

## THE GLASS FINDS FROM BEN SHEMEN

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A small but important glass assemblage was revealed during a salvage excavation near Ben Shemen (see Lupu, this volume).<sup>1</sup> Despite the poor state of preservation of the glass material, a number of items were restored, illustrated and catalogued (Figs. 1–4); unillustrated pieces are also mentioned in the text.

In *Miqveh C* most of the fragments dated from the late first to the early second centuries CE (Figs. 1, 2). They include well-known vessels from contemporaneous settlements in Jerusalem, Judea (Katsnelson 2009) and Shephelat Lod, as well as uncommon types (Fig. 1:4–9), rarely found in local excavations. A smaller quantity of glass material was unearthed in *Miqveh B* (Fig. 3). It comprises fragments contemporary to those from *Miqveh C*, but also a few later specimens dating to the Late Roman and Byzantine periods (not discussed).

In addition, a number of glass vessels and objects, dating from the Persian to the Byzantine periods, were found in surface layers. Some of these will be discussed below.

### *MIQVEH C*

This installation yielded the most interesting assemblage from the site. Fragments of some 22 blown vessels were found: four bowls, nine beakers and nine bottles. In most cases, only rim or base fragments remained, not enabling a full reconstruction. The vessels are similar in their simplicity of form, color and date. Bowls and bottles are plain. Beakers exhibit moderate decorations, such as gentle trailing (Fig. 1:5), incision (Fig. 1:10), indentation (Fig. 1:12), or a combination of trails and incised lines (Fig. 1:4). A remarkable feature of this group is a large circular pontil mark (diam. 20 mm) on the underside of the different vessel types. It indicates an identifiable workmanship, probably of a single blower, who used a specific tool to hold the hot vessel while forming its final shape.

The glass repertoire, dating from the end of the first to the second century CE, was compared with parallel corpora from a number of excavations: Ben Shemen (Zelinger

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<sup>1</sup> I wish to thank Ronit Lupu for inviting me to study the glass finds from her excavation at Ben Shemen. Olga Shorr restored the vessels and Carmen Hersch drew them.

2009);<sup>2</sup> 'Ein ez-Zeituna, a Roman public building east of Caesarea Maritima (Winter 2006); the *miqveh* near Alon Shevut (Gorin-Rosen 1999); and Shu'afaṭ (Katsnelson 2009). The latter two sites were settled between the two Jewish Revolts.

### *Bowls* (Fig. 1:1–3)

Two subtypes of blown bowls were found: a deep bowl with an out-folded rim (Nos. 1, 2), and a shallow bowl with a thin rounded, horizontally splayed rim (No. 3). Similar bowls with folded rims were dated prior to 70 CE in the Burned House in the Jewish Quarter of the Old City of Jerusalem (Israeli 2010:222, G1–G5); from the mid-first century to the first third of the second century CE at 'Ein ez-Zeituna (Winter 2006:77, Fig. 1:1–6, see further reference therein); and to the time of the Bar Kokhba Revolt or possibly earlier, in the excavations within the Hasmonean and Herodian palaces at Jericho (Jackson-Tal 2013:108, Pl. 3.5:42–45).

A shallow bowl with a rounded rim, similar to No. 3, was found at 'Ein ez-Zeituna (Winter 2006:79, Fig. 2:17, see a further reference therein).

1. Deep bowl (L123, B1058). Rim and small part of wall. Out-folded rim with a small hollow, thickened at the edge. Beginning of thin walls. Colorless with greenish blue tinge. Patches of black-silver enamel weathering, iridescent film, severe pitting.

2. Deep bowl (L123, B1077). Restored. Rim and wall fragment. Outward folded rim with a small hollow. Vertical thin walls. Colorless with greenish blue tinge. Patches of black-silver enamel weathering, iridescent film, pitting.

3. Shallow bowl (L123, B1058). Small rim fragment. Thickened, rounded, nearly horizontal rim. Greenish blue. Silver iridescence.

### *Beakers* (Fig. 1:4–12)

Nine fragments may be classified as beakers, the majority having a rounded rim (Nos. 4, 5, 7 and 10), and one with a cut-off rim (No. 11). The beakers exhibit trailed (Nos. 4, 5), linear-cut (Nos. 4, 10) and indented (No. 12) decorations. There are four specimens of a footed base (Nos. 4, 6, 8 and 9).

*Beakers with Rounded Rim, Conical Base and Trailed or Incised Decoration.*— These beakers (Fig. 1:4–8) are the main type found. Number 9 may be included in this category, although only its base was preserved. All the specimens are of colorless glass with a greenish

<sup>2</sup> The author studied the material from this excavation, conducted by Y. Zelinger (Permit No. A-3337/2000). I wish to thank the excavator for his permission to mention the material.

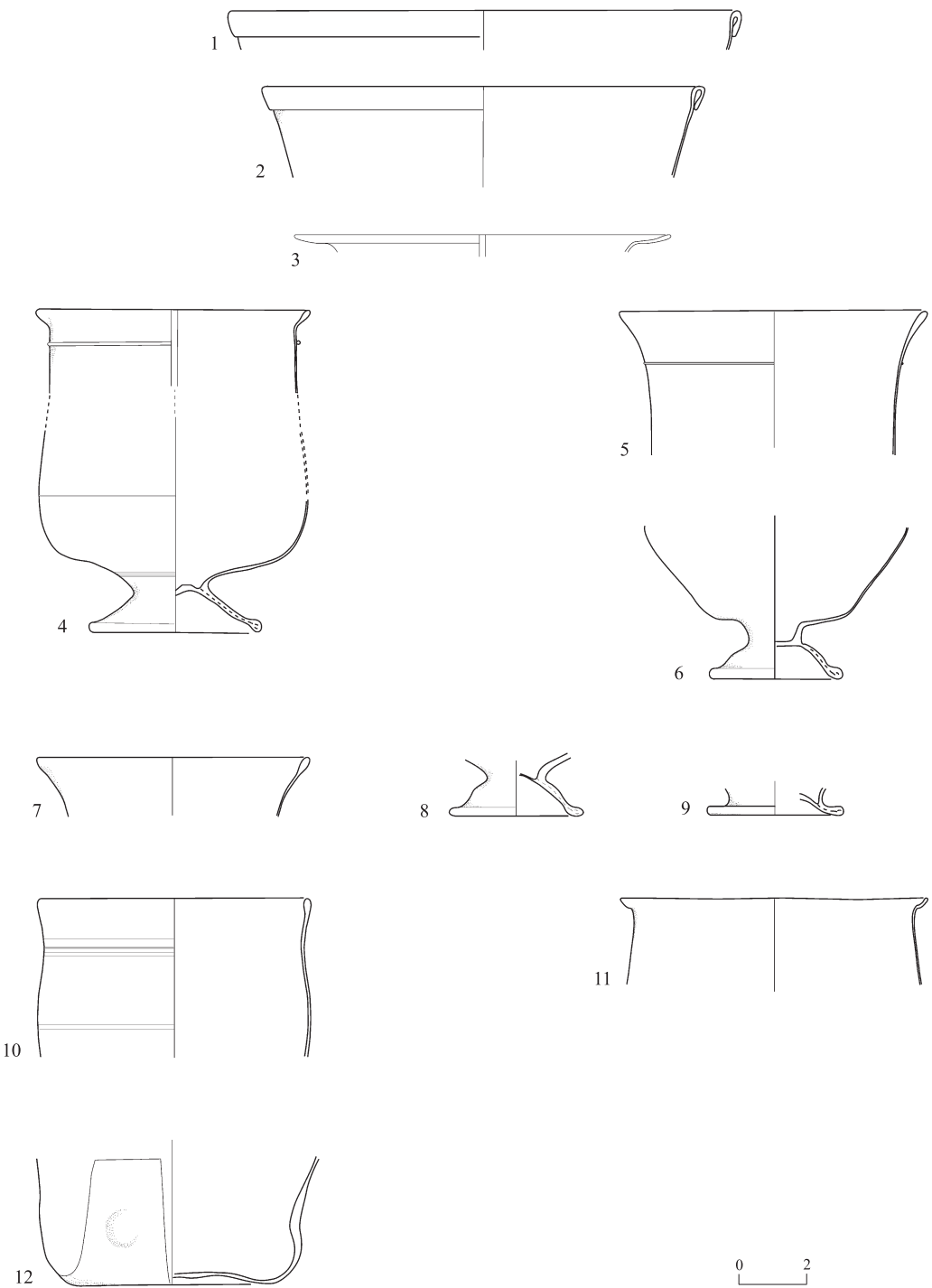


Fig. 1. Glass vessels from *Miqveh C*.

tinge, similar in quality, form and workmanship. Each rim fragment displays traces of wheel polishing or incised designs on the exterior wall (not illustrated). Vessel No. 4 provides a more-or-less complete profile of a medium-sized beaker. It has a flaring, rounded rim, vertical walls that sharply curve at the bottom, and a conical footed base. The vessel is decorated with a delicate horizontal trail, applied below the rim and on the lower body, and shallow incised lines around its bottom, just above the foot. Two conical footed bases (Nos. 6 and 8) may also belong to a similar type of beaker; the identification of rim Nos. 5 and 7 is less certain.

Rounded beakers with a wound trail decoration were common in the region mostly in the Late Roman period, but there are examples dated as early as the late first or early second century CE. The early parallels from Israel are from the *miqveh* near Alon Shevut, destroyed during the Bar Kokhba Revolt (Gorin-Rosen 1999:87, Fig. 2:8, 9); from 'Ein ez-Zeituna, dated from the late first or early second century CE (Winter 2006:80, Fig. 2:23); and from a hiding cave in the northern Judean Desert, assigned to the period between the Great Revolt and the Bar Kokhba Revolt, or solely to the latter (Gorin-Rosen 2002a:143–144, Fig. 1:2, and see further references therein).

Conical footed bases similar to Nos. 4, 6 and 8 are rare. A few parallels include a cup from an Anatolian collection attributed to the second or third century CE (Lightfoot and Arslan 1992:103, No. 54); a decorated beaker from the Oppenländer collection, Germany, dated to the second and third centuries CE (von Saldern 1974:225, No. 658); and base fragments from the third-century CE tomb at Hurfeish, Galilee (Gorin-Rosen 2002b:160\*, Fig. 11:51a, b).

It seems unnecessary, however, to assign the beakers from this excavation to a later date than the other vessels found in the *miqveh* (see Lupu, this volume: Fig. 4). The delicate workmanship and the quality of the glass suggest that this type may have first appeared as early as the late first–early second centuries CE. Moreover, the colorless vessels decorated with similar motifs of wound-trail and circular incisions from the *miqveh* near Ben Shemen (personal observation), may indicate that this was a popular local ware, possibly manufactured in the area.

4. Beaker (L127, B1094). Two rim and wall fragments and a mended base, probably of the same vessel. Most of the body and part of the base are missing. Flaring, thickened rounded rim. Straight thin walls forming a cylindrical body. Polishing marks or traces of incised designs on the exterior of the rim. Small remains of a thin trail applied 10 mm below the rim. Pushed-in base (diam. 6 cm) forming a conical foot with almost no hollow at the edge, with a bulge on the interior floor and a small protrusion underneath. Thin horizontal trails: one applied on upper part of the body, below the rim, and another on lower body. Band of tightly-set, circular incisions on the exterior, just above the foot. Colorless with greenish tinge at the base. Body strongly weathered. Black enamel-like crust, white and silver patches, iridescence. Circular pontil mark underneath (diam. 20 mm).

5. Beaker (L123, B1077). Rim and wall fragment. Thickened rounded rim bending outward. Thin-walled cylindrical body. Polishing marks or circular incisions on the exterior of the rim and on the wall. Thin trail applied on the body 16 mm below the rim. Colorless with greenish blue tinge. Patches of grayish white weathering, iridescence, severe pitting.

6. Beaker (L130, B1112). Lower part, body and base are not complete. Mended. Thin wall splaying out and upward. Pushed-in base forming a conical foot with almost no hollow at the edge, flattened on the interior floor. Circular pontil mark underneath (diam. 20 mm). Colorless with greenish tinge at the base. Body badly weathered with grayish silver crust, iridescence.

7. Beaker (L123, B1058). Rim and wall fragment. Flaring, thickened rounded rim. Polishing marks or traces of incised design on the exterior of the rim and on the wall. Thin sloping walls.

8. Beaker (L130, B1112). Small fragment of lower part. Most of the body and the base are missing. Wall splaying upward from the foot. Pushed-in base, forming a conical foot with almost no hollow at the edge, with a dome on the interior floor. Colorless with greenish tinge at the base. Crust of black-silver enamel-like crust, iridescence.

9. Beaker (L130, B1112). Small fragment of base. Concave base, pushed-in to form a splayed low foot with almost no hollow on the ring's edge. Colorless with greenish tinge. Crust of grayish-silver weathering, iridescent film.

*Beaker with Wheel-Cut Lines.*— This fragment (Fig. 1:10) represents an unusual version of a cylindrical beaker incised with bands of horizontal lines below a rounded rim and on the lower body. This style of decoration was common from the first century CE onward, but the rounded shape of the rim is rare. Most contemporary beakers with such decoration have a cut-off rim, such as No. 11 (see below) (Katsnelson 2009:165, Fig. 4:1, 2, and see further references therein).

10. Beaker (L123, B1058). Rim and wall fragment. Rounded rim, slightly bent out and incurving at the edge, polished on the exterior. Cylindrical body. A band of almost surface incisions appears one centimeter below the rim, and another one two centimeters lower. Almost colorless with greenish blue tinge, black and white patches of weathering, iridescence, pitting.

*Beakers with Cut-Off Rim.*— This fragment (Fig. 1:11) represents a common Early Roman type of cut-off rim beakers. A large quantity of beakers with similar rims, dated between the Great Jewish War and the Bar Kokhba Revolt (70–135 CE), was found at Shu'afaṭ (Katsnelson 2009:164–165, Fig. 4:1–4, and see further references therein). This fragment is too small to reconstruct the complete shape of the vessel. It may belong to an indented beaker, similar to No. 12 (see below).

11. Beaker (L123, B1077). Small rim and wall fragment. Thin-walled. Cut-off flaring rim. Straight wall. Greenish blue, patches of grayish white weathering, iridescent film, severe pitting.

*Indented Beakers.*— Fragment No. 12 belongs to a broad indented beaker with a convex profile. Such beakers, dating from the mid-first to the third century CE, have a short cut-off rim, similar to No. 11, and oval indentations on the body—usually two on each side (Whitehouse 1997:112, No. 171). A similar example was found in the Roman Villa in Jericho, dated to 70–112 CE (Jackson-Tal 2013:113, Pl. 3.9:1, and see further references therein, including Jerusalem, Shu‘afaṭ and other sites of the late first–second centuries CE).

12. Indented beaker (L127, B1094). Lower part. Most of the body and part of the base are missing. Mended. Wide cylindrical body. Large oval thumb indents on the wall (two preserved). Flattened base, thickened at the center, forming a kind of shallow solid ring underneath. Circular pontil mark underneath (diam. 20 mm). Greenish blue, grayish silver crust of weathering, silver iridescence, lime deposit, pitting.

#### *Bottles and Jugs* (Fig. 2:1–5)

Five bottles of different sizes, shapes and functions, including two pieces with handles (Nos. 2, 4) were found.

*Candlestick-Type Bottle.*— This small cosmetic bottle (Fig. 2:1) has a triangular body with thick walls and a base. Similar bottles are common in Judean Desert contexts dated to the Bar Kokhba Revolt (Jackson-Tal 2007:475–476, Pls. 1:11; 4:8, and see further references therein). A similar fragment, attributed to the second century CE, was found in a *miqveh* near Ben Shemen (personal observation).

1. Short candlestick-type bottle (L123, B1077). Part of body, beginning of neck and base. Thick-walled. Triangular-shaped body. Greenish blue. Crust of grayish yellow weathering, silver iridescence.

*Juglet.*— This small vessel (Fig. 2:2) has a peculiar ridged rim and a strip handle, which exhibits two ribs. The handle was originally applied on the upper body, drawn up and folded at a right angle and attached with a thick blob to the neck, below the rim. The missing body was probably globular or cylindrical. No exact parallels were found. A larger, complete globular juglet with a similar handle was unearthed in a burial cave at Ha-Gosherim, dated to the first century CE (Ovadiah 1999:41\*, Fig. 4:1).

2. Juglet (L130, B1112). Upper part. Cylindrical neck, beginning of shoulder and part of a handle. Flaring rim, folded down and inward, forming an uneven ridge. Greenish blue, crust of grayish silver weathering, iridescence.

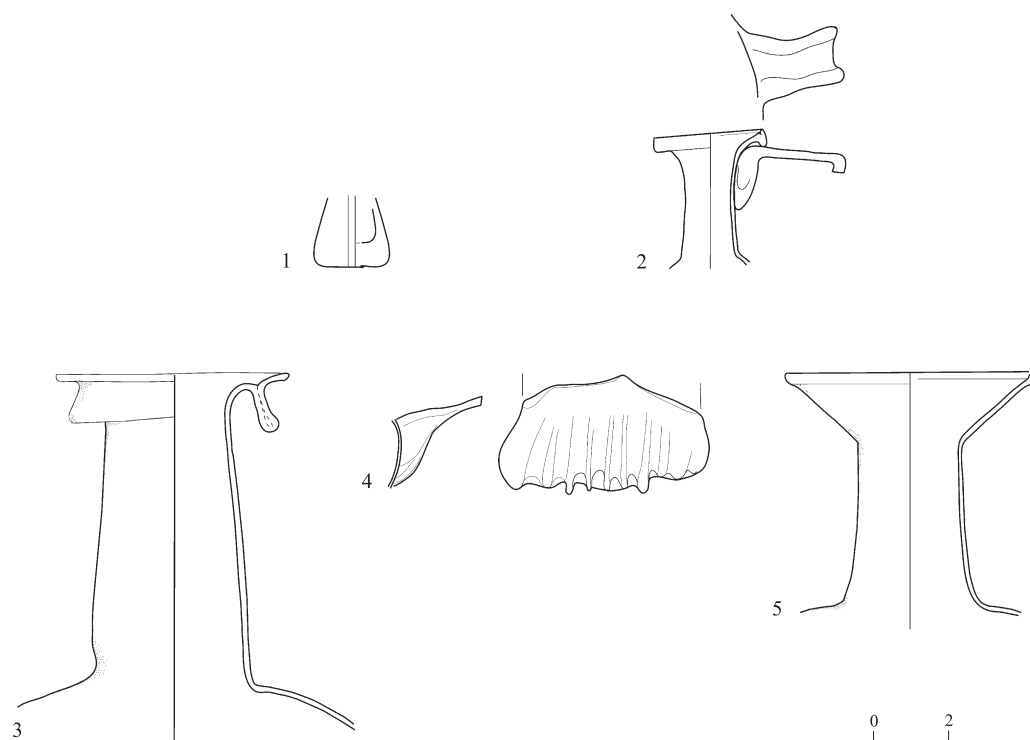


Fig. 2. Glass vessels from *Miqveh C* (cont.).

*Bottle with Collared Rim.*— The fragment in Fig. 2:3 belonged to a large bottle with a stepped rim, forming a collar around a tall cylindrical neck that was constricted at its base. A similar piece was found in a late first–early second-century CE context at Shu‘afaṭ (Katsnelson 2009:167, Fig. 6:3). Long-necked bottles are not common in our region, but similar rims appear on contemporaneous short-necked jugs (Gorin-Rosen 2002a:144, Fig. 1:3).

3. Large bottle (L130, B1112). Upper part. Mended. Parts of rim are missing. Rounded rim, folded down, up and out, forming an uneven, tubular fold around the neck and a ledge at the top. Tall cylindrical neck, slightly constricted at the base. Widely splaying shoulders. Greenish blue, crust of black-silver enamel-like weathering, iridescence, pitting.

*Ribbed Handle.*— This small fragment (Fig. 2:4) was part of a wide, thick, multi-ribbed handle, belonging to a large storage jug, usually of rectangular or cylindrical form. This type, dated from the mid-first to the second century CE, was widespread in the Eastern Roman Empire, for example a jug with a similar handle found at Shu‘afaṭ (Katsnelson 2009:166, Fig. 6:2, and see further references therein) and a fragment from the Roman Villa in Jericho, dated to 70–112 CE (Jackson-al 2013:113–114, Pl. 3.9:11).

4. Ribbed handle (L123, B1058). Small fragment of handle and body. Thick strap handle thickened at the end. Ten densely-set delicate ribs. Concave, convex body. Greenish. Crust of black enamel-like weathering, silver iridescence.

*Bottle/Jug with Funnel Mouth.*— This type of vessel (Fig. 2:5) is characterized by its high funnel-shaped mouth. It was common in the region mainly in the Late Roman period, but rare fragments occur in settlements around the Dead Sea, in late first–second-century CE contexts, such as at Rujm el-Bahar (Bar-Adon 1989: Fig. 11a:9). The delicate rim and the fabric indicate that this fragment should be dated no later than the second century CE, as the rest of the corpus.

5. Bottle or Jug (L123, B1077). Upper part. Mended. Most of the rim, the mouth and parts of the neck are missing. Funnel mouth with thin, rounded or in-folded rim. Tall cylindrical neck, constricted at its base with a concavity. Beginning of broadly splayed shoulders. Greenish blue, patches of grayish yellow weathering, silver iridescence, pitting, elongated vertical bubbles on lower neck.

## MIQVEH B

This installation yielded a small number of glass fragments dated from the Early Roman to the Byzantine periods. Only the earlier vessels are drawn and catalogued (Fig. 3): a beaker decorated with an applied trail (No. 1), three bowls (Nos. 2–4), a candlestick-type bottle (No. 5), a ribbed bottle (No. 6) and a ribbed bead, probably made of faience (No. 7). Fragments of the later period are excluded from the discussion, being small and of well-known types.

### *Beaker*

*Trail-Wound Beaker.*— This fragment (Fig. 3:1) has a rounded flaring rim and a thin trail is horizontally wound around a cylindrical body. It may have belonged to a beaker or a small bowl, attributed to the Early Roman period, as the similar fragments from *Miqveh C*, discussed above (Fig. 1:4, 5).

1. Beaker (L138, B1147). Rounded, flaring rim. Thin tapering walls. A thin trail is horizontally wound around the vessel, 10 mm below the rim. Colorless, fine fabric, patches of white and black weathering, iridescence.

### *Bowls*

Three base fragments (Fig. 3:2–4)<sup>3</sup> characteristic of Early Roman bowls were discovered. All have a low ring base with a small upward hollow. They may have belonged to various

<sup>3</sup> Bowl No. 2 was unearthed alongside a common Late Roman/Byzantine greenish bowl with a high tubular ring and a bluish green bottle with an upward rounded rim and a cylindrical neck.



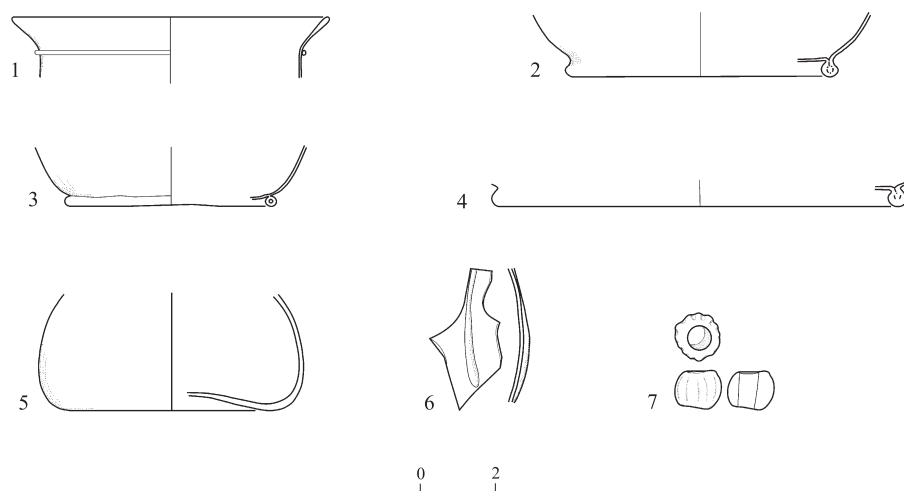


Fig. 3. Glass vessels from *Miqveh B*.

shapes of bowls. Similar bases, dated from the end of the first to the early second century CE, were found in the *miqveh* near Alon Shevut (Gorin-Rosen 1999:85, 87, Figs. 1:6, 7), at 'Ein ez-Zeituna (Winter 2006:77, Fig. 1:10, 12, 13) and at Shu'afaṭ (Katsnelson 2009:164, Fig. 3:7).

2. Bowl (L134, B1135). Base and body fragment. Pushed-in base, forming a low ring with a small, rounded hollow. Thin curved wall. Greenish blue tinge, small patches of black and white weathering, bubbly, sand deposit.

3. Small bowl (L138, B1147). Base and body fragment. Pushed-in base forming a low hollow ring, almost closed. Thin curved wall. Colorless with greenish blue tinge, crust of silver weathering, iridescence, pitting.

4. Bowl (L138, B1147). Base and body fragment. Pushed-in base forming a low hollow ring, almost closed. Thin curved wall. Colorless with bluish green tinge, iridescence, lime deposit.

### *Bottles*

*Candlestick-Type Bottle.*— This candlestick-type cosmetic bottle (Fig. 3:5), with a hemispherical body, was especially common during the late first and second centuries CE (Barag 1970:212–213, Fig. 46, Type 21:1, 3, and see further references therein; see also Shu'afaṭ: Katsnelson 2009: Fig. 5:4).

5. Candlestick-type bottle (L140, B1156). Two fragments of body and base. Body with convex curved walls. Concave base. Bright greenish blue, sand deposit, bubbly, black impurities.

*Ribbed Bottle.*— This small fragment (Fig. 3:6) may belong to a bottle with vertical pinched ribs on the body. This type of decoration first appeared in the late first century CE, and remained in use in Israel up to the Byzantine period. The fine fabric of this small fragment indicates a vessel of the Early Roman period, similar to a ribbed bottle from the Cave of Horror in the Judean Desert, dated to around the first third of the second century CE (Barag 1962:213–214, Fig. 18, No. 19, see further references therein).

6. Small body fragment (L124, B1097). Thin wall, convex curving. Delicately pinched rib, tapering at one of the ends. Colorless with greenish blue tinge, crust of white enamel-like weathering, sand deposit.

### *Faience Bead*

This object is of a type known as “melon” beads, made of faience or frit, with a typical decoration of ribs or flutes. It is common in our region from the first to the early fourth century CE (e.g., at the Akeldama tombs, Jerusalem; Winter 1996:114, Fig. 7.2:17).

7. Bead (L139, B1151). Faience(?). Uneven barrel shape. Light blue glazed surface. Multiple ribs, parallel and diagonal to axis, uneven and unequally spaced. Wide conical perforation.

## MISCELLANEOUS OBJECTS FROM SURFACE LAYERS

Among these objects are a rare glass pendant dated to the Persian or Hellenistic period (Fig. 4:3), a late Hellenistic cast bowl (Fig. 4:1) and small remnants of Early Roman and Byzantine blown bottles (Fig. 4:2), wineglasses (not illustrated) and windowpanes (not illustrated).

### *Grooved Bowl*

The fragment in Fig. 4:1 belongs to a conical mold-made bowl decorated with wheel-cut interior grooves. These bowls were widespread in our region in the late Hellenistic and the beginning of the Early Roman periods. A similar fragment with one groove below the rim was found in the Jewish Quarter excavations in the Old City of Jerusalem. It came from Stratum 5, generally attributed to the early first century CE (Gorin-Rosen 2003:367, G 27).<sup>4</sup>

1. Cast bowl (L111, B1206). Rim and wall fragment. Rounded rim, polished on both sides (0.3 cm thick). Marks of tooling on the exterior below the rim. One horizontal groove preserved on the interior, 5 mm below the rim. Bluish, iridescence, surface severe pitting.

<sup>4</sup> Our bowl was uncovered together with fragments of a Byzantine bluish green bottle with an upward, rounded deformed rim and a windowpane.

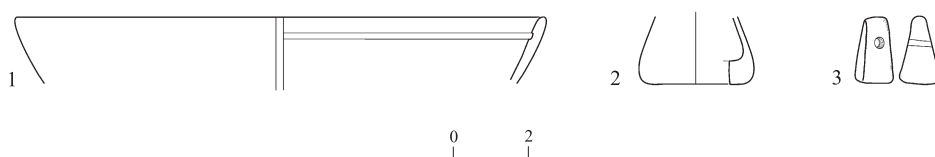


Fig. 4. Miscellaneous surface finds.

### *Candlestick-Type Bottle*

This fragment (Fig. 4:2) belongs to a small triangular bottle, similar to the one from *Miqveh C* (Fig. 2:1; see above).

2. Candlestick-type bottle (L107, B1019). Body fragment, base and beginning of neck. Triangular body, flat base with thick walls. Deep greenish blue, patches of black and silver weathering, iridescence, pitting.

### *Axe-Shaped Pendant*

This is the earliest piece of glass (Fig. 4:3) found at the site, dated to the Persian or Hellenistic period (Spaer 2001:164, No. 292). This type of pendant is rarely found in excavations. A few parallels from the Levant come from Hellenistic Delos (Nenna 1999:133, Type 4E. Pl. 52:E93, E97) and Tel Anafa (Weinberg 1972: Fig. 10, fourth from left).

3. Pendant (L119, B1064). Complete. Small chip at the top. Tooled or molded. Rod-pierced horizontally. Triangular-shaped. Flat sides widening to a slightly convex bottom. Transparent olive green, silver crust of weathering, sand deposit.

## CONCLUSIONS

Despite the small quantity of glass fragments and their poor state of preservation, the corpus adds important data regarding glassware used in Shephelat Lod from the late first to the early second century CE. The assemblage, however limited, combines well-known types with vessels less familiar in the region. It includes simple vessels of domestic function, some of which were possibly made in a local workshop. When compared to other contemporaneous corpora, it provides a rare opportunity for a more precise dating of certain types, such as beakers with conical footed bases (Fig. 1:4–8) and funnel (Fig. 3:5) and ribbed bottles (Fig. 3:6), supporting their early appearance in local contexts in the late first and second centuries CE.

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