

## A LATE BRONZE AGE CEMETERY ON THE COAST OF PALMAḤIM

ELI YANNAI, RAM GOPHNA, SHMUEL LIPSHITZ AND YUVAL LIPSHITZ

### INTRODUCTION

The site of the Palmaḥim cemetery is located on the shore, some 200 m south of Nahal Soreq's outlet to the Mediterranean Sea, just north of Yavne-Yam (map ref. NIG 1720/6490, OIG 1220/1490; Fig. 1). During a violent storm in 1960, the waves exposed a number of tombs along the coast of Kibbutz Palmaḥim, and over the years, subsequent tempests revealed additional burials (Fig. 2). A total of 23 tombs from this cemetery have been excavated: two by Aharon Kempinski and Shmuel Liphshitz in 1961, thirteen by Ram Gophna and Shmuel

Liphshitz in 1967–1969, and the remainder by local residents, including six tombs in 1974 by Shmuel and Yuval Liphshitz of Kibbutz Palmaḥim.<sup>1</sup> The cemetery is discussed in Gonen 1992:90–93 and briefly mentioned in Gophna 1993:1412.

Some of the 23 excavated tombs are located close to the current shoreline and others slightly further inland. The cemetery—designated the Northern Cemetery—stretches across several dozen meters in a low area bordered by *kurkar* hills to its north and south. The erosion of the beach by waves damaged some of the tombs and we have no information regarding the location

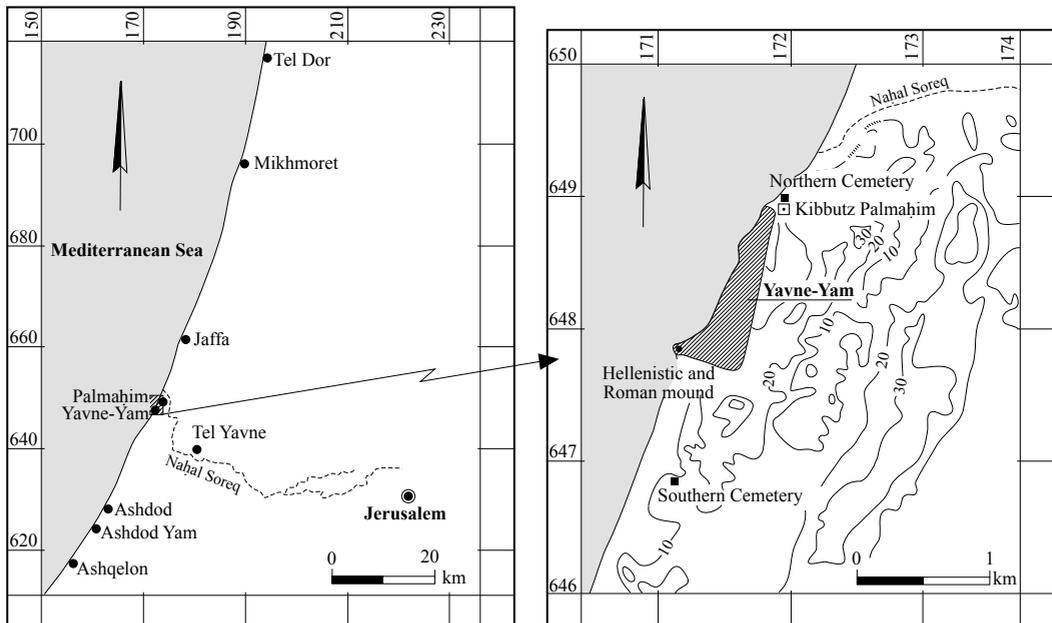


Fig. 1. Location map, showing Yavne-Yam and the cemeteries, the inland site of Yavne, and Late Bronze Age sites on the coastal plain.



Fig. 2. Palmaḥim shore, showing tombs exposed after a storm.

of the shoreline during the Late Bronze Age, nor of the weathering processes that affected it over the years. We therefore assume that the tombs that were exposed do not represent the entire cemetery and that, over time, some were washed into the sea. The eastern part of the cemetery is beneath the houses of Kibbutz Palmaḥim and was not excavated.

The only ancient settlement on the Palmaḥim coast is the large site of Yavne-Yam, located on the shore some 500 m south of the cemetery discussed here (Fig. 1). The site consists of a compound enclosed by an earthen rampart. Along its southern fringes is a small mound with remains from the Hellenistic period (Sadeh 1991). Excavations at Yavne-Yam cut into the ramparts in the north and uncovered a fortified gate on the southeastern side of the compound (Kaplan 1993:1505). Sectional trenches through the ramparts have shown that the compound was built during Middle Bronze Age IIB. Settlement remains from Late Bronze Age I were exposed inside the compound (Kaplan 1993:1506), but none dating to LB II have been found. Over the years, a number of salvage excavations were carried out along the edges of the ramparts, along the seashore and in the immediate vicinity of Kibbutz Palmaḥim (Gophna and Liphshitz 1980; Fisher 1991;

Braun 2000). A survey conducted in 1950 by Moshe Dothan in the region of Naḥal Soreq determined that the Iron Age II occupation at Yavne-Yam was of more limited scope than the extensive Middle Bronze Age settlement (Dothan 1952:111).

Four tombs hewn in the slope of the *kurkar* ridge were exposed some 1 km south of Yavne-Yam—designated the Southern Cemetery (see Fig. 1); two of them date to LB IIB (Singer-Avitz and Levy 1992)<sup>2</sup> and two, from Iron II (Singer-Avitz and Levy 1994). It is possible that the Late Bronze Age tombs in both the Northern and Southern Cemeteries belonged to an as yet undiscovered LB II occupation of Yavne-Yam or to some other presently unknown or eroded settlement that was situated nearby.

#### THE TOMBS

The tombs were hewn into a layer of hard, smooth *kurkar*, most of them reaching an underlying layer of black sandy clay (*nazaz*). In general, they were laid out in more-or-less parallel rows (Fig. 3): in the eastern row—Tombs 20, 23; in the next row to the west—Tombs 22, 13, 16; in the center row—Tombs 19, 8, 14, 5; in the fourth row from the east—Tombs 21, 18, 11. Farther to the west, next to the present shoreline, the layout of the tombs was less orderly (probably because of the nature of the bedrock there)—Tombs 2, 15, 6, 12, 3. Most of the tombs were hewn close together, with less than a meter separating them. However, several were farther apart: Tomb 17 is 5 m south of the southernmost tomb in the main group; Tombs 4 and 7 are 10 m north of the northernmost tomb in the main group, while Tombs 9 and 10 are located some 11 m north of Tomb 7. Nearly all of the tombs were hewn along a northeast–southwest axis and only several (Tombs 6, 7, 21, 23) were placed along a northwest–southeast axis.

Many of the tombs were cut to uniform dimensions, although there are exceptions: Tombs 4, 15, and 21 are smaller, and Tombs 7, 13, 14 and 18 are larger than the others. All

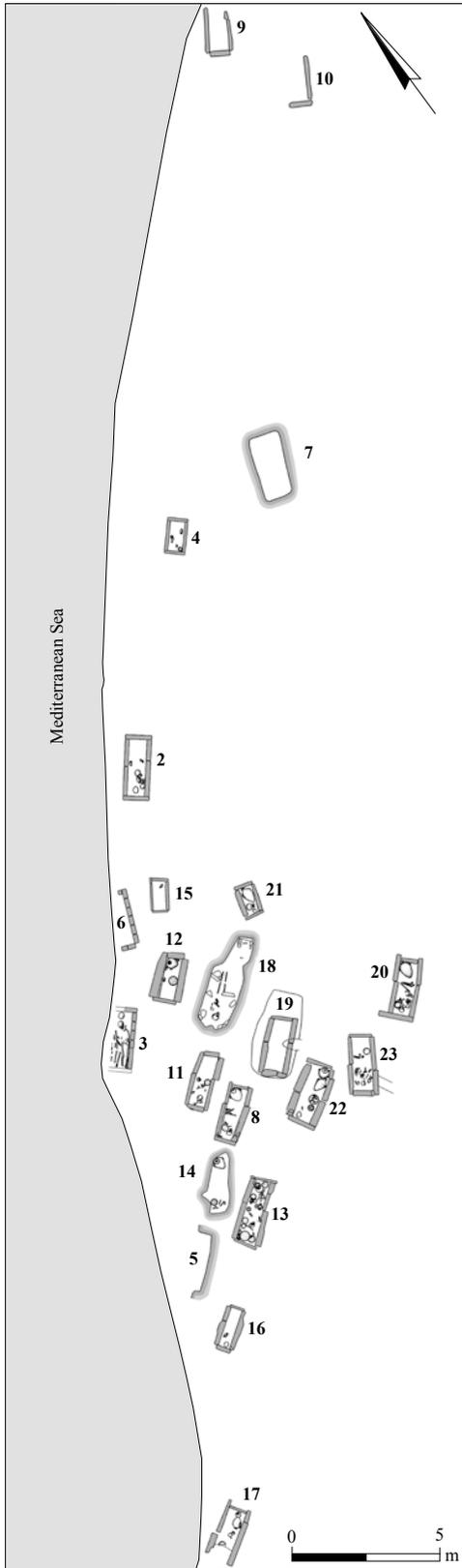


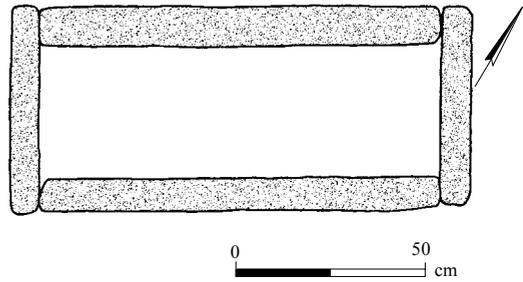
Fig. 3. Location map of the tombs.

but one of the tombs were cist graves, lined with *kurkar* slabs that were, for the most part, carefully dressed, flat rectangles. Many of the burials were found covered, usually with the same kind of dressed *kurkar* slabs.

Since the tombs are presented below in numerical, rather than geographical order, care has been taken to describe the location of each one in relation to the rest of the cemetery. Table 1 summarizes the basic information regarding all the interments: inner dimensions, number of individuals, orientation (note that ‘northeast’ is considered in the descriptions as ‘north’), and the contents of each tomb.<sup>3</sup>

*Tomb 1* (Plan 1; Fig. 4).— Located next to the shore, exact spot unknown.<sup>4</sup> The tomb was lined with four dressed rectangular *kurkar* stones that were completely preserved.

A Bucchero jug (Fig. 4) and a bronze pin (not illustrated) were found, although their exact location in the tomb was not recorded.



Plan 1. Tomb 1.

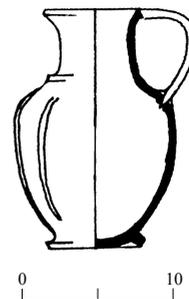


Fig. 4. Bucchero jug from Tomb 1.

**Table 1. The Tombs and their Contents**

Tomb	Dimensions <sup>i</sup> (cm)		Deceased		Finds (N)			
	Length	Width	MNI <sup>ii</sup>	Orientation of Skull	Pottery Vessels	Metal Objects	Beads	Scarabs
1	105	35	?	-	1	1 pin	-	-
2	190	60	3	South (2) Center (1)	5	2 needles 2 toggle pins	1	-
3	190	-	2	North	2	-	-	-
4	110	50	?	-	4	6 rings	-	-
5	190	-	?	-	-	-	-	-
6	180	-	?	-	-	-	-	-
7	230	120	?	-	1	-	-	-
8	180	50	1	South	6	3 needles	-	1
9	150	60	?	-	-	-	-	-
10	150	50	?	-	-	-	-	-
11	170	55	1	South	6	-	-	-
12	140	50	?	-	6	-	-	-
13	220	60	3	Center (2) North of center (1)	17	1 pin	8	-
14	210	60	1	South	4	-	-	-
15	100	45	?	-	1	-	-	-
16	130	40	2	South (adult) North (child)	1	-	-	-
17	190(?)	60	?		7	-	-	-
18	300	100	1	South	1	2 pins 1 bracelet	4	-
19	180	70	?		9	-	1	-
20	180	60	1	South	5	1 pin	-	-
21	100	40	1	South	5	1 pin	-	-
22	200	70	1	South	7	1 ring	-	-
23	180	65	2	South	3	4 needles	-	-

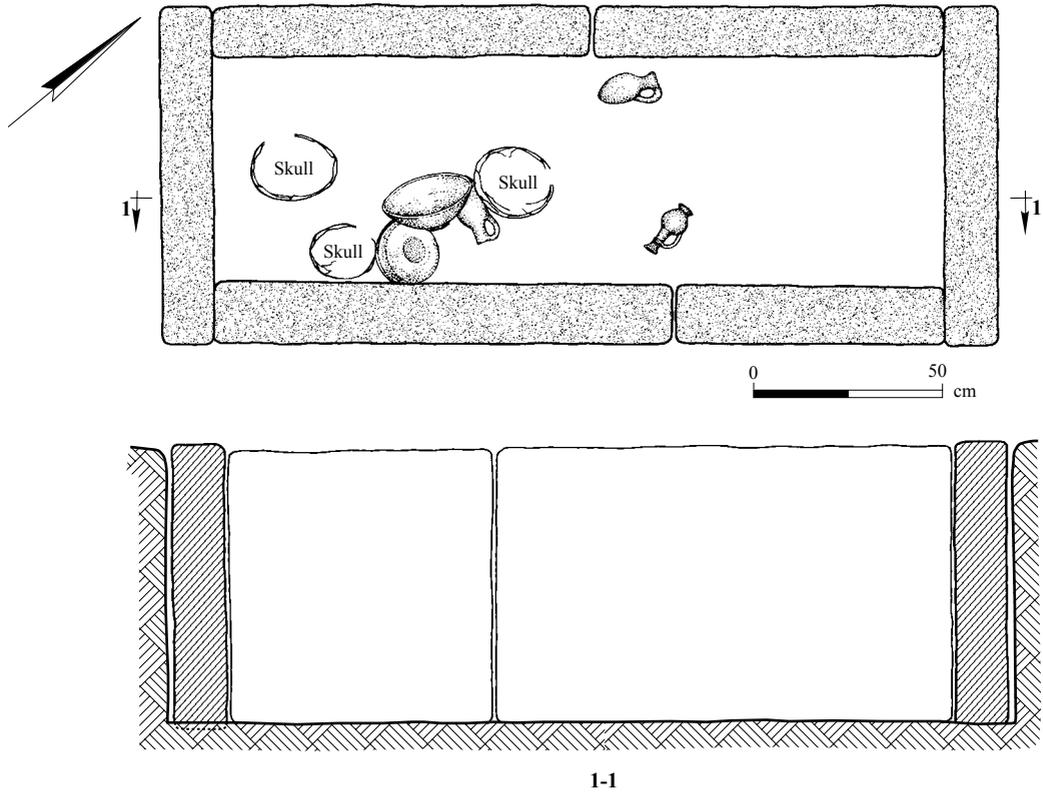
<sup>i</sup> Length and width are the inner dimensions of the tombs; incomplete measurements are not included.

<sup>ii</sup> MNI = Minimum Number of Individuals

*Tomb 2* (Plan 2; Fig. 5).— Located next to the shore. The tomb was lined with eight dressed rectangular *kurkar* stones that were completely preserved. Two skulls were found on the southern side of the tomb, indicating that two of the deceased were laid to rest with their heads to the south. A third skull was

found close to the center of the burial. The pottery vessels were deliberately placed next to the skulls.

Finds in this tomb include two local bowls (Fig. 5:1, 2), one local juglet (Fig. 5:3), one juglet from the Lebanese coast (Fig. 5:4) and one Base Ring juglet (Fig. 5:5), as well as four



Plan 2. Tomb 2, plan and section.

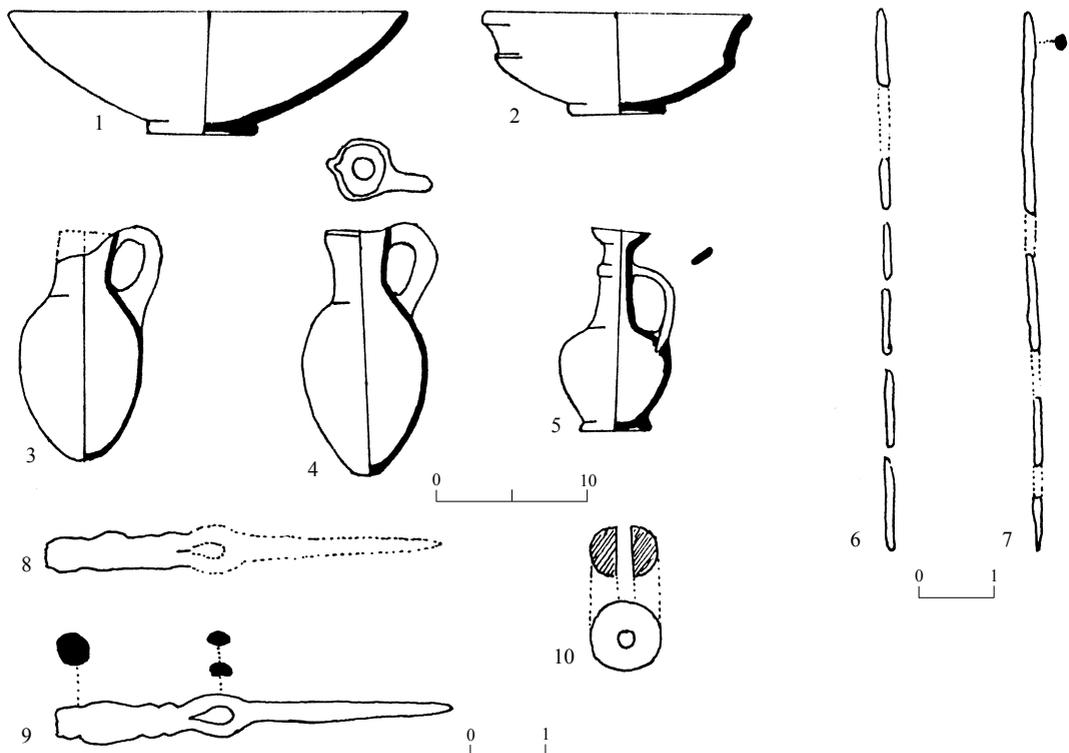


Fig. 5. Finds from Tomb 2.

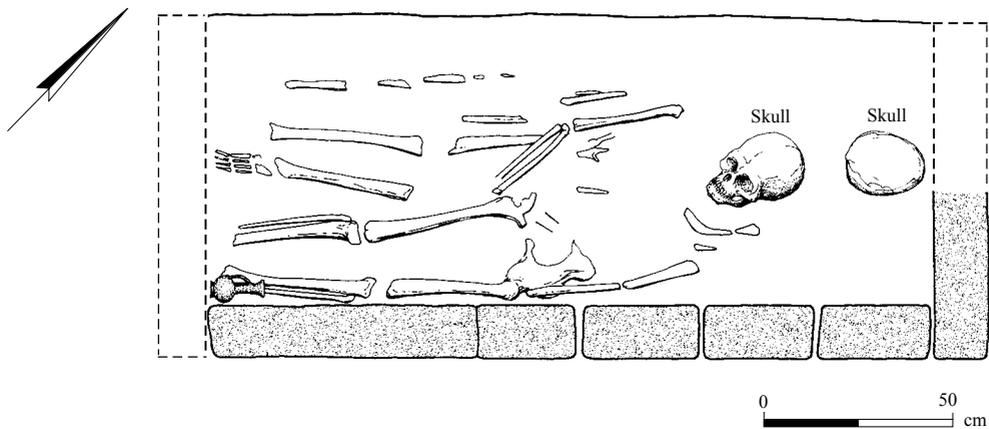
bronze objects—two needles (Fig. 5:6, 7) and two toggle pins (Fig. 5:8, 9), a stone bead (Fig. 5:10) and a shell (not illustrated).

*Tomb 3* (Plan 3; Figs. 6, 7).— Located next to the shore. The western part of the tomb was eroded into the sea. The eastern wall and part of the northern wall were constructed of mud brick. The skeletons of two individuals were found in a supine position, their skulls in the northern part of the tomb.

The finds included two imported pottery vessels: a White Shaved juglet (Fig. 7:1) and a Base Ring juglet (Fig. 7:2).

*Tomb 4* (Plan 4; Figs. 8–10).— Located next to the shore, in the northern part of the cemetery, apart from the main group of tombs. It was lined with four dressed rectangular *kurkar* slabs. No human remains were found in it.

The finds included four pottery vessels: one local juglet (Fig. 10:1) and three imports—a Monochrome bowl (Fig. 10:2), a Base Ring juglet (Fig. 10:3) and a Base Ring mug (Fig. 10:4). A clump of six bronze rings or earrings was found in the southern part of the tomb (Fig. 10:5–10).



Plan 3. Tomb 3.



Fig. 6. Tomb 3, skeletal remains *in situ*, looking east.

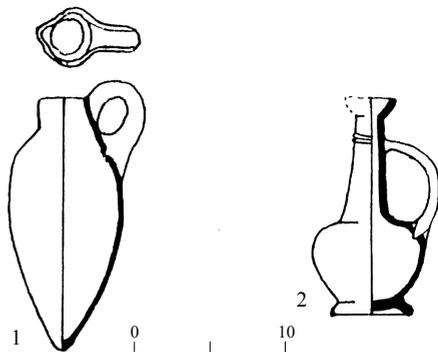


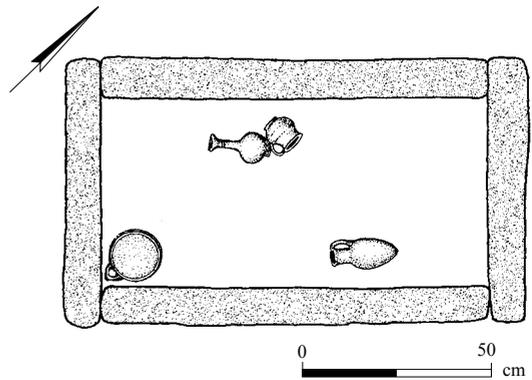
Fig. 7. Finds from Tomb 3.



Fig. 8. Tomb 4, looking west, at the beginning of the excavation.



Fig. 9. Tomb 4, looking south, at the conclusion of the excavation.



Plan 4. Tomb 4.

Fig. 10 ▶

No.	Type	Reg. No.	IAA No.
1	Juglet	69-5138	74-609
2	Cypriot Monochrome bowl	69-5136	74-608
3	Cypriot Base Ring juglet		
4	Cypriot Base Ring mug	69-5137	74-607
5	Bronze earring		74-665-7
6	Bronze earring		74-665-7
7	Bronze earring		74-665-7
8	Bronze earring		74-665-7
9	Bronze earring		74-665-7
10	Bronze earring		74-665-7

*Tomb 5.*— Located next to the shore, with all of its contents eroded by the sea. Only the eastern part of the pit hewn in the *kurkar* survived and no plan was drawn. No finds were associated with this tomb.

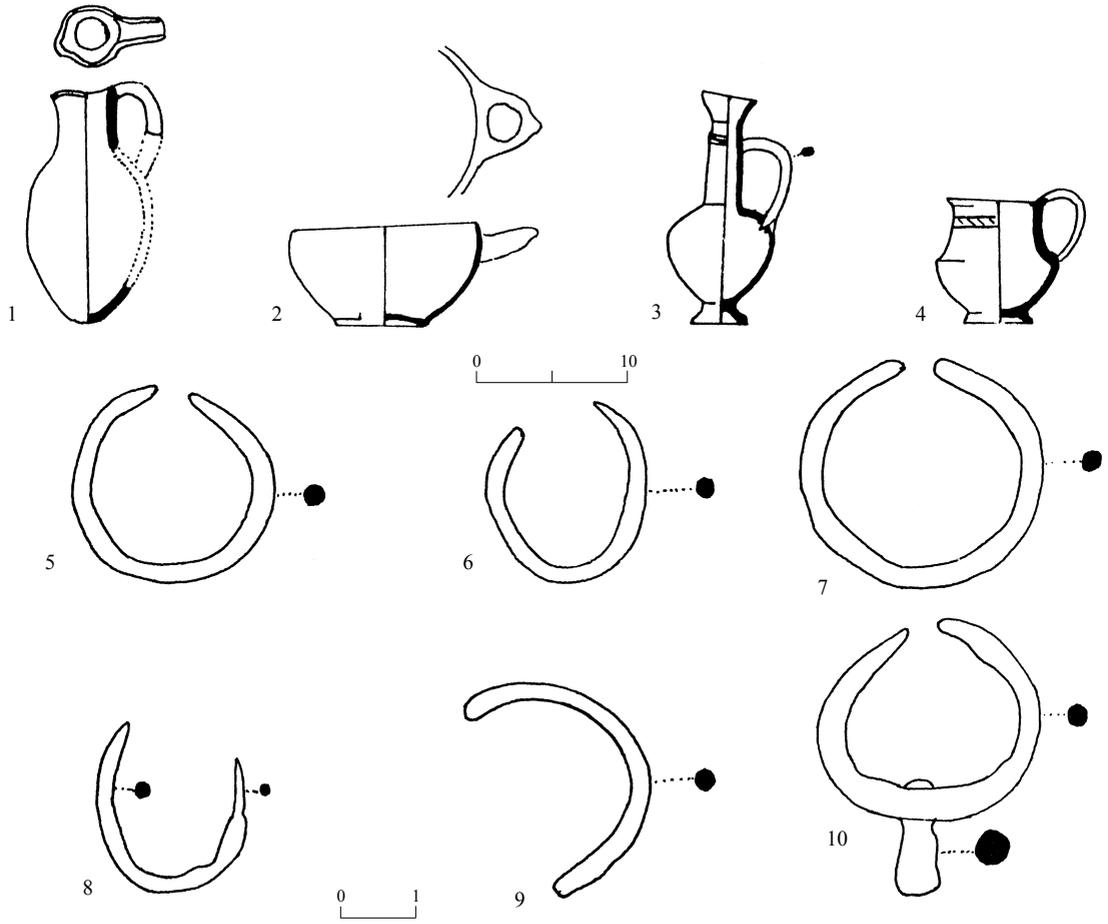
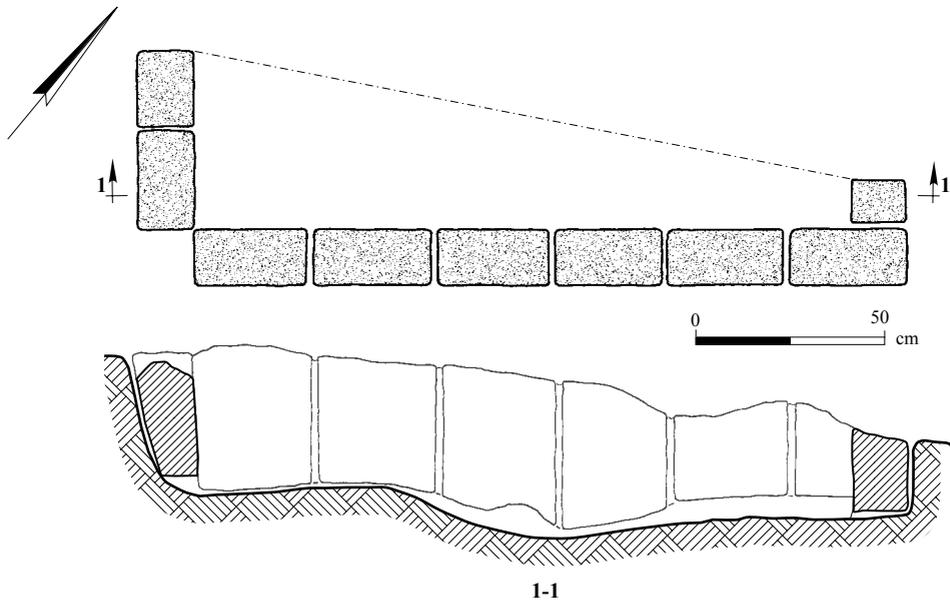


Fig. 10. Finds from Tomb 4.



Plan 5. Tomb 6, plan and section.

*Tomb 6* (Plan 5).— Located next to the shoreline and mostly destroyed. Only the *kurkar* stones lining the eastern wall and parts of the northern and southern sides of the tomb survived. All of the tomb's contents were washed away.

*Tomb 7*.— Located 15 m north of the center of the cemetery. A pit hewn in the *kurkar* was preserved; no plan was drawn. The negative impressions left by dressed lining stones were visible along the sides of the tomb, indicating

that they had been robbed. One imported Monochrome bowl was found (Fig. 11).

*Tomb 8* (Plan 6; Figs. 12, 13).— Located in the middle of the cemetery, c. 4 m from the

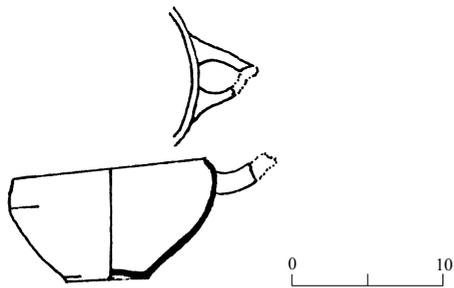


Fig. 11. Cyproit Monochrome bowl from Tomb 7.

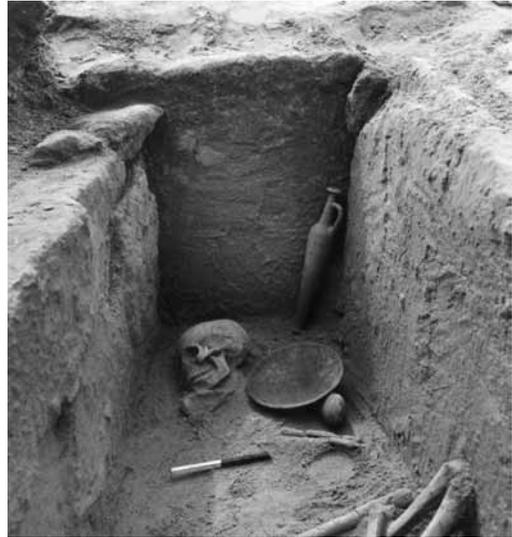
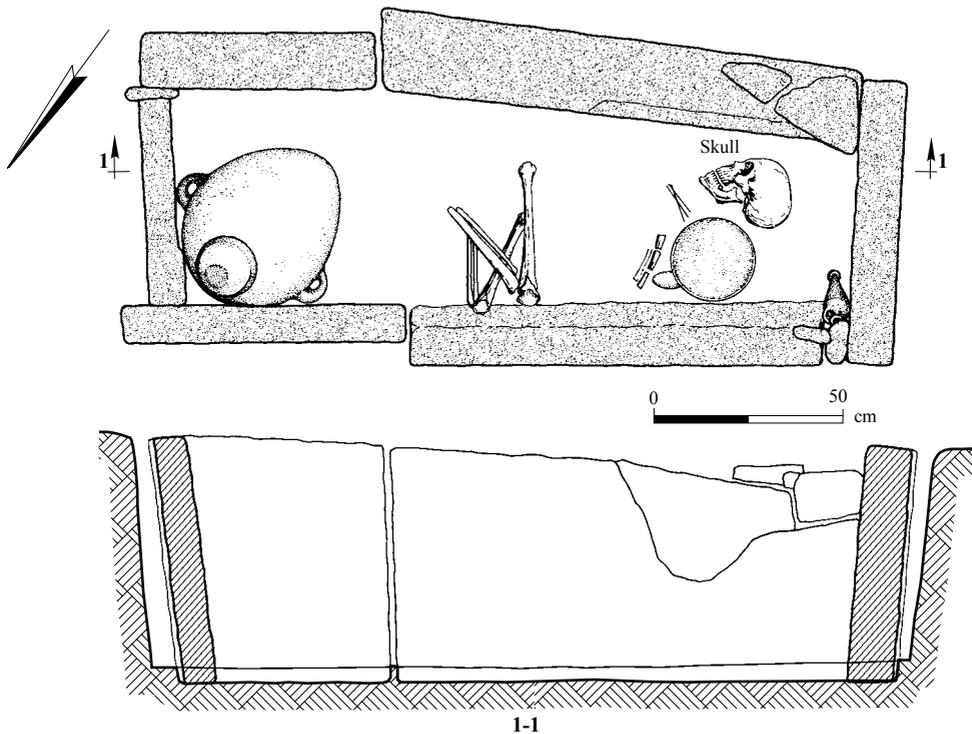


Fig. 12. Tomb 8, looking south.



Plan 6. Tomb 8, plan and section.

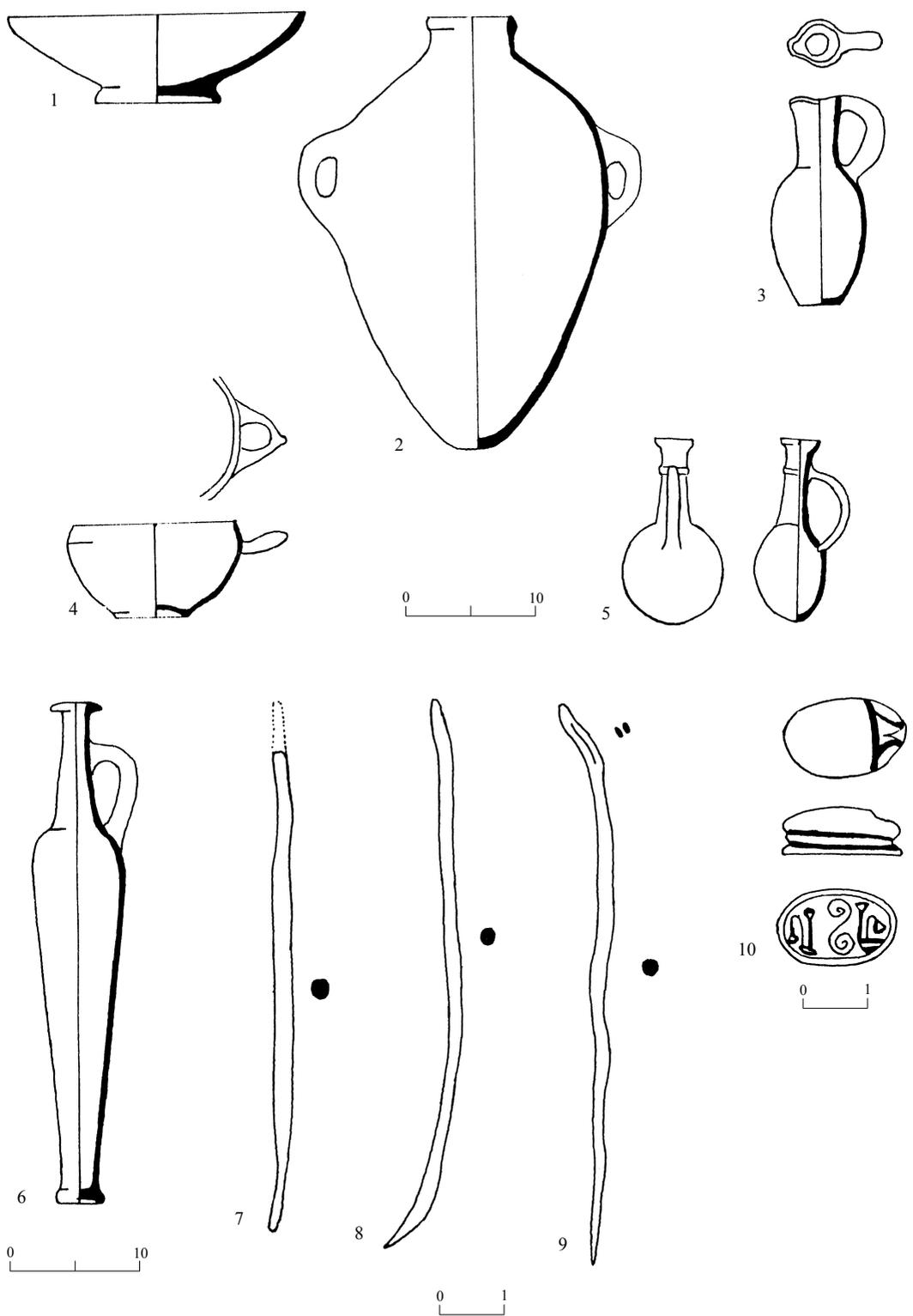


Fig. 13. Finds from Tomb 8.

◀ Fig. 13

No.	Type	Reg. No.	IAA No.
1	Bowl		74-613
2	Storage jar		74-615
3	Lebanese coastal juglet	69-5141	74-611
4	Cypriot Monochrome bowl	69-5128	
5	Cypriot Base Ring flask	69-5140	74-612
6	Red Lustrous Wheel-Made Ware jug	69-5126	74-614
7	Bronze needle		
8	Bronze needle		
9	Bronze needle		
10	Scarab		

shoreline. The tomb was hewn in bedrock, lined with six dressed rectangular *kurkar* stones and covered with a number of such slabs. On the southern side of the tomb was a well-preserved skull; long bones were found in the center. Based on the position of the bones, the deceased was laid to rest on his back, in a flexed position.

Six pottery vessels were found in the tomb: a local bowl (Fig. 13:1) and storage jar (Fig. 13:2), as well as four imported vessels—a Lebanese coastal juglet (Fig. 13:3), a Monochrome bowl (Fig. 13:4), a Base Ring flask (Fig. 13:5) and a Red Lustrous Wheel-Made Ware jug (Fig. 13:6). Other finds included three bronze needles (Fig. 13:7–9) and a scarab (Fig. 13:10). The storage jar was leaning against the northern corner; it was covered by the Monochrome bowl and the Lebanese coastal juglet was inside it. The Red Lustrous Wheel-Made Ware jug was leaning against the wall in the southern corner.

*Tomb 9.*— Located next to the shoreline, 15 m north of Tombs 4 and 7 and c. 30 m north of the center of the cemetery, next to Tomb 10. The tomb was partially destroyed. Presumably, the northern part of the tomb had eroded away and it was originally slightly longer, like the rest of the tombs. Only the bottom 10 cm of the *kurkar* walls survived. The tomb was devoid of finds and no plan was drawn.

*Tomb 10.*— Located 15 m north of Tombs 4 and 7 and c. 30 m north of the center of the cemetery, next to Tomb 9. Its northern and western sides were eroded away. The tomb was devoid of finds and no plan was drawn.

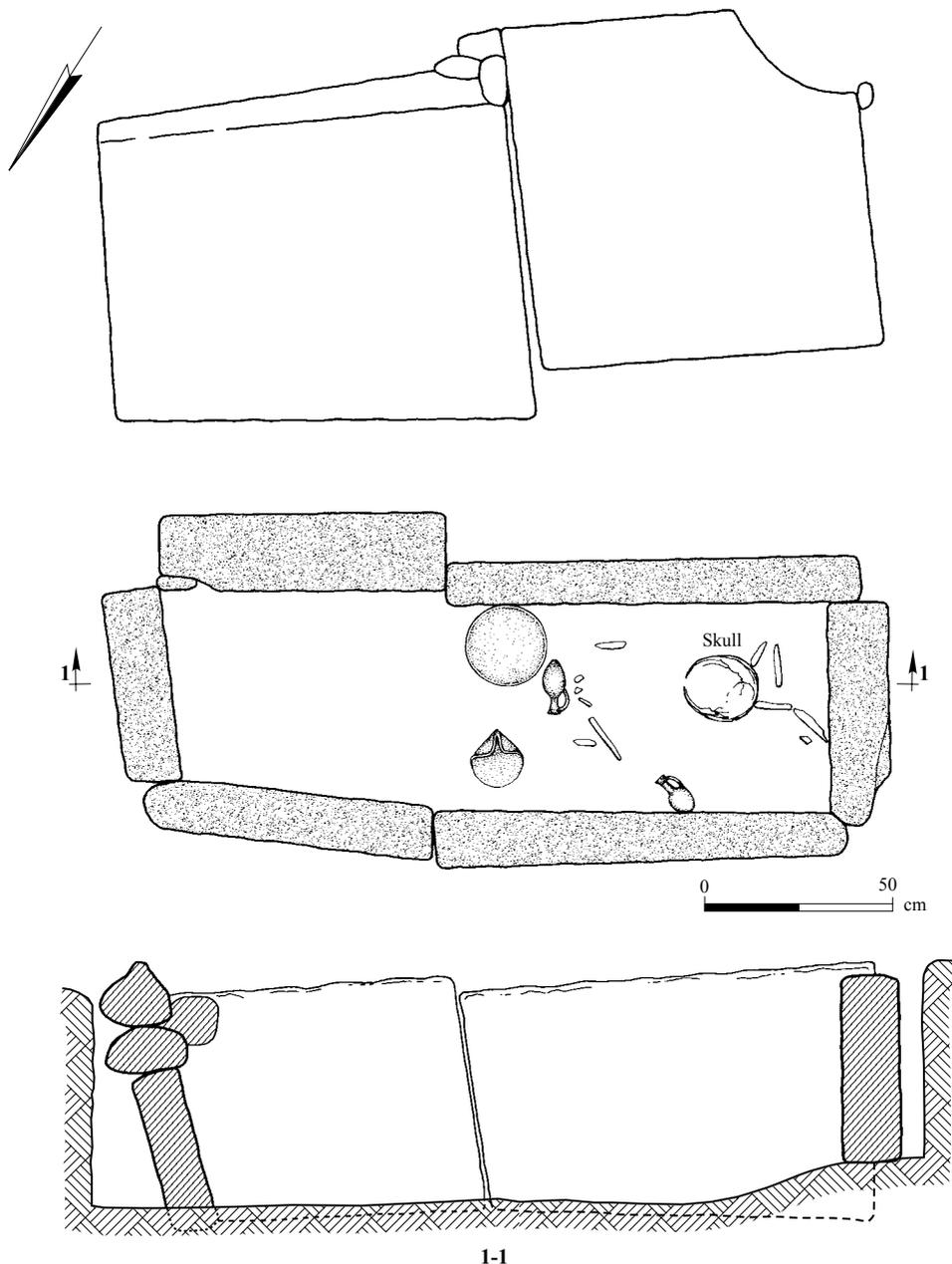
*Tomb 11* (Plan 7; Figs. 14, 15).— The tomb consisted of a hewn pit, lined with six dressed rectangular *kurkar* slabs and covered with two dressed *kurkar* slabs. A poorly preserved skull and several bones were found in the southern part of the tomb.



Fig. 14. Tomb 11, looking south.

The tomb contained six vessels: two local bowls (Fig. 15:1, 2), a local lamp (Fig. 15:3), and three imports—a Base Ring juglet (Fig. 15:4) and two Base Ring flasks (Fig. 15:5, 6).

The bowls, lamp and one of the flasks were found in the middle of the tomb, while the other flask was discovered in the southwestern part.



Plan 7. Tomb 11, plan and section.

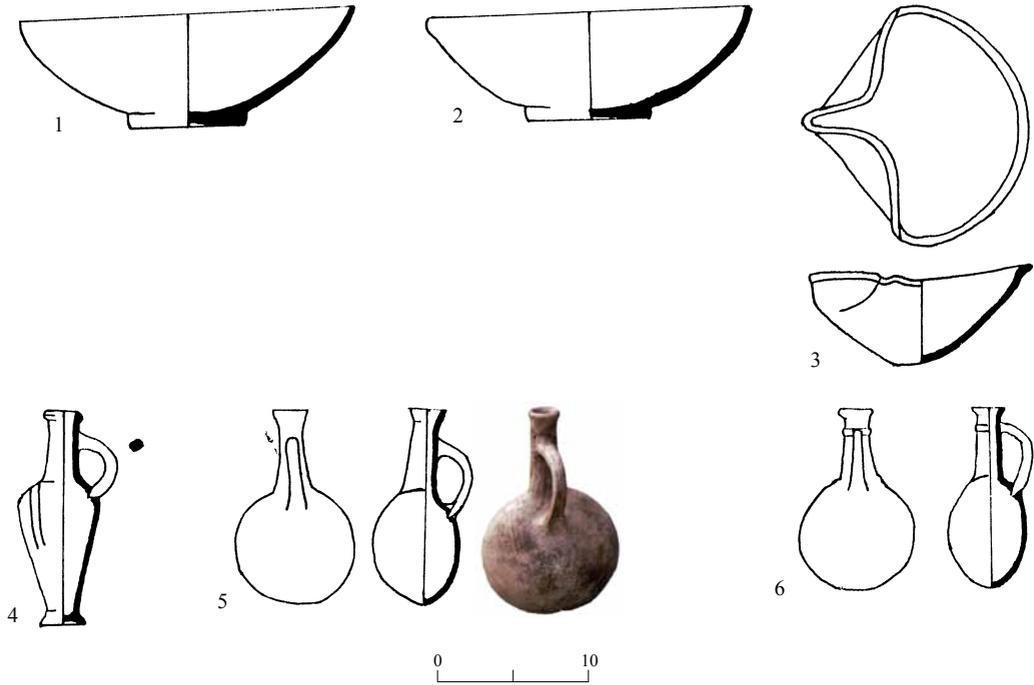


Fig. 15. Finds from Tomb 11.

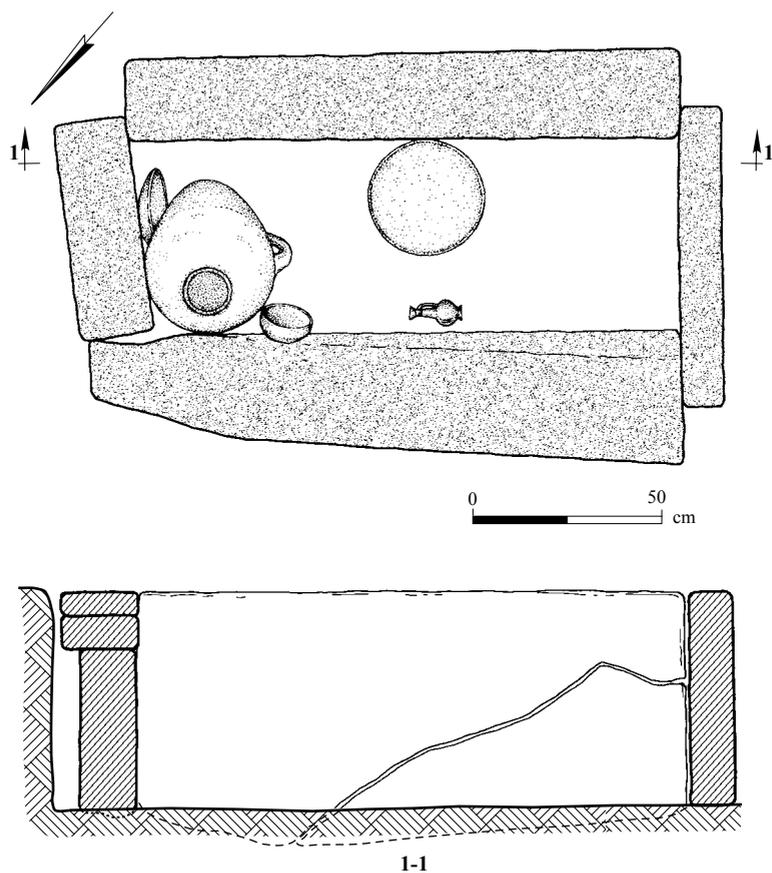
No.	Type	Reg. No.	IAA No.
1	Bowl	69-5130	74-657
2	Bowl	69-3133	74-636
3	Lamp	69-5134	74-635
4	Cypriot Base Ring juglet	69-5129	74-633
5	Cypriot Base Ring flask	69-5132	74-634
6	Cypriot Base Ring flask		

*Tomb 12* (Plan 8; Figs. 16–18).— Located in the western side of the center of the cemetery, between Tomb 18 and Tombs 3 and 6. The tomb consisted of a pit hewn in the *kurkar*, lined with four dressed rectangular *kurkar* slabs and covered with a number of fragmentary cover stones. The tomb was devoid of human remains.

The finds included four local vessels—two bowls (Fig. 18:1, 2), one storage jar (Fig. 18:3) and one dipper juglet (Fig. 18:4), and two imports—a Monochrome bowl (Fig. 18:5) and a Base Ring juglet (Fig. 18:6).



Fig. 16. Tomb 12, looking south; cover stones *in situ*.



Plan 8. Tomb 12, plan and section.



Fig. 17. Tomb 12, looking north.

Fig. 18 ▶

No.	Type	Reg. No.	IAA No.
1	Bowl	69-8099	74-655
2	Bowl		
3	Storage jar		74-693
4	Juglet	69-5097	74-629
5	Cypriot Monochrome bowl	69-5101	74-654
6	Cypriot Base Ring juglet	69-5100	74-630

*Tomb 13* (Plan 9; Figs. 19–22).— Located close to the center of the cemetery, south of Tombs 8 and 22 and east of Tombs 5 and 14. The tomb consisted of a pit hewn in the *kurkar* that was lined with seven dressed rectangular

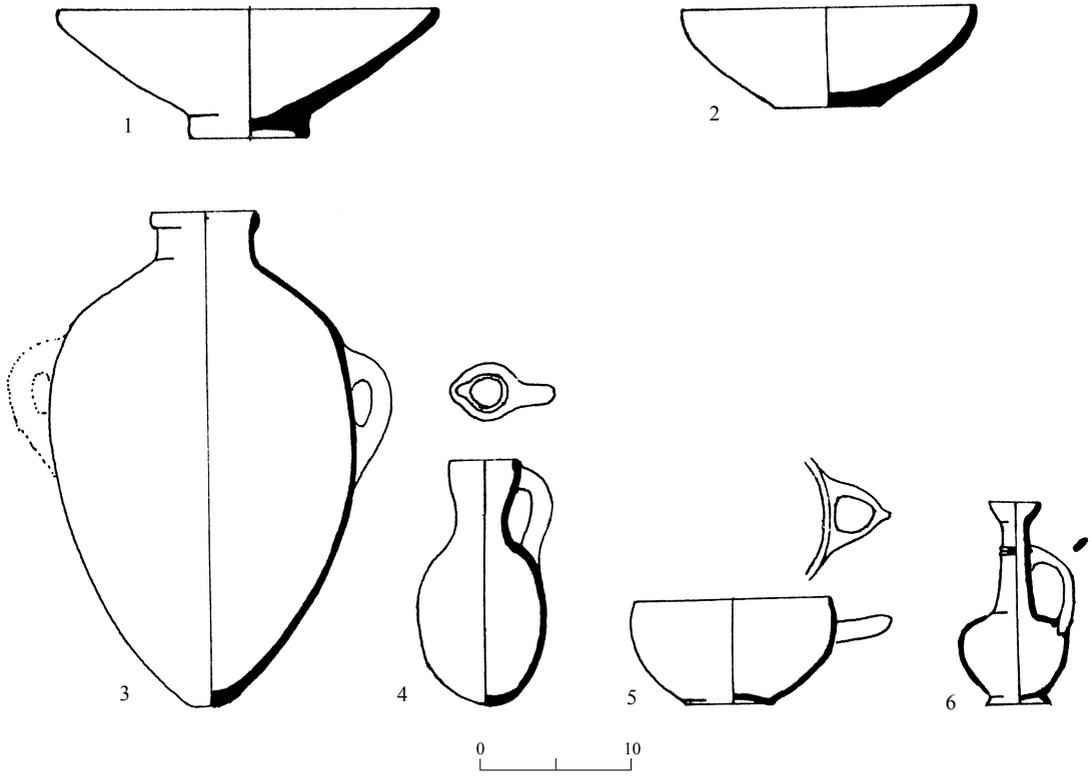


Fig. 18. Finds from Tomb 12.



Fig. 19. Tomb 13, looking south; vessels on top of cover stones *in situ*.

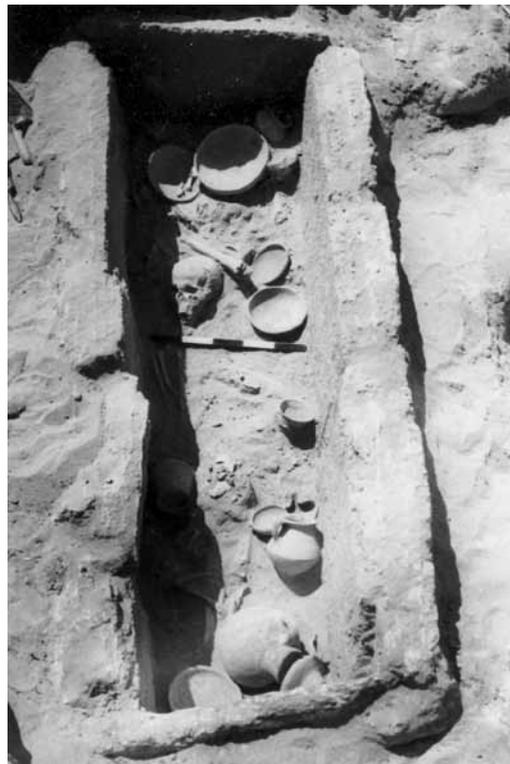
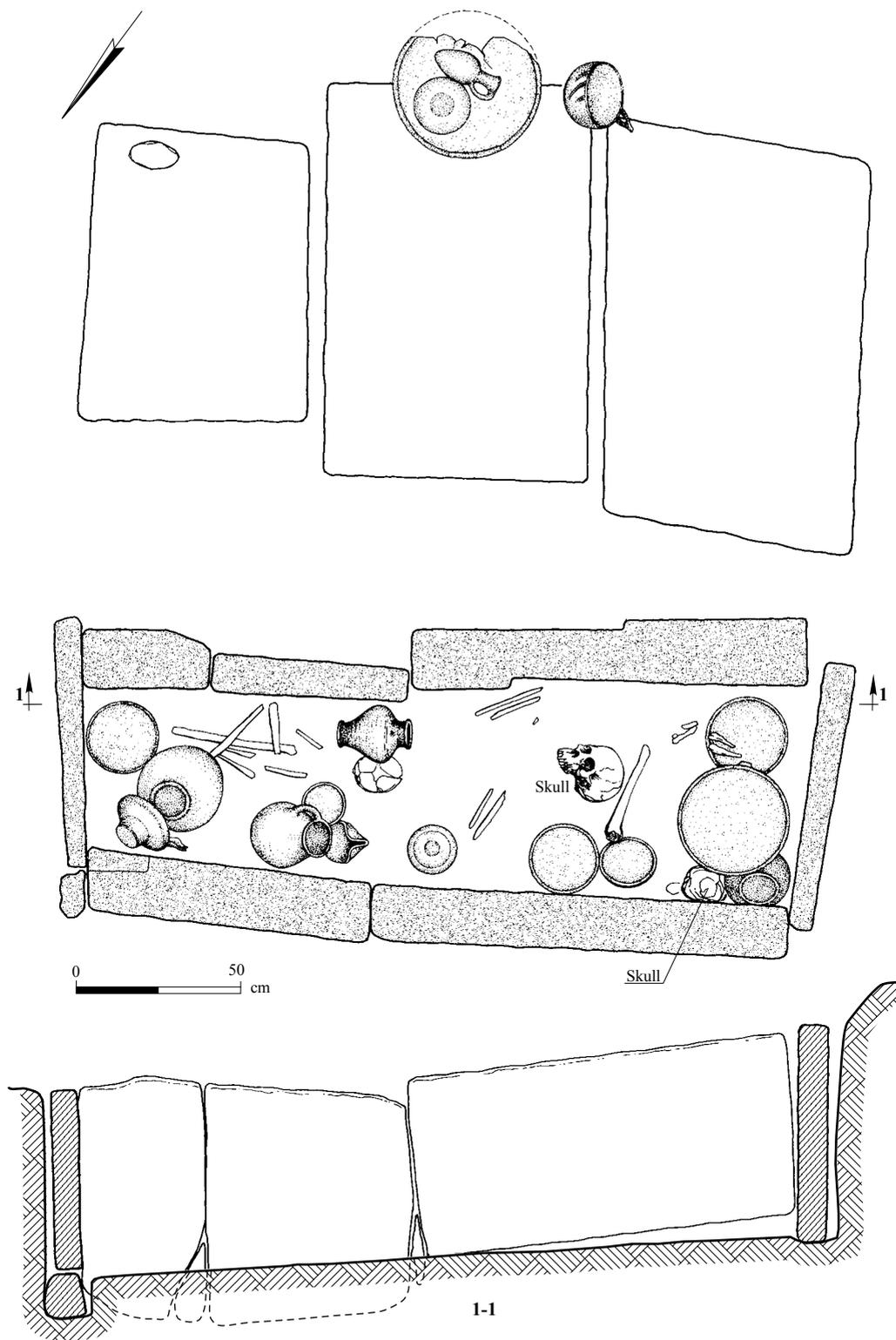


Fig. 20. Tomb 13, looking south.



Plan 9. Tomb 13, plan and section.

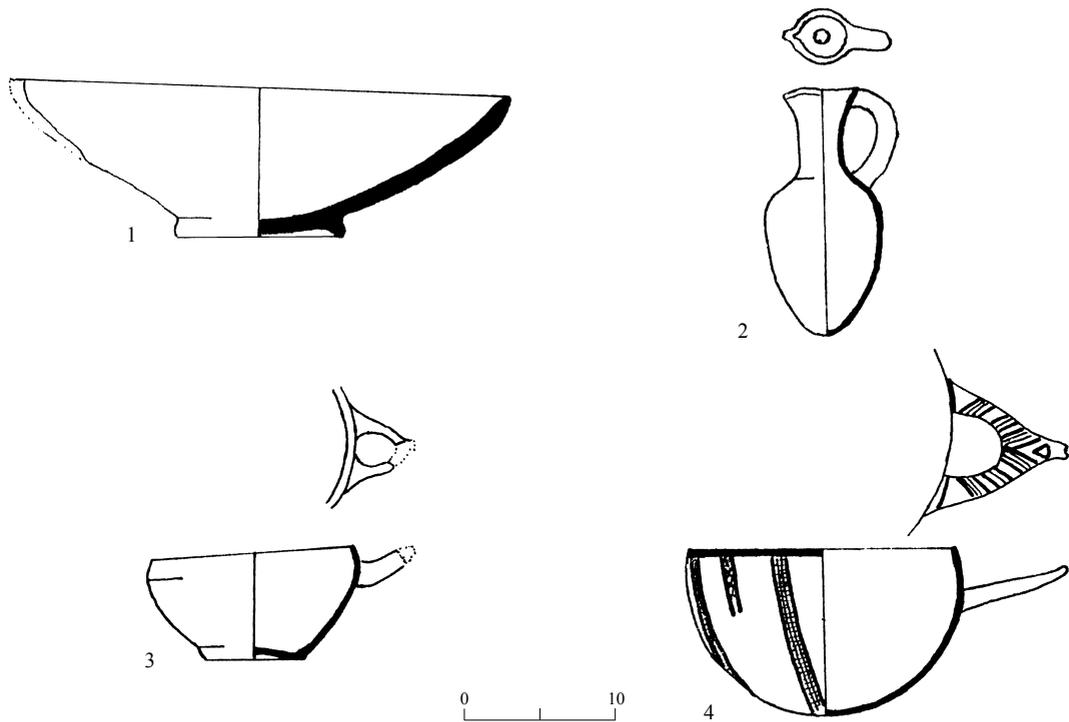


Fig. 21. Tomb 13, finds from atop the cover stones.

No.	Type	Reg. No.	IAA No.
1	Bowl	69-5113	74-625
2	Juglet		
3	Cypriot Monochrome bowl		
4	Cypriot White Slip II bowl		

*kurkar* slabs and covered with three such slabs (Figs. 19, 20). Two skulls were found south of the middle of the tomb, while a third was just north of the middle. The rest of the bones were scattered throughout the tomb, so that it is impossible to reconstruct the positions of the deceased. Overlying the skeletal remains was an infant burial in a state of disintegration.

This tomb contained the richest assemblage of finds. A group of four pottery vessels was exposed on top of the middle covering stone. This group included a local bowl (Fig. 21:1), a local dipper juglet (Fig. 21:2) and two imports: a Monochrome bowl (Fig. 21:3) and a White Slip hemispherical bowl (Fig. 21:4). Thirteen pottery

vessels were found on the floor of the tomb, placed on their bases as their original position at the time of interment (Plan 9). These vessels included five local bowls (Fig. 22:1–5), two local biconical jugs (Fig. 22:6, 7), a local jar-jug (Fig. 22:8) and a local lamp (Fig. 22:9), as well as four imports: two Plain White Wheel-Made Ware bowls (Fig. 22:10, 11), a Base Ring bowl (Fig. 22:12) and a Mycenaean piriform jar (Fig. 22:13). In the northwestern corner, the Base Ring bowl appears to have covered the jar-jug. A silver pin (Fig. 22:14), seven faience beads (Fig. 22:15–21), one shell bead (Fig. 22:22) and two scarabs (Fig. 22:23, 24) were uncovered together with the pottery vessels.

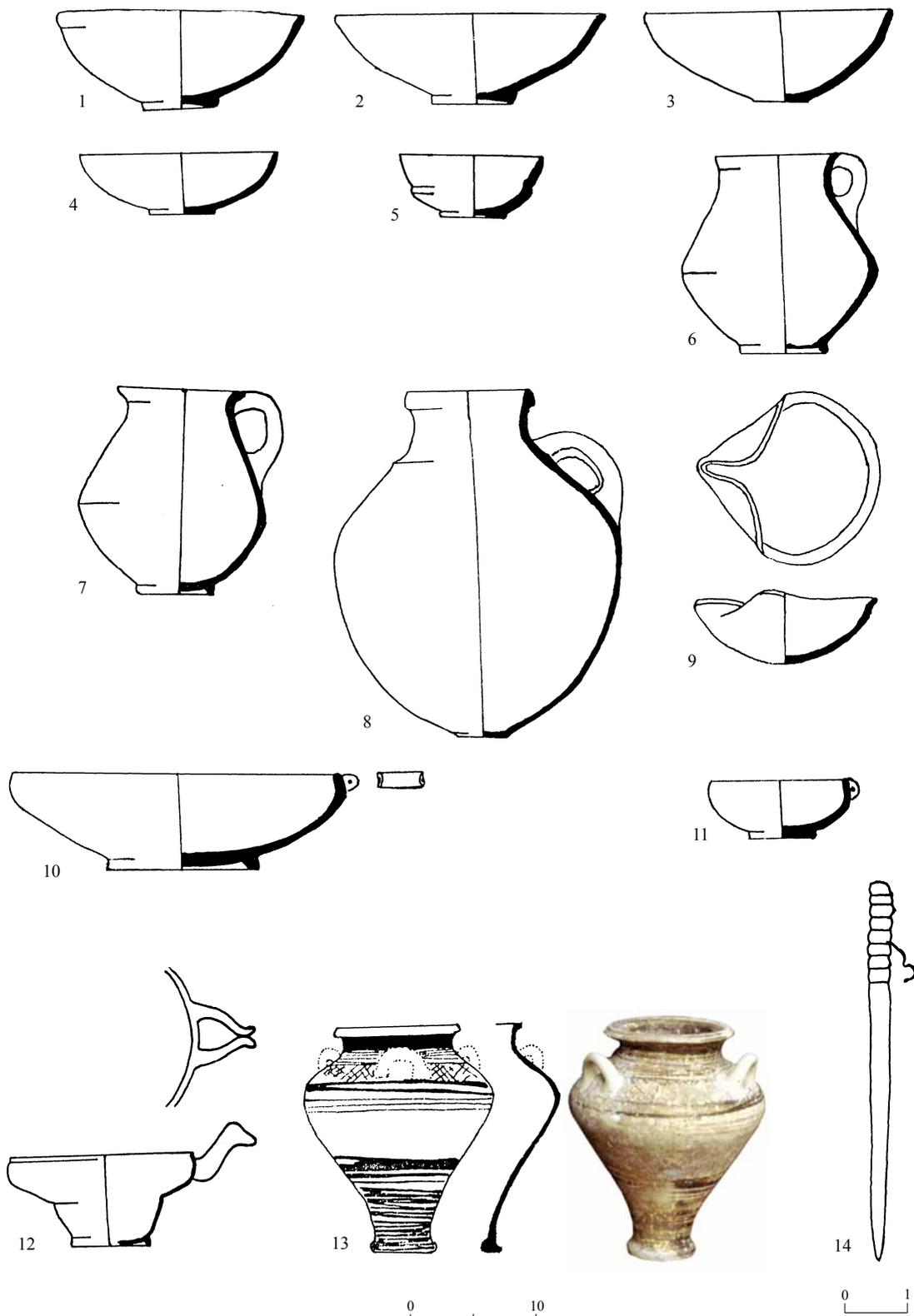


Fig. 22. Finds from Tomb 13.

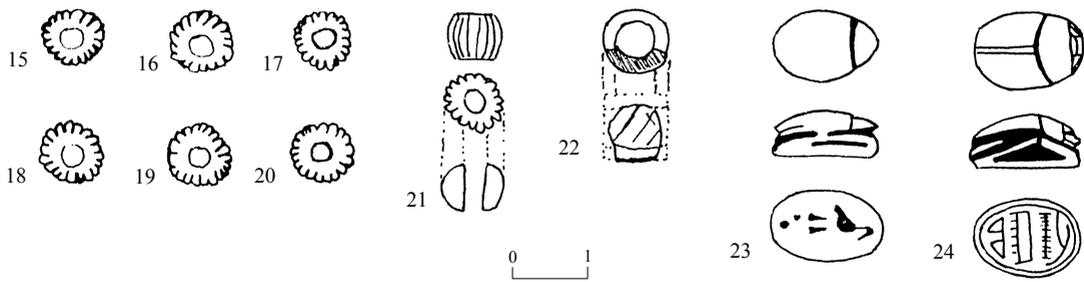


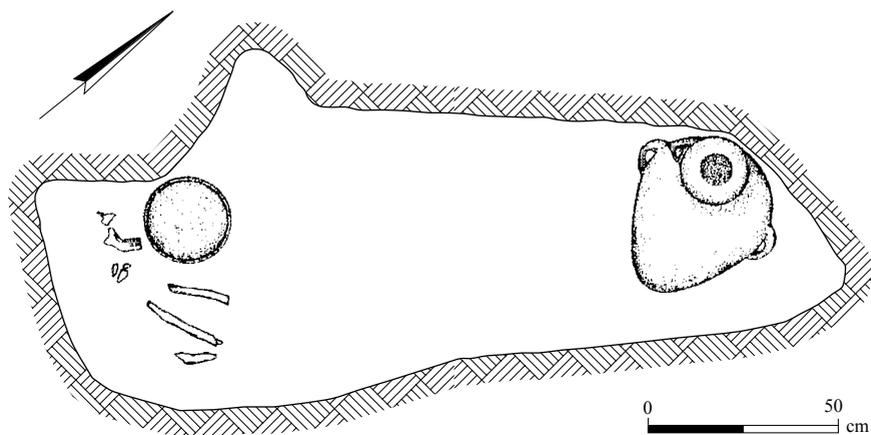
Fig. 22. (cont.)

No.	Type	Reg. No.	IAA No.
1	Bowl	69-5102	74-621
2	Bowl	69-5103	74-624
3	Bowl	69-5107	74-623
4	Bowl	69-5109	74-622
5	Bowl	69-5106	74-645
6	Biconical jug	69-5116	74-646
7	Biconical jug	69-8117	74-627
8	Jar-jug	69-5123	74-648
9	Lamp	69-5104	74-647
10	Cypriot White Plain Wheel-Made Ware bowl	69-5108	74-619
11	Cypriot White Plain Wheel-Made Ware bowl	69-5105	74-617
12	Cypriot Base Ring bowl	69-5114	74-616
13	Mycenaean piriform jar	69-5115	74-618
14	Silver pin		74-650
15	Faience Bead		74-651-6
16	Faience Bead		74-651-6
17	Faience Bead		74-651-6
18	Faience Bead		74-651-6
19	Faience Bead		74-651-6
20	Faience Bead		74-651-6
21	Faience Bead		
22	Shell Bead		
23	Scarab		
24	Scarab		

*Tomb 14* (Plan 10; Figs. 23, 24).— Located slightly south of the center of the cemetery, between Tombs 5, 8 and 13. Unlike the other tombs in the cemetery, this burial consisted of an irregular-shaped pit hewn in the natural *kurkar*, with no lining stones. It was found

covered with three broken dressed *kurkar* slabs. A skull and a number of disintegrated long bones located nearby a local bowl were found in the southern part of the tomb (Fig. 23).

Four pottery vessels were found: a local bowl (Fig. 24:1), a local storage jar (Fig. 24:2) and



Plan 10. Tomb 14.



Fig. 23. Tomb 14, looking north.

Fig. 24 ▶

No.	Type	Reg. No.	IAA No.
1	Bowl	69-5119	74-625
2	Storage jar		74-692
3	Lebanese Coast juglet	69-5138	74-609
4	Cypriot Monochrome bowl	69-5120	74-639

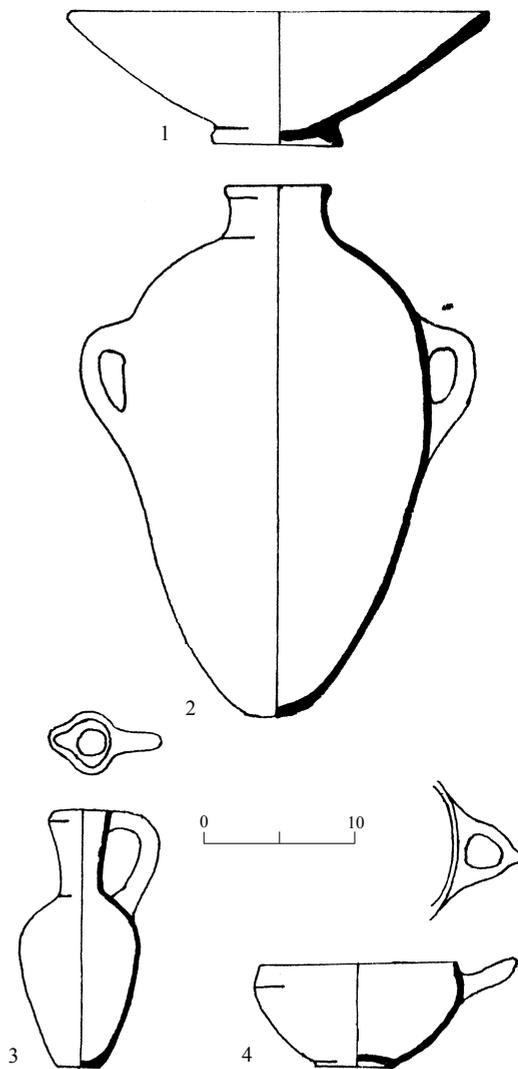
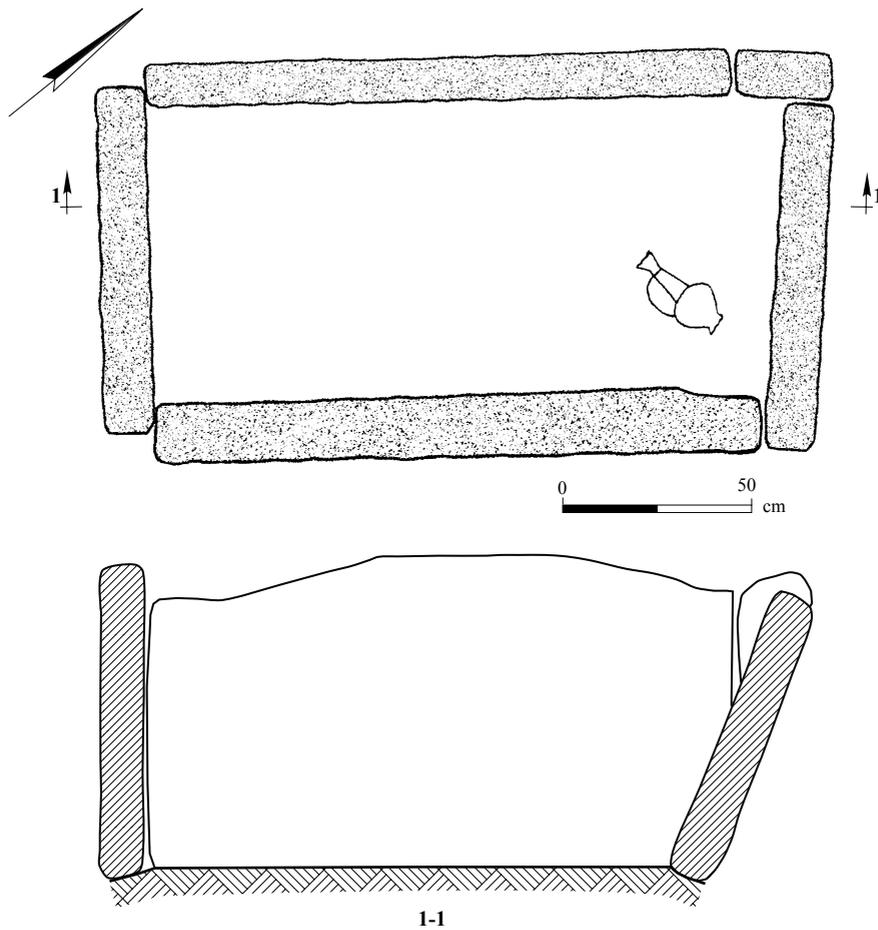


Fig. 24. Finds from Tomb 14.



Plan 11. Tomb 15, plan and section.

two imports—a juglet from the Lebanese coast (Fig. 24:3) and a Monochrome bowl (Fig. 24:4). The storage jar was placed on the northern side of the tomb, with the juglet inside it; it was covered by the Monochrome bowl.

*Tomb 15* (Plan 11; Fig. 25).— Located in the western part of the center of the cemetery. The tomb consisted of a pit hewn in the *kurkar*, lined and covered with a number of dressed rectangular *kurkar* slabs. No human remains were found. One imported Base Ring juglet (Fig. 25) was found.

*Tomb 16* (Plan 12; Fig. 26).— The tomb consisted of a pit hewn in the *kurkar*, lined and covered with a number of dressed rectangular

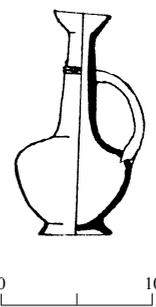
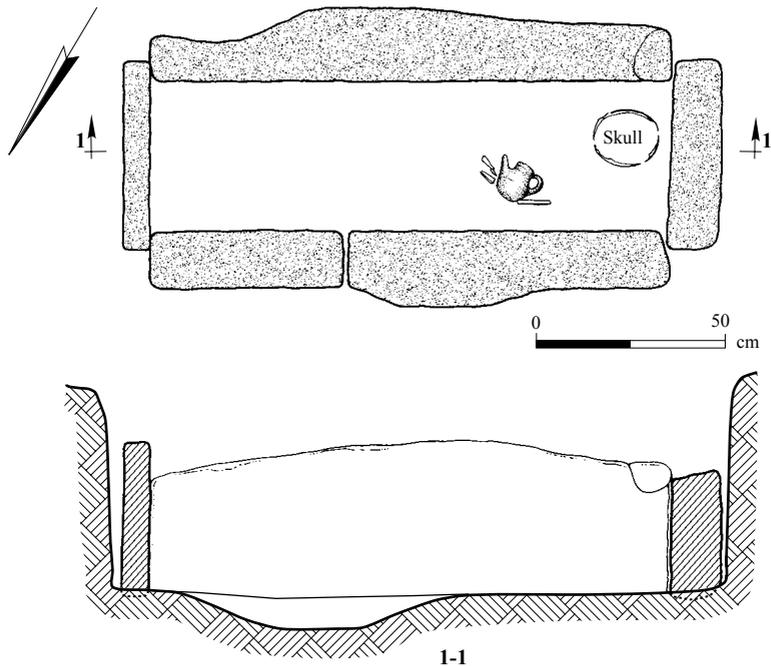


Fig. 25. Cypriot Base Ring juglet from Tomb 15.

*kurkar* slabs. One skull was found in the southern part of the tomb, so that it appears the deceased was laid to rest with his head to the south. A number of disintegrated bones were found close to the skull. One imported White Painted teapot (Fig. 26) was found.



Plan 12. Tomb 16, plan and section.

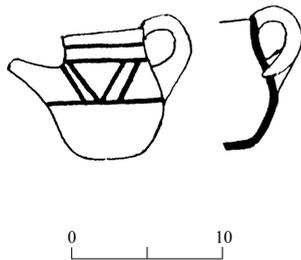


Fig. 26. Cypriot White Painted teapot (IAA No. 745-98) from Tomb 16.

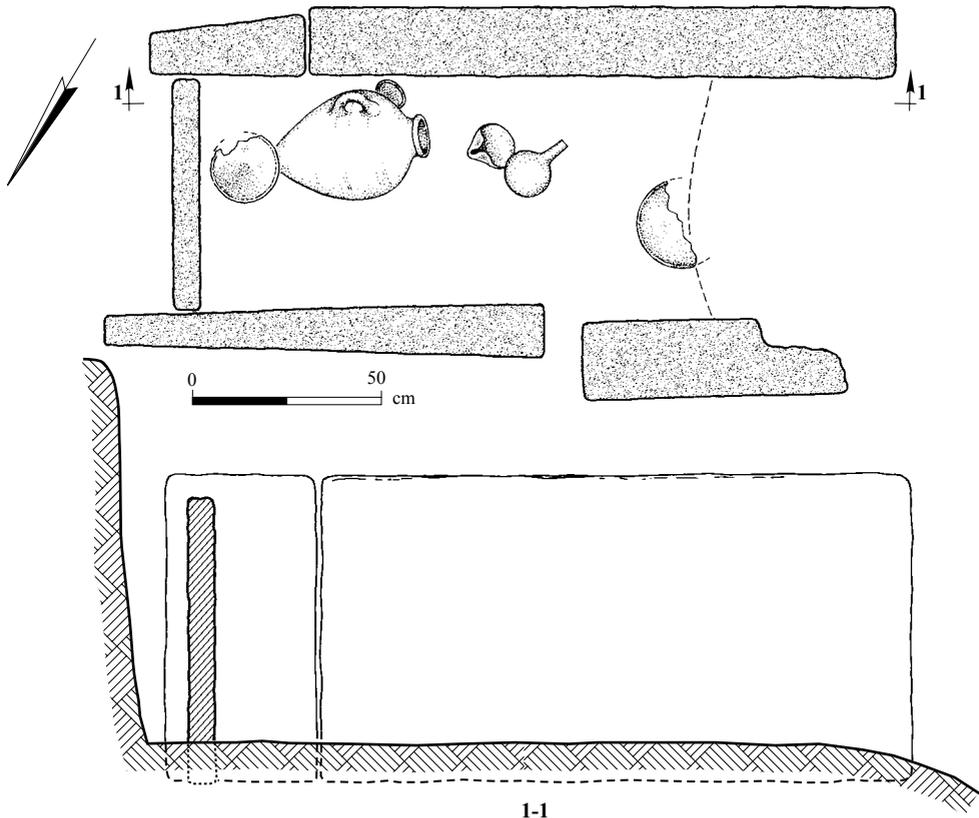
Fig. 27 ▶

No.	Type	IAA No.
1	Bowl	74-641
2	Bowl/foot of chalice	74-642
3	Chalice	74-644
4	Storage jar	74-687
5	Lamp	74-643
6	Cypriot Base Ring flask	74-596
7	Cypriot White Shaved juglet	74-597

*Tomb 17* (Plan 13; Fig. 27).— Located c. 6 m south of Tomb 16, this is the southernmost burial found in the cemetery. The tomb consisted of a pit hewn in the *kurkar*, lined with five dressed rectangular *kurkar* slabs. The southern part of the tomb was damaged by a later disturbance, probably in the Iron Age, based on the pottery sherds that were recovered there. Other than a small fragment of a bone, no human remains were found in the tomb.

The finds included five local vessels—two bowls (Fig. 27:1, 2), a fragmentary chalice

(Fig. 27:3), a storage jar (Fig. 27:4) and a lamp (Fig. 27:5), and two imported vessels—a Base Ring flask (Fig. 27:6) and a White Shaved juglet (Fig. 27:7). The possibility exists that Fig. 27:2 is the detached base of Fig. 27:1. The White Shaved juglet was found inside the local storage jar in the northern part of the tomb, while the small local bowl (or chalice base) (Fig. 27:2) was found near the jar's rim and may have been used as its lid. The rest of the pottery vessels were found scattered throughout the tomb.



Plan 13. Tomb 17, plan and section.

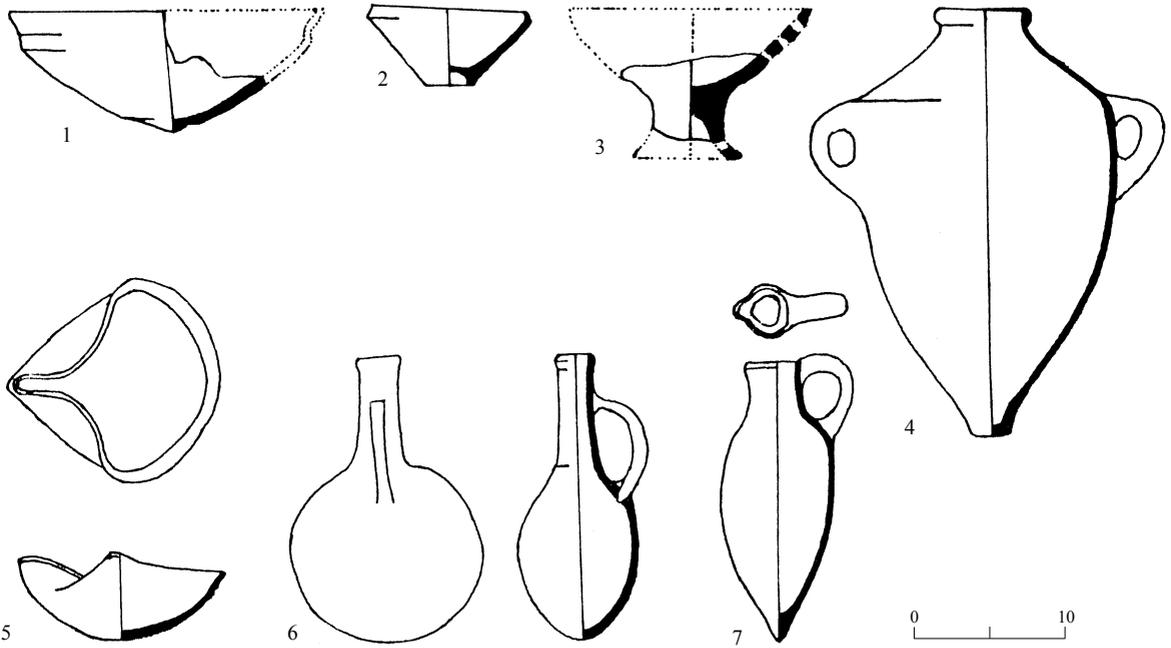
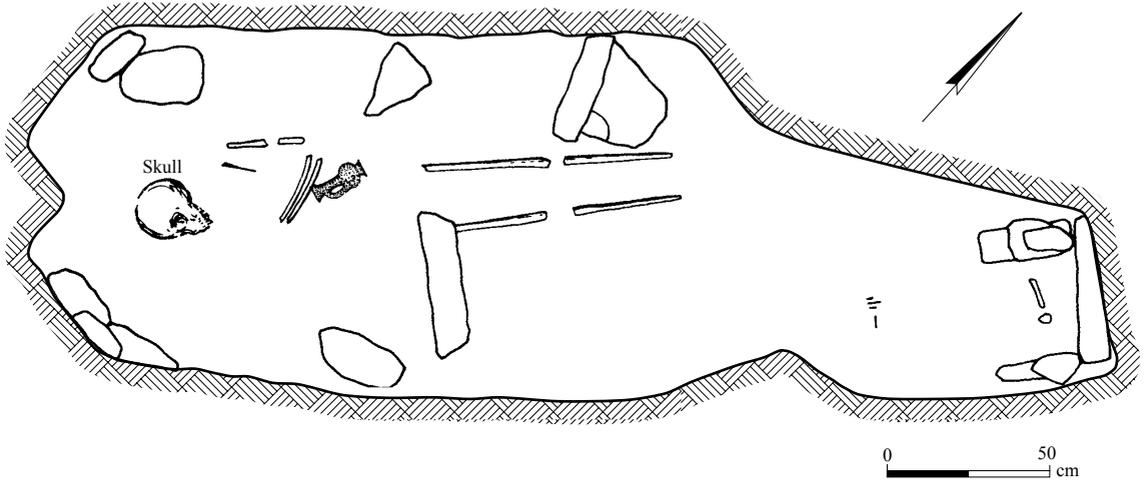


Fig. 27. Finds from Tomb 17.

*Tomb 18* (Plan 14; Fig. 28).— Located in the center of the cemetery. This tomb was damaged when a channel was dug through it, smashing

the *kurkar* stones that had lined the tomb. Only several slabs on the northern end remained *in situ*.



Plan 14. Tomb 18.

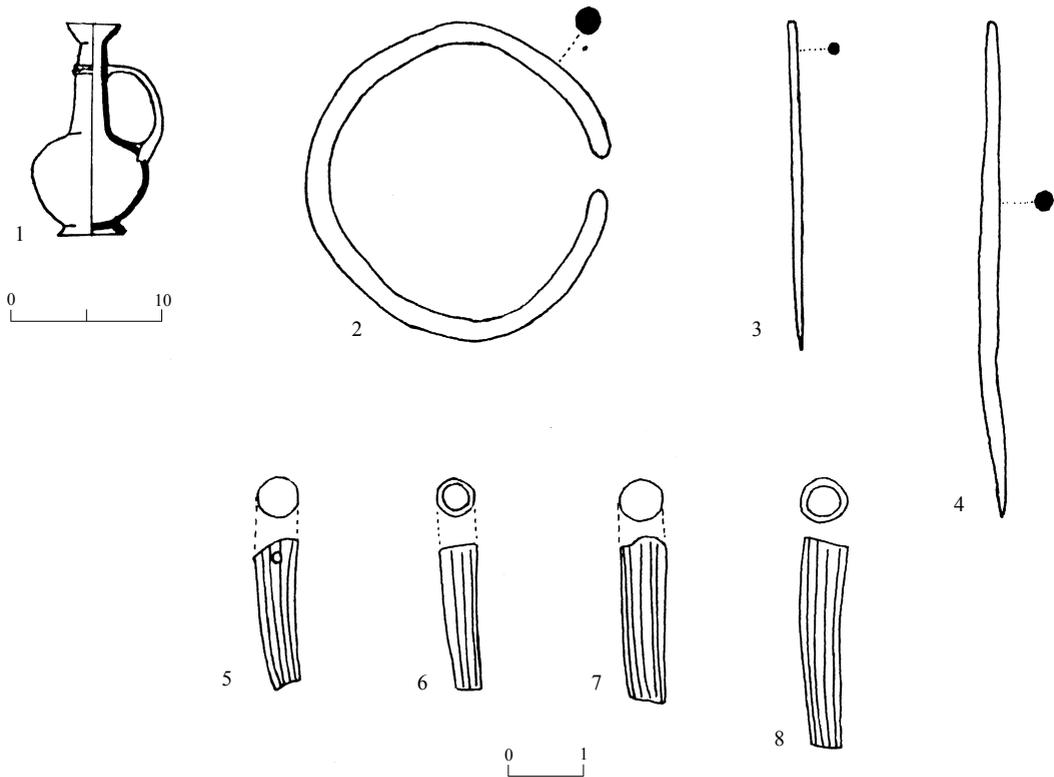


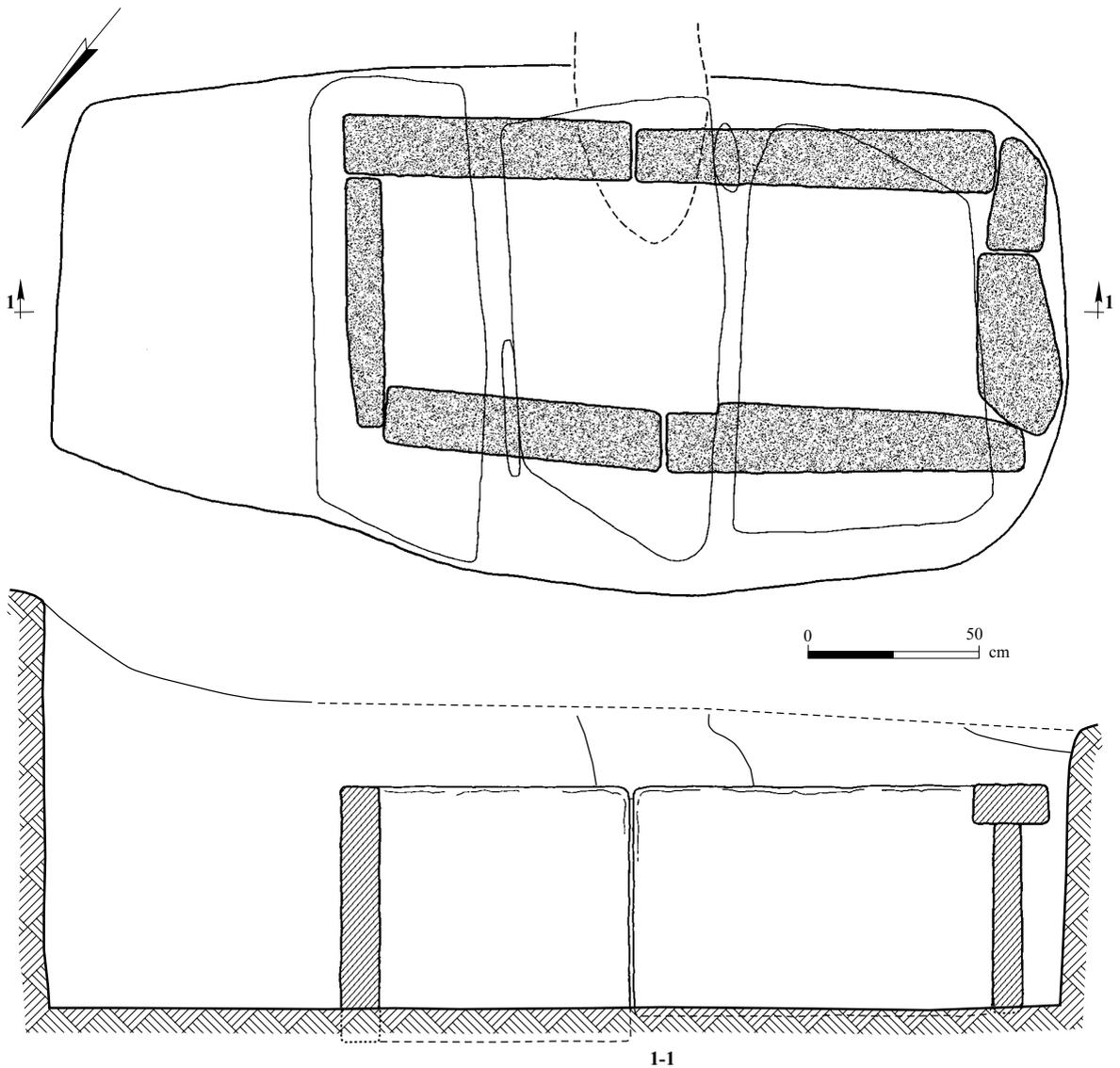
Fig. 28. Finds from Tomb 18.

The tomb contained two interments, both of which were disturbed: the burial of a small child in the northern side of the tomb and an adult in the southern side. The placement of the skull and several long bones of the adult suggest that this individual was interred in a supine position, facing south. A bronze bracelet was found near the adult skeleton.

The finds in the tomb include an imported Base Ring juglet (Fig. 28:1), a bronze bracelet

or earring (Fig. 28:2), two bronze pins (Fig. 28:3, 4) and four shell beads (Fig. 28:5–8).

*Tomb 19* (Plan 15; Figs. 29–31).— Located in the center of the cemetery. The tomb consisted of a pit hewn in the *kurkar* and lined and covered with large dressed rectangular *kurkar* slabs (Fig. 29). This tomb is unique in that it was built inside a wider, irregularly shaped pit that was cut out of the *kurkar*. Only a small



Plan 15. Tomb 19, plan and section.



Fig. 29. Tomb 19, cover stones, facing north.



Fig. 30. Tomb 19, looking south.

Fig. 31 ▶

No.	Type	IAA No.
1	Bowl	74-601
2	Biconical jug	74-683
3	Storage jar	74-671
4	Juglet	
5	Cypriot Base Ring jug	74-595
6	Cypriot Base Ring juglet	74-600
7	Cypriot Base Ring juglet	
8	Cypriot Base Ring juglet	
9	Cypriot White Slip II bowl	74-682
10	Bronze needle	
11	Bronze needle	
12	Bronze toggle pin	
13	Bronze toggle pin	
14	Faience bead	

bone remained at the bottom of the tomb. None of the finds were drawn on the plan, but they can be seen in Fig. 30.

Four local vessels were found in the tomb—a bowl (Fig. 31:1), a biconical jug (Fig. 31:2), a storage jar (Fig. 31:3) and a dipper juglet (Fig. 31:4), as well as five imported vessels—one Base Ring jug (Fig. 31:5), three Base Ring juglets (Fig. 31:6–8) and one White Slip hemispherical bowl (Fig. 31:9). Additional finds included two bronze needles (Fig. 31:10, 11), two bronze toggle pins (Fig. 31:12, 13) and a blue faience bead (Fig. 31:14). The storage jar was found leaning against the northern wall of the tomb, covered by the White Slip bowl and with the dipper juglet inside it. The decorated biconical jug was placed near the storage jar. Several vessels were exposed near the southern wall, and the bronze objects and the bead were found in the middle of the tomb.

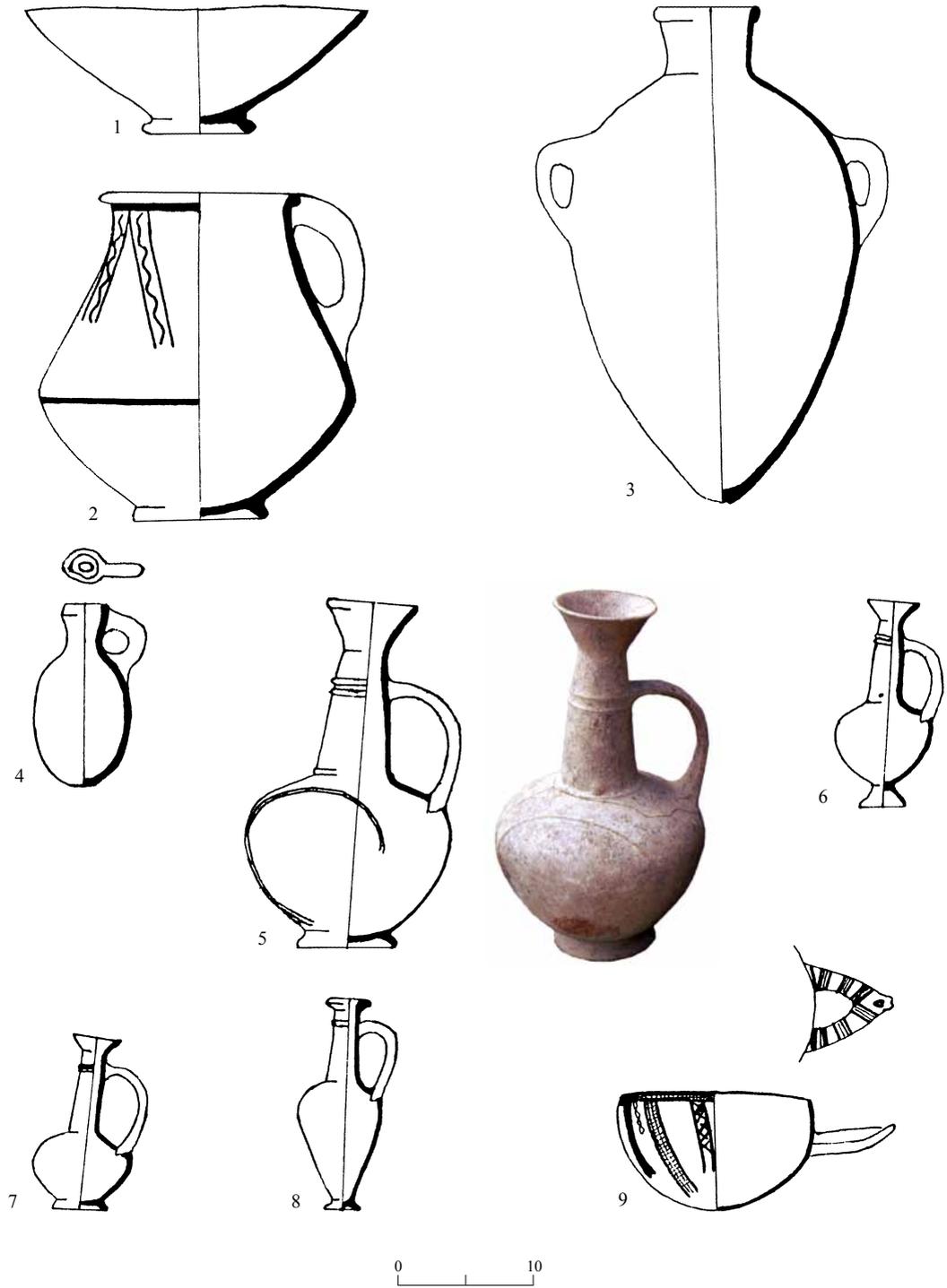


Fig. 31. Finds from Tomb 19.

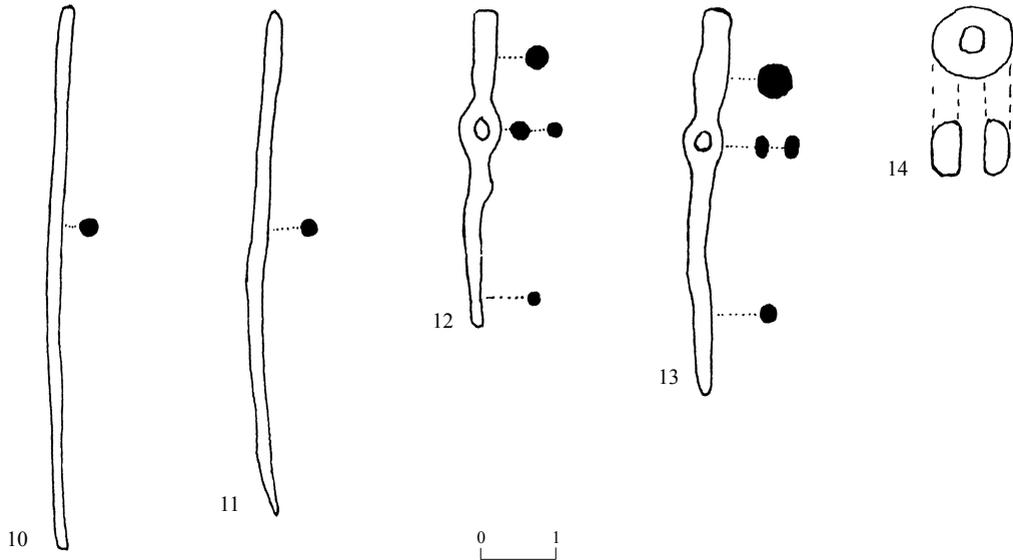
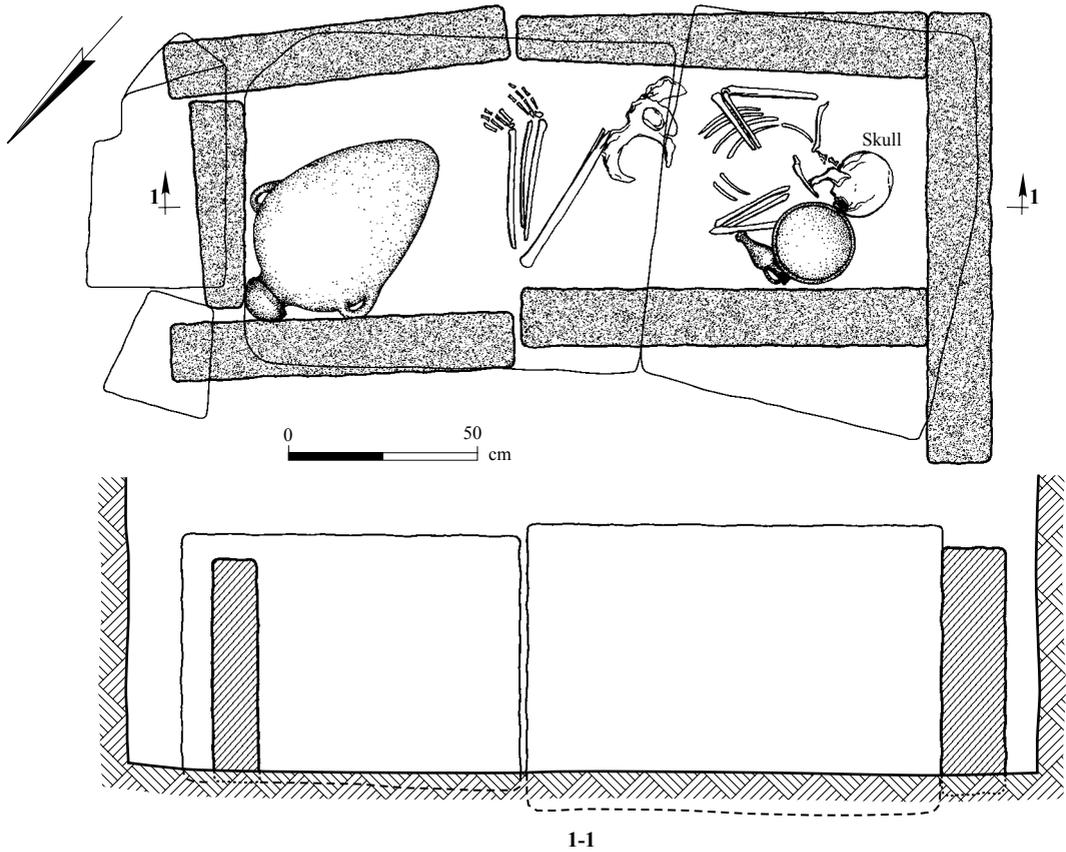


Fig. 31. (cont.)



Plan 16. Tomb 20, plan and section.

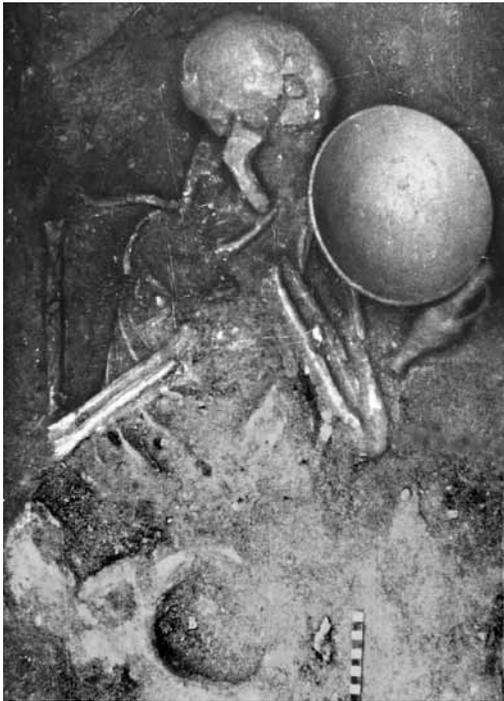
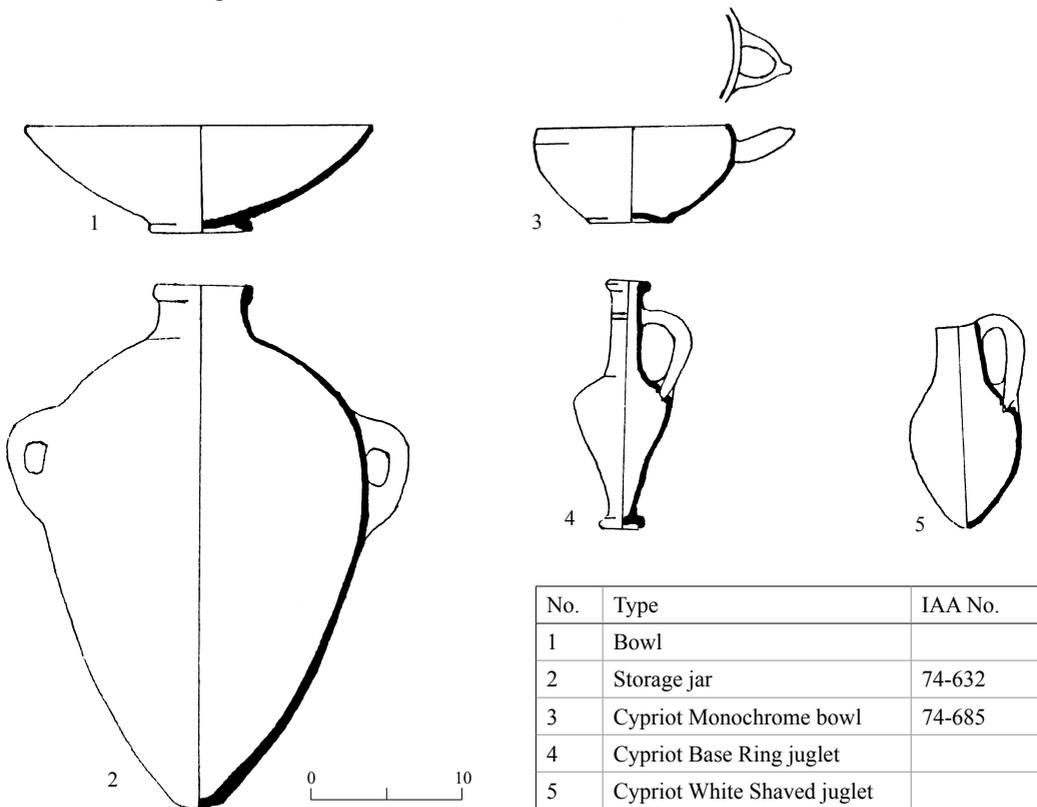


Fig. 32. Tomb 20, skeletal remains and finds *in situ*, looking south.



Fig. 33. Tomb 20, looking north.



No.	Type	IAA No.
1	Bowl	
2	Storage jar	74-632
3	Cyprriot Monochrome bowl	74-685
4	Cyprriot Base Ring juglet	
5	Cyprriot White Shaved juglet	

Fig. 34. Finds from Tomb 20.

dressed *kurkar* blocks. The skeletal remains were very well-preserved. Based on the position of the bones and the skull, the deceased was placed in a flexed position with his head at the southern end of the tomb and his face to the west (Fig. 32).

Five pottery vessels and a bronze pin (not illustrated) were found in the tomb. In addition to a local bowl (Fig. 34:1) and storage jar (Fig. 34:2), there were three imported vessels: a Monochrome bowl (Fig. 34:3), a Base Ring jug (Fig. 34:4) and a White Shaved juglet (Fig. 34:5). The Monochrome bowl was used as a cover on the storage jar (Fig. 33). The local bowl was placed just to the west of the skull.

*Tomb 21* (Plan 17; Fig. 35).— Located slightly north of Tomb 18. The tomb consisted of a pit

hewn in the *kurkar* and lined with four dressed, rectangular *kurkar* slabs and covered with two such slabs. The remains of a skull were found in the southern part of the tomb.

The tomb contained three local vessels: a bowl (Fig. 35:1), a storage jar (Fig. 35:2) and the broken bottom part of a second storage jar (Fig. 35:3). There were two imported vessels: a Lebanese coastal juglet (Fig. 35:4) and a Base Ring juglet (Fig. 35:5). A bronze earring or bracelet (Fig. 35:6) and the upper part of a scarab (Fig. 35:7) were also found. The storage jar, with the imported Base Ring juglet inside it, was found in the northern part of the tomb. Next to the bottom of this jar was the broken rounded storage jar base (Fig. 35:3), which appears to have been used as its lid.

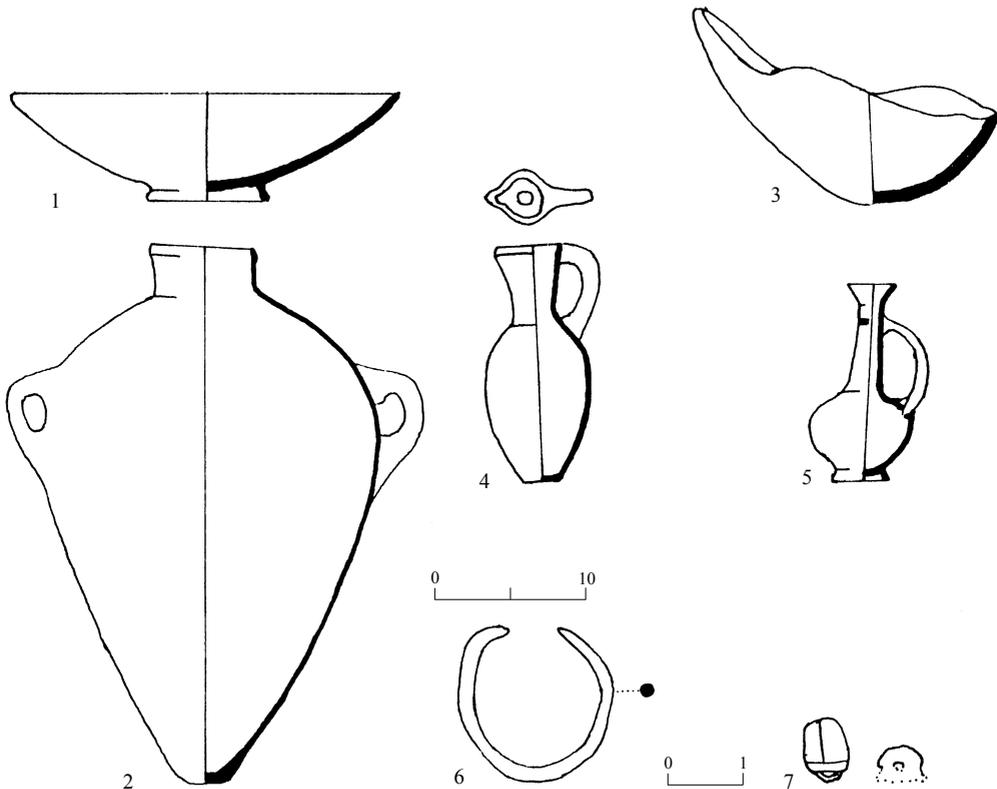
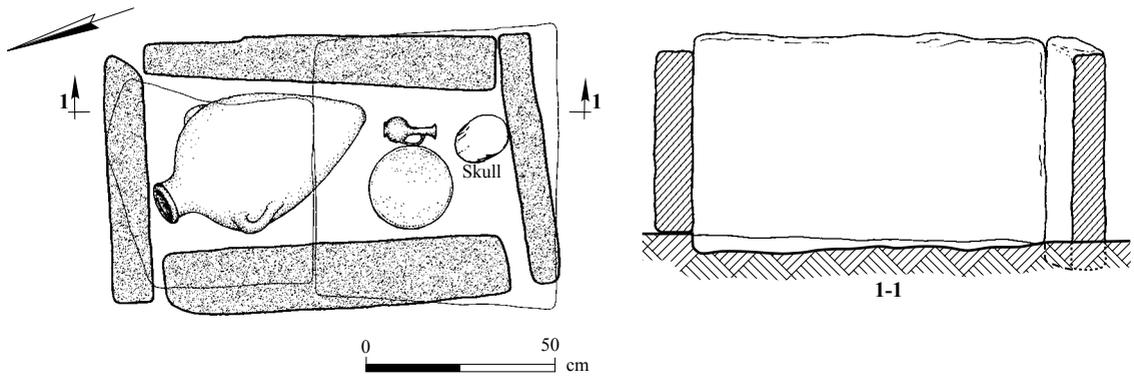


Fig. 35. Finds from Tomb 21.



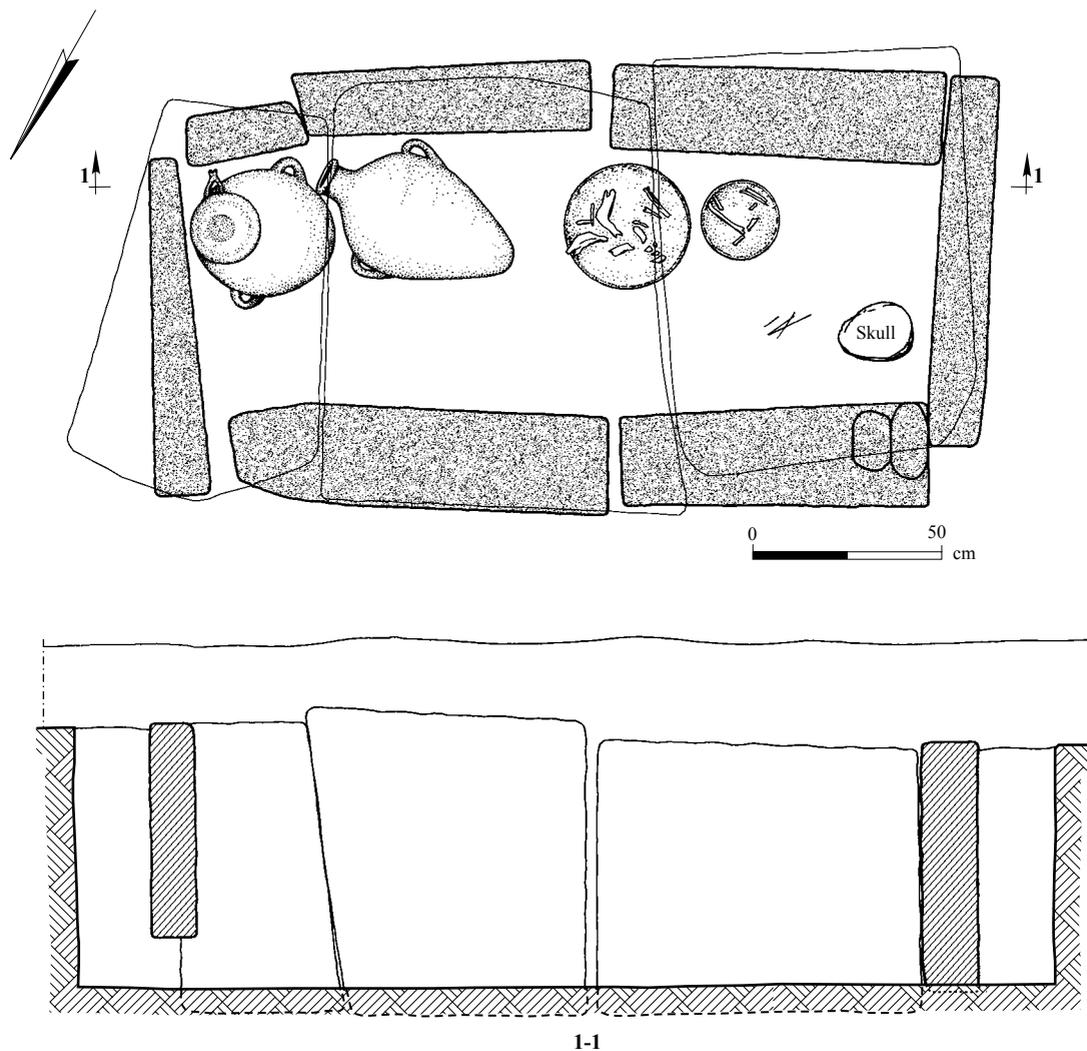
Plan 17. Tomb 21, plan and section.

*Tomb 22* (Plan 18; Figs. 36–38).— Located in the center of the cemetery, about 0.5 m southeast of Tomb 19. The tomb consisted of a pit hewn in the *kurkar*, lined with seven dressed rectangular *kurkar* slabs and covered with three such slabs (Fig. 36). The remains of a skull were found in the southern part of the tomb and the rest of the bones were poorly preserved.

Seven pottery vessels and four bronze needles were found (Fig. 37). The pottery included a local bowl (Fig. 38:1), two local storage jars (Fig. 38:2, 3) and four imported vessels: a Lebanese coastal juglet (Fig. 38:4), a Base Ring bowl (Fig. 38:5), a Plain White Wheel-Made Ware bowl (Fig. 38:6), and a White Slip hemispherical bowl (Fig. 38:7). One of the storage jars (Fig. 38:2) stood in the northeastern corner of the tomb, with the Lebanese-coast juglet inside and covered by the White Slip bowl. The other storage jar was found lying nearby. Two of the bowls (Fig. 38:1, 6) contained animal bones and were found in the northern third of the tomb (Fig. 37). The four bronze needles (Fig. 38:8–11) were found between the skull and these bowls, probably where the deceased's chest had been.

Fig. 36. Tomb 22, looking south; cap stones *in situ*.

Fig. 37. Tomb 22, looking north.



Plan 18. Tomb 22, plan and section.

Fig. 38 ▶

No.	Type	IAA No.
1	Bowl	
2	Storage jar	74-698
3	Storage jar	
4	Lebanese coastal juglet	
5	Cypriot Base Ring bowl	74-599
6	Cypriot White Plain Wheel-Made Ware bowl	74-602
7	Cypriot White Slip II bowl	74-697
8	Bronze needle	
9	Bronze needle	
10	Bronze needle	
11	Bronze needle	

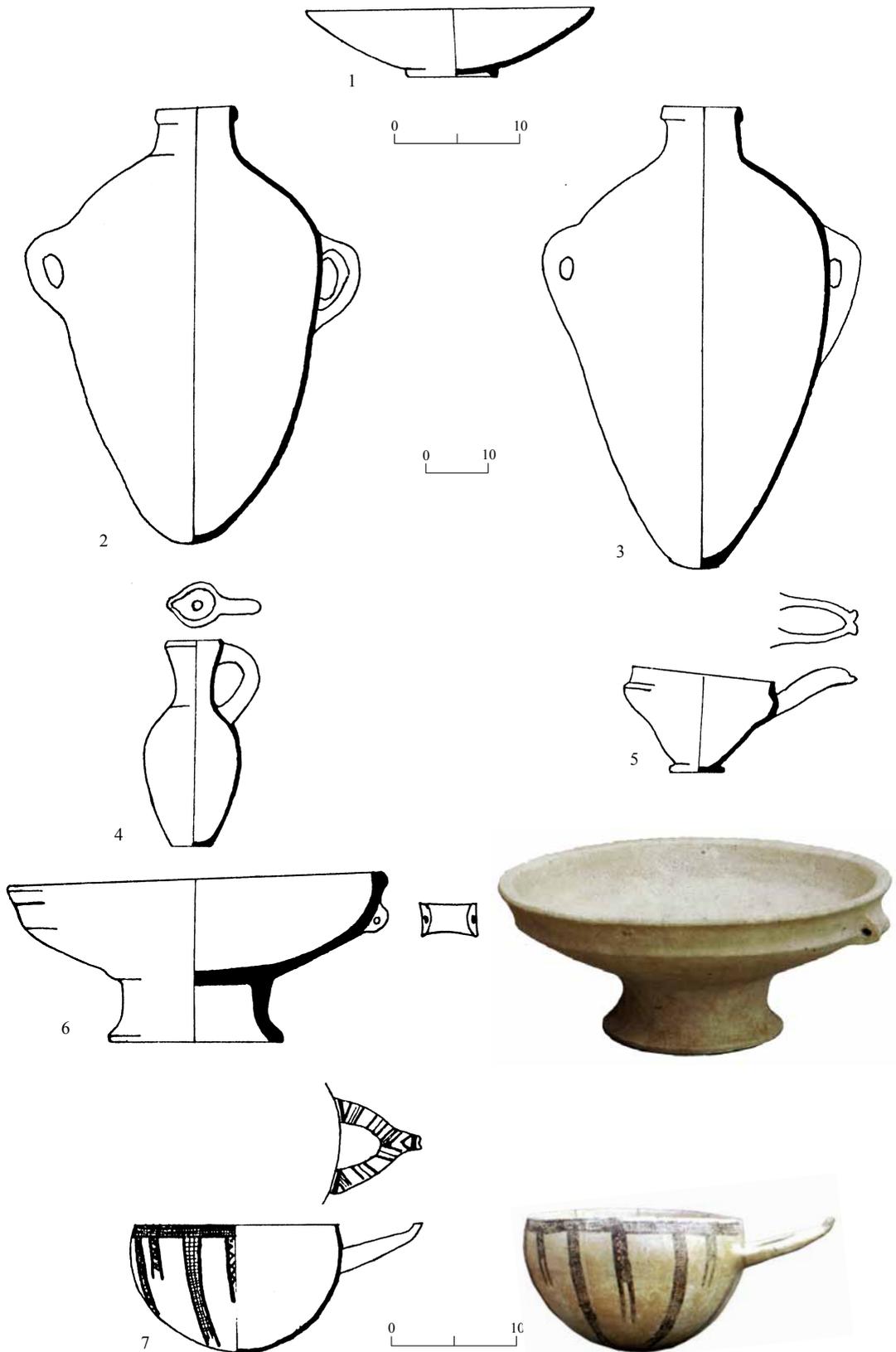


Fig. 38. Finds from Tomb 22.

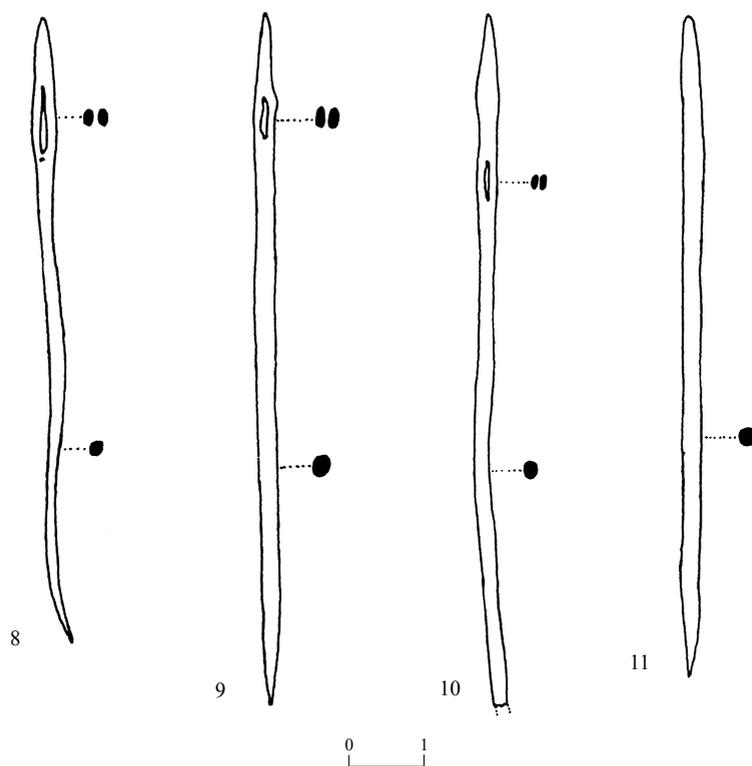


Fig. 38. (cont).

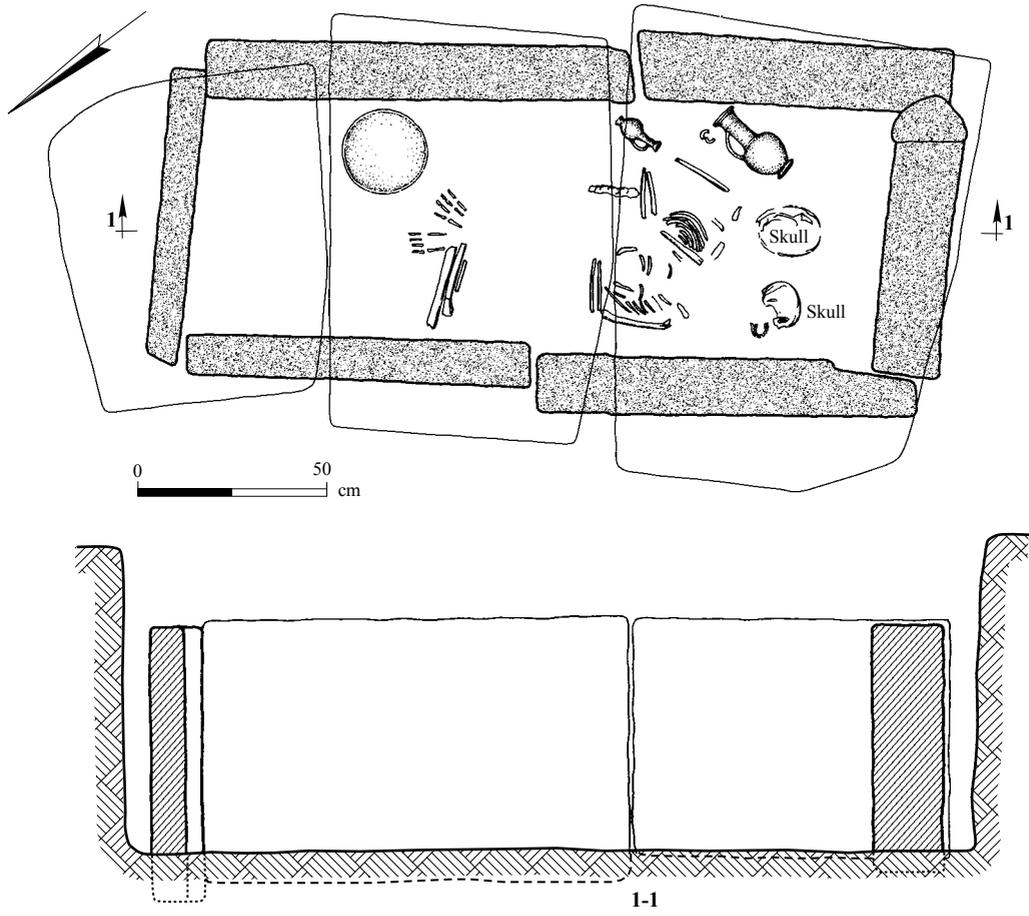


Fig. 39. Tomb 23, looking south.

*Tomb 23* (Plan 19; Figs. 39, 40).— Located in the eastern part of the cemetery, between Tombs 20 and 22. The tomb consisted of a pit hewn in the *kurkar*, lined with six dressed rectangular *kurkar* slabs, and with three such slabs as cover stones. Two skulls were found at the southern end. The remains of two individuals were laid to rest in a flexed position. These two skeletons were found at somewhat different levels and it is possible they were interred at different times. We are unable to determine for which of the deceased the funerary deposit was intended. Three pottery vessels were found: one local bowl (Fig. 40:1) and two imports: a Base Ring jug (Fig. 40:2) and juglet (Fig. 40:3).

Fig. 40 ▶

No.	Type	IAA No.
1	Bowl	
2	Cypriot Base Ring jug	74-703
3	Cypriot Base Ring juglet	



Plan 19. Tomb 23, plan and section.

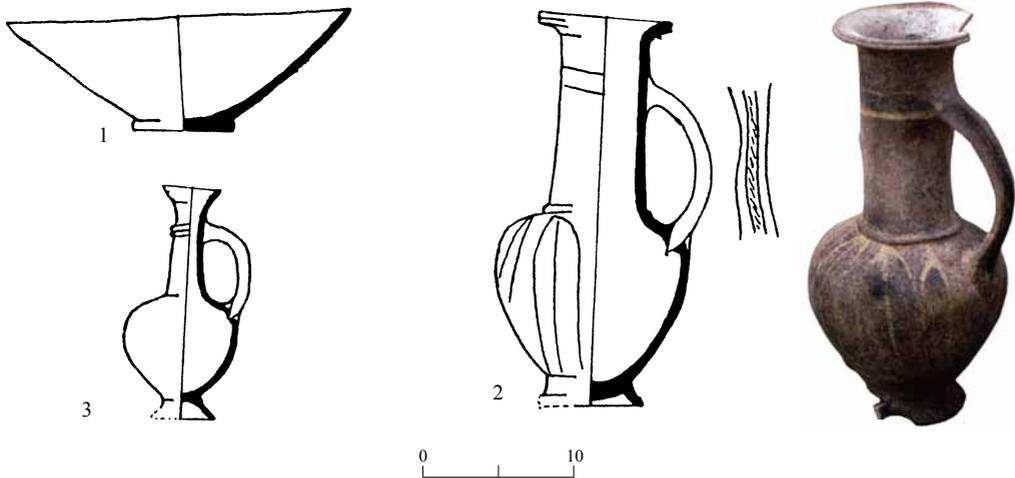


Fig. 40. Finds from Tomb 23.

## THE FINDS

Finds dating to the Late Bronze Age were recovered from most of the tombs, and included both locally produced and imported pottery vessels, as well as bronze objects, scarabs and beads (see n. 3).

## THE POTTERY

The ceramics found in the tombs are similar to assemblages from Late Bronze Age cemeteries and tombs at other sites in Israel. The local vessels were various types of bowls, storage jars, jugs, juglets and lamps. The imported vessels included a variety of bowls, jugs and juglets from Cyprus, juglets from the Lebanese coast, and one Mycenaean piriform jar. Each tomb contained a limited number of vessels and the remains of only one or a few deceased. Therefore, we can assume that the tombs were used for burial for only a short period of time and apparently, the deceased in each tomb were interred at the same time, with the possible exception of Tomb 23. There are no significant differences between the assemblages in the different tombs and this homogeneity indicates that all of the tombs date to the same time. Therefore, we will treat the finds as a single corpus and will detail parallels for each type of vessel, with the goal of placing the assemblage in its spatial and temporal context.

Parallels for the locally produced vessels were found in occupation layers at Tel Lakhish (Lachish), Tel Baṭash, Tel Gezer, Ashdod, Tel SHERA', Tell Abu-Hawam, Tel Mikhal, Megiddo, Yoqne'am, Tel Qashish and Ḥazor, and in tombs at Qubeibeh, Tel Jedur, Jerusalem (Naḥalat Aḥim), Gezer, Tell Beit Mirsim, the Southern Cemetery at Palmaḥim, Tell el-'Ajjul, Megiddo, Jatt, Wadi 'Ara, Ḥanita, Tell Abu-Hawam, Ḥazor and the Persian Gardens near 'Akko. Parallels for the Cypriot, Lebanese-coastal and Mycenaean imported vessels are cited from sites and tombs throughout Israel, as well as selected contexts from Lebanon and Cyprus.

*Local Pottery*

*Plain Bowls* (Figs. 5:1; 13:1; 15:1, 2; 18:1, 2; 21:1; 22:1–4; 24:1; 31:1; 34:1; 35:1; 38:1; 40:1).—Seventeen plain bowls can be classified as belonging to four general typological groups, although the difference between these groups is not great. The first group consists of open bowls with almost straight walls, a ring or flat disc base and a rounded or slightly tapering rim (Figs. 18:1; 21:1; 24:1; 40:1). The second group of bowls is characterized by an open contour and slightly curved walls (Figs. 5:1; 13:1; 15:1; 22:1, 2; 31:1; 34:1; 35:1; 38:1). The third group also features bowls with an open contour, but with more rounded walls (Figs. 15:2; 22:3). The fourth group has a thicker curved wall, giving the bowls a less open contour (Figs. 18:2; 22:4).

Most of the bowls were made of well-levigated fabric, mixed with local temper and some grog. The clay is sandy and slightly rough to the touch. It is difficult to determine if this roughness is a result of the natural weathering of the vessels' surfaces or of the bowls not having been burnished. Judging by the roughness that was also detected on the surfaces of the juglets imported from the Lebanese coast, we assume that the roughness on the bowls is a result of post-depositional damage.

Parallels to bowls of the first group were found in Fosse Temple II, Lakhish (Tufnell 1958: Pl. 70:L.II:29) and in Stratum VIIA on the western slope of Lakhish, dated to the thirteenth century BCE (Yannai 2004: Fig. 19.25:2); note a small variant of this type in Stratum S3 at Lakhish (Yannai 2004: Fig. 19.9:3). Other parallels are found in tombs at Tel Jedur, thirteenth century BCE (Ben Arieḥ 1981: Fig. 1:16), Qubeibeh, late fourteenth century BCE (Ben-Arieḥ, Ben-Tor and Godovitz 1993: Fig. 7:7) and in Tomb 803 at Tell Beit Mirsim (Ben-Arieḥ 2004: Fig. 2.85:3, 4). Bowls from the second group also have parallels from Lakhish Fosse Temple II (Tufnell 1958: Pl. 70:L.II:15) and in Stratum VIIA on the western slope at Lakhish (Yannai

2004: Fig. 19.30:4). Additional comparisons are found in Strata IX and VIII at Tel Baṭash (Panitz-Cohen and Mazar 2006: Pls. 16:1, 2; 21:4; 34:4), in the tomb at Qubeibeh (Ben-Arieh, Ben-Tor and Godovitz 1993: Fig. 7:1–6) and in Tomb 1 at Tell Beit Mirsim (Ben-Arieh 2004: Fig. 2.67:7). Bowls from the third group also have parallels from Lakhish Fosse Temple II (Tufnell 1958: Pl. 71:L.II:41) and in Stratum VIIA on the western slope at Lakhish (Yannai 2004: Fig. 19.25:1), as well as in Strata IX, VIII and VII at Tel Baṭash (Panitz-Cohen and Mazar 2006: Pls. 16:3; 34:3, 5; 37:1–3). See also such bowls in Tomb 1 at Tell Beit Mirsim (Ben-Arieh 2004: Fig. 2.67:12–14). Bowls from the fourth group also have parallels from Lakhish Fosse Temple II (Tufnell 1958: Pl. 71:L.II:51), as well as from Lakhish Fosse Temple III (Tufnell 1958: Pl. 71:L.III:8), in the tomb at Tel Jedur (Ben Arieh 1981: Fig. 1:10), and in Tomb 26 from the Southern Cemetery at PalmaḤım, dated to the thirteenth century BCE (Singer-Avitz and Levy 1992: Fig. 2:15, 16). It is worth noting that the bowls from our Northern Cemetery at PalmaḤım have a plain rim and walls without thickening or carination, whereas most of the bowls from the aforementioned Tomb 26 have a thickened rim and slightly carinated walls. Therefore, aside from the one bowl just mentioned, there are almost no parallels from Tomb 26 at PalmaḤım, which was located only some 2.5 km south of the tombs being discussed here.

Most of the bowls from the Northern Cemetery have a ring base and only a few of them have a convex disc or flat base. The extensive use of ring bases coincides well with the distribution of the bases in the bowl assemblages from Lakhish. The renewed excavations at Lakhish (Yannai 2004:1044) have shown that while bowls with ring bases were found in Strata S1–3, none were found in Strata VII–VI, which post-date the latter phases. Therefore, the bowls from PalmaḤım are earlier than the bowls of Lakhish Stratum VII. Of the 18 bowls published from the Southern Cemetery at PalmaḤım, only two have a ring

base (Singer-Avitz and Levy 1992: Fig. 2:13, 18) and the rest have a flat or convex base. In Stratum XVI at Ashdod, two bowls with ring bases were published from Area G (Dothan and Porath 1993: Fig. 9:6, 7); whereas in Strata XIV–XV, all of the bases, without exception, were flat or convex (Dothan and Porath 1993: Fig. 11:1–17). Bowls with ring or deeply convex disc bases (Panitz-Cohen and Mazar 2006: Pl. 34:1, 2, 4–7, 9) were published from Stratum VIII at Tel Baṭash. In Stratum VI, no ring bases were found, save two, one of which was in secondary use as a stopper (Panitz-Cohen and Mazar 2006: Pls. 55:6; 58:23). Most of the bases are convex disc bases (Panitz-Cohen and Mazar 2006: Pls. 55:1, 2; 58:7, 17); this is also the case in Stratum VIIA (Pl. 52:1–5). Based on these parallels, the bowls are similar to those of Fosse Temple II and Stratum VIIA on the western slope of the tell at Lakhish, Strata IX–VII at Tel Baṭash, and the tombs at Tel Jedur and Qubeibeh. Only a few resemble bowls from Lakhish Fosse Temple III and Tomb 26 from the PalmaḤım Southern Cemetery. Thus, the plain bowls from the Northern Cemetery at PalmaḤım may be dated to the period of Lakhish Fosse Temple II and slightly before the assemblages that were found in Fosse Temple III and in Tomb 26 in the Southern Cemetery at PalmaḤım, which were dated to the thirteenth century BCE (Yannai 2004:1062; Singer-Avitz and Levy 1992:22\*), allowing us to determine the date of our plain bowls to the end of the fourteenth and the early thirteenth centuries BCE.

*Carinated Bowls* (Figs. 5:2; 22:5; 27:1).—

Three carinated bowls were found in the tombs and each one of them is different. They are made of a fabric similar to that of the plain bowls discussed above. Figure 5:2 has parallels from Strata IX and VII at Tel Baṭash (Panitz-Cohen and Mazar 2006: Pls. 17:5; 20:13) and from a tomb at Tel Jedur (Ben Arieh 1981: Fig. 1:2). Figure 22:5 has a parallel from Fosse Temple III at Lakhish (Tufnell 1958: Pl. 69:L.III:56). A parallel to Fig. 27:1 was found in a tomb

from the fourteenth century BCE in Jerusalem (Amiran 1960: Fig. 3:41).

Figure 27:2 may be the detached base of the carinated bowl shown in Fig. 27:1. The use of bowls or chalices whose base was severed or detached is not unique to the tombs at Palmahim. A similar phenomenon was also published from the cemetery at Tell Beit Mirsim (Ben Arieḥ 2004: Fig. 2.33:66, 67). If indeed Fig. 27:2 is the base of Fig. 27:1, then the latter would be the upper part of a carinated chalice. However, it has been included in the group of carinated bowls because of the uncertainty regarding the shape of its base.

*Chalice* (Fig. 27:3).— Only one clearly identifiable chalice was found in the excavation. Although broken on the bottom, it appears to have had a medium-sized pedestal. The bowl is broken above the join with the pedestal; the extant fragment is slightly open and the rim shape is unknown. The vessel is made of well-levigated clay, mixed with some white temper and organic material.

Parallels were found in a tomb in the Persian Gardens near 'Akko (Ben-Arieḥ and Edelstein 1977: Fig. 8:16), in Tomb 216 dating to the fourteenth century BCE at Lakhish (Tufnell 1958: Pl. 72:636) and in Tomb 803 at Tell Beit Mirsim (Ben Arieḥ 2004: Fig. 2.86:19). The medium-sized pedestal is characteristic of chalices from the fifteenth–fourteenth centuries BCE, while chalices in the thirteenth century BCE tend to have taller pedestals that make up about two-thirds of the total height of the vessel (i.e., in Tombs 501 and 1003 at Lakhish: Tufnell 1958: Pl. 72:634, 635, 637, 638).

For another possible chalice, see the carinated bowl in Fig. 27:1, above.

*Storage Jars* (Figs. 13:2; 18:3; 24:2; 27:4; 31:3; 34:2; 35:2, 3; 38:2, 3).— Most of the storage jars are of a single type, characterized by a round tapering body, sloping shoulders, a short cylindrical neck, a thickened and rounded rim and a rounded base. Parallels to the jars with a round base and cylindrical neck were found

in Fosse Temple II at Lakhish (Tufnell 1958: Pl. 87:1008, 1009), at Deir el-Balah (Killebrew 2010: Fig. 4.6:4), and in Stratum XII (LB IB) and Stratum XI at Tel Shera' (Yannai, in prep.). Figure 27:4 is exceptional in its slightly more carinated shoulder, very short neck and thick pointed stump base. Jars with tapering bases have parallels in Strata VII and VIII at Tel Baṭash (Panitz-Cohen and Mazar 2006: Pls. 29:1–3, 7–9; 35:10; 41:2–9; note that Pl. 35:10 has a stump base that is very similar to that of Fig. 27:4) and in Stratum X at Tel Shera' (Yannai, in prep.). Jars with a thick pointed base were found at Gezer (Dever 1986: Pl. 11:12, Stratum 8 and Pl. 15:6, 12, Stratum 7). Another parallel to Fig. 27:4 was found in a tomb in the Persian Gardens near 'Akko (Ben-Arieḥ and Edelstein 1977: Fig. 10:6, 7).

*Jar-Jug* (Fig. 22:8).— Only one jar-jug was found in the tombs. Its clay contained a large quantity of white and brown temper. The outer surface of the vessel is rough and coarse. The vessel is large, with a round, almost spherical body and a flattened base. This shape is uncommon, since most of the jar-jugs have an elongated body and a pointed base. Parallels to our variant were found in Tomb 216 at Lakhish (Tufnell 1958: Pl. 74:674, 676). The presence of a single large jar-jug in the Palmahim assemblage is quite in keeping with its limited distribution in tombs in general. Slightly smaller jar-jugs were found in tombs at Lakhish (Tufnell 1958: Pl. 74:680–682, 685; 75:691, 695; 76:708, 709), Qubeibeh (Ben-Arieḥ, Ben-Tor and Godovitz 1993: Fig. 8:10, 11, 13) and Tel Jedur (Ben Arieḥ 1981: Fig. 3:9, 10).

*Biconical Jugs* (Figs. 22:6, 7; 31:2).— Three biconical jugs were found in the excavation. Two (Fig. 22:6, 7) are small, undecorated, with a carination almost at mid-body. The third jug (Fig. 31:2) is large, with a carination at the bottom third of its body; it is painted on the upper body with a geometric decoration in dark red. All three are made of well-levigated material, almost devoid of temper.

Parallels to the larger jug were found in Strata VII and VIIA at Tel Baṭash (Panitz-Cohen and Mazar 2006: Pls. 37:12; 54:1 respectively) and at Lakhish (Tufnell 1958: Pl. 84:963), whereas the small jugs (Fig. 22:6, 7) have a close parallel in Stratum VIA at Tel Baṭash (Panitz-Cohen and Mazar 2006: Pl. 60:7). At Lakhish, the small biconical jugs lacked decoration (Tufnell 1958: Pl. 84:967–969), while the large jugs (1958: Pl. 84:961–963) were adorned with geometric decorations, such as metopes.

*Juglets* (Figs. 5:3; 10:1; 18:4; 27:7; 31:4).— The juglets are made of well-levigated clay with a small amount of small white temper. The surface of the juglets was meticulously smoothed and great care was taken in their preparation. Most of the juglets have a round body and base (Fig. 5:3; 10:1; 18:4; 31:4) and one has a pointed base (Fig. 27:7); this base was most likely inspired by the form of the White Shaved juglets imported from Cyprus (see below).

Parallels to the juglets with round bodies and bases were found in tombs, dated to the fourteenth and thirteenth centuries BCE, from Jatt (Yannai 2000: Fig. 4:48–51), Jerusalem (Amiran 1960: Fig. 2:30, 34) and Qubeibeh (Ben-Arieh, Ben-Tor and Godovitz 1993: Fig. 8:1, 2), as well as in Tombs 216, 501 and 555 at Lakhish (Tufnell 1958: Pl. 78:795, 796). A parallel to the pointed-base juglet (Fig. 27:7) was uncovered in a tomb in the Persian Garden near ‘Akko (Ben-Arieh and Edelstein 1977: Fig. 9:2) and in Tombs 555 and 216 at Lakhish (Tufnell 1958: Pl. 78:784, 786).

*Lamps* (Figs. 15:3; 22:9; 27:5).— Three lamps were found in the tombs; one (Fig. 15:3) was somewhat deeper than the other two. Parallels were found in tombs from Tel Jedur (Ben-Arieh 1981: Fig. 4:8) and Jerusalem (Amiran 1960: Fig. 3:50, 51), as well as in Tomb 26 from the Southern Cemetery at PalmaḤım (Singer-Avitz and Levy 1992: Fig. 3:9–12).

### *Imported Pottery*

*Juglets from the Lebanese Coast* (Figs. 5:4; 13:3; 21:2; 24:3; 38:4)

These juglets were defined as imports from the Lebanese coast following petrographic analysis (Yannai, Gorzalczany and Peilstöcker, in prep.). All are made of orange or light pink fabric mixed with a large amount of red, brown and black inclusions. The juglets have a slightly elongated body, a conical or cylindrical neck, a trefoil rim and a narrow flattened base. Some of them, such as Fig. 5:4, have a slightly wider body and their proportions are more similar to those of their locally produced counterparts from PalmaḤım.

Parallels were found in Tombs 7 and 13 at Jatt (Yannai 2000: Fig. 4:54, 55; 2005: Fig. 10:29, 30), in Stratum V at Tell Abu-Hawam (Hamilton 1935: No. 260), in Stratum XIV at Tel Mikhal (Negbi 1989: Fig. 5.7:7, 8) and in Strata IX and VIII at Megiddo (Loud 1948: Pls. 50:8; 58:16). Based on the parallels, these juglets date to the fifteenth–fourteenth centuries BCE.

The distribution of the juglets imported from the coast of Lebanon shows they were mostly found at port and coastal sites, although they also appear inland, at Megiddo (Loud 1948: Pl. 58:16) and perhaps even at Lakhish (Tufnell 1958: Pl. 86:995). Several juglets of this group were also found in tombs in Ashqelon (Celia Bergoffen, pers. comm.). In light of these findings, we can reasonably assume they were traded as part of the maritime commerce that was conducted along the coast during the Late Bronze Age.

### *Cypriot Vessels*

*Red Lustrous Wheel-Made Ware Jug* (Fig. 13:6).— The jug from PalmaḤım is made of very well-levigated, dark orange clay devoid of temper. Its surface is covered with a dark orange slip and treated by dense vertical burnishing. Based on its form and particularly the fabric, the jug was imported from Cyprus (Eriksson 1993:149) and not from the Syrian/Lebanese

coastal regions (Yannai, Gorzalczy and Peilstöcker 2003:111). Red Lustrous Wheel-Made Ware jugs have been found in a number of assemblages in Israel and they are also common in Egypt, Syria and Cyprus (Eriksson 1993:1–3). A parallel was found in Jerusalem, in a tomb from the fourteenth century BCE (Amiran 1960: Fig. 1:2).

Production of Red Lustrous Wheel-Made Ware in Cyprus had probably ceased by the Late Cypriot IIB (Eriksson 2007:52). Since the jug that was found at Palmaḥim, like the one from Jerusalem, is one of the latest types of this ware to have been exported from the island to Israel, it should probably be dated to the fourteenth century BCE (Eriksson 1993:1–3; 2007:52).

*Plain White Wheel-Made Ware Bowls* (Figs. 22:10, 11; 38:6).— These bowls are made of yellow or pinkish orange fabric with no core. The clay contains a large amount of tiny brown, black and red temper. One of the bowls (Fig. 22:10) has a rim with a shallow groove on the exterior, a carinated body and a high ring base. The walls are thick and there is a horizontal tubular handle just under the rim.

This type of bowl is commonly found in many ceramic assemblages in the country. Most of the bowls in this group were not identified as imports by the excavators because of the erroneous assumption that all the imports from Cyprus were handmade. Thus, in most cases, they were published as local bowls, for example a bowl from Stratum S2 at Lakhish (Yannai 2004:1041, Fig. 19.12:6). Other bowls were found in a tomb at Tell Abu-Hawam (Anati 1959:97, Fig. 8:1), in a tomb at Ḥanita (Yedaya 1961: Fig. 1:3) and in Tomb 26 in the Southern Cemetery at Palmaḥim (Singer-Avitz and Levy 1992: Fig. 26:19). While Singer-Avitz and Levy (1992:16) raised the possibility that this bowl was a Cypriot import, it was presented together with the locally produced bowls. Dozens of fragments of these bowls were found in recent excavations at Tell Abu-Hawam (Artzy 2006: Fig. 8:3). Several bowls

that might belong to this group were also found in Tomb 989A1 at Megiddo (Guy and Engberg 1938: Pls. 15:14–16; 19:14; 34:6).

It is worth noting that, aside from the more commonly imported bowls belonging to this group, several other Plain White Wheel-Made Ware types have been found in Israel (although not at Palmaḥim). These include jugs, such as from the Persian Garden tomb near 'Akko (Ben-Arieh and Edelstein 1977: Figs. 8:10; 10:3, 4), and one krater from Tomb 39 at Megiddo (Guy and Engberg 1938: Pl. 69:5).

*White Painted V Teapot* (Fig. 26).— This vessel is made of a very light yellow clay with a light-colored core; it lacks temper. There are traces of knife-paring, done when the vessel was partially dried, on the surface of the body and especially around the rim and handle. The body is round, its height and width almost identical; the decoration is a reddish brown color. The decorative motif consists of three horizontal stripes, one in the center of the body and two under the rim. Between them are diagonal stripes on the upper body above the central horizontal stripe and extending to the rim of the vessel. The decoration on the bottom half of the teapot from Palmaḥim has not survived.

Cypriot White Painted V (WP V) teapots have been found in numerous tomb assemblages in Israel. The WP V teapots are divided into two groups on the basis of color of clay, shape of body and decorative style. Our vessel belongs to the early group, characterized by its clay ranging in color from light to dark yellow, its squat shape, and its black/brown decorative motif.

The earliest example of a WP V teapot decorated in the early style from a credible stratigraphy was found in Stratum VIII of the Middle Bronze Age IIB at Tel Qashish (Ben-Tor, Bonfil and Zuckerman 2003:4, Fig. 93:30). The early decorative style also appears on a teapot found in Stratum X at Megiddo (Loud 1948: Pl. 41:32) and in several tombs in this layer (Loud 1948: Pl. 51:5); one teapot was found in a tomb at Megiddo that dates to

MB IIB or the beginning of LB 1A (Guy and Engberg 1938: Pl. 24:3). Note also a teapot decorated in the early style found in Stratum VIII at Megiddo (Loud 1948: Pl. 59:10). Two such teapots were found in a tomb in Jerusalem from the fourteenth century BCE (Amiran 1960: Fig. 2:22, 23).

*White Shaved Juglets* (Figs. 7:1; 34:5).— Two juglets of this type from Palmaḥım were both made of a well-levigated white fabric with no core or temper. They are carelessly formed and asymmetric. The exterior of the entire vessel, including the handle and the rim, are treated with vertical knife paring that is especially visible near the base.

White Shaved juglets exported from Cyprus to Israel are common in ceramic assemblages from the fourteenth–thirteenth centuries BCE throughout the entire country, in tombs as well as in occupation levels. Since the publication of Gittlen's catalogue of White Shaved juglets found in Canaan (Gittlen 1977:343–368), many more such juglets have been found in Israel and on the Syrian/Lebanese coast. In fact, such juglets are present in just about every fourteenth–thirteenth-century context.<sup>5</sup> Selected examples include Yoqne'am Stratum XIXb (Ben-Tor, Ben-Ami and Livneh 2005:5, Fig. IV.20:13, 14), Tel Qashish Stratum VI (Ben-Tor, Bonfil and Zuckerman 2003:276, Fig. 112:21), Tel Baṭašh Strata VIII and VII (Panitz-Cohen and Mazar 2006: Pls. 37:17, 18; 45:7, 8; 51:13), Tel Nami (Artzy 2006: Fig. 11:6–9), Tel 'Akko (Artzy 2006: Fig. 11:4, 5) and Tell Abu-Hawam (Artzy 2006: Fig. 11:1–3). Such juglets were also found in Tombs 7, 12, 13 and 22 in the Sidon cemetery (Saïdah 2004: Figs. 16:29; 26:59; 30:70; 42:112), dated to the end of the fourteenth–beginning of the thirteenth centuries, as well as at Tell 'Arka in Lebanon (Thalman 2006: Figs. 123:11; 131:12–14).

*Monochrome Bowls* (Figs. 10:2; 11; 13:4; 18:5; 21:3; 24:4; 34:3).— All the Monochrome bowls from Palmaḥım are of the later type, dated to the thirteenth century BCE. They are uniform

in shape and dimensions, their diameter is small and their profile is significantly more closed than in earlier variants of this type, dated to the fifteenth–fourteenth centuries. The exterior of the body, particularly below the rim and the upper part, as well as the wishbone handle, are knife-pared. The bowls are made of well-levigated clay, but with a few air bubbles. The clay is treated with a slip that occurs in shades of black, gray, brown and light and dark red, and some of the bowls are slipped in several colors. The quality of the slip is excellent and there are no apparent signs of flaking.

Parallels were found in Stratum 1B at Ḥaḏor (Yadin et al. 1960: Fig. 276:26, 27), in Tomb 803 at Tell Beit Mirsim (Ben-Arieh 2004: Fig. 2.90:39), in Stratum X at Tel Mevorakh (Kromholtz 1984: Fig. 9:3, 4), in a tomb from Jerusalem from the fourteenth century BCE (Amiran 1960: Fig. 2:25), in Tombs 501, 555 and 612 at Lakhish (Tufnell 1958: Pl. 79:828), Tomb 77 at Megiddo (Guy and Engberg 1938: Pl. 42:12) and in Stratum VIII at Tel Bet She'an (James and McGovern 1993: Fig. 57:16).

*Bucchero Jug* (Fig. 4).— The clay is light orange or sometimes gray and lacks temper. The jug is treated with a dark brown and gray slip. It has a low ring base and a spherical body with a squat upper part, a short narrow cylindrical neck and a strap handle that extends from the rim to the shoulder. Most Cypriot Bucchero jugs have a spherical body, such as one from a fourteenth-century BCE tomb in Jerusalem (Amiran 1960: Fig. 1:19), but several jugs are slightly squat, such as the example from Palmaḥım. Parallels were found in some tombs dated to the fourteenth–thirteenth centuries at Lakhish (Tufnell 1958: Pl. 79:285), as well as in Tomb 8144–45 at Ḥaḏor (Yadin et al. 1960: Pl. 136:16), dated to the fourteenth century by a very rare scarab of Thutmose IV (Yadin et al. 1960:141, Pl. 137:15).

*Base Ring Bowls* (Figs. 22:12; 38:5).— Base Ring (BR) bowls appear in imported Cypriot ceramic assemblages from the beginning of the

fourteenth century and perhaps even from the end of the fifteenth century BCE and continue until the end of the thirteenth century.

Figure 38:5 seems to be earlier, and can be classified as BR I. It is made of delicate, eggshell thin fabric and has a shallow ring base (not visible in drawing), a broad conical body whose upper part curves inward, and a tall vertical rim that is gently folded. A thick wishbone handle is attached to the carination on the upper part of the body; the join of the handle was treated with a sharp instrument. The slip occurs in shades of orange, red, gray and black and has a tendency to flake. The vessel's surface is densely burnished to a glossy finish. Similar bowls were found in Tomb 7 at Jatt (Yannai 2000: Fig. 8:87), in Tomb 10A at Gibeon (Pritchard 1963: Fig. 8:18) and in Tombs 524, 547, 554 and 555 at Lakhish (Tufnell 1958: Pl. 81:869).

Figure 22:12 belongs to the later BR II type. It has a short, straight ring base and a sharply carinated body. The walls are thicker and the upper quarter of the body curves in; the rim is short with a rounded top. Unlike the thin slip that tends to flake on the BR I bowls, the slip on the BR II bowls is strong and does not peel, and the surface finish of these bowls is coarse and rough. The slip color of Fig. 22:12 has shades of red and dark brown that are darker than other vessels of this ware, in some spots, the slip is carelessly smeared over the surface of the vessel. The surface of the bowl is matte, without a shine or gloss. This bowl type was found in assemblages dated to the fourteenth century BCE, such as a tomb in the Persian Garden in 'Akko (Ben-Arieh and Edelstein 1977: Fig. 12:1, 5, 6) and a tomb in Jerusalem (Amiran 1960: Fig. 2:25). Parallels were also found in various assemblages dated to the thirteenth century BCE, such as Stratum VI at Tel Qashish (Ben-Tor, Bonfil and Zuckerman 2003: Fig. 110:7), Stratum VII at Tel Bet She'an (James and McGovern 1993: Fig. 56:6), a tomb at Tel Jedur (Ben-Arieh 1981: Fig. 5:7) and in Tomb 100 in Tell Beit Mirsim (Ben-Arieh 2004: Fig. 2.42:116).

*Base Ring Jugs* (Figs. 31:5; 40:2).— Two jugs belonging to the Base Ring group were found in the tombs. Figure 31:5 has a conical neck and is decorated in relief with curved coils on the body and ridges on the neck, features that characterize it as BR I. Parallels were found in Tomb 7 at Jatt (Yannai 2000: Fig. 7:76). Figure 40:2 has a cylindrical neck and a body decorated with a grooved antithetic pattern on one side and a vertical groove incised on the handle (rather than two notches as is usually the case with Base Ring jugs).

The jug with the cylindrical neck (Fig. 40:2) is Gittlen Type VIA3d:1 (Gittlen 1977:118, Pl. 2), which is very common in tomb assemblages throughout Israel. Parallels decorated with the same patterns were found in Tombs 501, 1006, 1003, 555, 548, 216 at Lakhish (Tufnell 1958: Pl. 80:844), in Tomb 803 at Tell Beit Mirsim (Ben-Arieh 2004: Fig. 2.90:40), in Locus G70 at Gezer (Seger 1988: Pl. 26:2), in Tomb 4 at Megiddo (Guy and Engberg 1938: Pl. 55:2), and in Ḥazor Tomb 8065 (Yadin et al. 1960: Fig. 140:1) and Tomb 8144–45 (Yadin et al. 1960: Fig. 136:8, 9).

*Base Ring Juglets* (Figs. 5:5; 7:2; 10:3; 15:4; 18:6; 25; 28:1; 31:6–8; 34:4; 35:5; 40:3).— The Base Ring juglets are divided into two sub-groups: one influenced by the shape of the Red Lustrous Wheel-Made Ware jugs (Figs. 15:4; 31:8; 34:4) and a second group of the more typical Base Ring juglets (Figs. 5:5; 7:2; 10:3; 18:6; 25; 28:1; 31:6, 7; 35:5; 40:3).

The juglets of the first subgroup are made of orange–dark pink fabric and are treated with a dark orange slip. They have an elongated body, a carinated shoulder, and a short, narrow disc base. The thickened rim is everted. The narrow neck is tall and slightly conical, with a thin strap handle extending from its upper part to the shoulder. The wall, neck and rim are thin and the surface is carefully fashioned, aside from a few traces of knife-paring near the handle join. Parallels to this type were found in a tomb from the fourteenth century BCE at Jerusalem (Amiran 1960: Fig. 1:4) and in a tomb from the

thirteenth century BCE at Tel 'Eṭun (Tzaferis and Hess 1992: Fig. 6:7, 8). The juglet found in Jerusalem has a thin ridge on the neck, but the neck above the ridge is longer than that of the Palmaḥım juglets.

The second subgroup of more typical Base Ring juglets can be further divided into a type with a high trumpet base (Figs. 10:3; 31:6; 40:3) and a type with a low, wide ring base (Figs. 5:5; 7:2; 18:6; 25; 28:1; 31:7; 35:5). However, the differentiation between the two base types is of no chronological significance: parallels to juglets with both types of base were found in a tomb of the fourteenth century BCE from Jerusalem (Amiran 1960: Fig. 1:5–8), in Tomb 7 from Jatt (Yannai 2000: Fig. 8:77–82) and in a tomb from Tel 'Eṭun (Tzaferis and Hess 1992: Fig. 6:1).

*Base Ring Flasks* (Figs. 13:5; 15:5, 6; 27:6).— These vessels are made of clay ranging in color from light red to dark brown with a gray core, and lack temper. They are covered with a slip that is usually gray, sometimes turning dark red. The flasks with a ridge around the neck (Figs. 13:5; 15:6) tend to appear in earlier contexts than those without, as in the case of a ridge-necked flask from the LB I burial phase in Tomb 7 at Jatt (Yannai 2000: Fig. 8:85).<sup>6</sup> A flask with a ridged neck was also found in a thirteenth century tomb at Tel 'Eṭun (Tzaferis and Hess 1992: Fig. 6:6). The flasks without the neck ridge (Figs. 15:5; 27:6) are paralleled in somewhat later contexts, such as a tomb at Qubeibeh (Ben-Arieh, Ben-Tor and Godovitz 1993: Fig. 11:1, 2) and Tombs 501 and 555 at Lakhish (Tufnell 1958: Pl. 81:875). According to the parallels, all the flasks from Palmaḥım can be dated to the fourteenth–thirteenth centuries BCE.

*Base Ring Mug* (Fig. 10:4).— One Base Ring mug was found. It has a ring base, above which the body is round up to a carination. Above the carination is a long, slightly convex neck. The everted rim had been cut with a knife. The handle is attached to the rim and has a narrow

rectangular cross-section. Diagonal lines are incised between two horizontal lines, c. 1 cm below the rim.

Like our example, most of the mugs found in excavations in Israel are small in size; it is the decorative technique that differentiates between the early and later variants. As a rule, BR I mugs have one or two plastic strands applied on the upper quarter of the vessel, such as those found in Tomb 7 from the fifteenth–fourteenth centuries BCE at Jatt (Yannai 2000: Fig. 8:86), whereas BR II mugs are decorated with white paint on a gray background (Tufnell 1958: Pls. 850; 851). The mug from Palmaḥım is unusual in its incised decoration that, together with the reddish hue of the body, is generally characteristic of BR I. One parallel to the Palmaḥım mug, found at Tell el-Ḥesi (Petrie 1891: Pl. VIII:146), was assigned by Bergoffen to BR I (Bergoffen 1990:529, Pl. VII:1508, Pl. 267). Such an incised decoration as on the Palmaḥım mug can also be found on a few BR I juglets, such as one from Tell el-'Ajjul, dated to Dynasty XVIII (Petrie 1932: Pl. XXXVI:89J7) and one in a tomb at Wadi 'Ara, dated to the fifteenth–thirteenth centuries BCE (Ilan, Gadot and Yannai, in prep.).

*White Slip II Hemispherical Bowls* (Figs. 21:4; 31:9; 38:7).— Three White Slip bowls, all with a deep hemispherical shape, were found in the tombs. The fabric is dark reddish brown, with a dark gray core. The temper includes very tiny black inclusions. The painted decoration of the bowls is uniform and consists of a horizontal ladder under the rim exterior and vertical ladders extending from it downward. The vertical bands are divided into wide and long ladders separated by short bands containing rhomboids.

This combination of a deep hemispherical bowl and a ladder with rhomboid bands decoration is rare in Cyprus, and does not appear elsewhere in Israel; moreover, it does not appear in Sjöqvist's book, although he does show rhombi incorporated in the decoration of some WS I bowls (Sjöqvist 1940: Figs. 11, 12). In the

publication of a conference in Nicosia devoted to White Slip ware (Karageorghis 2001), only one bowl decorated with these components appears in a photograph of vessels from various tombs at Kalavassos Ayios Dhimitrios (South and Steel 2001: Fig. 3), but the photograph is not really clear. On the other hand, two bowls with the same decoration as the Palmaḥim bowls were found at Stephanía in Tomb 7 (Hennessy 1963: Pl. 37:3), together with BR I jugs and a WS I bowl, and in Tomb 14a (Hennessy 1963: Pl. 57:13), together with early Base Ring jugs and juglets. In addition, a fragment of a bowl adorned with an identical motif was uncovered in the excavations at Bamboula, Kourion, and it is dated by the excavator to the Late Cypriot IIA period (Benson 1961: Fig. 4). Therefore, despite the early appearance of this combination of motifs on White Slip bowls in Cyprus, it seems that the Palmaḥim bowls should be attributed to WS II.

*Mycenaean Piriform Jar* (Fig. 22:13)

This small piriform jar is covered in a dark, yellowish slip and decorated in black-painted bands on the neck, shoulder and lower body, with a net-pattern between the handles. It is Furumark's Type FS 44 (Furumark 1941:591).

The combination of shape and decoration is rare and only two close parallels to it have been found in Israel. The first parallel was found in Tomb 7 at Tel Gezer (Macalister 1912:306–307, Pls. 66:44; 67:2 top left) and is dated by Stubbings to LH IIIA (Stubbings 1951:63, Fig. 18a), although this identification is uncertain because of the poor quality of the illustration. The second parallel is from Tomb B3 in the Persian Garden at 'Akko (Hankey 1977:47, Fig. 23.1; Pl. IV:3). Only the upper part of that jar has survived; it is decorated in orange and red painted stripes that are relatively thicker than customary for this type of vessel (Mountjoy 1986:56). Åström (1972:296–297) noted that this type was more common in Cyprus than in Israel. Hankey (1977:47) assigned the 'Akko jar to LH IIIA1–2, a date that suits most of the local Canaanite vessels in the Palmaḥim

assemblage. The quality of the drawing of the net pattern on the Palmaḥim jar is not as good or precise as that on the jar from 'Akko, perhaps an indication that it is of a slightly later date than the one from 'Akko.

*Pottery Summary*

The pottery discovered in the tombs was in a fine state of preservation, making it easy to identify the production technology, such as knife-paring, slipping, burnishing and painting. It is reasonable to assume that the local vessels were made at Palmaḥim or in its vicinity, as most are similar in shape and in technical quality to vessels from the Shephelah. The parallels from more distant Late Bronze Age tombs and occupation levels, for instance, from 'Akko and other northern sites, reflects a considerable uniformity in the ceramic horizon of the period.

Imported vessels from Cyprus, too, are typical of those found in Late Bronze Age sites and tombs throughout Israel. They include traditional handmade vessels, such as Base Ring jugs and White Slip bowls, and vessels made on a fast wheel, such as the Plain White Wheel-Made Ware bowls and the Red Lustrous Wheel-Made Ware jug. Six imported juglets from production centers on the Lebanese coast were also among the imports, as was one Mycenaean piriform jar. No imported Egyptian vessels or Egyptian influence on the pottery techniques were found.

The presence of many imported vessels in the Palmaḥim tombs has already been discussed by Singer-Avitz and Levy (1992:22–24) and Gonen (1992:91–92). At Palmaḥim, as in tombs in the Shephelah and at coastal sites such as Tell el-'Ajjul and 'Akko, there is a high proportion of imports to local vessels compared to tombs in other regions, a phenomenon that reflects both economic and cultural aspects of these regions during the Late Bronze Age.

Based on the pottery parallels, the cemetery should be dated from the late fourteenth until the early thirteenth centuries BCE.

## METAL OBJECTS

*Bronze Rings(?)* (Figs. 10:5–10; 28:2; 35:6).— Nine circular pieces of bronze that are open on one end were found (only eight are presented in the illustrations). Their diameters are not uniform and they range in size from two to four centimeters. Since these bronze rings were not found on the human bones, it is difficult to determine whether they were earrings or some other form of adornment. However, a tang on Fig. 10:10 probably indicates that this piece, at least, is an earring. Parallels were found in a tomb at Tel Jedur (Ben-Arieh 1981: Fig. 7:3–7), in tombs at Deir el-Balaḥ (Lipton 2010: Fig. 1.8:3, 4) and in Strata VII–IX at Megiddo (Loud 1948: Pl. 224:3, 4, 6, 7).

*Bronze Needles* (Figs. 5:6, 7; 13:7–9; 28:3, 4; 31:10, 11; 38:8–11).— The bronze needles that were found in the tombs were both perforated (Figs. 13:9; 38:8–10) and not perforated (Figs. 5:6, 7; 13:7, 8; 28:3, 4; 31:10, 11; 38:11). No parallels were found for perforated needles in Late Bronze Age contexts in Israel, although there are needles that do have a loop formed by bending the tip, cf. examples from Megiddo (Loud 1948: Pl. 219:1–9).

*Bronze Toggle Pins* (Figs. 5:8, 9; 31:12, 13).— Four undecorated toggle pins were found. Toggle pins are commonly found at occupation sites and in tombs. See, for example, several from Strata VIII–IX at Megiddo (Loud 1948: Pl. 223:61–73).

*Silver Pin* (Fig. 22:14).— A silver pin with a ridged top and no perforation was found in Tomb 13.

SCARABS (Figs. 13:10; 22:23, 24; 35:7).

Four scarabs were found in the tombs; one in Tomb 8, two in Tomb 13 and one in Tomb 21.<sup>7</sup> The two scarabs from Tomb 13 (Fig. 22:23, 24) date to Dynasty XVIII and the scarab from Tomb 8 (Fig. 13:10) dates to MB IIB (Lalkin

2008). The signs carved on the scarabs are not royal names and their chronological designation is based on their shape and on the composition of the signs. The scarab from Tomb 21 (Fig. 35:7) was poorly preserved and its face could not be drawn.

BEADS (Figs. 5:10; 22:15–22; 28:5–8; 31:14)

Fourteen beads of different kinds were recovered from the tombs. Five of the beads are made of shell (Figs. 22:22; 28:5–8) and the rest are made of stone and faience. Beads are common tomb deposits in the Late Bronze Age. White and turquoise faience beads strung together in delicate vertical strands were found in Stratum IX at Megiddo (Loud 1948: Pl. 212:53).

## DISCUSSION: BURIAL PRACTICES

The Northern Cemetery at Palmaḥım, consisting of individual tombs hewn in bedrock and lined with stone slabs, represents a method of burial that is almost unique in the Late Bronze Age in Israel (Gonen 1992:91). The only parallel known to date is at Deir el-Balaḥ (Lipton 2010: Figs. 1–10). Cist graves lined with stone are typical of cemeteries with soft alluvial soil (Tell Abu-Hawam) or loess (Tell el-‘Ajjul). In hilly and rocky terrain it was customary to inter numerous deceased in caves, such as in the Southern Cemetery at Palmaḥım (Singer-Avitz and Levy 1992), at Lakhish (Tufnell 1958), Tel Jedur (Ben Arieh 1981), Tell el-Far‘ah [South] (Starkey and Harding 1932:22–27), Wadi ‘Ara (Ilan, Gadot and Yannai, in prep.), Megiddo (Guy 1938) and Ḥazor (Yadin et al. 1960:130).

The Northern Cemetery at Palmaḥım is exceptional not only in its burial method, but also in its spatial organization. The distribution of tombs across an extensive area, on the one hand, and the small number of deceased interred in each tomb, on the other hand, indicate that a large tract of land was allocated for burial. The shape, size and layout of the tombs may have been dictated by the nature of the *kurkar*

bedrock, which did not facilitate quarrying of large caves for interment of multiple individuals. However, the digging of the tombs in orderly rows also may attest to a developed social organization and common ownership of the land, based on kinship (an extended family) or community.

Several phenomena occurring in the Northern Cemetery at Palmaḥim appear at other cemeteries and sites as well. For example, storage jars covered with bowls or fragments of jar bases as lids (see Tombs 13, 20, 22) are known from the cemetery at Tell Abu-Hawam (Anati 1959: Figs. 3, 4) and in one of the loci excavated by Hamilton on the tell (Artzy 2001: Fig. 6), as well as in Tombs 114 and 303 at Deir el-Balah (Dothan 1979:10; Lipton 2010: Fig. 2.6). This type of similarity does not necessarily point to close ties between these sites; it simply indicates general affinities in custom and practice.

No correlation was found between the number of funerary offerings and the size of the tomb; some of the small tombs contained more artifacts than the larger tombs. Moreover, no correlation was found between the quantity of objects and the number of deceased. For instance, Tomb 13, which is the same size as most of the other tombs in the cemetery, contained thirteen vessels—more than double the amount of pottery recovered in any other tomb; yet there is no evidence that Tomb 13 accommodated more deceased. It is reasonable to assume that the greater number of vessels bears witness to an elevated economic status of the users of this tomb. Nonetheless, on the whole the difference between the contents of the tombs is relatively small, perhaps an indication that the community at Palmaḥim was basically homogenous in its socio-economic composition.

Due to the poor state of preservation of the bones, we do not have complete information regarding the number of interred individuals.<sup>8</sup> From the evidence at hand, it appears that in most of the tombs one skeleton was found, although in some cases there were two or

even three (Gonen 1992:92). In those tombs that contained more than one individual, it is impossible to know if the dead were interred individually or in groups. In some of the tombs it seems that the skeletons were articulated and the pottery vessels were found *in situ*, but in others, the artifacts were found scattered about and their position does not help us determine the order in which the deceased in each tomb were laid to rest. Interring the dead separately would require reopening the tomb for the burial of the newly deceased, with or without additional funerary gifts.

The position of the bodies and the location of most of the skulls in the southern part of the tombs, suggest fixed burial conventions. Adherence to tradition is reflected not only in the orientation of the heads to the south, but also in the uniform structure of the tombs, the quantity and composition of the pottery vessel assemblage, and the small number of deceased interred in each tomb. This uniformity leads us to believe that the deceased are all members of a single extended family or of a small and intimate community that resided close to the cemetery.

Burial customs in the Northern Cemetery at Palmaḥim were significantly different from those exhibited in the two tombs exposed slightly south of Yavne-Yam (Singer-Avitz and Levy 1992). In the Southern Cemetery the practice was to inter together many individuals with many offerings in large caves (Singer-Avitz and Levy 1992:22\*). While it seems most likely that both communities were associated with the proximate site of Yavne-Yam, it must be kept in mind that, to date, no LB II remains have been exposed there. Nonetheless, one can assume that during LB II there was a diverse population in the Palmaḥim area, residing in several communities in close proximity to one another. It is difficult to know whether the variation in burial practices between the two cemeteries stems from cultural differences between the communities, or whether it is related to the kind of rock and the nature of the terrain in the tracts of land used by each group.

Moreover, since it seems that the Northern and Southern cemeteries were not in use at the same time, the possibility exists that the differences between them are chronological as well. The pottery from the Northern Cemetery dates it

to the late fourteenth century BCE (the end of Egyptian Dynasty XVIII) and the beginning of the thirteenth century BCE, while the Southern Cemetery is dated to the thirteenth century BCE (during Dynasty XIX).

#### NOTES

<sup>1</sup> The 1967 excavations were directed by Ram Gophna (Permit No. A-124), in collaboration with Shmuel Liphshitz, on behalf of the Israel Department of Antiquities and Museums (now the IAA). The excavation in 1961 was conducted by Aaron Kempinski (License No. &-25/1961). The map of the cemetery, plans of the tombs and all the pottery and artifacts were drawn by Yuval Liphshitz as part of a term paper he wrote as a twelfth-grader at the Giv'at Brenner High School, under the supervision of Ram Gophna. Dov Porotsky prepared the plans and maps for publication and Don Glick translated the text into English. The authors wish to thank Lily Singer-Avitz, for reading the manuscript and making valuable comments; Nava Panitz-Cohen, for her thorough editing and many helpful insights; and Aviva Schwarzfeld, for her input at the final stage of editing.

<sup>2</sup> Artifacts from an additional tomb in the Southern Cemetery are on display in the museum in Kibbutz PalmaḤım. According to Shmuel Liphshitz, the finds were collected from a tomb that was hewn close to the tombs excavated by Singer-Avitz and Levy (1992). Owing to safety concerns, the remains of the tomb were only partially excavated by Shmuel Liphshitz and Aharon Kempinski and have never been published. Among the finds recovered from this tomb is a large group of Simple Style stirrup jars. Based on their forms and fabric, the stirrup jars were made in Israel; it should be emphasized, however,

that this conclusion is not based on petrographic examinations. This type of stirrup jar is dated to the fourteenth and thirteenth centuries BCE. We thank Shmuel Liphshitz for the information and for allowing us to mention it here.

<sup>3</sup> Many of the objects are on display at the Kibbutz PalmaḤım museum; others are in the IAA collections. Due to the passage of time and the circumstances of the excavations, not all the objects drawn could be identified today by registration number. Whenever possible, IAA Nos. accompany the pottery figures.

<sup>4</sup> Tomb 1 was excavated following a storm in 1960. Its location was not documented and thus it is not included in Fig. 3.

<sup>5</sup> We should mention that no imported juglets of this kind were found in Tomb 7 at Jatt, where it seems the early burial phase predates the beginning of the importation of these vessels and the late burial phase postdates the end of their importation to Israel.

<sup>6</sup> In fact, the small body and red-slipped, burnished surface of the flask from Jatt are perhaps indications that it is even earlier than the flasks from PalmaḤım.

<sup>7</sup> The scarabs were examined by Nir Lalkin of Tel Aviv University and they are included in the corpus of his doctoral dissertation (Lalkin 2008). We wish to thank him for the information.

<sup>8</sup> The human remains from the tombs were transferred for study to the Tel Aviv University School of Medicine and, unfortunately, over the years were misplaced.

## REFERENCES

- Amiran R. 1960. A Late Bronze Age II Pottery Group from a Tomb in Jerusalem. *Eretz-Israel* 6:25–37 (Hebrew; English summary, p. 27\*).
- Anati E. 1959. The Excavations at the Cemetery of Tell Abu Hawam (1952). *'Atiqot (ES)* 2:89–105.
- Artzy M. 2001. White Slip Ware for Export? The Economics of Production. In V. Karageorghis ed. *The White Slip Ware of Late Bronze Age Cyprus: Proceedings of an International Conference Organized by the Anastasios G. Leventis Foundation, Nicosia, in Honour of Malcolm Wiener, Nicosia 29th–30th October 1998*. Vienna. Pp. 107–115.
- Artzy M. 2006. The Carmel Coast during the Second Part of the Late Bronze Age: A Center of Eastern Mediterranean Trans-shipping. *BASOR* 343:45–64.
- Åström P. 1972. *The Swedish Cyprus Expedition IV, 1C: The Late Cypriote Bronze Age: Architecture and Pottery*. Lund.
- Ben-Arieh S. 1981. A Late Bronze Age Tomb at Tel Jedur. *Eretz-Israel* 15:115–126 (Hebrew; English summary, p. 81\*).
- Ben-Arieh S. 2004. *Bronze and Iron Age Tombs at Tell Beit Mirsim* (IAA Reports 23). Jerusalem.
- Ben-Arieh S., Ben-Tor D. and Godovitz S. 1993. A Late Bronze Age Burial Cave at Qubeibeh, near Tel Lachish. *'Atiqot* 22:77–89.
- Ben-Arieh S. and Edelstein G. 1977. *Tombs near the Persian Garden ('Atiqot [ES] 12)*. Jerusalem.
- Benson J.L. 1961. The White Slip Sequence at Bamboula, Kourion. *PEQ* 93:61–69.
- Ben-Tor A., Ben-Ami D. and Livneh A. 2005. *Yoqne'am III: The Middle and Late Bronze Ages: Final Report of the Archaeological Excavations (1977–1988)* (Qedem Reports 7). Jerusalem.
- Ben-Tor A., Bonfil R. and Zuckerman S. 2003. *Tel Qashish: A Village in the Jezreel Valley: Final Report of the Archaeological Excavations (1978–1987)* (Qedem Reports 5). Jerusalem.
- Bergoffen C. 1990. *A Comparative Study of the Regional Distribution of Cypriote Pottery in Canaan and Egypt in the Late Bronze*. Ann Arbor.
- Braun E. 2000. Area G at Afridar, Palmahim Quarry 3 and the Earliest Pottery of Early Bronze Age I: Part of the Missing Link? In G. Philip and D. Baird eds. *Ceramics and Change in the Early Bronze Age of the Southern Levant*. Sheffield. Pp. 113–128.
- Dever W.J. 1986. *Gezer IV: The 1969–1971 Seasons in Field VI; The "Acropolis"* (Annual of the Nelson Glueck School of Biblical Archaeology 4). Jerusalem.
- Dothan M. 1952. An Archaeological Survey of the Lower Rubin River. *IEJ* 2:104–117.
- Dothan M. and Porath Y. 1993. *Ashdod V: Excavations of Area G; The Fourth–Sixth Seasons of Excavations, 1968–1970 ('Atiqot 23)*. Jerusalem.
- Dothan T. 1979. *Excavations at the Cemetery of Deir el-Balah (Qedem 10)*. Jerusalem.
- Eriksson O.K. 1993. *Red Lustrous Wheel-Made Ware* (Studies in Mediterranean Archaeology 103). Jonsered.
- Eriksson O.K. 2007. Using Cypriot Red Lustrous Wheel-Made Ware to Establish Cultural and Chronological Synchronisation during the Late Bronze Age. In I. Hein ed. *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean. Papers of a Conference, Vienna, 5th–6th of November 2004*. Vienna. Pp. 51–60.
- Fisher M. ed. 1991. *Yavneh-Yam and Its Surroundings*. Kibbutz Palmahim (Hebrew).
- Furumark A. 1941. *The Mycenaean Pottery: Analysis and Classification*. Stockholm.
- Gittlen B.G. 1977. *Studies in the Late Cypriote Pottery Found in Palestine*. Ph. diss. University of Pennsylvania. Philadelphia.
- Gonen R. 1992. *Burial Patterns and Cultural Diversity in Late Bronze Age Canaan* (ASOR Dissertation Series 7). Winona Lake.
- Gophna R. 1993. Sorek, Nahal. *NEAEHL* 4. Pp. 1410–1412.
- Gophna R. and Lipshitz S. 1980. A Chalcolithic Burial Cave at Palmahim. *'Atiqot (ES)* 14:1–8.
- Guy P.L.O. and Engberg R.M. 1938. *Megiddo Tombs (OIP 33)*. Chicago.
- Hamilton R.W. 1935. Excavations at Tell Abu-Hawām. *QDAP* 4:1–69.
- Hankey V. 1977. The Aegean Pottery. In S. Ben-Arieh and G. Edelstein. *Tombs Near the Persian Garden ('Atiqot [ES] 12)*. Jerusalem. Pp. 45–51.
- Hennessy B.M. 1963. *Stephania: A Middle and Late Bronze Age Cemetery in Cyprus*. London.
- Ilan D., Gadot Y. and Yannaï E. In preparation. *Bronze Age Tombs at 'Ara*.
- James F.W. and McGovern P.E. 1993. *The Late Bronze Egyptian Garrison at Beth Shan: A Study of Levels VII and VIII*. Philadelphia.
- Kaplan J. 1993. Yavneh-Yam. *NEAEHL* 4. Jerusalem. Pp. 1504–1506.
- Karageorghis V. ed. 2001. *The White Slip Ware of Late Bronze Age Cyprus: Proceedings of an International Conference Organized by the Anastasios G. Leventis Foundation, Nicosia, in*

- Honour of Malcolm Wiener, Nicosia 29th–30th October 1998*. Vienna.
- Killebrew A.E. 2010. Canaanite Pottery. In T. Dothan and B. Brandl. *Deir el Balah: Excavations in 1977–1982 in the Cemetery and Settlement II: The Finds* (Qedem 50). Jerusalem. Pp. 75–109.
- Kromholtz A.H. 1984. Imported Cypriot Pottery. in E. Stern. *Excavations at Tel Mevorakh (1973–1976) II: The Bronze Age* (Qedem 18). Jerusalem. Pp. 16–20.
- Lalkin, N. 2008. Late Bronze Scarabs from Eretz Israel. Ph.D. diss. Tel Aviv University. Tel Aviv (Hebrew; English summary).
- Lipton G. 2010. The Excavation of the Cemetery. In T. Dothan and B. Brandl. *Deir el Balah: Excavations in 1977–1982 in the Cemetery and Settlement I: Stratigraphy and Architecture* (Qedem 49). Jerusalem. Pp. 3–46.
- Loud G. 1948. *Megiddo II: Seasons of 1935–39* (OIP 62). Chicago.
- Macalister R.A.S. 1912. *The Excavations at Gezer, 1902–1905 and 1907–1909 I–III*. London.
- Mountjoy P. 1986. *Mycenaean Decorated Pottery: A Guide to Identification*. Göteborg.
- Negbi O. 1989. Bronze Age Pottery (Strata XVII–XV). In Z. Herzog, G. Rapp and O. Negbi eds. *Excavations at Tel Michal, Israel* (Tel Aviv University Institute of Archaeology Monograph Series 8). Minneapolis–Tel Aviv. Pp. 43–63.
- Panitz-Cohen N. and Mazar A. 2006. *Timnah (Tel Batash) III: The Finds from the Second Millennium BCE* (Qedem 45). Jerusalem.
- Petrie W.M.F. 1891. *Illahun, Kahun and Gurob, 1889–90*. London.
- Petrie W.M.F. 1932. *Ancient Gaza II: Tell el Ajjul* (BSAE 54). London.
- Pritchard J.B. 1963. *The Bronze Age Cemetery at Gibeon* (University of Pennsylvania Museum Monographs 25). Philadelphia.
- Sadeh A. 1991. The History and Archaeology of Yavneh-Yam. In M. Fisher ed. *Yavneh Yam and Its Surroundings*. Kibbutz Palmaḥım. Pp. 15–32 (Hebrew).
- Saïdeh R. 2004. *Sidon et la Phénicie méridionale au bronze récent: À propos des tombes de Dakerman*. Beirut.
- Seger J. 1988. *Gezer V: The Field I Caves* (Annual of the Nelson Glueck School of Biblical Archaeology 5). Jerusalem.
- Singer-Avitz L. and Levy Y. 1992. Two Late Bronze Age Tombs at Palmaḥım. 'Atiqot 21:15\*–26\* (Hebrew; English summary, pp. 174–175).
- Singer-Avitz L. and Levy Y. 1994. Two Late Iron Age–Early Persian Period Tombs at Palmaḥım. 'Atiqot 25:1\*–9\* (Hebrew; English summary, p. 187).
- Sjöqvist E. 1940. *Problems of the Late Cypriote Bronze Age*. Stockholm.
- South A. and Steel L. 2001. The White Slip Sequence at Kalavassos. In V. Karageorghis ed. *The White Slip Ware of Late Bronze Age Cyprus: Proceedings of an International Conference Organized by the Anastasios G. Leventis Foundation, Nicosia, in Honour of Malcolm Wiener, Nicosia 29th–30th October 1998*, Vienna. Pp. 65–74.
- Starkey J.L. and Harding L. 1932. *Beth-Pelet II: Beth-Pelet Cemetery* (BSAE 52). London.
- Stubbings F.H. 1951. *Mycenaean Pottery from the Levant*. Cambridge.
- Thalmann J.-P. 2006. *Tell Arka I: Les niveaux de l'âge du Bronze* (Bibliothèque archéologique et Historique 177). Beirut.
- Tufnell O. 1958. *Lachish IV (Tell ed Duweir): The Bronze Age*. London.
- Tzaferis V. and Hess O. 1992. A Late Bronze Age Tomb at Tell 'Eitun. 'Atiqot 21:9–21.
- Yadin Y., Aharoni Y., Amiran R., Dothan M., Dunayevsky E. and Perrot J. 1960. *Hazor II: An Account of the Second Season of Excavations, 1956*. Jerusalem.
- Yannai E. 2000. A Late Bronze Age Tomb at Jatt. 'Atiqot 39:49–82.
- Yannai E. 2004. The Late Bronze Age Pottery from Area S. In D. Ussishkin. *The Renewed Excavations at Tel Lachish*. Tel Aviv. Pp. 1032–1063.
- Yannai E. 2005. Late Bronze Age Pottery from Tombs 12 and 13 at Tell Jatt, Sharon Plain. 'Atiqot 49:13\*–30\* (Hebrew; English summary, pp. 134–135).
- Yannai E. In preparation. The Local Late Bronze Age Pottery. In E.D. Oren ed. *Tel Sher'a, Final Report*.
- Yannai E., Gorzalczany A. and Peilstöker M. 2003. A Group of Vessels from the Syrian Coast Found in the Coastal Plain of Israel. *Levant* 35:101–116.
- Yannai E., Gorzalczany A. and Peilstöker M. In preparation. Narrow Base Dipper Juglets Imported from the Syrian-Lebanese Coast.
- Yedaya M. 1961. Ancient Ḥanita. In A. Gil and M. Yedaya eds. *The West of Galilee*. Tel Aviv. Pp. 69–72 (Hebrew).

