

Iron Age II Pottery Vessels from Tall Al-Ḥimmah in The Jordan Valley

Introduction

Human activity adjacent to the site of Tall al-Ḥimmah, especially cultivation, has caused damage to its eastern, southern and western limits (FIG. 1). This prompted the co-directors of the Tall Dayr 'Allā excavations to extend their archaeological activities to the area around this Bronze and Iron Age site. In 1996 they started a first season of rescue excavation at the site of Tall al-Ḥimmah, which continued under the supervision of Eveline van der Steen (1997).

Van der Steen has described how the main reason behind the decision to excavate at the site was to investigate the idea that a 'trade market' centred on the city-state of Saḥāb was established on the Jordanian plateau during the Late Bronze Age. She also hypnotised that a trade route led from Tall

Dayr 'Allā in the Jordan Valley to Saḥāb, by means of the Baq'a basin, and that several sites – Tall al-Ḥimmah amongst them – were established on the banks of Wādī az-Zarqā' (van der Steen 2001: 229).

As a result of this small-scale excavation, a number of iron furnaces, thought to date to the 8th-7th centuries BC, and a large amount of slag were uncovered. The excavators claimed that the archaeological remains recovered from Tall al-Ḥimmah demonstrate that an iron production centre existed there.

New data about the date of iron production at the site were obtained from the more recent 2000 and 2009 excavations supervised by Xander Veldhuijzen (2009: 158). Veldhuijzen argued that the excavations had uncovered a large metal workshop, which he dated to *ca.* 930 cal BC through scientific



1. General view of Tall al-Ḥimmah, looking east (photo Yousef al-Zu'bi).

dating methods, claiming that it represents the earliest such workshop in the region.

During 2009 excavations, more iron production installations were discovered. In addition, an assemblage of pottery vessels was found in association with these installations (FIG. 2). Owing to the discrepancy between the dates obtained by the two abovementioned studies, the excavators decided that further discussion of the Iron Age II vessels recovered in 2009 may help in attributing a more precise date to the iron production workshops at Tall al-Ḥimmah. In particular, this report will focus on surface treatment, ware, firing technique and form.

Location

Tall al-Ḥimmah is located approximately 2.5 kilometers east of the well-known archaeological site of Tall Dayr 'Allā in the Jordan Valley. It is situated on the north bank of Wādī az-Zarqā', ca. 150-200m from the wadi-bed (FIG. 3). The *tall* itself is situated on a natural hill, and rises approximately 7m above the surrounding area. The location of the site gave it significant strategic importance, in that it controlled the routes from the Jordan Valley to the plateau and *vice versa*. As well as Tall Dayr 'Allā, a number of other archaeological sites are known from the vicinity of Tall al-Ḥimmah, including EBIII Tall al-Ḥandaqūq South (Chesson 2000) and Tulūl adh-Dhahab (Gordon and Villiers 1983).

In addition, the site of Tall al-Ḥimmah is relatively close to Maghārit al-Wardah in the 'Ajlūn mountains, which is thought to have been a major source of iron ore (al-Amri 1999).

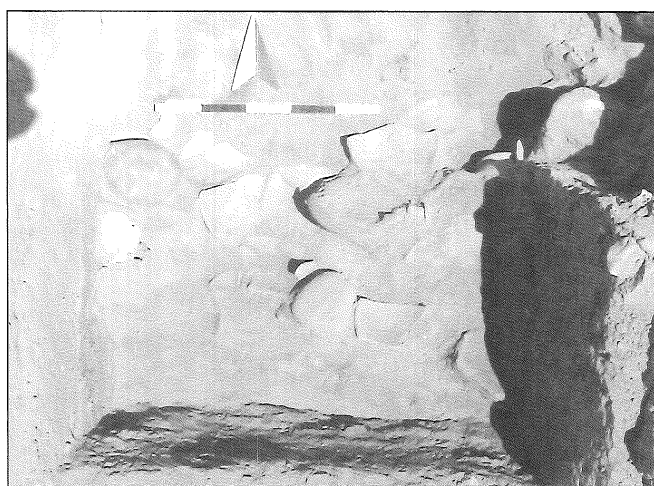
Fieldwork at Tall al-Ḥimmah

The archaeological site Tall al-Ḥimmah was mentioned by several early travelers, including Dahlgren (1913) and Steuernagel (1925), and has been surveyed on several occasions (Glueck 1951; Mel-laart 1962; Yassine *et al.* 1988; Gordon 1987; Mit-tmann 1987; Lamprichs and Bienert 2002). All survey reports describe the presence of sherds dating from the Chalcolithic to the end of the Iron Age, as well as from the Hellenistic, Roman, Byzantine and Umayyad periods. In addition they reported that architectural remains including walls and a tower were still visible on the surface of the site.

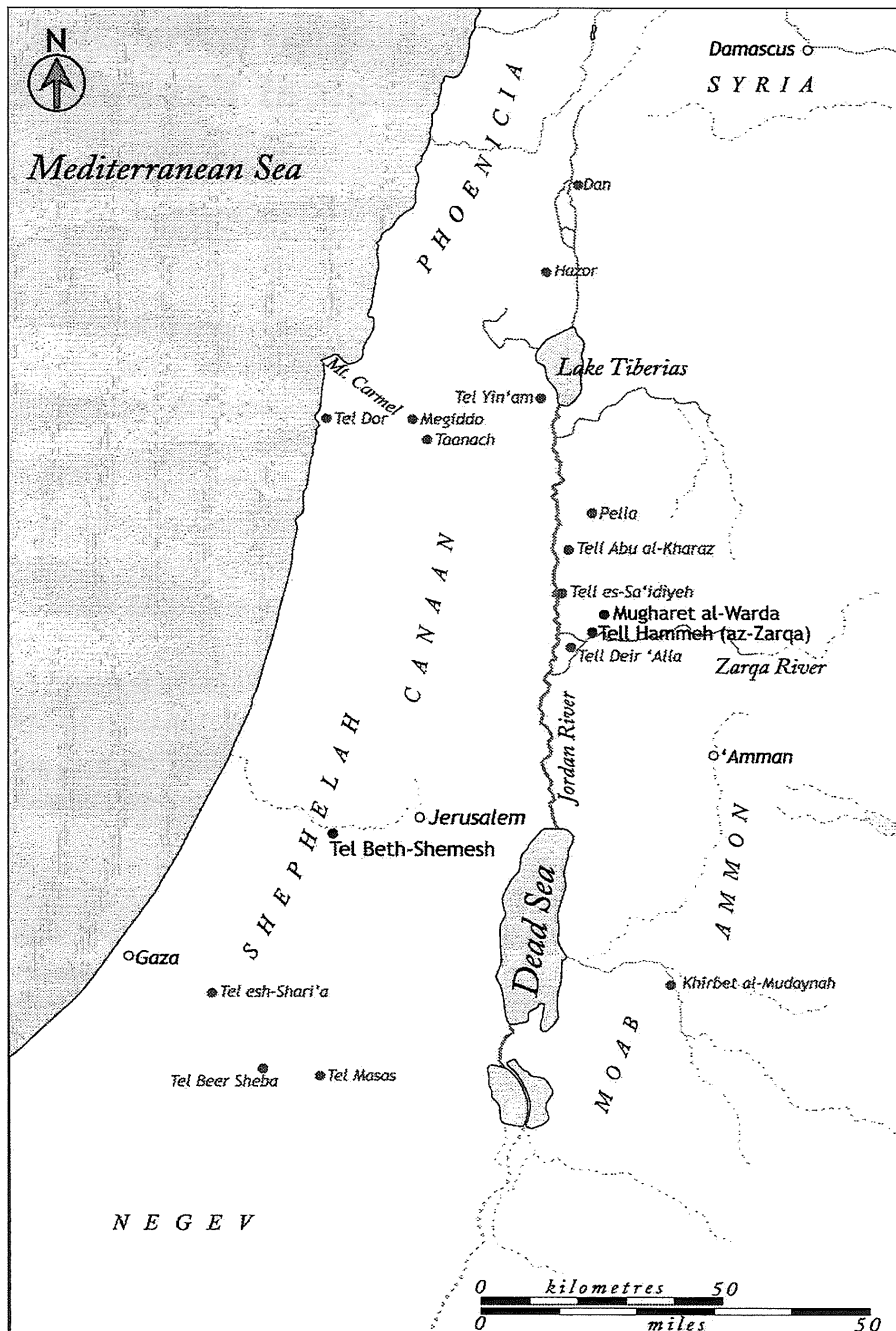
In 1996 and 1997, under the auspices of the joint Jordanian-Dutch excavations at Tall Dayr 'Allā, Evelyn van der Steen conducted two seasons of small-scale rescue excavations at Tall al-Ḥimmah (van der Steen 1998). This came about after the discovery that a large proportion of the *tall* had been bulldozed for agricultural purposes. The excavations hoped to clarify settlement patterns during the transitional period between the Late Bronze Age and beginning of the Iron Age, and to examine the possibility that an ancient trade-route had led from the Jordan Valley to the Baq'a valley by means of Wādī az-Zarqā' (Van der Steen 1996).

These excavations demonstrated that the site was occupied from the Chalcolithic to the end of the Persian period, albeit with a few gaps in the sequence (van der Steen 1998).

During the 2000 season, a site-grid was established and the site divided into four main areas (A - D) in which 5 x 5m squares were laid out. The



2a. and b. Assemblage of 9th century BC pottery found stored in a house at Tall al-Ḥimmah (photo Yousef al-Zu'bi).



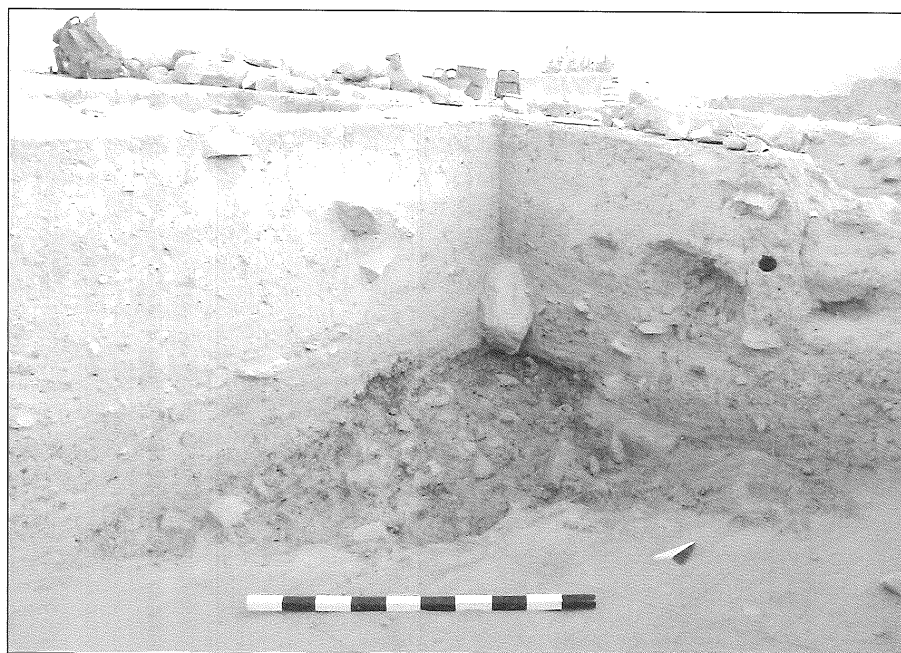
3. Map showing the location of Tall al-Hammah.

squares excavated in 2000 were located adjacent to those excavated in 1996 and 1997. In 2009, additional squares were excavated in areas located further to the west. The objective of these excavations changed from gaining an understanding of the settlement during the Late Bronze and Iron Ages to recovering as much information as possible about the early iron-smelting activities that occurred on the site during the Iron Age II period.

The 2009 joint excavation at Tall al-Hammah was preceded by a geophysical survey with spe-

cific objectives. In previous seasons, a wealth of evidence for iron smelting activities at the site during the 10th century BC had been discovered (FIG. 4). This was subsequently studied by Veldhuijzen at University College London, as a result of which Tall al-Hammah was recognised as an excellent case-study for gaining an understanding of early iron-making technology and its social context (Veldhuijzen 2009).

During her rescue excavations, van der Steen cleaned and drew a large part of the bulldozer cut



4. General view of a smelting furnace at Tall al-Himmah (photo Yousef al-Zu'bi).

located at the south-east side of the site. Archaeological material from the different strata of the cut enabled her to get a first impression of the occupational history of the site. She demonstrated that the earliest evidence of occupation was found at the south-west end of the cut, where a mud-brick wall was visible, and dated to the Chalcolithic and Early Bronze Ages. Van der Steen also how, above the Early Bronze Age stratum, Late Bronze Age material was recovered for the first time at Tall al-Himmah. After cleaning the northern part of the bulldozer cut, large quantities of ash, layers of slag and three furnaces dating to the beginning of the 8th century BC were found (van der Steen 1998: 12).

In addition to cleaning the bulldozer cut, van der Steen opened four squares: two in the centre of the cut and one each at the south and north ends. She subsequently concluded that the following archaeological periods were represented at the site (van der Steen 1998, 2001):

Phase 1

Chalcolithic - Early Bronze Age: represented by a mud-brick wall, layers of ash and burnt rubble, and an EBII juglet.

Phase 2

Middle Bronze Age III: represented by sherds.

Late Bronze Age I: represented by wash and surface layers, cooking pot sherds (dominant) and chocolate-on-white ware (few).

Late Bronze Age II: represented by pits dug into the LBI layers; it has been argued that the presence of large number of pits indicates the presence of farmers and / or pastoralists.

Late Bronze Age III - Iron Age 1 (transitional): represented by surfaces covering the LBII pits. The excavator suggested that industrial or household activities may have been carried out on these surfaces, on the basis of the presence of ash, burnt patches, a fireplace and a *tannūr*, as well as pottery sherds.

Phase 3

Iron Age I: represented by structures consisting of mud-brick walls on stone foundations and a courtyard with a *tannūr*, fireplace and small circle of pebbles.

Phase 4

Early Iron II: represented by a large building containing a row of standing stones ca 30 cm high, with the spaces between them filled with mud-bricks. After this structure was destroyed during the last phase of Iron Age II, the iron furnaces were constructed. Dense layers of slag and ash were visible in the area between the courtyard and building walls.

Phase 5

Late Iron Age II: represented by a huge pit (ca. 6-7m diameter), lined with mud-bricks and with stones at the bottom, cutting through all phases; a large number of sherds, loom-weights and two grinding

stones were also found in strata of this phase.

Phase 6

Persian period: represents the final phase of occupation at Tall al-Ḥimmah; the main features of this phase are a building constructed of dressed stone blocks and a number of pits (Van der Steen 1998, 2001).

Archaeological Context of Iron Age II

As mentioned above, the aim of this paper is to discuss the results of the Iron Age II excavations at Tall al-Ḥimmah, in order to explain and confirm the radiocarbon date published by Veldhuijzen. He has proposed that during the period between *ca* 930 and 850 BC, seasonal iron smelting took place at the site (Veldhuijzen 2009: 158).

During the 2000 and 2009 seasons, furnaces other than those excavated in 1996 and 1997 were found. A huge amount of slag and a large number of tuyères were also excavated. Furthermore, architectural remains and pottery vessels dating to Iron Age II were uncovered.

Van der Steen had proposed that infrastructure in the 'Ammān region may have collapsed by the end of the Late Bronze Age, and that as a result some of its population might have migrated to still-functioning areas such as Dayr 'Allā (van der Steen 2004). She also suggested that some of these migrants from the plains around modern 'Ammān were farmers and that others were potters. Henk Franken (1969: 33-43) had previously noted that the destruction of Late Bronze Age Tall Dayr 'Allā was followed by a break, after which the Iron Age phases started. He added that there was an architectural shift at the site at this time, evidenced by

the presence of pits, fragmentary walls and the re-use of older structures. Moreover, the pottery assemblage differed from that of the Late Bronze Age, although the technology and form of locally produced pots remained the same (London and Franken 1995: 218). The population of Tall Dayr 'Allā during Iron Age I was characterised as semi-nomadic, with an influx of more sedentary people during Iron Age II.

The Iron Age II architectural remains exposed at Tall al-Ḥimmah consist of small rooms constructed of medium-sized natural boulders (FIG. 5). Unfortunately, a complete house-plan was not uncovered during the 2000 and 2009 seasons owing to the excavation methods employed.

Iron Age II Pottery

A small assemblage of pottery vessels, including bowls, kraters, cooking pots, jugs, juglets and jars, was recovered from the floors of houses and courtyards associated with Iron Age II levels (FIG. 6). Most of these vessels were excavated in Square A/D 7, locus 34 (soil layer inside a pit), locus 37 (pit containing brittle material, slag and charcoal) and locus 43 (surface into which a number of pits containing sherds, slag, bone and charcoal were cut).

These vessels were found in groups, such as that encountered in Locus 43 (FIG. 7), and may have been used by the smiths. A study of the pottery assemblage recovered during the 2009 season follows below.

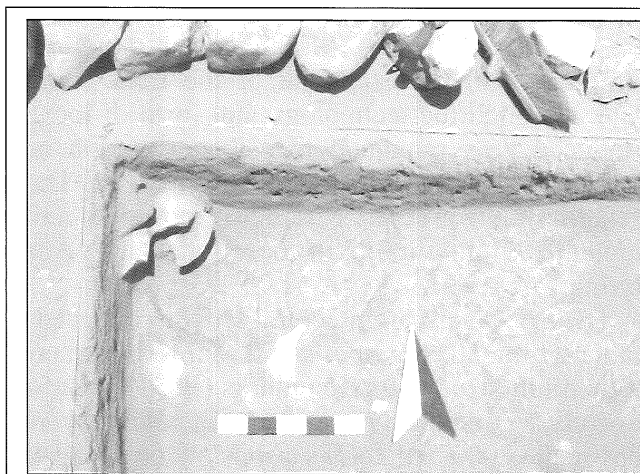
Bowls

A number of different types of bowl have been

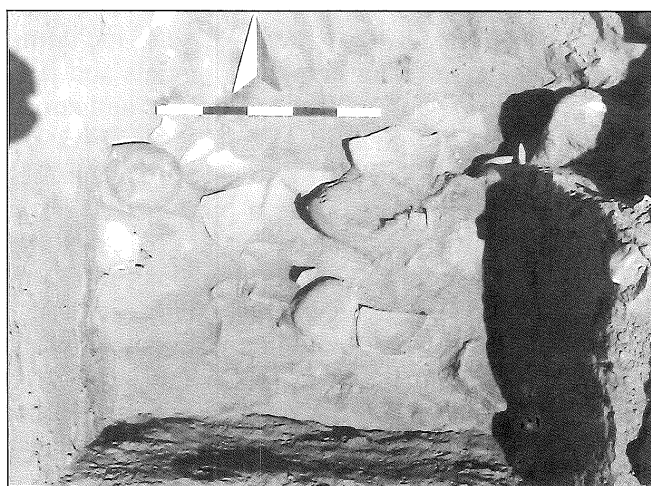


5. Walls excavated in 2009 (photo Yousef al-Zu'bi).





6. Location of Iron Age II pottery vessels.



7. Pottery utensils excavated in locus 43.

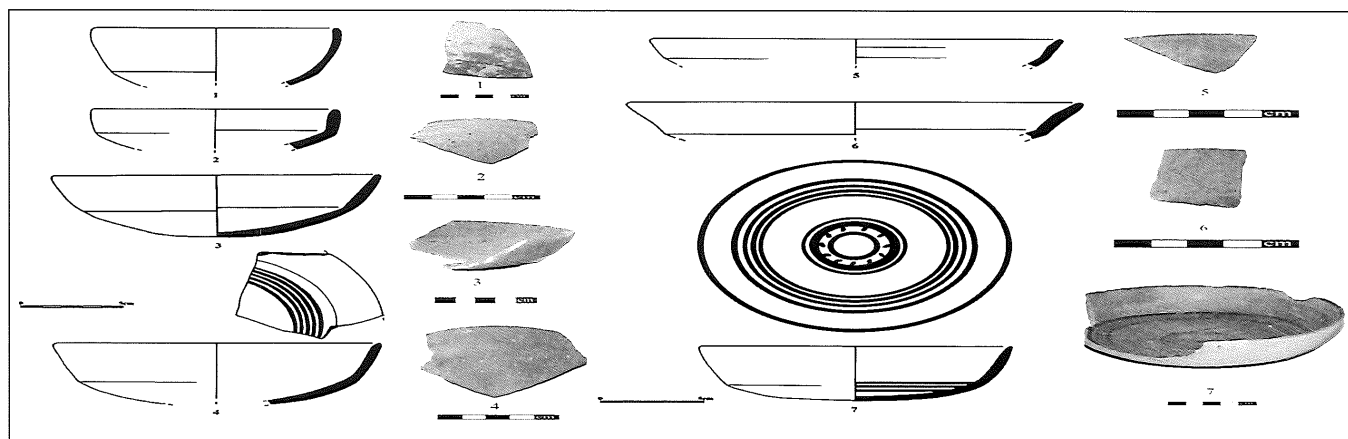
identified in the ceramic assemblage from Tall al-Ḥimmah, including the following:

Rounded bowls: Rounded bowls are the most plentiful type, which includes many types with

similar profile but variations in form and size; these may be categorized as:

1. Small Bowls (FIG. 8): Approximately 15cm in diameter, having carination mostly on the lower third or middle of the bowl, slipped and burnished, with a few painted with red circles on the interior. They have simple rims and either rounded or flat bases.

Parallels for this type of Iron Age II bowl have been published from several sites in Jordan and Palestine, including Tall Dayr 'Allā Phases J and K (Franken 1969: figs 69-71), Tall as-Sa'īdiyya Strata VII - IV (dated to the first three-quarters of the 8th century BC) (Pritchard 1985: 79), Tabaqat Faḥil (Pella) Stratum 6 in the West Cut (Area VIII) (dated to Iron Age IIa) (McNicol *et al.* 1982: pl. 126: 10-11, 1992: pl. 66: 10 and 13), Tall ad-Duwayr (Lachish) Levels V and IV (Zimhoni 1997: fig. 3.5), Hazor Stratum IX (Yadin *et al.* 1958 - 1961) and Tall Abū Ḥawwām (Hamilton 1953: 29, 153).



8. Small bowls.

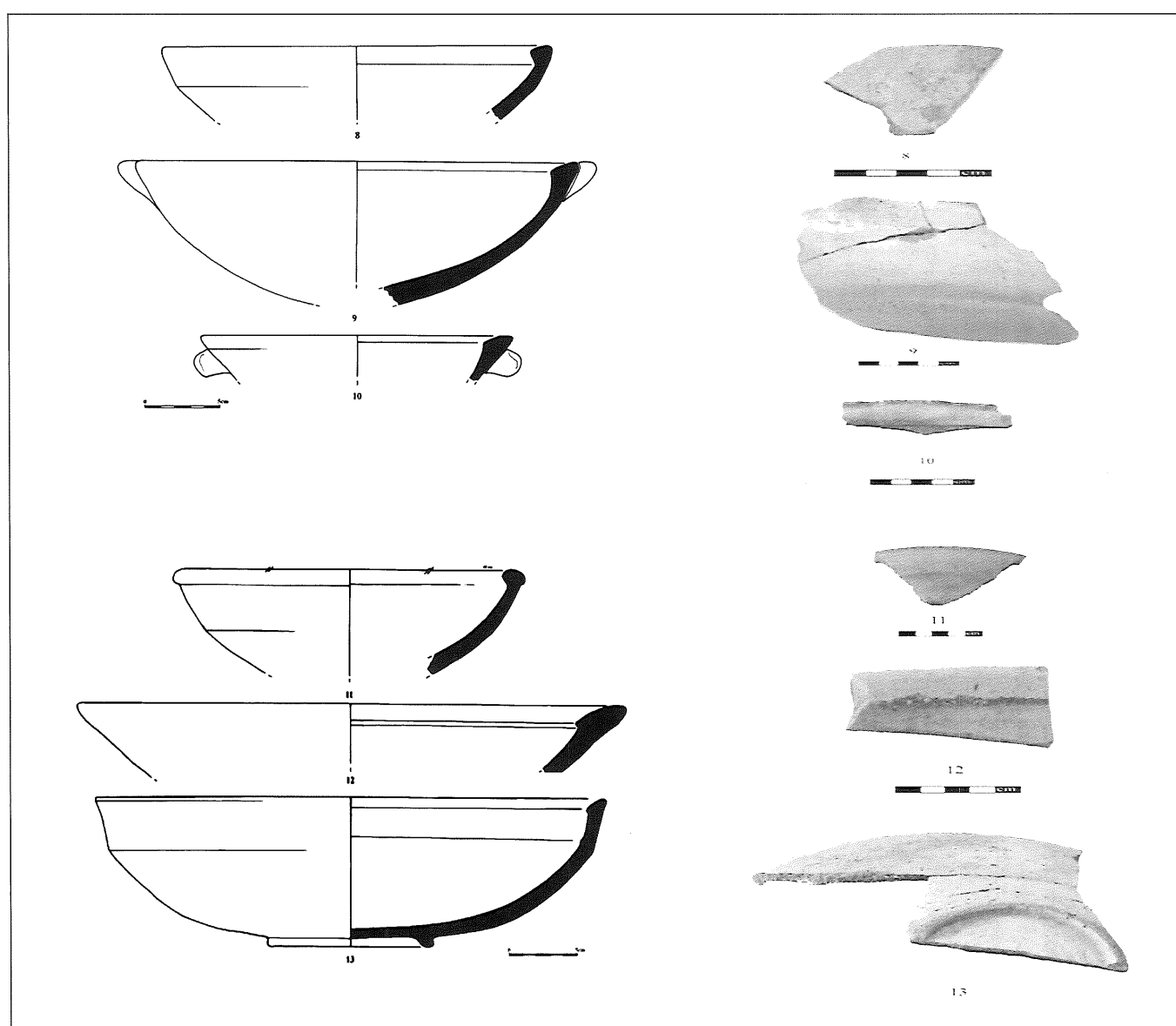
Bowls painted with red or red-and-black decoration on the inside were also described from Hazor Stratum VB and dated to the Iron Age IIC period (Yadin *et al.* 1961: pl. CCXXIII: 19). These parallels are all from the Iron Age II period, which is considered to date from *ca.* 900 to 587 BC; it is typically subdivided into Iron Age IIa (*ca.* 900-800BC) and IIb (*ca.* 800-587BC) (Amiran 1969: 191).

2. Medium and Large Deep Bowls (FIG. 9): This group includes medium- and large-sized bowls of which hardly two are alike. They have rounded walls, profiled and thickened rims, and ring bases. A few bowls are slipped. Some have knob-handles attached to the rim or just below

it. However, the forms illustrated below (nos. 8-13) demonstrate that the main difference between types is found at the rim.

In general the rims are thickened and some are inverted (no. 8). Amiran suggested that although this type of bowl started at the beginning of Iron Age II, it only became common later, during Iron IIC (Amiran 1969: 199).

Parallels for this type of bowl are found at many Iron Age II sites excavated in the Jordan Valley. At Tall Dayr 'Allā, Phases J and K produced a large quantity of this type (Franken 1969: figs 70 and 72), as did Tall as-Sa'īdiyya Strata VII-V (Pritchard 1985: figs 2: 1-10, 10: 13-18). In Palestine, paral-



9. Medium and large deep bowls.

els are known from Hazor Strata VIII - VI (dated to Iron Age IIa, b and c) (Yadin 1959-1961), Tell Beit Mirsim Stratum A (Albright 1932: pls 51, 61 and 62) and Tall ad-Duwayr (Lachish) Levels V - IV (Zimhoni 1997: figs 3.7-3.12).

Based on the above examination of *comparanda*, we may argue that this type of bowl started in the 9th century BC and continued into the Persian period (ca. 900-587BC).

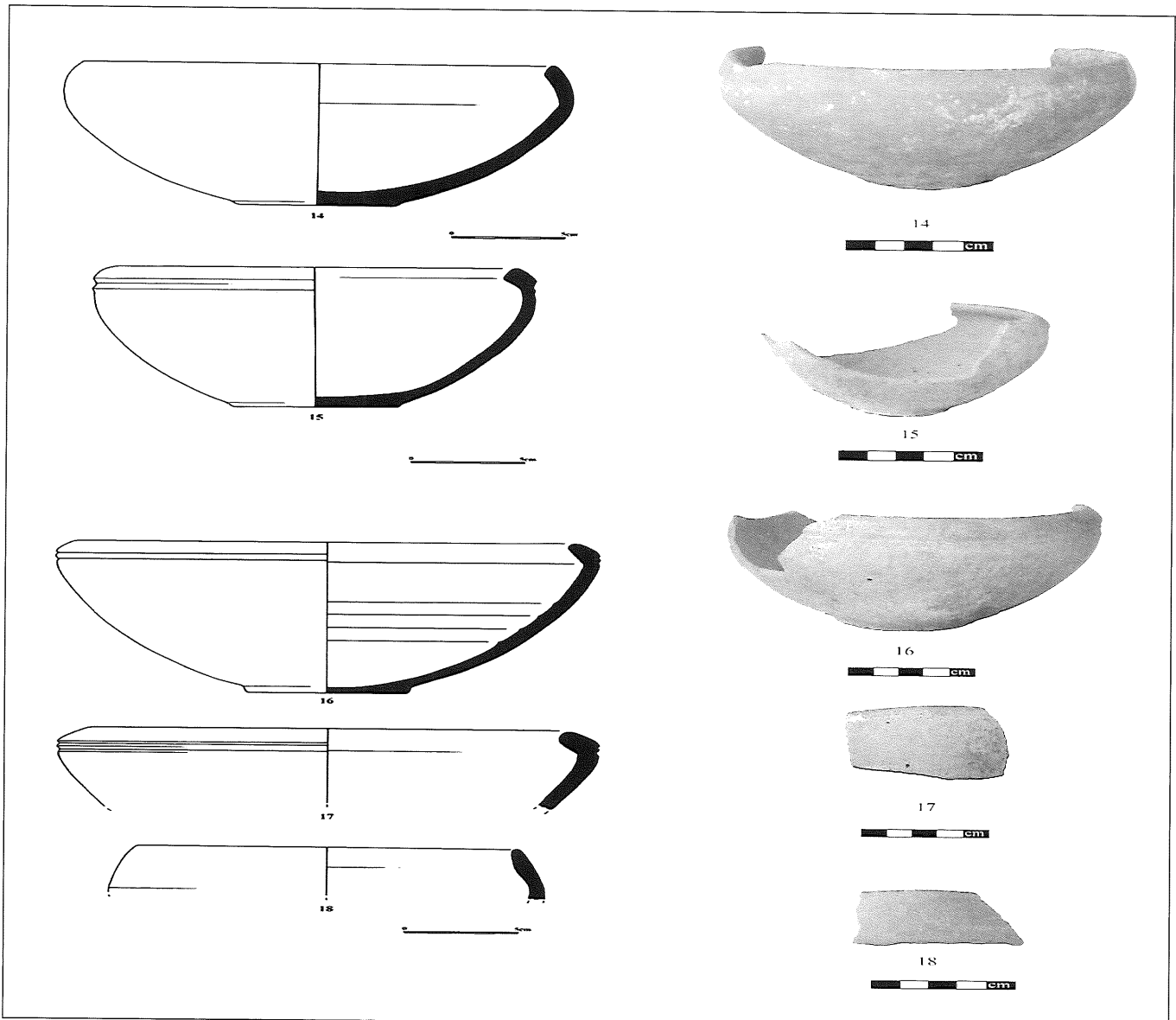
Deep and large hemispherical bowls (FIG. 10): A small number of hemispherical bowls were also encountered at Tall al-Ḥimmah. They are characterised by an inverted, sometimes thickened, rim and

red-burnished slip on the inside. Very few parallels have been discovered in Jordan or Palestine (but see Tall Dayr 'Allā Phase J (Franken 1969: fig. 70: 11) and Tell Beit Mirsim Stratum A (Albright 1943: pl. 15: 13)).

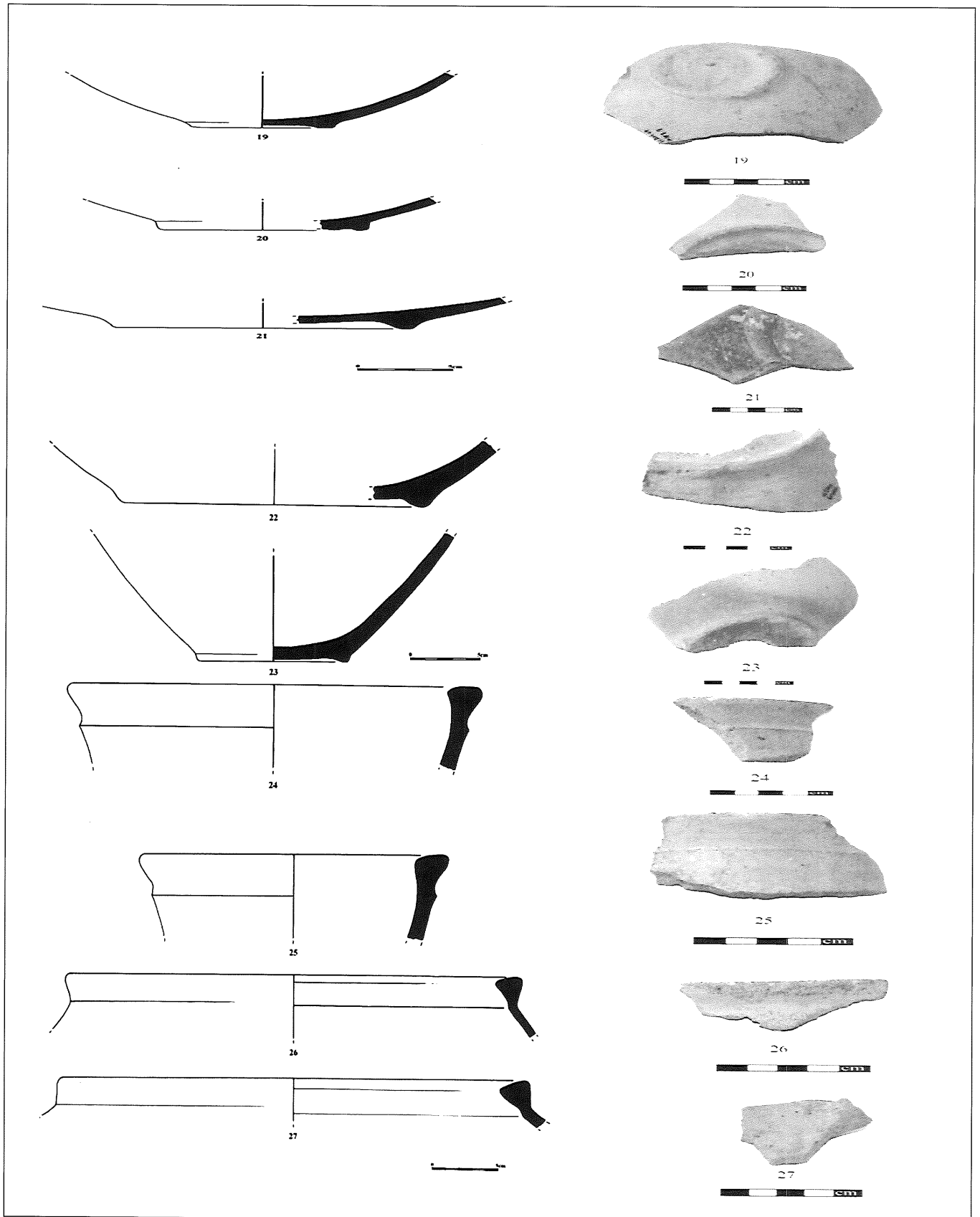
Kraters (FIG. 11)

Several types of krater were identified in the Tall al-Ḥimmah assemblage (nos. 19-27). All excavated and drawn krater sherds have a red-painted slip, low ring-bases and no handles. They are characterised by a flat-profiled rim, some with a ridge below it.

Parallels for the Tall al-Ḥimmah kraters were encountered in Iron Age II Strata VII-IV at Tall



10. Deep and large hemispherical Bowls.



11. Different types of krater.

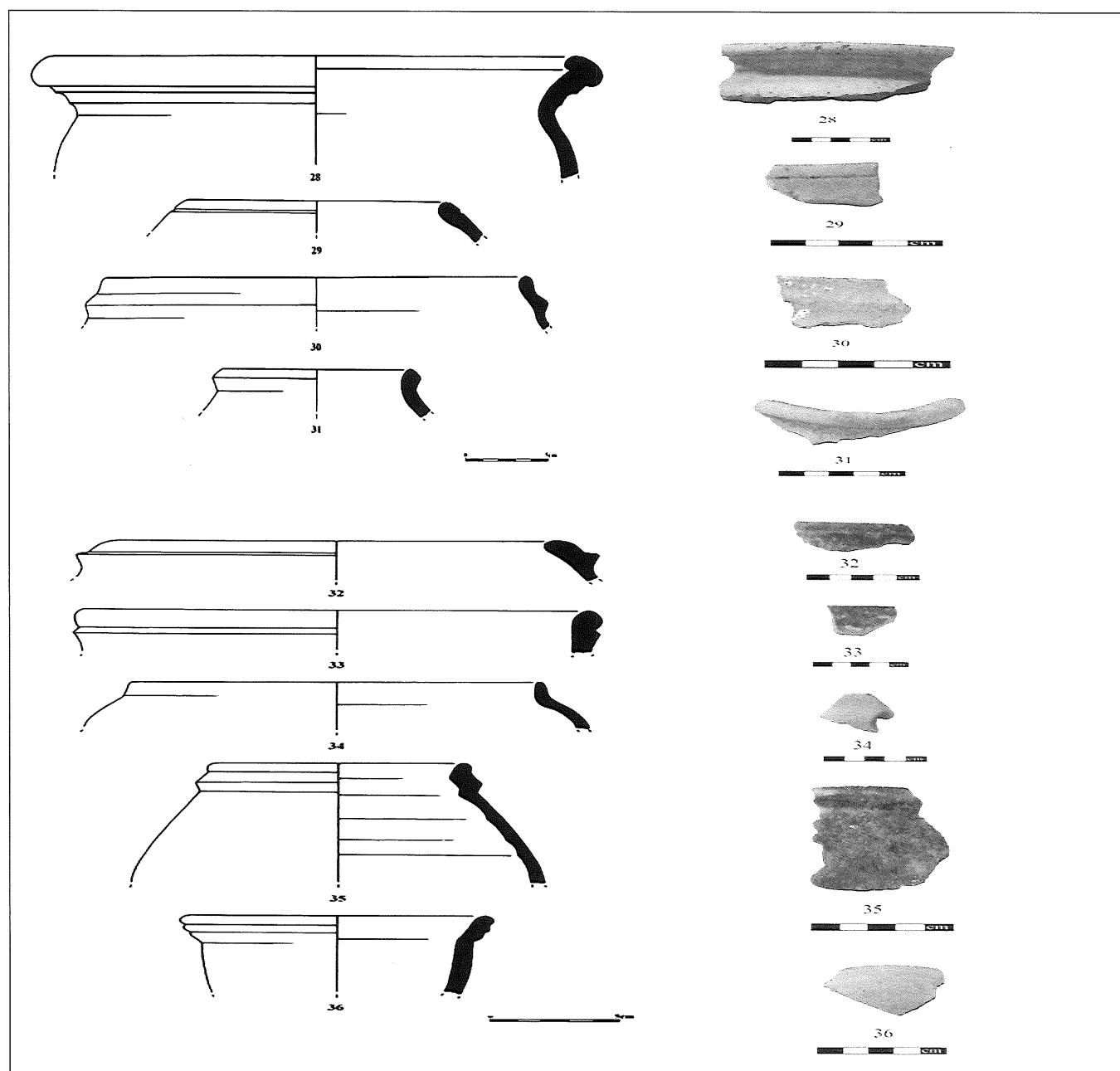
as-Sa'idiyya (Pritchard 1985: figs 1: 1-14, 8: 1-15, 12: 1-16, 17: 25-27) and Tall Dayr 'Allā Phase K (Franken 1969: fig. 73: 1-8). These have all been dated to Iron Age II.

Cooking pots (FIG. 12)

Cooking pot sherds were also excavated and are direct descendents of Iron Age I examples. Usually the clay of cooking pots is easy to distinguish. The examples under consideration here have no handles and are carinated under the rim; the triangular Iron

I rim has developed into a ridge-form. Some are hole-mouth, while others are short-necked. Many are rounded in shape and some have a reddish-brown slip.

Similar cooking pots are known from major Iron Age II sites in the Jordan Valley, e.g. Dayr 'Allā Phases J, K and L (Franken 1969: pls. 69-74), Tall as-Sa'idiyya (Pritchard 1985) and Tabaqat Fahil (Pella) (McNicol *et al.* 1982). Cooking pots parallel to nos. 35-36 have been dated to between 800 and 587 BC and are known from several Palestinian



12. Iron Age II cooking pots.

sites, e.g. Beit Mirsim (Albright 1932: pl. 55: 3).

Jars (FIG. 13)

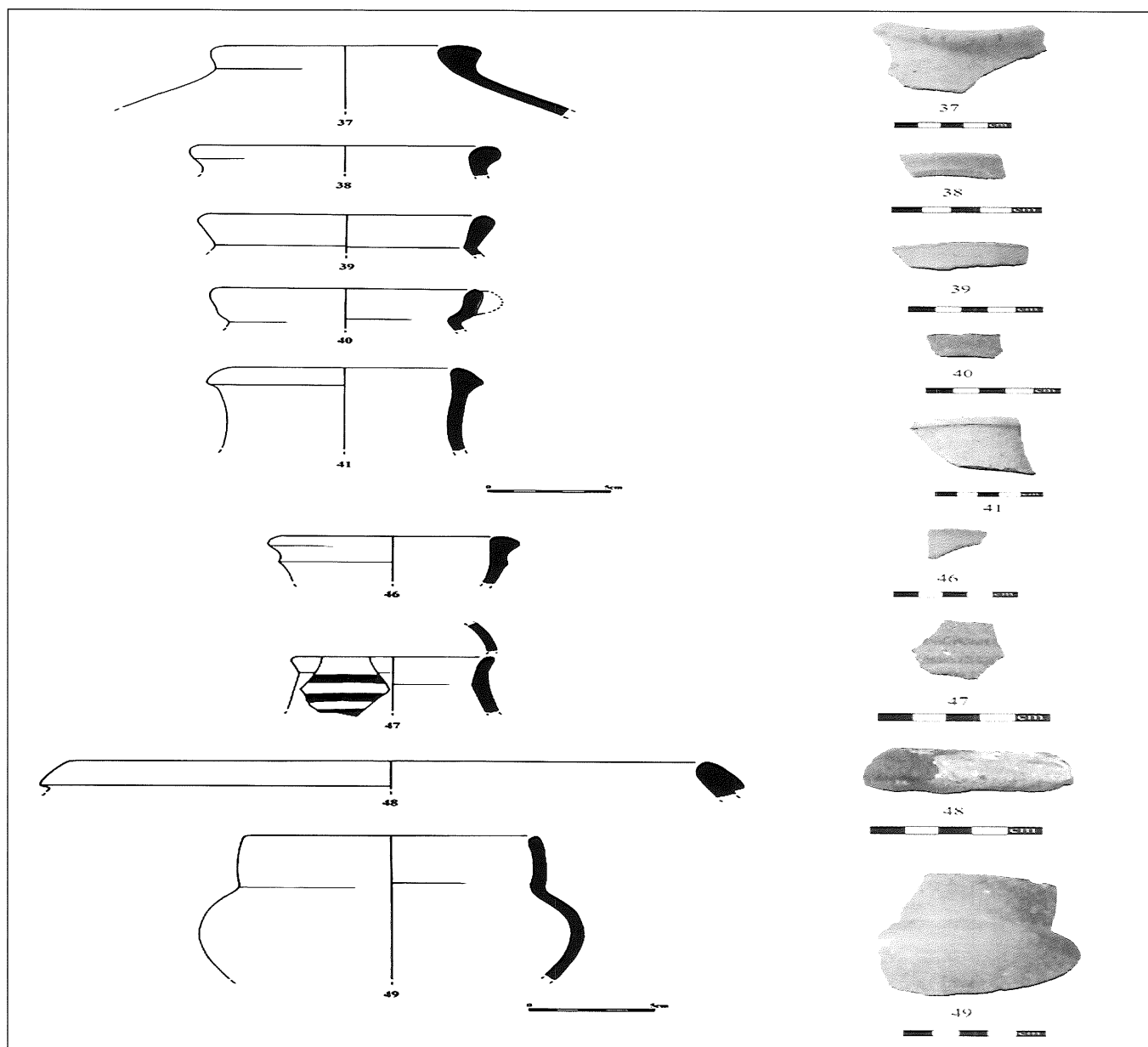
No intact jars were found during the 2009 season at Tall al-Ḥimmah, although several sherds could be attributed to jars. It is however worth noting that not a single sherd attributable to the so-called collared rim jar was found. One example of a hole-mouth jar (no. 48) was registered. All the jars under study here are necked; some are ovoid ridge-neck examples. One (no. 42) has been incised around the neck, whereas another (no. 47) has red-painted circles on the neck.

Similar jars have been excavated at other sites in the Jordan Valley and have been dated to the Iron Age II period, e.g. Tall Dayr 'Allā, especially Phase K (Franken 1969: fig. 72).

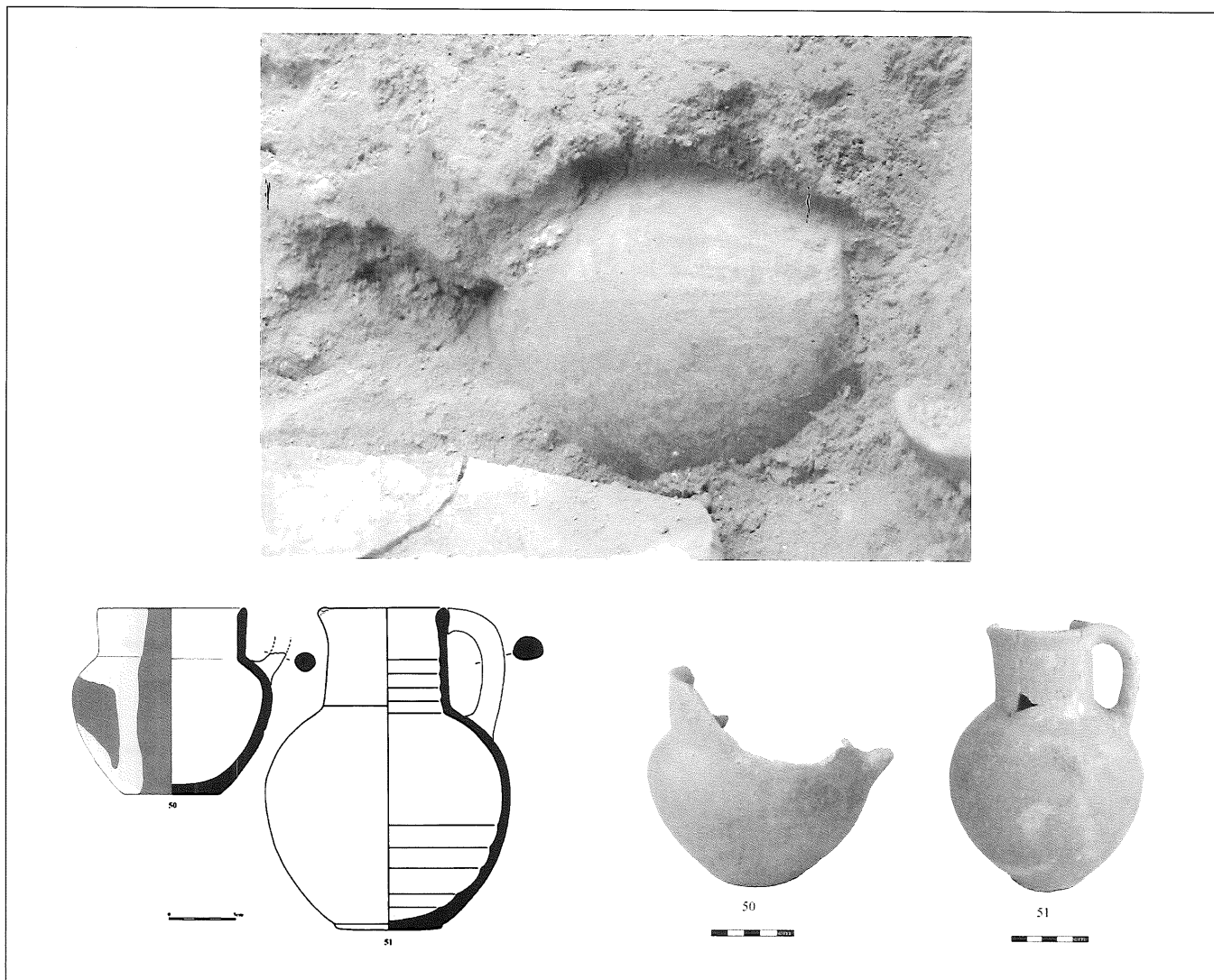
Jugs (FIG. 14)

A number of different jug types were identified at Tall al-Ḥimmah, including:

Dipper jugs: This form is characterised by a high neck, red-painted slip, loop-handles and disk-bases. Similar jugs are known from Tall Dayr 'Allā Phase K (Franken 1969: fig. 72: 83).



13. Different jar types.



14. Jugs.

Spouted jugs (FIG. 15): A single example was excavated in locus 43 as part of an assemblage consisting mainly of bowls. The spout has been pierced; the jug has a loop-handle, disk-base and whitish slip. Spouted jugs are known from other sites in the region, such as Tall al-Mutasallim (Megiddo) Stratum VI (Loud 1948: pl. 82:2).

Painted jugs (FIG. 16)

The painted jug excavated at Tall al-Ḥimmah has an elongated body, with two loop-handles attached to its middle. It is decorated with a red-painted slip and dusky red-painted circles on the shoulders and the lower part of the body. It was discovered as part of a group of vessels consisting of a bowl, jug and spouted jug.

Owing to the fact that the other vessels found

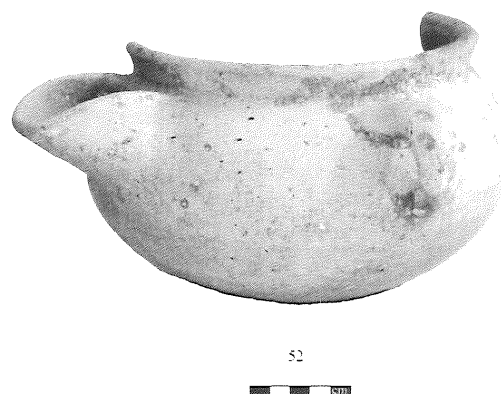
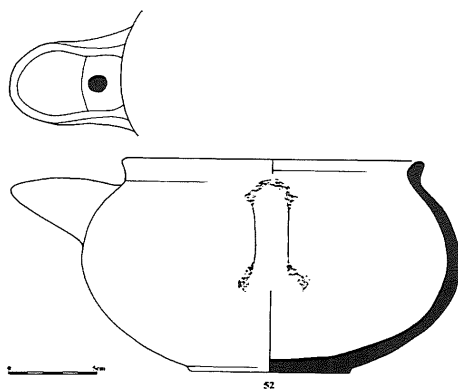
with this jug date to Iron Age II, it has been tentatively dated to the same period. However, it should be noted that similar objects are known from later Iron Age periods and have been identified as Ammonite.

Juglets (FIG. 17)

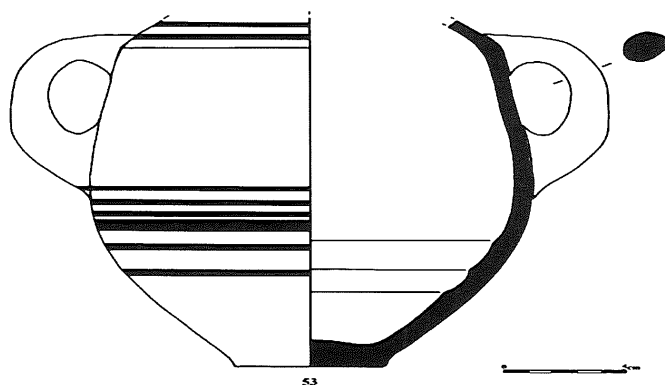
A single dipper juglet sherd was recovered from Tall al-Ḥimmah (no. 54). Parallel examples, dated to Iron Age II, were excavated at Tall Dayr 'Allā Phase J (Franken 1969: fig. 69: 7-8). The sherd under consideration here came from locus 43 and consisted of the lower part of a wheel-made dipper juglet with a round base.

Decorated body sherds (FIG. 18)

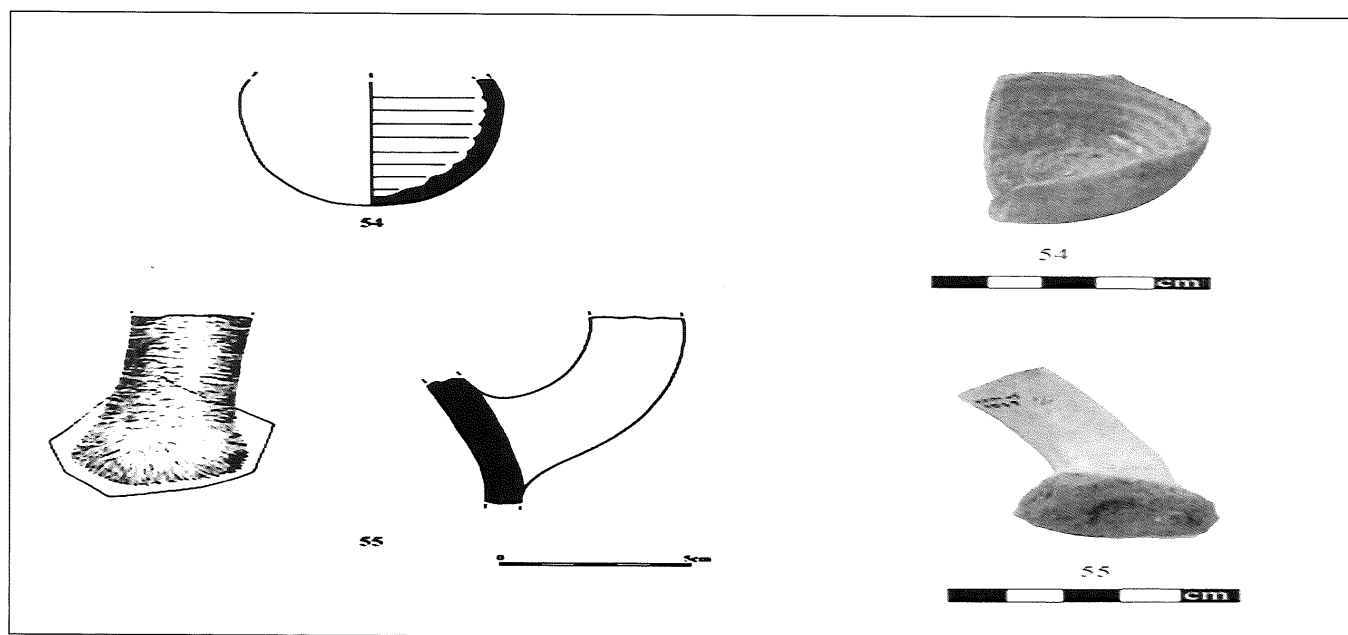
Many decorated sherds were registered from Iron



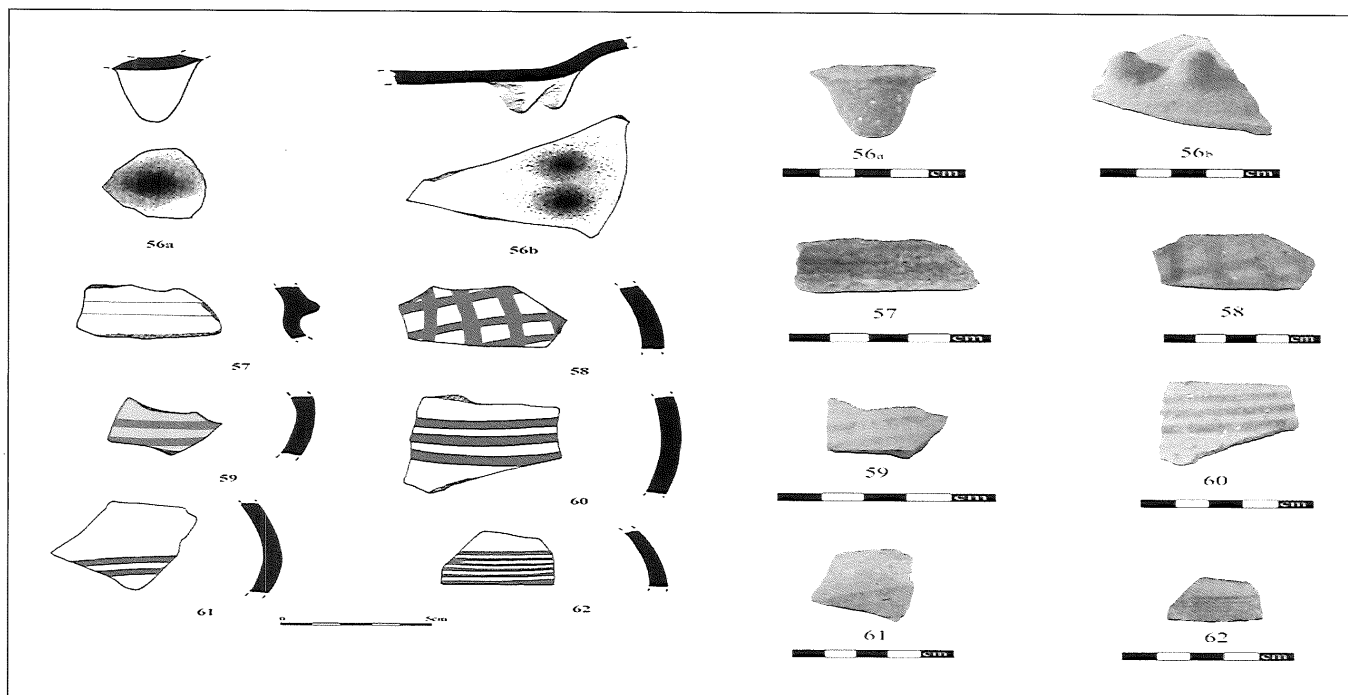
15. Spouted jugs.



16. Painted jugs.



17. Juglets.



18. Decorated sherds.

Age II levels at Tall al-Himmah. Most of them are decorated with red-painted circles or criss-crossed lines forming a net-pattern. Other sherds (nos. 56a and b) may be parts of a tripod cup, a well-known form during Iron Age II.

Conclusion

The pottery assemblage excavated in 2009 at Tall

al-Himmah consists mostly of household vessels intended for daily use. The assemblage includes bowls, jars, jugs, juglets and cooking pots. Familiar forms such as chalices, collared-rim jars and even lamps were apparently absent. Surface treatment consisted mostly of a red-painted slip which was highly burnished. Red and reddish-brown painted circles were the main decorative motive. Analysis

of *comparanda* suggests that the Tall al-Himmah assemblage dates to the 9th-10th centuries BC. This would fit very well with the radiocarbon date of ca. 930 - 850 BC published by Veldhuijzen.

Acknowledgments

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