

EXCAVATIONS AT ḤORBAT MALṬA, LOWER GALILEE

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THE SITE

The site of Ḥorbat Malṭa (map ref. NIG 227800/723525, OIG 177800/223525) is situated in the Nazareth Hills on the summit of a steep limestone outcrop on the northwestern outskirts of Naẓarat (Nazareth), about 4 km southeast of ancient Ẓippori and close to 'En Malṭa, one of the many small springs in the Nazareth Hills (Figs. 1–3). Soils in the area include complex *terra rosa*, a soil that includes *terra rosa*, Mediterranean brown forest soil and rendzina (Ravikovitch 1969).

Ḥorbat Malṭa is marked on maps from the days of the British Mandate, although there is no mention of the site in early surveys of the region. Gal (1992:15) surveyed the site in the mid-1970s and collected pottery sherds dating to the Early Bronze Age I, Iron Age I and the Byzantine period. The site was also surveyed in the 1980s by Raban (1993:20), who estimated its size as one hectare and dated the occupation to the late Iron Age, Persian, Hellenistic and Roman periods. Raban also noted a lime pit, caves and signs of quarrying on the northern slope below the site. The present excavation

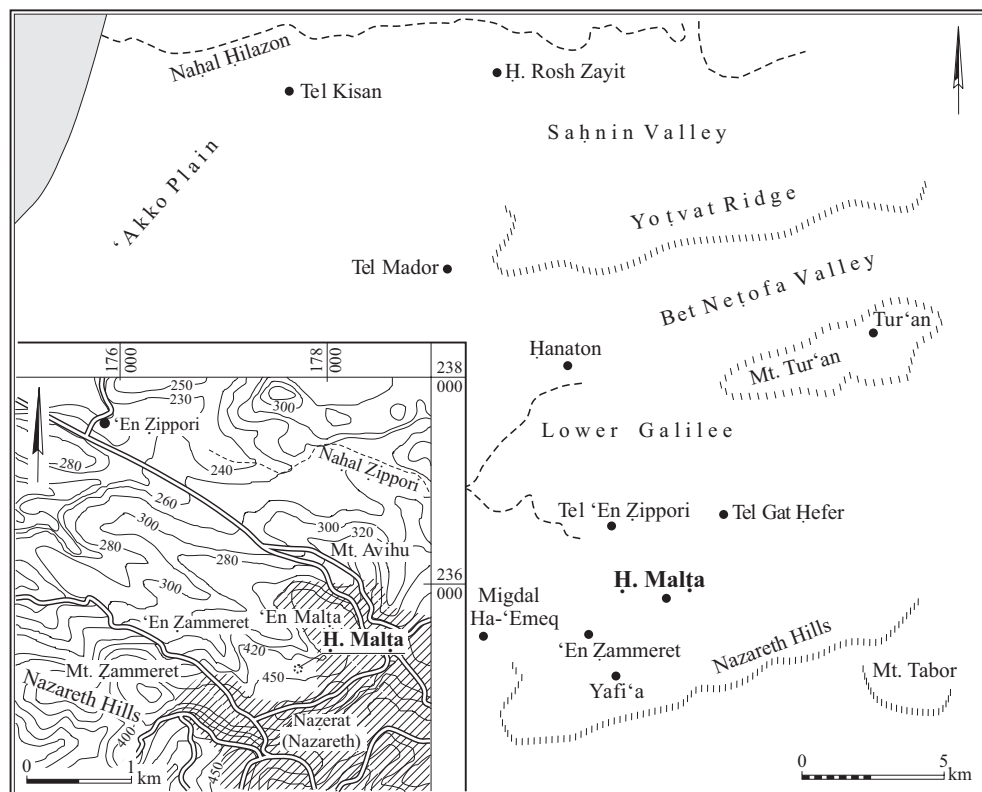


Fig. 1. Map of the Lower Galilee (adapted from Gal 1992: Fig. 7.2); inset: location map.



Fig. 2. General view of the site.



Fig. 3. General view from the site looking northwest.

exposed evidence of occupation dating to Middle Bronze Age II, Iron Age II, the Persian and Roman periods. It should be noted that

the site was extremely damaged by erosion, as well as by modern garbage-dumping activities.

Subsequent to the excavation, most of the site was built upon.

The topography of the limestone hill includes two natural terraces that revealed evidence of settlement: an upper terrace on the southern side, and a lower terrace on the northern side of the site (Fig. 4). The height discrepancies between the terraces are noted by absolute elevations in the plans. Both Areas B and C are located on the upper terrace, although the elevation of the bedrock in the southern part of Area C is c. 2 m lower than the northernmost part of Area B. Area A, on the western edge of the lower tier, is 6 m lower than Area C.

THE EXCAVATION

The areas designated for excavation were determined by modern destruction. The entire center of the site (between Areas B and C) was removed by bulldozing for construction of a road, cutting deep into bedrock, well below the ancient remains. In the remaining intact area of the site, six primary excavation areas were opened (A–F; Figs. 2, 4), covering a total of 1260 sq m. The areas were arranged on a grid of 10 × 10 m squares, aligned on a north–south axis. An additional row of squares was excavated in order to investigate the correlation between the

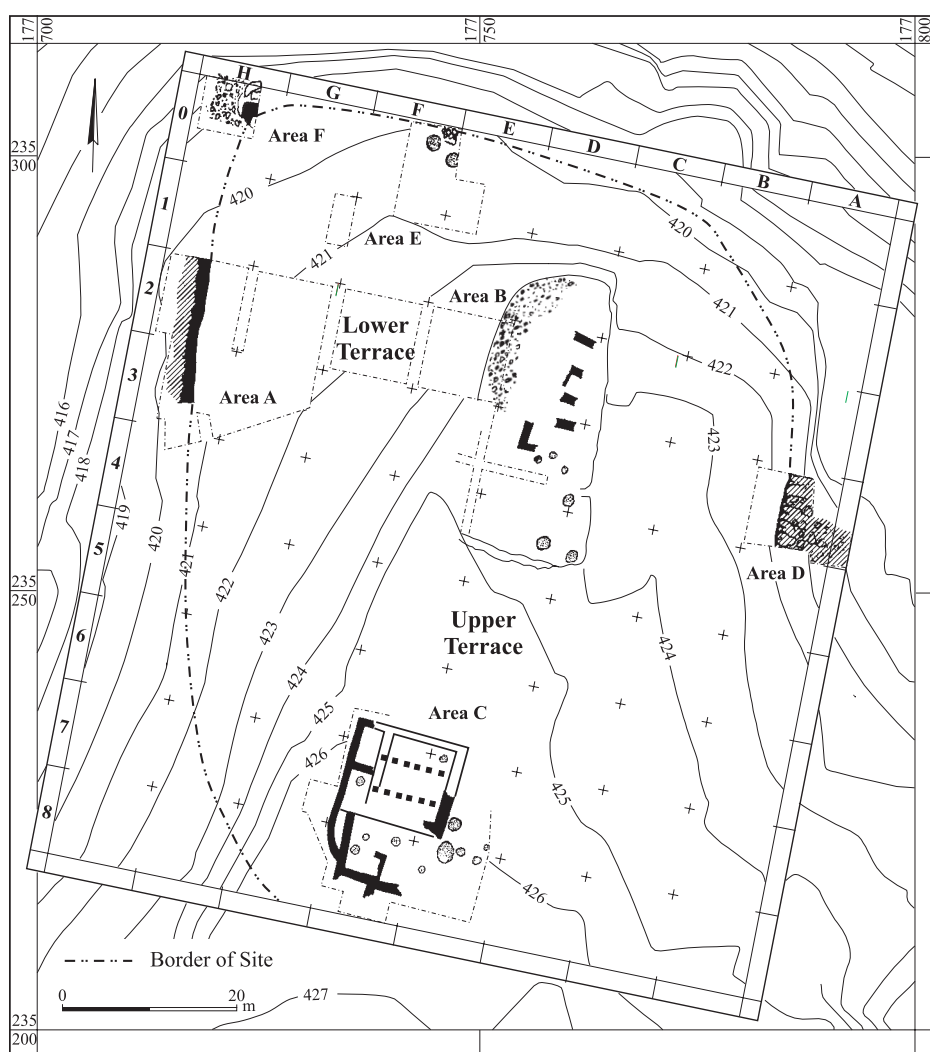


Fig. 4. Excavation areas with grid.

upper terrace (Area B) and the lower terrace (Areas A, E, F), located on the slope to the west of Area B.

STRATIGRAPHY AND ARCHITECTURE

The excavation at Ḥorbat Maḷṭa revealed three strata dating to Iron II (Stratum III), the Persian period (Stratum II) and the Roman period (Stratum I). The presence of pottery sherds dating to MB II indicates occupation in this period, although no architectural remains were exposed. The stratigraphy and architecture of each area are presented separately, as the various excavation areas were not physically connected. The correlation between them, therefore, is based on pottery analysis (Table 1).

Table 1. The Stratigraphic Sequence at Ḥorbat Maḷṭa

Str.	Area	Period	Date (BCE)
I	B	Roman	
II	A*, B, C, D, E, F*	Persian	5th c.
III	A, B, C, D, F	Iron II	9th–8th c.
-	C*	MB IIA	

* based on pottery finds only

AREA A

Area A is located in the western part of the lower terrace. A row of four squares was opened in an east–west direction from the westernmost limits of the site, traversing the lower terrace and merging with Area B (Fig. 4; Plan 1). In Sqs G2, F2 and the western half of E2 the excavations exposed smooth bedrock with a westward slope directly below a shallow topsoil layer. No architectural features were found in these squares. In the westernmost part of Area A (Sqs H2–3, G3), the excavation revealed a massive wall with an adjacent industrial area.

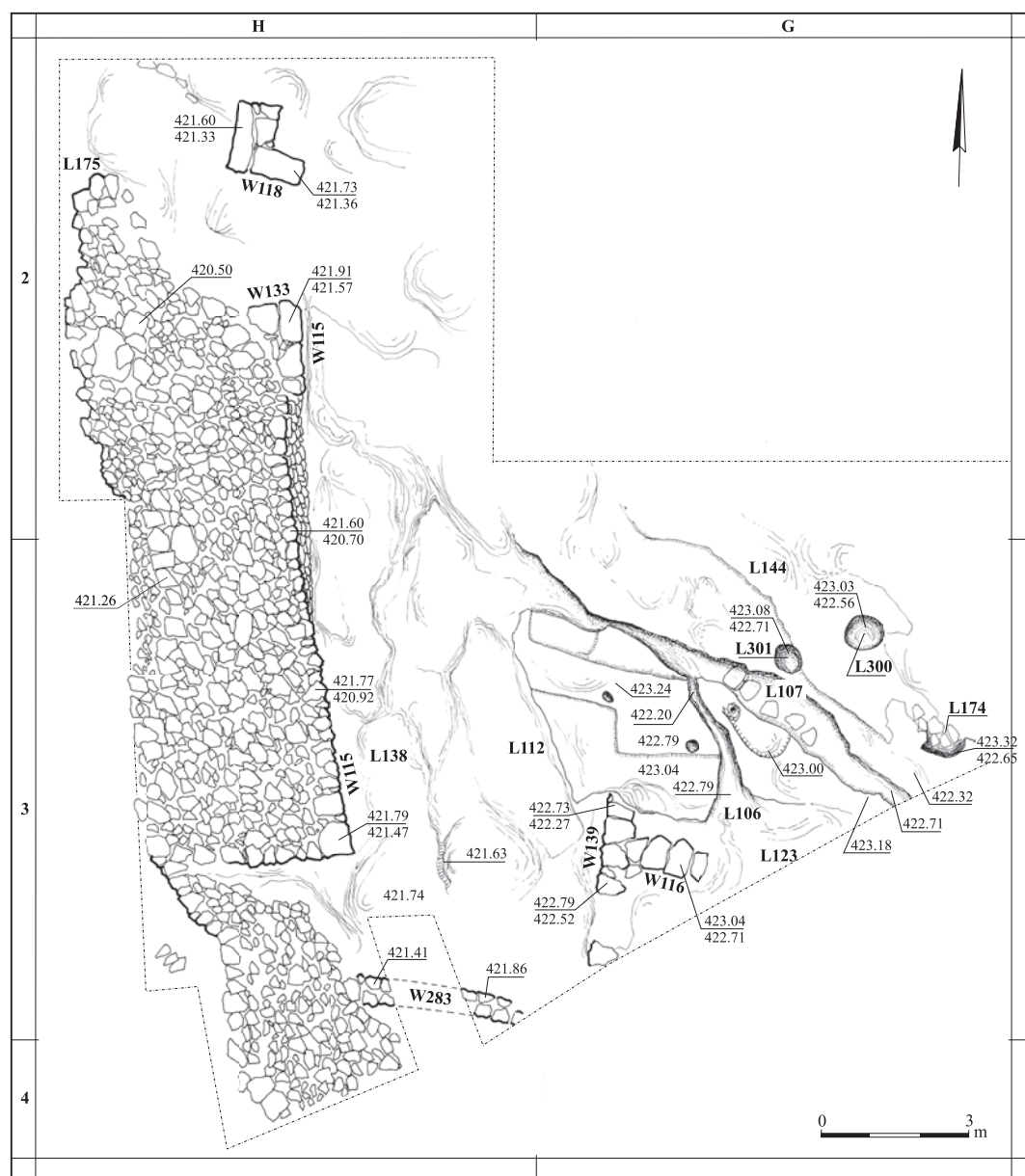
Stratum III: Iron Age

The architectural elements of this stratum include a massive stone boundary wall (W115) and an adjoining area with rock-hewn installations.

Fortification Wall.— Wall 115, which consisted of a 4.5 m wide stone foundation (Fig. 5), was exposed for a maximum length of 15 m along the western perimeter of the lower terrace, overlooking the streambed below. This wall was evidently built in segments, each segment with a core of various-sized fieldstones and a border



Fig. 5. Area A: fortification W115, looking west.



Plan 1. Area A.

of well-hewn stones at the corners. While the inner face of the wall was vertical, with four to five extant courses, the outer face sloped down in the form of a glacis (see also Area F; Fig. 4). The northern end of the exposed segment merged with a higher outcrop of bedrock, which served as an integral part of the wall and connected to well-built W118, possibly a gate jamb. The phenomenon of incorporating

bedrock in the construction of architectural elements is common in all the excavated areas at Ḥorbat Malṭa.

South of this segment, the wall was not as well preserved and not fully excavated. A fragment of an additional wall, W283, was exposed adjacent to W115 in this area. Abutting the inner face of W115 is a fill (L138) that contained pottery dating solely to Iron II.



Fig. 6. Area A: general view.

Installation Area.— To the east of massive W115 is a series of interconnecting hewn channels (L106, L107) varying in width and depth, which is associated with numerous rock-hewn surfaces, pits and depressions (L144, L174, L300, L301; Fig. 6; Plan 1). These are often joined by enlarged cracks in the bedrock. At the edge of a well-hewn, semicircular niche, a limestone grinding bowl (Fig. 49:7) was found *in situ* adjacent to channel L107 (Fig. 7). Additional grinding and pounding stones directly associated with these channels and hewn surfaces include a hammerstone (Fig. 50:7) and a grinding slab (Fig. 48:1).

Directly south of the channels are two abutting wall fragments (W139, W116) and smoothed bedrock surfaces (L112, L123) that are most likely connected to the adjacent hewn installations. Two hewn cupmarks north of W116 and W139 suggest additional installations in this area, possibly rock-hewn winepresses.

It is possible that many of the channels and enlarged bedrock cracks are part of a drainage system, which channeled runoff water toward the lowest part of the site (cf. Yoqne'am Stratum 10; Ben-Tor, Portugali and Avissar 1983:37).



Fig. 7. Area A: rock-hewn installation in L107.

Although these installations are difficult to date, it is suggested to attribute them to Stratum III since the majority of the pottery sherds date to the Iron Age (Figs. 31, 32) and no Persian-period assemblages were found in Area A (see below).

Stratum II: Persian Period

There are no architectural elements in Area A that can be associated with Stratum II. A minimal amount of pottery sherds dating to the Persian period were found in the topsoil throughout this area, yet no *in situ* deposits were exposed. It

appears that the Stratum II occupation of the lower terrace was limited to the northern part, in the vicinity of Area E (see below).

AREA B

Area B was physically detached from Areas C, D, and E due to modern damage prior to the excavation. At the northern and eastern ends of the area the ancient accumulation had been leveled deep into bedrock, whereas the area west of the excavated squares bore evidence of numerous modern pits and therefore was not investigated. A total of c. 253 sq m was excavated in Area B down to bedrock (Fig. 4; Plan 2). Throughout Area B are leveled bedrock surfaces, depressions and channels that cannot be assigned to any specific stratum due to a lack of diagnostic finds. The poor preservation of the finds is primarily the result of modern dumping of building debris.

Stratum III: Iron Age

Pre-Stratum II remains in this area of the site are very limited and not well preserved. Successive building activities of the later Stratum II inhabitants probably resulted in the destruction of most Stratum III remains. Only a single floor fragment (L182; Sq D2) can be associated with this stratum. In addition to the absence of rock-hewn features associated with Stratum III, relatively little pottery dating to the Iron Age was uncovered. In two isolated loci (L153, L182) Iron Age pottery was imbedded in deposits immediately above bedrock, thereby representing the initial occupation in this area.

Stratum II: Persian Period

The architectural elements attributed to this stratum include a series of walls belonging to a large structure aligned on a northeast-southwest axis, and numerous pits, installations and bedrock surfaces. The excavation did not reveal the complete plan of the structure due to both poor preservation and modern destruction in the area.

Room 161.— The eastern border of the room is rock-hewn W304 that is directly aligned with the corner of W117 (Sq D2; Fig. 8). A small circular depression was hewn into the smoothed bedrock floor of the room. Finds above the bedrock floor include an *in situ* storage jar and a handle from an imported basket-handle storage jar (Fig. 44:2).

Room 192.— This room (Sq D2) had a leveled bedrock floor, the natural depressions in the bedrock filled with additional stones. A small circular cupmark was hewn into the floor. The finds include pottery sherds (mostly storage jars), stone implements (an upper grinding stone, a hammerstone), iron blade fragments and a large, round (catapult?) stone.

Room 180.— This room (Sq D2) also had a leveled bedrock floor and was delineated on the east and the west by rock-hewn walls. A large, circular shaft pit (L163) was hewn in the center of the room (Fig. 9). Finds include two

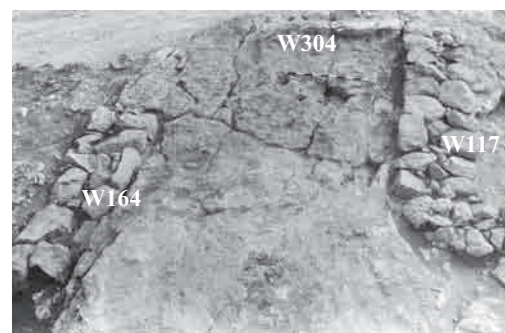
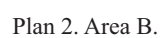


Fig. 8. Area B: Room 161, looking east.



Fig. 9. Area B: Room 180 with Pit 163, looking east.



hammerstones (Fig. 50:6) and a pestle (Fig. 50:2); pottery finds were completely absent.

Room 147.— This room was defined by partly preserved wall segments (W120, W135, W141, W122; Sqs D2–3) between which was a floor of leveled bedrock with patches of stone-filled cracks and niches (L142). The original floor level was preserved near the corner of W135 and W141 (Fig. 10).

In the area south and west of Room 147 (Sq D3) are a number of architectural features assigned to Stratum II. Parallel to W135 is rock-hewn W305; rock-hewn W306 and W307 abut W305 at either end. Wall 305 is abutted by a small stone-paved area, L266, which leveled out a natural depression in the bedrock. A small cupmark (L265) is hewn into the bedrock directly south of the pavement in L266. It is plausible that this pavement, fabricated from a large stone slab, a basalt grinding-stone fragment and other small stones, provided the foundation for a plastered floor similar to the floor in L282, which abutted W306 from the east. Floor 282 was 2 cm thick and overlay a stone foundation that leveled the cracked

bedrock to the same elevation as Pavement 266. These two floor segments were probably interrelated.

Additional features east of Room 147 (Sq D3) include a small hewn depression (L183) and an adjacent stone-built installation (L198). This partially preserved installation had a flat stone-slab floor and walls that incorporated two lower basalt grinding stone fragments in secondary use.

A stone layer (L124/187; Sqs D1–2) encircled the northern and western sides of the structure in Area B. This stone layer, composed of large and medium-sized stones, seems to have functioned as a type of revetment or rubble terrace wall, abutting the structure. A section through Layer 124/187 revealed a westward descent toward the lower terrace of Area A. Included in the finds from this layer were pottery sherds dating to the Persian period and grinding stones (two upper grinding stones, two rubbing stones, and a hammerstone).

Pits.— Eleven rock-hewn pits, most only partially excavated, were exposed in this area (Table 2). Aside from a single pit (L210) assigned to Stratum I, all of the excavated pits (L121,

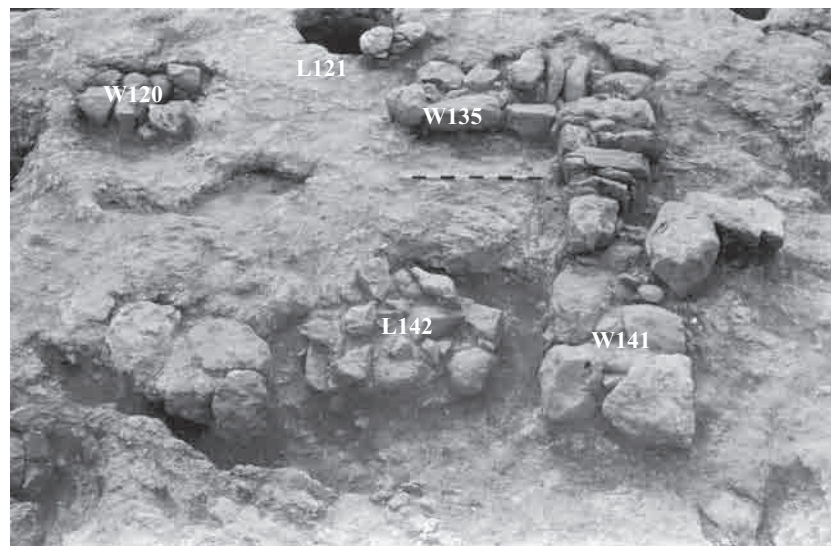


Fig. 10. Area B: Room 147, looking south.

Table 2. Area B: Stratum II Pits

Pit	Sq	Shape	Dimensions (m)			Finds	Comments
			Top	Base	Depth		
121	D3	Shaft	0.9				Evidence of stone construction above bedrock around perimeter
163	D2	Shaft?	1.2	-	-	Pottery, stone-tool fragments	Stone collapse throughout pit; excavation incomplete
171	D3	Shaft	2.1	2.0	1.04?	Pottery, basalt upper grinding-stone fragment	Large quantity of pottery, stone collapse
172	D3	Shaft?	1.0	-	-	Pottery in uppermost level (not excavated)	Filled with stone collapse
186	D3	Shaft?	0.9	-	-	Pottery (not excavated)	Filled with stone collapse
217	D3	Shaft	1.4	-		Pottery (not completely excavated)	Filled with stone collapse (stopped at a depth of 0.82 m)
259	D3	Shaft	0.9	-	-	Not excavated	Filled with stone collapse
260	D3	Shaft	0.9	-	-	Not excavated	Filled with stone collapse
261	D3	Shaft?	0.9	-	-	Not excavated	Damaged by bulldozer
263	D2	Shaft	1.3	-	-	Not excavated	Filled with stone collapse, damaged by bulldozer
264	D2	Shaft	1.1	-	-	Not excavated	Filled with stone collapse, damaged by bulldozer

L163, L171, L217) are attributed to Stratum II. These pits were shaft pits whose upper diameter measured between 0.9 and 1.4 m with the exception of a single large pit (L171) with a diameter of 2.1 m.

Most of the pits were filled with stones, pottery sherds and stone-tool fragments. Pit 171 contained large quantities of restorable pottery. Seven pits (L172, L186, L259, L260, L261, L263, L264) were only minimally excavated and did not reveal diagnostic pottery sherds; these pits are attributed to Stratum II based on their comparable shape and diameter with the excavated pits. Around the upper perimeter of the bedrock, Pit 121 showed evidence of stone construction (Fig. 10; cf. Pit 225 from Area C, below).

Stratum I: Roman Period

A single architectural feature, Pit 210 (Sq C3), is attributed to the Roman period at Ḥorbat Maṭṭa. This circular rock-hewn pit, c. 1.6 m in diameter, contained partially restorable pottery (Fig. 47) and many medium to large fieldstones. This single pit stands out against the almost total absence of Roman pottery, even among the surface finds of

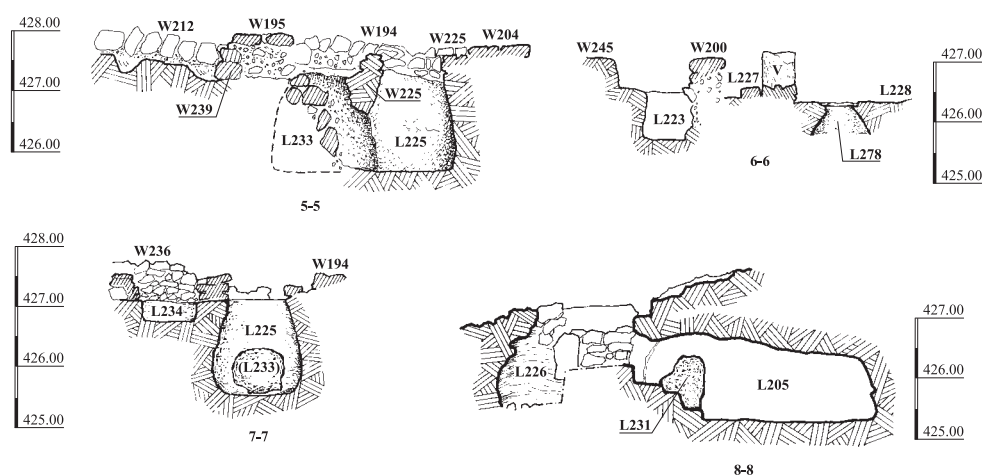
other excavated areas, and the character of this occupation at the site remains enigmatic.

AREA C

Area C (c. 450 sq m; Fig. 4; Plan 3) is located in the southernmost and highest part of the site (Fig. 11). Due to the topography here, there was only shallow accumulation of topsoil above the archaeological remains and in some places bedrock protruded above the modern surface level. In the southern part of Area C the bedrock is much higher than the basal floor levels in the northern part, resulting in varying depths of accumulated archaeological debris.

Area C revealed extensive architectural finds assigned to Stratum III, with additional architectural features associated with Stratum II. In addition to these well-stratified features, ceramic evidence of an earlier occupation during MB II was uncovered. However, since no associated architectural features were discerned and no further evidence was uncovered in other areas, a stratum was not assigned.

The expanse between Areas C and B was totally destroyed by modern construction,



Plan 3. Area C (cont.).



Fig. 11. Area C: general view, looking northwest.

eradicating all possibility of correlation between these areas.

Middle Bronze Age II

The MB II pottery was found in loci that also contained Iron Age pottery, such as the Stratum III pits L213 (Sq D8) and L215 (Sq D7), and the area above the bedrock west of the Stratum III four-room house (L249; Sq E7). It cannot be determined whether these pits were hewn during the Middle Bronze Age, or the sherds filtered into them from an MB II living surface in the vicinity. However, the evidence attests

to an MB II occupation in the southern reaches of the site in the vicinity of Area C, probably limited to the summit of the hill.

Stratum III: Iron Age

The largest and most well defined structure of this stratum in Area C is the four-room house (Fig. 12). In the area directly south of the house, and most likely an integral part of it, are additional rooms, pits and installations.

Four-Room House.— The four-room house covers an area of 131.25 sq m (exterior

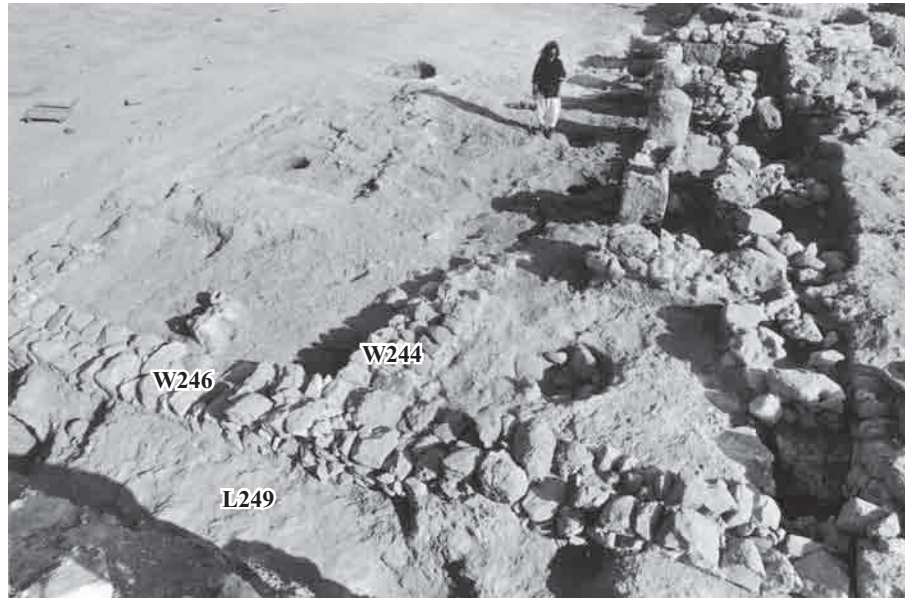


Fig. 12. Area C: general view of the four-room house.

dimensions; Table 3) and consists of five separate rooms (Plan 3). The entrance of this structure was not exposed, but was probably located in the eastern wall (W157) or the easternmost end of the northern wall (W247); both of these walls and a large part of the northern side of the house were leveled to bedrock by modern construction activities, yet fragmentary evidence of the wall outlines were indicated by rock-hewn depressions and enable a sound reconstruction of the plan. Stone collapse covered most of the floors in the area north of W245.

This well-planned house shows high-quality construction. There are three long halls (L248, L228, L274) that are separated by two rows of five regularly spaced, almost square, monolithic pillars (c. 0.6×0.6 m); W244 divides the western perpendicular hall into two smaller rooms (L229, L243). It is possible that a pierced stone found in Room 243 was a door socket, indicating a further division of one of the smaller back rooms.

The two outer long halls (L248, L274) have identical dimensions (7.2 m long, 2.25 m wide), while the central hall (L228) is exactly one meter wider than the halls flanking it (Table 3).

None of the pillars from the northern row have survived; however, three of the square rock-hewn foundations of the pillars were preserved, enabling reconstruction of the remaining two. Stone construction between Pillars V, IV and III did not reach the top of the pillars, suggesting that these were benches or platforms rather than walls. It is possible that the pillars were originally free standing and this construction is evidence of the continual changes and additions made throughout the occupation of this structure.

The southern (W245), eastern (W157) and western (W258) walls of the southern hall (L274) had hewn bedrock foundations varying in height from 0.5 to 0.8 m. Western W258 merged with

Table 3. Area C: Interior and Exterior Dimensions of the Four-Room House

	Room	L	W	Area (Sq m)
Interior Dimensions	229	2.5	4.00	10.00
	243	2.5	4.50	11.25
	274	7.2	2.25	16.20
	228	7.2	3.25	23.40
	248	7.2	2.25	16.20
	<i>Total</i>			77.05
Exterior Dimensions	10.5 × 12.5			131.25

the base of Pillar VI, which was part bedrock, part stone construction. The floors of the house were leveled bedrock with sporadic stone-filled crevices where the bedrock was lower or uneven (e.g., L227 in Room 274). On the floor of the central hall (L228) were found, *in situ*, smashed pottery vessels and numerous grinding stones. The bedrock floors of the southern hall (L273, L274, L227) varied in height from the upper step of L227 to the lower L257 (Fig. 13). Floor 257 had a hewn drainage channel.

All the preserved floors of the building revealed *in situ* pottery vessels and other finds below stone debris (L209, L220, L221). The debris was not extensive enough to suggest the existence of a second story. The distribution of the *in situ* pottery vessels within the rooms also hints at a single-story dwelling.



Fig. 13. Area C: Floors L257 and L227 between Pillars V and VI.

Pits and Installations.— Deep, well-hewn, bell-shaped pits (L252, L278, L279, L284), circular shaft pits (L223, L251, L253, L277) and a corner installation (L302) were located inside the house. One of the bell-shaped pits (L278) had a well-hewn margin for placing a lid (Fig. 14), similar to contemporaneous ‘granaries’ (e.g., Horbat Rosh Zayit Area A; Gal and Alexandre 2000: Plan 7). The shallow shaft pit/installation (L251) in Room 229 was lined and paved with stone slabs. These pits and installations were probably hewn or built throughout the extended occupation of this structure. There is no direct evidence for the function of these pits.

Open Courtyard Area.— Directly south of the four-room house, in Sqs D–E8, is an open

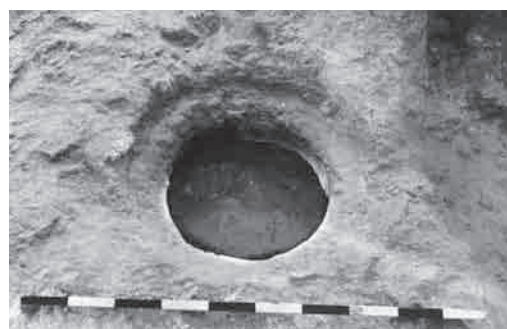


Fig. 14. Area C, Stratum III: rock-hewn, bell-shaped Pit 278 with hewn margin for lid.



Fig. 15. Area C, Stratum III: general view of the open area south of the four-room house.

area (Fig. 15) containing fragmentary walls and numerous rock-hewn pits, the intervening bedrock varying from leveled surfaces to hewn niches (L197) and paved areas. This area was undoubtedly an integral part of the four-room house, as evident from curvilinear W216, which directly abutted the southern corner of W245 and W246. Wall 216 ascends the difference in height between the lower northern area of the bedrock and the upper southern area, but at this point the wall was cut by Stratum II W204; hence, the connection with the other Stratum III walls in the upper area is enigmatic. In Sq E8,

W238 and W239 (Fig. 16) form a corner of a small room whose entrance was between W238 and W281. Wall 239 apparently abutted an early phase of W212, which probably continued westward below Stratum II W194.

Pits.— The rock-hewn pits in the area south of the four-room house (Table 4), assigned to Stratum III, are bell-shaped (L131, L188, L190, L211, L226, L230, L231, L233, L237, L303) or amorphic/shaft-type pits (L206, L213, L215). Three of the bell-shaped pits were interconnected, L188 above L303 and

Table 4. Area C: Stratum III Pits South of the Four-Room House

Pit	Sq	Shape	Dimensions (m)			Finds	Comments
			Top	Base	Depth		
131	D7	Bell	0.6	1.5	1.68	Pottery sherds	Side of pit cut by Pit 165 (Plan 3: Section 2–2)
188	E7–8	Bell	0.5	1.6	1.90	Pottery sherds (small amount), animal bones, charcoal, burnt stones, organic material, bronze arrowhead	Interconnected with Pits 190 and 303 (Plan 3: Section 4–4)
190	E7–8	Bell	0.9	1.5	1.50	Loose brown debris with large amount of pottery sherds	Interconnected with Pits 188 and 303 (Plan 3: Section 4–4)
206	D7	Shaft?	1.5–2.0	-	-	Loose burnt debris, charcoal, animal bones and pottery sherds	<i>Tabun</i> 208 in upper part; partially excavated to a depth of 0.7 m
211	E9	Bell	0.7	-	2.08	Very few pottery sherds	Three circular depressions north of pit possibly functioned as an installation (pulley?)
213	D8	Shaft?	0.8	-	1.24	Pottery sherds (large amount) and a few animal bones	Stone reinforcements on wall of pit
215	D8	Shaft?	-	2.0	1.79	Filled with many large rocks, a few pottery sherds, organic material, charcoal and animal bones	Stone revetment on wall
226	D8	Bell	-	-	2.12	Pottery sherds, charcoal, basalt grinding stone fragment, animal bones	Sides cut by Stratum II T205 (Plan 3: Section 8–8)
230	E8	Bell	0.9	-	1.61	Pottery sherds and animal bones (large amount)	
231	D8	Bell	0.6	1.4	2.12	Pottery sherds, animal bones charcoal, burnt stones, organic material	Sides cut by Stratum II T205 (Plan 3: Section 8–8)
233	E8	Bell	0.7	1.5	1.60		Cut by Stratum II Pit 225; below Stratum II W195 (Plan 3: Sections 5–5, 7–7)
237	E8	Bell?	0.7	-	-	Not excavated	West of W216, below Stratum II W267
303	E7–8	Bell	0.6	1.3	1.80	Pottery sherds, animal bones, charcoal, burnt stones, organic material	Interconnected with Pits 190 and 188 (Plan 3: Section 4–4)



Fig. 16. Area C, Stratum III: W239 below Stratum II W195.



Fig. 17. Area C: Stratum III: rock-hewn, bell-shaped Pit 188 opening onto Pit 303 (taken from L190 looking toward L188).



Fig. 18. Area C, Stratum III: Pit 237 below Stratum II W267. Note W216 on left side.

L190 to the east (Fig. 17; Plan 3: Section 4–4); the deposits in Pits 188 and 303 contained animal bones, charcoal, burnt stones, organic material, pottery sherds (Fig. 37) and an intact bronze arrowhead (Fig. 51:1). The extended use of these pits during Stratum III is evident from the pottery assemblage, which is earlier than that found on the floors of the house (see below, Chronology). Pit 231 also contained charcoal deposits, animal bones, pottery and additional small finds (Fig. 54:2, 3, 5); this pit was damaged, much like L226, by the hewing

of Stratum II T205 (see Fig. 23). Additional pits were assigned to Stratum III, e.g., Pit 237 (Fig. 18), although not all of them were excavated.

A concentration of architectural features east of W157 (Sq D7) includes a leveled bedrock floor (L224), a rectangular stone installation with a clayish floor (L241), and a *ṭabun* (L208) overlying charcoal and other burnt deposits in Pit 206 (Fig. 19). The *ṭabun* comprised a circular stone foundation with thick clay walls (4 cm thick); inside the *ṭabun*, below the collapsed roof, were numerous olive stones and cooking-



Fig. 19. Area C, Stratum III: *tabun* in L208 above Pit 206.



Fig. 20. Area C, Stratum II: rock-hewn Pit 250 with *in situ* bronze bowl (Fig. 53).

pot sherds. The olive stones imply the use of olive-press residue as combustible material.

The area surrounding the four-room house, with small annexed rooms and numerous installations, was an integral part of the house, most likely functioning as a courtyard where domestic activities (e.g., cooking) took place.

Stratum II: Persian Period

The architectural finds associated with this stratum include wall fragments, rock-hewn pits, stone-lined pits/installations and a rock-hewn tomb. The wall fragments all belong to a single structure whose plan is incomplete. In the northern part of Area C, the modern construction activities halted directly above the Stratum III architecture, probably removing additional Stratum II architectural remains.

Well-preserved W204 cuts Stratum III W216, forms a corner in the south with W194 and overlies Stratum III W245 in the north (Sqs E7–8). Wall 194 abuts W195, which runs parallel to W204 and overlies Stratum III Pit 233. The walls from this structure often rest directly on the Stratum III walls of the four-room house, in conformance with the orientation of those walls. This is especially notable in the southeastern corner of the house. Wall 158 (Stratum II) overlies a layer of debris above the bedrock W245 (Stratum III) and abuts W157 (Stratum III–II). Wall 158 also covers Stratum III Pit 277.

Additional walls (W267, W268) were exposed west of Stratum III W216 (Sq F7). Although

these walls were not fully excavated, their stratigraphic context is above Stratum III W216 and Pit 237 (Fig. 20). The connection between these walls and W204 remained unclear at the end of the excavation.

No distinct floors were revealed in the structure; however, a number of pottery concentrations (L126, L160) are indicative of living surfaces. Locus 126 (Sq D8) was found directly upon bedrock, whereas L160 lay above the post-Stratum III accumulation north of W158. It is probable that the leveled bedrock, utilized as a floor during Stratum III, continued to be used during Stratum II, e.g., L219. South of W212 (Sq E8) is a stone-paved area (L222) that had associated ashy deposits; an adjacent small rock-hewn pounding or grinding installation (L232) had a hammerstone inside.

Pits.—A number of rock-hewn shaft pits (L165, L178, L215, L225, L234, and L250, L271) are scattered over the upper bedrock area (Table 5). Two of the pits had a stone-built perimeter wall above bedrock (L225, L234), similar to Pit 121 in Area B. The Stratum II pits contained pottery sherds that were frequently restorable, animal bones, and often iron fragments and bronze items (e.g., L250; Fig. 20). Many of these pits cut through the lower walls of the Stratum III bell-shaped pits: L250 cut the side of L190; L225 cut the side of L233; L165 cut the side

Table 5. Area C: Stratum II Pits

Pit	Sq	Shape	Dimensions (m)			Finds	Comments
			Top	Base	Depth		
165	D8	Shaft	1.20	1.00	1.05	Pottery, 2 basalt rubbing stones, 2 basalt grinding-slab fragments, 1 lower grinding-stone fragment, iron fragments	Sides partially reinforced by stones, stone collapse, possible connection with Pit 215, stone revetment between them (Plan 3: Section 2–2)
178	D8	Shaft	1.00	1.00	2.40	Restorable pottery, fibula, loom weight	Loose fine debris, stone collapse, large quantities of pottery (Plan 3: Section 3–3)
215	D8	Shaft?	2.40	-	1.75	Pottery, limestone rubbing-stone fragment, bone	Filled to top with many large rocks, wall-like revetment connected to Pit 165, bowl <i>in situ</i>
225	E8	Shaft	1.00	1.00	2.00	Pottery, 2 basalt grinding-slab fragments, iron fragments	Stone-built superstructure 0.5 m high cuts into Pit 233 (= post-233) (Plan 3: Sections 5–5, 7–7)
234	E8	Shaft	0.95	0.95	0.43	Amphora base found above stone collapse	Shallow, descends from floor level, stone collapse in pit
250	E8	Shaft	1.20	1.20	1.28	Pottery, bronze bowl with handle	Cuts Pit 190
271	D8	Shaft	1.00	-	-	Pottery	Incomplete excavation to depth of 1.07 m

of L131 (see Plan 3: Sections 2–2, 5–5). As the pits with the stone superstructure contained relatively small quantities of pottery and other finds, it is suggested that they were utilized as silos for storage of agricultural produce, while pits with large quantities of finds (e.g., L178) were used for refuse.

Two stone-built installations (L156, L200) were constructed directly above the stone debris of the Stratum III four-room house. The circular stone-built installation (L156) attached to Pillar II of the Stratum III house (Fig. 21) had a squarish stone slab at its base (0.4 × 0.5 m). It is possible that this extant stone wall was the stone lining of a pit. This installation/pit contained a high concentration of animal bones representing cattle, sheep, goat, pig and donkey, indicating it may have served as a refuse pit (See Cope, below). Installation L200 overlies the stone debris L202 that fell onto Stratum III Floor 227.

Tomb 205.— Tomb 205, in the southeastern corner of Area C, was entered through a



Fig. 21. Area C, Stratum II: stone-built installation in L156 attached to Pillar II of Stratum III.

rectangular, rock-hewn shaft lined with stone slabs (Fig. 22; Plan 3), which cut through the edges of two bell-shaped pits (L226, L231) of Stratum III. The entrance to the burial chamber was down three stairs; next to the stairs was a hewn depression, which perhaps functioned as a doorpost (Fig. 23). The main chamber had a flat roof and a number of small niches, possibly for lamps (Fig. 24). The shaft is relatively shallow and narrow compared with contemporary shaft tombs. There were no preserved bones from the



Fig. 22. Area C, Stratum II: entrance to rock-hewn T205.

interments in this tomb, although burial goods include an intact bronze kohl stick (Fig. 52:2), pottery sherds (Fig. 41:5), carbonized olive stones and glass fragments. It is probable that the tomb was robbed in antiquity.

AREA D

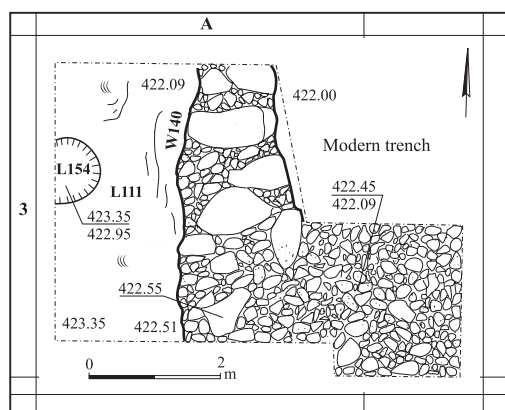
This small area (c. 21 sq m) is located at the eastern edge of the site (Fig. 4; Plan 4). The architectural remains in this area shed additional



Fig. 23. Area C, Stratum II: stairs descending to rock-hewn T205. Note Pit 231 beyond the opening to the right of the entrance.



Fig. 24. Area C, Stratum II: rock-hewn tomb chamber of T205.



Plan 4. Area D.



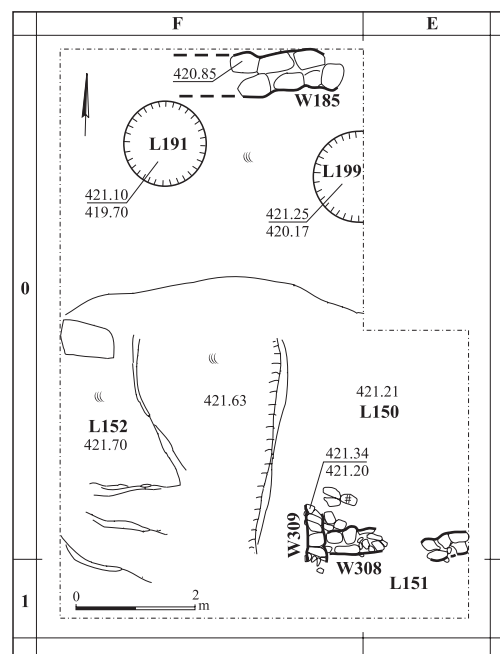
Fig. 25. Area D: W140 abutting the bedrock surface, looking north.

light on the fortification system and the limits of the site.

The fortification wall (W140) disclosed in this area abutted a smooth bedrock surface to the west, and was constructed from a combination of large protrusions of natural bedrock together with many large stones (Fig. 25). Modern construction activities east of Area D cut through this wall; the resulting section revealed a sloping layer of stones, resembling a rampart abutting the wall. Topographically, there is a natural descent eastward that might explain the use of larger stones to augment the sloping layer.

The dating of this fortification wall is problematic. There are three potential stratigraphic definitions for the wall:

(1) Wall 140 should be attributed to Stratum III based on the architectural parallels with



Plan 5. Area E.

the fortification wall in Areas A (W115) and F (W168; see below). However, patches of pottery sherds dating to the Persian period were found above W140. It is conceivable that these pottery concentrations originated from Stratum II pits comparable to the rock-hewn pit (L154) to the west of the wall, thus indicating that the Stratum II pitting activities reached this area.

(2) Wall 140's initial construction should be dated to Stratum III with a pattern of reuse during Stratum II.

(3) Wall 140 was erected during Stratum II based on the numerous pottery sherds above the wall and on the abutting bedrock surface (L111).

AREA E

The sparse architectural remains in Area E, located to the north of Areas A and B, were uncovered within a single square (7.0 × 9.5 m) and attributed to Stratum II (Fig. 4). They include floor and wall segments and two rock-hewn pits (Fig. 26; Plan 5). The pottery and



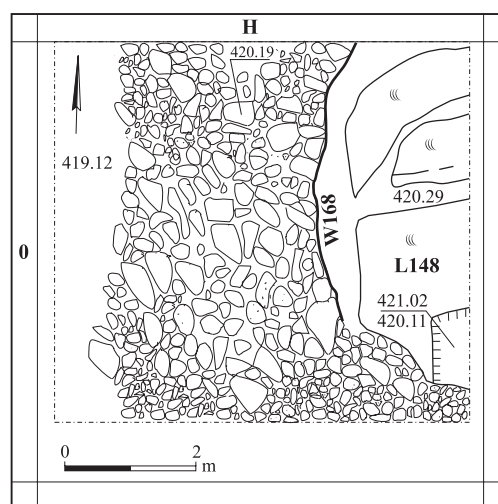
Fig. 26. Area E: looking north.

other finds associated with these elements all date to the Persian period.

The wall segments in this area do not reveal any clear plan of a structure. The northernmost wall (W185) abuts a straight line hewn in the bedrock. The location of this domestic wall at the edge of the ridge indicates that during the Persian period this area of the site was not fortified. Two additional wall segments (W308, W309) are evidence of a domestic structure whose floors (L150, L151) were a combination of smoothed bedrock and flat paving stones. An additional bedrock floor (L152) to the west of these walls is also associated with this structure.

The two rock-hewn shaft pits (L191, L199) were partially excavated. On the eastern side of Pit 191 was another man-made depression which may have functioned together with the pit. Inside this pit were loose debris, pottery sherds, bones, stone tool fragments and an iron chisel (Fig. 52:3). Pit 199 contained small quantities of pottery sherds.

Three basalt grinding-slab fragments and iron tool fragments were found in the surface debris of this square.



Plan 6. Area F.

AREA F

This probe, 33 sq m in area (Plan 6; Figs. 4; 27) and located at the northwestern edge of the site along the topographically steep slope, was initiated to trace the continuation of the fortification wall (W115) exposed in Area A.

The excavation revealed a 0.7 m high rock-hewn wall (W168), which was abutted on

the west by a glacis or revetment constructed of medium- and large-sized fieldstones that sloped downward in accordance with the



Fig. 27. Area F, looking west.

natural topography (Fig. 28). As this wall is almost identical in construction to the wall and sloping stone layer exposed in Area A, it can be concluded that the architectural fragments exposed in this probe are part of the Stratum III fortification system.

The finds from Area F include pottery (Fig. 39) and a basalt upper grinding stone.

ARCHITECTURAL SUMMARY

The most widespread phenomenon at the site throughout the periods is the exploitation of the easily hewn limestone bedrock, which became an integral part of the site's architecture. There are hewn bedrock walls (superstructure), hewn wall foundation trenches (Area B) and leveled bedrock floors. The following discussion will review the primary architectural elements of each stratum.

Stratum III: Iron Age

Architectural features attributed to Stratum III were found in all the excavated areas with the exception of Area E. The architectural remains from Stratum III were the best preserved and indicate both site planning and high-quality construction. The intrasite planning will be



Fig. 28. Area F: W168 and abutting revetment, looking northeast.

discussed following a review of the main constructional elements.

Fortification Wall.— The fortification wall was exposed on the perimeter of the lower terrace (Areas A, D, F). This wall towers over the areas with the steepest topography surrounding the site. The southern limits, where the site was easily accessed, were not exposed. This type of construction, a solid wall with a rampart built in segments, suited the topographic conditions at the site, specifically along the western and northern edges of the lower terrace.

Evidence of such a wall type, with a sloping outer face, has been found at additional Iron Age II sites in Lower Galilee, e.g., Tel Gat Hefer (Alexandre, Covello-Paran and Gal 2003), Tel Mador (Gal 1992:36) and Horbat Rosh Zayit (Gal and Alexandre 2000).

The function of perimeter walls in rural Iron II sites has recently been discussed by Faust (2000:26–28, Table 4), who suggests, based on ethnographic studies, that the function of these surrounding walls is often more of a ‘boundary’ marker, both symbolic and physical, than for solely defensive purposes. In any event, whether the wall at Horbat Malta functioned as a fortification or served to enclose livestock and the farmstead itself, its construction reflects strategic preplanning of the site’s boundaries.

Four-Room House.— The four-room house in Area C is the main building at the site and was constructed according to a set plan (for an architectural discussion of this house type, see Netzer 1992:193–199). Adjoining this building to the south was a large courtyard area containing many pits and installations. There is no evidence for a second story in the four-room house at Horbat Malta, although the extension of the courtyard to the south was actually an alternative to the two-story building, i.e., the area south of the house functioned much as the lower level of two-story four-room houses (see Holladay 1992:315–316 for functional analysis of the lower story).

In his recent study, Faust (2000:19–22) concluded that the larger four-room houses found at rural sites housed extended families, the biblical *bet av* (see also Holladay 1992:317 and references there). Furthermore, Faust (2000:20) attributes the ever-changing internal division of the houses to the developing needs (e.g., privacy) of the nuclear units within the extended family.

The four-room house type is not foreign to the Lower Galilee region and houses of this type have been excavated at Tel ‘En Zippori Stratum III (Dessel 1999:19), Tel Gat Hefer (Alexandre, Covello-Paran and Gal 2003), Tur’an (Shalem and Gal 2000), Horbat Rosh Zayit Area B (Gal and Alexandre 2000) and the rural Iron Age site of Horbat Nesiba north of Zefat (Eisenberg 1981).

Functional Analysis. Despite the incomplete assemblage from the house due to modern damage, *in situ* finds were retrieved above the floors in the two long Rooms 228 and 274 and the back Rooms 229 and 243. Room 248 is not included in the functional analysis of the house due to poor preservation. The pottery frequencies are presented according to functional groups within the assemblage from each room. The count is based on diagnostic rims; restored vessels were counted as a single vessel. The data from Tables 6 and 7 are indicative of a number of trends (for a typological discussion, See The Finds, below).

Table 6. Groundstone Tools in the Four-Room House

Room	274	228	243
Tool Type			
Grinding stones (upper grinding stones, grinding slabs)	2	7	
Hammerstones and rubbing stones		2	
Grinding bowls (including tripod bowls, mortars?)	1	2	2
Perforated stone			1
Total (N = 17)	3	11	3
Percentage of total tools in house	18%	64%	18%

Table 7. Vessel-Type Frequencies in Room Assemblages of the Four-Room House

Room	274			228			229			243			Total	
	% in room	% type	N	% in room	% type	N	% in room	% type	N	% in room	% type	N	% in house	N
Serving vessels (bowls, kraters, amphoriskoi, jugs, juglets)	52	43	21	33	18	9	47	12	6	38	27	13	43	49
Cooking vessels	24	42	10	11	13	3	15	8	2	26	38	9	21	24
Storage vessels	24	24	10	56	36	15	38	12	5	36	29	12	36	42
Total	100		41	100		27	100		13	100		34	100	115

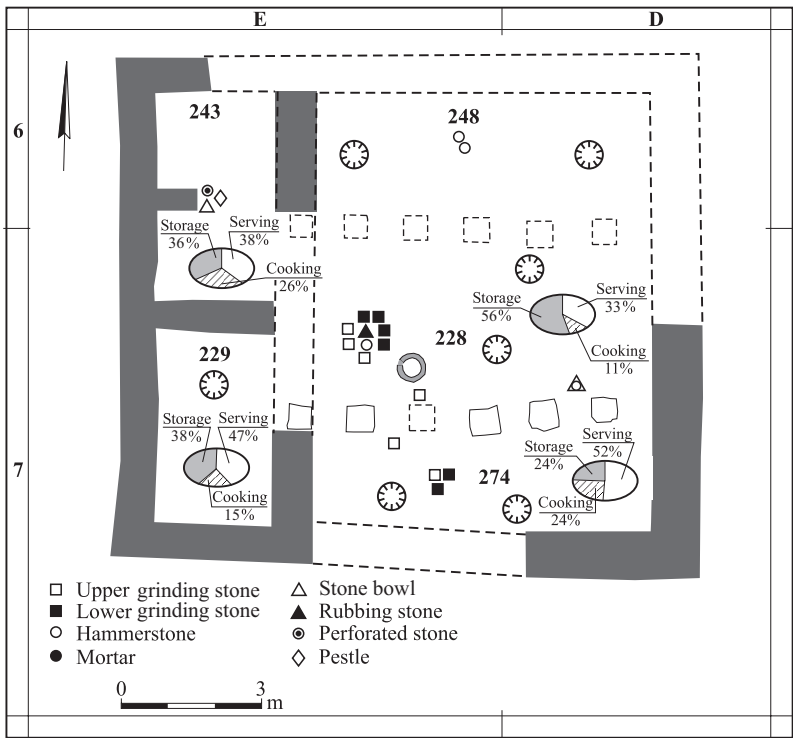


Fig. 29. Schematic plan of the four-room house showing distribution of finds; the piecharts are based on the pottery-vessel assemblage.

The distribution of pottery vessels and grinding stones (Fig. 29) reveals a pattern of diversified function within the different rooms. The pottery assemblage in the central room, L228, had the highest ratio of storage vessels, representing 56% of the vessels in this room and 36% of the total storage vessels in the house (Table 7. Room 228 also had the highest percentage of basalt grinding tools (65%; Table 6), mostly grouped together in the western part of the room. This high frequency of both

storage vessels and grinding stones suggests that the central room was used mainly for processing and storage of agricultural produce. It should be noted that there were fewer types of serving vessels in this room; for example, kraters are not present in the assemblage. The bell-shaped storage pits in this room provide further evidence of storage. Although the finds are not conclusive for determining if this central room was an internal courtyard, this possibility should not be ruled out.

In the two back rooms, L229 and L243, the serving vessel types were more varied, and in addition to bowls and kraters they included jugs, juglets and amphoriskoi.

The ratio of cooking vessels in the different rooms does not reveal a distinct pattern, although the highest percentages are in Rooms 274 and 243, the lowest percentage (11%) in the central long room, L228. There is no direct evidence for a cooking place in any of the excavated rooms of the house; the only preserved cooking oven (L208) was found in an adjoining courtyard south of Room 274 (see below).

The plotting of the grinding stones (Fig. 29) revealed that three main concentrations could be isolated, the largest in the western half of central Room 228, with two smaller groups in Rooms 274 and 243. However, the grinding stones in Room 243 appear to have been used to support the pierced stone (Fig. 50:3) that might have functioned as a door socket.

The small number of pottery vessels in Room 229, with the notably low number of cooking pots (8% of the pottery assemblage of the house) and absence of stone tools, suggests that this room was not used for food preparation. However, the two shaft pits and storage vessels (38% of the pottery assemblage of the room) suggest that certain foodstuffs were stored there.

The metal finds are also informative as to the function of the various spaces in the four-room house. An intact iron sickle blade (Fig. 51:2) was found above the floor in the southeastern corner of Room 274 (L273). This corner was most likely used for storage of agricultural implements whereas the grinding stone concentration further to the west in L274, suggests that grinding stones may also have been stored here when not in use. This long room had the highest relative percentage of bowls and other serving vessels (52%) as well as the highest number of cooking pots.

The dearth of information concerning the northernmost Room 248 limits our functional interpretation of the various rooms. However, the partial evidence from the four-room

house suggests that processing and storing activities took place primarily in central Room 228. The southern long room was probably partitioned into smaller units for storage of both agricultural tools and harvest produce, with further evidence of the processing of grain or the storing of related implements (grinding stones). The pottery assemblages in Rooms 229 and 243 indicate multiple activities in these rooms. It should be noted that the distribution patterns of finds outlined above may have been altered by erosion between Strata III and II, post-Stratum III building activities in this area and modern damage.

Courtyard.— Directly annexing the four-room house was an open area with numerous pits (storage installations), a cooking place and a few small rooms. It appears that this area was partly enclosed in the west.

The numerous pits that dot the inside and outside of the four-room house represent a known phenomenon at Iron Age sites. Most of the pits are bell-shaped with a small opening that probably had a cover, similar to the one found *in situ* at Tel Qiri (Ben-Tor and Portugali 1987: Plan 22). Similar bell-shaped pits are commonly found in the courtyard rooms at Tell en-Nasbeh (McCown 1947:215–219, Fig. 50). In addition to the bell-shaped pits, shaft pits and pits of amorphic shape were uncovered. It is probable that some of these pits were multifunctional. The functions most commonly associated with these pit types are water or grain storage, or refuse. There were no signs of plastering in the pits at Horbat Malta, and it is possible that plaster was not used for Iron Age cisterns, or was not preserved. Three circular depressions hewn close to the opening of bell-shaped Pit 211 may have supported a pulley-type device used to extract water from the pit/cistern.

The practice of storing grains in similar bell-shaped pits has been extensively researched by Currid and Navon (1989), who discussed the phenomenon from the point of view of biblical texts, ethnographic parallels and experimental

archaeology. According to their study, it is clear that bell-shaped pits were commonly used for grain storage during the Iron Age (Currid and Navon 1989:76) and presumably the shaft pits were also used to store agricultural produce.

The plotting of the pits indicates that agricultural produce was stored at a household level in both the four-room house and the annexed courtyard and rooms. This pattern is typical of farmsteads and less of villages where communal storage installations are more common (for discussion see Faust 2000:25–26).

Installation Area.— Numerous rock-hewn channels, depressions and pits are evidence of installations in the lower terrace, adjacent to the fortification wall. It is possible that some of these channels were used for water drainage and regulation. The lack of bell-shaped pits in this area supports the suggestion that storage facilities were located within the domestic household area. As was suggested above, some of the rock-hewn surfaces, walls and cupmarks may be evidence of winepresses, implying that agricultural installations were intramural within the boundaries of the site.

Intrasite Planning.— The site comprises three basic elements of planning: a fortification or boundary wall, a large four-room house with an annexed courtyard and an open area with installations. Additional architectural elements are very sparse at the site, even in areas not destroyed by modern construction. This settlement type is familiar from Iron I sites in the central hill area, e.g., Izbet Zarta (Finkelstein 1986). The development of the architecture of the four-room house and the site plan at Izbet Zarta from Stratum II to Stratum I resembles that of Horbat Malta, despite its earlier date. In an early phase of Izbet Zarta Stratum II the core of the site was occupied by a large four-room house surrounded by silos and a belt of peripheral buildings. During the terminal phase of Izbet Zarta Stratum I the four-room house, the only building occupied at the site, was subdivided and new annexed rooms and numerous pits

were added (Finkelstein 1986:110–114, Fig. 5). A similar development is evident in the four-room house at Horbat Malta Stratum III, which was continually occupied while undergoing numerous constructional changes, such as the subdivision of the back room, a partition wall between the pillars, as well as the addition of annexed rooms in the open courtyard (L203). Although no distinct peripheral buildings were exposed at Horbat Malta, it can be suggested that the perimeter wall had both a defensive and boundary-defining function, similar to that of the peripheral buildings at sites such as Izbet Zarta. It is possible that additional buildings existed south of Area C, although no architectural elements were exposed during modern construction in this area. Therefore it is suggested to identify this site as a fortified farmstead with a single large central house, rather than a village.⁵ Considering the large size of the central four-room house, it is probable that it was populated by an extended family consisting of over ten persons.

In summary, the site plan of Horbat Malta is similar to that of the ‘courtyard sites’ of Iron I and II that are characterized by a low ratio of built-up areas to open courtyards (see Finkelstein 1986:116–117). Such sites, as at Horbat Malta, reflect a mixed subsistence economy that included the processing and storage of agricultural produce, as well as animal husbandry geared toward secondary products (see below). In the Jerusalem area, the ‘terraced farm’ settlement type that emerged during the Iron Age, usually with a four-room house, is well documented (Edelstein and Milevski 1994:2–11, 20–21; see also Seligman 1994). These self-contained farmsteads included a house, courtyard and installations for agriculture and associated industries, and were usually enclosed by a boundary wall. The topography at Horbat Malta differs from that of the Jerusalem area. This difference explains the lack of terraces necessary to enlarge the cultivable area (see Gal 1992:86). However, the basic elements of the self-contained farmstead are parallel for both regions.

Stratum II: Persian Period

The architectural remains are chiefly of a domestic nature and include stone buildings and pits. A single tomb was found in close proximity to the domestic area.

Structure.—The fragmentary elements in Areas B and C do not reveal any distinct structural plans, although an alignment of small rooms is distinguishable in Area B (Plan 2). This is a common plan during the Persian period, as at Shiqmona (Elgavish 1968: Pl. LXX).

The walls of Stratum II were not uniform. Most of them were constructed in an irregular manner, with one or two faces of different-sized stones. A single large stone often replaced two smaller stones, and grinding and pounding stones in secondary use were incorporated into the walls as filler stones, probably originating in Stratum III, e.g., an upper grinding stone in W117 and a hammerstone in W122.

Pits.—Outstanding among the architectural features of Stratum II are the many shaft pits containing large quantities of restorable pottery, stone tools and iron fragments. Notable are the small finds from the pits, such as the bronze fibula from Pit 178 and the shallow bronze bowl from Pit 250. The pits with a constructed stone wall around the perimeter (Pit 225 in Area C, Pit 121 in Area B) may have been silos rather than refuse pits. The phenomenon of numerous pits at Persian-period sites is well documented, although their function is unclear. At the coastal site of Tel Mikhal the pits were interpreted as storage facilities that were later converted to refuse pits (Herzog 1989:91). The large quantities of pottery and other finds in the Stratum II pits contrast the sparse finds in the Stratum III pits, certainly reflecting a functional variance.

The site was apparently not fortified during the Persian period, as evidenced by the scarcity of architecture and pottery in Area A, and the proximity of the domestic structure to the edge of the site in Area E.

Tomb.—The shaft tomb at Ḥorbat Malṭa is of a type common during the Persian period (for a review see Stern 1982:81–84). The occurrence of a single tomb at the site,⁶ in proximity to the domestic area, is enigmatic.

Intrasite Planning.—When the site was resettled during the Persian period, the surrounding Iron Age wall was replaced by the stone fill that encircled a smaller area at the eastern reaches of the site, apparently stone revetments encircling a large, well-built structure in Area B. On the lower terrace in Area E, beyond this revetment, is a series of pits and installations. Additional structures, pits and installations were also revealed in the southernmost area of the site (Area C).

The reconstruction of a large, Persian-period structure is supported by the findings of Raban, who surveyed the site in the 1980s prior to the recent damage (Raban 1993:20).⁷ Raban observed architectural remains of a large ashlar-built structure in association with Persian-period pottery, extending from Area B westward toward Area D (Avner Raban, pers. comm.).⁸

THE FINDS

POTTERY

The pottery is presented in chronological order from the earliest period of occupation (MB II) to the final Stratum I (Roman). The Middle Bronze Age and Roman-period pottery is presented in minimal fashion in light of the sparse finds and the absence of architectural remains, and the comparative material is incorporated into the figure descriptions. The pottery assemblages from Strata III and II are presented in a more detailed manner that includes limited quantitative analyses. The diagnostic pottery forms, selected from stratigraphically secure loci in Areas A–F, are represented in the pottery figures according to stratigraphic phases. The Stratum III pottery is further divided according

to areas in order to examine the differences between the functionally diverse contexts.

Middle Bronze Age

Diagnostic pottery sherds from this period include straight-sided handmade cooking pots (Fig. 30:1–3), a wheel-made necked cooking pot (Fig. 30:4), a storage jar with an elongated rim (Fig. 30:5) and a profiled-rim pithos (Fig. 30:6). This assemblage is comprised of MB IIA pottery types, of which certain forms continue in smaller quantities into the following MB IIB period. Although the assemblage is too small to pinpoint an exact phase within the period with any certainty, it is suggested to date this assemblage to the mid-late MB IIA (see list of comparative material in Fig. 30).

Stratum III: Iron Age II

The Stratum III pottery is made up of assemblages in varying states of preservation according to their context. For example, in the Area C four-room house, restorable pottery vessels were found *in situ* above the floor, whereas within the Stratum III pits only pottery sherds were retrieved. In light of this divergence, the pottery discussion is based on typology whereas the accompanying figures are arranged according to excavation area. In addition, the Area C assemblage is further separated into two separate units comprising finds from the ‘interior’ and ‘exterior’ areas of the four-room house. The pottery from the interior was found smashed *in situ* on the floors and therefore represents the end of the

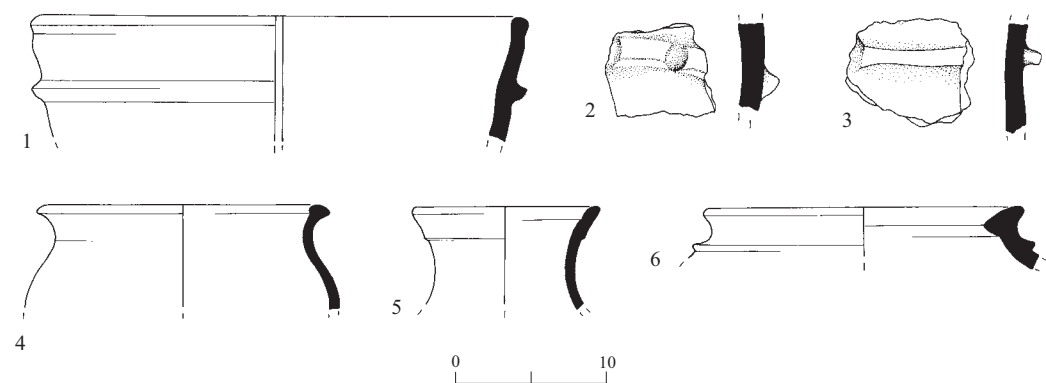


Fig. 30. Area C: MB II pottery.

No.	Vessel	Locus	Reg. No.	Description	Parallels
1	Cooking pot	215	1697/2	Dark gray clay; basalt and white grits	Megiddo XVI–XII (Loud 1948: Pls. 7:9–12; 30:5) Afeq Str. AXVII–XIV, Phases 1–3 (Beck 2000: Figs. 10.1:24–25; 10.2:12; 10.10:22, 23)
2	Cooking pot	249	1510/4	Dark red-brown clay; basalt grits	As No. 1
3	Cooking pot	249	1704/1	Dark red-brown clay; basalt grits	As No. 1
4	Cooking pot	215	1649/2	Dark gray clay; white grits; extensive soot on ext.	Megiddo XII–XI (Loud 1948: Pls. 30:4; 38:13)
5	Storage jar	249	1757/5	Orange clay; many white and gray grits	Tel Qiri X (Ben-Tor 1987: Fig. 62:12) Afeq Str. AXIV (Beck 2000: Figs. 10.11:4; 10.12:21–23)
6	Pithos	249	1704/4	Light orange clay; white and gray grits	Megiddo XII (Loud 1948: Pl. 27:7, 8)

Stratum III occupation of this structure. In light of the *in situ* nature of this pottery, quantitative analysis was conducted. The pottery from the exterior areas surrounding the building (pits, living surfaces) is presented separately due to the conceivably extended use of these areas throughout the Stratum III occupation.

The pottery assemblage from Stratum III is domestic in character and includes bowls, kraters, cooking pots, storage jars, holemouth jars, jugs, juglets and lamps, as well as specialized forms such as a censer bowl. The bulk of the pottery appears to be locally made; however, there are two sherds of imported Black-on-Red ware.

The comparative material for the pottery of Stratum III is primarily from Ḥorbat Rosh Zayit, due to the quantity and well-preserved quality of that assemblage within a stratigraphic sequence, as well as its proximity to Ḥorbat Malṭa. Moreover, an attempt has been made to apply the typology established by Gal and Alexandre (2000) at Ḥorbat Rosh Zayit to the Ḥorbat Malṭa assemblage. Further comparanda is provided by sites in the adjoining valleys of the Galilee and from the extensive Iron Age stratigraphic sequence at Tel Ḥazor.

Quantitative Analysis.— The quantitative analysis was conducted on the assemblage from the interior of the four-room house. This assemblage includes undisturbed loci representing the final Iron Age occupation of the structure and the site (Table 8). The chronological implications for certain types will be discussed in the typological discussion below. Only rims were counted and adjoining rims were considered as a single vessel. It should be noted that specific types that are defined by body profile were not always determinable from the rim sherds. In such cases the rims were included under a generic “unidentified” category. Handles, bases and decorated pottery sherds of ceramic types not represented by rims are illustrated, but not included in the quantitative analysis.

Table 8. Stratum III Vessel-Type Frequencies in the Four-Room House

Vessel	N	% of Total
Bowls	26	22.0
Kraters	15	12.7
Cooking pots	25	21.1
Storage jars	39	33.0
Holemouth jars	3	2.6
Small jars	2	1.7
Jug	1	0.9
Juglets	4	3.4
Lamps	3	2.6
<i>Total</i>	<i>118</i>	<i>100.0</i>

Bowls

Most of the bowls from Stratum III are medium-sized with rounded or slightly carinated walls, thickened rims and varying degrees of slip and burnish. A single complete profile of a bowl has a ring base (Fig. 38:1). In the four-room house the bowls represent 22% of the pottery assemblage. The following typology is based on body profile.

B I: Slightly Carinated Bowls.— These bowls have a low carination and various types of thickened rims: a simple thickened rim (Fig. 33:2, 3, 5), an exterior-ledged rim (Figs. 31:3; 34:9; 38:4) and a flat thickened rim (Fig. 31:4, 5). A smaller carinated bowl has a tapered rim (Fig. 33:1; cf. Ḥazor Stratum VI: Yadin et al. 1960: Pl. LXVI:10). These bowls often have red slip on the interior and rim.

B II: Rounded Bowls.— These bowls have a flat thickened rim (Figs. 31:6; 33:6, 7; 38:3) or a simple thickened rim (Figs. 31:2; 38:1). One example (Fig. 38:1) has a wide band of red slip on the interior and the rim; this bowl has a ring base. Another bowl (Fig. 33:6) has red slip on the interior and rim.

B III: Deep Bowls.— A large deep bowl (Fig. 37:1) with rounded sides and a thickened

inverted rim is burnished on the interior. Another deep rounded bowl has a thickened ledge rim (Fig. 33:8).

Comparisons: The repertoire of bowl types presented above is well known at Ḥorbat Rosh Zayit Stratum II (Gal and Alexandre 2000:34–38) and Ḥazor Stratum VI, although the percentage of red-slipped bowls at Ḥorbat Maḥta is lower, and notable is the absence of burnished red-slipped bowls that are common in Ḥazor Strata X–IX (Yadin et al. 1960: Pls. LI:1, 2; LII:5, 6).

Censer Bowl

This three-legged bowl (Fig. 38:18) has a row of holes pierced in the walls; only the lower part of the vessel is preserved. The function of this bowl type as a censer is conclusive in light of an intact bowl with a lid from Ḥorbat Rosh Zayit (Gal and Alexandre 2000:185–186, Fig. VII.6:18). Similar vessels are found at Ḥazor in Strata X–VII (Yadin et al. 1960: Pls. LV:43; LXIII:34; Yadin et al. 1961: Pls. CLXXI:16, 17; CLXXX:13; CCVIII:34).

Kraters

There are three krater types in the Ḥorbat Maḥta assemblage based on rim variation.

K I: Kraters with a Profiled Rim.— Two handleless kraters (Fig. 31:7, 8) have an oval profiled rim and a concave shoulder. This krater type is a continuation of the common Iron I handleless kraters that carry through into Iron II in the Jezreel Valley, as at Tel Qiri Stratum V/VI (Ben-Tor and Portugali 1987: Fig. 23:5; Hunt 1987:195). These two kraters were found in Area A, which contained a predominance of earlier pottery types (see below).

K II: Kraters with a Thickened Sloping Rim.— The most common krater type has a thickened sloping rim, a rounded or slightly carinated body and two handles extending from rim to shoulder (Figs. 31:9–12; 33:12–18; 38:5–8). Among the many variants of this type, some have an internal concavity below the thickening of the rim (Fig.

33:13–15, 17, 18). Most of these kraters have a plain surface, although there are examples with red slip on the interior walls and the rim (Figs. 33:12; 39:6) or a red-slipped exterior (Fig. 33:13). One of the kraters (Fig. 33:15) has thin walls that make a metallic ring when struck.

This krater type first appears in Ḥazor Stratum VIII (Yadin et al. 1960: Pl. LVI:1); however, it is more common in Strata VI–V (Yadin et al. 1960: Pls. LXVIII:1, 2; LXXXIII:1–4, 7–12; XCIV:1–4). In the nearby Jezreel Valley, these kraters are found in Megiddo H-3 (IV) (Finkelstein, Zimhoni and Kafri 2000: Fig. 11.44:1–3), Tel Qiri V/VI (Ben-Tor 1987: Figs. 22:8; 23:6) and Yoqne'am 10 (Ben-Tor, Portugali and Avissar 1983:10).

K III: Kraters with a Ledge Rim.— A third krater type (Fig. 34:19) has a flat ledge rim, straight neck and handles positioned at mid neck. Similar vessels are known from Ḥorbat Rosh Zayit II (Type K I), where they are not numerous (Gal and Alexandre 2000: Fig. III.77:5), Ḥazor VII (Yadin et al. 1960: Pl. LXIV:6) and Yoqne'am 10 (Ben-Tor, Portugali and Avissar 1983: Fig. 11:11). A vessel from Ḥazor VIII–VII has the same profile, although the handles extend from the rim (Yadin et al. 1961: Pl. CCXV:6). This ledge-rim krater type is a continuation of the earlier Late Bronze Age kraters and is found only in small quantities in the Iron Age (Hunt 1987:195).

Cooking Pots

CP I: Cooking Pots with a Triangular Rim.— These cooking pots have a wide, shallow, carinated body and a triangular or pinched rim, sometimes with an inner concavity. A number of rim variants of this cooking-pot type include a sloping triangular rim (Fig. 32:1, 4, 6), an overlapping rim (Figs. 32:2; 34:1), a horizontal rim (Figs. 32:3, 5, 7; 34:2, 3; 37:2) and a massive rim (Figs. 34:3; 38:3).

The rim of one cooking pot (Fig. 34:4) appears to be transitional between the triangular rim and the ridged rim (below). The ridge of this triangular rim is both shorter and more

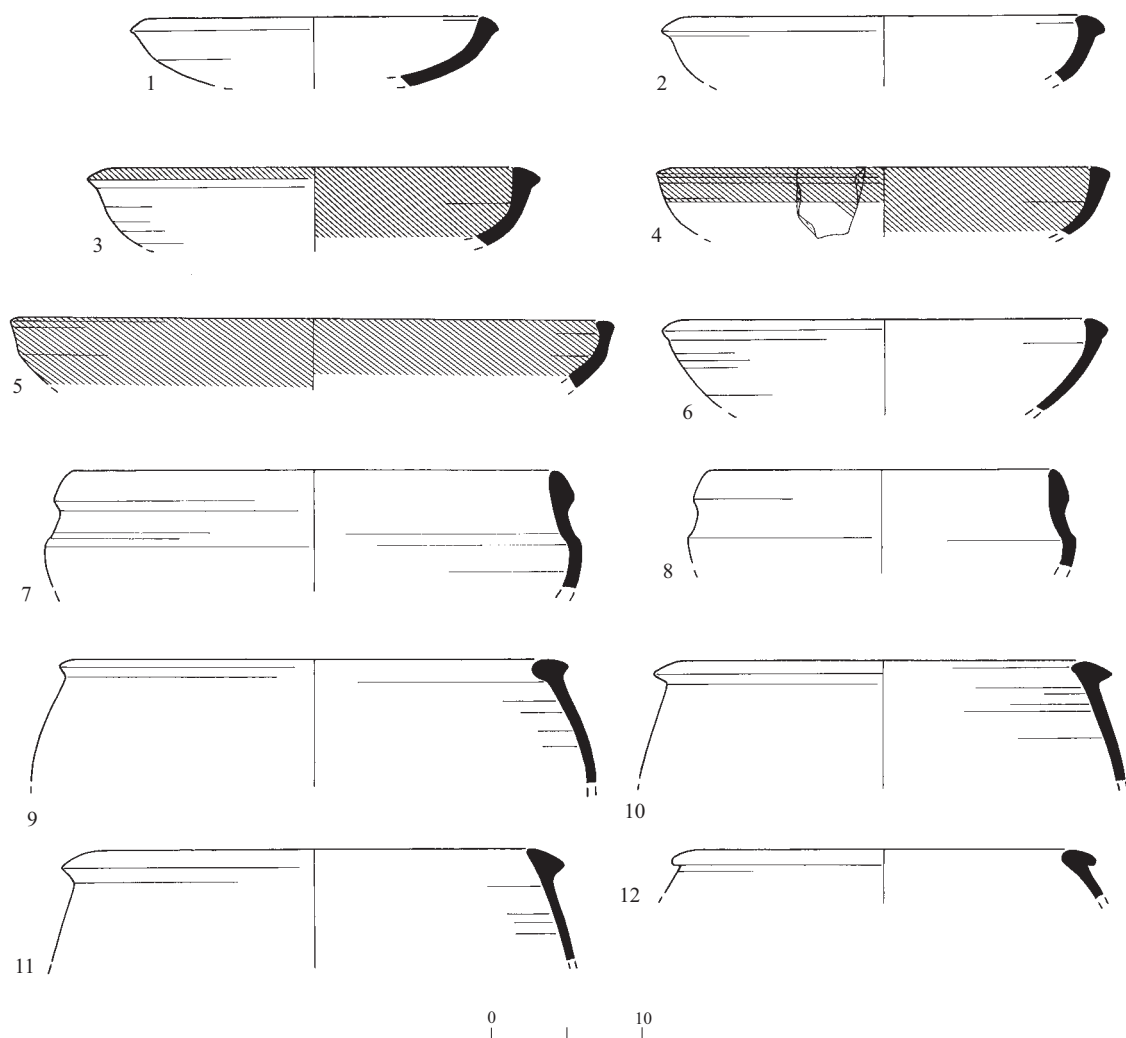


Fig. 31. Area A, Stratum III pottery: bowls and kraters.

No.	Vessel	Locus	Reg. No.	Description
1	Bowl	106	1104/2	Orange-brown clay; white and gray grits; faint traces of slip on int.
2	Bowl	107	1053/2	Orange clay; white and gray grits
3	Bowl	106	1078/10	Orange clay; gray grits; red slip on int. and rim
4	Bowl	123	1175/9	Orange brown clay; white and gray grits; red-brown slip on int. and ext.
5	Bowl	138	1710/1	Orange brown clay; white and gray grits; red-brown slip on int. and ext.
6	Bowl	106	1078/5	Red brown clay; white and gray grits
7	Krater	123	1128/1	Red brown clay; white and gray grits
8	Krater	138	1272/9	Brown clay; white and gray grits
9	Krater	144	1130/8	Orange clay; gray and red grits
10	Krater	123	1175/1	Brown clay; white and gray grits
11	Krater	107	1035	Orange clay; gray and red grits
12	Krater	123	1111/2	Red brown clay; white and gray grits

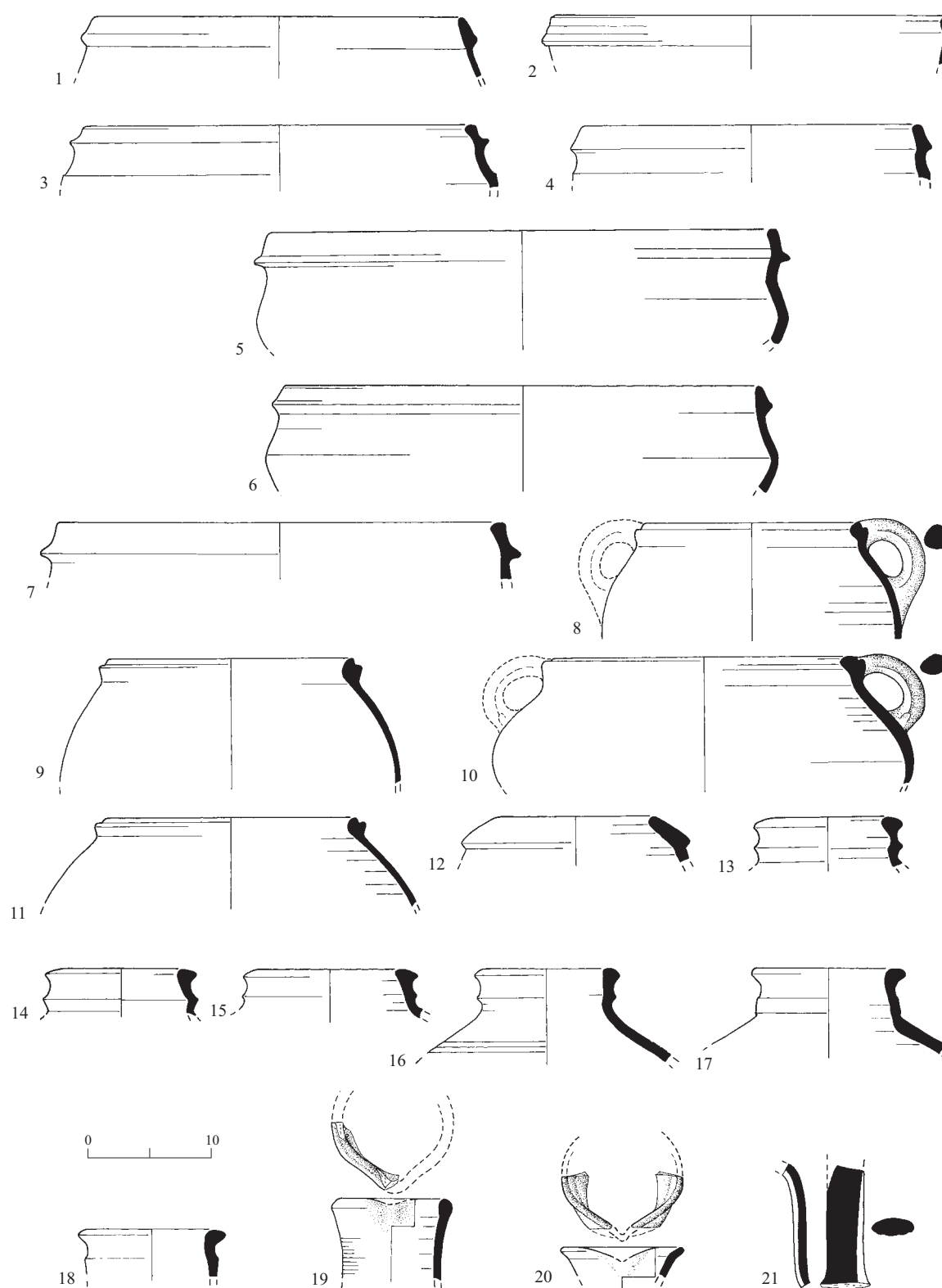


Fig. 32. Area A, Stratum III pottery: cooking pots, storage jars and jugs.

◀ Fig. 32

No.	Vessel	Locus	Reg. No.	Description
1	Cooking pot	123	1105/3	Red-brown clay; white grits
2	Cooking pot	138	1152/1	Brown clay; white grits
3	Cooking pot	138	1346/1	Red-brown clay; white grits
4	Cooking pot	138	1152/7	Dark red-brown clay; white grits
5	Cooking pot	138	1174/4	Dark red-brown clay; white grits
6	Cooking pot	123	1110/7	Dark red-brown clay; white grits
7	Cooking pot	138	1152/12	Dark red-brown clay; white grits
8	Cooking pot	123	1175/8	Dark red-brown clay; white grits
9	Cooking pot	123	1150/8	Dark red-brown clay; white grits
10	Cooking pot	106	1078/11	Red-brown clay; white grits
11	Cooking pot	174	1199/6	Dark red-brown clay; white grits
12	Storage jar	138	1710/3	Orange clay; white and gray grits
13	Storage jar	106	1016/1	Gray clay; white grits; metallic ware
14	Storage jar	123	1150/2	Brown clay; white and gray grits
15	Storage jar	123	1075/7	Orange clay; white and gray grits
16	Storage jar	138	1102/2	Orange brown clay; white grits; metallic ware
17	Storage jar	138	1109/1	Brown clay; white grits
18	Storage jar	138	1272/3	Brown clay; white grits
19	Jug	138	1102/5	Orange clay
20	Jug	123	1128/5	Red-brown clay
21	Handle	123	1128/9	Orange brown clay; black paint

Fig. 33 ▶

No.	Vessel	Locus	Reg. No.	Description
1	Bowl	228	1605/2	Orange clay; white and gray grits; red slip on int. and rim
2	Bowl	274	1793/9	Orange-brown clay; white and gray grits
3	Bowl	228	1808/1	Orange-brown clay; gray grits; red slip on int. and rim
4	Bowl	228	1798	Red brown clay; white and gray grits
5	Bowl	257	1831	Orange-brown clay; white and gray grits
6	Bowl	274	1793/4	Red brown clay; red and gray grits; red slip on int. and rim
7	Bowl	228	1835/5	Red brown clay; red and gray grits
8	Bowl	274	1793/7	Red brown clay; gray and red grits
9	Bowl	243	1699/8	Orange-brown clay; gray grits
10	Bowl	243	1631/2	Gray clay; white grits
11	Bowl	227	1652/2	Orange brown clay; large white grits
12	Krater	202	1479/1	Light brown clay; red slip on int. and rim
13	Krater	257	1831/1	Orange-brown clay; white and gray grits; red slip on ext. and rim
14	Krater	229	1665/1	Red-brown clay; large white grits
15	Krater	227	1830/1	Brown ext., dark-gray int.; white and gray grits; metallic ware
16	Krater	228	1809/2	Orange-brown clay; white and gray grits; traces of red slip on ext.
17	Krater	228	1748/2	Red-brown clay; white grits
18	Krater	243	1805/1	Dark red-brown clay; white grits
19	Krater	227	1652/5	Red-brown clay; white and gray grits

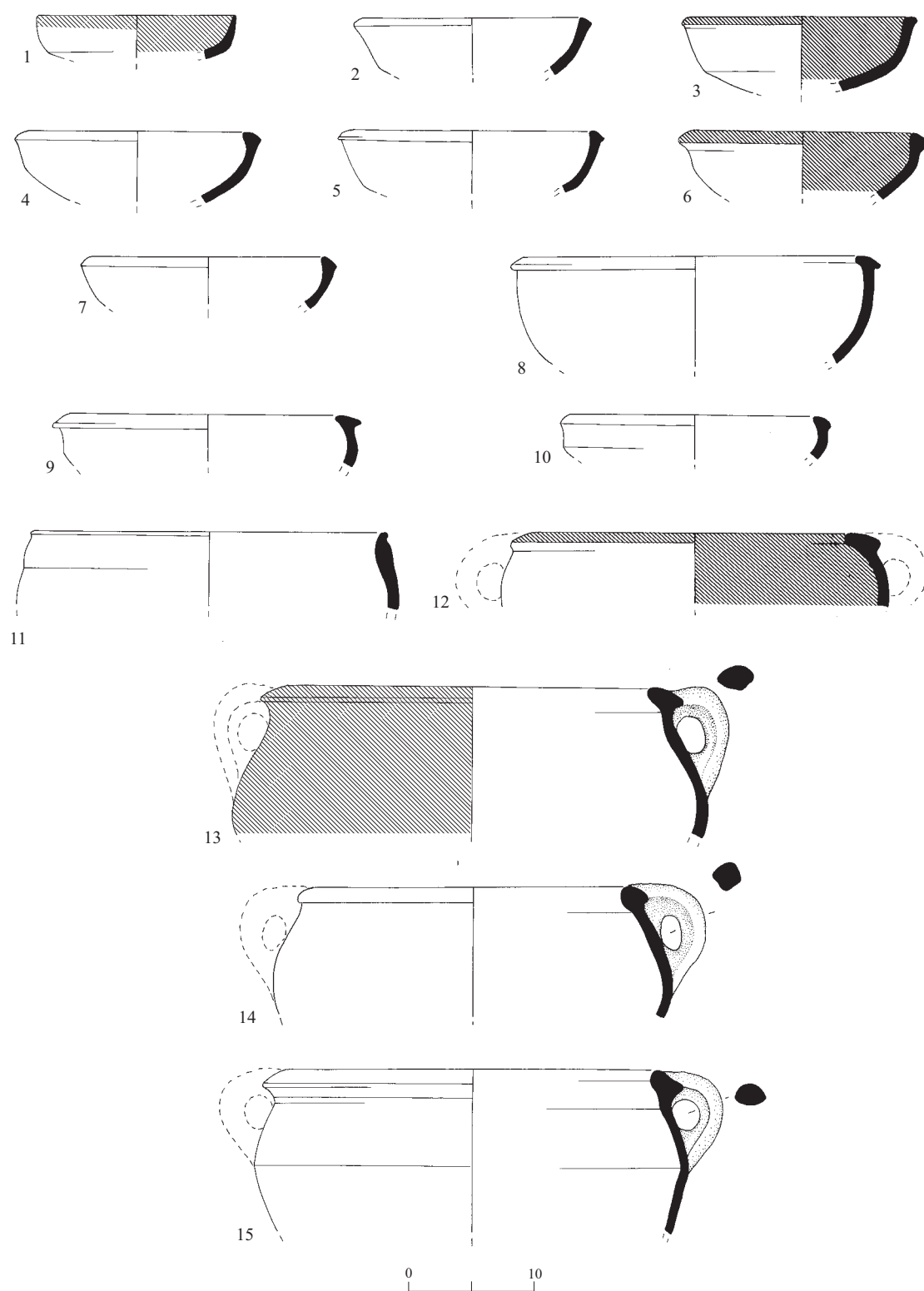


Fig. 33. Area C, Stratum III pottery: bowls and kraters from the four-room house.

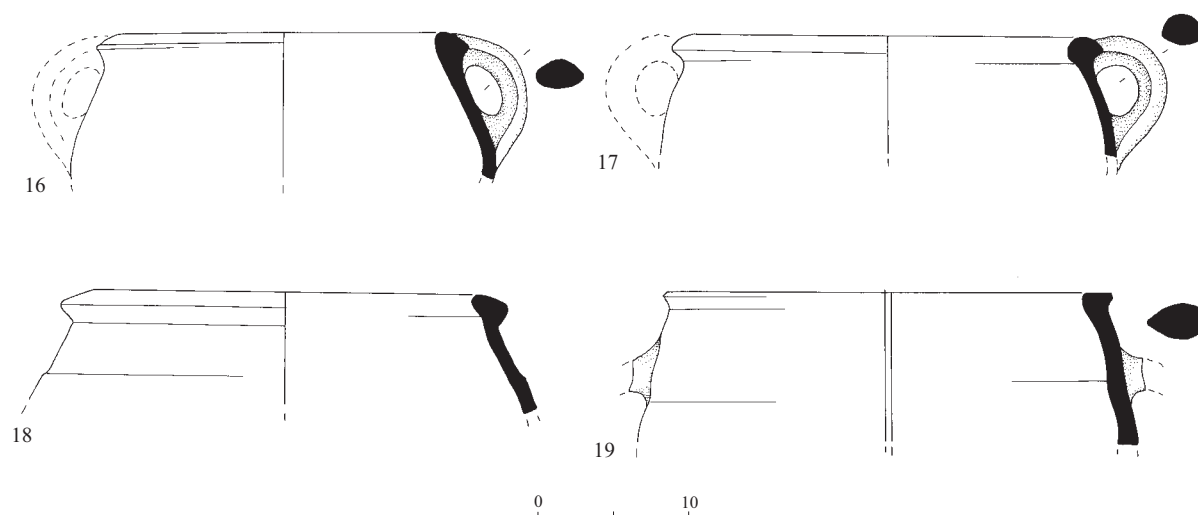


Fig. 33. (cont.).

upturned, creating an exterior concavity that resembles the groove of the ridged-rim cooking pots.

The triangular-rim cooking pots are dominant in the north of the country in the tenth–ninth centuries BCE, and are replaced by the ridged-rim type in the eighth century BCE (for a full discussion and parallels see Gal and Alexandre 2000:40–42). The poor preservation of the triangular-rim cooking pots on the floors of the four-room house, together with their low frequency (20% versus 80% of the ridged-rim type, see below), suggests that the extant sherds are residual from the initial use of the building and are not to be associated with the terminal occupation of this structure.

CP II: Cooking Pots with a Ridged Rim.— This cooking-pot type is a closed, handled form with a squat, rounded body, round base, short neck and thickened rim with a groove on the upper part of its exterior (Figs. 32:8–11; 34:5–8; 38:9, 10). One of the cooking pots from the four-room house (Fig. 35:5) is of smaller dimensions than most of the other pots of this type.

These cooking pots first appear in the late ninth century and continue until the end of the eighth century BCE. They are often used as a

chronological indicator of the eighth century BCE and are known from Ḥorbat Rosh Zayit I (Type CP III; Gal and Alexandre 2000:43, 157–158, Fig. V.6) and Ḥazor VI–V (e.g., Yadin et al. 1960: Pls. LXIX:4–14; LXXXV:1–10).

Storage Jars

Storage jars are the most frequent vessel types retrieved from the four-room house and represent 33% of this domestic assemblage. The typology of the storage jars is based on neck and rim shape and adheres to the Ḥorbat Rosh Zayit typology (Gal and Alexandre 2000).

SJ Ia: ‘Hippo’ Jars.— The ‘hippo’ jar is a subtype of the ridged-neck jars. These vessels have a distinctly profiled ridged neck with a concavity on the interior of the ridge. The rim varies from either a rounded rim that is turned out and over (Fig. 37:4) or a thickened, ridged rim (Fig. 32:13). The ‘hippo’ jar bears similarities to the ridged-neck jars, although it has a distinctive form, size and metallic ware that distinguish it from the other ridged-neck storage jars. The typology, chronology and function of this jar type has been studied by Alexandre (1995; see also Gal and Alexandre 2000:44–48).¹⁰

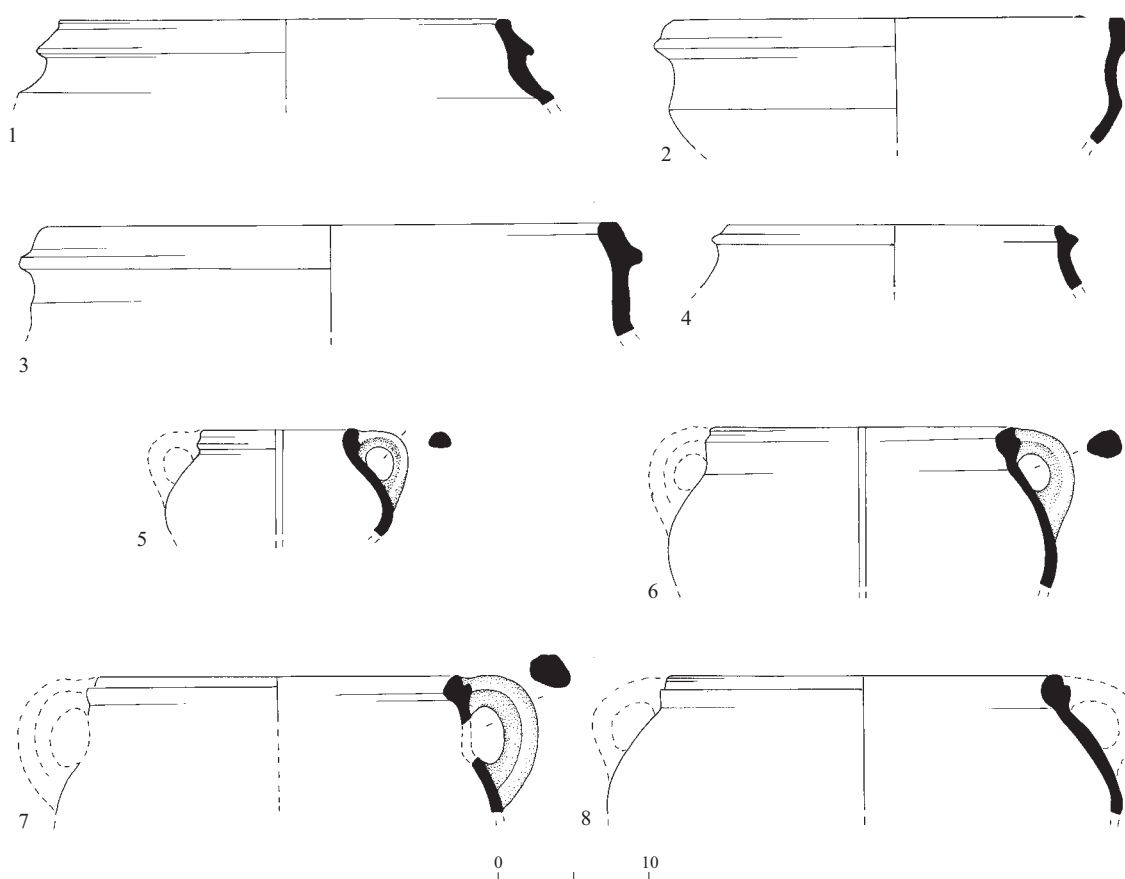


Fig. 34. Area C, Stratum III pottery: cooking pots from the four-room house.

No.	Locus	Reg. No.	Description
1	243	1739/5	Dark brown clay; many white grits
2	221	1573/5	Dark red-brown clay; many white grits
3	202	1479/2	Dark red-brown clay; many white grits
4	243	1678/1	Dark red-brown clay; many white grits
5	228	1813/1	Dark red-brown clay; many white grits
6	221	1573/6	Dark brown clay; many white grits
7	243	1786/1	Dark red-brown clay; many white grits
8	229	1702/2	Dark brown clay; many white grits

SJ Ib: Storage Jars with a Ridged Neck.— The storage jar with a ridged neck, the most common storage-jar type at the site (Figs. 32:14–18; 35:1–8; 38:13, 14), has many variants. The rim ranges from a thickened ledge to a sloping ridged rim; the edge is often pinched, forming a slight gutter on the rim top (Figs. 32:14; 35:1–3).

These jars all have a ridge on the neck in varying degrees of protuberance. Some of the jars (Fig. 35:5) have a concavity on the interior wall of the neck ridge that is reminiscent of the pronounced concavity of the ‘hippo’ jars. There are sometimes incised lines on the shoulder of these jars (Fig. 32:16). The ware

type varies, yet it is notable that some jars have a metallic ring (Figs. 32:17; 35:1, 2, 5).

This is a common storage-jar type in the north, found at most sites including Ḥazor IX–V (Yadin et al. 1960: Pls. LII:23, 24; LX:4, 5, 8; LXXI:10–16; 1961: Pls. CLXXIX:14, 15; CLXXXVI:2–8; CLXXXIX:19–21⁹).

SJ II: Cylindrical ‘torpedo’ Jars.— This storage-jar type has a short neck, rectangular rim, rounded, slightly sloping shoulders that join the body with a carination, and a long, narrow cylindrical body that tapers to a sharp point at the base (Figs. 35:14; 38:15, 16). At Ḥorbat Rosh Zayit the ‘torpedo’ jars (SJ VI of the Ḥorbat Rosh Zayit typology) are found only in the later levels (Gal and Alexandre 2000:158–159). At Ḥazor this jar type first appears in Stratum VII (Yadin et al. 1961: Pl. CLXXX:19, 20, 23), but is much more common in Strata VI and V (Yadin et al. 1960: Pls. LXXII; LXXIII; XCI; 1961: Pls. CCXXX:28; CCXXIX:9–13; CLXXXIX:22).

SJ III: Storage Jars with a Straight, Medium–High Neck.— This storage jar (Figs. 35:9; 38:6) has a straight, medium-high neck (3 cm), a plain thickened rim and sometimes a decorated surface. It is common in Ḥazor IXA–VIII (Yadin et al. 1960: Pl. LIX:7; 1961: Pl. CLXXIX:12).

SJ IV: Storage Jars with a Short Neck.— The short-necked storage jar has a thickened rim (Fig. 35:11, 12) and sloping shoulders that join the body with a carination.¹¹ The ware of these jars is gritty, similar to the ‘torpedo’ jar.

Impressed and Incised Storage-Jar Handles.— Among the storage-jar handles with ‘potters’ marks, one example has three circular impressions probably made with a reed (Fig. 36:7); another handle bears an incised grid (Fig. 37:7). Incised storage-jar handles are very common during Iron II throughout Israel (cf. Ḥazor VA–IV: Yadin et al. 1960: Pl. CII). On a more local note, reed-impressed storage-jar handles, identical to the example here (Fig. 36:7), are known in the Iron II Stratum IV at Tel Qedesh (Stern and Beit-

Arieh 1979: Fig. 11:7, 8) and the Iron I site of Tel ‘En Zippori (Dessel 1999: Fig. 12). Thumb impressions on handles are also known from this stratum.

Holemouth Jars

The small holemouth jars have a thickened, sloping rim (Figs. 32:12; 38:12) or a ledge rim (Fig. 38:11) and a cylindrical body. Similar holemouth jars are known from the ninth–eighth centuries BCE in the Jezreel Valley at Tel Qiri VI–V (Ben-Tor 1987: Figs. 9:6; 22:16) and Yoqne‘am (Ben-Tor and Rosenthal 1978: Fig. 12:7). This vessel type continues into the Persian period and is present in Stratum II (Fig. 42:1–6).

A unique holemouth jar of large proportions (Fig. 35:13) has a wide mouth, a simple rolled rim and was handmade, as is evident from the uneven walls and the signs of smoothing on the interior. No identical vessel is found in excavation reports for this apparently local vessel type. It is possible that it is functionally related to other wide-mouthed holemouth jars with handles found in Ḥazor VIII and VI (Yadin et al. 1960: Pl. LIX:1, 2; 1961: Pl. CLXXXVI:1).

Small Jars

This jar type has a globular body, a thickened rim and a high straight neck with a ridge in the middle from which two handles are drawn to the shoulders (Fig. 36:1). The handles have a triangular cross section. This small jar is comparable in dimensions and form to several different vessel types: ridged-neck jugs and small jars of the tenth century BCE (Megiddo VA—Lamon and Shipton 1939: Pl. 19:105–109; Loud 1948: Pl. 89:1, 2) and larger storage jars with three handles and a spout (Ḥazor VII–V—Yadin et al. 1961: Pls. CCXV:23; CCXXVIII:24, 25; Megiddo IV—Loud 1948: Pl. 91:5).

Jugs

Two jugs were uncovered in Area A. These jugs have simple pinched rims; one jug has a wide straight neck (Fig. 32:19), the second has

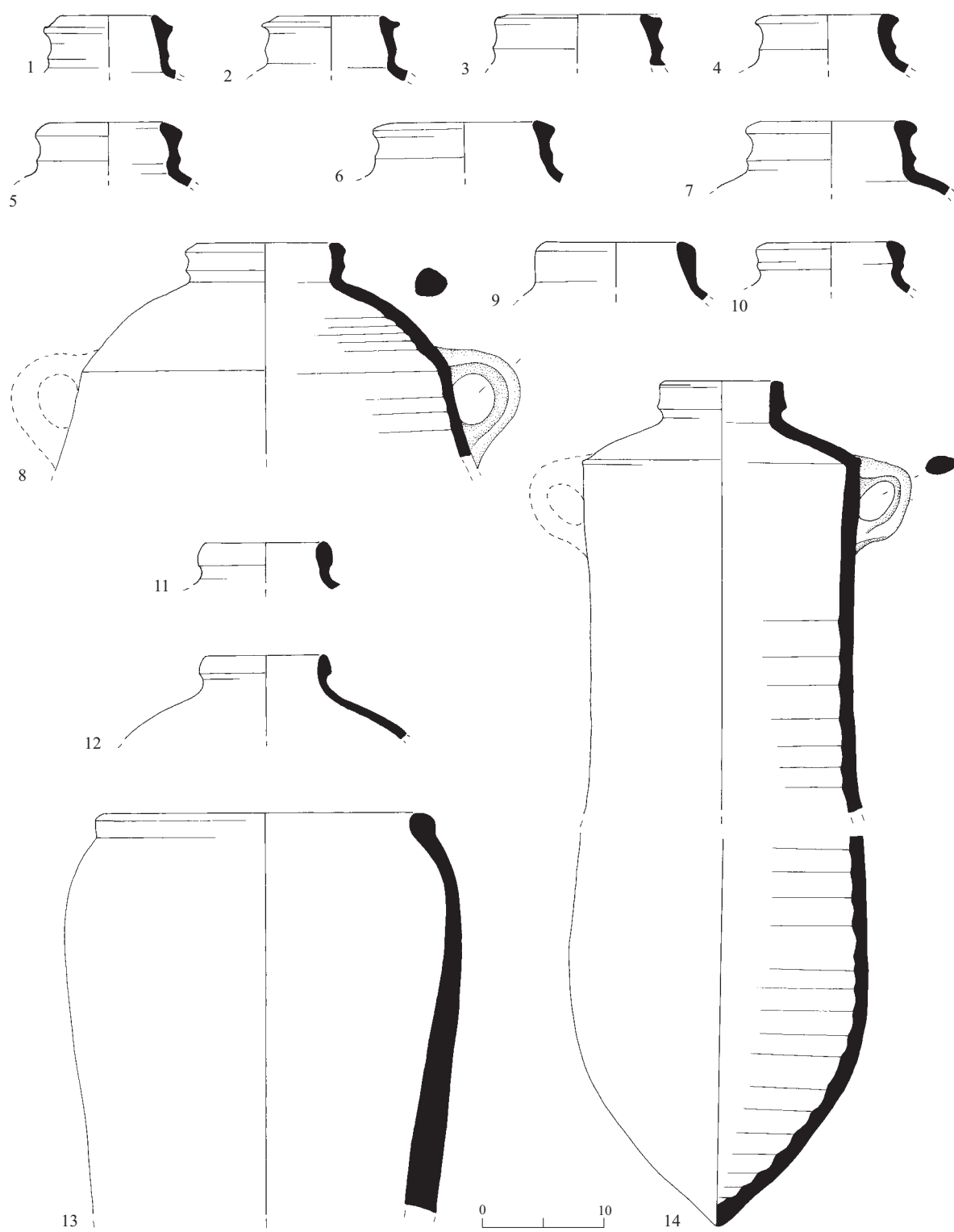


Fig. 35. Area C, Stratum III pottery: storage jars from the four-room house.

◀ Fig. 35

No.	Locus	Reg. No.	Description
1	243	1699/2	Red-brown clay, dark gray core; white and dark gray grits; metallic ware
2	228	1835	Dark brown clay, dark gray core; white and dark gray grits; metallic ware
3	228	1802/4	Orange-brown clay; white and gray grits
4	228	1803/3	Light brown clay; white and gray grits
5	228	1803/4	Red-brown clay, dark gray core; white and dark gray grits; metallic ware
6	228	1803/1	Orange-brown clay; white and gray grits
7	228	1758/1	Light brown clay; white grits
8	243	1677	Light brown clay; white grits
9	243	1804/1	Red-brown clay; white and gray grits
10	243	1786/2	Brown clay; white grits
11	227	1781/2	Orange clay; many minute red grits
12	229	1703	Orange clay ext., dark gray int.; many minute white and red grits
13	227	1688	Orange clay; white, gray and red grits
14	243	1759	Orange clay; many minute white and red grits

a flaring neck (Fig. 32:20). Similar jugs, with or without the pinched mouth, are common throughout the ninth and eighth centuries BCE, as in Ḥazor Strata VIII–VA (Yadin et al. 1960: Pls. LVIII:13–14, LXIV:18, 19; 1961: Pls. CLXXV:1, 2; CCXXVIII:2, 3).

Juglets

The juglets at Ḥorbat Malṭa can be separated into two types: dipper juglets and smaller container juglets.

JT I: Dipper Juglets.— These juglets (Fig. 36:2, 3, 5, 6) are all variations of the typical dipper juglets with a cylindrical body, a straight neck and a handle from rim to shoulder. No complete examples were found at the site. One of the juglets (Fig. 36:6) has a slight carination at the joint between the neck and the shoulders. The dipper juglets have either a plain or trefoil mouth (Fig. 37:2); it is impossible to determine whether any of the other juglets at Ḥorbat Malṭa had a pinched rim due to their incomplete preservation. The dipper juglets are fabricated of a plain undecorated ware. Similar juglets are known from Ḥazor VIII–V (Yadin et al. 1960: Pls. LVIII:5, 9; LXX:2, 3, 5; LXXXVI:7, 8,

11–13; 1961: Pls. CCXX:24–27; CCXXIV:5, 6; CCXXVIII:14–16).

Notable is an almost intact dipper juglet (Fig. 36:5), found in Backroom 229 of the four-room house, with an out-flared rim, a cylindrical, bag-shaped body and a characteristic pointed base that protrudes from the body at a distinct angle. The clay of this juglet is very gritty. This juglet type has many parallels at northern sites in Israel, such as Ḥorbat Rosh Zayit Area B (Gal and Alexandre 2000:175, Fig. VI.16), Megiddo III–II (Lamon and Shipton 1939: Pl. 1:10), Ḥazor VII–V (Yadin et al. 1960: Pl. LXXXVI:9, 14; 1961: Pls. CLXXX:16; CCXXIV:7) and Tel Kisan 5 (Briend and Humbert 1980: Pl. 43:8–8a), and apparently has affinities with the Phoenician coast (see Gal and Alexandre 2000:175 for discussion).

JT II: Container Juglets.— The container juglets are defined in the Ḥorbat Rosh Zayit typology as containers for small quantities of liquids and include there a number of subtypes (Gal and Alexandre 2000:64). The Ḥorbat Malṭa juglets have a handle from rim to shoulder with either a slipped (Fig. 36:4) or vertically-burnished surface (Fig. 38:19). Similar juglets are known in Ḥazor V (Yadin et al. 1960: Pl. C:14).

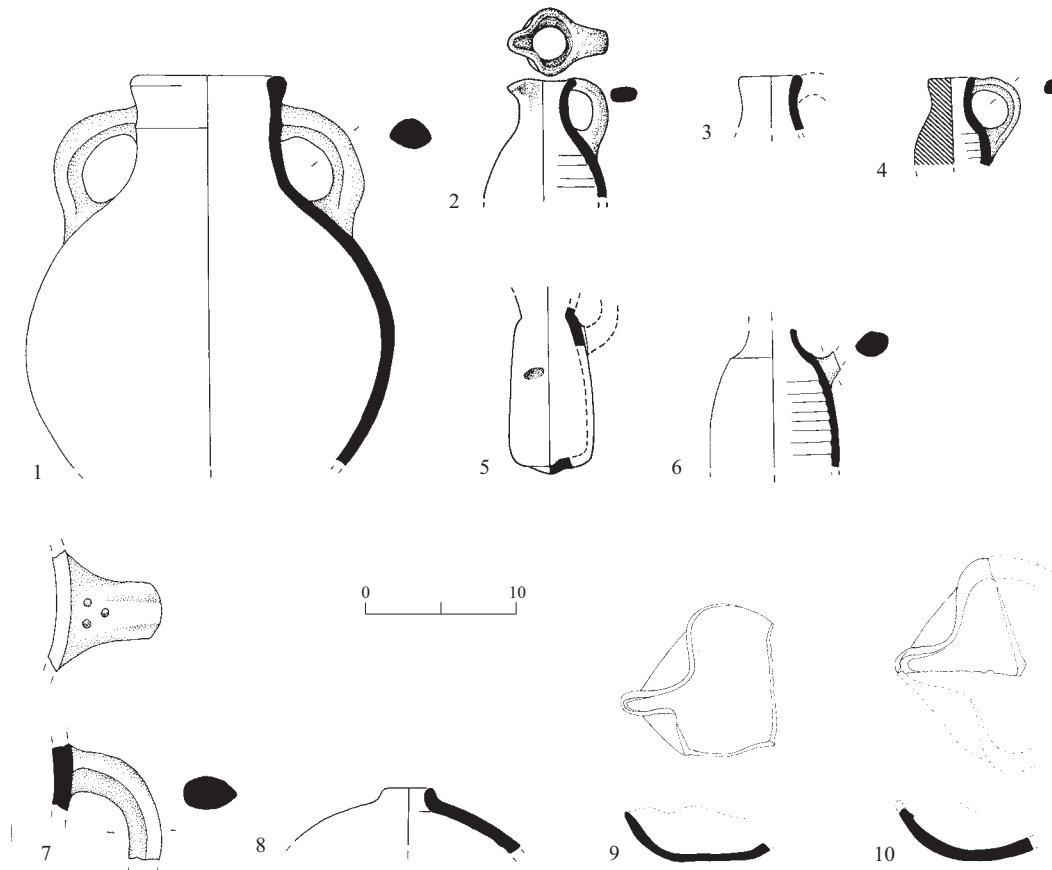


Fig. 36. Area C: Stratum III pottery from the four-room house.

No.	Vessel	Locus	Reg. No.	Description
1	Storage jar	229	1689	Orange-brown clay; white, gray and red grits
2	Juglet	243	1738	Brown clay; dark gray grits
3	Juglet	243	1631/5	Light brown clay; fine dark gray grits
4	Juglet	274	1793/2	Light orange-brown clay; fine white and red grits; traces of red slip on ext.
5	Juglet	229	1686	Orange clay; minute white grits
6	Juglet	229	1553	Reddish brown clay; red and dark gray grits
7	Storage jar handle	220	1567	Brown clay; white and gray grits
8	Unidentified	229	1654/1	Orange-brown clay; white grits; traces of soot on int.
9	Lamp	229	1664	Red-brown clay; white and gray grits; traces of soot
10	Lamp	243	1677/5	Orange-brown clay; white and gray grits; traces of soot

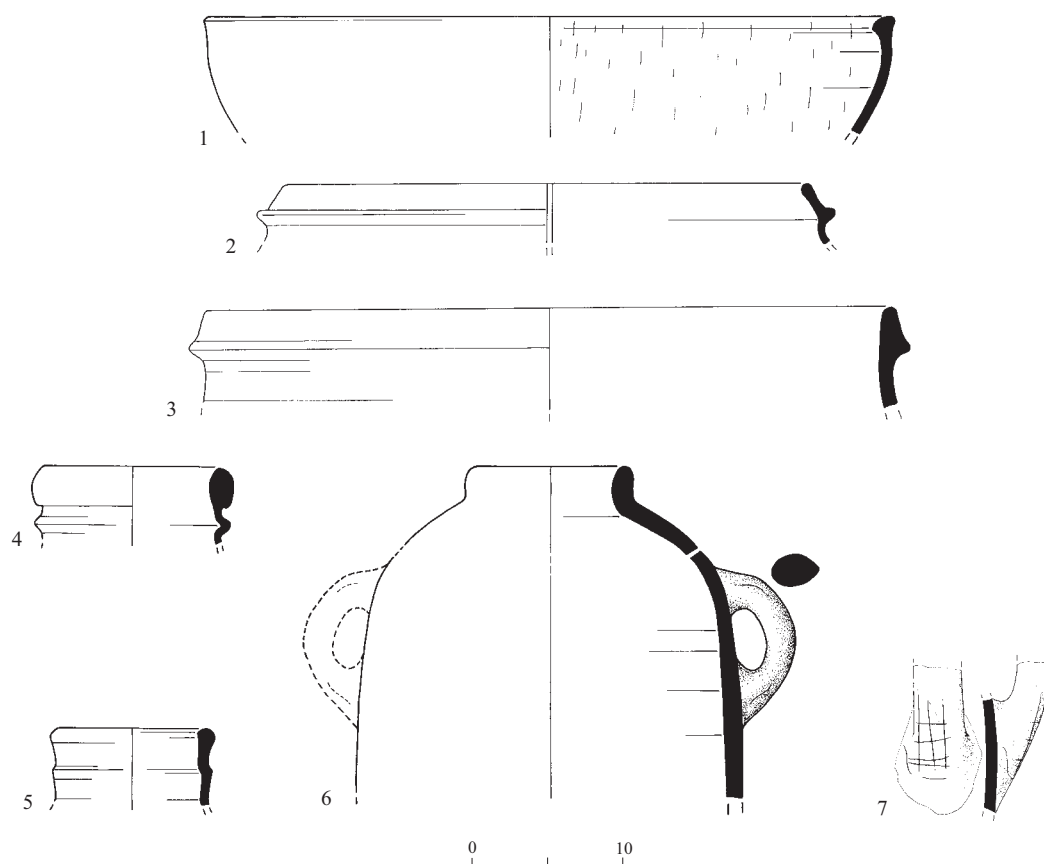


Fig. 37. Area C: Stratum III pottery from Pit 188.

No.	Vessel	Locus	Reg. No.	Description
1	Bowl	188	1401/1	Red-brown clay; small white grits; burnished int.
2	Cooking pot	188	1621/2	Dark red-brown clay; white grits
3	Cooking pot	188	1374/1	Dark red-brown clay; white grits
4	Storage Jar	188	1335/7	Dark gray clay; metallic ware
5	Storage jar	190	1334/8	Orange clay; gray grits
6	Storage Jar	188	1401/2	Reddish clay; white and red grits
7	Storage jar (handle)	188	1374	Light brown clay; white grits; incised marks

Unidentified Closed Vessel

This vessel (Fig. 36:8), represented by a single sherd, has a very small opening with soot near the rim. Although the form and function of this vessel is unclear, the soot near the rim suggests that it was used for lighting purposes.

Lamps

The small number of lamps are of the common Iron Age open type with a flat (Fig. 36:9) or rounded (Fig. 36:10) base and a simple pinched nozzle. At Ḥorbat Rosh Zayit this lamp type also functioned as a lid for storage jars upon

which a dipper juglet was probably placed (Gal and Alexandre 2000:67).

Imports

Only two imported sherds are attributed to the Stratum III assemblage; both are Cypriote imports.

Black-on-Red Ware.— A sherd of a Black-on-Red rounded bowl (Fig. 38:17) was found in Pit 131 in Area C. The bowl has a red-burnished slip with black painted bands. Deep rounded bowls of this type were found in the Ḥorbat Rosh Zayit Fort, Strata IIa–b, dated to the late tenth–early ninth centuries BCE (Gal and Alexandre 2000:73, Fig. III.77:16).

Varia

A wide, flat strap handle with black paint over a white slip (Fig. 32:21) is most likely from a Cypriote closed vessel such as a jug or an amphora, similar to that found at Ḥorbat Rosh Zayit (Gal and Alexandre 2000: Fig. III.73:2).

Discussion of Stratum III Pottery

The Stratum III pottery assemblage is comprised mostly of local domestic types, with only two sherds of finer imported ware. This assemblage dates to Iron II and has close affinities with other northern Israel assemblages, primarily Ḥorbat Rosh Zayit II–I, Ḥazor VII–V and Megiddo H-3(IVA).

The pottery assemblage from the four-room house in Area C contains both early forms predominant in the ninth century BCE, such as the ridged-neck storage jar and triangular-rim cooking pots, and later forms indicative of the eighth century BCE, such as the ‘torpedo’ jar and ridged-rim cooking pots. These last two types, when found together, are clear indicators of the eighth century BCE (cf. Ḥorbat Rosh Zayit I, Ḥazor VI–VA). As the excavations in the four-room house were unable to separate primary and secondary depositions, we can only state that the structure spanned the ninth–eighth centuries BCE. The pottery assemblages

from the surrounding loci, in both Areas C and A, have a corresponding chronological span. However, there are specific loci, for example the bell-shaped Pit 188, which contained only early types, such as the ‘hippo’ storage jar, the elongated storage jar and the triangular-rim cooking pot. Thus, it is possible to date the initial occupation of the Iron II settlement at Ḥorbat Maṭta to the ninth century BCE with continuous occupation until the site was abandoned during the eighth century BCE.

Corresponding pottery assemblages in the nearby Jezreel Valley, with both ninth and eighth century types, are found at Tel Qadesh IV¹³ (Stern and Beit-Arieh 1979:6–8) and Megiddo H-3 (IVA) (Finkelstein, Zimhoni, and Kafri 2000:310).

Stratum II: Persian Period

The Stratum II pottery finds from all the excavation areas are presented here as a single assemblage due to their homogenous character and the limited architectural units. The pottery originates from floor segments and well-stratified pits. The rims from these loci were recorded for quantitative analysis (Table 9; see discussion in Stratum III above). The figures and discussion are both arranged in a typological framework.

Table 9. Stratum II Vessel-Type Frequencies

Vessel	N	% of Total
Small bowls	13	9.0
Large heavy bowls	17	11.8
Kraters	8	5.5
Cooking pots	10	6.9
Storage jars	72	48.6
Small jars	2	1.4
Amphoriskoi	15	10.5
Jugs	5	3.5
Juglet	1	0.7
Lamps	3	2.1
<i>Total</i>	<i>145</i>	<i>100.0</i>

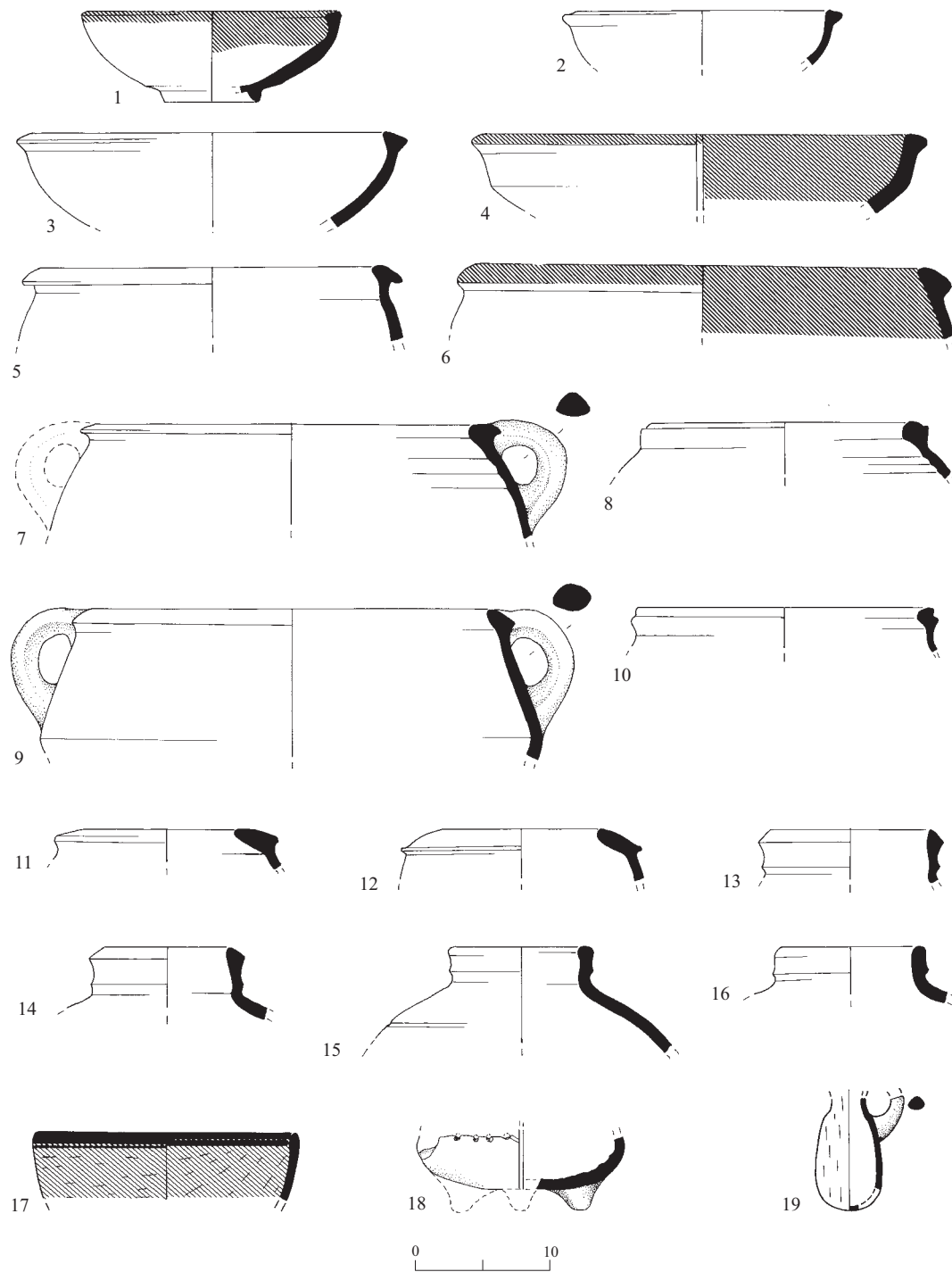


Fig. 38. Area C: Stratum III pottery from the area south of the four-room house.

◀ Fig. 38

No.	Vessel	Locus	Reg. No.	Description
1	Bowl	203	1535/1	Orange-brown clay; red slip on int. and rim
2	Bowl	203	1598/3	Red-brown clay
3	Bowl	203	1549/6	Red-brown clay; slight traces of red slip on rim
4	Bowl	203	1418/5	Orange-brown clay; gray grits; red slip on int. and rim
5	Krater	203	1373	Light brown clay
6	Krater	203	1519/3	Light orange-tan clay; gray grits; red slip on int. and rim
7	Krater	203	1518/7	Red-brown clay
8	Krater	203	1518/9	Light brown clay
9	Cooking pot	203	1418/12	Red-brown clay; calcite grits
10	Cooking pot	203	1549/21	Red-brown clay; calcite and gray grits
11	Storage jar	203	1518/4	Red-brown clay
12	Storage jar	203	1516/2	Light brown clay; gray grits
13	Storage jar	203	1549/13	Dark red-brown clay; dark gray core
14	Storage jar	203	1418/4	Dark red-brown clay; dark gray core; large white grits
15	Storage jar	203	1549/5	Light tan clay; greenish ext., reddish int.; minute white grits
16	Storage jar	203	1598/1	Light tan clay; minute white grits
17	Bowl	131	1087/12	Light brown clay; red-burnished slip, black painted bands
18	Censer bowl	249	1799/3	Brown clay; white grits
19	Juglet	223	1685	Light brown clay; gray grits; vertical burnish ext.

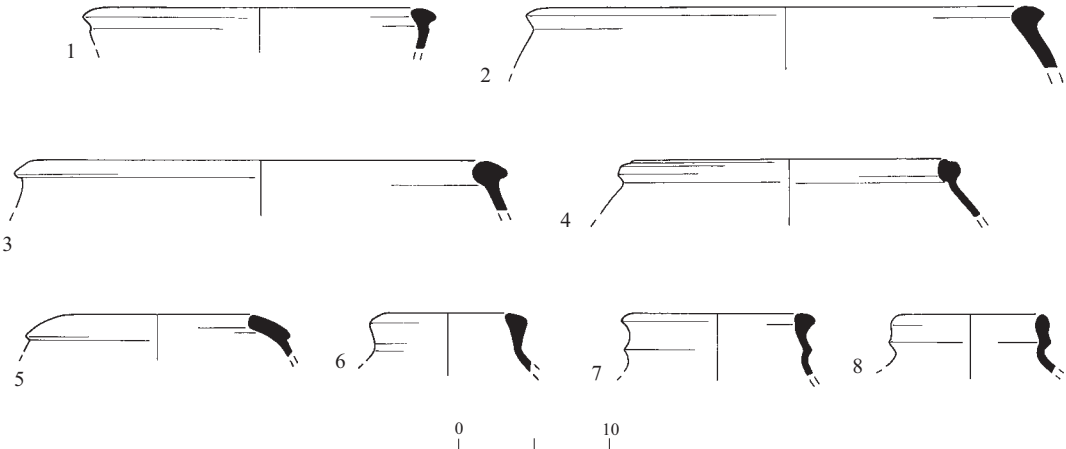


Fig. 39. Area F: Stratum III pottery.

◀ Fig. 39

No.	Vessel	Locus	Reg. No.	Description
1	Bowl	168	1125/4	Orange-brown clay; small white and gray grits
2	Krater	168	1305/4	Light brown clay; gray grits
3	Krater	168	1125/7	Orange-brown clay; small white and gray grits
4	Cooking pot	168	1207/5	Red-brown clay; many small white grits
5	Holemouth	168	1176/2	Orange-brown clay; small white and gray grits
6	Storage jar	168	1245/2	Red-brown clay; small white and gray grits
7	Storage jar	168	1222/4	Orange-brown clay; small white and gray grits
8	Storage jar	168	1207/8	Gray clay; many minute white grits; metallic ring

The pottery discussion follows the typology initially established by Stern (1982) and further refined in subsequent excavation reports (e.g., Stern 1995b). When applicable, a reference is made to a specific type from Stern's (1982) typology.

The comparative material for the pottery assemblage derives primarily from sites along the coast or in the adjacent valleys where the bulk of Persian-period excavations have been conducted, e.g., Tel Mevorakh, Apollonia, Tel Kisan, Tel Qedesh (Abu Qudeis), Tel Mikhal and Tel Dor.

Small Bowls

The small bowls represent 43.6% of the total bowls in Stratum II. Stern (1995b:51) has noted the poor representation of small bowls in Persian-period assemblages, although at Ḥorbat Malṭa they are almost equal in number to the larger heavy bowls ('mortaria'—56.7% of the total bowls). There are three main types of small bowls with variations within each type.

B I: Carinated Bowls.— These bowls (Fig. 40:1–3) have a carination either mid-body or in the upper third of the vessel. One of the bowls (Fig. 40:1) is fabricated from a finely levigated clay, has horizontal burnishing on the exterior and is well fired. Similar bowls are known from Tel Mevorakh IV–VI (Stern 1978: Fig. 4:11, 12) and Tel Kisan 3 (Briend and Humbert 1980: Pl. 20:4, 10).

B II: Bowls with Rounded Walls.— These bowls (Fig. 40:4, 5) have a thickened, inverted or everted rim, rounded walls and red slip on the interior surface. They are very similar to the Iron II bowls from Stratum III (e.g., Fig. 33:6), although the ware of the Persian bowls is coarser and the red slip is not as evenly applied.

B III: Bowls with a Ledge Rim.— These bowls (Fig. 40:6–8) have a sharply everted, folded ledge rim. One example has a burnished interior (Fig. 40:6). Such bowls are known from Dor 7/9 (Stern 1995b: Type A3, Fig. 2.1:5) and Tel Kisan 3 (Briend and Humbert 1980: Pl. 20:8, 9, 13, 14).

Large Heavy Bowls

This is the most common bowl type at most Persian-period sites to the extent that they are used as a *fossile directeur* of the period. These bowls are frequently referred to as 'mortaria' (grinding bowls—see Stern 1995:53–55). In the present study the term 'heavy bowls' is employed, following the recent overview and typology of this bowl type by Tal (1999:97–99), based on the pottery assemblage from Apollonia. This term incorporates the multi-functional character of these vessels, as opposed to an exclusive function as a 'grinding bowl' or 'mortarium'. It should be noted that at Ḥorbat Malṭa there are fewer stone grinding bowls in Stratum II than in Stratum III, although the

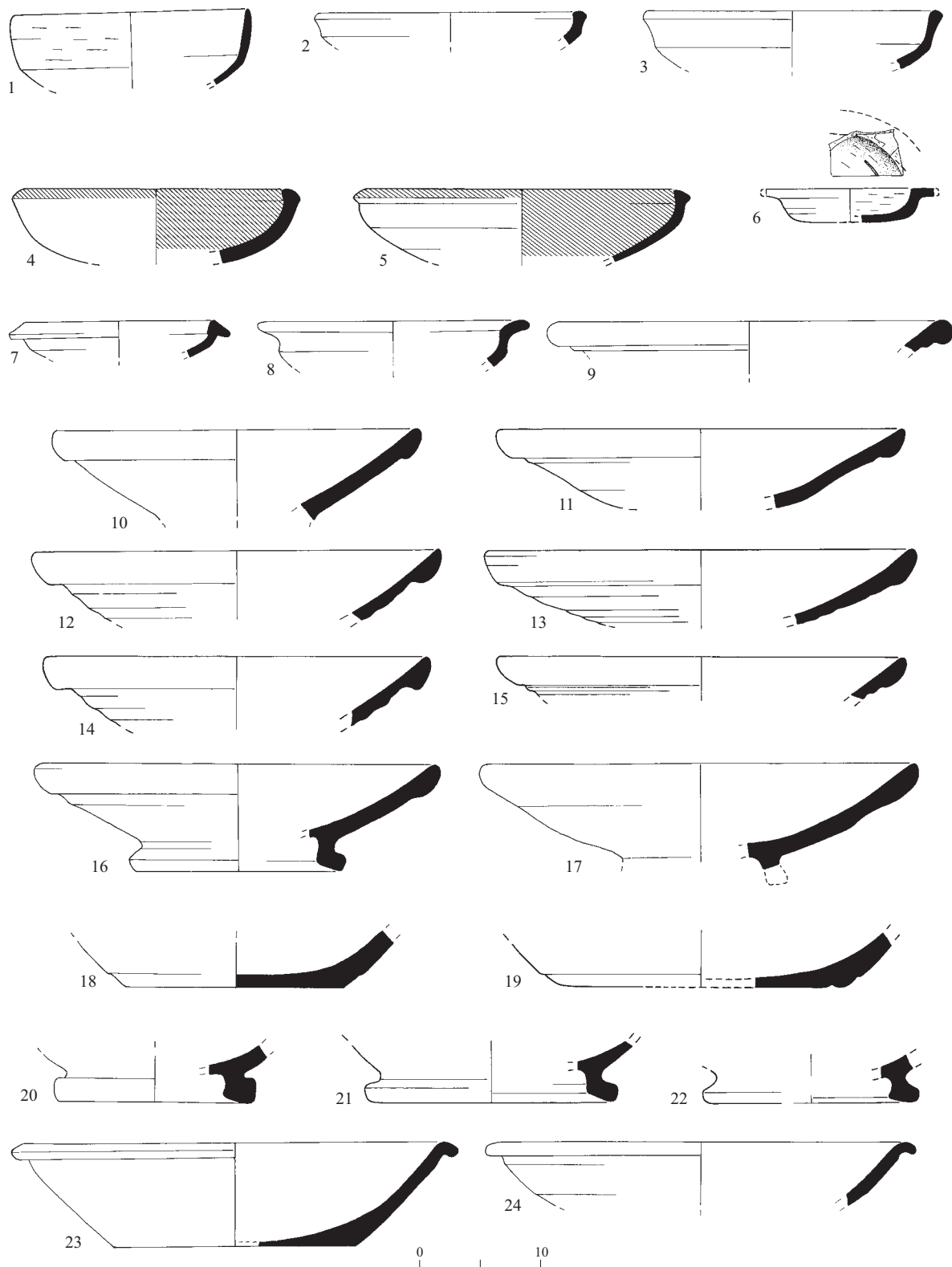


Fig. 40. Stratum II pottery: small bowls and heavy bowls.

◀ Fig. 40

No.	Vessel	Locus	Reg. No.	Area	Description
1	Bowl	151	1143/4	E	Buff clay; gray grits; horizontal burnishing on ext.
2	Bowl	178	1399/3	C	Red-brown clay, gray core; small white and gray grits
3	Bowl	250	1746/1	C	Red-brown clay; small white and gray grits
4	Bowl	191	1285/15	E	Orange-brown clay; white and gray grits; red slip on int. and rim
5	Bowl	191	1285/4	E	Brown clay; white calcite grits; red slip on int.
6	Bowl	152	1113/3	E	Orange-brown clay; red grits
7	Bowl	W140	1107/8	D	Light orange-brown clay; white grits
8	Bowl	W140	1218/1	D	Brown clay
9	Heavy bowl	171	1184/4	B	Reddish-orange clay; minute gray and white grits; white wash on int.
10	Heavy bowl	126	1321/6	C	Pale orange clay; small gray and white grits
11	Heavy bowl	151	1143/2	E	Light tan clay; many small red, gray and white grits; petrographic Group D
12	Heavy bowl	165	1450/5	C	Reddish-yellow clay; minute gray and white grits
13	Heavy bowl	151	1389/4	E	Orange-red clay; small white and shiny grits; medium gray and red grits
14	Heavy bowl	163	1361/3	B	Orange-red clay; small white and shiny grits; medium gray and red grits; petrographic Group D
15	Heavy bowl	124	1254/1	B	Pale orange clay; small gray and white grits; traces of slip on int.
16	Heavy bowl	178	1380/10	C	Light orange-brown clay; many small gray, white and red grits; medium white and gray grits; petrographic Group D
17	Heavy bowl	171	1215/1	B	Light orange-brown clay; many small gray, white and red grits; medium white and gray grits; petrographic Group D
18	Heavy bowl (base)	203	1519	C	Reddish clay; few white and gray grits
19	Heavy bowl (base)	124	1365/6	B	Reddish-brown clay; few small white and gray grits
20	Heavy bowl (base)	171	1348/6	B	Pale brown-gray clay; small white and gray grits
21	Heavy bowl (base)	187 or 163?	1267/2	B	Light orange-brown clay; many small gray, white and red grits; medium white and gray grits
22	Heavy bowl (base)	124	1340/1	B	Light brown clay; small red, gray and white grits
23	Heavy bowl	250	1700/1	C	Brown clay; minute gray, red and shiny grits; petrographic Group D
24	Heavy bowl	126	1350/1	C	Light brown clay; minute gray grits.

number of basalt lower grinding slabs is almost equal for the two strata.

A provenance study of these bowls from Horbat Malta revealed that all of the sampled heavy bowls belong to petrographic Group D, which originated in western Cyprus or the Aegean (see Gorzalczany, this volume). The implications of this study will be discussed in the summary below.

B IV: Coarse Heavy Bowls.— The large, coarse, heavy bowls are the single most common bowl type in Stratum II (46.7% of all bowls). The sides of the bowls vary from smooth (Fig. 40:10, 11) to wavy or rippled (Fig. 40:12–17) and the rim is externally thickened. The bowls have either a flat base (Fig. 40:18, 19; Stern Type 5a) or a high ring base (Fig. 40:16, 17, 20–22; Stern Type 5b); both base types were

found in Stratum II. The ware of these bowls is usually coarse with a high density of both basalt and other stone inclusions. One bowl (Fig. 40:9) has a whitish wash/slip on the interior surface. There is a general consensus that these bowls were mold-made (Tal 1999:97).

The functional aspects of this bowl type have been extensively discussed. Whether they were used exclusively as grinding bowls (Bennett and Blakely 1989:201–203) or also for a variety of functions (Tal 1999:97) is inconclusive. The high frequency of such bowls suggests they were a key vessel for preparing and serving food.

As to the origin and chronology of the heavy bowls, Stern (1982:96–98) identifies the bowls with the high ring base as a later local creation (fifth–fourth centuries BCE), which developed from the earlier bowls with the flat base (seventh–sixth centuries BCE onward), themselves local imitations of a foreign prototype from the west, probably eastern Greece. At many sites both bowl types appear together, e.g., Dor 6b (Stern 1995a:53–55, Fig. 2.26:7, 10, see references p. 53). In the Persian sequence at Apollonia, flat bases and ring bases were found in the earlier Stratum II, while in the later Stratum I only ring bases were recovered (Tal 1999:124). At Ḥorbat Maṭṭa both types appear together in L124 of Area B.

B V: Fine Heavy Bowls.— A variant of the typical heavy bowl is distinguished by both form and ware. Two variants (Fig. 40:23, 24) are fabricated of much finer, well-levigated clay with very minute inclusions. The walls are slanting; the rim is rounded and out-turned with a groove below it, and the base is flat. The base of the restored bowl in Fig. 40:23 tapers in width toward the center.

The appearance of numerous variants of large heavy bowls alongside the more dominant coarse bowls has been noted at other sites such as Apollonia (Tal 1999:98–99, 124, 154, Figs. 4.11:17–21; 4.21:16–19; 4.35:19, 20).¹³

Kraters

The common krater type (Fig. 41:1–4) at Ḥorbat Maṭṭa has an elongated upright neck and handles from the rim to the shoulder (Stern 1982:99, Type 2). There are slight variations in the rim and angle of the neck within this type. One of the kraters (Fig. 41:3) originated from the northern coastal region (petrographic Group C; see Gorzalczy, this volume). Similar kraters are known from Apollonia on the coast (Tal 1999: Fig. 4.22:6–10) and Tel Qiri (Avisar 1987: Fig. 3:13–16) and Tel Yoqne‘am (Ben-Tor, Portugali and Avisar 1983: Fig. 9:5, 6) in the Jezreel Valley. At Ḥorbat Maṭṭa kraters represent only 5.5% of the total assemblage.

Cooking Pots

The cooking pots (Fig. 41:5–9) comprise 6.9% of the total assemblage and are characterized by wide necks, often with a slight outward angle, an everted ledge rim, a globular body and a convex base. The friable ware of these pots is based on *ḥamra* soil that is characterized by a reddish brown color. One of the cooking pots (Fig. 41:7) is extremely small in size compared with the other vessels at the site and has a concave, elongated neck with a thickened rim. Another variation (Fig. 41:9) has a straight neck and simple rounded rim and probably also had handles (cf. Ḥazor II: Yadin et al. 1961: Pl. CXCI:15). These pots date from the fifth to the fourth centuries BCE (Stern 1982:100; 1995a:55, Fig. 2.4:5–14) and are found at most Persian-period sites, e.g., Dor (Stern 1995a: Fig. 2.4:5–11). Note that no lids were found at Ḥorbat Maṭṭa; lids appear in the fourth century (Stern 1995b:55–58).

The petrographic analysis of two of the cooking pots indicates that neither were of local ware (petrographic Group A; see Gorzalczy, this volume) and originated in the coastal area.

Storage Jars

The storage jars represent 49.6% of the pottery assemblage included in the quantitative study.

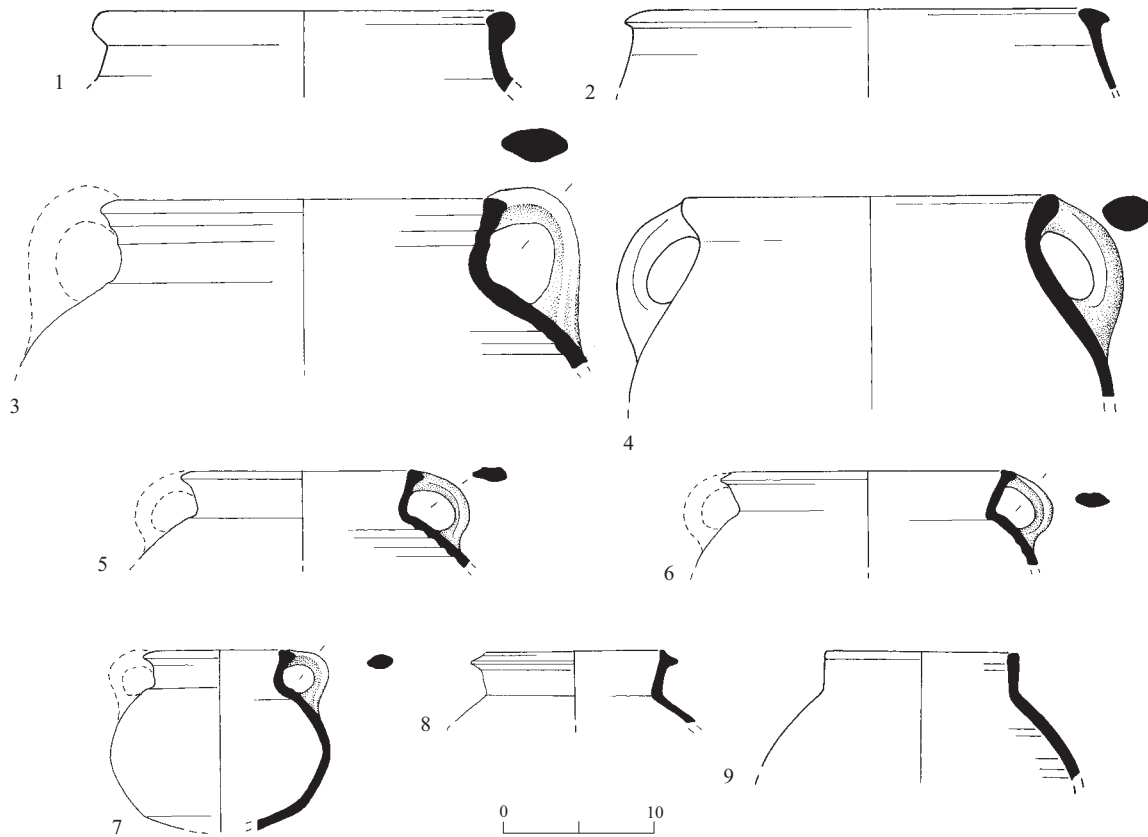


Fig. 41. Stratum II pottery: kraters and cooking pots.

No.	Vessel	Locus	Reg. No.	Area	Description
1	Krater	130	1086/4	B	Light brown clay; small gray grits
2	Krater	152	1177/1	E	Reddish-brown clay; small gray grits
3	Krater	250	1717/2	C	Buff clay; minute white grits; petrographic Group C
4	Krater	165	1450/1	C	Light brown clay; small white, red and gray grits
5	Cooking pot	205	1507/1	C	Red clay; small white grits.
6	Cooking pot	171	1348/1	B	Brown clay; small gray grits; petrographic Group A
7	Cooking pot	235	1516/4	C	Brown clay; small gray and white grits; petrographic Group A
8	Cooking pot	171	1216	B	Dark red-brown clay; small gray grits
9	Cooking pot	163	1361	B	Dark brown clay; shiny white grits

Holemouth Jars.— These vessels (Fig. 42:1–6) have a wide, flat, in-turned rim without a neck. They are similar to the Iron Age holemouth jars at Ḥorbat Malṭa (Fig. 38:11, 12), although the ware of the Stratum II vessels is coarser than that of the Stratum III vessels. Both vessels included in the provenance study were locally made (petrographic Group B; see Gorzalczany, this volume). These vessels date to the fifth–

fourth centuries BCE (Stern 1982:103, Type C) and are known at Tel Qadesh III (Stern and Beit-Arieh 1979: Fig. 8:11) and Tel Mevorakh IV–VI (Stern 1978: Fig. 8:17–19).

SJ I: Storage Jars with a Bag-Shaped or Cylindrical Body and a Thickened, Rounded Rim.— These storage jars (Fig. 42:7–10) have a short cylindrical neck, a thickened, rounded

rim, sloping shoulders and either a bag-shaped or a narrow, cylindrical body. A few of these jars have a ridge at the base of the neck (Fig. 42:9, 10) and one example is very warped (Fig. 42:10). Both of these traits are common on this vessel type at other sites (e.g., Tel Mikhal—Singer-Avitz 1989:122). The handles extend from the shoulders to mid-body and it is probable that an incised handle (Fig. 44:3) was from a jar of this type. The two jars of this type that were included in the provenance study were locally made

(petrographic Group B; see Gorzalczy, this volume).

These vessels (Stern 1982:104–105, Type F) date from the end of the sixth to the fourth century BCE (Stern 1995b:58) and are known from most Persian-period sites, e.g., Tel Mevorakh IV–VI (Stern 1978: Fig. 7:1–4). This storage-jar type is especially common at Tel Mikhal XI–IX, where it is more frequent at the beginning of the Persian period (Singer-Avitz 1989:116, 122, Fig. 9.3:2–6, ‘bag-shaped’ Type 2).

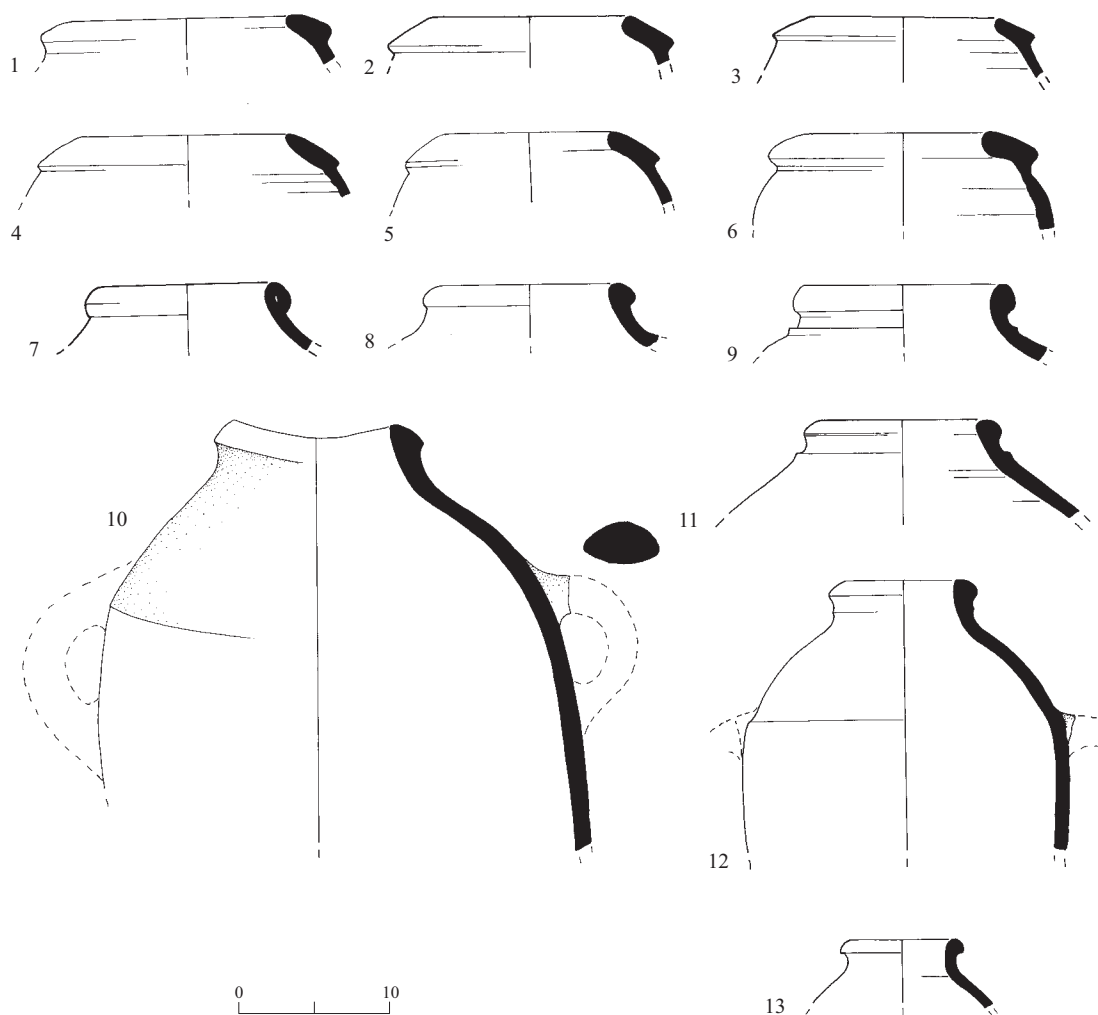


Fig. 42. Stratum II pottery: holemouth jars, thickened-rim storage jars and small jars.

◀ Fig. 42

No.	Vessel	Locus	Reg. No.	Area	Description
1	Holemouth	126	1081/2	C	Reddish light brown clay; medium and large gray and white grits
2	Holemouth	124	1117/1	B	Light brown clay; small gray grits
3	Holemouth	124	1331/2	B	Orange-brown clay; medium white grits
4	Holemouth	178	1380/2	C	Reddish clay; small gray and white grits; petrographic Group B
5	Holemouth	178	1405/3	C	Reddish-brown clay, dark gray core; small gray and white grits; petrographic Group B
6	Holemouth	178	1410/8	C	Light reddish clay; small and medium gray grits
7	Storage jar	124	1365/5	B	Gray clay; small red and gray grits
8	Storage jar	126	1093/1	C	Light gray clay, gray core; medium white grits
9	Storage jar	171	1378/2	B	Light brown clay; small gray and white grits
10	Storage jar	178	1400/1	B	Light orange-brown clay; red and gray grits; petrographic Group B
11	Storage jar	W164	1165/2	C	Light brown clay, gray core; small gray grits; medium white and red grits
12	Small jar	126	1122/1	C	Orange clay; small white and gray grits; petrographic Group B
13	Small jar	179	1292/5	B	Light brown clay; small gray and white grits; petrographic Group B

SJ II: Flat-Shouldered Jars (Fig. 43).— The main features of this jar type are the broad flat shoulders set at a sharp angle to the wall, a wide mouth, a very short neck and a short straight rim. The body is either biconical (Type H6), dated to the sixth–fifth centuries BCE, or sack-shaped (Type H8), dated to the fifth–fourth centuries BCE (Stern 1995b:62). However, at Ḥorbat Malṭa this chronological distinction could not be utilized due to the fragmentary nature of the jars. One of the jars (Fig. 43:6) may have had a sack-shaped body, whereas another (Fig. 43:10) possibly had a biconical body, as it was found together in the same pit with an extremely pointed base (Fig. 44:5), which is typical of the biconical jars. A difference in the degree of carination of the shoulder might be indicative of the body types, i.e., the sharper carination (Fig. 43:8–10) is more typical of the biconical vessels while the less sharply carinated shoulder (Fig. 43:1, 3, 4) is typical of the sack-shaped vessels. If this distinction proves valid, then there are both biconical and sack-shaped storage jars at Ḥorbat Malṭa.

According to Stern, this is the “primary storage jar type” (Type H) found at almost all the Persian-period sites along the coast and in Galilee (1982:107–110, Figs. 147–155; 1995b: Figs. 2.7, 2.8).

Two examples of this type were included in the petrographic analysis (see Gorzalczany, this volume). One of the jars (Fig. 43:3) was locally made (Group B) while the other (Fig. 43:10) was imported from either western Cyprus or the Aegean (Group D).

SJ III: Basket-Handled Storage Jars.— No storage-jar rims could be definitely attributed to this type. The few extant handle sherds (Fig. 44:1, 2) indicate that these jars (Stern 1982:110–111, Type I) were poorly represented in the pottery assemblage of the site. One of these handles (Fig. 44:2) was included in the petrographic analysis, disclosing a western Cypriote or Aegean origin (petrographic Group D; see Gorzalczany, this volume).

Small Jars

A smaller type of jar (Fig. 42:12, 13) has an elongated neck with a thickened rim. A similar small jar is known from the early Persian Phase 6b/c at Dor (Stern 1995b: Fig. 2.22:5, 6).

Jugs

J I: Narrow-Necked Jugs.— The most well-preserved jug from Stratum II (Fig. 45:1) has a narrow cylindrical neck, a thick, flaring rim

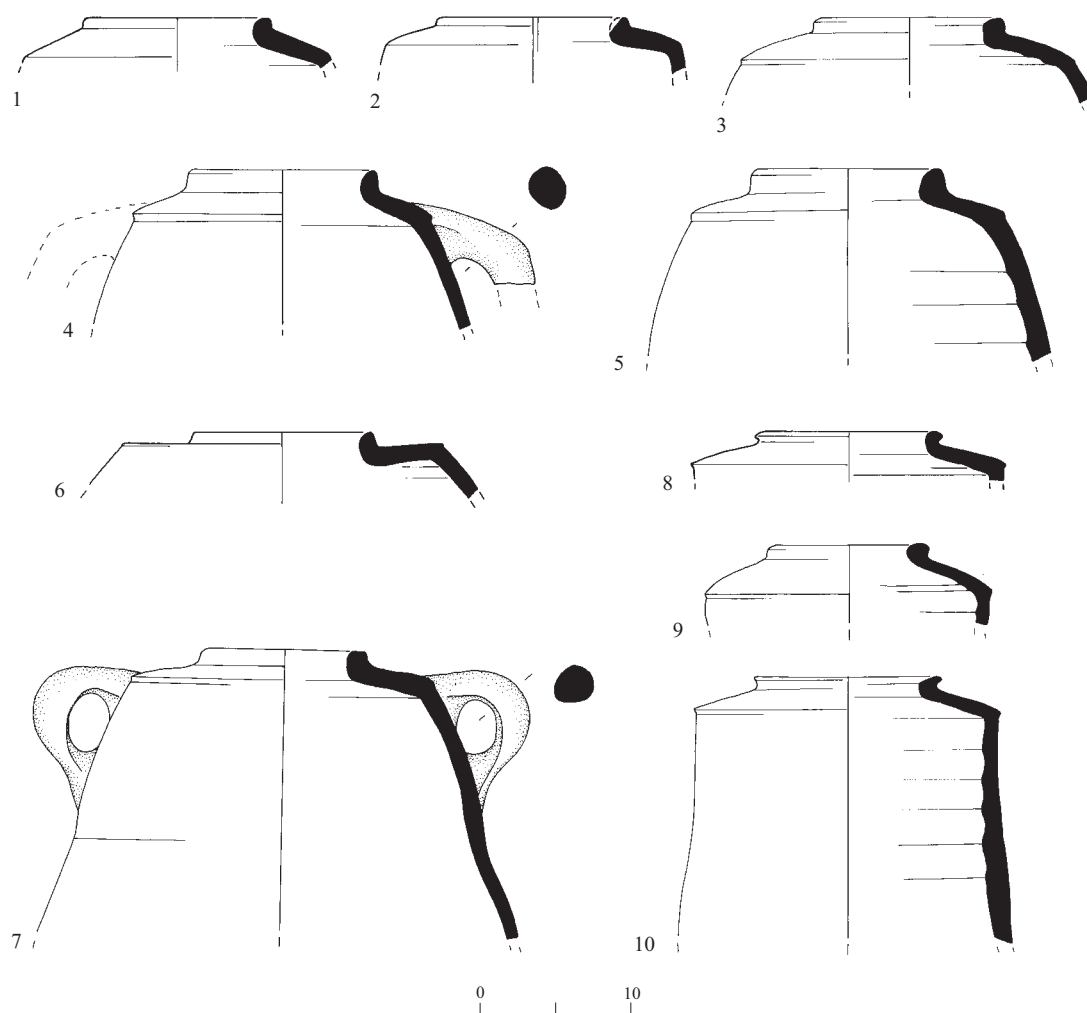


Fig. 43. Stratum II pottery: flat-shouldered storage jars.

No.	Locus	Reg. No.	Area	Description
1	126	1321/5	C	Pale brown clay; fine white grits
2	151	1143/9	E	Orange clay; minute red grits
3	235	1516/3	C	Pale yellow clay; small white grits; petrographic Group B
4	225	1727/4	C	Cream clay; small white grits
5	171	1387/1	B	Pale yellow clay; minute red and gray grits
6	178	1380/6	C	Pale yellow; minute red and gray grits
7	119	1163/5		Pale yellow clay; minute white and red grits
8	151	1359/13	E	Light brown clay; minute gray grits
9	153	1146/2	B	Orange clay; minute gray grits
10	235	1640/2	C	Orange-brown clay; small gray and red grits; petrographic Group D

and a globular body. This jug was locally made and is attributed to petrographic Group B (see Gorzalczy, this volume). Similar jugs are known at Qadum (Stern and Magen 1984: Fig. 8:6–9).

J II: Wide-Necked Jugs.— An additional jug (Fig. 45:2) has a wide cylindrical neck, an everted rim and a handle extending from below the rim to the shoulder (cf. Tel Kisan 3: Briend and Humbert 1980: Pl. 21:11; Tel Mevorakh:

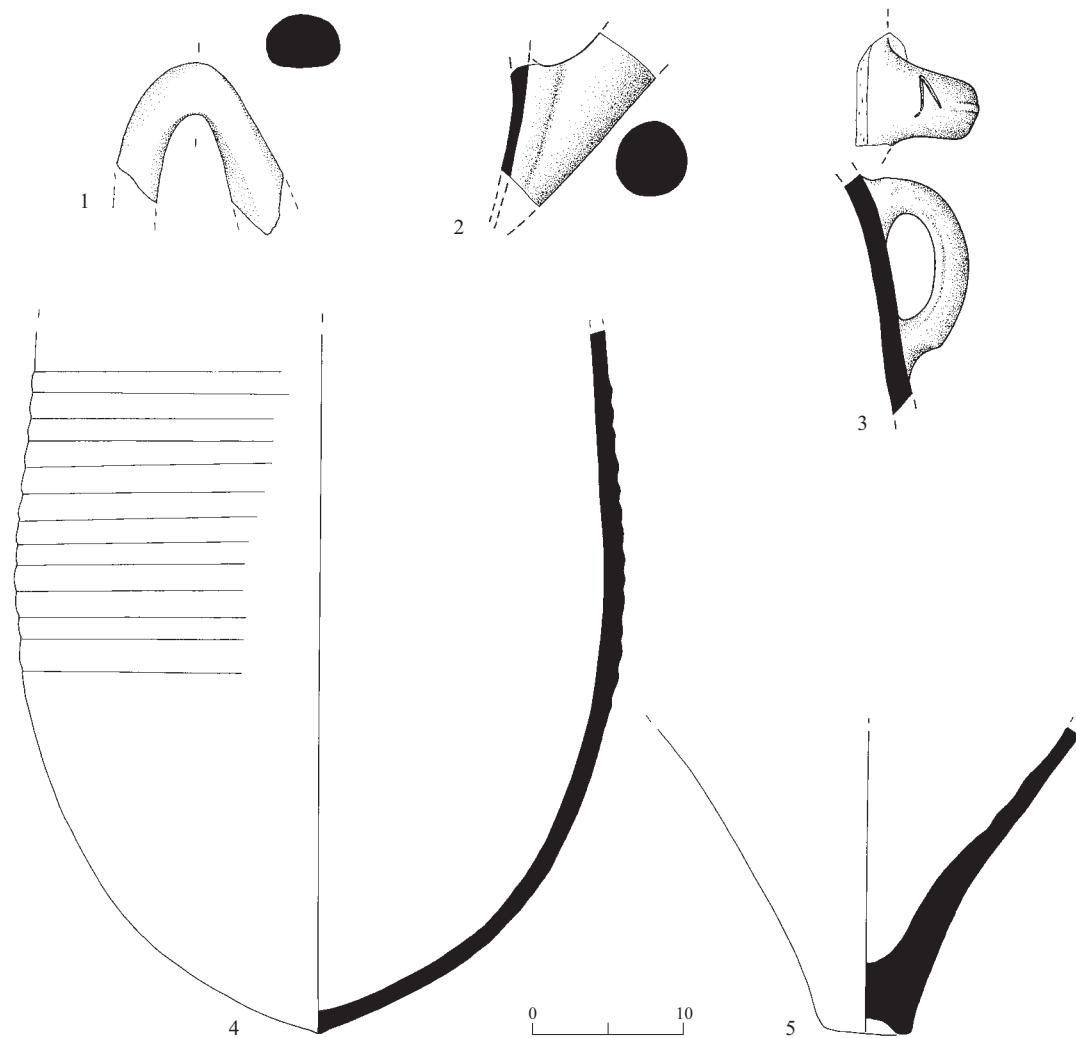


Fig. 44. Stratum II pottery: storage-jar handles and bases.

No.	Vessel	Locus	Reg. No.	Area	Description
1	Storage jar (handle)	111	1132/1	D	Orange-red clay; minute gray grits
2	Storage jar (handle)	161	1459/1	B	Yellowish brown clay; small gray grits; petrographic Group D
3	Storage jar (handle)	151	1358/6	E	Pale brown clay, gray core; medium white grits; incised lines
4	Storage jar (base)	178	1400	C	Buff clay; large white and gray grits; petrographic Group B
5	Storage jar (base)	235	1640/1	C	Light orange-brown clay, gray core; small red, gray white grits; medium white grits

Stern 1978: Fig. 9:1). A body sherd of another jug has red-brown painted bands (Fig. 45:3).

Juglets

Juglets were very rare at Ḥorbat Maṭṭa, represented by a single rim. Only the bases have been recovered, limiting our ability to define the exact type of the juglet, which is usually dependent on body form.

Jt I: Dipper Juglets.— The convex bases (Fig. 45:4–6) are probably from dipper juglets with a

sack-shaped body (Stern 1982:119, Type A1b; cf. Tel Mevorakh: Stern 1978: Fig. 9:9). One of these juglets was produced in the coastal area (petrographic Group C; see Gorzalczy, this volume). An additional dipper juglet type (Stern 1982: Type 2), with a small flat base, is also noted in the assemblage (Fig. 45:7; cf. Dor 5–6: Stern 1995b: Fig. 2.11:2, 3).

Jt II: Globular Juglets.— The flat disc bases (Fig. 45:8, 9) most likely belong to globular juglets (see Stern 1982:120, Type B2).

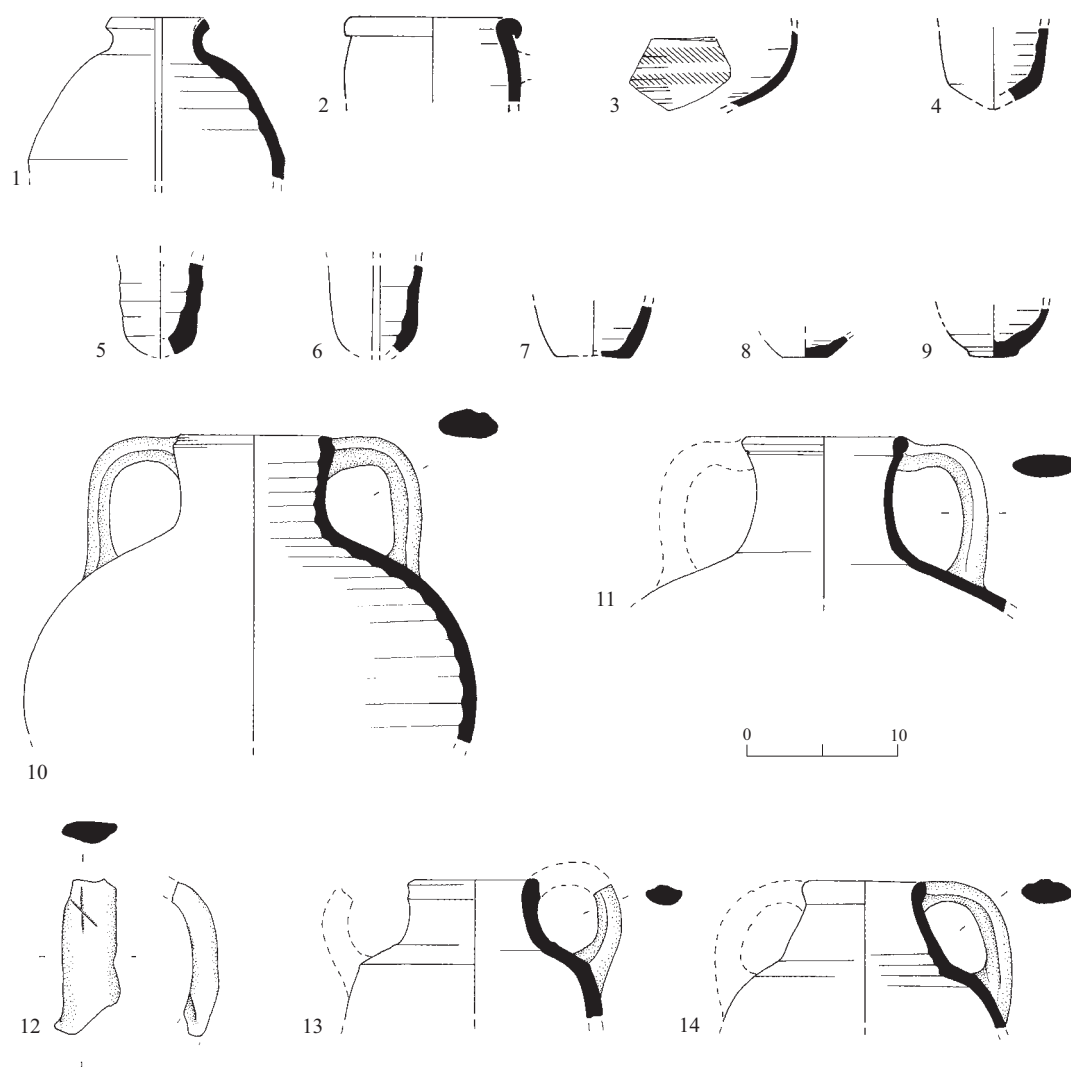


Fig. 45. Stratum II pottery: jugs, juglets and amphoras.

◀ Fig. 45

No.	Vessel	Locus	Reg. No.	Area	Description
1	Jug	225	1727/6	C	Pale brown clay; large white grits; petrographic Group B
2	Jug	151	1392/1	E	Brown clay; minute white and shiny grits
3	Jug (fragment)	147	1124/13	B	Light, reddish brown clay; minute red and gray grits; painted red-brown bands
4	Juglet (base)	166	1352/1	C	Orange-brown clay; minute grits
5	Juglet (base)	225	1727/7	C	Light brown clay; minute white grits
6	Juglet (base)	250	1723/4	C	Light, reddish brown clay; minute gray grits; petrographic Group C
7	Juglet (base)	126	1249/2	C	Reddish yellow clay; minute red grits
8	Juglet (base)	178	1375/4	C	Reddish yellow clay; minute white grits
9	Juglet (base)	163	1361/2	B	Light, reddish brown clay; minute red and white grits
10	Amphora	178	1380/4	C	Light cream clay; minute gray grits; petrographic Group B
11	Amphora	225	1757/3	C	Light cream clay; minute grits
12	Amphora (handle)	178	1376	C	Light cream clay; minute grits
13	Amphora	153	1145/1	B	Cream clay; small gray and red grits; petrographic Group B
14	Amphora	171	1184/1	B	Light brown clay, very black core

Table Amphoras

Amp I: Amphoriskoi with a High Neck.— These amphoras (Fig. 45:10, 11) have a high neck with a groove below the simple rim. The body appears to be slightly globular. The ware of these vessels is very light in color, well levigated and highly fired, resulting in a metallic ring. A handle with an incised 'X' (Fig. 45:12) is also from an amphora of this type. This vessel type was locally made (petrographic Group B; see Gorzalczany, this volume). The thin walls coupled with the highly-fired metallic ware, suggest that these amphoras were fine tableware vessels. To date this is a unique vessel type, with no known published parallels.

Amp II: Amphoriskoi with a Short Neck.— These amphoras (Fig. 45:13, 14) have a shorter neck with a carination below it where the handle was attached; the ware is not as fine as in the first type. Petrographic analysis revealed that one vessel of this type was locally made (Fig. 45:13). These vessels are similar in shape to a 'krater' from Late Persian Apollonia (Tal 1999: Fig. 4.36:6).

Lamps

The lamps are of the open type with a flat base, a broad flat rim and a sharply pinched wick hole. On two of the lamps (Fig. 46:1, 2) it is possible to discern knife shaving on the lower exterior surface. One example (Fig. 46:3) has burnishing on the surface of the out-turned rim. This type is the dominant open lamp type throughout the Persian period. According to Stern it has Phoenician origins and dates to the sixth–fourth centuries BCE (1982:128). Alongside this lamp type is a simpler, open bowl lamp (Fig. 46:1) that continues the typical Iron Age lamps. There are no closed lamps in the Stratum II pottery assemblage.

The petrographic analysis of the two lamps (Fig. 46:1, 2) indicated their provenance on the northern Israel–Lebanese coast (Group C; see Gorzalczany, this volume). Similar lamps are known from most Persian phases at Dor (Phases 7 and 8—Stern 1995b: Fig. 2.16:13; Phase 5b—Stern 1995b: Figs. 2.30:5; 2.32:4; 2.33:3, 4) and at Tel Kisan 3 (Briend and Humbert 1980: Pl. 21:1–4).

Imported Jugs/Table Amphoras

The small rim sherd of an imported vessel (Fig. 46:4) is probably of Cypriote or eastern Greek origin. This vessel was fabricated from well-levigated, well-fired, cream-colored clay and decorated with black-painted bands on the interior and exterior rim. The exact vessel type cannot be determined from the small sherd, although it is a closed vessel, probably a jug or table amphora. The ‘streaky’ appearance of the black paint is a common feature of contemporaneous imported pottery (Mook and Coulson 1995:93).

Discussion of Stratum II Pottery

The pottery assemblage from Stratum II can be dated roughly to the end of the sixth–fifth

centuries BCE. Although most of the vessel types present in the assemblage continue until the end of the Persian period, the absence of other vessels, such as closed lamps and imported Athenian ware (end of the fifth–fourth centuries BCE), suggest that this assemblage should be dated to the early part of the Persian period.

The comparative study of the Ḥorbat Maṭṭa assemblage indicates a close similarity with pottery assemblages from contemporary coastal and neighboring valley sites, such as Apollonia, Tel Dor, Tel Mikhal, Tel Mevorakh, Tel Kisan and Tel Qiri. The petrographic analysis upholds the coastal affinities of the pottery assemblage.

Petrography.— The provenance study of selected vessels within the assemblage revealed one local (B) and three non-local (A, C, D)

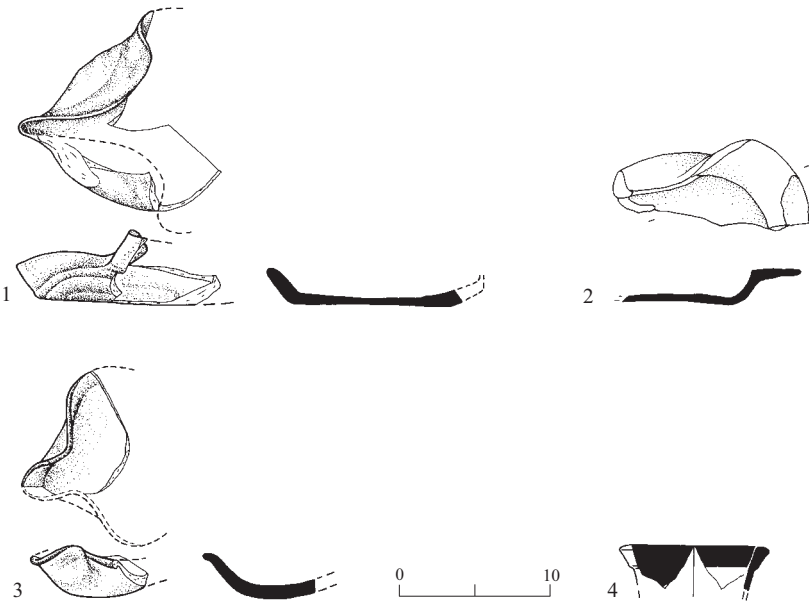


Fig. 46. Stratum II pottery: lamps and imported ware.

No.	Vessel	Locus	Reg. No.	Area	Description
1	Lamp	152	1113/4	E	Reddish-brown clay, black core; small gray and white grits; soot around wick hole
2	Lamp	166	1386/6	C	Red-orange clay; minute red grits; soot around wick hole; petrographic Group C
3	Lamp	250	1746/2	C	Red-orange clay; burnishing on out-turned rim; petrographic Group C
4	Amphoriskos(?)	166	1208/6	C	Light cream clay; black painted band on int. rim and ext.

petrographic groups (see Gorzalczany, this volume: Table 1). The local Group B (44%) included amphoras, a jug and a large number of storage jars. The non-local groups are all connected to the coastal region, whether through manufacture (Group A: 9%; Group C: 17%) or long-distance trade (Group D: 30%).

The review of the vessel types within each group indicates that aside from the storage jars, typically used in maritime trade (see Stern 1995b:62–63), many of the utilitarian domestic vessels, such as cooking pots and heavy bowls, were not produced in the site's vicinity. The most enigmatic phenomenon revealed by the petrographic analysis is the emerging pattern of widespread importation of heavy bowls from western Cyprus/Aegean sites throughout Israel in the Persian period (see Gorzalczany, this volume; Bennett and Blakely 1989:198–203).

Stratum I: Early Roman Period¹⁴

The pottery assigned to Stratum I (Fig. 47) originated from a single pit (L210) in Area B. The bowl, cooking pot and storage jar are common vessel types in the Galilee and represent an Early Roman domestic assemblage dating from the mid-first century BCE to the mid-second century CE (see comparative material in the figure description).

GROUNDSTONE OBJECTS

A total of 89 groundstone objects were retrieved from Ḥorbat Malta. Each object was registered according to area, stratum, locus, material, type, subtype, condition and locus type following Hovers (1996). The discussion and accompanying figures (Figs. 48–50) are arranged typologically. The stone implements and objects, used for daily household tasks and food preparation, include bowls, mortars, pestles, grinding stones and hammerstones. Table 10 illustrates the breakdown of types and relative frequencies of each type according to stratum, as well as the distribution of the tool types according to area in order to distinguish intrasite activity patterns. For example, there is a higher density (90%) of all groundstone implements in the central area of the site (Areas B and C) during all periods of occupation.

Lower Grinding Stones/Slabs (N = 26; 29%)

The lower grinding stones (12%) and slabs (88%) are all made of basalt (Fig. 48:1–3). The lower grinding slabs are either elliptical with a plano-convex cross section (Fig. 48:1), or have higher margins resulting in a plano-concave cross section (Fig. 48:2). These stones were all found in fragmentary condition.

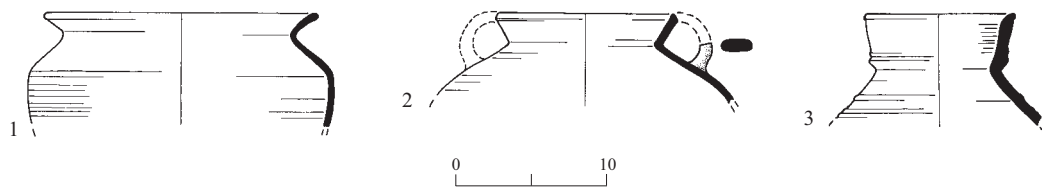


Fig. 47. Stratum I pottery.

No.	Vessel	Locus	Reg. No.	Description	Parallels
1	Bowl	210	1499/3	Orange-red clay; brown core; gray grits	Kefar Ḥananiya Type 3A (Adan-Bayewitz 1993: Pl. 3A:112–119)
2	Cooking pot	210	1499/4	Orange-red clay; dark gray core; gray grits	Kefar Ḥananiya Type 4A (Adan-Bayewitz 1993: Pl. 4A:124–125)
3	Storage jar	210	1482/1	Orange-red clay	Meron Str. II (Meyers and Strange 1981:127, Pl. 8.15:14)

Table 10. Ground Stone Tool-Type Frequencies According to Stratum and Area

Stratum Type	Str. I		Str. II				Str. III						Str. II-III						Total	
	Area B (N)	% per str.	Area B (N)	Area C (N)	N per str.	% per str.	Area A	Area B	Area C	Area F	N per str.	% per str.	Area A	Area C	Area E	Surf.	N per str.	% per str.	N of Type	% of Assemblage
Lower grinding stone	2	67	4	7	11	29	2		7		9	23		1	3		4	45	26	29
Upper grinding stone			3	1	4	10		1	7	1	9	23				1	1	11	14	16
Rubbing stone			3	2	5	13			7		7	18							12	13
Grinding bowl			1		1	3	1		3		4	10							5	6
Footed bowl			1		1	3			2		2	5	1			1	2	22	5	6
Pestle			2		2	5		1			1	3							3	3
Hammerstone	1	33	3	9	12	32	1	2	3		6	15		1			1	11	20	23
Varia			2		2	5													2	2
Pierced stone									1		1	3		1			1	11	2	2
Total/ percentage per area per stratum	3	100	19	19	38	100	4	4	30	1	39	100	1	3	3	2	9	100	89	100

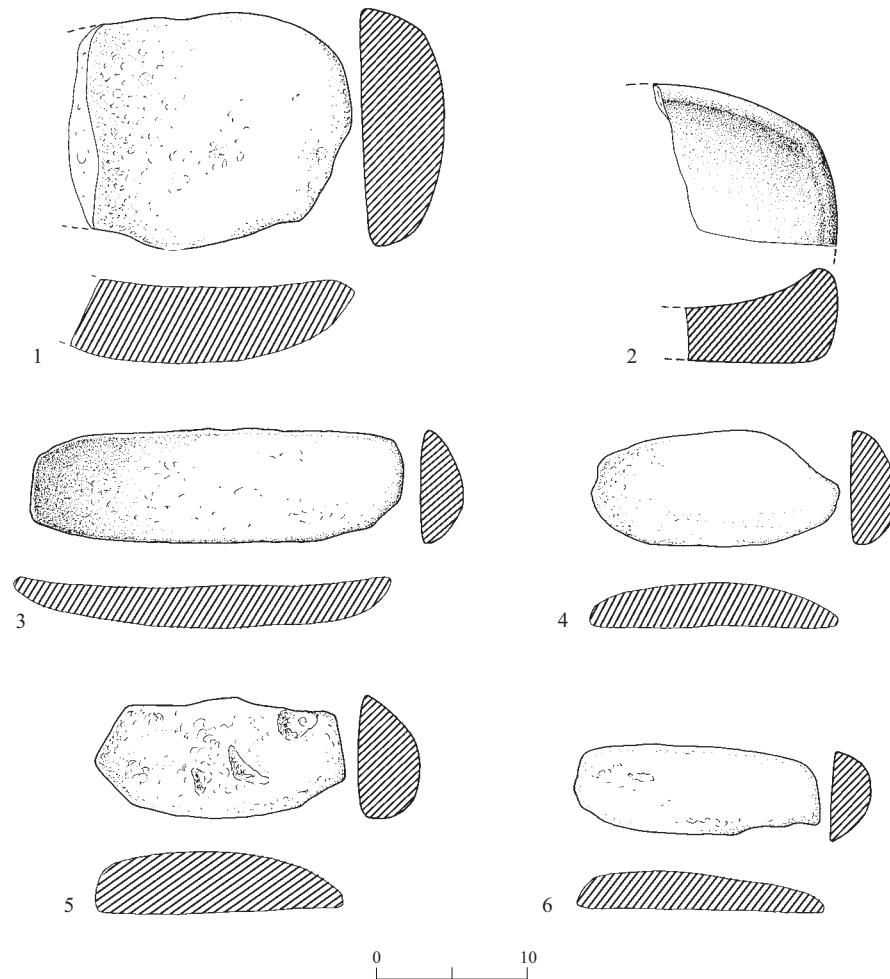


Fig. 48. Groundstone tools: basalt grinding stones.

No.	Type	Loc.	Area	Reg. No.	Str.	No.	Type	Loc.	Area	Reg. No.	Str.
1	Grinding slab	107	A	1842	III	4	Upper grinding stone	228	C	1815	III
2	Grinding slab	227	C	1791/2	III	5	Upper grinding stone	227	C	1791/1	III
3	Lower grinding stone	228	C	1848	III	6	Upper grinding stone	228	C	1829	III

The complete lower grinding stone (Fig. 48:3), found in Room 228 of the Stratum III four-room house, is a very narrow, elliptical stone that might have originally been a loaf-shaped upper grinding stone later reused as a lower grinding stone. The concave working platform, as well as the higher margins at the shorter ends, indicate that despite the narrow width, this stone functioned as a lower grinding stone (see Hovers 1996:173 for criteria).

Upper Grinding Stones (N = 14; 16%)

Upper grinding stones, all made of basalt, are the typical, elongated, loaf-shaped stones (Fig. 48: 4–6) known from most Iron Age sites (e.g., City of David: Hovers 1996:178). At Ḥorbat Maḥta, 64% of the upper grinding stones were found in Iron Age contexts. These stones were held by two hands and used together with a lower grinding slab. Twenty-nine percent of the upper grinding stones were found intact, 14% almost intact and

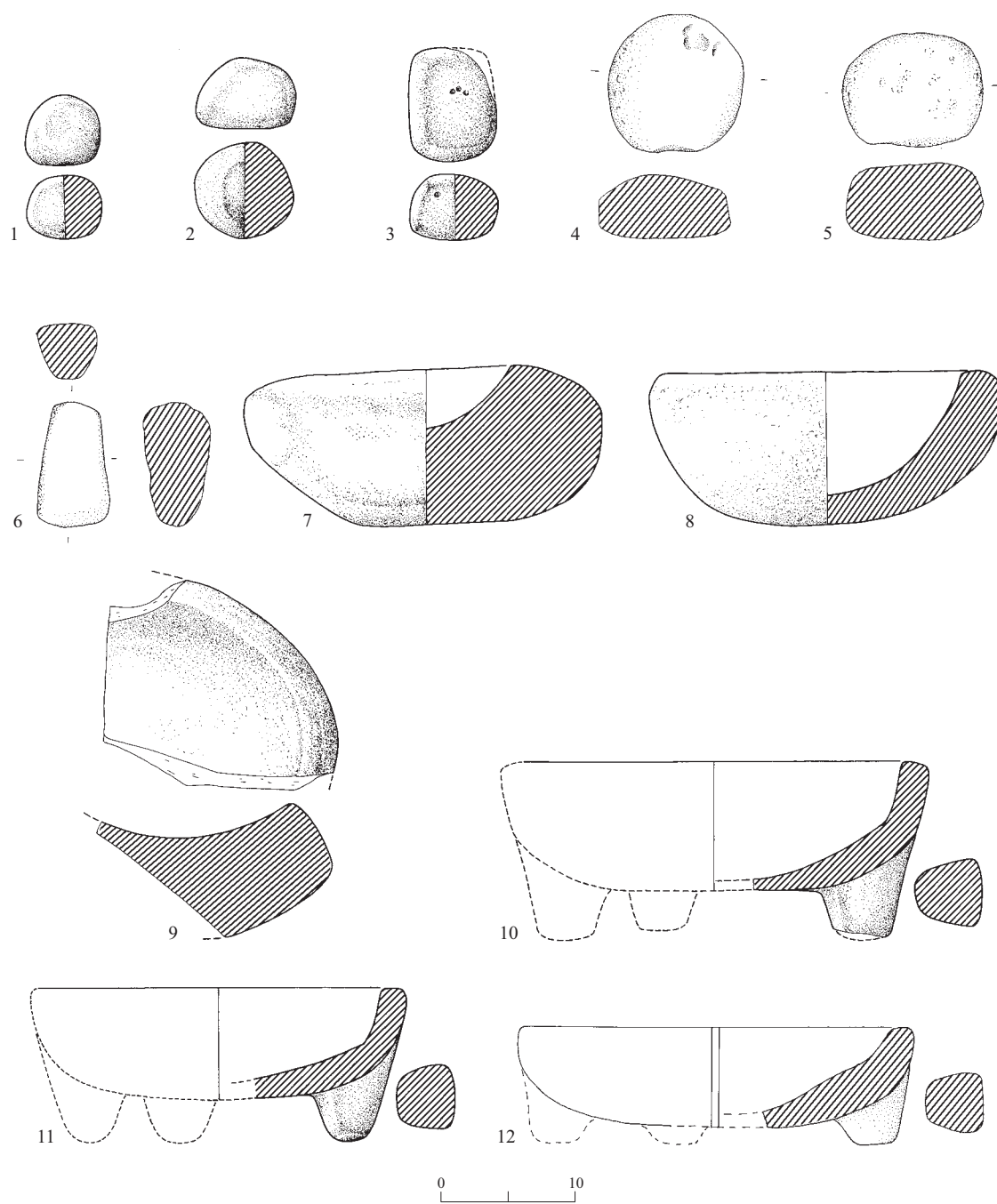


Fig. 49. Groundstone tools: rubbing stones and grinding bowls.

Fig. 49

No.	Type	Locus	Area	Reg. No.	Stratum	Material
1	Rubbing stone	229	C	1687	III	Basalt
2	Rubbing stone	W246	C	1670	III	Basalt
3	Rubbing stone	228	C	1845/2	III	Basalt
4	Rubbing stone	165	C	1169	II	Basalt
5	Rubbing stone	183	B	1242	II	Pumice
6	Rubbing stone	188	C	1659	III	Pumice
7	Grinding bowl	107	C	1813	III	Basalt
8	Grinding bowl	107	A	1813	III	Basalt
9	Grinding bowl	243	C	1785	III	Basalt
10	Footed grinding bowl	243	C	1849	III	Basalt
11	Footed grinding bowl	228	C	1841	III	Basalt
12	Footed grinding bowl	Surface	-	1545	-	Limestone

57% were found in fragmentary condition. Two upper grinding-stone fragments were found in secondary usage in walls.

Rubbing Stones (N = 12; 13%)

Rubbing stones are similar in function to the upper grinding stones, however, they were held with one hand and used with a smaller lower grinding stone or a bowl. The rubbing stones, often called 'manos', are "...an upper grinding stone made from a rounded item..." (Hovers 1996:178). The rubbing stones vary from round with a plano-convex cross section (Fig. 49:1, 2), to rectangular or circular with a plano-plano cross-section (Fig. 49:3–5). One of the rubbing stones was fabricated from pumice and is trapezoidal in shape (Fig. 49:6).

Grinding Bowls (N = 10; 12%)

Bowls without Feet (N = 5; Fig. 49:7–9).— The complete bowls of this type were found stationary, imbedded into floors or supported by small stones. This usage pattern is in contrast to that of the mobile, footed bowls (below) that were easily stabilized due to the three feet (see discussion in Hovers 1996:185).

These vessels are hollow to varying depths and finished on the outer walls to varying degrees. It is unclear whether the stationary

vessel (Fig. 49:7) that was found *in situ* as part of a Stratum III installation in L107, Area A (Fig. 7), was used as a grinding bowl or a mortar. The rounded concave depression of this limestone bowl shows signs of polishing. A basalt bowl with a deeper hollow (Fig. 49:8) was found *in situ* imbedded into the floor of the central hall (L228) of the four-room house.

Footed Bowls (N = 5).— These bowls have three feet with a trapezoidal cross section (Fig. 49:10–12); four of the five bowls of this type were made of basalt, and one, of limestone (Fig. 49:12). Three of the bowls were found in surface loci, two (Fig. 49:10, 11) in the Stratum III four-room house. All of the footed basalt bowls have a highly polished interior surface. The limestone bowl has many chisel markings on the exterior walls and base.

A rock-hewn cupmark in L232, Area C, found with a spherical limestone hammerstone inside the depression, most likely functioned as a mortar.

Pestles (N = 3; 3%)

Only three pestles were recovered from the site (Fig. 50:1, 2). The pestles are cubical, made from basalt and all show signs of polish on their working surface.

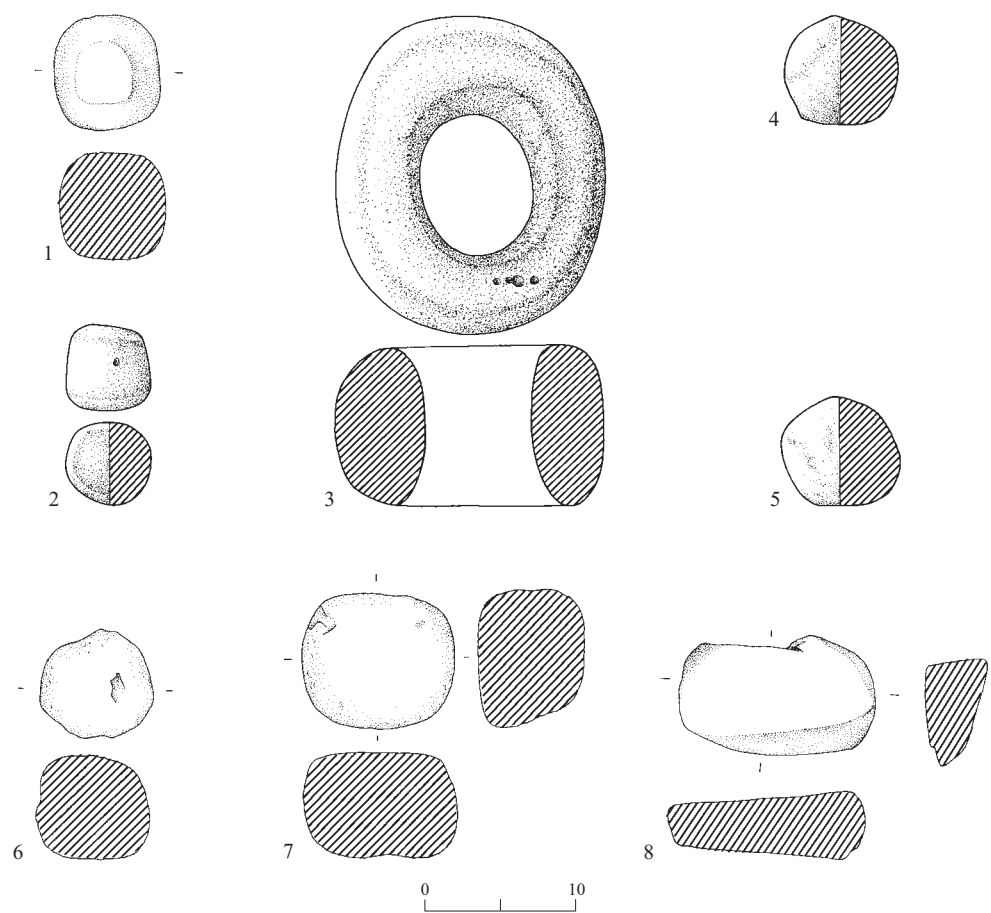


Fig. 50. Groundstone tools: hammerstones and miscellaneous.

No.	Type	Locus	Area	Reg. No.	Stratum	Material
1	Pestle	228	C	1604	III	Basalt
2	Pestle	180	B	1228/2	II–III	Basalt
3	Perforated stone/door socket	243	C	1850	III	Limestone
4	Hammerstone	228	C	1845/3	III	Flint
5	Hammerstone	228	C	1840/2	III	Flint
6	Hammerstone	180	B	1228/1	II–III	Flint
7	Hammerstone	106	A	1103	III	Flint
8	Sharpening stone	171	B	1215/6	II	?

Pierced Stones (N = 2; 2%)

A large limestone ring (Fig. 50:3) was found superimposed above a footed grinding bowl fragment (Fig. 49:10). The position of these objects together in the center of Room 243 of the four-room house suggests secondary usage as a door socket. The original function of the large limestone ring is unclear.

Hammerstones (N = 20; 22%)

The hammerstones are made of flint (40%), limestone (40%) or a conglomerate stone (20%). These tools have multiple working surfaces, exhibiting signs of battering, and are spherical (Fig. 50:4, 5) or cubical in shape (Fig. 50:6, 7). All the cubical hammerstones, 15% of the hammerstone assemblage, were

made of flint. With the exception of one almost complete object, all the hammerstones were found intact.

Sharpening Stone (N = 1)

A single sharpening stone was found in Stratum II Pit 171 (Fig. 50:8). This stone has a trapezoidal shape and is made of an unidentified stone.

Discussion

A total of 73% of the stone tools were used for grinding purposes (Table 10). The remaining 27% of the tools (hammerstones, pierced stones and varia) were used for a myriad of household activities.

The distribution of the tools according to area reveals that in Stratum III, 77% of the tools were found in Area C, 10% in Area A, 10% in Area B and 3% in Area F. In Stratum II, 55% of the tools were found in Area C and 17% in Area B. It is probable that these numbers also reflect the relative preservation of finds per area not only the function or location within the settlement of the specific excavated squares (e.g., fortification wall). However, the concentration of most of the groundstone tools in Areas B and C supports the observations of

intrasite planning during the Iron Age and the Persian period and the functional division of the site.

More than half the groundstone tools deriving from Area C, comprising almost half the Stratum III groundstone assemblage, were concentrated inside the four-room house. This suggests that the secondary processing of agricultural produce for household consumption, e.g., the grinding of flour and other cereals, took place within the household framework. The clustering of grinding activities in Area C in general, and in the four-room house in particular, is differentiated from Area A, where very few grinding implements were found in association with the rock-hewn installations there.

METAL FINDS

Tali Kan-Cipor Meron

A total of 13 metal objects were found in the excavations, including working tools (a chisel, a sickle, a nail and blades), weapons (an arrowhead and a spearhead), a fibula, a kohl stick and a unique cultic vessel (Table 11).

The discussion and figures are arranged typologically according to stratum. Technological

Table 11. Metal Finds

Str.	Description	Reg No.	Loc.	Area	Length (mm)	Width (mm)	Thickness/ diam. (mm)	Condition	Material	Fig.
III	Arrowhead	1568	188	C	68	21	10	Complete	Iron	51:1
III	Sickle	1792	273	C	240	30	10	Complete	Iron	51:2
II	Blade	1382	178	C	76	18	6	Fragment	Iron	
II	Blade	1383	178	C	-	40	8	Fragments	Iron	
II	Blade	1448	192	B	63	17	3	Fragment	Iron	
II	Blade	1632	235	C	Fragments	25	5	Fragments	Iron	
II	Bowl/censer (handle)	1745	250	C	100	55	4 × 5	Complete	Bronze	53
II	Bowl/censer	1745	250	C	-	170	4	Complete	Bronze	53
II	Chisel	1221	191	E	188	9	7	Complete	Iron	52:3
II	Fibula	1384	178	C	57	-	-	Complete (no pin)	Bronze	52:1
II	Kohl stick	1569	205	C	149	-	4	Complete	Bronze	52:2
II	Nail?	1397	178	C	Fragments	-	-	Fragments	Iron	
II	Spearhead	1515	203	C	86	-	18	Broken and corroded	Iron	

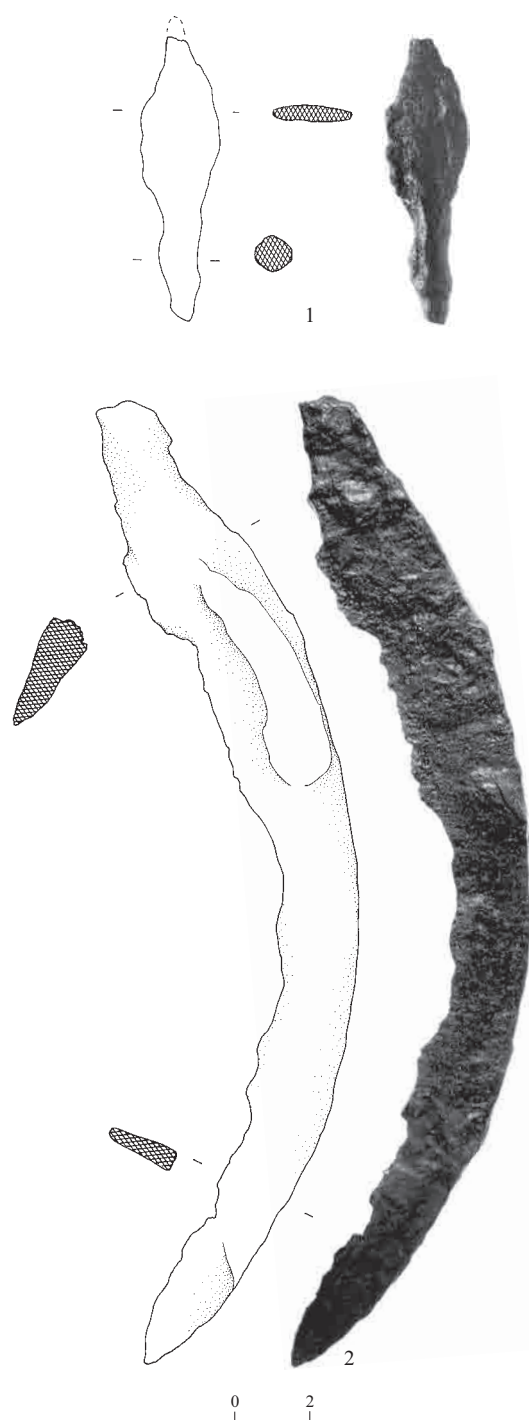


Fig. 51. Stratum III metal finds.

No.	Item	Locus	Basket	Material
1	Arrowhead	188	1568	Bronze
2	Sickle	273	1792	Iron

aspects are based on observation and comparanda. No metallurgical tests were conducted. Parallels for the finds are taken from stratified sites in the Jezreel Valley (Megiddo), Lower Galilee (Horbat Rosh Zayit) and Upper Galilee (Hazor).

Stratum III (Fig. 51)

Arrowhead.— A highly corroded, leaf-shaped bronze arrowhead (Fig. 51:1) with a long tang for attachment to the wooden shaft was found in a bell-shaped pit (L188) in Area C. Similar arrowheads from Iron II contexts are known from Hazor IXA and VA (Yadin et al. 1961: Pls. CLXXIX:24, 25; CCXXXIV:13) and Horbat Rosh Zayit Area C (Gal and Alexandre 2000: Fig. VII.10).

Sickle.— This flat, curved, iron sickle blade (Fig. 51:2) is heavily corroded, although the length and width are intact. The sickle tapers toward the blade's point. This tool was found in a corner of one of the side rooms (L273) in the four-room house. Iron sickle blades are common in Iron II at Hazor IXA and VB–VA (Yadin et al. 1960: Pls. LXXIX:30, CVI:7, 20; 1961: Pl. CLXXIX:28), Megiddo IV–II (Lamon and Shipton 1939: Pl. 82) and Horbat Rosh Zayit IIa (Gal and Alexandre 2000: Fig. III.118:1–5).

Stratum II (Figs. 52, 53)

The majority of the metal finds, both bronze and iron, were found in pits dated to Stratum II, in particular Pit 178, which contained a well-preserved bronze fibula, a scythe fragment, a blade fragment and a nail.

Fibula.— A well-preserved bronze fibula was found in Pit 178. This triangular bow fibula has a single bead on each arm flanked by two ribbed moldings on either side—one plain and one with hatch incision. The pin was not preserved. The catch plate is in the shape of a human hand (Fig. 52:1).

This fibula was probably cast in a mold, similar to those found in contemporary contexts at Tel Qashish (Ben-Tor and Bonfil 2003: Fig. 137:11), Tel Mikhel (Sari 2001:19, 22; Pl. 7)

and Tel Megadim (Sari 2001:27, 29; Pl. 10:1, 2).¹⁵ After molding, the fibulas were hammered and annealed into the final shape.

Fibulas with a triangular bow are the most common type in the ancient Near East (Stronach 1959:193, Type III; Moorey 1980: Fig. 14:339–354). Stronach's Type III 7 comprises triangular fibulas with ribbed and beaded moldings that are commonly found at Iron Age and Persian-period sites such as Tel Kisan (Briend and Humbert 1980: Pl. 100:1–8) and Tell en-Nasbeh (McCown 1947: Pl. 110:22, 26).

Kohl Stick.— The elongated cylindrical bronze kohl stick or 'spatula' (Fig. 52:2) was found in the back part of Tomb 205.¹⁶ This kohl stick has a square crenellated top with three reel moldings on the upper shank and a thickened, round bottom end. Analogous kohl sticks are known from contemporary mortuary contexts, where they are frequently found together with a decorated bone kohl tube, e.g., Hazor II (Yadin et al. 1961: Pl. CXCI:21–23). According to Stern (1982:149), a long tradition of kohl stick production is found in Egypt, which is the probable source of the Persian-period sticks.

Chisel.— An iron chisel (Fig. 52:3) was found broken in two pieces in Pit 191, Area E. This square-sectioned chisel tapers from the thickened center toward two blunt ends. Similar tools were found in Megiddo III–IV (Lamon and Shipton 1939: Pl. 81:32, 34).

Bowl/Censer.— A completely preserved bronze bowl (Fig. 53) was found in Pit 250, Area C. The bowl is very shallow and plate-like, and has a wide, flat ledge rim (2.0–2.3 cm wide), a flat base and an extended handle. There is a single rectangular tear on the ledge rim that indicates the point where two nails attached the handle. The handle, found near the bowl, is horseshoe shaped, fabricated from a thick bronze rod with a square cross-section. There are signs of horizontal hatching near the two ends of the handle.

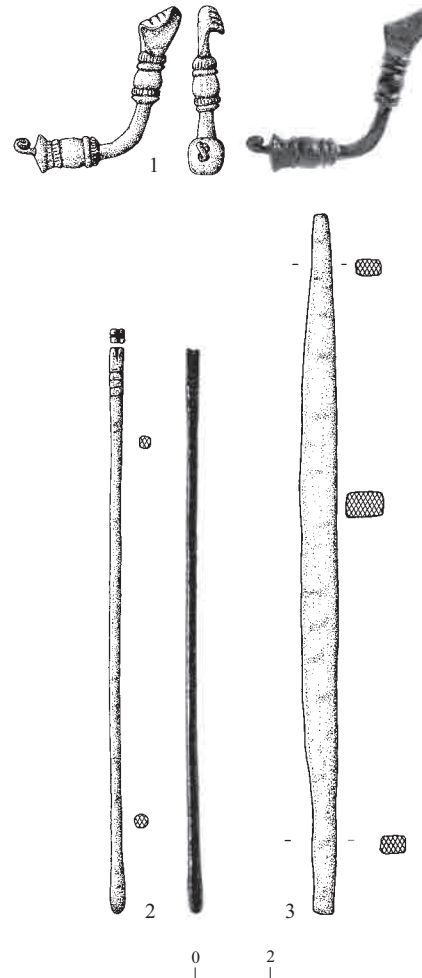


Fig. 52. Stratum II metal finds.

No.	Item	Locus	Basket	Material
1	Fibula	178	1384	Bronze
2	Kohl stick	205	1569	Bronze
3	Chisel	191	1221	Iron

An identical vessel was found among the burial goods of tombs near Shekhem (Stern 1980: Fig. 110:4, Pl. XVb). Stern cautiously identifies this vessel as a 'censer' used in connection with a *thymiaterion*, also found in the tomb assemblage; however, Stern (1980:104) notes that there is no hard evidence for such a usage. Two additional analogous 'censers' or 'incense ladles or shovels' were found in a domestic context at Dor that were



Fig. 53. Stratum II bronze bowl/censer.

“probably intended for home ritual use” (Stern 1994:177; 1995a: Fig. 7.7). Stern (1995b:453) suggests that these vessels were used together as a pair and “...employed in the local cult”. If indeed these vessels were used in pairs, as suggested at Dor, then their identity as ‘censers’ in connection with the *thymiaterion* warrants further confirmation. An additional example of this vessel type was found in a tomb at Khirbat Ibsan (Amiran 1972: Fig. 3), albeit this vessel is more elaborately decorated than the examples from Ḥorbat Malṭa, Shekhem and Dor. Amiran also terms this vessel a ‘censer’, however she notes that this definition is for “... descriptive means only” and suggests that the function of the bowl was possibly associated with cult in either a palace or shrine, much like a comparable ivory prototype found at Nimrud (Amiran 1972:138).

Spearhead.— A highly corroded, iron socketed-shaft spearhead (L203, B1515) has a hollow, cylindrical socket that was probably cast over a clay core. The blade received its final form through hammering (Shalev 1997:349). The poor condition of the spearhead rendered typological identification difficult.

Narrow Blades.— Two highly corroded and broken, narrow iron blade fragments (L192, B1448; L178, B1382) taper toward the cutting edge.

Broad Blades.— Two fragmentary and poorly preserved broad blades were found in pits (L235, B1632; L178, B1383).

Nail.— One highly corroded nail fragment (L178, B1397) was found at the site.

Summary

The division of the metal finds from Ḥorbat Malṭa into functional categories of working tools (chisel, sickle, nail, blades), weapons (arrowhead, spearhead) and jewelry (fibula), mirrors the division of metal type and manufacture. The working tools and weapons

were fabricated from iron since this metal could be hammered and annealed into a strong blade that could withstand the eroding effects of continuous use. Moreover, the short life span of these implements rendered corrosion of minor importance. On the other hand, the jewelry and the unique cultic vessel were manufactured of bronze and mechanically treated in the final stages of fabrication to obtain the sought-after shape and decoration.

MISCELLANEOUS SMALL FINDS

Stratum III

Stone Cosmetic Palette.— A cosmetic palette (Fig. 54:1), fabricated of good-quality dolomitic limestone,¹⁷ was found in Stratum III. This palette, of which exactly half is preserved, has two ledge-type handles placed opposite each other, a flat disc base and a bowl-like depression 14 mm deep. The flat rim (28 mm) surrounding the central depression has a poorly preserved decoration of incised concentric circles and crosshatching. Encircling the outer perimeter of the palette are two bands of concentric circles with evenly spaced lattice or crosshatch patterns between them.

The distribution, chronology, function and decoration of such cosmetic bowls have been discussed in several studies (Barag 1985; Thompson 1989). According to Barag (1985:215–216), these bowls are Phoenician luxury goods and date from the eighth century to the beginning of the sixth century BCE. Stone palettes, used for grinding small amounts of cosmetics or medicine, are found at both northern and southern sites in Israel, e.g., Ḥazor, Megiddo, Gezer, Samaria, in addition to sites in Transjordan, e.g., Tawilan and Tell es-Sa‘idiyeh (see Thompson 1989 for a full description and review of parallels from these sites). The geometric designs on the Ḥorbat Malṭa palette are duplicated on many of the above analogous palettes (e.g., Ḥazor VI—Yadin et al. 1960: Pl. LXXXVIII:7), often with additional elements such as radial lines and circles with or without dots. There is no evidence

for chronological development of the incised decoration (Thompson 1971:68–69), although at Ḥazor, it was noted that handles appear on the palettes from Stratum VI onward (e.g., Stratum VA—Yadin et al. 1961: Pl. CCXXXIII:3, 4). While Barag claims they were Phoenician, manufactured and imported to the local market, Thompson notes local manufacturing centers that conceivably made these objects more affordable to the consumer. It is clear, however, that this meticulously decorated item attests to the wealth of the inhabitants of Ḥorbat Maṭṭa during this period.

Alabaster Chalice.— The pedestal foot of an alabaster chalice or goblet was found in Pit 231 (Fig. 54:2).

Loomweights/Jar Stoppers.— Two doughnut-shaped clay objects with a central perforation (Fig. 54:3, 4) have been identified as either loomweights or jar stoppers. Shamir (1996:142–145) has extensively discussed the proposal that these objects are loomweights, based on archaeological context and ethnographic parallels. The identification of these objects as jar stoppers (Gal 1989), is based partially on their context at Ḥorbat Rosh Zayit where they were found in association with large quantities of storage jars in the tenth–ninth-centuries BCE fortress. According to Browning (2001), the size of this loomweight type attests to the mixing of linen and wool in a tapestry weave, thus refuting Gal’s suggestion that they functioned as stoppers.

A small reworked sherd (Fig. 54:5) was used as a jar stopper.

Stratum II

Bead.— A small spherical carnelian bead (Fig. 55:1) was found in Pit 171 in Area B.

*Stone Spindle Whorls.*¹⁸— The stone spindle whorls are of two types: dome-shaped and cylindrical. The dome-shaped whorls are made

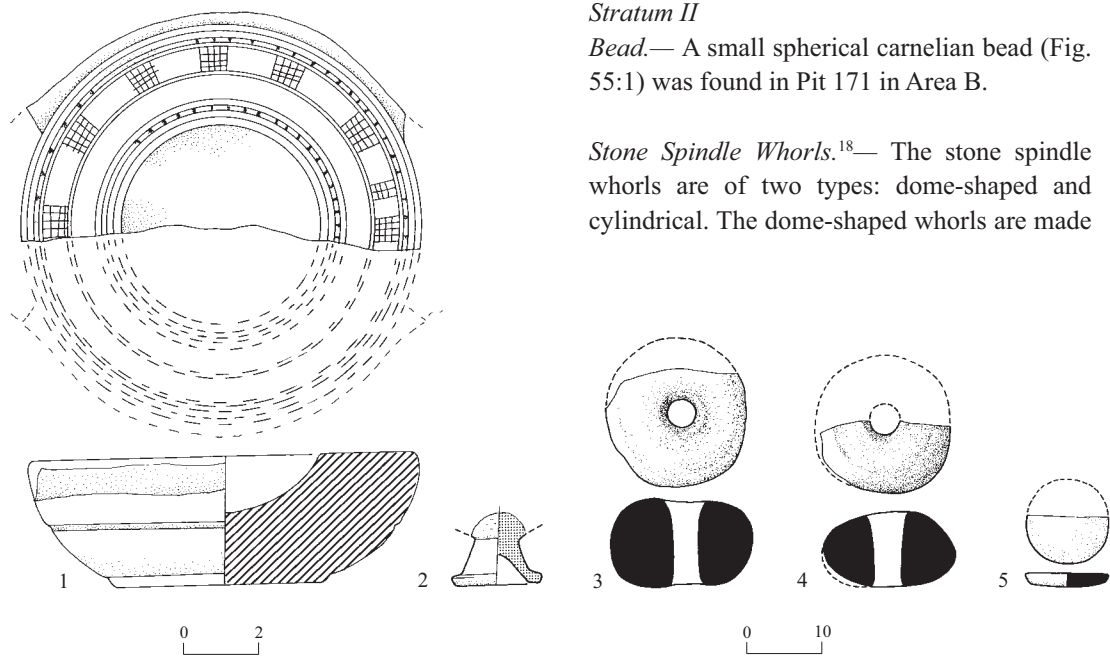


Fig. 54. Stratum III miscellaneous small finds.

No.	Item	Locus	Area	Basket	Material
1	Palette	224	C	1585	Limestone
2	Chalice	231	C	1673	Alabaster
3	Loomweight	231	C	1696	Clay
4	Loomweight	123	A	1150/1	Clay
5	Stopper	231	C	1674	Clay

of quartzite (Fig. 55:2) and limestone (Fig. 55:3). The base of the quartzite whorl has concentric lines. The cylindrical limestone whorl (Fig. 55:4) is decorated on its side with an incised double row of diagonal lines. This whorl type is common in the Iron Age and Persian period (cf. Megiddo V—Lamon and Shipton 1939: Pl. 95:30, 31).

Clay Spindle Whorls.— A broken, biconical spindle whorl (Fig. 55:5) was fabricated from poorly fired clay. Biconical whorls are a common type during the Persian period (Shamir 1996:151; cf. Shiqmona—Elgavish 1968: Pl. XXXVIII:44). A ceramic disc whorl (Fig. 55:6)

was made on a reworked and rounded pottery sherd with a drilled biconical hole.

Loomweights.— Two clay loomweights (Fig. 55:7, 8) were found broken in two adjacent pits (L225, L235) in Area C. The dome-shaped loomweight (Fig. 55:7), fabricated from unfired clay, has an elliptic base and a horizontal perforation. The pyramidal loomweight (Fig. 55:8), fabricated from poorly fired clay, has a flat, circular base and a horizontal perforation. Neither of these loomweights was intact; therefore, it is impossible to determine their weight. According to Shamir (1997:4*–7*), both loomweight types were common during

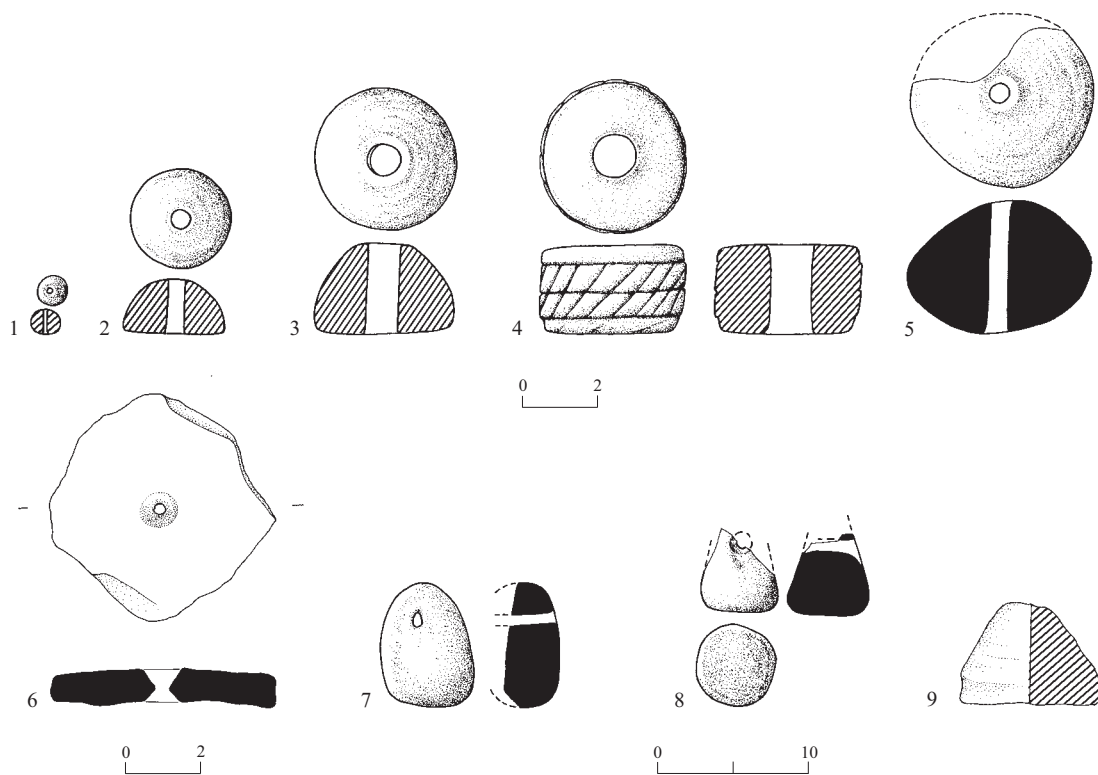


Fig. 55. Stratum II miscellaneous small finds.

No.	Item	Loc.	Area	Basket	Material	No.	Item	Loc.	Area	Basket	Material
1	Bead	171	B	1213	Carnelian	6	Whorl	222	C	1576	Clay
2	Whorl	Surface	B	1230	Quartzite	7	Loomweight	225	C	1726	Clay
3	Whorl	W141	B	1345	Limestone	8	Loomweight	235	C	1642	Clay
4	Whorl	191	E	1357	Limestone	9	Stopper	191	E	1287	Stone
5	Whorl	178	C	1319	Clay						

the Persian period, used for weaving wool and goat hair.

Stone Stopper.— A stone stopper (Fig. 55:9) of pyramidal shape was found in Area E; the stone is friable due to burning.

FAUNA

Carole Cope¹⁹

The economic strategies of the inhabitants of Ḥorbat Maṭṭa can be gleaned from the faunal sample and *in situ* finds.

The limited faunal sample included 411 identified bones attributed to 11 species, including *Bos taurus* (cow), *Ovis aries* (sheep), *Capra hircus* (goat), *Sus scrofa* (pig), *Equus asinus* (ass), *Canis familiaris* (dog), *Felis domesticus* (cat), *Clemmys caspica* (fresh water turtle), *Spalax sp.* (mole rat), *Martes foina* (stone marten) and *Gazella gazelle* (gazelle).

The sample from the Persian period contained 213 identifiable bones from six species: *Bos taurus*, *Ovis aries*, *Capra hircus*, *Sus scrofa*, *Equus asinus*, and *Martes foina*. The sample was well preserved and originated primarily from Installation 156, Area C. The Iron Age sample was more problematic, as when the ambiguous and mixed samples were discarded, only 33 bones remained. The small size of this sample renders it difficult to analyze. However, a number of similarities stand out between the Iron Age (Stratum III) and Persian period (Stratum II) samples.

1) In both strata cattle were the predominant species. In the Persian period, 29.6% of the cattle bones were immature, in the Iron Age 25%. Such a high percentage of immature cattle is indicative of a pattern of females raised for dairy, calves for food, reflecting an emphasis on secondary products during both periods.

2) In the Persian period sheep/goat were of almost equal importance with cattle in terms of relative frequency (39.6%). However, in meat-weight terms, the cattle provided over six times the amount of meat as the sheep/goat. Sheep and goats are valuable herding animals for their

milk, meat, wool and hair. The caprine females are the most valuable as adults for the production of milk; young males are often killed for meat although some are kept for reproduction and as a source of hair. Both sheep sexes are valuable for wool production. Thus it is likely that the high rate of immature sheep/goat (26% immature, 1.8% still suckling) might represent young male goats slaughtered for food. A total of 74% of sheep/goat were mature at slaughter, clearly indicating a breeding population.

3) All but one of the pig bones (most under 6 months) came from the Iron Age sample of Stratum III. Note, however, the small size of the sample.

Although the data from the small faunal sample at Ḥorbat Maṭṭa is scanty, it is reflective of economic strategies of a small rural farmstead. The age-at-death ratio of *Bos* and *Ovis/Caprines* is classic for the small farmer raising domestic ungulates primarily for secondary products such as draft and dairy, rather than meat.

SUMMARY

Economic Aspects

The spindle whorls and loomweights are evidence of local textile production during Stratum II, most likely wool and goat hair from the mature sheep and goats. The agricultural element of the local economy is gleaned from the iron sickle blades and the numerous groundstone tools for processing agricultural produce.

Storage of surplus agricultural goods is attested by the numerous pits or silos in Strata III and II. The acquisition of 'luxury' goods during both the Iron Age (cosmetic palette) and Persian period (bronze finds) indicates integration within a regional economy.

In summary, it is probable that this farmstead had a mixed economic strategy comprising agriculture (in the Naḥal Zippori lowlands), horticulture (on the surrounding slopes), pasturage and local craft industries (for discussion of these strategies during the Iron Age II see Holladay 1995:386).

Site History

Ḥorbat Malṭa is one of many sites located in the vicinity of the multiple springs in the Nazareth Hills. The excavations exposed occupation at the site, with periodic intervals of abandonment, from the Middle Bronze Age II until the Roman period. The sparse remains from the Middle Bronze Age II in Area C indicate that the location of the site during this period was south of the excavated areas, although the extent of the MB II settlement cannot be determined. In Lower Galilee, in the vicinity of Ḥorbat Malṭa, there are a number of sites known from surveys and excavations dated to this period, such as Be'er Ḥoresh and an unnamed site (1750/2340; Raban 1993:20), Tel Gat Ḥefer (Alexandre, Covello-Paran and Gal 2003), Tur'an (Eisenberg 1975), Yafia' (Gal 1992:13) and a rural settlement at Migdal Ha-'Emeq bordering the Jezreel Valley and the Nazareth Hills (Covello-Paran 1997). In the immediate surroundings of Nazareth a number of MB II tombs were excavated south of the Sanctuary of the Annunciation (Bagatti 1969:17, 18, Fig. 208).

In his survey of the area, Raban (pers. comm.) identified pottery sherds at Ḥorbat Malṭa dating to Iron I. The absence of any architectural or small finds dating to this period in the present excavations is problematic. If the site was in fact occupied during this period, the occupation and settlement activity was limited to the southern, unexcavated area of the site. Nevertheless, there is an observable occupational gap until resettlement of the site during Iron II (Stratum III) in the late ninth century BCE. Gal discerned a similar settlement pattern at additional sites in the Lower Galilee and he categorizes Ḥorbat Malṭa as one of the Iron I sites that later became a larger rural site in Iron II (1992:94). The excavations of Iron I and II silos and rock-cut tombs in Lower Nazareth, below the Sanctuary of the Annunciation, the Church of St. Joseph and a private residence (Bagatti 1969:184–185, 269–272; 1971:18, 52; Vitto 2001), provide additional evidence of the extent of the Iron Age occupation and associated necropolis within a two-kilometer radius south and east of Ḥorbat Malṭa.

The Stratum III occupation was continuous from the ninth to the eighth centuries BCE. Throughout this Iron II occupation a fortification or boundary wall surrounded the site, which appears to have been a farm complex that contained a small population. This settlement type of a fortified farmstead is well known and has been studied within the settlement hierarchy in the Jerusalem area (see Gibson and Edelstein 1985). It is unlikely that Ḥorbat Malṭa was an isolated farmstead located on the summits of the Nazareth Ridge. In archaeological surveys in the Lower Galilee, Gal has identified a number of small, fortified Iron Age sites (1992:94–96), e.g., Tell 'Alil Humma'arabi (0.7 hectares), 'En Zammeret (0.5 hectares) and Ḥorbat Shimshit. However, Ḥorbat Malṭa is the first site of this type to be extensively excavated in this region, enabling a study of the plan and layout and intrasite planning of one of these small sites, considered by Gal as the 'fourth category' in the settlement hierarchy (1992:106).

According to Gal, Ḥorbat Malṭa is one of many sites in the Lower Galilee which were founded in the ninth century BCE and destroyed or abandoned in the late eighth century BCE following the campaign of Tiglath Pileser III. Furthermore, these sites, like Ḥorbat Malṭa, were later resettled in the Persian period. The occupational gap between the late eighth century and the late sixth–early fifth centuries BCE observed at Ḥorbat Malṭa is replicated at additional sites in the nearby vicinity, such as 'En Zammeret, Tel Mador, Ḥanaton and Tel Gat Ḥefer (1992:108–109).

During the Persian period (Stratum II) a large building dominated the center of the site (Area B), surrounded by numerous storage and refuse pits. Fragmentary building remains were noted around the perimeter of the site and notable was the rock-hewn tomb found in the southern expanse of the site.

According to Raban (1993:20), Ḥorbat Malṭa was one of a series of 'fortified farmsteads' during the Persian period such as 'En Zammeret, Be'er Ḥoresh and an unnamed site (map ref. 1750/2340) that are located along the northern perimeter of the Nazareth Ridge. He further suggested that these sites are most likely

associated with Tyre/Sidon on the Phoenician coast and that all the Lower Galilee was subject to Phoenician rule and influence in this period. Gal identifies the rural sites of the Lower Galilee as the agricultural hinterland of the newly-erected Phoenician coastal cities during the mid-sixth century BCE (1992:109). Both of these hypotheses are upheld by the study of the Stratum II material culture that exhibits explicit affinities with the coastal sites. The typological parallels of the pottery assemblage and the provenance study (see Gorzalczy, this volume) provide direct evidence of interaction with coastal sites. Both the short- and the long-range import of pottery vessels, with or without contents, indicate connections with sites along the Phoenician coast, which had further contacts with Cyprus or the Aegean.

Within a more regional framework, the density of Persian-period sites in the area of Naḥal Zippori and the Nazareth Ridge can perhaps be understood against the Persian-period occupation at Zippori. The ninth–mid-eighth

centuries BCE occupation at Tel ‘En Zippori was abandoned and resettlement during the Persian period shifted to the adjoining city of Zippori (Meyers 1996:16). According to Meyers, an elaborate clay rhyton and a quadrilingual vase fragment from Zippori suggest there might have been an official Persian “garrison” at the site. This Persian presence would have had direct influence over Ḥorbat Maṭṭa and the other sites within the immediate environs.

The Roman-period occupation at the site is evident from Raban’s survey (Raban 1993:20) and a single architectural feature in Area B of the present excavations. The lack of additional architectural or pottery finds in other excavation areas implies a location to the south and east of Area C for the Early Roman settlement.

In conclusion, the excavations at Ḥorbat Maṭṭa have exposed the rural farmstead settlement type previously identified in the Lower Galilee by surface surveys. The excavations shed new light on the nature and complexity of the rural settlement-system during the Iron Age and Persian period.

NOTES

¹ The salvage excavation (Permit No. A-2049) on behalf of the Israel Antiquities Authority was directed by the author with the assistance of Haya Ben Nahum during October–December 1993, following building activities that initially damaged the site in 1988 (see the house in Fig. 2). Additional participants included Pavel Gertopsky, Israel Vatkin, Raz Nicolescu, Israel Stark (surveying), Sandu Mendrea (photography), Ella Altmark (metal cleaning), Estrella Amr (pottery restoration), Gila Midbari and Hagit Tahan-Rosen (drawing of finds), Carole Cope (archaeozoology), Natalia Zak (drawing of plans), Amir Gorzalczy (petrography) and Tali Kan-Cipor Meron (metal finds). The article is updated to the year 2000.

² Only the body of the storage jar was found, without any extant rim sherds.

³ Locus 142 is the stones that were apparently used to fill up depressions in the bedrock from the previous stratum.

⁴ This hewn niche is probably the result of the quarrying of a building stone. Note that the squarish shape and dimensions are similar to the cornerstone of W157 and W158.

⁵ Based on the preliminary report of the excavation at Ḥorbat Maṭṭa (Covello-Paran 1996) Faust (2000:20, 24) included the site in his discussion of rural villages during Iron II. The definition of Ḥorbat Maṭṭa as a farmstead will not necessarily alter any conclusions reached by Faust based on additional sites.

⁶ Most excavated Persian sites have revealed cemeteries with a high density of burials, e.g., Tel Qiri. Note that the burials at Tel Qiri in Area H are only 30 m west of the architectural remains of Stratum IV in Area A2 (Avissar 1987:15–26, Plan 7).

⁷ Note that the Persian-period architectural remains were probably damaged by modern dumping activities at the site, especially notable in Area B.

⁸ The author wishes to thank Avner Raban for discussing the results of his survey of the Nazareth Map prior to its publication.

⁹ There are many parallels for this jar type, of which only a sampling is presented here.

¹⁰ The author wishes to thank Yardenna Alexandre for examining the Horbat Malta storage jars and for confirming that these storage jars are of the 'true' hippo type as defined in Alexandre 1995. Alexandre also identified the Black-on-Red Cypriote bowl (Fig. 38:17).

¹¹ The carination was distinct on body sherds of one of the jars (Fig. 35:12).

¹² This stratum is dated by the excavators to the "late ninth–early eighth century BCE" (Stern and Beit-Arieh 1979:8).

¹³ A bowl from Tel Yoqne'am (Ben-Tor et al. 1983: Fig. 18:5) might also be of this type.

¹⁴ The author wishes to thank Dina Avshalom-Gorni (IAA) for providing the dating and parallels for the Stratum I pottery assemblage.

¹⁵ The parallel fibulas from these sites were metallurgically tested, revealing their composition of bronze with tin (7–12%), some with the addition of lead (Sari 2001:80).

¹⁶ The exact find spot of the kohl stick is unknown as it was discovered in the mesh used to sieve through the debris of the tomb.

¹⁷ The author wishes to thank Anastasia Shapiro of the IAA for carefully removing the heavy patination/crustation on the palette and identifying the stone type.

¹⁸ The typology of the loomweights and spindle whorls is based on that established by Shamir (1996).

¹⁹ The author is indebted to Dr. Carole Cope who carried out the faunal analysis. The small size of the sample yielded limited results.

REFERENCES

- Adan-Bayewitz D. 1993. *Common Pottery in the Roman Galilee: A Study of Local Trade*. Ramat Gan.
- Alexandre Y. 1995. The 'Hippo' Jar and Other Storage Jars at Hurvat Rosh Zayit. *Tel Aviv* 22:77–88.
- Alexandre Y., Covello-Paran K. and Gal Z. 2003. Excavations at Tel Gat Hefer in the Lower Galilee, Areas A and B. *Atiqot* 44:143–170.
- Amiran R. 1972. Achaemenian Bronze Objects from a Tomb at Kh. Ibsan in the Lower Galilee. *Levant* 4:135–138.
- Avissar M. 1987. The Medieval to Persian periods: Architecture, Stratigraphy and Finds. In A. Ben-Tor and Y. Portugali eds. *Tell Qiri: A Village in the Jezreel Valley* (Qedem 24). Jerusalem. Pp. 7–50.
- Bagatti F.B. 1969. *Excavations in Nazareth I: From the Beginning till the XII Century*. Jerusalem.
- Bagatti F.B. 1971. Scavo presso la Chiesa di Guiseppe a Nazaret (Agosto 1970). *LA* 21:5–32.
- Barag D. 1985. Phoenician Stone Vessels from the Eight–Seventh Centuries BCE. *Eretz Israel* 18: 215–232.
- Beck P. 2000. Area A: Middle Bronze IIA Pottery. In M. Kochavi, P. Beck and E. Yadin eds. *Aphek-Antipatris I. Excavation of Areas A and B. The 1972–1976 Seasons* (Tel Aviv University Institute of Archaeology Monograph Series No. 19). Tel Aviv. Pp. 173–238.
- Bennett W.J. Jr. and Blakely J.A. 1989. The Coarse Ware. In W.J. Bennett Jr. and J.A. Blakely eds. *Tell el-Hesi 3: The Persian Period (Stratum V)*. Winona Lake. Pp. 139–230.
- Ben-Tor A. and Bonfil R. 2003. The Transitional Late Bronze/Iron Age to the Persian Period in Area A. In A. Ben-Tor, R. Bonfil and S. Zuckerman eds. *Tel Qashish: A Village in the Jezreel Valley* (Qedem Reports 5). Jerusalem. Pp. 331–361.
- Ben-Tor A. and Portugali Y. 1987. Stratigraphy, Architecture and Key Loci. In A. Ben-Tor and Y. Portugali eds. *Tell Qiri: A Village in the Jezreel Valley* (Qedem 24). Jerusalem. Pp. 53–131.
- Ben-Tor A., Portugali Y. and Avissar, M. 1983. The Third and Fourth Seasons of Excavations at Tel Yoqneam, 1979 and 1981. *IEJ* 33:30–54.
- Ben-Tor A. and Rosenthal R. 1978. The First Season of Excavations at Tel Yoqneam, 1977. *IEJ* 28:57–82.
- Briend J. and Humbert J-B. 1980. *Tell Keisan (1971–1976): une cité phénicienne en Galilée*. Fribourg.
- Browning D.C. Jr. 2001. Loomweights. In A. Mazar and N. Panitz-Cohen eds. *Timnah (Tel Batash) II*. Jerusalem. Pp. 248–258.

- Covello-Paran K. 1997. Migdal Ha'Emeq. *ESI* 17:19*-20*.
- Covello-Paran K. 1998. Ḥorbat Malta. *ESI* 18:27-28.
- Currid J.D. and Navon A. 1989. Iron Age Pits and the Lahav (Tell Halif) Grain Storage Project. *BASOR* 273:67-78.
- Dessel J.P. 1999. Tell 'Ein Zippori and the Lower Galilee in the Late Bronze Ages: A Village Perspective. In E. Meyers ed. *Galilee through the Centuries*. Winona Lake. Pp.1-32.
- Edelstein G. and Milevski I. 1994. The Rural Settlement of Jerusalem Re-evaluated: Surveys and Excavations in the Repha'im Valley and Mevasseret Yerushalayim. *PEQ* 126:2-23.
- Eisenberg E. 1975. A Burial Cave at Tur'an. *HA* 53:7.
- Eisenberg E. 1981. Ḥ. Nesiba (Kerem Ben-Zimra). *HA* 77:5-6.
- Elgavish J. 1968. *Archaeological Excavations at Shikmona, Field Report No. 1, the Levels of the Persian Period, Seasons 1963-65*. Haifa (Hebrew).
- Faust A. 2000. The Rural Community in Ancient Israel during the Iron II. *BASOR* 317:17-39.
- Finkelstein Y. 1986. *Ṭzbet Sartah: An Early Iron Age Site near Rosh Ha'ayin, Israel* (Bar Int. S. 299). Oxford.
- Finkelstein I., Zimhoni O. and Kafri A. 2000. The Iron Age Pottery Assemblages from Areas F, K and H and their Stratigraphic and Chronological Implications. In I. Finkelstein, D. Ussishkin and B. Halpern eds. *Megiddo III: The 1992-1996 Seasons* (Tel Aviv University Institute of Archaeology Monograph Series No. 18). Tel Aviv. Pp. 244-324.
- Gal Z. 1989. Loom Weights or Jar Stoppers? *IEJ* 39:281-283.
- Gal Z. 1992. *Lower Galilee during the Iron Age* (ASOR Dissertation Series 8). Winona Lake.
- Gal Z. and Alexandre Y. 2000. *Ḥorbat Rosh Zayit: An Iron Age Storage Fort and Village* (IAA Reports 8). Jerusalem.
- Gibson S. and Edelstein G. 1985. Investigating Jerusalem's Rural Landscape. *Levant* 17:139-155.
- Gorzalczyk A. This volume. Petrographic Analysis of the Persian Period Pottery at Ḥorbat Malta.
- Herzog Z. 1989. Persian Period Stratigraphy and Architecture. In Z. Herzog, G. Rapp and O. Negbi eds. *Excavations at Tel Michal* (Tel Aviv University Institute of Archaeology Monograph Series No. 8). Tel Aviv-Minneapolis. Pp. 88-114.
- Holladay J. Jr. 1992. House, Israelite. In D.N. Freedman ed. *Anchor Bible Dictionary* 3. New York. Pp. 308-318.
- Holladay J. Jr. 1995. The Kingdoms of Israel and Judah: Political and Economic Centralization in the Iron IIA-B (ca. 1000-750 BCE). In T. Levy ed. *The Archaeology of Society in the Holy Land*. London. Pp. 370-398.
- Hovers E. 1996. The Groundstone Industry. In D. Ariel and A. de Groot eds. *Excavations at the City of David 1978-1985 Directed by Y. Shiloh IV* (Qedem 35). Jerusalem. Pp.171-203.
- Hunt M. 1987. The Tell Qiri Pottery. In A. Ben-Tor and Y. Portugali eds. *Tell Qiri: A Village in the Jezreel Valley* (Qedem 24). Jerusalem. Pp. 139-223.
- Lamon R.S. and Shipton G.M. 1939. *Megiddo I: Seasons of 1925-1934, Strata I-V* (OIP 42). Chicago.
- Loud G. 1948. *Megiddo II: Seasons of 1935-39* (OIP 62). Chicago.
- McCown C.C. 1947. *Tell en-Nasbeh I*. Maryland.
- Meyers C.L. 1996. Sepphoris and the Lower Galilee: Earliest Times through the Persian Period. In R.M. Nagy, C.L. Meyers, E.M. Meyers and Z. Weiss eds. *Sepphoris in Galilee: Crosscurrents of Culture*. Raleigh. Pp. 15-19.
- Meyers E.M. and Strange J. 1981. *Excavations at Ancient Meiron, Upper Galilee, Israel 1971-72, 1974-75, 1977* (Meiron Excavation Project 3). Cambridge.
- Mook M.S. and Coulson W.D.E. 1995. East Greek and Other Imported Pottery. In E. Stern ed. *Excavations at Dor, Final Report I B: Areas A and C; The Finds* (Qedem Reports 2). Jerusalem. Pp. 93-125.
- Moorey P.R.S. 1980. *Cemeteries of the 1st Millennium BC at Deve Hüyük* (BAR Int. S. 87). Oxford.
- Netzer E. 1992. Domestic Architecture in the Iron Age. In A. Kempinski and R. Reich eds. *The Architecture of Ancient Israel from the Prehistoric to the Persian Periods*. Jerusalem. Pp. 193-201.
- Raban A. 1993. Nazareth and 'Afula Maps, Survey. *ESI* 12:19-21.
- Ravikovitch S. 1969. *Manual and Map of Soils of Israel*. Jerusalem (Hebrew).
- Sari K. 2001. *Production of Metal Objects on the Israeli Coast in the Persian Period*. M.A. thesis. University of Haifa. Haifa.
- Seligman J. 1994. A Late Iron Age Farmhouse at Ras Abu Ma'aruf, Pisgat Ze'ev A. *Ṭtiqot* 25:63-75.
- Shalem D. and Gal Z. 2000. A Sounding at Iron Age Tur'an, Lower Galilee. *Ṭtiqot* 39:105-111.
- Shalev S. 1997. Metal Objects from Hazor. In A. Ben-Tor and R. Bonfil eds. *Hazor V*. Jerusalem. Pp. 348-352.
- Shamir O. 1996. Loomweights and Whorls. In D.T. Ariel. *Excavations at the City of David 1978-85*,

- Directed by Y. Shiloh IV* (Qedem 35). Jerusalem. Pp. 135–170.
- Shamir O. 1997. Loomweights of the Persian Period from Khirbet Nimra. *Atiqot* 32:1*–8*.
- Singer-Avitz L. 1989. Local Pottery of the Persian Period (Strata XI–VI). In Z. Herzog, G. Rapp and O. Negbi eds. *Excavations at Tel Michal* (Tel Aviv University Institute of Archaeology Monograph Series No. 8). Tel Aviv and Minneapolis. Pp. 115–144.
- Stern E. 1978. *Excavations at Tel Mevorakh (1973–1976) I: From the Iron Age to the Roman Period* (Qedem 9). Jerusalem.
- Stern E. 1980. Achaemenian Tombs from Shechem. *Levant* 12:90–111.
- Stern E. 1982. *Material Culture of the Land of the Bible in the Persian Period 538–332 BC*. Warminster.
- Stern E. 1994. *Dor: Ruler of the Seas*. Jerusalem.
- Stern E. 1995a. Clay Figurines, Popular Cult Objects, and Sculpture. In E. Stern ed. *Excavations at Dor; Final Report I B: Areas A and C; The Finds* (Qedem Reports 2). Jerusalem. Pp. 435–454.
- Stern E. 1995b. Local Pottery of the Persian Period. In E. Stern ed. *Excavations at Dor; Final Report I B: Areas A and C; The Finds* (Qedem Reports 2). Jerusalem. Pp. 51–92.
- Stern E. and Beit-Arie Y. 1979. Excavations at Tel Kedesh (Tell Abu Qudeis). *Tel Aviv* 6:1–25.
- Stern and Magen 1984. A Pottery Group of the Persian Period from Qadum in Samaria. *BASOR* 253:9–27.
- Stronach D. 1959. The Development of the Fibula in the Near East. *Iraq* 21:181–206.
- Tal O. 1999. The Persian Period. In I. Roll and O. Tal eds. *Appollonia-Arsuf: Final Report of the Excavations* (Tel Aviv University Institute of Archaeology Monograph Series No. 16). Tel Aviv. Pp. 83–222.
- Thompson H.O. 1971. Iron Age Cosmetic Palettes. *ADAJ* 16:61–69.
- Thompson H.O. 1989. Iron Age Cosmetic Palettes. In H.O. Thompson ed. *Archaeology in Jordan*. New York. Pp. 253–271.
- Vitto F. 2001. An Iron Age Burial Cave in Nazareth. *Atiqot* 42:159–169.
- Yadin Y., Aharoni Y., Amiran R., Dothan T., Dothan M., Dunayevsky I. and Perrot J. 1961. *Hazor III–IV: An Account of the Third and Fourth Seasons of Excavations 1957–1958*. Jerusalem.
- Yadin Y., Aharoni Y., Amiran R., Dothan T., Dunayevsky I. and Perrot J. 1958. *Hazor I: An Account of the First Season of Excavations 1955*. Jerusalem.
- Yadin Y., Aharoni Y., Amiran R., Dothan T., Dunayevsky I. and Perrot J. 1960. *Hazor II: An Account of the Second Season of Excavations 1956*. Jerusalem.