

GLASS FROM THE LATE BYZANTINE REMAINS NEAR SHIQMONA

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Four-hundred and twenty-five glass fragments were found during the 1999 excavations at Shiqmona (see Kletter, this volume).¹ More than half were unidentified body fragments; the rest were very small, diagnostic vessel fragments, or remains of glass production. All the diagnostic fragments were documented, sixteen items were selected for discussion. The sixteen chosen fragments contribute to the dating of the site, or provide new information concerning their typology or distribution. General information relating to the type and date of small uncatalogued sherds is also given.

Glass finds were uncovered in almost every excavation at Shiqmona. A few complete vessels were found in a burial cave by Elgavish (1994:152–158, Figs. 141–143). In addition to vessel fragments and glass tesserae, remains of glass production activities, including chunks of raw glass and glass wasters, were uncovered by Hirschfeld (1998:20). Glass remains and other finds, dating to the sixth–seventh centuries CE, were unearthed by Torge and Ad (2003).²

The fragments from the salvage excavation under discussion are of local types known from almost all nearby sites, as well as from a wider geographical area. The vessels were found in various areas of the excavation, and are presented as in the main article, i.e., first according to area, then according to type and chronology.

THE MONASTERY

The Chapel

Very few glass fragments were retrieved from this area. Two window fragments were found

beneath the floors of the chapel (L217, L218), as well as one beaded foot of a wineglass (L217), too small to be drawn. All probably date to the late Byzantine period.

North of the Chapel

Only one fragment of a glass vessel was found in this area (No. 1, see below). Although very small, it was identified as belonging to a common type of a wide shallow bowl, known as 'bowls with double-folded rims' or 'Folded Collar'. This type is characterized by its double-folded rim. The edge of the rim is rounded and thickened. It folds outward and downward, and then back upward, producing either two hollows or a very thick ridge at the lower edge and a hollow tube in the upper edge of the rim.

This type is dated to the fourth century CE. About 100 fragments of this type were found in the factory dump at Jalame, where they were evidently produced during the second half of the fourth century CE (Weinberg 1987:65). In the final report of the Jalame excavations, a few examples of this type were published (Weinberg and Goldstein 1988:47–49, Fig. 4-7:71–73, see therein for further references).

During the last two decades many bowls of this type were unearthed and some were published, thus the dating and distribution of the type is much clearer. Similar bowls were found in cemeteries in the Galilee, e.g., in Burial Cave 2 near Ḥorbat Sugar, dated to the fourth–fifth centuries CE (Gorin-Rosen 1997: Fig. 5:1), in Burial Cave 3 at Kisra, dated to the fourth century and first quarter of the fifth century CE (Stern 1997:106–107, 131, Fig. 1:6), and a complete bowl in Burial Cave 2 at

Kh. el-Shubeika, dated to the fourth century CE (Gorin-Rosen 2002:303–305, Fig. 1:1, see therein for references).

This type was also common in Jordan, where examples from Jerash, ‘Amman, ‘Ain ez-Zâra/Callirrhoé, and ‘Iraq al-Amir were dated to the fourth century CE (Dussart 1998:75, Type BII.311, Pl. 11:2–10, see therein for further references).

1. Small wall fragment (L209, B2130; Fig. 1:1). Light, greenish blue glass, covered with silver weathering and iridescence. Lower part of a broad, double-folded rim; the upper out-fold is missing, and only the lower fold remains, as well as part of the bottom.

Area D

Eighteen diagnostic fragments were found in Loci 400–403. Most were small rim fragments of bowls, wineglasses and bottles, with two wineglass bases. The vessels were dated to the late Byzantine period. Most are too small to be drawn; therefore, only one fragment (No. 2) from Area D is presented in this report.

Number 2 is a small rim fragment of a honeycomb beaker. It is a well-known type, characterized by a vertical or slightly incurving cut-off rim, beneath which are mold-blown vertical ribs above a honeycomb or geometrical mold-blown decoration on an ovoid or spherical body. The type is known

in the east and west, and dates mainly to the fourth century CE (for western fourth-century examples, see Isings 1957:133, Form 107a). Most fragments found in Israel are ovoid rather than spherical, while No. 2, which is small and severely corroded, seems to belong to a spherical vessel.

A complete honeycomb beaker of green glass, now exhibited in the Israel Museum, was recovered from a tomb at Ha-Gosherim.³ A similar rim, made of olive-green glass, was found in the fourth-century CE winepress at Akhziv (Syon 1998:95, Fig. 15:6). A small cobalt blue glass body fragment, with ribs and a geometrical decoration (not a honeycomb), was found in Burial Cave 2 at Kh. el-Shubeika (Gorin-Rosen 2002:314, Fig. 7:35, see therein for further references). A fragment found at Jalame, in a context later than the factory, was identified as a honeycomb bowl and dated to the fourth century CE (Weinberg and Goldstein 1988:79–80, Fig. 4-38:350). The decoration below the ribs on the Jalame bowl is unclear, and it could also be a geometric design rather than a honeycomb (for further references to this type of bowl, see Stern 2001:291, Cat. No. 155). A rather large honeycomb beaker of light yellowish-green glass was found in Burial Cave 2 at Ḥorbat Rimmon (Gorin-Rosen 2004:113*–114*, Fig. 1, and see therein for further references).

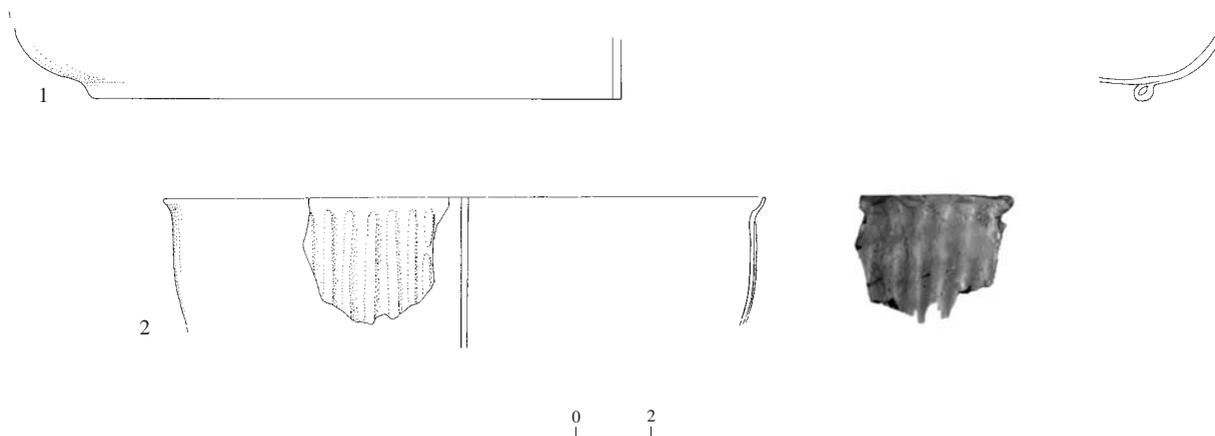


Fig. 1. Glass finds from north of the chapel and Area D.

2. Small rim fragment (L401, B4004; Fig. 1:2). Colorless glass with light purple strikes. Severely corroded and pitted with iridescence film. Up-curving cut-off rim, polished. Slightly curving wall with mold-blown vertical ribs from below the rim. Wide diameter, approximately 15.8–16.0 cm.

3. Small rim fragment (L223, B2149; Fig. 2:3). Light purple or colorless with purple tinge. Severely pitted and iridescence. Flared, thick, cut-off rim, polished on both sides. The wall is thick with remains of a cutting band or deep polishing below the rim. Rim diam. c. 17.5–18.0 cm.

BUILDINGS A AND B

The majority of the glass finds from this excavation were discovered in Buildings A and B. Twelve fragments were catalogued and are discussed below, representing most of the types identified in the excavation. The buildings, as well as the pottery, were dated to the late Byzantine period (Kletter, this volume). Locus 223, in which most of the glass was found, yielded one coin dated to the mid-sixth century (see Kool, this volume).

The early glass vessels found in Buildings A and B were dated to the fourth or early fifth centuries, including bowls (Nos. 3–5), the lower part of a double-kohl tube (No. 12) and its handle (No. 13). Other vessels were dated to the Byzantine and late Byzantine periods, including wineglasses (Nos. 6–8), a bottle (No. 9), oil lamps (Nos. 10, 11) and a window-pane fragment (No. 14).

Bowls

Bowl with Cracked-Off Rim.— Rim No. 3 is characterized by its cut-off thickened rim and remains of a grooved or polished ridge below it. Such rims were found at Jalame among the debris from the factory dump, dated to the second half of the fourth century CE (Weinberg and Goldstein 1988:96, Fig. 4-49:484, see therein for further references). A bowl of this type, although with some variations in shape, was found at Ashqelon and dated to the Late Roman period, namely the fourth century CE (Katsnelson 1999:120*, Fig. 9:4, see therein for further references). Even though the shape and fabric of rim No. 3 are rather rare in this region, and probably represent a non-local type, the date of this type is rather safe based on similar bowls from various unpublished excavations.

Bowl with Flaring Out-Folded Rim.— Bowl No. 4 is characterized by its delicate thin wall and flaring out-folded hollow rim. Bowls of this type are mainly dated to the Late Roman period, the fourth century CE, and were found in burials and settlements, as well as in the glass factory dump at Jalame (Weinberg and Goldstein 1988:41–43, Fig. 4-3:28). The same shapes appeared later during the Byzantine period and, in smaller quantities, even in the Umayyad period, e.g., at Bet She'an (Hadad 1998b:29, Fig. 2:22). Therefore, it is difficult to date bowl No. 4, although the fabric and workmanship might point to an earlier, rather than a later, date.

4. Small rim fragment (L223, B2191; Fig. 2:4). Light, greenish blue glass covered with slight silver weathering, sand deposit and iridescence. Small bubbles and blowing spirals. Flaring out-folded rim with thin delicate wall. Rim diam. c. 18 cm.

Bowl with Tooled-Out Ring Base.— This type of Late Roman-period base usually belongs to bowls, and sometimes, to jugs. It appears in smaller quantities during the Byzantine and Umayyad periods. The later vessels are frequently characterized by fabric and workmanship. Bases of this type were found in the Marinus Estate at Ḥorbat Raqit on the Carmel and are dated to the fourth and fifth centuries (Lehrer-Jacobson 2003:233, 237, Fig. III:2, 6, 10). Another base was found in the Byzantine church at Shave Ziyon (Barag 1967: Fig. 16:14). The type continues with some differences up to the Umayyad period, e.g., at Bet She'an (Hadad 2005: Pl. 3:74).

5. Small base fragment (L223, B2191; Fig. 2:5). Light green glass covered with sand deposits. High pushed-in tubular base. Base diam. 6.8 cm.

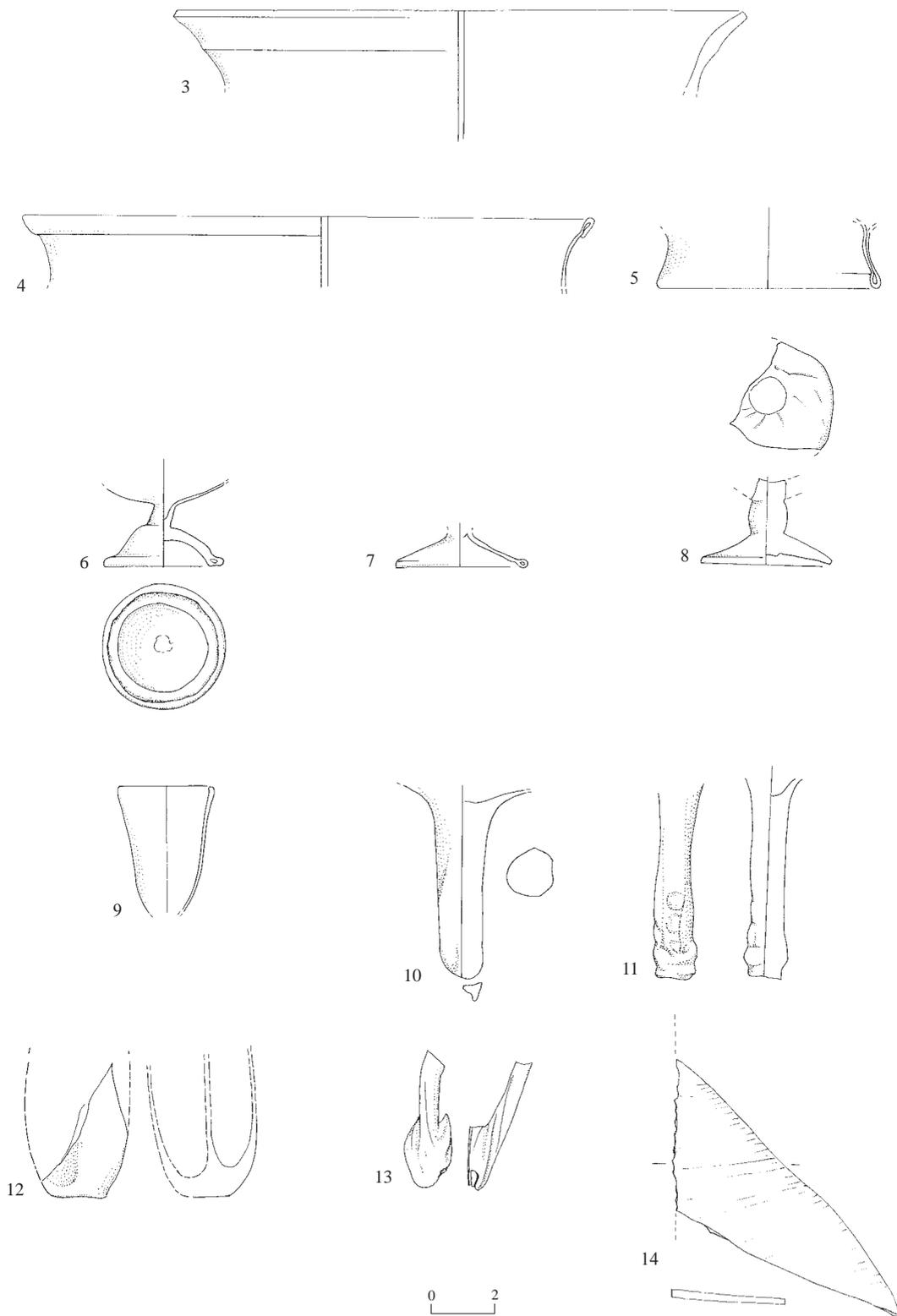


Fig. 2. Glass finds from Buildings A and B.

Wineglasses

Wineglasses with Ring Base.— This type was the most common type of wineglass during the Byzantine period until its end, and also during the beginning of the Umayyad period. This type of wineglass is very widely distributed in Israel, Syria, Lebanon and Jordan (Dussart 1998:115–121, Pl. 27–28: BIX.1).

To mention just a few from the region, a base found at Kh. Tina'ni was dated to the sixth–seventh centuries (Gorin-Rosen 1999a:31, Fig. 36:11), and fragments were found in the Byzantine church at Shave Ziyon (Barag 1967:67–68, Fig. 16:15, 17), Nazerat (Bagatti 1969: Fig. 237:29–32) and Jerusalem (Gorin-Rosen 1999b:210–212, Fig. 2:25; 2000b: 85*–86*, see therein for further references).

6. Complete base, stem and beginning of body (L222, B2162; Fig. 2:6). Bluish green glass covered with gold and silver weathering and iridescence. Pushed-in, uneven, tubular ring base with small pontil scar. Asymmetrical, short cylindrical foot and beginning of flaring wall. Base diam. 3.8 cm.

7. Base fragment (L223, B2149; Fig. 2:7). Greenish glass. Delicate, tubular ring base with remains of the pontil. Base diam. 4 cm.

Wineglass with Solid Base and Foot.— Fragment No. 8 is a common subtype of wineglass with a thick foot and a solid base. Bases of this type appeared during the Byzantine period and became very popular during the late Byzantine and Umayyad periods. A complete wineglass with such a base was found at Ḥorbat Qaṣṭra and dated to the fifth–seventh centuries (*Castra* 1999:21, left). A base of this type was found at Khirbat Tina'ni and dated to the sixth–seventh centuries (Gorin-Rosen 1999a:31, Fig. 36:12). Another was found in Burial Cave 2 at Kh. el-Shubeika (Gorin-Rosen 2002:314, 316, Fig. 7:36, see therein for further discussion).

8. Base and stem fragment (L223, B2149; Fig. 2:8). Bluish glass covered with silver weathering and iridescence. Solid tooled base with pontil scar (diam. 1 cm) and tooling marks on the upper part of the base. A short cylindrical foot. Base diam. 4 cm.

Bottle

Bottle with Narrow Funnel Mouth, Constricted toward Neck.— This bottle has a simple rounded rim at the end of the funnel mouth. The only characteristic element is the constriction toward the neck, or the connection to the shoulders. A similar plain rim was found in the Byzantine church at Shave Ziyon (Barag 1967:66, Fig. 16:3). Decorated, elongated funnel mouths, with slight constrictions at the connections to the shoulders, were found in Umayyad contexts at Bet She'an (Hadad 2005: Pls. 12:226–229; 13:261–268).

9. Rim and mouth (L223, B 2191; Fig. 2:9). Light, bluish green glass, severely pitted with iridescence film and sand deposits. Rounded rim, slightly incurving at the edge. Funnel mouth with constriction at the base. Rim diam. 3 cm.

Oil Lamps

Oil Lamp with Solid Plain Stem.— This type of oil lamp was common during the Byzantine and Umayyad periods. One stem of this type was found in a Byzantine context at Caesarea Maritima (Peleg and Reich 1992:155, Fig. 20:1). Another was found in an Umayyad context at Bet She'an (Hadad 2005: Pl. 22:435).

10. Complete stem (L223, B2191; Fig. 2:10). Green glass covered with silver weathering and iridescence. Solid cylindrical stem with slight tooling marks.

Oil Lamp with Solid Beaded Stem.— This type of stem became popular during the late Byzantine and Umayyad periods. Large quantities of such lamps were found in wide distribution in Israel, e.g., Bet She'an (Hadad 1998: Type 2, 66–69, Fig. 2:18–22), as well as in Lebanon (see below) and Jordan (Dussart 1998:88, Pl. 16:BVI.23:13–16). Large quantities of such bases were found in various areas of the settlement at Ḥ. Qaṣṭra,⁴ and among remains of a glass workshop in the excavations at Bat Gallim in Haifa.⁵ In both these sites, the bases were accompanied by remains of local glass production (Gorin-Rosen 2000a:58–59, 61). Thus, I believe the vessels found at Shiqmona could be a local product made at the site or in

one of the nearby production sites. Another base of this type was found at Kh. Tina'ni and dated to the sixth–eighth centuries (Gorin-Rosen 1999a:31–32, Fig. 36:14). It seems that this type of oil lamp was locally produced during the late Byzantine and Umayyad periods. Such a local glass workshop, which produced oil lamps with solid beaded stems, was uncovered in Beirut (Foy 2000:242–247, Figs. 4:6–10; 6:12–18; 7:18–22).

11. Complete stem (L223, B2149; Fig. 2:11). Bluish glass covered with silver weathering, sand deposits and iridescence. Solid stem, tooled on its lower part. Knocked off at its edge.

Double Kohl-Tube

Fragment No. 12 is the lower part of a double kohl-tube with no remains of decoration. It could belong to a plain subtype like Barag's Type 12-2 or 12-3 (Barag 1970:176–177, Pl. 39:2, 3), or to a subtype similar to the fragment found in the winery with trail decoration on the upper part (Fig. 3:16), discussed below. A complete example of a plain double tube was found in Tomb 200 at Giv'at Sharet in Bet Shemesh (Seligman, Zias and Stark 1996:50, 58, Fig. 17:2, with further references).

Handle No. 13 is also attributed to a double kohl-tube. Many plain and decorated double kohl-tubes with similar handles were uncovered in burial caves at Ḥ. Qaṣṣra, most not yet published (see for example: *Castra* 1999:59).

12. Small fragment of the lower part of a double kohl-tube (L223, B2149; Fig. 2:12). Greenish blue glass covered with silver weathering and iridescence, severely pitted. Thick base, knocked off by pontil. Remains of uneven tubes.

13. Small body fragment and beginning of handle. (L223, B 2191; Fig. 2:13). Greenish blue glass covered with silver weathering and sand deposits.

Window Pane

Square or rectangular windows, such as No. 14, were blown as cylinders and opened to create the square shape. Therefore, one edge of the window is rounded by fire, two are cut, and one is broken off the blowpipe, usually with cheeps.

Glass window panes of this type became very popular during the Byzantine period as part of the intensive building that took place under Justinian rule (Meyer 1989:217).

Remains of such window panes have been found in Israel in large quantities and wide distribution. Examples from the northern coast were unearthed in the Byzantine church at Shave Ziyon (Barag 1967:69–70, see therein for further references) and at Caesarea (Peleg and Reich 1992:160). Many were found at Jerusalem, for example, in Khirbat Ṭabaliya, in a context dated to the late Byzantine period (Gorin-Rosen 2000b:92*, Fig. 3:38, 39, see therein for further discussion and references).

14. Window-pane fragment (L223, B2191; Fig. 2:14). Bluish green glass covered with silver weathering and iridescence. Big bubbles and blowing spirals. Flat window. Remains of edge broken from blowpipe during the production process.

THE TOMBS

Very few glass fragments were uncovered from the tombs, which were robbed in the past. They all date to the Byzantine period and seem to be intrusive from the structures above ground level, rather than to the original grave goods. Vessels interred as offerings are usually of different types, resembling, e.g., those found in Shiqmona Tomb 1, excavated by Elgavish (1994:152–158), or in burial caves in the nearby cemetery at Ḥ. Qaṣṣra (unpublished).

Tomb 3 yielded four glass fragments: one small fragment of a rounded window pane with remains of the plaster frame (B2017), one glass drop, probably production waste, a small glass rod, and a glass waster (B2000). These fragments seem to be surface finds rather than part of the original grave goods.

Tomb 4 yielded three glass fragments: part of the stem and base of a wineglass, a small body fragment with a handle, probably from a double kohl-tube or juglet (B2004), and the tubular base ring of a bowl (B 2028). These fragments were dated to the Byzantine period.

Tomb 6 yielded eight glass fragments: a bowl with an out-folded rim, three small fragments of rims folded inward, part of a ring base from a wineglass, an oil lamp with a hollow stem, a thin glass rod of light purple glass (B2034), and part of the base and stem of another wineglass (B2039). These fragments were dated to the Byzantine period.

Tomb 12 yielded only one basket with eight glass fragments: two bowls with out-folded rims and a fused-in blue trail inside the folds, rounded rims of bottles, and a flat window pane (B1091). These also date to the Byzantine period.

THE WINEPRESS

Fifty-seven diagnostic glass fragments were found in the three collecting vats (Locs 4, 5, and 8) of the winepress. They include small fragments of glass vessels and remains of glass production activities.

The vessels and objects include: bowls with out-folded rims and high ring bases, rounded rims of wineglasses and bottles, bottles with concave bases, bottle necks, bases of wineglasses, bowl-shaped oil lamps with beaded stems, and fragments of window panes. These finds are very similar to those found in Buildings A and B.

Oil Lamp with Solid Stem

Such oil lamps are usually dated to the Byzantine, late Byzantine and Umayyad periods, namely the sixth–mid-eighth centuries CE. A similar oil lamp was found in L223 (see No. 11 above for discussion and parallels).

15. Complete stem and beginning of body (L4, B1051; Fig. 3:15). Bluish green glass covered with silver weathering. Solid stem with remains of tooling and twisting at its lower edge. Small pontil scar.

Double Kohl-Tube

Vessel No. 16 is an almost complete body of a double kohl-tube, dated to the Late Roman–early Byzantine periods, mainly the fourth and early fifth centuries CE. This vessel exhibits a failed manufacturing process: usually the tube is pinched all along the body, creating two separate tubes from rim to base, whereas here, the glassmaker pinched the tube only in its upper part. The tube was decorated with applied horizontal trails from the rim down to the center of the body, where the handles were applied and drawn upward. A complete, double kohl-tube, found in a burial cave at Shiqmona, was dated to the second half of the third century and the fourth century CE (Elgavish 1994:156, 158, Fig. 142:left).

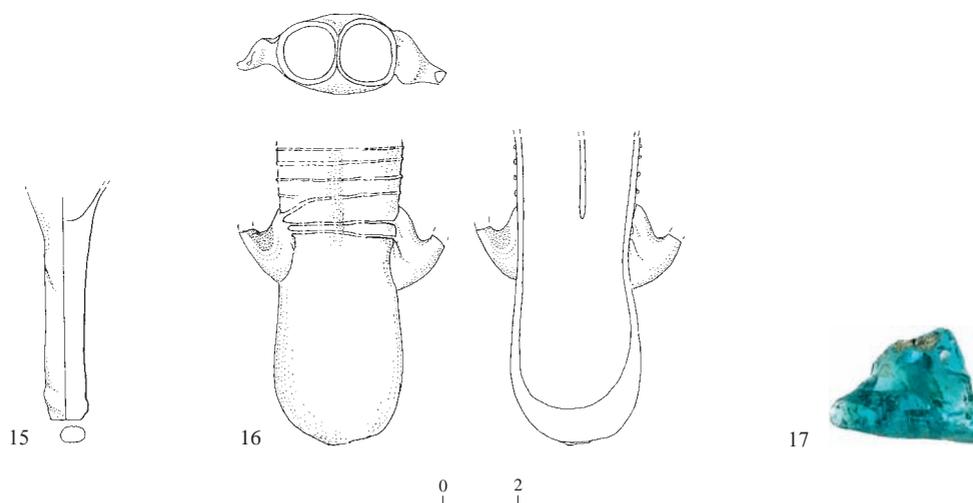


Fig. 3. Glass finds from the winepress.

Two fragments of lower parts of double kohl-tubes, with a trail decoration on the body, were found at Bet She'arim: one in Catacomb 17, and the other in the debris of the courtyard of Catacomb 15 (Barag 1976:201, Fig. 97:23). Barag (1976:201) noted that these vessels first appeared at the beginning of the fourth century and continued throughout the fifth and sixth centuries CE. Four lower parts of trail-decorated, double kohl-tubes were found in the Marinus Estate at H. Raqit on the Carmel, and are dated to the fourth and fifth centuries (Lehrer-Jacobson 2003:233, 245, Fig. XII:2–5). A double tube with a trail decoration on the center of the body was found in a burial cave at Kafr 'Ara, dated to the fifth–sixth centuries CE (Sussman 1976:99, Pl. 28:15). Another, similarly decorated, from Tomb 3 at Samaria, was dated to the fourth–fifth centuries (Crowfoot 1957:413–414, Fig. 95:24, Pl. XXV:2).

16. Lower part of double kohl-tube with a rounded bottom (L5, B1045; Fig. 3:16). Bluish green, covered with silverish weathering and iridescence. Remains of a crude pontil scar (diam. 1.1 cm). On the center of the body are the beginnings of two drawn upward handles, one with a blue strike inside the glass. Above the handles are remains of applied horizontal trails, wound at least six times. The divider between the two parts of the tube was pinched only half way, at the upper part.

Production Waste

The production waste consists of at least four chunks of raw, bluish green glass, one

of yellowish glass and four wasters. The concentration of glass production debris in the winepress may indicate the latter's proximity to a glass workshop, or that the winepress was filled with debris brought from another area.

Large quantities of glass vessels and remains of glass production activity were retrieved in other salvage excavations in the Shiqmona area. The largest assemblages were uncovered at H. Qaşra (*Castra* 1999; Gorin-Rosen and Katsnelson 1999) and Bat Gallim in the southern part of the Haifa bay (Gorin-Rosen 2000a:58–59). A smaller amount was discovered at Kh. Tina'ni (Gorin-Rosen 1999a). Remains of glass-production debris were found at H. Sumaq (Lehrer-Jacobson 1998:363) and H. Raqit on nearby Mount Carmel. At H. Raqit, several fragments, including the lower section of a furnace and blowing leftovers, were identified as evidence of local production (Lehrer-Jacobson 2003:246–247, Pl. b). The well-known, Late Roman glass workshop at Jalame (Weinberg 1987; 1988) is situated north of Mount Carmel. The number and distribution of glass workshops in the area of the Haifa bay and Mount Carmel attest to the prosperity of this craft during the Late Roman and Byzantine periods. It seems that each village or even estate, such as the Marinus Estate at H. Raqit, had its own glass maker.

17. Raw glass chunk with small remains of the furnace wall (L4, B1026; Fig. 3:3). Greenish-blue covered with sand deposits. Very bubbly glass with a few lime impurities. Natural breaks.

NOTES

¹ I wish to thank Raz Kletter for inviting me to publish the glass finds, and Carmen Hersch, for drawing them.

² The glass from this season was studied by Ira Barash.

³ This tomb was excavated by Gideon Foerster in 1965 (IAA No. 65-913). My thanks to Yael Israeli for this information.

⁴ The first two excavation seasons at H. Qaşra were conducted by Ze'ev Yeivin and Gerald Finkielsztein (1999), and the third season, by Gerald Finkielsztein and Hervé Barbé. I wish to thank them for allowing me to mention this information.

⁵ The excavation at Bat Gallim was conducted by Dror Barshad.

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