'Atiqot 74, 2013

A Thirteenth-Century BCE Site on the Southern Beach of Ashdod

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Introduction[1]

In 1994, while inspecting development work conducted at the southern beach of Ashdod (map ref. NIG 1638/6309, OIG 1138/1309), inspectors Eyal Tishler and Ilan Meir identified the remains of a site. An exploratory excavation was undertaken in the southern part of the site (Nadelman 1996; this volume). The site is located approximately 4 km west of Tel Ashdod and 1 km south of the Ashdod fortress and the Assyrian compound known as the "Stronghold of Yamani" (Kaplan 1969). It is situated on a low *kurkar* hill (13 m asl), about 50 m from the shoreline (Fig. 1). The estimated area of the site, excluding that of the cemetery to the north,[2] is about 4 dunams. Prior to the development work, the area was covered with sand dunes and dune-vegetation, which included grapevines from the vineyards and orchards that had been planted there before 1948.

The Excavation

Two areas were excavated (Fig. 1):[3] 12 squares were opened in the southern Area A, on the southern slope of the *kurkar* hill, where

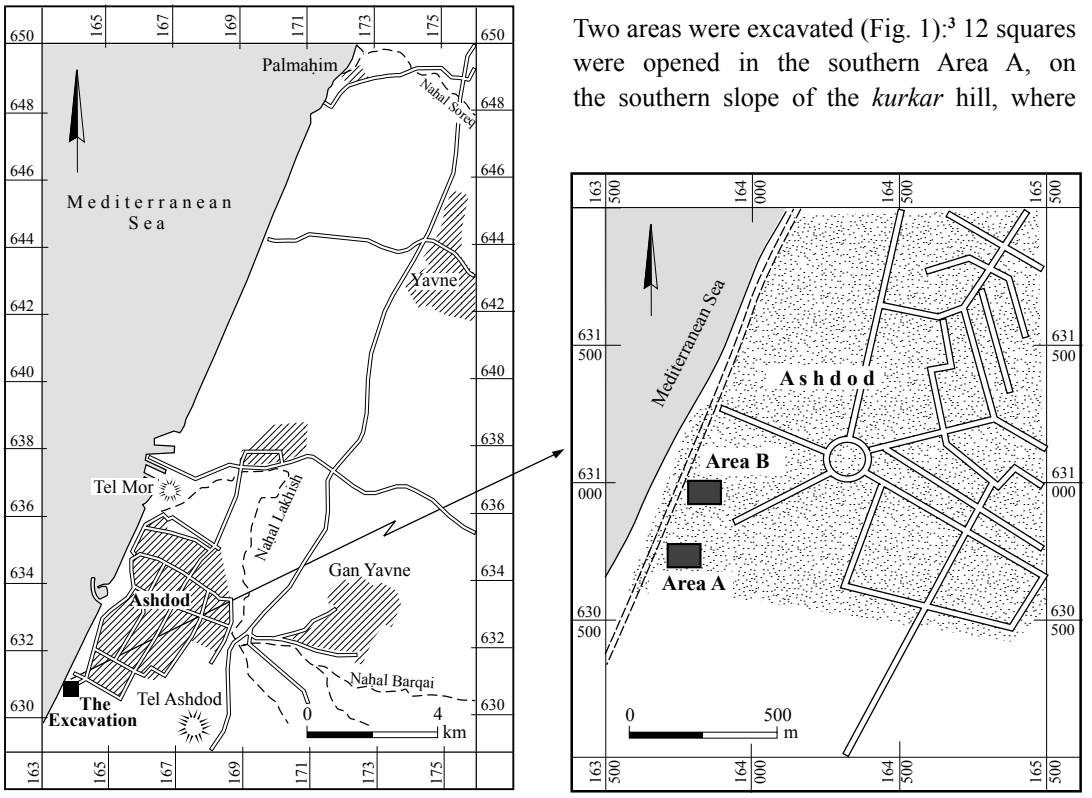


Fig. 1. Location maps of site and excavation areas.

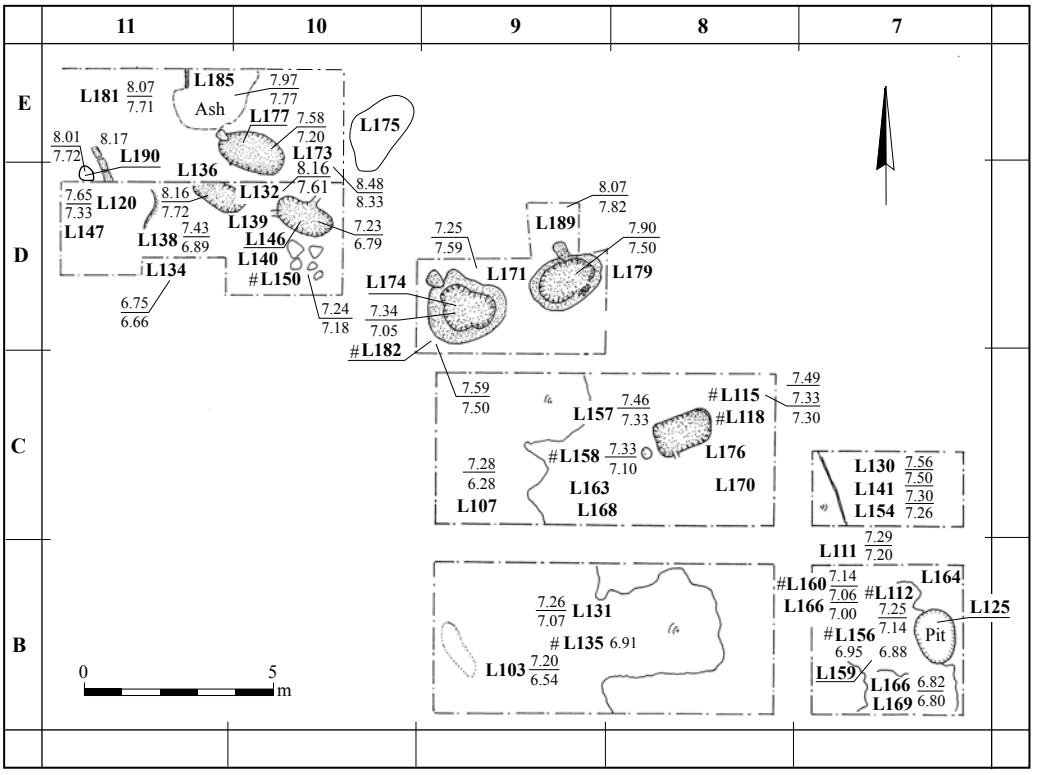
installations identified as winepresses, as well as occupation levels, were found; in the northern Area B, located on the eastern slope of a *kurkar* hill c. 50 m from the shore, a mud-brick complex was uncovered in 70 excavation squares. The northern, western and eastern edges of the site were damaged by erosion. A section of the site located to the south, between Areas A and B, was not excavated. One tomb (T1; see below) was discovered, and traces indicating the presence of other tombs were discerned, while overseeing the quarrying of sand north of the site.

In the building and in the vicinity of the winepresses, numerous pottery sherds were found of locally-produced vessels, as well as Cypriot, Mycenean and Egyptian imports. Other finds included metal fishhooks, needles for mending fishing nets, and stone and lead weights for the nets. Numerous pale green pebbles were scattered throughout the site, some of them incorporated into the installations. An analysis of a sample proved them to be from southern Cyprus (see Barzilay, below).

AREA A (Plans 1–4)

Seven rock-cut plastered basins were exposed on the southern slope of the *kurkar* hill in Area A (Fig. 2; Table 1). Only faint traces of construction were discovered, comprising a row of three mud bricks that represent the remains of the bottom course of a wall or installation. A solid mass of mud-brick material observed at the western edge of Area A was examined and found not to be *in situ,* having been displaced from higher up the slope during the development work (see below, Area B).

Six of the basins were complete (L136, L146, L170, L174, L177, L179), while the seventh (L147) was only partially preserved (see Plans 1–4). The basins were tub-shaped,



Plan 1. Area A.

Table 1. The Basins in Area A

No.	Locus	Square	Direction	Length (m)	Width (m)	Depth (m)	Gutter	Treading Surface
1	136	D10–11	Southeast–northwest	1.50	0.80	0.30	–	
2	146	D10	Southeast–northwest	1.50	1.00	0.45	2	
3	147	D11	Not preserved	–	–	–	–	
4	170	C8	Northeast–southwest	1.45	0.85	0.42	–	
5	174	D9	Southeast–northwest	1.85	1.30	0.30	1	
6	177	E10–11	Southeast–northwest	1.70	1.00	0.65	1	+
7	179	D9	Northeast–southwest	2.00	1.20	0.40	1	+

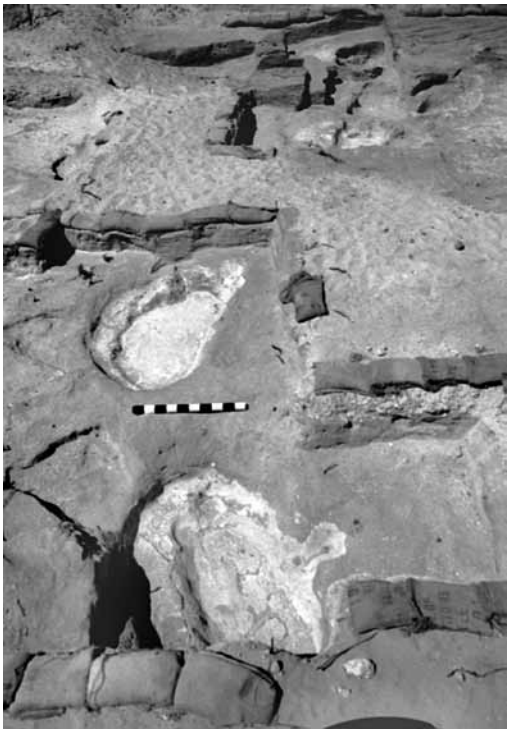
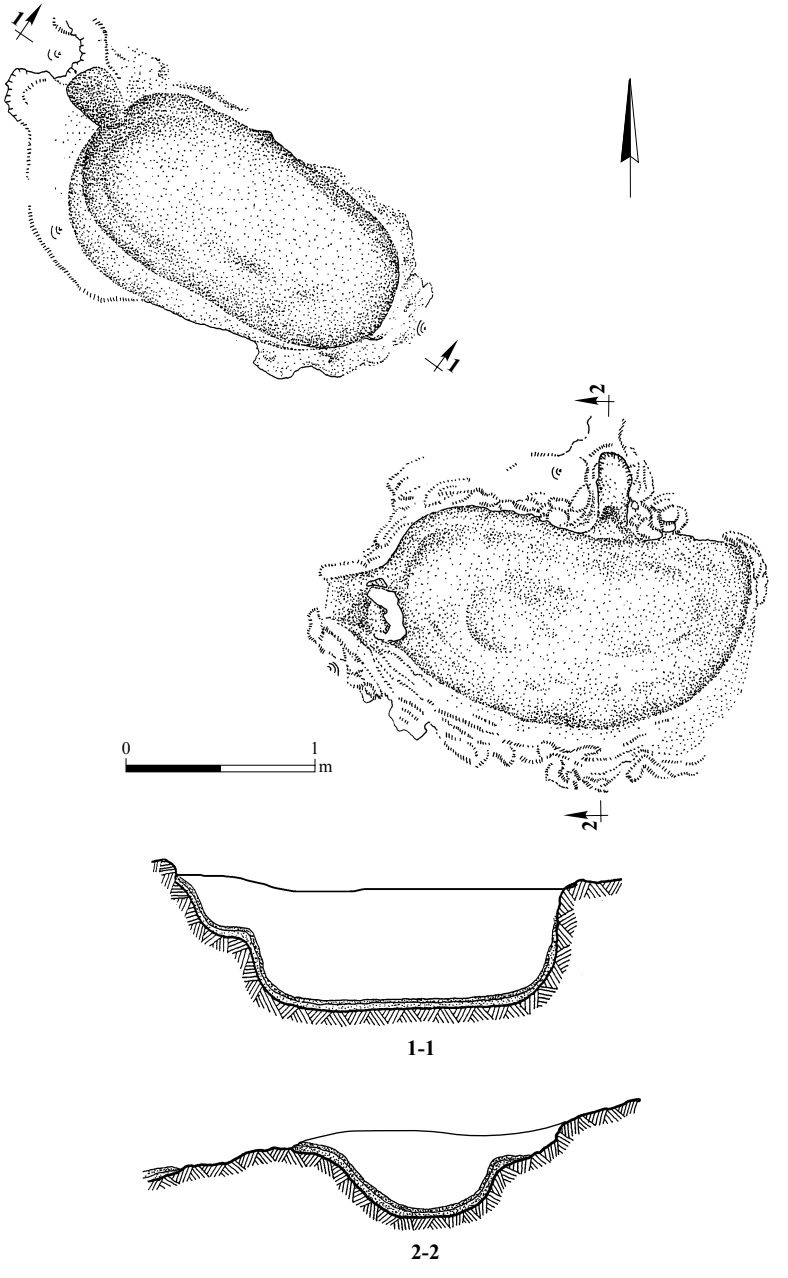


Fig. 2. Area A, looking west; at front, Basin 179, on right, Treading Surface 189.

hewn into the *kurkar* and, with the exception of L136 that was never completed, covered with white plaster containing shells. They measured 1.5–2.0 m long × 0.8–1.3 m wide, and ranged in depth from 0.3 to 0.6 m. These basins were probably used as winepresses. Leading to four of the complete ones (L146, 174, 177, 179; Plans 2 and 4; Figs. 2–4) were one or two plastered gutters cut into the *kurkar,* running north or northwest toward the top of the slope. The grape juice flowed through these gutters from treading surfaces that were installed further up the slope directly above the basins. Two of the surfaces were preserved (L185, L189; Sqs E10–11, D9; Plan 1, Figs. 2, 3, 5). These were made of tamped brick material, which was deposited onto a surface hewn in the *kurkar*. The fruit may have been trodden on an installation made of perishable material, possibly wood, which was placed over the brick material. These installations were probably shaded by mats stretched between wooden poles. Carbonized material found in a recess (L190) located very close to the northwestern edge of the basin in L147 (Sq D11), may well be the remains of a wooden pole. A row of three mud bricks nearby may signify the remains of some sort of treading surface.

A thick layer of refuse (L134, Sq D11; L161, Sq C9; L163, Sq C9), which consisted primarily of organic waste with pottery sherds and animal bones, accumulated throughout the entire area of the basins and particularly on the lower part of the slope. In L170, the refuse covered the basin itself. The principal plant component in the refuse layer was grape-seeds (see Melamed, this volume), supporting the identification of the basins as winepresses.

Only a limited area was excavated in the vicinity of the winepresses and most likely there were additional ones. Use of this industrial

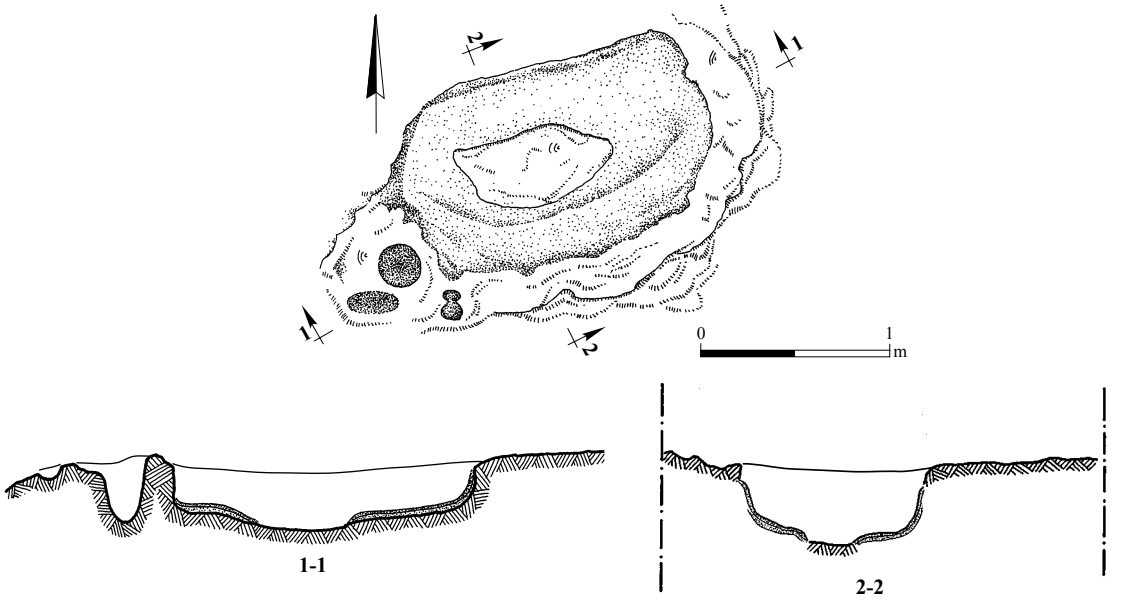


Plan 2. Area A: Basins 146 and 177, plan and sections.

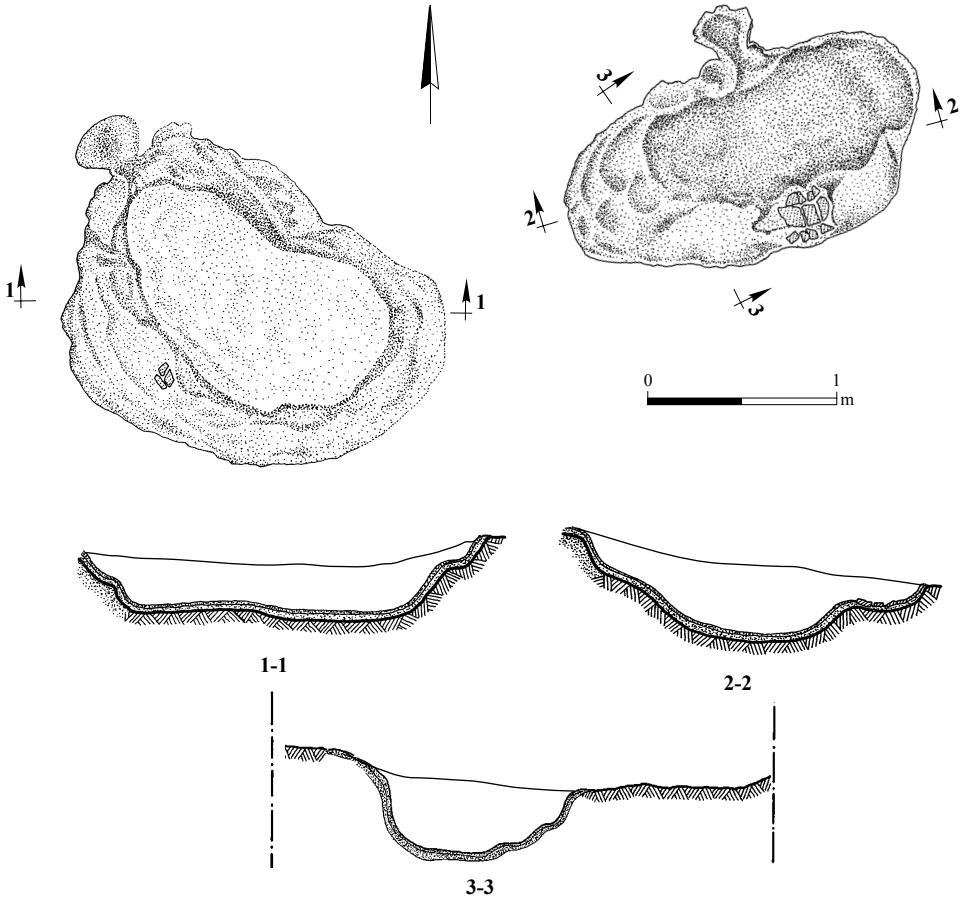
area continued for a number of years as can be concluded from the following:

1) The accumulation of refuse containing grape seeds (L161, L163) over the basin in L170, evidence that this basin went out of use, and new ones (L174, L179) were installed farther up the hill to replace it.

2) The refuse layer (L161, L163) was leveled and superposed by a tamped earth floor, to which two phases (L115 the earlier one, L118 the later; Sq C8) are attributed. Pottery vessels, bronze objects and a scarab from the reign of Ramses II (Fig. 40) were found on the floor (L115—Figs. 15:8, 9; 16:3–6, 9, 11, 12, 14,



Plan 3. Area A: Basin 170, plan and sections.



Plan 4. Area A: Basins 174 and 179, plan and sections.

Fig. 3. Area A, looking south: Basins 177, 146, 136; at front, Treading Floor 185.

Fig. 4. Area A, looking south: Basin 174.

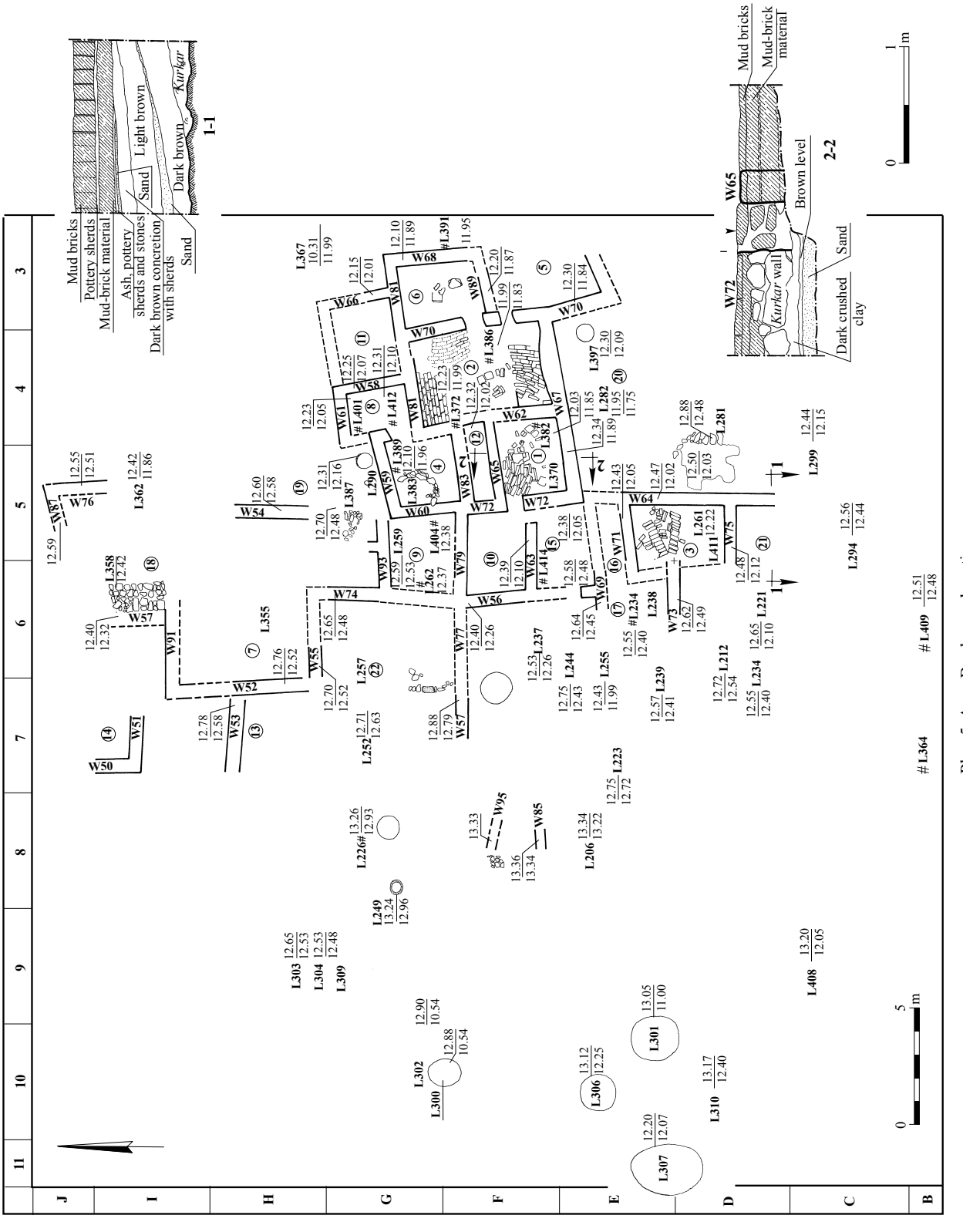
Fig. 5. Area A, looking north: Basin 177, with plastered gutter leading from Treading Floor 185 in the background.

16; 17:5; 29:5, 12; 30:4, 7; 31:1; 36:1; 40; L118—Figs. 15:15; 29:19; 30:11, 13). Another floor, paved with sherds (L139, L150/162; Sq D10), which was also laid atop a layer of refuse (L140, L143) was exposed around the basin in L146.

AREA B (Plan 5)

A building complex, preserved over an area of about 30 × 35 m, was uncovered in Area B (Fig. 6). The remains include rooms and internal courtyards, which were located on the gentle eastern slope of a *kurkar* hill, approximately 50 m from the shore. Six pits (L300, L301, L306, L307, L310, L408) were discovered farther up the *kurkar* hill, west of the buildings.

The walls of the building complex were all oriented east–west and north–south, attesting to the site having been planned. The walls were constructed of mud bricks set directly on the sand. In several places, stones of varying sizes were used to create level foundations. This method of construction is known from buildings at Deir el-Balaḥ (Brandl 2010:53) and Ḥaruvit (Oren 1980:28) in strata dating to the fourteenth–twelfth centuries BCE. During this period, southern Canaan was controlled by the Egyptians, and administrative buildings,



Plan 5. Area B, plan and sections.

Fig. 6. Area B, general view to the west.

palaces, and governors' residencies were constructed in Egyptian style and technique (Oren 1992:120).

The walls were preserved to a height of up to four courses, and mud-brick collapse was found in several rooms (Nos. 1, 2, 3; Sqs D–F/4–5; Figs. 7, 8). As a result of previous work with heavy mechanical equipment during a rainy period, it was impossible to identify the individual bricks of some of the walls, and only their general outlines were discernable. Since the walls are only one-brick thick, we assume that these were one-story buildings.

Prior to the beginning of the development work, a huge mud-brick mass was observed on the high part of the *kurkar* hill, about 30 m west of the buildings. This area was razed during the development work and the mud-brick material was found displaced at the western edge of Area A. The area east and north of the building was examined, but no wall remains were found.

The Units in the Building Complex (Plan 5)

Twenty-two units were identified. Thirteen of them seem to be rooms, whose walls were either located, or could be reconstructed according to the overall plan. The remaining units were courtyards or open spaces whose remains were more fragmented.

Three *ṭabun*s in Loci 249 (Sq G8), 290 (Sq G5) and 397 (Sq E4) probably denote the location of courtyards. The floors of the rooms were made of tamped clay laid upon a layer of sand. In Room 2, a raised area built of mud bricks set on edge was found. A surface paved with slabs of beachrock was uncovered in Room 18 (Sq I5–6). In the southeastern corner of the building (L261; Room 3), a surface of *kurkar* was placed atop a layer of natural *ḥamra*. The surface was raised by half a meter, and delimited on its eastern side by a row of large stones (L280). The function of this surface is unclear.

Fig. 7. Area B, mud-brick collapse in Room 1, looking northeast.

Fig. 8. Area B, mud-brick collapse in Room 3, looking southwest.

Room 1 (2.7 × 3.2 m; Sqs F4–5).— Located in the center of the complex, Room 1 (L370 = collapse; L382 = floor) is delimited by W62 (east), W65 (north), W67 (south) and W72 (west). An opening leading to Room 10 was found in W72. Wall 62 may have had another opening that led to Room 2. A cladding of large, flat beachrock slabs was revealed on the southern section of W72 (Fig. 9), possibly attesting to an official function of the room. Its

Fig. 9. Area B, Room 1, looking northwest.

floor was made of crushed clay that was applied to a leveled layer of sand (Plan 5: Section 2–2). The finds in the room included jars (Figs. 20:6; 33:7), a Cypriot jug (Fig. 32:15) and a bronze point (Fig. 36:10).

Room 2 (3.5 × 5.7 m; Sq F4).— Room 2 (L372 = floor) is east of Room 1 and is delimited by W62 (west), W67 (south), W70 (east) and W81 (north). Two openings in W70 led to Rooms 6 and 5. In the northwestern corner of the room was a massive surface built of bricks laid lengthwise on their side. Our examination showed that it was constructed above a leveled layer of sand. Most of the room was covered with mud-brick collapse. Only a fishhook (Fig. 36:8) was found in the room.

Room 3 (est. 2.5 × 4.0 m; Sqs D–E5).— This room (L411= floor) is in the southern part of the complex, delimited by W64 (east), W71 (north) and W75 (south). No closing wall was located in the west. Mud-brick collapse was also found in this room. The finds in the room included bowls (Fig. 17:10, 12, 14, 15), a cooking pot (Fig. 19:3) and a lamp (Fig. 21:8).

Room 4 (2.5 × 3.0 m; Sqs F–G5).— This room (L389 = floor) is delimited by W59 (north), W60 (west) and W83 (south). No wall was clearly discerned in the east; the massive mud-brick surface in the northwestern corner of Room 2 probably delineated the room on this side. A rounded installation, built of one course of large fieldstones and filled with tamped clay, was found in the northwestern corner of the room (L383; Fig. 10). There was probably some kind of platform here. The finds in the room included, among other things, magnificent vessels, such as a decorated krater, a decorated jug and piriform amphoriskos (Fig. 22:1–3), bowls (Fig. 17:2, 6, 8), kraters (Fig. 18:2, 7, 14), jars (Fig. 20:2–4, 7), a lamp (Fig. 21:7), a Cypriot milk bowl (Fig. 32:3), an Egyptian bowl (Fig. 33:1), a decorated limestone weight (Fig. 37:5) and a copper needle for mending fishing nets (Fig. 36:15). An opening in the east led to Room 8. A *maẓẓeva* (stela), with carved 'hips' that render it a schematic anthropomorphic shape, was discovered in the opening (Fig. 39). Remains of red paint were found on the *maẓẓeva*.

Room 5 (4.5 m wide; Sqs E–F3).— The designation of this space as a room is uncertain; it is partially delimited by W70 (west) and W89 (north), and a line that appears to be the remains of a wall foundation in the south. No closing wall was located in the east. An opening in W70 leads to Room 2.

Fig. 10. Area B, Room 1, W72 with beachrock cladding the rounded installation, looking west.

Fig. 11. Area B, Room 8, looking northwest.

Room 6 (2.7 × 3.2 m; Sqs F–G3).— The room is located north of Room 5, and is delimited by W68 (east), W70 (west), W81 (north) and W89 (south). There is an opening in W70 leading to Room 2.

Courtyard(?) 7 (Sq H6).— This is an undefined space (L355 = surface level) that may be a courtyard between W52 (west), W54 (east), W55 (south) and W91 (north).

Room 8 (1.8 × 2.5 m; Sq G4).— This small room (L401 = floor; Fig. 11) is delimited by W58 (east), W61 (north) and W81 (south). In the west, no obvious wall was observed, except for a short section next to the opening to Room 4 (L412 = the floor of the opening). There was probably another opening to Courtyard 19, where a *ṭabun* (L290) was found. The finds included a stone anvil in the middle of the room, surrounded by numerous remains of

ocher, two piles of stone weights—apparently the remains of fishing nets placed near the walls (Fig. 38), bowls (Fig. 17:3, 4, 13), a krater (Fig. 18:8), Mycenaean kraters (Fig. 32:12, 16) jugs and juglets (Fig. 21:3–5), jars (Fig. 20:5, 9) and stoppers (Fig. 37:1, 2).

Room 9 (2.7 × 3.0 m; Sqs F–G/5–6).— The room (L259 = collapse; L262 and L404 = floor) is located west of Room 4 and is delimited by W60 (east), W74 (west), W79 (south) and W93 (north). The finds in the room included a bowl (Fig. 17:1), imported jars (Fig. 33:3, 8) and an Egyptian bowl (Fig. 33:2).

Room 10 (2.5 × 3.4 m; Sqs F5–6).— This room is adjacent to Room 9 and is delimited by W56 (west), W63 (south), W72 (east) and W79 (north). An opening in W72 connects Room 10 with Room 1.

Room 11 (2.5 × 3.3; Sq G4).— Located east of Room 8, Room 11 is delimited by W58 (west), W61 (north), W66 (east) and W81 (south).

Room 12 (1.0 × 3.2 m; Sq F5).— This is a narrow room, located between Rooms 1 and 4. It is delimited by W65 (south), W72 (west) and W83 (north); in the east, no closing wall was defined with certainty.

Room 13 (Sq H7).— This is an undefined space, located in the northwestern part of the complex. It is only delimited by W52 (east) and W53 (north). The rest of the walls did not survive.

Room 14 (Sq I7).— This is an undefined space, located between W50 (west) and W51 (south). Preservation in this area is very poor.

Room 15 (2.5 × 3.5 m; Sqs E–F/5–6).— The room (L414 = floor) is located south of Room 10, and is delimited by W56 (reconstructed in the west), W63 (north) and W72 (east). Its southern wall was probably W69, of which very little is preserved. This would allow the reconstruction of another narrow storeroom (Room 16, see below) to the south. The entrance to Room 15 is through an opening in W56, to the west. An opening in W63 led to Room 10. The finds in the room consisted of one bowl (Fig. 17:16).

Room 16 (width c. 1 m; Sqs E5–6).— This room is located south of Room 15, and is similar to Room 12; its length was not ascertained. Wall 71 (south) is the sole wall that survived, together with a small, half-meter-long section of W69 on the north. The reconstruction was based on Room 12. Only a small, half-meter-long section of W69 on the north survived and its reconstruction was based on Room 12.

Room 17 (Sq E6).— The room (L234 = floor) is delimited by W69 (north) and by a few segments preserved of W73 (south). A jar (L238; Fig. 20:8) filled with organic matter containing an abundance of raisins and grape seeds was discovered near W73.

Room 18 (1.2 × 2.4 m; Sq I6).— A surface paved with beachrock slabs (L358) in the northern part of the complex. Room 18 is delimited by the stumps of W57 (west) and W91 (south), both preserved to a height of only 1–3 cm. Fishhooks (Fig. 36:7) were found on the surface.

Courtyard 19 (Sq H5).— The boundaries of this courtyard (L387 = occupation level) which is located north of Rooms 4, 8 and 9, are unclear, due to poor preservation. A *ṭabun* (L290) was found in the courtyard, and among the finds there are kraters (Fig. 18:6, 10) and a bronze point (Fig. 36:9).

Courtyard 20 (Sq E4).— The courtyard (L282 = occupation level) is located south of Rooms 1 and 2. A *ṭabun* (L397) was exposed in it.

Room 21 (Sqs D5–6).— At the southern boundary of Area B, south of Room 3, Room 21 is delimited by W64 (east) and W75 (north). The other walls were not preserved, although in the

southern section of the square a row of bricks set on their narrow side (see section) is visible.

Room 22 (Sqs 6–7).— This is an open space south of Courtyard(?) 7 (L257 = surface level) that is delimited by segments of W55 (north), W74 (east) and W77 (south). No clear wall remains were discovered to the west. A Cypriot pithos was found in this room (Fig. 34:2).

Evidence of a small fire (L252) containing remains of raisins and grapevines was discovered west of Room 22 (see Melamed, this volume).

Patches of occupation levels that do not abut any walls were identified south of the buildings (L364, L409).

Pits.— Six pits (Loci 300, 301, 306, 307, 310, 408) were hewn into the natural *kurkar*. Their diameter ranges from 1.3 to 3.0 m and their depth, from 0.77 to 2.34 m. There were meager finds in most of them. In the pits, a low and constant temperature could be maintained. Therefore, they were probably part of the wine industry, and served as a kind of 'wine cellar' for storing the jars of wine during the stage of slow fermentation. Refuse was eventually discarded into the pits, once they were no longer in use.

TOMB 1

A damaged pit grave hewn in the *kurkar* was discovered in the course of sand quarrying c. 100 m north of Area B. In the grave were the remains of one adult individual (see Nagar, below) who was interred with funerary offerings that included a jar, plain bowls, a Cypriot BR II bowl and jug, and a Cypriot White Shaved juglet (Fig. 35).

The Anthropological Remains from Tomb 1
Yossi Nagar

The remains in Tomb 1 included a fragmentary skull-vault, two teeth and postcranial bones in a poor state of preservation. The teeth show advanced attrition: the upper central incisor shows dentine cup, the upper premolar shows dentine cup in both cusps. The age estimate, based upon tooth attrition rate, is 30–50 years (Hillson 1993:189–201). Estimate of sex was not possible.

THE FINDS

THE POTTERY

The pottery vessels at the site (Areas A and B, and Tomb 1) include both locally produced and imported vessels. The locally produced vessels constitute 84% of the pottery assemblage, the imported pottery—16% (Fig. 12).

A comparison of the types of vessels in Areas A and B shows considerable differences between the two areas (Fig. 13; Table 2).[4] In Area B, where the building is located, the high percentage of bowls (45.66%) is conspicuous

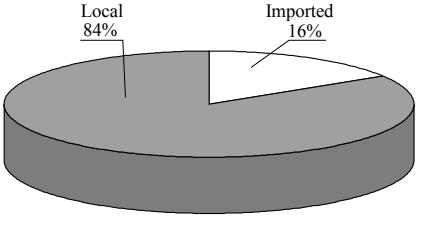


Fig. 12. Proportions of local and imported pottery at the site.

Table 2. Breakdown of Pottery Vessels at the Site according to Type

Type	%
Bowls	38.93
Kraters	18.84
Cooking pots	2.04
Storage jars	17.05
Jugs	17.47
Juglets	3.61
Flasks	0.88
Lamps	0.51
Flower pots	0.07
Stirrup jars	0.59
Total	*100.00*

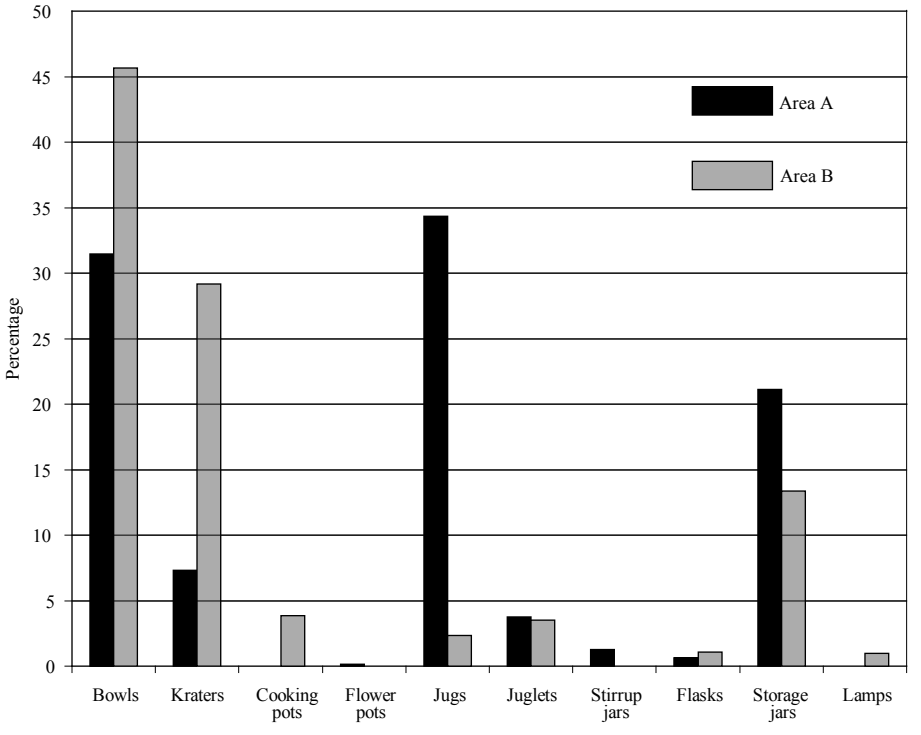


Fig. 13. Breakdown of the pottery vessels in Areas A and B according to type.

in comparison with Area A (31.45%). The difference is especially striking in regards to the kraters which constitute 29.18% of the vessels in Area B as opposed to 7.33% in Area A. The percentage of jugs (34.32%) in Area A is extremely high compared with that of Area B (2.33%). The percentage of jars is also higher in Area A (21.12%) than in Area B (13.39 %). Cooking pots and lamps were only found in Area B, whereas stirrup jars were found only in Area A.

In the discussion of the individual types below, references to the ceramic figures for each type will begin with Area A, followed by Area B, and finally Tomb 1, where applicable.

Locally Produced Vessels (Fig. 14)

Bowls.— The bowls constitute 40.69 % of the assemblage of local vessels. The following types of bowls are the most common:

Type A1: Plain bowls with straight or slightly concave walls, and a disc or ring base (Figs. 15:1, 2, 4; 17:3–8; 35:1). Similar bowls were found in Fosse Temples II and III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pls. 37B:10–31; 38B:48, 51); in Stratum 1 of Area B at Ashdod (Dothan and Freedman 1967: Fig. 22:3); and in Strata V and VI at Tel Ẓippor (Yannai 2000: Figs. 3:1–3, 11; 4:1, 2, 7, 8).

Type A2: Bowls with straight or slightly curved walls and a folded rim (inverted or everted, Figs. 15:3; 17:9). Similar bowls were found in Fosse Temple II at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 38B:43) and in Stratum sub XII at Gezer, where they date to the later part of the thirteenth century BCE (Gitin 1990: Pl. 1:20).

Type B1: Bowls with concave or slightly carinated walls and a flared rim (flared bowls, Figs. 15:5–10, 12, 13; 17:2, 10–19; 35:3). On some of the bowls a red-painted stripe-

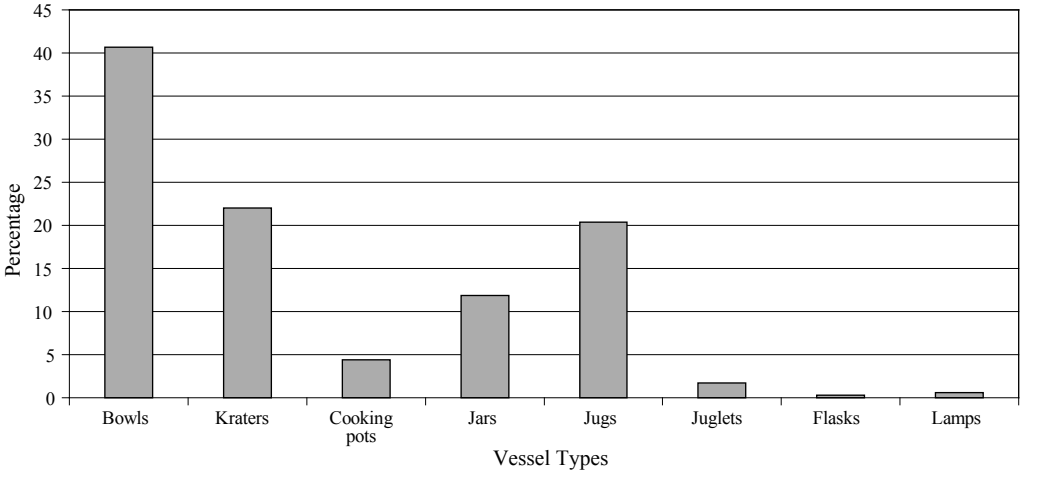


Fig. 14. Breakdown of locally produced pottery according to type.

decoration survived, and in one instance, red slip was preserved on the inside of the bowl (Fig. 17:15). These bowls are very common in the Late Bronze Age in Fosse Temples II and III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pls. 40B:78–89; 41B:109, 111, 112, 123–125); in Stratum 1 of Area B at Ashdod (Dothan and Freedman 1967: Fig. 22:2, 5, 7); in Stratum sub XII at Gezer, from the later part of the thirteenth century BCE (Gitin 1990: Pl. 1:12, 14); and in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 3:1, 3, 4). Bowls with a flared, S-shaped rim were found in Strata VI–IV at Tel Ẓippor (Yannai 2000: Figs. 2:10–13; 3:12; 4:15, 16).

Type B2: Bowls with slightly concave walls and a thickened rim (Figs. 15:11; 17:1, 13). Similar bowls were found in Fosse Temples II and III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 38B:44, 53); in Stratum VI at Tel Ẓippor (Yannai 2000: Fig. 4:4); in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 3:2); and at 'Akko (Ben-Arieh and Edelstein 1977: Fig. 8:1).

Kraters.— Kraters constitute 21.98% of the total local vessels at the site (Fig. 14). The most common are those with a gentle carination (Figs. 15:16, 20; 18:13; 19:1); the upper part of the wall may be everted (Figs. 15:15–18; 18:2, 3, 5, 6, 8, 9, 13, 14), upright (Fig. 18:4, 10) or inverted (Figs. 15:18, 20–22; 18:7, 11, 12; 19:1). The rims of the kraters are either inverted (Fig. 18:2, 3, 5, 6, 14) or everted (Figs. 15:15, 17, 18; 18:7–9, 11, 12).

Similar kraters were found, among other places, in Stratum XV of Area G at Ashdod (Dothan and Porath 1993: Fig. 10:6), in Strata V and VI at Tel Ẓippor (Yannai 2000: Figs. 3:15, 16; 4:18, 19), in Fosse Temples II and III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 39B:64, 65) and in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 3:6).

Kraters with thickened and shaped rims are also common in the assemblage (Figs. 15:19, 21; 18:11, 14; 19:1). Similar kraters were found at the site of Gerar 5 (Gazit and Gophna 1993: Fig. 2:1, 2). Axe-shaped rims are less frequent (Fig. 15:20, 21).

Among the plain kraters only one has handles (Fig. 19:1). Judging by other assemblages, however—e.g., Fosse Temples II and III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pls. 39B:70; 43B:159, 162, 163), Stratum V at Tel Ẓippor (Yannai 2000: Fig. 3:16) and at the site of Gerar 5 from the thirteenth century BCE (Gazit and Gophna 1993: Fig. 2:8, 9)—it may

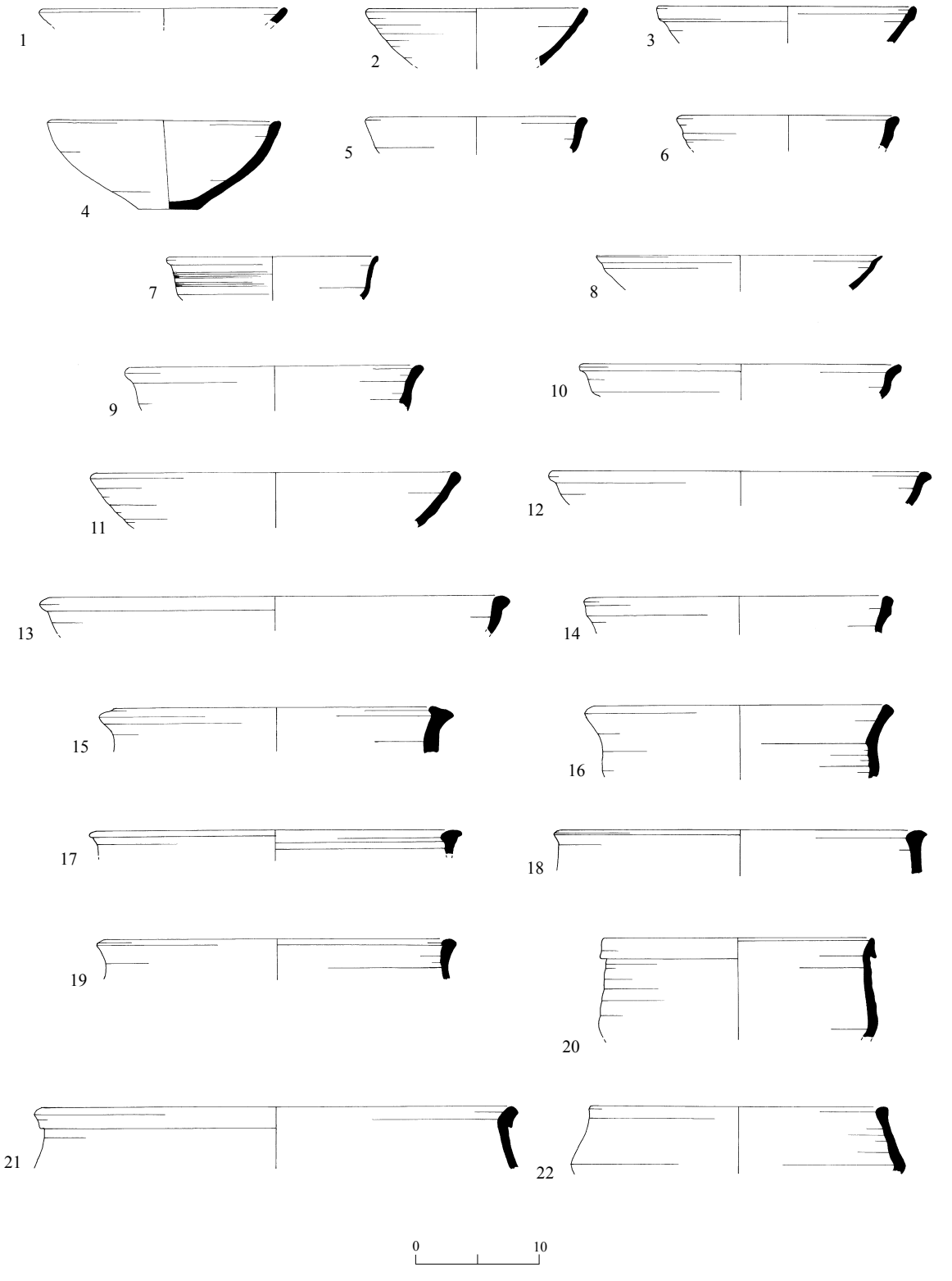


Fig. 15. Locally produced bowls and kraters from Area A.

◂ **Fig. 15**

No.	Vessel	Reg. No.	Locus	Findspot	Description
1	Bowl	1124/1	175	Treading surface?	Orange–brown clay, black core
2	Bowl	1112/1	163	Fill	Orange clay, black grits, black core
3	Bowl	1064/1	140	Fill	Orange clay, white grits, gray core
4	Bowl	1121/1	173	Fill	Orange clay, brown core
5	Bowl	1120/2	173	Fill	Orange clay
6	Bowl	1084/8	156	Floor	Orange–brown clay, black and gray grits
7	Bowl	1102/4	163	Fill	Brown clay, white and black grits, black core
8	Bowl	1031/2	115	Occupation level	Yellowish brown clay
9	Bowl	1031/3	115	Occupation level	Orange–brown clay, white grits, gray core
10	Bowl	1084/5	156	Floor	Orange clay, black and white grits
11	Bowl	1084/3	156	Floor	Orange–brown clay, white and black grits, greenish core
12	Bowl	1084/4	156	Floor	Orange–brown clay, few black and white grits
13	Bowl	1028/2	118	Occupation level	Orange clay, gray grits
14	Krater	1112/3	163	Fill	Brown clay, gray grits, black core
15	Krater	1028/3	118	Occupation level	Yellowish brown clay, black and white grits
16	Krater	1053/2	135	Occupation level	Orange–brown clay, white and gray grits, gray core
17	Krater	1129/1	183	Occupation level	Orange–brown clay, white grits, greenish core
18	Krater	1053/3	135	Fill	Pinkish brown clay, gray grits
19	Krater	1084/6	156	Floor	Orange–brown clay, white and gray grits, greenish core
20	Krater	1013/2	103	Surface level	Orange clay, gray, white and black grits
21	Krater	1102/2	163	Fill	Orange–brown clay, gray and white grits, black core, worn white slip
22	Krater	1084/7	156	Floor	Orange–brown clay, black and white grits, gray core

be assumed that some of the other kraters also had handles.

The kraters apparently had ring bases (Fig. 19:1) or raised discs similar to those of some bowls (Fig. 17:3, 17).

Cooking Pots.— Cooking pots were only found in Area B (Fig. 19:2–5). Cooking pots constitute 4.43% of the local vessels (Fig. 14). They have a wide mouth and a squat body, frequently with a slight carination. The rim is thickened (Fig. 19:4) or folded (Fig. 19:2, 3, 5), upright or everted. Cooking pots with thickened rims are very common in sites of the period throughout the country. Such cooking pots were found, among other places, at Ḥaẓor (Yadin et al. 1958: Pl. 107:6, 8) and at Tel Mikhal (Negbi 1989: Fig. 5.6). Cooking pots of this type and cooking pots with folded, broad rims were found at Ashdod (Dothan and Freedman 1967: Figs. 19:4, 5; 22:10, 11; Dothan and Porath 1993: Fig. 11:21, 22); in Strata VI, VIII–IX at Tel Ẓippor (Yannai 2000: Figs. 5:7; 6:7); in Fosse Temples II and III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 56B:366–370); and in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 3:5). Evidently, cooking pots with broad, folded rims are characteristic of the coastal plain and the southern Shephelah and are uncommon in the north.

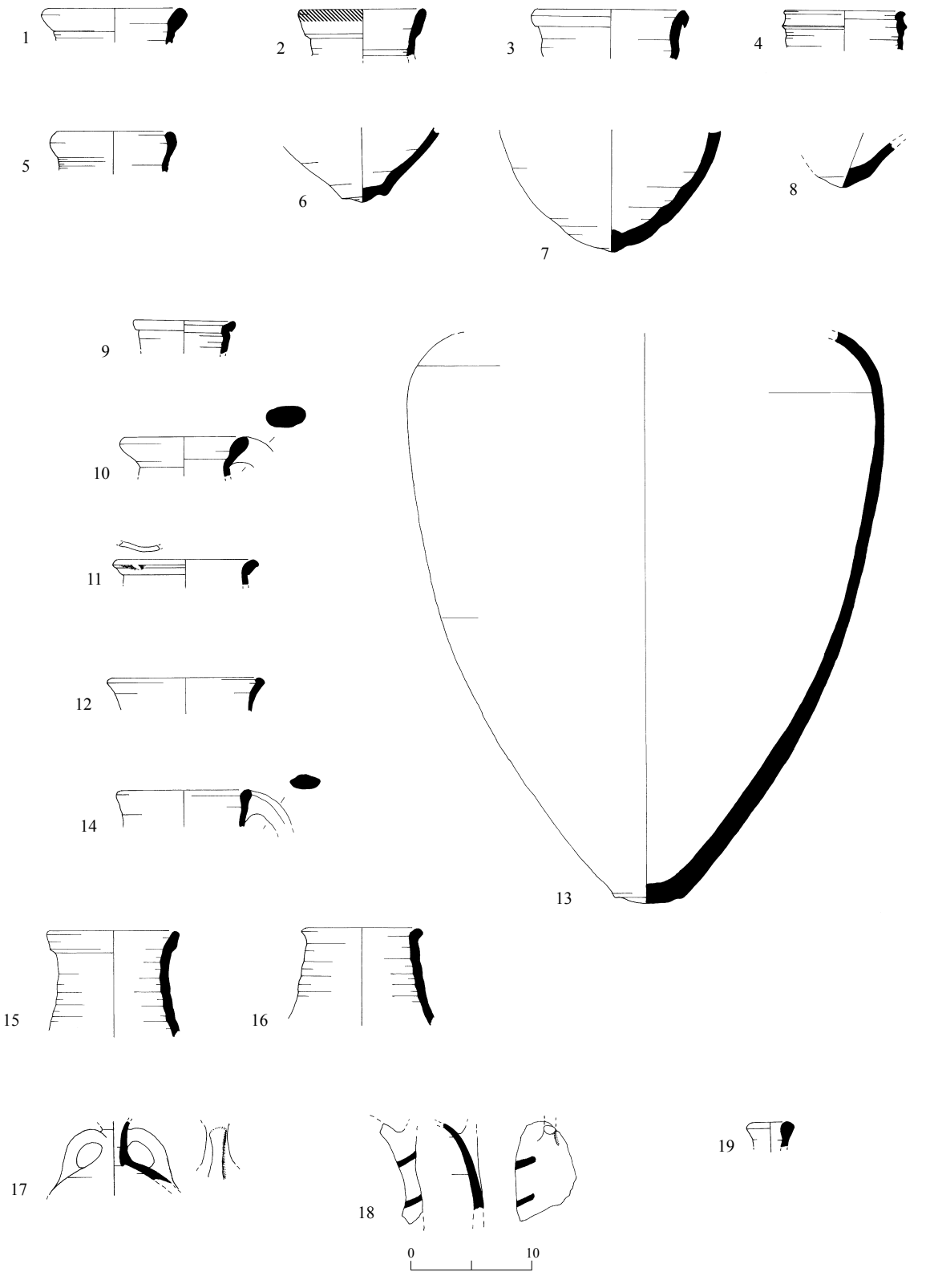


Fig. 16. Closed vessels from Area A.

◂ Fig. 16

No.	Vessel	Reg. No.	Locus	Findspot	Description
1	Jar	1098/2	163	Fill	Brown clay, black and white grits, gray core
2	Jar	1104/1	165	Fill	Brown clay, black and gray grits, greenish gray core
3	Jar	1031/7	115	Occupation level	Yellowish brown clay, white and gray grits, gray core
4	Jar	1025/4	115	Occupation level	Yellowish brown clay, black and white grits
5	Jar	1025/6	115	Occupation level	Orange–brown clay, white and gray grits, greenish core
6	Jug	1025/8	115	Occupation level	Orange–brown clay, black and white grits
7	Jar	1013/1	103	Surface level	Brown clay, white and gray grits, gray core
8	Jar	1098/1	163	Fill	Brown clay, gray grits
9	Jug	1031/8	115	Occupation level	Brown clay, black grits
10	Jug	1084/9	156	Floor	Pinkish clay
11	Jug	1031/9	115	Occupation level	Brown clay, white grits, gray core
12	Jug	1025/7	115	Occupation level	Orange–brown clay, black and white grits
13	Jar	1063/1	139	Occupation level	Reddish brown clay, white and gray grits
14	Jug	1031/4	115	Occupation level	Brown clay, white and gray grits, greenish core
15	Jar	1112/2	163	Fill	Orange–brown clay, black, white and gray grits, gray core
16	Jar	1038/3	115	Occupation level	Brown clay, white grits, gray core
17	Flask	1114/4	169	Fill	Yellowish clay, black grits, gray core
18	Flask	1062/2	141	Fill	Yellowish brown clay, large gray and black grits, dark brown decoration
19	Flask	1086/5	158	Occupation level	Yellowish orange clay, small white and gray grits

Fig. 17 ▸

No.	Reg. No.	Locus	Findspot	Description
1	2125/2	262	Room 9	Orange clay
2	389/3	389	Room 4	Orange–brown clay, white grits
3	2426/2	401	Room 8	Pinkish orange clay, black and white grits
4	2420/2	401	Room 8	Pinkish orange clay, white grits
5	2016/1	206	Surface level	Orange–brown clay, white grits
6	389/15	389	Room 4	Orange clay, white grits
7	2318/2	301	Pit	Orange clay, white and black grits
8	389/16	389	Room 4	Light pink–brown clay, black grits
9	2317/1	307	Pit	Orange clay, small white grits, gray core
10	2416/5	411	Room 3	Orange clay
11	2309/1	303	Surface level	Pinkish brown clay, white grits
12	2416/2	411	Room 3	Orange–brown clay, white grits, gray core
13	2413/2	401	Room 8	Light brown clay, white grits
14	2403/2	411	Room 3	Orange clay, black and whit grits, gray core
15	2416/4	411	Room 3	Gray–brown clay
16	2405/1	414	Room 15	Reddish brown clay
17	2318/3	301	Pit	Pinkish brown clay, black and white grits
18	2318/1	301	Pit	Orange–brown clay, white grits, gray core
19	2287/1	409	Occupation level	Orange clay, gray grits

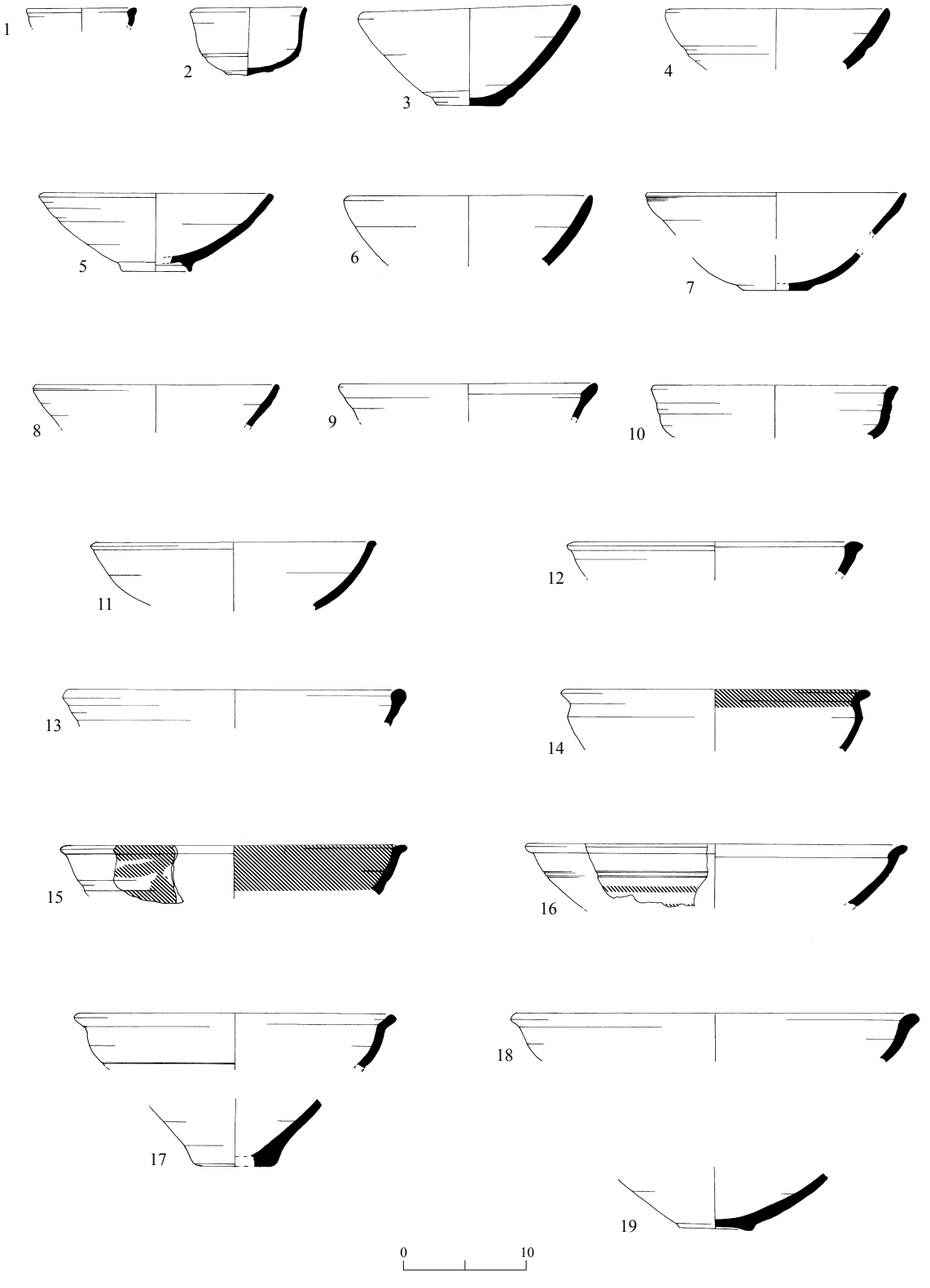


Fig. 17. Locally produced bowls from Area B.

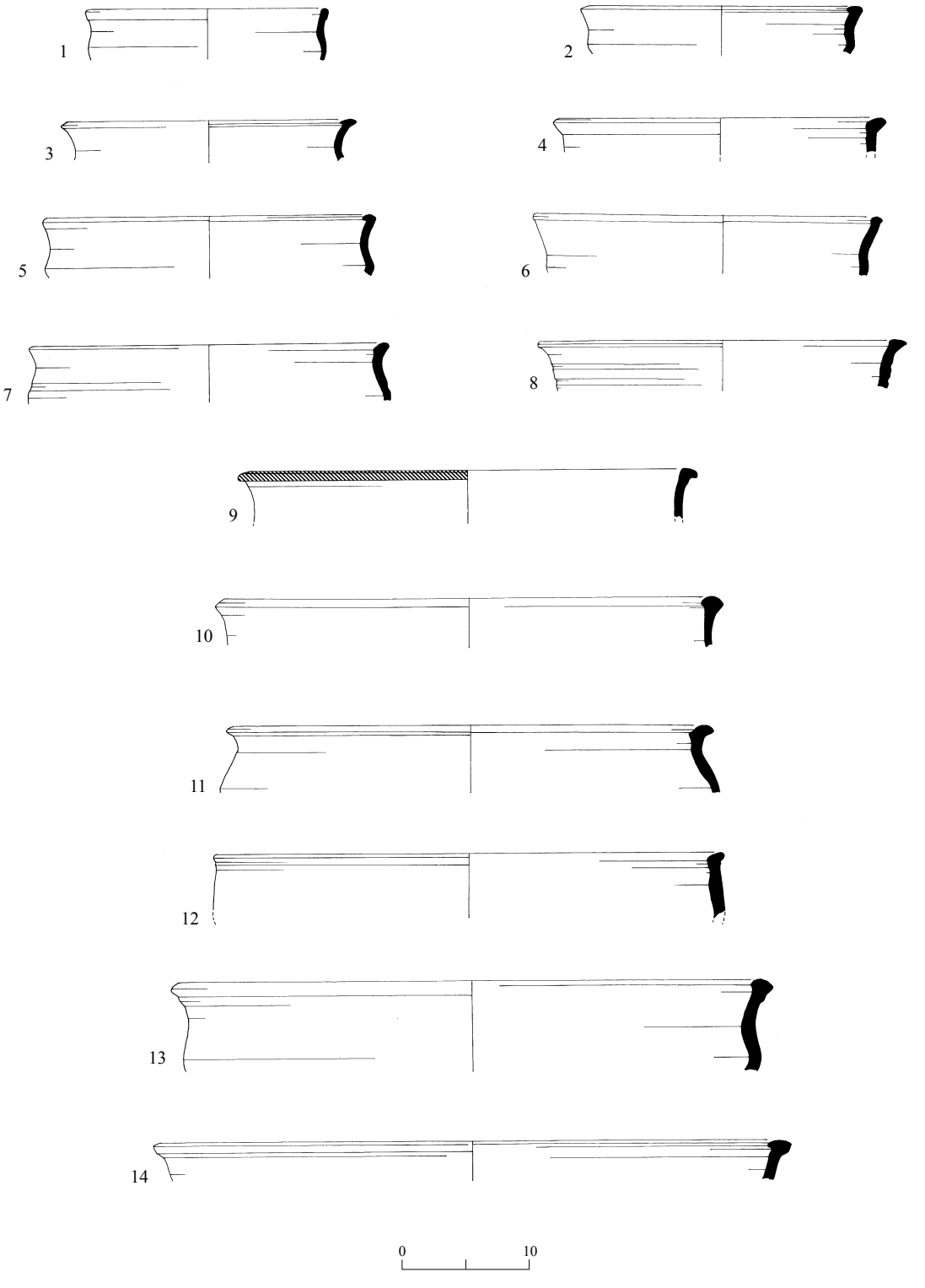


Fig. 18. Locally produced kraters from Area B.

◂ **Fig. 18**

No.	Reg. No.	Locus	Findspot	Description
1	2325/2	309	Fill	Reddish brown clay, white grits
2	389/14	389	Room 4	Orange clay, white grits
3	2416/3	411	Room 3	Orange clay, gray core
4	2185/1	362	Later intrusion	Yellowish brown clay, white and gray grits
5	2306/1	301	Pit	Pink–orange clay, white and gray grits
6	2234/2	387	Courtyard 19	Orange clay, gray and white grits, gray core
7	389/12	389	Room 4	Orange–brown clay, white and black grits, gray core, dark brown slip on both int. and ext.
8	2262/1	401	Room 8	Orange–brown clay, gray and white grits
9	2325/1	309	Fill	Orange–brown clay, gray and white grits
10	2234/1	387	Courtyard 19	Yellowish brown clay, white and black grits
11	2302/2	301	Pit	Yellowish brown clay, white and gray grits
12	2302/3	301	Pit	Orange–brown clay, gray grits, gray core, brown slip on both int. and ext.
13	2325/3	309	Fill	Orange clay, white grits and crushed shell, dark brown slip on both int. and ext.
14	389/11	389	Room 4	Reddish brown clay, gray and white grits, gray core

Jars.— The jars constitute 11.9% of the local vessels (Fig. 14) and are divided into the following subtypes:

Type 1: Jars with curved shoulders or a gentle carination, an elongated body with two or four handles and a stump base. The rim is usually folded and everted or slightly inverted (Figs. 16:1–5, 13; 20:3, 4, 6, 8). This is the largest group among the locally produced jars. Occasionally, there is a 'collar' at the base of the neck (Fig. 20:6). Similar jars were found in Fosse Temple III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 57A:385, 388) and also in the assemblages at Tel Lakhish, dating to the thirteenth century BCE (Tufnell 1958: Pl. 87:1018, 1021); in Stratum VI at Tel Ẕippor (Yannai 2000: Fig. 5:8); in Tombs 8 and 63C at Megiddo (Guy and Engberg 1938: Pl. 56:10; 61:3); and in the northern cemetery at Bet She'an (Oren 1973: Fig. 47b:25). A four-handled jar (Tufnell, Inge and Harding 1940: Pl. 87: No. 1020), which was assigned to this type (Class D), is dated there to the last quarter of the thirteenth century BCE. Similar jars were also found in Stratum XV at Gezer, dating to the thirteenth century BCE (Dever 1974: Pl. 23:1, 3); in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 5:2, 3); and in Tombs at Deir el-Balaḥ: Tomb 110 (Beit-Arieh 1985: Pl. 6:8), Tomb 114 (Dothan 1979: Nos. 22; 28); and Tomb 118 (Dothan 1979: Nos. 124; 130).

Type 2: A jar with a carinated shoulder and a plain everted rim (Fig. 35:4) was found in the tomb exposed north of Area B (T1). Similar jars were found in Tomb C1 at 'Akko (Ben-Arieh and Edelstein 1977: Pl. 12:1); in Tombs 1122 (Upper) and 989 A1 at Megiddo (Guy and Engberg 1938: Pls. 5:7; 17:14); in Strata VIII and VIIB at Megiddo (Loud 1948: Pls. 59:11; 64:1); in Tomb 241 in the northern cemetery of Bet She'an (Oren 1973: Fig. 50:11); in the tombs at Palmaḥim (Singer-Avitz and Levy 1992: Fig. 4:1, 2); in Tomb 501 at Lakhish (Tufnell 1958: Pl. 87:1019); in Tomb 114 at Deir el-Balaḥ (Dothan 1979: Nos. 17, 18); in Tomb 1455 at Deir el-Médineh, which was used during Dynasties XIX and XX (Castel and Meeks 1980, 1: Pl. 11b:1, 2); and at Minet el-Beida—the port of Ugarit—where a storehouse

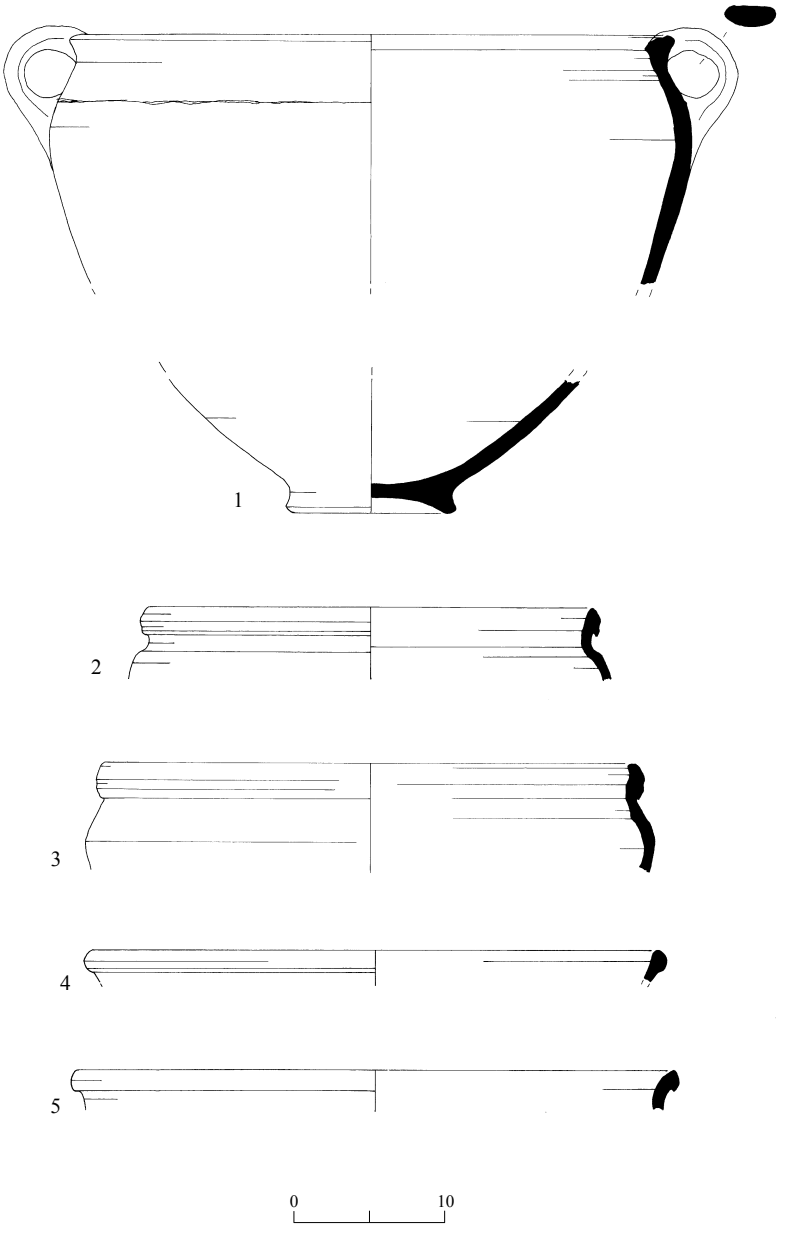


Fig. 19. A krater and cooking pots from Area B.

No.	Vessel	Reg. No.	Locus	Findspot	Description
1	Krater	2334/1	307	Pit	Orange–brown clay, white grits, gray core
2	Cooking pot	2286/2	408	Pit	Orange–brown clay, crushed shell grits, gray core
3	Cooking pot	2403/1	411	Room 3	Orange–brown clay, crushed shell grits, gray core
4	Cooking pot	2325/5	309	Fill	Orange–brown clay, crushed shell grits
5	Cooking pot	2325/4	309	Fill	Orange–brown clay, crushed shell grits, gray core

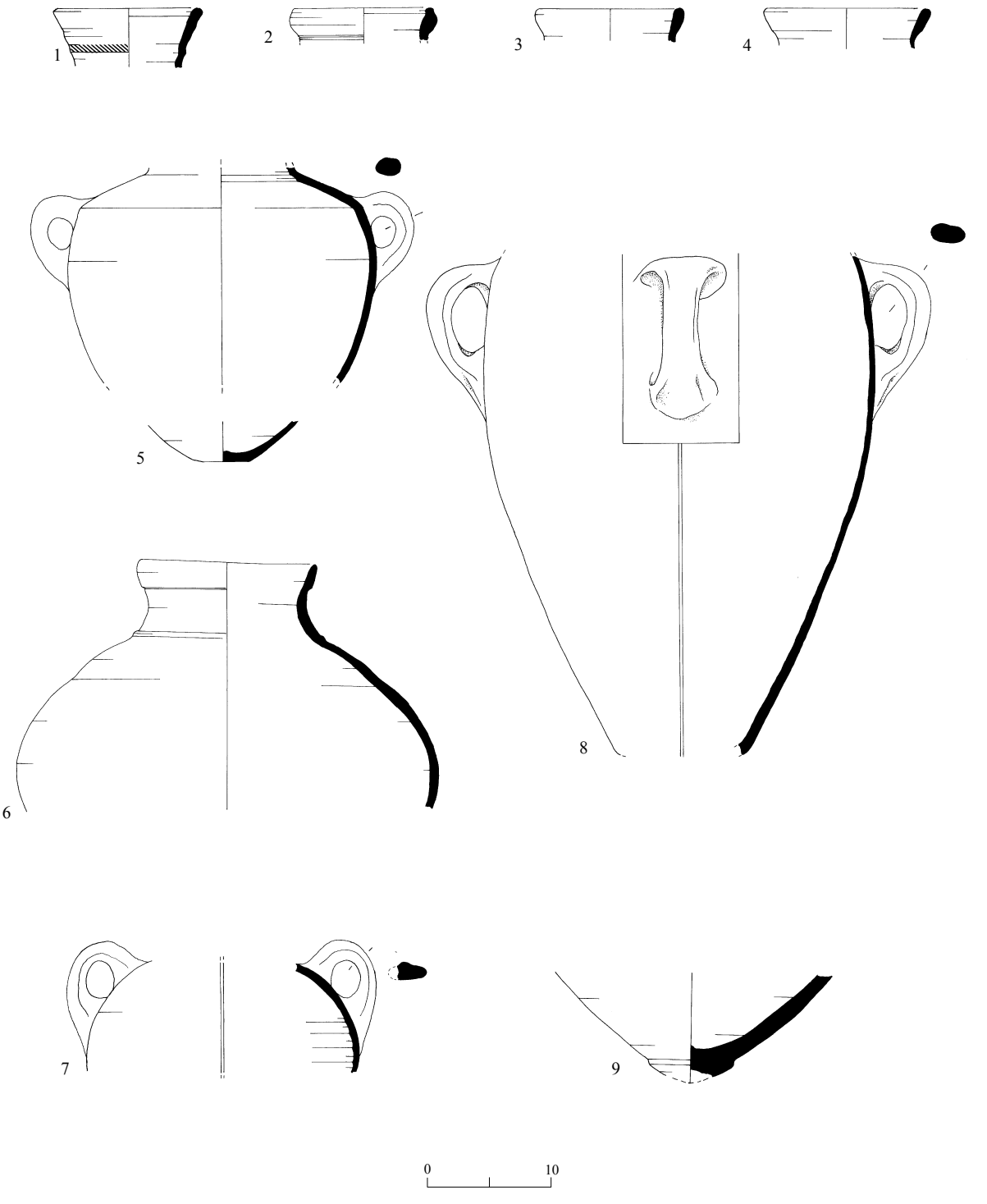


Fig. 20. Jars from Area B.

◂ **Fig. 20**

No.	Reg. No.	Locus	Findspot	Description
1	2156/1	290	*Ṭabun*	Orange–brown clay, black grits, gray core
2	2413/1	389	Room 4	Orange–brown clay, black and white grits, greenish core
3	389/6	389	Room 4	Orange–brown clay, white grits, gray core
4	389/13	389	Room 4	Orange–brown clay, black grits, gray core
5	2417/2	401	Room 8	Reddish brown clay, white grits, gray core
6	2402/1	382	Room 1	Light orange–brown clay, white grits, greenish core, remains of a white slip
7	389/10	389	Room 4	Reddish brown clay, white and gray grits, gray core
8	2070/1	238	Room 17	Light brown clay, small and large white grits, gray core, remains of a brown slip
9	2410/1	412	Room 8/4	Brown clay, gray grits

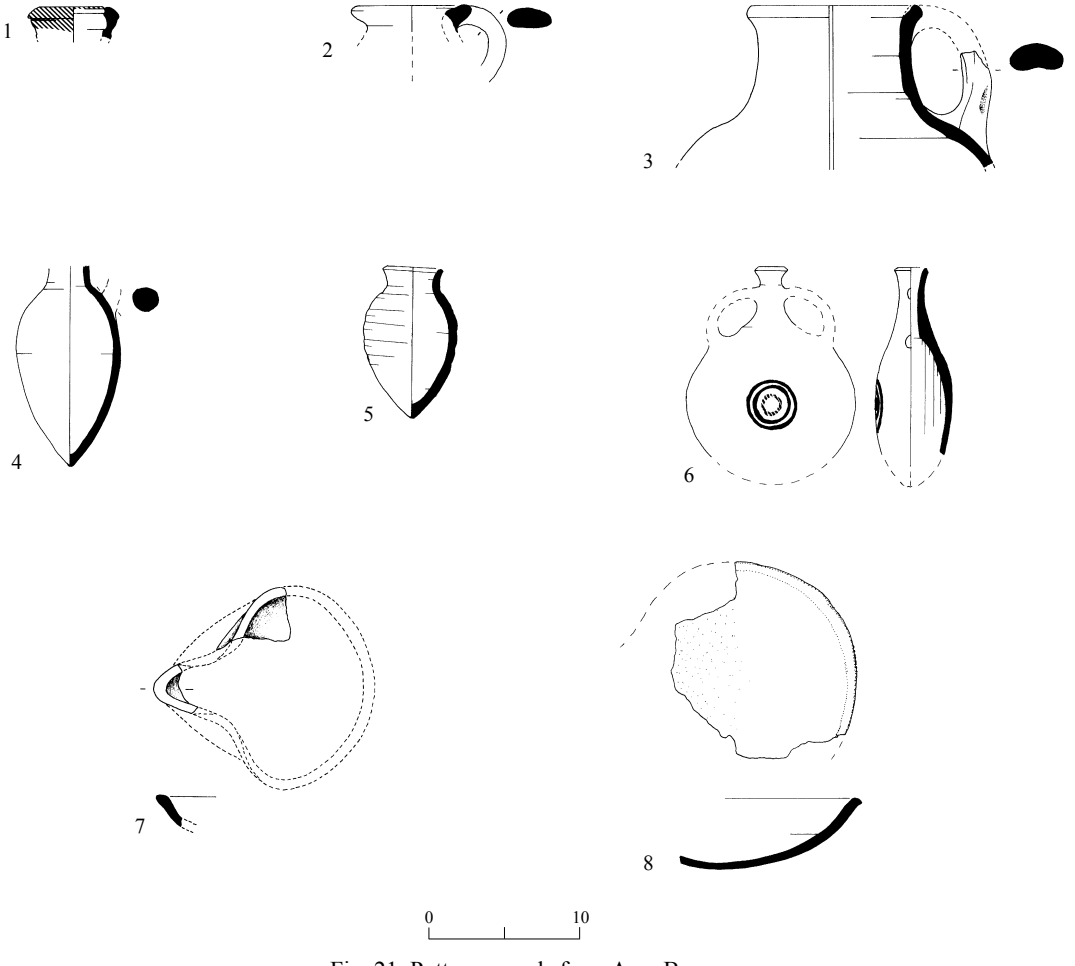


Fig. 21. Pottery vessels from Area B.

◂ **Fig. 21**

No.	Vessel	Reg. No.	Locus	Findspot	Description
1	Flask	2308/2	302	Surface level	Greenish brown clay, small black grits
2	Jug	2309/2	303	Surface level	Orange–brown clay, white grits, black core
3	Jug	2411/1	401	Room 8	Yellowish brown clay, large and small white grits
4	Juglet	2414/1	412	Room 8/4	Reddish brown clay, black and white grits, signs of paring
5	Juglet	2417/1	401	Room 8	Orange–brown clay, white and black grits
6	Flask	2008/1	206	Surface level	Light reddish brown clay, black and white grits
7	Lamp	389/9	389	Room 4	Orange–brown clay, gray core
8	Lamp	2412/1	411	Room 3	Orange–brown clay, gray core

filled with jars of this type was found (Schaeffer 1932: Pl. III, n. 3).

Type 3: Small jars with high loop-handles (Fig. 20:5, 7) and a flattened or convex base (Fig. 20:5) were found at Tel Lakhish (Tufnell 1958: Pl. 87:1023); Tel Mikhal (Negbi 1989: Fig. 5.9:1); in Stratum VIII in the Egyptian fortress at Bet She'an (James and McGovern 1993: Fig. 18:3); in Tomb 27 in the northern cemetery of Bet She'an (Oren 1973: Fig. 38:6); in Area D at Ḥaẓor (Yadin et al. 1958: Pl. 109:1); and in Tomb C2 and Group B1 near 'Akko (Ben-Arieh and Edelstein 1977: Fig. 10:1, 2).

Parallels for the jar with a handle on the shoulder (Fig. 20:7) were found at Tel Lakhish, and designated by Tufnell as Type B (Tufnell 1958:187f., Pl. 74:674, 676, 677).

Type 4: Imitation of Egyptian-type jars (Fig. 16:7, 15, 16) characterized by their elongated, date-palm-like form. Jars of this type were also found in the Megiddo Tombs (Guy 1938: Pl. 57:9, 10); at Tel Mikhal (Negbi 1989: Fig. 5.7:14); and in Tomb 100 at Deir el-Balaḥ, where the excavator considered them to be an Egyptian type (Beit-Arieh 1985:52, Fig. 6:6).

Jugs.— The jugs constitute 20.36% of the local pottery (Fig. 14). Most of the jugs found at the site have a broad neck and a folded or thickened rim, which is frequently pinched. The handle extends from rim to shoulder (Figs. 16:10, 11, 14; 21:3) and the base is often button-like (Fig. 16:6). In Tel Lakhish, these jugs were included in Tufnell's Types D and E (Tufnell 1958:188f. Pls. 75, 76), and were also found in Fosse Temple I (Tufnell, Inge and Harding 1940: Pl. LIB:277, 278). Similar jugs were found in Tomb B3 near 'Akko (Ben-Arieh and Edelstein 1977: Fig. 9:11, 12), and in Tomb 989 A1 at Megiddo (Guy and Engberg 1938: Pl. 17:1–5).

One jug (Fig. 16:9) is an imitation of an Egyptian vessel similar to that from the tombs at Deir el-Balaḥ (Beit-Arieh 1985: Fig. 6:3).

Juglets.— Juglets constitute 1.74% of the local vessels (Fig. 14). They are imitations of Cypriot shaved juglets (Fig. 21:4). Juglets of this type were found in Stratum V at Tel Ẓippor (Yannai 2000: Fig. 3:18–20) and in Tombs 114 and 118 at Deir el-Balaḥ (Dothan 1979: Nos. 23, 125). The juglet in Fig. 21:5 is unique in that it does not have a handle. A parallel juglet was found in Ashdod Stratum XIII, which is dated to Iron Age I (Dothan and Ben-Shlomo 2005: Fig. 3.7:2).

Flasks.— Flasks constitute 0.3% of the local vessels (Fig. 14). They have a thickened rim (Figs. 16:19; 21:1), and the handles envelop the neck (Fig. 16:17). This type of flask is very common throughout the entire country during LB II. See, for example, Tomb 118 at Deir el-Balaḥ (Dothan 1979:60, Nos. 140, 141); the cemetery at Palmaḥim (Singer-Avitz and Levy 1992: Fig. 3:5); Tel Lakhish (Tufnell 1958: Pl. 84:952–954); and Tombs 90 and 219 in the

northern cemetery at Bet She'an (Oren 1973: Figs. 44b:27, 28; 48b:12, 13). A large flask (Fig. 16:18) apparently belongs to the same group.

One flask is decorated with black and red concentric circles (Fig. 21:6). It is small and has a tall, narrow neck. It has a flaring, plain rim and its handles are attached to the neck at right angles. Similar flasks were found in Fosse Temple III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. LIVB: 351); and in Tomb 912B at Megiddo (Guy and Engberg 1938: Pl. 34:14–16). Petrographic analysis identified the origin of this flask as the Galilean coast (see Cohen-Weinberger, this volume).

Decorated Vessels.— Elegant vessels were found in Room 4 (L389), smashed beneath a layer of collapsed mud bricks. Among them, a krater (Fig. 22:1), an amphoriskos and a hydria (Fig. 22:2, 3) which imitates a Mycenaean shape. The krater is made of local clay and is decorated with a pattern of alternating red stripes and zigzags, and a red stripe on the rim. The general shape is reminiscent of the Mycenaean bell kraters (see below). A similar krater, which is believed to be Mycenaean, was found in the Megiddo Tombs (Guy and Engberg 1938: Pl. 34:9).

The amphoriskos is made of orange-colored clay, derived from rendzina soil in the Judean Mountains (see Cohen-Weinberger, this volume). It is adorned with a pattern of stripes flanking a zigzag line, and with floral decoration. A similar vessel was found at Ashdod in an assemblage dating to the second half of the fourteenth century–beginning of

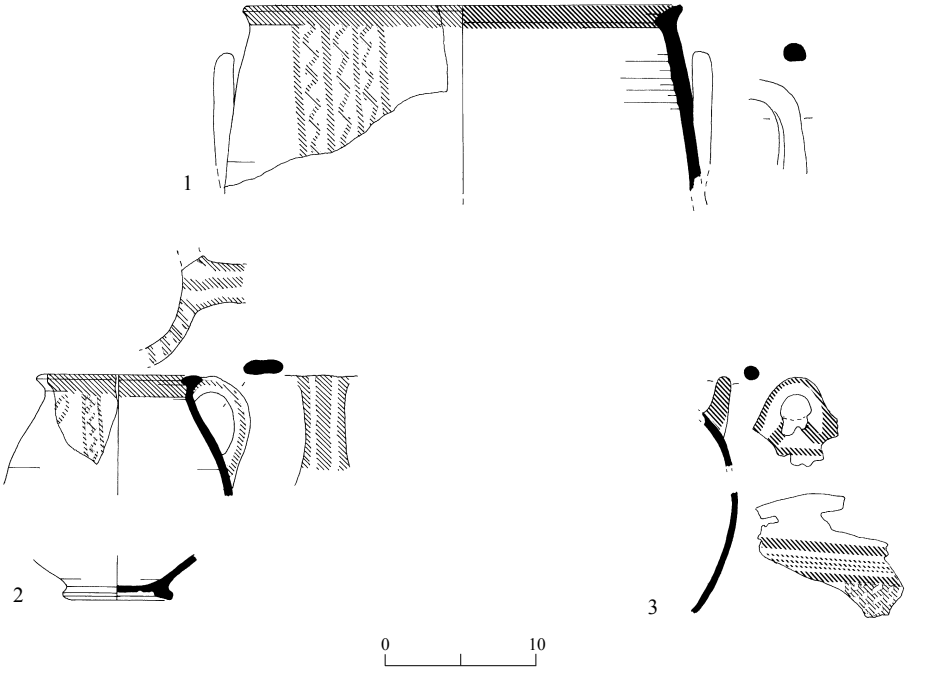


Fig. 22. Decorated vessels from Area B (L389, Room 4).

No.	Vessel	Group	Reg. No.	Description
1	Krater	Local (coastal plain)	389/8	Reddish brown clay, white and gray grits, gray core
2	Amphoriskos	Local (Shephelah)	389/19	Orange clay, small white and black grits
3	Hydria	Local (Shephelah)	389/1	Orange clay

the thirteenth centuries BCE (Dothan and Freedman 1967: Fig. 20:4); and in Stratum VI at Tel Ẓippor, which, in Yannai's opinion, is analogous to Stratum VII at Tel Lakhish (Yannai 2000:215, Fig. 5:5). Similar jugs, but with a different decoration, were found in Stratum IX at Tel Shera', dating to the end of the thirteenth–beginning of the twelfth centuries BCE (Oren 1985: Ill. 6:1); in Tomb 73 at Megiddo (Guy and Engberg 1938: Pl. 66:9); and in Building B of Habitat IV at Ugarit (Yon 1987: Fig. 53:80/80).

Lamps.— Lamps constitute 0.6% of the local vessels (Fig. 14). The lamps that were found (Fig. 21:7, 8) have a pinched-bowl shape, a type characteristic of the end of the Late Bronze Age. Similar lamps were found in Stratum IX at Tel Shera' (Oren 1985: Ill. 4:9); in Lakhish Fosse Temple III (Tufnell, Inge and Harding 1940: Pl. 45B:202), and in the tombs on the tell (Tufnell 1958: Pl. 73:668, Class G); at Bet She'an, Tombs 27, 202, 219 in the northern cemetery (Oren 1973: Fig. 38:2; 46:7; 48a:6) and at Ḥazor Area E (Yadin et al. 1958: Pl. 145:10) and Area D Stratum I (Yadin et al. 1958: Pl. 125:25).

Imported Vessels

Most of the imports are of types whose origin is well-known. The vessels from the Lebanese coast and the Galilee, were identified through petrographic analysis. Cypriot vessels constitute 42.88% of the imported pottery, 42.08% are Egyptian, 6.19% Mycenaean, 2.11% Minoan, 2.04% Aegean (of either Greek or Anatolian origin, see Cohen-Weinberger, this volume) and 1.06% are from the Lebanese coast. There is also one Anatolian vessel (only a body sherd was found, hence it does not appear in the statistics) and one vessel (a flask, see above) from the coast of the Galilee (Fig. 23).

Jars form the largest group of imported vessels (44.18%; Fig. 24). Bowls constitute 29.68% of the assemblage, juglets 13.49%, stirrup jars 3.72%, kraters 2.31%, flasks 3.6%, jugs 0.62% and flower pots 0.13% (one vessel).

The breakdown of the imported vessels according to their origin varies between the

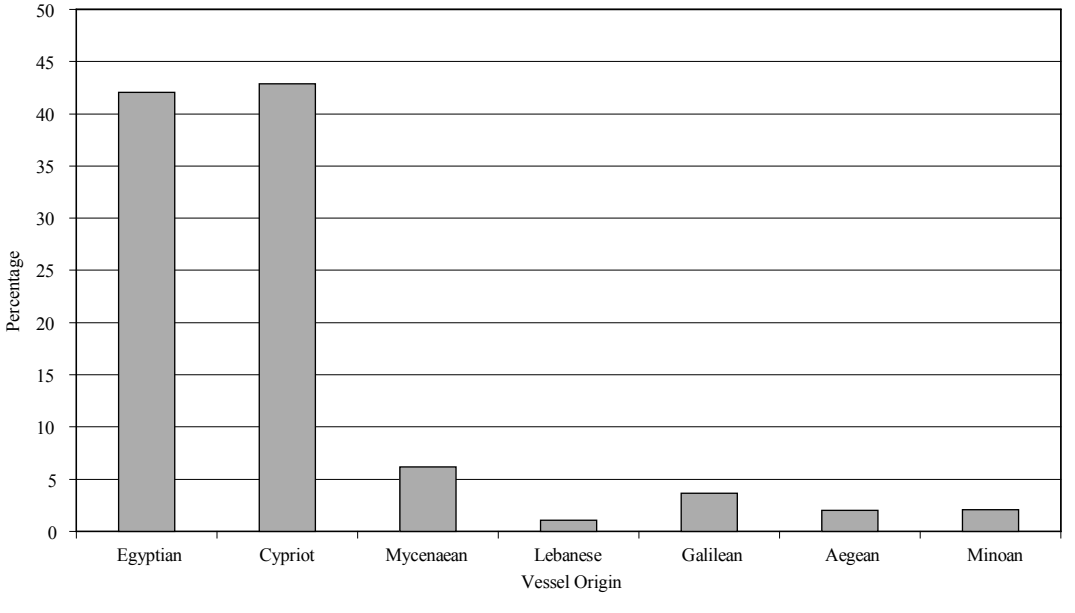


Fig. 23. Breakdown of the imported pottery vessels according to origin.

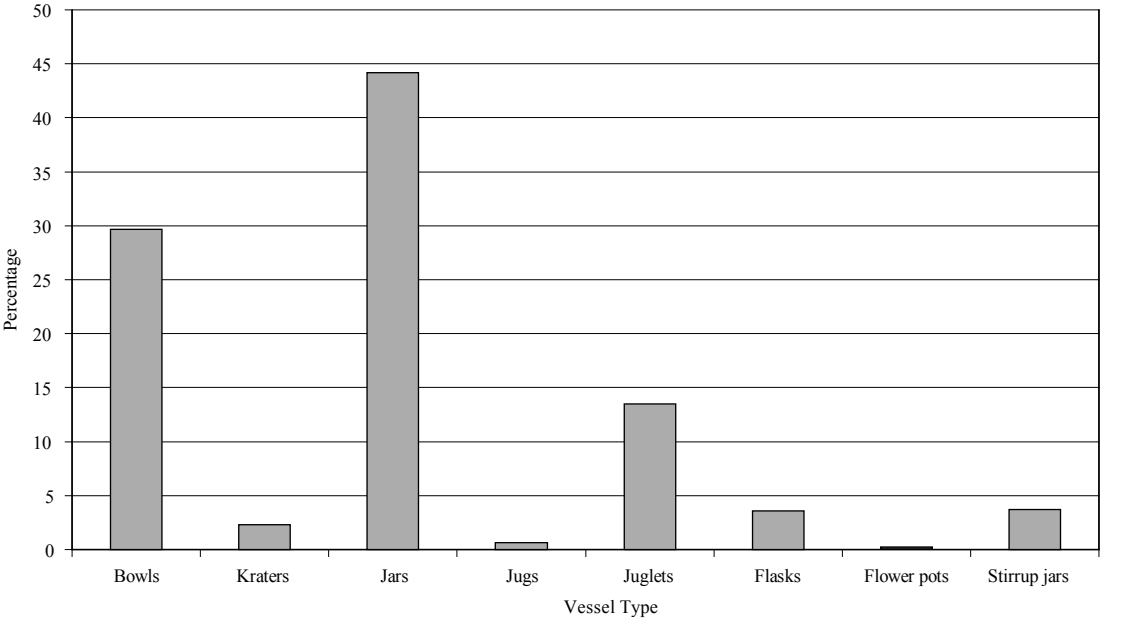


Fig. 24. Breakdown of the imported pottery vessels according to type.

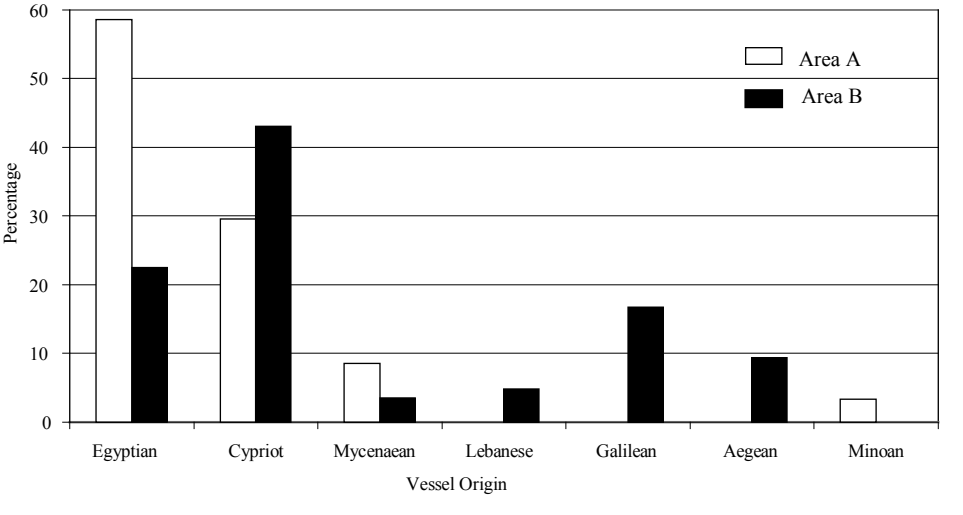


Fig. 25. Breakdown of the imported pottery vessels in Areas A and B according to origin.

excavation areas. For instance, more Cypriot vessels and less Egyptian and Mycenaean vessels were found in Area B than in Area A. Minoan vessels were only found in Area A, whereas the vessels from the Galilee, Lebanon, and the Aegean were only found in Area B (Fig. 25).

When the imports are considered according to their types (Fig. 26), the similarity in the percentage of imported bowls from Area A (29.7%) and Area B (33.01%) is apparent. There are considerable differences between the areas, however, regarding the other types of vessels: the jars in Area A constitute most of

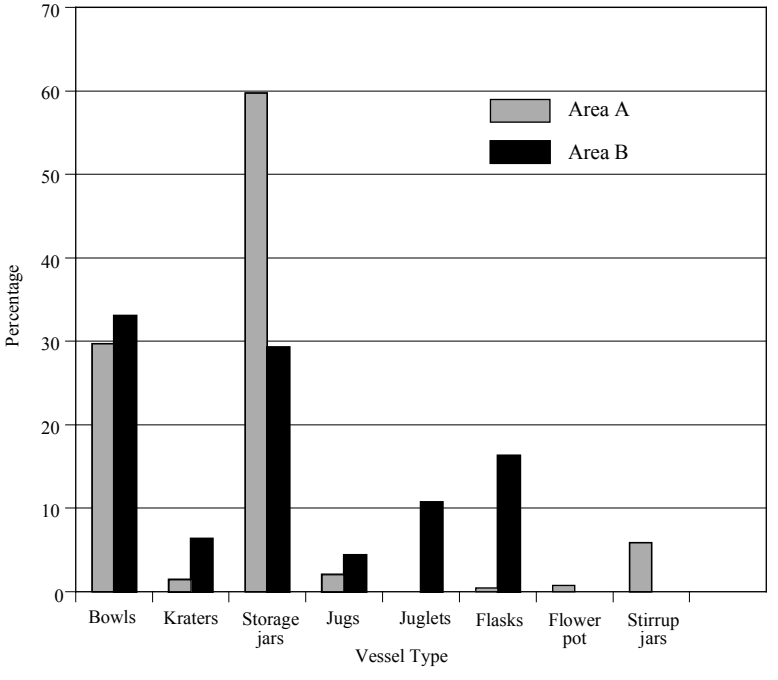


Fig. 26. Breakdown of the imported pottery vessels in Areas A and B according to type.

the assemblage of imported vessels (59.75%), while in Area B they account for only 29.75%. The jugs and flasks are also more plentiful in Area A. Stirrup jars were not found in Area B, and in Area A no juglets were found.

Cypriot Vessels

White Slip Vessels.— White Slip bowls are the principal component in the assemblage of Cypriot vessels. All of the bowls from this family are White Slip II. The most common bowls are decorated with a ladder design (Fig. 27:2, 4, 7, 9, 11, 18) or a group of parallel lines (Figs. 27:3, 5, 8, 12, 13, 16; 32:1–5). They occur in the later part of the Late Bronze Age, and are included in the groups referred to by Gittlen as WSII-I1C, I1C', I1Dα', I1Dβ', I3B and I3C (Gittlen 1993:111–124). Most of the decoration is executed somewhat carelessly and the bowls tend to be shallow.

The bowls decorated with ladders (Fig. 27:2, 4, 7, 9, 11, 18) belong to Types WSII-I1C, I1C', I1Dα' and I3B (Gittlen 1993:114–115, and see there for additional parallels); see also Strata VII and VIII in the Egyptian fortress at Bet She'an (James and McGovern 1993: Fig. 57:1–7). Other vessels of this shape were found at Ugarit (Yon 1987: Pl. IV:f, g); Tel Mevorakh (Kromholtz 1984: Figs. 14–23); Tel Mikhal (Negbi 1989: Fig. 5.10:10–12); Ashdod Area B (Dothan and Freedman 1967: Fig. 23:13); and among the surface finds at Deir el-Balaḥ (Beit-Arieh 1985: Fig. 5:11,12).

The bowls decorated with groups of 3–4 parallel lines (Figs. 27:3, 5, 8, 12, 13, 16; 32:1–5) belong to Type WSII–I1 Dβ' (Gittlen 1993:114–115, and see additional parallels therein); see also James and McGovern 1993: Fig. 57:1–7. Similar bowls were also found in Ugarit (Yon 1987: Fig. 61:79/178); Tel Abu Hawâm (Hamilton 1935: Pl. 23:f, g); Tel Mevorakh (Stern 1984: Fig. 10:27); and Ashdod Area B (Dothan and Freedman 1967: Fig. 23:13). Evidently, Type I1D is later than Type I1C because it does not appear before Phase VII in the Egyptian fortress at Bet She'an (Gittlen 1993:115–116).

A bowl decorated with reticulated rhombi bounded by parallel lines (Fig. 27:1), that

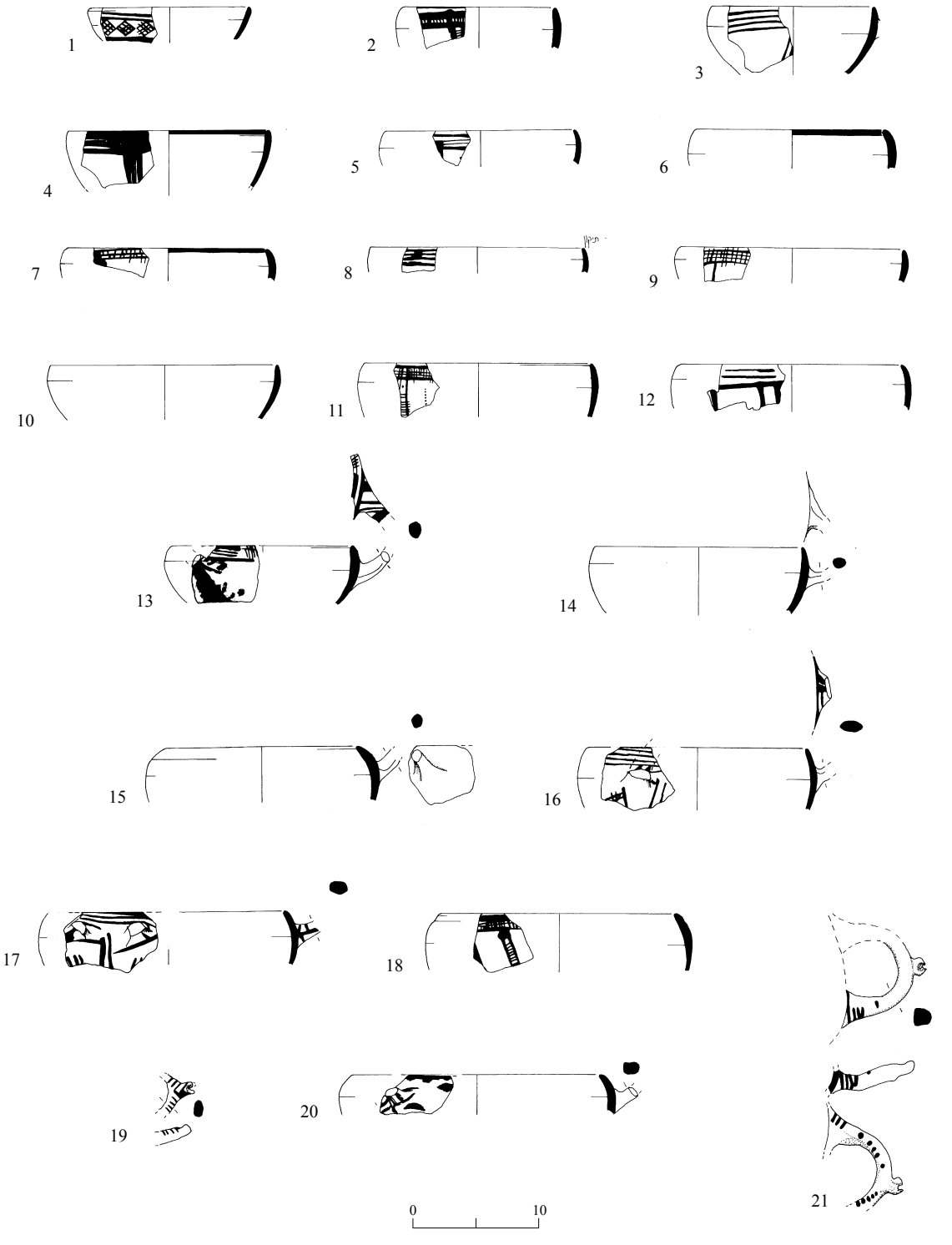


Fig. 27. Cypriot WS II bowls from Area A.

◂ **Fig. 27**

No.	Reg. No.	Locus	Findspot	Description
1	1097/1	160	Occupation level	Orange–brown clay, white slip, brown–black decoration
2	1118/1	171	Surface level	Brown–gray clay, buff slip, brown–black decoration
3	1089/1	159	Fill	Dark orange clay, black grits, brown–gray core, buff slip, dark brown decoration
4	1030/2	120	Fill	Greenish brown clay, white grits and mica, buff slip, dark brown decoration
5	1038/1	115	Occupation level	Orange–brown clay, black and white grits, gray core, buff slip, dark brown decoration
6	1084/2	156	Floor	Reddish brown clay, black and gray grits, worn decoration
7	1090/4	158	Occupation level	Greenish gray clay, white–buff slip, dark brown decoration
8	1082/1	154	Occupation level	Orange–brown clay, white and black grits, buff slip, dark brown decoration
9	1086/2	158	Occupation level	Greenish gray clay, buff slip, dark brown decoration
10	1098/3	163	Fill	Reddish orange clay, white grits, gray core, buff slip
11	1093/3	158	Occupation level	Brown–gray clay, brown–black decoration
12	1073/1	147	Installation	Orange–brown clay, greenish core, white grits and mica, buff slip, dark brown decoration
13	1049/1	132	Fill	Dark orange clay, black and white grits, brown–black decoration
14	1095/1	162 (150)	Floor	Orange–brown clay, white grits, greenish gray core, buff slip, worn decoration
15	1094/1	161	Fill	Orange–brown clay, white grits, greenish core
16	1092/1	160	Occupation level	Reddish brown clay, gray core, buff slip, brown–black decoration
17	1062/1	141	Fill	Orange–brown clay, white grits, brown core, buff slip, dark brown decoration
18	1114/1	169	Fill	Orange–brown clay, white grits, buff slip, dark brown decoration
19	1087/1	158	Occupation level	Orange–brown clay, buff slip, dark brown decoration
20	1033/1	112	Occupation level	Orange–brown clay, white and black grits, greenish core, buff slip, dark brown decoration
21	1030/1	120	Fill	Orange–brown clay, white grits, white slip, dark brown decoration

probably had a round wishbone handle like the one illustrated in Fig. 27:21, also belongs to Type I1D. Similar bowls were found in the foundations of Stratum IV at Tel Abu Hawâm (Hamilton 1935: Pl. 23:f, g) and among the finds from the section in the Late Bronze Age cemetery in ʻAkko (Ben-Arieh and Edelstein 1977: Fig. 12:10). In Cyprus, this decoration appears on bowls from Katydhata and on a bowl in the Cypriot Museum (No. A. 1365). The shape of these bowls is anomalous. They have a ring base and the type is designated by Åström as Type 1h (Åström 1972: Fig. 56: 1, 3).

Base-Ring Bowls.— The bowls in this group (Figs. 28:2, 3; 29:17, 18; 32:7–10, 17; 35:2) all belong to BRII Type Fb according to Åström's classification (Åström 1972:176). Similar bowls were found in Group B1 at ʻAkko (Ben-Arieh and Edelstein 1977: Fig. 12:5); in Stratum VII at Bet She'an (James and McGovern 1993: Fig. 56:4, 5); in Tombs 60 and 221 in the northern cemetery of Bet She'an (Oren 1973: Figs. 43:23; 47a:8); at Megiddo Stratum VIIA (Loud 1948: Pl. 69:10) and in Tomb 912 (Guy and Engberg 1938: Pl. 35:25); and in Fosse Temple III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 44B:176).

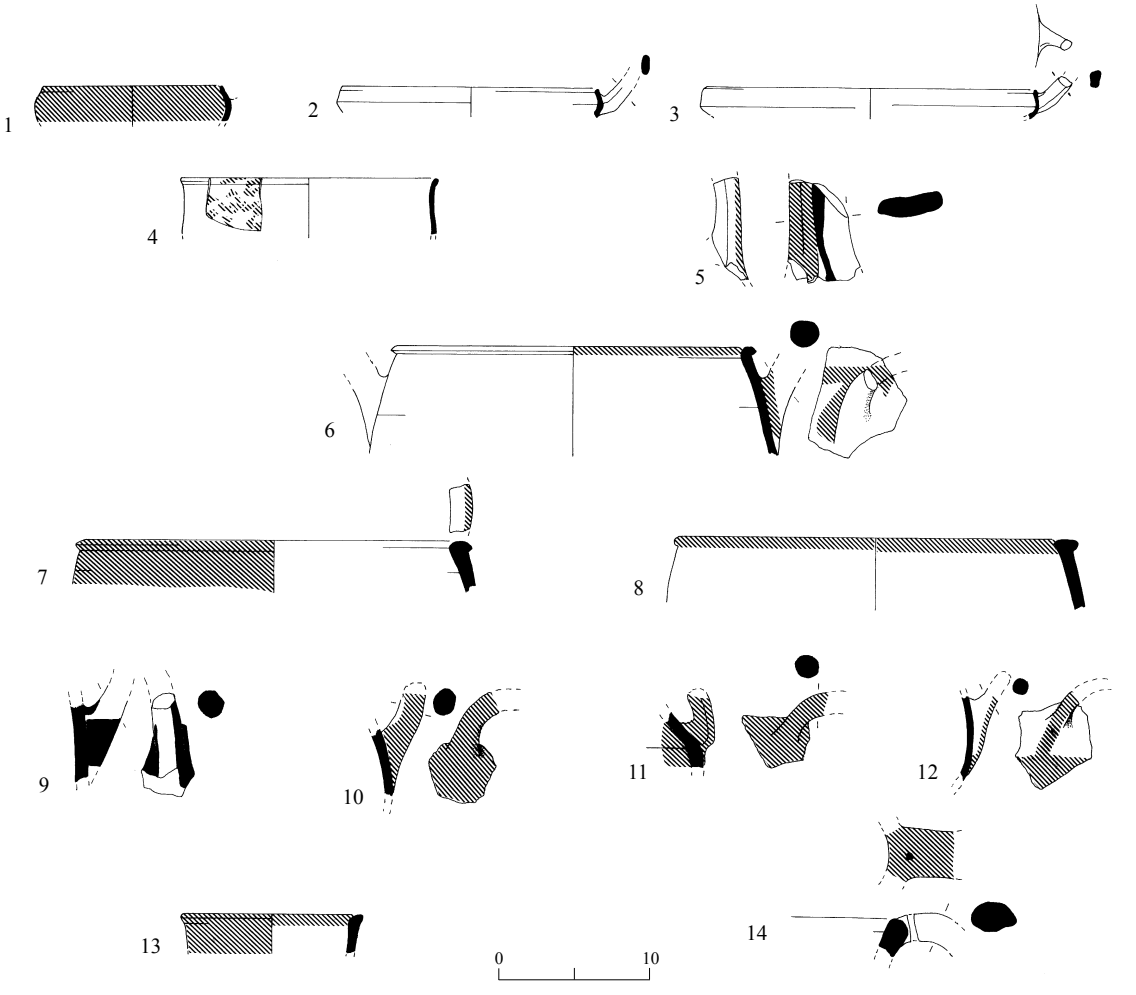


Fig. 28. Cypriot and Mycenaean pottery vessels from Area A.

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Bowl	Cypriot Monochrome	1102/1	163	Fill	Orange clay
2	Bowl	Cypriot BR II	1114/2	169	Fill	Red–orange clay
3	Bowl	Cypriot BR II	1055/1	141	Fill	Orange–brown clay
4	Bowl	Mycenaean IIIB	1065/3	141	Fill	Orange–brown clay, remains of red decoration
5	Krater	Mycenaean IIIB	1100/3	164	Occupation level	Light brown clay
6	Krater	Mycenaean IIIB	1009/1	107	Fill	Light pink clay
7	Krater	Mycenaean IIIB	1065/2	154	Occupation level	Light orange–brown clay
8	Krater	Mycenaean IIIB	1084/1	156	Floor	Light brown clay, worn red decoration
9	Krater	Mycenaean IIIB	1086/1	158	Occupation level	Pinkish brown clay, dark brown decoration
10	Amphoriskos	Mycenaean IIIB	1053/1	135	Occupation level	Light orange clay
11	Amphoriskos	Local imitation	1100/1	164	Occupation level	Light orange–brown clay
12	Amphoriskos	Mycenaean IIIB	1089/3	159	Fill	Orange clay, red decoration
13	Jug	Mycenaean IIIB	1127/1	181	Surface level	Pinkish brown clay, mica
14	Jug/hydria	Mycenaean IIIB	1101/3	164	Occupation level	Light orange clay

Fig. 29 ▸

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Stirrup jar	Minoan	1120/1	173	Fill	Red–orange clay, several white grits
2	Jar	Minoan	1086/4	158	Occupation level	Buff clay, large and small white grits, worn brown decoration
3	Jug(?)	Minoan?	1008/1	103	Surface level	Light yellowish brown clay, large gray and brown grits
4	Jar	Minoan?	1047/1	130	Surface level	Buff clay, white and gray grits
5	Jug	Cypriot?	1025/1	115	Occupation level	Buff clay, burnished buff slip, red and brown black decoration
6	Stirrup jar	Mycenaean IIIB	1090/3	158	Occupation level	Pinkish clay
7	Jug	Mycenaean IIIB	1101/1	164	Occupation level	Yellowish brown clay, small black and white grits, dark brown decoration
8	Stirrup jar	Mycenaean IIIB	1093/1	158	Occupation level	Buff clay, dark brown decoration
9	Stirrup jar	Mycenaean IIIB	1090/1	158	Occupation level	Light orange clay
10	Stirrup jar	Mycenaean IIIB	1087/2	158	Occupation level	Yellowish pink clay
11	Stirrup jar	Mycenaean IIIB	1048/1	131	Surface level	Pinkish clay, red decoration
12	Juglet	Mycenaean IIIB	1031/1	115	Occupation level	Buff clay
13	Stirrup jar	Mycenaean IIIB	1100/2	164	Occupation level	Light pinkish clay
14	Stirrup jar	Mycenaean IIIB	1101/2	164	Occupation level	Pinkish clay
15	Jug	Cypriot BR II	1116/1	168	Fill	Gray–brown clay, small white and gray grits
16	Jug	Cypriot BR II	1108/1	166	Fill	Orange–brown clay, small white grits
17	Bowl	Cypriot BR II	1090/5	158	Occupation level	Orange–brown clay
18	Bowl	Cypriot BR II	1064/5	140	Fill	Gray clay, white grits
19	Handle	Cypriot?	1028/1	118	Occupation level	Yellowish brown clay, gray and white grits, worn brown decoration

Base-Ring Jugs.— The jugs that were found (Figs. 29:15, 16; 32:15; 35:6) are all BRII. An intact jug from Tomb I in the north of the area (Fig. 35:6) belongs to Type AIa according to Åström's classification (Åström 1972:181, Fig. 52:10), and it would appear that the handle and the base from Area A (Fig. 29:15, 16) also belong to this type, which is rare in the assemblages of the period in Canaan. A similar vessel decorated with white stripes was found in Tomb 27 in the northern cemetery of Bet She'an (Oren 1973: Fig. 37:8). A jug that was found in Area B (Fig. 32:15) probably belongs to Åström's Type BR IIB1 (Åström 1972:183–187).

Base-Ring Zoomorphic Vessel.— A horn of a figurine (Fig. 31:2) apparently belongs to a Base-Ring-type vessel.

Monochrome Bowls.— An Åström-Type Aa monochrome bowl (Åström 1972:91–92, Fig. 45:2–3) was found in Area A (Fig. 28:1).

White Shaved Vessels.— The juglets from this group (Figs. 32:14; 35:5) belong to Åström's Type Ia (Åström 1972:222, Fig. LVIII:6). The juglet from Area B (Fig. 32:14) may be a local imitation because the handle does not fully penetrate the wall, and the clay is sandier than the usual clay of these juglets. Based on its shape and clay, the handle of an unidentified vessel (Fig. 29:19) appears to be Cypriot.

Pithoi.— Different types of pithoi were found that may be Cypriot in origin. Among them is a pithos with a broad mouth, narrow ledge rim and a ridge at the base of the short neck

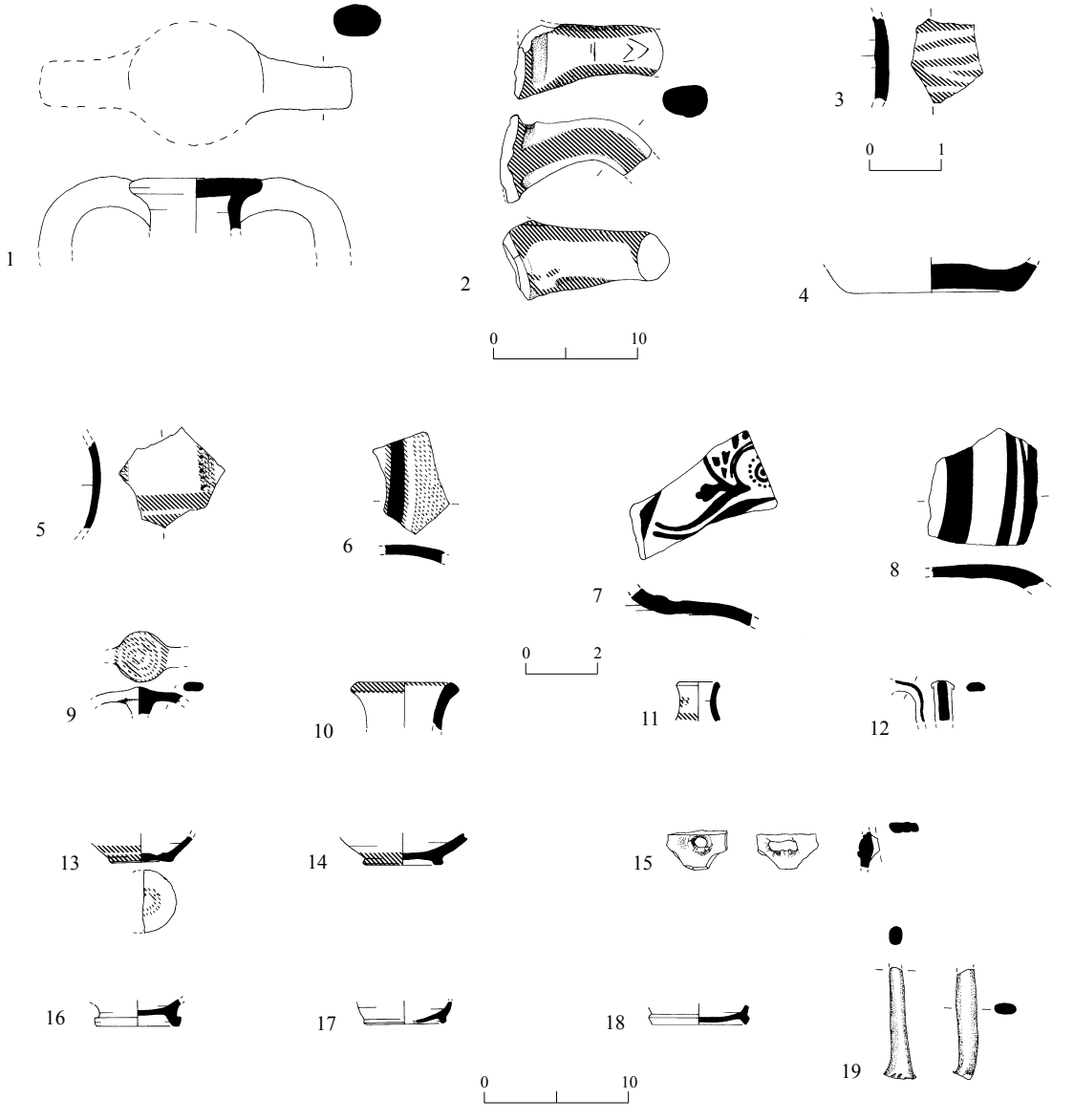


Fig. 29. Cypriot, Mycenaean and Minoan pottery vessels from Area A.

(Fig. 34:2). A similar vessel was found in Ugarit (Yon 1987: Fig. 36:79/36). Also found was a body sherd from a very large pithos decorated with an applied wavy band of light colored clay (Fig. 34:3). This pithos may belong to Group II as classified by Keswani-Schuster (2009:111–112).

Wall Bracket.— The fragment of a wall bracket (Fig 31:1), apparently Cypriot, was found in Area A (see Panitz-Cohen 2006a:617 for their distribution in the Late Bronze Age). Similar items were found at Ugarit (Yon 1987: Figs. 5:79/762; 37:79/186) and at Tel Abu Hawâm (Hamilton 1935:37, 228, and see parallels therein).

Mycenaean Vessels
This family of ceramics includes open and closed vessels of various sizes (Figs. 28:4–14; 29:6–14; 32:11–13, 16).

Open Vessels.— Apart from kraters, this group includes a deep bowl with a thin, upright wall and a plain, slightly everted rim with remains of red paint on it (Fig. 28:4). This bowl belongs to the FS 305 Type Stemmed Bowl (Mountjoy 1986: Fig. 165).

The kraters are mostly bell-shaped, characteristic of LH/LM IIIB (Figs. 28:6–8, 9; 32:12, 16). They are classified as Type FS 281 by Mountjoy (1986: Fig. 159) and Form 80 by Leonard (1994:113–115, and see there for the distribution of the type). A krater of this type was found at Ugarit in Habitat III, Building A (Yon 1987: Fig. 37:79/661) and in Habitat Building B IV (Yon 1987: Fig. 66:84/331). One krater (Fig. 32:11) is of the type referred to as an Amphorid Krater (FS 53–55/FM Liniar) and belongs to Leonard's Form 8, Group C (Leonard 1994:32–33, and see there for the distribution of the type). A similar krater was found in Stratum VIII, in the Egyptian fortress at Bet She'an (James and McGovern 1993: Fig. 53:2). Strap handles of Type FS 9 kraters (Mountjoy 1986: Fig. 134) were found during the inspection (Fig. 47:7), as well as in Area A (Fig. 28:5).

Closed Vessels.— Handles and rims of piriform amphoriskoi (Fig. 28:10, 12) and jugs (Figs. 28:13; 32:13) were found. These vessels belong to Types FS 40 and FS 48 according to Mountjoy's classification (Mountjoy 1986: Fig. 149). A similar amphoriskos was found at Ugarit (Yon 1987: Fig. 80:81/890). A handle of another amphoriskos (Fig. 28:11) was identified as Aegean, produced in a coastal region (see Cohen-Weinberger, this volume). A jug or hydria (Fig. 28:14) with a perforated handle is Mountjoy's Type FS 128 (Mountjoy 1986: Fig. 124).
Stirrup Jars: Most of the stirrup jars are decorated with broad painted stripes characteristic of LH/LM IIIB (Fig. 29:6, 8–11, 13–14).
Jug: A jug fragment (Fig. 29:7) is decorated with a bull design.[5]
Juglet/Bottle: Only one handle was found (Fig. 29:12).

Minoan Vessels
Stirrup Jar.— A large vessel manufactured in coarse, reddish brown clay (Fig. 29:1). A similar jar was found at Ugarit (Yon 1987: Fig. 7:81/639).

Jar.— A neck and a narrow mouth was found, with a handle that extends from just below the rim to the shoulder, which is missing. The upper face of the handle is incised (Fig. 29:2). A similar vessel was found in the foundation level of a building from Stratum IV at Tel Abu Hawâm (Hamilton 1935:35:311). A flat base of light colored clay (Fig. 29:4) may belong to a jar like this.

Anatolian Vessels
One fragment of Trojan Gray Ware with combed decoration of alternating bands of straight and wavy lines (Fig. 34:4) was found. The fragment is of a closed vessel—a jar or a krater. Vessels of this group are quite rare in Israel. They were found in Fosse Temple III at Tel Lakhish (Tufnell, Inge and Harding 1940: Pl. 63:8) and in Stratum VI at Tel Ẓippor (Yannai 2000: Fig. 5:3). A close parallel was found in Kition Bambula (Yon and Caubet 1985:156–157, Figs. 73:339; 82:364; 85:364). A similar vessel that was found at Tel Abu Hawâm Stratum IV (Hamilton 1935: Pl. 22:a), appears to be later than the thirteenth century BCE. A vessel from Stratum VIIIa in Area A at 'Eqron is dated by the excavators to the end of the thirteenth century BCE (Gitin and Dothan 1987:197, 200–201; Killebrew 1996: Pl. 8:1).

Vessels from the Lebanese Coastal Region
Parts of an unknown type of jar (Fig. 34:1) were found in one of the pits (L301). The body of the vessel was evidently elongated (numerous body sherds from this jar were found); the mouth is wide and the rim flares. According to

the petrographic analysis, it originated from the Lebanese coast, as did another jar (Fig. 30:10) whose shape is characteristic of the Canaanite jars (Cohen-Weinberger, this volume).

Egyptian Vessels

Bowls.— Shallow bowls made of Nile clay and covered with a deep, red-colored slip (Figs. 30:1, 2; 33:1, 2) were found. These bowls

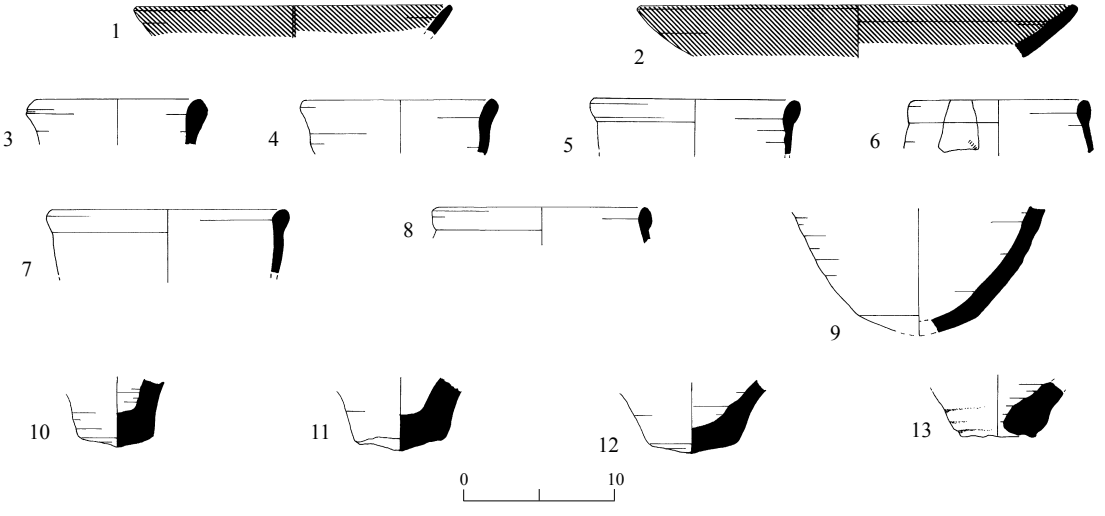


Fig. 30. Egyptian and other imported vessels from Area A.

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Bowl	Egyptian	1115/1	169	Fill	Reddish brown clay, brown core
2	Bowl	Egyptian	1031/6	115	Occupation level	Reddish brown clay, brown core
3	Jar	Egyptian	1038/2	112	Occupation level	Orange clay, black and white grits
4	Jar	Egyptian	1025/5	115	Occupation level	Pink–brown clay, numerous white grits, gray core
5	Jar	Egyptian	1104/2	165	Fill	Orange–brown clay, white grits, burnished buff slip
6	Jar	Egyptian	1104/1	165	Fill	Orange–brown clay, white grits, burnished buff slip
7	Jar	Egyptian	1025/3	115	Occupation level	Brown clay, small white grits, burnished buff slip
8	Jar	Egyptian	1089/2	159	Fill	Orange–brown clay, small white grits, burnished buff slip
9	Jar	Egyptian	1114/3	169	Fill	Orange–brown clay, small white grits, burnished buff slip
10	Jar	Lebanese coast	1003/1	103	Surface level	Dark orange clay, small white grits, greenish slip
11	Jar	Egyptian	1028/5	118	Occupation level	Orange clay, white grits
12	Jar	Egyptian	1061/1	136	Winepress	Orange clay, numerous white and gray grits
13	‘Flower pot’	Egyptian (?)	1024/4	118	Occupation level	Orange–brown clay, white and gray grits, gray core

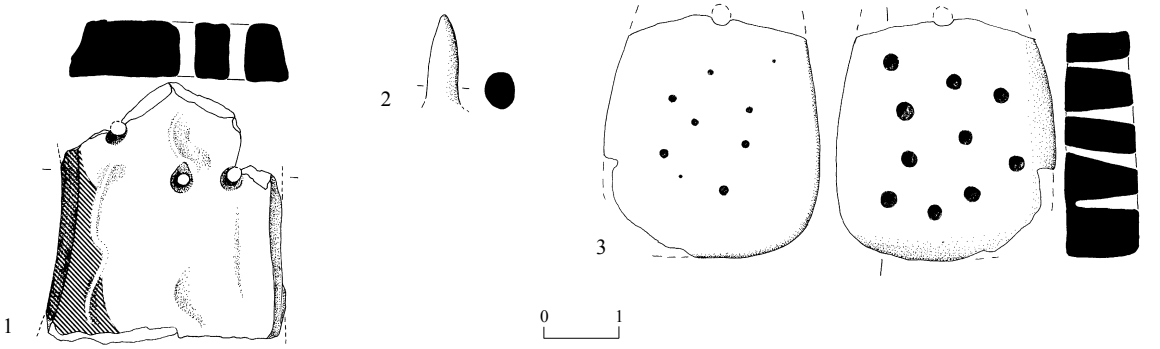


Fig. 31. Miscellaneous artifacts from Area A.

No.	Object	Group	Reg. No.	Locus	Findspot	Description
1	Wall bracket	Cypriot?	1031/5	115	Occupation level	Reddish brown clay, white, brown and gray grits
2	Zoomorphic vessel	Cypriot BR II	1085/1	157	Recent intrusion	Light pink–brown clay
3	Weight?		1092/2	160	Occupation level	Yellowish brown clay, white and gray grits

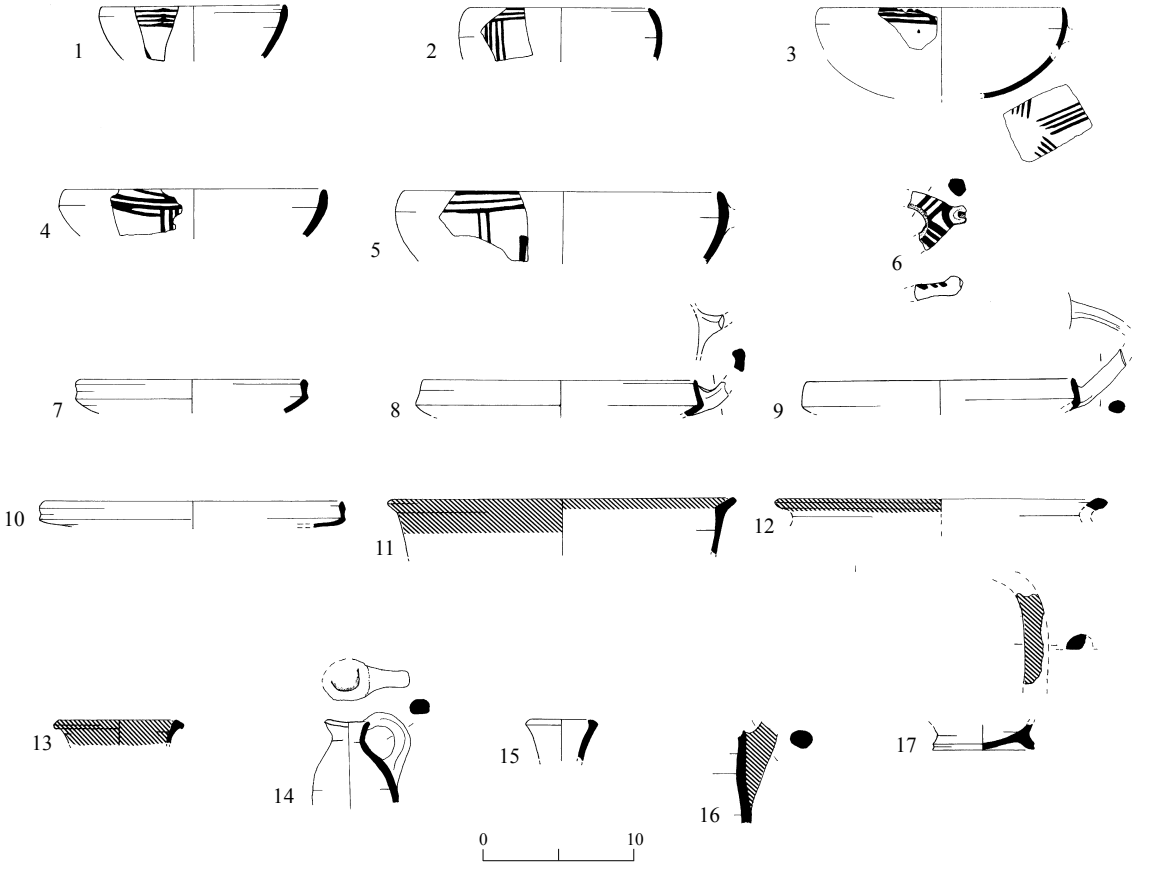


Fig. 32. Cypriot and Mycenaean pottery vessels from Area B.

have a flat or convex base and a plain or flaring rim. The bowls that were found are analogous to the following types according to Nagel's classification: Type II (Fig. 30:1; see Nagel 1938:153–155, Pl. 1); Type X 1938:181–182, Pl. 10). Similar bowls were found in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 2:1–3) and in Stratum VII in the Egyptian fortress at Bet She'an (James and McGovern 1993: Figs. 49:1–15; 50:1–4, 5–8).

Flower Pot.— The lower part of a vessel with everted conical walls and a string-cut, perforated base, was found in Area A (Fig. 30:13). This may be an imitation of an Egyptian vessel, classified by Nagel as Type XX (see

◂ **Fig. 32**

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Bowl	Cypriot WS II	2308/1	302	Surface level	Gray–brown clay, white slip, dark brown decoration
2	Bowl	Cypriot WS II	2310/1	304	Fill	Dark orange–brown clay, white grits, buff slip, dark brown decoration
3	Bowl	Cypriot WS II	389/20	389	Room 4	Reddish brown clay, small white grits, black core, white slip, dark brown decoration
4	Bowl	Cypriot WS II	2195/1	367	Fill	Reddish brown clay, white grits, greenish core, white slip, dark brown decoration
5	Bowl	Cypriot WS II	2103/1	226	Occupation level	Dark orange–brown clay, white and black grits, buff slip, dark brown decoration
6	Bowl	Cypriot WS II	2058/1	232	Fill	Gray–brown clay, brown decoration
7	Bowl	Cypriot BR II	2156/2	290	*Ṭabun*	Pink–orange clay, gray core
8	Bowl	Cypriot BR II	2058/2	232	Fill	Orange clay, dark brown slip on both int. and ext.
9	Bowl	Cypriot BR II	2039/1	221	Fill	Pink–orange clay, gray core
10	Bowl	Cypriot BR II	2306/2	301	Pit	Orange clay, small white grits, gray core, reddish brown slip
11	Krater	Mycenaean IIIB	2058/3	232	Fill	Reddish brown clay
12	Krater	Mycenaean IIIB	2413/3	401	Room 8	Light orange–brown clay
13	Jug	Mycenaean IIIB	2027/1	212	Surface level	Yellow–orange clay
14	Juglet	Cypriot White Shaved	2087/1	244	Fill	Buff clay, signs of paring
15	Jug	Cypriot BR II	2226/2	382	Room 1	Greenish brown clay, gray and white grits
16	Krater	Mycenaean IIIB	2420/3	401	Room 8	Orange clay, red slip
17	Bowl	Cypriot BR II	2215/1	374	Fill	Orange clay, white grits, gray core, thin worn red slip

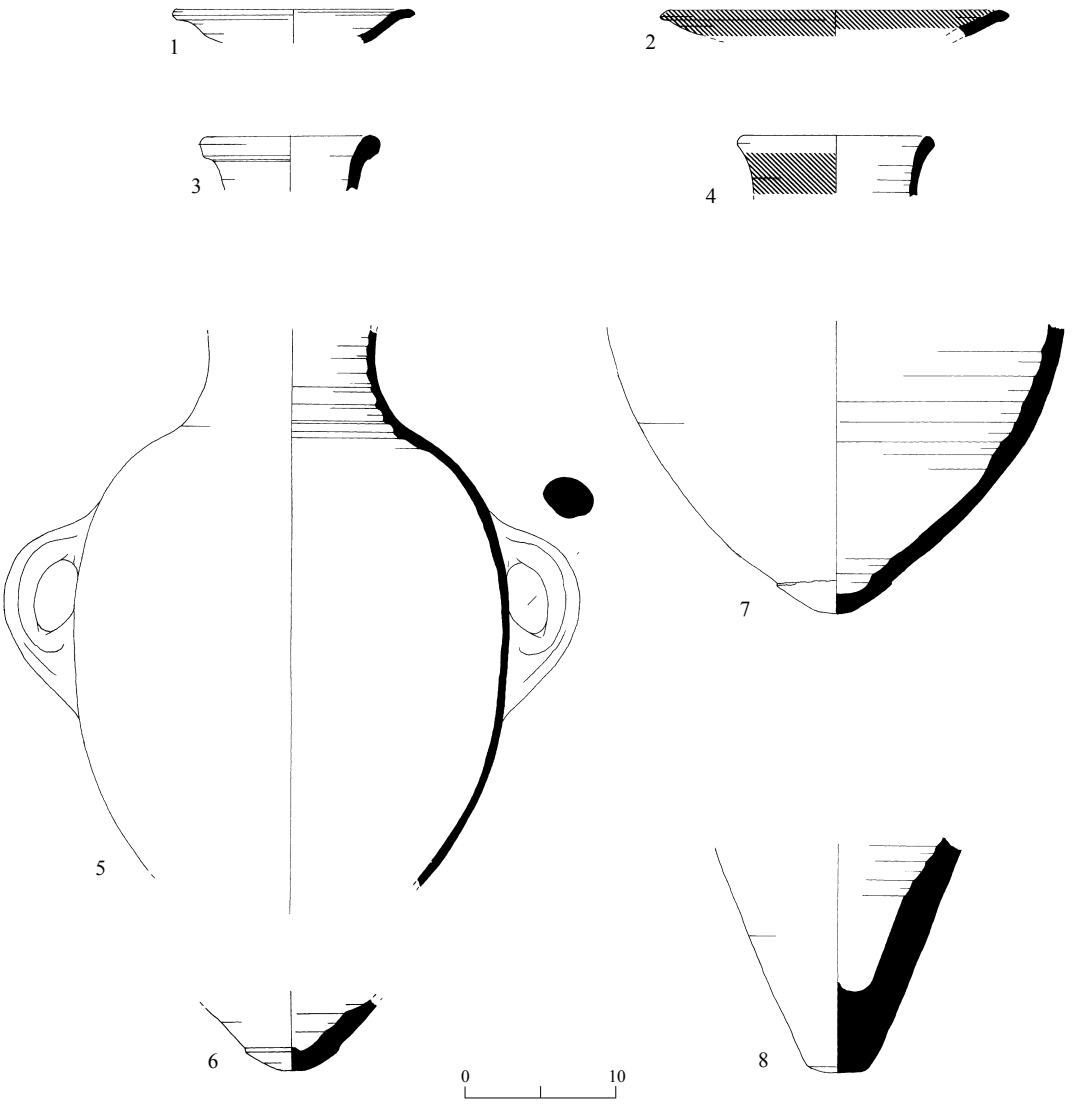


Fig. 33. Egyptian and other imported vessels from Area B.

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Bowl	Egyptian	389/2	389	Room 4	Orange–brown clay, white grits, mica
2	Bowl	Egyptian	2125/1	262	Room 9	Red–brown clay, white and black grits, mica, black core
3	Jar	Aegean?	2285/1	404	Room 9	Pinkish brown clay
4	Jar	Egyptian	2334/2	307	Pit	Buff–orange clay, brown, white and gray grits
5	Jar	Egyptian?	2286/1	408	Pit	Light yellowish brown clay, white and black grits
6	Jar	Egyptian?	2416/1	411	Room 3	Dark orange–brown clay, small and large white grits, buff slip
7	Jar	Egyptian?	2226/1	382	Room 1	Light gray–brown clay, white, gray and red grits, black core
8	Jar	Egyptian?	2110/1	259	Room 9	Yellowish brown clay, large and small gray and white grits

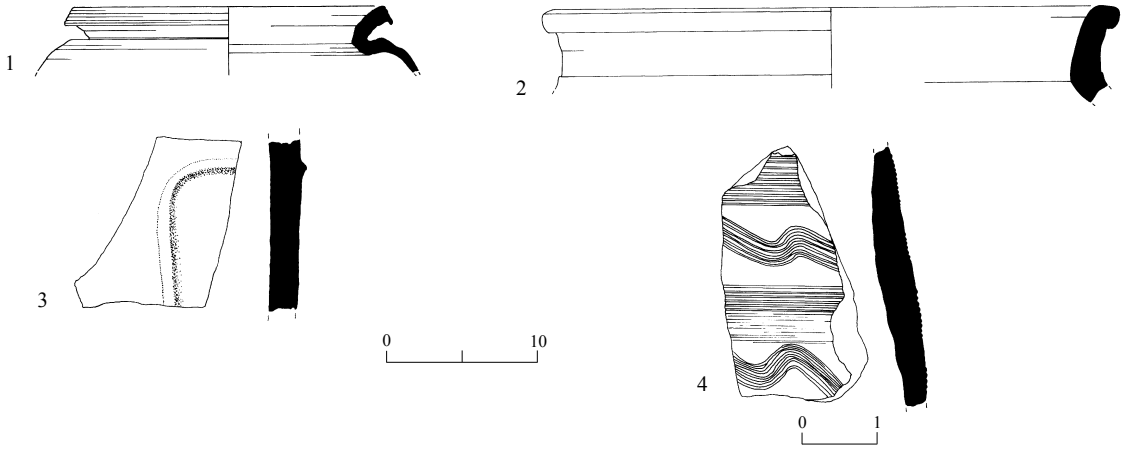


Fig. 34. Imported vessels from Area B.

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Jar/krater	Lebanese coast	2302/1	301	Pit	Orange–brown clay, gray and white grits
2	Pithos	Cypriot?	2105/1	257	Room 22	Greenish yellow clay, gray, white and brown grits
3	Pithos	Cypriot?	2207/1	362	Intrusion	Orange–brown clay, white and brown grits
4	Krater	Gray Anatolian Ware	2310/2	304	Fill	Gray clay, white grits and mica, burnished and combed ext.

Nagel 1938:192–193, Pls. 13, 14); it was apparently made of local clay. Similar vessels were found in Strata XIV–XV at Ashdod (Dothan and Porath 1993: Fig. 11:24, in this instance without the base perforation); in Tomb 59A at Megiddo (Guy and Engberg 1938: Pl. 157:13); and they are extremely common in tombs from the period of the New Kingdom in Egypt (see Nagel 1938:193).

Jars.— Rims, bases and body sherds from large and small jars of different types were found (Figs. 30:3–9, 11, 12; 33:4–8). Jars made of levigated clay with an abundance of small white temper are especially common.

Some of the jars are well-fired, treated with a light slip, and burnished (Fig. 30:6–9). Similar jars were found in Tomb 359 at Deir el-Medineh in Egypt, dating to the New Kingdom (Nagel 1938: Fig. 20:67; 21:71; 22:75). A small jar of this type was found in the Egyptian governor's residency at Tel Afeq (Beck and Kochavi 1985: Fig. 2:5).

Other jars, which imitate the Canaanite jars (Figs. 30:3, 11, 12; 33:4–8), were identified as Egyptian by their clay.

METAL OBJECTS

Jewelry

Earrings (Fig. 36:1–3) were found in both areas.

Fishing Accessories

Fishing hooks (Fig. 36:4–8), sundry points (Fig. 36:9–11), lead net sinkers (Fig. 36:12) and needles for mending nets (Fig. 36:13–15) were all found in the building complex and in the area of the winepresses.

Weapon

The fragment of an axe was found in Area B (Fig. 36:16). No other weapons were found; however, a spearhead was recovered from the surface during the exploratory excavation in Area A (see Nadelman, this volume: Fig. 6:2).

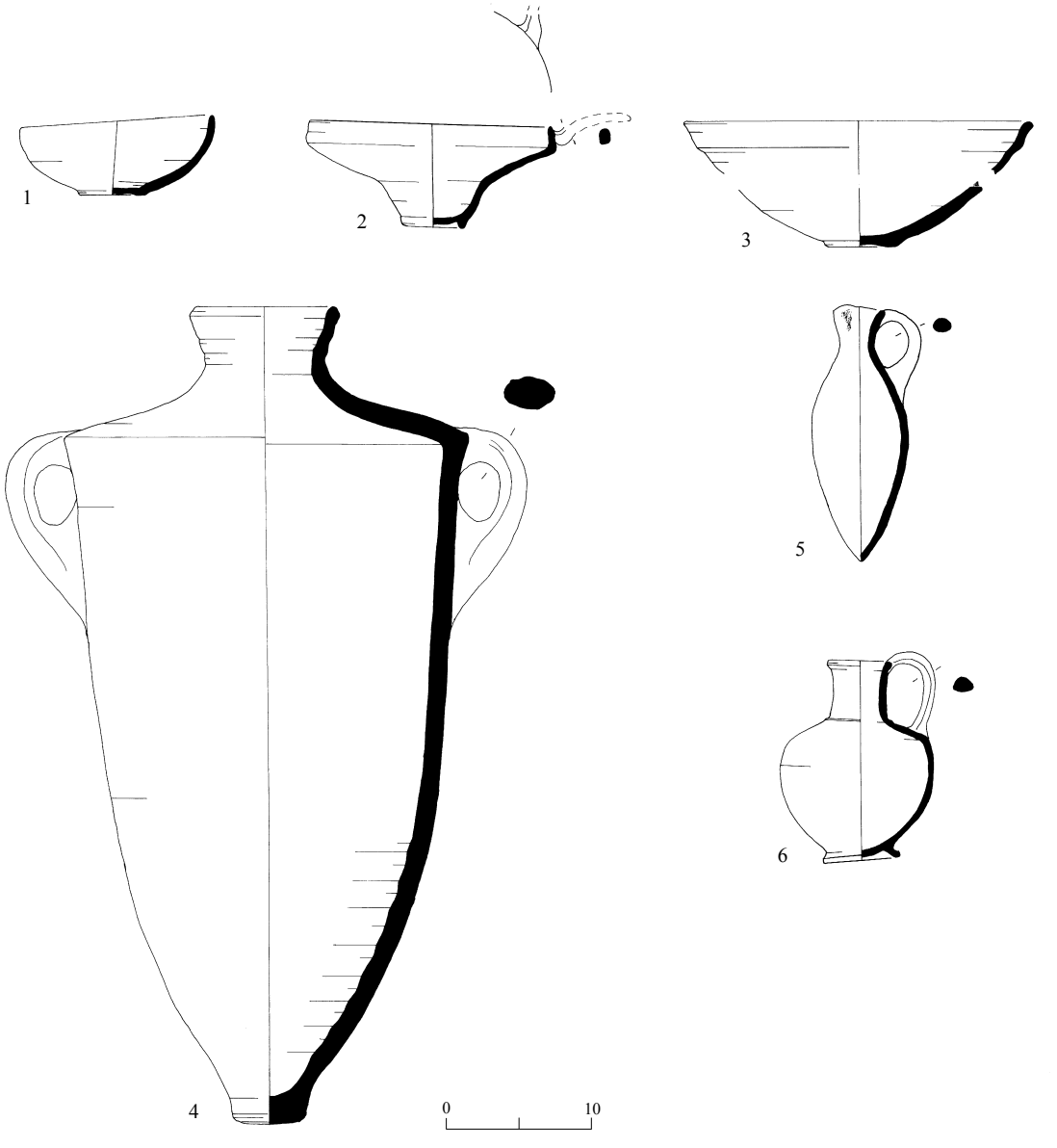


Fig. 35. Pottery vessels from Tomb T1.

No.	Vessel	Group	Reg. No.	Description
1	Bowl		1/3	Orange–brown clay, white and gray grits
2	Bowl	Cypriot BR II	1/1	Light orange–brown clay, remains of a reddish slip
3	Bowl		1/4	Brown clay, white and black grits, gray core
4	Jar		1/6	Light orange–brown clay, white and gray grits
5	Juglet	Cypriot White Shaved	1/7	Buff–white clay, traces of paring
6	Jug	Cypriot BR II	1/2	Pinkish brown clay, white grits, remains of a dark brown slip

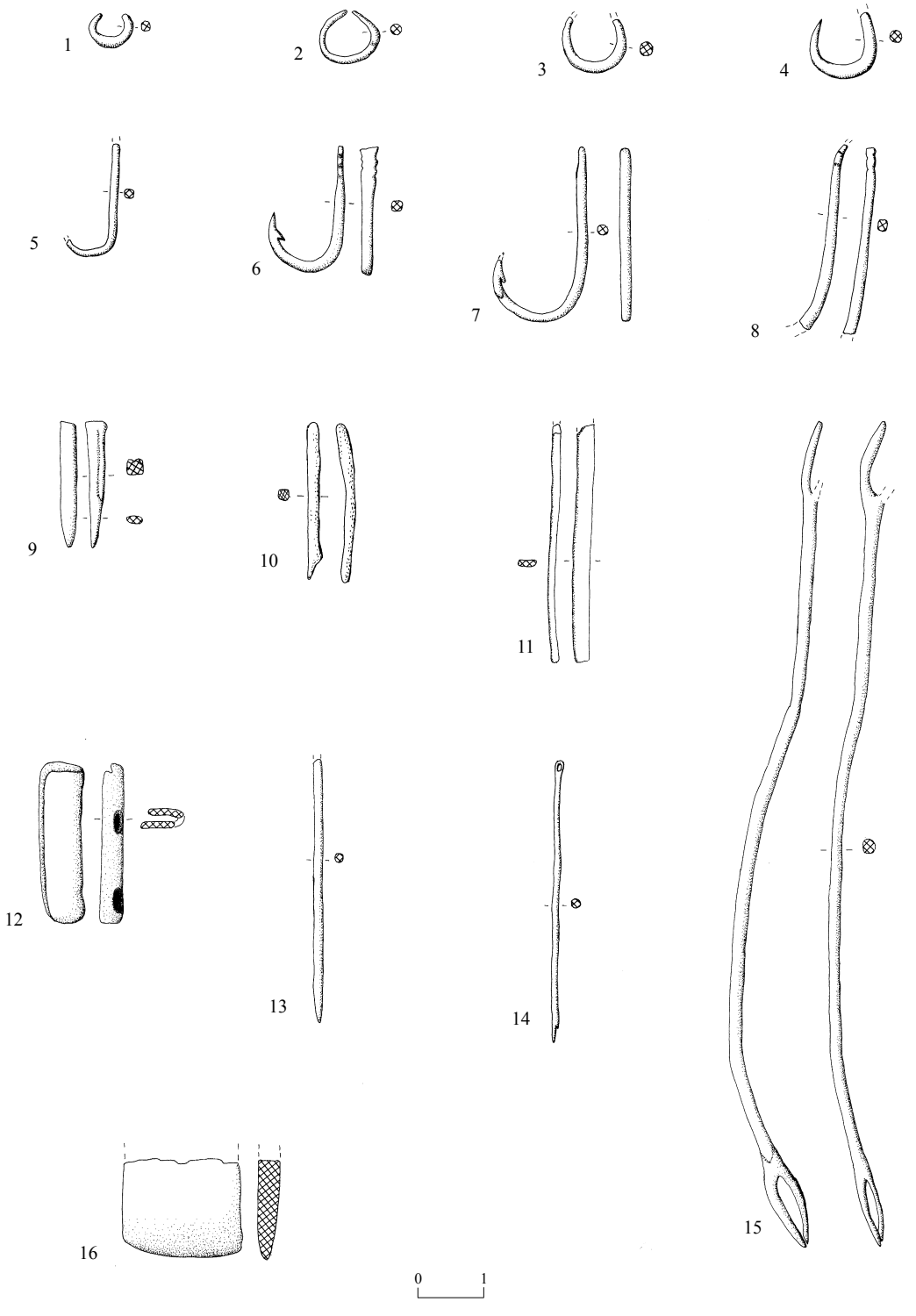


Fig. 36. Bronze objects from Areas A and B.

◂ **Fig. 36**

No.	Object	Reg. No.	Locus	Area	Findspot
1	Earring	1025/2	115	A	Occupation level
2	Earring	2144/1	282	B	Courtyard 20
3	Earring	2225/1	374	B	Fill
4	Fishhook	2160/1	294	B	Surface level
5	Fishhook	2243/1	391	B	Occupation level
6	Fishhook	1017/1	111	A	Intrusion
7	Fishhook	2179/1	358	B	Courtyard 18
8	Fishhook	2244/1	372	B	Room 2

No.	Object	Reg. No.	Locus	Area	Findspot
9	Point	2255/1	387	B	Courtyard 19
10	Point	2200	370	B	Room 1
11	Unknown	2097/1	254	B	Occupation level
12	Weight	2311/1	301	B	Pit
13	Needle	2303/1	301	B	Pit
14	Needle	2120/1	266	B	Surface level
15	Needle	389/18	389	B	Room 4
16	Axe	2060/1	234	B	Occupation level

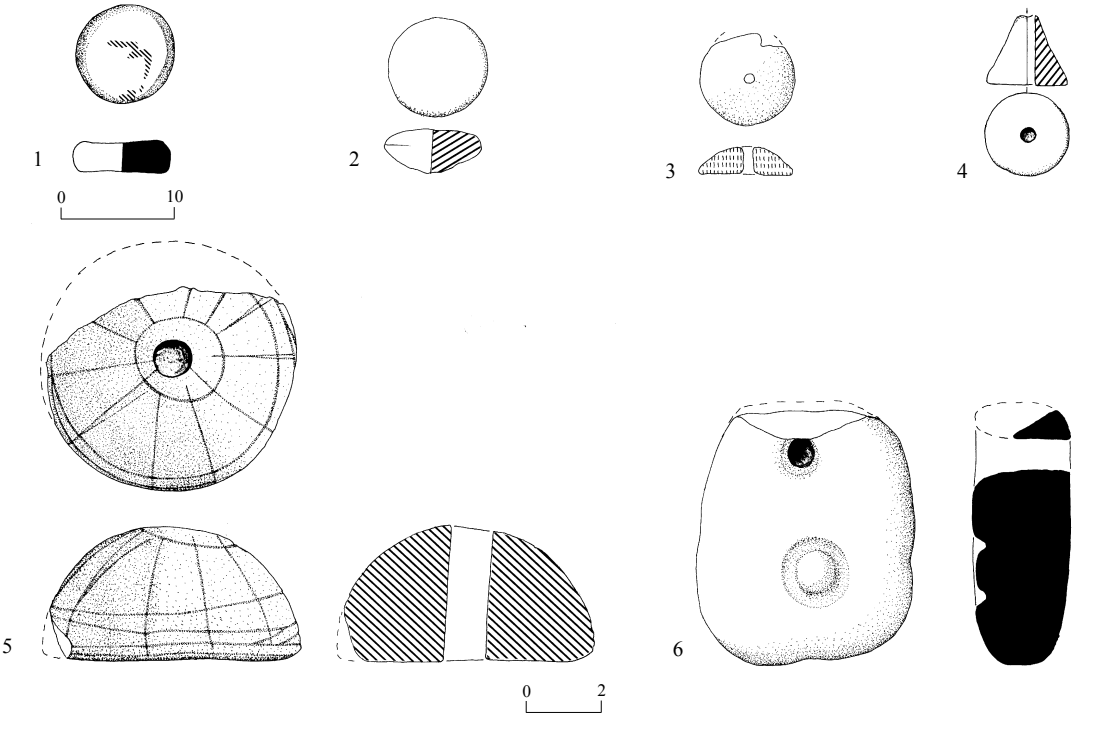


Fig. 37. Miscellaneous artifacts from Area B.

No.	Object	Reg. No.	Locus	Findspot	Description
1	Stopper	2426/1	401	Room 8	Yellowish clay, white and gray grits
2	Stopper	2420/4	401	Room 8	Limestone
3	Button	2040/2	223	Surface level	Bone
4	Weight	2040/1	223	Surface level	Steatite
5	Weight	389/17	389	Room 4	Limestone
6	Loomweight	2147/1	248	Fill	Orange–brown clay, white and gray grits

Fig. 38. Beachrock net sinkers and stone anvil *in situ*, looking west.

MISCELLANEOUS

Weights, Stoppers and a Button

Loomweights and a button were found in Area B (Fig. 37:3–6). The loomweight depicted in Fig. 37:6 is a ceramic one. A stone stopper (Fig. 37:2) was also found in this area, as well as a ceramic one, with remains of red paint (Fig. 37:1).

Two piles of beachrock net sinkers (with natural or drilled perforations) that were found in Room 8 (Fig. 38) are the only remains of fishing nets. Their sizes range from 6 to 12 cm in length.

Maẓẓeva

A *maẓẓeva* made of a squat piriform limestone bulb was found in the opening between Rooms 4 and 8 (Fig. 39). "Hips" were hewn on both sides of the *maẓẓeva* giving it an anthropomorphic form. The *maẓẓeva* is 0.35 m high with a maximum width of 0.29 m and a maximum thickness of 0.16 m. The remains of red paint are discernable in several places.

Fig. 39. The *maẓẓeva*.

Stone Anvil

A pale green, smooth, rounded stone (Fig. 38, center bottom) was used as a pounding surface for ochre in Room 8.

Pumice.— Numerous lumps of pumice that were apparently collected on the seashore were

found in both excavation areas. They were probably used as floats.

THE SCARAB (Fig. 40)[6]
Shlomit Israeli

A scarab (Reg. No. 1025) from the time of Ramses II was found on a tamped habitation level (L115) in the area of the installations (Area A).

Glazed steatite. L 19 mm, W 14 mm, H 8 mm. Dynasty XIX.

The base of the scarab is inscribed with the name of Ramesses II: "Ramesses, beloved of Amon"*(ramss mri imn),* the hieroglyph *mri* ("beloved") serving as a divider between the name and the inscription below it. A number of comparable scarabs, bearing the name of Ramesses II above a similar inscription, have been found.[7] On other scarabs, the same inscription, although with slight variations, appears beneath the name of the god "Amon-Re, king of gods" *(imn-ra nswt n Tr.w)*.[8] The similar structure of all of these inscriptions seems to suggest a certain interchangeability between Amon-Re and the king in this context, leading to the conclusion that the texts relate to some aspect of the god's and king's common attributes.[9] The inscriptions' readings are not sufficiently clear, however, and are open to several interpretations.[10] Drioton (1955:44–50, especially p. 50, n. 14) suggested that the hieroglyphs are cryptograms representing the familiar formula "The one who gives breath to him who loves him" (*rdi ṯ3w n mry sw*).[11] But Drioton's approach is somewhat extreme, given that a number of much simpler readings can be proposed for the text, e.g., "As for the royal boat expedition, may wind surround it" (*nˁ nswt ḳdi ṯ3w ḥr.s*).

The back of the scarab is bedecked with wings, and its legs are molded in detailed relief. The front section of the back is broken, as is its back end, but the line dividing it into two wings is clearly discernable, along with the curving lines designating the edges of the wings, the V-shape at the top of each wing—a characteristic typifying scarabs from the New Kingdom—the arcs adorning the lower back, and the line markings on the legs. The fusion of these features is characteristic of scarabs from Dynasty XIX,[12] a date compatible with the inscription on the base of the scarab, and the ceramic context in which it was found.

THE FLINT FINDS
Hamoudi Khalaily

During the excavation of the site, 98 flint items were collected, comprising 76 flaked elements and 22 small flint pebbles. The lithic finds are

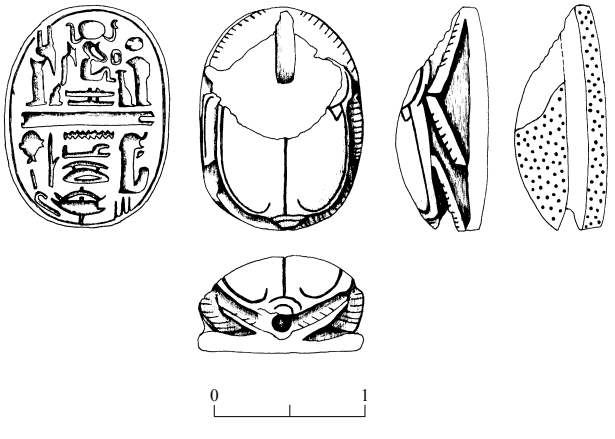


Fig. 40. The scarab from Area A.

Table 3. Debitage Frequencies at the Site

Type	No.	%
Primary flakes	13	13.3
Flakes	12	12.2
Blades	10	10.2
Cores	2	2.0
Core tablet	2	2.0
Chips	3	3.1
Pebbles	32	32.7
Tools	24	25.5
Total	*98*	*100.0*

characterized by the large number of tools and small amount of debitage (Table 3). Although flint was systematically collected, the lithic finds are few. Hence, no methodical sorting was undertaken and the flint finds will be treated here solely as a selection of implements representing specific periods. Special attention was paid to L303 (surface level), in which several implements representing a homogeneous material culture were found.

Most of the raw material ranges in color from light gray to light beige. Some items display patina, and several have double patina, indicating extensive exposure on the surface. The origin of the flint is primarily small pebbles that are found along Naḥal Lakhish, ranging in size from 2.5 to 5 cm. The two cores that were found are bladelet cores shaped on small pebbles. Each has two opposed platforms and most of the surface is still covered with cortex.

The Tools

The 24 tools represent a wide variety of cultures and periods. The majority (11) are ad hoc tools, some of which are common in the Epipalaeolithic period. Of the rest, five date to the Epipalaeolithic period, six to the Neolithic period and two to the Bronze Age and later.

The Epipalaeolithic Period.— In L303, a group of five implements and one core were recovered, and dated according to their typology to the Epipalaeolithic period (the Kebaran Culture). The core (Fig. 41:1) was made on a small pebble, 2.2 cm long and 1.7 cm thick. It has two opposed platforms and was used for producing bladelets. Two of the implements are microliths (Fig. 41:2, 3). The first is on a backed bladelet with a fine retouch on the other working edge; the second is a micropoint made on a narrow bladelet, 2.4 mm thick with a pointed end. It has an abrupt retouch on one edge and a fine retouch on the other. Two tools are end-scrapers (Fig. 41:4, 5): one is fashioned on a blade, while the other is a double endscraper on a retouched blade. The fifth implement is a burin on a truncation (Fig. 42:6). Even though the number of implements is small, they form a homogenous group of Kebaran tools that are characterized by the presence of microliths and especially, by the narrow micropoint (Bar-Yosef 1970). They probably originated from a nearby Epipalaeolithic site. Implements like these were found at Kefar Darom Sites 3 and 28 (Bar-Yosef 1970). They are common also at other Kebaran sites along the coastal plain (Ronen et al. 1975; Kaufman 1976; Saxon, Martin and Bar-Yosef 1978).

The Neolithic Period.— The Neolithic period is represented by six tools, four of which are sickle blades and backed blades. Two of the sickle blades are characteristic of the Pre-Pottery Neolithic B (Fig. 42:1, 2). One of them is made on a long, thick flint element, the back of which was thinned in order to fit into a haft. The second displays a natural back and a fine denticulated working edge. Sickle sheen covers almost the entire working edges of both items. The two remaining sickle blades (Fig. 42:3, 4) are backed truncated blades with fine denticulation on their working edges. Such sickle blades are frequent in late Pottery Neolithic assemblages. Both are fashioned on broad (± 2.4 cm), truncated flint elements. In

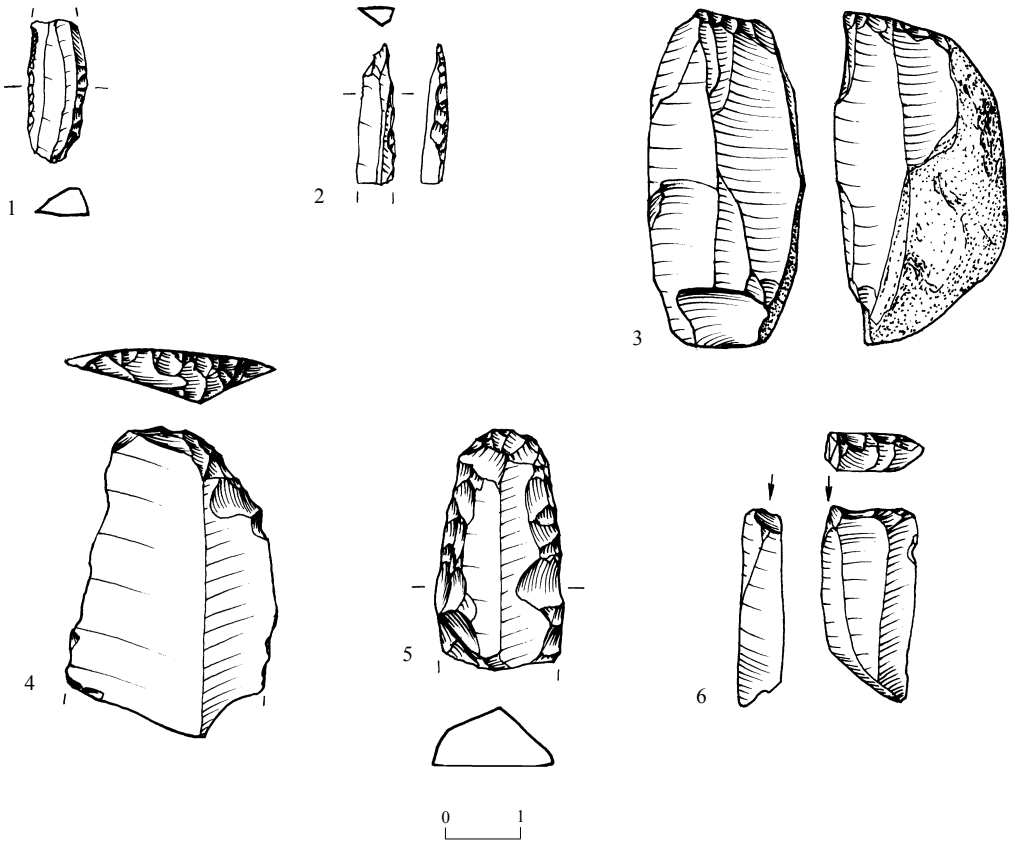


Fig. 41. Flint finds.

addition, there are two retouched blades that have no sickle sheen on their working edges.

These tools occur in late Neolithic sites along the southern coastal plain (Noy 1977). Similar sickle blades were found also in the Qatifian Culture, which is a transitional phase between the Pottery Neolithic and the Chalcolithic periods (Gilead 1990).

Bronze Age and Later.— The tool assemblage includes two implements from later periods. The first (Fig. 42:5) is a Cannanean sickle blade shaped in the Canaanean tradition but from light beige, local flint. The blade was evidently flaked from a two-opposed-platforms core and is trapezoidal in section. Both ends of the blade are broken; there is continuous fine retouch along one edge and a semi-abrupt retouch toward the ventral side of the other. Such blades appear in Early Bronze Age sites and continue until the beginning of the Middle Bronze Age (Rosen 1983; 1997). The second implement (Fig. 42:6) is a large geometric sickle element fashioned on a thick, broad flake. The back is fashioned by a semi-abrupt to abrupt retouch, and is truncated on the distal end. The working edge has an irregular retouch and is partially snapped, apparently as a result of having been used to cut hard materials. Sickle elements like these usually appear in periods later than the Early Bronze Age and they are characteristic of flint assemblages from the Middle Bronze Age until the Persian period (Rosen 1983; 1997).

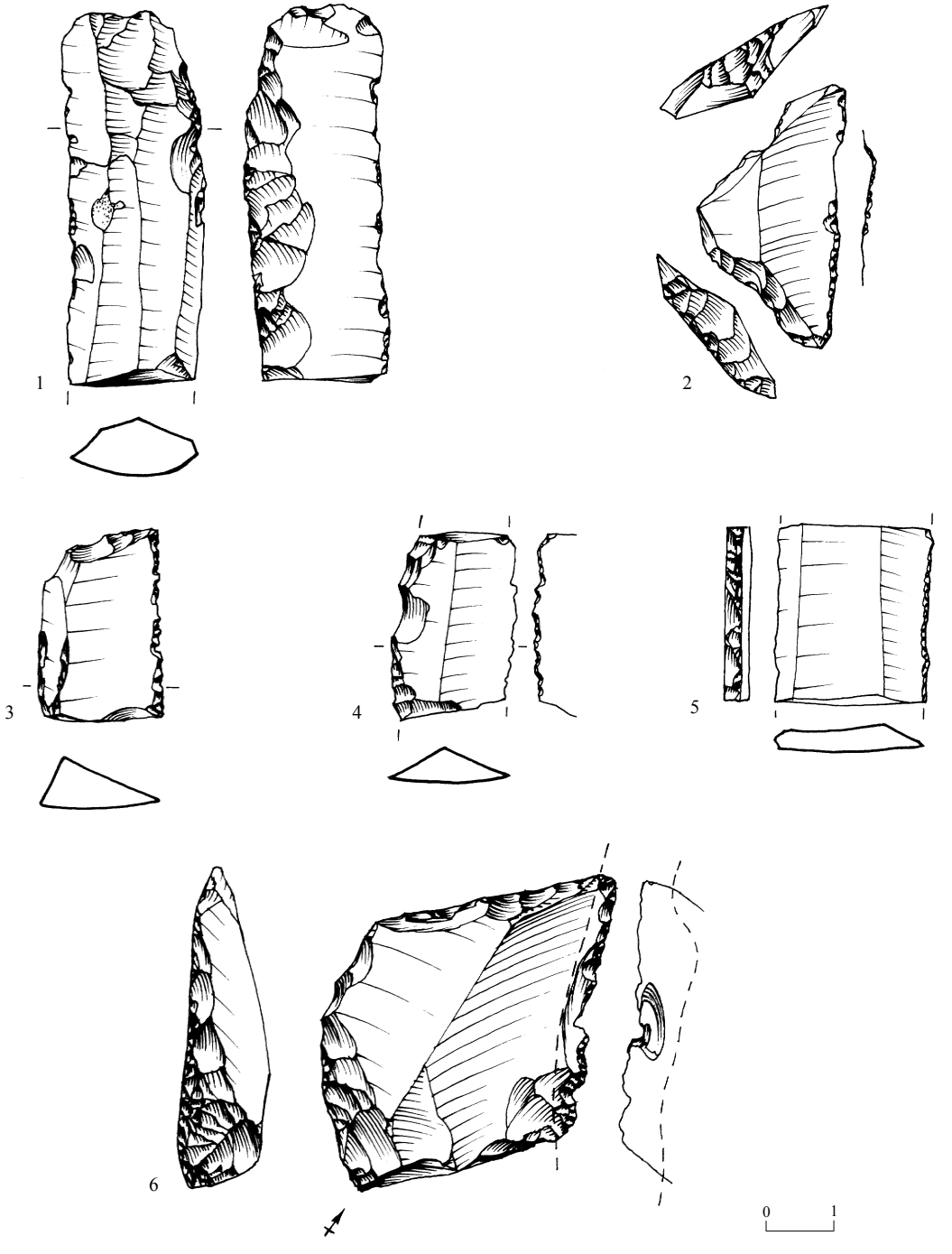


Fig. 42. Flint finds.

RADIOCARBON DATING
Dror Segal and Israel Carmi

In November 1995, a sample of seeds from the site on the southern beach of Ashdod was submitted for analysis in the radiocarbon dating laboratory in the Weizmann Institute of Science, Reḥovot. The seeds, which are big and black, were identified as wine grapes (see Melamed, this volume). They were found within a sealed level of refuse in Area A (L161, B1103; Laboratory No. RT-2445).

The sample was cleaned with an acid (HCL) and an alkali (NaOH) solution. It was next oxidized to carbon dioxide, reduced to lithium carbide and hydrolyzed to acetylene (by the addition of water; Carmi 1987) and benzene, which is the counting liquid in scintillation counting (Gupta and Polach 1985).

The process of preparing the sample transpired with no mishaps and was in keeping with standard chemical practices. The results (Table 4) were calibrated and gave the seeds a calendaric age of 1259–1126 BCE, which is credible, and in line with other finds, supporting a thirteenth-century BCE date for the site.

THE FAUNAL REMAINS
Dalia Hakker-Orion

Animal remains were collected in Areas A and B (Table 5; Fig. 43). The goat and sheep bones (72.8%) constitute the predominant component in the assemblage. Also found, in descending order of frequency, were fish, deer (gazelle), cattle, donkeys, poultry, a camel, a dog, a rabbit and a lizard.

There is a difference between the remains that were recovered in each area (Fig. 44). All the remains of gazelle, dog and lizard were found in Area A, as were most of the donkey remains. In addition, more remains of goat/sheep, fish and cows come from Area A than from Area B.

Most of the remains are those of mature animals (Table 5). This indicates animal husbandry for the purpose of producing

Table 4. Results of ^{14}C Examination

Sample No.	δ C‰	Δ^{14} ybp	δ^{13} C‰	Calendaric Age	Probability (%)
RT-2445	309.63 ± 3.52	-24	2975 ± 40	1259–1126 BCE	100

Table 5. Breakdown of Animal Bones from the Site

Animal	Fore-Quarters	Hind-Quarters	Head	Body	Young	Worked	Fragments	Total No.	Total %	Total without fragments
Gazelle	2	4	9	5			19	39	7.0	20
Goat/sheep	41	52	29	44	5	7	229	407	72.8	178
Cattle	5	8	4	1			16	34	6.1	18
Donkey	2	9	2	1			9	23	4.1	14
Camel			1	2				3	0.5	3
Dog		1			1	1		3	0.5	3
Rabbit	2							2	0.4	2
Poultry		2		1			1	4	0.7	3
Lizard			1					1	0.2	1
Fish			2	34		1	6	43	7.7	37
Total	*52*	*76*	*48*	*88*	*6*	*9*	*280*	*559*	*100.0*	*279*

secondary products—milk and its by-products, and wool—prior to consuming the meat.

The comparison between the various body parts (Figs. 45, 46; Table 5) shows a preference for the hindquarters of sheep and goats. The gazelles (Area B) were brought whole to the site without discarding the parts with little meat, such as the head.

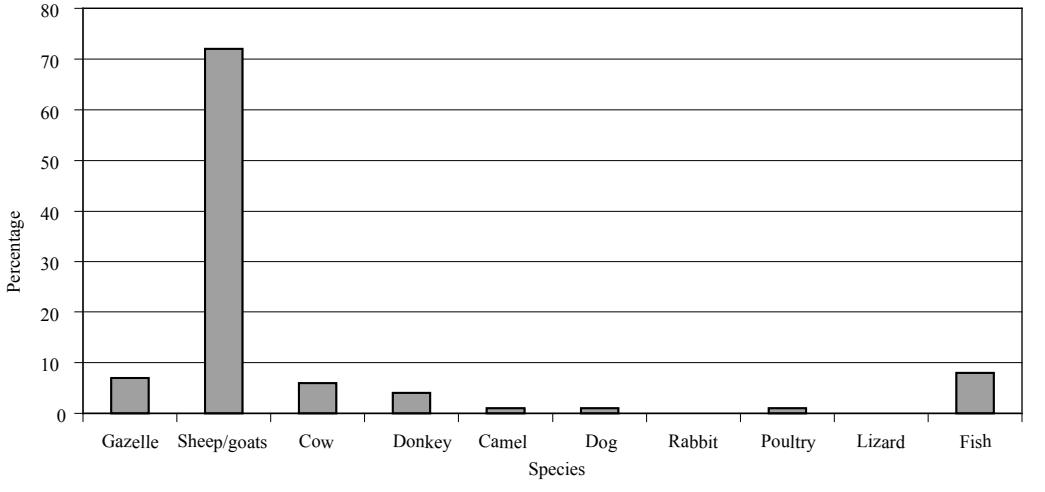


Fig. 43. Breakdown of animals according to species.

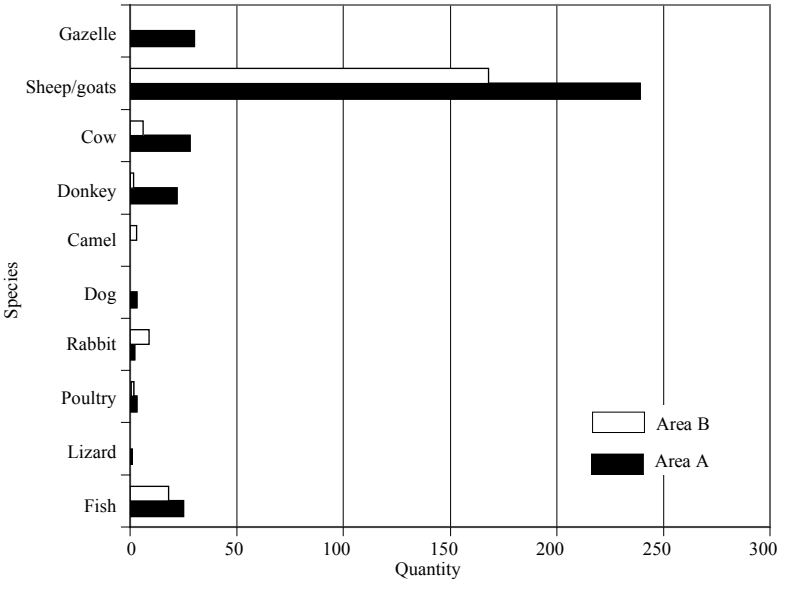


Fig. 44. Distribution of animals in Areas A and B.

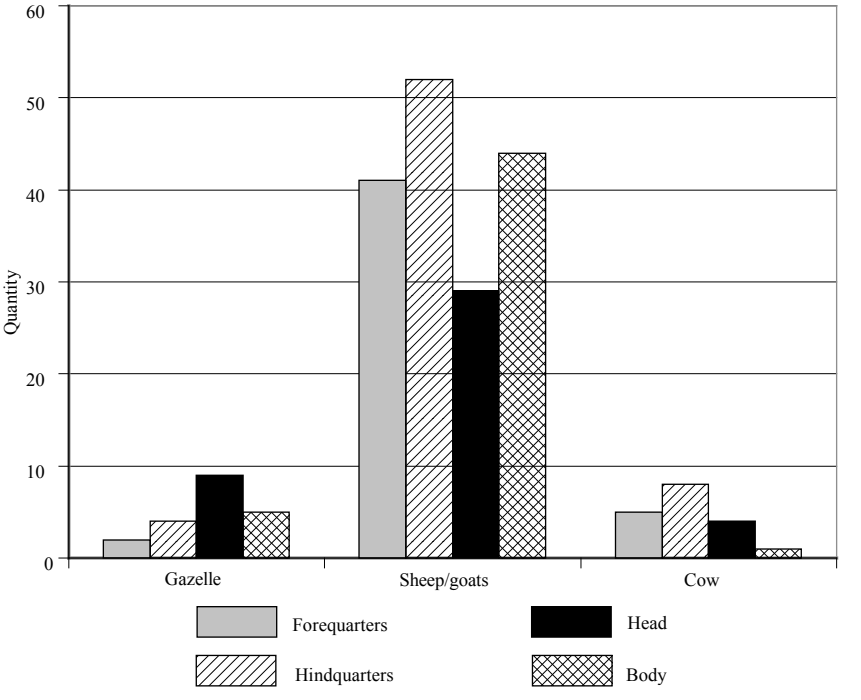


Fig. 45. Breakdown of animal body parts (quantity).

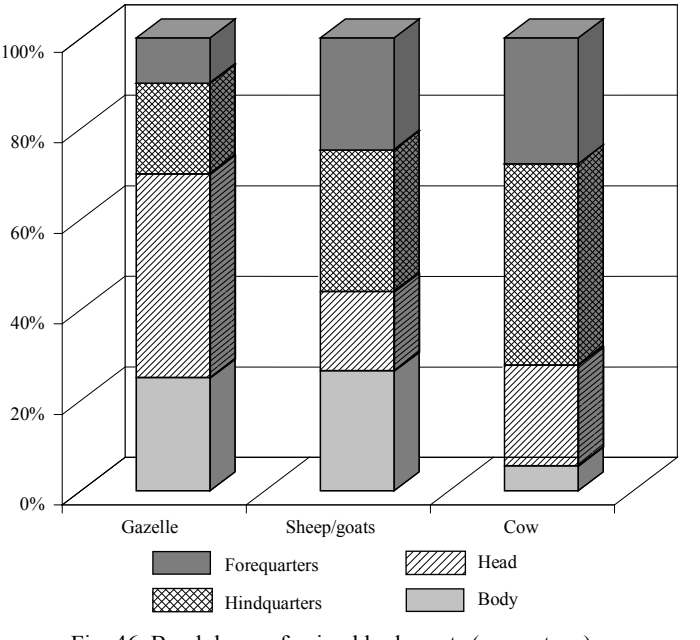


Fig. 46. Breakdown of animal body parts (percentage).

Stones

Eldad Barzilay[13]

Aims and Methods

Several hundred stones that appear to be of foreign origin were unearthed during the excavation (Table 6). This section focuses on their possible sources. The large quantity of stones and budget constraints determined the scope of this study. Initially, a sample of about 20 specimens was taken for careful examination at the Geological Survey of Israel. These stones were sorted by Dr. A.E. Shimron. A subsequent examination of the full assemblage led to a second sample of about a hundred more stones (see Table 6). The sample was not selected to reflect the relative percentage of each rock type, but rather the variety of the finds. The specimens of this second sample were identified using geological field methods, and special features were noted.

Table 6. The Lithic Sample

Locus	Type	Description
258	Greywacke	'Dirty' micaceous sandstone
262	Basalt	Black pebble
362	Basalt	Quartz crystals in voids
Surface	Basalt	Black, massive
141	Basalt(?)	Black
161	Chalk	Large, white clast with gypsum crystals forming crust
164	Chalk	White
213	Chalk	
262	Chalk	
141	Chert	White
144	Chert	Bracciated, brown, broken with cortex
164	Chert	White
246	Chert	Banded
262	Chert	Bedded laminated chert
273	Chert	Laminated
301	Chert	
370	Chert	Brown and white amorph pebble
389	Chert	Banded
389	Chert	Laminated white and brown clast
164	Diorite-Gabro	Large
254	Diorite-Gabro	
264	Felsic to intermediate volcanics(?)	Small clasts
164	Felsites	Pink
161	Ferruginous marl(?)	Brown, small clast
171	Granite	
213	Hematite	Two massive round clasts
394	Intermediate magmatic	Oval pebble
164	Intermediate magmatics	Gray
262	Intermediate porphyry rock	Gray (dyke or volcanic rock flow)

Table 6. (cont.)

Locus	Type	Description
159	Kaolin(?)	White
127	*Kurkar*	
244	*Kurkar*	
404	Limestone	
408	Limestone	Pitted
159	Magmatics	Mixture of small clasts
141	Marly limestone	
389	Micro-conglomarate	Orange
158	Obsidian	Small clast, black
113	Quartz	Small pebble
218	Quartz	Gray and white amorph. Pebble
262	Quartz	Quartz pebble (vein or quartzite?)
291	Quartz Porphyr	Reddish
368	Quartz Porphyr	Reddish
171	Sandstone	Some coarser grains (arkoza?), valvet, pink and orange
203	Sandstone	Pink, flat
231 (×2)	Sandstone	Yellowish green, oval, flat
159	Sediments	Mixture of small clasts
103 (×3)	Serpentinized Peridotite	
158 (×2)	Serpentinized Peridotite	
164	Serpentinized Peridotite	
164	Serpentinized Peridotite	3 clasts
212	Serpentinized Peridotite	Flat, green
212	Serpentinized Peridotite	Flat pebble
218	Serpentinized Peridotite	
236 (×2)	Serpentinized Peridotite	
239	Serpentinized Peridotite	Broken (cut?)
244	Serpentinized Peridotite	
252	Serpentinized Peridotite	
256	Serpentinized Peridotite	
257	Serpentinized Peridotite	
269	Serpentinized Peridotite	
272	Serpentinized Peridotite	
300	Serpentinized Peridotite	Pitted
307	Serpentinized Peridotite	
349	Serpentinized Peridotite	
359	Serpentinized Peridotite	
370	Serpentinized Peridotite	
387	Serpentinized Peridotite	
389 (×2)	Serpentinized Peridotite	
409	Serpentinized Peridotite	

Table 6. (cont.)

Locus	Type	Description
411	Serpentinized Peridotite	
214	Serpentinized Peridotite	
277	Siltstone	Laminated carbonate

Results and Discussion

The sample comprises a mixture of magmatic and sedimentary rocks. The sedimentary rocks are mostly chert, chalk, limestone, sandstone and *kurkar*. The magmatic constituents are ultramafic, intermediate to felsic in composition. No coarse crystalline felsic magmatics rocks are present, and there are no metamorphoic constituents in this collection. The volcanic rocks consist of basalt and obsidian.

Most of the sedimentary rocks seem to derive from a source close to the coast. The magmatic rocks, on the other hand, were moderately rounded by transport and had very likely been carried to a coastal region by rivers in flood from a fairly distal source.

The serpentinized peridotite, the obsidian, and the white-banded chert imply a foreign source for the whole, or certainly most, of this association. The lithologic association, as indicated by the peridotite, is most likely derived from an ophiolite complex (slices of abducted oceanic crust and mantle that occur along plate suture boundaries). The possibilities for such a lithologic association in the Mediterranean area are Cyprus, the Baer Bassit area in Syria, or the Antalya area in southern Turkey.

The sedimentary rocks found at the site indicate different sources. The banded chert in association with chalk and serpentinized peridotite may have come from a port in southeastern Cyprus. The sedimentary and magmatic collection suggests a southeastern trade route. The colored sandstones are known as Nubian sandstones and are common in the Nubian Desert of eastern Egypt. The diorite-gabro and granite are found in Sinai and Egypt. Limestone, marly limestone, bracciated chert and chalk, all outcrop in the Judean and Samarian hill country and the Shephelah and are found as pebbles in the channel beds of the major rivers in Israel. The only rocks that can be considered local, since they outcrop at the site, are the *kurkar* and the beachrock stones that were used as weights for fishing nets.

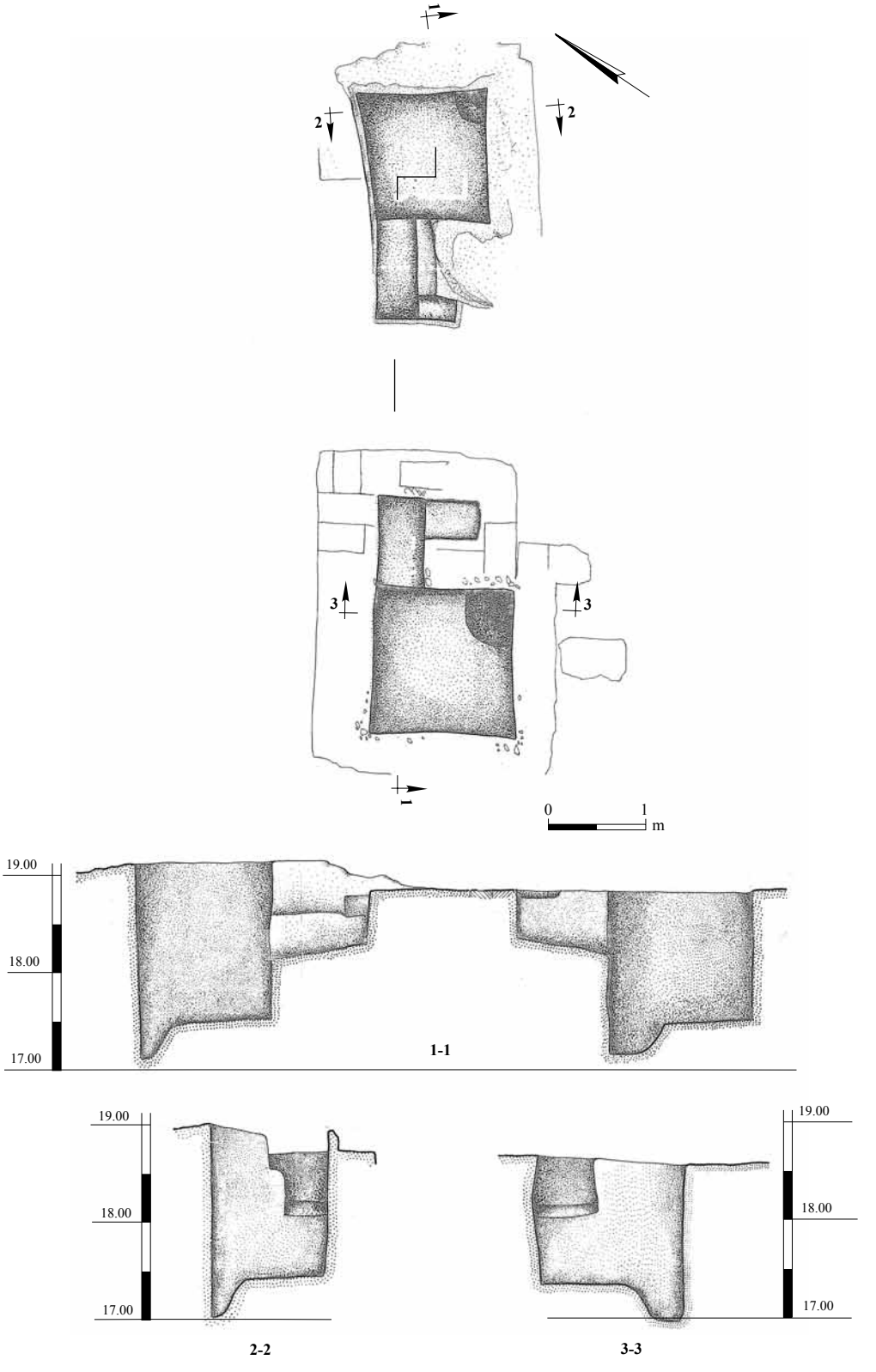
When investigating the source of rock specimens that were unearthed in an archaeological excavation, one should consider human-derived modes of transportation. The site was a port on the eastern Mediterranean trading routes. The foreign rocks would have arrived either as commodities or as ballast stones. The size of the peridotite rocks reaches some 30–40 cm in diameter, and many of them have one or two newly cut facets while the others are rounded. The serpentinized peridotite is not known as a fashionable building material. Therefore, these stones were probably brought to shore as ballast.

The volcanic rocks, on the other hand, were valuable. The obsidian may have been brought as a commodity from Turkey, and the basalt specimens are broken pieces of artifacts. The source for the basalt is most likely from northern Israel and the Golan, although basalt outcrops in many other inland areas.

THE FINDS FROM THE ARCHAEOLOGICAL INSPECTION

Pirhiya Nahshoni and Eyal Tishler

Iron Age Winepress (Plan 6; Figs. 47, 48).—While inspecting development work carried out at the site, the remains of a winepress were



Plan 6. Iron Age winepress, plan and sections.

Fig. 47. Iron Age winepress, looking east.

Fig. 48. Iron Age winepress, looking south.

discovered south of the Assyrian glacis (map ref. NIG 16422/63125, OIG 11422/13125). The winepress was cleaned during two days in January 1993.[14] The well-preserved elements of the winepress included two square settling vats, with a rectangular collecting vat next to each, and a section of a collecting channel. Very little of the treading surface survived (see Plan 6 and Fig. 48). The rectangular collecting vats have slanting floors that slope from 0.5 to c. 1 m in depth. The grape juice drained from the very poorly preserved treading surface via a channel into the vats. The southern, shallow part of the channel is 5–10 cm deep. The juice flowed from the collecting vats to the settling vats, which are not of identical size. The dimensions of the eastern vat, which is well-preserved, are 1.3 × 1.3 m and the maximum depth in the vicinity of the settling niche is 2 m. The western vat is larger, measuring 1.5 × 1.5 m, and its preserved depth (to the base of the settling niche) is 1.7 m. The settling niches are located in the eastern corner of each vat.

The winepress was built of uniform-sized mud bricks (15 × 30 × 47 cm) inside a cavity that was hewn into the *kurkar* (Plan 6) and all of its elements, including the collecting channels and the treading surface, were treated with hydraulic plaster containing shells. The plaster in the vats is well-preserved; it is about 3 cm thick and stained in places with the remains of a dark liquid. Pottery sherds were inlaid in several places where the plaster was repaired.

Within the plaster lining of the western collecting vat (L11), were found the embedded fragments of two jars (Fig. 49:1, 4) dated to the end of the Iron Age. The winepress evidently existed during this period and served the agricultural hinterland of Ashdod Yam.[15]

Egyptian Jar.— While inspecting the development work, a jar (Fig. 49:6) was found embedded in a layer of sterile *kurkar* (map ref. NIG 16434/63139, OIG 11434/13139). Although no bones were found, it may have been a burial jar as attested by its isolation from any archaeological context. The jar is crafted from Nile clay containing an abundance of organic temper. This jar probably dates to the end of the Iron Age or the Persian period.

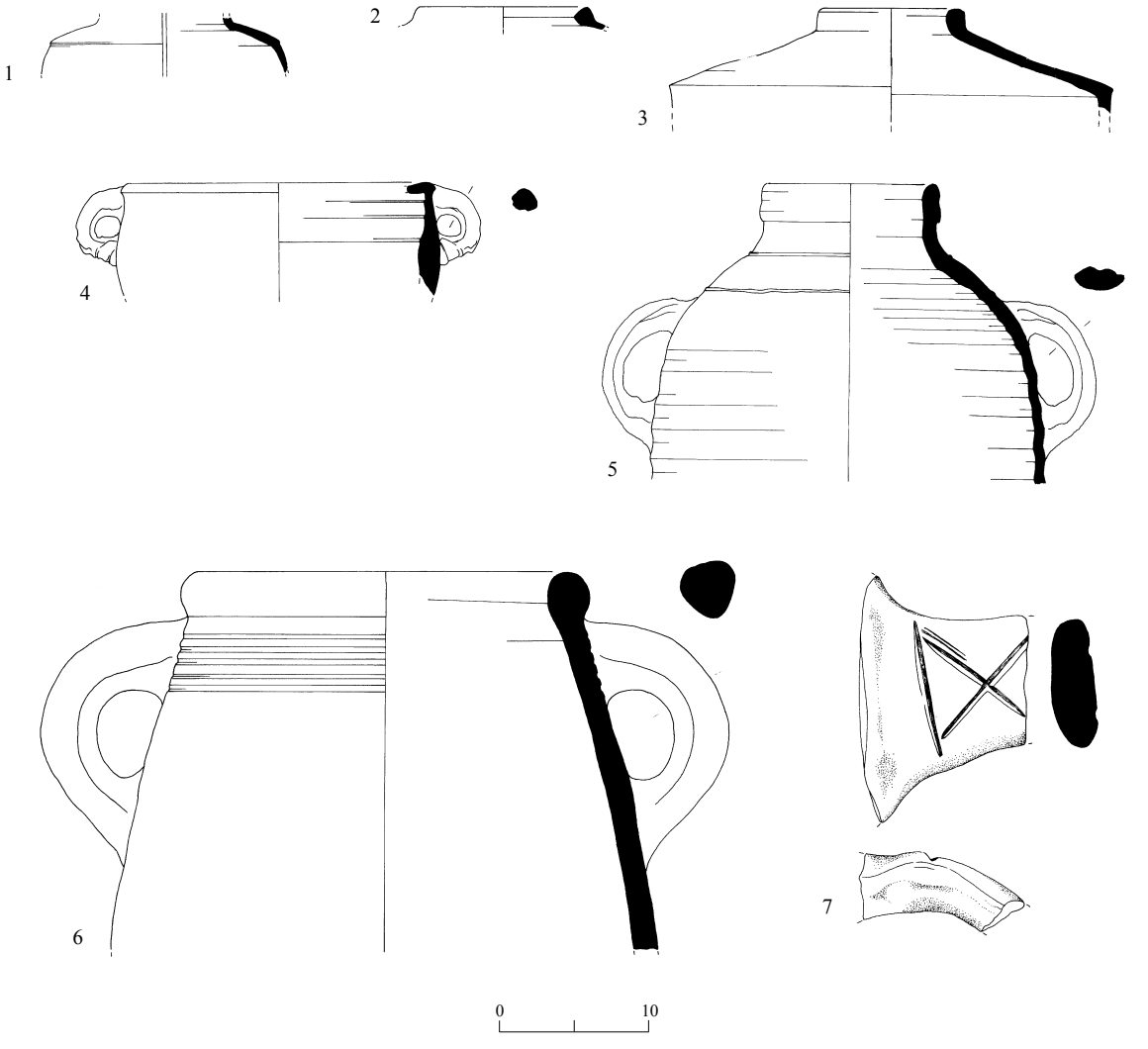


Fig. 49. Iron Age pottery vessels from the winepress and Area B, and finds from the archaeological inspection.

No.	Vessel	Group	Reg. No.	Locus	Findspot	Description
1	Jar		101/2	11	Winepress	Reddish brown clay, white grits, gray core
2	Jar		2167/1	299	Later intrusion	Orange–brown clay, white grits, greenish core
3	Jar		2176/1	355	Surface level	Orange clay, brown and gray grits
4	Jar		101/1	11	Winepress	Orange clay, white grits and crushed ceramic material, gray core
5	Jar		1/5		Near T1	Brown clay, white and gray grits
6	Jar	Egyptian	P/1		Inspection	Dark red clay, straw, gray core
7	Krater	Mycenaean IIIB	P/2		Inspection	Light yellowish orange clay, remains of a red slip

Fig. 50. A jar from the Persian period.

Persian-Period Jar.— This jar (Fig. 50) was found by Nitzan Sarig and Pirhiya Nahshoni in 1994 after it was exposed in a collapsed section west of Moshe Dayan Street, in an area where a cemetery from the Persian period (map ref. NIG 1814/6143, OIG 1314/1143) was identified (unpublished excavation).

CONCLUSIONS AND DISCUSSION

Based on the architectural evidence and the finds in the building in Area B and the vicinity of the winepresses, this is a single-period site that existed for a short time during the late part of the thirteenth century BCE. The winepresses were set up together with the building to form an industrial-administrative complex that was primarily engaged in the production and marketing of wine.

The rooms and courtyards of the building in Area B were built according to a plan. It was used by the inhabitants of the place as a dwelling and for storing the processed product, as well as for administrative and cultic purposes. The center of the complex was probably in Rooms 1 and 2, as attested by features such as the stone-lined wall in Room 1 and the mud-brick podium in Room 2. Rooms 4 and 8, which have a common opening, are conspicuously different from the two previous rooms. The corner *bema* in Room 4, the ceramic assemblage with the decorated vessels from this room, the anthropomorphic shaped *maẓẓeva*,[16] the stone anvil with the remains of ochre around it, the piles of stone weights, and other objects associated with fishing, may all attest to some sort of cultic function this pair of rooms fulfilled. There was probably a popular shrine in this place, providing for the needs of the inhabitants and for those of the seafarers visiting there.[17]

The selection of this location for the establishment of the site was not accidental. This is attested by the following two points:

1) The proximity of the complex to the areas with the vineyards from whose grapes the wine was produced. Vineyards were planted in the region until about 50 years ago, and their remains are still visible in the area. One can still see similar vineyards today in sections of the Gaza Strip.

2) The proximity of the complex to the sea. The fact that those who initiated the construction of the complex chose to build it on the shore, removed from the city, attests to the purpose for which it was erected, i.e., the processing of agricultural produce (wine-production) for export by sea, thereby taking part in the prosperous maritime trade.

The following finds strongly suggest the existence of a trading port:

1) The numerous stones, among them the pale green serpentinized peridotite that were found at the site, some of which were incorporated in the construction of the installations, were probably ballast that was unloaded from the ships when the local products were placed on

board. The large concentration of stones of this type attests to repeated anchorage (on the sand?). Identification of the possible source for a considerable number of these ballast stones as Kourion in southern Cyprus, the area of Baer Bassit in Syria, the coast of Antalya in southern Turkey, or Sinai and the Nubian desert (see Barzilay, above) is sufficient to infer the possibility of an anchorage for a number of maritime trade routes.

2) The plethora of imported finds (see Fig. 12) attests to commerce in Cypriot, Mycenaean and other pottery vessels, and probably also in organic materials that did not survive. Commerce flourished thanks to the existence of a terminal for handling the local wine products, and this site was its port of trade.

The great diversity of the imports—including objects from the Galilee, the coast of Lebanon, Anatolia, Cyprus, Crete, Greece, the Aegean region and Egypt—at a site decidedly minor, attests to 'tramping'. Tramping is a form of trade whereby itinerant ships sail from harbor to harbor conducting commercial exchange. This activity may have been combined with specific trade, which in this instance was the transport of the wine to a destination that is as yet unknown.

Despite the numerous imported objects found at the site, very few rare luxury items were identified. It appears that if such items did reach the site, they did not remain, but continued on their journey to Ashdod and elsewhere. The absence of rare luxury items in the area of the site and in Tomb 1 attests to the socio-economic status of the inhabitants, who were perhaps land tenants, laboring on behalf of a local ruler. In any event, these laborers did not possess vast amounts of property.

The tomb discovered north of the site, taken in conjunction with the spindle whorls and loomweights that were found in the building complex (Fig. 37:4–6), indicates the presence of families that maintained the vineyards and operated the winepresses during the grape-harvest season. They resided here year round, making their living also from fishing, as is evident from the abundance of fishhooks, fishnet needles and net-sinkers, and as the faunal findings indicate, from husbandry of sheep, goats and a few cattle (see Hakker-Orion, above). On the basis of the phytolithic finds, there is no evidence of grain having been grown, even though a few carbonized grain seeds were found (see Melamed, this volume).

The donkeys that were found primarily in Area A (Fig. 44) were used for transporting the grapes from the vineyards to the industrial installations, and probably also for transferring imported merchandise that was offloaded at the site to the next destination, which was probably Ashdod. The industrial zone is removed from the residential quarters and probably served also as a refuse dump into which were discarded the carcasses of the donkeys.

The Egyptian scarab that was found may indicate the presence of an official who supervised the wine industry and other commercial activity on behalf of the authorities. Despite the variety of imported objects, however, the finds reflect the "Canaanite" essence of the site, and it would therefore appear that the Egyptian scarab belonged to a Canaanite clerk appointed to oversee the place. The only city nearby was Ashdod. Evidently, the site on the southern shore was subordinate to the ruler of Ashdod and it was at his initiative that the site was actually established. The self-initiative of this ruler was carried out under the patronage of the Egyptian authorities that benefited from it by means of taxes that were collected.

An interesting fact is that during the same period in which the wine-production center operated on the shore of Ashdod, wine was produced in the Egyptian governor's residency in Afeq, in winepresses that had a volume of 3500 liters (Kochavi 1989:76). The winepresses at Ashdod are of smaller volume (only several hundred liters per press); however, a number of winepresses probably operated simultaneously. There is probably evidence here of profit-making opportunities that were exploited, for this is the period that marked the height of

maritime trade in the Mediterranean Sea. Wine production in Ashdod, and perhaps in Afeq as well, was driven by domestic and external market forces—by demand for wine[18] and perhaps also by the demand for luxury items such as imported vessels and fragrant oils that were received in return for the wine products (Sherratt and Sherratt 1991).

Both the local and imported pottery vessels from the site are characteristic of the later part of the thirteenth century BCE. The best ceramic comparisons are those from the Fosse Temples (mainly II–III) at Lakhish and the Egyptian governor's residency at Afeq, which were contemporary with the complex on the southern beach of Ashdod. The ceramic assemblage reveals considerable similarity to that of Tel Ẓippor—primarily Stratum VI, which in Yannai's opinion parallels Lakhish VII (Yannai 2000). Both the scarab and the Carbon-14 dating are compatible with this date.

The site was abandoned at the end of this period for unknown reasons. There is no evidence that it came to a violent end. Not long after being abandoned, the mud-brick walls caved in simultaneously, as the collapse indicates, perhaps as a result of a seismic event or because of tsunami waves hitting the shore.

The finds from the excavation of this small site constitute important evidence for the study of the economy, particularly the agriculture and commerce, of the area of Ashdod during the thirteenth century BCE. They contribute substantially to understanding the economic changes that the Canaanite centers underwent in this particular period, stemming from, among other things, the market forces of the flourishing maritime trade in the eastern part of the Mediterranean basin.

NOTES

[1] I would like to thank Don Glick for the translation of this paper.

[2] One tomb was discovered, and traces indicating the presence of other tombs were discerned, during the quarrying of sand north of the site.

[3] The excavation (Permit No. A-2330), conducted in 1995 on behalf of the Israel Antiquities Authority and financed by the Corporation for the Development of Tourism, Ashdod, was directed by Pirhiya Nahshoni, with assistance from Yishai Shuster and Daniel Varga (area supervision), Ezra Hadad (administration), Israel Vatkin and Pavel Gertopsky (surveying), Tali Krinkin-Fabian and Yoheved Casaby (field plans and drawing of objects), Tania Kornfeld (drafting), Yogev Lavi (field and aerial photography), Shula Lavi (pottery restoration), Anat Cohen-Weinberger (petrography), Yoel Melamed (palaeobotany), Dalia Hakker-Orion (animal bones), Hamoudi Khalaily (flint tools), Arlene Rosen (phytoliths), Eldad Barzilay (geology and lithology), Yossi Nagar (physical anthropology), Dror Segal and Israel Carmi (Carbon-14 analyses), Ela Altmark (metallurgical laboratory), Shlomit Israeli (scarab reading) and Gelena Yofe (finds processing assistant). Also of assistance were Amir Barel and Ofer Salame.

[4] All the diagnostic pottery sherds were saved. Quantification followed the Estimated Vessel Equivalent (e.v.e) method in the following manner: The percentage of the complete rim represented by each rim-sherd was measured using a diameter board. When only a base was found the calculation was performed according to the same method. This is the reason for the tiny size of the sample, reflecting in our opinion the correct proportions (in percentages) within the assemblage. The diagnostic sherds were also counted according to types; however, the results are not presented in the article.

[5] I would like to thank Jerry Rutter for identifying this vessel.

[6] I wish to thank Daphna Ben-Tor for her comments, references and input regarding this scarab.

[7] The name of Ramesses is fashioned in one of two styles: (1) in the format of the scarab described here (see Matouk 1971:194, 632 and 109, 632; Jaeger 1982:203, Ill. 581; Petrie 1889:51, C 3771); (2) in a cartouche (see Drioton 1955:47, No. 5; Jaeger 1982:310, Ill. 731; Drioton 1955:47, No. 6; Hall 1913:213, 2122, No. 32266).

[8] See Drioton 1955:45, Nos. 1–4; 48, No. 7; Newberry 1907: Pl. VIII, 36491; 48, Nos. 8–11; 49, No. 12; 49, No. 13; Newberry 1907: Pl. VIII, 36399; 50, Nos. 14, 15.

[9] These common attributes are also apparent in other sources of the period. See, for example, Kitchen 1982:174–178.

[10] These will be discussed in a separate article.

[11] On the meanings of this formula, see Lorton 1974:136–144; Israeli 1998.

[12] See, for example Keel 1995:51, Abb. 54–66 and §100; Ben-Tor 1989:48:1, 2, 4, 6, 7; Giveon 1985:28 (and 29), No. 21; 30 (and 31), Nos. 25, 26; 32 (and 33), Nos. 31, 43; 34 (and 35), Nos. 36–39.

[13] I thank Dr. Aryeh E. Shimron of the Geological Survey of Israel, who kindly identified an initial collection of stones and paved the way to the wider study presented here. Since we could not inspect all the stones, or apply geo-chemical and petrographic methods, it was impossible to narrow down the possible sources.

[14] Due to the urgency in carrying out the work, the winepress was cleaned by the antiquities inspector Eyal Tishler, with the help of laborers from the S.I. Infrastructures Company. Assistance was also provided by Raz Niculescu (plan and sections), Yigal Israel (administration), Yesha'yahu Lender and Pirhiya Nahshoni (photography) and Yoheved Casaby (pottery drawing).

[15] It is worth noting that a few other Iron Age jar fragments were discovered out of context at the site (see Fig. 49:2, 3, 5).

[16] At Tel Kitan, north of Bet She'an, small anthropomorphic-shaped *maẓẓevot*, made of river pebbles, were found in a Canaanite temple from the Middle Bronze Age IIB (Eisenberg 1993:880–881).

[17] This temple can be categorized as a 'road temple'. Such temples are known in Canaan from the Late Bronze Age, as well as in the Aegean, where one can find similar examples, such as at Phylakopi, and in Mycenae (see Negbi 1988). It seems that the appearance of these small temples attests to a socio-economic change from temples located in close proximity to the palace, to temples located within residential areas (Mycenae, Phylakopi, Ugarit) and trade stations (Tel Mevorakh, the Southern Beach of Ashdod). Their appearance in the eastern Mediterranean and in the Aegean at the end of the Late Bronze Age is evidence to influence spreading from the Levant as a result of the ongoing and direct contact of seamen and merchants with the local populace.

[18] On the influence of demand on the economy in antiquity, see Warburton 2000:120.

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