is painted red (2YR 4/6), heavily worn; the inside is covered with green (5Y 6.5/3.5) lead glaze. Inv. no. 91.1.38.1.  
Dp=28 cm; 13.5 × 10 × 0.8–1.3 cm  
Budapest District III, Mocsárosdűlő (E. Máriy 1987–88)
- 48 *Mortarium fragment* (Fig. 8, 48). Side and base fragment of a flat-based red-brown *mortarium*; the inside is brushed with fine grit and coated with red-yellow (5YR 6/8) glaze. Inv. no. 86.2.48.1.  
Db=13 cm, 9.6 × 6.4 × 0.9–1.6 cm  
Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)
- 49 *Mortarium fragment* (Fig. 8, 49). Side and base fragment of a flat-based *mortarium*; the inside is dark grey (5R 6/1), brushed with crushed limestone and coarse grit, and coated with dark olive green (5Y 5/4) glaze; the outside is brick red (5R 6/6). Inv. no. 86.2.61.1.  
Db=13 cm, 9.8 × 7.6 × 1–2 cm  
Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)
- 50 *Mortarium fragment* (Fig. 8, 50). Side fragment of a brick red (5R 7.5/3.5) and grey (7.5 YR 7/1) *mortarium* made of fine clay. The inside is brushed with grit and covered with olive green (5Y 6.5/3.5) glaze. Inv. no. 86.2.66.1.  
7 × 4.7 × 0.8–1 cm  
Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)
- 51 *Mortarium fragment* (Fig. 8, 51). Side and base fragment of a flat-based *mortarium*. The external ceramic surface is brick red (5R 6/6), the internal one, grey (5R 5/1). The vessel's inside is densely brushed with fine grit and covered with olive green (5Y 5/6) glaze that only persisted in traces. Inv. no. 89.1.1016.1.  
Db=12 cm, 13.9 × 8.5 × 0.9–1.7 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 52 *Mortarium fragment* (Fig. 8, 52). Side fragment of a yellow-brown/red (5YE 7/6, 5YR 6/3) *mortarium* of relatively porous ceramic material. The inside is brushed with gravel and coated with brown (7.5YR 5/4) lead glaze that had almost completely worn off by today. Inv. no. 95.11.290.1.  
4.5 × 4.3 × 1 cm  
Budapest district III, 1 Vályog Street (O. Madarassy 1995)



*Fig. 14* Analogies to the vessels from Aquincum in the collection of the Hungarian National Museum. 1: Inv. no. MNM.1.1950.105.1.; 2: Inv. no. MNM.10.1951.83.1.; 3: Inv. no. MNM.28.1908.248.1.; 4: Inv. no. MNM.89.1909.3.1. (Photos by the author, with the permission of the HNM)

14. kép Legfontosabb analógiák az egyes *aquincumi* edénytípusokra a Magyar Nemzeti Múzeum gyűjteményéből. 1: Ltsz. MNM.1.1950.105.1.; 2: Ltsz. MNM.10.1951.83.1.; 3: Ltsz. MNM.28.1908.248.1.; 4: Ltsz. MNM.89.1909.3.1. (fotó: Kölcze Bettina, a MNM engedélyével)



53 *Mortarium fragment* (Fig. 8, 53). Side and base fragment of a brick-yellow (5YR 7/6, 6/6) ceramic *mortarium*. The external surface is coated with reddish brown (5YR 5/3), the gravel brushed inner side with yellow-green (2.5Y 6/6, 6/8) glaze. Inv. no. 98.76.3468.1.

Db=11 cm, 9.5 × 3.3 × 0.8–1.2 cm

Budapest District III, Flórián Square, Atrium House / New Toilet (Átriumos Ház / Új WC; L. Kocsis 1984)

### Bowls

54 *Bowl fragment* (Fig. 9, 54). Rim and side fragment of a bowl with flared horizontal rim. The ceramic surfaces are brick-yellow (5YR 8/4), the core, grey (5YR 7/1). Both sides and the rim are coated with green (5Y 6/3.5, 5Y 7/4) glaze. Inv. no. 86.2.50.1.

Dr=30 cm, 7.5 × 6.8 × 0.8–0.9 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

55 *Bowl fragment* (Fig. 9, 55). Rim and side fragment of a bowl (perhaps a *mortarium*) with a flared horizontal rim. The ceramic surfaces are brick red (2.5YR 6/4) with grey (7.5YR 6/1) core; the inside is covered with green (5Y 6/4) lead glaze. Inv. no. 86.2.51.1.

Dr=24 cm, 8.5 × 5.2 × 0.8–1 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

56 *Bowl fragment* (Fig. 9, 56). Rim and side fragment of a brick-yellow (5YR 6/8) ceramic bowl with flared, horizontal, slightly bulging rim. Covered with olive (5Y 6/8) glaze that had partially worn off by today; with marks of secondary burning. Inv. no. 86.2.53.1.

Dr=23 cm, 6 × 3.5 × 0.7–1.3 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

57 *Small bowl fragment* (Fig. 9, 57). Rim and side fragment of a small brick red (5R 7.5/3.5) biconical bowl with a wide horizontal rim decorated with circular grooves, covered with yellow-green/pale olive (5Y 7.5/4) lead glaze; with marks of secondary burning. Inv. no. 86.2.67.1.

Dr=20 cm, 3.5 × 2 × 0.4–0.6 cm

Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)

58 *Bowl fragment* (Fig. 9, 58). Rim and side fragment of a grey (5Y 6/1) bowl with a slightly outcurving rim, covered with olive (5Y 6/6) glaze. Inv. no. 86.2.69.1.

Dr=20 cm, 3.5 × 2 × 0.4–0.6 cm

Budapest District III, Flórián Square, *Thermae Maiores* (M. Kaba 1981–83)

59 *Bowl fragment* (Fig. 10, 59). Rim and side fragment of a bowl with a wavy rim, resembling a *turibulum*. The ceramic surfaces are brick yellow (5YR 6/8), the core,

grey (5YR 6/1). The inner side is covered with dark olive green (5Y 5/6) glaze. Inv. no. 86.2.91.1.

Dr=20 cm, 7.2 × 3.3 × 0.6–0.9 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

*Note:* The Budapest History Museum's collection comprises another fragment from the same vessel under Inv. no. 86.2.151, which is not presented here.

60 *Bowl fragment* (Fig. 10, 60). Rim and side fragment of a bowl with a wide flared rim decorated with circular wavy grooves. The ceramic surfaces are brick red (5YR 7/6), the core, grey (7YR 6/1); the rim and inner side are covered with green (5Y 6.5/4) lead glaze. Inv. no. 86.2.94.1.

Dr=27 cm, 10 × 5.4 × 0.9 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

61 *Bowl fragment* (Fig. 10, 61). Rim and side fragment of a bowl with wide, flared, horizontal, grooved rim, made of clay tempered with mica and fine gravel. The ceramic surfaces are brick red (2.5YR 7/4), the core, grey (5YR 7/1). The inner side and the rim are covered with olive green (5Y 7/3) lead glaze. Inv. no. 86.2.95.1.

Dr=18 cm, 7.2 × 6 × 0.5–0.8 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

62 *Bowl fragment* (Fig. 10, 62). Rim and side fragment of a pale brick-yellow (2.5YR 8/2) bowl with a wide horizontal rim decorated with a grooved band filled with a row of oblique impressions, made of fine gravel-tempered clay. The rim and inner side are covered with yellow (10YR 7/8) lead glaze. Inv. no. 86.2.140.1.

Dr=25 cm, 10.5 × 5.7 × 0.7–0.9 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

63 *Bowl fragment* (Fig. 11, 63). Rim and side fragment of a brick-yellow / brown (7.5YR 7/6, 7.5YR 6/3) bowl with a wide horizontal rim. The inside and, partially, the rim is covered with olive green (5Y 5/6) glaze. Inv. no. 86.2.145.1.

Dr=26 cm, 8.3 × 4.3 × 0.6–0.8 cm

Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)

64 *Bowl fragment* (Fig. 11, 64). Rim fragment of a grey (5Y 4/1) bowl with a slightly bulging rim, covered with light olive brown (2.5Y 5/6) glaze. With marks of secondary burning. Inv. no. 91.1.198.1.

Dr=18 cm, 4 × 2.6 cm

Budapest District III, Mocsárosdűlő (E. Mártly 1987–88)

65 *Bowl fragment* (Fig. 11, 65). Rim and side fragment of a small grey (2.5Y 6/1) bowl or *patera* with a slightly outcurving rim and circular grooves around the neck,

- coated with homogenous olive brown (2.5Y 5/8) glaze. Inv. no. 94.1.27117.1.  
Dr=14 cm, 3.5 × 2.5 × 0.3–0.5 cm  
Budapest District III, 7–11 Korvin Ottó (today: Pácsiartamező) Street, trench X, section A9, from a mixed grey soil layer under a modern wall (O. Madarassy 1989–91)
- 66 *Bowl fragment* (Fig. 11, 66). Rim and side fragment of a small grey (2.5Y 6/1) bowl or a *paterna* with a slightly outcurving rim and circular grooves around the neck, coated with homogenous olive brown (2.5Y 5/8) glaze. Inv. no. 94.1.31369.1.  
Dr=15 cm, 5 × 2.9 × 0.5–0.6 cm  
Budapest District III, 7–11 Korvin Ottó (today: Pácsiartamező) Street (O. Madarassy 1989–91)
- 67 *Bowl fragment* (Fig. 11, 67). Side fragment of a bowl, perhaps a *mortarium*. The ceramic surface outside is dark grey (5Y 4/1), slightly overfired, the inside is brick yellow (5YR 5/6); it is coated with homogenous olive green (10YR 5/4) glaze that only persisted in spots on the inner surface. Inv. no. 86.2.46.1.  
10.2 × 9.3 × 0.8 cm  
Budapest District III, Flórián Square, Thermae Maiores (M. Kaba 1981–83)
- 68 *Bowl fragment* (Fig. 11, 68). Side fragment of a bowl. The external ceramic surface is brick yellow (7.5YR 7/6); the inner side is grey (5Y 7/1), covered with olive green/yellow (5Y 6/6) glaze. Inv. no. 89.1.1013.1.  
5.3 × 3.8 × 0.8 cm  
Budapest District III, 6–12 Kórház Street (K. Szirmai 1987–88)
- 69 *Bowl fragment or mortarium* (Fig. 11, 69). Side and base fragment of a brick-yellow (2.5YR 6/6) bowl with a hole in the bottom, painted in dark red (2.5YR 5/6) and coated in dark yellow (7.5YR 6/8) lead glaze. Inv. no. 98.76.3432.1.  
Db=5.6 cm, 7.4 × 6.2 × 0.8–1.2 cm  
Budapest District III, Flórián Square, atrium House (Átriumos ház; L. Kocsis 1984)
- Mugs, cups, and mugs with no handle*
- 70 *Mug, reconstructed* (Fig. 12, 70). Grey (5Y 7/1) with green (5Y 6.5/4) lead glaze. Inv. no. R.2527.  
H=8.2, dr=6.3, db=3.7 cm  
Budapest District III, Old Buda (Óbuda), around 1930  
Reference: Zsidi et al. 2009, Cat. 1363
- 71 *Mug fragment* (Fig. 12, 71). Rim, neck, and side fragment of a vivid brick-yellow (2.5YR 7/8) and grey (7.5YR 5/1) biconical cup with a B-profile band handle made of mica-tempered clay, covered with pale olive green (5Y 7.5/4) lead glaze. The acid used for cleaning the find had eaten into the surface, so the remains of the glaze and the ceramic surface appeared as a uniform grey surface. Inv. no. 91.1.1214.1.  
Dr=13 cm, 8.5 × 7 × 0.4–0.8 cm  
Budapest District III, Mocsárosdűlő, trench no. XIII (E. Mártity 1987–88)
- 72 *Mug or cup fragment* (Fig. 12, 72). Rim and side fragment of a mug or cup with a somewhat outcurving rim profiled with a circular groove and slightly biconical body. The external ceramic surface is brick-yellow (5YR 6/8), the inner side is grey (5YR 6/1), the vessel is coated with a pale green-yellow (5Y 7/8) glaze. Inv. no. 91.1.1234.1.  
Dr=13 cm, 4.5 × 3.7 × 0.4 cm  
Budapest District III, Mocsárosdűlő, trenches no. XIII–XIV from a soil layer with brick debris (E. Mártity 1987–88)
- 73 *Mug or cup fragment* (Fig. 12, 73). Rim and side fragment of a brick-yellow (2.5YR 7/6) mug or cup with a vertical rim, made of fine clay. The outer side is decorated with horizontal, circular grooves. Both sides are coated: the inner with olive green (5Y 6/2.5), the outer, with brownish yellow (7.5YR 5/8) glaze. Inv. no. 91.1.1364.1.  
Dr=8 cm, 5.2 × 3.7 × 0.5 cm  
Budapest District III, Mocsárosdűlő, trench no. XIII, section G, from between stones at a relative depth of 23 cm (E. Mártity 1987–88)
- 74 *Mug or small bowl fragment* (Fig. 12, 74). Rim and side fragment of a small brick-yellow (5YR 7/6) bowl or mug with a slightly outcurving rim; the outer and, partially inner surfaces are covered with yellow or pale brown (7.5YR 6/6, 6/8) glaze. Inv. no. 2000.8.2003.1.  
Dr=8 cm, 4 × 2.9 × 0.3 cm  
Budapest District III, 13–17 Dugovics Titusz Square (A. Facsády 2000)
- 75 *Faltenbecher, complete* (Fig. 13, 75). Mug with no handle, ribbed neck, dented body, and narrow base, covered with yellow (7.5YR 6/8) glaze. Inv. no. 2007.11.3.1.  
H=9 cm  
Budapest District III, 271 Bécsi Street (T. Budai-Balogh 2007)  
Reference: Budai-Balogh 2009, 93–100
- 76 *Faltenbecher fragment* (Fig. 13, 76). Side fragment of a grey (7.5YR 5/1)-greyish brown (7.5YR 5/3, 10YR 5/2) mug with a dented body, covered with dark green/brown (5Y 6/2) glaze. Inv. no. 98.95.435.1.  
3.2 × 5.5 × 0.4–0.9 cm  
Budapest District III, Solymár Street (L. Kocsis 1980)
- 77 *Beaker, complete* (Fig. 13, 77). Brick red (5YR 5/6) beaker with a short pedestalled base and a body decorated by circular, horizontal, narrow grooves; covered with brown (7.5YR 5/6) lead glaze. Inv. no. 2007.11.1.1.

7.7 × 6.6 cm

Budapest District III, 271 Bécsi Street (T. Budai-Balogh 2007)

Reference: Budai-Balogh 2009, 93–100

### Lamps

78 *Lamp, complete* (Fig. 13, 78). Grey (7.5YR 6/1) terracotta oil lamp with a hole between the wick hole and the base; covered with green-yellow (5Y 7.5/3) lead glaze. Worn. Inv. no. 98.101.475.1.

11.5 × 8.6 × 0.5–1 cm

Budapest District III, Laktanya Street (M. Németh 1974)

79 *Lamp fragment* (Fig. 13, 79). *Discus*, side, and base fragment of a brownish grey (2.5Y 6/2) terracotta oil lamp of hard ceramic material, covered with yellow-brown (2.5Y 6/4) lead glaze. Inv. no. 2000.21.1211.1.

Hf=2, dd=4.1, db=2.5 cm

Budapest District III, 62 Bécsi Street (T. Hable 2000)

80 *Lamp fragments* (Fig. 13, 80). Two fragments of a brick-yellow (7.5YR 7/6) oil lamp of undeterminable

type, made of fine clay. The external surface and, partially, the inside are covered with brown/brick-yellow (7.5YR 6/8) glaze. Inv. no. 2017.23.1348.1.

Db=3.7 cm, 6.5 × 5.7 × 0.6 cm

Budapest District III, 24 Szőlő Street, section 11, SNR 04/48 (P. Vámos 2017)

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### Notes

- 1 For further literature, see Varga 2010, 145–184; Symons 2012, 169–214. Glazed *mortaria* are discussed by Švaňa 2012, 169–179.
- 2 The area of the Roman military town lies on the territory between the Danube and today's Bogdáni, Hévízi, Bécsi, and Nagyszombat Streets; however, no evaluation must exclude its immediate surroundings (see, e.g., Vámos 2014, 12).
- 3 Bettina Kölcze: *Adatok a Pannoniai késő római mázas kerámiákhoz. Az intercisai temetők késő római mázas anyaga [Data to Late Roman glazed pottery in Pannonia. Late Roman glazed pottery in the cemeteries of Intercisa]*. MA dissertation, Pázmány Péter Catholic University, 2019.
- 4 K. Ottományi's studies on Roman settlements and cemeteries are key sources for terminology and classification; see, e.g., Ottományi 1999, 726–738; Ottományi 2004, 265–294; Ottományi 2007, 7–238; Ottományi 2015, 2–93; Ottományi 2018, 128–152.
- 5 The descriptions use some terms from the *Encyclopaedia of Hungarian Ethnography* and previous research; see Bónis 1942, 15; Bónis 1992, 23.
- 6 This study does not discuss mug-like vessels with three handles or none. For these, see Kölcze 2019, Cat. 21–22.
- 7 This type includes *Faltenbechers*. For sizes, see Bónis 1942, 15.

- 8 The ceramic record of Intercisa comprises handle-less jugs in quantities; see, e.g., Póczy 1957, 29–139; Teichner 2011.
- 9 Inv. no. MNM1.1950.102, from the Lázár Collection in Szombathely.
- 10 Inv. no. MNM.28.1908.248, from Dunaujváros-Öreghegy.
- 11 Inv. no. MNM.10.1951.83, site unknown.
- 12 Dating based on information from the Budapest History Museum Data Archive.
- 13 For a more precise classification, see the descriptions of the related types.
- 14 For analogies to two-handled bowls, see, e.g., Bánki, Cserményi 1992, 80, Cat. 88.
- 15 *Dellenbecher/Faltenbecher*; inv. no. MNM.89.1.909.3, MNM.1.1950.105, from the Lázár Collection in Szombathely.
- 16 The text refers to the number of the evaluated items presented here with a “Cat.” prefix.
- 17 The numbering of the catalogue is continuous, and the items were entered in increasing order of inventory number within their type/sub-type. The descriptions also comprise references and notes where applicable.
- 18 Budapest History Museum Data Archive; Mocsárosdűlő, between the Aranyhegyi–Határút–Gladiátor–Zsófia Streets, E. Máriy 1987–88, documentation by

- A. Facsády and E. Máriy, documentation ID: 1549–88, 1576–89. 20 Budapest History Museum Data Archive; documentation ID: 1340–84, 1421–84.
- 19 For a summary of the excavations at *Thermae Maiores* see Kaba 1991. 21 Budapest History Museum Data Archive; 3–11 *Pacsirtamező* Street, documentation ID: 1640–91.

## BIBLIOGRAPHY

- Bánki, Zs., Cserményi, V. 1992: *Glasierte Keramik in Pannonien*. Szent István Király Múzeum Közleményei D sorozat 212. Székesfehérvár.
- Barkóczi, L. 1992: *Frührömische glasierte Keramik in Ungarn*. In: Bánki, Zs., Cserményi, V. (ed.), *Glasierte Keramik in Pannonien*. Székesfehérvár, 7–35.
- Bónis, É. 1942: *A császárkori edénművesség termékei Pannoniában (A Terra Sigillatakon kívül): A korai császárkor anyaga, I. kötet*. Budapest.
- Bónis, É. 1990: *A mázas kerámia Pannoniában – Die Glasierte Keramik in Pannonien*. *Archaeologiai Értesítő* 117, 24–38.
- Bónis, É. 1991: *Glasierte Keramik der Spät Römerzeit aus Tokod*. *Acta Archaeologica Academiae Scientiarum Hungaricae* 43, 87–150.
- Bru Calderon, M. 2011: *Spätantike glasierte Keramik aus der Grabung St. Pölten-Rathausplatz*. Ungedr. Dipl. Wien.
- Budai-Balogh, T. 2009: *Késő római sírcsoport az aquincumi katonaváros nyugati temetőjében*. *Ókor* 3–4, 93–100.
- Bugán, A. 2002: *Újabb kutatási eredmények az aquincumi lelőhelyű ólommázas serpenyők gyártásának körülményeiről – Neue Forschungsergebnisse über die Produktionsumstände der bleigliasierten Pfannen aus Aquincum*. *Communicationes Archaeologicae Hungariae* 2002, 93–113.
- Cvjetičanin, T. 2006: *Late Roman glazed pottery. Glazed pottery from Moesia Prima, Dacia Ripenses, Dacia Mediterranea, and Dardania*. Belgrade.
- Dági, M., Mráv, Zs. 2019: *A Seuso-kincs. Pannonia fénye*. Budapest.
- Fülep, F. 1969: *Későrómai temető Pécs-Geisler Eta u. 8. sz. alatt*. *Archaeologiai Értesítő* 96, 3–42.
- Gátfalvi-Delbó, G. 2019: *Brigetio településrendszerének kerámiaművessége*. Doktori dissz. ELTE Komárom (Kézirat). <https://doi.org/10.15476/ELTE.2019.268>
- H. Kelemen, M. 2008: *Solva, Esztergom későrómai temetői*. *Libelli Archaeologici ser. Nov. no. III*. Budapest.
- Kaba, M. 1991: *Thermae Maiores Legionis II Adiutricis*. *Monumenta Historica Budapestinensia VII*. Budapest.
- Kölcze, B. 2018: *A typology of the Late Roman glazed pottery of Pannonia*. *Hungarian Archaeology online journal*, Autumn 2018, 19–25.
- Kölcze, B. 2019: *Adatok a pannoniai késő római mázas kerámiához. Az intercisai temetők késő római mázas anyaga*. MA Szakdolgozat kézirat. PPKE. Budapest.
- Krekovič, E. 2010: *Late Roman glazed pottery in the cemeteries of the Pannonia Limes: Gerualata, Tokod, and Solva*. In: Margini, C., Sbarra, F. (eds.), *Late Roman glazed pottery in Carlino and in central-east Europe: production, function, and distribution*. *BAR International Series* 2068, 87–91.
- Lányi, V. 1972: *Die spätantiken Gräberfelder von Pannonien*. *Acta Archaeologica Academiae Scientiarum Hungaricae* 26, 53–213.
- Nádorfi, G. 1992: *Glasierte Keramik in den spätromischen Gräberfeldern Pannoniens*. In: Bánki, Zs., Cserményi, V. (eds.), *Glasierte Keramik in Pannonien*. Székesfehérvár, 45–51.



- Olgay, J. 2017: Római ólommázás kerámia a Barbaricumban. Adalékok a Maros völgyének kereskedelmi kapcsolataihoz. In: T. Gábor, Sz., Czukor, P. (eds.), Úton a kultúrák földjén. Az M43-as autópálya Szeged-országhatár közötti szakasz régészeti feltárásai és a hozzá kapcsolódó vizsgálatok. Szeged, 345–368.
- Ottományi, K. 1999: Late Roman pottery in the Dunabogdány camp – A dunabogdányi tábor későrómai kerámiája. *Antaeus: Communicationes ex Instituto Archaeologico Academiae Scientiarum Hungariae* 24, 333–373, 726–738.
- Ottományi, K. 2004: A Budakalász-Luppacsárdai őrtorony késő római kerámiája. *Studia Comitatus* 28, 265–294.
- Ottományi, K. 2007: A pátyi római telep újabb kutatási eredménye. *Studia Comitatus* 30, 7–238.
- Ottományi, K. 2011: Késő római mázas kerámia a budaörsi telepen. *Arrabona* 49/1, 263–290.
- Ottományi, K. 2015: A Visegrád-Gizellamajorban feltárt késő római kiserőd keletkezése a kerámia anyag alapján (déli épületszárny). *Archaeologia – Altum Castrum Online*, 2–93.
- Ottományi, K. 2018: Késő római kerámia a Visegrád-Gizellamajori erőd északnyugati saroktoronyából – Late Roman pottery from the north western tower of the Visegrád-Gizellamajor fort. In: Forisek, P., Szabó, Á., Szakács, J. (eds.), „Hadak útján”. A népvándorlaskor fiatal kutatóinak XXVII. konferenciája. Debrecen, 128–152.
- Ottományi, K. 2019: A pátyi temető római sírjai (Malom dűlő). Szentendre.
- Pirling, R. 1986: Römer und Franken in Krefeld-Gellep. *Rheine*.
- Póczy, K. 1957: Keramik. In: Barkóczi, L., Erdélyi, G., Ferenczy, E. et al. (eds.), *Intercisa II. (Dunapentele). Geschichte der Stadt in der Römerzeit*. *Archaeologia Hungarica* 36. Budapest, 29–139.
- Symons, P. R. 2012: A brief history of the ceramic mortarium in Antiquity. *Journal of Roman Pottery Studies* 15, 169–214.
- Švaňa, K. 2012: Basic characteristics of the Late Roman glazed mortars from the auxiliary fort at Iža, Bridgehead of Brigetio. In: Dyczek, P. (ed.), *Novensia* 23. Warszawa, 167–179.
- Teichner, F. 2011: Die Gräberfelder von Intercisa II. Die Altfunde der Museumsammlungen in Berlin, Mainz und Wien. In: Wemhoff, M. (ed.), *Museum für Vor- und Frühgeschichte. Bestandskataloge* 11, Berlin.
- Topál, J. 1993: *Cemeteries of Aquincum, Pannonia. The Western Cemetery, Bécsi Road I.* Budapest.
- Topál, J. 2003: *Roman Cemeteries of Aquicum, Pannonia. The Western Cemetery, Bécsi Road II.* Budapest.
- Vámos, P. 2014: *Az aquincumi katonaváros fazekasipara*. Doktori disszertáció. ELTE, Budapest.
- Varga, G. 2010: Roman mortaria from Salla. *Acta Archaeologica Academiae Scientiarum Hungaricae* 61, 145–184. <https://doi.org/10.1556/AArch.60.2009.2.6>
- Vári, A. 2011: Néhány római mázas kerámia a Dél-Alföldön. *Békés Megyei Múzeumok Közleményei* 34, 93–12.
- Zsidi, P., Hárshegy, P., Vámos, P. (eds.) 2009: *Aquincumi Látványraktár – Visual Store at Aquincum*. Budapest.

## KÉSŐ RÓMAI MÁZAS KERÁMIÁK AQUINCUMBÓL – ELŐZETES TIPOLÓGIAI OSZTÁLYOZÁS

### Összefoglalás

A mázas kerámia már a Kr. u. 1. században megjelent Pannoniában. Nagy része még import áruként érkezett, és a század második felében, illetve a 2. század elején kezdődhetett meg helyi gyártása (Bónis 1990, 24). Aquincum területéről ismert olyan műhely, amely vélhetőleg kora római mázas kerámiá-

kat, pontosabban egy sémára épülő mázas paterákat, pateranyeleket gyártott (Bugán 2002, 93–95). A mázas kerámia gyártása a késő római időszakban lendült fel igazán (Bónis 1990, 29–35), olyannyira, hogy pannoniai viszonylatban igen nagy mennyiségben állították elő őket. Ilyen műhelyek ismertek többek

között az egykori Castra ad Herculem (Pilismarót) vagy akár Sirmium (Sremska Mitrovica) területéről is. Az Aquincumból és környékéről előkerült leletek száma is bizonyítja (1. kép), hogy viszonylag nagy számban ismert késő római mázas kerámia. Ennek ellenére műhelyt, amely ezeket a termékeket gyártotta volna, egyelőre nem tudunk lokalizálni (Vámos 2014, 155–156). A feldolgozott tárgyak nagy része az egykori katonaváros zónájából került elő.

A késő római mázas kerámiák a Kr. u. 3–5. század meghatározó leletcsoportját alkotják, nemcsak Pannoniában, más provinciák anyagában (Cvjetičanin 2006) és a Római Birodalom határain kívül eső területeken is megjelennek (Vári 2011; Olgyay 2017).

A tárgyakon különböző színű ólomházbevonatok jelennek meg, egyfajta „lyukacsos” mázréteget képezve az edény felületén. Korábban próbálták összefüggésbe hozni a máz színét az edényformával, ezáltal a máz színe alapján keltezni, de ennek lehetőségét viszonylag hamar megcáfolta a kutatás. Az edények tipológiája a tárgyak formai jegyein alapszik. Miközben következtetéseket vonhatunk le a díszítések, illetve az ólomház színe kapcsán is, ezek nem képezhetik egy időrend felállításának alapjait. Megjelennek ugyan jellegzetes formákra jellemző színek és díszítési módok is, de ezek a kronológiai elkülönítést nem minden esetben segítik, azonban az információk által levont következtetésekkel könnyebb lehet az időrend megállapítása.

A kerámia anyagát oxidációs, illetve redukációs égetéssel égetik ki. A szintelen alapmáz összetételéhez képest a mázak különböző anyagokkal, mint a réz-oxid, mangán és vas-oxid, színezhetőek, így kapjuk meg a jellegzetes olívaöld vagy akár olívasárga ólomház színeket. A színek nagymértékben függhetnek mind a hozzáadott anyagoktól, mind a kiégetés módjától. Általában a tárgyalt kerámiacsoportot hozzávetőleg 900–1000 fok között égették ki (Cvjetičanin 2006, 17). A mázszínek változásáról a különböző égetési móddal készített edényekkel kapcsolatban készültek értekezések (Ottományi 2015, 32–34). Eredményeik teljes körű bizonyításához mindenképpen pontosabb adatokkal szolgáló archaeometriai módszerek alkalmazása is szükséges. Az ólomházak összetételének vizsgálata kiemelkedően fontos lesz a későbbiek során.

A tanulmányban a hagyományosabbnak mondható kerámiaformák, típusok kerülnek górcső alá, amelyeket leginkább analógiák figyelembevételével datálunk, valamint Pannonia egyéb területeiről, illetve a provincián kívül előkerült kerámiák segítsé-

gével értelmezünk. T. Cvjetičanin monográfiájában a Moesia Prima, Dacia Ripensis, Dacia Mediterranea és Dardania területéről előkerült mázas kerámiákat gyűjtötte és dolgozta fel, miközben műhelykérdésekre is kitért. Az aquincumi lelőhelyű darabokat ezekkel is párhuzamba tudjuk állítani. Fontosak az előkerülési körülmények, hiszen segítségükkel akár 10-20-30 év pontossággal is datálni tudunk a 4. századon belül. A feldolgozás során nagy hangsúlyt fektettünk a Nádorfi G. tipológiai táblázatában definiált tárgytípusok datálására (Nádorfi 1992, 46, 49).

A kerámiák egy része temetőből származik, többségük ép edény, amelyek típusokba sorolása a töredékekkel ellentétben egyszerűbb. A tanulmányban nem célja minden Aquincumból eddig feldolgozásra került késő római mázas kerámia bemutatása. A teljesség igénye és a nem releváns darabok feltüntetése nélkül a dolgozatban összesen 9 típust (I–IX. típus; 2. kép–12. kép) ismertettünk, 80 darab tárggyal. A főtipusok mellett néhány esetben altípusok is meghatározásra kerültek, de ezeken belül kisebb csoportok egyelőre nem alakíthatók ki az anyagban.

Nádorfi alapul szolgáló tipológiájából számos olyan típus kimaradt, amelyek, bár nem gyakran kerülnek elő sírokból, a mindennapi életben használatosak voltak. A benyomkodott falú edény, a *Faltenbecher* (Kat. 75; Kat. 76; 13. kép 1; 13. kép 2) az egyik ilyen típus, egy másik a fül nélküli korsó (Kat. 1; 2. kép 1). A hagyományosabb típusok közé tartoznak még a mortariumok is. Utóbbiak tipológiája a jelen anyagban egyszerűnek mondható, általában a galléros peremű formák érvényesülnek (6–8. kép). Vélhetőleg már a 3. század végén megjelennek a dörzstálak ólomház kivitelben (Ottományi 2015, 27).

Az aquincumi anyagban leggyakoribbak a korsók (I.1–3 altípus; Kat. 1–40). Mindezek mellett kancsók, illetve palackok kerültek meghatározásra (II. és III. típus), amelyeknek töredékeit néhány esetben nem lehetett megkülönböztetni a korsókétól (Kat. 15; Kat. 32). A dörzstálak, illetve különböző peremkialakítású tálak (6–11. kép) töredékei is viszonylag nagy mennyiségben kerültek elő (Kat. 54–69). A bögrék, csészék, poharak (Kat. 70–77) között egy ép *faltenbecher* pohár (Kat. 75), és egy kis pohárka (Kat. 77) is feltűnik. A mécsesek alkotják jelen tanulmány utolsó típusait (Kat. 78–80). Egy bizonytalan töredék (Kat. 80), a többi két darab pedig vélhetőleg firmamécseshez tartozott (Kat. 78–79).

A bemutatott tárgyak kora leginkább a 4. századra tehető, egyes daraboknál vélhetőleg a 3. századi

megjelenés is lehetséges, ilyen típus többek között a festett oldalú, illetve festett peremű dörzstál (Kat. 43; Kat. 47). A legkésőbbi formáknak a feldolgozott anyagból legnagyobb valószínűséggel a lóherekiöntős korsókat tekinthetjük (2. kép 2; 3. kép 12), melyek a 380-as évektől tűnnek fel az analógiák alapján.

Jelen tanulmány egy hosszabb kutatási folyamat egyik első lépése, melynek keretében Aquincumból és környékéről származó leleteket dolgozunk fel. A munka része egy olyan tipológia felállítása, mely az ismert típusokat tartalmazza és a késő római időszakon belül minél szűkebb időszámban datálja.