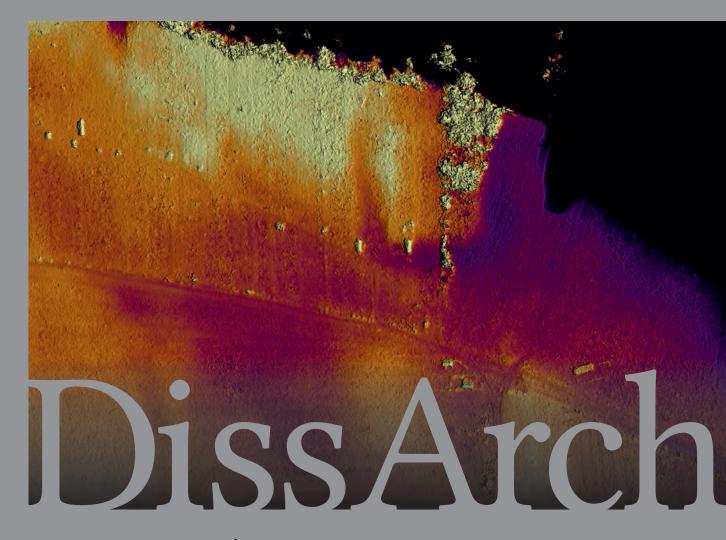
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Household pottery of an urban noble house and craftsmen in Visegrád

Late medieval pottery finds from 5 Rév Street

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Abstract: In 2003-2004, the King Matthias Museum in Visegrad conducted archaeological excavations at 5 Rév Street, Visegrád. The fieldwork brought to light, besides an already known late medieval house and a glass workshop of outstanding importance, some more buildings and the excellently preserved part of a street pavement. The study presents the pottery finds obtained by the excavations.

Keywords: Late Middle Age, household, glass workshop, pottery

Introduction

Visegrad played a prominent role as the royal seat of the medieval Kingdom of Hungary throughout the Middle Ages. The settlement is situated on the line of the Roman limes; its place has always been an important spot through pre-modern times, even before King (Holy) Stephen I established the Hungarian state at the turn of the second millennium AD. It has owed its importance primarily to its excellent location, a well-protected and safe place between the Pilis and Börzsöny mountains, which has been, at the same time, easy to access along the Danube and, thus, a trade hub. In the Middle Ages, settlements, castles and churches were founded in the town, making it one of the most significant places in the kingdom. Based on the research carried out so far, the large stone building at 5 Rév Street provides important data for the topography and history of Visegrád. Probably a nobleman's house stood on the plot once; it was later converted into two glass workshops. The processing of the pottery finds may yield new data on the eating and cooking habits of the town's noble residents and analogies to the artefacts from the royal buildings while also increasing the number of finds known from the medium regni. Overall, it offers a glimpse at the aspects of life in a noble house and a glass workshop of European significance. Besides, the unearthed features contribute with new information to almost every period of history of the town.

The history of the town

Rév Street is located in the centre of both medieval and modern Visegrád. It was situated at the centre of the so-called 'Hungarian town', south of the other, separate part, the so-called 'German town', of the 14th-century settlement. According to persisting documents, this early phase is characterised by an (ethnic?) duality of the two parts. The researched plot and its closer area provide

Vác and Buda show such a duality at these times (Mészáros 2009b, 63). 1

direct data on the distribution of the residential plots of land in medieval times and the rural residential buildings of the period.² Originally, the almost entirely excavated site was located in the centre of the medieval royal town, at a short distance from the main street and the ferry (Fig. 1).

The area bordering the present-day town centre became intensively settled after King Béla IV had the first castle erected there; therefore, it can only be evaluated in the context of the royal residence. The nearby fortress and settlement were established in the mid-13th century at the latest.³ The first written mention of the town dates back to 1285, when King Ladislaus IV donated the village of Maros, on the opposite bank of the Danube, to the residents living under Visegrád Castle.⁴ Nevertheless, the town's origins date back to earlier times, most probably when the population living under the castle was settled down in a designated area at the feet of the walls.

During the turmoil following the extinction of the first owner family, the fortress changed hands several times and finally became the property of Máté Csák. King Charles I recaptured the fortress in 1317 and, after consolidating his power, moved the royal court from Temesvár to Visegrád in 1323.

After a long struggle against the lords of the provinces, he made the Castle of Visegrád his seat.⁵ The large-scale construction works in the lower and upper castles in the first half of the 14th century are strong evidence of royal presence.⁶ The initial boom and prosperity of the town were also due to the royal court following the king and moving to Visegrád. In the second half of the 14th century, the well-organised settlement already had a town council and an advanced literate burgher class. Several ecclesiastics issued charters in the town, some in their own houses.⁷ Among others, the king himself had a large two-storey stone house there, a forerunner of the later royal palace.⁸ The town had its heyday under the reign of Louis the Great, more precisely between the second half of his reign and the first two decades of the reign of Sigismund of Luxembourg. It was one of the most important places of the *medium regni* then, including luxurious residences for the monarch and the court officials and their families. The continuous presence of the court was interrupted in the mid-14th century: the king transferred his seat back to Buda⁹ and dated his charters from there from 1346. One reason for that might have been a demolishing fire in 1345, which, according to written sources, swept through the town rapidly. As attested by the excavated plots in Rév Street, the following period also witnessed a major structural change in the architecture of the town.¹⁰

In the first decades of the 15th century, the royal court moved to Buda for good, and the castle, together with the town, became a secondary residence. To prevent its decline, King Sigismund of Luxembourg ordered the renovation of the town's houses by a decree, while later, King Matthias had Saxon families settled there. However, these measurements did not reach the desired effect. Eventually, the town became home to a high-class residence, but the court clerks left their houses and craftsmen serving the royal palace replaced them.

- 2 Mészáros 2009b, 63.
- 3 Szőke Buzás 1990, 121.
- 4 BÁRTFAI 1938, 114; MON. STRIG. II. 207–208; National Archives of Hungary, Database of archival documents of medieval Hungary (Catalogue number: 273158).
- 5 Iván 2004, 24.
- 6 Iván 2004, 25.
- 7 Mészáros 2009b, 25.
- 8 То́тн Buzás 2016, 142.
- 9 Iván 2004, 26.
- 10 Mészáros 2009b, 27.
- 11 Mészáros 2009b, 59.
- 12 The residential building at 5 Rév Street is a good example.

The processing of the finds has made it possible to trace the development of the site from its founding, i.e., the wooden houses of the first inhabitants, to the 15th-century glass workshop that served the royal residence.



Fig. 1. The topography of the late medieval town

Research history

While systematic research in the town, starting with the excavations of the royal palace and the castle complex, began only in the years following the Second World War, related historical data were published as early as the late 19th century by Gustáv Wenzel¹³ and József Viktorin.¹⁴ Wenzel's regests were supplemented by Dezső Csánki, and János Schulek conducted the first excavations in the town in the same decade.¹⁵ In the mid-20th century, the body of available historical data became expanded considerably due to the work of László Makkai.¹⁶ The most recent evaluation of the history and topography of the medieval town was written by Orsolya Mészáros.¹⁷ Mátyás Szőke started large-scale excavations in the area of the town in the 1980s; Gergely Buzás joined him in the 1990s.¹⁸ The summary of their results was published in 2014.¹⁹ The number of publications on the artefacts obtained by these excavations is not prominent.²⁰

Archaeological features on the plot (Fig. 2)

The trench opened at the street front of the plot at 5 Rév Street included the remains of an approximately 7 m long wooden building (Fig. 3), the width of which could not be determined. The destruction layer contained pieces of charred beams and the remains of a rammed clay floor. Based on the preliminary processing of the findings and field observations, the building could be dated to the first half of the 14th century.

A section of a 2.4 m wide street with a pavement made from regular stones (Fig. 4) was discovered north of the remains of the timber-framed building and 20 cm above its floor at 106.25–106.32 a.B.s.l., 50–80 cm below the present street's walking surface.

A stone cellar came to light south of the wooden building (Fig. 5); the trench covered its southern wall from corner to corner. The cellar had a window on the southern side and a doorway with a section of the cellar's foundation wall on the eastern one. The surviving wall section appeared at the same level as the pavement unearthed at the street front (at 105.80-106.25 a.B.s.l.), while its rammed earthen floor was found almost 3 m lower (at 103.52 a.B.s.l.). In summary, the foundations of a 12×8 m house with a solid basement became outlined in the excavation area.

The stone building in the southwestern part of the plot persisted in the best condition of all unearthed monuments (Fig. 6). The house with the highest rising walls was renovated several times until the 20th century. In its late medieval form, it was a four-room building with a northwest extension. The residential building was transformed into a magnificent glass workshop in the 15th century. The huge workshop is unique in Europe; it was published in detail by Orsolya Mészáros.²¹

- 13 Wenzel 1868, 395-412.
- 14 VIKTORIN 1872.
- 15 Mészáros 2009b, 15-16.
- 16 Dercsényi 1958, 79-81, 397-399.
- 17 Dercsényi 1958.
- Besides Gergely Buzás and Mátyás Szőke, excavations have been conducted by Péter Gróf, Dániel Gróh, István Kováts, József Laszlovszky, Orsolya Mészáros, and András Pálóczi Horváth.
- 19 Buzás et al. 2014.
- 20 For the glass artefacts, see Mészáros 2010; for the items made of bone, see Gróf Gróн 2004; for the newest pottery, see Bárdi 2014.
- 21 Mészáros 2010, 675-690.

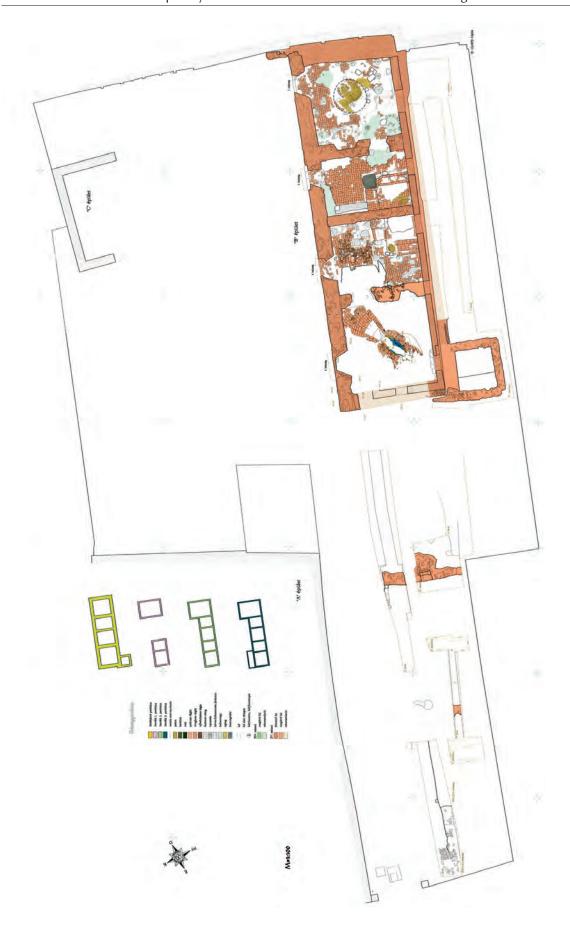


Fig. 2. Overview of the excavated area with the archaeological remains



Fig. 3. Layers of the timber-framed house and the remains of a charred wooden beam



Fig. 4. Excavation trench with the timber-framed house and the stone pavement in its end







Fig. 5. The cellar with the frame of a window

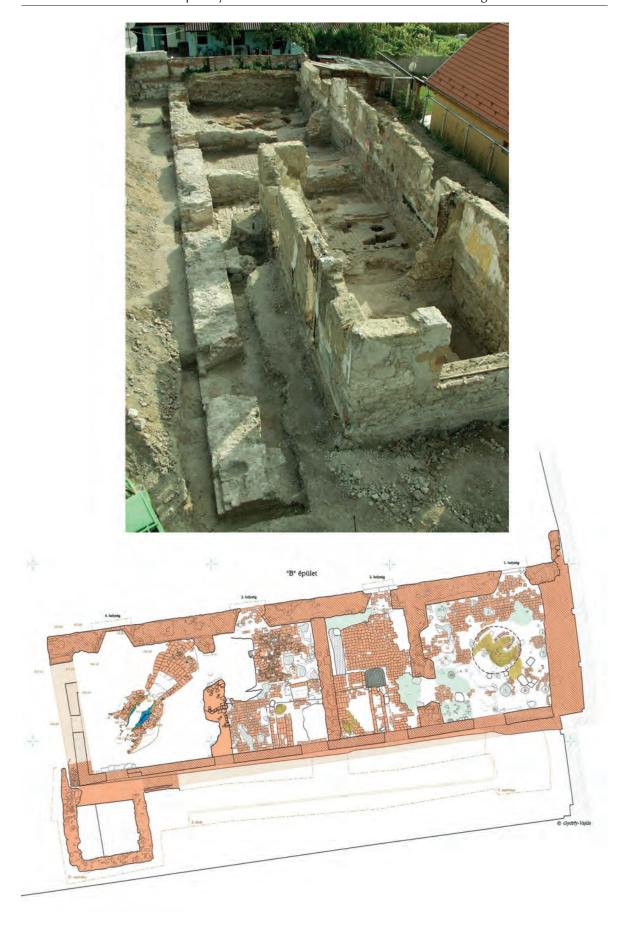


Fig. 6. The large building and its layout

Kitchen pottery

By function, the vast majority of the finds belong to cooking vessels. Having been used daily, such vessels wore out or broke rapidly, getting useless quickly, which explains their large quantity in the archaeological record. Like today, these pots were made and sold in different qualities; besides, potters of the time crafted various cooking vessels in terms of colour, material, and firing technique everywhere, including Visegrád. The pots, pans, and lids, classified by type of material, are presented below.

White, yellow-white pots

All but a few white and yellow-white pots were fast-wheeled; they came with a variety of rim types. Therefore, and because the pottery record of the site contained very few with a full profile, such pots are classified here primarily by rim shape rather than vessel form. The technical characteristics and decoration are described in the presentation of the various rim types. First, the different pot rim types are classified, and their joint discussion is presented in the second part of the paper.

Slightly everted, downward-rolled rims

This type includes three well-fired potsherds made of sand-tempered clay, their body adorned with dense but shallow circular ribs (Fig. 7.1–3). The potter formed the rim by narrowing down the shape of the vessel from the neck upwards while reducing the thickness of its wall (the upper part of the neck is thinner than the wall of the pot of all three fragments). The excess material thus obtained was rounded at the rim and rolled downwards around the outer wall of the vessel, albeit the lips on the fragments in focus have only slightly been rolled down, and the rims do not touch the outer side of the neck.

Slightly everted, simple rims

The number of simple, vertical rims does not exceed that of the everted pieces. Only two fragments could be classified into this group (Fig. 7.4–5). They were made of sand-tempered clay and fired yellowish-white; their bodies are decorated with dense, shallow ribs. As the tempering and quality of the clay they were made of do not differ from the types described below, the rims cannot be regarded as archaic. The simplicity of their shaping suggests a long-lived wheeling method. Both vessels have a slightly curved body, probably reaching their maximum width at the upper third of the body.

Barely everted, rounded rims

A small proportion of white and yellowish-white pots had rounded and inward-curved, often inverted C-shaped rims. Most of the fifteen specimens are yellowish-white while some are pure white (Fig. 8.5, Fig. 9.3–4, Fig. 10.4). These differ from the 'nailhead' rims (discussed below) in that the outer side of the rim is always rounded.

Two more fragments were also classified into this group, which, although having a segment rim, belong here because of their shape (Fig. 10.3–4). Almost all were made of fine, finely tempered clay and fired carefully.

'Nailhead' rims

This type includes the second most fragments. Unfortunately, it was not possible to identify any full-profile pots with this type of rim, which Hungarian literature calls—after the rim profile—'nailhead'. Most vessels were made of sand-, while some of fine gravel-tempered clay, all fast-wheeled.

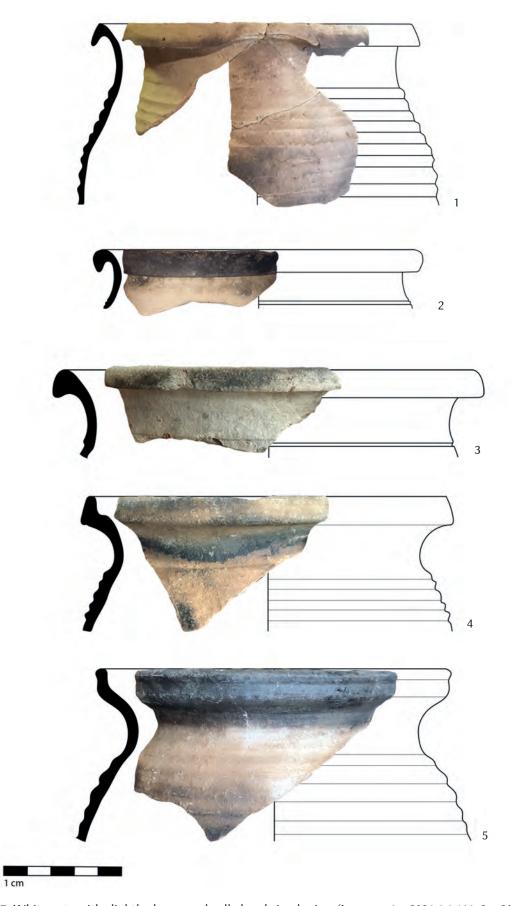


Fig. 7. White pots with slightly downward-rolled and simple rims (Inv. nos: 1-2021.1.1.111, 2-2021.1.1.74, 3-2022.1.5.23, 4-2022.1.7.17, 5-2022.1.8.28)

The side of the rim of some were flattened, while a slightly elongated variant had a rim with a tapered vertical top (Fig. 12.2). Their decorations do not differ from other white pot types: the entire surface of most is slightly ribbed, while two feature deeper and slightly uneven ribbing (Fig. 12.3–4). The rim diameter of most ranges between 18 and 23 cm, with pieces with narrower mouths missing from the find material.

Pots with double-groove or double-segment rims

The surface treatment, decoration, and size of the rims with a double groove also show great variation. All pieces were made of clay tempered with fine, micaceous sand. The rim sizes also vary: smaller pots range between 13–14 and 16 cm, while medium to large ones (the bulk of the type) from 18 to 25–26 cm. The rim was formed by creating a vertical lip above the flaring neck first and segmenting its outer side in the following step.

The two pots with full profiles are large, their widest part being the shoulder at the upper third of the body (Fig. 15). One of the most interesting and unique finds among white pots is a piece with a slightly articulated or segmented wide conical rim different from the other pots' (Fig. 15.1). The body bears production traces which the maker did not care to remove, nor did he smooth the surface sufficiently. He decorated the vessel body with bundles of shallow circular grooves arranged in unevenly spaced horizontal zones between the neck and the bottom.

The few vessels that persisted relatively intact provide more information about shape. The shape of almost all wide-bellied, densely ribbed, white pots differs from that of the yellow-white or yellow pieces (Fig. 16.1–3, Fig. 17.1). These were made of clay with a high kaolin content and tempered with fine sand.

A variant of double-segment rims has its top flattened (Fig. 18.5–6), gently sloping inwards, probably to facilitate the proper placing of the lid.

Fragments with a slightly segmented rim, similar in design to early modern collared-neck types (Fig. 24.3–4), were classified as a separate variant. Their bodies have been shaped on a relatively fast wheel, so their outer surface is neatly smoothed. Their raw material is similar to the pieces discussed above, but their walls are thinner. Their decoration sets them apart from other pots with articulated rims: their entire bodies are covered with a more or less regular, thin, incised, circumferential spiral. A fragment with a similar decoration was also classified here (Fig. 25.1).

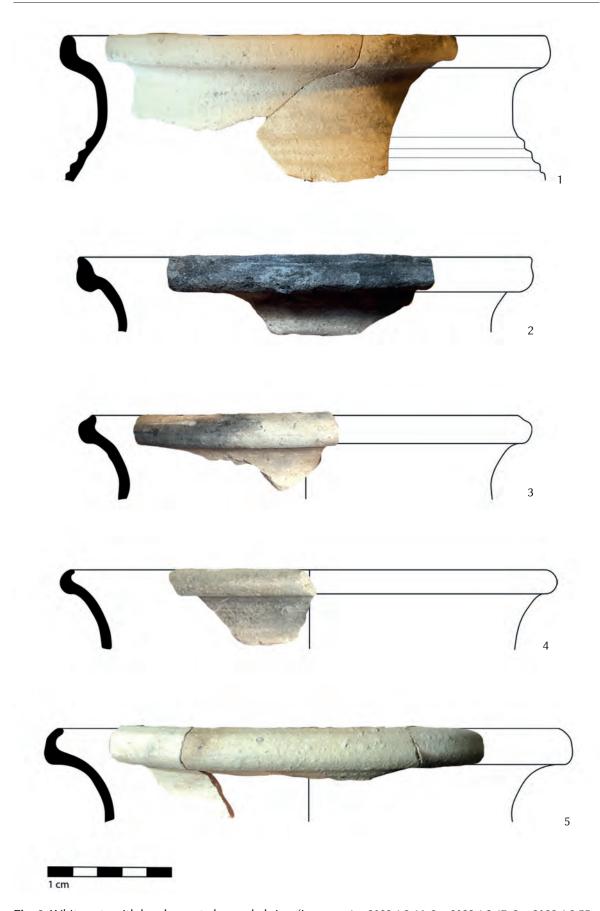
Pots with a triple groove or multiple-segment rim

One of the largest pot variants comprises specimens with a triple- or multiple-segment rim (Figs 20-24). The category comprises almost the same number of fragments as the double-segment variant but only one vessel with a full profile. The ceramic of the fragments is well-fired, hard, tempered with sand and, in some cases, mica. As with other types of white pottery, the mouth size is quite varied, and several vessels have a band- or oval-profile handle attached to the rim.

A yellowish-white pot with a complete profile has a relatively elongated, shouldered body covered with shallow but regular grooves (Fig. 22.1). It is fast-wheeled, has thin and smooth walls, and bears a cross-shaped stamped potter's mark on the base.

Side and bottom fragments

The high number of white and yellowish-white pots in the catalogue is, apparently, due to the abundance of side fragments. Only some of the biggest pieces with different decorations and shapes have been included in the plates just to illustrate their variety (Figs 25–26).



 $\textbf{Fig. 8.} \ \textbf{White pots with barely everted}, \ \textbf{rounded rims (Inv. nos: 1-2022.1.2.46, 2-2022.1.2.47, 3-2022.1.2.55, 4-2022.1.2.53, 5-2022.1.2.43) }$

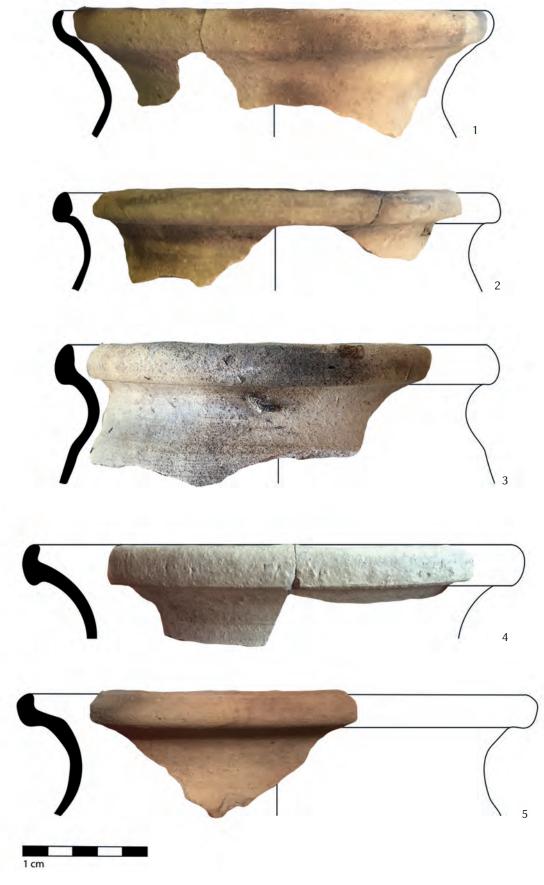


Fig. 9. White pots with barely everted, rounded rims (Inv. nos: 1-2021.1.1.103, 2-2021.1.1.104, 3-2022.1.10.5, 4-2021.1.3.11, 5-2021.1.2.27)

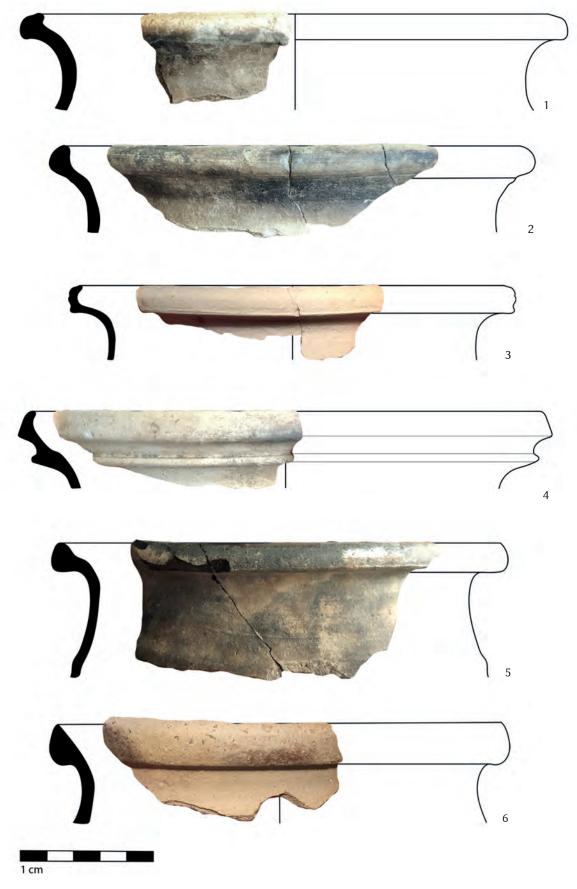


Fig. 10. White pots with barely everted, rounded rims (Inv. nos: 1-2022.1.4.11, 2-2022.1.5.3, 3-2021.1.1.171, 4-2022.1.7.20, 5-2022.1.5.24, 6-2021.1.2.24)

Almost all bottom fragments come from well-fired pots tempered with sand and sometimes fine gravel. Most are ribbed, and the forms show a relatively great variety. As all vessels have been fast-wheeled: their inner surfaces are relatively well-smoothed, and the ribs or grooves decorating their outer side are also regular. The inner side of the bottom of a few pots has no smoothing-related finger marks. Several pots were coiled manually and slow-wheeled later, allowing us to observe the presence of secondary wheeling in the pottery record (Fig. 27.1–3).

The dimensions of the pots can be deduced from the base diameters. The small (5–6 cm) base fragments of probably mugs or liquid storage vessels were not included in this group, where most vessels had a base between 8 and 11 cm in diameter.

Potter's marks

Stamped potter's marks—a positive equal-arm cross in each case—have been identified on the bases of two vessels (Fig. 22.1, Fig. 32.4). The positive pattern indicates that the vessel was placed on a plank with the engraved negative of the 'stamped' pattern to dry. Making such a pot probably required more attention; therefore, they could have been of higher value.

József Höllrigl was the first to process and publish an inventory of medieval pots with potter's marks on their base from the collection of the Hungarian National Museum, not only presenting a catalogue of finds with descriptions and drawings but also completing the list with similar vessels available in publications.²² The almost whole century spent researching and evaluating such finds resulted in making clear that vessels with a potter's mark on their base were common throughout almost the entire Middle Ages.

The oldest such vessels (with cross-shaped marks) are known from 10th-century context from the area of Zalavár.²³ According to scholarly literature, while marked vessels were the most common in the Árpád Age, they appeared everywhere in the area of the country from 10th-century *comes*'s seats²⁴ to 14th-century royal towns.²⁵ Upon evaluating the findings of Buda Castle, Imre Holl has also confirmed on white pots the survival of the custom of marking the vessels' base into the 15th-century.²⁶ In the *medium regni*,²⁷ late medieval white pots with potter's marks on their base have also been found in Vác²⁸ and Visegrád.²⁹ The two cross-marked sherds from 5 Rév Street resonate with the find material of the surrounding sites.

White lids

White and yellow-white kitchen pottery contains the most lids among the identified fragments. The material of most was tempered with sand, fine gravel, and, to a lesser extent, mica. The surface of many shows marks of secondary firing. Only two lids have a complete profile (Fig. 33.1–2), while the rest were side or button fragments.

White and yellowish-white lids were conical, joining the button in a straight line. Two fragments may come from bell-shaped lids with a wall thicker than the conical variant (Fig. 34.1, Fig. 35.4).

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22 HÖLLRIGL 1930, 142–169.
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- 23 Szőke 1994, 257.
- 24 Wolf 2002, 46-49.
- 25 BÁRDI 2014, 40.
- 26 Holl 1956, 189-190.
- 27 So far, no late medieval bottom-stamped vessel has been published from the excavations in Esztergom.
- 28 Mészáros 2016, 274, 50. tábla.
- 29 Bárdi 2014, 294, 38. tábla.

The lower part of the lid does not meet the flanged, flared rim at a sharp angle but in a curve with possibly several breaks instead (Fig. 33.1). Similarly, the top of the lid in Fig. 35.4 joins the button with a relatively sharp break or a groove.

All lids had round, disc-shaped knobs. Based on the pieces with almost full profiles, almost all lids were made for medium-sized pots as their rim diameters fall within the 14–17 cm range.

White pottery includes the most lids (in proportion with the predominance of white pots within the pottery record of the site). Bell-shaped and flat lids first appeared in Buda³⁰ with Austrian-type pottery and became common during the 14th century.³¹ Austrian-type pots and lid forms, their variants differing only in raw material, remained in use throughout the Middle Ages. As seen in Visegrád, grey, reduction-fired lids were mostly bell-shaped.³² In the German part of the medieval town of Vác, 14th–15th–century white lid types still included a flat variant with a round knob; however, the bell-shaped variant was more common.³³ Nándor Parádi made a similar observation regarding the proportions of flat and conical lids.³⁴

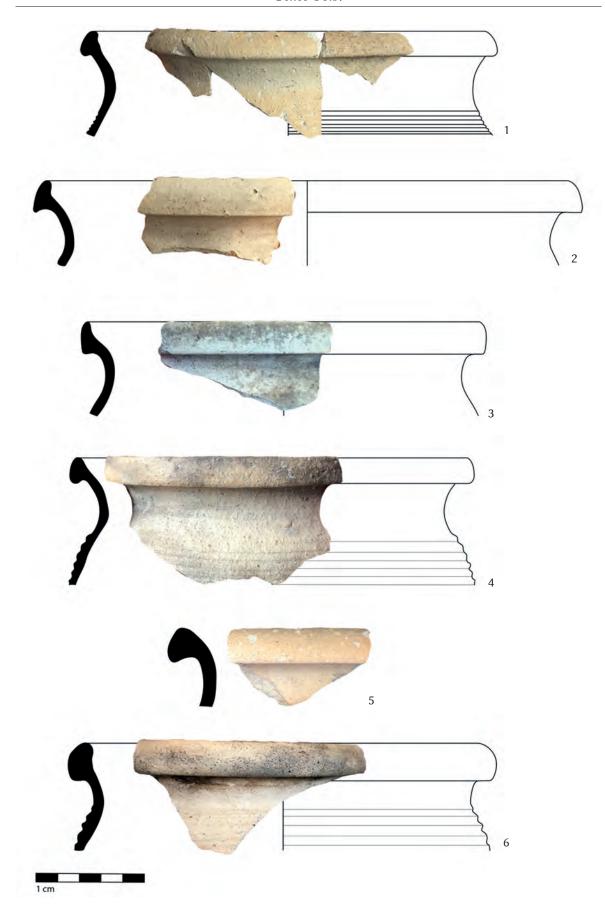
In summary, the lid types in the record of 5 Rév Street match the coeval types in the *medium regni*. While flat and bell-shaped variants are also present, conical lids with knobs in diverse shapes and sizes are predominant in the pottery record.

White and yellowish-white pottery – Summary

Based on the rim diameter of the recovered pieces, kitchen vessels made of white clay came in different shapes and sizes. The vast majority had double or multiple-segment rims. White pots include less frequent variants with a simple everted rim, while a significant proportion has a square-profile 'nailhead' rim, typical of medieval kitchen pottery. In his study about the findings from Buda Castle, Imre Holl observed that—besides the square-profile rim—the rounded and barely everted rim variant also appeared in the 14th century and remained in fashion throughout the Middle Ages. The same trend can be seen in central towns of the kingdom, including Buda, ³⁶ Esztergom, ³⁷ Vác, ³⁸ and Visegrád. ³⁹

White or yellowish-white cooking pots (made of white clay and oxidation-fired) first appeared in the 13th century. The coarse finish of the early pieces, resulting from manual shaping on a slow wheel, reveals how these vessels were made.⁴⁰ The early variants already had segment rims, and their bodies were almost always decorated with incised lines spiralling around the body. Nevertheless, the simple or slightly segmented rim form remained the main characteristic of such pots

- 30 Holl 1963, 372, 70. kép 3-4; Feld 1987, 263.
- 31 Holl 1963, 377, 75. kép 8; Imre Holl calls reduction-fired pieces identical in form to imported pots without exception 'Austrian' imports. It is now assumed that Hungarian potters could also produce this type of pottery, even in the same quality.
- 32 BÁRDI 2014, 329-332, 73-76. tábla; Polgár 2010, 18; Sarkadi 2010, 12.
- 33 Mészáros 2016, 105, Catalogue 5, 6, 7.
- 34 Parádi 1958, 155–161.
- 35 Holl 1963, 343.
- 36 Benda 2002, 546, 7. kép; Holl 1966, 20–21, Abb. 18–19.
- 37 PARÁDI 1973, 241, 10. kép.
- 38 Mészáros 2016, 258–259, 20, 22. tábla; Miklós 1991, 34.
- 39 BÁRDI 2014, 271–274, 15–18. tábla; Nyékhelyi 1994 6, 165; Polgár 2010, 15–16; Mészáros 2006, 151, 5. kép.
- 40 Holl 1963, 336.



 $\begin{array}{l} \textbf{Fig. 11.} \ \text{White pots with `nail head' rims (Inv. nos: 1-2021.1.1.230, 2-2021.1.2.77, 3-2021.1.3.18, \\ 4-2021.1.1.269, 5-2021.1.5.159, 6-2022.1.1.39) \end{array}$

throughout the 14th century. This type of pot was present in Buda Castle⁴¹ and all the towns mentioned above until almost the end of the century, while in the royal palace of Visegrád, the incised spiral-decorated variants had probably disappeared by the Sigismund Era.⁴² Apart from a few pieces, the diverse pot types with multiple segment rims in the studied pottery record differ from the most popular types of the Angevine Era. Fast-wheeled variants and ribbed decoration became predominant by the end of the 14th century. Although pots with a smaller base were generally slimmer, the 14th-century pot forms remained in use in the 15th century. While the turn of the 14th and 15th centuries did not see a radical change in ceramic production, there is a definite difference between the pottery of the Angevine Era and later periods. Research suggests that 14th-century forms remained in use and became improved later, their shape and decoration only changing slowly.⁴³ Apart from the 13th-14th-century pottery from the street pavement and the timber-framed house, the white and yellowish-white pottery from 5 Rév Street is predominated by fast-wheeled forms with diverse rims and regularly spaced shallow grooves on their thin-walled body, i.e., types characteristic of the second half of the 14th and the 15th centuries.

The rim diameter of segment-rim pots is usually larger than those with other rim types. The differences in shape and height could not be compared due to the small number of full profiles. As the pottery record of the site did not contain a cooking vessel (i.e., one bearing soot and secondary firing marks) or a similar type without cooking-related usewear traces with a narrow mouth (relative to its body and neck), no vessel could be identified as a container.

All vessels but one were fast-wheeled or wheeled after coiling to remove the related traces. The scarcity of slow-wheeled pots implies the introduction of new techniques in the local workshops. As pot shape and decoration change slowly, each variant may represent about 100–150 years; therefore, one cannot focus only on fashion-related changes in design with time but must keep an eye on technical development as well. Considering the trends of the era, one can only assume that potters in late medieval Visegrád commonly used the fast wheel. Technologically, the present finds are in strong contrast with the white, yellow and pink vessels from Visegrád, 1 Duna-parti Road, dated to the second half of the 14th century. Most coin-dated pottery in that material was coiled and secondarily wheeled, indicating that the pieces with marks suitable for analysing the applied technique from 5 Rév Street are likely younger. A similar tendency outlined from the finds of the royal palace: most vessels were slow-wheeled, but this technique became less popular by the end of the 14th century. Based on production method, rim shape, and decoration, most white and yellowish-white pots could be dated to the turn of the 14th and 15th centuries at the earliest, but most probably to the 15th century.

Petrographic analysis

Altogether, nine white pottery fragments were selected for analysis: a 14th-century red-painted liquid storage vessel (Sample 5/ 2022.1.5.31) and eight pots. The pots include two side fragments with incised lines, dated to the second half of the 13th century (Samples 1/2022.1.5.9; 22/2022.1.4,

- 41 Holl 1963, 374, 72. kép.
- 42 Kocsis 2010, 384.
- 43 Feld 1987, 263.
- 44 BÁRDI 2014, 269, 13. tábla, 302, 46. tábla.
- 45 BÁRDI 2014, 45; it is unlikely that 14th-century potters in Visegrád used a different technique to shape their vessels.
- 46 Kocsis 2010, 381.
- The differences in form, type, and chronological position, determined by traditional archaeological methods, are indicated in the discussion of the individual pieces.

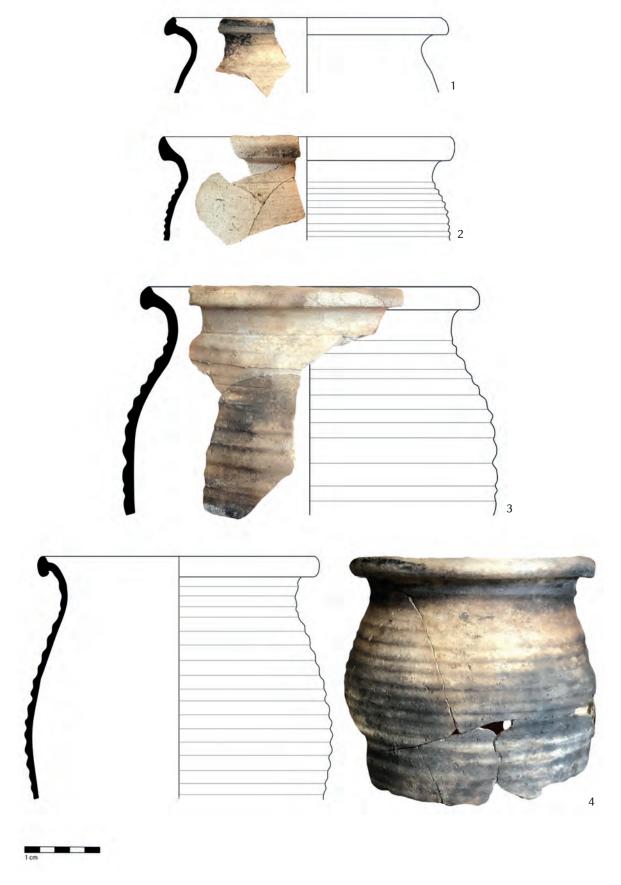


Fig. 12. White pots with 'nail head' rims (Inv. nos: 1-2022.1.4.31, 2-2022.1.2.44, 3-2022.1.5.2, 4-2022.1.8.1)

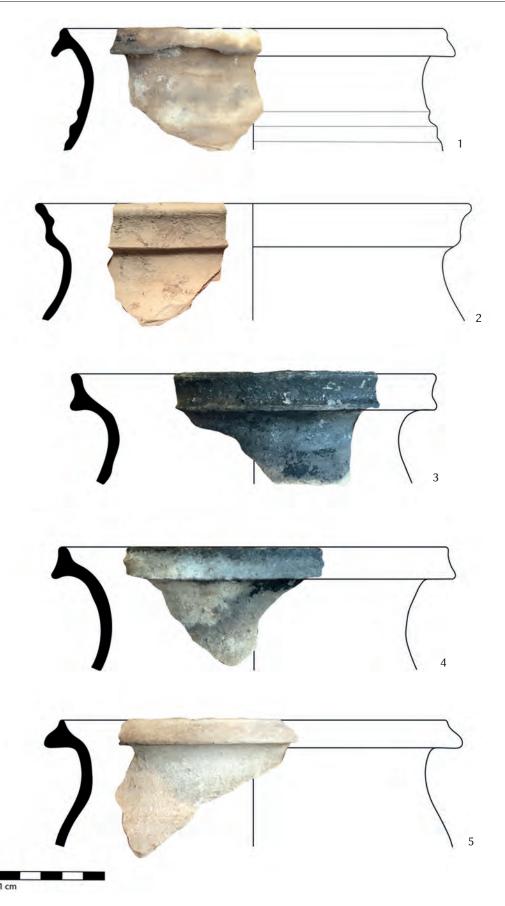


Fig. 13. White pots with double-segment rims (Inv. nos: 1-2021.1.3.55, 2-2021.1.1.172, 3-2022.1.4.1, 4-2022.1.4.2, 5-2022.1.4.3)

2022.1.5.46; 4/2022.1.5.28; 6/2022.1.9.18; 17/2021.1.1.360), and a 15th-16th-century fragment with a rounded and curved rim (Sample 18/2021.1.4.6).

Their raw material is fine, carbonate-free clay, usually tempered with fine, sometimes micaceous sand with muscovite flakes. By material, all fragments originate from one place, but their raw material may have been transported to Visegrád from a long distance. Assuming that the raw clay was transported to the town where a workshop processed it, the workshop must have relied on the same raw material deposit for several centuries.⁴⁸

White pottery was made from clay with high kaolin content, a raw material foreign to the geological environment of the *medium regni*. Recently, research has identified the nearest kaolin deposits in the southern and south-eastern parts of present-day Slovakia; however, ethnographic analogies suggest that the raw material for white pottery was transported to the central parts of the kingdom from the Gömör Region instead.⁴⁹ Recent results of the petrographic analysis of 12th–14th-century white pottery outlined a narrow area in north-eastern Hungary as a probable raw material source.⁵⁰

Pink pots

A small proportion of kitchen pottery are large pots fired to pink. These were classified into a separate group based on of their colour, characteristic shape, and decoration (Figs 36–37).

They were made of fine sand-tempered clay fired in oxidation to pink or pale brick red ceramic with a pink core, more porous than red ceramic. By its characteristics, this material is closer to white ceramic than red. The material is perhaps white clay (with high kaolin content) mixed with a small amount of other clay (with high iron oxide content) and tempered with very fine sand.

No pink pot with a full profile has been found during the excavation; however, based on some less fragmented pieces, these tall pots had a body that slightly narrowed downwards (Fig. 36.1–3, Fig. 37.1), while the marks on their bases indicate that they had been cut off the wheel with a wire.

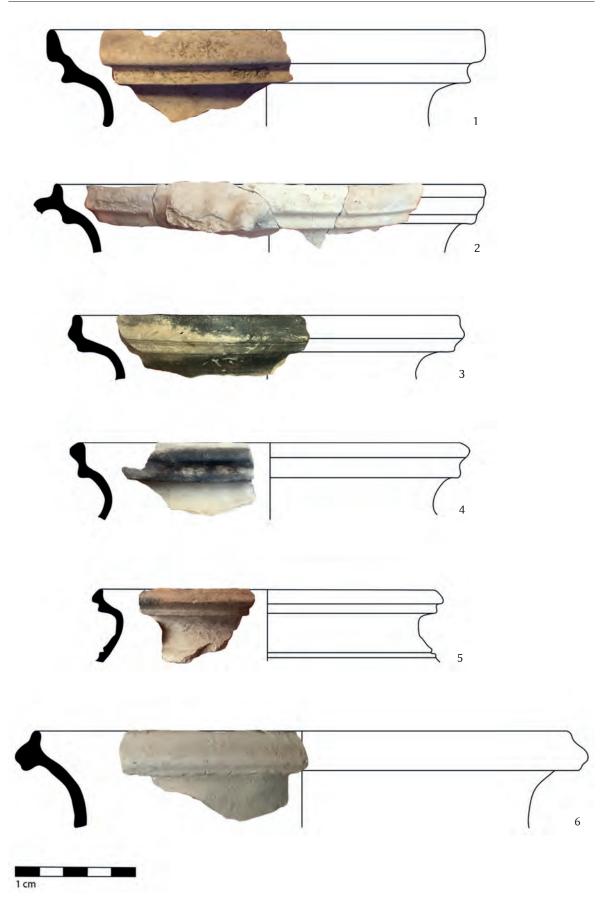
Most pots have 'nailhead' rims of the same width as the shoulder, while two have rounded rims rolled down towards the outside of the pot (Fig. 37.2,4). Rim diameters vary between 18 and 22 cm, and the pots' decoration is limited to two or three grooves or sharp ribs around the shoulder, a pattern borrowed from grey (reduction-fired) and imported Austrian pots.

Analogies to pink pots can be found amongst the late-14th-century finds of 1 Duna-menti Road in Visegrád. Bogáta Bárdi identified a group of pink pots with relatively porous material in her thesis.⁵¹ Unlike these, the pink pots from 5 Rév Street are characterised by higher-quality workmanship and regular decoration on their shoulders, based on which they could be dated to the 15th century.

Red pots

Akin to white ware, red pots were also classified based on rim type, while different decorations are discussed within each group. Differences in shape could not be analysed due to the lack of full profiles.

- 48 It must be pointed out that identifying the place of origin would require examining artefacts from the same pottery kiln or workshop. I am grateful to the staff of the National Archaeological Institute of Hungarian National Museum for carrying out the petrographic surveys.
- 49 Kresz 1960.
- 50 Simonyi 2010, 132.
- 51 BÁRDI 2014, 298-300, 42-44. tábla.



 $\begin{array}{l} \textbf{Fig. 14. White pots with double-segment rims (lnv. nos: } 1-2021.1.1.131, 2-2021.1.1.238, 3-2021.1.3.19, \\ 4-2021.1.3.20, 5-2021.1.1.9, 6-2022.1.1.32) \end{array}$

'Nailhead' rims

The category includes well-fired bright brick red (Fig. 38.2) and brown-red (Fig. 38.6) pots made of sand- and gravel-tempered clay, their bodies featuring a ribbed pattern similar to white pots' but much more even and shallow. One large vessel, most probably a storage vessel, differs from the rest as it has a rim of more than 30 cm in diameter (Fig. 39.1).

Rounded and downward-rolled rims

Four pots with rounded and downward-rolled rims are included in the illustrations. Their rim is usually 18–20 cm in diameter (Fig. 39.3,4), but two have rims over 35 cm (Fig. 39.5,6). They are pale red, with an incised wavy line and two grooves around the shoulder, a pattern resembling archaic Árpád Age pots (Fig. 39.5).

Rims with double-groove or double-segment rims

Most red pieces belong to this type.⁵² Akin to white and yellowish-white ware, red pots with double-grooved rims come in a great variety, the differences manifesting in the depth and sharpness of the articulation of the rim (to be discussed later).

Most pieces were tempered with sand and small pebbles and well-fired; their bodies are decorated with shallow, regular circular grooves starting at the shoulder. In one case, the grooves only cover the shoulder of the pot (Fig. 41.2). Only one such vessel had a full profile (Fig. 43.1): a 31 cm high pot with a conical double-segment rim and a shallow groove bundle on the shoulder that is wider than the rim. Its base bears the traces of having been cut off the wheel with a thin wire or string in circular movements from the far side towards the potter. The type includes variants with different rim solutions (Fig. 44), including flattened and almost horizontal (Fig. 44.4,5). In general, red ware rim fragments belong to large vessels, the smallest being 15 cm but most around 20 cm in diameter.

Multiple segment rims

Differing only in rim shape, their colour and raw material are identical to the previous type. The category includes vessels with a 15–18 cm rim diameter. Triple-segment rims are sometimes densely articulated and flared (Fig. 45.5,6). No fragment featured decoration.

Bottom fragments

Despite their large number in the pottery record, bottom and base fragments did not include an outstanding piece. Their diameter varies between 8 and 12 cm, and almost all have been cut off the wheel with a wire.

Side fragments

Side fragments make up the largest part of red pot finds. Only two pieces were informative enough to be included (with an illustration) in this paper: a large, shouldered one with groove bundles akin to segment rim pots' around the shoulder (Fig. 48.5) and the fragment of a dark red, densely ribbed medium-sized pot, typical of the late Middle Ages (Fig. 48.6).

52 Similar to white and yellowish-white pots with segment rims.

Glazed pots with a handle and 'nailhead' rim

The category includes pots with a 'nailhead' rim (Fig. 49), outside or both sides coated in white engobe, and covered inside with a (mostly dark green) lead glaze up to the edge of the rim. Based on secondary firing marks, they were used for cooking. Typologically, these vessels are small to medium-sized pots based on rim diameter and height. Besides engobe and glaze coating, their decoration includes dense ribbing, typical of medieval pots. Almost every piece has a flat or oval-profile handle attached to the rim. The excavation record only included a single small pot with a full profile; it has a rim 11 cm in diameter (Fig. 49.5).

Glazed pots with collared rims

A considerable part of the finds is fine sand-tempered brick-red pots with collared rims and soot marks on the side, attesting to their cooking function. Their inside was covered with a coloured lead glaze, especially brown, yellow, or green.

Sometimes, the collared rim is quite wide (Fig. 50.1), while in other cases, it is narrower and slightly segmented (Fig. 50.2–3). The edge of the collared rim of a single-handled pot is decorated with ruffles (Fig. 50.4) made by pinching the surplus clay at the top of the rim into waves and folding them down outside.

Lids

Red lids have the same material and colour as pots. In addition to slightly curvy conical lids (Fig. 51.1–2), there are also lower straight-walled conical pieces (Fig. 51.3). All have round buttons, and two attach to the top of the lid with a centimetre-wide ring, a solution also appearing on cups' bottoms (Fig. 51.5–6).

Red pots - Summary

Red pots, like the white vessels, were made in a variety of shapes and sizes. The vast majority have a double- or multiple-segment rim, a few 'nailhead'-profile.

Imre Holl's research has shown that red pots first appeared (although in small quantities) in Buda Castle in the 13th century.⁵³ These oldest pieces were slow-wheeled and had a segment rim. The illustrations published by the author show pots with incised spiral and wavy line decoration.⁵⁴ They also differ in shape and decoration from the pots presented here.⁵⁵ Excavations in Buda⁵⁶ brought to light very few red pots dating to the 14th century.⁵⁷ They were found in similarly small quantities in the Visegrád castle and palace,⁵⁸ and amongst the urban finds of the town.⁵⁹

- 53 Holl 1963, 340.
- 54 HOLL 1963, 371, 69. kép.
- 55 Since the rim design and the decoration of the red pots presented by Imre Holl do not differ from 13th-century white pots, they were probably imitations of popular white pottery forms in locally available materials. In addition to traditional archaeological investigations, petrographic analyses may prove an effective tool for distinguishing their material from late medieval red pots'.
- 56 ÍRÁSNÉ MELIS 1973, 197.
- 57 Benda 2002, 539.
- 58 Nyékhelyi 1994, 165; Tóth 2006, 51.
- 59 SARKADI 2010, 12; POLGÁR 2010, 25; NICSOVICS 2013, 13; BÁRDI 2014, 77-78.

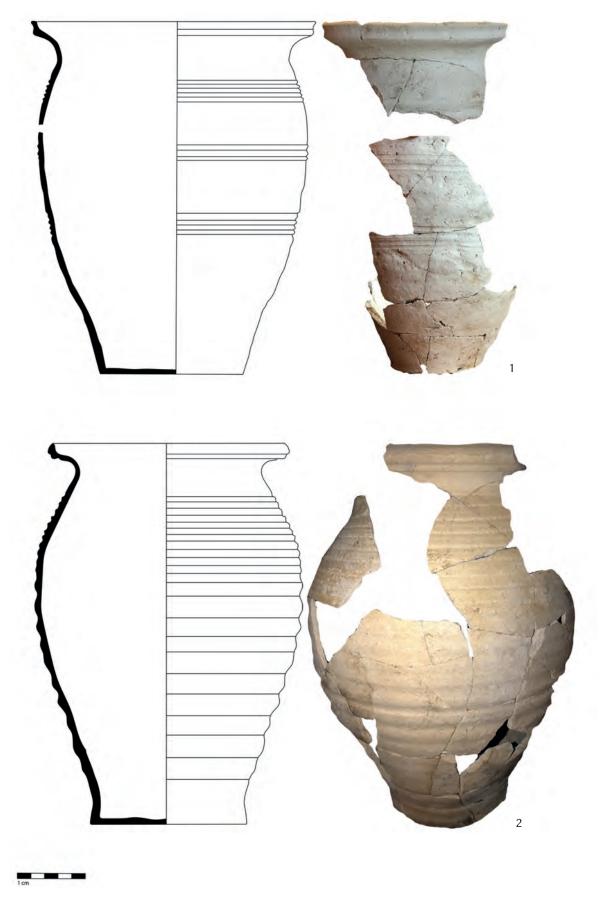
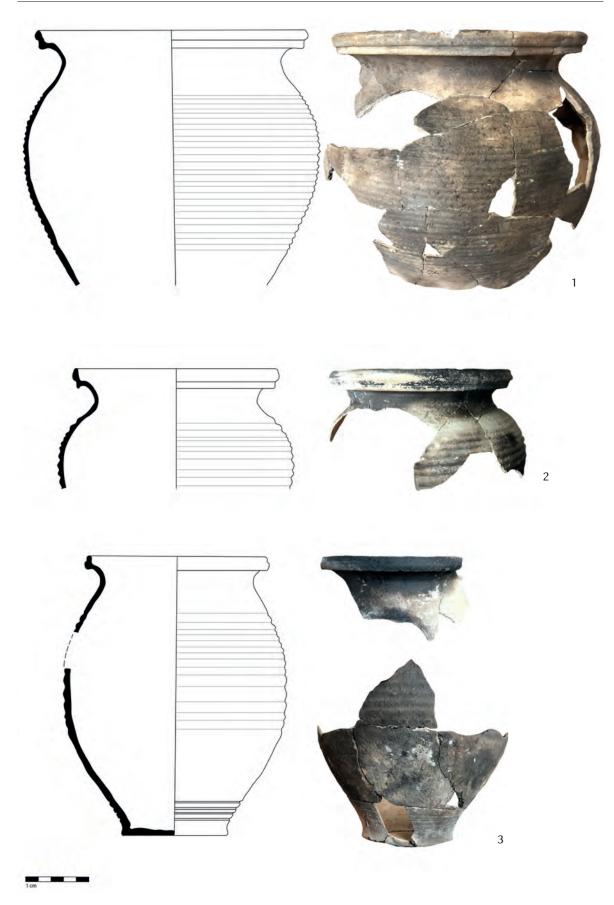


Fig. 15. White pots with double-segment rims (Inv. nos: 1-2021.1.1.101, 2-2021.1.1.71)



 $\textbf{Fig. 16.} \ \ \textbf{White pots with double-segment rims (Inv. nos: 1-2021.1.5.2, 2-2021.1.5.42, 3-2022.1.2.93)}$

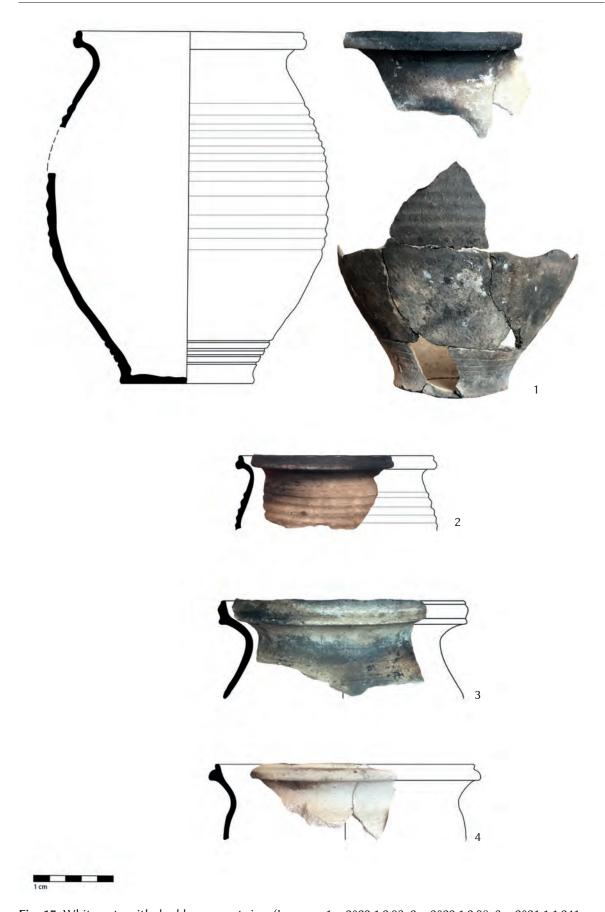


Fig. 17. White pots with double-segment rims (Inv. nos: 1-2022.1.2.93, 2-2022.1.2.98, 3-2021.1.1.241, 4-2022.1.2.77)

The colour of cooking pots changed in the 15th century. White pottery lost its predominance in the central part of the country⁶⁰ and the proportions of red and white vessels became equal,⁶¹ only for red ware to become predominant by the second half of the century. While the 15th-century record of all sites mentioned above contains red pottery in larger quantities than white, that was not the case in Vác⁶² and the site in focus. The trend probably reflects a change in kitchen pottery 'fashion': a special kind of red ware, the so-called 'red pottery of Buda' was produced from the mid-15th century by potters operating in Buda during the reign of King Matthias, i.e. between 1460 and 1480. This pottery comprised fast-wheeled vessels of quality raw material, with an engobe wash outside and a green or yellow lead glaze coating inside.⁶³ Such pots were the widest above the belly, had square-profile rims (the same as 'nailhead' rims), and groove bundle decoration around their shoulders. The glazed pots from 5 Rév Street perfectly match the Buda finds. Glazing the inside of the vessels became common only in the early modern period, as reflected by the 16th- and 17th-century pots with collared rims in the present material. However, 16th- and 17th-century pieces typically have a more sharply everted or collared rim, while 18th-century variants are more closely fitted to the side of the pot, and the collar is wider. They have several analogies in the early modern pottery record of Pápa.⁶⁴

Pots with a ruffled rim first appeared in the mid-16th century. ⁶⁵ One is known from a medieval well in Buda, dated to the turn of the 15th and 16th centuries. ⁶⁶ The green- or brown-glazed pieces from Visegrád are similar, besides the fragment from Buda, to 16th-century vessels found in the area of the abbey of Garamszentbenedek, ⁶⁷ Mohi, ⁶⁸ and Pápa, ⁶⁹ outlining a distribution area wider than the *medium regni*.

Petrographic analysis

Four red fragments were selected for petrographic analysis: two 15th-century rim fragments (Sample 19/2021.1.2.70; 21/2022.1.4.6), a side fragment of a 15th-century ribbed pot (Sample 11/2022.1.7.36), and a rim fragment of a late 15th-early 16th-century 'red pottery of Buda' vessel (Sample 9/2021.1.2.34).

The results indicate the use of raw materials different from white pottery's. While upon firing, these clays turn into ceramics of a colour clearly different from white ware, some materials resemble it. It is also particularly interesting that all four samples had different raw materials and could be classified into separate groups. Also, the clays were processed differently: the ceramics comprised, in addition to fine mineral particles (sand), other mineral constituents, and fine granitoid rock gravel. Glazed pottery contained a higher proportion of iron than others.

In summary, every red pottery vessel examined was made from a different raw material or with a different type of glaze. Their raw material is not local; however, it is more likely that the clay, rather than the finished product, was transported to the local potters' workshops.

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60 Feld 1987, 269.
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- 61 HOLL 1963, 352.
- 62 Mészáros 2016, 113.
- 63 Holl 1963, 351; Feld 1987, 269.
- 64 Kolláth 2013, 158.
- 65 Tomka 2018, 99.
- 66 Benda 2002, 544, 3. kép
- 67 Góra 2020, 51, 10. tábla 4.
- 68 Томка 2018, 434, 3. kép 14.
- 69 Kolláth 2013, 159, 3. kép 9.

Grey pots

Unlike the types described above, grey pottery was fired in a reduction environment, which gave the finished vessels their grey colour. However, the final colour was determined largely by the firing conditions, clay composition, and temper. To Iron oxide, naturally present in clay, changes the colour of reduction-fired ceramics to grey. As the condition of the kiln and the potter's skills varied, pots' colours could also range from red to dark grey. Experiments have revealed that the same clay may turn into red pottery when fired in oxidation and grey when fired in the absence of oxygen. The best example is the bottom fragment of a grey pot, the lower part of which may have been exposed to more oxygen during firing, giving it a red colour (Fig. 62.1).

Classification possibilities

Grey, reduction-fired pots were fast-wheeled from finely tempered clay. Their form and material differ from the previous types. The highly fragmentary state of the related finds makes any formal classification impossible;⁷² however, strikingly, their rims are uniform, lacking the variety seen in white or red pottery. Almost all have a rounded, slightly everted and downward-rolled rim, a few with rounded 'nailhead' profiles.

This category comprises vessels made of different raw materials (Fig. 58). Some are heavily tempered with graphite and mica, which can be clearly distinguished from the sand particles by the naked eye. Also, some vessels in this group bear stamped potter's marks on the rim (Fig. 57.1–5, Fig. 58.2–4) or handle (Fig. 58.1).

Rounded and downward-rolled rims

Based on rim diameter, the category includes mostly medium-sized and some quite large pots. Both relatively low (ca. 20 cm high) pieces with full profiles have wide shoulders, wide bottoms, and rim diameters of 17 and 17.5 cm, respectively (Fig. 52.1–2).

Unluckily, the outer side of most identified pots can only be examined above the neck. The few rims with a larger shoulder or side fragment are decorated with one (Fig. 56.3) or a maximum of three or four (Fig. 52.1, Fig. 54.4, Fig. 56.4) grooves around the shoulder.

Two small pots with a rim and decoration identical to the above were also included in this category as they hardly differed in function (Fig. 56.4–5).

Vessels with stamps

The pottery record comprises eight pot rim fragments with stamps (Figs 57–58), a small number compared to all finds but all the more important and informative.

The downward-rolled rim design allowed potters to place their marks on a clearly visible part of the vessel. When the potter shaped the vessel, he left an excess of clay at the rim, which he rolled back towards the neck of the vessel, thus creating a relatively wide rim where he could stamp his own mark or the coat of arms of his town. In the mid-20th century, Imre Holl devoted a special study to the description of imported ceramics, presenting the results of his research on the stamps of imported Austrian vessels.⁷³ Potter's marks played a distinctive role, each workshop having its stamp, and, in the 15th century,

- 70 Szakmány 2008, 57.
- 71 Duma 1962, 463-469.
- 72 The full profiles of only two vessels could be examined.
- 73 Holl 1955, 164.

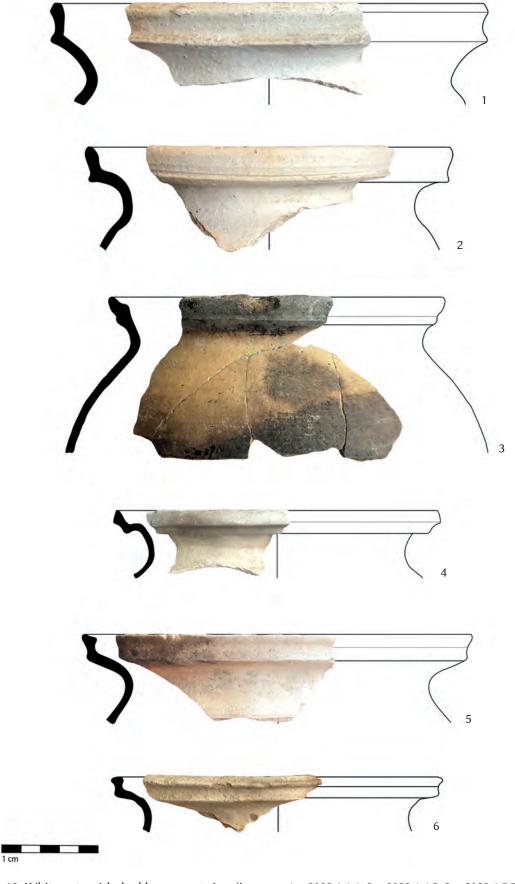


Fig. 18. White pots with double-segment rims (Inv. nos: 1-2022.1.4.4, 2-2022.1.4.5, 3-2022.1.5.7, 4-2022.1.7.19, 5-2022.1.8.30, 6-2022.1.4.33)

marking pottery this way was made compulsory for quality insurance and authentication of origin. The oldest known related written source dates back to 1435, when the town of Vienna made it compulsory to issue the vessels made on its territory with a mark of origin. The stamps published by Imre Holl and the types associated with each Austrian town are still used as a basis for identifying imported ceramics in Hungary. Vilmosné Bertalan also published a several studies on stamped vessels excavated in Óbuda. Therefore, the following descriptions rely primarily on the analogies in her and Imre Holl's works. The four graphite-tempered stamped vessels were edited into a separate table (Fig. 58). The origin of the individual rim stamps and the vessels are discussed in the evaluation.

Stamp types

Type 1. Two horizontal lines in an oval shield (Fig. 57.1). Imre Holl published several variants. 77

Type 2. Oval stamp with an equal-arm cross under a horizontal line (Fig. 57.2). The shaping of the cross is sloppy, and the arms of the cross are stumps. The mark appears in Buda,⁷⁸ 163 Lajos Street, and Névtelen Street in Óbuda.⁷⁹

Type 3. Oval stamp with an equal-arm cross under a horizontal line with a dot and a small 'x' in two neighbouring quadrants (upper right and left) (Fig. 57.3). Imre Holl presented several stamp variations, including a dot paired with an x or a small cross; one of these is identical to a piece from Visegrád.⁸⁰ This type also appears on reduction-fired pots and jugs in Óbuda.⁸¹

Type 4. Shield-shaped stamp with an equal-arm cross under a horizontal line with two dots in the upper quadrants (Fig. 57.4). The piece was double-stamped. The most frequent stamp variant, albeit the number and position of the dots may vary.⁸².

Type 5. Shield-shaped stamp with an equal-arm cross under a horizontal line and a dot in every quadrant, appearing on two pieces (Fig. 58.1,3). The rim of one was too small for the stamp, so half of it could not be pressed completely into it (Fig. 58.3). The other vessel was probably a grey, reduction-fired jug (Fig. 58.1).

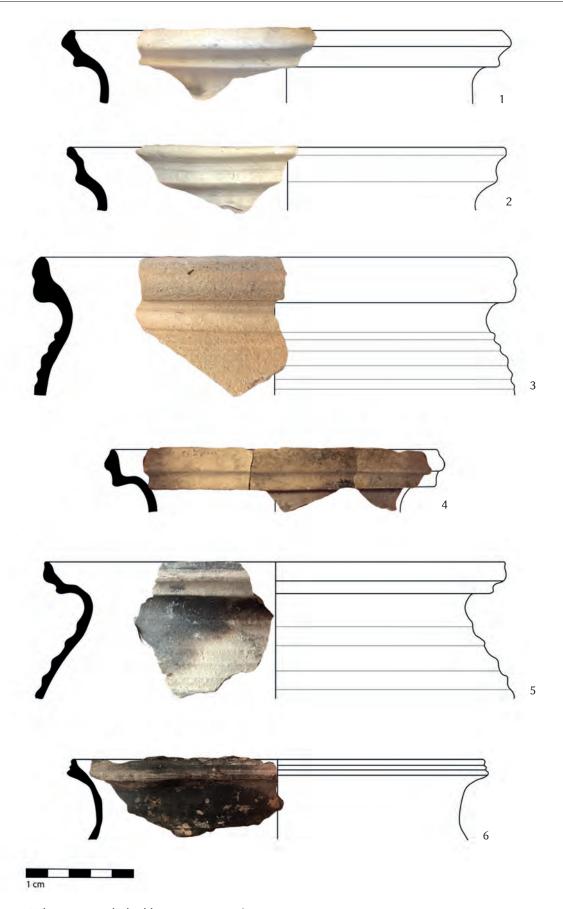
Some stamps were way too fragmentary for reconstruction and, thus, classification (Fig. 58.2,4). They probably depict a cross.

Besides stamped pieces, the assemblage also includes non-stamped graphite-tempered fragments (Fig. 59) of medium-sized pots with rims of 11–18 cm in diameter, identical to the sand-tempered variants.

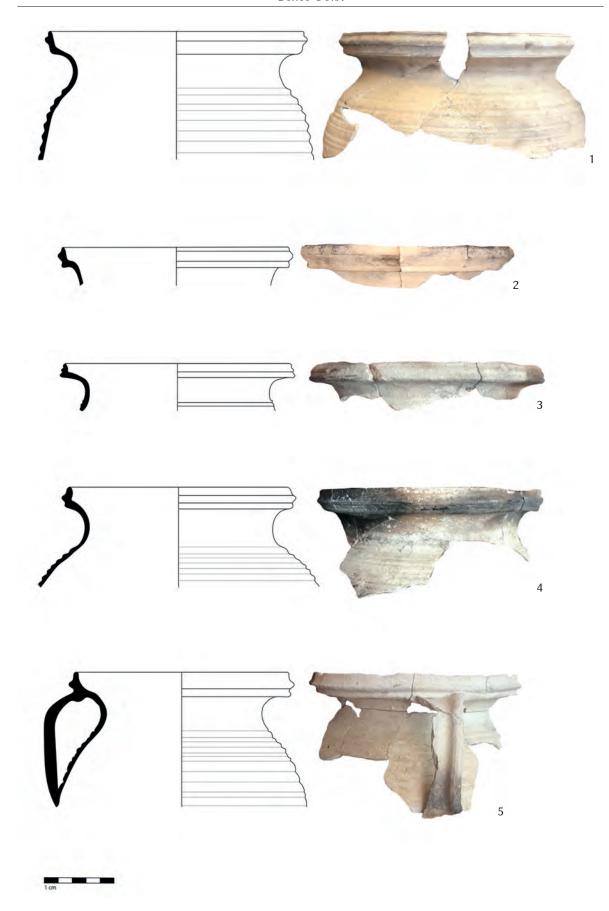
Rounded 'nailhead' rims

Some grey pots, of a material and design identical to pots with a downward-rolled rim, had 'nail-head' rims. Their decoration includes one or two grooves around the shoulder (Fig. 60.1), regular

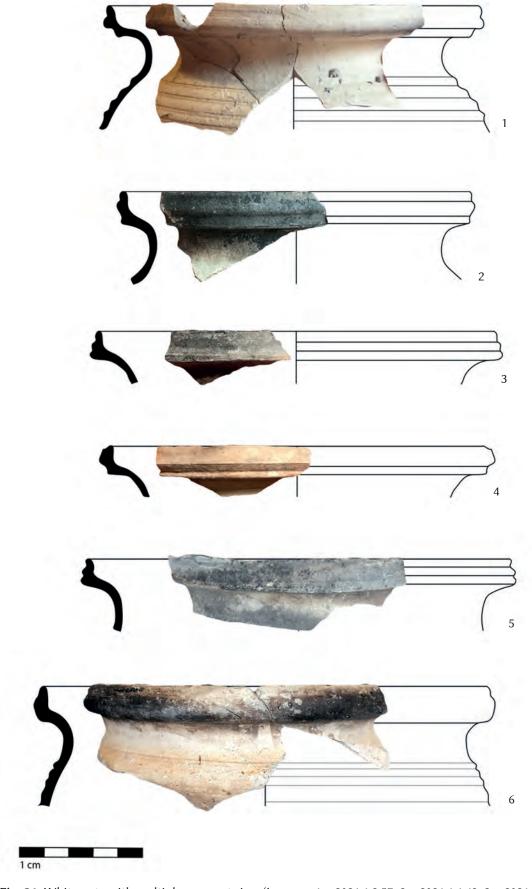
- 74 Holl 1955, 166.
- 75 HOLL 1955, 180-186, 53-59. kép.
- The material composition may only be determined, and tempering agents identified by petrographic analysis.
- 77 Holl 1955, 185, 58., 66., 79. kép
- 78 Holl 1955, 181, 52. kép 11, 184, 55. kép 55.
- 79 Bertalan 1998, 200, 10. tábla 2, 205, 15. tábla 1.
- 80 HOLL 1955, 181, 54. kép 17.
- 81 Bertalan 1998, 197, 7. tábla 8,9.
- The pottery record of Buda comprises variants where the cross is in an oval stamp, and the upper line is in a separate stamp (Holl 1955, 182, 53. kép 17); e.g., Bertalan 1998, 202, 12. tábla 4.



 $\begin{array}{l} \textbf{Fig. 19.} \ \ \textbf{White pots with double-segment rims (Inv. nos: 1-2021.1.5.163, 2-2021.1.2.54, 3-2022.1.2.89, \\ 4-2021.1.1.139, 5-2021.1.1.270, 6-2021.1.1.8) \end{array}$



 $\textbf{Fig. 20.} \ \ \textbf{White pots with multiple-segment rims (Inv. nos: 1-2021.1.5.41, 2-2021.1.1.35, 3-2021.1.1.52, 4-2021.1.1.50, 5-2021.1.1.128)$



 $\begin{array}{l} \textbf{Fig. 21.} \ \text{White pots with multiple-segment rims (Inv. nos: } 1-2021.1.2.57, \, 2-2021.1.1.49, \, 3-2021.1.1.24, \\ 4-2021.1.1.31, \, 5-2021.1.1.58, \, 6-2021.1.5.110) \end{array}$

ribs (Fig. 60.4), and, in one case, an incised wavy line around the shoulder. Their material is generally more porous than grey pots' (Fig. 60.5).

Bottom and side fragments

The only informative side fragment of a large vessel is decorated with an incised wavy line between two straight ones (Fig. 61.1).

The few bottom fragments differ in size and colour. They illustrate excellently the differences in ceramics due to dissimilarities in raw materials and firing environment. The best example might be a grey potsherd, the lower part of which may have been exposed to more oxygen during firing, which gave it a red colour (Fig. 62.1), or fragments that would be classified as reduction-fired grey pots but have a white core (Fig. 62.2–3). Already in the last decades of the last century, scholars emphasised the importance of identifying the raw material of pots considered imports. István Feld drew attention to the fact that the raw material of some grey vessels is the same as that of white ware.⁸³

Lids

Reduction-fired grey lids were made of the same material as grey vessels. The problem of colour and tempering is also present here, as the group includes an almost white piece (Fig. 63.3) of a raw material identical to other grey lids'. Almost all are massive pieces, tempered with sand and gravel, that gained their grey colour during firing rather than use. Their shapes being identical to white and red ware lids, they cannot be distinguished from other lids within kitchen pottery by form. All lids were made on wheels, and many were bell-shaped (Fig. 63.1–3). All pieces bear marks of having been cut off the wheel with a wire.

Grey pots – Summary

Akin to the previously discussed wares, the analysed grey kitchen pottery consists mostly of pots with a few lid fragments.

An analogy can also be drawn with the pottery of other Visegrád sites and several urban assemblages. Imre Holl has revealed in his evaluation of the pottery record of Buda that grey pottery appeared in masses in the 13th century at the latest. By then, imported vessels were already integral to the kitchens of noble houses and the royal court. It latest 13th-century grey vessels with bulging undecorated bellies do not appear in the studied record; however, the 14th-century variants, frequently with a rim stamp, are closely similar to the vessels at 5 Rév Street. Relatively wide and tall pots appeared in Buda and Vác in the second half of the 14th century. Wide-shouldered, graphite-tempered grey pots, often with Austrian or Viennese workshop marks, became common at Visegrád Palace in the 15th century. However, the surface traits (finish and decoration) of the pots in the present assemblage are different, their variety of form and stamp types being not even close to their counterparts in Óbuda and Vác.

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83 Feld 1987, 263.
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87 Kocsis 2010, 385, 25. ábra; Nyékhelyi 1994, 166.
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⁸⁴ Holl 1963, 340.

⁸⁵ Holl 1955, 165; Holl 1963, 340; Feld 1987, 262.

⁸⁶ Holl 1966, 16; these publications do not mention 15th-century forms and types of decoration due perhaps to the continued existence of vessels in an unchanged form or to the small number of late medieval reduction-fired pieces.

⁸⁸ Bertalan 1998, 181-209.

⁸⁹ Miklós 1991, 36.

As the two or three circular, incised grooves below the rounded and downward-rolled rim do not appear on pots before the 15th century, these could be dated, together with most vessels of the type, to the Sigismund Era and later, but mostly to the reign of Matthias, up to the first half of the 16th century. The dating of stamped pots was confirmed by Vilmosné Bertalan, who observed that 14th- and 15th-century pots bear stamps based on heraldic images instead of the ornamental or incised marks of the previous periods. As for shape, the tall grey pots were coeval with their white and red counterparts. Nándor Parádi presents a pot of this type, dating it to the 15th century.

The proportion of grey pots to white and red ware changed between the 14th and 15th centuries. In the 14th-century urban record of Buda and Visegrád, the proportion of the three wares is roughly equal, and grey ware may even be predominant (e.g., in the assemblages from under the Franciscan monastery, 3 at 2 Rév Street, 4 Rév Street, 1 Duna-parti Street and 32 Fő Street in Visegrád). The advanced and late 14th-century record of Buda Palace and Castle also include a high proportion of grey pots. During the 15th century, this proportion changes, partly in line with the increasing popularity of red pots. The number of grey pots from 5 Rév Street is lower than that of red pots, a fashionable ware at the time, and also lower than that of the less-popular white pots'.

Petrographic analysis of the pots

Seven grey ceramic fragments were selected for petrographic analysis: the rounded and downward-rolled rim fragments of five 14th–15th-century pots¹⁰⁰ and a 'nailhead' rim fragment, all graphite-tempered,¹⁰¹ as well as a side fragment adorned with a wavy line from the late 15th or the first half of the 16th century.¹⁰²

The five graphite-tempered pots with rolled rims (Samples 7, 8, 12, 13, and 24) were made of fine, carbonate-free clay. Three (Sample 7/2022.1.9.11; 13/2022.1.7.32) were presumably tempered with granitoid/meta-granitoid and graphitic fragments. One was perhaps made of clay with a natural graphite content (Sample 12/2022.1.9.5), while the graphite-less clay of another was mixed perhaps first with graphitic clay or graphite powder. The raw material and additives of these sherds are certainly not local.¹⁰³

The raw material of the pot with a wavy line (Sample 23/2022.1.7.51¹⁰⁴) is made of carbonate-free clay tempered with sand and crushed lime, partly different from the previous groups as it contains local rock and mineral fragments but also graphite, a material barely present in Hungary. It is also interesting that it contains purified graphite.¹⁰⁵

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90
     HOLL 1963, 340; BENDA 2002, 358-359; BERTALAN 1998, 181-209.
91
     BERTALAN 1998, 181.
92
     PARÁDI 1963, 17, 4. kép.
93
     Polgár 2010, 11.
94
     Nicsovics 2013, 14.
95
     SARKADI 2010, 9.
96
     BÁRDI 2014, 71; 1 Duna-parti Street contained a few Austrian-type stamped pots.
97
     Mészáros 2006, 150.
98
     HOLL 1963, 346.
99
     Benda 2002, 539.
100 Sample 7, 8, 12, 13, and 24.
    Sample 20.
102
    Sample 23; similar to the side fragment with an incised wavy line between a pair of straight ones (Fig.
     61.1).
103 Group 10, 11, 12.
     A side fragment probably belonging to the pot in Fig. 60.5.
105 Group 14.
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 $\textbf{Fig. 22.} \ \ \textbf{White pots with multiple-segment rims (Inv. nos: 1-2022.1.1.40, 2-2022.1.2.108)}$



 $\begin{array}{l} \textbf{Fig. 23.} \ \text{White pots with multiple-segment rims (lnv. nos: } 1-2021.1.1.132, 2-2021.1.1.133, 3-2021.1.1.135, \\ 4-2021.1.2.32, 5-2021.1.3.40, 6-2021.1.3.16) \end{array}$

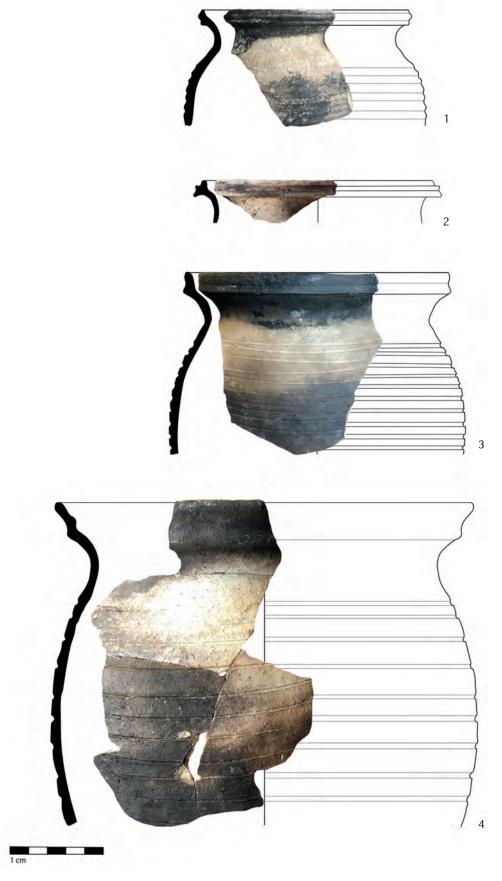


Fig. 24. White pots with multiple-segment rims (Inv. nos: – 2022.1.7.18, 2 – 2022.1.9.41, 3 – 2022.1.4.25, 4 – 2022.1.8.17)

The analysis revealed that the potters of Visegrád used both distant and local raw materials and mixed the clay with graphite, probably imported from south Bohemia. Additionally, distant raw materials, including clay with natural graphite content, likely originated from the geological environment of Český Krumlov or Chvaletice.

The fragment with a 'nailhead' rim differed slightly (Sample 20/2021.1.1.198) from the rest. Although its material seemed identical to graphitic pottery, petrographic analysis told otherwise. It was made of poor earthenware clay tempered with coarse sand that contained local rock and mineral fragments but no graphite—a composition indicating local origin. It is related to a reduction-fired pot, a possible Austrian import, from Piac Street, Vác; The petrographic analysis of the two pieces raises serious doubts about their foreign origin.

The problem of Austrian pots

Early research considered grey pottery clearly and exclusively Austrian import.¹⁰⁸ Although the origin of the pieces bearing the coat of arms of Austrian cities is beyond doubt, Hungarian sites abound with non-stamped pieces and ones tempered only with sand. Recent research has identified the characteristic traits of the type as a quality mark (while still using a term referring to its origin to describe it). It is also possible that such vessels were made in urban workshops in Hungary, either as imitations or by immigrant potters.¹⁰⁹

Research today benefits from petrographic analysis that may expand the body of data in several fields. Albeit such analysis was carried out on samples from only a few sites thus far, these may accumulate with time into a dataset useful for comparison with the records obtained by new excavations. Recent research in Austria has acknowledged the ware called by Hungarian research 'Austrian pottery' as a separate category based on its specific traits (as illustrated by numerous vessels), ¹¹⁰ and the same holds for the type in research in Slovakia, where (unlike in Hungary) several petrographic studies have been carried out on graphite-tempered ceramics. ¹¹¹

Progress has already been made regarding vessels considered imports based on traditional archaeological evaluation. For example, the foreign origin of several vessels from the Piac Street site in Vác has been confirmed,¹¹² and our understanding improved of the Austrian grey pottery from 5 Rév Street in Visegrád, partly answering the questions of their origin.

In the case of graphitic pottery, the raw material and the graphite temper proved to be of foreign origin, although they could possibly be made in a town in north-western Hungary, close to graphite clay mines and the places where purified graphite was sold.¹¹³

The analysis of a pot identical to the naked eye to other 'Austrian' vessels from the site has revealed that it was made exclusively of local raw materials. While the small sample number does not allow one to draw any major conclusions, the fragment identical in form and quality to other pottery finds interpreted as imports but made of local materials is convincing evidence of the local imitating of Austrian-style pots, indicating that the potters of Visegrád were able to produce, using local raw materials, pottery of a quality comparable to popular imported ware.

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106 Group 15.
107 Mészáros 2016, Catalogue 37.
108 Holl 1955; Holl 1963; Holl 1966.
109 Feld 1987, 263; Feld 2008, 310.
110 Harl 1983, 60.
111 Fusek - Spišiak 2005, 265-336; Poláček 1998.
112 Mészáros 2016, 107-108.
113 Feld 2008, 310.
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Moreover, the analysis of a pot side fragment from the end of the 15th or the first half of the 16th century has confirmed that local potters bought purified graphite from the Czech Kingdom or Austria, transported it on the Danube, and used it to enhance local clay. The quality of the pots they made was almost identical to the imported ones. Although the problem requires further research, it may serve as an example for future research on medieval pottery. Apart from the finds from 5 Rév Street, no late medieval pottery made of local material tempered with imported graphite has ever been found in Hungary.

Pots on legs and pans

The proportion of such vessels is low amongst medieval kitchen pottery and negligible in the record dated to between the Middle Ages and the modern period. They are represented and identified mainly by leg and handle fragments (Fig. 64).

Most were made in red pottery and some in white or pink, all tempered with fine gravel or sand. All seem to have been covered inside with lead glaze. Pans had a downward-rolled rim; they were covered with a brown or yellow-brown glaze (Fig. 64.1–3) and had a relatively straight, vertical side with a large handle applied to it. A cylindrical (Fig. 64.4) and a conical (Fig. 64.5) handle fragment have also been identified. Some had strongly bent (Fig. 64.6), while others had straight legs (Fig. 64.7–8). The bent foot is decorated with a finger impression, with which the potter also tried to fasten the foot to the bottom of the vessel. The tapered cylindrical legs were simply pressed to the vessel's bottom—a practice that, based on analogies from northern Hungary, became common at the end of the 17th century.

Although pans appeared in Hungary as early as the 13th century, they were always imported and usually taller. Hungarian urban potters started producing pans in the 15th century, but the type only became widespread in the 16th century. Given their small number, pans were certainly amongst the most expensive and valuable vessels in the Middle Ages. Thanks to an increase in their popularity, this had probably changed by the early modern period. By the 16th century, glazed pans had become common in Transdanubia, but it was not until the late 17th century that they also became an essential part of kitchens in the eastern part of the country. Early 18th-century price lists from Borsod County describe this type of vessel as equivalent to glazed pots.

Based on their glaze, the bent-legged pots in our assemblage could be dated to the 17th–18th centuries, while the straight-legged variant is probably relatively older (dating to the 16th–17th centuries). The legs became more strongly bent outwards with time; thus, these pieces could have been made in the late 17th or the first half of the 18th century. Analogies to the bent feet and the handles can be found in the record of the 18th-century pottery workshop in Víziváros, Buda. 120

Tableware

Besides kitchenware, another main functional pottery group is tableware and serving vessels. While they are more varied in decoration and design, their number is not even close to kitchenware, and they are generally more fragmented; the record in focus did not contain an intact piece.

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114 Tomka 2018, 98.
115 Tomka 2018, 270, 124. tábla.
116 Holl 1955, 48. kép; Mészáros 2016, Catalogue 31.
117 Holl 1963, 342.
118 Tomka 2018, 84.
119 Vida 2003, 62.
120 Benda 2007, 308, 12, 13. kép.
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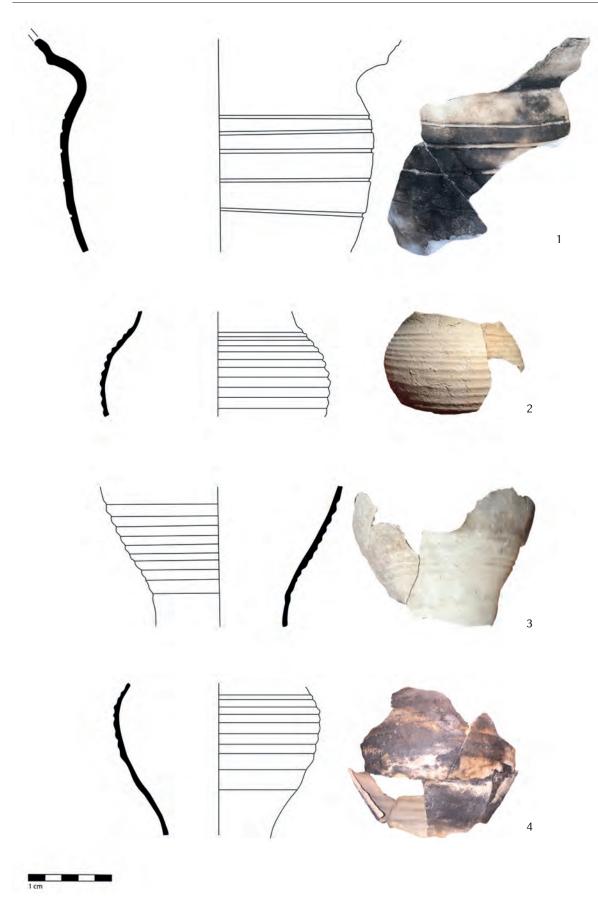


Fig. 25. White pots, side fragments (Inv. nos: 1-2021.1.4.21, 2-2021.1.2.53, 3-2021.1.1.239, 4-2021.1.1.110)

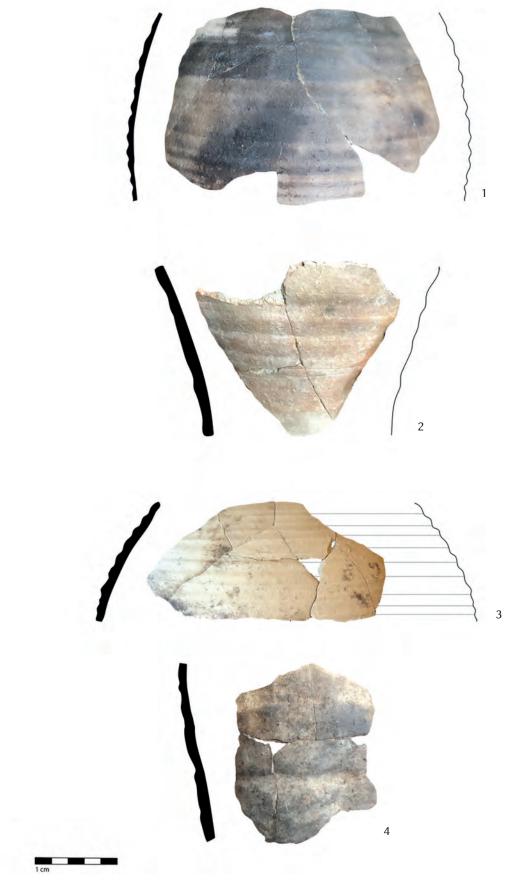


Fig. 26. White pots, side fragments (Inv. nos: 1 – 2021.1 4 20, 2 – 2021.1.5.29, 3 – 2022.1.2.45, 4 – 2022.1.5.4)

Tableware, like pots, were also made in mostly red and white and, to a lesser extent, grey ware. The group includes several functional categories: drinking vessels, liquid containers, bowls, and plates. The studied record also includes several other fragments which were classified as tableware based on their material; however, as most are base fragments, it is not possible to determine their function more precisely (Fig. 65).

White pitchers

In the case of pitchers, rim diameter may hint at the function of the vessel. Rim fragments with a diameter smaller than the pots but larger than jugs were classified here (Figs 66–67). Besides raw material, the decoration of white pitchers sets them apart from cooking vessels as, like medieval liquid storage vessels, most were decorated with painted red patterns (Fig. 66.3–5, Fig. 67.1–6), including lines, dotted lines, or semicircular arcs of comb-like lines (Fig. 66.3–4).

This decoration appears in the late 14th-century layers of the Visegrád Palace, ¹²¹ and is present in Buda from the 14th century. ¹²² Red-painted vessels were made in the north-eastern parts of Hungary as early as the 13th century, also appearing on white ware in Borsod-Abaúj-Zemplén and Nógrád counties and only becoming popular in the whole *medium regni* later in the early 14th century. ¹²³ Unlike the Visegrád pieces, the oldest yellow sherds date from the 13th and 14th centuries. Mária Wolf published an early 14th-century jug from Mezőnyárád, ¹²⁴ and a yellowish-white pottery fragment with red painting was recovered from a 13th-century layer in Vác. ¹²⁵ However, many pitchers with funnel-shaped or narrow mouths of pure white material and red painting, as well as small perfume bottles and spice jars, are also present in 15th-century assemblages from the *medium regni*. ¹²⁶

The pattern of two yellow, painted fragments consists of thick brushstrokes and dense lines (Fig. 67.5–6), a typical solution on early modern pieces. The moulded and painted patterns of 16th-century jugs survived until the 18th century at some sites in north-eastern Hungary.¹²⁷

Jugs

Several jug fragments included the neck part, facilitating their evaluation (Fig. 68). All vessels were classified here because of their narrow necks. A vessel with a more rounded mouth and a narrow neck (Fig. 68.1) represents a transition between jugs and pitchers. There are white and yellow-ish-white rims with deeply grooved multi-segment rims (Fig. 68.1,4) and dense incised lines around the neck and shoulder (Fig. 68.2–3), analogies to which were found in the 15th-century palace in Buda¹²⁸ and a late medieval feature in Csónak Street.¹²⁹ The late medieval pieces from Visegrád are closely similar to related types in red ware. Besides, the 15th-century finds of Ozora Castle include analogies to the jugs from Visegrád; in their case, the stratigraphical position has enabled to specify the time of production as all jars and jugs were found in the uppermost layers, dated between the

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121 Kocsis 2010, 382, 9-10. kép.
122 Holl 1963, 345.
123 Gál-Mlakár 2009, 165-184.
124 Wolf 1996, 157.
125 Mészáros 2016, 74, 10. ábra.
126 Kocsis 2010, 18, 21. kép.
127 Tomka 2004, 89.
128 Holl 1963, 351.
129 Magyar 2019, 21, 21. tábla.
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last decade of the 15th century and the battle of Mohács. ¹³⁰ Conclusively, the more elaborate jugs from Visegrád can be dated to the end of the 15th century at the earliest.

Mugs and cups

Identifying drinking vessels was the easiest task of all. In addition to small diameter, characteristic base and simple rim fragments could also be identified as such. Almost all vessels classified here were cups (Figs 69–71). These are well-smoothed, fine sand-tempered, yellowish-white or yellow vessels, their colour making them match the white and yellow pottery of the period. Their bodies are covered with regular or irregular ribs (Fig. 69).

In addition to the cups with a conical rim, there is an equal number of narrow goblet-shaped cups (Fig. 70.2–5) with slim bottoms and often a foot ring. Their decoration and shaping relates them to 14th–15th-century pieces. Goblet-shaped cups appeared as early as the 14th century but only became prevalent at the time of King Matthias. Several glasses, cups, and goblets have been found in Visegrád Palace, but their full shape could not be reconstructed from the bottoms alone. Glasses in various sizes and shapes, made probably in red ware, appear in the record of the palace in the second half of the 15th century.

With a thinner wall and a more carefully finished rim than common drinking vessels, a few cups represent 'eggshell' quality (Fig. 71.1–3). They have been dated to the 16th century based on their pure white material; the dark green or brown lead–glazed specimens (Fig. 71.4–5) may be dated to the early modern period.

Red tableware

A small jar fragment (Fig. 72.1) stands out from amongst sand-tempered red jugs and jars (Figs 72–73). Its shoulder above the lower attachment of the handle is decorated with incised alternating wavy and straight-line bundles, a type of archaic decoration typical of late medieval pots. In the studied record, such decoration appears on grey pots (Fig. 61.1) and a pinkish liquid storage vessel (Fig. 72.4).

Jugs with a multiple-segment or ribbed rim and those with a narrow mouth have their counterparts in white ware (Fig. 73.2–5). The amount of quality red ware matched white pottery from the Mathias Era on; accordingly, the present find material contains rim fragments of the same types of vessels in diverse wares in almost identical quantities.

A rim fragment of a jug with stamped decoration must also be mentioned here (Fig. 73.1). The impressions of the rectangular stamp bearing an X surrounded by wolf's teeth motifs are aligned side by side, below, and above. It is also interesting to note that the two stamps, resembling half-stars, together make a new (whole-star or sun-like) motif.

The custom of stamping liquid storage vessels arrived in the Kingdom of Hungary undoubtedly from the West. Slovakian research suggests that the first stamped vessels appeared in the western parts of the country as early as the 14th century. However, they only became widespread, especially on glazed vessels of the royal court, in the second half of the 15th century, while the technique appeared again later in a simplified form on the shoulders of cooking vessels. The most recent collection of stamped tableware and kitchen utensils from Transdanubia, partly in the *medium*

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130 Feld et al. 1989, 192, 15. kép.
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¹³¹ Holl 1963, 345.

¹³² Kocsis 2010, 387, 35-38. kép.

¹³³ Hoššo 1984, 136.

¹³⁴ Holl 1963, 355.

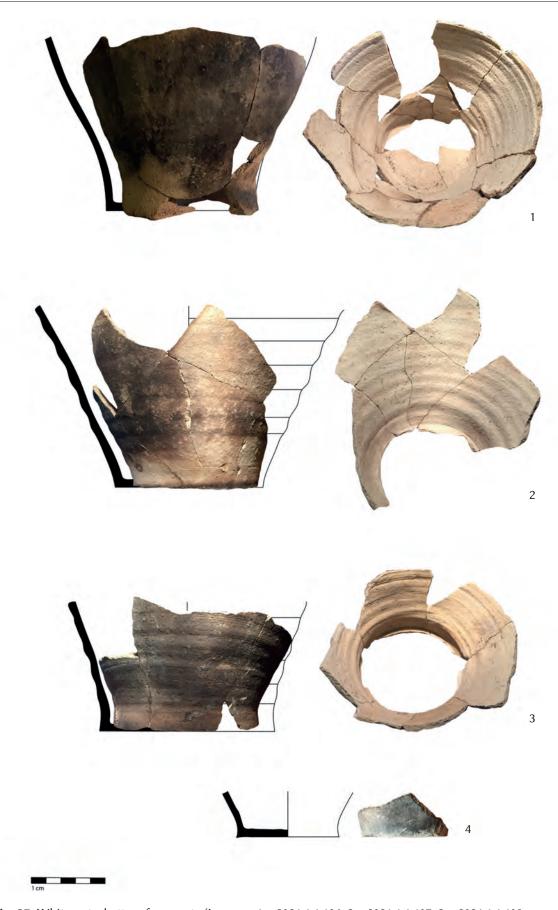


Fig. 27. White pots, bottom fragments (Inv. nos: 1-2021.1.1.106, 2-2021.1.1.107, 3-2021.1.1.108, 4-2021.1.1.51)

regni, was published by Gina Bianka Kovács.¹³⁵ The closest analogies from Hungary to the stamped vessel from Visegrád may be found on yellow pots;¹³⁶ however, considering its quality, the vessel in focus was probably imported.

Tin-glazed tableware finds may be the relics of post-Ottoman Era settlers (Fig. 74). A handle fragment covered with blue tin glaze against a white background is a product of Haban potters (Fig. 74.2), while the green-and-brown-glazed cup may be the legacy of Swabians who settled in Visegrád in the early 18th century (Fig. 74.3). 'Haban pottery' is a term used for a high-quality ware with a characteristic decoration, made by Haban (an Anabaptist sect) potters settled in Hungary. Habans made earthenware vessels with tin glaze, a type almost unique in the Kingdom of Hungary then. ¹³⁷ The Haban spread their art in Central Europe, including the Kingdom of Hungary, making products of a higher quality than common early modern period tin-glazed pottery. The bodies of the vessels, often made by pressing, were dried, bisque-fired and then covered with a white tin glaze or a translucent lead glaze. The piece from Visegrád shows the characteristic cobalt blue decoration. ¹³⁸

Grey tableware

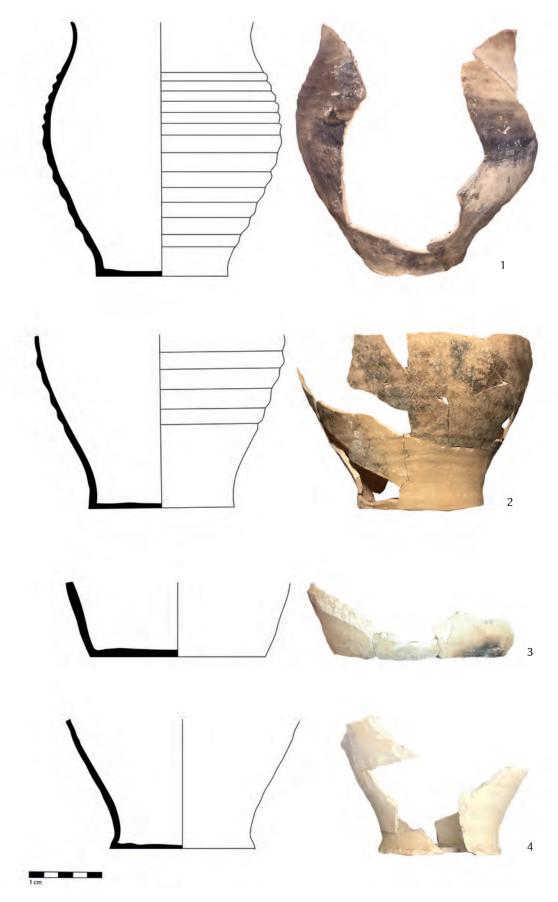
Tableware includes a distinct group of reduction-fired pottery. The material of some is similar to white ware; many are coated in a grey clay slip and bear engraved patterns (Fig. 75), while some are fragments of liquid storage vessels with a burnished pattern (Fig. 76).

Amongst grey tableware, notable are a small mug or cup with a ribbed body (Fig. 75.1) and a large liquid container with a funnel-shaped, ribbed neck (Fig. 75.2). A medium-sized jug also has a slightly conical, ribbed neck and probably a three-lobed spout (Fig. 75.3).

The jugs with conical necks date to the 15th–16th centuries. Their design is identical to late 15th-century red liquid storage vessels. ¹³⁹ Grey clay slip-coated pieces are known from 15th–16th-century context from Vác, ¹⁴⁰ Visegrád, ¹⁴¹ and Buda.

Vessels with a burnished surface are referred to as 'black pottery'. This type of pottery can be found as late as the 19th century and is still made today by potters in towns in northern Hungary. While modern variants can be pitch black, early modern pottery is invariably grey. The first reduction-fired burnished jugs were made in the 16th century. The jugs from Túrkeve-Móric could be dated to the mid-16th century, and the archaeologist excavating Vác dated the pieces found there to the late 15th or early 16th century. Conclusively, the earliest pieces may have been made or brought into the country before the Ottoman conquest. The type became widespread in the 17th and 18th centuries. The large amount of available material in north-eastern Hungary made a typological classification possible, this record was way too small and fragmentary for that.

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135
    Kovács 2021, 249–282.
136
    Kovács 2021, 266, Fig. 13.3,4,5.
     RINGER 2016, 399.
138
    RIDOVICS 2002, 67.
139
     Feld 1987, 268.
    Mészáros 2016, 315, 85. ábra.
    Kocsis 2016, 181, 10. kép 1.
    ORTUTAY 1977, see the entry entitled nádudvari kerámia.
142
143 Parádi 1963, 210.
144 Miklós 1991, 38.
    Томка 2004, 81.
145
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 $\textbf{Fig. 28. White pots, bottom fragments (Inv. nos: 1 - 2021.1.1.109, 2 - 2021.1.1.72, 3 - 2021.1.1.244, 4 - 2021.1.5.44)$

Bowls and plates

Several large bowl or plate fragments (Fig. 77), which can be defined as decorative ceramics, were found during the excavation of the largest building. All are red ware, their inside decorated with various types of glazing. They all have simple band rims over 30 cm in diameter.

Their decoration is a combination of incised motifs and glazing. The only exception is a bright green monochrome glazed bowl, which lacks more elaborate decoration (Fig. 77.1). In contrast, a brownish bowl was covered with red engobe, which was then scraped away in various patterns that were detailed with green, black and light beige glaze using a *kistka* (glaze pen), one of the decorative tools of the early modern period (Fig. 77.2). Most bowl fragments feature running glaze decoration. One illustrates how the dark base glaze was scraped away, and then the lighter glaze was added (Fig. 77.4). A variation of this technique was dripping lighter or darker patterns radially over a background glaze. Albeit heavily burnt, a bowl with a dark green glaze (Fig. 77.3) and one with a pink glaze against a red background (Fig. 77.5) could also be identified.

Bowls and plates are an essential part of early modern artefact assemblages, and in this period, they were regarded not only as part of everyday meals but also as decorative objects. Accordingly, tableware assemblages include abundant monochrome plates besides ones with lavish decoration; however, the latter is the easiest to identify and may facilitate dating considerably. In the western part of central Europe, painted vessels were produced from the last third of the 16th century. Red earthenware with painted decoration appeared in the Kingdom of Hungary in the late 16th and early 17th centuries. The oldest pieces are known from the castle of Bajcsa from the last quarter of the 16th century, while pots with light glaze patterns against a dark background are known from the eastern parts of the country from the first half of the 17th century. Extensive pottery records several sites reflect this tendency, which changed by the end of the century. In north-eastern Hungary, the dark-painted and light-glazed ware became replaced by plates decorated with light glazes by the second half of the 17th century.

Pieces with scraped-away (*sgraffito*) decoration also appear in Ottoman Era assemblages, suggesting that they imitate Ottoman pottery. Ornamental patterns with running glaze decoration appear on Ottoman footed bowls from Szekszárd¹⁴⁹ and Szolnok.¹⁵⁰ Besides Renaissance glazed vessels, the running glaze technique appears on Ottoman pottery, but it is difficult to determine their origin; one can only state with certainty that the decoration of early modern vessels can be traced back to these periods. Whether the forms and decorations were brought by the new settlers—some of them Germans—after the reconquest of the country or whether Hungarian potters handed them down has also remained unanswered. Judit Benda links the products of an 18th-century pottery workshop in Buda with German immigrants,¹⁵¹ and Ágnes Kolláth argues similarly in context with some pieces from Pápa.¹⁵² The bowls with moulded decoration from Vác—among which a green-glazed bowl with a leaf decoration against a black background¹⁵³ is a perfect analogy to a piece from Rév Street—are also considered the products of German settlers. The decorative pieces described above may have belonged to (and were probably made by) German-speaking settlers who moved into the

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146 Kovács 2002, 66.
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¹⁴⁷ Kalmár 1959, 67.

¹⁴⁸ Tomka 2018, 58.

¹⁴⁹ GAÁL 2010, 419.

¹⁵⁰ Kovács 1984, 151, 33. ábra.

¹⁵¹ Benda 2007, 301.

¹⁵² Kolláth 2013, 172.

¹⁵³ Mészáros 2016, 324, 94. ábra 1.



Fig. 29. White pots, bottom fragments (Inv. nos: 1-2021.1.2.43, 2-2021.1.5.40, 3-2022.1.2.61, 4-2022.1.2.62)

relatively intact medieval house at 5 Rév Street in the first years of the 18th century. These vessels probably became buried when the Baroque residence was built on the plot.

Stove tiles

Stove tile fragments were only found in a negligible quantity during the excavation of the stone building. Most are undecorated grey ceramic fragments, and all come from square, bowl-shaped stove tiles (Fig. 78.1–2). The single piece that could be reconstructed from several fragments was found under the late medieval floor level in Room 2 (Fig. 78.3). It was a pink earthenware tile with dark green glaze and a relief pattern; it probably had a regular square shape and was 10.5 cm deep. The flat front face was decorated with a relief pattern of intersecting branches, representing the two intertwined tails of the double-tailed lion in King Sigismund's coat of arms.¹⁵⁴ This tile, called the 'double-tailed lion type' by Imre Holl, was made during the second half of Sigismund's reign, in the first decade of the 15th century. 155 Provided the small fragment from Visegrád can be identified as a product of the workshop of Group I¹⁵⁶ of the Sigismund Era, one can assume that the master stove-makers of this workshop, active for a long period, built several stoves in Visegrád.¹⁵⁷ In addition to Nyék and Pomáz castles, a stove built of tiles with double-tailed crowned lions was also installed in a room of Buda Palace. 158 A more elaborate variant of the Buda pieces, with a lion facing right, is known from Visegrad Palace: the Order of the Dragon is depicted on a stove built of heraldic tiles, probably between 1409 and 1412. 159 As stoves by the workshop were probably installed in the castles of barons close to the court, 160 it is possible that the house at 5 Rév Street was the urban house of a high lord before it was converted into a workshop, heated by a fashionable stove.

The question is, what kind of heating equipment was the house furnished with? While the four furnaces in the workshop probably made it unnecessary to install any additional heating appliance, the previous 14th-century house certainly had a stove. The excavated finds suggest the presence of a simpler tile stove built in the late Sigismund Era. The excavation, however, only covered a small part of the period before the house was converted into a workshop, and no stove foundations were uncovered.

Other ceramic finds

In addition to ceramic vessels, a fragment of a grey, graphite-tempered crucible (Fig. 79.1) was found in the residential building. Crucibles with a triangular spout appeared in Buda Palace along with imported Austrian pottery in the 14th century.¹⁶¹

The pottery record also contained a pale red ceramic disc with a hole at its upper third (Fig. 79.2), which seems to be without analogies from Hungary and could not be identified, akin to a round ceramic object in the material of pink ware (Fig. 79.3), which may be an unfinished or faulty piece.

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154 I am grateful to Edit Kocsis for her help with the identification.
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¹⁵⁵ HOLL 1958, 243, Group IV, Type 3; HOLL 1971, 175, 114. kép, Group I, Type 11.

¹⁵⁶ Holl 2002, 358-370.

¹⁵⁷ Stove tiles of this workshop have also been discovered in castles and monasteries (Kocsis – Varga 2019, 10).

¹⁵⁸ Holl 1958, 244, 58. kép.

¹⁵⁹ Kocsis 2010, 370, 23-24. kép.

¹⁶⁰ Kocsis - Varga 2019, 10.

¹⁶¹ Holl 1963, 348.



Fig. 30. White pots, bottom fragments (Inv. nos: 1-2021.1.4.34, 2-2021.1.4.35, 3-2021.1.4.36, 4-2022.1.4.46, 5-2022.1.5.30)

Evaluation of the finds

Field observations and the preliminary dating of the finds were important aspects of their classification. The present work aimed to specify these first impressions by a comparative analysis of the pottery record using typological and typochronological data available in academic literature and to determine the position of the related monuments in the medieval history of the town.

The street's walking surface at the northern end of the plot and the burnt layer of the wooden house (Inv. no. 2022.1.5.1–62) could roughly be dated based on the few potsherds they yielded; however, a few finds enable specifying this dating. Apart from two 14th–15th-century pot fragments, the two features contained the same late 13th–14th-century types. Although the street was certainly in use until the end of the Middle Ages, the timber-framed house, with its finds from the second half of the 13th century, had only remained in use until the second half of the 14th century at the latest when it burnt down, presumably during the great fire, and was not rebuilt.

Most finds recovered from the stone cellar (Inv. no. 2022.1.6; 2022.1.7; 2022.1.9) could be dated to the 15th century. Although the upper layers contained early modern pottery, pre-14th-15th century finds were not recovered from the cellar's fill in significant quantities, indicating that it may have been built immediately after the destruction of the timber-framed house and became filled up during the landscaping in the Baroque period, which resulted in the pottery of the old and the new settlers becoming mixed up in many soil layers.

Room 1 of the large stone building yielded the most finds (Inv. no. 2021.1.1–3), which but did not provide information on when the house was constructed. The hundreds of fragments represent a range of types from the 14th to 15th centuries to the turn of the 17th and 18th centuries. It is important to note, however, that both the layers of the glass furnace and the postholes around it contained late 17th-century finds, suggesting that the post-Ottoman Era settlers found this room intact and probably deposited rubbish there, filling it in during the landscaping works before the Baroque house was built.

The find assemblages of the other rooms do not show any difference (Inv. no. 2021.1.4–5; 2022.1.1–2). Except for the uppermost layer, the material of all rooms can be dated from the turn of the 14th and 15th centuries to the first half of the 16th century. The deteriorated floor in the northern half of Room 2 provided some information on the period before the building was turned into a workshop. Its repeated renewal made it clear that the house had been built before the 15th century, i.e., in the last third of the 14th century at the latest. Although two Angevine Era fragments were recovered from under the floor, no valid conclusions can be drawn from their position; however, further excavations are necessary to establish the time of construction of the house. The mixed layers representing the entire excavated depth in the northern extension of the building contained a massive amount of finds from the 15th to the first half of the 18th century (Inv. no. 2022.1.3), while the filling could be dated to the last years of the early 18th century.

In summary, the field observations were basically correct. Apart from some clarifications, the processing of the ceramic material has confirmed the primary dating of the excavated features. It is certain that a timber-framed house stood in the street-side end of the plot in the late Árpád Age or the early Angevine Era at the latest, and it burnt down around the mid-14th century. A nobleman's four-room residence and another building with a cellar were built on the south side of the plot probably during the reign of Louis the Great, and the house became expanded later with a probably a two-storey attachment with a function that could not be clarified from archaeological evidence. The complete absence of Ottoman or Ottoman Period artefacts indicates that the site was abandoned at the time of the conquest. Based on early modern pottery finds, the plot became settled again after the Ottomans had been driven out of the country.

A comparative analysis of the archaeological material

In terms of floor area and layout, the largest house in Visegrád does not match the distinguished residences in Buda. ¹⁶² It is also amongst the largest compared to houses in royal free towns, but its condition is considerably worse, with fewer details, than the Gothic houses in Buda or Sopron, many of which have, e.g., floors. ¹⁶³

The closest analogy in time and space to the large stone house at 5 Rév Street is the house at 32 Main Street, Visegrád, also in use from the mid-14th to the end of the 15th century, 164 the findings of which are closely related to the material published in this paper. Although the building may be somewhat older based on the abundance of 14th-century slow-wheeled vessels in its record, the proportion of white and red vessels is identical. Importantly, both houses corresponded in size to a noble residence of the time, and both were turned into workshops in the Late Middle Ages.

Although these prestigious stone buildings were probably built for high-ranking town officials, their records do not include imported liquid storage vessels. ¹⁶⁵ In comparison, the large number of imported vessels in the royal palace reflects the varied royal and aristocratic ways of use. Saxon vessels, ¹⁶⁶ stone pots from Dreihausen, ¹⁶⁷ glasses from Loštice, and other decorative vessels of the Matthias Era, ¹⁶⁸ found in Visegrád Palace, are completely missing from the aristocratic residences mentioned above—partly perhaps because the conversion of the houses into workshops was preceded by some 'cleaning', involving a change in material culture to a simpler style. Accordingly, the finds fit better in the kitchen of the craftsman who moved into the house and represent the same quality as the ones from the 15th-century houses and cellars in Vác. ¹⁶⁹

In contrast to our workshop, the pottery record of the house at 4 Rév Street across the street is characterised by a predominance of white ware. Based on the numerous small, square-mouthed graphitic crucibles, the excavating archaeologist hypothesised a goldsmith workshop on the site.¹⁷⁰ A similar piece was also found in our glass workshop (Fig. 79.1). The trend seems to be present in almost all houses excavated in Visegrád (e.g., the four-room house at 36 Fő Street): 14th-century noble residences became turned into workshops in the second half of the 15th century.¹⁷¹

Although not lacking expensive imported graphitic cooking pots, the pottery used in craftsmen's houses did not reach the standard of an urban noble residence. A good example is the cordwainer workshop in Molnár Street in Pest: its record, like our glass workshop, contains high-quality white pottery and imported Austrian pots but is very different from the coeval neighbourhood. Besides decorative pots, majolica floor tiles mark the difference between the simpler homes of craftsmen and the more sumptuous residences of the urban gentry. Furthermore, while in the densely

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VÉGH 2008, 353-356, 61-63. kép.
DÁVID 1970, 95-123.
MÉSZÁROS 2006, 145.
MÉSZÁROS 2006, 160.
KOCSIS 2010, 385, 24. kép.
KOCSIS 2010, 385, 23. kép.
KOCSIS 2010, 387, 40. kép.
MIKLÓS 1986, 241-245, 6-10. kép.
KOVÁTS - MÉSZÁROS 2015, 649.
KOVÁTS - MÉSZÁROS 2015, 657. The pottery finds of the site are unpublished.
ÍRÁSNÉ MELIS 1996, 224, 12. kép.
ÍRÁSNÉ MELIS 1996, 229, 16. kép.
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built-up urban environment of St. George's Square in Buda, glazed pots on legs are common finds, appearing there first in the 14th century, ¹⁷⁴ 5 Rév Street is devoid of such finds and glazed handles. ¹⁷⁵

Evaluation

The oldest pottery types were found in the layers of the street pavement and the timber-framed house. The distinctive, incised spiral decoration of the white cooking pots dates the oldest vessels to the late 13th century. Conclusively, the house of one of the first settlers was built there in the late 13th or the early 14th century; its floor level was identical to that of the stone-paved street running down to the Danube.

The pottery record of the site includes a few 14th-century cooking pots, still shaped on a slow wheel. Although the uneven shaping of the bodies and the smoothing of their surfaces make them different from 15th-16th-century pottery, they are also present in the stone cellar and the large house. Their small number may indicate that broken and disused vessels were deposited in a remote or unexcavated rubbish pit at the time. Nevertheless, there is no doubt that the area was continuously settled. It is possible, however, that after the devastating fire, the new owners simply removed what had remained of the furnishing of the former noble residence.

Late medieval pottery only differs from the previous century because of new technologies and the spread of the fast wheel. The vast majority of the vessels were made in this period, the 15th and the first half of the 16th century, and the finds were concentrated in the large house and the cellar. Pots' smoothed walls were decorated with dense, shallow, and relatively regular ribs and grooves. The proportion of white ware decreased, red ware types catched up in quantity, and, based on the related marks, cutting off the vessels from the wheel with a string or wire became common. Some grey pieces may be Austrian imports or grey pots made in a Hungarian workshop using the same material as white ware's. Petrographic analyses yielded new data on the origin and material composition of pottery, revealing that imported ware was actually imitated in Hungary. One of the most important results is the identification of a fragment of the same quality and form as Austrian pots but probably made in Visegrád with graphite imported from South Bohemia.

The second half of the 15th century is characterised by an increase in the number of liquid storage vessels, the design of some of which remained in fashion up to the early modern period. At the same time, pots with inner glaze (known as the 'red pottery of Buda') appeared, reflecting the use of high-quality and varied raw materials.

Most importantly, the find material of the site does not contain Ottoman pottery and Ottoman Period domestic pottery is also completely absent. However, a large number of vessels from the last years of the 17th and the first half of the 18th centuries were found throughout the site, most of them concentrating in Room 1 of the house. This may be interpreted as the workshop was abandoned suddenly around the mid-16th century, during the Ottoman occupation, left to decay, and filled up later during landscaping by the new settlers, who thus mixed up the artefacts of almost five centuries.

In summary, the pottery record fits well in the material culture of the medieval *medium regni*, albeit it also contains some hitherto unknown vessel types, including a red jar with alternating wave and straight-line bundle decoration (Fig. 72.1) and a large white pot with incised line bundles (Fig. 15.1). The few hitherto unknown types, shapes, and decorations may provide new data for research. A comparison of the finds from the Visegrád Palace and urban excavations also provides an exciting contribution to the wealth of types of late medieval kitchen- and tableware. The pottery types of

¹⁷⁴ Benda 2002, 545, 5. kép.

¹⁷⁵ Szebeni 2003, 340, Abb. 5.

the site include those of an average urban late medieval household, more likely representing the kitchen of a 15th-century glassmaker than the table in a nobleman's home. The pottery from 5 Rév Street offers a glimpse into the daily life of a European-level medieval glass workshop.

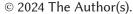
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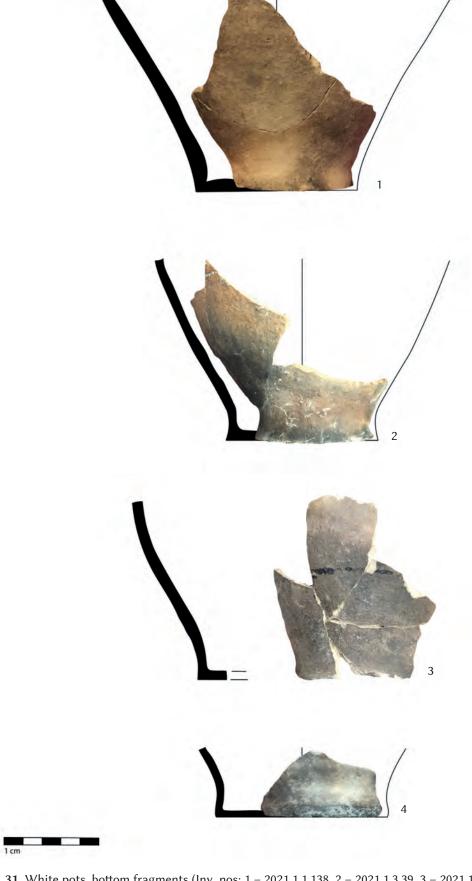


Fig. 31. White pots, bottom fragments (Inv. nos: 1-2021.1.1.138, 2-2021.1.3.39, 3-2021.1.5.49, 4-2021.1.3.24)

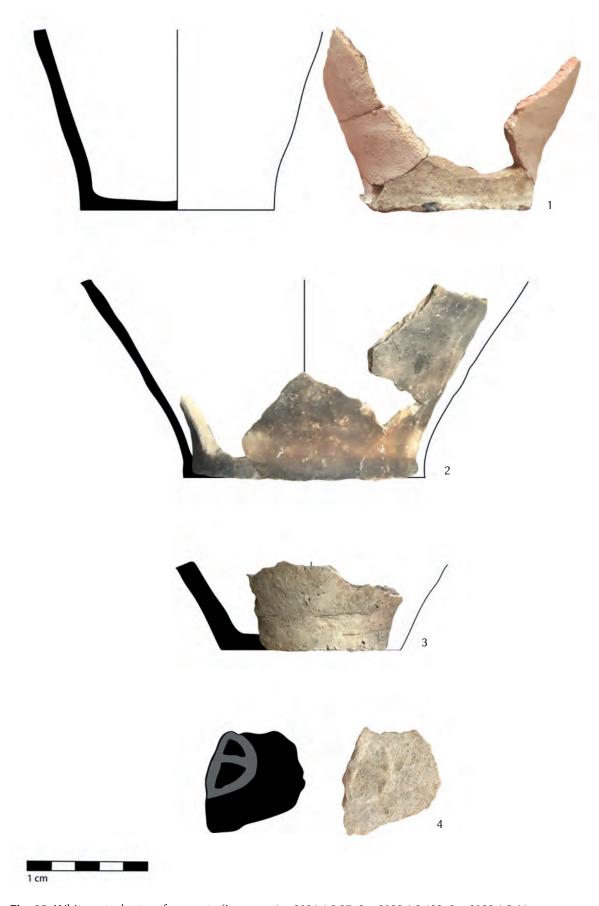


Fig. 32. White pots, bottom fragments (Inv. nos: 1-2021.1.2.37, 2-2022.1.2.132, 3-2022.1.5.61, 4-2022.1.2.57)

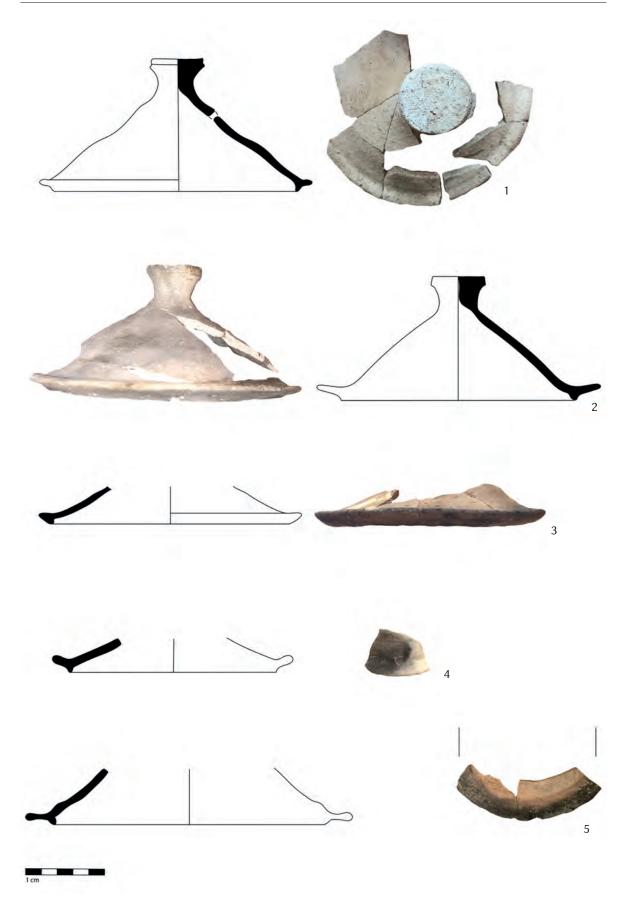


Fig. 33. White lids (Inv. nos: 1-2021.1.1.23, 2-2021.1.1.67, 3-2021.1.1.263, 4-2021.1.2.29, 5-2021.1.1.145)

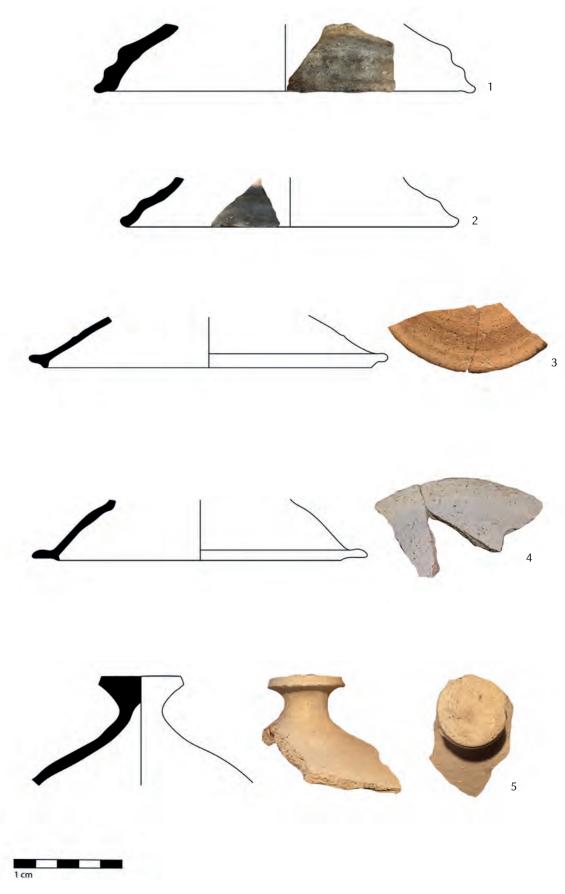


Fig. 34. White lids (Inv. nos: 1 – 2022.1.4.21, 2 – 2021.1.4.17, 3 – 2021.1.1.168, 4 – 2021.1.1.170, 5 – 2021.1.2.21)

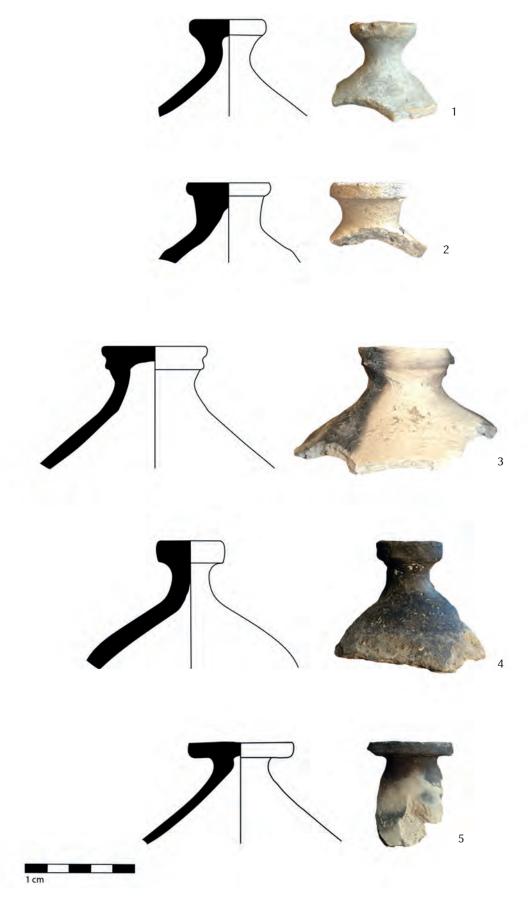


Fig. 35. White lids (Inv. nos: 1 – 2021.1.5.84, 2 – 2021.1.5.161, 3 – 2021.1.5.85, 4 – 2021.1.1.157, 5 – 2021.1.2.84)

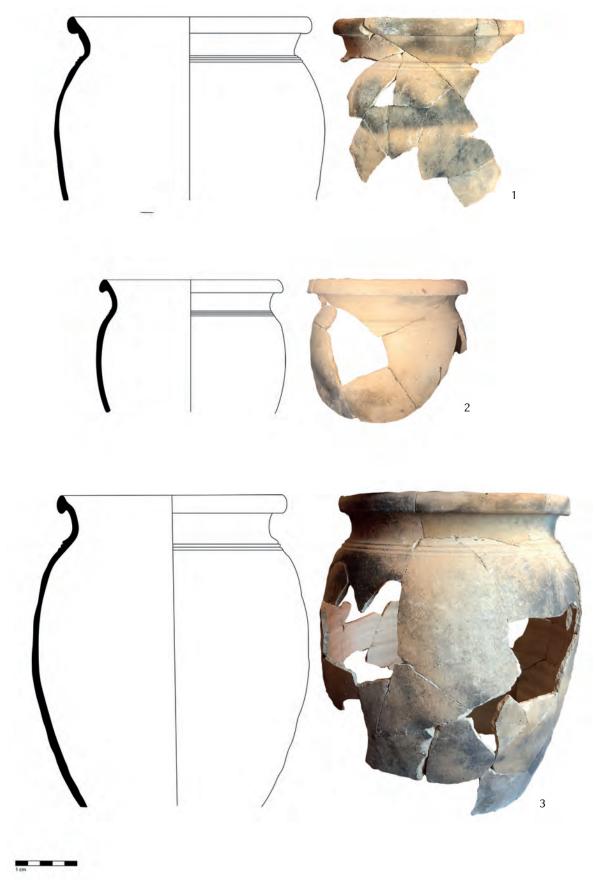


Fig. 36. Pink pots (Inv. nos: 1 – 2021.1.1.64, 2 – 2021.1.1.68, 3 – 2021.1.1.63)

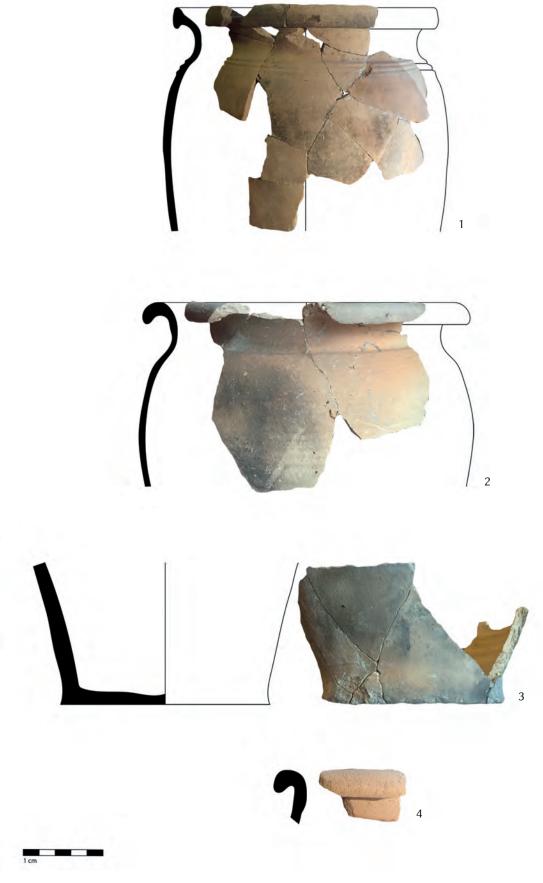
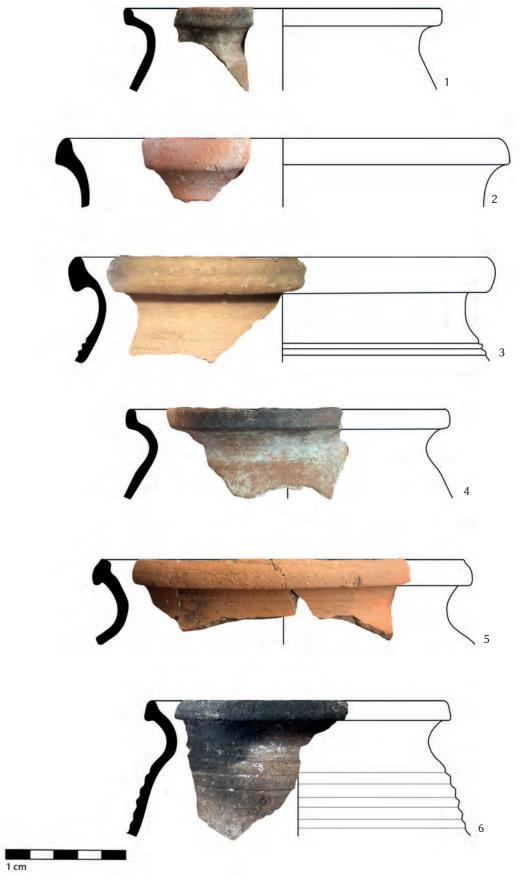
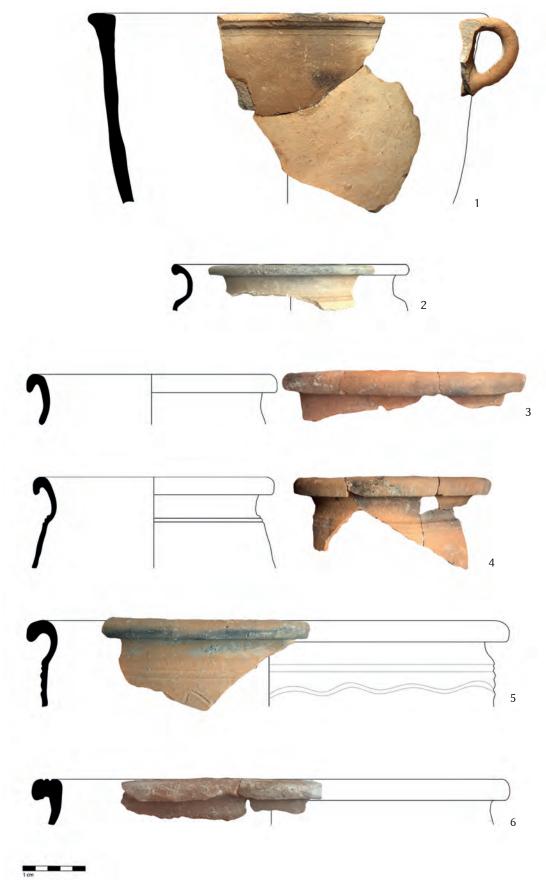


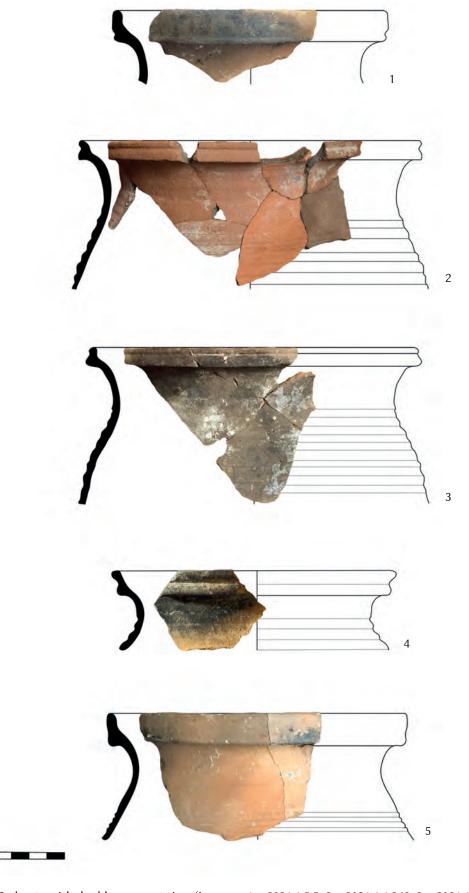
Fig. 37. Pink pots (Inv. nos: 1 – 2021.1.1.165, 2 – 2021.1.1.97, 3 – 2021.1.1.92, 4 – 2021.1.1.155)



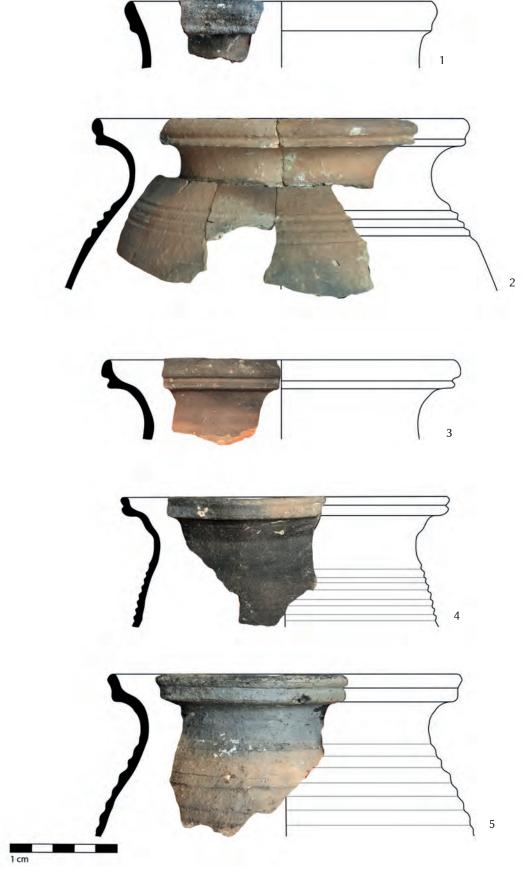
 $\textbf{Fig. 38.} \ \, \text{Red pots with `nail head' rims (Inv. nos: 1-2021.1.1.41, 2-2021.1.143, 3-2021.1.3.6, 4-2021.1.1.243, 5-2022.1.5.1, 6-2022.1.9.31) }$



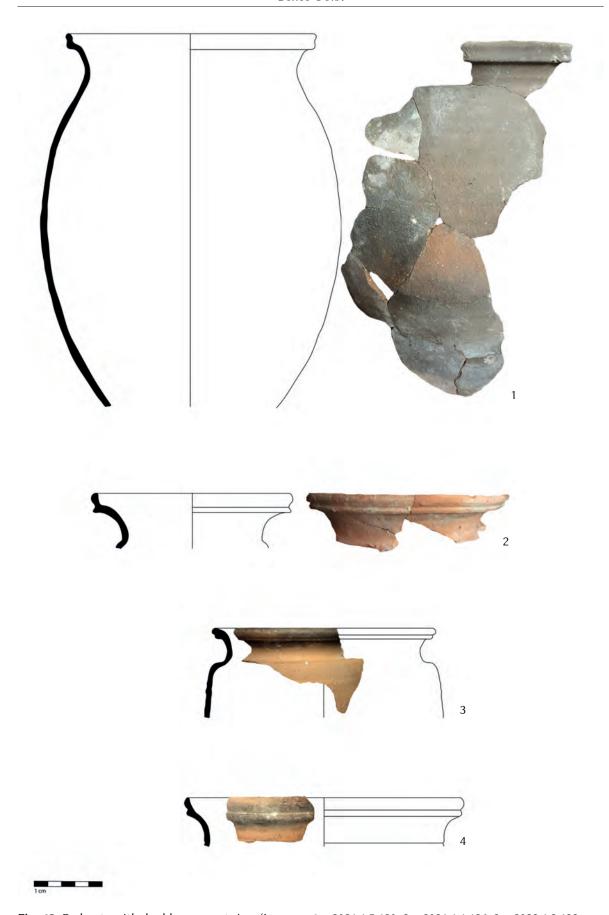
 $\begin{array}{l} \textbf{Fig. 39.} \ \text{Red pots with rounded and downward-rolled rims (Inv. nos: 1-2022.1.2.121, 2-2021.1.2.149, 3-2021.1.1.125, 4-2021.1.1.260, 5-2022.1.7.23, 6-2021.1.1.127) \end{array}$



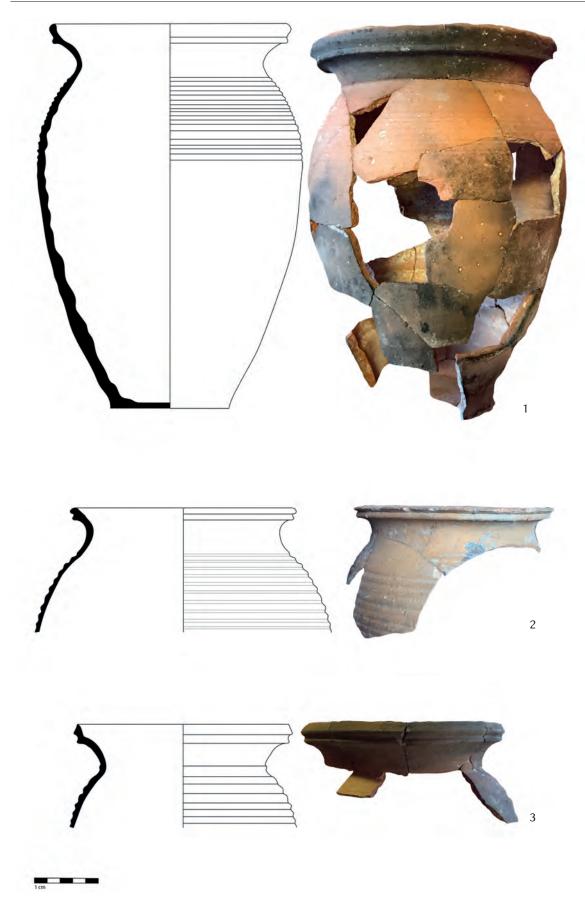
 $\begin{array}{l} \textbf{Fig. 40.} \ \ \textbf{Red pots with double-segment rims (Inv. nos: 1-2021.1.5.5, 2-2021.1.1.262, 3-2021.1.1.259, 4-2022.1.2.51, 5-2021.1.5.28) \end{array}$



 $\begin{array}{l} \textbf{Fig. 41.} \ \ \text{Red pots with double-segment rims (Inv. nos: } 1-2021.1.1.39, 2-2021.1.1.95, 3-2021.1.3.4, \\ 4-2021.1.5.160, 5-2021.1.5.4) \end{array}$



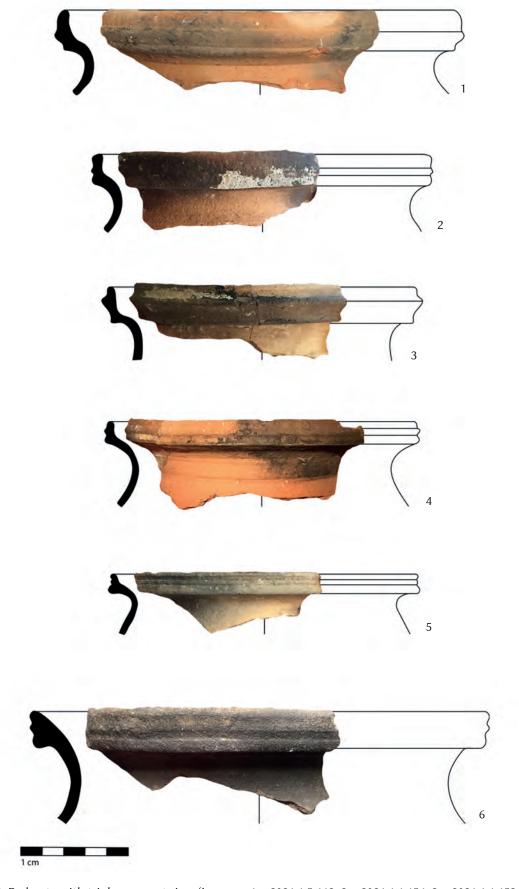
 $\textbf{Fig. 42.} \ \, \text{Red pots with double-segment rims (Inv. nos: 1 - 2021.1.5.120, 2 - 2021.1.1.126, 3 - 2022.1.2.122, 4 - 2021.1.1.1) }$



 $\textbf{Fig. 43.} \ \ \text{Red pots with double-segment rims (Inv. nos: 1-2021.1.1.62, 2-2021.1.3.37, 3-2021.1.1.164)}\\$



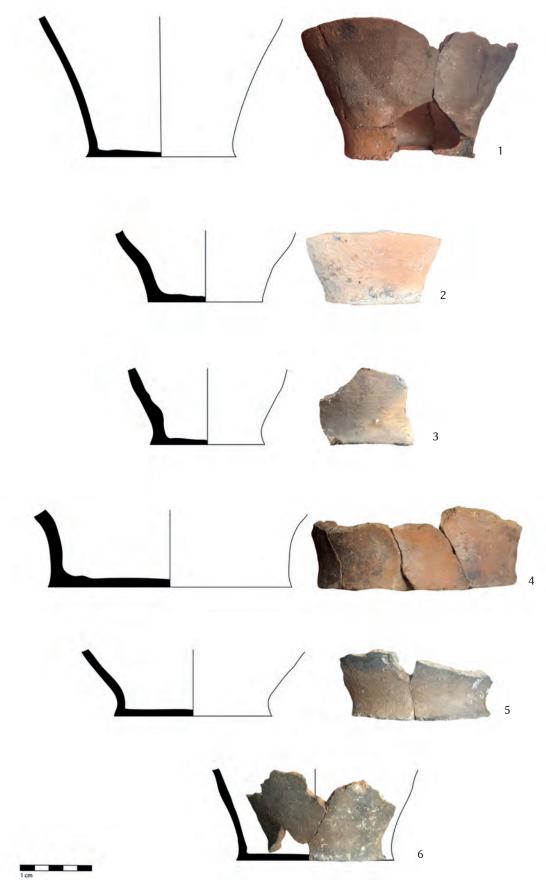
Fig. 44. Red pots with double-segment rims (Inv. nos: 1-2022.1.7.52, 2-2022.1.2.52, 3-2021.1.1.90, 4-2021.1.1.37, 5-2021.1.1.173)



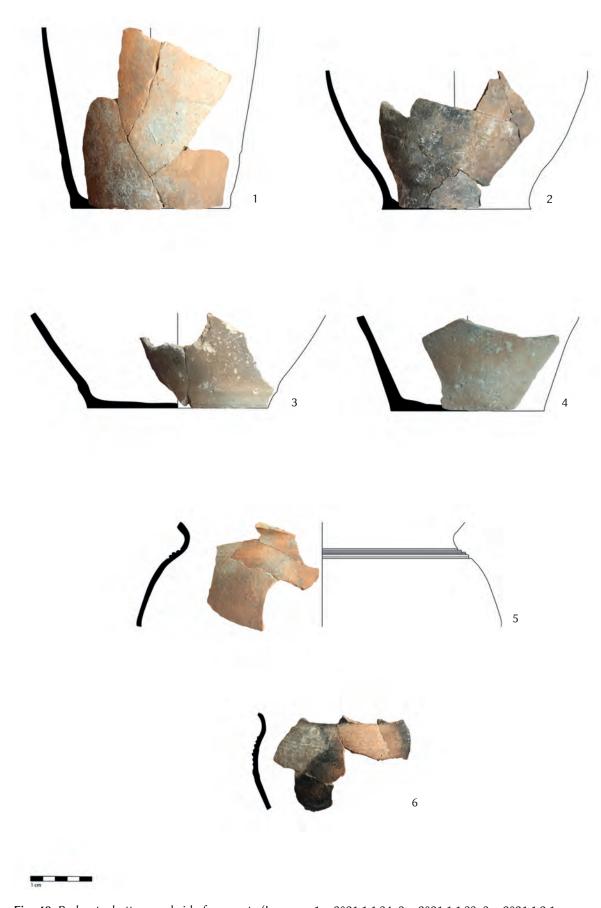
 $\begin{array}{l} \textbf{Fig. 45.} \ \ Red \ pots \ \ with \ triple-segment \ rims \ (lnv. \ nos: \ 1-2021.1.5.112, \ 2-2021.1.1.154, \ 3-2021.1.1.153, \ 4-2021.1.1.174, \ 5-2021.1.2.79, \ 6-2022.1.2.96) \end{array}$



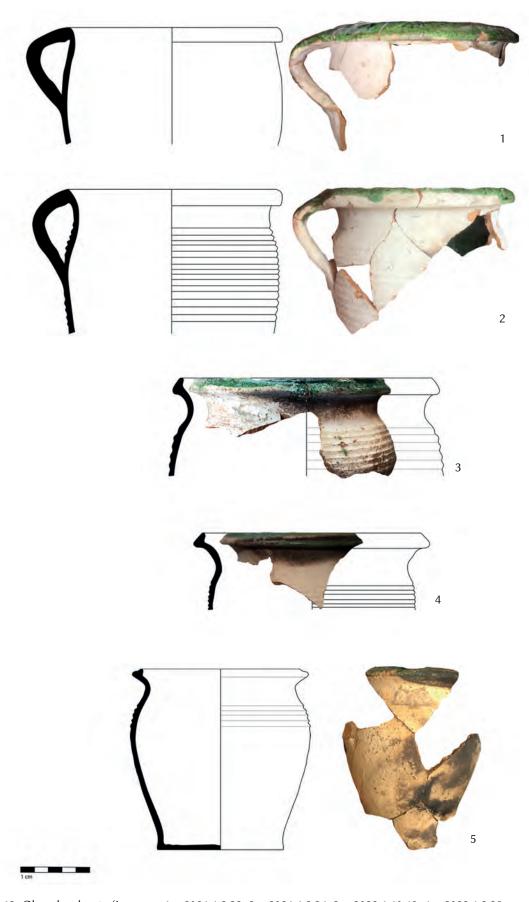
Fig. 46. Red pots, bottom fragments (Inv. nos: 1 – 2021.1.1.48, 2 – 2021.1.1.61, 3 – 2021.1.1.152, 4 – 2021.1.2.3, 5 – 2021.1.1.257)



 $\begin{array}{l} \textbf{Fig. 47. Red pots, bottom fragments (Inv. nos: } 1-2021.1.1.258, 2-2021.1.4.13, 3-2021.1.4.14, \\ 4-2021.1.5.109, 5-2021.1.5.50, 6-2022.1.2.131s) \end{array}$



 $\begin{array}{l} \textbf{Fig. 48.} \ \ \text{Red pots, bottom and side fragments (Inv. nos: 1-2021.1.1.34, 2-2021.1.1.33, 3-2021.1.2.1, \\ 4-2021.1.1.89, 5-2022.1.6.7, 6-2021.1.1.229) \end{array}$



 $\begin{array}{l} \textbf{Fig. 49. Glazed red pots (Inv. nos: 1-2021.1.2.33, 2-2021.1.2.34, 3-2022.1.10.19, 4-2022.1.2.38, \\ 5-2022.1.2.133) \end{array}$



Fig. 50. Glazed red pots (Inv. nos: 1 – 2022.1.4.56, 2 – 2021.1.1.38, 3 – 2022.2.7.48, 4 – 2021.1.2.36)

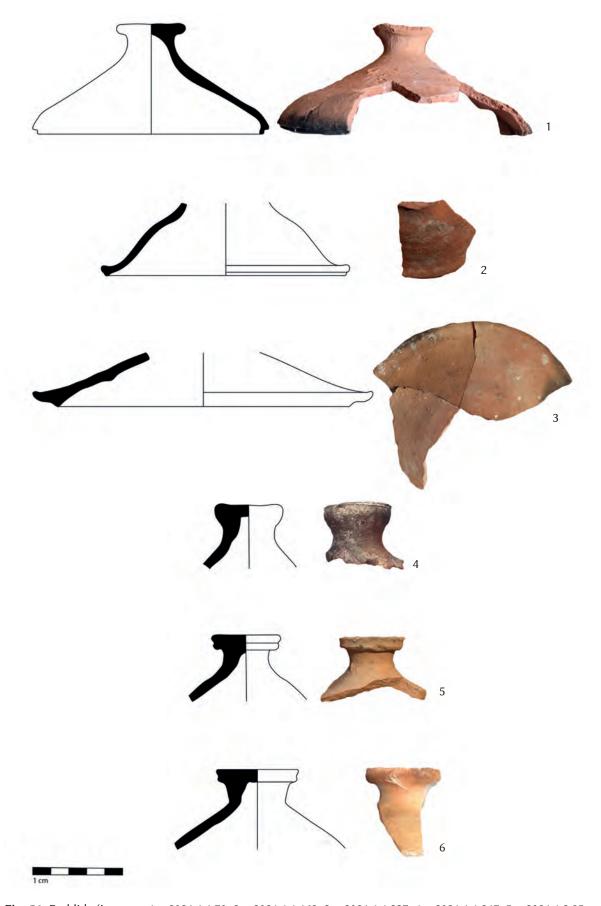


Fig. 51. Red lids (Inv. nos: 1 – 2021.1.1.70, 2 – 2021.1.1.169, 3 – 2021.1.1.237, 4 – 2021.1.1.247, 5 – 2021.1.2.85, 6 – 2022.1.2.78)



Fig. 52. Grey pots with rounded and downward-rolled rims (Inv. nos: 1-2021.1.1.65, 2-2021.1.5.1, 3-2021.1.3.41)

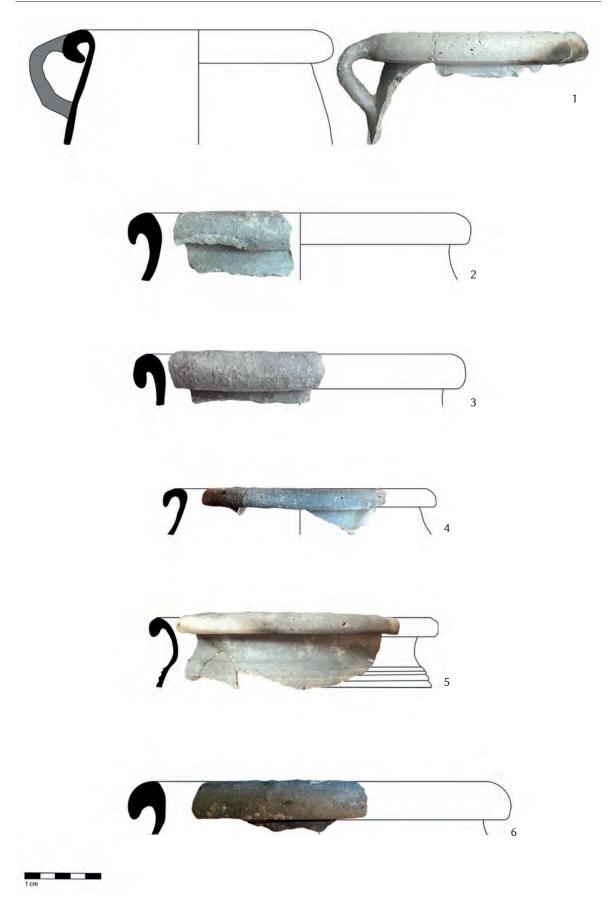
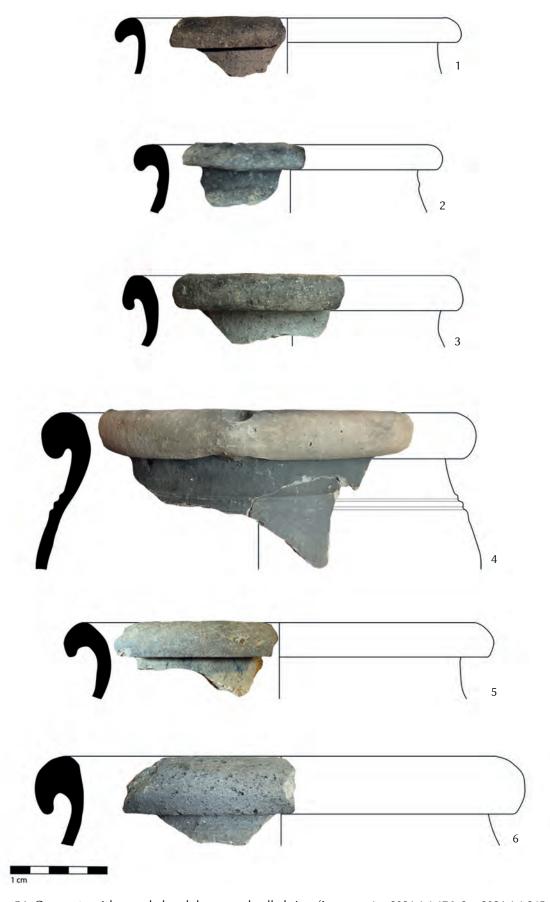


Fig. 53. Grey pots with rounded and downward-rolled rims (Inv. nos: 1-2021.1.5.48, 2-2021.1.1.54, 3-2021.1.1.55, 4-2021.1.1.66, 5-2021.1.1.99, 6-2021.1.1.150)



 $\begin{array}{l} \textbf{Fig. 54. Grey pots with rounded and downward-rolled rims (Inv. nos: 1-2021.1.1.176, 2-2021.1.1.245, \\ 1-2021.1.2.81, 4-2021.1.3.42, 5-2022.1.2.48, 6-2022.1.2.135) \end{array}$

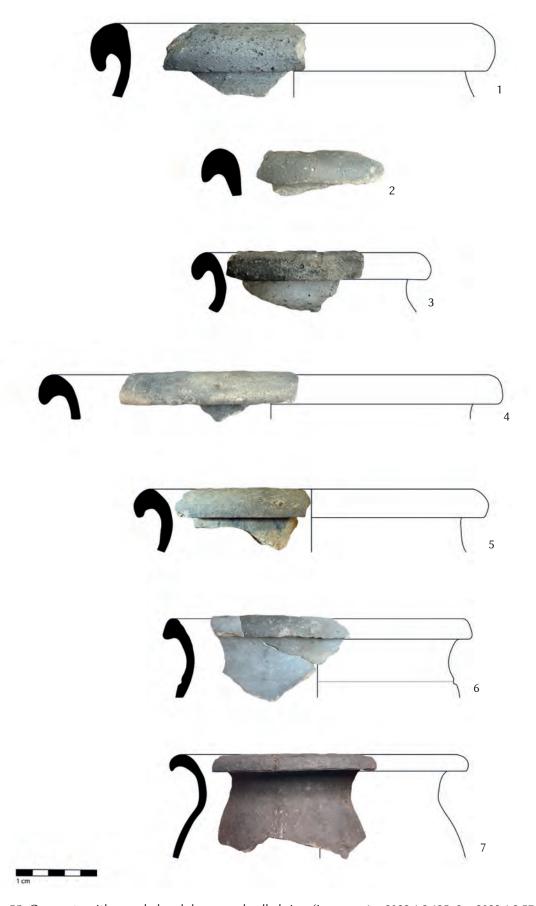


Fig. 55. Grey pots with rounded and downward-rolled rims (Inv. nos: 1-2022.1.2.135, 2-2022.1.3.57, 3-2022.1.3.40, 4-2022.1.3.51, 5-2022.1.2.48, 6-2022.1.2.94, 7-2022.1.2.95)



Fig. 56. Grey pots with rounded and downward-rolled rims (Inv. nos: 1-2022.1.6.71, 2-2022.1.7.15, 3-2022.1.7.16, 4-2022.1.6.70, 5-2021.1.2.51)

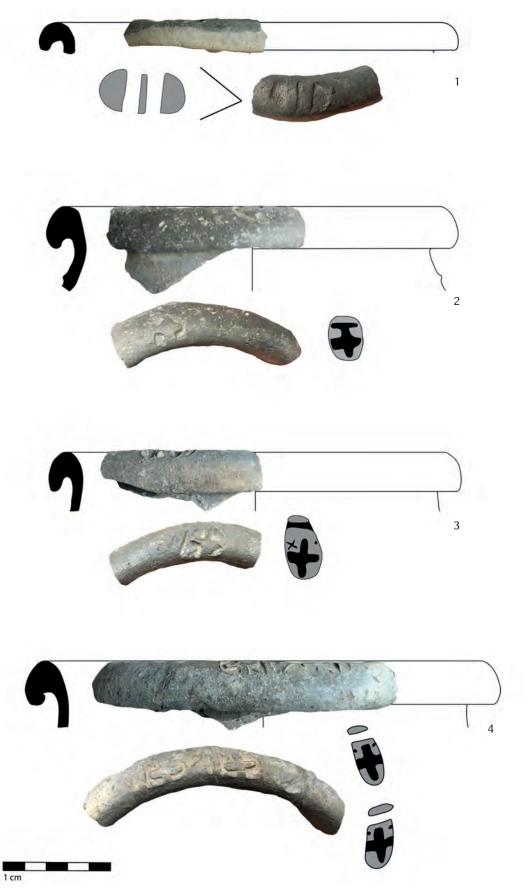


Fig. 57. Grey pots with rim stamp (Inv. nos: 1 – 2022.1.5.34, 2 – 2022.1.7.13, 3 – 2022.1.7.14, 4 – 2022.1.7.26)

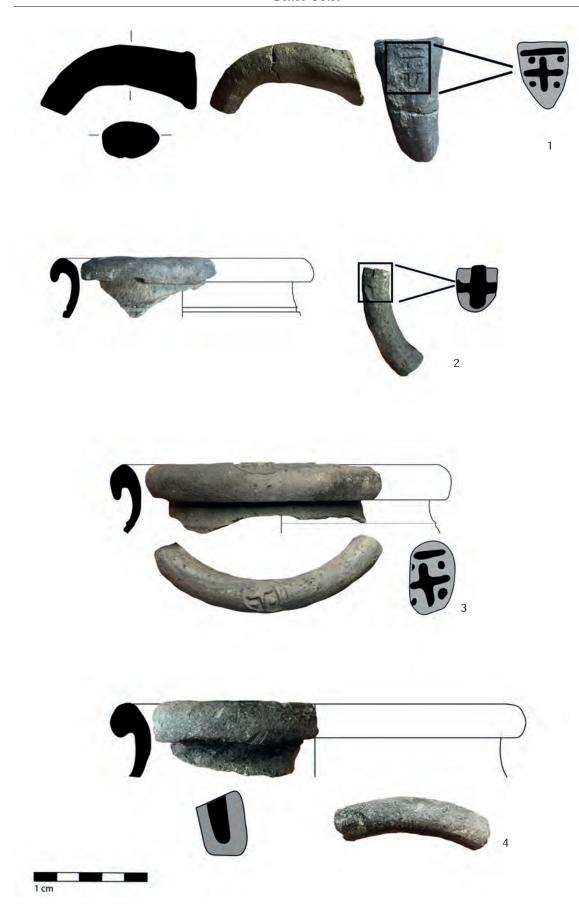
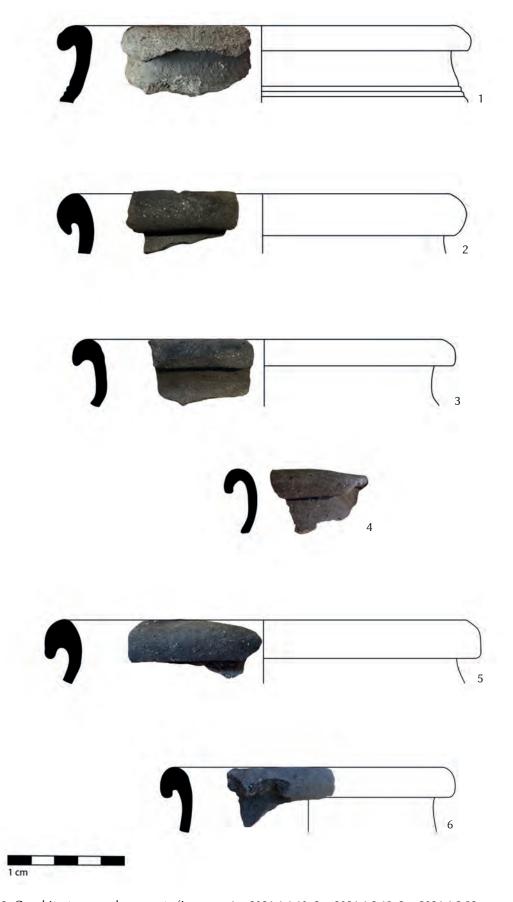
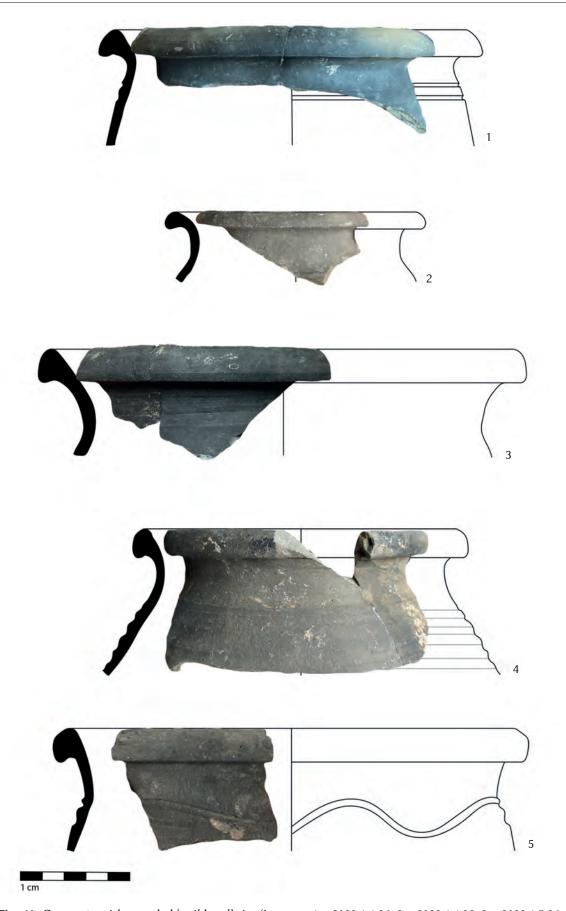


Fig. 58. Grey pots with rim stamp (Inv. nos: 1-2021.1.5.112, 2-2021.1.5.114, 3-2022.1.2.99, 4-2021.1.1.11)



 $\begin{array}{l} \textbf{Fig. 59. Graphite-tempered grey pots (Inv. nos: } 1-2021.1.1.10, 2-2021.1.2.18, 3-2021.1.2.82, \\ 3-2021.1.2.82, 4-2021.1.1.175, 5-2022.1.9.11, 6-2022.1.9.12) \end{array}$



 $\begin{array}{l} \textbf{Fig. 60. Grey pots with rounded 'nail head' rim (Inv. nos: $1-2022.1.4.26$, $2-2022.1.4.32$, $3-2022.1.5.36$, $4-2022.1.7.21$, $5-2022.1.7.51$)} \\ \end{array}$



 $\textbf{Fig. 61.} \ \, \textbf{Grey pots, side fragments and handles (Inv. nos: 1-2022.1.5.35, 2-2021.1.1.267, 3-2021.1.5.162)}$

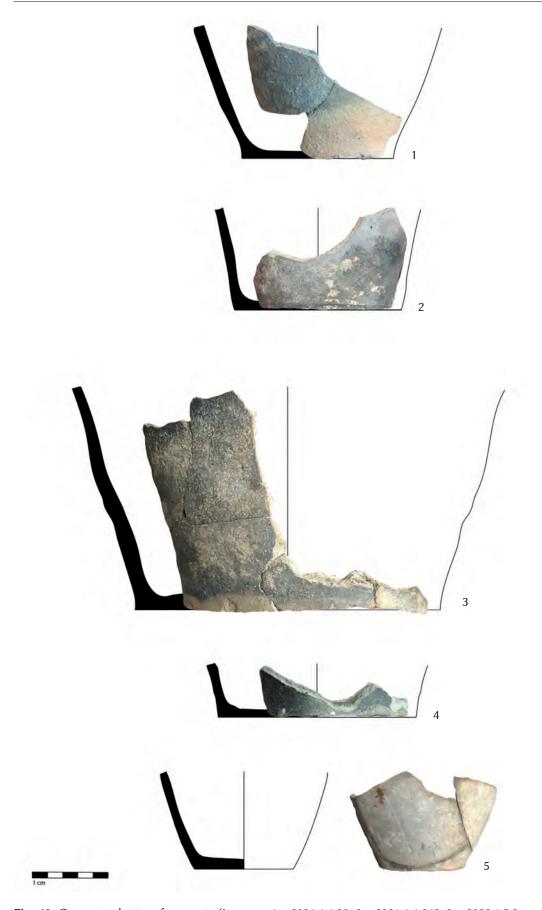


Fig. 62. Grey pots, bottom fragments (Inv. nos: 1-2021.1.1.98, 2-2021.1.1.242, 3-2022.1.5.9, 4-2021.1.2.80, 5-2022.1.2.59)

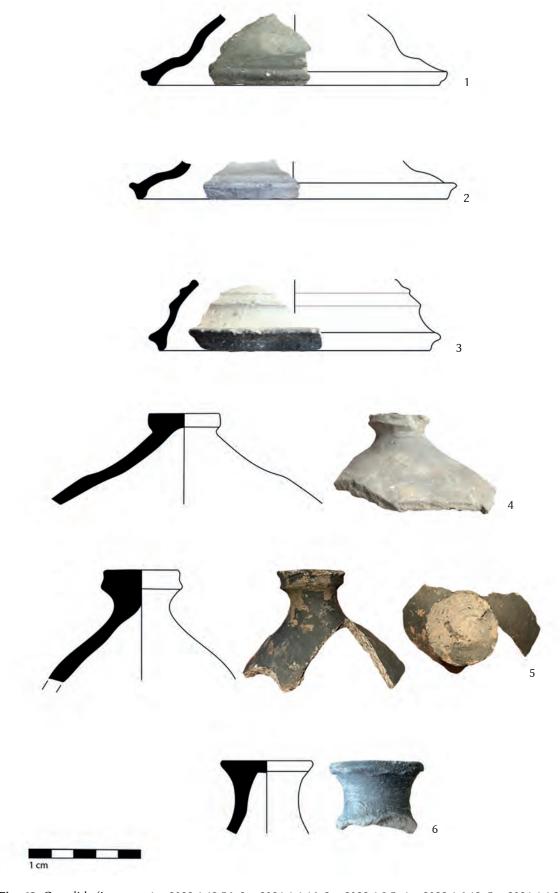
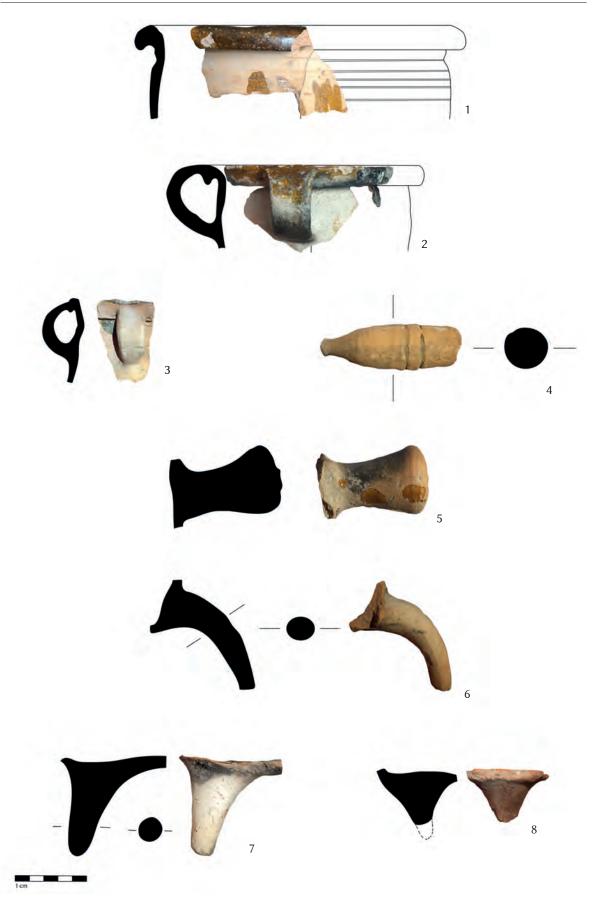


Fig. 63. Grey lids (Inv. nos: 1 – 2022.1.13.56, 2 – 2021.1.4.16, 3 – 2022.1.8.5, 4 – 2022.1.6.12, 5 – 2021.1.1.36, 6 – 2021.1.5.143)



 $\begin{array}{l} \textbf{Fig. 64. Pots on legs and pans (Inv. nos: } 1-2021.1.5.51, 2-2021.1.2.35, 3-2021.1.1.188, 4-2021.1.1.185, \\ 5-2021.1.1.180, 6-2021.1.1.184, 7-2021.1.5.52, 8-2021.1.2.48) \end{array}$

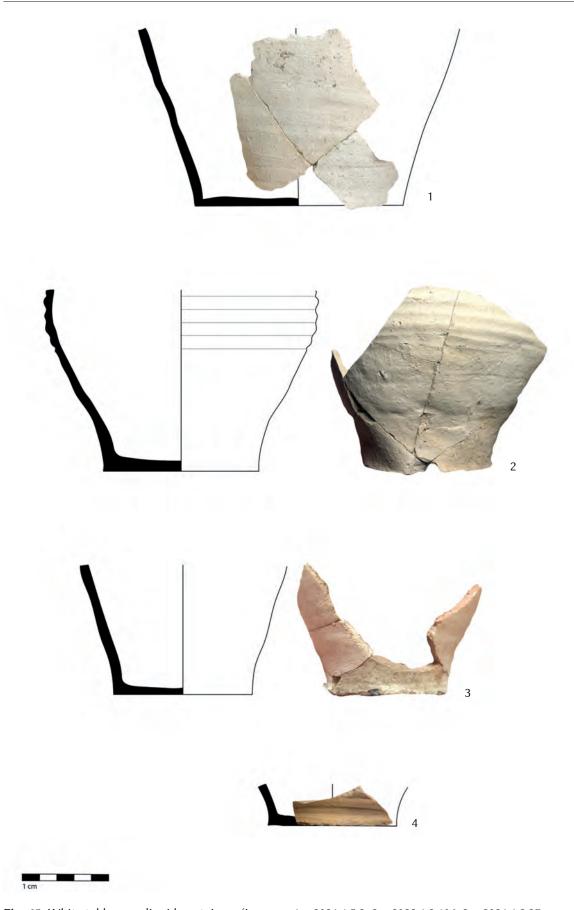


Fig. 65. White tableware, liquid containers (Inv. nos: 1-2021.1.5.3, 2-2022.1.2.106, 3-2021.1.2.37, 4-2021.1.1.77)

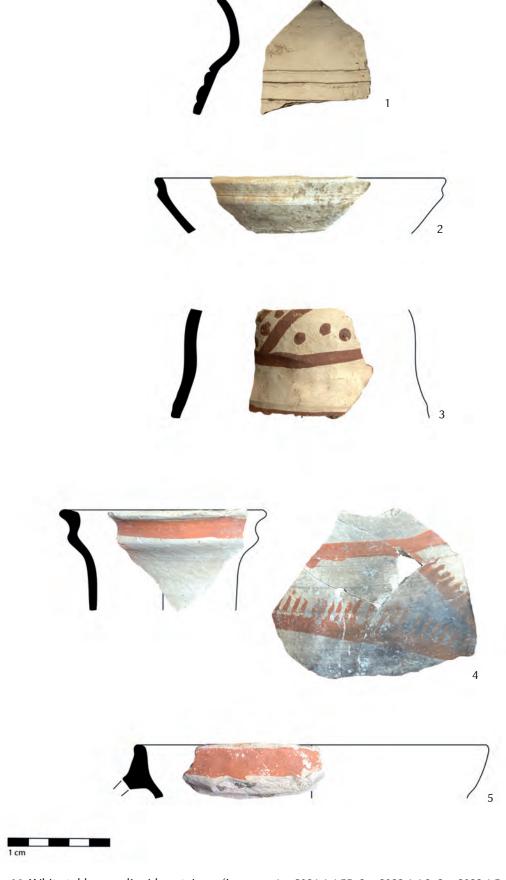


Fig. 66. White tableware, liquid containers (Inv. nos: 1-2021.1.4.55, 2-2022.1.4.9, 3-2022.1.5.62, 4-2022.1.6.69, 5-2021.1.4.18)

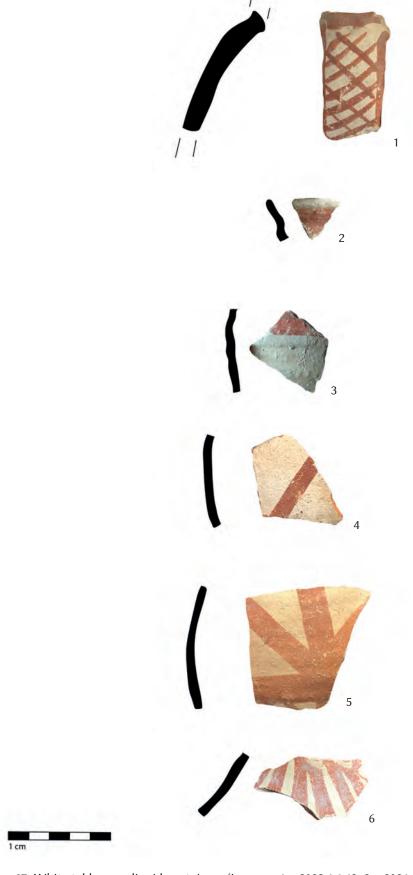


Fig. 67. White tableware, liquid containers (Inv. nos: 1-2022.1.1.13, 2-2021.1.5.30, 3-2021.1.3.25, 4-2022.1.2.107, 5-2022.1.2.100, 6-2021.1.1.265)

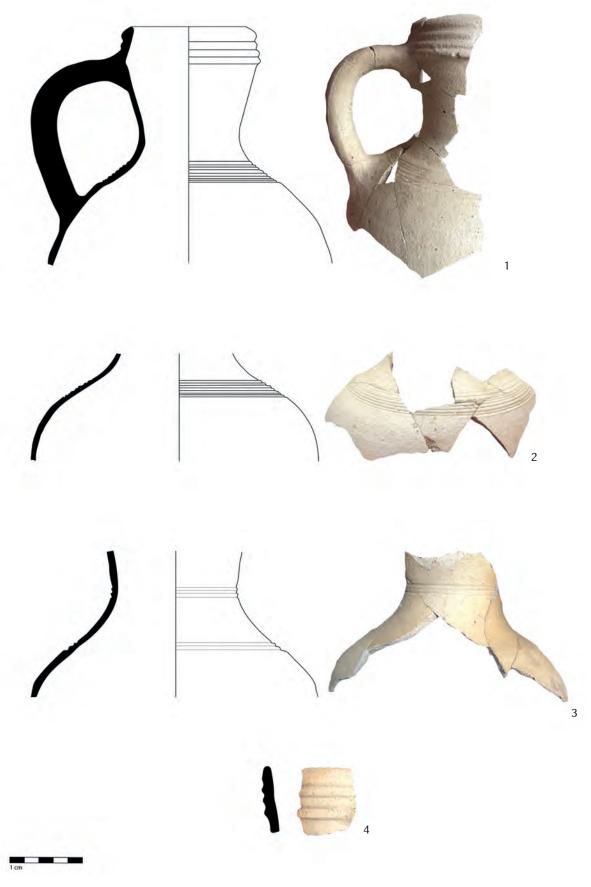
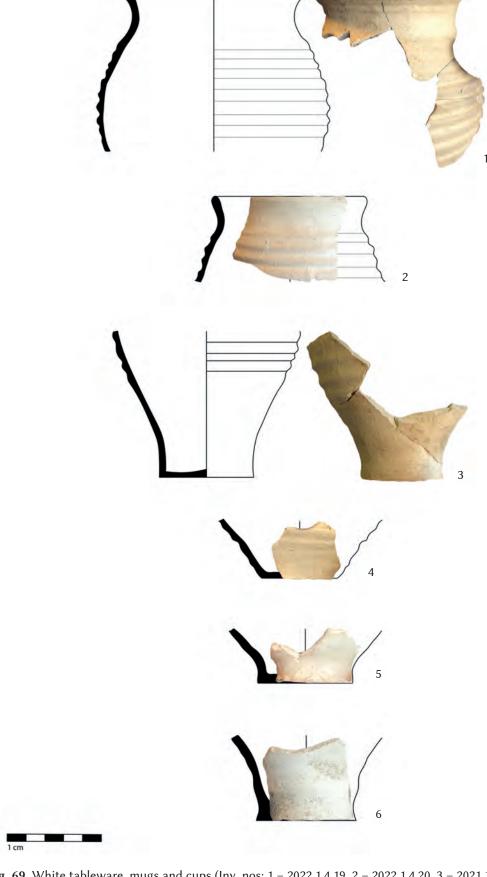


Fig. 68. White tableware, jugs (Inv. nos: 1 – 2021.1.1.94, 2 – 2021.1.2.52, 3 – 2021.1.5.47, 4 – 2022.1.2.150)



 $\begin{array}{l} \textbf{Fig. 69.} \ \ \textbf{White tableware, mugs and cups (Inv. nos: 1-2022.1.4.19, 2-2022.1.4.20, 3-2021.1.1.102, 4-2022.1.2.91, 5-2022.1.2.76, 6-2022.1.4.22) \end{array}$

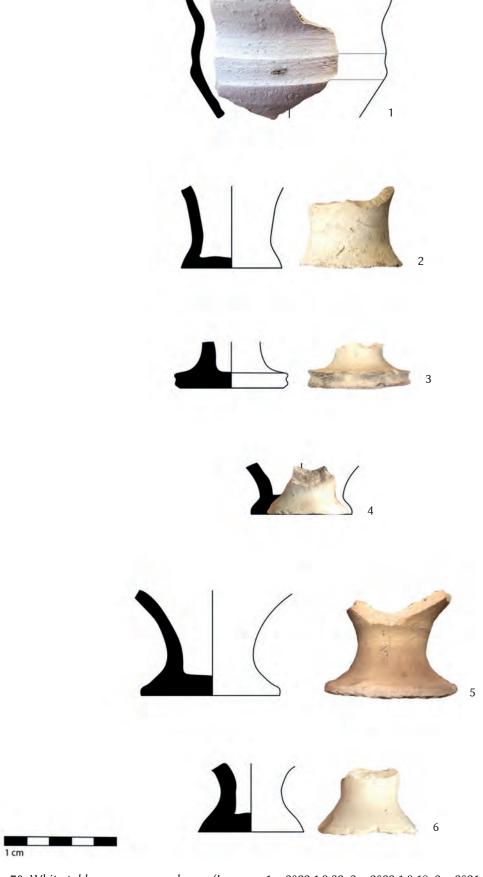


Fig. 70. White tableware, mugs and cups (Inv. nos: 1 - 2022.1.9.32, 2 - 2022.1.8.18, 3 - 2021.1.5.144, 4 - 2022.1.2.56, 5 - 2022.1.2.75, 6 - 2022.1.2.152)

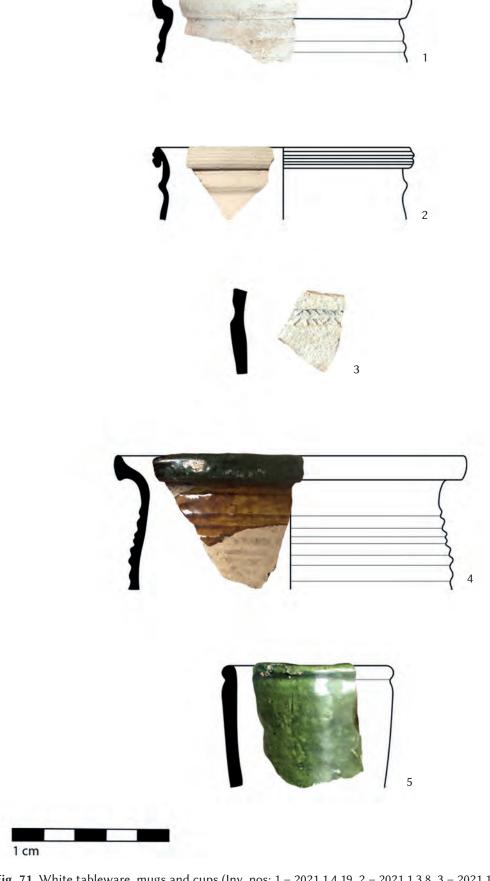


Fig. 71. White tableware, mugs and cups (Inv. nos: 1-2021.1.4.19, 2-2021.1.3.8, 3-2021.1.5.86, 4-2022.1.7.49, 5-2022.1.2.151)

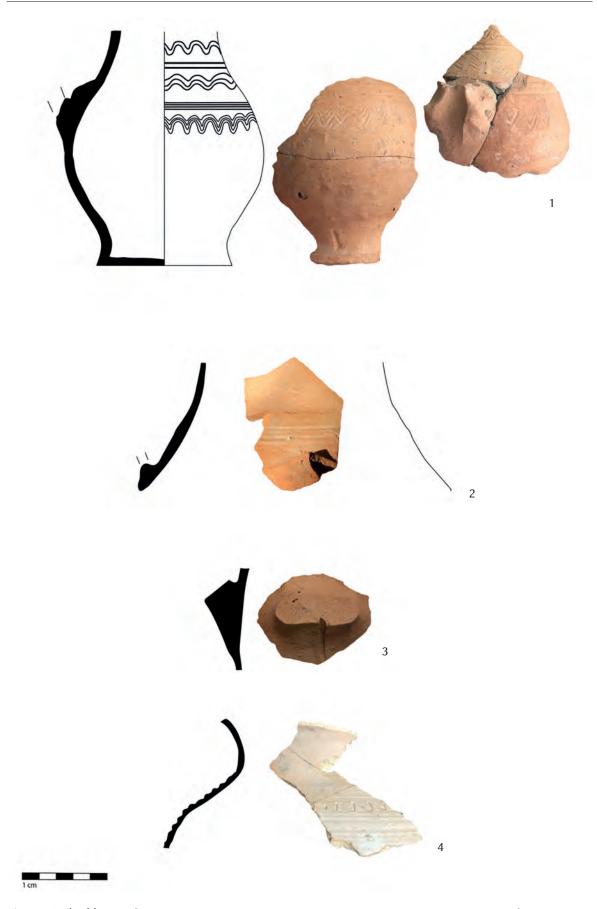


Fig. 72. Red tableware (Inv. nos: 1 – 2021.1.1.328, 2 – 2022.1.1.9, 3 – 2021.1.1.78, 4 – 2022.1.3.29)

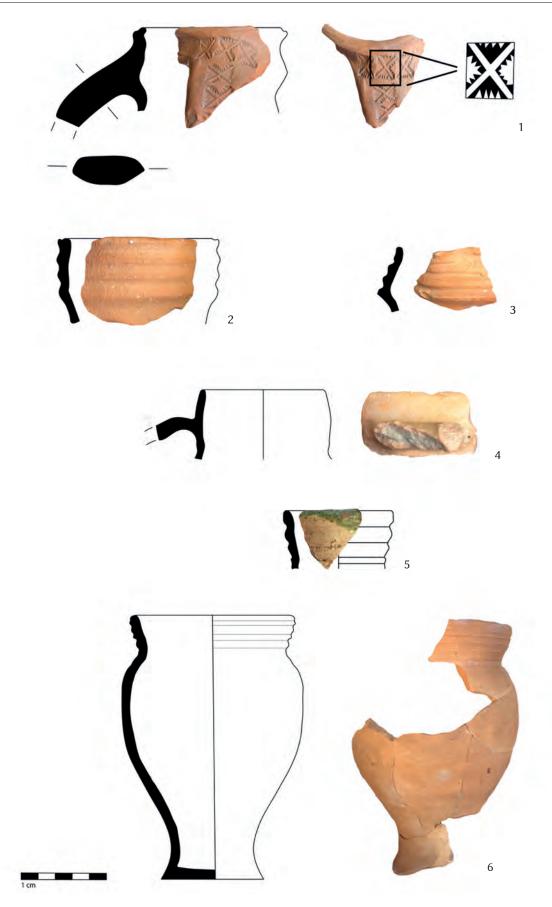


Fig. 73. Red tableware (lnv. nos: 1-2021.1.5.146, 2-2021.1.5.158, 3-2022.1.6.50, 4-2022.1.3.43, 5-2021.1.1.158, 6-2022.1.1.21)



Fig. 74. Red tableware (Inv. nos: 1 – 2021.1.5.45, 2 – 2022.1.1.31, 3 – 2021.1.2.10)

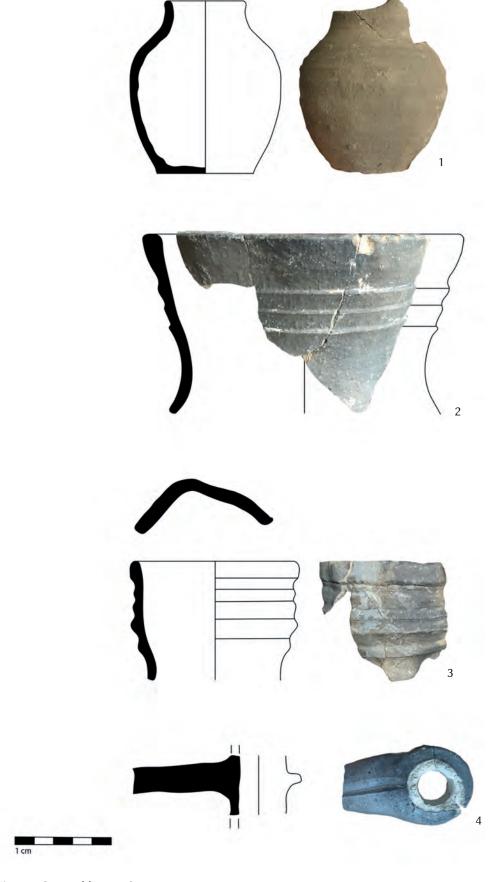


Fig. 75. Grey tableware (Inv. nos: 1 – 2022.1.5.6, 2 – 2022.1.7.22, 3 – 2022.1.8.26, 4 – 2021.1.1.79)

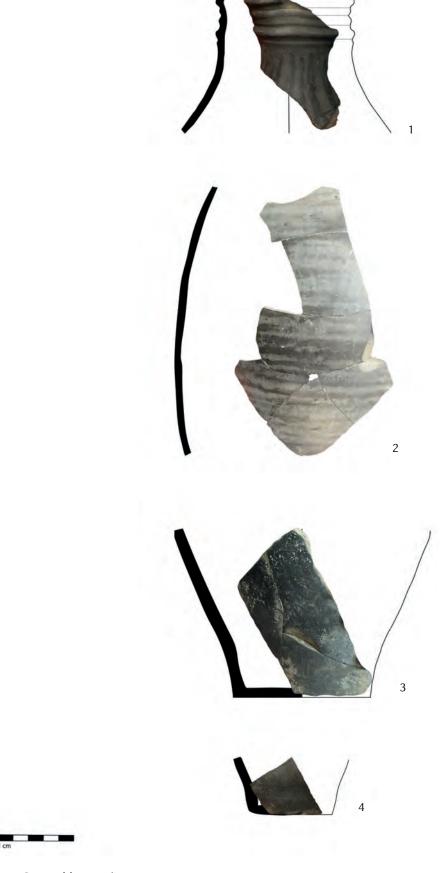


Fig. 76. Grey tableware (Inv. nos: 1 – 2022.1.6.27, 2 – 2021.1.5.46, 3 – 2022.1.5.8, 4 – 2021.1.2.17)

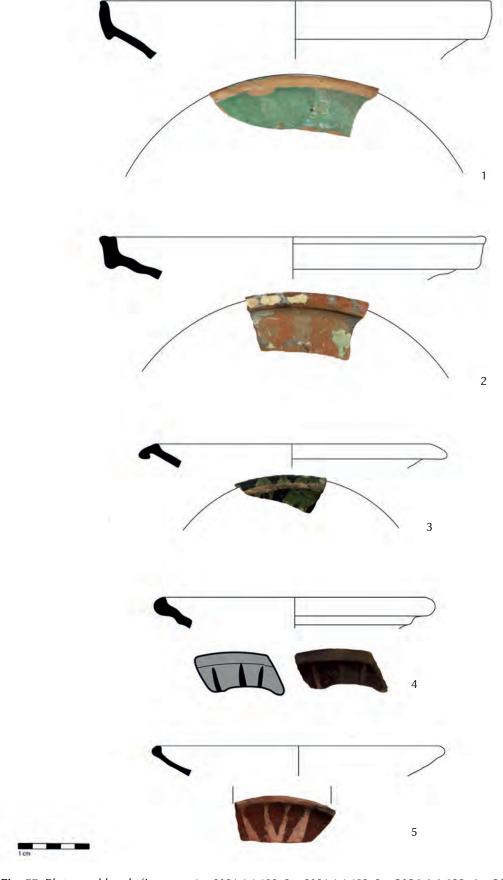


Fig. 77. Plates and bowls (lnv. nos: 1-2021.1.1.182, 2-2021.1.1.183, 3-2021.1.1.189, 4-2021.1.2.50, 5-2021.1.2.86)

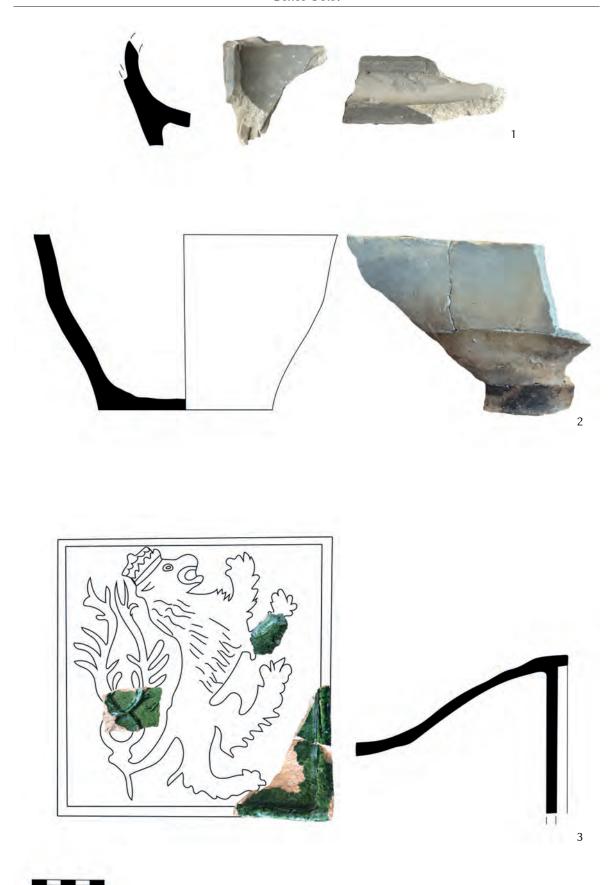


Fig. 78. Stove tiles (Inv. nos: 1 – 2022.1.2.148, 2 – 2021.1.5.82, 3 – 2021.1.4.22)



Fig. 79. Crucible and unidentified objects (Inv. nos: 1 – 2021.1.1.69, 2 – 2021.1.1.81, 3 – 2021.1.3.52)