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Title: GLASS FINDS FROM AREAS U AND G ON KOM EL-DIKKA SITE IN ALEXANDRIA (EXCAVATIONS IN 2012–2013)

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ABSTRACT: The glass material from PCMA excavations on the Kom el-Dikka site in Alexandria in the 2012 and 2013 seasons consisted mainly of a late Roman/early Byzantine assemblage, mostly yellowish-green blown glass characterized by a homogeneity of the fabric, a limited variety of vessel types and simple workmanship, all indicative of a local glasshouse most likely operating at the site. Fragments of early and late Roman mosaic glass was also an important element of the set. Excavations in area US also yielded a handful of late Hellenistic/early Roman glasses: various types of cast bowls seldom previously reported from Kom el-Dikka, a linear-cut bowl, monochrome patella, and colorless bowl with broad rim and overhung edge. The assemblage coming from Area G (basement of the late Roman baths) comprised late Roman free-blown, utilitarian wares representing a limited range of forms. Also found in this area was cast glass of the late Hellenistic/early Roman period: mosaic glass and a grooved bowl, the latter recorded for the first time at Kom el-Dikka.

KEYWORDS: Alexandria, Kom el-Dikka, cast glass, mosaic floral plaque, late Roman glass, late Roman mosaic glass, early Byzantine glass

لقى الزجاج الأثرية من المناطق U و G من موقع كوم الدكة الأثرى بالإسكندرية
(حفائر موسمي ٢٠١٢ و ٢٠١٣)

Renata Kucharczyk

الملخص : إن مواد الزجاج الأثرية من حفائر المركز البولندي لآثار البحر المتوسط (PCMA) من موقع كوم الدكة الأثرى بالإسكندرية خلال مواسم حفائر عامي ٢٠١٢ و ٢٠١٣، تتكون بشكل أساسي من مجموعة تؤرخ بالعصر الروماني المتأخر/ البيزنطي المبكر ، وأغلبها نماذج من الزجاج الأخضر- المصفر المنفوخ ، تتميز بتماذج النسيج ، كذلك تتميز هذه المجموعة بمحدودية التنوع في أنواع الأواني و بساطة الصناعة ، كل المؤشرات تدل على بيوت محلية لصناعة و تشكيل الزجاج (أفران صناعة و تشكيل الزجاج) وهي على الأرجح كانت تعمل في الموقع. تم العثور كذلك على بقايا و كسر من قطع الفسيفساء الزجاجية تعود للعصر الروماني المتأخر ، كانت أيضاً كأحد العناصر المستوردة في هذه المجموعة. أعمال الحفائر في المنطقة U أسفرت عن عدد قليل من المواد الزجاجية تعود للعصر الهلينستي المتأخر / الروماني المبكر و تشمل التالي: أنواع مختلفة من السلطانيات المصبوبة التي نادراً ماتم ذكرها في تقارير حفائر كوم الدكة، سلطانية (وعاء) مقصوص خطياً، رصفة (باتلا ذات لون أحادي وأخيراً وعاء (سلطانية) عديم اللون ذو حافة واسعة و طرف متدلى . أما بخصوص المجموعة الآتية من المنطقة G (وهي المنطقة التي تمثل الطابق السفلي لحمامات العصر الروماني المتأخر)، تتكون من الأواني التي تعود تاريخياً للعصر الروماني المتأخر وهي مشكلة بالنفخ الحر ، وهي كذلك أواني ذات نفع (إستخدام يومي وهي هنا تمثل مجموعة محدودة من الأشكال. كما تم العثور أيضاً في هذه المنطقة على الزجاج المصبوب و الذي يعود تاريخياً إلى العصر الهلينستي المتأخر / الفترة المبكرة من العصر الروماني و تشمل التالي : الفسيفساء الزجاجية و الأواني المجوفة و هذه الأخيرة يتم تسجيل وجودها لأول مرة في موقع كوم الدكة .

الكلمات الدالة : الإسكندرية ، كوم الدكة ، الزجاج المصبوب ، لوحة فسيفساء الأزهار ، زجاج العصر الروماني المتأخر ، الفسيفساء الزجاجية من العصر الروماني المتأخر ، زجاج العصر البيزنطي المبكر .

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ABBREVIATIONS

<i>AA</i>	<i>Archäologischer Anzeiger; Jahrbuch des Deutschen Archäologischen Instituts</i> (Berlin)
<i>ÄA</i>	<i>Ägyptologische Abhandlungen</i> (Wiesbaden)
<i>ADAIK</i>	<i>Abhandlungen des Deutschen Archäologischen Instituts, Abteilung Kairo</i> (Glückstadt)
<i>AJA</i>	<i>American Journal of Archaeology</i> (New York)
<i>ANM</i>	<i>Archéologie du Nil Moyen</i> (Lille)
<i>ASAE</i>	<i>Annales du Service des Antiquités de l'Égypte</i> (Cairo)
<i>AV</i>	<i>Archäologische Veröffentlichungen, Deutsches Archäologisches Institut, Abteilung Kairo</i> (Berlin–Mainz am Rhein)
<i>BAAL</i>	<i>Bulletin d'archéologie et d'architecture libanaises</i> (Beirut)
<i>BAH</i>	<i>Bibliothèque archéologique et historique</i> (Paris)
<i>BAR IS</i>	<i>British Archaeology Reports International Series</i> (Oxford)
<i>BASOR</i>	<i>Bulletin of the American Schools of Oriental Research</i> (Ann Arbor, MI)
<i>BCH</i>	<i>Bulletin de correspondance hellénique</i> (Paris)
<i>BdE</i>	<i>Bibliothèque d'étude</i> (Cairo)
<i>BIFAO</i>	<i>Bulletin de l'Institut français d'archéologie orientale</i> (Cairo)
<i>BSAA</i>	<i>Bulletin de la Société d'archéologie d'Alexandrie</i> (Cairo)
<i>BSFE</i>	<i>Bulletin de la Société française d'égyptologie</i> (Paris)
<i>CCE</i>	<i>Cahiers de la céramique égyptienne</i> (Cairo)
<i>CdE</i>	<i>Chronique d'Égypte</i> (Brussels)
<i>CRIPEL</i>	<i>Cahiers de recherches de l'Institut de papyrologie et égyptologie de Lille</i> (Lille)
<i>DBMNT</i>	<i>Database of Medieval Nubian Texts</i> (www.dbmnt.uw.edu.pl)
<i>EtTrav</i>	<i>Études et travaux</i> (Warsaw)
<i>FIFAO</i>	<i>Fouilles de l'Institut français d'archéologie orientale</i> (Cairo)
<i>GAMAR</i>	<i>Gdańsk Archaeological Museum African Reports</i> (Gdańsk)
<i>GM</i>	<i>Göttinger Miszellen</i> (Göttingen)
<i>JARCE</i>	<i>Journal of the American Research Center in Egypt</i> (Boston et al.)
<i>JEA</i>	<i>Journal of Egyptian Archaeology</i> (London)
<i>JGS</i>	<i>Journal of Glass Studies</i> (Corning, NY)
<i>JJP</i>	<i>Journal of Juristic Papyrology</i> (Warsaw)
<i>MDAIK</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo</i> (Wiesbaden)
<i>OBO</i>	<i>Orbis Biblicus et Orientalis</i> (Freiburg–Göttingen)
<i>OIP</i>	<i>Oriental Institute Publications</i> (Chicago)
<i>OLA</i>	<i>Orientalia lovaniensia analecta</i> (Louvain)
<i>PAM</i>	<i>Polish Archaeology in the Mediterranean</i> (Warsaw)
<i>SAOC</i>	<i>Studies in Ancient Oriental Civilisation</i> (Chicago)
<i>WVDOG</i>	<i>Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft</i> (Berlin–Leipzig)

GLASS FINDS FROM AREAS U AND G AT THE KOM EL-DIKKA SITE IN ALEXANDRIA (EXCAVATIONS IN 2012 AND 2013)

Renata Kucharczyk

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Abstract: The glass material from PCMA excavations at the Kom el-Dikka site in Alexandria in the 2012 and 2013 seasons consisted mainly of a late Roman/early Byzantine assemblage, mostly yellowish-green blown glass characterized by a homogeneity of the fabric, a limited variety of vessel types and simple workmanship, all indicative of a local glasshouse most likely operating at the site. Fragments of early and late Roman mosaic glass were also an important element of the set. Excavations in area U (sub-area US) also yielded a handful of late Hellenistic/early Roman glasses: various types of cast bowls seldom previously reported from Kom el-Dikka, a linear-cut bowl, monochrome patella, and colorless bowl with broad rim and overhung edge. The assemblage coming from area G (basement of the late Roman baths) comprised late Roman free-blown, utilitarian wares representing a limited range of forms. Also found in this area was cast glass of the late Hellenistic/early Roman period: mosaic glass and a grooved bowl, the latter recorded for the first time at Kom el-Dikka.

Keywords: Alexandria, Kom el-Dikka, cast glass, mosaic floral plaque, late Roman glass, late Roman mosaic glass, early Byzantine glass

The early Islamic and Mamluk glasses excavated in area U in 2012 and 2013 have already been published (Kucharczyk 2015), but the assemblage discovered in these two seasons, including vessels, windowpanes, and small glass objects, covered a wider time span, starting from the late Hellenistic period. This report presents glass from the late Hellenistic to the mid-Roman period (1st BC–3rd century AD), and the late Roman/early Byzantine period (4th–6th century AD), including also the finds from area G at the southwestern entrance to the

basement of the bath in this part of the site. This material is of particular interest, as it contains a few vessel types attested for the first time at the site.

Excavations in area U were initiated in 1980–1981 (see Rodziewicz 1984–1985: 241–242) and were continued in 1990–1991 (see Majcherek 1992: 7–10). Regular excavations were undertaken again in 2011, 2012 and 2013 in a northern extension of the trench adjoining the theater portico (sub-area UN) and to the south of the main trench (sub-area US) (see Majcherek

and Kucharczyk 2014: 23–37; Majcherek 2015: 31–42).

As for area G, which was explored first in the 1990s (see Kiss et al. 2000: 9–13), the excavation was extended recently (see Majcherek 2013: 37–39; 2015: 43–47,

Fig. 1), documenting an assemblage of glass finds from the fill trapped under a collapsed vault and from contexts sandwiched between the latest floor of the auditorium B, which was abandoned in the late 6th century AD, and the top of the vault.

GLASS FINDS FROM SUB-AREA UN

LATE HELLENISTIC TO MID-ROMAN

Excavations in sub-area UN yielded only a handful of glass fragments of the late Hellenistic to mid Roman period (1st century BC–3rd century AD), found in late Roman contexts. They represent free-blown, simply shaped vessels. Among them is an unguentarium made of green glass of low quality [Fig. 1:1] and a few colorless fragments of cylindrical beakers

[Fig. 1:2,3]. The set is significant because of a cast mosaic floral plaque, which is one of just a few pieces of this category of fine glass known from regular excavations in Alexandria. Plaques of this kind were produced in Egypt in the 1st century BC–1st century AD.

Mosaic floral plaque

The plaque, made of opaque glass, exhibits a set of stylized flowers, leaves and fruits

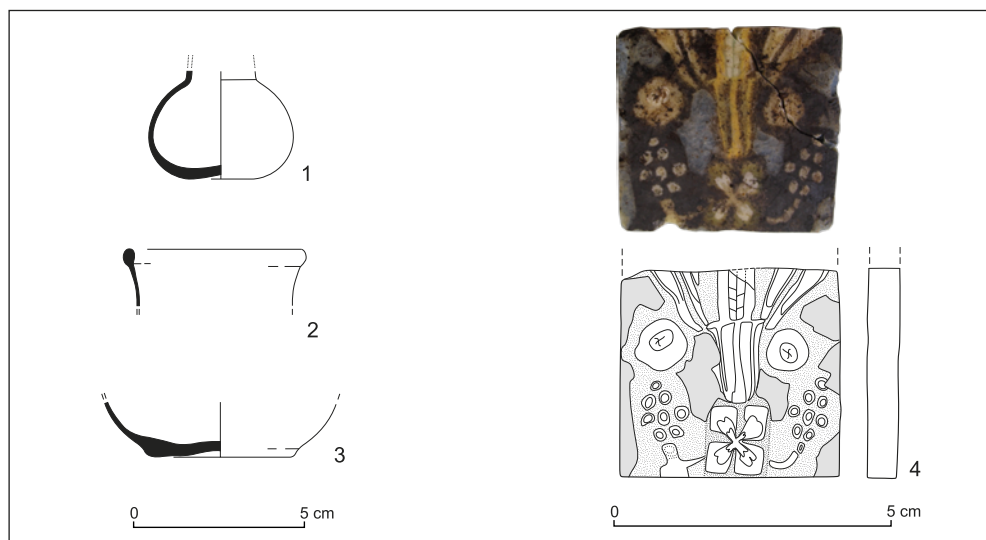


Fig. 1. Late Hellenistic and early Roman period glass fragments from sub-area UN: 1 – unguentarium; 2, 3 – beakers; 4 – mosaic floral plaque

All drawing and digitizing: Agnieszka Dzwonek, Alicja Jurgielewicz, Kalina Juszczuk, Renata Kucharczyk, Emanuela Kulicka, Marta Momot, Anna Zawadzińska

composed of sections of preformed composite mosaic canes and strips of colored glass [Fig. 1:4]. The center of the vegetal decoration, arranged in right-left symmetry, characteristic of this type of objects, occupies part of a large floral element. It consists of a sheaf of wheat, with a yellow stem and head composed of squarish, off-white kernels with pale green, poorly visible outlines, and yellow beards. It is flanked by thin yellow leaves. Two thick stems, each composed of two thinner stems made of white and yellow glass, project from both sides of the sheaf. The stem is flanked by two rounded fruits or buds of various sizes, with a white center and a dark x-shaped element set in milky-white glass. Below them are two fruits, which look like inverted grape clusters with a milky center embedded in a white matrix. In the middle of the lower border is a quatrefoil flower with four heart-shaped petals. Each petal has a white-yellow center tipped in yellow. The decoration is completed by irregular chips of blue glass, visible along the edges of the plaque and next to the wheat stem. The vegetal composition was inlaid only on the front of the plaque and was undoubtedly intended for viewing only from one side. None of the floral mosaic plaques were ever found in position, hence their purpose has not been established beyond doubt. Given their size, these attractive and exuberant objects may have been intended as decorative elements in an architectural context, as inlays for wooden jewel boxes and furniture and the like, where they undoubtedly could have been admired at close range (for more detailed presentation of this plaque and other parallels from Alexandria, as well as from many museums and private collections, see Kucharczyk 2016).

Late Roman/early Byzantine period

The bulk of glass recovered from sub-area UN comes from the late Roman/early Byzantine period (4th–6th century AD). Largely identical material was observed also during the exploration of the Islamic necropolis in the western part of area U. Almost all of the recorded fragments represent nothing but utilitarian in nature, free-blown specimens. Open forms largely prevail over closed forms. They are mainly various types of bowls and lamps, with some bottles and jugs. Vessels are distinguished by their plainness. Decoration, if present, was limited to moulded and applied elements.

The presence of a significant number of yellowish-green glass fragments is noteworthy. This low-quality glass showed countless spherical and elongated bubbles, and blowing spirals, occasionally with impurities. Vessels, as well as windowpanes made of this color glass, are typical of all late Roman contexts on Kom el-Dikka. Other colors include various shades of green and bluish-green. Glass is often covered with a creamy/white enamel weathering, and a layer of peacock iridescence. The limited variety of vessel types, the common forms and simple workmanship, the color and homogeneity of the glass fabric, and the large number of vessels made of this glass, all point to local manufacture.

Some pieces of cylinder-blown windowpanes were also recorded. None had any preserved edges. Mosaic glass of the late Roman period was an important component of this assemblage, as were also remains indicative of glass-making.

Bowls

Bowls of different forms and sizes with varied rim profiles are the main components of this assemblage. These

tableware vessels of simple shape are represented by specimens with curved sides and club rims [Fig. 2A:1–3], shallow and hemispherical bowls with cracked-off rim, occasionally with neatly ground edge [Fig. 2A:4,5], or with rounded rim [Fig. 2A:6]. Several pieces came from deep vessels with thickened, pointed rim [Fig. 2A:7], infolded rim [Fig. 2A:8], and outturned rim [Fig. 2A:9]. Others had a rounded, thick rim and thin, slanting walls [Fig. 2B:10–12], or flaring outfolded rim with a large hollow [Fig. 2B:13].

There are also several high-ring bases, in a few cases exhibiting tooled impressions on the outside of the ring. They should be connected with some of the bowls presented above [Fig. 2B:14,15]. Bases fashioned in this way are very common finds in almost every context from the site, strengthening the assumption about local glass production. Similarly finished bases are also connected with smaller forms like wineglass or goblets. Bowls equipped with such bases, and with various rims, are very well known in the Alexandrian region,

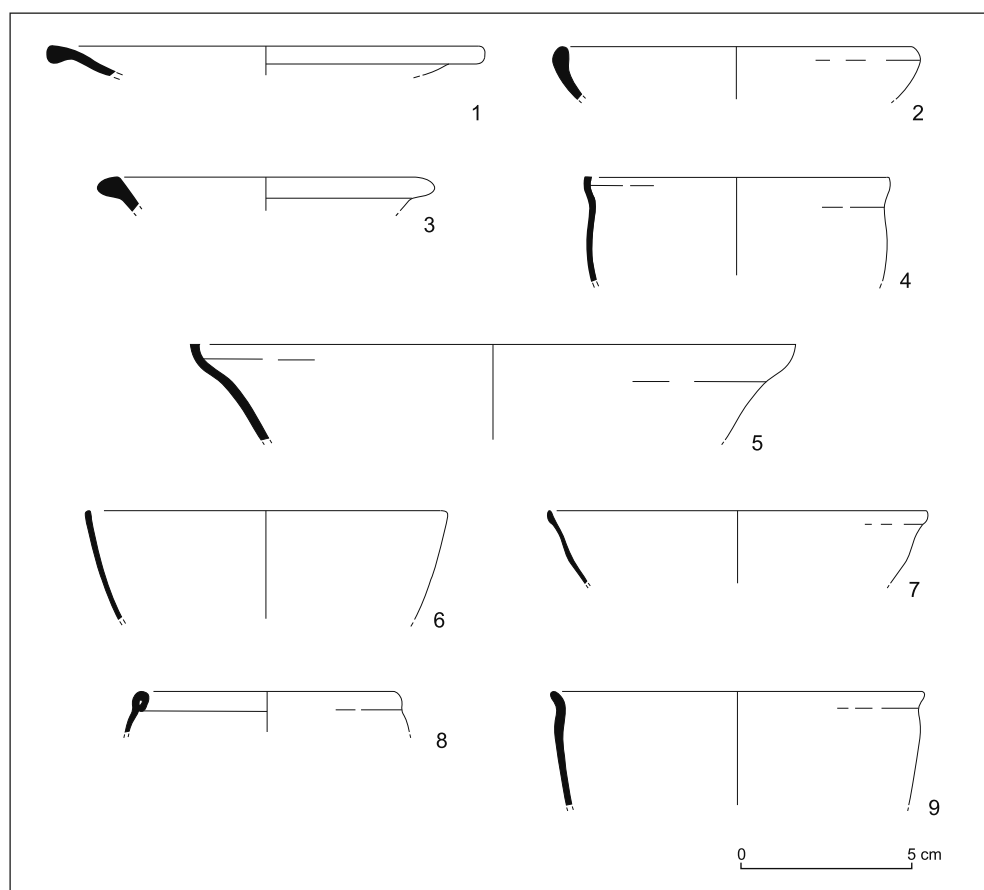


Fig. 2A. Late Roman/early Byzantine glass bowls of different shape (1–9) from sub-area UN

not only from Kom el-Dikka (Kucharczyk 2007a: 51–52, Fig. 3:6–12; 2010a: 60–61, Fig. 3:1–4; 2011b: 59–60, Fig. 2:1–5; Majcherek and Kucharczyk 2014: 28–30, Fig. 4:4,6), but also from the sites of Marina el-Alamein (Kucharczyk 2010b: 116–118, 120, 122, Figs 1:14, 2:6, 5:2)

and Marea (Kucharczyk 2008: 132, Fig. 46:26–27).

Only one fragment of a bowl illustrates a decorative style typical of the early Byzantine period. It is a thin-walled bluish-green vessel with slanting walls and trailing on the body [*Fig. 2B:16*]. The blue trail

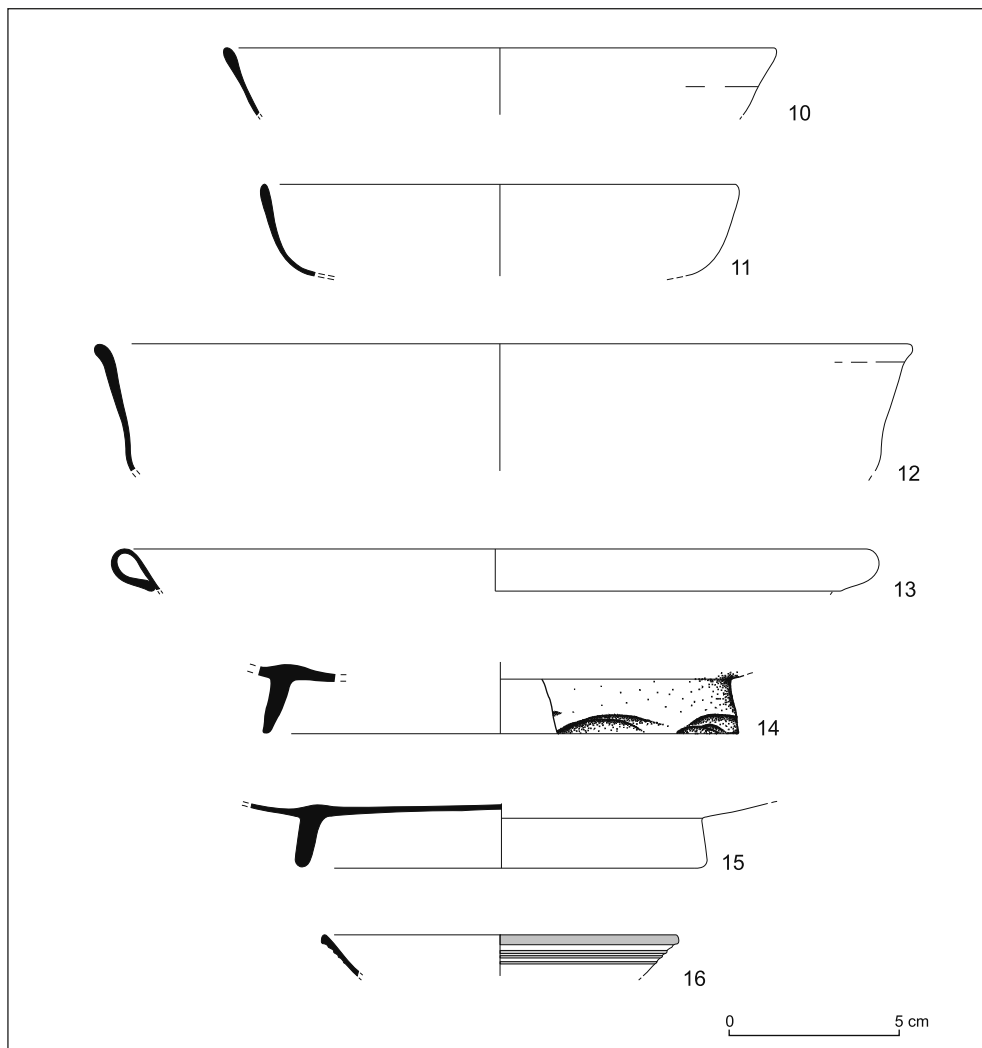


Fig. 2B. Late Roman/early Byzantine glass bowls of different shape (10–13); ring bases (14–15) and bowl with trailing (16) from sub-area UN

was horizontally applied and fused-in on the edge of the rim and below it. Very few bowls of this type have been excavated at the site so far, which could suggest that they were not a local product.

Bottles and flasks

In contrast to the numerous bowls, bottles and flasks were poorly represented in the assemblage. These simply shaped vessels survive as small sections of body walls, necks and a few bases [*Fig. 3:1–3*], precluding any certain reconstruction of overall shape. A few pieces belong to specimens with short cylindrical neck and funnel-shaped mouth, and an irregular infolded rim flattened on top [*Fig. 3:4,5*]. Flasks with cracked-off rim are, like the closed vessels with rims worked in this method, very rare at Kom el-Dikka [*Fig. 3:6*]. Jugs or flagons are exemplified by neck fragments with plain flaring rim and rounded edge, and a single horizontal trail applied beneath it, as well as a strap ribbed handle, typical of this type of container [*Fig. 3:7,9*]. A base with a three-turn applied spiral trail forming the pedestal could have come from these vessels, which, like the base and handle, were made of yellowish-green glass [*Fig. 3:8*]. Many similar bases have been noted not only on Kom el-Dikka (Kucharczyk 2010a: 58–59, *Fig. 1:11–13*; 2011b: 57–58, *Fig. 1:5–7,11*; Majcherek and Kucharczyk 2014: 30, *Fig. 4:7,8*), but also at Marina el-Alamein (Kucharczyk 2010b: 116–117, *Figs 1:11–13, 8:6,7*) and Marea (Kucharczyk 2007b: 73, *Fig. 1:12*; 2008: 132, *Fig. 46:25*). The assemblage also includes a base with indentations, closely set around the outer edge [*Fig. 3:10*]. Similarly finished bases were used for a variety of shapes and were associated either with smaller forms like goblets

and wineglasses, or with bottles. It seems that the base under discussion could have belonged to the latter form (Kucharczyk 2007a: 52, *Fig. 3:6–9*). Such bases are not unusual at the site. Like the high-ring bases, either plain or with distinct tooling marks on the inside, they are common components of all late Roman contexts at Kom el-Dikka. The local origin of this form is hardly questionable.

Decorated bottles and flasks were also present in this material, but in a very limited number. A few yellowish-green body shards with mould-blown decoration, exhibiting most probably knobby locks, are likely from head flasks (not illustrated). Not enough pieces have been recorded to determine whether they had a single or double face. So far, only one intact example of this type of a toilet container (Kucharczyk 2004: 43–44, *Fig. 1:1*) and a number of fragments assigned to the 4th century AD were found at Kom el-Dikka (Kucharczyk 2010a: 59, *Fig. 2:5*; 2011b: 58–59, *Fig. 1:12*). Fragments recently excavated at Berenike represent the same chronological horizon (author's personal observation). A find from House 1 in Marina el-Alamein most probably belongs to the 2nd–3rd century AD (Kucharczyk 2010b: 116, *Fig. 1:7*). A single example of pale blue flask with funnel-neck bears trail decoration. A dark blue trail of uneven thickness is wound several times around the neck, starting below the thickened, pointed rim [*Fig. 3:11*].

Lamps

Lamps are among the standard forms present in the late Roman/early Byzantine assemblage. Three major types are identified, all very well attested at the site. Conical lamps, either with rounded

or cracked-off, sometimes ground rim, account for the largest part of this collection. No ornamentation of any kind was observed.

The second type represents bowl-shaped lamps. At Kom el-Dikka, they are usually plain, but decorated versions with mould-blown, twisted shallow ribs have also been observed. Such lamps are equipped with three small, trail suspension handles drawn from the wall up to the edge

of the outfolded hollow rim. A few short, ear-shaped handles with broad uneven base and a piece of a delicate thin wall have been found in this set [Fig. 3:12,13,15]. Apart from these there was a single example of simple loop handle clamped at its base. It may belong to a suspended lamp with three handles applied on the body, but at mid-height [Fig. 3:14]. All handles, like the vessels to which they were attached, were made of low quality bluish-green glass.

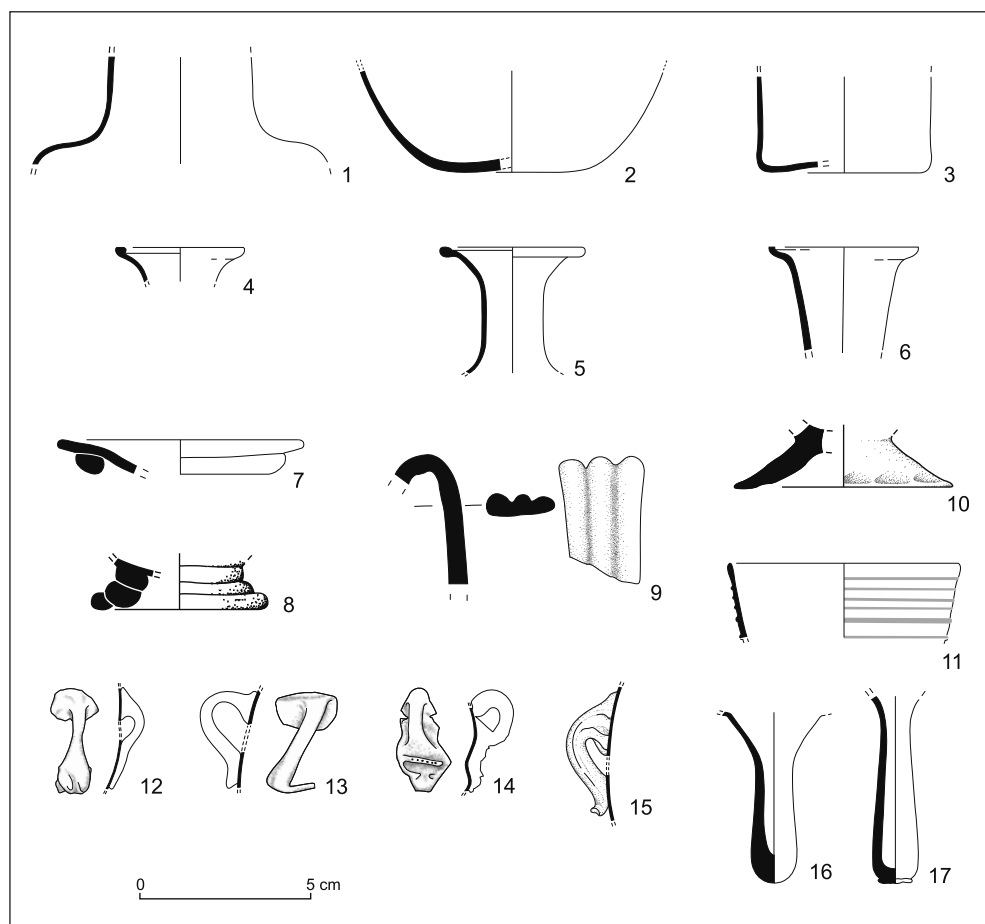


Fig. 3. Late Roman/early Byzantine glass fragments from sub-area UN: 1–11 – bottles and flasks; 12–15 – lamp handles; 16, 17 – lamp stems

The last type of lamp, a bell-shaped bowl type intended to be placed in metal holders or *polycandela*, is represented by plain, hollow cylindrical stems, sometimes with a part of the pontil wad attached to the bottom [Fig. 3:16,17].

All three types of lamps are fairly well represented in the glass assemblage from Kom el-Dikka (Kucharczyk 2007a: 46–50, Figs 1, 2:4,5; 2010a: 63–64, Fig. 5:14–16).

Wineglasses/goblets

Excavations in this area also produced a few fragments of wineglasses or goblets with rounded [Fig. 4:1] and inturned, looped rims [Fig. 4:2]. Only one isolated example of a base, which can be ascribed to this form, was found. It represents an extremely rare at Kom el-Dikka type of folded base with hollow ring around the outer edge (for a parallel from the Marea site, see Babraj, Drzymuchowska, and Willburger 2014: 56, Fig. 9:4) [Fig. 4:3]. Like many other

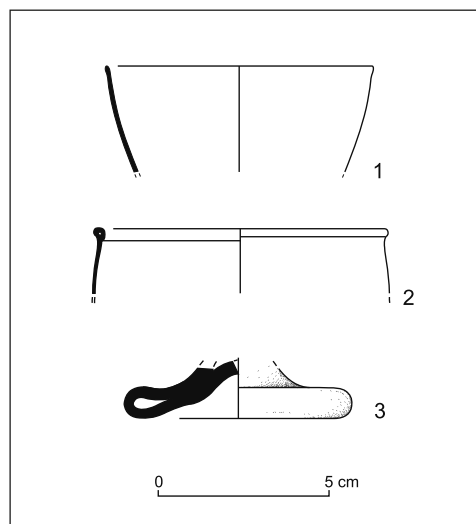


Fig. 4. Wineglasses or goblets from sub-area UN (late Roman/early Byzantine)

vessel fragments of the late Roman period from this area, the fragment was made of yellowish-green glass. Usually, most of the wineglass/goblet bases recovered from the site belong to either flat solid bases, sometimes with jack marks, or tubular and hollow ring-base specimens, often with pontil scars.

Mosaic glass

Pieces of mosaic wall panelling and circular gaming pieces were also discovered (not illustrated). Their decoration, made up of sections of opaque yellow canes, randomly encased in various shades of green matrix, is usually considered as an imitation of *serpentino verde* (*lapis lacedaemonius*). It is one of the commonest patterns observed on mosaic glass, likewise in the early and late Roman periods, when this mosaic technique flourished in Egypt. It is clearly evidenced by finds from Kom el-Dikka, including vessels (small bowls and bottles), a wide assortment of revetment plaques, counters and gaming pieces, and “buttons”. Most importantly, however, the production process is attested by prefabricated mosaic canes with this pattern. These point to the existence of local glass workshops operating most probably at the site (Kucharczyk 2010a: 67, Fig. 7:2; 2011b: 66–67, Fig. 9:3).

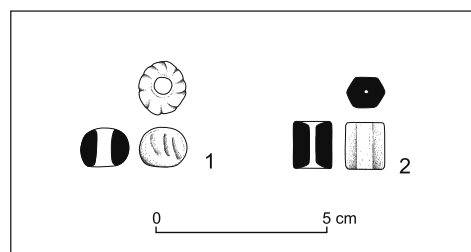


Fig. 5. Beads from sub-area UN (late Roman/early Byzantine)

Personal adornments

Two glass beads with evidence of individual finishing by hot-working and tooling were recorded. One is a single melon bead with short, closely spaced diagonal grooves [*Fig. 5:1*], made of turquoise-blue faience (Diam. 1.26 cm, H. 1 cm; for a similar find from the site, see Kucharczyk 2011b: 65, Fig. 8:3, bead excavated at the 2nd–3rd century AD context). The other is a faceted bead, hexagonal in section, made of green glass, with very small circular perforation (Diam. 1.05 cm, H. 1.3 cm) [*Fig. 5:2*].

Glass production remains

Evidence of primary and secondary glass production stages is common on Kom el-Dikka regardless of the location of excavation trenches in each given season. It is a pity that the overwhelming majority of the finds comes from mixed layers overlying the Islamic necropolis, and their dating

is uncertain. This important assemblage contains large chunks of dismantled furnaces, partly vitrified glass covered with lime deposits, droplets, raw-glass chunks of various sizes and colors, remains of crucibles with a glass layer adhering to the walls, a significant number of stone moulds for bead-making, and various types of wasters (distorted vessel fragments and windowpanes, semi-products, waste from tube-drawing and beads). Sub-area UN is not an exception. Some chunks of yellowish-green and green raw glass, which can be related to the secondary production process, were unearthened. It is interesting to note that the colors of these chunks correspond to the color of many glass fragments excavated from the area. This combined evidence indicates the existence of a local glass workshop operating in the area, most probably at the site of Kom el-Dikka.

GLASS FINDS FROM SUB-AREA US**LATE HELLENISTIC
TO MID-ROMAN PERIOD**

Excavations in the 2013 season in sub-area US (rooms 12 and 13) (Majcherek 2015: 36, Fig. 4) yielded a small, but significant glass assemblage. It contains fragments of vessels, either very rare or not reported earlier from Kom el-Dikka. Most of them are late Hellenistic and mid Roman in date, apart from a few exceptions dated to the late Roman period.

Bowls

Two finds of the late Hellenistic/early Roman period stand out clearly. One is a small body fragment of a deep, dark blue bowl with a single wheel-cut horizontal groove below the rim on the interior and

most probably with a flat bottom [*Fig. 6:1*]. It is the more important of the two, because it belongs to a group of “linear-cut” bowls produced from the later 1st century BC to the early 1st century AD (Grose 2012: 54–59, Figs 23–25; Group D). It is the first fragment of this type of bowl ever excavated at Kom el-Dikka. Parallels have been reported only from two sites in Egypt: Pelusium (Fontaine 1952: 79) and Quseir al-Qadim (Meyer 1992: 19, Pl. 2:26,27. For a list of sites in the eastern and western Mediterranean, see Weinberg and Stern 2009: 36.

The other fragment is a glossy, opaque brownish red piece with rotary polishing marks on the inside and outside surfaces. It belongs most probably to a carinated cup

(*patella*) (not illustrated). This type of cast vessel, assigned to the 1st century BC–1st century AD, is extremely rare at Kom el-Dikka. Interestingly, it relates to vessels made of opaque or mosaic glass. So far only one fragment of a polychrome *patella* cup with imitation of *serpentino verde* has come to light at the site.

Of particular interest is a fragment of rim with an overhang at the edge coming from a colorless cast deep bowl [Fig. 6:2]. This luxury tableware, characteristic of the Flavian–Trajanic period and frequently assigned to Alexandrian glass workshops,

is still a “big absentee” in the material from Kom el-Dikka. A similar picture is provided by the collection from Marina el-Alamein, where excavations have yielded a very limited number of large and small undecorated deep bowls (Kucharczyk 2005a: Fig. 2; 2010b: 119, 121, Fig. 4:1,2). Large quantities of colorless cast bowls and plates with convex-curved sides, as well as conical beakers, many with elaborate facet-cutting, either covering the entire vessel or confined to the edge of the rim and base, have recently come to light in Berenike. They represent one of the most common

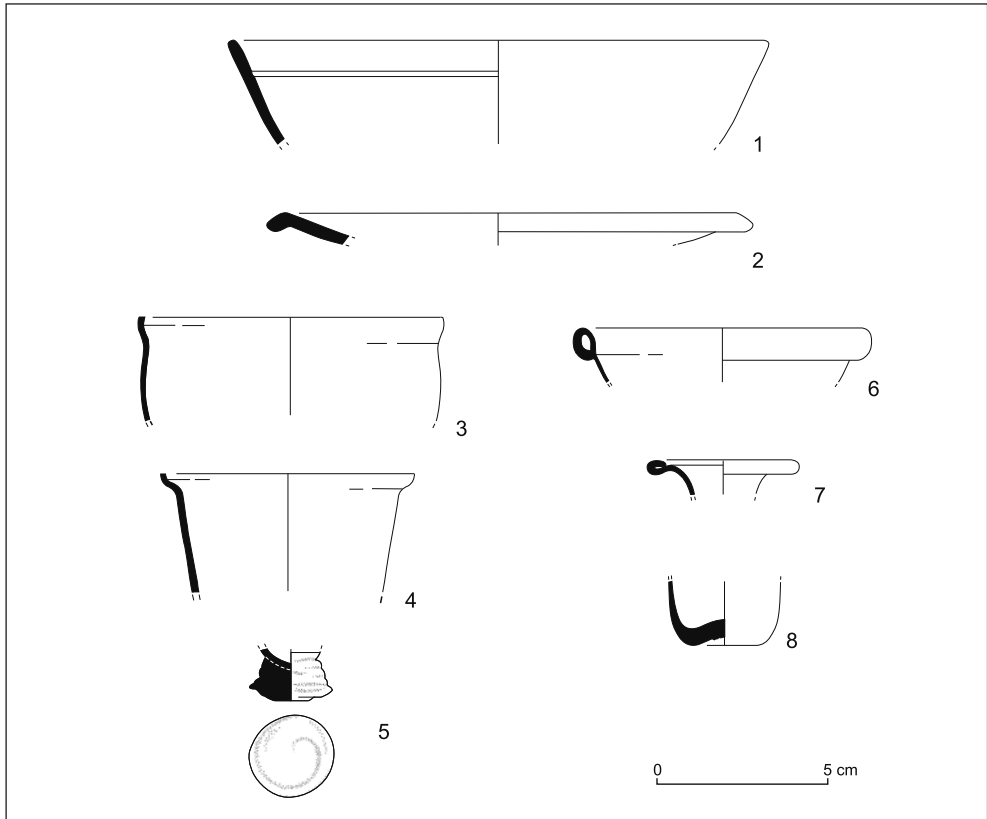


Fig. 6. Selection of glass fragments from sub-area US: 1 – linear-cut bowl; 2 – cast bowl; 3 – bowl; 4, 5 – conical lamp and knob base; 6 – deep bowl; 7, 8 – bottles

categories of glass excavated at the Red Sea site (Kucharczyk 2011a: Nos 15–17, 47–50, 65–67; see further references therein to similar material from Quseir al-Qadim, and the Roman station at Didymoi, Maximiano, Krokodilô, and Umm Balad on the Berenike–Koptos road).

Other glass finds

A small number of finds from sub-area US is assigned to the 1st–3rd century AD. They include fragments of unguentaria made of green glass of inferior quality, and a slightly concave base of a thin-walled, most probably spherical bottle, blown from decorative turquoise glass (not illustrated). One should say that the early Roman vessels made of this color of glass are extremely rare finds on Kom el-Dikka. There are also colorless bottles

and beakers with evidence of simple cut decoration in the form of horizontal lines and grooves (not illustrated). As the shards are fairly small, no conclusion can be drawn as to the exact shape of the vessels and the overall decoration.

Very few residual pieces of the late Roman period made of yellowish-green and pale bluish-green glass complete this glass assemblage. They include conical lamps and neatly formed solid knob bases, often as a termination of this type [*Fig. 6:3,4*], deep bowls either with a cracked-off rim with minimal smoothing [*Fig. 6:5*] or with an outfolded hollow rim [*Fig. 6:6*]. Bottles are represented by thin-walled, small receptacles with a funnel-shaped mouth and an infolded rim with a narrow hollow [*Fig. 6:7*], and a fragment of thin walled vessel with thick, concave base [*Fig. 6:8*].

GLASS FINDS FROM AREA G

PRE-6TH CENTURY AD CONTEXTS

Exploration of layers above a collapsed vault in the baths yielded free-blown, utilitarian wares displaying a limited range of forms. Diagnostic pieces belong mainly to bowls, bottles, wineglasses, and unguentaria. A few examples of personal adornments, made by the non-blowing technique, as well as some fragments of cylinder-blown and “bull’s eye” windowpanes, made of yellowish-green glass, and a few mosaic glass tesserae of various colors (green, cobalt blue, yellowish-green) were recorded as well. The assemblage, representing local types, characteristic of the late Roman/early Byzantine period (4th–early 6th century AD), finds parallels not only at the few excavated sites in the region, but also at many other Egyptian sites. The shapes of

the vessels, their workmanship, the color and low quality of the glass all point to local manufacture in Alexandria.

Bowls and cups

Bowls of various sizes and shapes, and with variously shaped rims, are the main component of this very small assemblage. A large, bell-shaped, deep bowl merits note. It is blown of green glass and has thin, slanting walls and a neatly tooled, thick club rim. The upper part of the vessel was formed in a ribbed mold. During re-inflation, the ribs were twisted and became very shallow, almost invisible and widely spaced, slanting down from right to left across the body. A solid, out-splayed base-ring with faint diagonal tooling marks on the outside was also found here [*Fig. 7:1*]. There is no doubt that this

base and the fragment described above, although not joining, came from one vessel. They have been made of identical green glass containing many tiny spherical bubbles and small, black impurities. Other fragments of pale yellow and bluish-green glass represent large and middle-sized thin-walled deep bowls with a limited variety of rim forms, either with an infolded hollow rim [Fig. 7:2,3], or with a broad infolded rim, clamped to form a narrow, elongated hollow [Fig. 7:4]. A few shards of thin-walled cups with cracked-off rim were also

recorded [Fig. 7:5,6]. No bases, which could be associated with these forms, were found.

Bottles

Evidence of bottles was very limited. It includes a lower body with slightly concave base from a very thin-walled, cylindrical bottle with concave sides [Fig. 7:7]. The specimen, blown of pale bluish glass, could have a cylindrical, pillar-like or funnel neck. Such bottles, representing one of the most characteristic containers from

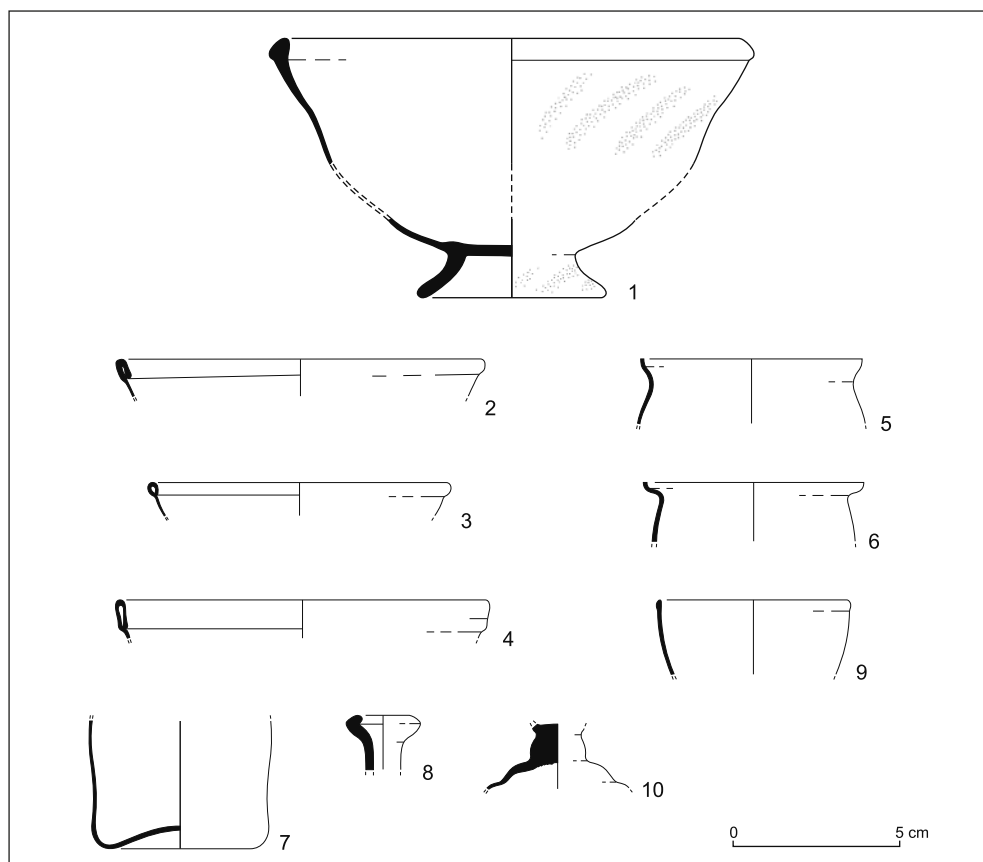


Fig. 7. Selection of glass fragments from area G (contexts above the vault): 1 – deep bowl; 2–4 – bowls; 5, 6 – cups; 7, 8 – bottles; 9, 10 – wineglasses/goblets

the early Byzantine period, have been noted at Kom el-Dikka, but not in large numbers (Kucharczyk 2007a: 50–51, Fig. 3:1–5), unlike at the nearby Marea site, where they appeared in quantity. These mass-produced and inexpensive products for everyday use, very often carelessly fashioned of notably poor quality bluish-green glass, represent a major vessel type that was produced in local workshops beside lamps and windowpanes. They were excavated, not surprisingly, in the late antique bath (Kucharczyk 2008: 130–131, Fig. 45) and the basilica (Kucharczyk 2005b: 57–58, Fig. 2:5,7; 2007b: 70–71, Fig. 1:1–6). Most of the recovered pieces came from unadorned vessels. Decorative features, when present, consisted mainly of unmarvered trails and thin threads, applied horizontally to the bottle neck, occasionally to the bowls. They were either of the same color or formed a contrasting combination with the vessel body, either blue, green or occasionally also brownish-red (Kucharczyk 2007b: 70–71, Fig. 1:4; 2008: 131, Fig. 46:24; 2010a: 60–61, Fig. 3:9). Some fragments bear a vertical mould-blown ribbing on the body and variously shaped elements painted of brownish-red enamel. The latter type of embellishment, a unique local phenomenon, is observed not only on glass from Marea (Kucharczyk 2007b: 72, Fig. 2:1–3; 2008: 131, Fig. 46:23; Babraj, Drzymuchowska, and Willburger 2014: 56, Fig. 9:9), but also from Kom el-Dikka, where around 40 pieces were registered, mainly including bottles of various shape (Kucharczyk 2005c: 34, Fig. 2:3–5).

Among the recorded fragments are a few body parts of what appears to have been unguentaria. Like many other vessels of this type, also these receptacles were made

of pale green glass. A narrow, thick-walled cylindrical neck with an unevenly infolded rim, flattened on top, may be identified in turn as belonging to a small, long-necked flask. However, this carelessly executed, bluish-green specimen, apparently serving medical or chemical purposes, could be of the Umayyad date [Fig. 6:8].

Wineglasses/goblets

Wineglasses/goblets are also present in the assemblage, representing forms of the early Byzantine period very well attested at Kom el-Dikka. The recorded fragments include a bowl blown of pale bluish-green glass, featuring a thickened, rounded rim and convex body [Fig. 7:9], and a solid, short stem tooled into a bulge, with an outplayed, concave base bearing a pontil mark, made of bubbly, pale yellowish glass [Fig. 7:10].

Personal adornments

The excavations produced a few pieces of jewelry: an intensively colored bangle and a few beads. The fragment of monochrome, cobalt-blue bangle (not illustrated), semicircular in cross-section, was decorated with vertically tooled ribbing (Spaer 1988: Type B2 [b], 55–56). This type of bangle, already seen at the site, was recovered from a late Roman/early Byzantine context (Kucharczyk 2010a: 65, Fig. 6:3; see also references to similar finds reported from Egypt).

The small assemblage of beads comprises four plain, monochrome examples, as well as two decorated varieties (not illustrated). Undecorated, variously shaped small specimens include a rounded, slightly flattened, most probably rod-formed bead with a narrow perforation, made of green glass, glossy surface (Diam.

5 mm, H. 3 mm) and a circular, rounded bead, with a narrow perforation, made of brownish-red glass. Two beads were made by the drawing technique, a method usually associated with mass production rather than individual working. One is a cylindrical bead with a very narrow perforation, broken from a string of segmented beads, made of green glass, whitish weathering (L. 7 mm, Diam. 3 mm), while the other is rounded and flattened with a very narrow perforation, broken from a string of segmented beads, made of pale yellowish-green glass (Diam. 10 mm, H. 5 mm). In the latter, the collar ends were smoothed.

Plastic decoration occurs on two beads (not illustrated). One is a monochrome specimen with a dark base, which now appears to be black, decorated with an opaque yellow thread. It was applied around the circumference and fused-in by heating, then tooled into an irregular wavelike pattern, and later marvered into the surface of the bead. This glossy, rod-formed, barrel-shaped bead has a wide, cylindrical perforation (H. 8 mm). A few trailed beads with identical combination of colors, one a deformed double rounded example, were found at Kom el-Dikka in mixed layers. It seems quite possible that the finds either from Kom el-Dikka and from Marina el-Alamein are of Alexandrian origin (Kucharczyk 2010b: 116–117, Fig. 1:18, 1st–5th century AD context). A single melon bead with short, closely

spaced diagonal grooves, made of bluish faience, with wide conical perforation (Diam. 10 mm, H. 10 mm) was found as well (for a parallel, see above, *Fig. 5:1*).

Late Hellenistic and early Roman glass from the fill under the vault

Glass material from under the vault is again very fragmentary and generally similar to that obtained from contexts overlying the vault. Almost all of the recovered shards represent vessel forms characteristic of the late Roman/early Byzantine period. Very few residual pieces of the late Hellenistic and early Roman period (1st century BC–1st century AD), which also came to light, stand out among the finds.

Cast bowls

A particularly important find in this assemblage is a tiny, amber-colored fragment of a thick rim with two closely set horizontal cut grooves on the interior [*Fig. 8*]. It belongs to a hemispherical grooved bowl, most probably with rounded bottom, dated chiefly to the late 2nd to early 1st century BC (Grose 2012: 57–58: Group A). So far, this type of bowl has not been found at Kom el-Dikka. The only other published evidence from Alexandria includes two pieces from the Chatby cemetery (Breccia 1912: 103, Nos 327, 328) and unpublished fragments found in the excavations of the Caesareum. Similar vessels, which are unique in Egypt, are reported from only a few sites: Tell

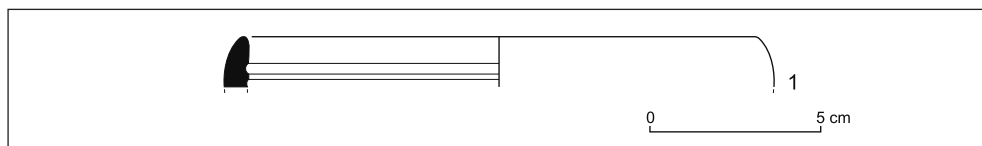


Fig. 8. Late Hellenistic hemispherical bowl from area G (fill under the vault)

el-Balamun (Spencer 1996: 18, Pl. 89:2,4,6), Tell el-Herr (Nenna 2007: 278–279, Fig. 217), Pelusium and Tebtynis (material from the latter two has yet to be published).

Grooved bowls, either hemispherical, conical or ovoid, decolorized, strongly or naturally colored, were found on many sites in the Mediterranean (Spain, France, Italy), but they are particularly numerous in Greece, Cyprus and the Aegean. They are also reported from the Near East (Syria, Lebanon, Jordan, Israel and the Gulf; for a list of sites, see Weinberg and Stern 2009: 25). The manufacture of grooved bowls is usually attributed to workshops in the Syro-Palestinian region. The marked concentration in Tel Anafa in Northern Galilee, where they constitute the overwhelming majority of glass vessels found there, suggests that they were produced in local glass workshops and widely exported (Grose 2012: 27–168, Figs 15–18). New evidence from Beyrouth seems to point, however, to the existence of yet another production center of this type of bowls (Foy 2005: 18–21; Jennings 2006: 28–36).

Mosaic glass

Mosaic glass shards found in this area included a small fragment of a thick slice of

a circular mosaic composite bar, preserving brownish-red opaque glass, outlined in opaque yellow (not illustrated). Completely preserved polychrome slices like this one, characteristic of the late 1st century BC–early 1st century AD, variously shaped, had delicate flowers or rosettes set in the middle. A combination of glass identical to the said find occurs on two circular slices with eight petalled flowers from the Art Museum of Princeton University (Antonaras 2012: 291, Nos 487, 488). Examples of sections of circular canes with variously shaped patterns are also known from the Toledo Museum of Art (Grose 1989: 363–364, Nos 637–639), Corning Museum of Glass (Goldstein 1979: 216, No. 619) and the “Per-neb” Collection (Christie’s 1993: Nos 53, 54). A plain circular slice made of opaque red and white glass is in the collection of the Louvre Museum (Arveiller-Dulong and Nenna 2011: No. 705, 1st–4th century AD). Such objects, most probably of Egyptian provenance, could act as inlays in more elaborate and complex plaques and wall decoration.

Late Roman contexts from the fill under the vault

Most of the excavated glass belongs to the late Roman period. The assemblage

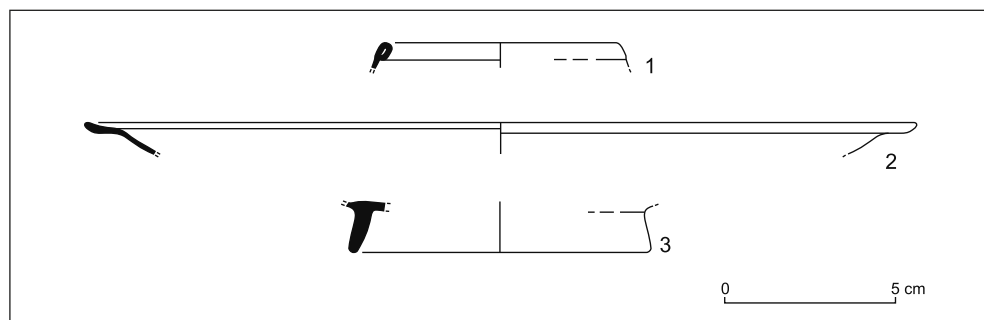


Fig. 9. Selection of late Roman glass from area G (fill under the vault): 1, 2 – bowls; 3 – ring base

contains common wares for daily use, fashioned as bottles and bowls, as well as lamps, all blown of bluish-green and yellowish-green glass of low quality. Bowls represent a thin-walled, large shallow vessel with a wide, horizontally splayed rim,

with rounded edge [*Fig. 9:2*] and a deep specimen, probably with globular body and an infolded, looped rim [*Fig. 9:1*]. A single fragment came from a high basering made of green glass (for parallels, see above, *Fig. 2B:14,15*) [*Fig. 9:3*].

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REFERENCES

- Antonaras, A. (2012). *Fire and sand: Ancient glass in the Princeton University Art Museum*. Princeton, NJ: Princeton University Art Museum
- Arveiller-Dulong, V. and Nenna, M.-D. (2011). *Les verres antiques du Musée du Louvre III. Parures, instruments et éléments d'incrustation*. Paris: Somogy
- Babraj, K., Drzymuchowska, A., and Willburger, N. (2014). Marea 2011. *PAM*, 23/1, 45–61
- Brescia, E. (1912). *Catalogue général des antiquités égyptiennes (Musée d'Alexandrie). Nos. 1–624. La nécropole de Sciabi*. Cairo: Institut français d'archéologie orientale
- Christie's. (1993). *Ancient Egyptian glass and faience from the "Per-neb" Collection*, part III [auction catalogue]. London: Christie's, Manson & Woods
- Fontaine, A.-L. (1952). Enquête sur Péluse. *Bulletin de la Société d'études historiques de l'Isthme de Suez*, 4, 17–80
- Foy, D. (2005). Une production de bols moulés à Beyrouth à la fin de l'époque hellénistique et le commerce de ces verres en Méditerranée occidentale. *JGS*, 47, 11–35
- Goldstein, S.M. (1979). *Pre-Roman and early Roman glass in the Corning Museum of Glass*. Corning, NY: Corning Museum of Glass
- Grose, D.F. (1989). *Early ancient glass: Core-formed, rod-formed, and cast vessels and objects from the late Bronze Age to the early Roman Empire, 1600 B.C. to A.D. 50*. New York: Hudson Hills Press in association with the Toledo Museum of Art
- Grose, D.F. (2012). The pre-Hellenistic, Hellenistic, Roman, and Islamic glass vessels. In A.M. Berlin and S.C. Herbert (eds), *Tel Anafā II.2. Glass vessels, lamps, objects of metal, and groundstone and other stone tools and vessels* (pp. 1–98). Ann Arbor, MI: Kelsey Museum of Archaeology
- Jennings, S. (2006). *Vessel glass from Beirut: BEY 006, 007, and 045 [=Berytus 48–49]*. Beirut: Faculty of Arts and Sciences, American University of Beirut
- Kiss, Z., Majcherek, G., Meyza, H., Rysiewski, H., and Tkaczow, B. (2000). *Fouilles polonaises à Kôm el-Dikka (1986–1987) [=Alexandrie 7]*. Warsaw: Centre d'archéologie méditerranéenne de l'Académie polonaise des sciences
- Kucharczyk, R. (2004). Two Roman toilet bottles from Kom el-Dikka. *PAM*, 15, 43–45
- Kucharczyk, R. (2005a). Early Roman glass from Marina el-Alamein. *PAM*, 16, 93–99

- Kucharczyk, R. (2005b). Glass finds from the basilica in Marea, 2004. *PAM*, 16, 55–59
- Kucharczyk, R. (2005c). Islamic glass from the auditoria on Kom el-Dikka in Alexandria. *PAM*, 16, 31–41
- Kucharczyk, R. (2007a). Late Roman/early Byzantine glass from the auditoria on Kom el-Dikka in Alexandria. *PAM*, 17, 45–53
- Kucharczyk, R. (2007b). Late Roman/early Byzantine glass from the basilica in Marea. *PAM*, 17, 70–74
- Kucharczyk, R. (2008). Glass finds from the baths and sāqiyah. In H. Szymańska and K. Babraj (eds), *Marea I. Byzantine Marea: Excavations in 2000–2003 and 2006* [=Biblioteka Muzeum Archeologicznego w Krakowie 4] (pp. 129–143). Kraków: Muzeum Archeologiczne w Krakowie
- Kucharczyk, R. (2010a). Glass from area F on Kom el-Dikka (Alexandria). *PAM*, 19, 56–70
- Kucharczyk, R. (2010b). Glass from Houses 1 and 2 in Marina el-Alamein. *PAM*, 19, 114–130
- Kucharczyk, R. (2011a). Glass. In S.E. Sidebotham and I. Zych (eds), *Berenike 2008–2009: Report on the excavations at Berenike, including a survey in the Eastern Desert* [=PCMA Excavation Series 1] (pp. 83–111). Warsaw: PCMA UW
- Kucharczyk, R. (2011b). Glass from area F on Kom el-Dikka (Alexandria). Excavations 2008. *PAM*, 20, 56–69
- Kucharczyk, R. (2015). Islamic glass from sector U (2012–2013). *PAM*, 24/1, 73–86
- Kucharczyk, R. (2016). Mosaic floral plaque fragment from Alexandria. *EtTrav*, 29, 125–134
- Majcherek, G. (1992). Excavations in Alexandria in 1990–91. *PAM*, 3, 5–14
- Majcherek, G. (2013). Alexandria. Excavations and preservation work on Kom el-Dikka. Preliminary report 2009/2010. *PAM*, 22, 33–53
- Majcherek, G. (2015). Alexandria. Excavations and preservation work on Kom el-Dikka. Seasons 2012 and 2013. *PAM*, 24/1, 29–61
- Majcherek, G. and Kucharczyk, R. (2014). Alexandria. Excavations and preservation work on Kom el-Dikka. Season 2011. *PAM*, 23/1, 23–44
- Meyer, C. (1992). *Glass from Quseir al-Qadim and the Indian Ocean trade* [=SAOC 53]. Chicago: Oriental Institute of the University of Chicago
- Nenna, M.-D. (2007). Le mobilier en verre de l'époque ptolémaïque et du Haut-Empire. In D. Valbelle (ed.), *Tell el-Herr: les niveaux hellénistiques et du Haut-Empire* (pp. 278–283). Paris: Errance
- Rodziewicz, M. (1984–1985). Excavations at Kom el-Dikka in Alexandria 1980–81 (preliminary report). *ASAE*, 70, 233–246
- Spaer, M. (1988). The pre-Islamic glass bracelets of Palestine. *JGS*, 30, 51–61
- Spencer, A.J. (1996). *Excavations at Tell el-Balamun 1991–1994*. London: British Museum Press
- Weinberg, G.D. and Stern, E.M. (2009). *Vessel glass* [=Athenian Agora 24]. Princeton, NJ: American School of Classical Studies at Athens

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