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ORIGINAL RESEARCH PAPER



Roman glass bowls from Intercisa

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ABSTRACT

This paper covers the glass bowl fragments brought to light at Intercisa (Dunaújváros, Hungary). Bowls occur in relatively high number among the finds from the *vicus* and the military fort of Intercisa. The open vessels assigned to this category have a rim diameter exceeding the vessel height or exceeding the vessel height by at least 60%. Of the roughly 700 glass fragments known from the site, no more than 72 represent bowls, accounting for about 10% of the vessel glass, a relatively high proportion. Facet-cut bowls are the most frequent type among bowls: 40 pieces can be assigned to this category. Mosaic and ribbed bowls, as well as some cast and mould-pressed bowls are typical of the early Roman period. The vast majority of the bowls are blown vessels and date to the later second and the third centuries, with a few exemplars dating to the fourth century. Two bowl types stand out from among the finds, namely the facet-cut bowls and the scallop bowls of the late Roman period, which, judging from their regional distribution, had probably both been produced in a glass workshop active on the Intercisa settlement. One remarkable fragment from a hemispherical bowl bears a male head with a hedgehog hairstyle; it is paralleled by several vessels not only from the Cologne area, but also from Pannonia.

KEYWORDS

glass tableware, Roman vessel glass, bowls, mosaic bowls, ribbed bowls, facet-cut bowls, scallop bowls, facet-cut decoration, hedgehog hairstyle

INTERCISA

The auxiliary *castellum* and *vicus* of Intercisa both lie in the area of modern Dunaújváros, on the loess table of Öreghegy, south of the former Dunapentele settlement. Before the arrival of the Romans, the area was inhabited by the Celtic Eravisci, who left little in the way of epigraphic finds on the site.

Intercisa was a military fort and civilian settlement located on the *ripa Pannonica*. The auxiliary fort of Intercisa and the adjacent *vicus* were prospering settlements. On the Pannonian *limes*, forts were on average built at every 20 km along the Danube. Their purpose was to control the important military road along the river marking the province's border. According to the *Itinerarium Antonini* (245,3), Intercisa lay 49 Roman miles from Aquincum and 24 from Lussonium. Equestrian units were stationed in Intercisa from the first century AD onward.¹

The most famous unit garrisoning the fort was the Syrian *cohors I millaria Hemesenorum sagittariorum equitatus civium Romanorum*, which had originally been stationed in the Syrian town of Hemesa, whence some groups of its population most likely moved to Intercisa. The Syrian archers brought their families with them, who in turn were followed by Syrian merchants and various craftsmen, glassmakers among them.²

The cemeteries of the settlement were located along the roads leading out of the fort and the *vicus*. The earliest cemetery with cremation burials probably lay on the western slopes of

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¹Erdős and Pongrácz (2000) 37; Barkóczi et al. (1954) 1–4; Visy (1977) 3–4.

²Barkóczi et al. (1954) 202–209; Visy (1977) 6.

the Öreghegy.³ The exact sequence of the burials and the internal chronology of the cemetery's use still remain to be clarified. Although cremation burials of the early Roman period are attested, by far the most is known about the late Roman burials. Since no plans were made for the areas that were excavated and investigated before World War 2, the exact location of the graves and their relationship to each other remain unknown, as do details about the burial rites.⁴ Eszter B. Vágó and István Bóna published a report with a plan of the burial grounds that meets modern standards solely for the contiguous areas of the south-eastern cemetery.⁵ Despite the shortcomings of the documentation and publication of the excavations conducted at Intercisa, a diverse range of burial rites have been documented, ranging from simple cremation to more elaborate inhumation burials.⁶ The cremains were generally simply deposited in a grave pit, very rarely in urns. The inhumation burials, which account for three-quarters of all burials, can be divided into earth, brick and stone sarcophagus graves.⁷

The dominant burial rite in the third and fourth centuries was inhumation. Two large cemeteries can be distinguished in the area known as the Öreghegy. The so-called Great Cemetery lay on either side of the road from Intercisa to Annamata, on the northern slope of the Öreghegy. Another separate cemetery lay to its south-east. Between 1963 and 1967, Eszter B. Vágó conducted an excavation south-east of the Intercisa fort and uncovered 600 graves. The late Roman burials lay in the area west of the *limes* road.⁸ The cemetery's use began in the final third of the third century and many burials date from the first decade of the fourth century. The cemetery's use continued during the fourth century, up to the early fifth century.⁹ The burial grounds later expanded and apart from the southern cemeteries, whose graves were almost without exception located on the eastern side of the *limes* road, a new cemetery was opened in the abandoned western part of the civilian settlement, whose grave goods included countless articles reflecting the presence of Barbarians. The burials were mostly west to east oriented; some deceased had been wrapped in linen and wooden coffins and sarcophagi were also uncovered.¹⁰

The revival and prosperity of the settlement began after the Marcomannic-Sarmatian wars in the 180s and lasted until the 260s. The construction work was largely carried out by the Hemesan cavalry troops. Following the extensive reconstruction of the military fort, the civilian settlement also flourished, as indicated by the construction of multi-roomed, often luxurious houses with frescoes and underfloor heating. On the testimony of the inscriptions, the main driving force of the boom, which began at the close of the second century and lasted until the mid-third century, was the arrival of the eastern troops and the eastern population groups in their wake. An affluent military class demanded large-scale imports. Under the Severans, the civilian settlement expanded considerably and even though it remained a *vicus* in terms of its legal status, a definite process of urbanisation can be noted. The two imperial visits in 202 and 214 gave a great boost to development.¹¹

Workshops and furnaces related to various industrial activities were located in the area south of the fort. The pottery kilns represented a type used in Asia Minor that was previously unattested in Pannonia. The kilns were dug into the ground and had probably been introduced by the eastern population arriving with the Syrian soldiers stationed in the fort.¹² The industrial quarter with the iron and bronze workshop as well as the glass workshop was established in the immediate vicinity of the *castellum*, on the outer side of the defensive ditch. The glass workshop probably started its activity after the arrival of the Syrian troops and mainly produced snake-thread beakers and other vessels typical of the second to third centuries. The workshop was built on the site of a former leather-working workshop with adobe walls. The workshop area contained several small kilns, while the two rooms and several refuse pits in the area yielded more than a hundred kilograms of glass waste and raw glass, as well as some wasters. Regrettably, no tools were brought to light.¹³

The last inscription of the Syrian garrison occurs on a statue base of Trebonianus Gallus from 252. The fort was completely destroyed in 259–260. In the late Roman period, the settlement and its population declined, although new troops arrived and rebuilt the fort. In 379–380, there was an influx of Barbarian *foederati*. The settlement shrank, the fort was reinforced and gradually began to resemble a fortified settlement, with the civilian population finding shelter within its walls.

DETERMINATION OF THE VESSEL SHAPES

It is not always easy to clearly designate and determine glass vessel shapes or types. The easily mouldable material provided craftsmen with numerous options for rim, base and

³Barkóczi et al. (1954) 42–100; Vágó (1969) 168–169.

⁴Teichner (2011) 24.

⁵Vágó and Bóna (1976). The excavated graves were numbered sequentially during the successive excavation campaigns, irrespective of in which cemetery they had been uncovered, and this in the lack of an overall plan of the cemeteries and of reports on the excavations, it is often uncertain in which cemetery a particular burial had come to light. Therefore, the cemetery in which a specific burial was excavated is only indicated in cases when this can be determined.

⁶Teichner (2011) 24–25.

⁷Vágó and Bóna (1976) 141; Teichner (2011) 24–25.

⁸Vágó and Bóna (1976) 7; Teichner (2011).

⁹Vágó and Bóna (1976) 207–208.

¹⁰Vágó (1970) 109–132; Visy (1977) 37.

¹¹Barkóczi et al. (1954) 209–217; Visy (1977) 27.

¹²Visy (1977) 25. A detailed report on the workshop and its finds is still lacking.

¹³Visy (1977) 33.



handle forms as well as for the vessel body itself, especially after the invention of glass blowing. This diversity was coupled with a wide range of decorative techniques and ornamental schemes. At the same time, the shape of the vessel body, the rim, the base and the handle would sometimes remain unchanged over a long period of time.¹⁴ It is also possible to establish types based on formal attributes or to define styles based on the production technology, the finish of various elements and the decorative system. Vessels excavated on settlements are usually strongly fragmented and can therefore only be classified imprecisely, and the classification system itself often remains incomplete. While the glass vessels recovered from burials are often intact, they were selected for specific ritual purposes and do not represent the full range of glass use. Glassware became a symbol of Roman-type culture and a realistic indicator of wealth and social diversity after the invention and spread of glass-blowing. In addition to the determination of formal criteria, the functional groups – such as bowls, beakers, jugs, bottles, ungentaria, etc. – proposed by Sophia van Lith and Klaus Randsborg enable the study of the differences in the use of glass in different periods and on different settlement types (from rural settlements to the largest cities) on a statistical basis. It is possible to roughly classify even a strongly fragmented material and to determine whether a particular fragment comes from a drinking vessel such as a cup or from tableware such as bowls/plates. This contributes to understanding what types of vessels were used, even if the exact type cannot always be determined.

Although some glass vessel shapes were current throughout the Roman Empire from the first to the fourth centuries, variations on the basic forms can be noted that are distinctive to a particular province.

At the same time, caution must also be exercised when undertaking statistical analyses to determine whether a specific vessel type or shape is frequent because it was genuinely popular in Roman times or because it can be identified particularly well.¹⁵ Comparisons between individual sites must also be made with the necessary caution: the range of glass finds will be more modest on a rural settlement than in a city. The best practice is to compare similar settlement types: an early military camp with another early military fort, a villa with another villa, and so on.

Recycling was a common practice in ancient times that was echoed widely in Roman literature and became something of a genuine poetic topos (Martial, *Epig.* 1.41.3–5, 10.3.3–4, Juvenal, *Sat.* 5.47–48, Statius, *Silv.* 1.6.73–74).¹⁶ However, there is little in the way of evidence in the glass assemblages from excavated settlement sites as to the proportion of recycling, even though this should also be taken into account in statistical analyses. We do not have an accurate picture of the scale of remelting.

In the case of fragmented settlement assemblages, it is also more difficult to identify the fragments that came from the same vessel (and can perhaps be refitted) than in the case of pottery and therefore the one-time number of vessels is also more uncertain.

The overall goal of the present study is the detailed assessment and discussion of the bowls surveyed according to the above criteria. Earlier research had classified these vessels based exclusively on their form; however, aside from a basic typology, several other, equally important attributes must also be considered, as shown by more recent studies.

Basically, it is necessary to specify the manufacturing technology of the vessel, in addition to its colour, shape and other attributes. Before the invention of glass blowing, glassworkers used a variety of techniques to produce vessels, such as casting in open moulds, sagging, turning on a potter's wheel and tooling on a potter's wheel.¹⁷ In Roman Pannonia, cast vessel date exclusively to the first and second centuries. With some early exceptions, most vessels were made by blowing. The earliest evidence of inflating glass comes from Jerusalem, from the early first century BC. Commercial glassblowing dates from the onset of Augustus's rule and blown glass tableware played an important role in the transmission of Roman culture to the new provinces in Europe. Glass vessels became object of daily use by the end of first century AD.¹⁸

When undertaking the formal and functional classification of glassware, it is essential to identify glassblowing techniques. These call for a meticulous study of manufacturing techniques and the classification of vessels according to their function, as well as a focus on colour and size.¹⁹ Owing to these reasons, I have adopted the functional groups distinguished by Sophia van Lith and Klaus Randsborg.²⁰

The colour and shade of the glass can be an important chronological indicator. This is true despite the fact that individual perceptions of colour differ slightly and the colour one sees is influenced by the lighting conditions and the surviving wall thickness of the glass. The range from bluish to greenish or greenish-yellow tones is due to the iron contamination of the sand. Greenish glass is also called blue/green, “natural colour”, or greenish.²¹ Colourless glass was made using antimony or manganese, or could be made from very clean, impurity-free sand.

Roman glass is mostly transparent. By its nature, glass can be transparent, translucent or opaque. Different colours

¹⁴Fünfschilling (2015) 17–20; Stern (1999).

¹⁵Fünfschilling (2015) 18.

¹⁶Stern (1999) 450–451.

¹⁷Stern and Schlick-Nolte (1994) 27–81.

¹⁸Stern (1999) 481.

¹⁹Dévai (2023)

²⁰Van Lith and Randsborg (1985) 413–533.

²¹Blue-green glass was widely used. In Pannonia the vessel glass of the first and second centuries is characterised by vessels with a strong bluish-green tint. This implies intentionality and differs from the greenish vessels of the late second and third centuries. This strong bluish tint suddenly disappears in the second century and is replaced by glass with different, but typical greenish tint in the late second and third centuries, which also differs from the distinctly late HINT-like olive green tints.



are achieved by the deliberate addition of metal oxides. Opaque glass is usually white, blue, yellow, red, blue or green. “Black” glass is strongly-coloured dark purple, blue, green or amber glass, the original colour of which becomes visible in strong transmitted light.²² The use of strong colours is more typical of the early imperial period for translucent glass. Colourless glass was particularly fashionable from the Flavian era. However, many vessels that at first glance appear to be colourless glass are in fact made of very light blue-green glass, which appears to be colourless because of their thin walls, but reveal their original colour when broken. Colourless glass remained fashionable in tableware until the end of the third century. Glass with a greenish tint was used extensively for storage and transport vessels and unguentaria throughout the imperial period, a tint caused by the iron oxide in the sand. From the later fourth century onward, glasses with greenish, yellowish-green and finally olive green tints became stronger and dominated fifth- and sixth-century glass. This tint is often associated with so-called HIMT (high iron manganese titanium) glass.

Presented in this study are the bowl and cup types and forms appearing in the tableware from Intercisa. In the case of certain forms, it is easy to distinguish which represent bowls and which were used for drinking, but not always. Smaller bowls and cup-like forms could equally well have been used for drinking or as bowls for sauces and dips. I assigned a vessel to the category of bowls if the rim diameter exceeded the vessel height by at least 60%.²³

MOSAIC GLASS BOWLS (FIG. 1)

Cast glass vessels made from slices and strips of mosaic canes are commonly referred to as mosaic vessels. These were made from monochrome or polychrome, twisted, reticella and overlay canes that were cut crosswise into small segments or lengthwise into strips.²⁴ No more than a handful of mosaic vessels are known from Pannonia: these are almost exclusively small fragments and were recovered mostly from first- and second-century AD contexts, usually in the course of settlement excavations. László Barkóczy mentions only one intact exemplar in his catalogue that was found in a cemetery in Brigetio and was dated to the late first century.²⁵ The vessel is intact and has a rim diameter of 8 cm; it is decorated with yellow and red strips on a dark green ground, and represents the strip- and lace-mosaic vessel type. Other small fragments of mosaic vessels are known from Aquincum, Vetus Salina, Arrabona, the military fort of Albertfalva and Zalalövő. These mosaic vessels probably reached Pannonia through trade and were not produced locally.

Most of the mosaic glass fragments from Intercisa date from the first to the third century. The contexts from which these glass vessels were retrieved contained finds from different periods (Fig. 1–4) and their precise dating was therefore no easy task. Two fragments come from the area of the *vicus* (excavated by Zsolt Visy, Trench 1970/III). The small fragments were found together with a snake-thread glass goblet with stem and foot. No. 3 comes from the *castellum* area.

1. Millefiori mosaic bowl fragment (Fig. 1.1)

Intercisa Museum, inv. no.: 79.18.71.72.1.

Fragmentary, opaque black ground, with a complex decoration of mottling, flowers and spirals; opaque white and yellow strips and flowers; fused, assembled, sagged and polished.

Form: AR 2

2. Millefiori mosaic bowl fragment (Fig. 1.2)

Intercisa Museum, inv. no.: 79.18.71.72.2.

Opaque green ground; complex decoration of opaque yellow flowers; fused, assembled, sagged and polished.

Form: AR 2

3. Millefiori mosaic bowl fragment (Fig. 1.3)

Intercisa Museum, inv. no.: 74.28.497.

Translucent dark green ground; decoration: opaque yellow mottling; fused, assembled, sagged and polished.

Form: AR 2

4. Millefiori mosaic bowl fragment (Fig. 1.4)

Intercisa Museum, inv. no.: 77.196.1.

Opaque black ground; decoration: opaque white and yellow mottling; fused, assembled, sagged and polished.

Form: AR 2

RIBBED BOWLS (FIGS 1.5–8)

The most widespread vessel type made by tooling on a potter's wheel was the ribbed bowl, whose production began in the first century BC²⁶ and appears to have ended around the close of first century AD in the western part of the Roman Empire.²⁷ The use of this type often overlaps with mosaic glass bowls. Ribbed bowls were made of monochrome translucent glass or polychrome mosaic canes cut into slices or strips.

Mosaic ribbed bowls were made by fusing slices and strips of polychrome canes and then sagged and tooled over a half-mould on a slow potter's wheel.²⁸ Diagonal toolmarks near the edge of the rim interior were possibly left by the tool used for prying the hot bowl off the mould.²⁹

²²Cosyns (2011) 1–13.

²³van Lith and Randsborg (1985) 417.

²⁴Stern and Schlick-Nolte (1994) 52–66.

²⁵Barkóczy (1988) 51.

²⁶Lierke (1993) 228; Stern and Schlick-Nolte (1994) 72–78.

²⁷Stern and Schlick-Nolte (1994) 72.

²⁸Stern and Schlick-Nolte (1994) 322.

²⁹Stern and Schlick-Nolte (1994) 75.





Fig. 1. 1: Millefiori mosaic bowl fragment. No. 1, Intercisa Museum, inv. no.: 79.18.71.72.1.; 2: Millefiori mosaic bowl fragment. No. 2, Intercisa Museum, inv. no.: 79.18.71.72.2.; 3: Millefiori mosaic bowl fragment. No. 3, Intercisa Museum, inv. no.: 74.28.497.; 4: Millefiori mosaic bowl fragment. No. 4, Intercisa Museum, inv. no.: 77.196.1.; 5–9: Mosaic ribbed bowl fragment. No. 5, Intercisa Museum, inv. no.: 77.35.48.

5. Mosaic ribbed bowl fragment (Fig 1.5–8)

Intercisa Museum, inv. no.: 77.35.48.

Rim and body fragment of a mosaic ribbed bowl. Straight upright rim with round edge, convex curving side. Canes with a spiral pattern were made from flat bands of differing colours, in this case white on top of blue, that were rolled up and then stretched out. After cutting the cane crosswise, the pattern was created by fusing these sections together. Colour: opaque white, dark and middle blue. Exterior of the rim flattened by tooling, horizontal toolmarks and rotary scratches on the exterior, top and interior of the rim. Fused, assembled, sagged, tooled and polished.

dR.: 11 cm, Th. of rim: 0.42 cm

CAST OR MOULD-PRESSED BOWLS (FIG. 2)

Glass vessels imitating *terra sigillata* forms are usually characterised by angular profiles and were often made of a strongly-coloured or colourless glass. They imitate Dragendorff 27 and 22 forms as already noted by Ludwig Berger in his study on the vessel glass from Vindonissa. These vessels are generally associated with *terra sigillata* types, while colourless vessels can perhaps be derived from metal bowls. In addition, completely colourless glass was perhaps intended to mimic vessels made of rock crystal. Sigillata-like vessels mostly date from the first century AD. An early date is also suggested by their manufacturing technology.³⁰ Colourless cast or mould-pressed bowls first appeared in the Flavian period and retained their popularity until the mid-third century (although some rarer forms disappeared by the second century).³¹

6. Base fragment of a cast bowl (Fig. 2.1)

Intercisa Museum, inv. no.: 76.46.95.

Colourless.

dR.: 11 cm, Th. of base: 0.42 cm

7. Base fragment of a cast bowl (Fig. 2.2)

Intercisa Museum, inv. no.: 76.44.174.

Colourless.

dR.: 15 cm, Th. of base: 0.55 cm

CONVEX BOWLS WITH WIDE, ALMOST HORIZONTAL RIM (FIG. 2.3)

The form is rare in Pannonia. These deep bowls have a slightly convex body tapering into a flat base and are made of colourless and greenish glass, with colourless exemplars being far more common. Their interior and exterior are smooth and often bear grinding and polishing marks. They are generally dated from the final quarter of the first century

to the third quarter of the second century AD.³² The broad, funnel-shaped rim ends with a short overhang, the collar; usually a bridge accentuates the transition to the wall inside.³³ The plates have a large diameter, in the range of approx. 20–30 cm. The type can be correlated with Bar-kóczy's Form 11. One specimen from Savaria has been dated to the second century AD.

8. Rim fragment of a cast convex bowl (Fig. 2.3)

Intercisa Museum, inv. no.: 76.46.94.

Colourless.

dR.: 25 cm, Th. of rim: 0.3 cm

BLOWN GLASS BOWLS (FIG. 2.4–5, FIG. 3.1, FIG. 3.6)

Plates and bowls are often missed or elude a precise identification in fragmented glass assemblages because usually only the rims or bases survive, whose forms are rarely exclusive to a single vessel form. These vessels were usually free-blown and appeared as early as the first century. As the form can rarely be exactly determined, it is all the more important to publish these rim and base fragments that can be an indication of the presence of bowls, even though they can come from one of several different types. Tubular, outward-folded rims are a characteristic feature of these bowls. They can equally come from flat bowls with vertical sides and bowls with curved or S-shaped sides (Isings Forms 46, 47, 43, 44). If a section of the vessel wall remains below the rim, this may help in the precise determination of the vessel form.

In the early Roman period (first–second centuries AD), hemispherical bowls with tubular, outward-folded, fire-rounded rim in a pale blue colour, made of average and good quality glass, were common on the settlement.³⁴ The body can be slightly bulbous, recurved or straight with a tubular rim folded from the body; very often, only the rim or base ring of the vessel survives. Known mainly from the western and northern provinces, some regional differences can be noted in their use; they are attested in northern Italy, while less common in the eastern Mediterranean. However, tubular rims are attested throughout the empire.³⁵ In Pannonia, this bowl type (coming mainly in the form of rim fragments) was quite frequent in the civil town of Brigetio during the early imperial period.³⁶

³²Cool and Price (1995) 35–40; Cottam and Price (1998) 56–57, Fig. 13; Rütli (1991) Form AR 16, Cat. 776–782; Bonnet Borel (1997) 23; Goethert-Polaschek (1977) Form 23; Fünfschilling (2015) 282, Katalog 781, 782, 5249, 5250.

³³Fünfschilling (2015) 281.

³⁴Rütli (1991) Form AR 109; Isinigs (1957) Form 44a; Goethert-Polaschek (1977) Form 22.

³⁵Rütli (1991) 104–106, Cat. 2039–2092; Fünfschilling (2015) 386.

³⁶Dévai (2011) 137; Bartus et al. (2022) 322.

³⁰Grose (1991) 12–14.

³¹Fünfschilling (2015) 108–110.



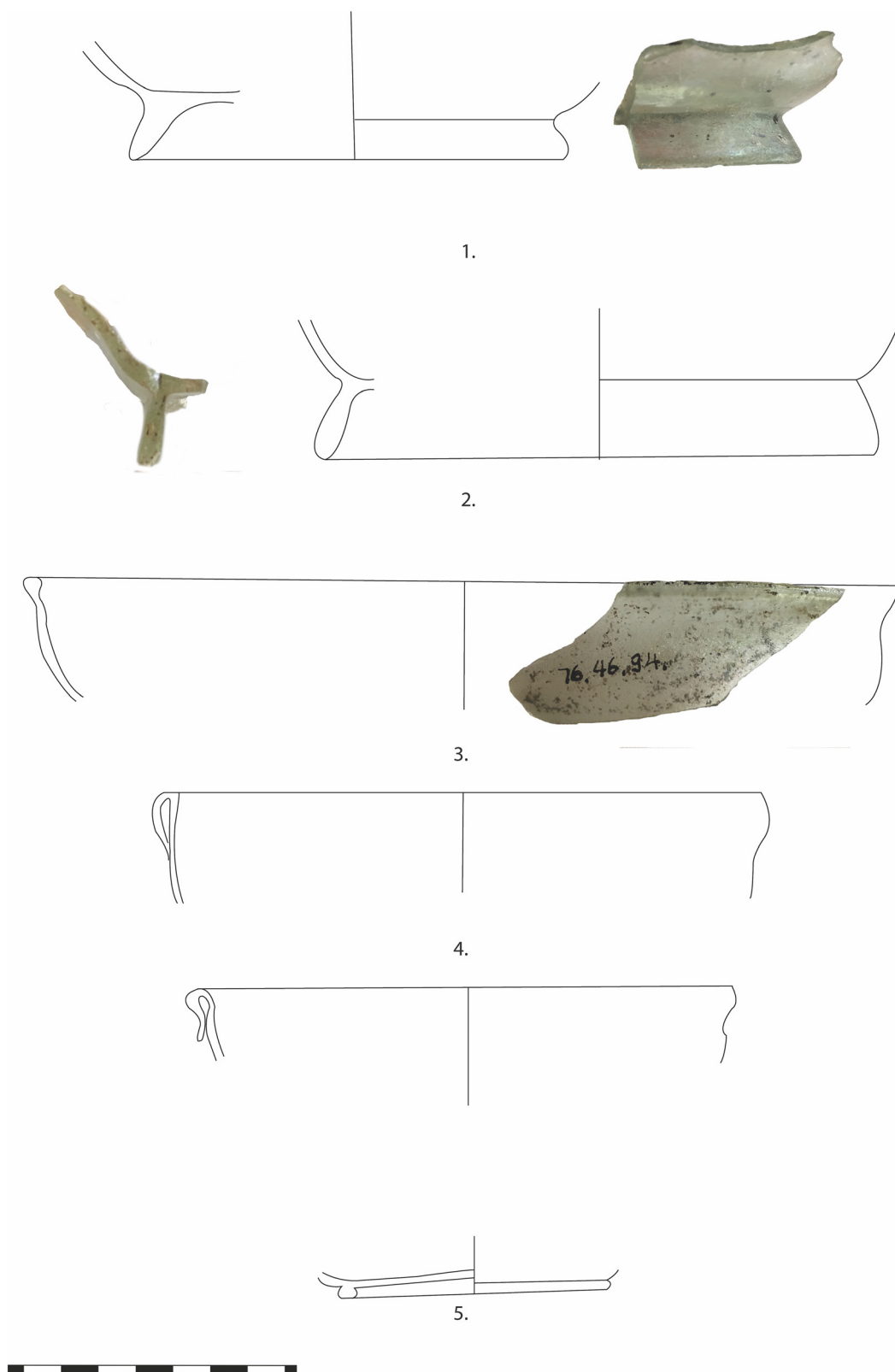


Fig. 2. 1: Cast bowl, base fragment. No. 6, Intercisa Museum, inv. no.: 76.46.95.; 2: Cast bowl, base fragment. No. 7, Intercisa Museum, inv. no.: 76.44.174.; 3: Cast convex bowl, rim fragment. No. 8, Intercisa Museum, inv. no.: 76.46.94.; 4: Rim fragment of a hemispherical bowl. No. 9, Intercisa Museum, inv. no.: 2006.33.135.; 5: Rim and base fragment of a hemispherical bowl. No. 10, Intercisa Museum, inv. no.: 77.92.23a.

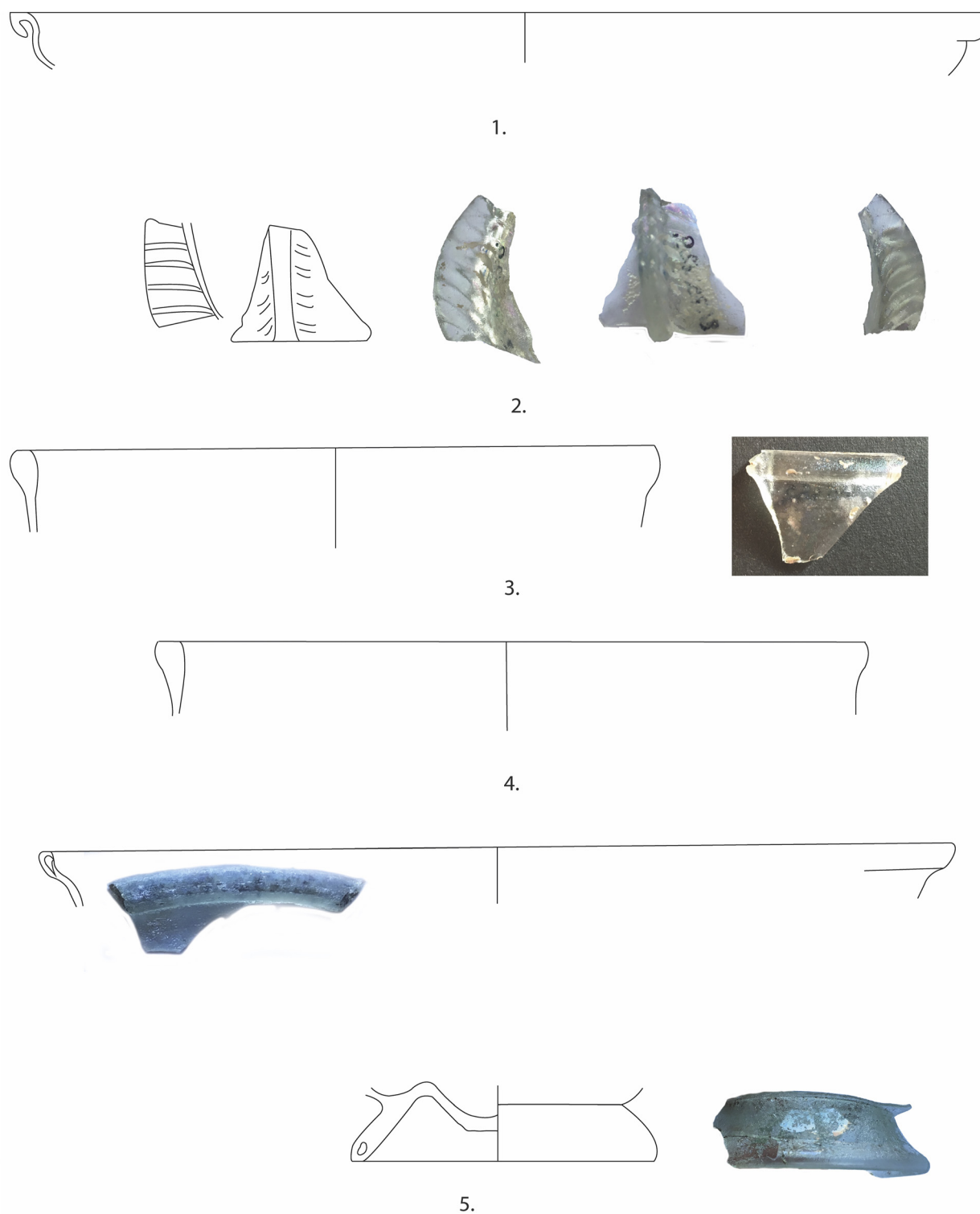


Fig. 3. 1: Rim fragment of a hemispherical bowl. No. 11, Intercisa Museum, inv. no.: 76.46.86e.; 2: Body fragment with pinched-out vertical ribs. No. 13, Intercisa Museum, inv. no.: 81.75.129.; 3: Rim fragment of a deep bowl. No. 14, Intercisa Museum, inv. no.: 75.48.2.; 4: Rim fragment of a deep bowl. No. 15, Intercisa Museum, inv. no.: 2006.30.4.; 5: Rim fragment of a deep bowl. No. 12, Intercisa Museum, inv. no.: 76.46.84a.

Form AR 107/Isings 46 is typical mainly in the second century, with its use possibly extending into the earlier third century. Comparable rims, mainly from first- and second-century contexts, have been reported from the northern provinces; the type appears to have lost its popularity by the third century.³⁷ In Pannonia, this low-sided, wide bowl, usually coming in a bluish colour, generally dates from the later first to the earlier second century. Its tubular outward-folded rim fragments are often difficult to distinguish from Form AR 109/Isings 44a. The type is known from Raetia, although it is mainly distributed in northern Italy, Slovenia and Croatia, while it is rather rare in the east.³⁸ It is also infrequent in Pannonia, although it is attested at Brigetio. The type is not listed in Barkóczi's catalogue.³⁹

9. Rim fragment of a hemispherical bowl (Fig. 2.4)

Intercisa Museum, inv. no.: 2006.33.135.

Colourless; tubular fire-rounded rim, folded out, down and in. dR.: 14 cm, Th. of rim: 0.5 cm

10. Rim and base fragment of a hemispherical bowl (Fig. 2.5)

Intercisa Museum, inv. no.: 77.92.23a.

Colourless; tubular fire-rounded rim, folded out, down and in.

dR.: 12.2 cm, Th. of rim: 0.48 cm, dB.: 5.5 cm

11. Rim fragment of a hemispherical bowl (Fig. 3.1)

Intercisa Museum, inv. no.: 76.46.86e.

Colourless; tubular fire-rounded rim, folded out, down and in; concave base with thin applied base ring.

dR.: 22 cm, Th. of rim: 0.4 cm

12. Rim fragment of a deep bowl (Fig. 3.5)

Intercisa Museum, inv. no.: 76.46.84a.

Colourless; vertical, fire-rounded, slightly thickened rim; almost vertical sides; separately blown base ring.

dR.: 20 cm, Th. of rim: 0.35 cm, dB.: 7.2 cm

Rütti's Form AR 61 is a flat to hemispherical bowl with outward curved rim and pinched-out ribs.⁴⁰ The vertical ribs often bear fine impressions/dents from the material used to pinch the rib out of the body. The base is almost flat to slightly convex. These bowls are usually made of colourless or slightly greenish glass. Beat Rütti dated the type from the later second to the third quarter of third century.⁴¹ Comparable bowls have been reported from Avenches where they were recovered from second–third-century contexts.⁴² The type was widespread in the empire's north-westerly regions.

While the type does not appear in Barkóczi's catalogue, it has more recently been found at Brigetio. The Pannonian pieces typically have tool marks on the surface of the ribs: these are usually horizontal lines on the vertical ribs left by the tool used for pinching.⁴³ Fourteen fragments of hemispherical bowls with curved, cracked-off rim and pinched-out ribs made of colourless, high-quality glass are known from Brigetio. It must here be noted that this type of ribbed decoration appears on both bowls and cups, as well as on smaller bottles throughout the empire.⁴⁴

13. Body fragment of a hemispherical bowl (Fig. 3.2)

Intercisa Museum, inv. no.: 81.75.129.

Colourless; body fragment with pinched-out vertical ribs bearing tool marks.

DEEP BOWLS WITH VERTICAL, FIRE-ROUNDED RIM (FIG. 3.3–4, FIG. 4.1–7)

This bowl type has a vertical, fire-rounded rim, a slightly conical body and a flat base with high-standing ring. The form is identical to Rütti's AR 98.3, dated to second–third centuries AD.⁴⁵ It is a larger-sized variant of the cylindrical cup with applied base ring (Form AR 98) that was common in Pannonia and the empire's westerly regions. The type was widely used in the civil town of Brigetio during the second century.⁴⁶ The exact type of Nos 19–22, although very similar to the cylindrical bowl form classified as AR 98.3, cannot be accurately determined.

14. Rim fragment of a deep bowl (Fig. 3.3)

Intercisa Museum, inv. no.: 75.48.2.

Greenish; vertical, slightly thickened, fire-rounded rim; almost vertical side.

dR.: 15 cm, Th. of rim: 0.40 cm

15. Rim fragment of a deep bowl (Fig. 3.4)

Intercisa Museum, inv. no.: 2006.30.4.

Colourless; vertical, slightly thickened, fire-rounded rim; almost vertical side.

dR.: 17 cm, Th. of rim: 0.60 cm

16. Rim fragment of a deep bowl (Fig. 4.1)

Intercisa Museum, inv. no.: 74.28.478.

Greenish; vertical, slightly thickened, fire-rounded rim; almost vertical side; horizontal polished ribs under the rim.

dR.: 17 cm, Th. of rim: 0.30 cm

17. Rim fragment of a deep bowl (Fig. 4.2)

Intercisa Museum, inv. no.: 74.28.484.

³⁷Cool and Price (1995) 219, Fig. 13.5 and 220, Fig. 13.6.

³⁸Biaggio Simona (1994) 51; Fünfschilling (2015) 385.

³⁹Dévai (2011) 137; Bartus et al. (2016) 117.

⁴⁰Rütti (1991) Form AR 61, Taf. 63. 1369–1377; Fünfschilling (2015) 334, Cat. 5672–5682; Hoffmann (2002) Form C 4.7.23.9, Taf. 88; Harter (1999) Form B15a; Sakl-Oberthaler and Tarsay (2001) Taf. 3.26; Šaranović-Svetek (1986) Tab. X.1.

⁴¹Rütti (1991) 70–71.

⁴²Bonnet Borel (1997) 33.

⁴³Dévai (2011) 136, Pl. 1.2,

⁴⁴Stern (2001) Cat. 133–134.

⁴⁵Rütti (1991) 96–99.

⁴⁶Hoffmann (2002) 130, Fünfschilling (2015) 375; Dévai (2011) 137, Pl. 2.1.



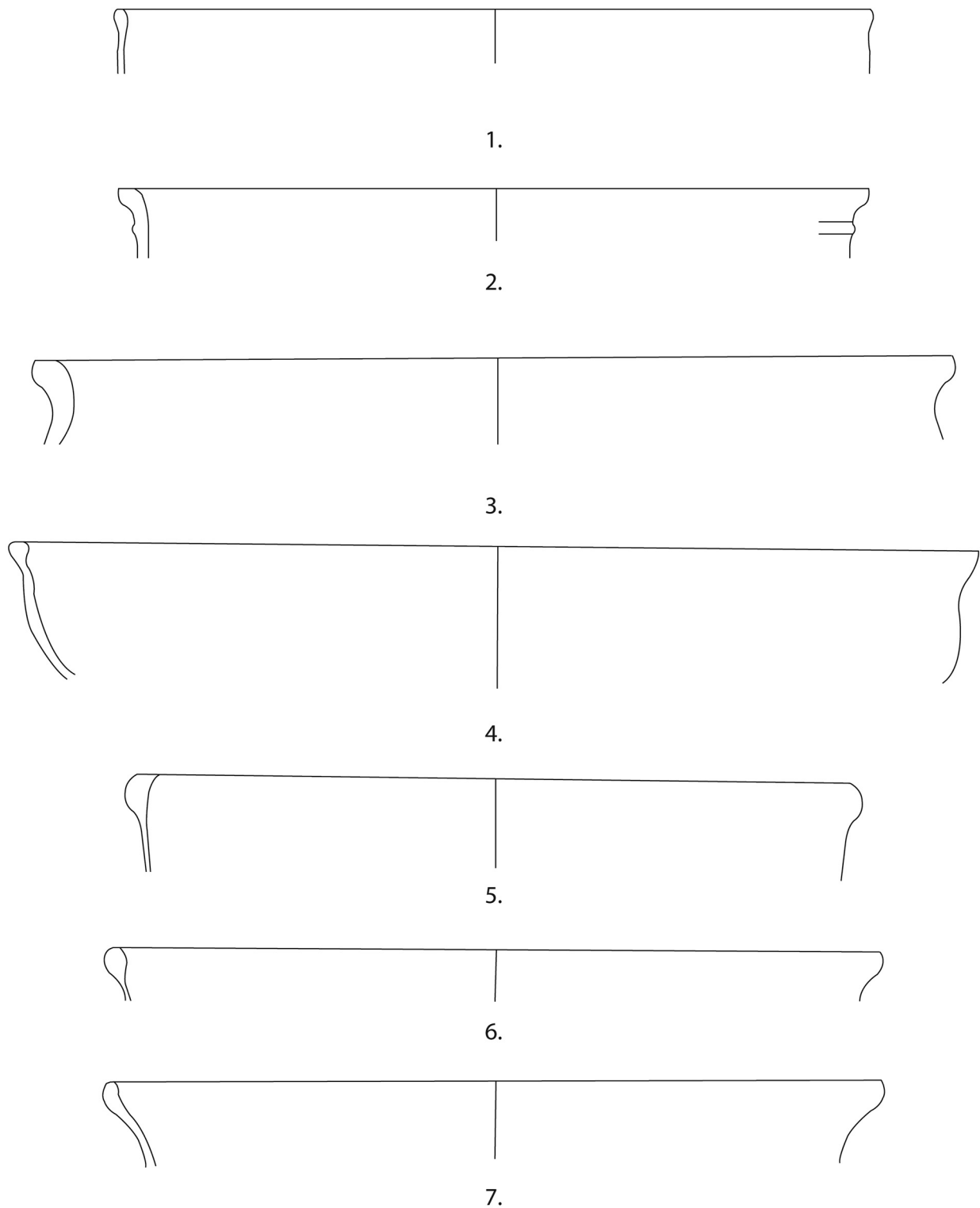


Fig. 4. 1: Rim fragment of a deep bowl. No. 16, Intercisa Museum, inv. no.: 74.28.478.; 2: Rim fragment of a deep bowl. No. 17, Intercisa Museum, inv. no.: 74.28.484.; 3: Rim fragment of a deep bowl. No. 18, Intercisa Museum, inv. no.: 91.481.1.; 4: Rim fragment of a deep bowl. No. 19, Intercisa Museum, inv. no.: 76.46.94.; 5: Rim and base fragment of a deep bowl. No. 20, Intercisa Museum, inv. no.: 75.48.5.; 6: Rim fragment of a deep bowl. No. 21, Intercisa Museum, inv. no.: 2006.33.126.; 7: Rim fragment of a deep bowl. No. 22, Intercisa Museum, inv. no.: 2006.33.123.

Colourless; vertical, slightly thickened, fire-rounded rim; almost vertical side.

dR.: 16.5 cm, Th. of rim: 0.32 cm

18. Rim fragment of a deep bowl (Fig. 4.3)

Intercisa Museum, inv. no.: 91.481.1.

Colourless; vertical, slightly thickened, fire-rounded rim; almost vertical side.

dR.: 20 cm, Th. of rim: 0.34 cm

19. Rim fragment of a deep bowl (Fig. 4.4)

Intercisa Museum, inv. no.: 76.46.94.

Colourless; slightly out-turned, thickened, fire-rounded rim; wide mouth; curved and concave side; the fragment cannot be precisely classified.

dR.: 22 cm, Th. of rim: 0.34 cm

20. Rim and base fragment of a deep bowl (Fig. 4.5)

Intercisa Museum, inv. no.: 75.48.5.

Colourless; slightly out-turned, thickened, fire-rounded rim; curved and concave side; base ring created by applying a circular trail of glass, slightly concave in centre; the fragment cannot be precisely classified.

dR.: 15 cm, Th. of rim: 0.43 cm, dB.: 4 cm

21. Rim fragment of a deep bowl (Fig. 4.6)

Intercisa Museum, inv. no.: 2006.33.126.

Colourless; slightly out-turned, thickened, fire-rounded rim; wide mouth; curved and concave side; the fragment cannot be precisely classified.

dR.: 14.8 cm, Th. of rim: 0.28 cm

22. Rim fragment of a deep bowl (Fig. 4.7)

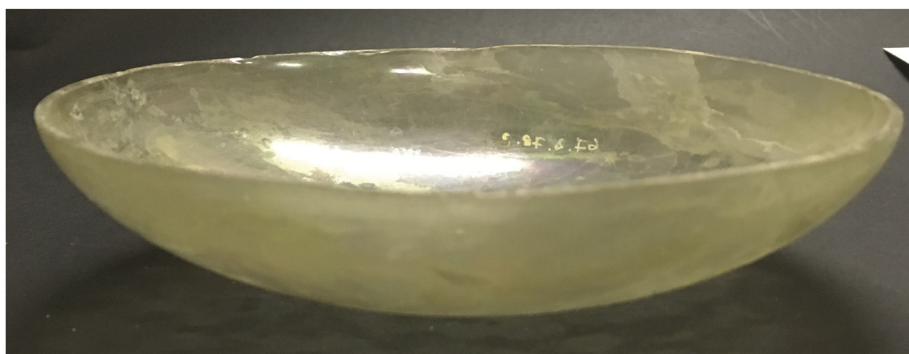
Intercisa Museum, inv. no.: 2006.33.123.

Colourless; slightly out-turned, thickened, fire-rounded rim, wide mouth; curved and concave side; the fragment cannot be precisely classified.

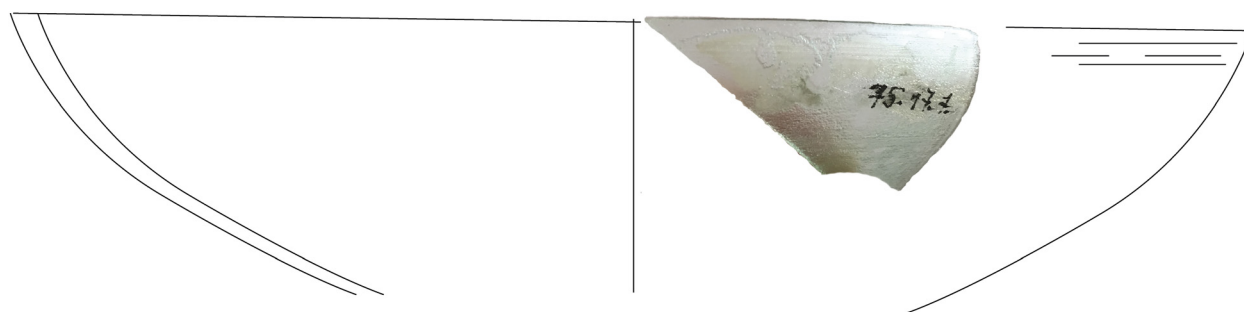
dR.: 15 cm, Th. of rim: 0.27 cm

HEMISPHERICAL BOWLS WITH STRAIGHT, CRACKED-OFF RIM (FIG. 5.1–2)

Hemispherical bowls represent the most frequent type among bowls. They frequently have a cold-worked rim, a low body, often with a very large diameter, a usually slightly rounded to flat base and different varieties of decoration. Twelve glasses can be assigned here: all have cracked-off



1.



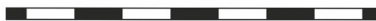
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Fig. 5. 1: Hemispherical bowl with cracked-off rim. No. 23, Intercisa Museum, inv. no. 76.2.78.2.; 2: Hemispherical bowl with cracked-off rim. No. 24, Intercisa Museum, inv. no. 76.2.78.2.



1.



2.



Fig. 6. 1: Scallop bowl. No. 69, Intercisa Museum, inv. no.: 76.44.1.70.; 2: Hemispherical shallow bowl. No. 70, Intercisa Museum, inv. no.: 77.112.1. (photo: Tamás Keszi); 3: Base ring of a bowl. No. 71, Intercisa Museum, inv. no.: 67.2.203.2. (photo: Tamás Keszi); 4: Base ring of a bowl. No. 72, Intercisa Museum, inv. no.: 67.203.1. (photo: Tamás Keszi)

rims and are decorated with abrasion bands or wheel-cut lines.⁴⁷ This type corresponds to Forms AR 56, Trier 27b, Lazar 2.6.1, Harter A17, Gellep 178 and Cottam and Price (1998) Fig 51.⁴⁸ It was popular in southern Pannonia, too.⁴⁹ An exemplar with the typical unworked, cracked-off rim is recorded from Poetovio.⁵⁰ The bowls decorated with abrasion bands and wheel-cut lines typical for the fourth and fifth centuries from Vindobona have been discussed by Sakl-Oberthaler and Tarcsay.⁵¹ In Aquileia, hemispherical bowls with abrasion bands, wheel-cut lines and the occasional cut figural decoration were highly popular during the fourth and fifth centuries.⁵²

In Barkóczy's catalogue, hemispherical bowls are classified as Form 13, within which he distinguished two types: a thin-walled and a thick-walled variant.⁵³ In Pannonia, the type's earliest appearance is dated by a coin of Licinius in the Halimba cemetery, while its latest occurrence falls into the early decades of the fifth century in the Csákvár cemetery.⁵⁴ It became more widespread from the later fourth century. Barkóczy contended that the type reached Pannonia and the other provinces to its south as an import from the south-eastern provinces.⁵⁵ They are generally decorated with abrasion bands, while the thick-walled variants usually bear bands of wheel-cut lines.

23. Low hemispherical bowl (Fig. 5.1)

Intercisa Museum, inv. no.: 76.2.78.2.

Findspot: South-eastern cemetery, Grave 451

Greenish; vertical, polished, cracked-off rim; rounded base.

dR.: 12.8 cm, Th. of rim: 0.18 cm, dB.: 2 cm, H.: 2.4 cm

24. Rim fragment of a low hemispherical bowl (Fig. 5.2)

Intercisa Museum, inv. no.: 75.47.7.

Greenish; vertical, polished, cracked-off rim; horizontal abrasion bands below the rim.

dR.: 25, Th. of rim: 0.18 cm (Fig. 6.1–4)

FACET-CUT HEMISPHERICAL BOWLS (FIGS 7–14)

An overview and detailed discussion of Pannonian facet-cut bowls has already been published together with a catalogue of the facet-cut vessel glass from Brigetio.⁵⁶

Wheel-cut circular or oval motifs are called facets. This decorative mode is known as *ornamentaler Hohlschliff* in German and as facet cutting in English.⁵⁷ Facet-cutting appeared in the first century AD; shallow facet-cut honeycomb patterns are attested from the 60s of the first century AD. Several proposals have been put forward as to the origins of oval motifs, a decorative scheme which made its first appearance in a band under the rim of first-century AD terra sigillata vessels.⁵⁸ However, the facet-cut ornamentation on glassware was made up of motifs of different sizes that were part of an elaborate ornamental design; moreover, unlike on terra sigillata bowls, which often bear both faceted and other motifs facet-cut decoration was never combined with other ornamental motifs on glass. The vessel forms also differ substantially and we can therefore only speak of the resemblance between the motifs.⁵⁹ This decoration survived into the second century. In the second century, more loosely spaced, narrow, oval facets are common on cylindrical, free-blown bowls. Narrow, slightly recessed facets (rice grain facets) occur on free-blown plates and bowls, usually on the rim. Shallow facets are also attested from the late second and third centuries on flat, free-blown bowls (AR 58/Isings 116a-b) and on hemispherical bowls. A tendency towards circular facets can be observed on hemispherical bowls on which the entire body and base are decorated.⁶⁰

Glass cutters began to create zoned facet-cut decoration with facets arranged in horizontal zones divided by linear grooves mostly on Isings 96 bowls in the later second and the earlier third centuries A.D.

A look at the regional distribution and the major concentrations of sites reveals that facet-cut bowls had been manufactured in four main regions: the Rhine region (perhaps at Cologne), Pannonia, Syria (possibly at Dura Europos) and the Pontic (at Tanais).⁶¹ Its popularity is best indicated by the fact that this elegant ornamental technique began to be applied on silverware which clearly imitated the glass bowls, as shown by the adoption of the Isings 96 hemispherical bowl form that was lacking from among silver vessels.⁶² The peak in the production of these vessels fell into the later second and early third centuries, after which their production ceased in the Pontic, Syria and Pannonia, although their manufacture continued up to the fourth century in the west, alongside the creation of increasingly more sophisticated and elaborate geometric patterns.⁶³

⁴⁷Rütti (1991) Form AR 55; Goethert-Polaschek (1977) Form 14; Dévai (2023) Form T1; Dévai (2017) 222–223; Dévai (2016) 255–286.

⁴⁸Rütti (1991) 64; Goethert-Polaschek (1977) 38; Lazar (2003) 82; Harter (1999) 50; Pirling (1966) Taf 88; Cottam and Price (1998) 119–120.

⁴⁹Ružić (1994) T. Xxvi.1–4, 6–8.

⁵⁰Petru (1974) 22. Tab. Ix.1.

⁵¹Sakl-Oberthaler and Tarcsay (2001) Taf. 5.44–45.

⁵²Mandruzzato and Marcante (2005) 103–104, Cat. nos. 272–278.

⁵³Barkóczy (1988) 56–58.

⁵⁴Barkóczy (1988) 57.

⁵⁵Barkóczy (1988) 57.

⁵⁶Dévai (2021) 253–265.

⁵⁷Cottam and Price (1995) 115; Fünfschilling (2015) 85–87. In her discussion of this decorative technique, Stefanie Nagel has opposed the use of the term “facets”; nevertheless, the term is widely used in German and French literature to describe this ornamentation. Nagel (2020), 111–121.

⁵⁸Ettlinger et al. (2002) 118, Taf 34. Form 38.1.1. The technique is different (rouletting), but the pattern is similar.

⁵⁹Paolucci (1997) 63.

⁶⁰Fünfschilling (2015) 87–88.

⁶¹Stern (2001) 137; Paolucci (1997) 68.

⁶²Paolucci (1997) 67, Figs 31–32.

⁶³Stern (2001) 137.



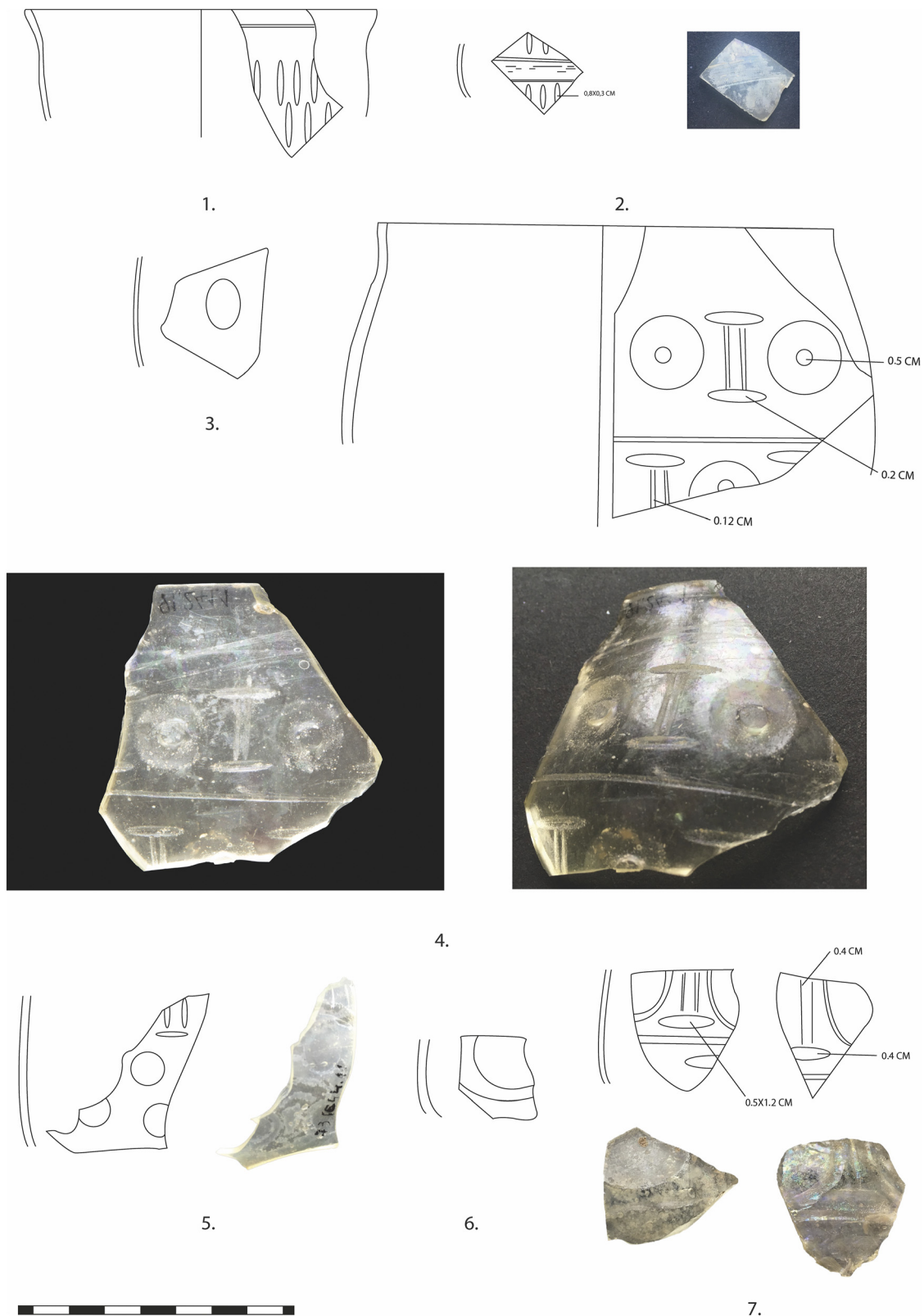


Fig. 7. 1: Deep hemispherical bowl with facet-cut decoration. No. 25, Intercisa Museum, inv. no.: 2000.173.8.; 2: Deep hemispherical bowl with facet-cut decoration. No. 26, Intercisa Museum, inv. no.: 91.324.1.b.; 3: Deep hemispherical bowl with facet-cut decoration. No. 27, Intercisa Museum, inv. no.: 93.27a.; 4: Deep hemispherical bowl with facet-cut decoration. No. 28, Intercisa Museum, inv. no.: 91.241.1.; 5: Deep hemispherical bowl with facet-cut decoration. No. 29, Intercisa Museum, inv. no.: 73.1644.11.; 6: Deep hemispherical bowl with facet-cut decoration. No. 30, Intercisa Museum, inv. no.: 73.1644.6.; 7: Deep hemispherical bowl with facet-cut decoration. Nos 31–32, Intercisa Museum, inv. no.: 68.114.21.

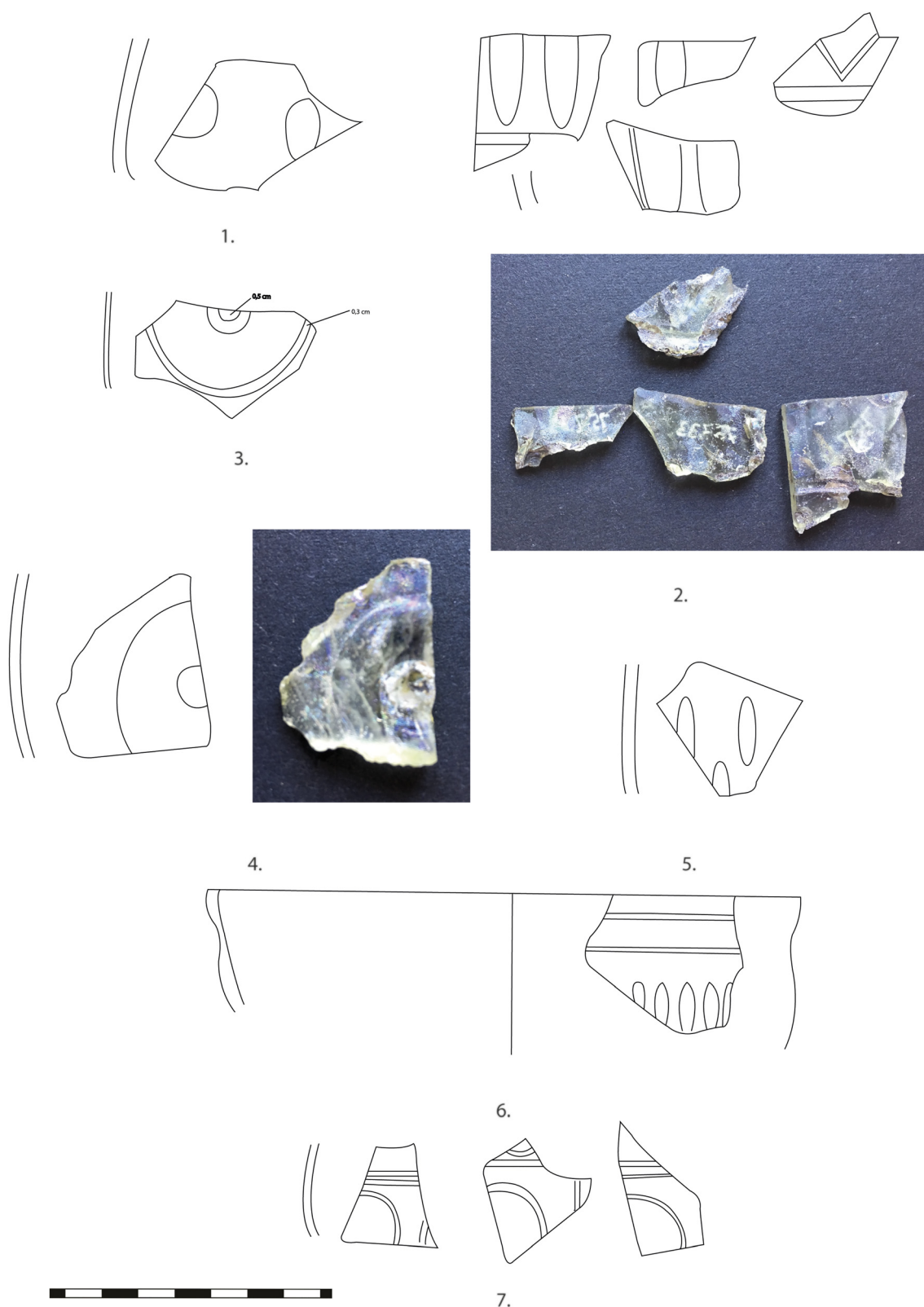
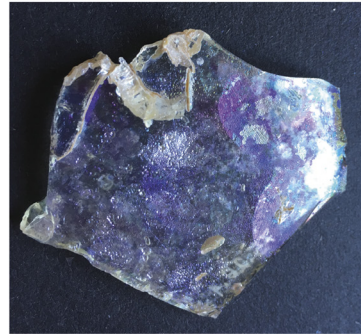
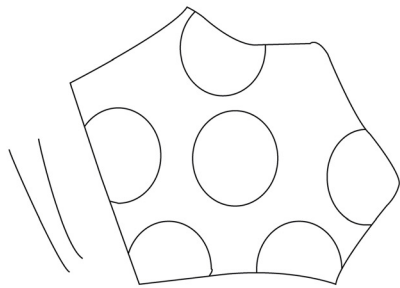
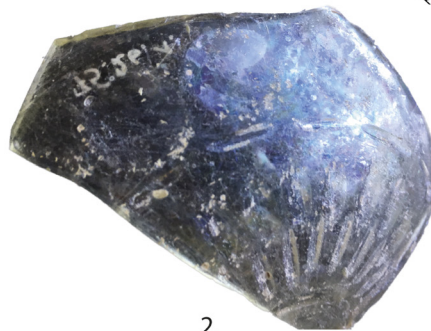
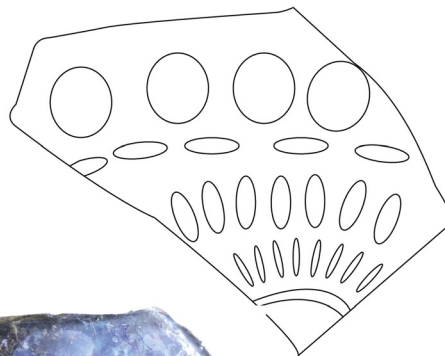
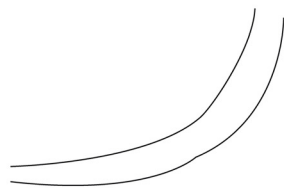


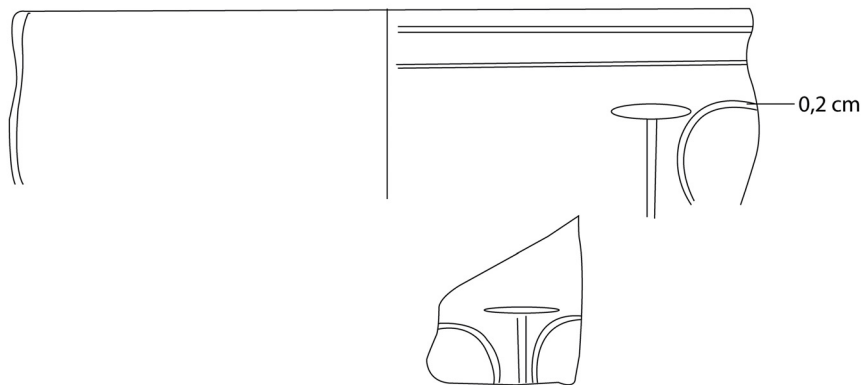
Fig. 8. 1: Deep hemispherical bowl with facet-cut decoration. No. 33, Intercisa Museum, inv. no.: 75.7.119.a.; 2: Deep hemispherical bowl with facet-cut decoration. Nos 34–37, Intercisa Museum, inv. no.: 75.7.33a–d.; 3: Deep hemispherical bowl with facet-cut decoration. No. 38, Intercisa Museum, inv. no.: 75.13.43.; 4: Deep hemispherical bowl with facet-cut decoration. No. 39, Intercisa Museum, inv. no.: 75.40.2.; 5: Deep hemispherical bowl with facet-cut decoration. No. 40, Intercisa Museum, inv. no.: 75.37.7.; 6: Deep hemispherical bowl with facet-cut decoration. No. 43, Intercisa Museum, inv. no.: 77.11.6.; 7: Deep hemispherical bowl with facet-cut decoration. Nos 44–45, Intercisa Museum, inv. no.: 77.35.51.



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Fig. 9. 1: Deep hemispherical bowl with facet-cut decoration. No. 41, Intercisa Museum, inv. no.: 75.26.1.d.; 2: Deep hemispherical bowl with facet-cut decoration. No. 42, Intercisa Museum, inv. no.: 75.26.1.e.; 3: Deep hemispherical bowl with facet-cut decoration. Nos 46–47, Intercisa Museum, inv. no.: 77.11.6.

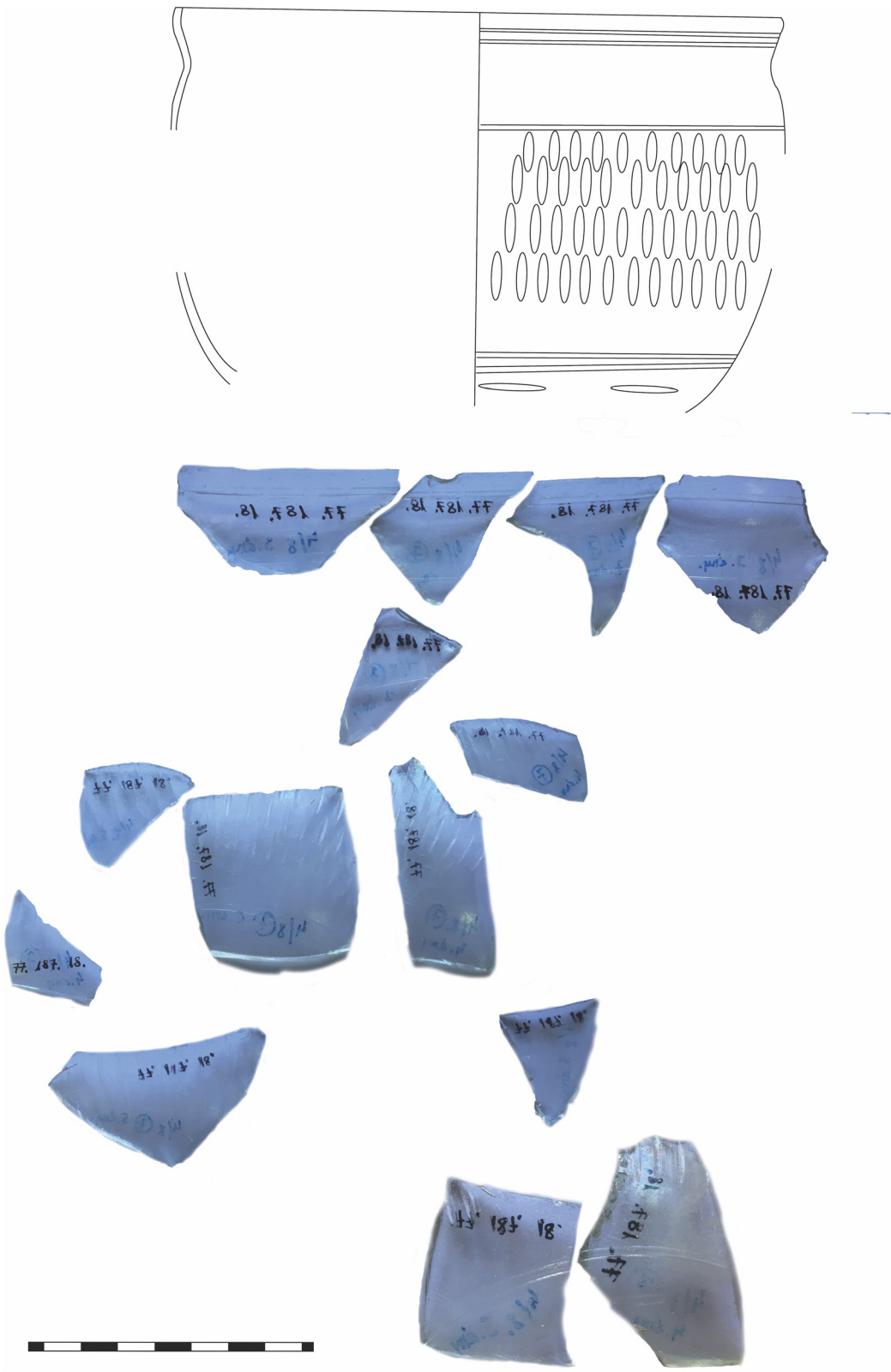
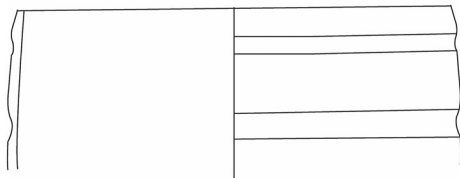


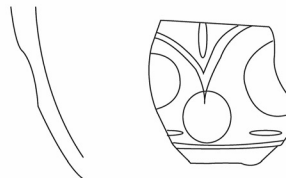
Fig. 10: Deep hemispherical bowl with facet-cut decoration. No. 48, Intercisa Museum, inv. no.: 77.187.18.



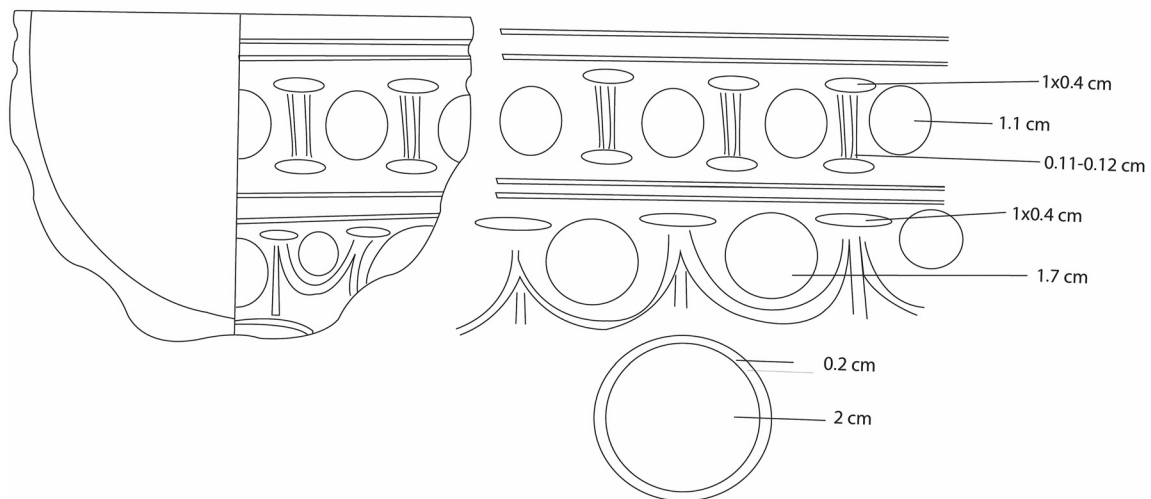
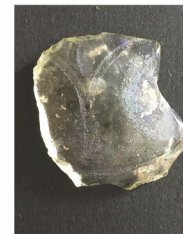
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Fig. 11. 1: Deep hemispherical bowl with facet-cut decoration. No. 49, Intercisa Museum, inv. no.: 75.1.12.; 2: Deep hemispherical bowl with facet-cut decoration. No. 50, Intercisa Museum, inv. no.: 76.44.167a.; 3: Deep hemispherical bowl with facet-cut decoration. No. 53, Intercisa Museum, inv. no.: 76.44.167b.; 4: Deep hemispherical bowl with facet-cut decoration. No. 54, Intercisa Museum, inv. no.: 68.112.2.

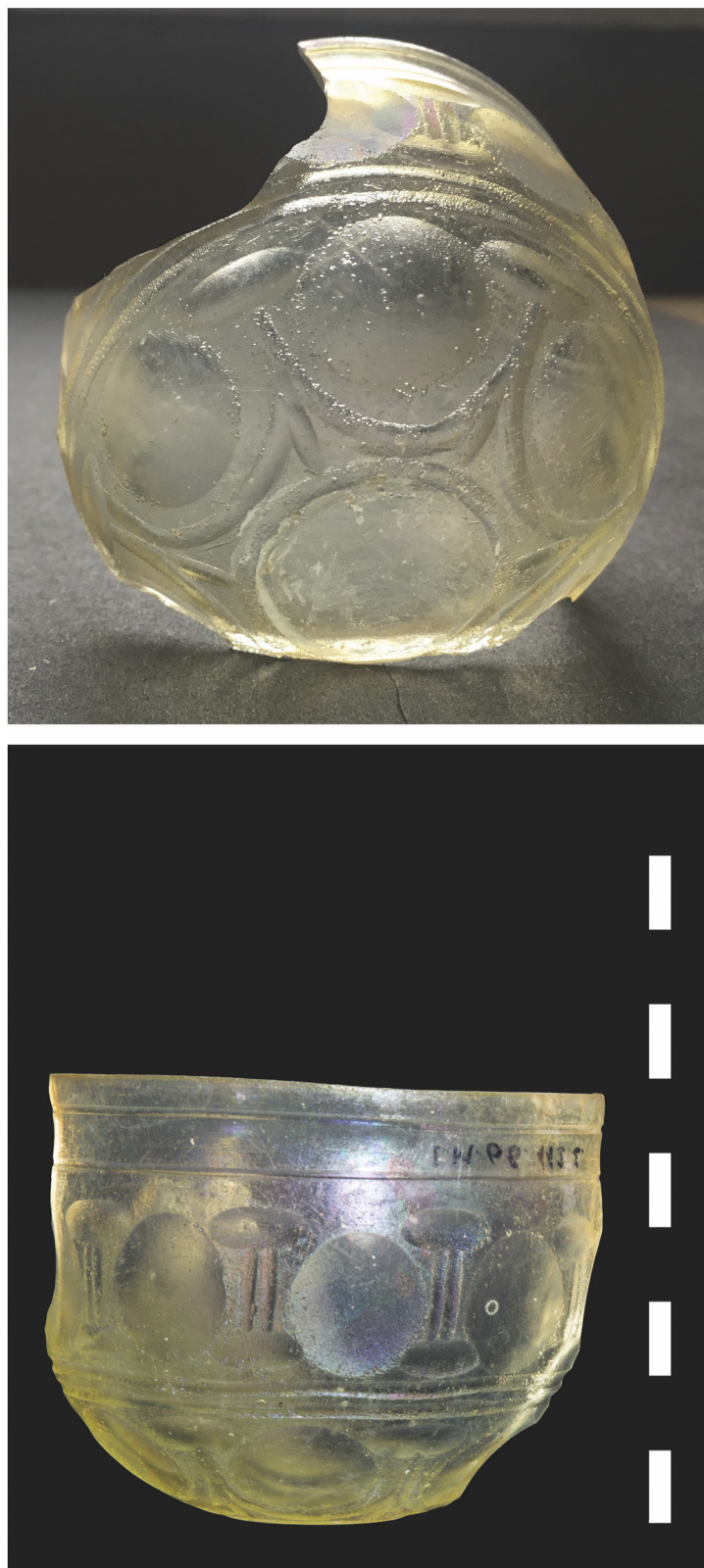


Fig. 12: Deep hemispherical bowl with facet-cut decoration. No. 54, Intercisa Museum, inv. no.: 68.112.2. (photo: Tamás Keszi)

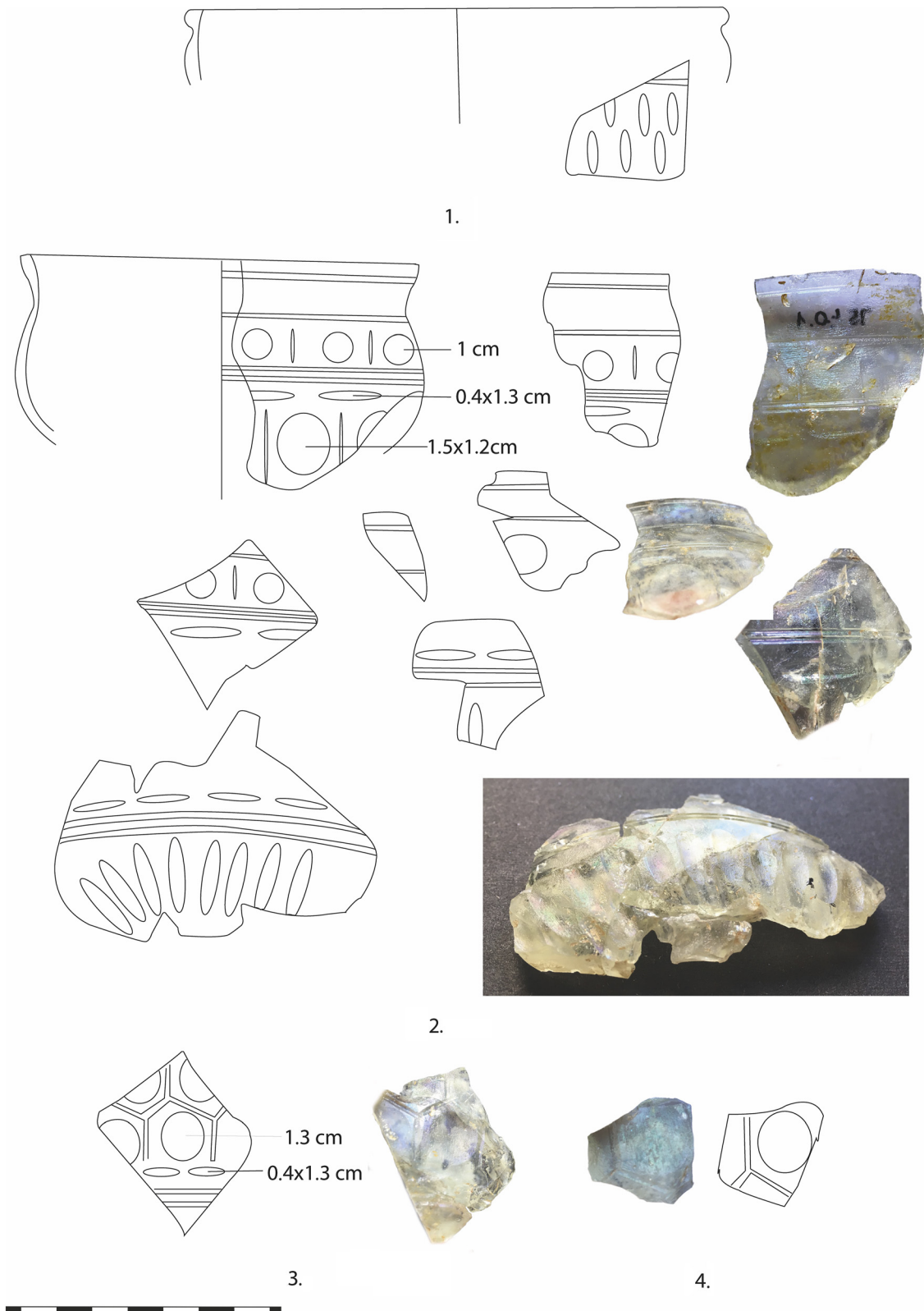


Fig. 13. 1: Deep hemispherical bowl with facet-cut decoration. No. 53, Intercisa Museum, inv. no.: 91.362.1.; 2: Deep hemispherical bowl with facet-cut decoration. Nos 54–60, Intercisa Museum, inv. no.: 75.40.1.a–g.; 3: Deep hemispherical bowl with facet-cut decoration. No. 61, Intercisa Museum, inv. no.: 75.40.1.h.; 4: Deep hemispherical bowl with facet-cut decoration. No. 62, Intercisa Museum, inv. no.: 75.40.1.i.

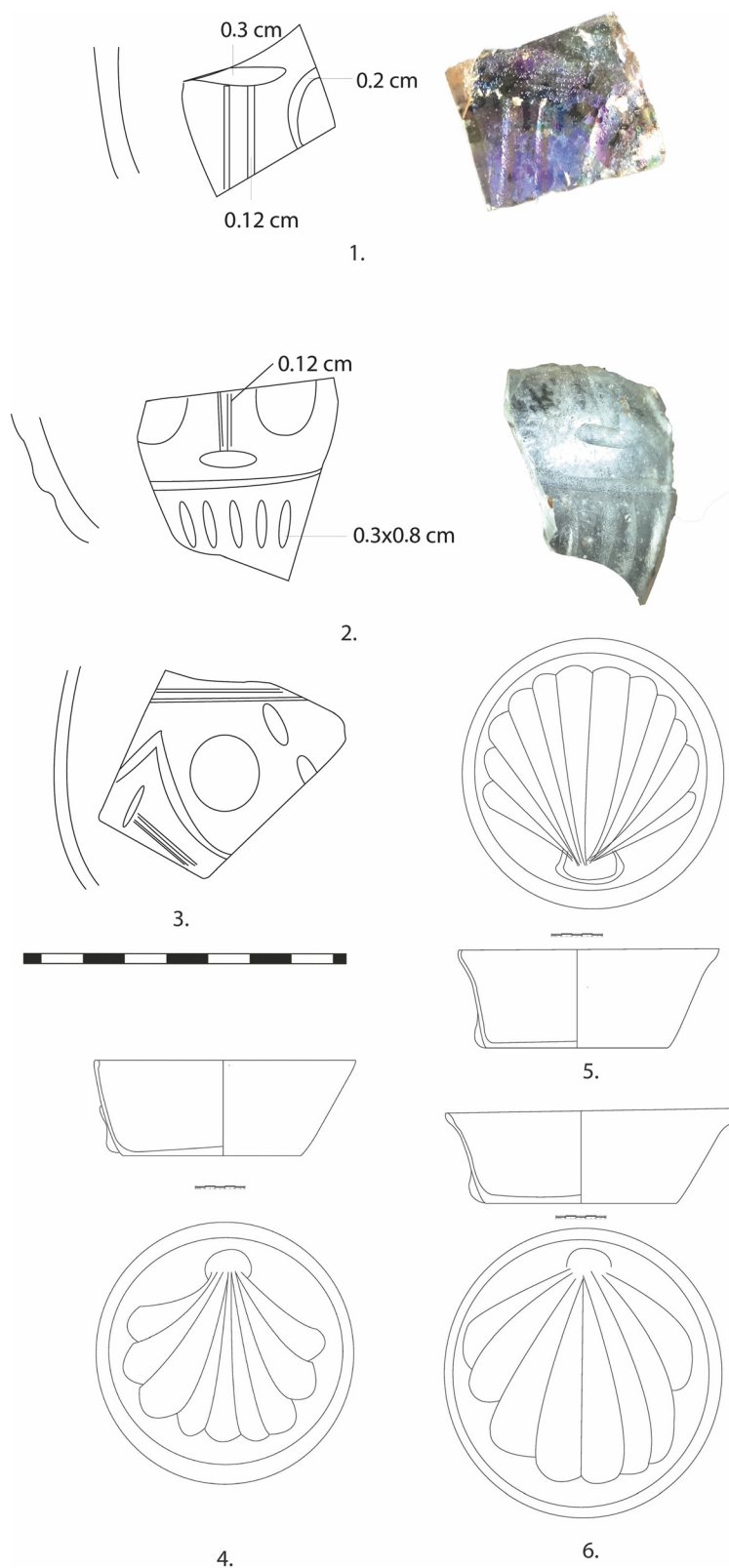


Fig. 14. 1: Deep hemispherical bowl with facet-cut decoration. No. 63, Intercisa Museum, inv. no.: 76.44.173.; 2: Deep hemispherical bowl with facet-cut decoration. No. 64, Intercisa Museum, inv. no.: 76.44.169.; 3: Deep hemispherical bowl with facet-cut decoration. No. 65, Intercisa Museum, inv. no.: 91.581.1.; 4: Scallop bowl. No. 66, Intercisa Museum, inv. no.: 65.11.24.7.; 5: Scallop bowl. No. 67, Intercisa Museum, inv. no.: 67.2.157.18.; 6: Scallop bowl. No. 68, Intercisa Museum, inv. no.: 67.2.107.5.

A tendency towards circular facets can be observed on the hemispherical bowls; the entire body and base are decorated in the later second and the earlier third centuries in Pannonia. The facet-cut bowls from Pannonia were first analysed in detail by László Barkóczi, who distinguished three main groups,⁶⁴ which have been discussed in detail in a previous paper.⁶⁵ These colourless, good quality vessels have a thick wall of 3–4 mm and are decorated with carefully designed and executed engraved motifs. The vessel body is divided into fields by one or more wheel-cut lines and are filled with oval or circular facets alternating with single or double I-shaped motifs.⁶⁶ One essential precondition to the spread of this decorative mode was the growing popularity of colourless glass for tableware on which this type of ornamentation was truly attractive.

Barkóczi distinguished three main groups among the intact and fragmentary bowls known to him based on their decorative motifs. As a matter of fact, only his Groups I and II can be regarded as independent groups since his Group III is essentially made up of the vessels with a unique design that could not be fitted into his other two.⁶⁷ Group I is made up of the earlier vessels dating from the later second century, while Group II is made up of vessels with a more elaborate decorative scheme that can be clearly distinguished from the earlier pieces.⁶⁸

In rare cases, these vessels appear to have been mould-pressed, as some of them have very thick walls and are ornamented with high-relief decoration.⁶⁹

The possible combinations of circular and long, narrow, oval facets, rows of circular facets, large circular facets with bosses are almost inexhaustible. The entire vessel body is decorated in the third century.

In the western and northern part of the empire, bowls covered with faceting over the entire vessel body were mainly used in the earlier third century.⁷⁰ Beat Rütli

highlighted the difficulties in identifying the glass workshops producing these vessels and in determining possible mutual influences between them. Thus, there is no conclusive evidence that the Pannonian glasses had been produced under influence from Syrian wares,⁷¹ a view shared by Gabriele Harter, who pointed out that these vessels can hardly be regarded as luxury goods: they were objects of everyday use (tableware) for serving sauces, dressings and side dishes, as suggested by their frequencies in the find assemblages from Mainz and Augst as well as their find contexts.⁷²

There are numerous examples of comparable elaborate zoned ornamentation covering the entire vessel body made up of circular facets alternating with I-shaped motifs at Dura Europos on the Euphrates, which demonstrably fell victim to a Sassanid onslaught in 256/57 AD and was not rebuilt. It is therefore certain that these combinations of facets must have been known before 256 AD.⁷³ This is also suggested by fragments retrieved from coin-dated contexts at Ostia, the latest of which was dated by a sestertius of Gordian III (240 AD). The style of the vessels from Dura Europos is slightly different, given their differing decorative scheme.⁷⁴

Examining the distribution of these bowls within Pannonia, the following can be established: 15 pieces are known from Aquincum, 41 from Intercisa, 33 from Gorsium, two from Ostropataka, four from Brigetio, and eight are unprovenanced.⁷⁵

The fragments of the facet-cut bowls found at Intercisa were first published by László Barkóczi.⁷⁶ Regrettably, Barkóczi's study did not contain the inventory numbers, and in most cases, his descriptions and drawings rarely match the fragments that are currently available for study. We therefore prepared new photos and drawings, and all the pieces are here republished with their inventory number and the findspot (if known). A reference to Barkóczi's paper is included if a particular piece could be matched against a fragment in his catalogue.

Previously, 44 fragments were said to have been found at Intercisa; however, a re-examination of the finds indicated a lower figure of 41 pieces, but even so, most of the currently known fragments come from this site. A look at the findspots of the fragments within Intercisa reveals that their majority originates from the area of *vicus*, from houses and rubbish pits. Facet-cut bowls were very often found in the same contexts as snake-thread glass fragments, indicating that their use on the Intercisa settlement can be dated to the same period.

⁶⁴Barkóczi (1986) 166–189.

⁶⁵Dévai (2021) 253–265.

⁶⁶Barkóczi (1988) Form 25.a–b; Isings (1957) Form 96; Rütli (1991) Form AR 56 and 60.1; Harter (1999) Form A 16; Hoffmann (2002) Form C3.3.1.9; Paolucci (1997) 100–101; Sakl-Oberthaler and Tarcsay (2001) Taf. 3.23–24; Šaranović-Svetek (1986) Tab. I.4.8.

⁶⁷Barkóczi (1986) 166–189. Barkóczi's Group Ia–e is made up of simpler, less elaborate designs, chiefly of combinations of irregularly and sparsely set circular and oval facets. His Group IIa has vessels whose body is divided into bands separated by wheel-cut lines. The bands are filled with circular facets alternating with single or double I-shaped motifs, each with an oval facet on top and at the bottom. The centres of the circular facets occasionally feature a small decorative boss. His Group IIb is made up of vessels whose body is divided into panels by wheel-cut lines under the rim and around the shoulder. The main motifs in the panels are circular facets enclosed within a slender engraved circle alternating with I-shaped motifs with a horizontal oval facet at both ends. His Group III comprises individual pieces that cannot be assigned to either of the other two groups and can be dated to a later period. Oval facets are often combined with cross-hatched lozenges.

⁶⁸Dévai (2021) 253–265.

⁶⁹Fünfschilling (2015) 88.

⁷⁰Cool and Price (1995) 78, Fig. 5.8, 5.8, 417.

⁷¹Rütli (1991) 147.

⁷²Harter (1999) 50; Rütli (1991) 147.

⁷³Carandini (1968) 23, Taf. 11, 244–246a–b.

⁷⁴Clairmont (1963) 266–269, Taf. XXVI.

⁷⁵Dévai (2021) Fig. 1. The number of fragments from Intercisa was taken from Barkóczi's study. As it later turned out, the type is represented by 41 fragments instead of 44 at Intercisa; however, this does not substantially change the frequencies in the type's Pannonian distribution, as most of the fragments were found at Intercisa.

⁷⁶Barkóczi (1986) 166–189.



25. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 7.1)

Intercisa Museum, inv. no.: 2000.173.8.

Findspot: 1996, rescue excavation

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: a thin horizontal wheel-cut line below the rim and two rows of vertical narrow oval facets (also termed rice-grain facets) underneath.

dR.: 10 cm, Th. of rim: 0.21 cm, narrow, oval facets: 1×0.2 cm

26. Body fragment of a deep hemispherical facet-cut bowl (Fig. 7.2)

Intercisa Museum, inv. no.: 91.324.1.b.

Findspot: 1973, Zsolt Visy, Trench 73/3/7

Colourless; zoned decoration: a pair of double horizontal wheel-cut lines in the centre, above and below which runs a row of vertical narrow oval facets.

Narrow oval facets: 0.8×0.3 cm, W. of wheel-cut lines: 0.6 cm
Barkóczy (1986) Cat. 5/9(?): the pattern is similar, but not identical

27. Body fragment of a deep hemispherical facet-cut bowl (Fig. 7.3)

Intercisa Museum, inv. no.: 93.27a.

Findspot: 1973, Zsolt Visy, Trench 73/1, *vicus*

Colourless; decoration: oval facet.

28. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 7.4)

Intercisa Museum, inv. no.: 91.241.1.

Findspot: 1973, Zsolt Visy, *vicus*, Trench 11, found together with a snake-thread glass fragment

Colourless; slightly out-turned, cracked-off, polished rim; zoned decoration: two zones separated by a pair of thin horizontal wheel-cut lines, each zone filled with circular facets with central bosses alternating with double I-shaped motifs made up of double vertical engraved lines with narrow oval facets on top and bottom.

dR.: 10.2 cm, Th. of rim: 0.19 cm, circular facets: 1.5 cm, central boss: 0.5 cm, W. of double vertical line: 0.12 cm, W. of narrow oval facets: 0.2 cm

29. Body fragment of a deep hemispherical facet-cut bowl (Fig. 7.5)

Intercisa Museum, inv. no.: 73.1644.11.

Findspot: Partvédelem-Öreghegy

Colourless; decoration: small circular facets in two rows at the bottom, above which is horizontally standing narrow ovals, probably forming a horizontally line, at the top of the fragments, a series of narrow upright ovals.

Circular facets: 0.8 cm

Barkóczy (1986) Cat. no. 8/16.

30. Body fragment of a deep hemispherical facet-cut bowl (Fig. 7.6)

Intercisa Museum, inv. no.: 73.1644.6.

Findspot: Partvédelem-Öreghegy

Colourless; decoration: circular facets with central bosses.

Barkóczy (1986) Cat. 8/7

31–32. Two body fragments of a deep hemispherical facet-cut bowl (Fig. 7.7)

Intercisa Museum, inv. no.: 68.114.21.

Findspot: 1965, Eszter B. Vágó, Papszőlő, Trench 1, Pit 1

Colourless; decoration: two zones separated by a pair of horizontal wheel-cut lines, above which are circular facets with central bosses alternating with double I-shaped motifs made up of a pair of vertical engraved lines with a narrow oval facet on top and a horizontal narrow oval facet below the engraved line on one of the fragments; a vertical engraved line with narrow oval facets on the other fragment.

W. of vertical engraved lines: 0.12, 0.4 cm, narrow, horizontal, oval facets: 0.5×1.2 cm

33. Body fragment of a deep hemispherical facet-cut bowl (Fig. 8.1)

Intercisa Museum, inv. no.: 75.7.119.a.

Findspot: 1962, basilica, Trench A

Colourless; decoration: two small widely-spaced circular facets.

34–37. Four body fragments of a deep hemispherical facet-cut bowl (Fig. 8.2)

Intercisa Museum, inv. no.: 75.7.33a-d.

Findspot: 1962, basilica, Trench A

Colourless; decoration: wider vertical oval facets above a horizontal wheel-cut line, the lower corner of a wheel-cut lozenge on the fourth fragment.

38. Body fragment of a deep hemispherical facet-cut bowl (Fig. 8.3)

Intercisa Museum, inv. no.: 75.13.43.

Findspot: Papszőlő, Grave 440, Pit D

Colourless; decoration: large circular facets with central bosses.

Circular facets: 3 cm

39. Body fragment of a deep hemispherical facet-cut bowl (Fig. 8.4)

Intercisa Museum, inv. no.: 75.40.2.

Findspot: 1963, Eszter B. Vágó, Trenches 4–5

Colourless; decoration: circular facet with a central boss.

40. Body fragment of a deep hemispherical facet-cut bowl (Fig. 8.5)

Intercisa Museum, inv. no.: 75.37.7.

Findspot: 1967, Eszter B. Vágó–Zsolt Visy, Pit 3, south of Papsziget

Colourless; decoration: two rows of close-set vertical oval facets.
Barkóczy (1986) Cat. 3/5(?)

41. Body fragment of a deep hemispherical facet-cut bowl (Fig. 9.1)

Intercisa Museum, inv. no.: 75.26.1.d.

Findspot: 1967, Eszter B. Vágó–Zsolt Visy, Pit 3, south of Papsziget

Colourless; decoration: sparsely spaced circular facets.

Barkóczy (1986) Cat. 3/15(?)



42. Body fragment of a deep hemispherical facet-cut bowl (Fig. 9.2)

Intercisa Museum, inv. no.: 75.26.1.e.

Findspot: 1967, Eszter B. Vágó–Zsolt Visy, Pit 3, south of Papsziget

Colourless; decoration: a horizontal row of widely-spaced circular facets, a row of vertical narrow oval facets (also termed rice-grain facets), two rows of close-set vertical narrow oval facets and a large circular facet engraved with a double line on the base.

Barkóczy (1986) Cat. 3/16(?)

43. Three body fragments of a deep hemispherical facet-cut bowl (Fig. 8.6)

Intercisa Museum, inv. no.: 77.35.51.

Findspot: 1967, Papsziget, Pit 43

Colourless; zoned decoration: a pair of thin horizontal wheel-cut lines below the rim and a row of close-set narrow, vertical, oval facets underneath.

44–45. Two rim fragments of a deep hemispherical facet-cut bowl (Fig. 8.7)

Intercisa Museum, inv. no.: 77.11.6.

Findspot: 1967, Papsziget, unstratified find

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: a pair of thin horizontal wheel-cut lines below the rim larger and circular facets engraved with two thin lines separated by I-shaped motifs.

Barkóczy (1986) Cat. 8/7a–b(?)

46–47. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 9.3)

Intercisa Museum, inv. no.: 77.26.2–3.

Findspot: 1967, Papsziget, unstratified find

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: a pair of thin horizontal wheel-cut lines below the rim and larger circular facets engraved with two thin lines alternating with simple vertical lines with narrow oval facets on top.

dR.: 14 cm, Th. of rim: 0.15 cm

48. Rim and body fragments of a deep hemispherical facet-cut bowl (Fig. 10)

Intercisa Museum, inv. no.: 77.187.18.

Findspot: 1969, Eszter B. Vágó, Víztorony, 15 fragments of the same vessel

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: a pair of thin horizontal wheel-cut lines below the rim, another horizontal wheel-cut line underneath, below which is a wide band filled with four rows of close-set vertical narrow oval facets, followed by a pair of thin horizontal wheel-cut lines, below which are widely-spaced horizontal rice-grain facets.

dR.: 16 cm, Th. of rim: 0.18 cm

49. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 11.1)

Intercisa Museum, inv. no.: 75.1.12.

Findspot: 1963, *castellum*, Building 15/b, unstratified find

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: a thin horizontal wheel-cut line below the rim, underneath which is a wide band filled with two rows of close-set vertical narrow oval facets, a row of rice-grain facets and widely-spaced small circular facets towards the base.

dR.: 14 cm, Th. of rim: 0.18 cm, diam. of circular facets: 1×1 cm, vertical rice-grain facets: 0.3×1.1 cm, vertical oval facets: 0.2×0.8 cm.

50. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 11.2)

Intercisa Museum, inv. no.: 76.44.167a.

Findspot: 1967, Papsziget, Pit 32

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: two thin horizontal wheel-cut lines below the rim.

dR.: 9 cm, Th. of rim: 0.19 cm

51. Body fragment of a deep hemispherical facet-cut bowl (Fig. 11.3)

Intercisa Museum, inv. no.: 76.44.167b.

Findspot: 1967, Papsziget, Pit 32

Colourless; zoned decoration: two larger circular facets on either side of a wheel-cut chevron-like motif and a vertical rice-grain facet between the two stems of the chevron, a small circular facet at the tip of the chevron flanked by two horizontal rice-grain facets; the tip of the chevron extends into the small circular facet, meaning it was cut later.

52. Deep hemispherical facet-cut bowl, small-sized (Fig. 11.4, Fig. 12)

Intercisa Museum, inv. no.: 68.112.2.

Findspot: 1966, Eszter B. Vágó, *castrum*, rubbish pit

Colourless; slightly out-turned cracked-off and polished rim; thick, rounded base; zoned decoration: two thin horizontal wheel-cut lines below the rim, underneath which is a wide band filled with larger circular facets alternating with double I-shaped motifs made up of a vertical line with narrow oval facets on top and bottom, separated by a pair of horizontal wheel-cut lines from the lower band filled with circular facets separated by a festoon-like motif with narrow oval facets at the tip; a large circle of a double engraved line (diam: 2.8 cm) on the base.

dR.: 7.4 cm, Th. of rim: 0.16 cm, diam. of circular facets in the upper band: 1.1 cm, diam. of circular facets in the lower band: 1.7 cm, W. of double vertical engraved lines: 0.11–0.12 cm, narrow oval facets in both bands: 1×0.4 cm

53. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 13.1)

Intercisa Museum, inv. no.: 91.362.1.

Findspot: 1973, Zsolt Visy, *vicus*, Trench 73/41

Colourless; slightly out-turned, cracked-off and polished rim; zoned decoration: a thin horizontal wheel-cut line below the rim and two rows of vertical narrow oval facets.

dR.: 122 cm, Th. of rim: 0.20 cm

54. Deep hemispherical facet-cut bowl, small-sized (Fig. 13.2)

Intercisa Museum, inv. no.: 75.40.1.a.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2



Colourless; slightly out-turned, cracked-off, polished and thick rim: zoned decoration: two thin horizontal wheel-cut lines below the rim, underneath which is a narrow band filled with larger circular facets alternating with single vertical engraved lines, separated by a pair of horizontal wheel-cut lines from the lower band filled with circular facets alternating with I-shaped motifs made up of a vertical engraved line with narrow oval facets on top.

dR.: 8.8 cm, Th. of rim: 0.23 cm, diam. of circular facets in upper band: 1.1 cm, diam. of circular facets in lower band: 1.5×1.2 cm, W. of vertical engraved lines: 0.12 cm, narrow oval facets in both rows: 1.3×0.4 cm

Barkóczy (1986) Cat. 8/11(?): the pattern is similar, but not identical

55. Body fragment of a deep hemispherical facet-cut bowl (Fig. 13.2)

Intercisa Museum, inv. no.: 75.40.1.b.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; zoned decoration: section of a thin horizontal wheel-cut line, larger circular facets alternating with vertical engraved lines, followed by a double horizontal wheel-cut line below which are narrow oval facets.

Diam. of circular facets: 1.1 cm

56. Rim fragment of a deep hemispherical facet-cut bowl (Fig. 13.2)

Intercisa Museum, inv. no.: 75.40.1.c.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; zoned decoration: two thin horizontal wheel-cut lines.

dR.: 8.8 cm, Th. of rim: 0.23 cm

57. Rim fragment of deep hemispherical facet-cut bowl (Fig. 13.2)

Intercisa Museum, inv. no.: 74.40.1.d.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; zoned decoration: two thin horizontal wheel-cut lines and a large circular facet.

58. Body fragment of a deep hemispherical facet-cut bowl (Fig. 13.2)

Intercisa Museum, inv. no.: 75.40.1.e.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; zoned decoration: a row of horizontal narrow oval facets separated by a pair of horizontal wheel-cut lines from a row of vertical narrow oval facets.

59. Body fragment of a deep hemispherical facet-cut bowl (Fig. 13.2)

Intercisa Museum, inv. no.: 75.40.1.f.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; zoned decoration: a pair of thin horizontal wheel-cut lines below the rim, underneath which is a narrow band filled with larger circular facets alternating with single vertical engraved lines, separated by a double horizontal wheel-cut line from the lower band with circular facets and vertical engraved lines with narrow oval facets on top.

60. Fragment of a deep hemispherical facet-cut bowl (Fig. 13.2)

Intercisa Museum, inv. no.: 75.40.1.g.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; zoned decoration: a row of narrow oval facets separated by a pair of horizontal wheel-cut lines from a band filled with a row of close-set oval facets.

Diam. of oval facets: 0.5×1.5 cm

Barkóczy (1986) Cat. 8/17(?): the pattern is similar, but not identical

61. Fragment of a deep hemispherical facet-cut bowl (Fig. 13.3)

Intercisa Museum, inv. no.: 75.40.1.h.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; decoration: honeycomb-shaped wheel-cut hexagonal pattern with large circular facets inside the hexagons and a row of rice-grain facets and a double wheel-cut line underneath.

Diam. of circular facets: 1.3 cm, diam. of rice-grain facets: 0.4×1.3 cm

Barkóczy (1986) Cat. 8/15(?): the pattern is similar, but not identical

62. Body fragment of a deep hemispherical facet-cut bowl (Fig. 13.4)

Intercisa Museum, inv. no.: 75.40.1.i.

Findspot: 1963, Eszter B. Vágó, Trench 2, Building 2

Colourless; decoration: honeycomb-shaped wheel-cut hexagonal design with large circular facets inside the hexagons.

63. Fragment of a deep hemispherical facet-cut bowl (Fig. 14.1)

Intercisa Museum, inv. no.: 76.44.173.

Findspot: 1967, Papsziget, Pit 32

Colourless; decoration: section of a large circular facet and a pair of vertical engraved lines with a rice-grain facet on top.

Barkóczy (1986) Cat. 8/7(?): the pattern is similar, but not identical

64. Fragment of a deep hemispherical facet-cut bowl (Fig. 14.2)

Intercisa Museum, inv. no.: 76.44.169.

Findspot: 1967, Papsziget, Pit 32

Colourless; decoration: section of a large circular facet and a single vertical engraved line with a rice-grain facet below, separated by a thin horizontal wheel-cut line from a row of close-set vertical oval facets.

Barkóczy (1986) Cat. 9/1a(?): the pattern is similar, but not identical

65. Body fragment of a deep hemispherical facet-cut bowl (Fig. 14.3)

Intercisa Museum, inv. no.: 91.581.1.

Colourless, decoration: two thin horizontal wheel-cut lines, underneath which is a larger circular facet, two small rice-grain facets, the tip of a lozenge and a vertical engraved line with a rice-grain facet on top inside the lozenge.



SCALLOP BOWLS (FIG. 14.4–6, FIG. 6.1)

While the pieces from Intercisa were included in a previously published detailed study on the scallop bowls known from Pannonia,⁷⁷ a brief description of the vessel type and a list of the exemplars from Intercisa are given here. It should be noted that although three pieces were listed from this site in the previous study, this number has risen to four and the newly discovered scallop bowl is included here. Three of these bowls were recovered from burials in the settlement's western cemetery.

Scallop-shaped glass bowls have been discussed in detail by E. Marianne Stern;⁷⁸ in László Barkóczy's catalogue of the Roman vessel glass from Pannonia, the type appears as Form 189.⁷⁹ The majority of mould-blown, decorated glass vessels are bottles, sprinklers and smaller jars.⁸⁰ The reason for this was in part that unlike cut and faceted designs imitating the elegant engraved designs on crystal, a point noted by Pliny the Elder,⁸¹ the imprints of the moulds were not particularly attractive on the colourless tableware that became fashionable from the late first/early second centuries. The predilection for these vessels remained significant until the later fourth century, up to the century's end. Tableware was predominantly produced from colourless glass, frequently decorated with attractive cut and faceted motifs. From the second century onward, mould-blown vessels were usually restricted to storage and transport vessels, such as square and hexagonal bottles and flagons, although small globular bottles with relief decoration and head bottles remained popular, too.

The glass variety of scallop bowls can be divided into two main types. The first was current before 79 and was made by sagging,⁸² while the second was mould-blown and began to be produced during the fourth century. The early type is far more realistically modelled, with particular attention to the curving lines of the shell and the scalloped rim. The findspots would suggest that this vessel form had evolved in Italy. The more stylised fourth-century vessels are made of delicate colourless glass and three main groups can be distinguished based on their rim diameters: the largest ones have rim diameters of 15.5–16 cm, the medium-sized ones of around 13.5 cm, while the smallest ones of roughly 9.5–10.5 cm. Their distribution shows a concentration in the Cologne and Intercisa areas, suggesting that their workshops lay in these areas.⁸³

The distribution of the glass scallop bowls in the Roman Empire shows the following picture: six colourless specimens

are known from Cologne.⁸⁴ The scallop bowl from the Jakob Strasse site does not come from a burial.⁸⁵ Danièle Foy mentioned five from Gallia, one from Hispania and one from Rome, which appear to be the earliest, dating mostly from the third century, and it is uncertain whether they were new when they became buried or whether they had been in use for a longer period.⁸⁶ The five Gallic exemplars and the Roman specimen are quite certainly earlier, dating to the second or third century; neither was brought to light from a burial and they belong to a different group of shell-shaped bowls than the later ones. A similar bowl is known from Carthage.⁸⁷ Their distribution suggests that these bowls were more popular in the western part of the empire. The examples from Gaul and Germania made of decolourised glass appear to be earlier. By comparison, the Pannonian pieces are clearly later, dating from the fourth and fifth centuries.

This type of glass bowl has much in common with the similar pieces known mainly from the Rhine and Danube frontiers, suggesting that they were most likely produced in those region. However, given their larger concentration in Pannonia, a local production cannot be excluded.

66. Scallop bowl (Fig. 14.4)

Intercisa Museum, inv. no.: 65.11.24.7.

Findspot: South-eastern cemetery, Grave 38

Blown in an open one-part mould; flaring, cracked-off rim, lightly ground; body modelled in the shape of a bivalve marine mollusc (scallop) with ribs in relief; rounded base; colourless, good-quality glass with few bubbles.

H.: 4.70 cm, dR.: 12.70 cm, dB.: 8.80 cm

67. Scallop bowl (Fig. 14.5)

Intercisa Museum, inv. no.: 67.2.157.18.

Findspot: Grave 570

Blown in an open one-part mould; body modelled in the shape of a bivalve marine mollusc (scallop) with ribs in relief; rounded base, no pontil scar, ground; colourless, good-quality glass with few bubbles.

H.: 4.70 cm, dR.: 13.0 cm, dB.: 8.90 cm

68. Scallop bowl (Fig. 14.6)

Intercisa Museum, inv. no.: 67.2.107.5.

Findspot: South-eastern cemetery, Grave 4

Blown in an open one-part mould; fire-rounded rim; body modelled in the shape of a bivalve marine mollusc (scallop) with ribs in relief; rounded base, no pontil scar, ground; colourless, excellent quality, bubble-free glass.

H.: 4.50 cm, dR.: 14.28 cm, dB.: 9.50 cm

69. Scallop bowl fragment (Fig. 6.1)

Intercisa Museum, inv. no.: 76.44.1.70.

⁷⁷Dévai (2023).

⁷⁸Stern (1995) Cat. no. 137.

⁷⁹Barkóczy (1988) 212–213.

⁸⁰Stern (1995) 185.

⁸¹Pliny, *Naturalis Historia* 36.37.198.

⁸²Stern (1995) 199; Maiuri (1932) Pl. 62; Goldstein (1979) 139–140, no. 288.

⁸³Stern (1995) 199.

⁸⁴Fremersdorf (1961) 73–74, Taf. 134. The six bowls mentioned in Fremersdorf are not dated.

⁸⁵Friedhof (1991) 138.

⁸⁶Foy (2018) 124–125.

⁸⁷Tatton-Brown (1984) 194, Cat. no. 1 and 196, fig. 65.1.



Blown in a one-part cup-shaped mould; colourless, excellent quality glass.

HEMISPHERICAL BOWLS WITH CUT FIGURAL DECORATION (FIG. 6.2)

These bowl variants were mainly used in the fourth and fifth centuries. This type corresponds to Isings Form 116 and Rützi's Form AR 59. The type appears as Form 27 in Barkóczi's catalogue of the Roman vessel glass from Pannonia.⁸⁸ Several fragments of similar shallow bowls with cut figural decoration are known from Pannonia, and a comparable male head with a hedgehog hairstyle has been published from the late Roman cemetery of Pilismarót.⁸⁹ The other two fragments of this type were found at Gorsium. They also bear male figures with a typical hedgehog hairstyle, a star motif and other geometric ornaments.⁹⁰ Thus, this type of cut figured decoration on late Roman bowls seems to be as common in Pannonia as in the Cologne area and the Rhine region.

The bowls bearing depictions of males wearing the characteristic hedgehog hairstyle have mainly been found in the Cologne area and in the Rhineland. The surface of the elongated cuts is matte and parallel scratches can be seen in the cuts. The cuts appear to be somewhat carelessly made. The hair itself was created with a series of fine cuts with a smooth surface, unlike the classical hedgehog hairstyle heads. The hedgehog hairstyle heads probably come from a workshop in the Cologne area.⁹¹ This depiction type is virtually unknown in the empire's eastern provinces. The Intercisa fragment represents either Nagel's Stilgruppe A (3.3.1) or Stilgruppe B (3.3.2).⁹²

70. Shallow hemispherical bowl with cut figural decoration (Fig. 6.2)

Intercisa Museum, inv. no.: 77.112.1.

Findspot: Vágó, E.B, Víztorony, 3/8.2.

Colourless; cracked-off, polished rim; decoration: a fine wide horizontal wheel-cut line below the rim, underneath which is a man with a hedgehog hairstyle, a large facet-cut star and three smaller star motifs between its stems.

RE-USED BASE RINGS OF BOWLS (FIG. 6.3–4)

While re-worked glass objects are known throughout the Roman Empire, a detailed study of the different ways in which glass was reworked and reused has not yet been undertaken.

The over thirty re-used glass vessel fragments from Intercisa are noteworthy since they come from the find material of a single *vicus*. It seems likely that the repurposing of broken glass vessels was a more common practice than the currently available publications would suggest. In all likelihood, it made good sense to re-use the fragments of broken glass vessels either as simple domestic objects or as grave goods. In the present collection, only those pieces that were probably the base rings of large bowls are described here.⁹³

In her study on re-worked glass fragments, Sylvia Fünfschilling identified various categories and sought to determine their possible new function. The most often re-used pieces were vessel base rings, generally representing the following types: folded tubular base rings, disc-like folded bases (Isings 109) or applied base rings (such as Isings 85), which fall into a wide range of sizes.

One possible new function has already been mentioned in the above: it seemed practical to use the base of larger broken vessels after trimming off the jagged edges for funerary purposes, as cups or bowls deposited in burials. However, they could also be repurposed as small cups, bowls or even cosmetics palettes in daily life.

71. Re-used base ring (Fig. 6.3)

Intercisa Museum, inv. no.: 67.2.203.2.

Greenish tubular base ring with a pontil scar; the remnants of the vessel wall were trimmed off.

dB.: 10.5 cm

72. Re-used base ring (Fig. 6.4)

Intercisa Museum, inv. no.: 67.203.1.

Greenish flat tubular base with a pontil scar; the remnants of the vessel wall were trimmed off.

dB.: 13.2 cm

CONCLUSION

The differing patterns of glass consumption in military forts, towns and rural settlements add interesting new details to the period's economic history. The bowl types described and discussed here were particularly popular in a military fort and the associated *vicus* along the *limes*, which were exposed to eastern cultural impacts owing to the immigrant eastern population. A total of 662 glass fragments and intact vessels can currently be found in the collection of the Intercisa Museum (this study does not include the glasses from this site in the Hungarian National Museum which mainly come from excavations conducted in the earlier twentieth century or the costume accessories, beads, bracelets and pendants, or the wasters from the glass workshops in the Intercisa Museum). Based on the primary assessment of the glass finds, drinking vessels represent the largest group: about 250 pieces were assigned to this functional category, accounting

⁸⁸Barkóczi (1988) 66–67.

⁸⁹Barkóczi (1960) 120, Abb. 34.

⁹⁰Barkóczi (1988) Kat. 66–67, 47–48.

⁹¹Fünfschilling (2015) 97–100.

⁹²Nagel (2020) 332, 371.

⁹³Dévai (2020) 187–204.



for 37% of the finds. The third major group of glass tableware, made up of vessels for serving liquids and liquid containers, such as jugs, pitchers and flagons used as tableware, was less typical in Intercisa.

A total of 72 bowls, accounting for the roughly 10%, can be assigned to this group, taking into account all the vessel fragments discussed in the present study. Bowls occur in relatively high number among the vessel fragments. The bowls can be divided into two main groups: cast or mould-pressed and blown vessels. Being quite common, facet-cut bowls quite certainly played an important role in the settlement's life; nevertheless, two points concerning the identification of the fragments must be taken into account in statistical analyses: on the one hand, it is a very easily identifiable type, clearly recognisable even from a small fragment, while on the other hand, it is very difficult to reconstruct the decorative schemes. Given that the entire vessel body was decorated, the small fragments rarely reveal the entire decorative design and it is often virtually impossible to ascertain the number of vessels represented by the fragments or even whether some fragments came from the same vessel. This was also a problem when compiling the catalogue: which pieces should be described under the same catalogue entry and which should be treated separately. In one case, 15 fragments were recovered from the same archaeological context (No. 48): the fragments could be refitted, revealing the decorative scheme of the vessel body. The intact or near-intact pieces similarly represent simple cases. In others cases, however, although it seemed highly probable that the fragments came from the same vessel, there remained some uncertainty and therefore these fragments are listed under separate catalogue numbers, but in the same entry. For example, some of the fragments described under Nos 54–62 may have been part of the same vessel, but probably not all; in my view, they came from two or three vessels and were therefore described under separate entries.

While blown bowl types are frequent among the finds, the early pieces include a handful of cast and mould-pressed exemplars. The mosaic ribbed bowl fragments testify that glass tableware was used as early as the time of the first garrison of Intercisa.

Facet-cut bowls represent the most popular type among bowls and the pieces assigned to this category represent a wide range of sizes and different patterns. The entire vessel body as well as the base were decorated in the later second and the earlier third centuries in Pannonia. It must be highlighted that at Intercisa, facet-cut bowls were not recovered from burials, but came to light on the settlement, usually in the form of small fragments from which it is rather difficult to reconstruct the one-time pattern covering the vessel body.

In addition to the diversity of the decorative schemes and the rich variety of ornamental motifs, it has been often noted that the size of the motifs is frequently near-identical, suggesting that they had been made with the same tool, a chisel wheel. I have therefore included the dimensions of each wheel engraved motif both in the catalogue and on the

drawings. This enables a comparison of the motifs appearing on different vessels and vessel fragments as well as of the sizes of the tool marks, which in turn can shed light on whether the tools and chisels used by artisans were standardised and if so, to what extent, while the identical size of the chisel marks is perhaps an indication of the work of the same artisan.

Facet-cut bowls were often recovered from the same archaeological contexts as snake-thread beakers, indicating their use during the same period. This was also the case at Intercisa, where their fragments were typically found together, mainly in the *vicus* area.⁹⁴ The two types are closely linked: both are typical of the late second century and, more likely, of the early third century, and may have been produced in the same workshop. This workshop was probably founded by immigrants from the east. Both elegant wares, the facet-cut bowls and the snake-thread beakers, were made during the same period, the late second and early third centuries, in a local workshop active on the settlement. This is borne out by the fact that both types are among the most common glass finds at Intercisa, where they were recovered not from burials, but were found in association with each other in settlement contexts. Both vessel types have distinctive motifs and decorative schemes that are unique to Intercisa. The glass artisans working on the settlement created their own style distinctive to Intercisa from various ornamental elements, such as various facet types and their combinations, and in the case of snake-thread beakers, they had a predilection for designs made up of applied leaves, tendrils and birds, whose surface was stamped with a special tool.

Only a few bowls are known from the late Roman period: this vessel type virtually disappeared, and the handful of known pieces are mostly hemispherical bowls with straight, cracked-off rim, often undecorated, or bearing wheel-cut lines or abrasion bands. One late Roman bowl type stands out in this respect, namely the scallop bowls. Four specimens were found at Intercisa, a remarkably high number compared to the total number known throughout the empire. This study presents a new exemplar of this type, bringing the number of these bowls from Pannonia up to five, four of which are from Intercisa. Given their larger concentration in Pannonia, especially at Intercisa, they were most likely produced in a smaller area along the *limes* in the province. Curiously enough, the parallels to the scallop bowls from the western part of the empire seem to be earlier, dating from the third century, while in Pannonia they are known from late fourth–fifth-century contexts, suggesting that they had in all likelihood been local products.

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⁹⁴The relationship between these two wares will be discussed at greater length in a forthcoming study.



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