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The Metal Finds from Gane Ṭal

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The metal finds from the Gane Ṭal excavation (see Arbel and 'Ad, this volume) include objects made of iron and copper alloys (Table 1).[1] A large percentage of the finds was corroded and unidentifiable.

Among the identifiable finds are a bracelet (Table 1: No. 1), two fragments of agricultural tools (Fig. 1:1, 2; Table 1: Nos. 2, 3), one dagger (Fig. 1:3; Table 1: No. 1:4), a pot handle (Fig. 4; Table 1: No. 5), two cosmetic or small surgery tools (Table 1: Nos. 6, 7), a few nails (Table 1: Nos. 8–13), a bronze tack (Table 1: No. 14), a bronze clasp (Table 1: No. 15), six bronze rings (Table 1: Nos. 16, 17; see Amitai-Preiss, this volume: Nos. 1–4) and four musket balls.[2]

The iron sickle or curved knife blade (Table 1: No. 2) was found only as a fragment. The shape of sickles has hardly changed and similar tools were used up until the twentieth century (Avitsur 1976:154). The other agricultural tool was also found only as a fragment—all that remains is part of the blade and the socket of the handle (Table 1: No. 3).

The iron dagger was excellently preserved, and the tang was found fitted into the short handle (Fig. 1:3; Table 1: No. 4). The blade is very blunt, but was probably originally narrower and sharper. A similar, but not identical blade was found at the excavations of the Crusader fortress at Vadum Jacob and dates to the late twelfth century (Boas 1999:215, Photograph 13).

One of the surgery or cosmetics tools is a bronze rod with a square flat spoon (Table 1: No. 6); the spoon is slightly chipped. This type of spoon (*ligula*) was used to remove ointments, creams, powders, perfumes or medicines from narrow containers. It was also used as a medical probe to remove objects from ears or nostrils, and to instill drops into a patient's ears, eyes or nose (Rimon and Zias 1996:62). The other surgery or cosmetic tool is a bronze probe (*specillum*; Table 1: No. 7) whose tip resembles an olive stone. This is a multi-purpose tool used to examine ears, noses and small wounds, and was also used for smearing and spreading medicines (Rimon and Zias 1996:62).

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[1] The objects were cleaned in the IAA laboratory under the direction of Lena Kupershmidt.

[2] All photographs were taken by Clara Amit, of the IAA.

Table 1. Metal Finds

Reg No.	Object	Area	Locus	Basket	Context and Date	Measurements (cm)	Comments
1	Bracelet	C2	765	7593	Fill of a 5th c. vaulted tomb	Diam. 5.4 Th 0.2	Copper alloy; fragment
2	Sickle or curved knife blade	E1	1662	15520	Fill within Byzantine storage building	L 10.5 W 2.3 Th 0.3	Iron; fragment; see Fig. 1:1
3	Working tool	E1	1608	15398	Above the walls of a Byzantine storage building (end of 6th c.)	L 13 W 2.5 Th 0.4	Iron; fragment; see Fig. 1:2
4	Dagger	E3	1509	15057	Fill of Mamluk debris (13th–15th c.)	Blade: L 14.4 W 2.5 Th 0.4 Tang: L 8	Iron; excellent preservation; see Fig. 1:3
5	Pot handle	E1	1637	15522	Below floor of Byzantine storage room (end of 6th c.)	Diam. 11 W 0.6	Copper alloy; one of the loops is missing; see Fig. 1:4
6	Surgery or cosmetic tool	D1	1004	10033	On paved stone platform of Byzantine domestic area (end of 6th c.)	L 8.5	Bronze rod with a square flat spoon (slightly chipped)
7	Surgery or cosmetic tool	C1	615	6051	On paved stone platform of Byzantine domestic area (end of 6th c.)	L 8.5	Bronze probe (specillum)
8	Iron nail	D2	1100	10671	Byzantine domestic structure	L 10 Th 0.6	
9	Iron nail	D1	1018	10138	Byzantine domestic structure	L 12 Head Diam. 2.4	
10	Iron nail	C1	620	6067	Late Byzantine fill within Roman vaulted tomb	L 9 Th 0.5 Head Diam. 2	
11	Iron nail	E1	1601	15343	On surface of Byzantine storage area	L 10 Th 0.8 Head Diam. 2.3	
12	Iron nail	E1	1637	15467	Fill within Byzantine storage room	L 10 Th 0.7 Head Diam. 2	
13	Iron nail	D1	1000	10193	Byzantine fill	L 11 Th 0.6 Head Diam. 2	
14	Tack	C2	765	7530	Byzantine fill within vaulted tomb dated to the 4th–5th c.	L 2	Bronze; round mushroom-shaped head; may have been used in a leather belt or bag, or in a fine wooden box or furniture

Table 1. (cont.).

Reg No.	Object	Area	Locus	Basket	Context and Date	Measurements (cm)	Comments
15	Clasp	E1	1640	15493	Surface find within Byzantine storage room	L 9.5 Diam. 1.5 Th 0.4 Ring Diam. 1.5	Bronze rod with a flat ring at the edge
16	Bronze ring	D1	1007	10381	Found on a working platform, Byzantine domestic context	Diam. 2.5 Th 0.5	
17	Bronze ring	D1	1066	10665	Surface find, Byzantine domestic context	Diam. 1.5 Th 0.2	

Fig. 1. Metal objects: (1) sickle or curved knife blade; (2) working tool; (3) dagger; (4) pot handle.

One of the nails has a rectangular head (Table 1: No. 8), and may have had a slightly different purpose than the other heads. The rest of the nails (Table 1: Nos. 9–13) have round heads, and their legs are rectangular in section, which is similar to most nails in antiquity. Their shape is reasonably preserved, although the iron is badly corroded in most cases. Judging by their size, they appear to have been used in construction of gates and heavy doors.

The bronze tack has a round, mushroom-shaped head (Table 1: No. 14). It may have been used in a leather belt or bag; or it may have been used in a fine wooden box or furniture.

The bronze clasp consists of a bronze rod with a flat ring at the edge (Table 1: No. 15).

CONCLUSIONS

Judging from the raw material and the quality of the tools, they appear to have been locally made. Since the site was identified as a Byzantine agricultural farm (see Arbel and ʻAd, this volume), it may well have had a metal workshop for the production and repair of tools. The dagger was found in the remains of a building that may have served as a road station during the Mamluk period.

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