

## TIBERIAS, AVIV HOTEL: DOMESTIC AND INDUSTRIAL POTTERY FROM THE ABBASID AND CRUSADER PERIODS

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### INTRODUCTION

Presented here is the pottery from the Abbasid and Crusader periods uncovered in Area B of the Aviv Hotel excavations in Tiberias (see Zingboym, Amitai and Avshalom-Gorni, this volume: Fig. 1). Due to the limited area excavated, the pottery was not quantified. The ceramic sherds, chosen from selected loci, represent types known from other excavations in Tiberias.<sup>1</sup>

The site is situated in the midst of the Abbasid town (Stacey 2004:9–10), but outside the walled city of the Crusader period (Pringle 1998:353–353, Fig. 99; Zingboym, Aharoni and Avshalom-Gorni, this volume). The recently revealed moat, which probably belonged to the southern late Fatimid/Crusader wall, provides archeological evidence of the southern boundary of the Crusader city (Hartal and Har’el 2013).

### THE ABBASID PERIOD

The fragmentary remains excavated beneath the Crusader-period layer were designated Stratum 3, dating to the Abbasid period. The pottery from this stratum was mainly retrieved from L109—a stone collapse in the southern side of the area (see Zingboym, Aharoni and Avshalom-Gorni, this volume: Plan 2). The pottery from L109 is domestic in character and includes coarse-ware lids, buff-ware jugs and juglets, a *zir*, cooking ware and glazed bowls. The presence of a kiln waster is an indication of pottery production in close proximity. It was completely warped and therefore it is impossible to identify the type of vessel.

Comparisons are provided from well-dated contexts from previous excavations at Tiberias. The most extensive study is by David Stacey, who published the Early Islamic levels from Gideon Foerster’s 1973–1974 excavations in the southern part of modern Tiberias (Stacey 2004:89–166). Roni Amir published the Abbasid pottery from Yizhar

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<sup>1</sup> I would like to thank Oren Zingboym for inviting me to study the pottery from this excavation. Thanks are due also to the editor of this article, Shoshana Israeli, for her patience, interest and dedicated work.

Hirschfeld's excavations at the Sewage Processing Plant and on Mount Berenice (Amir 2004a:31–53; 2004b:158–161).<sup>2</sup>

Pottery production from the Abbasid period is recorded from at least two sites in Tiberias: remains of a glazed-pottery workshop, which was excavated at Gane Ḥamat but never fully published (Oren 1971); and a pottery kiln from Ḥammat Tiberias, which collapsed during, or shortly after firing, containing fully-fired vessels and kiln bars (Stern 1995). Further excavations at Ḥammat Tiberias exposed more of the workshop.<sup>3</sup>

### Unglazed Wares

*Lids.*— Two intact lids were found, both deep bowls: one (Fig. 1:1) with a flaring rim, a knob handle inside and a very narrow flat base; and the other (Fig. 1:2) with an everted rim and a flat base. The latter was identified as a lid because it was smoothed on the exterior before firing to facilitate its use. Attention to this small detail may help, in general, to distinguish between bowl and lid fragments.

Lids were commonly used, but rarely recorded, as their fragments have probably been identified as bowls. The shape of the lid serves its purpose well, and therefore, its form did not change over time. Lids, shaped as bowls with a knob handle inside, are known from the Byzantine, Umayyad (Magness 1993:247) and Crusader (Stern 2012a:35, Type AC.PL.2, Pl. 4.3) periods, and continue in use as late as the Ottoman period (unpublished material from 'Akko). A bowl-shaped lid was found in the 1970s in Tiberias Stratum IV, dating to the early Abbasid period (750–880 CE).

*Buff Ware Jugs and Juglets.*— Many fragments of thin-walled jugs and juglets made of buff or cream ware, were found, including rims, handles, bases and a strainer (Fig. 1:3–10). Due to their very thin walls there is a high percentage of breakage. These jugs and juglets usually have splaying necks, some with decorated strainers, handles extending from the rim or the neck to the shoulder, a globular or cylindrical body and a flat or low ring base. Occasionally, they are decorated with incised, stamped and barbotine appliqué motifs. In contemporary written sources from the Cairo Geniza they have been identified as drinking cups (*kūz*) and water coolers (*barrāda*; Frenkel and Lester 2014:169–172, 176, Figs. 7.14, 7.15, 7.19).

<sup>2</sup> Miriam Avissar studied the pottery from the Abbasid and Fatimid residential quarter over the Roman Theater in Tiberias (Atrash 2010). Abbasid pottery was also unearthed in a salvage excavation at the Berenice Aqueduct along the saltwater carrier (Cinamon 2013) and in the Hebrew University New Tiberias Excavation Project in the southern part of modern Tiberias, which was in fact the city center in the early Islamic period, to the north of the Byzantine gate (Cytryn 2016:111–119 and pers. comm.). Yael Arnon is currently studying the pottery from more recent IAA excavations, exposing additional parts of the Islamic city: Plaza Hotel (Hartal 2013), Ḥammat Tiberias (Hartal 2009; Cinamon, per. comm. [Permit No. 5361]).

<sup>3</sup> Hartal 2009, Ḥammat Tiberias, Permit No. 5062; Cinamon (per. comm.), Ḥammat Tiberias, Permit No. 5361; Hartal and Vincenz (pers. comm.), License No. B-402/2013.

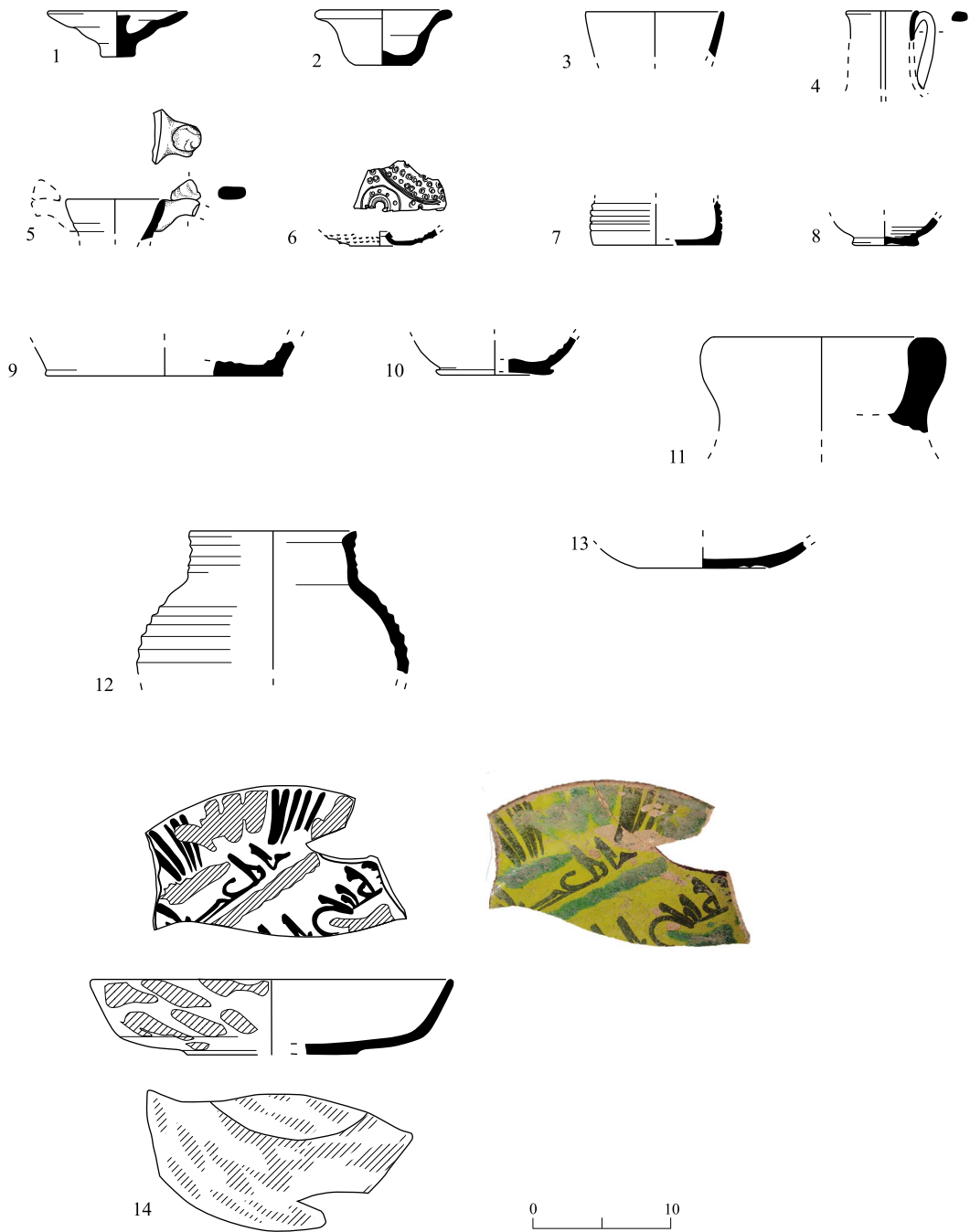


Fig. 1. Abbasid pottery.

◀ Fig. 1

No.	Type	Locus	Basket	Description	Parallels
1	Lid	109	1036/4	Reddish yellow 5 YR 6/6 fabric; white grits and inclusions; some grog	Tiberias: Stacey 2004:125–126, Fig. 5.33:4 Ramla: Cytryn-Silverman 2010:104–105, Pls. 9.4:21; 9.11:18
2	Lid	109	1036/11	Light red 2.5 YR 6/6 fabric; reddish gray 2.5 YR 5/1 core; many small voids and some dark inclusions	As No. 1
3	Jug	109	1036/5	Very pale brown 10 YR 7/4 fabric; very pale brown 10 YR 8/3 surface; very thin walls	Caesarea: Arnon 2008:36–37, 129–131, Type 521; 41, 202–205, Type 531; 43, 241–243, Type 541; 45, 278, Type 551
4	Jug	109	1036/1	Light red 2.5 YR 6/6 fabric; pink 2.5 YR 8/3 surface; many white grits	As No. 3
5	Jug	109	1036/10	Very pale brown 10 YR 7/4 fabric; very pale brown 10 YR 8/3 surface	As No. 3
6	Jug	109	1036/2	Very pale brown 10 YR 7/4 fabric; very pale brown 10 YR 8/3 surface	As No. 3
7	Juglet	109	1036/7	Very pale brown 10 YR 7/4 fabric	As No. 3
8	Juglet	109	1036/6	Very pale brown 10 YR 8/2 fabric; some grog	As No. 3
9	Jug	109	1036/3	Pink 7.5 YR 7/3 fabric; some grog and dark inclusions	As No. 3
10	Jug	109	1036/9	Very pale brown 10 YR 8/3 fabric; some grog	As No. 3
11	<i>Zir</i>	109	1036/13	Very pale brown 10 YR 8/2 fabric; gray 10 YR 6/1 core; pink 5 YR 7/3 surface; some white grits and many dark large inclusions	Caesarea: Arnon 2008:42, 223, Type 931d
12	Cooking pot	109	1036/12	Reddish brown 5 YR 4/3 fabric; some white grits	Tiberias: Stacey 2004:123, Fig. 5.32:1–4
13	Glazed bowl	109	1036/8	Light reddish brown 2.5 YR 7/4 fabric; some white inclusions; light green glaze on ext. and dark green glaze on int.	Caesarea: Arnon 2008:35, 108–113, Type 221 Ramla: Cytryn-Silverman 2010:109–110, Pls. 9.5:16; 9.10:10
14	Glazed bowl	109	1036/4	Light reddish brown 2.5 YR 7/4 fabric; some white inclusions; dark green painted design on int. with green glaze over a lemon-yellow glaze background; light green painted streaks on ext.	Caesarea: Arnon 2008:109, Type 221b

Buff ware jugs and juglets have a wide distribution from Egypt to Mesopotamia and were common in our region (for a comprehensive discussion, see Avissar 1996:155–164, Types 2–12; Arnon 2008:36–37, 41; Cytryn-Silverman 2010:104–108). At Tiberias, similar vessels were uncovered in Strata IV–I, dated from the late eighth and ninth centuries to the mid-eleventh century CE (Stacey 2004:130–132, 144, Figs. 5.41; 5.60). There, evidence of local production was revealed in the form of a warped jug (Stacey 2004:132, 144, Fig. 5.60:7). Similar jugs were discovered in Caesarea Strata VII–IV, their date corresponding to that of the vessels from Tiberias.

*Storage Jar (Zir).*— This straight and thickened rim (Fig. 1:11) belongs to a large storage jar, which was usually coil-made and finished on a wheel. It served for long-term storage of foodstuffs and was usually not portable. In the Islamic world, this type of jar was called a *zir*, as attested in a document from the Cairo Geniza (Frenkel and Lester 2014:172–176, Fig. 7.17). A similar example was recorded from Caesarea Stratum VI, dated from the late ninth to the mid-tenth century CE. *Zir*-type storage jars with a stamped handle were found in Caesarea and Ramla (for further discussion, see Cytryn-Silverman 2010:102, Ware V).

*Cooking Vessel.*— This closed cooking pot (Fig. 1:12) has a vertical neck and a rounded, ribbed body. Although the handles did not survive, this type of cooking pot usually has two loop handles extending from the rim to mid-body. This form of cooking pot was common in Jund al-Urdun (modern northern Israel and Jordan) during the Umayyad and early Abbasid periods; note that the parallels from Stacey 2004 have a carinated body, while our pot has a more rounded body.

## Glazed Wares

*Glazed Bowls.*— Two glazed bowls were found: one (Fig. 1:13) with a monochrome green glaze, and the other (Fig. 1:14), with a polychrome glaze and a painted design on the interior. The background of bowl No. 14 is lemon yellow and the design, part of it script, was painted in dark brown and green glaze. Both bowls were made of the same fabric, and therefore, they may be of the same type. Similar bowls, found in the 1970s excavations at Tiberias, were identified as local imitations of the Coptic Glazed Ware (“Later Matt-Glazed Wares”; Stacey 2004:108–110, Fig. 19). The Egyptian Coptic Glazed Ware usually has a light, pink fabric containing mica, while our bowls have a darker fabric with no mica (for a comprehensive discussion of the Coptic Glazed Ware, see Arnon 2008:35 and Cytryn-Silverman 2010:109–110). Therefore, it seems that the bowls found in this excavation are also a local imitation of the well-known Egyptian Coptic Glazed Ware.<sup>4</sup> The form of our bowls is similar to Stacey Type I, carinated bowls with flat bases, and corresponds

<sup>4</sup> I would like to thank Katia Cytryn for observing the bowls from Tiberias and pointing out the fabric issue.

to his decorative-technique Groups A (monochrome) and C (Green and/or yellow with black lines; Stacey 2004:108). The dating of the local imitation of the Coptic Glazed Ware ranges between the mid-ninth and the mid-tenth centuries (Stacey 2004:110). Chemical or petrographic analyses may provide more information regarding the Egyptian wares and the local imitations.

The polychrome bowl (Fig. 1:14) has an inscription, perhaps pseudo, painted on the interior bottom of the bowl. Another bowl of this type, found in Tiberias, bears a pseudo(?) -Kufic inscription (Stacey 2004:106–110, Pl. 1:1). It is interesting that inscriptions occur on two local imitations of Coptic Glazed bowls from Tiberias, as calligraphy is rare on Coptic glazed bowls. Examples include a bowl from Caesarea that has a very similar decoration and bowls with inscriptions from the Benaki Museum in Athens (Philon 1980:47, Fig. 90).

The Abbasid-period pottery found in Stratum 3 dates from the mid-eighth to the tenth century CE. It includes ceramic types known from previous excavations in Tiberias, except for the *zir*.

#### THE CRUSADER PERIOD

The pottery from this phase was found mainly within accumulations in the plastered pool (Loci 122, 124 and 126). It contained restorable vessels, perhaps an indication that they originated near the pool. The pottery is mostly domestic, but some industrial ceramic wares are also present. These include sherds of vessels utilized in the sugar-production process, as well as some kiln bars related to pottery production. Within the domestic pottery, a distinction has been made between local and imported wares, the majority being local.

The pottery of the first Crusader Kingdom at Tiberias (twelfth century CE) is not as well-known as the Abbasid-period pottery, and is rarely published. The Crusader- and Mamluk-period pottery from Mt. Berenice was described together, without a distinction between the twelfth, thirteenth and fourteenth centuries CE (Amir 2004b:161–166). In a small salvage excavation at Tiberias conducted by the author c. 50 meters from the Sea of Galilee shoreline, north of the Greek Orthodox Church and the southern Ottoman city wall, occupation levels from the twelfth, thirteenth and fourteenth centuries CE were exposed. The ceramic assemblage, though small, can be dated based on stratigraphic evidence to the twelfth and thirteenth centuries (Stern 2013:186–194); petrographic analysis of two storage jars attests to a local production (Shapiro 2013:210–211; Stern 2013:190, Fig.12:1, 2). In the excavations at Gale Kinneret (Hartal 2008)<sup>5</sup> and during the Hebrew University

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<sup>5</sup> Personal observation. I would like to thank Moshe Hartal for inviting me to study the pottery from this excavation.

excavation (Cytryn 2016:118–119, Fig. 9), twelfth-century CE domestic pottery was found in association with sugar-production vessels.<sup>6</sup>

## DOMESTIC WARES

The local wares include pottery that was most likely produced in Tiberias and its vicinity. Pottery produced in Beirut, which was probably brought to Tiberias by sea and land, is also considered local ware since Beirut was part of the Crusader Kingdom (Stern and Waksman 2003:173–178; Waksman et al. 2008; Stern 2012a:41–47, Types BE.CW and BE.GL).

This assemblage consists of ceramic types that were in use in the region from the days of the First Latin Kingdom until the early days of the Second Latin Kingdom—the mid-twelfth to the first decades of the thirteenth century CE (Stern 2009:228–229, Assemblage II; 2012a:23–25, Table 3.1, ‘early assemblage’). It includes unglazed wares, glazed cooking wares and glazed bowls.

## Unglazed Wares

### *Handmade Wares*

Among the handmade vessels are an undecorated bowl (Fig. 2:1) and a jug (Fig. 2:2), and jugs of various shapes and sizes (Fig. 2:3–5) decorated with red-painted geometric motifs belonging to the Handmade Geometric Painted Ware (HMGP). The bowl in Fig. 2:1 is small with a simple rounded rim and curved walls. Both the undecorated and painted jugs have high necks, occasionally funnel-shaped, simple rims and a handle extending from below the neck to the shoulder. These simple vessels were made from a very coarse fabric containing many grits, inclusions and occasional traces of straw. The decorated jugs were painted with a fine brush, the design arranged in horizontal registers filled with crisscross and lozenge patterns.

Undecorated handmade wares and HMGP wares were widely distributed throughout the Levant (Avissar and Stern 2005:88–90, 113–116, Types II.1.4.1, II.1.4.2 and II.4.4.1, II.4.4.2; Stern 2012a:49–50, Types VL.PL.4, VL.PL.5; Gabrieli, Ben-Shlomo and Walker 2014:194). The chronological range of both wares spans the Crusader/Ayyubid (twelfth to mid-thirteenth centuries CE), Mamluk (mid-thirteenth to fifteenth centuries CE) and early Ottoman periods (sixteenth century CE; Avissar and Stern 2005:88–90, 113; Gabrieli, Ben-Shlomo and Walker 2014:194). However, at this stage it is impossible to distinguish between the vessels of the different centuries. Therefore, the well-dated context of these wares in Tiberias can refine their dating.

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<sup>6</sup> Other excavations in Tiberias (Razi and Braun 1992:221–226; Stepansky 2004; 2009) exposed Crusader-period remains, but no pottery was studied or published.

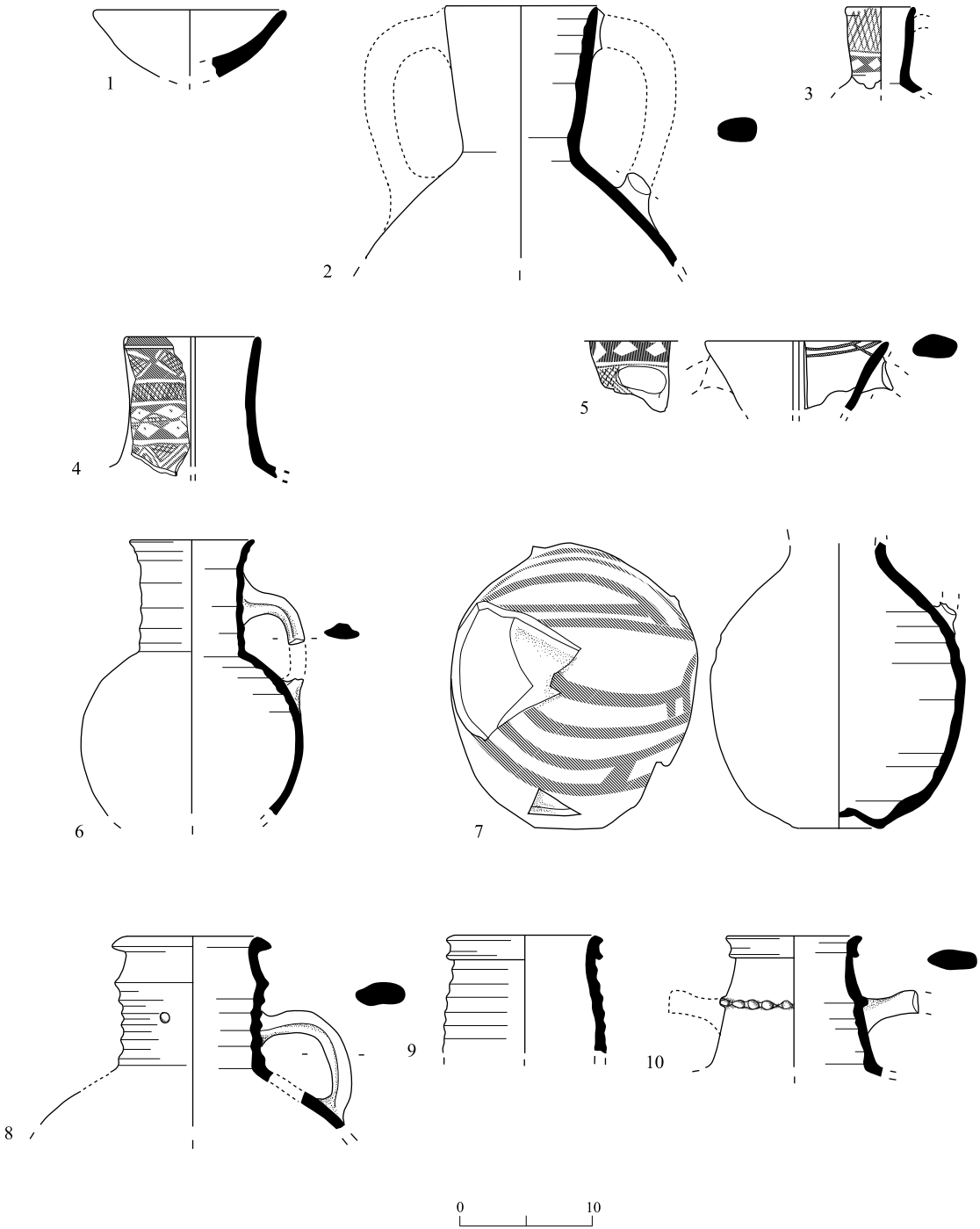


Fig. 2. Crusader pottery: local, unglazed domestic wares.



◀ Fig. 2

No.	Type	Locus	Basket	Description	Parallels
1	Handmade bowl	126	1094/1	Dark reddish gray 2.5 YR 4/1 fabric; reddish brown 2.5 YR 5/4 ext.; many white grits and inclusions, and voids	Avissar and Stern 2005:88–90, Type II.1.4.1, Fig. 38:2, 3
2	Handmade jug	126	1105/1	Light red 2.5 YR 6/8 core; light reddish brown 2.5 YR 7/4 ext.; numerous white grits and inclusions	Stern and Tatcher 2009: 129–130, Fig. 3.19:11
3	Handmade Jug	127	1098/1	Red 2.5 YR 5/6 ext.; reddish gray 2.5 YR 5/1 int.; many white grits and inclusions; red painted decoration	Avissar and Stern 2005: 113–116, II.4.4.1, Fig. 47
4	Handmade Jug	126	1095/2	Light reddish brown 5 YR 6/4 fabric; many white grits and inclusions; dark red painted decoration	As No. 3
5	Handmade Jug	127	1098/3	Light red 2.5 YR 6/8 core; pink 2.5 YR 8/3 ext.; many white grits and inclusions; dark red painted decoration	As No. 3
6	Jug	122	1088/1	Light red 2.5 YR 6/6 fabric; pinkish white 5 YR 8/2 ext.; many white grits and inclusions	Avissar and Stern 2005:108, Type II.4.1.1, Fig. 45:1 ‘Akko: Stern 2012a:34–38, Type AC.PL.3, Pls. 4.6:4–21; 4.7
7	Painted Jug	122	1087/2	Light reddish brown 5 YR 6/4 fabric; pinkish white 5 YR 8/2 ext.; many white grits and inclusions; red painted bands	Avissar and Stern 2005:111, Type II.4.3.1, Fig. 46:1 Tiberias: Stern 2013:197, Fig. 15:8
8	Storage jar	122	1087/1	Light reddish brown 5 YR 6/4 fabric; pink 5 YR 8/4 ext.; many white grits and inclusions	Avissar and Stern 2005:106, Type II.3.2.4, Fig. 44:6–11 ‘Akko: Stern and Waksman 2003:168: Fig. 2: upper row ‘Akko: Stern 2012a:34–38, Type AC.PL.5, Pl. 4.9
9	Storage jar	127	1098/4	Yellowish red 5 YR 5/6 fabric; pink 5 YR 7/4 ext.; some white grits and inclusions	As No. 8
10	Storage jar	127	1098/5	Red 2.5 YR 5/6, pink 5 YR 7/4 ext.; many white grits and inclusions	As No. 8

Recent research, focusing on the fabrics of these handmade wares in Northern Israel and Jerusalem, points to the potential of studying well-dated contexts for distinguishing chronological development, at least within the painted wares. There are a number of indications that the undecorated handmade wares and HMGP, despite being closely associated in many excavations and often being treated as part of a larger, uniform corpus of handmade pottery, are not part of the same industry. There are differences in distribution patterns and particularly in manufacturing techniques (see Gabrieli, Ben-Shlomo and Walker 2014).

### *Wheel-Made Wares*

Of the wheel-made unglazed wares only jugs and jars were found.

*Jugs.*— An undecorated jug and a painted one were found. The undecorated jug (Fig. 2:6) is made of a fabric similar to that of the storage jars described below. It has a wide, straight ribbed neck and a slightly flaring simple rim. The body is globular, and a handle extends from mid-neck to the shoulder of the vessel. Similar locally made jugs were found in ‘Akko and at various sites in Israel and Lebanon and date to the twelfth and thirteenth centuries CE.

The partly preserved painted jug (Fig. 2:7) was made of a fabric similar to that of the undecorated one. It has a globular body, an omphalos base and a handle pulled from the shoulder. The decoration consists of red bands painted across the body. This type of jug is not common in Israel; it was found mainly at sites in the northern part of the Jordan Valley, for example at Tiberias, Bet She’an and Pella, and also at ‘Afula (Nurit Feig, pers. comm.), dated there to the mid-thirteenth century CE. In this assemblage, however, we may suggest a twelfth- or early thirteenth-century date.

*Storage Jars.*— The rims and necks of these jars slightly vary, but their general form is similar (Fig. 2:8–10). They have a high and wide cylinder neck with ribbings, and a thick, everted or out-turned rim (Fig. 2:8, 9). In one case (Fig. 2:10), a thumb ridge occurs in the middle of the neck. The handles are attached from the lower part of the neck to the shoulders of the vessel.

This type of jar was found at other excavations at Tiberias (Cytryn 2016: Fig. 9, right) and at various sites in Israel and Lebanon dating to the twelfth and thirteenth centuries CE. Petrographic analysis of similar jars from a thirteenth-century context in Tiberias indicates they were probably produced in the immediate vicinity (Shapiro 2013:210–211, Samples 4, 5; Stern 2013:190, Fig. 12:1, 2). Jars of a similar form were also unearthed in ‘Akko and were identified as the “Akko workshop.” Petrographic analysis showed that they were locally produced from the same fabric as other unglazed wares (Stern and Waksman 2003:168–169, 173–175; Waksman et al. 2008; Shapiro 2012:104–105, 114–115; Stern 2012a: 37). Consequently, it seems that within the Crusader kingdom the same jar type was produced from local fabrics in different regions, presumably as early as the twelfth century CE.

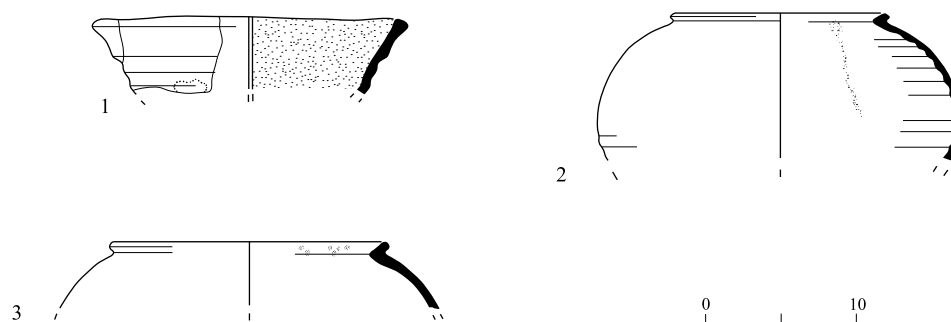


Fig. 3. Crusader pottery: glazed cooking ware.

No.	Type	Locus	Basket	Description	Parallels
1	Baking dish	126	1095/3	Reddish brown 4/6 2.5 YR fabric; transparent glaze on int. until the rim	Avissar and Stern 2005:96, Type II.2.3.1, Fig. 41:1, 2 ‘Akko: Stern 2012a:41–44, Type BE.CW.1, Pl. 4.14:1–6
2	Cooking pot	122	1088/2	Reddish brown 2.5 YR 4/3 fabric; white grits	Avissar and Stern 2005:92; Type II.2.1.3, Fig. 39:4 ‘Akko: Stern 2012a:41–44, Type BE.CW.1, 4.15; 4.16:1, 2
3	Cooking pot	126	1093/5	Dark reddish gray 5 YR 3/2 fabric; white grits	As No. 2

## Glazed Wares

*Local Cooking Vessels.*— The cooking vessels include open baking dishes (Fig. 3:1) and closed cooking pots (Fig. 3:2, 3). The cooking wares in this excavation are exclusively thin-walled types, dating to the twelfth–early thirteenth centuries CE. Well-known thick-walled types dating to the thirteenth century are absent (see Avissar and Stern 2005:92, 96–97, Types II.2.1.4, II.2.3.2, Figs. 39:7, 8; 41:4; Stern 2012a: 41–44, Type BE.CW.2, Pls. 4.14:7–17, 4.16:3–11; 4.17).

The baking dish has slightly flaring walls and a simple rim. The cooking pots are globular with an everted rim and the exterior is wet-smoothed. The baking dish has a transparent glaze on the interior that appears to be brown; the cooking pots are usually covered with the same glaze on the bottom. The application of the glaze on the cooking pots often left traces or splashes of glaze on the exterior of the vessels.

These cooking vessels were apparently produced in Beirut, as attested by medieval pottery kilns with similar vessels discovered in the city center of modern Beirut (el-Masri 1997–1998; François et al. 2003), as well as by chemical and petrographic analyses (Waksman 2002; François et al. 2003; Waksman et al. 2008:163, 178–180, Fig. 7; Shapiro 2012:107, 115; Stern 2012a:43, 44).

*Local Glazed Bowls.*— The local glazed bowls (Fig. 4:1–5) share similar forms, fabric and lead glaze, and are quite common in Crusader-period assemblages from the Levant.



◀ Fig. 4

No.	Type	Locus	Basket	Description	Parallels
1	Reserved-slip glazed bowl	122	1083/3	Red 2.5 YR 5/8 fabric; white grits and inclusions; white slip under green glaze on int. and extending over rim; the glaze is missing in two places	Avissar and Stern 2005:22, Type I.1.6.4, Fig. 8:1, 2 ‘Akko: Stern 2012a: 44–47, Type BE.GL.3, Pl. 4.20:4–9
2	Slip-painted glazed bowl	126	1094/2	Red 2.5 YR 4/6 fabric; white slip-painted design on int. under yellow glaze on int.	Avissar and Stern 2005:19, Type I.1.6.1–2, Fig. 7:1–8 ‘Akko: Stern 2012a: 44–47, Type BE.GL.4, Pl. 4.21:1–10
3	Sgraffito glazed bowl	122	1088/4	Red 10 R 5/6 fabric; white grits and inclusions; white slip under green glaze and incised design on int.; slip and glaze extending over rim	Avissar and Stern 2005:8, Type I.1.2, Fig. 2 ‘Akko: Stern 2012a: 44–47, Type BE.GL.7, Pl. 4.23
4	Sgraffito glazed bowl	127	1098/2	Red 10 R 4/6 fabric; white grits and inclusions; white slip under yellow glaze and incised design on int.; slip and glaze extending over rim	As No. 3
5	Sgraffito glazed bowl	126	1093/1	Red 10 R 5/6 fabric; beige slip under yellow glaze and incised design on int.; slip and glaze extending over rim	As No. 3
6	Sgraffito glazed bowl	126	1093/3	Light red 10R 6/6 fabric; white grits and inclusions; White slip on int. and ext.; yellow glaze on int. with thin incised design	Avissar and Stern 2005:42, Type I.4.3, Fig. 15:5–7 ‘Akko: Stern 2012a:65–69, GR.GL.4, Pl. 4.48:9–14
7	Sgraffito glazed bowl	126	1093/4	Red 2.5 YR 5/6 fabric; white slip on int. and ext.; yellow glaze on int. with thick incised design	Avissar and Stern 2005:43, 46, Types I.4.5, I.5.3, Figs. 16:1–2; 17:3, 4 ‘Akko: Stern 2012a:65–69, GR.GL.6, Pl. 4.49:1–9
8	Sgraffito glazed bowl	126	1096/1	Yellowish red 5 YR 5/6 fabric; white grits and inclusions; white slip on int. and ext.; yellow glaze on int. with thick incised design of human depiction	As No. 7, see also Athens: Frantz 1938:465, Fig. 30 Corinth: Morgan 1942:152–156, Pl. XLIX, Figs. 129–133 Papanikola-Bakirtzis 1999:176–179, Nos. 201–206 Vrea: Papanikola-Bakirtzis 1999:48, No. 34; Vroom 2011:410–411, Fig. 1

The bowls are quite shallow with a small or wide ledge rim and a low, wide ring base. The various decoration techniques include reserved slip (Fig. 4:1), slip-painted (Fig. 4:2) and sgraffito (Fig. 4:3–5). Chemical and petrographic analyses indicate that these glazed bowls, like the cooking wares, seem to have been produced in Beirut (Stern and Waksman 2003:170–171, 173–175, Fig. 5; Waksman et al. 2008:159–163, 178–180, Fig. 2:1–4; Shapiro 2012:107, 115).

*Imported Glazed Bowls.*— The imported glazed bowls are all subtypes of the well-known Byzantine Wares imported from Greece. These include one example of fine sgraffito ware (Fig. 4:6), and two examples of broad-incised sgraffito (Fig. 4:7, 8), also known as ‘Byzantine Incised Sgraffito Ware’ or ‘Aegean Wares’. One of the latter is uniquely decorated with an incised design of a warrior (Figs. 4:8; 5). All bowls are very shallow with a simple rim and a low ring base. They are white-slipped on the interior and a thinner layer on the exterior. Lead glaze covers the interior and occasionally extends over the rim. The fine sgraffito (Fig. 4:6) example has thin walls, while the two broad-incised sgraffito bowls (Fig. 4:7, 8) are quite crude, with thick walls and wheel ridges on the exterior.

Bowl No. 8, depicting a human figure, is a rare find in Israel; usually, simpler designs are found. In Greece, however, where such vessels were probably produced, depictions of human figures on broad-incised sgraffito bowls are common, and the warrior motif seems to be the most popular among them. Such warrior depictions were found in Athens (Frantz 1938:465, Fig. 30), Corinth (Morgan 1942:152–156, Pl. XLIX, Figs. 129–133; Papanikola-Bakirtzis 1999:176–179, Nos. 201–206) and Vrea, on the western coast of Chalkidhiki in Macedonia (Papanikola-Bakirtzis 1999:48, No. 34; Vroom 2011:410–411, Fig. 1). The bowl from Tiberias seems to be very similar to one of the bowls from Corinth (Fig. 6; Morgan 1942:153, Fig. 129; Papanikola-Bakirtzis 1999:179, No. 206) and to the one from Athens (Fig. 7). All three bowls are fragmentary, but by comparing them it is possible to reconstruct the design on the Tiberias bowl. The bowl from Vrea also assisted in its reconstruction. The Tiberias fragment (Fig. 5) exhibits a frontally standing warrior, advancing to the right. His head is missing, but can be reconstructed as facing front wearing a pointed cap, based on the bowls from Corinth and Athens. The warrior’s hair on the Corinth and Tiberias bowls is braided, ending with a tail on the left side of the head; on the Athens bowl, the hair is long and curly. The warrior is dressed in a tight, striped-sleeved upper garment, depicted by vertical lines (on the Athens bowl, by hatched lines). He wears a belt above a pleated skirt, possibly an attempt to depict chain mail. The legs are dressed in horizontally striped leggings, the shoes are long and pointed. The warrior seems to be girding a sheathed sword on the back of the belt, only visible on either side of his body. He carries a battle-axe (on the Athens bowl, a staff topped with a round object) in his right hand and an oval, pointed shield in his left. The background is decorated with floral scrolls. Vroom (2011:410–411, Fig. 1) described the warrior from Vrea as a “hybrid warrior”, and the ones found in Athens, Corinth and Tiberias fit this definition as well. The warriors are heavily armed, in accordance with the Byzantine style; however, the shoes, the mail leggings and the Norman-



Fig. 5. The warrior on the fragment from Tiberias (see Fig. 4:8).

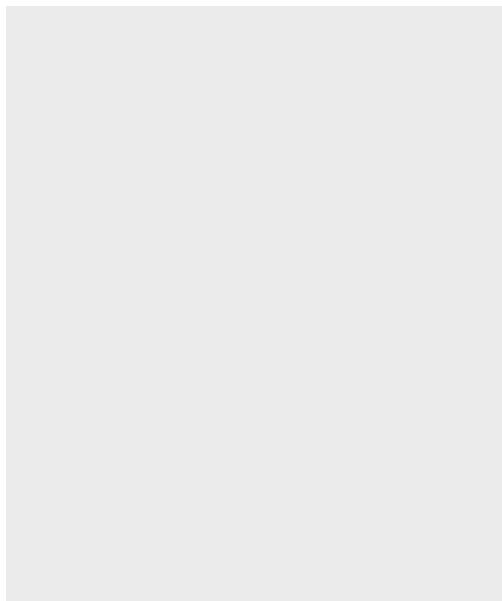


Fig. 6. A Byzantine incised sgraffito bowl from Corinth decorated with a warrior (Archaeological Museum of Ancient Corinth, Inv. No. C-1937-1449), courtesy of Ephorate of Antiquities of Corinth. © Hellenic Ministry of Culture and Sports/Archaeological Receipts Fund. Photography: I. Ioannidou, L. Bartzioti.

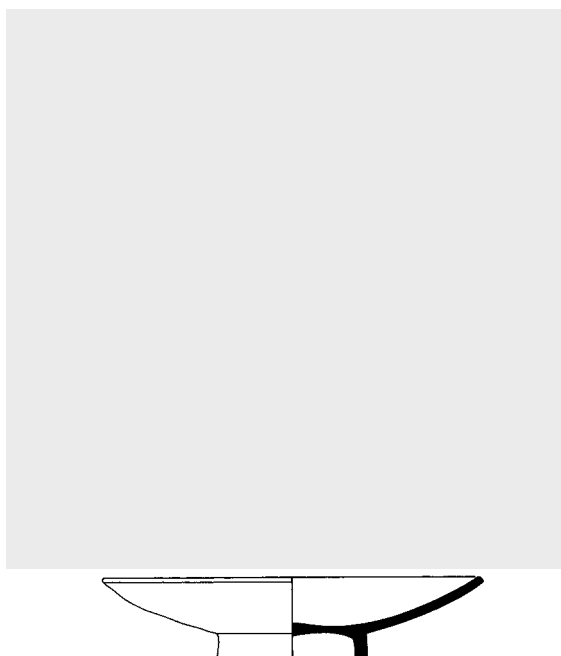


Fig. 7. A warrior depiction on the bowl from Vrea (Ouranoupolis, shipyard of the Prosphorion Tower, Inv. No. 1074), courtesy of Ephorate of Antiquities of Chalcidice and Mount Athos. ©Hellenic Ministry of Culture and Sports/Archaeological Receipts Fund. Photography: G. Fafalis.

type shield, exhibit a Western style. Vroom suggests that, rather than being a depiction of a Byzantine or Western (Crusader) soldier, this “cocktail of identities” may point to a process of acculturation in Greece following its conquest by the Crusaders in 1204 (Vroom 2011:410–411). It is interesting that such a bowl was imported to the Crusader Kingdom of Jerusalem; one wonders how the ‘hybrid warrior’ was interpreted and regarded by the people living in Crusader Jerusalem.

The bowls date to the end of the twelfth century CE and some, to the early thirteenth century CE; the Corinthian bowl was dated specifically from 1180 to 1210 (Papanikola-Bakirtzis 1999:179). They were produced in various production centers within the Byzantine Empire, and were widely distributed in the Eastern Mediterranean. Such bowls have been found in the cargo of shipwrecks in the Aegean Sea (Armstrong 1997:5–6). Results of chemical analyses have suggested that they were produced in the Aegean region (Waksman and von Wartburg 2006), and more recently, a production center in Chalcis (Greece) was identified (Waksman et al. 2014).

## INDUSTRIAL WARES

Ceramic objects utilized in sugar production and pottery production were found.

*Sugar Production Vessels.*— Two types of vessels, sugar molds and molasses jars were found. Sugar molds are conical vessels with a simple rounded rim (Fig. 8:1–3). Although no base fragment was preserved, it is usually rounded with a single hole. This type of vessel was made for one use only, the production of crystallized sugar from sugar cane. The liquid, extracted after the sugar cane was crushed, pressed and boiled, was transferred to these molds which were set upon molasses jars (see below). The liquid crystallized in these sugar molds, and the molasses drained into the jars. Finally, the sugar loaves that received the conical shape of the vessel were removed from the molds for marketing. Many molds broke during the removal of the crystallized sugar loaf; consequently, a large quantity of sugar-mold fragments may indicate a sugar-production site (Stern 2001).

Sugar molds can be dated based on typological features; the ones found at this excavation are from the Crusader period (Avisar and Stern 2005:86, Type II.1.3.1, Fig. 37:1–3), and their date can be narrowed to the twelfth and early thirteenth centuries CE (Stern et al. 2015). This date is reinforced by finds from previous excavations in Tiberias and its vicinity: at Gale Kinneret such vessels were found in association with twelfth-century CE pottery (personal observation); at the Hebrew University excavation in Tiberias, they were associated with pottery dated from the second half of the twelfth–early thirteenth centuries CE (Cytryn 2016:118–119, Fig. 9 and pers. comm.); at Migdal, they were unearthed with pottery dated from the end of the twelfth–early thirteenth centuries CE (Abu ‘Uqsa 2005: Fig.3:18); and at Khirbat al-Minya, similar sugar molds were also found (Cytryn 2016:122, Fig. 17). It seems therefore, that this type of sugar mold, with a simple, unfolded rim and thin walls, can be dated to the twelfth and early thirteenth centuries CE. Other sugar molds found in excavations at Mount Berenice were generally dated from the twelfth to the fourteenth century (Amir 2004b:165, Fig. 9.10:1).



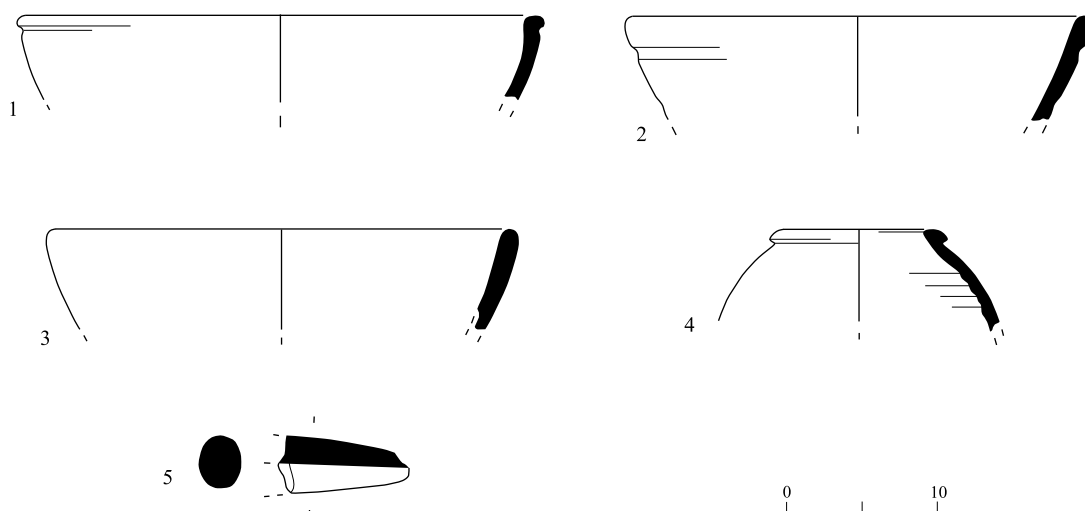


Fig. 8. Crusader pottery: industrial ware.

No.	Type	Locus	Basket	Description	Parallels
1	Sugar mold	126	1096/4	Light reddish brown 6/3 2.5 YR core; light red 6/6 fabric; many white grits and inclusions	Avissar and Stern 2005:86, Type II.1.3.1, Fig. 37:1–3 Mount Berenice: Amir 2004b:165, Fig. 9.10:1 Migdal: Abu ‘Uqsa 2005: Fig. 3:18 Yesud Ha-Ma‘ala: Biran and Shoham 1987:201–204, Figs. 4:3–6; 8:3, 4 Tel Qasile: Ayalon, Gilboa and Harpazi 1990:19–20, Fig. 16:1–3, 6,7 Umm al-Faraj: Damati 2011:152, Fig. 20:1–5; Getzov, Stern and Shapiro 2016: Fig. 7
2	Sugar mold	126	1095/1	Reddish gray 5/1 2.5 YR fabric; white grits and inclusions	As No. 1
3	Sugar mold	124	1091/1	Pinkish gray 6/2 7.5 YR fabric; white grits and inclusions	As No. 1
4	Molasses jar	126	1094/3	Reddish yellow 6/6 5 YR fabric; pink 8/4 7.5 YR surface; white grits	Mount Berenice: Amir 2004b:165, Fig. 9.10:2 Migdal: Abu ‘Uqsa 2005: Fig. 3:19, 20
5	Kiln bar	126	1093/2	Pink 7.5 YR 8/3 fabric; white grits and inclusions	Stern 1995:58, Fig. 1:6 Oren 1971 Khirbat el-Burj: Onn and Rapuano 1994 Ramla: Masarwa 2015: Fig. 7 Beirut: François et al. 2003:326–327, Fig. 2

Molasses jars (Fig. 8:4) are tall vessels with an outward-folded rim, a narrow opening and no handles. Similar jars have been discovered at Gale Kinneret (personal observation), in the Hebrew University excavation (Cytryn 2016:118–119, Fig. 9), on Mount Berenice and in Migdal.

*Kiln Bars.*— The kiln bars are pointed at one end and truncated at the other, and have a rounded section (Fig. 8:5). They were produced from local fabric, apparently by rolling between the hands. They were used in an updraft kiln to separate the vessels and support them. Similar kiln bars were found at several locations in Tiberias, mainly in the southern part of the city (Ḥammāt Tiberias), in a kiln associated with tenth- and eleventh-century CE pottery (Stern 1995:58, Fig. 1:6) and in other excavations in that area.<sup>7</sup> A glazed-pottery workshop dating to the tenth and eleventh centuries CE was previously unearthed at Gane Ḥammāt (Oren 1971), but no kiln was identified. This evidence, in addition to the petrographic analysis of jars from a Crusader-period context mentioned above, points to a long tradition of pottery production in Tiberias throughout the Abbasid, Fatimid and Crusader periods.

Kiln bars have also been found at other sites in the Southern Levant from the Early Islamic (e.g., Ramla), Crusader (e.g., Beirut) Ayyubid and Mamluk periods (e.g., Khirbat el-Burj in the Jerusalem area), evidence of a continuous firing tradition in this region.

In summary, the Crusader-period pottery unearthed at the Aviv Hotel dates exclusively from the mid-twelfth to the early thirteenth century CE (Stern 2009:228–229; 2012a:24–25, Table 3.1, ‘early assemblage’), and contains ceramic types recognized from previous excavations in Tiberias. No pottery dating to the mid–late thirteenth or fourteenth century CE was found, indicating that the last phase of occupation ended in the late twelfth or early thirteenth century CE, with a gap until the late Ottoman period.

## SHELL OBJECT

A pierced scallop shell (Fig. 9) that served as a pilgrim badge of Santiago de Compostella was found. This artifact was most probably brought by a pilgrim to the Holy Land during the period that Tiberias was in Frankish hands (Ktalav 2016).



Fig. 9. A Pilgrim badge in the shape of a pierced scallop shell.

<sup>7</sup> Yael Arnon, Gilad Cinnamon and Anna de Vincenz, pers. comm.

## DISCUSSION

The Abbasid-period assemblage, with the exception of the *zir*, consists of types well-known in Tiberias. Noteworthy is the inscribed glazed bowl (Fig. 1:14), which seems to be a local imitation of Coptic Glazed Ware. The presence of a ceramic waster in this context reinforces other evidence cited above of pottery production in Tiberias during this period.

The pottery from the Crusader period is of great interest for a number of reasons: (1) it seems to be dated to a short timespan; (2) it is one of the first well-dated pottery assemblages to be published from Tiberias and from a non-Mediterranean coastal site in general; (3) it was found in an area that seems to be outside the Crusader city walls; and (4) it was uncovered in association with sugar production.

As shown above, the pottery dates, at the latest, from the mid-twelfth to the early thirteenth century CE. Despite the small number of vessels, the assemblage is similar to others from the same period, mostly from the coastal area and two from the Jordan Valley: Tiberias (Stern 2013:186–187, Fig. 7; in prep. a) and Tel Bet She'an (Boas 2006). Among the Mediterranean coastal sites, the foremost is 'Akko (Stern 2012a:24–25, Table 3.1, 'early assemblage'), with some Frankish rural sites in its close vicinity: Ḥorbat 'Uẓa (Stern and Tatcher 2009:122–128), Kafr Yasif (Syon and Stern 2014) and Mi'ilya (Stern 2012b). Similar assemblages were identified in Yafo.<sup>8</sup>

In Mediterranean coastal sites, pottery imported by sea is to be expected; the presence of such pottery in Tiberias, however, is surprising. Among the vessels that arrived via the Mediterranean Sea are glazed bowls from the Aegean region, and possibly, cooking wares and glazed bowls from Beirut. These wares were brought to Tiberias by inland routes, possibly from the port of 'Akko, situated c. 50 km from Tiberias. Based upon the resemblance to other Crusader assemblages on the coastal plain ('Akko and its surrounding Frankish villages, and Yafo), it appears that this assemblage should be considered Frankish *per se*. Reinforcement of this argument is the unique find of the scallop shell pilgrim badge of Santiago de Compostella (Fig. 9). Furthermore, the historical data that Tiberias was in Crusader hands until 1187 (Pringle 1998:351–352) narrows the dating of the assemblage, from the mid-twelfth century to 1187, reflecting the Crusader presence at the site.

The fact that the pottery was found outside the city walls, in conjunction with plastered pools and sugar production vessels, apparently indicates an activity that could not be carried out within the city. However, it seems that sugar was not produced at the site, although it is the first activity that might come to mind. Sugar was probably not produced at Tiberias because some necessary requirements for sugar-cane cultivation were lacking (Galloway 1989; Stern 1999): (1) regular and sufficient water provision for irrigation and for operating the crushing mills; and (2) suitable fields for cultivation. While crushing mills could be operated

<sup>8</sup> Arbel 2009: Yafo, the Qishle (Permit No. A-5037, Burke and Stern, forthcoming); Re'em 2010: Yafo, the French Hospital (Permit Nos. A-5170, A-5522, Stern, in prep. b). I would like to thank Yoav Arbel and Amit Re'em for inviting me to study the pottery.

with animal power (for a description by al-Nuwari of the fourteenth century CE, see Deerr 1949:90–92), both water for irrigation and suitable fields are crucial; without them sugar could not be cultivated at Tiberias. Nonetheless, in addition to the archaeological presence of sugar pots in excavations in Tiberias, there is a historical source that provides evidence to the contrary. A Hospitaller document dated to 1182 mentions that the representatives of the Hospitaller order in Tiberias were required to provide sugar to the Hospital of Jerusalem (Pringle 1998:358; Bronstein 2005:53).

Five sites in the Sea of Galilee basin yielded sugar-production pottery and at some, also devices for sugar production were found: Migdal (Abu 'Uqsa 2005; Avshalom-Gorni and Stern 2016), Khirbat al-Mina (Grabar et al. 1960; Stern 1999:84–86; Cytryn 2016:119, 122, Figs. 17–20), Ṭaḥūnat Abu-Shusha, situated in Naḥal Zalmon (Idan Shaked, pers. comm.), al-Heshe (Stern 1999:83–84, Fig. 60:1, 2) and Dokat Kefar 'Aqba (Stern 1999:84, Fig. 60:3, 4). All these sites are situated in areas that are suitable for the cultivation of sugar cane, and it can be assumed with a high degree of certainty that they were closely connected to Tiberias. It is well-known that in ancient times the seas, lakes and rivers were a connecting, rather than a separating medium (Horden and Purcell 2000:133). As in the earlier periods, it is quite likely that during the Crusader period the main town on the shores of the Sea of Galilee was connected to its rural surroundings by small and medium-sized boats. It is possible that the sugar pots were produced in Tiberias and were distributed to the sugar plants by boats, and by the same means the final refined sugar was collected by the Hospitallers and from there sent to Jerusalem. This may be the reason for finding the sugar pottery in the present site, as well as at other spots in Tiberias. Its presence here could either indicate its proximity to the potters' workshop or to the warehouse from where it was put on boats and distributed to sugar production sites around the Sea of Galilee.

Finally, the association of sugar molds and molasses jars with a datable domestic pottery assemblage contributes to the typology and chronology of sugar production ceramics. Since the present assemblage could be dated to the short timespan of c. 1150–1187, it provides the most accurate dating for sugar molds from the early phase of the Crusader period (Stern 1999:139–140; Getzov, Stern and Shapiro 2016).<sup>9</sup>

The presence of kiln bars here indicates a nearby ceramic production, as they would not be found far away from the kilns. It is well-known that pottery workshops and kilns were usually situated outside the city walls due to pollution. However, it is not certain whether these kiln bars are a residual find from the Abbasid or Fatimid periods (and as such, date to the same time as those found to the south; Stern 1995; Fig. 1:6) or whether they date to the Crusader period.

<sup>9</sup> It is important to note that since the M.A. thesis was written in 1999, sugar molds dating to an earlier stage, the Fatimid period, were unearthed in an excavation at Kabri (Smithline 2004:5\*) and at Umm al-Faraj (Damati 2011: Fig. 22; Getzov, Stern and Shapiro 2016). They are typologically of a different type.

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