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GLASS FROM AREA F ON KOM EL-DIKKA (ALEXANDRIA) EXCAVATIONS 2008

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Abstract: During excavations in the central part of the Kom el-Dikka site (Area F) quite a large collection of glass has been unearthed. Most of it came from a thick accumulation of urban debris and ashes from nearby baths, attributed to the 4th–6th centuries AD. Some were also found in layers related to the occupation of the Early Roman house located there.

Keywords: Alexandria, Kom el-Dikka, ancient glass, vessel molds, beads, window panes

A large rubbish dump identified in Area F has been the main target of excavations in the past couple of seasons. This part of the site, located between the cisterns and the theater, was abandoned at a relatively early date (in the 4th century) and served as a dumping ground for urban debris and ashes evacuated from the nearby bath. The ashes accumulated over the long time that the baths were in operation, growing into a small mound in the course of the 5th and 6th centuries. Another portion of these ashy deposits was explored in 2008 in a westward extension of the trench in Area F, producing yet another assemblage of glass artifacts. Even so, the number of glass finds was definitely restricted, compared to the previous seasons.

The collected assemblage runs from the 4th through the 6th century AD and it is consistent with the overall glass repertoire already established for this trench (Kucharczyk 2010a). Much

of the assemblage was made up of common domestic vessel types, comprising mainly various types of free-blown, closed, utilitarian receptacles, poorly fashioned as handleless flasks and bottles, both plain and decorated. Most of the fragments are from rims and necks; bases make up a minor group. Other standards of the period included open forms, such as various types of bowls and lamps. Drinking vessels in the form of wineglasses were also present. Windowpanes were, similarly as before, an important component of the assemblage.

The vessels were distinguished by their plainness and simple workmanship. Decoration, if present at all, was limited in style and technique. The most frequent applied elements were not particularly engaging. They were restricted to horizontally applied trails, either blue or green in color, on the rim, body or base, as well as colored blobs, abraded lines and cut grooves. A small number of decorated vessels was

blown in a mold. The most exceptional fragment undoubtedly was a piece from a dichroic vessel. It is the first specimen of this very rare type of glass to be attested in Alexandria and only the second one from Egypt; it will be discussed in a separate study (Kucharczyk, forthcoming).

Bluish-green glass predominated, but yellow and yellowish-green, light blue and colorless with yellowish tinge also occurred.

The glass was of inferior quality, very bubbly with spherical and elongated bubbles, as well as blowing spirals. Deformations and occasional veins and black impurities also appeared. The glass bore a milky-white layer of weathering and iridescence. The color of the glass, its rather poor quality and careless workmanship point to local glasshouses. It seems reasonable to assume that the vessels were locally made and used.

BOTTLES AND FLASKS WITHOUT DECORATION

The finds represent mostly simple-shaped specimens of not very high standards. Bodies were often irregular, rims and walls uneven. These medium-sized containers can be identified mainly by their rims, necks and bases. Their bodies are assumed to have been either spherical or piriform. Among the recovered finds is a small flask with short funnel-shaped mouth and infolded rim [*Fig. 1:1*], one with a rolled-out rim [*Fig. 1:3*], a long-necked colorless flask with funnel mouth and rolled-in edge [*Fig. 1:2*] and a colorless flask with cylindrical neck constricted at its base, most probably with unworked rim and spherical body [*Fig. 1:4*]. These specimens are typical of the Late Roman period.

One of the most characteristic bases found in this sector was a trail-wound base

with flat or convex floor, attributed to jugs. They are actually few in number, especially compared to the previous season, when this type of base was particularly widely represented (Kucharczyk 2010a: 58, *Fig. 1:11–13*). Trails can be either single [*Fig. 1:7*] (in a few examples the blue trail had been wound horizontally once around the bottom of the colorless vessel, forming a neatly worked foot-ring) or spiraling with two or more turns [*Fig. 1:6*]. A remarkably massive green base fashioned in three trails of spirally-wound, thick green coil forming a distinctive foot-ring stands out [*Fig. 1:5*]. In all these cases, the completed trails had been slightly flattened to ensure a stable base. They have no visible pontil mark. The bases should be placed in the end of the 4th and beginning of the 5th century.

DECORATED BOTTLES

Decorated bottles featured one of two categories of decoration: threads applied to vessel rim, body or base and a mould-blown motif. A single self-colored trail (yellow) applied below a plain, fire-rounded rim likely came from a flagon with cylindrical neck and funnel-shaped mouth [*Fig. 1:11*].

Body forms in this case could be cylindrical, ovoid, or pear-shaped. There is no evidence of handles. The vessel can be dated to the 4th century. Threads in different shapes and designs were applied on or near rims and necks, often at regular intervals, on thin-walled flasks with cylindrical and

rather tall necks [Fig. 1:8-10]. A noticeable amount of recorded fragments belonged to this kind of vessel. In some cases, the trails which circled the neck several times were densely-set and carefully fashioned. Trail decoration is present on glass both in colors contrasting with the main body of the vessel (e.g. light blue vessels with dark blue trails, light green vessels with dark green trails), and in self-colored varieties (green).

The present fragments are paralleled in material previously attested at the site (see Rodziewicz 1989: Fig. 74:387, 389–390). Similarly decorated vessels have also been observed at the bath in Marea (Kucharczyk 2008: 130, Fig. 45:8,12). Our vessels are dated to the 5th–6th century. Deep blue trail decorations continued to be very popular also in the Early Islamic period, as indicated by numerous long-necked bottles with trailed threads exca-

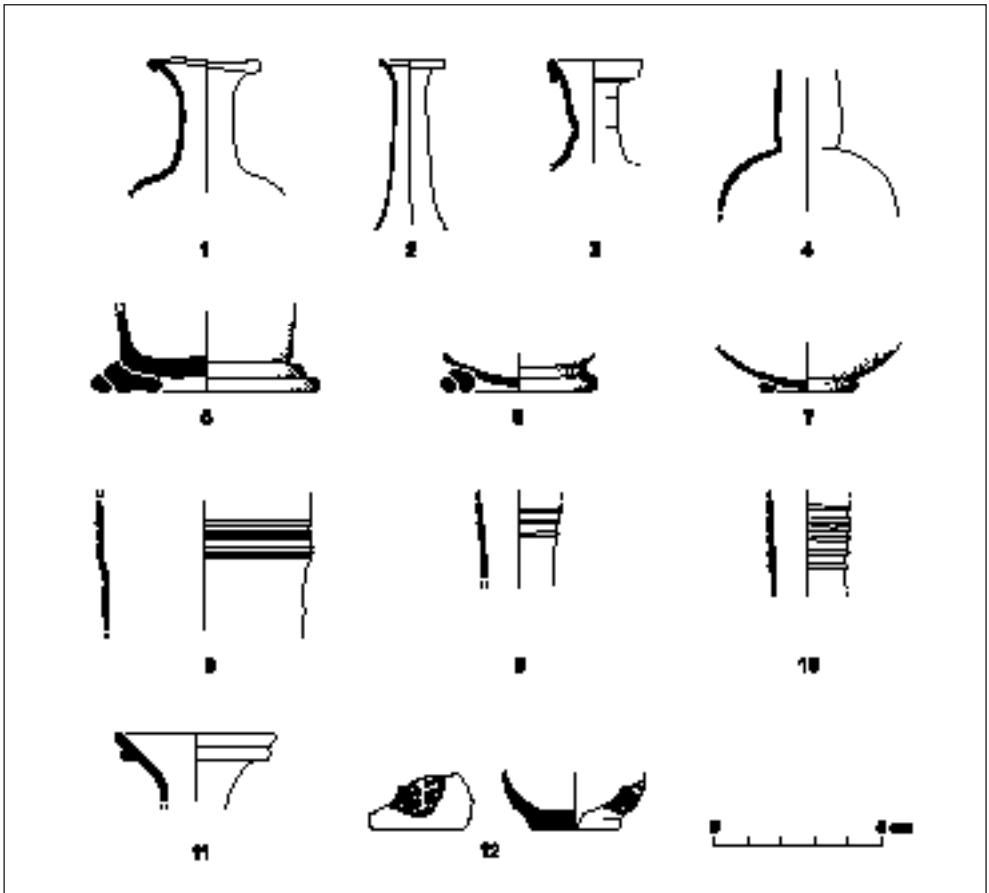


Fig. 1. Bottles and flasks, plain (1–7) and decorated (8–12), including flasks with double-shaped head (12) (This and following drawings R. Kucharczyk, digitizing M. Momot, S. Maślak)

vated at Kom el-Dikka. This decoration, however, was richer and more diverse (personal observation).

Decoration done in the molding technique was observed on a very few of the vessels. These included, in similarity to the previous season, fragments of toilet flasks in the form of double-shaped heads [*Fig. 1:12*]. Vessels of this type were blown in two-part molds, the vertical mold seams being visible on opposing side-walls but never on the flat oval bases. The wavy bands of hair slanted down to meet at the seams. The hair had irregular ridges aligned horizontally to the mold seam. The current two vessels were made of blue and light-yellow glass streaked with aubergine veins and appear to have been executed in the same mold. The quality of the fabric and the identical mold point to a common origin in a local glass workshop. (For the

evolution of mold-blown head-shaped vessels in the 1st to 4th centuries, see Stern 1995: 204–215).

The flask with double-shaped heads is relatively frequent in the excavated material from Kom el-Dikka. The site has produced one complete bottle, found previously nearby, in the underground corridors of the bath service area, in the thick ashy deposit originating from the furnaces (Kucharczyk 2004: 43–44, *Fig. 1:1*) and one such toilet receptacle was recorded last season (Kucharczyk 2010a: 59, *Fig. 2:5*). All fragments excavated so far at Kom el-Dikka were found in 4th century contexts. Parallels from the Alexandrian region include fragments found recently at Marina el-Alamein (Kucharczyk 2010b: *Fig. 1:7*). Other find-places in Egypt include Karanis (Harden 1936: Pl. XVIII:629) and recently also Berenike (personal observation).

BOWLS

Bowls of different forms and sizes were an important component of the assemblage, and yet, compared to the previous season, they appeared in much more limited numbers (Kucharczyk 2010a: 60, *Fig. 3:1–3*). Their shapes ranged from thin-walled deep and shallow bowls with simple external [*Fig. 2:1, 3*] and internal fold [*Fig. 2:6, 7*]. Other specimens represented thin-walled deep bowls with thickened rim [*Fig. 2:5*]. The size of the vessels varied, with diameters ranging between 8 cm and 24 cm. The bowls excavated at Kom el-Dikka were furnished with high-ring bases, often with slanting tool marks resulting from shaping the added base [*Fig. 2:2*]. This way of working the bases

was common in the various types of vessels found at Kom el-Dikka, strengthening the assumption about local glass production (Kucharczyk 2005: 51–52, *Fig. 3:6–12*).

The excavation also produced a thick-walled, deep hemispherical bowl with carefully ground and smoothed cracked-off rim. It was decorated with three wheel-cut horizontal lines forming a wide band on the outer surface [*Fig. 2:8*]. This large specimen was made of thick, yellowish-greenish glass with countless bubbles of varying size. The shape is fairly rare at the site. It is the largest of the cracked-off rim bowls found during the excavations on Kom el-Dikka. The bowl is dated to the later 4th and 5th century.

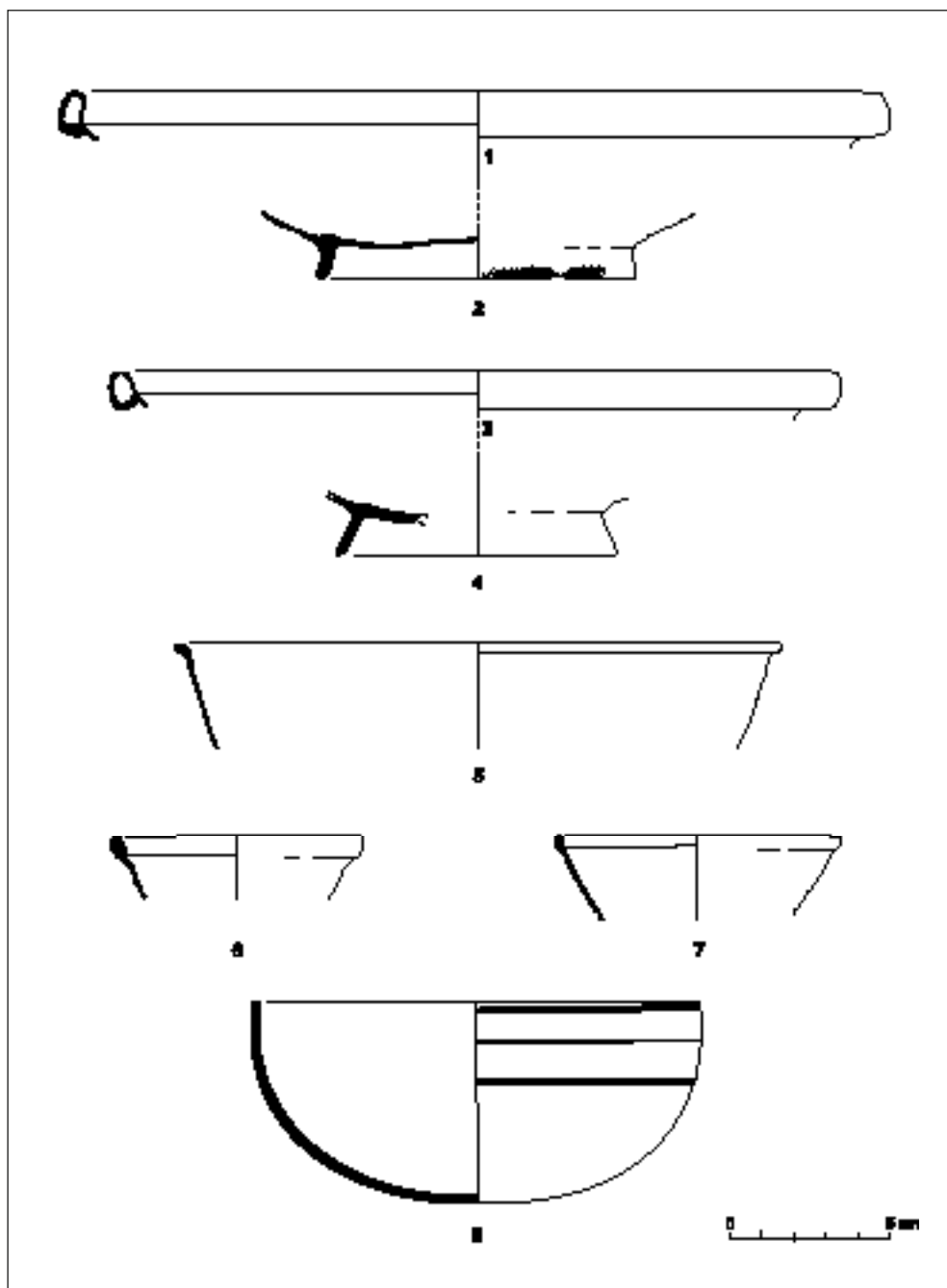


Fig. 2. Different types of bowls represented in the assemblage

LAMPS

Two main types of lamps are represented: conical and with pendent stem, both for insertion in polycandela. Conical lamps were commonly plain, thick-walled specimens, with cracked-off rim terminating in two various types of bases: coil or solid. The decoration on some fragments took on the form of slightly abraded lines and applied colored blobs of various shapes arranged in different patterns [Fig. 3:1, 2]. This type of lamp is very well represented in the Alexandrian region: at Kom el-Dikka (Kucharczyk 2007: 46–48, Fig. 1:1–12; 2010a: 63–65, Fig. 5:7–13), as well as Marea (Kucharczyk 2005: 73, Fig. 3:1) and Marina el-Alamein. On the latter site, conical lamps, either plain or decorated with abrasion bands in conjunction with colored blobs arranged in various patterns, came from two underground cistern fill contexts (Kucharczyk 2010b: 122–125, Fig. 6, 7:1–4; 127, Fig. 9:3, 7–8), dated from the mid-4th to the 5th century.

The second type of lamp was represented by a specimen with a narrow, hollow stem that had a constriction at the top and

apparently a bell-shaped bowl and fire-rounded rim [Fig. 3:3]. This type, which is of 5th century date, is very well represented in the Kom el-Dikka glass assemblage.

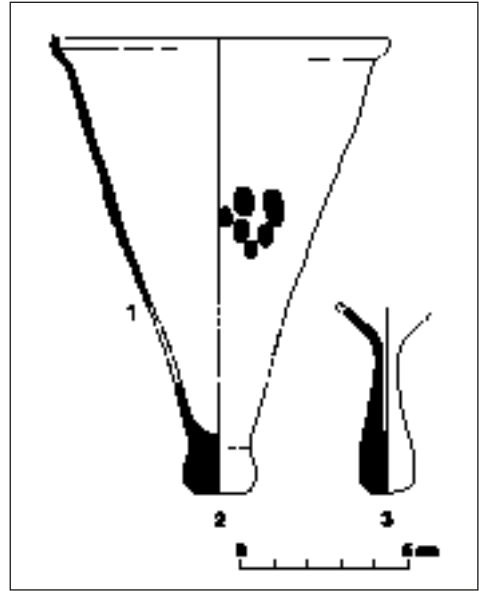


Fig. 3. Lamps: conical (1–2) and with pendent stem (3)

STEMWARE (WINEGLASSES?)

Stemwares were represented by short solid waisted stems with a knob, a sloping foot with rounded edges, and a bowl applied separately. The bowl is decorated with a wide trail applied to the outer rim and a thin trail below it [Fig. 4:1–4]. This ware was blown of bluish-green glass, which is very characteristic of the Alexandrian region during the early Byzantine period. Regardless of whether they were actually used for drinking or were a form of standing

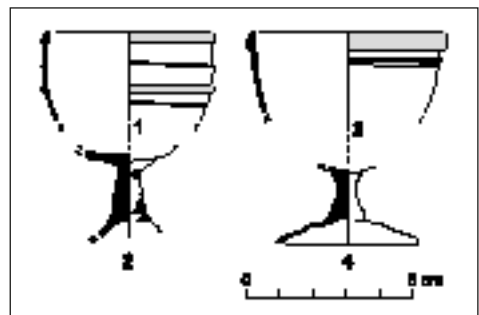


Fig. 4. Examples of stemware (wineglasses?)

lamp, they are among the commonest vessel forms found on Kom el-Dikka (see Rodziewicz 1986: Pl. 73: 375, 377–379 and more unpublished) They are of 6th century date. Parallels have been produced

from excavated contexts at nearby Marea, both the Basilica (Kucharczyk 2005: 73–74, Fig. 3:8) and bath (Kucharczyk 2008: 132–133, Fig. 46:31) as well as Marina el-Alamein (personal observation).

MISCELLANEOUS FINDS

A fragment of sidewall bore a stamp which is round, has a bulgy edge and relief ornamentation in the form of a Latin cross with surface decorated with diagonal hatches [Fig. 5:1]. This stamp was applied most probably to a bottle. Both the vessel and the stamp were made of the same light, transparent, green glass. Most probably, the vessel was used for commercial purposes and may have contained holy oil or water. It can be assigned to the 6th century. Glass stamps with Christian and Jewish symbols from Sardis are of the same date. They were either used as merchandise marks, weights, tokens, tickets or amulets, or were attached to a vessel (Saldern 1980: 89–90, Pl. 28:667–674).

The season also produced some rectangular, monochrome, bar-shaped inlays

with long striation, made of opaque, dark aubergine glass [Fig. 5:2]. Their original location and exact function are still uncertain. It seems possible that they were a component of the wall decoration of the nearby bath (Kucharczyk 2010a: 66, Fig. 6:4–5).

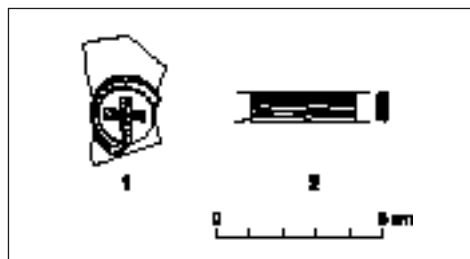


Fig. 5. Stamp with Latin cross (1) and example of bar-shaped inlay (2)

WINDOWPANES

Although many fragments of glass windowpanes have been recorded, they are definitely less numerous than last season (Kucharczyk 2010a: 66). Two methods of making window glass already evidenced at the site have been attested again. The flat, square/rectangular fragments exemplify panes made in the cylinder method. Panes were made of greenish-yellowish glass, elongated bubbles running in parallel lines. Most of the shards, which demonstrate matt/glossy faces, are perfectly flat and just

0.2 cm thick. There were a few cut edges. Some fragments demonstrated rounded depressions on the back and corresponding bulges on the front, apparently made by tools drawing the glass into shape [Fig. 6:1, 2]. Most of the window glass from this sector represented this type. A few fragments exhibited a thin layer of adhesive suggesting that they had once been set in a wooden or marble screen.

The other method is the circular “crown” or “bull’s-eye” technique. Most of the frag-

ments have thickened rims [Fig. 6:3] and other parts of the disks, but without corresponding edge fragments. This type of pane prevailed at the site in the early

Islamic period (Kucharczyk 2005: 40–41, Fig. 6:9–14). Windowpanes excavated now and in the previous season were most probably parts of the large windows of the bath.

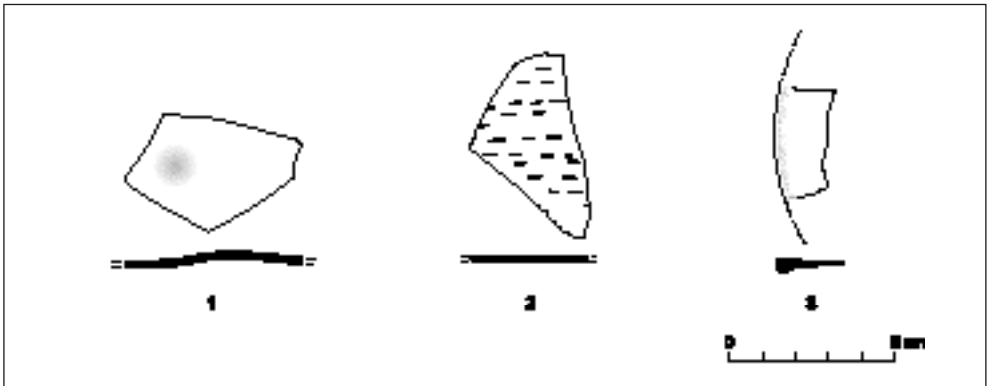


Fig. 6. Windowpane glass: by the cylinder technique (1, 2) and by the “crown” technique (3)

GLASS FRAGMENTS FROM THE EARLY ROMAN HOUSE

The present excavations in the western part of house FB brought surprising results in terms of the glass finds (for the eastern part of the house, see Kucharczyk 2010a: 66–67). Locus 17, identified as a kitchen, produced glass material in addition to pottery and metal objects (for a discussion of the pottery and location, see site report, Majcherek 2011, in this volume, especially ground plan of House FB in Fig. 8 on page 45). The pottery — a concentration of crushed plain kitchen ware found in a thick layer of ash and charcoal — pointed to the 2nd–3rd century AD as the most plausible date for the context.

A small colorless toilet flask was found inside a broken pottery vessel; it was severely deformed by high temperature. It had a rounded rim, with thick trails of

the same color below it, a cylindrical neck, probably constricted at its base, and pear-shaped body [Fig. 7:1]. A dark residue still inside it could be kohl. Two well smoothed bone rods found with the deformed flask were reminiscent of cosmetic tools. Both were slightly burned. One was complete, with one end rounded and the other slightly pointed [Fig. 7:3]. The base of a shallow bowl of green-tinged, nearly colorless glass was unearthed in the same context. Three faint cut grooves decorated its exterior: one around the base and a pair above it [Fig. 7:2]. The vessel was badly distorted by high temperature to the point that the glass had melted in some parts.

Yet another toilet flask came from the fill associated with this deposit [Fig. 7:4]. This small, very thin-walled perfume con-

tainer, made of green-tinged colorless glass, featured a cylindrical neck with outplayed mouth and rolled-in rim. The neck was constricted at the base, widening toward the pear-shaped body. Similar specimens appeared at the site last season (Kucharczyk 2010a: 66, Fig. 7:4). Apart from Alexandria, this type of flask has been noted at Marina el-Alamein (Kucharczyk 2005: 96–97, Fig. 3:4–5), Medinet Madi (Silvano 2001: 14–16, Fig. 3:2–4, 6), Tebtynis (Nenna 1998: 98, 22, Fig. 3) and Bagawat (Nenna 2010: 203, Cat. 34).

The metal items found in this assemblage included a complete iron nail (15 cm long), rounded in section and with a rounded head, used possibly in roofing; a dome-shaped bronze bell pierced at the top, perhaps originally jewelry suspended from a bracelet or a necklace; a fragment of

an iron rod and an iron blade (knife?). They may have been used as kitchen utensils or glass-working tools.

The most startling, however, were objects which could be counted as evidence for the existence of a glass workshop in, or nearby, that location, although its existence is not yet conclusive. These were three stone molds used for shaping drawn collared beads and a handful of beads of various shapes, individually finished by hot-working. One of the excavated molds merits special attention, not only because it is large, complete and in an excellent state of preservation. On the back it bears carefully cut letters: K and A (or Λ). They could be the owner's initials. The deeply pinched grooves at the ends of the mold would ensure easy bead separation [Fig. 8:1]. A large number of stone molds with ridged and grooved tops,

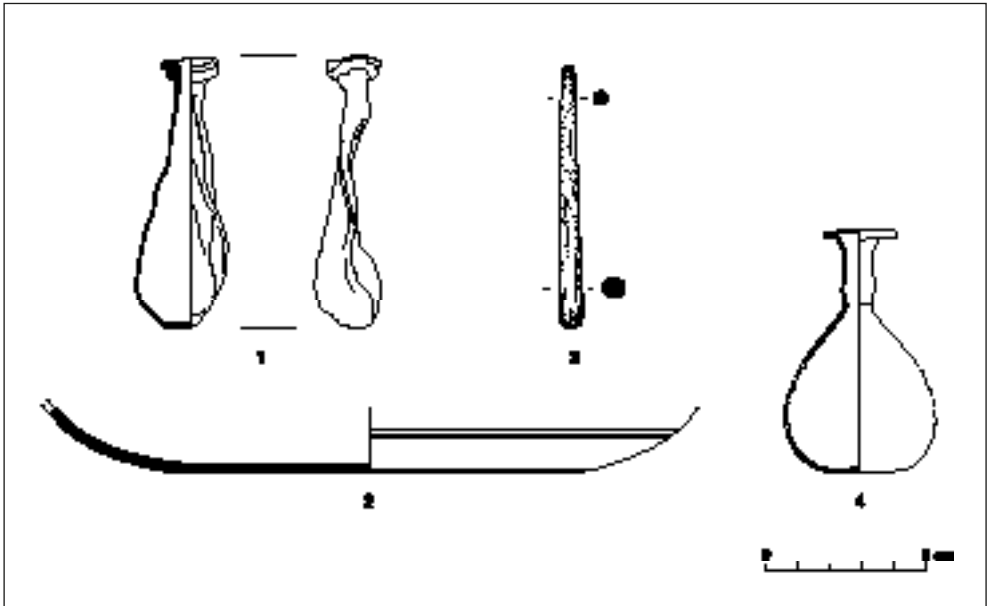


Fig. 7. Glass vessels (1 section and view, 2) and a bone rod (3) from a deposit in Room 17 of the early Roman house FB; 4 – toilet flask from associated fill

a significant number of glass tubes and single-layered drawn beads, made of various shades of blue, green, yellow, brownish-red glass, have been found at Kom el-Dikka in the debris of workshops located in the habitation district west of street R4, in contexts dated to the 5th–6th century AD (Rodziewicz 1984: 241–242, Fig. 265, Pl. 72:359–366).

The small but important assemblage of beads, counting nine in all, comprised simple, unadorned examples as well as decorated varieties. Two kinds of finish were in evidence: a few of the beads were collared, but most showed evidence of

individual finishing by hot-working, having neatly smoothed ends.

The decorated beads included a barrel-shaped specimen of red glass dotted with black crumbs with a wide cylindrical perforation [Fig. 8:2]; a so-called melon-shaped or gadrooned bead, with uneven diagonal ribs, made of turquoise-blue faience, with wide conical perforation [Fig. 8:3]; a faceted bead of biconical shape, with wide perforation, made of light-yellow glass and tooled [Fig. 8:4]; a faceted bead, hexagonal in section, tooled with narrow, oval perforation, made of green glass [Fig. 8:5]; a faceted bead, hexagonal in

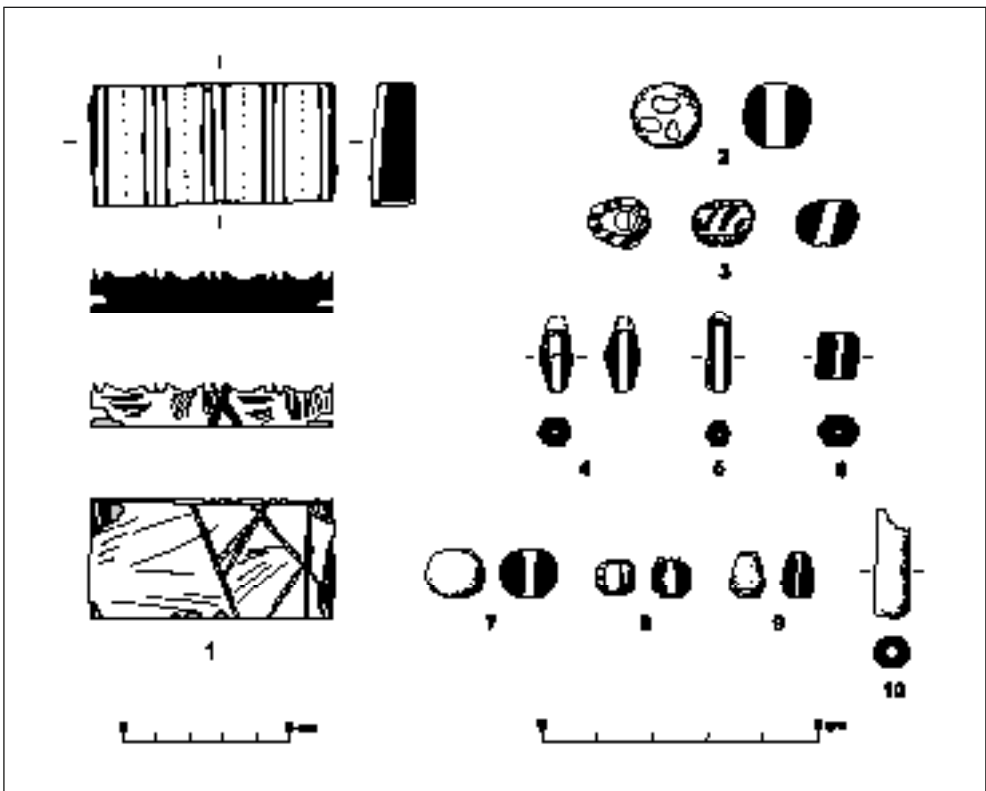


Fig. 8. Mold (1) and beads (2-10) from a set found in Room 17 of house FB (note the different scale)

section; colorless with pale yellowish tinge and a small, oval perforation [Fig. 8:6].

The undecorated beads comprised: globular-shaped bead, colorless but with a pale, yellowish tinge [Fig. 8:7]; small, spherical, slightly flattened bead with collars at the ends, made of colorless glass with a yellowish tinge and uneven, vertical cuts [Fig. 8:8]; conch-shaped bead formed on a rod, folded, made of opaque, light-green and a narrow strip of yellow glass, with narrow perforation [Fig. 8:9]; long, cylindrical bead, colorless with pale, yellowish tinge and wide, cylindrical perforation [Fig. 8:10].

OTHER FINDS

Glass fragments were also discovered in the tumble of walls in nearby room 19, but they were apparently residual and could not be related directly to the destruction and abandonment of the house.

One tiny fragment of cameo glass (not illustrated) is the first piece of a vessel executed in this technique ever recorded at Kom el-Dikka. It features the most popular scheme characteristic of the first phase of cameo glass production, between 25 BC and AD 50 or 60 (Whitehouse 1991: 19–32). The vessel was made in two contrasting colors: a thick layer of blue glass and a thin overlay of white, opaque glass. This fragment, with a rounded rim, most probably derived from an open form. Cameo glass associated with the early Roman period has been reported from Berenike (Nicholson 1998: 152–153, nos 2–3). The site of Berenike also yielded recently two circular cameo blanks cast in two layers: aubergine with blue overlays (personal observation).

Another fragment represents a massive aquamarine solid disk-base, with rounded

edge and a thick, solid knob on the inside of the vessel (Rütti 1991: AR 37.1) [Fig. 9:1]. Bases of this type are rare in Egypt. Apart from Alexandria, they are attested at Tell el-Herr (Nenna 2007: 278–279, Fig. 222: Cat. 25–26, Early Roman). A close parallel appeared at Sabratha (Hayes 1986: 299–300, No. A10, late 1st/early 2nd century AD), Carthage (Fünfschilling 1999: 469, Pl. 8:202, 1st century AD) and Corinth (Davidson 1952: 101, No. 637, 1st century AD). Find-places in the East have included Beirut (Jennings 2006: 249, Fig. 11.4:18, AD 60–70), Bethsaida *Iulias* (Rottloff 1998: 142–143, Fig. 2:20, AD 60–70), Sardis (Saldern 1980: 22–23, Pl. 21: 107, 1st–2nd century AD) and Jerash (Meyer 1987: 193, Fig. 7:C, Early Byzantine context). This

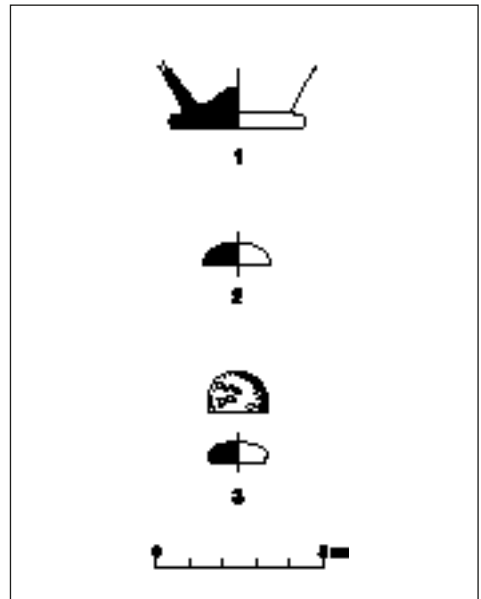


Fig. 9. Rare example of disc-base in Egypt (1) and two examples (2–3) of objects made in the non-blowing technique

type of base occurs in tall, slender beakers with simple linear decoration consisting of horizontal grooves cut on the body, such as specimens from the Corning Museum of Glass (Whitehouse 1997: 267, No. 384, 1st century AD and list of find-places from the East and the West of the Roman Empire) and from the Royal Ontario Museum (Hayes 1975: 56, nos 133–134, approximately mid-1st century and second half of 1st century AD; see Isings 1957: Form 34, 52–53 and further references).

A few objects in the non-blowing technique have been recorded, including gaming counters, as well as ordinary pieces, usually heavily weathered, to the point that they appear black [Fig. 9:2], and also one example of mosaic glass [Fig. 9:3]. This was consistent with the trend set last season (Kucharczyk 2010a: 67, Fig. 7:2). Blue and yellow glass tesserae are evidence of mosaic decoration. Unfortunately, nothing was found *in situ* to indicate where such mosaic decoration had originally been applied.

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