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**Article:**

Bedianashvili, G., Sagona, C., Longford, C. [orcid.org/0000-0003-1958-3763](https://orcid.org/0000-0003-1958-3763) et al. (1 more author) (2019) *Archaeological investigations at the multi-period settlement of Rabati; southwest Georgia : preliminary report (2016, 2018 seasons)*. *Ancient Near Eastern Studies*, 56. pp. 1-133. ISSN 1378-4641

<https://doi.org/10.2143/ANES.56.0.3286813>

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# Archaeological investigations at the multi-period settlement of Rabati, southwest Georgia: Preliminary report (2016, 2018 seasons)

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## Abstract

*Presented here is a preliminary account of excavations carried out at the site of Rabati (Meskhet-Javakheti region, southwest Georgia) in 2016 and 2018 by the Georgian-Australian Investigations in Archaeology (GAIA) project. At this multi-period site, architectural remains and a range of cultural artefacts span the Chalcolithic, through Bronze and Iron Ages, to the medieval period. Specific cultural finds have included Bedeni and Trialeti deposits characterised by distinctive pottery types and, importantly, contemporary common wares representing an otherwise little-known local domestic ceramic industry. Archaeobotanical and palynological analyses reflect on the agricultural economy at the site, which included cultivated cereals and other edible plants.\**

## Dedication

*Antonio Sagona forged strong links between Melbourne and Georgia through decades of fieldwork and research. We wish to acknowledge his vision and direction in turning the focus of GAIA's operations to the Rabati site. Although he did not live to see the excavation unfold past the first season, we will carry forward his objectives and aims for the site. We dedicate this report in memory of Tony: a director, friend, mentor and teacher to many; husband and tower of strength to one.*

\* Archaeological excavation at Rabati in 2018 and the preparation of this article was supported by the Shota Rustaveli National Scientific Foundation of Georgia (SRNSFG) (grant number FR17-415), as well as contributions from the Antonio Sagona research fund and private sources in Melbourne. We wish to gratefully acknowledge the assistance in the field by all team members. Apart from palynological examination, during the 2018 season Inga Martkopishvili made a significant contribution to coordinating the project. Levan Losaberidze produced the section drawing of D9.4 and also provided research assistance to Bedianashvili, particularly in sourcing publications and site plans. Giorgi Kirkitadze produced the aerial photography, topographic mapwork of Rabati and related spatial data. Zurab Makharadze, Giorgi Chilingarashvili, Giorgi Gogoladze, Levan Losaberidze and Giorgi Kirkitadze co-authored the report on the 2018 excavations for submission to the National Agency for Cultural Heritage Preservation of Georgia. Eliso Kvavadze provided consultancy in conducting palynological analysis. We would like to thank the anonymous reviewers for their suggestions on this article, and Abby Robinson for her helpful comments and editing work. We gratefully acknowledge the support shown to the project by Kim Wright, who funded the excavations in 2016 at Chobareti and Rabati.

## Introduction

(*Giorgi Bedianashvili*)

In the modern territory of southwest Georgia, the upper Kura (Mtkvari) River basin largely defines the Meskhet-Javakheti region (Fig. 1: 1). In this area, the Kura River flows towards the northeast through the deep, narrow gorge between the Javakheti and Erusheti volcanic mountains. In certain areas, the gorge widens slightly and creates small valley floors bordering the river. This part of the Kura River, throughout ancient times, represented an important corridor where ideas, technologies and goods often accompanied military expansion or the migration of people who were passing between the Caucasus and Anatolia. On the local regional scale, the route through the upper Kura River basin also acted as a link between the western, eastern and southern Caucasus regions. Hence, during the Early Bronze Age in the Meskhet-Javakheti territory, we find artefacts of the Kura-Araxes culture and alongside those from western Georgian cave sites.<sup>1</sup> A similar picture can be observed during the Late Bronze and Early Iron Ages, when the archaeological record for this region witnessed the co-existence of the Colchian and Samtavro cultures, the former from the western and the latter from the central part of the southern Caucasus.<sup>2</sup>

In this region, there is an abundance of archaeological sites of different periods. Many of them are concentrated along the floor of the Kura valley and the highlands which border the river. By the 1950s and based on field surveys, archaeologists recorded 40 settlements, among which 18 were attributed to the Early Bronze Age.<sup>3</sup> Since that time, the number of documented settlements has increased substantially. To this list can also be added a large corpus of fortified structures, often described as ‘megalithic buildings’, that are a characteristic feature of the Meskhet-Javakheti region.<sup>4</sup>

Despite the vast number of sites and active archaeological campaigns that started in the Meskhet-Javakheti region in the 1930s and continued right through the 20th century, almost no settlements were excavated systematically.<sup>5</sup> The only exception is Amiranis Gora, near the regional centre of Akhaltsikhe, which was investigated by Tariel Chubinishvili. At Amiranis Gora, a large Early Bronze Age settlement, comprising 21 stone structures was exposed.<sup>6</sup> Our knowledge of the archaeology of the Meskhet-Javakheti region is otherwise mostly based on the investigation of graves, such as the Middle Bronze Age barrow field in Bertakana, or the Middle Bronze and Late Bronze Age barrows in Zveli and adjacent areas.<sup>7</sup> Relying only on funerary contexts, our understanding of the material culture of the Meskhet-Javakheti region is skewed. Because of the dearth of systematically excavated multi-period settlements, our knowledge of absolute chronology, settlement patterns, pottery production, and social and economic structures in this region is lacking for all periods.

<sup>1</sup> Orjonikidze 2005, pp. 69–83.

<sup>2</sup> Japaridze 1982, pp. 41–62. Significantly, in medieval times, the movement toward unification of western and eastern Georgia into the Georgian Kingdom began in the territory of the upper Kura River Basin.

<sup>3</sup> Chubinishvili 1963.

<sup>4</sup> Khaburzania and Robinson 2018, pp. 303–324.

<sup>5</sup> For an overview of the historiography of archaeological excavations in Samtskhe-Javakheti, see Kakhiani *et al.* 2013.

<sup>6</sup> Chubinishvili 1963.

<sup>7</sup> Japaridze *et al.* 1983.

The situation in this regard, however, has improved in the last two decades. The first turning point was associated with the construction of an international oil and gas pipeline, where several settlements were identified and salvage excavations were conducted.<sup>8</sup> In addition, as a result of international collaborations, a number of habitation sites were investigated. One such collaboration is between the Georgian National Museum and the University of Melbourne, operating under the project title of ‘Georgian-Australian Investigations in Archaeology’ (GAIA) and established by the late Emeritus Professor Antonio Sagona. From 2012 to 2016, GAIA conducted excavations in the Meskheti region at the predominantly Early Bronze Age settlement of Chobareti, located some 28 km due east of the Turkish border.<sup>9</sup> Then in 2016, GAIA initiated investigations at Rabati, a multi-period settlement that lies 2 km from Chobareti. A second season of fieldwork at Rabati was conducted in 2018. The name ‘Rabati’ derives from Arabic, and in medieval Meskheti it signified a public square, which was the main political and economic focal point of a town or village. The ancient settlement is located on the northern side of Zveli village, which is on a flat highland plain at the edge of the Erusheti Mountains. The village is at an altitude of *c.* 1480 m above sea level (Fig. 1: 2).

As mentioned, this area is rich with archaeological sites. Apart from Chobareti, another extensive Early Bronze Age settlement, called Samarkhi Kanebi, is located *c.* 0.5 km west of Rabati. During the Middle Bronze and Late Bronze Ages, a burial ground was established at this settlement.<sup>10</sup>

On its northeastern side, Rabati is edged by the steep slope overlooking the Kura River and from the summit of the site there are uninterrupted views east and west along the valley (Fig. 2: 1). Evidence for the two-way process of population movements through this corridor was found in the second-millennium BC barrows discovered in Zveli village. Based on the funeral rites and artefacts in these burials, they are considered to have Aegean and central Anatolian influences. Significantly, the latter are believed to have played a role in the formation of subsequent Late Bronze Age cultures further into the territory of eastern Georgia.<sup>11</sup>

Rabati mound is a fortified place. Along the northeastern edge there is a substantial fortification wall, at the centre of which is a tower (Fig. 2: 2). Although the fortification wall is only partially visible in other parts of the site, it is likely that it originally encircled the summit of the mound. The wall shows evidence of having been rebuilt several times, which suggests that the defences were in use over a long period of time. In the detailed description of Zveli village that can be found in the Ottoman taxation document called the Great Defter (or Register) of Gurjistan, dated to 1595 AD, nothing is mentioned about the Rabati fortification.<sup>12</sup> The same is true of the description of the region around Zveli village made in the first half of the 18th century AD by the geographer and historian, Vakhushti Bagrationi, in his book, *Description of the Kingdom Georgia*.<sup>13</sup> Thus it can be assumed that by those times, the Rabati fortifications were no longer in use and the area was being employed for other purposes.

<sup>8</sup> For more details on the archaeological sites salvaged during the pipeline construction, see Gamkrelidze 2010.

<sup>9</sup> Kakhiani *et al.* 2013, pp. 1–138.

<sup>10</sup> For more on the Chobareti-Zveli area, see Anderson and Negus Cleary 2018, pp. 83–96.

<sup>11</sup> Gambashidze 1983, pp. 11–16; on the discussion of Aegean and Anatolian influence on the formation of Late Bronze Age culture in the southern Caucasus, see Pitskhelauri 2005. Generally, on the interaction between Aegean and Caucasus regions in the Middle Bronze Age, see Abramishvili 2016, pp. 178–179.

<sup>12</sup> For *The Great Defter (Register) of Gurjistan*, see Jikia 1958.

<sup>13</sup> Bagrationi 1973.

The Rabati mound was cut by late medieval Meskhetian, semi-subterranean houses, which were built on the terraces around the slope of the mound. Until the 19th century AD, most of the inhabitants of Zveli village lived in dwellings of this kind. Over time, they moved out of Rabati into other parts of the Zveli area.<sup>14</sup> Nowadays, all the Meskhetian subterranean houses are abandoned. On the summit of the mound, which was artificially flattened in historic times, there is no evidence of this kind of occupation. Until recently, this area, which coincides with the centre of the ancient settlement, was used for grain threshing. Fragments of paved threshing-floor are still visible in some places. Fortunately, the presence of these threshing areas prevented construction on the top of the mound; our archaeological activities are concentrated in this area, because it is the least disturbed part of the site.

The Rabati settlement has been known among archaeologists for rather a long time. Initial archaeological investigations at Rabati were conducted in 1974, when the archaeologist Tariel Chubinishvili dug a test trench on top of the mound as part of his campaign in the Meskhet-Javakheti region. Chubinishvili exposed a 3 m-deep cultural deposit, in which he distinguished two main layers. The upper deposit was 2.80 m thick and the lower, 0.70 m. The latter contained remains of wattle and daub structures, but due to the small scale of excavations it was impossible to understand their character.<sup>15</sup>

Among the various types of ceramic material at Rabati, which Chubinishvili dated to the Early Bronze Age, a clay anthropomorphic hearth or andiron was also found. It consists of a two-headed, upright object moulded onto a base; each figure has obsidian eyes, but an otherwise featureless face (Figs 32: 1–3; 33: 1–2). This unusual clay figurine, which has no affinities in the region, attracted the attention of other scholars. In 1977, Otar Gambashidze, the head of the permanent archaeological expedition in the Meskhet-Javakheti region, excavated another test pit. Besides Early Bronze Age layers, Gambashidze also recorded material of the Middle Bronze Age and an early phase of the Late Bronze Age. The results of Chubinishvili and Gambashidze's archaeological campaigns were published in short reports, which did not give sufficient information to enable comment about the character of the site with any certainty.<sup>16</sup> No archaeological investigations have subsequently been conducted at the site. In later publications concerning the archaeology of South Georgia, the Rabati settlement was listed, based on examination of the pottery, as a Bedeni and Kura-Araxes cultural site belonging to the late phase of the Early Bronze Age.<sup>17</sup>

In 2016 and 2018, the GAIA project continued archaeological excavations in the same trenches as were dug in 1974 and 1977. These old trenches were still visible on the surface and were aligned to the mound's shape and the visible fortification walls running along a southwest to northeast axis. Consequently, the new archaeological trenches were aligned along the same axis as the previous investigations and we established a corresponding 10x10 m grid system for the whole site (Fig. 2: 2; Fig. 3).

Presented below are the results of archaeological excavations at Rabati settlement conducted in 2016 and 2018. This account is preliminary. It does not include a complete analysis of all excavated materials, nor are any radiocarbon readings yet provided. The outcomes of palaeobotanical and

<sup>14</sup> Beridze 2012.

<sup>15</sup> Chubinishvili *et al.* 1976, pp. 14–20; Orjonikidze 1983, pp. 22–23.

<sup>16</sup> Chubinishvili *et al.* 1976; Orjonikidze 1983, pp. 22–23; Gambashidze and Kvijinadze 1982, pp. 29–31.

<sup>17</sup> Orjonikidze 1992.

palyнологical research included in this article are also preliminary. The purpose of communicating our results at this initial stage is to stimulate discussion around transitions at this multi-period site and to identify local characteristics of ceramic production. To explore the importance of the upper Kura valley in the interaction of the Caucasus with neighbouring regions is equally significant among our aims. The GAIA campaign at Rabati is intended to be a long-term and multi-disciplinary investigation, which will ultimately provide a comprehensive analysis of the settlement and its environment.

## Excavation Results

*(Giorgi Bedianashvili)*

In 2016 and 2018, archaeological excavations were conducted in three locations on the Rabati mound. In 2016, two trenches were situated on the western edge of the summit and one on the western terrace of the mound, where ruins of the late-medieval subterranean dwellings are situated. In the following season (2018), work continued only in the western sector, and in the central area of the summit a new trench was opened.

### Western edge of the summit

In the western part of the summit, two trenches were excavated in 2016 (Figs 3–4). These were trenches D9.4-D8.1 and D10.1-D10.4 and both measured 10 × 5 m. Excavation of trench D9.4-D8.1 continued in 2018, but only in its northern part (D9.4). Trench D10.1-D10.4 was extended over a larger area covering 10 × 10 m, incorporating squares D10.1, D11.4, E10.2, E11.3. Also in 2018, a third trench measuring 5 × 5 m, D9.2, was excavated. It is located between the two abovementioned trenches (Fig. 4).

#### *Trench D9.4 and D8.1*

This area was located in the old trench excavated in the 1970s. The main aim of continuing work in this area was to expose vertical depth in order to gain a better understanding of the stratigraphy of the site. Although the test pit opened in 1970s was backfilled, in its central area its depth was still around one metre. Excavation of this trench started by cleaning the surface level and excavating the fill, which contained a large number of pottery sherds belonging to different periods.

Along the eastern edge of the trench (D8.1), there was a fragment of drystone wall, which was preserved to a height of 1.20 m. Presumably it belonged to the late medieval period as it cut earlier depositions. Disturbed areas around the wall contained mixed material, from the modern to the Chalcolithic period. In D9.4, on a lower intact level cut by the wall, a partially preserved beaten earth floor and a circular clay hearth were exposed (Fig. 5: 1). The latter was only half preserved, and its diameter was 1.5 m. Pottery associated with these floor fragments is mostly what we have designated ‘Common Ware.’<sup>18</sup>

<sup>18</sup> For description of ware types found at Rabati settlement, see section below.

In the northern part of the trench (D9.4), a two-course stone wall, running along an east-west axis was excavated. It was built with large, roughly dressed basalt stones and whitish-coloured mortar was used for binding. A line of comparatively smaller size basalt stones was placed along the base of the wall, where it was disturbed by Pit 2 (Fig. 5: 2). The diameter of this pit was 1.5 m and it held a mixed range of material, but predominantly medieval, wheel-made pottery including a glazed fragment. Apart from the pottery, a bronze disc ornamented with knobs (Fig. 46: 8) and a rounded stone with a depression ground around its girth for hafting were found (Fig. 48: 1). At the base of the pit, there was a concentration of charcoal and here a large and rounded basalt mortar was found. It had traces of fire and, probably for this reason, it was cracked. Diversity in the artefacts recovered, as well as the contents of soil samples subjected to palaeobotanical analysis — which revealed such remains as an olive stone, fragments of fish bone and a large variety of grains — suggest that this pit was used (or re-used) for refuse.

Another irregularly shaped pit (Pit 1) was exposed while cleaning the northern section of the trench (Figs 6; 7: 1). From the actual surface level, it reached a depth of 2.33 m and it was cut in half all the way down the section. In the upper part, the pit had a cylindrical shape, 0.8 m in diameter, and towards the base, it widened to 1.2 m. That it was used on several occasions is indicated by different depositions as well as fragments of beaten clay layers. In the pit, mostly small, dark-coloured ceramic sherds were found; some were burnt and others have yet to be fully analysed, but they would appear to be part of the debris used to fill the pit. At the base of the pit, there was another large stone mortar, almost the same as the one in Pit 2 (Fig. 7: 2). The northern section of the trench, in which Pit 1 was cut, displays a detailed stratigraphic array of the site (Fig. 7: 1). So far, it is the deepest and best-preserved section within the trench. In 2016 and 2018, the excavation process was focused on cleaning and exposing the upper loci of the trench that had been reached in 1970s. In the lower levels where deposits were intact, a dark grey silt layer with charcoal fragments and a burnt orange coloured, sandy locus were excavated. Both were cut by Pit 1, as well as the wall of large, roughly dressed stones (mentioned above) running across the northern part of the trench.

During the 2018 season, we found that below the burnt, orange-coloured locus, lenses of ashy and black-coloured, silty loci with charcoal inclusions were exposed. The burnt orange locus, held mostly Drab and Pale Brown Wares, of which many examples bore traces of fire. The grey silty locus above it contained predominantly Common Ware. As for the lower locus, which sat below the burnt orange locus, there were fragments of Drab Brown ware together with Kura-Araxes ware in this deposit. It also contained in situ fragments of large-sized vessels placed on the soil with traces of fires around them. Further excavation of this area, together with radiocarbon analyses, will provide a greater understanding of this complex stratigraphy; this sector has key elements that are fundamental in determining the nature of the site.

In addition, further investigation is necessary to interpret the wall that disturbed the burnt orange locus. At this stage, the stratigraphy of the northern section of the trench as well as the small fragment of floor level associated with it, does not provide enough evidence to determine its chronology. As for the two pits excavated in the northern part of the trench, they are both tentatively attributed to the same period. Wheel-made ceramic material found in the first pit indicates the 12th–14th centuries AD.<sup>19</sup>

<sup>19</sup> Mindorashvili 2008; Orjonikidze 2014, pp. 211–216.

*Trench D9.2*

In order to better understand the stratigraphy of D9.4 and D8.1 and, in particular, its northern section, a new trench (5 × 5 m) was opened in square D9.2 in 2018. During the season, this trench was excavated from the original mound surface to about 0.80 m deep. As expected, the topsoil mostly contained pottery of different periods. In the western corner of the trench, not far from the surface level, a 0.80 m wide wall consisting of two rows of stones was exposed and it extended towards the west. It was built over a circular stone structure (described below). On the lower level of this wall, mostly in the northern part of the trench, was a clayey silt locus with charcoal inclusions. It contained a large number of ceramic fragments, mostly of Common Ware (Fig. 8: 1).

Along the northern edge of the trench within the same locus, an ashy deposit contained many charcoal fragments. This deposition was associated with larger fragments of pottery; notable among them was a thin-walled, double-handled pot with black burnished surface that is typical Bedeni ware (Fig. 21: 8). It finds close parallels in central and eastern Georgia from the final stage of the Early Bronze Age, in Bedeni cultural sites dated to the second half of third millennium BC.<sup>20</sup> Apart from this fine Bedeni ware, a coarser Common Ware pottery was found in the same locus. This type of pottery is considered the domestic ware of the Bedeni phase at Rabati, a situation paralleled at a number of settlements in Shida Kartli region such as Berikldeebi, Tsikhiagora and Natsargora.<sup>21</sup> It should be said, however, that Rabati's Common Ware is unlike the Shida Kartli examples, having characteristic pottery forms such as short necks and cylindrical, straighter bodies. In this regard, it resembles to a certain extent some of the pottery from the Orchosani settlement, located around 25 km west of Rabati. Recent excavations, however, in which C<sup>14</sup> absolute dates were obtained, showed that the Orchosani remains belong to a much earlier, Chalcolithic, period, which matches the range so far published from that site, including distinctive shapes of Chalcolithic type (see the discussion below).<sup>22</sup>

In trench D9.2, the southern part of the deposit containing Common and Bedeni Wares was disturbed by a circular-shaped stone structure, the diameter of which is 2.1 m. In 2018, it was possible to excavate only its northern half as the rest extends outside of the trench (into the as yet unexcavated D9.3). The interior of the circular stone structure was filled with loose clay-silt. As only its surface level was excavated, it is not possible to comment about its chronology. At the same time, it should be recalled that this circular structure was below the abovementioned stone wall that appeared in the southern corner of the trench.

*Trench D10, D11 and E11*

On the western edge of the summit, the third trench complex is located north of the D9 trenches described previously. In 2016, the size of this trench was 50 m<sup>2</sup> (D10.1 and D10.4) and in 2018, it was extended to cover 125 m<sup>2</sup> over the grid sectors D 10, D11 and E11. The main aim

<sup>20</sup> Orjonikidze 2015; Rova *et al.* 2017, pp. 152–171; Javakhishvili 2017. The absolute date for the recently discovered Bedeni-culture Ananauri kurgan in eastern Georgia is 2370 BC (±26 years).

<sup>21</sup> Javakhishvili 2017 (Berikldeebi); Makharadze 1994 (Tsikhiagora); Ramishvili 2013, Rova *et al.* 2017, pp. 152–171 (Natsargora).

<sup>22</sup> Orjonikidze 2004; Gambashidze 2018, pp. 74–84.



of excavating this trench was to understand the horizontal extension of the site, and especially to incorporate part of the fortification walls of the summit still visible on the surface.

In this trench, segments of different stone structures were exposed beneath an extensive layer of basalt and cobblestone rubble that appeared across the whole trench. In this area, quite a complex stone structure was erected, of which only the foundations are preserved. Overall, this trench revealed fragments of six drystone walls. Tentatively, it can be suggested that they belong to three different phases of the medieval period.

*Medieval Phase 1:* To the earliest medieval phase belonged a deposit outside (north) of a segment of curved, rubble-filled masonry wall (D10.1), which was faced on both sides with three courses of square-shaped stones (Fig. 8: 2). The width of the wall is 2.0 m. Associated with this curved wall are fragments of a circular clay oven cut into the floor, measuring *c.* 0.80 m in diameter. Around the oven were large numbers of animal bones, ceramic fragments and obsidian flakes and it was filled with charcoal and ash. About 1.0 m north of the oven was a large stone mortar, *c.* 0.60 m in diameter, sitting at the foot of the curved wall. It should be mentioned that this mortar is of the same type as was found in the pits in trench D9.4. Next to the mortar, there was a stone pavement *c.* 1.5 × 1.0 m wide. It extended from the base of the curved wall towards the north, where it met another fragment of irregular, slightly curved stone wall. The latter is 4.1 m long and 1.3 m wide and consists of a single course of roughly dressed basalt stones. About 2.0 m south of the oven is a shallow circular pit *c.* 1.2 m in diameter. The above features, namely the oven, mortar, pit and pavement, are connected to each other and represent an integrated food processing area. Although the clay oven was too poorly preserved to discern its specific function, palynological analysis demonstrated that it was used for bread baking.<sup>23</sup> A pit near a clay oven is quite a typical arrangement for medieval Meskhet-Javakheti and adjacent regions. For instance, in Armenia, in the 13th–14th century AD village of Ambroyi, associated ovens, shallow pits and pavement were excavated, and the pits were interpreted as food storage facilities.<sup>24</sup>

Material found in the oven and pit and on the surrounding floor level was very diverse. Among the finds of note is a fragment of twisted, black glass bangle (Fig. 46: 6). Based on parallels from eastern Georgia, it can be attributed to the 13th–14th centuries AD.<sup>25</sup> Ceramic material mostly consists of handmade Common Ware. Glazed sherds are also represented. One such glazed sherd was found in the oven. Some Kura-Araxes fragments have also been identified. It is difficult to explain such a mixture of ceramic material within the one context. It is possible that some of the excavated features, such as the curved, rubble-filled wall, were built earlier and then intensively re-used in the medieval period. Further excavation, especially in the western part of the trench, where we exposed the contours of stone features in 2018, may clarify this issue. At this stage, it is assumed that the earlier material was mixed into the medieval context as a result of some historic disturbance, or possibly the levelling of this area for other activities. A similar situation has been attested at other medieval-period sites in Georgia; for example, in Dmanisi, on the medieval-period floor level, a large quantity of Late Bronze/Early Iron Age pottery was found as well.<sup>26</sup>

<sup>23</sup> For more on the palynological analysis undertaken for the Rabati settlement, see the report by Inga Martkoplshvili below.

<sup>24</sup> Franklin *et al.* 2017, pp. 113–138.

<sup>25</sup> Ugrelidze 1963, pp. 61–67.

<sup>26</sup> Pers. comm. Jimsher Chkhvimiani.

*Medieval Phase 2:* Stone structures represented by two walls meeting at an angle in the eastern corner of the trench should be attributed to the second phase of the medieval period (Fig. 9: 1). Although these walls are not interlocked, it seems likely that they are part of the same structure, extending towards the west. The width of the walls is 0.95 m and they are built with two rows of dressed stones; the narrow gap between the wall faces was filled with rubble. The preserved height of these walls is also 0.95 m, and at their base was a beaten clay floor. The dearth of material found within this structure precludes us at this stage from precisely dating it, but the fact that the walls are cut into the level of the first medieval phase (described above) indicates that this building belongs to a subsequent period.

*Medieval Phase 3:* The third and latest medieval phase is represented by the wall excavated along the northern part of the trench. It is slightly curved and built with a single row of differently sized stones, faced only on the northern side (Fig. 9: 2). At its western end, this wall was built on top of the earlier fortification wall around the summit, which is comprised of larger stones. The eastern end of the wall extends outside the trench toward the central part of the summit. It is clearly built on top of the structures belonging to Medieval Phases 1 and 2. Given the characteristics of this wall, such as its poor quality, its somewhat meandering line and its length, it can be suggested that it was built for the purposes of terracing and levelling the western part of the summit sometime after the medieval buildings fell into disuse.

### *Rabati's Fortifications*

The drystone fortification wall that follows the edge of the summit was partially exposed in sectors D11 and E11. It is built with large, roughly dressed stones, and gaps between these blocks are filled with smaller stones. In its northern part, the wall turns and follows the edge of the site, continuing northeast. It seems that the original construction of this fortification wall pre-dates the medieval period and that it was in use over a long period of time. The deposits of materials such as rocks and rubble in this area might thus be the product of backfilling and levelling and might also explain the mixture of chronologically different pottery types.

Apart from stone structures exposed in trench D10.1, D11.4 and E11.3, in the southwestern corner of D10.4, a remnant of a circular clay rim or edging was revealed (Fig. 10). Ceramic material associated with this area all appears to belong to the same culture. Notable among the finds was a black-burnished, single-handled pot (Fig. 22: 6–7), as well as fragments from vessels with incised chevrons, and others that were undecorated, which can be assigned to the Bedeni period. Stratigraphically, the structure is almost on the same level as the wide, curved stone wall described above and its associated features, such as the mortar, oven, pavement and shallow pit. It was c. 0.30 m deep. Preservation of such an early and flimsy feature at this relatively shallow level can only be explained by the fact that it was outside of the medieval habitation area and that this spot was never disturbed by post-Bedeni occupation. At the same time, we should not exclude the possibility that the wall was contemporary with, or even earlier than, the clay feature, which was unlikely to have been reused and modified in the medieval period. A curved stone wall of similar dimensions was documented at Sos Höyük and dated to the Early Bronze Age.<sup>27</sup> The western

<sup>27</sup> Sagona *et al.* 1997, p. 187, pls 11–12.

part of the circular clay feature lies outside the trench (in E10.3); its complete excavation in the future will further clarify the character of this feature. It also appears to be associated with the Bedeni-period deposition excavated in trench D9.2. This pattern of the Bedeni cultural deposits being not very far under the current surface may have been repeated across the whole summit of Rabati, but disturbed in many areas by later activities. The same picture was observed in the trench excavated in the central area of the summit, discussed below. In this regard, it is interesting to note that at the Berikldeebi settlement in the Shida Kartli region of Georgia a similar pattern has been documented. There, Bedeni cultural levels again appear almost at the surface of the site.<sup>28</sup>

### The central area of the summit

#### *Trench A11, B11, B10 and A10*

In the central and flat part of the summit, a trench measuring 7.5 x 10 m was opened, spanning squares A11.4, B11.3, B10.2 and A10.1. This is possibly the best-preserved area of the settlement (Fig. 11). One purpose of excavating in this part of the site was to further investigate the context of the abovementioned clay twin figure with obsidian eyes (Figs 32 and 33), which was found in this area in 1979.

Having removed the topsoil across the whole 37 m<sup>2</sup> of the trench, patches of different loci and features were exposed. In the southwestern corner of the trench (B10.2), a concentration of stones was unearthed; this represents part of a circular fence line, the contours of which can be observed on the surface outside of the trench. The fence probably belongs to the 19th–20th centuries AD, when Rabati was still inhabited. In the central part of the southern edge of the trench (A10.1) a brownish-yellow, probably burnt, patch of silty clay was exposed. It contained large fragments of handmade Common Ware which, judging by its fabric and shape, resembles the Bedeni-phase ware found in Trench D9.2. We suggest that this patch, with its evidence of burning, is part of a disturbed fire installation (hearth?), similar to the Bedeni-period fire installations that were found at the Berikldeebi and Natsargora settlements.<sup>29</sup>

Almost at the same level, in the northeastern corner of the trench (A11.4) in a dark brown locus, a near-complete medieval pottery vessel was exposed. In the same area of the trench there was a rectangular stone structure, formed by single-width, drystone walls of mostly basalt and cobblestones. The structure's width (north–south axis) is 3.495 m and the length (east–west axis) so far excavated is 5.11 m. The interior of the structure was filled with stone rubble, on top of which, in the southwestern corner, a doubled-walled clay oven was built (Figs 12: 1–2; 13: 1). The oven's diameter was 0.80 m and it had a horseshoe shape, with the opening on its eastern side. On the outer wall of the oven, a fragment of the rim was still attached. This rim was wide and flat with a rounded edge; it was ornamented with impressed double circles (Fig. 38: 1–3). Palynological analyses found that the gap between the two walls of the oven was filled with volcanic ash (Fig. 13: 1). Further analysis of samples from the interior of the oven, which contained fine, grey silt mixed

<sup>28</sup> Javakhishvili 2017, p. 68.

<sup>29</sup> Rova *et al.* 2017; Javakhishvili 2017.

with large sized stones, demonstrated bread-baking activity. Next to the oven, on the western side, was a rounded area comprised of dumped ash, which was surrounded by brownish-yellow coloured, silty clay edges (Fig. 12: 2). Inside this ash-dump, fragments of handmade, black burnished pottery were found. The location of the oven on stone rubble indicates that the upper surface of the underlying and pre-existing stone wall was deliberately filled with rubble in order to make the base for the oven.

At this stage, it is difficult to argue whether the rubble packing was made when the stone structure was abandoned or created in order to raise the floor level of the habitation area to ground level. On top of the rubble, apart from the oven, ash-dump and fire installation, no other evidence of occupation, such as plaster flooring, was observed to support the latter argument. With radiocarbon analysis still to come, as yet it is difficult to date the oven. There are no examples of this type of oven, with impressed circle ornamentation, from the Early Bronze Age. The decoration itself is quite common for the Late Bronze/Early Iron Age pottery from eastern Georgia.<sup>30</sup> The closest analogue to the Rabati oven, however, can be found in Shida Kartli, at Uplistsikhe, where we have similar horseshoe-shaped ovens ornamented with various motifs, among them circles in relief. Like the Rabati hearth, they also have ash-dumps located on their western side. These Uplistsikhe ovens are considered to have had public ritual purposes and are dated to the 17th–18th centuries AD.<sup>31</sup>

Inside the stone structure, below the rubble, a silty deposit containing charcoal and ceramic fragments was exposed. In the centre of the structure, a dividing wall running parallel to the outer walls had been built (Fig. 13: 2). This central wall was constructed of large undressed stones (the largest was 68 × 35 cm), different to those in the other walls, indicating that it was a later modification to the structure. Although the floor level of this building was not reached in 2018, based on the ceramic material found below the stone rubble we have attributed it tentatively to the Kura-Araxes culture. Even though the area west of the structure was very much disturbed, it was still possible to detect silty clay deposits containing *in situ* material (Fig. 14: 1). Most of these deposits held Red-Black burnished Kura-Araxes ware as well as Common Ware similar to that found in Trench D9.2, which we have assigned to the Bedeni period.

Whether the Kura-Araxes and Bedeni cultures ever co-existed is a much-debated subject in the archaeology of the southern Caucasus. It has been considered that Bedeni pottery is found together with material from the final stages of the Kura-Araxes culture. Most evidence for this opinion has come from eastern Georgia, at settlements such as Tsikhiagora and Natsargora (both in Shida Kartli region) and at Ilto (in the Kakheti region).<sup>32</sup> Recent examination of both old and newly excavated material at Natsargora, however, has led to this proposition being questioned. Concerning Natsargora, it is now argued that Bedeni culture probably appeared after Kura-Araxes culture and that the co-existence of material in one layer at this settlement can be explained as resulting from disturbance.<sup>33</sup> The occurrence of both Bedeni and Kura-Araxes cultural material, but found separately in different stratigraphic levels, is known from the Berikdeebi settlement in the

<sup>30</sup> Pitshelauri 2005.

<sup>31</sup> Mindorashvili 2008.

<sup>32</sup> Makharadze 1994; 2008 (Tsikhiagora); Ramishvili 2013 (Natsargora); Mirtskhulava 2008 (Ilto). For general discussion of the co-existence of Kura-Araxes and Bedeni cultures, see Orjonikidze 1992.

<sup>33</sup> Rova *et al.* 2017, pp. 152–171.

Shida Kartli region.<sup>34</sup> For now, it can be said that the lower layers at Rabati, such as trench D9.4, contained exclusively Kura-Araxes material, whereas in the upper layers, such as in the central area of the summit, ceramic material of both these cultures was found together. It would be premature to decide whether this association is the result of disturbance or of co-habitation. It is hoped that further excavations will clarify the situation.

## The western terrace

### *Trench F9 and F10*

Excavation was conducted on the western terrace of the Rabati mound in 2016. Here one trench was opened that encompassed a total of 100 m<sup>2</sup> and comprised four squares: F9.1, F9.2, F9.4, and F10.1 (Fig. 15). The trench is located on the upper terrace, the first down from the summit, and immediately below the trenches located on the western edge of the mound.

The main aim of excavating on the western terrace was to gain a better understanding of the nature of the occupation beyond the summit. Before the excavation began, contours of stone walls were visible on the surface. The top layer of this trench contained a great diversity of ceramic material, among which fragments of the Kura-Araxes period dominated, but this deposit represented material that had eroded from the upper areas of the site.

The excavations unearthed a rectangular stone structure with walls comprised of a double row of large, well-dressed basalt stones. The walls were up to 1.0 m wide. The southeastern part of the rectangular structure, where the main entrance was probably located, was not excavated (Fig. 14: 2). A 1 m-wide fireplace was built into the northern wall. The internal width of the structure was 5.80 m and the room's earthen floor was reached at 0.50 m below the surface level. Among the artefacts found on the floor were fragments of handmade coarse ware as well as red-slipped Ottoman clay pipes. One of the pipes had a flaring rim decorated with palmettes and roulettes at the base and around its girth (Fig. 49: 7). Based on other clay pipes with similar features found across the territory of the Ottoman Empire, the Rabati clay pipe and the stone dwelling in which it was found, should be attributed to the mid-19th century AD.<sup>35</sup>

North of this dwelling, a curved wall made from a single row of stones enclosed an area which shared the north wall of the house and an extension of its wall on the eastern side. The areas were connected by an entrance that was situated on the right (east) side of the fireplace. Fewer artefacts, as well as a different, slightly damp silty clay deposit found at floor level, suggest the curved structure was a shed used for animals.

## Ceramic and other finds

*(Claudia Sagona)*

### *Background*

The reasons to turn our research interests to Rabati in 2016 were clear. As a multi-period site, which had been subject to some archaeological excavations in the 1970s, we knew it would

<sup>34</sup> Javakhishvili 2017.

<sup>35</sup> Hayes 1980; Robinson 1983, pp. 265–249; Simpson 2000, pp. 147–149; 2002, pp. 159–172.

supply cultural contexts that spanned from the medieval period into the Early Bronze Age with some Iron, Middle and possibly Late Bronze Ages also represented. Excavations carried out by T. Chubinishvili and his colleagues had already indicated that such deposits were significant at the site.<sup>36</sup> The ceramic finds from the Rabati area, however, have been surprising. It was anticipated that the chronological span would largely fall within the medieval period in the initial stages of excavation. Instead, after some medieval structures were excavated in Trench F9–F10 (2016) and in D10.1 (2016), Bronze Age material started appearing very close to the surface in D10.4, including a simple Bedeni mug (Fig. 21: 8), and the pattern has been repeated further to the east in Trench A10.1, A11.4, B11.3, B10.2. Some distinct fragments (likely to be secondary deposits) indicate the chronological range at the site will extend back to the Chalcolithic period. Overall, the potential for an excellent chronological span with corresponding occupational remains at the site is promising.

### Chalcolithic

While there is evidence that the Chalcolithic is represented at the Rabati site, a small dimpled circle (Fig. 16: 5–6) on a body fragment might hint at an even earlier time. A very similar decoration was documented at Arukhlo, in contexts that were assigned to the Neolithic.<sup>37</sup> If a date earlier than the Chalcolithic or perhaps very early *in* the Chalcolithic is verified through continuing excavation, Rabati might provide the evidence for the emergence of this decorative feature. Applied larger rings that decorate the Early Bronze Age, Kura-Araxes monochrome pottery from nearby Chobareti are quite distinctive and are the principal form of decoration.<sup>38</sup> Only in House 6, which is later in the sequence of structures, do we see an opposing spiral motif and dimples embellishing pottery, as well as the shift to classic Kura-Araxes' red-black controlled firing.

Elena Rova and Zurab Makharadze have already argued for long-term continuity from the Early Bronze Age to the Late Bronze Age in regard to the use of burial mounds.<sup>39</sup> Early Bronze Age houses at Chobareti held pottery that suggested enduring Chalcolithic types, notably Chaff-Faced Ware and some persistent shapes. Of special note are trays with scoop fronts in a distinct, rustic fabric designated 'Drab Ware', which were found alongside early Kura-Araxes pottery of the monochrome type.<sup>40</sup> Given the proximity of Chobareti to Rabati, it is not surprising that Chalcolithic pottery has been appearing among the finds at Rabati; indeed, the ceramic chronological range suggests that Chobareti was a satellite settlement of Rabati.

Chalcolithic types include combed surfaces (Fig. 17: 6–7), some fragments with chaff scars (Fig. 18: 5), some yellow-slip and red-painted examples (Fig. 19: 7–9) and thick red-slipped fragments (Fig. 19: 5–6).

<sup>36</sup> Chubinishvili *et al.* 1976, pp. 14–20.

<sup>37</sup> Bastert-Lamprichs 2017, p. 240, fig. 6: 2.

<sup>38</sup> Sagona (C.) in Kakhiani *et al.* 2013, Structure 4 (excavated in 2012), figs 30: 5, 7; 42: 8.

<sup>39</sup> Rova *et al.* 2010, p. 25, "the presence at the Okherakhevi kurgans of both Early and Late Bronze Age finds suggests a long-term continuity in the use of the site as the seat of ritual activities by the local population. A similar situation is common at other kurgan fields: one example in the Shida Kartli region is the Bebnisi cemetery near Berikldceebi, where kurgans of the Early, Middle, and Late Bronze, as well as of the Early Iron Age, have been excavated."

<sup>40</sup> Chobareti, Chaff-Faced Ware: Sagona, (C.) in Kakhiani *et al.* 2013, pp. 27–29, 32, fig. 44: 1–5.

*Drab Ware* (Figs 16: 1–9; 17: 1–3)

The fabric that falls into a Drab Ware group occurs in a few variations: (1) Matte surfaces with numerous and distinctive white flecks in the paste first came to my attention at Chobareti on a small group of sherds. Examples at Rabati certainly display the same kind of white flecks and others can have red, scoria-like spawls. Fragments with deeply notched rims fall into this category (Fig. 16: 1–4), however, they have been found within clear Bedeni contexts;<sup>41</sup> (2) Some sherds can have pale grey hues; (3) Occasional fragments have micaceous inclusions, which are presumably a natural feature of the clay sources; (4) Some fragments can have perfunctory burnished lines giving a streaky appearance (but not polished), sometimes the treatment runs vertically down the walls. Although examples may not yet come from contexts of this date, they can be explained as representing the drift of earlier material into later habitation contexts and, hence, represent secondary deposits.

Among the shapes so far identified in this category are open bowls with straight sides (Fig. 16: 8) and others with walls that curve into the rim (Figs 16: 9; 17: 3). A disc base from a large jar is also represented (Fig. 17: 1). Body fragments from relatively thin-walled jars (Fig. 17: 4) can be decorated with incised dashes and lines (Fig. 17: 2) and small knobs (Fig. 16: 8) have also been found. One jar has a horizontal ledge handle with three knobs moulded at the outer edge (Fig. 16: 7). Shapes suggest that tall-necked jars will figure in the repertoire at the site, akin to an early form of the Kura-Araxes vessel found elsewhere in Georgia (Fig. 17: 5).<sup>42</sup> An unusual curved fragment might be a late example of the comb-like attachment (in the sense of a rooster's comb) that are recorded on some trays of the Chalcolithic period at sites like Chinti, Akhali and Khertvisi (Fig. 19: 3–4).<sup>43</sup>

*Combed Surfaces*

A group of pot sherds from D10.4 locus 119 display a range of wares with Chalcolithic characteristics. One fragment has a combed surface (Fig. 17: 6–7) known at sites like Mentesh and Ovçular.<sup>44</sup> It was found with the tall-necked fragment, which has a vertical line of holes recalling a very early form of Kura-Araxes vessel, sometimes decorated with applied knobs in a similar manner (Fig. 18: 1–2; akin to Fig. 17: 5 in a narrower and tall neck shape). The notion of decorative holes pierced through vessel walls as a Chalcolithic tradition is discussed later (see Drab Brown Wares). A handle scar just under the rim suggests the fragment may have belonged to a jug. Also linking this vessel with the Chalcolithic tradition are remnant cuts around the lip of the vessel.

<sup>41</sup> Cut rim decoration, for example from: Tanditsqaro I, Chikovani 1999, p. 28, fig. 5, some from tray shapes; Mentesh (III), Lyonnet 2018, fig. 9; Hanago (eastern Turkey), Marro 2008, fig. 1: 1–5.

<sup>42</sup> Sagona (A.) 1984, vol. iii, fig. 107: 1, pl. 17: 8, tall-necked jar from Arukhlo.

<sup>43</sup> Chikovani 2005, pl. 1, especially no. 4 from Khertvisi. I am grateful to Belinda Shapardon for supplying this reference.

<sup>44</sup> Combed surfaces, for example from Mentesh, Lyonnet 2012, figs 143: 3–4; 144: 10; 145: 2; 146: 3; 148: 7; 149: 1; Ovçular Tepesi, Marro 2010, figs 5–6; Çetenli (Late Sioni date) and Hanago, Marro 2008, fig. 11: 1–2.

*Pale Brown (Chaff-Faced and/or Gritty) Wares* (Figs 17: 6–7; 18: 1–4)

One lid fragment (Fig. 18: 3–4) has large chaff impression on both surfaces. While Chaff-Faced wares were well-represented at Chobareti, only a few fragments, probably secondary depositions, have been identified at Rabati. These were thick cooking ware and a thick tray or oven rim (RSPF 511/2 and 109/2 respectively; not illustrated).<sup>45</sup> In Chobareti, forms represented were primarily open and scoop-fronted tray fragments, but some bowls and jars were made in Chaff-Faced ware.<sup>46</sup> They were found in typical Early Bronze Age domestic contexts alongside predominantly Kura-Araxes monochrome wares and trays fashioned from Drab Brown fabric (see following). Chaff-faced assemblages dating to the fourth millennium are found at such sites as Leilatepe, Alikemek and Berikdeebi and can be referred to as the Leilatepe cultural complex.<sup>47</sup>

So far, the Pale Brown range can have both chaff and gritty inclusions. Hand manufacture using coil or slab techniques is normal and vessels tend to be thinner in the wall than the majority of unequivocal Kura-Araxes wares. The use of chaff and few grits often resulted in a lightweight fabric. Chaff impressions are usually evident on the surfaces.

*Drab Brown Wares* (Fig. 18: 5–8; 19: 1–4)

Most intriguing is this ware category, because of the longevity of the tray form, the predominant shape in this fabric, which was well-represented at Chobareti. It should be noted that not all of the pottery bags from Early Bronze Age contexts at the site held Drab Brown wares. It may be that they are found where food was prepared or consumed. Significantly, Drab Brown trays have been found in Rabati (Figs 18: 5–8; 19: 1–4). Walls are low (generally around 8cm) and large pieces are seldom found. There is ample evidence that in many cases, the wall dips down to form an opening or scooped front. One example has a horizontal tab attachment on the interior wall (Fig. 18: 8).<sup>48</sup> Trays are very distinctive for their quite thin floors relative to their large size and open shape. Their thin and friable nature suggests they would not have been easily moved around the house. On the whole, the bases do not appear structurally sound unless they were supported by some form of external base or casing. In addition, and in support of this notion, examples can be found with basket impressions on the resting surfaces. This is true of Chobareti examples and the same characteristic has been reported at Arslantepe (Phase VIB 3).<sup>49</sup>

External walls are left plain with traces of perfunctory wiping to smooth the sides (Fig. 19: 1), while the inner surfaces were subjected to relatively better treatment and finishing (Fig. 19: 2). They are never burnished; although a few fragments from House 6 at Chobareti carried a red slipped inner surface, these examples still retained the rustic plain exterior.<sup>50</sup> It is likely that in keeping with the more classic Red/Black wares from this house — the appearance of spiral designs, omphalos

<sup>45</sup> Various bowls and larger jars from Hanago and Yılantaş are depicted in Marro 2008, figs 3–5, 7.

<sup>46</sup> Pale Brown Chaff Ware (Chaff-Faced Ware) at Chobareti: Sagona (C.) in Kakhiani *et al.* 2013, pp. 32, 89–90, fig. 44: 1–5.

<sup>47</sup> For a revision of the Sioni Cultural Complex: see Helwing *et al.* 2017, pp. 147–148; see also Lyonnet 2018.

<sup>48</sup> At Chobareti an inner tab feature was also documented, Sagona (C.) in Kakhiani 2013, p. 13, Pit 4, fig. 37: 4.

<sup>49</sup> Pers. comm. Giulio Palumbi (3 June 2018); Frangipane 2012, pp. 240, 253; Sagona (C.) and Shapardon (in press).

<sup>50</sup> Sagona (C.) and Shapardon (in press).



bases and decorative dimples — the tray reflected the shift in pottery technology and fashion, while still holding tenaciously to the other enduring characteristics of the form.

It is significant that Drab Brown trays at Rabati display what must be seen as the same rustic attributes (thin floor, open shape, low walls, plain wiped exterior, relatively better finished interior, scooped fronts), and a number of fragments were found in Trench D9.2. Significantly, Drab Ware continues into the late Early Bronze Age–Bedeni contexts at Rabati; for example, in Trench AII–BII.3. In this trench, the tray fragments are found among the pottery deposits dominated by late Kura-Araxes and Common Wares (Fig. 20: 3).<sup>51</sup> This strongly suggests that despite the shifting and evolving cultural trends in the region, a truly conservative foodways tradition persisted, represented by the Drab Brown tray, which spanned the late Chalcolithic to Bedeni periods.

One other aspect is worth pointing out. The notion of piercing trays around the rim is a feature of pottery in the Chalcolithic period at Sioni cultural sites (although not at Sioni itself).<sup>52</sup> Although we have similar trays, holed decoration has not been observed at Chobareti; however, as mentioned previously, one tall-necked jar fragment from Rabati does have decorative holes (Fig. 18: 1–2). At Orchosani a tray fragment, again with a scoop front, also has such perforations arranged in a wavy line under the rim.<sup>53</sup> My colleague Belle Shapardon and I have argued that this feature probably served to attach an outer supportive casing, because the floors of the trays were usually so wide and thin that they were unlikely to have been structurally sound.<sup>54</sup> Such is likely the case with the thin floor of the Orchosani fragment, apparent in the published illustrations. This example is significant as Orchosani is only *c.* 26 km east of Rabati and it is possibly the easternmost occurrence of this type of rim decoration on a Sioni-like tray fragment.

#### *Polished Wares* (Fig. 20: 1, 3–5)

A small number of sherds have appeared that are remarkable for their superior quality. The exact date of this range has yet to be determined. Their find spots would suggest that many examples are from secondary contexts. This handmade category is notable for its thin walls, as well as the highly polished exterior and interior surfaces of open vessels. One fragment was polished to an exceptional degree (Fig. 20: 5). Hues can vary from black, through greys and browns to pale reds (Fig. 20: 4).<sup>55</sup> On some fragments, the hues tend to be of unusual and pale pastel shades. One fragment has a well-executed incised plant design and traces of a second hatched motif (Fig. 20: 1). This example is from a pot with rounded lip and it has a scar from a handle. Perhaps related to

<sup>51</sup> AII.4 [809] bag 25, 28.7.2018, wares in this bag included Kura-Araxes varieties. A similar range is in BII.3 [806] bag 46, 2.8.2018 with Bedeni.

<sup>52</sup> Pers. Comm. Belinda Shapardon. Trays, with or without pierced decoration have a wide spatial and chronological span, for example: from Yeni Yol, Kuliyeve and Bahşeliyi 2018, p. 43, fig. 11: 1–2; from Köhné Pâsgâh Tepesi in north Iran, Maziar 2010, pp. 170–171, fig. 7: 3–4; Mentesh Tepe, Period III, Lyonnet 2012, fig. 148: 7; from Bavra-Ablari, Varoutsikos *et al.* 2012, p. 54, fig. 11; Ararat lowlands, Kushnareva 1997, fig. 10: 4.

<sup>53</sup> Orjonikidze 2005, pl. 4: 7, a tray fragment decorated with holes from Pit 21.

<sup>54</sup> See Sagona, (C.) and Shapardon (in press).

<sup>55</sup> Examples from Rabati of Polished black (RSPF 505/1), greys (RSPF 103/2, 523/2, 806/8, 806/9), browns (RSPF 509/4; 802/7), pale reds (RSPF 509/5, 509/6) and pastel shades (RSPF 523/1).

this category are hearth fragments (Fig. 20: 2) unusual for their pink clay and smoothed pink-slipped exterior. A wide and flat ridge finishes the outer edge and the very rough underside indicates that the hearth was probably fixed and round. Its medium gritty fabric is unlike Kura-Araxes types and it may be an earlier form, related to the unusual pastel coloured sherds of this Polished Ware category. Among the decorative elements is a pattern of roughly executed, incised zigzag lines (Fig. 20: 3). This zigzag example does not sit well with the range of burnished wares in the Early Bronze Age and Bedeni or Trialeti periods. The nature of production and finish, the thin walls and the fabric suggest this fragment (Fig. 20: 3) belongs to the Chalcolithic polished ware category.

#### *Red-Slipped Ware* (Fig. 19: 5–6)

Another burnished category is characterised by thickly red-slipped vessel fragments (Fig. 19: 5–6), which find parallels at Orchosani; some examples from that site are now on display in the Akhaltsikhe Museum. The fabric has a large amount of fine, mainly pale or white gritty inclusions and a medium-textured paste. In many respects the white inclusions recall the nature of the fabric in the Drab Ware category. The examples in the Akhaltsikhe Museum clearly display red slipped and burnished-to-polished surfaces; at Rabati, signs of burnishing are evident.

#### *Yellow Slipped on Red and Painted* (Figs 18: 9; 19: 7–9)

A few examples hint at late Chalcolithic painted traditions. Unfortunately, the contexts are secondary and surface finds (Fig. 19: 7–9). These fragments find parallels at Yılantaş (eastern Turkey, east of Lake Van) among other sites.<sup>56</sup> The flat base of a small pot (Fig. 18: 9) and fragments from large jars have been identified among the finds.

Some of the ware categories discussed above find general parallels within the Orchosani Chalcolithic–Early Bronze Age levels that have been dated between 3703 and 3385 BC. These similarities are useful indicators for the chronological range at Rabati.<sup>57</sup>

### Early Bronze Age

#### *Kura-Araxes*

Rabati also produced some early examples of Kura-Araxes pottery with very fine incised hatched band and burnished surfaces.<sup>58</sup> Among the finds were fragments that appear to be early in the Kura-Araxes sequence, some with chaff and gritty inclusions. Other examples from Trench 10.1 suggest the later Kura-Araxes tradition (c. 2500, mid to late third millennium). One has complex grooved linear decoration and highly burnished and finished surfaces (Fig. 21: 2); another is a jar fragment with a rail rim (Fig. 21: 1). At the time of writing, the quantity of Kura-Araxes pottery

<sup>56</sup> Yellow on Red, painted ware parallels: from Yılantaş (eastern Turkey), Marro 2008, figs 8: 1–4, 9: 1–2.

<sup>57</sup> Gambashidze 2018, pp. 79, 81, Table 1 and 2 for listing of radiocarbon dates from the Orchosani site.

<sup>58</sup> Trench 10.1 [102], bag 2, RSPF 102/18 (2016); not illustrated; in the same context was a fragment with lightly chaff-pitted surface (RSPF 102/19).

comprises a minority 4.2% of the ceramics so far studied. By comparison, Common Ware, which is abundant (75% of wares analysed), appears to be the domestic pottery that is contemporary with distinctive Bedeni ware (see below). Quantities of Kura-Araxes wares, however, were recovered from the substantial architecture in AII.4 and associated trenches, although this material has not yet been fully analysed. Among the distinct shapes so far observed is an example of the open and shallow scoop with one side pressed in to accommodate a vertical loop handle (not illustrated); this is a shape well represented in the northern, Shida Kartli region. An example came from Tsikhiagora Level B2, which is considered to represent the closing stage of the Kura-Araxes and is dated to 2200–2100 BC.<sup>59</sup>

### *Martkopi*

The Martkopi-Bedeni phase is generally viewed as the final stage in the Kura-Araxes culture.<sup>60</sup> Some fragments from Rabati find parallels among pottery in the Martkopi range. One fragment has a complex linear design (Fig. 21: 3). Another has a blackened exterior surface heavily incised with a nested-chevrons decoration and a red interior; both surfaces are burnished (Fig. 21: 4).

### *Bedeni*

A characteristic shape of the Bedeni fine ware repertoire is the deep cup, which could realistically also be classed as a tankard or mug (Fig. 21: 5, 8). These drinking vessels can have a single loop handle or two, often spurred, handles with a horizontal top, referred to as a ‘knee-handle’ in the literature.<sup>61</sup> This tankard (Fig. 21: 8) came from Trench D9.2 and helped to clarify the chronological context for the handmade common wares with which it was stratigraphically associated. Its simple decoration of an incised horizontal line under the rim and short vertical lines near the handles and at the centre point between them is a variation of a decorative theme seen on numerous examples at contemporary sites.<sup>62</sup> This very useful cultural marker was found in close proximity to a large number of sherds from deep and baggy vessels that, judging by the surface condition of some (heat damaged and smoke blackened), served as large cooking pots; see Common Ware at Rabati following. Antonio Sagona illustrated three vessels that he designated Form 197 in his repertoire of the Kura-Araxes.<sup>63</sup> It is likely that the jar from Zveli (that is, Rabati) he depicts is an example of Common Ware (see following). Bedeni wares are tentatively assigned to the

<sup>59</sup> For Kura-Araxes scoops: from Tsikhiagora, Makharadze 2008, pp. 66, 83, fig. 16: 2–3; from Khizanaant Gora and Kvatskhelebi in Sagona (A.) 1984, Form 120, vol. i, p. 38, pp. 98–99, assigned to Kura-Araxes phase II; vol. ii, pp. 469–470; vol. iii, fig. 54: 5–8; general comments about the period, Sagona (A.) 2018, pp. 257–258, fig. 5.10: 8.

<sup>60</sup> Stöllner 2016, p. 217: “the subsequent Martkopi-Bedeni stages of the Early Bronze Age that can also be understood as the final stage of the Kura-Araxes development that is now characterised by variations in ceramic styles and the occurrence of a new group of socially-significant tombs, the early kurgans”; Makharadze 2018, p. 410, “The genesis of the Bedeni culture is still a mystery. We know that in the territory of Georgia at the end of the Early Bronze Age (the second half of the third millennium BC), late Kura-Araxes, Martkopi and Bedeni cultures co-existed”; Rova 2014, p. 64.

<sup>61</sup> Another Rabati example of Bedeni knee handles is RSPF 507/31 (not illustrated).

<sup>62</sup> Linear decoration on Bedeni tankards: from Natsargora settlement Rova *et al.* 2017, fig. 10: top two left and middle; also in Rova *et al.* 2010, pl. 6 top left.

<sup>63</sup> Sagona (A.) 1984, vol. ii, pp. 536–537, Form 197, nos 1 and 2, both from Zveli; vol. iii, fig. 92: 1–2 from Pulur Sakyol and Zveli, pl. XV: 8.

Early Kurgan, beginning *c.* 2600–2500 BC (that is, the Early Bronze–Middle Bronze transition), and the opening years of the Early Bronze IV–Middle Bronze I, which spanned *c.* 2600/2500–2000 BC.<sup>64</sup>

Other Bedeni fragments probably came from cups or tankards; they are reasonably well burnished, usually with black exterior surface, and are of finer quality. Vessels can have rounded and everted rims (Figs 21: 5–6, 8; 22: 1–2, 9).<sup>65</sup> Shapes include a range of wide-bodied jars (Fig. 22: 3) and bowls (Fig. 22: 5).

Decorative designs that are common to Bedeni ware include vertical hatched bands down the length of the vessel (Fig. 22: 1, 3–4) and nested chevrons (Fig. 21: 7).<sup>66</sup> Other cups can be simple with no decoration, but well finished and black-burnished (Fig. 22: 6–7). Burnishing of dark grey to black surfaces is a common feature of Bedeni wares, although some have clear signs of controlled firing, creating zones of greyish yellow and black (Fig. 22: 3–4). Burnishing can be so vigorous that it gives the surface a slightly corrugated effect. Sharply carinated profiles reported at other contemporary Bedeni sites — indeed one of the pottery traits of this phase — have so far been represented by only one fragment from a biconical vessel (Fig. 22: 8).<sup>67</sup>

#### *Pattern-Burnishing — Bedeni*

General burnished surfaces are well represented at Rabati, but some examples of pattern burnishing are also present. Purely on stylistic grounds, a provisional sub-division of the range so far recovered at Rabati is presented here, which straddles late Early Bronze Age–Early Kurgan–Bedeni and the Middle Bronze–Trialeti period.<sup>68</sup> Bedeni pattern burnishing techniques can be less thorough and more haphazard in the nature of burnished lines. This type of patterning along with poorer surface treatment in RSPF 102/59 is akin to other Bedeni wares at Rabati (Fig. 23: 1). The dating of this decorative range in Georgia is in the late third millennium BC, *c.* 2300–2160 BC.<sup>69</sup>

#### *Common Ware — Shapes*

Rabati's pottery includes a category that we refer to as Common Ware. This is not the first time that a range of rather poor quality domestic or household wares was found to be contemporary to the highly burnished and well-produced black burnished wares. In his appraisal of the Bedeni culture, for instance, Jalabadze noted concerning Berikldeebi, Level III: “Besides the black-polished pottery... a series of absolutely new type of kitchen ware is observed” described as “rough jars”.<sup>70</sup>

<sup>64</sup> Sagona (A.) 2018, pp. 305 *ff.*; Palumbi 2008, p. 19, Table 1:1, for a summary of major chronological schemes concerning the fourth to third millennium BC.

<sup>65</sup> Rounded jar rims at Rabati: RSPF 507/29; 508/7.

<sup>66</sup> Rabati, Bedeni-type hatched bands: RSPF 501/16; 507/29.

<sup>67</sup> RSPF 508/11 is a corrugated (or slightly ridged) walled fragment. Carinated profiles and ribbed walls at other sites: Okherakhevi, Kurgan no. 1, Rova, Puturidze and Makharadze 2010, fig. 14. Other examples of carinated cups and other vessels are on display in the Akhaltsikhe Museum.

<sup>68</sup> Bedianashvili (2008) has analysed the typological and chronological range of pattern burnishing in the Georgian Bronze Age.

<sup>69</sup> Bedianashvili 2008, p. 89, fig. 2: 1–2.

<sup>70</sup> Jalabadze 2014, p. 218, figs 15–17, 18–22; also illustrated in Rova *et al.* 2010, pl. VI, bottom three pots; also Natsargora, Rova *et al.* 2017, fig. 9.

As mentioned above, it is likely that a large jar from Zveli illustrated by A. Sagona in 1984 is a reconstructed example of the kind of large jar fragments identified at Rabati as Common Ware, rather than a standard Kura-Araxes, Early Bronze Age type.<sup>71</sup> The shape is large and deep, with slight offsets in the profile, and variations of it have been found at Rabati, especially in Trench D9.2 and associated areas (Figs 23: 2–6; 24: 1–2; 25: 1–3, 5–6; 26: 1–2, 4). Sagona's description, "a coarse, poorly baked fabric and a mottled red and brown colour scheme," would conform with our Common Ware.<sup>72</sup> He designated this Form 197, Type B.<sup>73</sup> Variations of large jars occur in this category. Rims can be afforded different treatments but are often hole-mouthed. Sometimes they have a simple flattened rim, but a rounded lip is more usual (Figs 23: 2–3, 5–6; 24: 1).<sup>74</sup> Vessels can have a small, slightly everted rim (Figs 23: 4; 24: 2; 25: 1–2, 6) or a more flaring or outward-curving version (Figs 25: 3, 26: 5; 27: 1–3). Signs of a more pronounced offset at the juncture of neck and shoulder are less common (Fig. 26: 4). Sometimes the lip can show signs that the clay has been folded back over the rim to neaten it, but with traces remaining of a flap or smear of clay on the inner mouth (Fig. 25: 5). The jars can have simple, vertical loop handles high on their walls (Figs 23: 7; 24: 2–4). Some of the vessels seem to have been cooking ware. Bases tend to be flat, some with a small splayed or rounded outer edge (Fig. 28: 1–5). One example has a drainage hole pierced through the lower wall (Fig. 28: 4). The base illustrated in Figure 28: 6 is quite unusual and is from a very squat pot shape.

Some Common Ware fragments appear to be from tall but wide-necked jar necks, which slope out slightly from the rim to the body of the vessel (Fig. 25: 4, 7). Bowls with curved walls are represented (Fig. 27: 5–6). One open bowl or pot had a bulging neck to which a vertical tab handle was attached (Fig. 27: 7). A small mug found in Trench 10.4 (Fig. 27: 8–9) would seem to be a more rustic example of the well-finished drinking cups of the Bedeni and later periods (especially simpler forms like Fig. 22: 6–7).

Domestic wares include the lower part of a large pot with rounded opening cut near the base (Fig. 28: 8), which possibly functioned as a brazier. A small number of very thick-walled, shallow and coarse shapes probably served as baking pans. They often have perfunctory pie-crust pinched edges as a decorative effect on the outer face (Fig. 28: 7). Considering the very coarse and poorly levigated clay, it is somewhat surprising that they have any decorative features at all. Nonetheless, they can also be afforded a thin slip, roughly smoothed over the upper surfaces and sides; bases are left very gritty and coarse. A simpler, small pan showed extensive smoke blackening and heat damage (Fig. 27: 4). Within this broad group is a curved wall fragment pierced all over with small holes made while the clay was wet (Fig. 31: 8).

Lids are found in a few forms, but they are generally flat (Fig. 29: 1, 4–8) or convex (Fig. 29: 2). Decorations include finger-impressed edges (Fig. 29: 4–5), high-relief curved patterns (Fig. 29: 4), lines spiralling in from the rim (Fig. 29: 6), and alternating puncture and incised lines (Fig. 29: 1). A low disc shape was moulded onto one lid fragment, probably serving as a handle (Fig. 29: 3).

<sup>71</sup> For historic excavations at Zveli, see Sagona (A.) 1984, vol. i, p. 52 (note 47 indicates some information came as a pers. comm. from A. Dzhavakhisvili). He illustrated a large jar, vol. iii, fig. 92: 2, photo pl. 15: 8.

<sup>72</sup> Sagona (A.) 1984, vol. i, p. 52.

<sup>73</sup> Sagona (A.) 1984, vol. ii, p. 536.

<sup>74</sup> Common Ware rim treatments: flattened lip, RSPF 507/12; rounded lip, RSPFs 507/15, 508/6.

*Common Ware — Fabric and Surface Treatments*

Surface treatments vary from slipped and reasonably well smoothed (Fig. 30: 1) to straw wiped and scratched (Fig. 30: 2), and roughly paddle-smoothed (Fig. 30: 3). The latter two finishes give the fragments a rustic quality. Decorations or attachments are few, but include small knobs (Figs 24: 2; 25: 7; 30: 9).

Common Ware varies in hue from dark greys (N4/) through browns (7.5YR 5/1) to quite yellowish (10YR 8/2) hues. Yellowish grey slipped examples are not uncommon (Fig. 30: 9). It has to be noted that within the deposits of Trench D9.2 and D9.4, many of the Common Ware fragments were embedded in a matrix that seemed to be rich in organic material, although this has yet to be verified by analysis. The deposit itself was a strong tan colour, which not only stained the surfaces of the pottery but in many examples permeated the matrix of the fragments (e.g., Fig. 24: 3). Burnishing is carried out to varying degrees on Common Ware vessels, falling short of the finer wares of ‘classic’ Bedeni forms, though it is likely to be contemporary (Fig. 31: 5). Burnishing can be streaky and haphazard (Fig. 30: 4–5).

*Common Ware — Decoration*

Decoration is not common. There are some sherds with incised designs. One depicts grass-like patterns made at the leather-hard stage (Fig. 30: 6). At other sites, similar motifs occur on Bedeni vessels in pattern burnishing.<sup>75</sup> Incised designs on small, wide-bodied pots often incorporate hatched or cross-hatched bands on the upper shoulder, below which are pendent often nested chevron or zigzag lines (Fig. 30: 7–9). A new decorative feature that appears among the Common Wares is small punctured holes, alone or in combination with grooves. The former adorn the outer flat face of a hearth finial (Fig. 31: 9–10); the latter decorate a flat thin lid (Fig. 29: 1), the finial point of an andiron (Fig. 31: 11–12), and jar body fragments (Fig. 31: 6–7). A handle with incised lines at the sides of an impressed, finger-wide groove down its back has also been documented (Fig. 31: 13). The technique recalls andirons with punctured holes from Urkesh (Tell Mozan) in northeastern Syria, published by Marilyn Kelly-Buccellati.<sup>76</sup> From sound contexts in domestic structures at Urkesh, this range of andirons is dated between 1900 and 1600 BC, equating to the late phase of the Kura-Araxes (‘Early Transcaucasian culture’) and in line with the evidence from Sos Höyük, which also supported the longevity of the culture.<sup>77</sup>

*Possible Ritual Items*

At first glance, the hearth or andiron in the form of twin anthropomorphic figures with obsidian eyes could be associated with the Early Bronze Age tradition of the Kura-Araxes culture (Figs 32: 1–3; 33: 1–2).<sup>78</sup> But on closer inspection does this identification hold up? As mentioned above,

<sup>75</sup> Bedianashvili 2008.

<sup>76</sup> Kelly-Buccellati 2004, fig. 1: 1; 4: 2; 6: 1b–2.

<sup>77</sup> Kelly-Buccellati 2004, p. 74.

<sup>78</sup> The double-headed object’s details are: hue at upper exterior 5YR 6/3–5/2; interior slip 7.5YR 6/2; max. W 47 cm; Th 17 cm; H 32.5 cm; H between the two anthropomorphic upright figures 14.5 cm; W of the left figure 18 cm; W of right figure 16 cm; dimension of eyes — left face, left eye W 13 mm; right face, right eye W 15 mm.

this object was recovered from the Rabati site by Tariel Chubinishvili in 1974. It was found close to the surface, not far from A10 and associated trenches. In reality, its form is not typical of the Kura-Araxes culture; it has not a single prop, nor the horseshoe shape, nor does it fall within the range of fixed, in-floor hearths found so far in the centre of Kura-Araxes houses. The fabric is coarse and not a good indicator of date. Most unusual are the eyes, set with black polished obsidian pieces (Fig. 33: 1–2). A curious parallel in this regard can be found in a statue from Urfa in Turkey that is assigned to the Pre-Pottery Neolithic period.<sup>79</sup> Most would rightly argue, however, that the chronological difference is too great to draw a meaningful parallel.

Dating from the closing years of the Early Bronze Age is another unusual, mask-like object or plaque, which was found at Natsargora in central Georgia (Shida Kartli province, Khashursky district; *c.* 73km northeast of Rabati). Although damaged, one obsidian inlay eye and an additional inset fragment in the forehead remained, and the face and other markings were heavily defined in relief (Fig. 33: 4).<sup>80</sup> A hearth found in Berikldeebi in building no 8 (Layer III) had an inset feature with two figures fitted with obsidian eyes. The feature was dated to the Bedeni period.<sup>81</sup> Taking into consideration the Berikldeebi object and the high stratigraphic position of the Rabati object, what could be suggested about the latter is that it dates to the Bedeni period at the site. Its surfaces are smoothed, but heat damaged (burnt) on the back, where a narrow and shallow tray was moulded into the object (another attribute unlike the Kura-Araxes types). The only tenuous analogue to manufactures of the Kura-Araxes communities that I can suggest for this unique object is the smaller double-pronged andirons with curved back and shallow tray-like base found at Sos Höyük; these date to the Early Bronze Age I (e.g., Fig. 33: 3).<sup>82</sup>

The faces look out away from the, presumably functional, side of the object that was focused on the tray formed at the back. In this, their anthropomorphic qualities differ fundamentally from those of the Kura-Araxes hearths, where faces moulded onto the andirons faced the functional side of the object and presumably the person using them. Given that one large pot illustrated from past excavations likely belongs to the Common Ware category rather than the Kura-Araxes (see above), and that this range of wares so far identified at Rabati appears to belong to a significant Middle Bronze Age deposition at the site, this object probably dates to the Bedeni Period.

One other find is worth mentioning here. A small, hand-modelled, square object with well-finished rounded underside had possibly four prongs moulded into the corners; only one of these partially survives (Fig. 34: 1–3). This object can be compared to a find at Orchosani described as a portable altar. It, too, has four prong-like projections at each corner.<sup>83</sup> In terms of function, however, it has to be noted that this object from Rabati does not appear to be heat damaged or smoke-blackened.

<sup>79</sup> Sagona and Zimansky 2009, p. 32, figure on the right.

<sup>80</sup> Shanshvili and Ramishvili 2010, pl. 2: 4.

<sup>81</sup> Javakhishvili 2017, p. 140.

<sup>82</sup> Sagona and Sagona 2000, figs 10: 1; 11; 17; 25; 29.

<sup>83</sup> Orjonikidze 2005, pl. 8: 6, the pronged object came from Trench II, Pit 30. A small figurine was also found in this pit, perhaps reinforcing the ritual nature of the deposit, see pl. 5: 9.

## Middle and Late Bronze Age Wares

In 2011, Antonio Sagona wrote:

In Transcaucasia, this early barrow period has been further divided into three horizons — Martkopi, early Trialeti, and Bedeni — largely distinguished by nuances of pottery forms and decorations. Yet these terms often confuse rather than clarify. Martkopi and early Trialeti ceramics often bear similar traits, such as finely incised ornamentation ... which also distinguish late Kura-Araxes pottery... Indeed, this question of when exactly the Kura-Araxes horizon ended is part of a continuous debate.<sup>84</sup>

These problematic issues persist, but given the preliminary indications, Rabati may furnish more data on the complex rise and evolution of these predominantly black-burnished ceramic traditions.

### *Trialeti*

The Trialeti category at Rabati is characterised by handmade production and the use of coil techniques. The potters achieved relatively thin walls, considering the sizeable jars recognised among the finds and similar forms from previous excavations in the region. The clays tend to be medium-textured with a moderate amount of very fine, mixed gritty inclusions. Hues range from dark browns (7.5YR 4/1, 5/2, 5/3) and surface dark greys (N3/1) through to black. In many respects, it is still the distinctive decorations that define the Trialeti during this phase.

A hallmark of Trialeti pottery is comb-impressed zones of decoration, often infilling pendent triangles on the shoulder of jars (Fig. 34: 6). Examples have been found at Rabati. Typically, the design incorporates multiple fine lines of dots formed by the teeth of a comb while the clay was wet (Fig. 34: 4–6). Jars are wide-mouthed with everted rims and rounded lips (Fig. 35: 1–2). Vessel interiors can be heavily combed, a characteristic *as distinct as* the impressed design made with the teeth of a comb (Fig. 34: 7).

It is worth noting that deeply incised triangles with boldly incised hatched lines cut into the clay while it was wet can also decorate jars at Rabati (Fig. 35: 1). Significantly, these decorative techniques occur on pottery fragments which have combed interior surfaces, suggesting they are part of the Trialeti tradition.<sup>85</sup> Elena Rova and her colleagues illustrated a very similar vessel from Natsargora, which was assigned to the Martkopi phase.<sup>86</sup> Their reassessment, however, indicated that the site was not without its problems. Concerning ceramics, they noted that “Their relation to the site’s stratigraphy was far from clear” and there was a “very limited presence of Martkopi.” In addition, they found it “quite difficult to attribute specific find groups to the layers, floors and features mentioned in the excavation diaries and in the excavator’s unpublished final report.”<sup>87</sup> Natsargora would appear to have Middle Bronze Age remains, but considering the challenges of

<sup>84</sup> Sagona (A.) 2011, pp. 694–695.

<sup>85</sup> Combed interior walls: RSPF 501/4, D9.4 [501] bag 33 (comb-impressed exterior decoration); RSPF 102/50, D10.4 [102] bag 52 (hatched triangle decoration).

<sup>86</sup> Concerning hatched decoration at Natsargora assigned to a Martkopi date, Rova *et al.* 2017, fig. 6 right.

<sup>87</sup> Rova *et al.* 2017, pp. 154–157.



that site and the association of hatched and comb-impressed fragments at Rabati, it is possible that both techniques were used to decorate pottery during the Trialeti phase. This was also mooted for two large, bulbous jars from Sos Höyük with deeply incised hatched pendent triangles, which A. Sagona associated with the Trialeti tradition.<sup>88</sup> A fragment with an incised decoration of nested triangles edged with flecked impressions was also found in Rabati with, significantly, comb-impressed fragments; a Trialeti date is likely for this example (Fig. 35: 5).<sup>89</sup>

### *Pattern-Burnishing — Trialeti*

Some pattern-burnished designs (e.g., Fig. 35: 7) seem to exhibit the heavier and wider burnished lines seen in Trialeti III contexts (that is, 1800–1650 BC; equivalent to Middle Bronze Age III).<sup>90</sup> Of a similar date are examples with single-stroke wavy lines within a matte zone bordered by areas of solid burnished surface.<sup>91</sup> Single-stroke zigzag lines are a variant of this decorative technique (Fig. 35: 6).<sup>92</sup> These fragments are from surface levels. Likewise, hatched triangles left matte can be edged by burnished zones, providing a darker and shiny contrasting effect (Figs 34: 6; 35: 3–4). This technique appears, for instance, at Sajoge, near Tbilisi, on a jar sherd with a matte and comb-impressed area edged by burnished zones.<sup>93</sup> The contrasting design technique was also observed at Sos Höyük.<sup>94</sup>

### *Decorative Rods on Vessel Shoulders*

One near-complete vessel from Trench D9.2 (Fig. 36: 1) has a very distinctive decoration consisting of three vertical, short rods fixed at the rim and shoulder opposite the handle. In terms of handle modelling — with its deeply impressed groove down the back — and in body shape, the vessel can be compared to a one-handled drinking cup from the Atsquri barrow, located c. 15.7 km north of Rabati.<sup>95</sup> The notion of attachments opposite the handle is also represented in that burial, but it is manifested in small knobs under the rim.<sup>96</sup> The Atsquri barrow is assigned a Middle Bronze Age date falling within the Trialeti cultural range (1600–1500 BC).<sup>97</sup> At Rabati, there are other examples of decorative rods on the shoulder (Figs 35: 8, 9; 36: 2) and of deeply

<sup>88</sup> Sagona (A.) 2000, p. 337, figs 14–15, Period IVa, Middle Bronze Age I; fig. 14 was found in a burial dated 2325–1920 BC (Beta-95225); of the jar in fig. 15, he stated: “An incised black burnished jar, placed directly above the body ... leaves no doubt to its cultural affiliations with the Trialeti region” (p. 337).

<sup>89</sup> RSPF 122/3, D10.4 [122] bag 75, for the fragment with incised and flecked edge decoration. Similar designs are found in Lchashen (Armenia), Tomb 120, said to be typical Trialeti-Vanadzor I (MBA II). See Avetisyan and Bobokhyan 2008, p. 143, fig. 6: 2–3; p. 144, fig. 7: 3, 6.

<sup>90</sup> Bedianashvili 2008, p. 91, fig. 4.

<sup>91</sup> Rabati RSPF 113/2 (not illustrated).

<sup>92</sup> Bedianashvili 2008, figs 3: 4–6; 4: 3, 7.

<sup>93</sup> Abramishvili and Orthmann 2008, p. 283.

<sup>94</sup> An example of contrasting drab bands hatched with comb-impressed designs and bordered by burnished darker zones from Sos Höyük: M16 [546] bag 115 (1995).

<sup>95</sup> Atsquri parallels: Licheli and Rusishvili 2008, p. 222, figs 13: 5, 17: 2 (for body shape); 15: 2, 17: 2, 18: 3–4 (for handle form).

<sup>96</sup> Attachments opposite the handle: Licheli and Rusishvili 2008, fig. 17: 3, 5.

<sup>97</sup> Licheli and Rusishvili 2008, some items are reproduced in Sagona (A.) 2018, fig. 7.7: 9.

grooved handles (Fig. 23: 7).<sup>98</sup> Three rods on the shoulder of cups is also seen at Natsargora, where it is grouped with Bedeni wares;<sup>99</sup> however, stratigraphically, the cup at Rabati (that is, Fig. 36: 1) is higher than the deposit in which the Bedeni two-handled cup was found (Fig. 21: 8). The other fragments with this decorative feature (Figs 35: 9 and 36: 2) came from Locus 119, in which Common Ware was present, and it cannot be discounted that the style dated back to Bedeni and persisted into Trialeti contexts.

Considering this context and other pottery features at Rabati that find parallels in the Atsquri burial context, the comparison seems stronger with the Middle Bronze material from the burial site. One such parallel is the ridge-back handle form (Fig. 36: 3).<sup>100</sup> A second example, found in Trench D9.2, is possibly a handle; it is similarly shaped with ridged back and double loops (Fig. 36: 4–5). Similar double loop handles, however, have been found among Bedeni vessels at Natsargora.<sup>101</sup> Deeply incised grass-like, linear motifs that decorate one sherd (Fig. 36: 6) could also be likened to such designs on larger tankards in the Atsquri burial, but the connection remains tentative.<sup>102</sup> In addition, a very similar, thin bronze boss from Rabati (Art. 193, from Trench D9.4, Locus 548) is also matched in the burial (see Metal Work following; Fig. 46: 8). While we are in the early stages of the Rabati excavations, it is hoped that the stratigraphic sequence will help to define the interplay between the Bedeni, Martkopi and Trialeti traditions.

#### *Incised and Other Decorative Elements*

Another decorative element consists of a small knob cradled by two incised half circles pendent from horizontal lines decorating the shoulder of a vessel (Fig. 37: 1). Remnants of further half circles on either side suggest these decorative elements were repeated around the pot. Despite these possible stylistic connections, the context of the fragment appears to be within the Bedeni cultural deposits. A second fragment has a pale brownish pink and matte slipped exterior surface and it has been carefully decorated with a combed half circle pattern (Fig. 37: 6–7). The interior is plain and the gritty nature of the clay is visible at the surface (Fig. 42: 7 right).

Rare and remarkable is one fragment from Trench A10.1/A11.4. This piece is from a jar with two tab attachments at the widest point in the profile (Fig. 37: 3–4). The tabs have impressed concentric circles forming an eye-like design surrounded by nested zigzags and lozenge patterns comprised of finely incised short strokes. Other fragments at Rabati have similar incised linear patterns and likely traces of white in-fill paste (Fig. 37: 8–9).<sup>103</sup> One fragment at Rabati with two small knobs, above which are incised lines, reflects this decorative theme (Fig. 37: 5). These examples also appear to belong to the Bedeni Period.

<sup>98</sup> Examples of grooved handles at Rabati: RSPF 111/1, 119/36; 200/16, 507/23 (not illustrated).

<sup>99</sup> Rods on the shoulder of cups: at Natsargora in Rova *et al.* 2017, fig. 10 bottom left.

<sup>100</sup> Ridge-backed handles: at Rabati RSPF 504/2 (not illustrated).

<sup>101</sup> Double-loop handles: from the Natsargora settlement, Rova *et al.* 2010, pl. 6, top right, two double loop handle on a cup; at Atsquri, Licheli and Rusishvili 2008, fig. 13: 1, 3; 15: 1.

<sup>102</sup> Licheli and Rusishvili 2008, fig. 13: 1, 15: 1.

<sup>103</sup> Zigzag patterns: RSPF 102/46, D10.4 [102] bag 39 (2016).

### *Horseshoe Hearths*

In Trench AII.4, a horseshoe-shaped, deep hearth surround was found nestled into stone architecture (Fig. 38: 1–3). A few other fragments of the decorated upper surface of this or perhaps other similar hearths have been found during the course of the excavations (Fig. 38: 4–5). Constructed with wide coils of clay, the upper surface was decorated with impressed ovals and circles of differing circumferences, possibly made with variously sized, cut long bones. The decoration seems to be without parallel and it has been tentatively placed within the later stages of the Early Bronze (Bedeni)–Middle Bronze Ages. Other fragments of hearths or andirons have been found that fall into the Common Ware coarse category. They tend to be well modelled, horseshoe shaped, slipped and smoothed well, and without decoration. The only exceptions are the punctured examples mentioned previously (Fig. 31: 9–12).

### *Hard Red Ware*

The matte red slip is thick and of a dark hue (5YR 6/4), the fabric is relatively heavy and gritty, poorly levigated and generally handmade or at most perhaps slow-wheel-made, with wipe marks rather than wheel striations. It should be noted that it is not typical of medieval red-slipped wares of the type found in the upper regions of Chobareti or for that matter in the upper deposits at Sos Höyük. This category is tentatively placed within the late Middle Bronze to the early Late Bronze. Red slip is not usually associated with the Late Bronze Age in this region. Such surface treatments have, however, been appearing among the pottery fragments at Rabati and we hope to determine whether Hard Red might be another category of local domestic wares. Variants of surface treatments of Hard Red ware include yellow-slipped (2.5Y 8/3) examples.

A fragment from a large vessel with horizontal handle and adjacent drainage hole (Fig. 39: 1–2) finds a very similar shape parallel in a sherd from Udabno (II) which is dated to the Late Bronze Age (c. 1100–800 BC). This type of jar is described as a ‘butter vessel’, which clearly attributes a function to the form — presumably such vessels served as butter churns.<sup>104</sup> At Rabati, red-slipped fragments of a similar type came from a high-shouldered bowl with random vertical incised lines on the upper wall (Fig. 39: 4–5). Narrow necked jars (jugs or flasks) with mottled red-slipped surface (Figs 39: 6–7; 40: 1–2) are also found. One example with thin walls shows signs of some heat damage, with blackened surfaces (Fig. 40: 2). Rims tend to be simple and rounded at the lip; one has a well-formed collar around the upper edge and a short neck defined by an offset at the shoulder (Fig. 40: 3). The contexts of the fragments all have some degree of mixing, with a range of wares present. Whether the type of red-slipped ware belongs in the Late Bronze Age and Early Iron Age remains to be determined. Such vessels with basket handles and side holes occur in many contexts. At Yanik Tepe (Iran), a tall, narrow type was found in Trench K, Pit A, dated to Late Iron Age.<sup>105</sup> It must be noted that butter churns with horizontal handles with a hole to the side have also been attributed to the medieval period; for instance, at Dmanisi. But the Rabati type does differ in being a tall form with incised intersecting wavy line decoration.<sup>106</sup>

<sup>104</sup> Bertram 2008, p. 239; also in Sagona (A.) 2018, pp. 409–411, fig. 8.17: 3.

<sup>105</sup> Summers and Burney 2012, p. 271, figs 13: 1; 35.

<sup>106</sup> For butter churns: from Udabno (LBA), Bertram 2008, pp. 249, 239–240, fig. 10: 4, Ind. No. 443, from Area 640/760; from Dmanisi (medieval deposits), Chkhvimiani 2011, pl. 11: 4.

### *Brown Ware*

Other wares found with this distinctive Hard Red Ware include a Brown Ware category, which is handmade, using coil technique resulting in gently undulating surfaces (Fig. 40: 4) and lamination seams (Fig. 40: 6). Clays can have a large amount of mixed fine to small grits evenly dispersed through the matrix clay, and occasional voids may be present. Hues are even through the section from grey-browns (10YR 5/3; 7.5YR 5/3) to reddish-brown (5YR 6/4; 5YR 5/3) and vessels are generally thoroughly and hard fired. At Rabati this ware is mostly represented by body fragments, but the examples do display a few distinctive decorative features: applied curved motifs in relief (Fig. 40: 5–6), flecked, possibly lightly comb-impressed linear designs (Fig. 40: 4), and hatched bands incised on the shoulders of vessels (Fig. 40: 7). Surfaces can be drab or slipped brown (7.5YR 4/1), and paddle smoothed; some are lightly burnished.

This Brown Ware probably equates with Sos Höyük's 'Brown Gritty Ware':

[T]here is a hard fabric we have provisionally termed 'Brown Gritty Ware'... It does not bear the distinctive rocker stamp impressions, but its paste certainly compares well with Trialeti pottery in thickness and grittiness. Round profiles and bag-shaped forms with a short everted rim are popular... The cylindrical cup with ring base is specific to this ware type.<sup>107</sup>

As noted above, one fragment at Rabati did have comb-impressed design, but not in the same densely stamped, in-fill application as on Trialeti wares. At Sos Höyük, Brown Gritty Ware occurred in Late Bronze Age contexts and might be a domestic ware contemporary with Trialeti finer wares, in much the same way that Common Wares are associated with finer Bedeni fragments. Closed jar fragments, large (Fig. 40: 5–8) and small (Fig. 39: 4), are represented. Occasional fragments were wheel-made, and it is possible that this kind of fabric continued into later phases within the conservative setting of domestic life in the settlement (Fig. 40: 9–10).

### *Mid-Grey Ware*

This ware can be medium- and fine-textured and it tends to be a consistent mid-grey hue through the section (7.5YR 5/1–5/2, or grey to dark grey in Munsell terms). When present, finely striated lines such as those on the ring base point to (slow) wheel production (Fig. 41: 1), while other examples are clearly handmade. Clays have a compact texture with some voids visible in the section. Generally, examples are well fired, and clays can have a moderate amount of fine to medium, mixed gritty inclusions. Combed decoration (Fig. 41: 3) and zones of well-made combed wavy lines beside burnished areas have been recorded. Refined examples can have very fine flecks of mica and occasional very fine, mixed gritty inclusions in the paste. In the coarse examples, the matrix clay is a consistent pale grey through section, sometimes firing darker grey (10YR 5/2) in a clear narrow line (c. 1 mm thick) near the surfaces in a defined sandwich of hues. Shapes so far identified include a disc base (Fig. 41: 2), a ring base (Fig. 41: 1) and an open bowl, thick-walled and with a rounded simple lip (Fig. 41: 4). The bowl has excised notches neatly and evenly spaced around the outer rim.

<sup>107</sup> See Sagona (A.) 2000, p. 338, fig. 17: 5–6.

## Iron Age

A small quantity of Iron Age wares has been recovered during both seasons of excavation, from various trenches, although clear Iron Age contexts are illusive.<sup>108</sup> The nature of this material tends to fall into variations on black or red wares, similar to the range of fabrics seen at Sos Höyük.<sup>109</sup> Rabati reflects a pattern of popular shapes being manufactured out of various fabrics that is also apparent in the other neighbouring regions with Iron Age sites.<sup>110</sup>

### *Black Ware* (Fig. 41: 5–9)

Distinctive Iron Age shapes are certainly represented among the sherd material in Black Ware. In Trench D10.4, a high-shouldered bowl with black fabric and black burnished interior was found (RSPF 101/56; not illustrated, although similar to Fig. 40: 1 and 3).<sup>111</sup> A jar fragment had a slightly out-turned sharply defined rim (Fig. 41: 5). Decoration is also distinctive among Iron Age wares, including incised hatched (Fig. 41: 6, 8) or herringbone designs (Fig. 41: 7) and other variations of simple linear patterns (Fig. 41: 9). The latter example appears to have traces of white paste in-fill. The clay is generally compact and medium-fine with a small amount of fine gritty inclusions. Hues are even grey/black (N4/) through the section and the exterior surfaces are usually black-slipped and burnished; interiors can be left matte. Examples of similar wares were found during the survey of the Bayburt area and at Sos Höyük.<sup>112</sup>

### *Compact Red Ware* (Fig. 41: 10–11; 42: 1–2)

Clinker crisp, medium-textured and hard-fired, Compact Red Ware is even red throughout. Examples can be wheel-made. A moderate amount of very fine to minute black and occasional white particles are in the paste. Smoothed surfaces are left plain, drab and matte and some tend to be slightly crazed. The surface treatments vary, including a range of thick, matte slips, in red, reddish yellow, pale and dark hues; some examples are burnished. Shapes include high-shouldered bowls with thickened rim sloping into the vessel (Fig. 42: 1). A vertical rim, possibly from a flask, is encircled by a ridge (Fig. 42: 2). Rilled walls (Fig. 41: 11) on a large jar with flaring rim, and an example of a holemouth vessel (Fig. 41: 10) have been found in Compact Red Ware.

### *Grey Brown Ware* (Fig. 42: 3–9)

Likely to be handmade and with relatively thin walls for the estimated size of the vessels, Grey Brown Ware has signs of coil production, namely undulating wall thickness as well as dips

<sup>108</sup> Context of some Iron Age examples: F9.1 [306] (2016); D10.1 [102] (2016); D11.4-E11.3 [151] (2018).

<sup>109</sup> Sos Höyük's Iron Age wares: Sagona, (A.) 1999.

<sup>110</sup> Erdem 2012, pp. 114–116.

<sup>111</sup> Rabati, D10.4 [101] bag 34, 28.6.2016. Similar forms have been recorded among Iron Age wares in the Bayburt Plain, Sagona and Sagona 2004, pp. 195–202, fig. 146: 2, Black Ware (6: 2.1).

<sup>112</sup> Common Black fabric, Ware 6:2.1, from the Bayburt survey, Sagona and Sagona 2004, pp. 195–198; from Sos Höyük Sagona *et al.* 1996, p. 32, fig. 5: 9.

in the surface and wavy breaks. Clays are crisply fired, compact and evenly levigated in texture. Some very fine voids and fine gritty inclusions are in the paste. Hues range across browns (5YR 5/4) to greys (N5/–N3/). A thin-walled fragment from a closed jar is likely to date to the Iron Age. It has a thickened and flaring rim (Fig. 42: 7).<sup>113</sup> The angular ridge and rim on a pot in A11.4 has clear wheel striations on the interior (RSPF 806/3, not illustrated). High-shouldered bowls are common in the Iron Age, as we have seen in the previous ware type, and examples in Grey Brown Ware are present (Fig. 42: 3). A conical form has also been recorded (Fig. 42: 9). An unusual fragment might be part of an open tray with a small peak at the front (Fig. 42: 8). Closed jars can have flaring rims (Fig. 40: 9). One body fragment has a decoration consisting of darker vertical bands and paler bands, which were formed by scratching the surface with an implement that had a rough abrasive edge to produce finely striated zones (Fig. 42: 5–6).

### *Ridged Vessels*

A bowl with ridged upper walls from a semi-closed bowl (Fig. 43: 4) is suggestive of a type known in Elaziğ and Malatya, among other regions in eastern Anatolia, where it is generally considered to be a hallmark of the Early Iron Age. Aylin Erdem has illustrated numerous examples of bowls with rilled exterior walls spanning the Early and Middle Iron Ages.<sup>114</sup> The type can be produced in a range of fabrics and by hand, as seen in sites such as Kavuşan (eastern Turkey).<sup>115</sup> This range of vessel can be referred to as ‘Mushki Ware’ (after the Mushkian culture) with grooved rims, although not all agree to the use of this descriptor.<sup>116</sup> Ridged walls of this nature span some 600 years, from 1200–600 BC, with three general stages within that time frame. The example from Rabati appears to be wheel-made with grooves on the exterior for decorative effect. The clay is moderately well levigated and compact grey (5YR 5/1) through the core. The high points carry a sheen and are darker (5YR 4/3) through handling. Surfaces can be slipped red brown.<sup>117</sup>

### *Red-Slipped on Dark Ware* (Figs 43: 1–3)

Shapes so far identified in this Red-Slipped on Dark Ware include a conical bowl (Fig. 43: 1), another larger example, which had an oblique rim sloping into the bowl (Fig. 43: 2) and a high ring base (Fig. 43: 3). Again, this type of fabric can have indications of either handmade coil technique or wheel manufacture. The fabric is generally medium–coarse in texture, with small to medium, mixed and angular gritty inclusions in the paste. Breaks are moderately sharp. In hue, the clays can fire pale brown or grey (N4/), but tend to be dark and black near interior. Very dark grey (7.5YR 6/3) to thick red-slipped (10R 5/6), burnished and matte red-slipped surfaces are present.

<sup>113</sup> For shape, Sagona and Sagona 2004, fig. 140: 4 (in Black Ware).

<sup>114</sup> Erdem 2012; Kozbe 2008, ridged examples in figs 10–19; Tsaghkahovit Plain (Armenia), Smith *et al.* 2009, p. 84, fig. 30: F, G, I, dated to Lchashen-Metsamor 4 (Iron Age IA).

<sup>115</sup> Kozbe 2008, p. 294.

<sup>116</sup> Erdem 2012, p. 116.

<sup>117</sup> Sagona and Sagona 2004, Bayburt Province survey finds, p. 183: from Mezarlık, fig. 111: 6 (HM); Aksaçlı, fig. 114: 3 (slow wheel); Pulur (Danışment), fig. 116: 9 (HM); Örenşar, fig. 177: 9 (HM).

## Medieval

### *Crisp Bricky Ware* (Fig. 43: 5–7)

Some examples of Crisp Bricky Ware have been found in Rabati; the ware type, however, was better represented at Chobareti. Its coarse hand-manufacture is quite distinctive. In very coarse examples, the matrix has a large amount of small semi-angular, dark red-brown grit of generally consistent size, as well as smaller mixed particles and some voids in the paste. Clays tend to be mainly red through the section, very hard-fired with rough and eroding breaks.

A range of variants have been observed in this category. Red-Slipped examples, like the other Crisp Bricky wares, can have micaceous fine particles and other gritty inclusions in the fabric.<sup>118</sup> Yellow and matte grey slip (sometimes quite thin washes) can also be applied to the surfaces and burnishing has been noted. Paint and very fine and well-spaced combed designs can decorate the exterior.

The range of shapes tends to represent domestic cooking and table wares. An open and thin-walled casserole dish made on the wheel (Fig. 43: 6) was extensively blackened from use and little of its original red surface is preserved. Only one of probably two handles survives. A series of ridges and grooves on the inner mouth probably once served as a lid gallery. An open bowl with pendent rim is also illustrated here (Fig. 43: 7). The slight lip formed on the inner mouth of a jar mirrors a pot made in Mid Red Ware (Fig. 43: 5).

### *Mid Red Wares* (Fig. 43: 8–11)

Fine wares in this category are refined and rarely decorated. One fragment had a line of matte red paint on the smoothed, plain red surface. An open simple bowl had a thickened rounded rim (Fig. 43: 8). A tendency for the rim to have an overhang or lip on the inner mouth is seen in two examples (Fig. 43: 10–11). Wheel production is evident in a ring base (Fig. 43: 9).

This category might have its origins in the Compact Red wares, which are tentatively assigned to the Iron Age, hence, Mid Red Ware is possibly a late variation. Essentially this ware is hard-fired to a clinker quality and breaks are sharp and angular. A moderate amount of very fine grey and largely white inclusions and some mica flecks are present in some examples. Clays are mid-red (c. 10R 5/8) or pale reddish brown. Sherds in this material can have distinct wheel striations (R.SPF 102/28) and clays are fine in texture. Wheel manufacture may set this ware apart from the earlier Iron Age wares, although there are occasional fragments of that earlier phase with signs of wheel production (perhaps slow wheel) among a largely handmade range. Variations of this medieval type include Mid-Red with red slip, and other examples have pale yellow slip.

### *Pale Pink Ware* (Fig. 44: 2, 4–5)

Most examples of this ware are well finished, slipped and smoothed. Occasional painted fragments have been identified. One has matte and fugitive white paint on the exterior (RSPF 806/11,

<sup>118</sup> This Crisp Bricky Red-Slipped Ware with its distinctive splash drip pattern in dark red paint or large areas of red-slipped surface equates with Ware 8: 1.3 found in the Bayburt survey and red-slipped wares at Sos Höyük: Sagona *et al.* 1995, p. 200, fig. 6: 4.

not illustrated). Clays are refined and when inclusions are present, they are sparse and minute, sometimes micaceous. Wheel-made and thin-walled, often fine wheel striations are apparent on the interior and some have heavily wheel-ribbed walls. Breaks are usually sharp, but some are slightly eroding at the sections. Clays are usually consistent in hue (7.5YR 5/3) through the section, indicating adequate firing, though some can be slightly patchy on the exterior from the kiln conditions. A variant of the surface treatment was a thinly slipped, pale brown (7.5YR 6/3) example and another had a reddish yellow slip on the interior (7.5YR 6/3). Surfaces can have a glossy finish and be quite refined. Shapes include small thin-walled cups and a concave base from a small pot (Fig. 44: 2). One flat base has its side pressed in as a decorative feature, along with shallow grooves and traces of white painted lines (Fig. 44: 4). A thin-walled tub with everted rim is also represented (Fig. 44: 5). Overall, this category is characterised by refined thin-walled vessels, which were probably reserved as table wares.

### *Coarse Wares*

A range of coarse wares served as kitchen wares, such as shallow pans with haphazardly pinched outer wall and flat floor (Fig. 44: 6) and the high base probably from a goblet-shaped bowl (Fig. 44: 7). The fabric tends to be very coarse, poorly levigated and inconsistently fired. Although not as coarse as some household wares, a closed lamp can be classed with this group. It was located in Trench D9.4 in 2016. It showed signs of extensive use, with a blackened, sooty nozzle and, opposite that, a damaged and upswung thumb-plate handle (Fig. 45: 1). Otherwise, the simple 'slipper' shape finds a general parallel in glazed examples dated to the 12th–13th centuries AD.<sup>119</sup>

### *Glazed Wares* (Fig. 45: 4–11)

Glazed wares are few (Fig. 45: 4–9) at Rabati, as they were at Chobareti, in the upper sector of the site. The most distinctive at Rabati is a thick-walled pot with relief decoration comprised of an all-over pineapple-like, intricate and repeating mould-made design (Fig. 45: 10–11). A somewhat similar fragment has been illustrated in Bakhtadze's volume on medieval glazed wares. This example, with simple raised small knobs over the surface is dated to the 12th–13th centuries AD.<sup>120</sup>

Other glazed fragments at Rabati came from various bowl forms (Fig. 45: 4–8). A dark brown glazed fragment, probably from an open bowl (Fig. 45: 4), had remnant festoons of pale mint green glaze. It finds a very similar parallel in an example from Dmanisi dated to the 9th and 10th centuries AD.<sup>121</sup> One fragment came from a well-formed ring base, probably from an open bowl (Fig. 45: 7). Clays tend to be fine to medium in texture and red through the section.

<sup>119</sup> For closed lamps, Bakhtadze 2013, p. 64.

<sup>120</sup> Bakhtadze 2013, p. 63, fig. 61 (Tbilisi, inv. no. 1–54: 72).

<sup>121</sup> Bakhtadze 2013, Dmanisi (inv. no. 6.65: 5771), p. 42, fig. 31.



## Other Finds

### *Bone and Antler Implements*

Bone points of various types have been found (Fig. 46: 1–3). The tip of an antler tine, not modified or showing signs of use-wear sheen, has cut marks and may have been retained as raw material (Art. 182, not illustrated). A possible toggle was formed from a thin and flat antler segment, with three faint coloured lines possibly being staining from thread (Art. 180). A second example was also identified (Fig. 46: 5). The toggles are polished from handling.

Several needles have been recovered; one short and wide example with a large eye would be suitable for cross-knit looping, a single thread technique for creating fabric (Fig. 46: 4). This technique has a long history in the region.<sup>122</sup> Domed whorls made from the rounded end of long bones with central straight drill holes and smoothed and flat underside are present in small numbers and tie in to the evidence of textile production at the site.<sup>123</sup>

### *Glass Artefacts*

Apart from a very small brown glass medicine bottle (Art. 227, not illustrated) from recent historic times, most glass is fragmentary (Art. 103 a brown bottle neck of recent date and a few glass bubbles, which are possibly wasters, Art. 137, 149). A long, thin and slightly curved rod of pale blue-green glass may have been the handle of a small juglet (Fig. 46: 7) and there is also a clear pale green, blown glass flask rim fragment with round lip and a small loop handle (Fig. 46: 9). Bangle fragments, one of twisted black glass (Fig. 46: 6), came from the upper levels of the site.<sup>124</sup> Beads are rare and one glass example (Art. 159) is unlikely to be ancient.

### *Metal Objects*

Metal artefacts found in the upper levels would appear to be recent discards: nails (Art. 89, 96, 99, 226, 228); a padlock (Art. 90); bullet casings (Art. 91, 92); miscellaneous tooled and metal fragments (Art. 85, 93, 94, 98, 100, 101, 114, 117, 119); wire (Art. 95, 97, 192); an iron point (Art. 106); a ring (Art. 116, not jewellery), buckle and belt fittings (Art. 231) and a fitting from an old oil lamp. A damaged filigree silver ring (Art. 27) is also of uncertain age. A thin bronze disc decorated with small and larger hammered bosses, however, does have some ancient parallels and it may have served to ornament horse trappings (Fig. 46: 8).<sup>125</sup>

### *Fine Lithic and Heavy Duty Tools*

Of the lithic artefacts collected, obsidian was in greater supply at Rabati than it was in association with the structures in Chobareti. A few formal tools have been identified. Among these are

<sup>122</sup> Sagona (C.) 2018.

<sup>123</sup> Domed bone whorls: Rabati Arts 158, 174 not illustrated.

<sup>124</sup> Glass bangle fragments including a twisted example, from Sos Höyük (Sagona *et al.* 1995, p. 200, fig. 14: 6) in levels dated to 13th century AD (p. 202); 12th–13th century glass bangles from Moscow, Stolyarova 2018, pp. 158–165 (and colour plate of the bangles).

<sup>125</sup> Licheli and Rusushvili 2008, p. 218, fig. 9: 1–3, from the Middle Bronze Age burial at Atsquri.

tanged, pressure-flaked arrowheads (Fig. 47: 1–2) and other points that may have served a similar function (Fig. 47: 4). Debitage suggests obsidian was worked in the settlement. Formal, often red, flint tools continue to be found in small numbers, as they were in Chobareti (Fig. 47: 3, 5). A green flint core with some flake scars was also among the lithic material (Art. 160, not illustrated). A few implements are made of a black flint (Fig. 47: 7) and there is a white flint example (Fig. 47: 6). Most flint tools at Rabati have at least one denticulate edge. Art. 185 still carries remnants of resin on one side and the opposing denticulate edge is polished to high sheen, probably from use as a sickle blade (Fig. 47: 3).

Agricultural practices are also indicated by the numerous grinding stones, usually bun-shaped (e.g., Fig. 48: 4), and pestles found in the structures. Grinding stones often show extensive use and have been worn thin. Some have a lip formed at the ends where the upper bun grinder was smaller than the lower stone and over time the lower stone has worn down only in the middle section. Very large basalt basins found in the site probably served as large mortars (these remain in situ). Of the pestles at the site, many seem to be natural, river-worn cobbles chosen for their suitable shape and size for use as hand-held tools. These range from small ball-shaped stones to elongated examples that probably served as whetstones. Most show signs of grinding, or chipping on flat faces from use as anvils, or large chips at the ends from hammering. A few show faceted zones which have been ground down (Art 129, not illustrated). Grey basalt in varying degrees of density is the stone usually chosen for these heavy duty implements, as it is for hammer stones (Fig. 48: 1–2) and weights (Fig. 48: 3). Vesicular basalt, on the other hand, was usually used for grinding stones for milling grain. One unusual weight has a deep and roughly shaped cross ground into one face of the stone (Fig. 48: 3). Hammer stones can have slight grooves to facilitate hafting (Fig. 48: 1) or they can be shaped to form a handle and head (Fig. 48: 2).

Very small burnishing stones with one or more polished surfaces are represented (not illustrated). Usually hard and dense small stones, probably natural river-worn pebbles, were chosen for shape. They have a flattened side with a very smooth face and usually a ridge against which a finger could rest.

### *Ceramic Objects*

A miniature pot, possibly used to hold some rare commodity, has been found; in shape it resembles Early Bronze Age vessels (Fig. 49: 1). One thick cupped object has a dowel hole pierced vertically down its length and has a concave, smoothed base. It may have served as a funnel (Fig. 49: 2). Ceramic beads, which were possibly weights (Fig. 49: 5), some shaped like cotton reels (Fig. 49: 3), were probably used in producing textiles. Similarly, some modified sherds with a hole drilled through the centre may have been intended for use as spindle whorls (not illustrated). Numerous discs fashioned out of pot sherds have been found (e.g., Fig. 49: 6). One study suggested that this kind of object was used in personal hygiene during toilet ablutions.<sup>126</sup> Some very small examples with well-smoothed edges might be gaming pieces or used as stoppers in small flasks (Fig. 49: 4). One example broke during the process of drilling two holes through the very thin sherd (Art. 201). Several mould-made pipes, some likely to be for opium, have also been identified (Fig. 49: 7–8).

<sup>126</sup> Charlier *et al.* 2012, p. 41, on the use of ‘pessoi’ (or pebbles’) in the classical period. Those used in the Agora latrines ranged from Dm 3 to 10.5 cm.

## Rabati Archaeobotanical: Report for 2016, 2018

(Catherine Longford)

Archaeobotanical investigations at Rabati began in 2016 and continued in 2018. Soil samples were collected by excavators from sealed contexts of archaeological interest, with recognised floor levels, hearths, pits, ovens, pots and activity areas targeted for sampling. From the two excavation seasons at Rabati, 31 soil samples have been processed for archaeobotanical analysis; seven soil samples were floated in the 2016 season and 24 in the 2018 season. In total, 496.5 litres of soil from Rabati have been floated using the floatation machine built during the 2012 excavations at Chobareti.<sup>127</sup> Individual soil samples ranged from 3 to 46 litres in volume depending on the size of the context, and were an average of 16 litres. Table 1 summarises the sample counts and soil litre volumes of samples floated from each trench at Rabati. The light flotation fractions, containing charred seeds, charcoal, roots and insects, were collected, dried and transported to the University of Sheffield, UK, for laboratory analysis.

In the laboratory, the flot samples were split using a riffle splitter into subsamples of approximately 100ml for initial assessment. These subsamples were sieved into >1mm and >0.3mm fractions and each fraction was examined under a low power stereomicroscope. Charred seed identification was made with reference to Jacomet's *Identification of Cereal Remains from Archaeological Sites* (2006) and seed atlases.<sup>128</sup> Analysis of the Rabati samples is ongoing, however, initial results can be reported. Samples from possible Kura-Araxes contexts are rich in charred plant remains and contain free threshing wheat (*Triticum aestivum/durum*) grain and rachis internodes, hulled barley grain (*Hordeum vulgare/distichum*), crop weed seeds (*Adonis*, *Galium*, *Thymelaea*, *Trifolium/Medicago*) and fragments of charred animal dung. One Kura-Araxes hearth (locus 550) contained both twisted and straight hulled barley grains, which indicates the presence of 6-row barley (*Hordeum vulgare*) together with free threshing wheat grains. Material from Bedeni contexts has a wider range of cereal taxa; both free threshing wheat and emmer (*Triticum dicoccum*) grains are present together with hulled barley grains and crop weed seeds (*Lolium*, *Thymelaea* and *Cyperaceae*). From the medieval period, samples from two pits in trench D9.4 have been assessed. Samples from Pit 1 (loci 526, 527 and 528), contained free threshing wheat grains, hulled barley grains, wheat chaff, cereal culm nodes and crop weed seeds (*Lolium*, *Polygonum aviculare* agg., *Adonis*, *Silene* and *Trifolium/Melilotus*).

Pit 2 (loci 535 and 548) contained a highly diverse crop assemblage including free threshing wheat grains, straight hulled barley grains, broomcorn millet (*Panicum miliaceum*), bitter vetch (*Vicia ervilia*), and an olive stone (*Olea europaea*). Both the olive stone and barley grains in locus 548 have signs of insect damage. Fish vertebrae and small mammal bones were present in both pits. The medieval olive stone represents the importation of olive fruit or oil and indicates long-distance trade, since the mountainous Samtskhe-Javakheti region is outside the altitudinal range for olive cultivation (up to 750m asl).<sup>129</sup>

<sup>127</sup> Kakhiani *et al.* 2013.

<sup>128</sup> Anderberg 1994; Berggren 1969; 1981; Cappers *et al.* 2006.

<sup>129</sup> Davis 1978.

These initial trends identified in the crop taxa at Rabati are similar to the archaeobotanical record at Sos Höyük in northeastern Anatolia.<sup>130</sup> Throughout the Kura-Araxes period, free threshing wheat was the dominant cereal. Towards the end of the Kura-Araxes period, as Bedeni ceramics appeared at Sos Höyük, the proportion of emmer wheat increased, although free threshing wheat was still the main crop cultivated, a pattern that may be replicated at Rabati. These results from Rabati are only preliminary, however, and full analysis of the samples, together with continued excavations at the site, will clarify crop choices at Rabati.

Trench	Number of samples	Total soil volume (L)
A11.4	3	90
D10.1	4	40
D11.4	2	41
D8.1	1	17
D9.2	5	65.5
D9.4	16	243

Table 1. Sample counts and soil litre volumes of samples floated from each trench at Rabati.

### Palynological Examination of Organic Material from the Rabati settlement

(Inga Martkoplshvili)

At Rabati settlement, samples for palynological and non-pollen palynomorphs (NPP) analyses were taken during the archaeological excavation in 2018. They were collected from ovens, pits and vessels. Samples were processed using standard methodology. During the first stage, they were boiled in a 10% potassium hydroxide (KOH) solution and then washed. Following this, centrifugation in a heavy solution was carried out and in the final stage, acetolysis method was used.<sup>131</sup> Pollen grains were examined using a Motic BA 310 E microscope. For the identifications, pollen atlases<sup>132</sup> and modern comparative samples were consulted.

#### *Palynological Spectra of Organic Material Taken from the Ovens*

From the oven located in the central part of the summit (in trench A11.4), three samples were taken. Two of them came from the base (sample nos 1–2) and one from between the double walls of the oven (sample no. 3). All these samples gave quite poor results. Based on palynological material in the oven, almost no pollen grains were found apart from a few spruce (*Piceae*) and wheat pollen (Table 2, sample nos 1.2). One sample was analysed from the ash-pit located next

<sup>130</sup> Longford 2015.

<sup>131</sup> Moore *et al.* 1991.

<sup>132</sup> Beug 2004; Reille 1992, 1995, 1998; van Geel 1998; van Geel and Aptroot 2006.

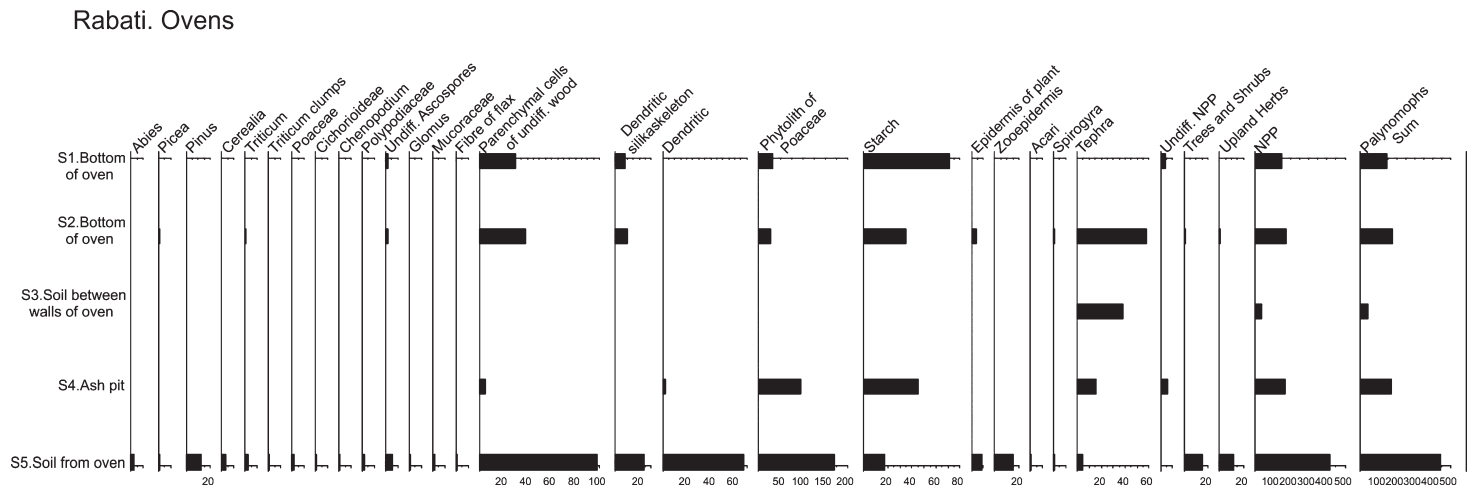


Table 2. The diagram of NPP of organic remains from the from the oven at Rabati settlement.

to the oven, which also showed a scarcity of pollen grains (sample no. 4). Comparatively more pollen grains were attested in soil taken from the second oven, located on the western edge of the summit (Table 2, sample no. 5, in Trench D10.4). In this oven were pollen grains of conifers, seeds (*Cerealia*) and wheat (*Triticum*).

As for the NPP content, the spectra of all samples resembled each other and, in almost all cases, phytoliths dominate. Parenchymal cells of charred wood bark are present in large quantities as well. There is also zoological material and micro remains of volcanic ash. In addition, phytoliths of grasses (*Poaceae*, *Pooideae*) and dendritic phytoliths of wheat were identified (Table 2, sample nos 1, 2, 4, 5; Fig. 50). It should also be mentioned that among the NPP were the epidermis of plants, zoological material, such as zoepidermis, remains of mites and freshwater algae 'water silk' (*Spirogyra*).

#### *Palynological Spectrum of Organic Material taken from the Pits.*

Several palynological samples were taken from Pit 1 situated in trench D9.4. One sample (Table 3, sample no. 1) that was taken from the base of the pit shows a spectrum rich in plant pollen grains. Among the trees represented, the most prevalent is pine (*Pinus*) and spruce (*Piceae*). There were also pollen grains of fir (*Abies*), walnut (*Juglans*), beech (*Fagus*), alder (*Alnus*), oak (*Quercus*), linden (*Tilia*) and hazel (*Corylus*).

As for the spectrum of herbs, this is represented by *Cerealia* and other wild grass (*Poaceae*) including knotweed (*Polygonum*), plumeless thistles (*Carduus*), mugworts (*Artemisia*), plantago (*Plantago*), goosefoots (*Chenopodium*), nettles (*Urtica*), mallow (*Malva*) pincushions (*Scabiosa*) and so on (Table 3, sample no. 1, Fig. 51). Among the NPP, the most prevalent is phytoliths and tracheal cells of wood bark. Starch grains are present in large quantities as well (Table 4, sample no. 1).

Another sample (Table 3, sample no. 2) was taken from the upper level of Pit 1 (H 70 cm) and this demonstrated the augmentation of zoological material and the freshwater algae, water silk (*Spirogyra*). In addition, samples were analysed from the beaten clay levels in Pit 1 (sample nos 3 and 4). The spectra of these samples are similar to each other. Here, among the trees, the most prevalent was pine (*Pinus*) and spruce (*Picea*). There are also a few pollen grains of fir (*Abies*) and hazel (*Corylus*). Among the grasses were pollen grains of *Cerealia*, hordeum (*Hordeum*), wheat (*Triticum*) wild cereal grasses (*Poaceae*), plantago (*Plantago*), knotweed (*Polygonum*), and goosefoots (*Chenopodium*). There are also pollen grains of mallow (*Malva*), nettles (*Urtica*) and spores of eagle fern (Table 3, sample nos 3, 4). From NPP there are spores of *Glomus* and *Sordaria*, and flax fibres, as well as parenchymal cells of wood. Among the NPP, starch grains also dominate (Table 4, sample nos 3, 4).

#### *Palynological Spectra of Organic Material from the Stone Mortar and Ceramic Vessel*

One sample was examined from the clay vessel in Square D9.4 located in the dark silty locus (549) situated below the burned orange layer (Table 3, sample no. 5). The palynological spectrum from D9.4 is very diverse. There are a few pollen grains of conifer, oak (*Quercus*), *Cerealia*, and herdeum (*Hordeum*), which dominates in the spectrum. The most prevalent are wheat (*Triticum*), knotweed

Rabati. Pit and pots NPP

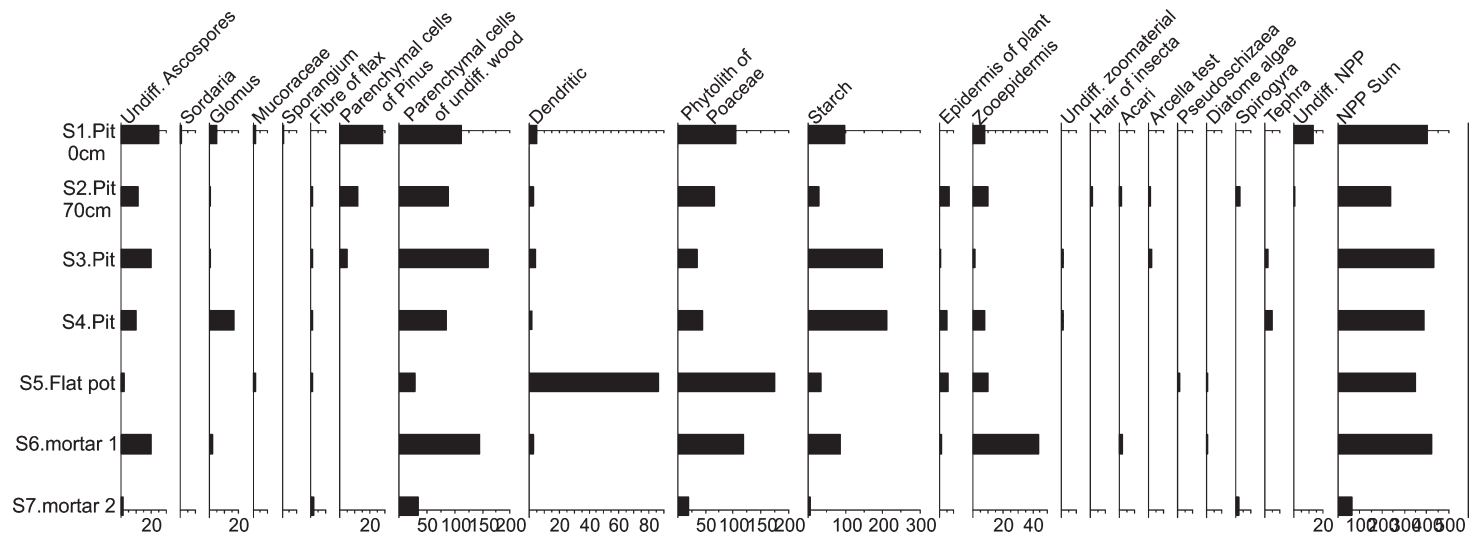


Table 3. The diagram of NPP of organic remains from the from the oven at Rabati settlement.

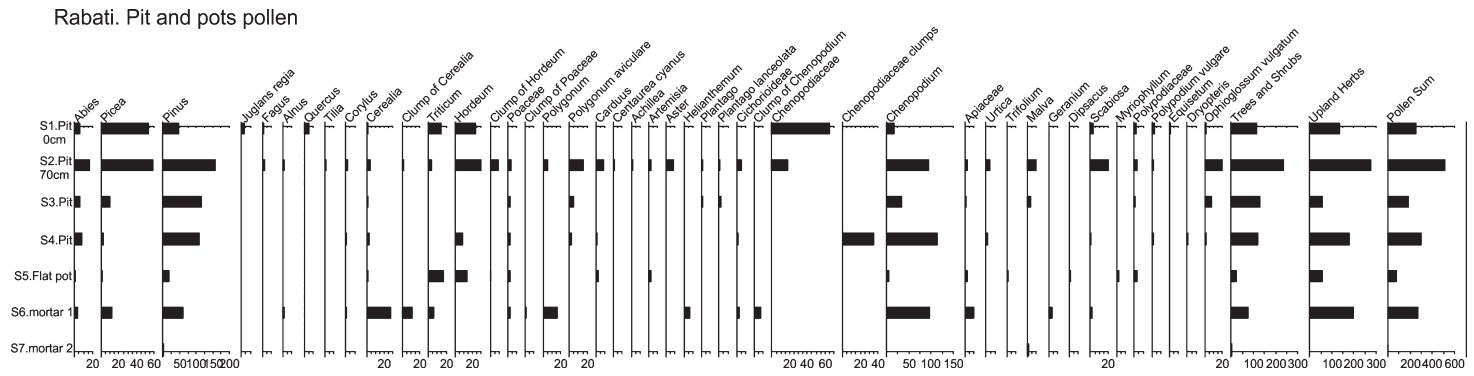


Table 4. NPP diagram of organic material from the pits and four levels of Rabati settlement.



(*Polygonum*), plumeless thistles (*Carduus*), mugworts (*Artemisia*), goosefoots (*Chenopodium*) and other pollen grains of grasses (Table 3, sample no. 5). Among the NPP, parenchymal cells of wood and wheat husk dendritic phytoliths dominate. There are also starch grains, flax fibre and freshwater algae *Spyrogira* (Table 4, sample no. 5).

Examination of samples taken from the stone mortars from two different pits showed that their palynological spectra are radically different. In Pit 1, there is a large spectrum of pollen grains of edible and medicinal plants. In Pit 2, pollen grains are almost absent. (Table 3, sample no. 7).

As for the NPP spectrum, the picture is the same as it was for palynological samples. The NPP spectrum from the mortar in Pit 1 differs greatly from the samples found in Pit 2. In the mortar found in Pit 1, most prevalent were phytoliths of wheat husks; the second was dominated by parenchymal cells of wood. There are also spores of *Glomus*, starch grains and zoological material in small quantities. In the mortar from the second pit, there was only a small number of parenchymal cells of wood and phytoliths, flax fibre and the freshwater algae, *Spyrogira* (Table 4, sample no. 7).

### Discussion

Although the palynological spectrum of organic material from the ovens is very poor, based on NPP, it can be said that these ovens were intensively used. This is supported by the spectrum of NPP in which large numbers of parenchymal cells of charred wood, as well as starch grains and husk dendritic phytoliths are presented (Fig. 50).

Parenchymal cells of charred wood are the evidence of fire. The dendritic phytoliths of wheat husk together with starch grains indicate the usage of flour.<sup>133</sup> Presence of the freshwater algae water silk (*Spirogyra*) suggests that the fire was put out with water. The similarity of spectra between the oven and ash-dump indicated that they are related to each other.

Examination of samples taken from Pit 1 in Square D9.4, suggests that it was used for storage purposes. There is a large number of Cerealia pollen: wheat (*Triticum*), hordeum (*Hordeum*). Apart from these, well represented in the pits are pollen of weeds typical of wheat fields.<sup>134</sup> These are knapweed (*Centaurea*), plumeless thistles (*Carduus*), knotweed, (*Polygonum*), prostrate knotweed (*Polygonum aviculare*), and pigweed (*Chenopodium album*). There is also pollen of weeds that usually appear near places of human habitation, such as yarrow (*Achillea*), mugwort (*Artemisia*), pincushions, pigweed (*Chenopodium album*) and nettles (*Urtica*). From the NPP spectrum, a large number of starch and dendritic phytoliths suggest that grain and in particular wheat was stored in the pit.<sup>135</sup>

Organic material from the beaten clay level in the pit demonstrated that there was a large number of anthropogenic markers, namely pollen grains typical of inhabited places, large amounts of starch, phytoliths of grasses and flax fibre.

<sup>133</sup> Kvavadze *et al.* 2012; Kvavadze *et al.* 2016.

<sup>134</sup> Behre 1981.

<sup>135</sup> Martkoplshvili 2017; Kakhiani *et al.* 2013; Sagona (A.) 2014.

Samples analysed from the vessel showed that it was used for cooking purposes. Indications of this function are a large occurrence of pollen grains, *Cerealia* and wheat, as well as goosefoot, which is still used as a food. The appearance of dendritic phytoliths, parenchymal cells of wood and starch grains suggests the consumption of wheat porridge.

As for the mortars found in the two pits, the one in Pit 1 was likely to have been used for grinding herbs for medical or food purposes. The scarcity of NPP material on the second mortar (in Pit 2) suggests that it was never used.

### *Summary of Results*

Examination of organic material indicated that Rabati settlement was occupied by a community for whom agriculture was one of the main subsistence activities. Cultivation of wheat, as well as hazelnut and walnut, were three of the main crops. Ovens were used for baking bread. As for the pit, it was used for storage of grains and different types of edible plants. Cooking pots were used for wheat porridge. As for the mortar, different types of plants were processed in it.

### **Conclusions**

*(Giorgi Bedianashvili)*

Preliminary results of the archaeological excavations at Rabati have demonstrated that the multi-layer settlement has significant potential to contribute to our understanding of the upper Kura basin region as an interaction zone between the southern Caucasus and its neighbouring areas. Evidence has also emerged concerning the nature of transition between material cultures and the ways in which Rabati's communities adapted to the environment in the region throughout the millennia.

Analysis of artefacts found during the 2016 and 2018 field seasons suggests that the Rabati settlement was occupied, with some intervals, over a long period of time, from the Chalcolithic right through to later medieval periods. Rabati was clearly an enduring place, the major reason being its strategic location: on one hand, the settlement overlooks and probably once controlled the passage of travellers along the narrow corridor of the Kura valley; on the other, it had access to highland meadows suitable for seasonal pasturing.

Archaeological excavations of secure contexts at Rabati exposed deposits of Kura-Araxes and Bedeni cultures as well as of the medieval period. The material of other periods — such as the Chalcolithic, Middle Bronze and Late Bronze Ages — were mostly found in disturbed contexts. Significantly, the finds indicate that these periods are present at Rabati, but are probably confined to intensely occupied pockets within certain parts of this large mound. Despite these depositional anomalies, Trench D9.4, with its deep northern stratigraphic section, demonstrates the *longue durée* of the settlement, the full extent of which has yet to be determined. Apart from contributing to documenting the chronology of this region, the stratigraphy at Rabati has already revealed aspects of the relationship between the last embers of the Kura-Araxes and the appearance of the Bedeni

culture, the nature of which is a running debate among specialists in the region. Recent publications of Early Bronze Age settlements in central Georgia have cast doubt on the previously accepted opinion that these cultures co-existed for a certain period of time. At Rabati, the appearance of the new and old ceramic traditions together strongly suggests some continuity within the population; it remains to be seen as the excavation progresses how changes played out in terms of domestic architecture, use of open space and other cultural traits.

Aside from pastoralism, which we suspect was well developed, given the settlement's proximity to highland pastures suitable for livestock herding and the amount of animal bone recovered at the site, palynological and archaeobotanical evidence has also indicated that agriculture was one of the main subsistence activities among the inhabitants of Rabati. Different types of grain, such as wheat and barley, were likely to have been cultivated locally over the long period of settlement, rather than the results reflecting trade with other, more fertile lowland areas.

Future long-term and multi-disciplinary archaeological investigations are planned for the Rabati settlement. Importantly, radiocarbon analysis of samples taken from the best contexts will underpin the stratigraphic evaluation of the site. It is anticipated that Rabati will help cement the greater cultural sequence for the upper Kura basin and that it will contribute to a better understanding of the flow of human populations and economic activities in the region.

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**Key to the Figures**

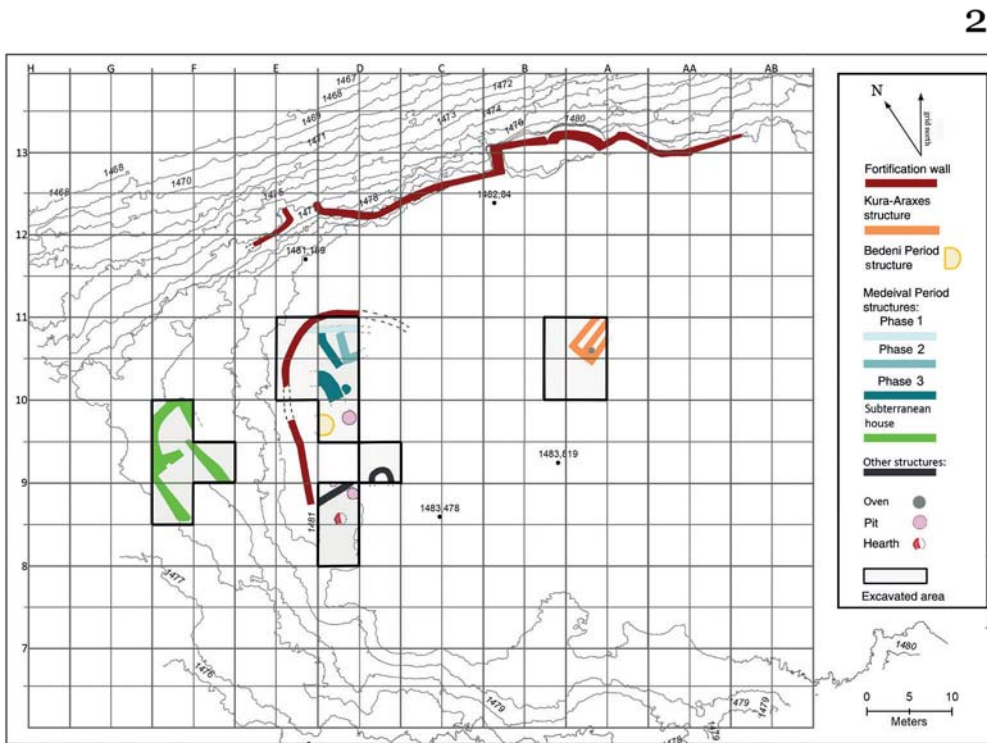
(All measurements in centimetres unless stated otherwise; BD — base diameter; Dm — diameter; H — height; HM — hand made; RD — rim diameter; RSPF — Rabati Special Pottery Find excavation registration number; Th — thickness; W — width; WM — wheel made).



Fig. 1: 1. Map of Georgia and neighbouring countries (C. Sagona);  
 2. Zveli village and Rabati settlement view to south to Erusheti mountains (photo G. Kirkitadze).



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Fig. 2: 1. Zveli village and Rabati settlement view to north over Kura valley;  
2. Schematic plan of Rabati settlement (2016-2018 excavations; photo G. Kirkitadze).

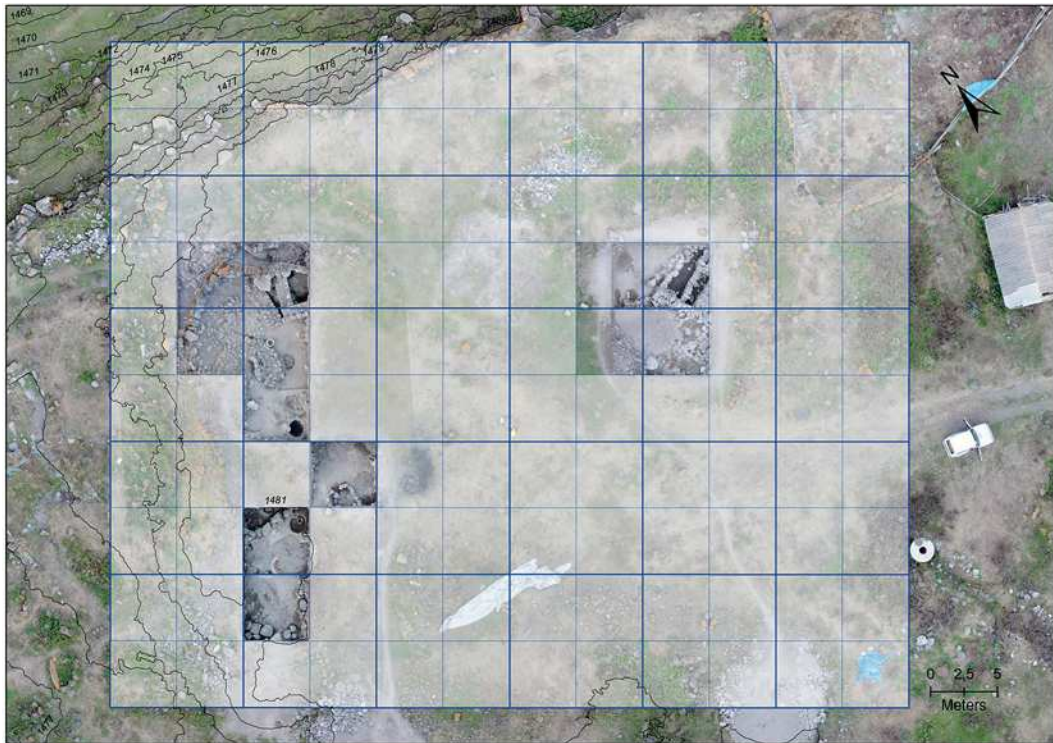


Fig. 3. Trenches excavated in 2018 (western and central part of the summit).

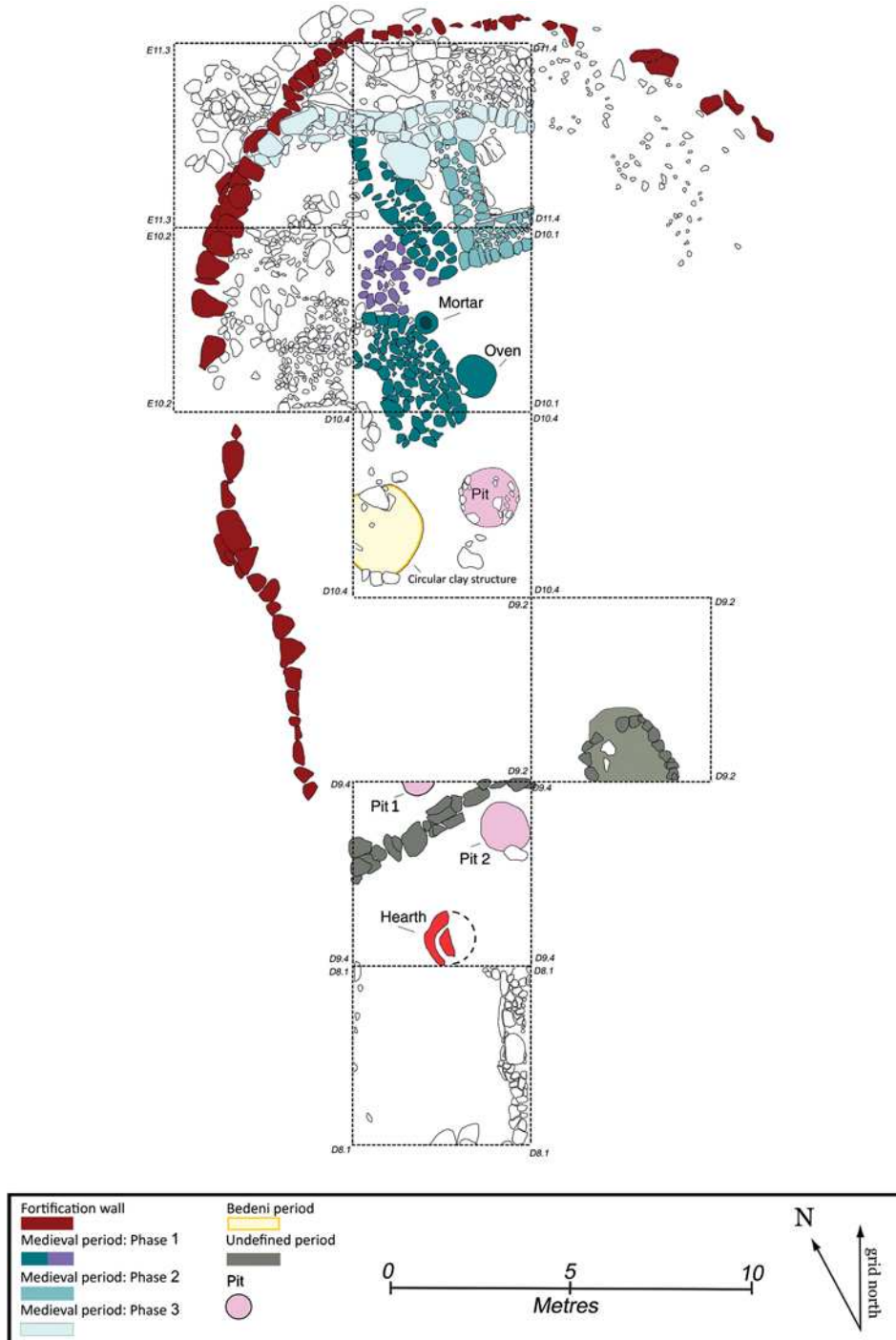


Fig. 4. Plan of the western edge of the summit.

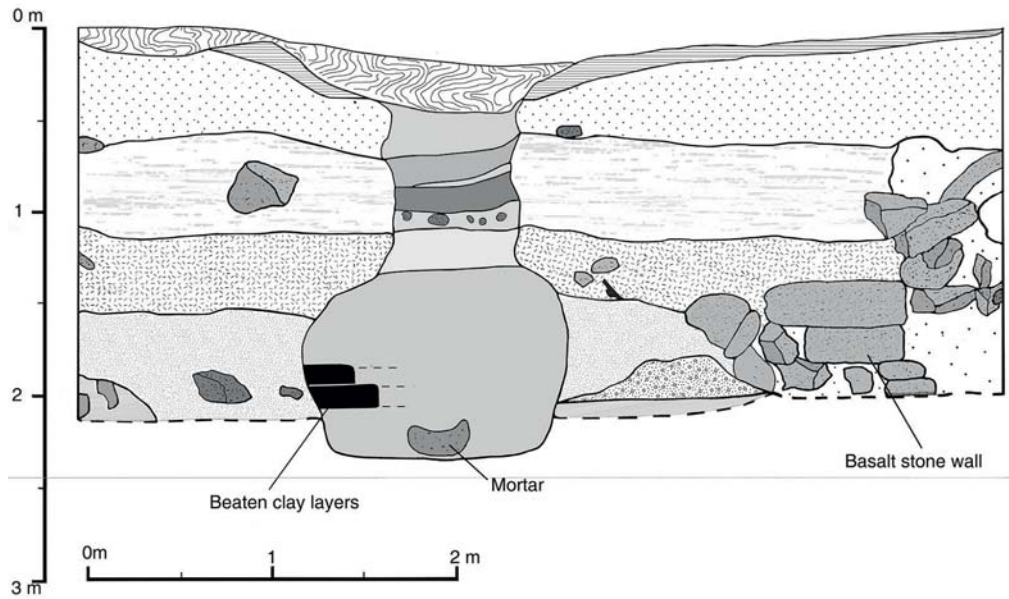


Fig. 5: 1. Trench D9.4, clay hearth; 2. Trench D9.4, Pit 2 (photos G. Bedianashvili).





Fig. 6. Trench D9.4, Pit 1 (photo G. Bedianashvili).



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Fig. 7: 1. Trench D9.4, Drawing of northern section; 2. Trench D9.4, northern part. Pits 1 and 2, the stone wall with white mortar and burnt orange locus is visible in the section (photo G. Bedianashvili).



Fig. 8: 1. Trench D9.2 Bedeni cultural period deposition;  
2. Trench D11.4 and D10.1 stone structures of Medieval Period Phase 1 and 2 (photos G. Bedianashvili).



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Fig. 9: 1. Trench D10.1 oven Medieval Period , Phase 2;  
2. Trench D11.4, stone wall. Medieval Period, Phase 3 (photos G. Bedianashvili).



Fig. 10. Trench D10.4 clay circular structure, Bedeni Period (photo G. Bedianashvili).

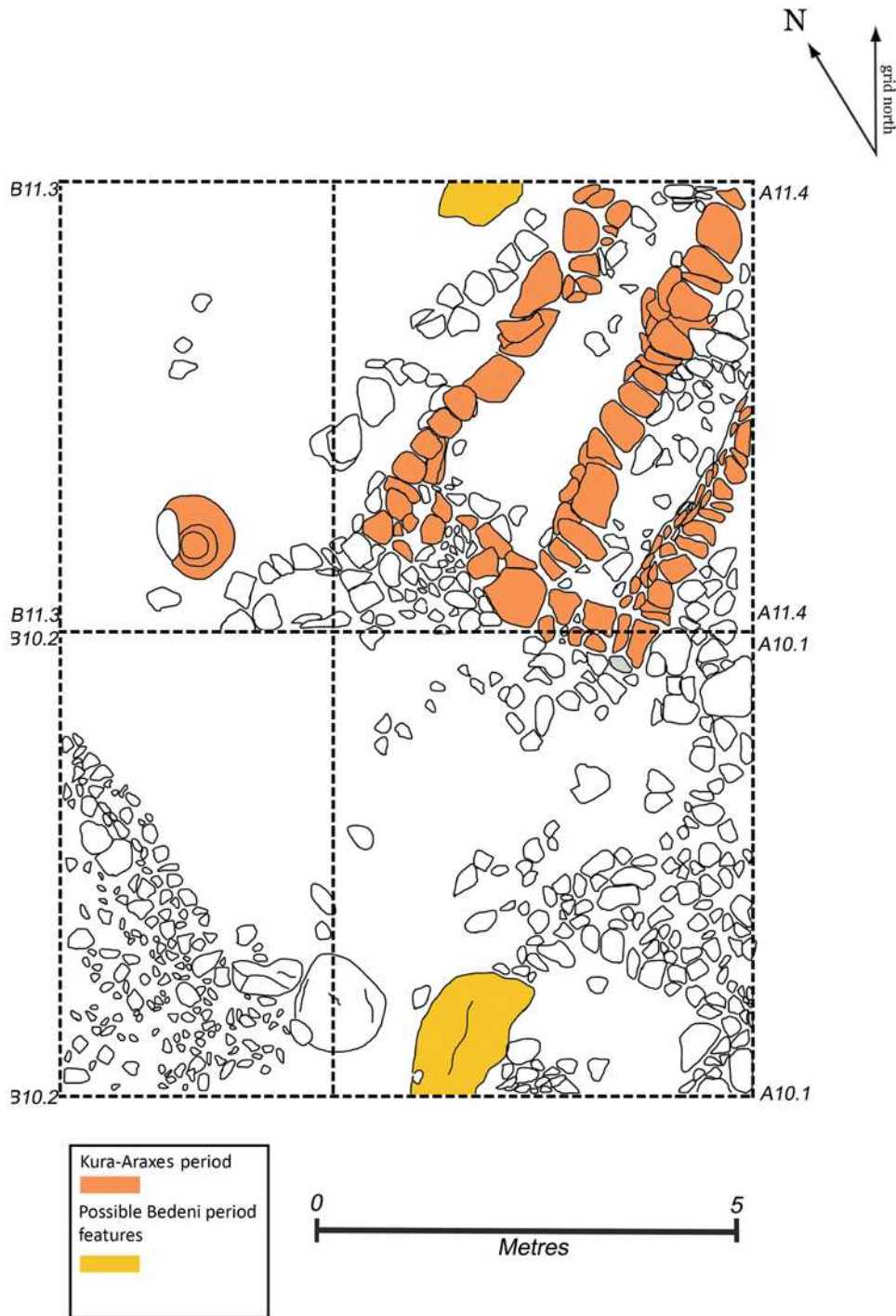


Fig. 11. Central part of the summit.



Fig. 12: 1. Trench A11.4 horseshoe-shaped clay oven;  
2. Trench A11.4 the same over with ash-dump on the right (west; photos G. Bedianashvili).



Fig. 13: 1. Top view of the oven in Trench A11.4 showing the double walls; 2. Trench A11.4 Kura-Araxes period stone structure (view from the north; photos G. Bedianashvili).





Fig. 14: 1. Trench A11.4 Kura-Araxes period stone structure and clay feature (view from the west; photo G. Bedianashvili);  
2. Western terrace (photo A. Sagona).

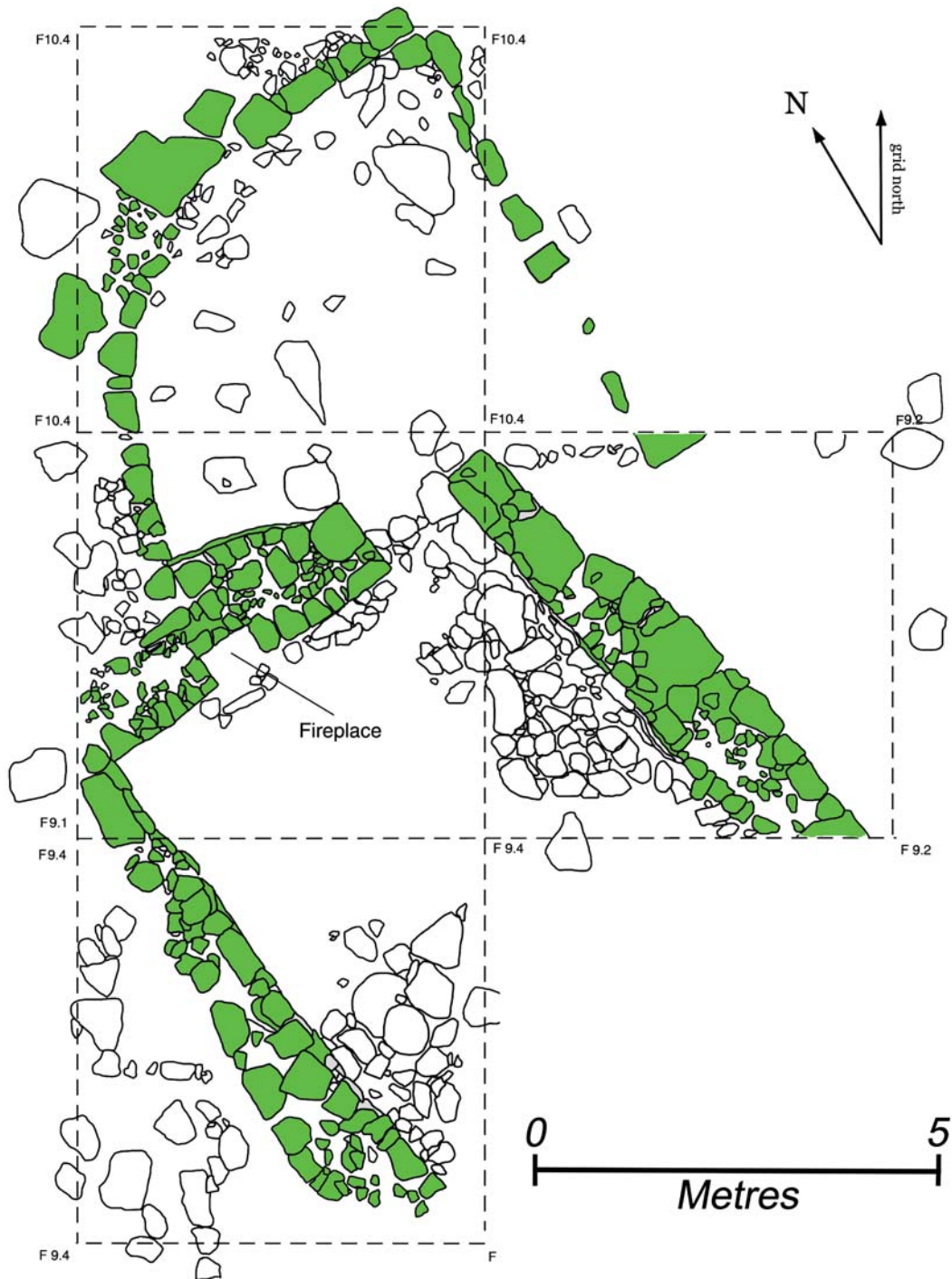


Fig. 15. Stone structure with fireplace details.

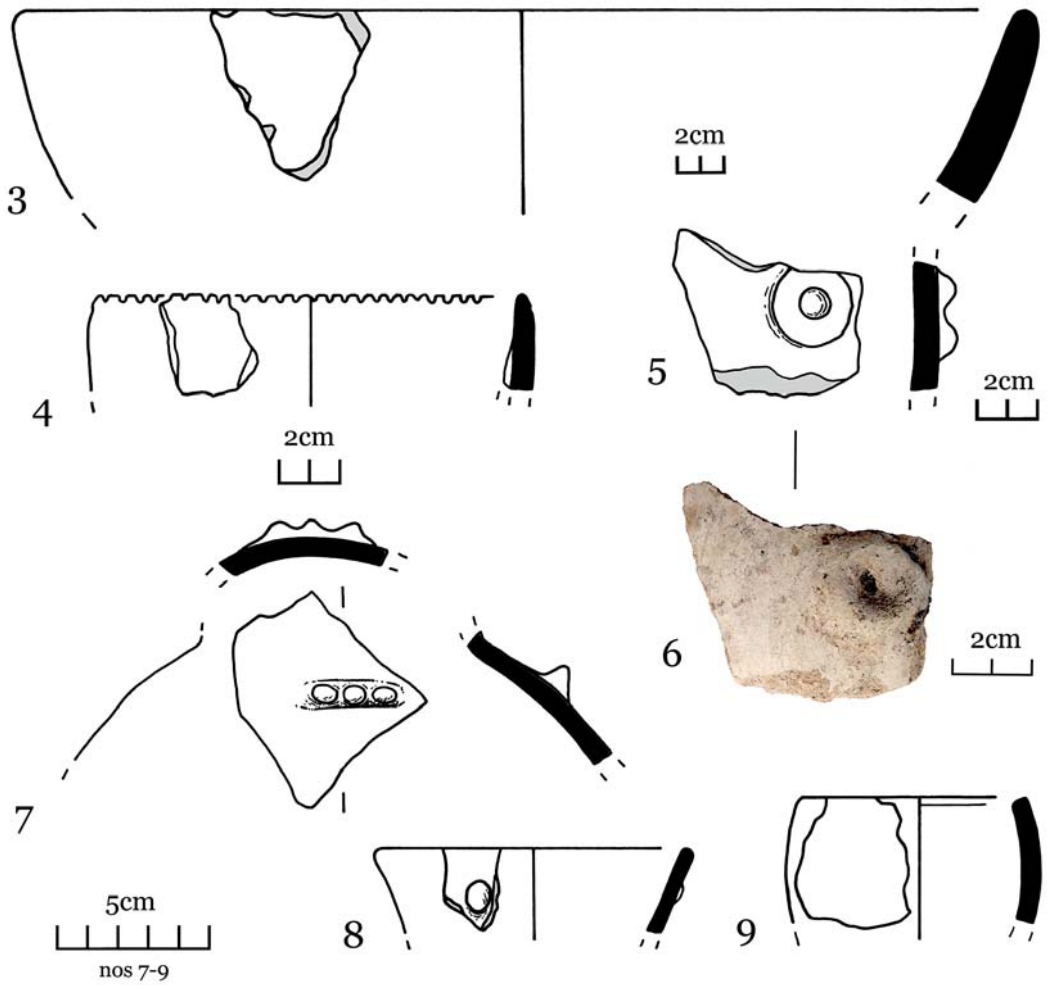
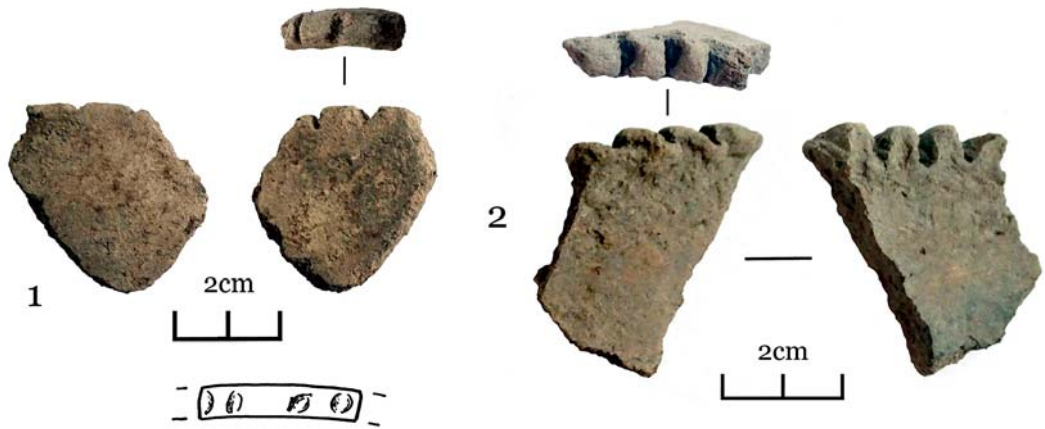


Fig. 16:

1. RSPF 117/5, D10.4 [117] bag 66 (2016); rim from a small pot, cuts decorate the lip; HM; medium textured clay with some small gritty inclusions; drab grey brown surfaces lightly smoothed.
2. RSPF 501/15, D9.4 [501] bag 14 (2016); bowl or jar rim; deep cuts decorate the lip; HM; matte grey slipped surfaces.
3. RSPF 102/43, D10.4 [102] bag 39 (2016); very large bowl; thick-walled; finger impressed dimples on the lip; Drab Ware (pale grey); HM coil technique; laminations and undulations in the section; coarse brown 7.5YR 6/4 fabric with voids and a large amount of missed small to large gritty inclusions; pale-slipped, 7.5YR 8/2 pitted surfaces, roughly smoothed. RD 46.
4. RSPF 507/6, D8.1 [507] bag 22 (2016). bowl with deep cuts decorating the rim made while the clay was wet; slightly twisted shape, possibly a wavy rim, which is another Sioni style; HM and undulating walls; grey through core; medium coarse fabric; fine to small gritty inclusions; pale yellow-buff exterior slip; grey 7.5YR 4/2 interior; wiped 10YR 6/1 interior with straw marks; smoothed 7.5YR 7/2 exterior. RD 14.
- 5-6. RSPF 105/7, D10.4 [105] bag 45 (2016); body fragment with small applied decorative ring decorating the exterior; HM; sandy, medium-textured and friable clay; red-brown 5YR 6/6 through section; thick and smoothed slipped interior; thick, pale yellow 5YR 6/4 interior, paddle-smoothed and matte 10YR 8/2 exterior.
7. Jar shoulder fragment with three-knobbed ledge attachment, RSPF 528/1, D9.4 [528] bag 100 (2018); shoulder from a closed jar with ledge handle decorated with three small knobs on the exterior; HM, from N2.5/ fabric; Drab Ware (1); thin-walled body fragment from a closed cooking pot; drab smoke-blackened exterior and interior; medium-coarse texture; smoothed 10YR 5/2 surfaces, likely self-slipped.
8. RSPF 303/1, F9.1 [303] bag 27 (2016); small open bowl; slopping straight walls; a small knob under the rim; rounded lip; HM; Drab Ware (1); brown 10YR 5/6 through section; a moderate amount of fine to small gritty inclusions; burnished and mottled 10YR 7/2-7/3 exterior and interior. RD 10.
9. RSPF 305/5 F9.1 [305] bag 29 (2016); small bowl fragment; the rim is cut to finish the lip; HM, grey N6/ through section; Drab Ware (1); fired clinker-hard; medium-coarse texture; coarse breaks; a large amount of grey angular, fine to small gritty inclusions and occasional voids; burnished 5Y 7/1-6/1 exterior; slipped and smoothed matte 5Y 7/1-6/1 exterior interior. RD 7.

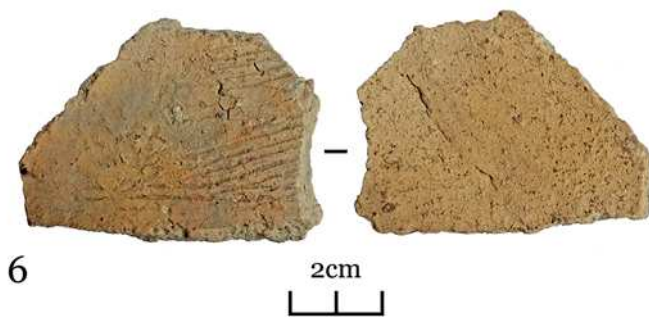
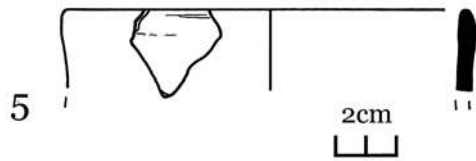
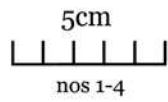
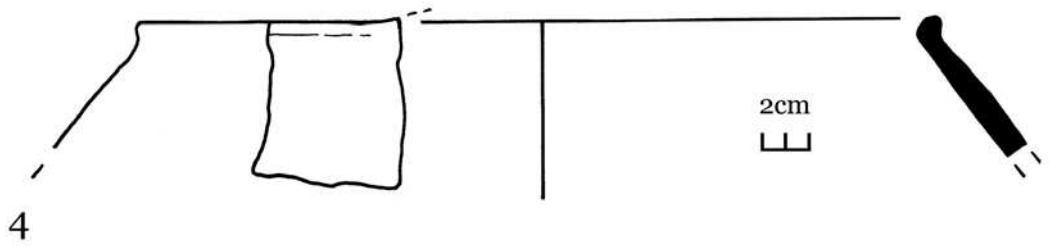
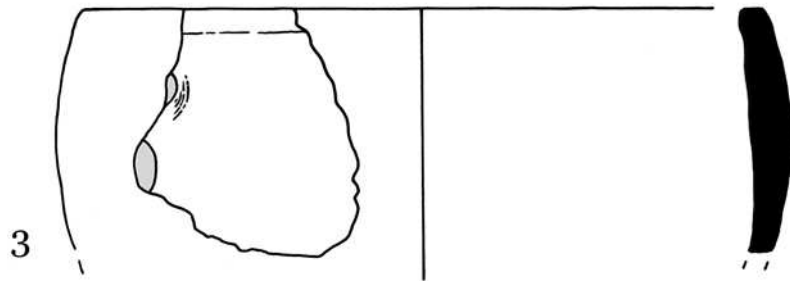
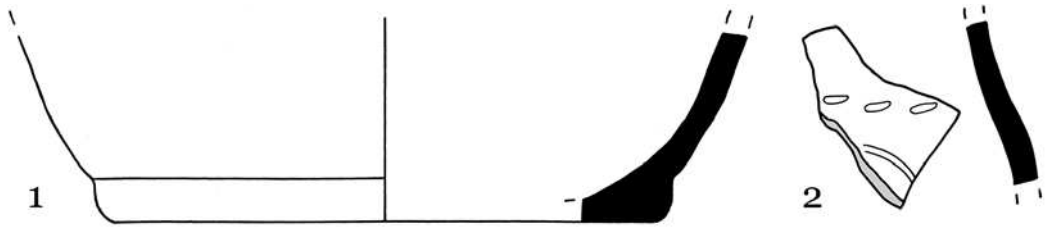


Fig. 17:

1. RSPF 501/17, D9.4 [501] bag 36 (2016); base fragment; flat and ground resting surface; slight bulge around the bottom; HM; likely Drab Ware (1); mid grey through section; smoothed and drab surfaces; eroded interior, exposing the gritty fabric; small red and mixed gritty inclusions. BD 18.
2. RSPF 200/2, D9.2 [200] bag 14 (2018); possibly Drab Ware (1); body fragment; encrusted 10YR 3/1 exterior, originally black; drab brown 10YR 5/2 interior; brown core; fine white particles in the paste suggesting an early date.
3. RSPF 102/42, D10.4 [102] bag 39 (2016); fragment from a deep pot with scars from a vertical handle on the left side; shallow finger impressions on the lip, which is a Chalcolithic decorative feature; Drab Ware (2); HM coil technique is evident in the 2.5Y 7/3 section; coarse clay with gritty inclusions; matte 5Y 7/1–7/2 grey and smoothed exterior; 5Y 8/1–7/1 grey and paddle burnished interior. RD 22.
4. RSPF 119/4, D10.4 [119] bag 74 (2016); hole mouth jar with off-set rim, rounded lip and possible rise in the rim on the right where a handle might have been joined; early Kura-Araxes/late Chalcolithic ware; HM coil technique, medium coarse fabric; even pale red 5YR 6/4 through section; fine to small gritty inclusions; crisp fired; the wall undulates from the coils; matte buff 10YR 8/2 slipped exterior; smoothed interior. RD 36.
5. RSPF 302/3, F9.1 [302] bag 44 (2016); small rim fragment from a slightly undulating tray; small size; HM with striated wipe marks on the surfaces; early Kura-Araxes/late Chalcolithic ware; even colour throughout; largely eroded thin 7.5YR 7/4 slip on the interior and exterior; medium textured breaks, sandy fabric with a large amount of fine to small gritty inclusions in the paste, browner 7.5YR 5/4 at core. RD c.13.
- 6–7. RSPF 119/23, D10.4 [119] bag 67 (2016); body fragment from a jar; Pale Brown (gritty) Ware; haphazard combing below a smoothed band on the top, possibly near the shoulder; HM, gritty (not chaffy) grey N4/ fabric firing red near the surfaces, coil technique with clear coil seams on the interior; well-levigated; mixed fine to small gritty inclusions; mottled pink to grey c.5YR 7/4 slipped exterior; self-slipped 7.5YR 7/3 interior.

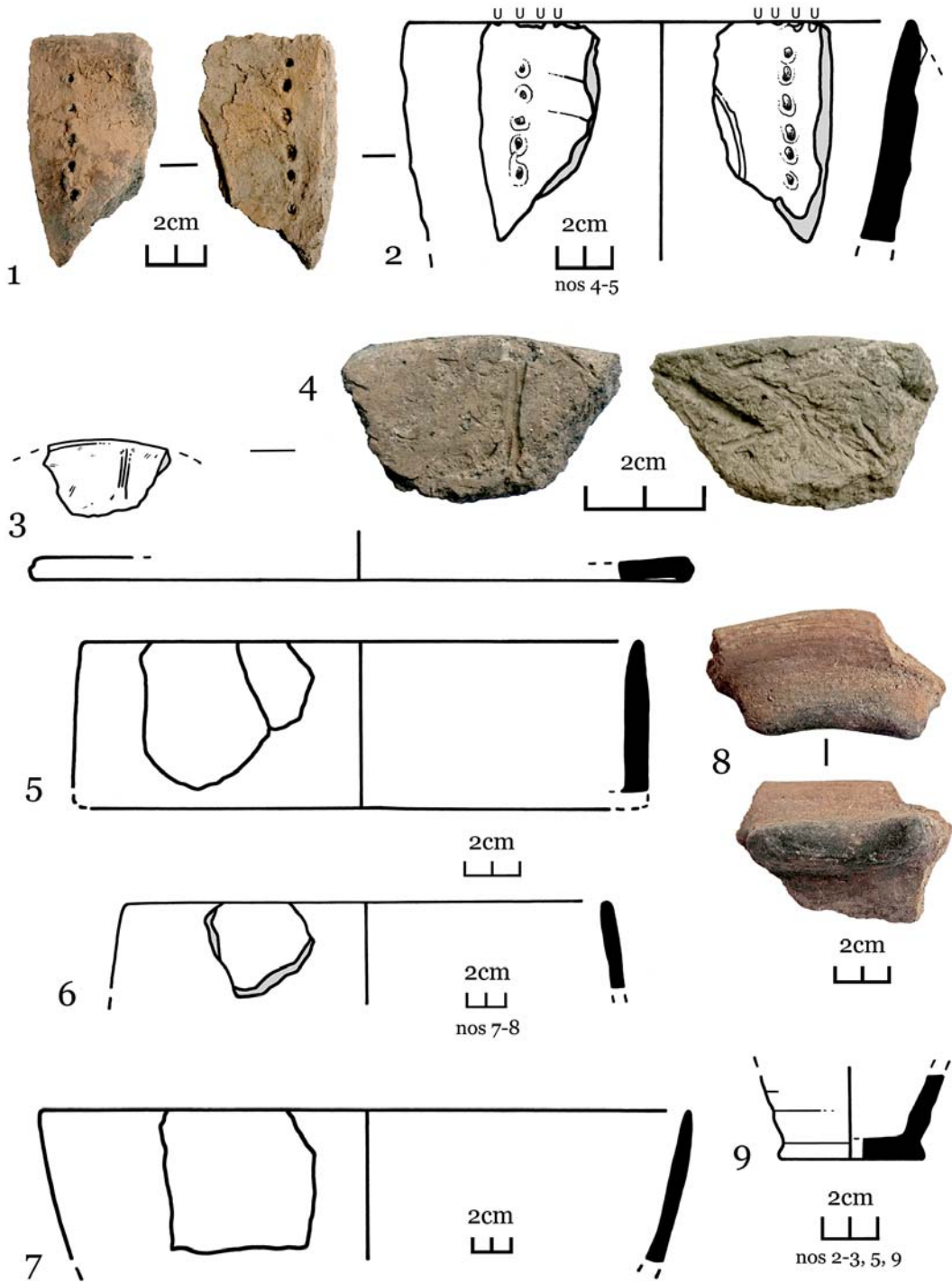


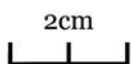
Fig. 18:

- 1–2. RSPF 119/24, D10.4 [119] bag 67 (2016); tall, cylindrical neck from a closed vessel; five holes have been pierced in a line down the exterior, a sixth is visible on the interior; remnants of cuts decorated the lip ('U' shapes above the rim indicate remnant notches); traces of a handle are on the right side; Pale Brown (gritty) Ware; HM coil technique; medium coarse and hard grey 7.5YR 5/1 fabric; coarse breaks; slipped and smoothed on the 7.5YR 7/3 interior and exterior.
- 3–4. RSPF 102/53, D10.4 [102] bag 52 (2016). lid fragment; very poor modelling; very large chaff scars on the 7.5YR 6/3 underside and not well-finished; a large chaff or twig scar on the top might be intentional; Drab Brown (Chaff) Ware; HM; voids and some fine to small gritty inclusions in the 5YR 5/4 paste; yellow-pale brown 7.5YR 7/3 slip on the upper surface; partly smoothed; heat damaged at the outer edge. Edge Dm 24.
5. RSPF 200/1, D9.2 [200] bag 14 (2018); two deep and joining tray fragments; flat base; Drab Brown Ware; HM; matte, plain and roughly wiped, grey brown exterior; eroding matte slipped and once smoothed interior, some signs of heat damaged patches. Dm 30.
6. RSPF 208/6, D9.2 [208] bag 29 (2018); Large tray fragment; HM; Drab Brown Ware; drab surfaces; 5YR 3/2 exterior; encrusted interior; fine and small gritty inclusions; brown 5YR 5/3 friable fabric; smoothed, but rustic surfaces; parallel to examples from Chobareti. RD c.70.
7. RSPF 809/1, A11.4 [809] bag 25 (2018); Tray fragment; relatively thin walled; HM; Drab Brown Ware; wiped surfaces; blackened interior; clear wipe marks on the matte grey brown surfaces. RD 35.
8. RSPF 806/18, B11.3 [806] bag 46 (2018); thick tab attachment on the inside of a tray fragment; Drab Brown Ware; slight smoke-blackening of the of outer edge of the tab possibly; HM; brown gritty clay; thick walled; slipped and smooth matte brown surfaces.
9. RSPF 200/3, D9.2 [200] bag 14 (2018); base fragment; ridges on the exterior (probably from coil manufacture; HM and roughly modelled; possibly Yellow on Red Ware; medium coarse clay, poorly levigated; smoothed resting surface. BD 5.





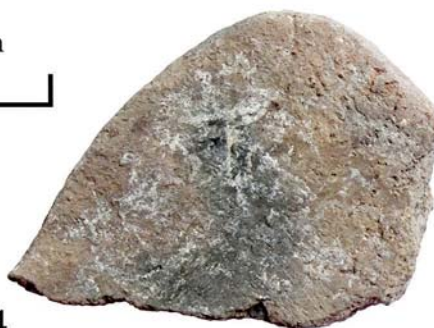
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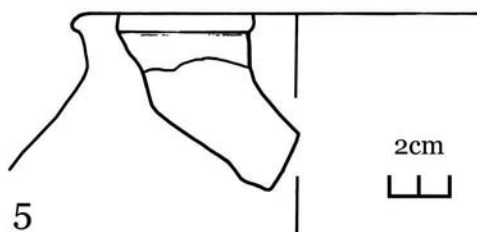
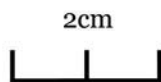
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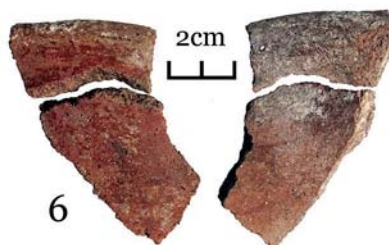
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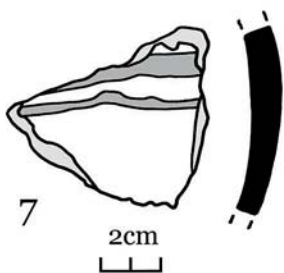
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**Fig. 19:**

- 1–2. RSPF 809/1, A11.4 [809] bag 25 (2018); (1) tray fragment, straw-wiped exterior surface and (2) smoothed interior; HM; Drab Brown Ware.
- 3–4. RSPF 806/15, B11.3 [806] bag 46 (2018); arched tab attachment from a pot or bowl; HM; Drab Brown Ware; even brown gritty clay; matte slipped and slightly darker brown on both sides; a small rounded lip is formed on the outer edge.
- 5–6. RSPF 523/3, D9.2 [523] bag 115, 3.8.2018; thin walled cup or bowl, two fragments; HM, Chalcolithic Red-Slipped Ware; thick red matte slip on the exterior; red through section; a large amount of fine, mainly pale gritty inclusions in the medium textured paste; streaky darker red matte slip over inner rim. RD 14.
- 7–9. RSPF D9.4/surf/4 (2016); body fragment; HM, medium-coarse, 2.5YR 6/6 fabric; Yellow on Red (painted) Ware; hard-fired clay; coarse breaks; fine to small mixed gritty inclusions; red clay matrix; yellow 10YR 7/3 ground; brown 7.5YR 5/2 dribbled painted lines; slipped 10YR 8/3 on the interior with matte and finely pitted surface.

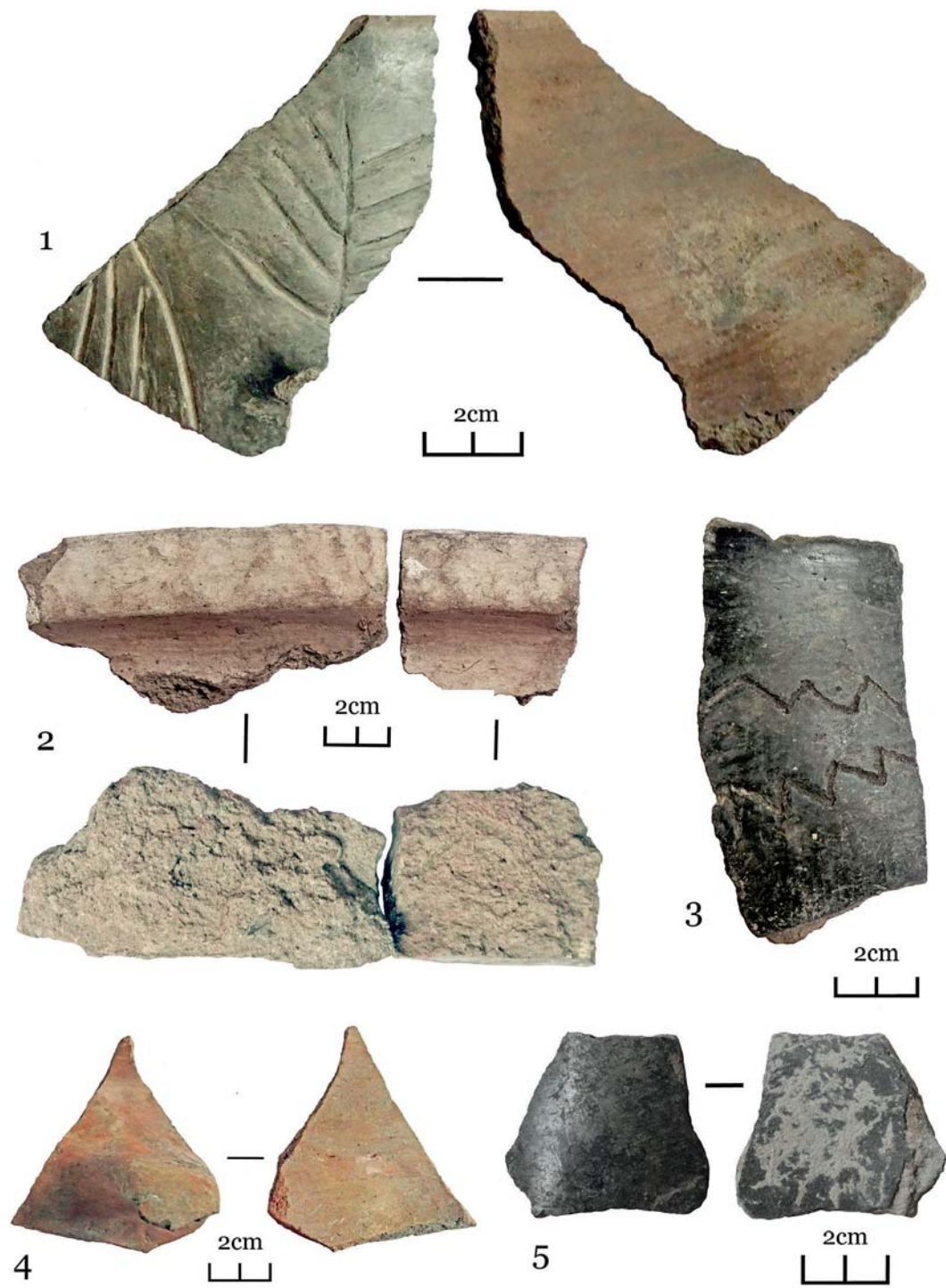


Fig. 20:

1. RSPF 509/4, D9.4 [509] bag 28 (2016); beautifully made and finished rim fragment from a deep jar; Polished Ware (pastel hues); HM; a pine tree like incised design and a hatched motif decorates the exterior; HM likely coil technique; red gritty clay; thickly slipped and surfaces, pale grey to pinkish burnished exterior; pinkish red on the smoothed interior.
2. RSPF 806/10, B11.3 [806] bag 46 (2018); fixed hearth fragment; flattened collar-like disc with shallow wall edging the outer perimeter; HM, pinkish and gritty clay; a most unusual pale pastel pink and matte slip on the upper surface (unlike Kura-Araxes example); flat and very rough underside; the top of the outer wall shows signs of use, which have worn away the slipped surface to form streaky bands.
3. RSPF 806/16, B11.3 [806] bag 46, 2.8.2018; likely shoulder fragment from a closed pot; Bedeni; two haphazardly incised zigzag lines run roughly horizontally on the exterior; HM; reddish brown in the section, grey near the outer surface; thin-walled; eroded inner face with traces of matte brown slip; thick grey-slipped and burnished exterior.
4. RSPF 509/6, D9.4 [509] bag 28 (2016); body fragment near rim; Polished Ware (pastel hues); HM; thin walled; red gritty fabric; burnished red to yellowish slightly patchy exterior; thinly slipped and smoothed interior.
5. RSPF 103/2, D10.1 [103] bag 6 (2016); thin body fragment; Polished Ware (1, grey); HM; sandy textured; a moderate amount of fine, largely white gritty inclusions; pinkish pale brown 10YR 6/3 core firing grey near the surfaces; matter plain N6/ interior; highly polished grey N5/ Exterior.

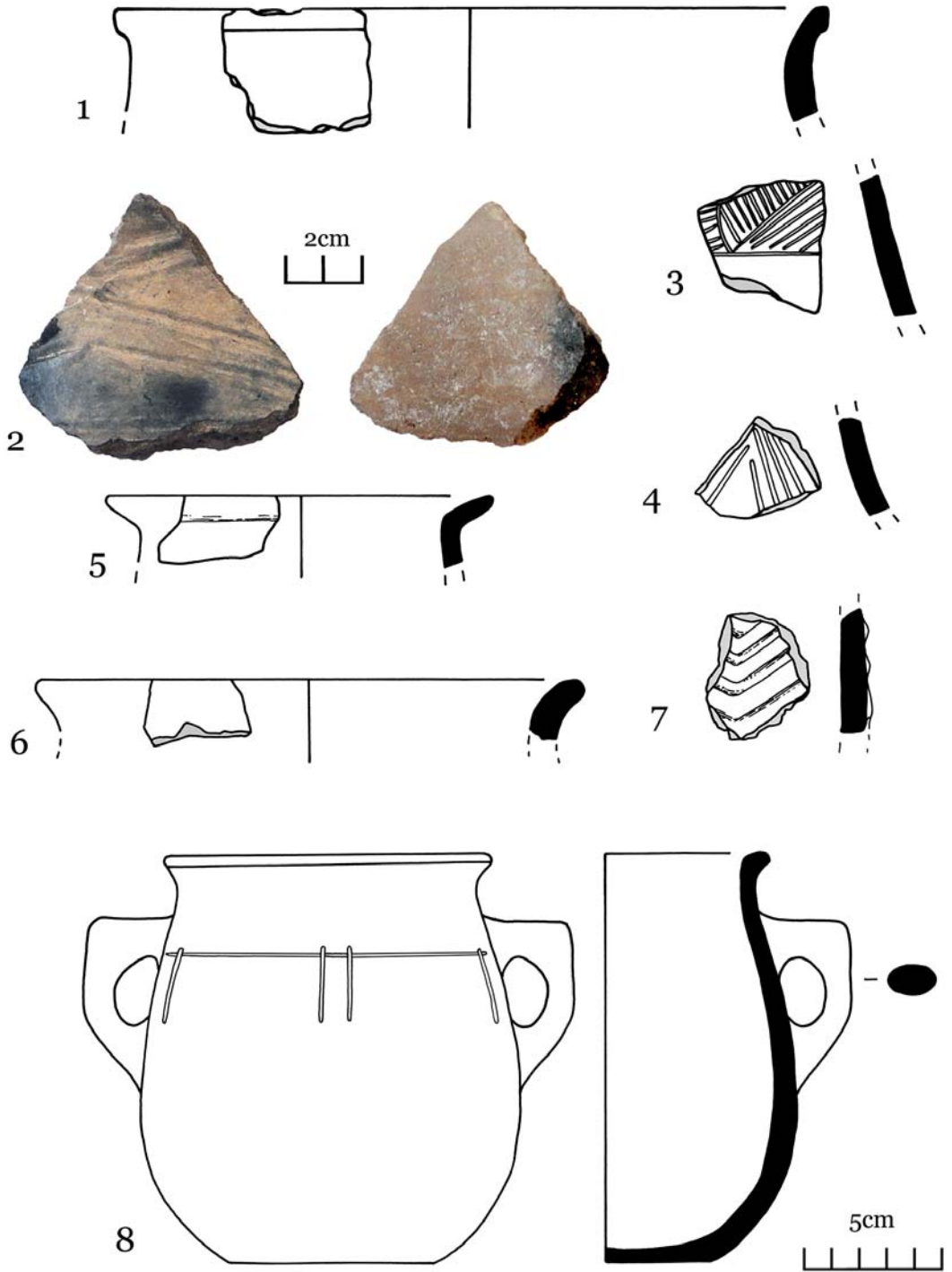
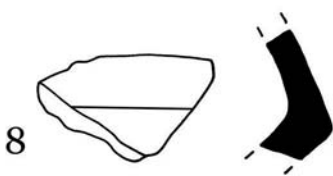
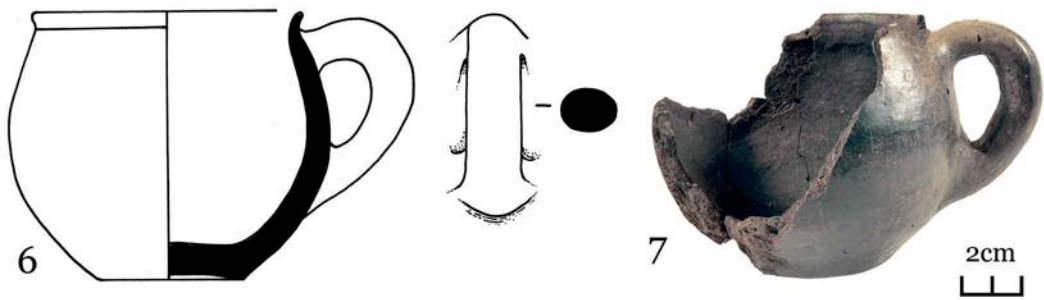
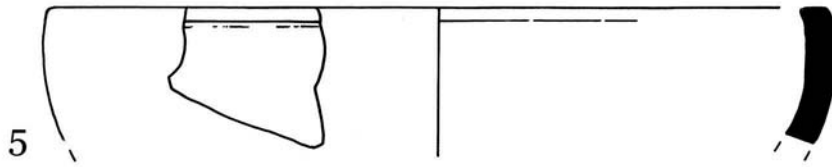
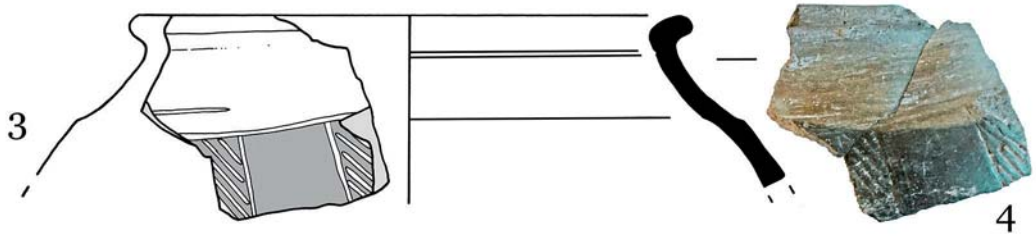


Fig. 21:

1. Kura-Araxes jar with rail rim, RSPF 300/3, F9.1 [300] bag 2 (2016); rail rim from a jar; HM coils and laminations evident in the section; ETC R/R ware; eroded burnished and smoke blackened 5YR 6/4 exterior; brown 7.5YR 6/3 burnished interior; medium sharp breaks; a moderate amount of fine to small mixed gritty inclusions. RD 26.
2. RSPF 102/8, D10.1 [102] bag 2 (2016). Kura-Araxes body fragment with linear grooved decoration; HM; fine to small mixed gritty inclusions; burnished mottled black and buff exterior; a later type than the finds at Chobareti, c.2500BC (medium to late third millennium BC); smoothed plain pale red interior.
3. RSPF 106/9, D10.1 [106] bag 19 (2016); body fragment with incised hatched triangle decoration made when the clay was leather hard; Martkopi Ware; medium-coarse textured brown 2.5YR 3/1 clay; a moderate amount of fine gritty ware; sharp breaks; grey 2.5YR 5/1 burnished streaky interior; black burnished exterior.
4. RSPF 507/17, D9.4 [507] bag 36 (2016); Bedeni body fragment; nested grooved chevrons decorate the exterior; HM, medium fine textured fabric; pale red clay darker near the exterior; black burnished exterior; reddish brown 10YR 4/6 burnished interior.
5. Thin everted rim probably from a mug or cup, RSPF 208/3, D9.2 [208] bag 32 (2018); HM, compact grey clay; smoothed interior; thick and polished black slip on exterior. RD 14.
6. From a larger vessel, RSPF 200/8, D9.2 [200] bag 4 (2018); flaring jar rim, rounded lip; Bedeni ware; HM and thick-walled; light grey 5YR 7.1; medium to medium-coarse textured fabric; burnished surfaces; black exterior extending over the rim forming a 7mm wide band; very pale brown 10YR 7/2 burnished slipped interior. RD 20.
7. Deeply grooved and ridged Bedeni type body fragment, RSPF 200/9, D9.2 [200] bag 4 (2018); body fragment from a jar; deeply ridged, nested chevron decoration on the exterior; likely Bedeni ware; HM grey core 5Y 5/1; burnished black exterior; matte, light grey interior.
8. Reconstructed typical Bedeni tankard or mug, RSPF 208/7, D9.2 [208] bag 53 (2018); Two-handled cup everted rim; Bedeni ware; decorated with a short vertical groove on either side of the ovoid-sectioned handles and two at the central point in between (one side of the vessel is intact and reconstructed from numerous fragments); HM, compact, dark grey-brown 2.5Y 5/1 clay; a moderate amount of very fine particles including white particles; streaky vertical burnished black exterior; matte smoothed interior; flat and well-formed, slipped and burnished resting surface. RD 15, H 15, BD 7.5.



5cm  
nos 1-6, 8

2cm

Fig. 22:

1. Jar RSPF 507/29, D8.1 [507] bag 42 (2016); small pot or beaker, everted rim, rounded lip; incised decoration made prior to firing; Bedeni ware; HM; grey N4/ fabric with fine voids and a small amount of fine gritty inclusions; black N2.5/ burnished exterior; drab grey N5/ interior; thin-walled. RD 14.
2. Small jar, RSPF 508/7, D9.4 [508] bag 44 (2016); small and very thin-walled, refined pot or cup; Common Ware (dark); HM, dark grey 2.5Y 3/1 core; minute and occasional small gritty inclusions in the paste; crisp and hard-fired; excellent quality burnished black N3/ exterior and top of rim; smoothed matte N5/ interior. RD 12.
- 3-4. RSPF 111/2, D10.1 [111] bag 82 (2016); fragments of a jar with high shoulder and everted rim; Bedeni Ware; HM, flattened coils are evident in the section; compact dark grey 7.5YR 4/1-6/1 clay; minute to fine, mixed gritty inclusions in the paste; excellent burnished exterior; controlled firing has produced a grey-brown paler neck and rim, black on the lower body; decorated with two incised, vertical hatched panels; smoothed, plain grey-brown 7.5YR 5/2 interior.
5. Bowl, RSPF 111/3, D10.1 [111] bag 82 (2016); bowl rim with a slight overhanging lip on the interior edge; HM coil technique; grey N2.5/-5YR 3/1 well-levigated clay; fine mixed gritty inclusions; hard fired; black N4/-N3/ and thoroughly burnished exterior; streaky brown 5YR 5/2 interior. RD 26.
- 6-7. Mug, RSPF 118/2, D10.4 [118] bag 43 (2016); damaged mug with thick, round-sectioned handle; thin and slightly flaring lip; slightly concave base; Bedeni type; HM; medium coarse fabric dark through core; a moderate amount of fine mixed gritty inclusions; thoroughly burnished, slightly mottled grey-black 10YR 5/2 exterior. RD 9, H 9, BD 4.7.
8. RSPF 119/27, D10.4 [119] bag 67 (2016); Bedeni type, sharply carinated body fragment probably from a cup; HM coil technique, grey 5YR 4/2 at the core firing red-brown near the interior; hard-fired and medium textured breaks with laminations apparent in the section; fine to small gritty inclusions including larger white particles; black 5YR 4/4 burnished exterior; smoothed and slipped pale brown-pink 5YR 6/3 interior. Dm at the carination 30.
9. RSPF 507/4, D8.1 [507] bag 22 (2016); fine jar rim; jar rim with rolled lip matte groove under rim; groove around the neck and shoulder junction; Bedeni ware; HM, medium fine texture; black burnished exterior; matte grey interior.



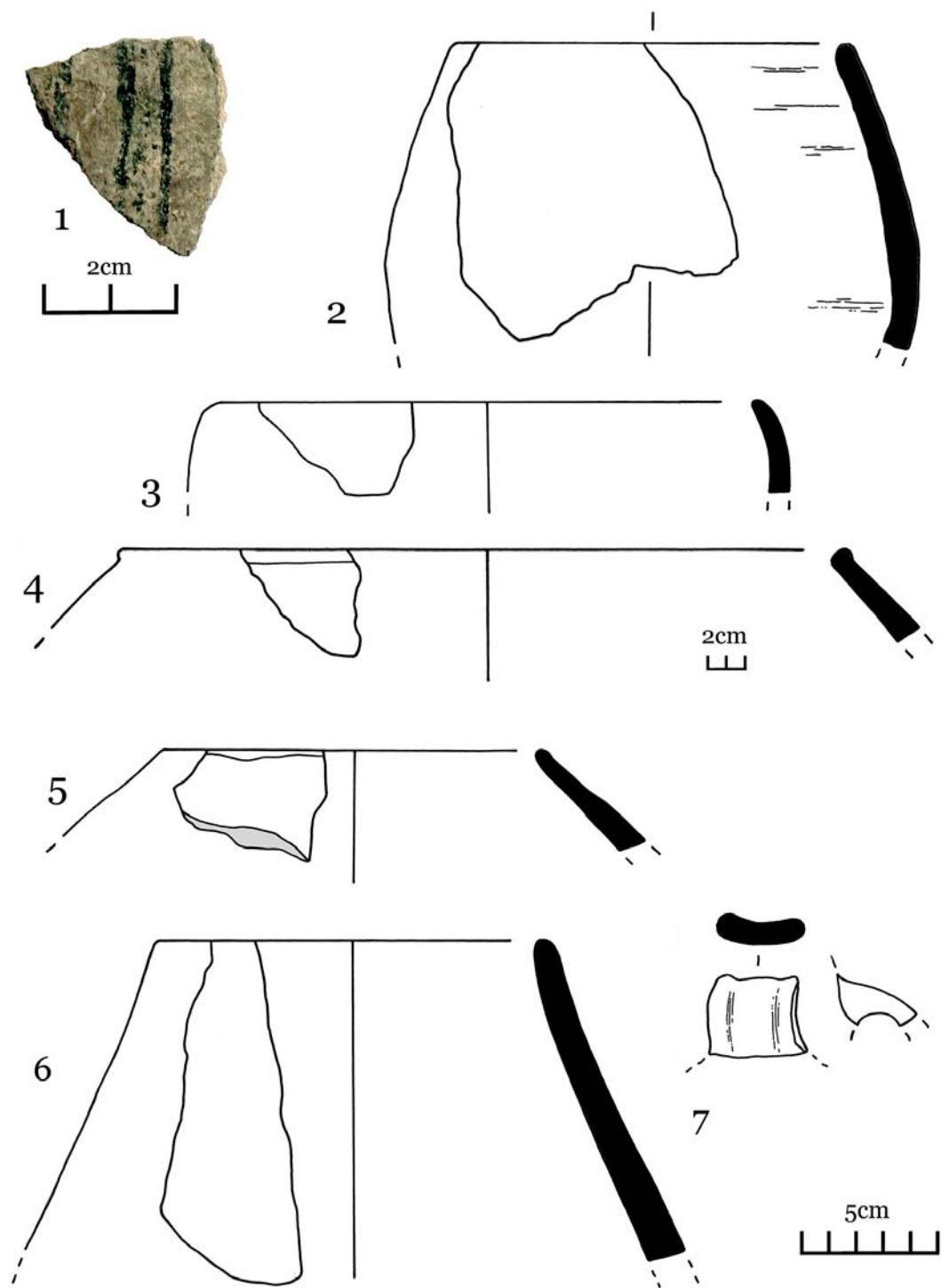
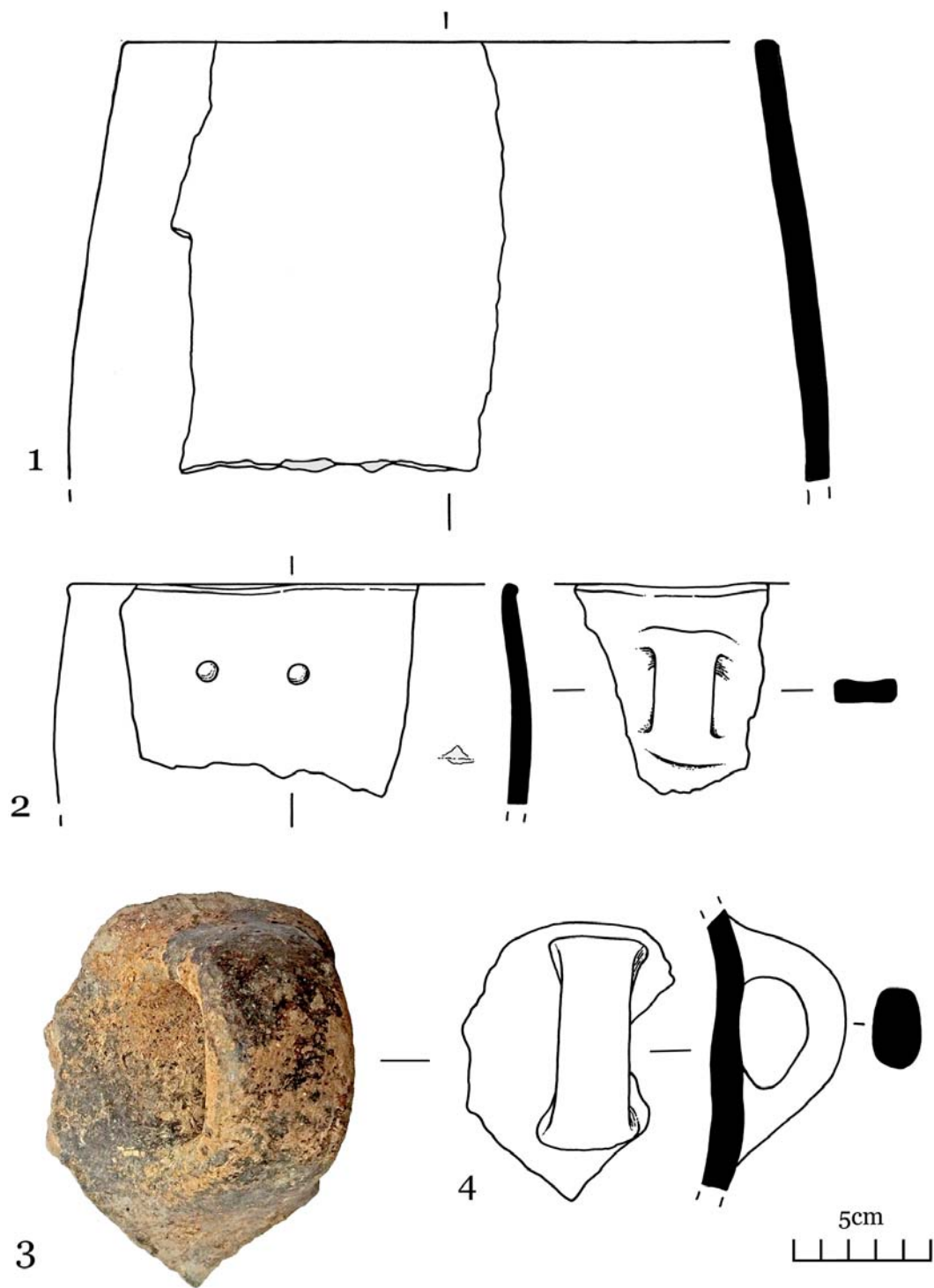


Fig. 23:

1. RSPF 102/59, D10 [102] bag 60 (2016); Bedeni body fragment; pattern burnished exterior comprising thin vertical lines on a matte grey 5Y 6/1 ground; HM pale reddish 5YR7/2 core; medium textured; roughly smoothed 5Y 6/2 interior. Common ware vessels:
2. RSPF 508/6, D9.4 [508] bag 44 (2016); hole mouth baggy pot; rounded lip; Common Ware; HM coil technique which left scar lines along the seams and undulations in the section; sandy looking 2.5YR 5/4 clay; hard-fired; even brown through the section; a medium amount of fine to small mixed gritty inclusions; smoothed matte surfaces; some heat damage on the 5YR 4/3 interior; mottled 7.5YR 7/3–6/2 exterior. RD 14.
3. RSPF 105/6, D10.4 [105] bag 45 (2016); wide bowl with incurving walls; Common Ware (dark); HM; grey slipped and burnished exterior; grey-brown burnished interior. RD.
4. RSPF 119/43, D10.4 [119] bag 62 (2016); hole mouth rim from a large jar; Common Ware (burnished); HM, coil technique, but flattened obliquely through the section; medium coarse texture with fine to small gritty inclusions and even colour 5YR 6/4 through the core; burnished and slipped yellowish-red 7.5YR 6/4 exterior and interior. RD 40.
5. RSPF 105/8, D10.4 [105] bag 45; hole mouth jar; Common Ware (red-brown); HM pale red clay; smoothed brown interior; slipped pale brown, smoothed and mottled exterior.
6. RSPF 200/4, D9.2 [200] bag 4 (2018); Hole mouth deep and baggy cooking pot fragment; simple rounded lip; wall thickens down the length of the vessel; Common Ware (dark); HM, with regularly spaced coils with corresponding voids in the section; medium-coarse texture; fine white and some mixed gritty particles in the paste; very dark grey 5Y 3/1 clay; hard-fired; matte smoothed exterior; smoke blackened interior. RD 38.
7. RSPF 122/16, D10.4 [122] bag 75 (2016); strap handle typical of the kind made in Common Ware with shallow depression down the back; HM; compact-textured grey B3/ clay with gritty inclusions; yellow-slipped 2.5Y 8/1 exterior; grey and plain on the underside.



**Fig. 24:**

1. RSPF 200/10, D9.2 [200] bag 17 (2018); cooking pot, hole mouth, deep and baggy shape; rounded lip with a slight thickening on the outer edge; Common Ware (red brown); HM, dark olive brown 2.5Y 3/3 clay; light yellowish brown 10YR 6/4, blackened lower exterior wall; pale yellow 2.5Y7/3 encrusted interior surface. RD 24.
2. RSPF 200/19, D9.2 [200] bag 19 (2018); deep, thin-walled cylindrical cooking pot; a slight thickening on the outer rim edge; two small knobs on the exterior; strap handle; Common Ware; HM coil technique; the flaking interior wall exposed a clear coil seam; poorly fired and roughly formed; sandy textured fabric with mixed gritty inclusions; slipped and smoothed 7.5YR 5/2 interior; smoothed and smoke-blackened 5YR 5/1 exterior. RD 16.
- 3-4. RSPF 510/3, D9.4 [510], bag 38 (2016); handle from a jar with ovoid section; Common Ware; even brown 7.5YR 4/6 through section; heavy residue deposits; HM; medium gritty inclusions in the paste; surfaces are smoothed but the hues are obscured by residues.

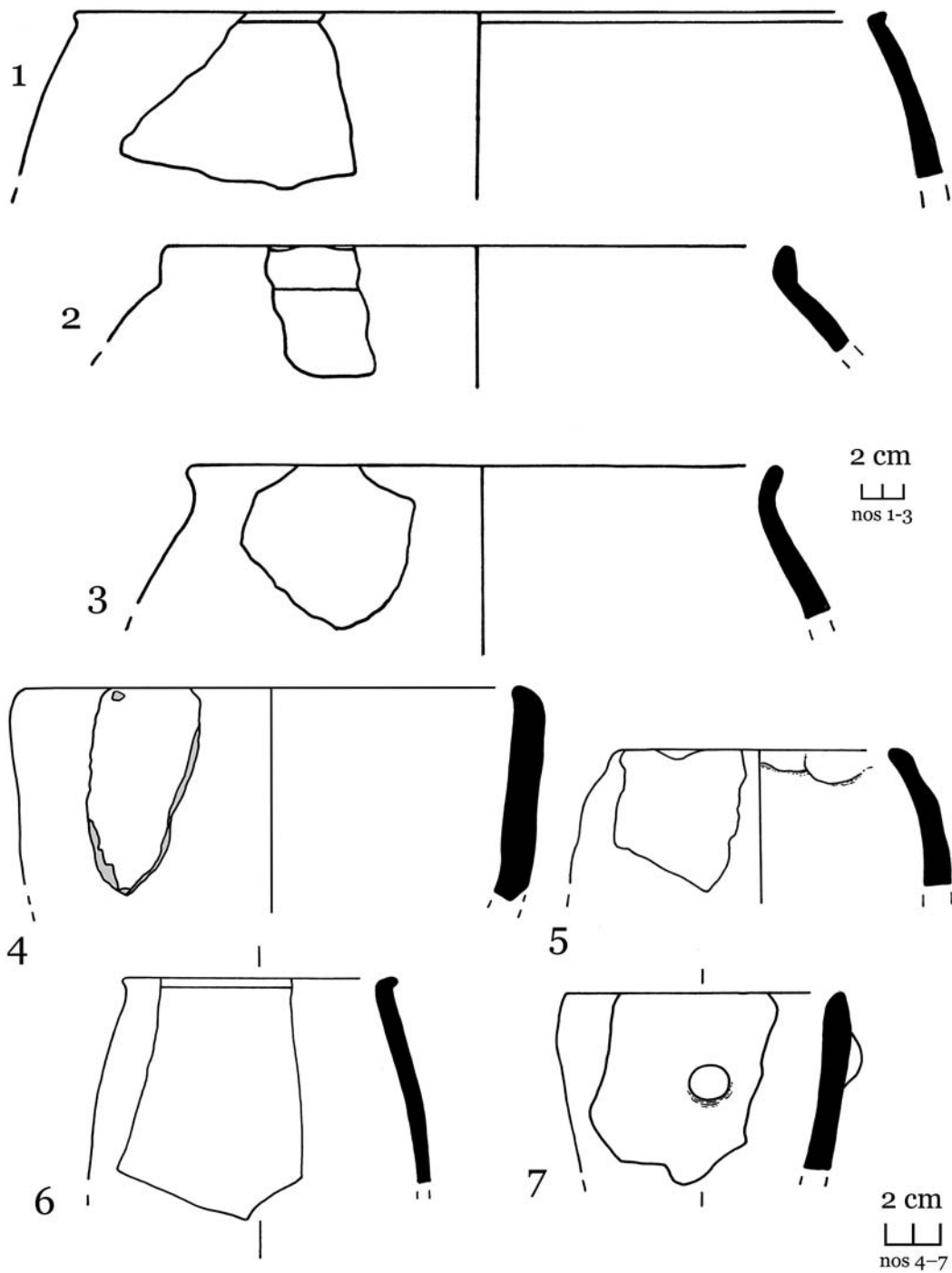


Fig. 25:

1. RSPF 508/4, D9.4 [508] bag 44 (2016); hole mouth, large jar rim; the folded rim is slightly untidy on the exterior; Common Ware; HM coil technique evident in distinct ripples through the wall of the vessel; sandy looking 5YR 6/3–6/1 clay with large amounts of fine gritty inclusions; hard-fired and crisp clay; slipped 5YR 4/2 with some paddle smoothing on the interior mouth which left vertical lines; mottled smoke-blackened smoothed brown 5YR 6/1 exterior. RD 40.
2. RSPF 507/18, D9.4 [507] bag 36 (2016); closed pot with vertical, slightly distorted, thickened rim with flattened lip; HM, coil technique, 7.5YR 5/2 clay; medium textured with fine gritty inclusions; matte and thinly slipped grey brown 2.5Y 5/1 surfaces. RD 30.
3. RSPF 116/4, D10.4 [116] bag 44 (2016); jar rim, which is slightly distorted on the left side, possibly from a handle join; Common Ware; HM, coil technique; heavy and hard-fired fabric; compact and medium textured clay; brown 7.5YR 3/2 at the core; moderate amount of rounded dark gritty inclusions; slipped and smoothed, matte, smoke-blackened 7.5YR 6/3 interior; compact surface falling short of burnishing on the mottled 7.5YR 7/1–6/1 exterior. RD 28.
4. RSPF 200/5, D9.2 [200] bag 4 (2018); deep and small bowl; HM; Common Ware (dark); pale yellow 5Y 8/2 fabric at the core; olive grey 5Y 5/2 exterior; dark grey 5Y 4/1 interior. RD 18.
5. RSPF 200/12A, D9.2 [200] bag 17 (2018); hole mouth, roughly modelled deep bowl or cup; flattened folds of clay on the inner mouth result from neatening the lip of the vessel; Common Ware (red brown); HM coil technique; 7.5YR 5/3 clay; a large amount of fine to small gritty inclusions; encrusted surface originally slipped 7.5YR 7/4 and smoothed exterior; 7.5YR 5/2 interior. RD 10.
6. RSPF 504/1, D9.4 [504] bag 15 (2016); deep and cylindrical pot; thin and folded rim on the interior; slightly everted lip; light sheen around the rim from use; Common Ware; HM from 10YR 3/1 fabric; striations indicate use of a slow wheel or wiping to finish the rim; matte 10YR 6/2 interior; smoke-blackened exterior originally N5/. RD 10.
7. RSPF 123/1, D10.4 [123] bag 77 (2016); bowl rim with a small knob on the exterior wall; Common Ware; HM, coil technique evident in surface undulations; uneven exterior brown slipped surface; brown-slipped interior, paler on the lower wall. RD 10.

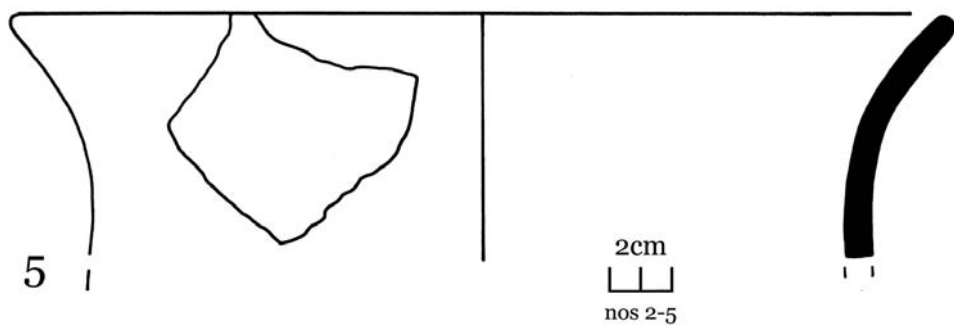
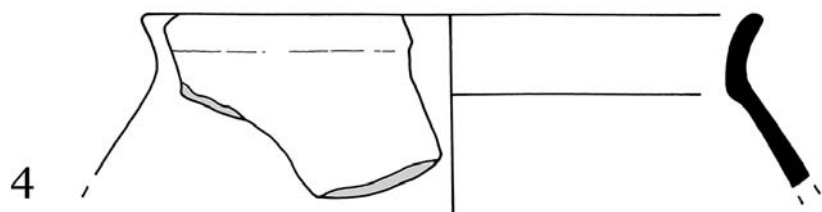
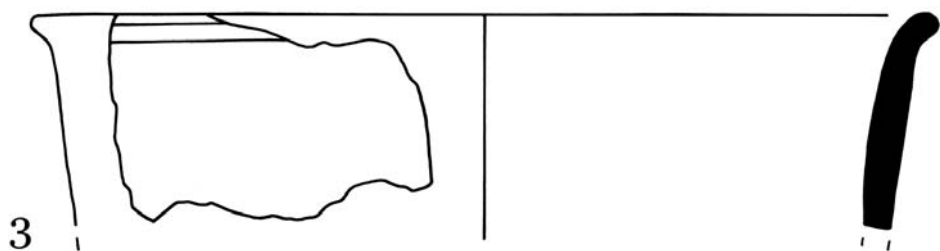
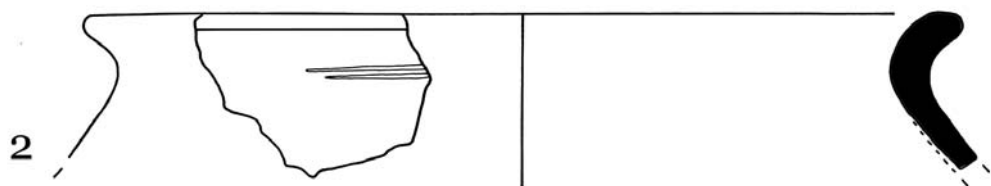
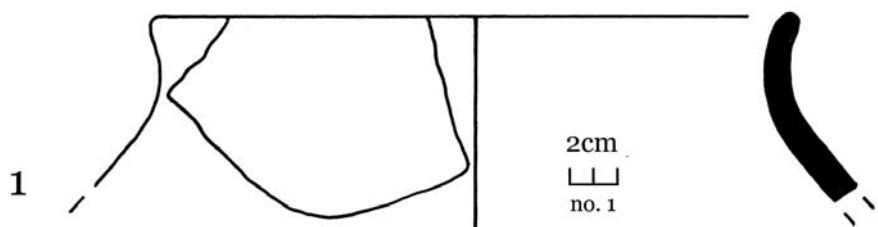


Fig. 26:

1. RSPF 511/3, D9.4 [511] bag 57 (2016); flaring rim fragment from a jar; rounded lip; Common Ware; HM; medium gritty inclusions and medium-coarse textured, heavy 5YR 5/4 clay; self-slipped and wiped smooth, 7.5YR 6/3 exterior; paddle smoothed mottled brown 2.5YR 5/4 to dark brown interior with some blackening from use as a cooking pot. RD 30.
2. RSPF 101/45, D10.4 [101] bag 35 (2016); jar rim with deeply curved neck; Common Ware; HM; lamination voids in the section from coil technique; compact grey/dark brown 5YR 6/3 clay through section; evenly distributed, fine dark gritty inclusions; eroded 10YR 7/2 interior lower wall; smoothed 10YR 6/3 exterior; two fine horizontal incised lines on the shoulder. RD 24.
3. RSPF 101/44, D10.4 [101] bag 35 (2016); rolled jar rim; tall and slightly bulging neck; sharply formed outer rim edge; Common Ware; fine to medium textured, compact dark 7.5YR 3/2 clay; fine dark and angular gritty inclusions; HM coil technique; burnished surfaces on the 5YR 7/3 interior and exterior; encrusted 5YR 5/3 exterior. RD 30.
4. RSPF 117/3, D10.4 [117] bag 56 (2016); jar rim; blackened, but with patches of light brown on the flaring rim; black on the lower wall; a slight off-set on the inner wall; Common Ware (red-brown); likely HM; hard-fired and crisp 7.5YR 5/3 clay; sandy looking texture; fine to small gritty inclusions; lightly burnished 10YR 7/2 exterior; matte pale brown 7.5YR 7/3 interior. RD 20.
5. RSPF 511/4, D9.4 [511] bag 57 (2016); large jar rim with walls that curve outward; rounded lip; Common Ware; HM, coil technique; well-levigated; evenly brown 7.5YR 6/4 through section; fine mixed angular gritty inclusions; drab 5YR 7/4 interior and 7.5YR 6/3 exterior. RD 30 (calculated from mid-wall measurements).



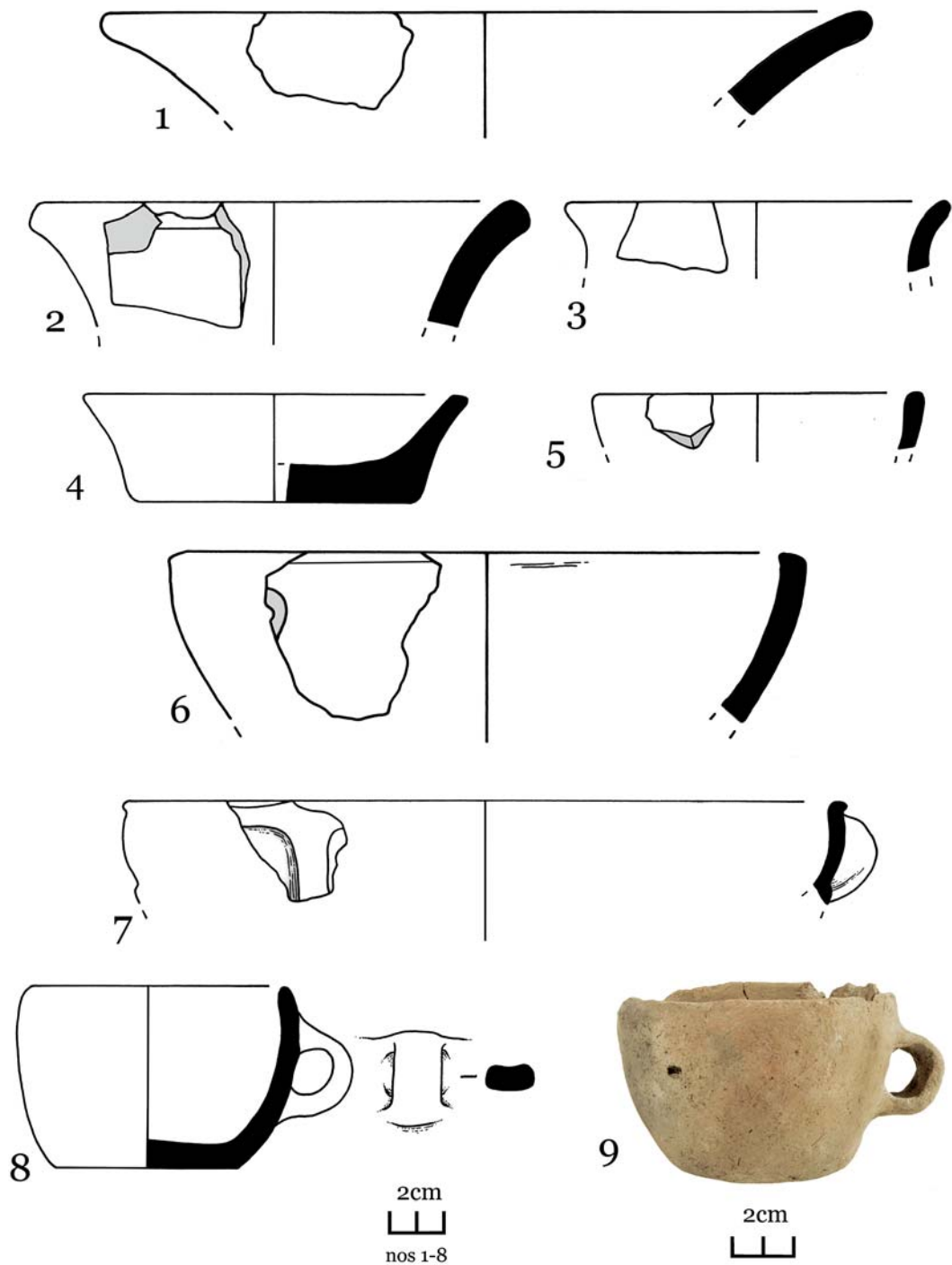


Fig. 27:

1. RSPF 101/47, D10.4 [101] bag 35 (2016); a flaring rim from a large vessel; use-wear around the outer edge of the rim; thick-walled; and heavy and dense 5YR 6/3 clay, medium textured and well-levigated; generally dark and angular gritty inclusions evenly distributed through the paste; buff 7.5YR 7/2 and smoke-blackened, lightly burnished exterior; paler 2.5Y 8/1 interior; smoothed surfaces. RD 28.
2. RSPF 300/7, F9.1 [300] bag 3 (2016); flaring rim from a moderately large jar; HM, coil technique evident in the undulating surface; Common Ware (red brown); heavy 10YR 5/4 fabric with some voids and a large amount of fine to small gritty inclusions; slipped and roughly smoothed exterior; the interior rim and mouth are lightly burnished possibly from use; 10YR 6/2 surfaces. RD 18.
3. RSPF 101/49, D10.4 [101] bag 35 (2016); flaring rim from a small jar with rounded lip; Common Ware; medium textured clay, grey-brown 5YR 6/3 through section; angular, fine gritty inclusions, evenly dispersed through the clay; well-levigated; HM; grey, lightly burnished exterior; drab interior. RD 14.
4. RSPF 815/1, A11.4 [815] bag 61 (2018); simple and shallow cooking pan; heat damaged interior; brown 7.5YR 6/3 exterior; Common Ware; HM and roughly finished; finger impressions are on the base; sandy and friable clay; grey N4/ at the core firing brown near the exterior; a large amount of fine mixed gritty inclusions in the paste. RD 14, H 4, BD 11.
5. RSPF 101/48, D10.4 [101] bag 35 (2016); open small bowl with simple thickened rim and rounded lip; Common Ware; compact well-levigated texture and heavy clay; even very dark grey N3/ through the section; mainly fine dark angular gritty inclusions; thick-walled; buff 5YR 5/2 and smoke-blackened, lightly burnished, grey-brown exterior; paler 5YR 5/2 interior; smoothed surfaces. RD 12.
6. RSPF 101/46, D10.4 [101] bag 35 (2016); deep simple bowl fragment; sharply cut rim; traces of a conical form on the left; Common Ware; HM; dark 10YR 4/1 at the core; compact fabric with mixed fine gritty inclusions, evenly distributed through the clay; smoothed, but encrusted surfaces; N4/ exterior; 7.5YR 5/2 interior. RD 22.
7. RSPF 116/16, D10.4 [116] bag 42 (2016); bowl fragment with solid vertical tab handle, slightly everted rim and high shoulder; Common Ware; HM; medium textured and hard fired clay; encrusted matte exterior surface; black slipped and burnished interior. RD 26.
8. RSPF 117/1, D10.4 [117] bag 57 (2016); small and simple cup with single wide strap handle; flat and well-finished base; likely Common Ware (red-brown); HM; fine red-brown 5YR 6/3 fabric through section; very fine gritty inclusions, including some fine white particles; restored, with a few fragments missing from the rim; drab and smoothed 7.5YR 6/3 interior and exterior; smoke-blackened patch opposite the handle.
9. RSPF 117/1, D10.4 [117] bag 57 (2016; photo G.B.).

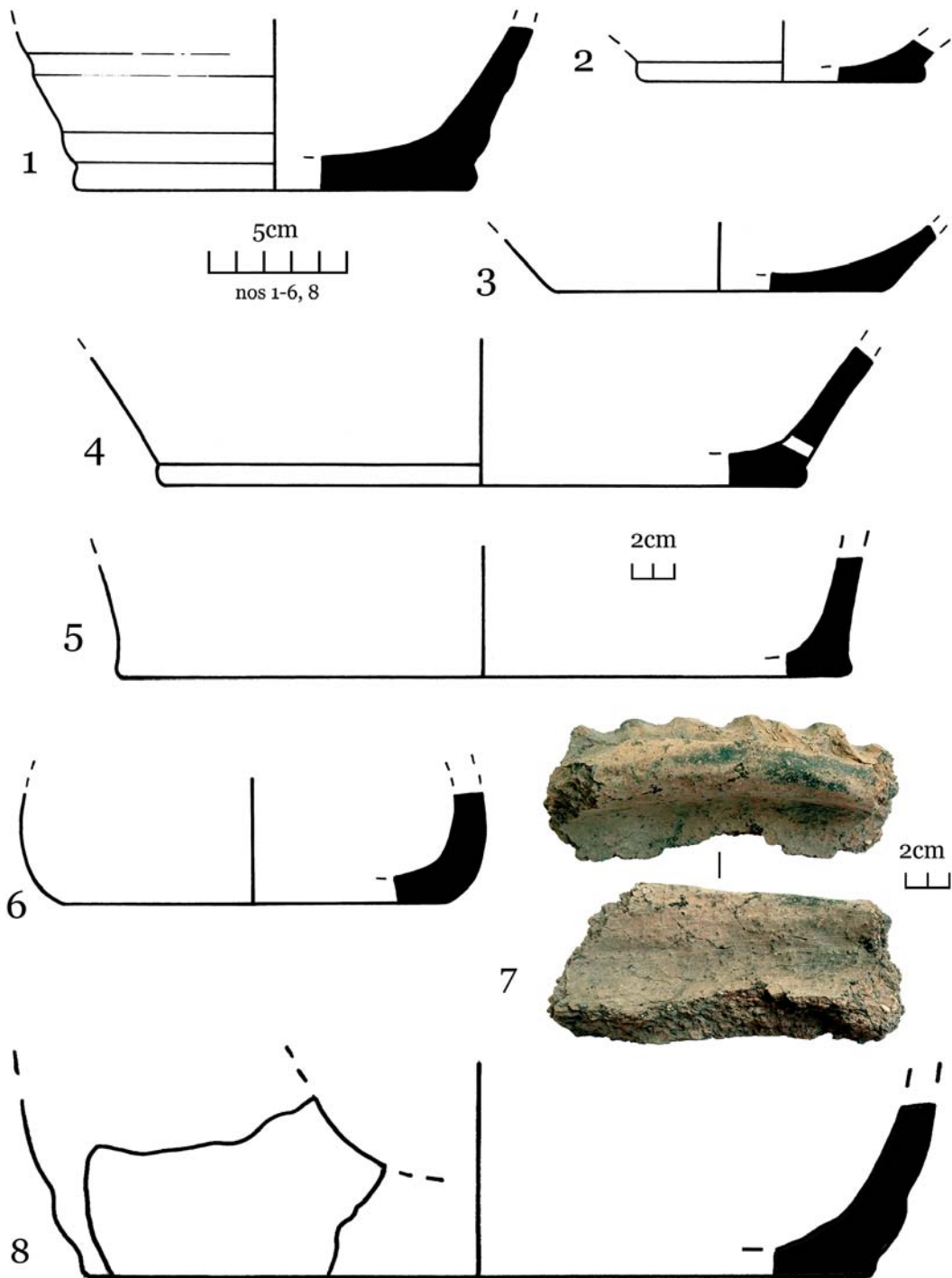


Fig. 28:

1. RSPF 507/20, D9.4 [507] bag 36 (2016); flat base; irregular wall, roughly smoothed resting surface; Common Ware; HM coil technique; even grey 10YR 4/1 through section; well-levigated; fine to small mixed gritty inclusions, smoothed smoke-blackened and mottled 10YR 5/1–6/1 exterior; smoothed pale brown 10YR 6/2 slipped interior. BD 14.
2. RSPF 510/5, D9.4 [510] bag 38 (2016); disc base fragment, flat and smoothed resting surface; Common Ware; HM, black 2.5Y 2.5/1 through section; medium-textured clay; hard-fired; black interior; exterior is grey and washed with a paler 10YR 8/2 clay. BD 10.
3. RSPF 116/19, D10.4 [116] bag 42 (2016); flat and well-finished base; Common Ware; HM, coil technique; grey N6/ through section; N5/–N4/ slipped and smoothed, matte exterior and resting surface; strong burnishing lines on the black interior. BD 12.
4. RSPF 501/3, D9.4 [501] bag 6 (2016); flat base fragment; Common Ware; drab smoothed exterior; small hole pierced through the wall just above the base. BD 23.
5. RSPF 508/9, D9.4 [508] bag 44 (2016); base with slightly flaring edge from a large jar, a common feature of Common Ware (red brown); HM, slab built with laminations in the core; a moderate amount of small to fine gritty inclusions in the paste; heavy, medium coarse clay; reddish 2.5YR 4/6 through the section; slipped and smoothed pale yellow 10YR 8/2 on the exterior and over the resting surface; pinker 5YR 6/4 on the interior. BD 36.
6. RSPF 507/19, D9.4 [507] bag 36 (2016); RSPF 507/19, D9.4 [507] bag 36 (2016); base fragment, curved walls; Common Ware; HM, well-made and refined light olive 2.5Y 5/3 paste; occasional fine to small gritty inclusions, including white particles; smoothed 7.5YR 3/1 exterior and resting surface; wet-smoothed 10YR 6/2 interior; matte surfaces. BD 14.
7. RSPF 508/21, D9.4 [508] bag 54 (2016); shallow and very coarse pan; rustic and irregular pinched decoration on the outer face; HM from coarse gritty clay; inclusions vary from fine to large; the surface has a thin wash that does not obscure the underlying gritty fabric; some signs of heat damage on the rim.
8. RSPF 507/14, D8.1 [507] bag 59 (2016); tray fragment with scooped front and very rough and sandy base; Common Ware; no major signs of heat damage; HM, tan 10YR 5/3 coloured clay matrix; hard-textured; gritty inclusions; plain walls, smoothed roughly on the 7.5YR 5/3 exterior; straw wipe 10YR 5/2 interior. BD 28.

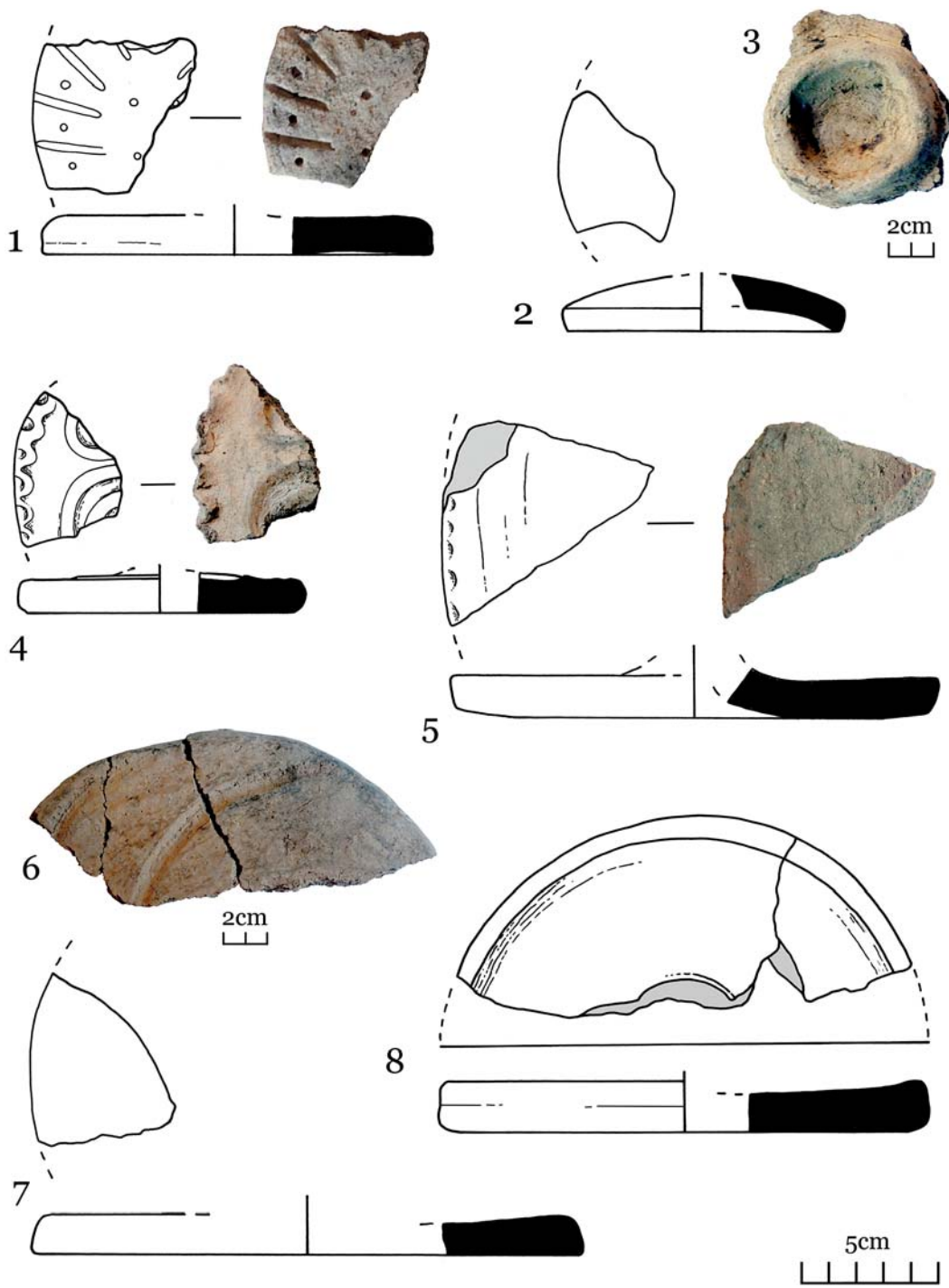


Fig. 29:

1. RSPF 508/16, D9.4 [508] bag 14 (2016); lid fragment; rustic in appearance from rough modelling and haphazard deeply incised line and punctured dot decoration on the upper; Common Ware (red brown); HM; friable 10YR 5/3 clay; mixed fine to medium gritty inclusions (no chaff); very poorly finished on the underside which is self-slipped and matte; pale grey 2.5Y 7/1 matte slip on the upper. Edge Dm 14.
2. RSPF 508/8, D9.4 [508] bag 44 (2016); lid fragment; Common Ware (red brown); HM; grey black 7.5YR 3/1 through core; some minute to small white and other gritty inclusions; compact, heavy and hard clay; rustic and coarse appearance; slipped 7.5YR 7/3 upper and 7.5YR 5/2 underside, smoothed and matte surfaces. Edge Dm 10.
3. RSPF 507/40, D8.1 [507] bag 55 (2016); applied ring, lid handle; Common ware (coarse and yellowish slip); HM; flat, plain and pitted underside; thickly matte, slipped and roughly smoothed upper.
4. RSPF 106/10, D10.1 [106] bag 19 (2016); lid fragment finger impressed and pinched outer edge; two circular areas of ridges and grooves; plain underside; Common Ware; friable and sandy looking grey clay firing 2.5YR 6/4 brown; laminations in the section; some fine to small voids and medium gritty inclusions; thick slip on the upper and lower burnished 5YR 7/4 surfaces; some smoke blackening.
5. RSPF 116/8, D10.4 [116] bag 44 (2016); lid fragment rising to a handle in the centre; Common Ware (red-brown); HM; red 2.5YR 7/8 through section; small mixed gritty inclusions in the paste; indistinct very small finger impressions at the edge; encrusted 2.5YR 6/4 surfaces; the upper seems slipped and smoothed. Edge Dm c.19.
6. RSPF 119/33, D10.4 [119] bag 62 (2016); flat lid, shallow finger-wide grooves curving out from the centre to the edges; HM, coarse fabric grey at core, firing pale brown near the surfaces; thickly slipped on both sides; mottled grey to pale brown on the upper; smoke blackened underside.
7. RSPF 122/9, D10.4 [122] bag 75 (2016); lid fragment; flat and roughly made and finished underside with some straw marks in the surface; Common Ware (dark); HM; hard-fired; heavy brown 10YR 5/4 and well-levigated fabric; gritty inclusions; 10YR 7/3 upper surface; 7.5YR 6/3 underside. Dm of edge 20.
8. RSPF 200/22, D9.2 [200] bag 19 (2018); two fragments from a flat lid with shallow ledge around the outer edge and scar from a central knob handle; HM from friable clay; grey core; medium-textured fabric with fine to small gritty inclusions; thin matte, pale greenish 10YR 7.2 wash on the surfaces; found in the dump and likely discoloured from the context matrix. DM 18.

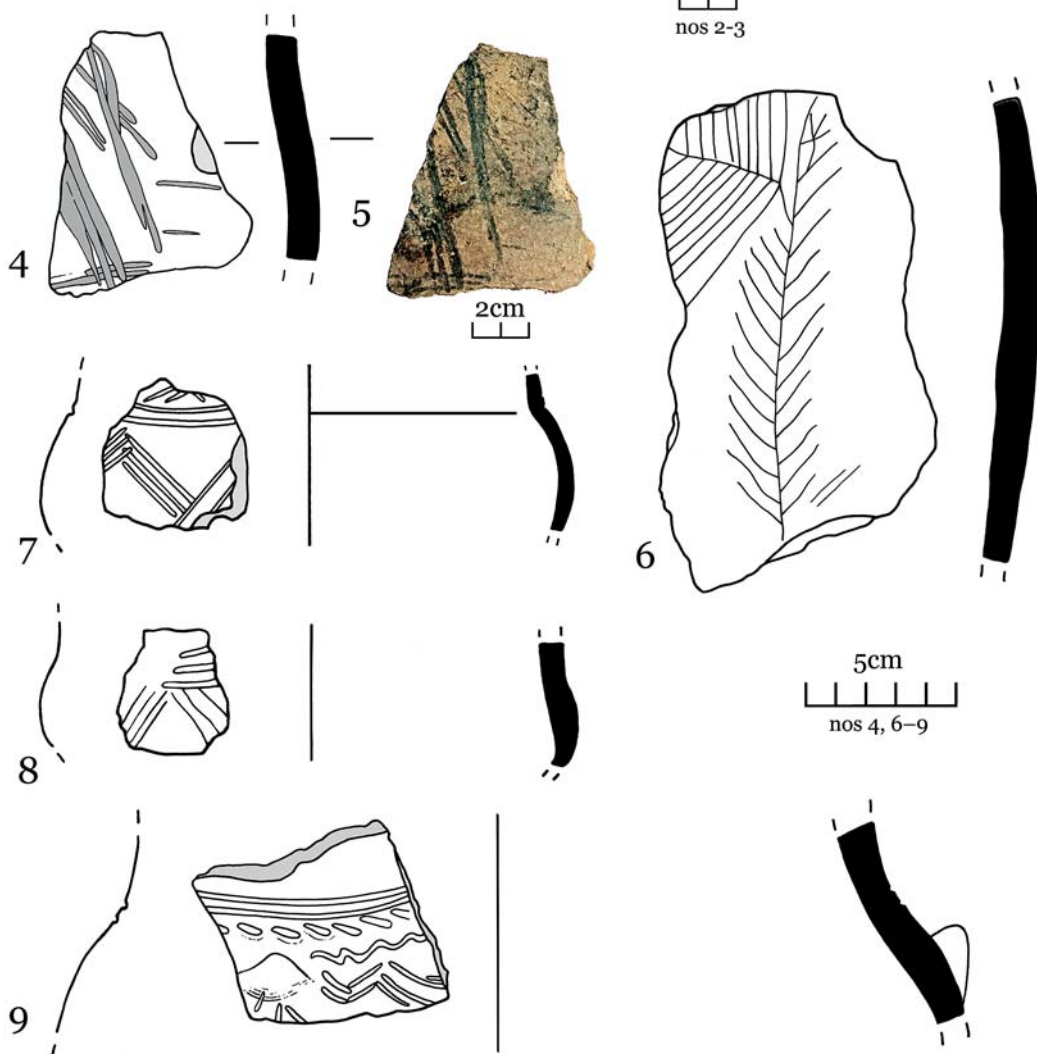
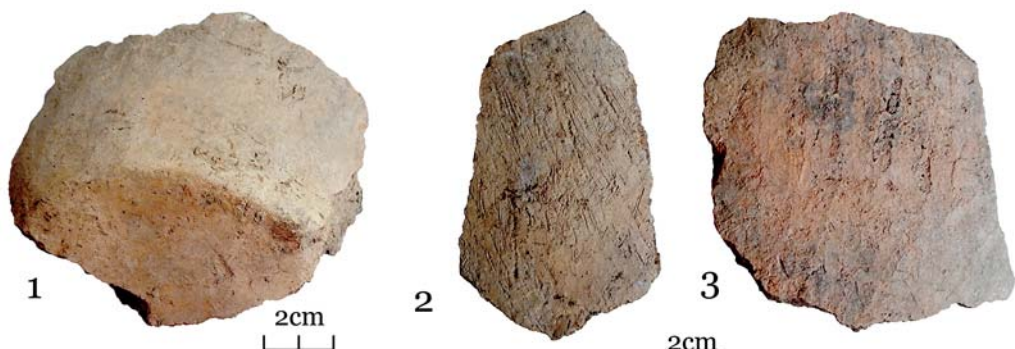


Fig. 30:

1. RSPF 507/25, D8.1 [507] bag 59 (2016); well-made base fragment from a closed pot; Common Ware (red brown); HM, medium-coarse fabric, moderately well-levigated with some laminations in the section; moderate amount of small mixed gritty inclusions; red 10YR 5/4 near the exterior; 10YR 3/2 near the interior; thick and well-smoothed and burnished, very pale yellow 10YR 8/3 slipped exterior; black oxidised interior. BD 12.
2. RSPF 507/9, D8.1 [507] bag 59 (2016); body fragment from a large jar; Common Ware (red-brown); HM; the surface is straw-wiped; slipped and smoothed interior.
3. RSPF 507/10, D8.1 [507] bag 59 (2016); body fragment from a large jar; Common Ware (red-brown); HM; paddle marks neaten the exterior.
- 4-5. RSPF 501/19, D9.4 [501] bag 21 (2016); body fragment from a large jar; Common Ware; matte surface with random streaks, possibly single stroke burnishing; plain smoothed interior.
6. RSPF 109/3, D10.1 [109] bag 22 (2016); large and decorated fragment from a deep and tall narrow jar; pine tree-like incised decoration was made while the clay was leather hard; HM: grey 7.5YR 5/1 through section; some laminations are evident; voids and a moderate amount of small to fine gritty inclusions in the paste; Common Ware (red-brown); mottled pink 7.5YR 7/3 to grey 7.5YR 6/1-4/1 and burnished on the exterior; grey-brown 7.5YR 5/2-4/2, smoke-blackened and matte interior.
7. RSPF 505/2, D8.1 [505] bag 12 (2016); body fragment from a small closed shape; incised nested zigzags and horizontal lines made prior to firing; Bedeni ware; HM, hard and crisply fired; medium texture; reddish brown 7.5YR 5/3 through the section; pale brown-red 7.5YR 6/4 and blackened N4/ areas on the exterior; drab smoothed 7.5YR 6/3 interior. Body width 18.
8. RSPF 101/41, D10.4 [101] bag 35 (2016); body and neck fragment from a small closed pot; three indistinct horizontal grooves on the neck; dark grey N3/ compact fabric; well-levigated; Common Ware (dark); burnished N5/-4/ near the exterior neck and N3/ on the lower body; post firing scratched oblique lines on the shoulder and lower body; the N4/ interior is roughly formed and matte; fine dark gritty inclusions in the clay. W of body 18.
9. RSPF 507/11, D8.1 [507] bag 59 (2016); rustic jar; decorated with deeply incised lines, zigzags and nested chevrons; a small knob is on the shoulder; Common Ware (red brown with pale slip); HM; coil and slabs have voids around the segments; sandy textured clay; fine mixed gritty inclusions; grey 7.5YR 5/2 at core firing red 2.5YR 5/2 near the surfaces; matte pale yellow 10YR 8/3 slipped exterior. Dm of the vessel at the shoulder lines 26.



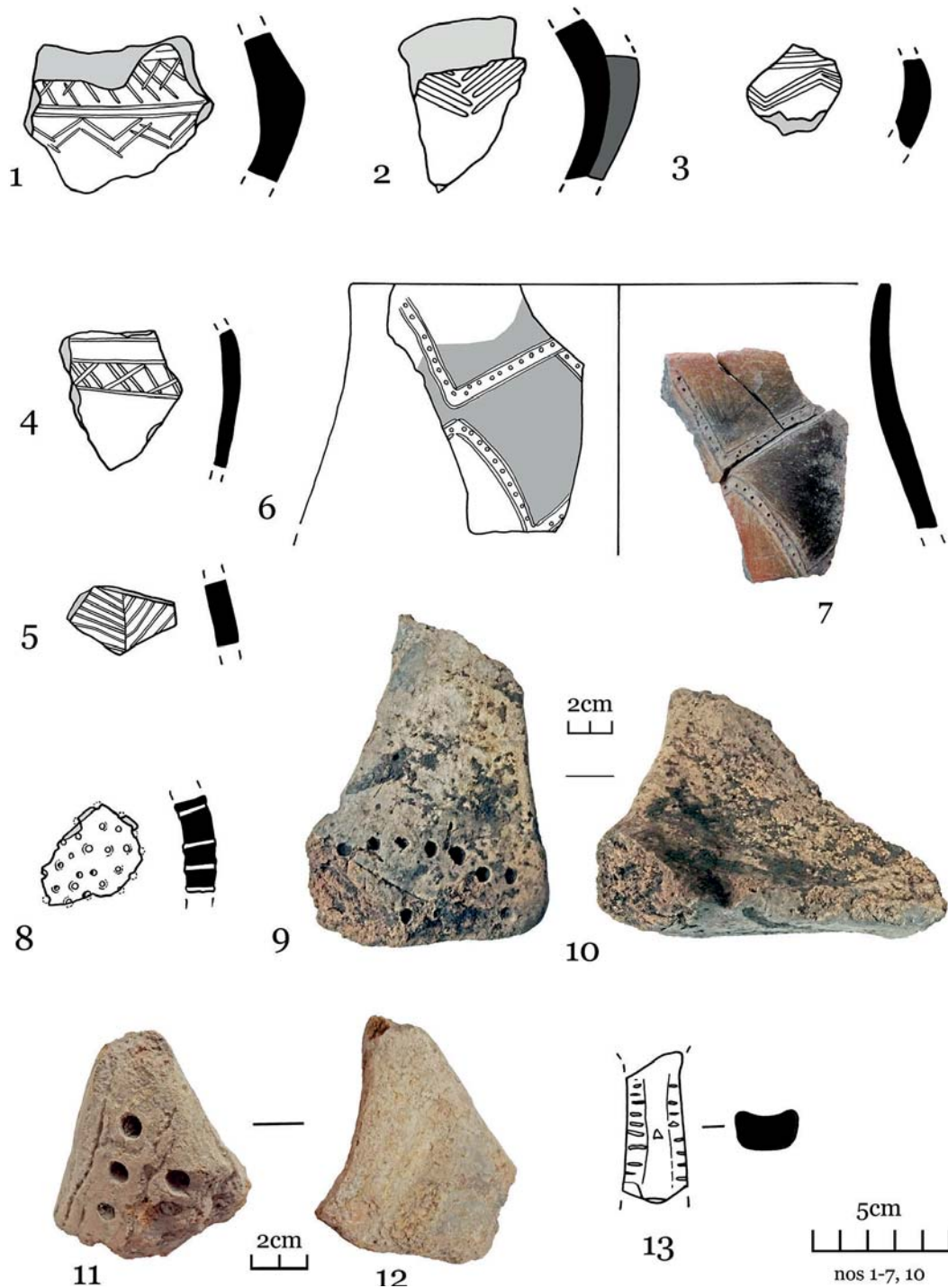


Fig. 31:

1. RSPF 106/12; body fragment with incised cross-hatched and zigzag pattern on the shoulder and upper body, either side of an offset at the widest point in the girth; Common Ware (red-brown); HM; compact, pale brown 7.5YR 5/1, medium coarse clay with fine black grits; laminations in the section; mottled grey-beige 10YR 8/3 and 5/1 slip on the exterior; pale brown 7.5YR 6/3, smoothed interior. Max W 32.
2. RSPF 105/5, D10.4 [105] bag 45 (2016); body fragment from a large jar; deeply incised nested chevrons made while the clay was wet; HM, likely slab construction; Common Ware; pronounced laminations through the section; sandy textured clay; dark 10YR 3/1 through core; fine, mainly dark gritty inclusions; black burnished interior; mottled matte grey M5/–N6/ exterior.
3. RSPF 800/7, A10.4 [800] bag 3 (2018); body fragment; Common Ware (dark); slipped and matte exterior; grey to brown, streaky interior; roughly incised nested zigzag lines pendant from a horizontal line on the shoulder; fine gritty inclusions in the paste; medium textured and compact clay.
4. RSPF 116/20, D10.4 [116] bag 42 (2016); body fragment from a very thin-walled pot, likely a closed form; irregular, incised cross-hatched band; Common Ware; HM; hard-fired, medium coarse-textured 5YR 4/3 fabric; matte surfaces; 5YR 6/1 interior; 5YR 6/2–5/2 exterior. Dm at the shoulder c.14 cm.
5. RSPF 101/43, D10.4 [101] bag 35 (2016); Common Ware (dark); HM; compact, fine textured weak red 2.5YR 5/4 clay; a moderate amount of mixed angular gritty inclusions; black N3/ burnished exterior; post-firing incised nested chevron design with central vertical line; smoothed drab reddish grey 5YR 5/2 interior.
- 6–7. RSPF 300/16, F9.1 [300] bag 1 (2016); three joining fragments [also RSPF 300/1]; a slight distortion of the wall suggests the vessel was a spouted jug; Common Ware (dark) ware; thin-walled and dark N3/ at the core; minute to small mixed gritty inclusions and some voids in the paste; smoothed black N2.5/ on the interior; slipped and stroke burnished red 5YR 5/6 exterior; the deeply incised and punctured bands arranged in opposing zigzag design appears to have been enhance by a form of controlled red and black firing and burnishing. RD 20.5.
8. RSPF 314/1, F10.4 [314] bag 77 (2016); Pierced sherd with fine holes made while the clay was wet; curved wall; HM from medium-coarse, dark brown 7.5YR 5/2 core; clay; Common Ware (coarse); gritty inclusions in the paste; matte 7.5YR 6/3 on both surfaces; smoothed exterior.
- 9–10. RSPF 208/8, D9.2 [208] bag 40 (2018); front and top views of a small hearth surround or andiron with two lines of punctured decoration; HM; coarse and gritty pale red fabric; thickly slipped grey surfaces; encrusted.
- 11–12. RSPF 507/38, D9.4 [507] bag 30 (2016); punctures bordered by roughly incised lines decorate the tip of an andiron finial; front and inside views, HM, coarse fabric; thickly slipped surfaces.
13. RSPF 122/10, D10.4 [122] bag 75 (2016); handle with deep cut marks decorating the sides; a shallow groove is down the back; Common Ware (red brown); HM; grey N5/ at core; hard-fired; a moderate amount of fine to small mixed gritty inclusions; slipped matte yellowish pink 7.5YR 7/3 surfaces.

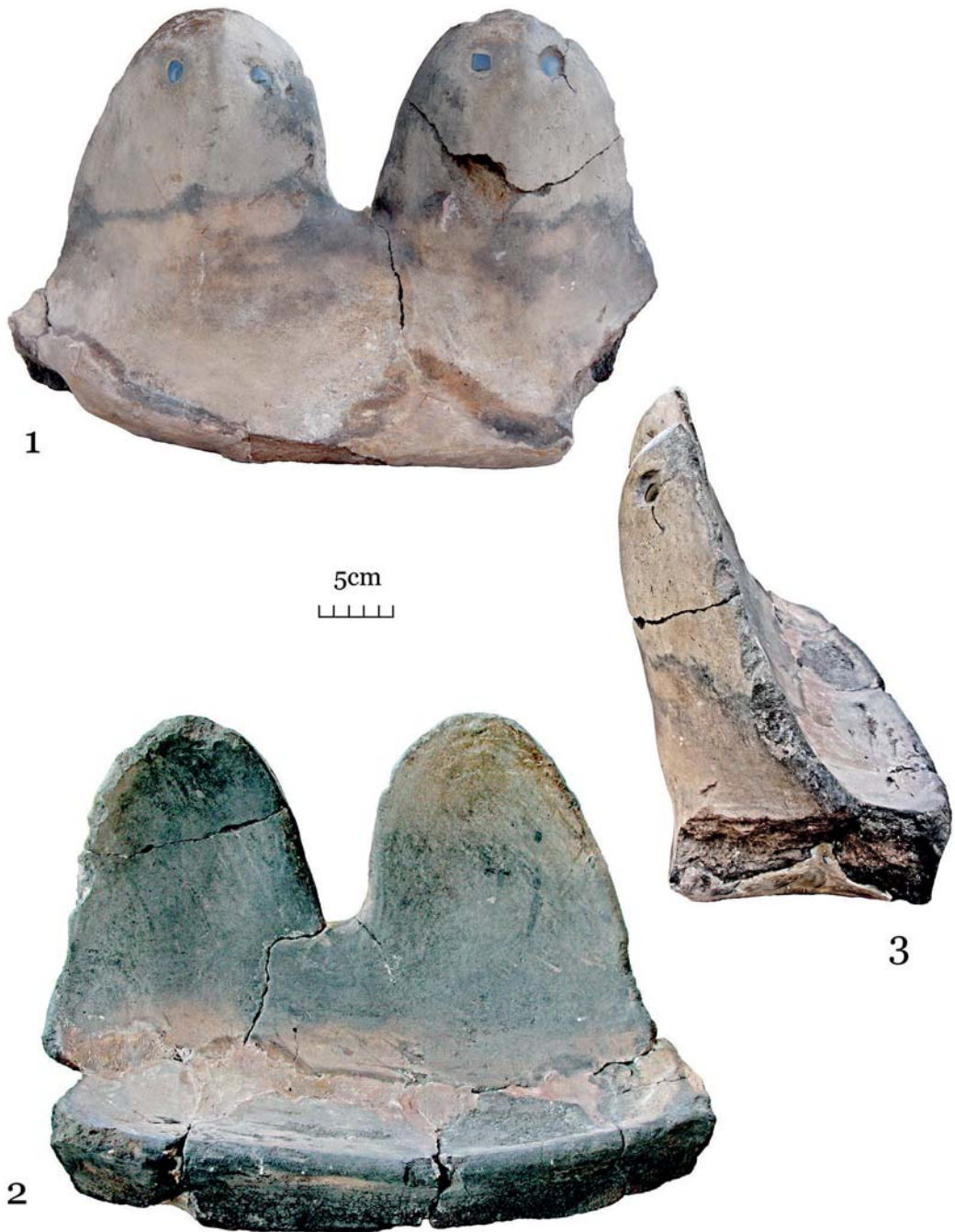


Fig. 32: Twin anthropomorphic figures with obsidian black polished inlay eyes moulded onto a tray-like base, Akhalsikhe Museum, Georgia: 1. front view; 2. rear view; 3. Side view (photos G. Bedianashvili 2018).



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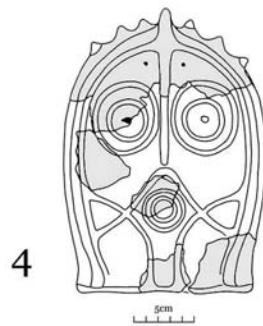
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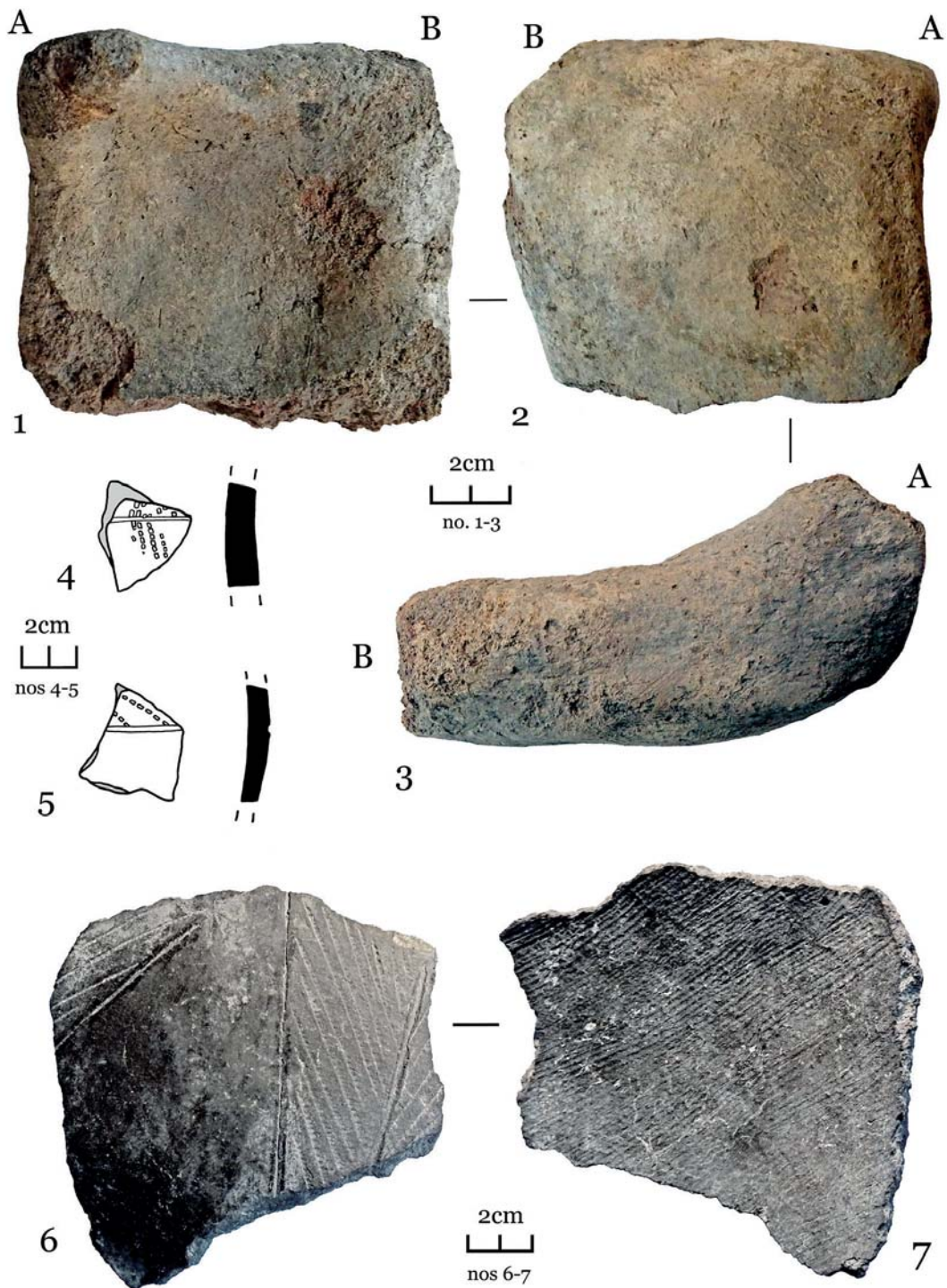
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Fig. 33:

1. Detail of the left figure's inset obsidian eyes (photo G. Bedianashvili 2018).
2. Detail of the right figure's inset obsidian eyes (photo G. Bedianashvili 2018).
3. Two-pronged portable andiron with tray-like base and dowel hole in the back of the floor, dated 3100–2600 BC (Early Bronze Age I), Sos Höyük, Art 3282, L17B [4299] pottery basket 141, object 46, 8.8.1999.
4. Relief mask or plaque from Natsargora (after Shanshvili and Ramishvili 2010, pl. II: 4).



**Fig. 34:**

- 1–3. RSPF 507/41, D8.1 [507] bag 48 (2016); square object which is likely to have had four peaks in each corner (only one peak partially survives); rounded underside; HM semi-coarse red 2.5YR 5/6 fabric; thickly grey brown 2.5Y 6/2 slip on both sides.
4. RSPF 122/4, D10.4 [122] bag 75 (2016); body fragment from a jar; Trialeti Ware; linear comb-impressed decoration made when the clay was wet; HM; fine to medium textured through core; even dark brown 5YR 4/1 fabric; fine mixed gritty inclusions and occasional voids; black N3/ burnished exterior; mid-brown 5YR 5/2 burnished interior.
5. RSPF 800/4, A10.4 [800] bag 3 (2018); body fragment; Trialeti ware, likely from a closed vessel; HM; pale brown 10YR 5/3 exterior with highly burnished zone under an area with impressed comb decoration on a drab surface; slipped and burnished 7.5YR 6/3 interior; even brown 7.5YR 5/4 through the section; compact and well-levigated; very fine, mixed gritty inclusions in the paste.
6. RSPF 501/4, D9.4 [501] bag 33 (2016); fragment from a large jar; Trialeti comb-impressed hatched triangles; the decoration was probably pendent from the shoulder of the vessel; the zone outside of the triangles is burnished and the surface is matte within the triangles; HM; hard fabric; gritty inclusions; all-over, combed striated interior — this interior treatment is a hallmark of the Trialeti Ware at Rabati, useful when fragments do not have the tell-tale comb impressed designs.

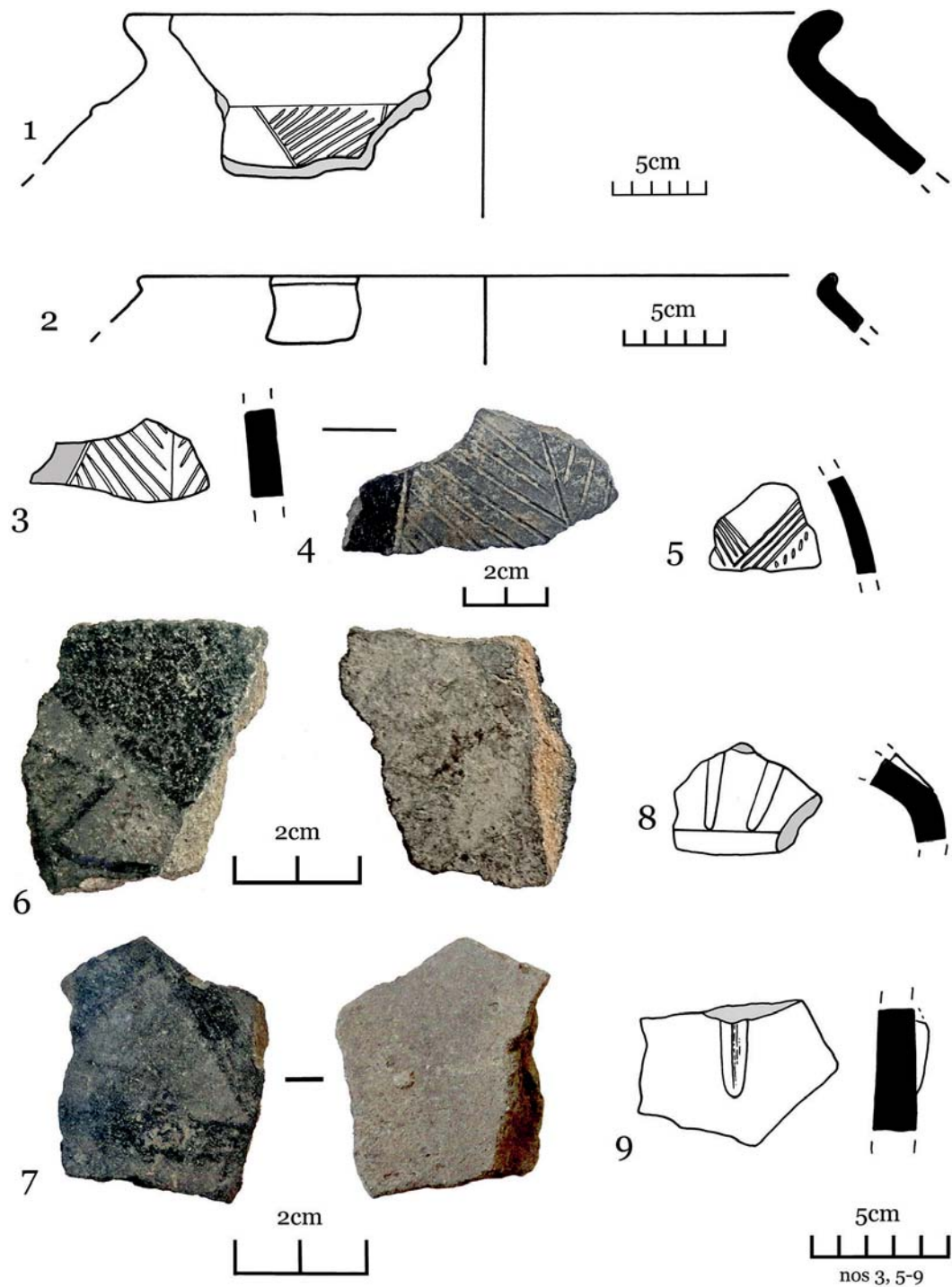
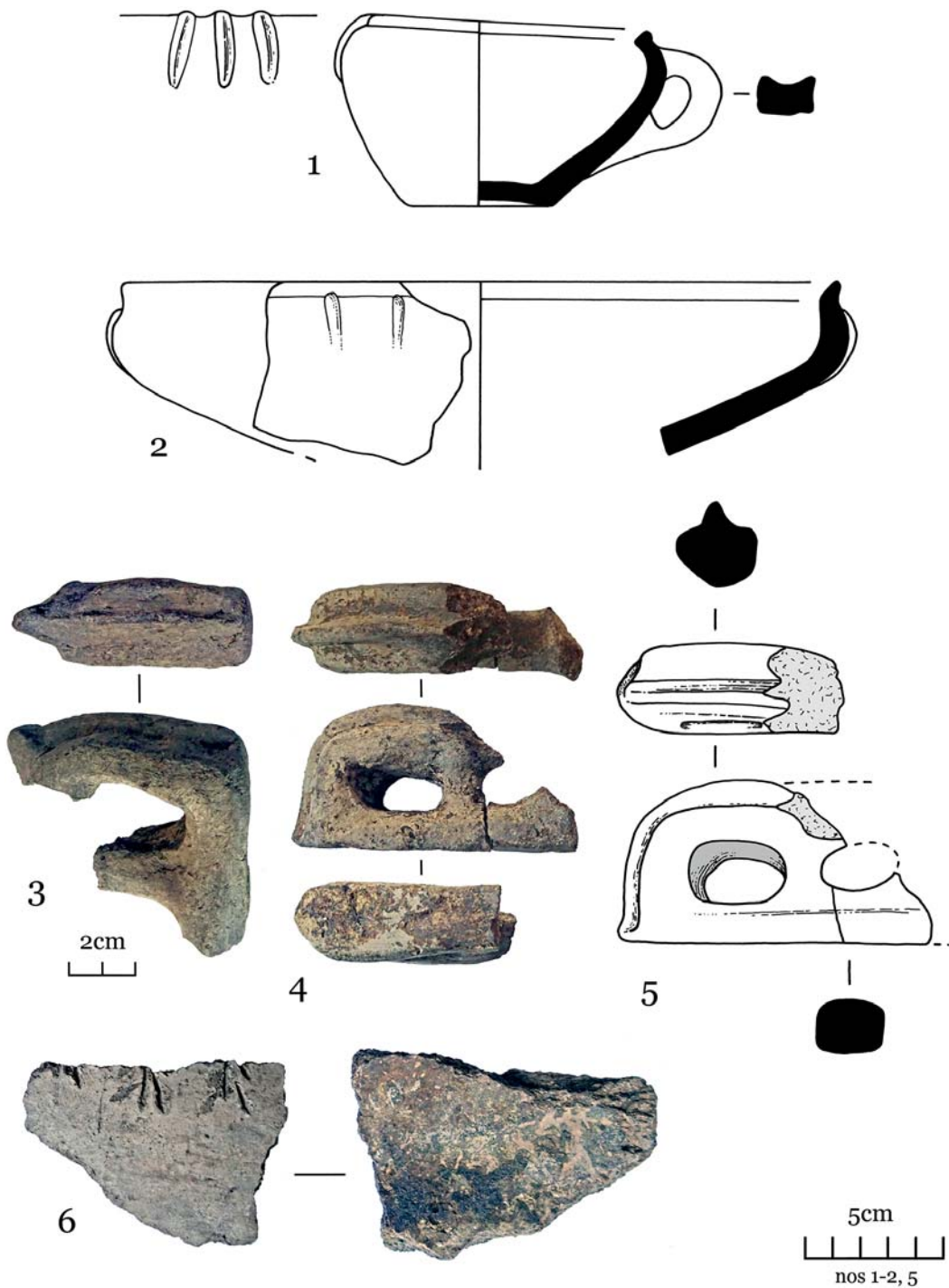


Fig. 35:

1. RSPF 102/50, D10.4 [102] bag 52 (2016).
2. RSPF 122/2, D10.4 [122] bag 75 (2016); closed pot, hole mouth; everted rim; Trialeti type; HM; thin-walled; a medium amount of fine dark inclusions; brown well-levigated paste; even colour 5YR 4/3 through the section; black-slipped exterior with a highly burnished surface; slipped slightly browner 2.5Y 2.5/1 on the matte interior; medium fine textured breaks. RD 35.
- 3-4. RSPF 102/51, D10.4 [102] bag 52 (2016); body fragment from a jar; Trialeti Ware; incised chevron (or pine tree) design in a drab incised triangle that would have been pendent from the shoulder in combination with pattern-burnished zones beside; grey-brown 7.5YR 4/2 refined clay; fine inclusions and medium-textured clay; black exterior; mottled pale and grey N7/-N5/ interior.
5. RSPF 122/3, D10.4 [122] bag 75 (2016); body fragment; Trialeti ware; deeply incised linear decoration edged by flecked incisions; HM; well-levigated brown 7.5YR 5/2 clay; fine gritty inclusions; brown 7.5YR 5/2 at the core near the smoothed interior; black N3/ near the burnished exterior.
6. RSPF 102/58, D10.4 [102] bag 60 (2016); body fragment; pattern burnished band with central zigzag line; HM; pinkish grey 5YR 6/2 clay, darker near the surfaces; compact and medium textured with fine white gritty particles in the paste; roughly smoothed grey 5YR 5/1 interior.
7. RSPF 101/27, D10.1 [101] bag 1 (2016); body fragment, pattern burnished; matte plain interior.
8. RSPF 508/15, D9.4 [508] bag 31 (2016); shoulder fragment with two applied rods above the off-set in the profile; Common Ware (fine and dark); HM, compact dense pale grey, gritty fabric; thickly dark grey slipped and burnished exterior.
9. RSPF 119/41, D10.4 [119] bag 62 (2016); body fragment from a large jar with applied rod-like attachment; HM; even tan-brown 10YR 4/4 through section; a small amount of fine gritty inclusions; compact and heavily encrusted; hard-fired; plain matte, dull red 2.5YR 5/3 interior; grey-black N6/-N4/ lightly burnished exterior.





**Fig. 36:**

1. RSPF 531/1, D9.2 [531] bag 95A, obj. 39 (2018); small, lop-sided cup with three vertical applied rods on the rim and shoulder opposite the loop handle; near complete; the handle is angular approaching rectangular in section and a finger-impressed wide groove down the back, cut edges and joined at the rim and low on the body; well-finished concave base; Common Ware; grey 10YR 3/1 through section; a moderate amount of fine gritty inclusions in the paste; drab surfaces with some paddle-smoothed marks near the handle; 10YR 5/1 exterior; 10YR 6/1 and black interior. RD 10, H near handle 6.5, H near bars 7.3, oblong base 5 × 4.3.
2. RSPF 119/38, D10.4 [119] bag 62; open and wide bowl fragment with two surviving applied rods at the thin and folded rim (a third might have been to the left); Common Ware (dark); HM, coil technique; dark grey N4/ at the core; compact and dense fabric; black lightly burnished interior; mottled grey 5YR 6/2 exterior, smoothed but not burnished. RD 26.
3. RSPF 507/44, D8.1 [507] bag 60 (2016); double loop handle with a ridge is formed on the top; HM; yellowish red gritty fabric; the surfaces are slipped mottled grey brown and roughly smoothed.
- 4-5. RSPF 200/15, D9.2 [200] bag 51 (2018); unusual object that is similar in appearance to double-loop handles raised angular crest down the length; two joining fragments; Common Ware (red brown); HM from 10YR 7/1-7/2, medium textured fabric; matte and encrusted surfaces.
6. RSPF 507/27, D9.4 [507] bag 51 (2016); body fragment from a jar; deeply incised grass-like design in three vertical lines; Common Ware (red brown); HM; residue adheres to the interior smoothed matte surface; matte pale grey slipped exterior.

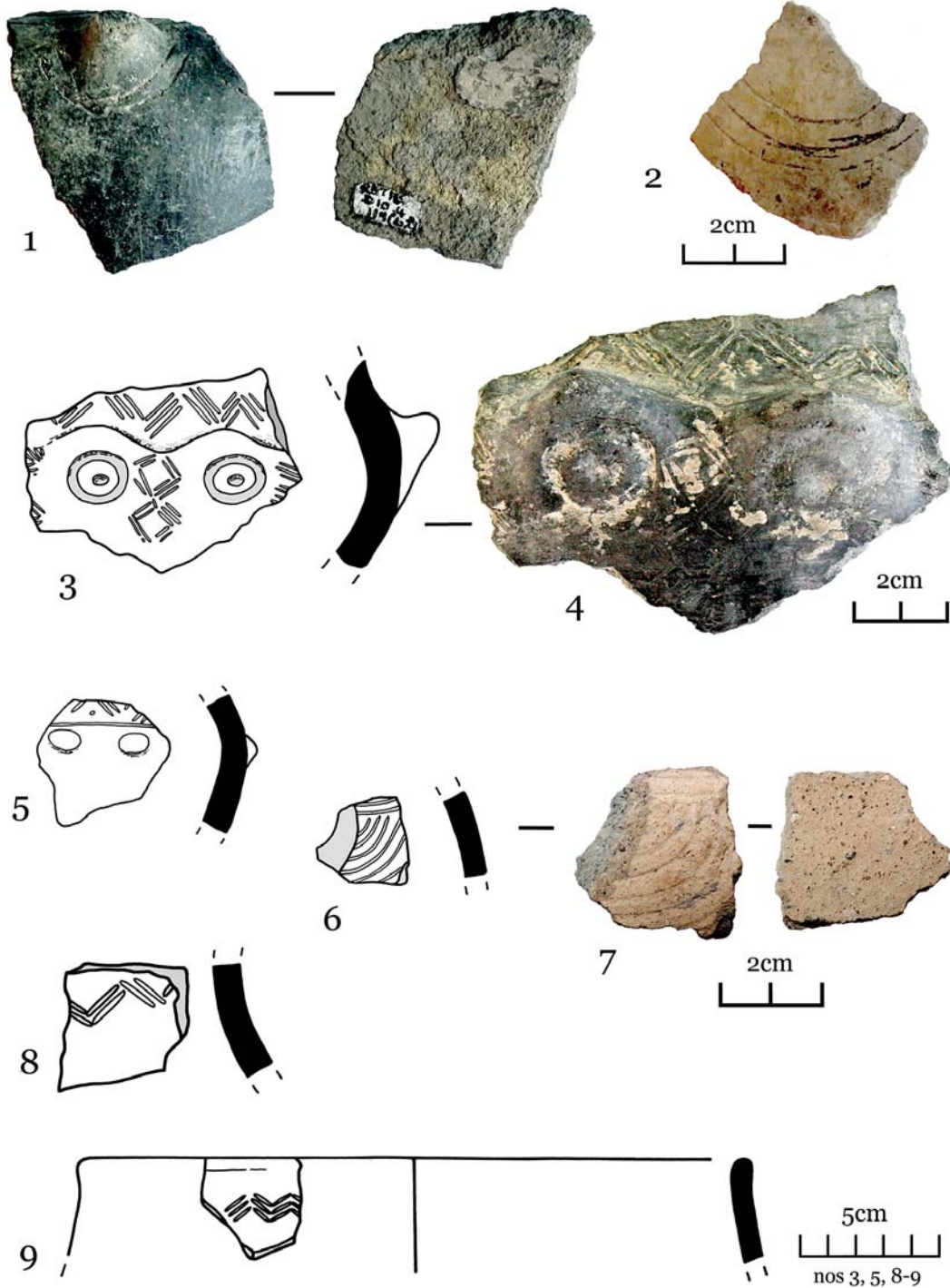


Fig. 37:

1. RSPF 119/37, D10.4 [119] bag 62 (2016); body fragment with small knob cradled by two incised semicircles on the exterior; HM; medium textured grey-greenish clay; thick but eroded slip on the interior, smoothed but not burnished; burnished dark grey/black exterior.
2. RSPF 119/34, D10.4 [119] bag 62 (2016); shoulder fragment with three roughly incised nested festoons; HM, hard fired; very fine gritty inclusions in the 5YR 5/4 paste; pale brown 7.5YR 7/3 slipped exterior; mid brown 7.5YR 5/3 and slightly streaky burnished interior; brown through section.
- 3-4. RSPF 801/5, A10.1-A11.4 [801] bag 5 (2018); Common Ware (dark); likely Middle Bronze Age fragment; two impressed eye-like circles with incised zigzag and lozenge shaped decoration; black N2.5/ burnished exterior; slightly burnished, slipped and smoothed, but flaking N6/ to N2.5/ interior; HM, coil technique with corresponding undulating surfaces and laminations evident in the section; grey N4/ through section; a moderate amount of mixed gritty inclusions; hard-fired; medium-coarse breaks.
5. RSPF 119/40, D10.4 [119] bag 62 (2016); body fragment with incised band on the shoulder and two small oblong knobs; a band of chevrons decorates the wall above the knobs; Common Ware; HM; brown 7.5YR 5/4 compact fabric near the interior surface and black near the exterior; a moderate amount of small to fine gritty inclusions; hard-fired; smoothed pale brown 10YR 6/2 interior; black burnished slip on the exterior.
- 6-7. RSPF 103/8, D10.1 [103] bag 6 (2016); shallow and nested, half circle grooved decoration formed by rotating a comb over the shoulder of the vessel under, at least two, horizontal grooved lines; Pink-slipped Coarse Ware; grey 10YR 6/1 core firing browner near the exterior; a large amount of mixed fine to small gritty inclusions; wet-smoothed 10YR 7/3 interior with the fabric grits still visible at the surface; matte yellowish pink 7.5YR 8/2 slipped exterior.
8. RSPF 116/5, D10.4 [116] bag 44, (2016); body fragment from a large jar with two rows of incised zigzags; black N3/ burnished exterior; matte red 5YR 6/4 interior; HM compact and even red 5YR 5/4 clay; fine to small gritty inclusions; well levigated; white paste in-fill in the design is likely.
9. RSPF 102/46, D10.4 [102] bag 39 (2016); near vertical walls to the rounded lip; fragment from a thin-walled jar; Common Ware (dark); compact and refined 5YR 5/4 clay; occasional minute particles in the paste; nested zigzag design comprised of incised short strokes made when the clay was wet; the section is black near the exterior; browner 5YR 4/4 near the interior; mottled grey-black exterior; brown interior; moderate burnishing on both sides. RD 24.

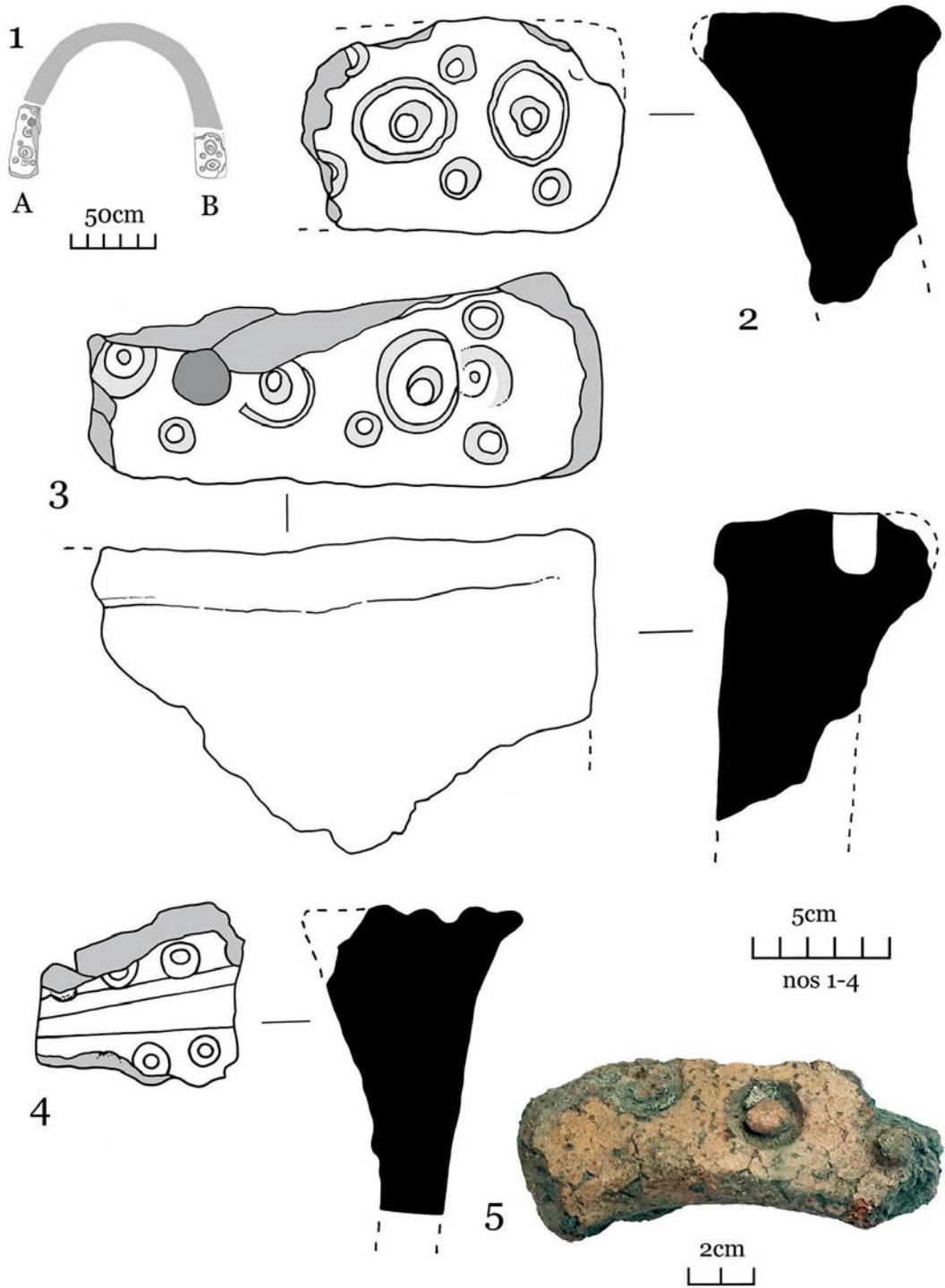


Fig. 38:

- 1-3. Impression of the hearth shape and position of the decorated finials, RSPF 804/5, A11.4 [804] bag 19 (2018); very roughly modelled finials from the left and right side of a horseshoe-shaped hearth; flattened and smoothed top with impressed ovals and circles of differing circumferences, possibly made with variously sized cut long bones; one dowel hole 2.5 cm deep and smoothed on the interior was formed 20.5 cm from the front left edge; Common Ware (coarse 1); HM friable and poorly levigated 10R 5/4 clay; inner surface and top 10YR 8/3; grey 10YR 5/1 slipped interior, reddish brown 10YR 5/1 exterior; (2) left side; (3) right side, with dowel hole near the back of the fragment and view of the outer wall.
4. RSPF 804/6, A11.4 [804] bag 16 (2018); decorated top from a horseshoe-shaped hearth (possibly from a second example, see RSPF 804/5); grooved along the length of the top and decorated with impressed with circles; Common Ware (coarse 1); HM, thin yellow wash on top; smoothed 2.5Y 8/2 surface.
5. RSPF 508/22, D9.4 [508] bag 54 (2016). finial likely to be from a horseshoe-shaped simple hearth; impressed circles decorate the upper flat surface; HM, very coarse fabric, poorly levigated with large to small gritty inclusions; matte grey brown slipped surfaces.

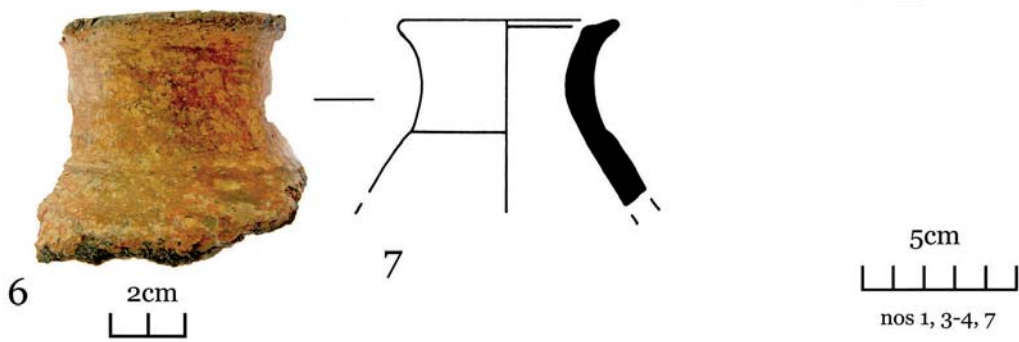
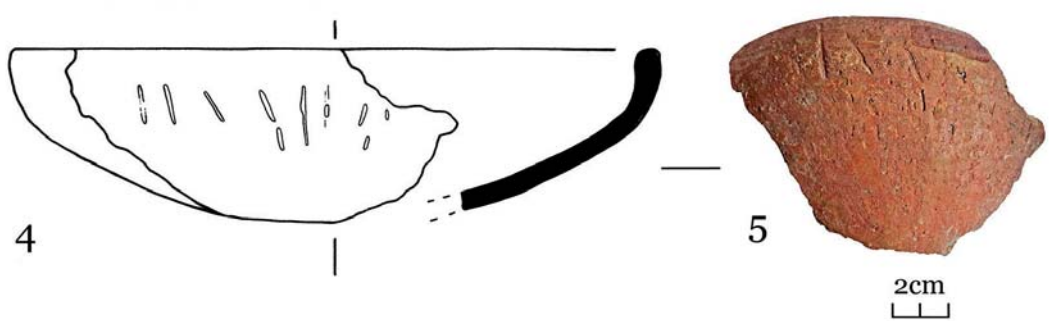
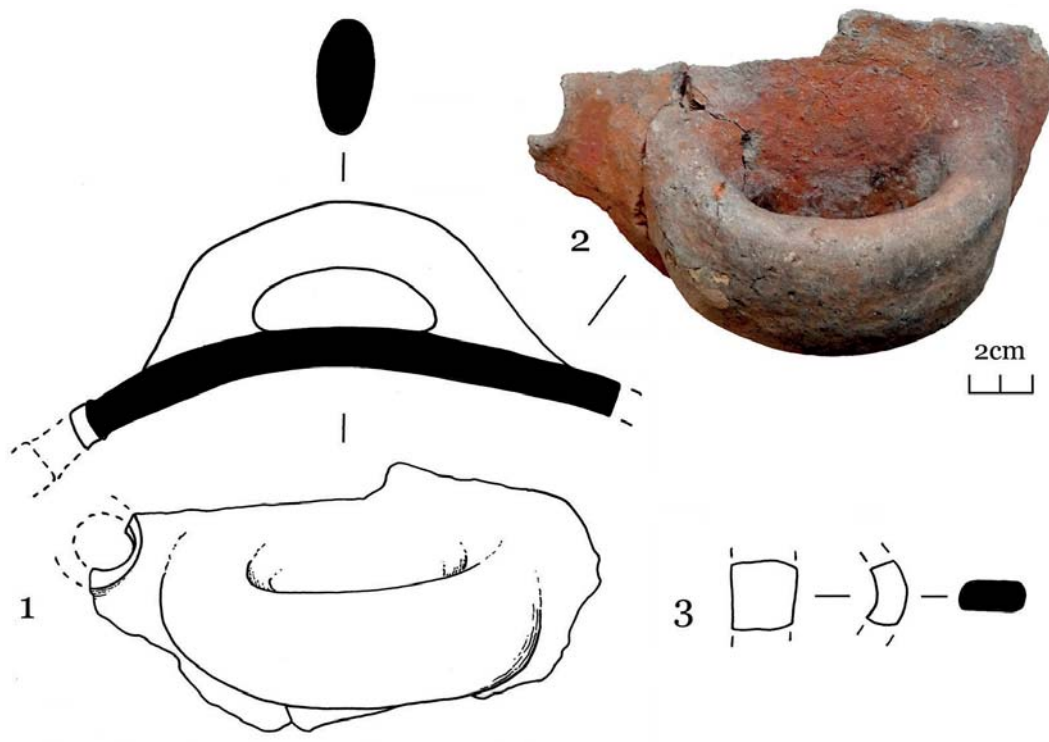


Fig. 39:

- 1–2. RSPF 502/2, D9.4 [502] bag 10 (2016); two joining fragments with horizontal basket handle and small round hole to the left side of the handle; Hard Red (red slipped) Ware; HM, very coarse fabric firing red 5YR 6/4, poorly levigated with lamination void at the handle end; large to small mixed gravel-like inclusions; red 10R 5/8 through section and grey 5YR 5/1 where the wall is thick; thick matte, red-slipped exterior.
3. RSPF 302/2, D9.1 [302] bag 39 (2016); strap handle fragment with rectangular section; HM; Hard Red (yellow slip) ware; from a small vessel; pinkish light red 7.5R 7/4 clay; some small voids and fine gritty inclusions; matte yellow 2.5Y 8/3 slip on the exterior; medium-textured clay.
- 4–5. Bowl RSPF 502/3, D9.4 [502] bag 10 (2016); open bowl, high shoulder falling short of carinated; haphazard vertical incised lines around the shoulder; HM; thick and flaking red 5YR 6/4 slip; medium to small gritty inclusions; red on the interior and exterior; signs of sheen possibly from use on both surfaces; rough edges. RD 21.
- 6–7. Narrow jug neck, RSPF 508/14, D9.4 [508] bag 31 (2016); narrow neck from a jug or flask; a slight lip, possibly a lid gallery is formed on the inner mouth; Hard Red (red slip) Ware; likely HM; dark N3/ core, firing redder near the surface in patches; poorly levigated and coarse fabric; fine to large mixed gritty inclusions; sharp jagged breaks; blotchy red/brown 5YR 5/4 and paler red/brown 5YR 6/6 surfaces; slipped and roughly smoothed matte 5YR 5/2 interior. RD 7.



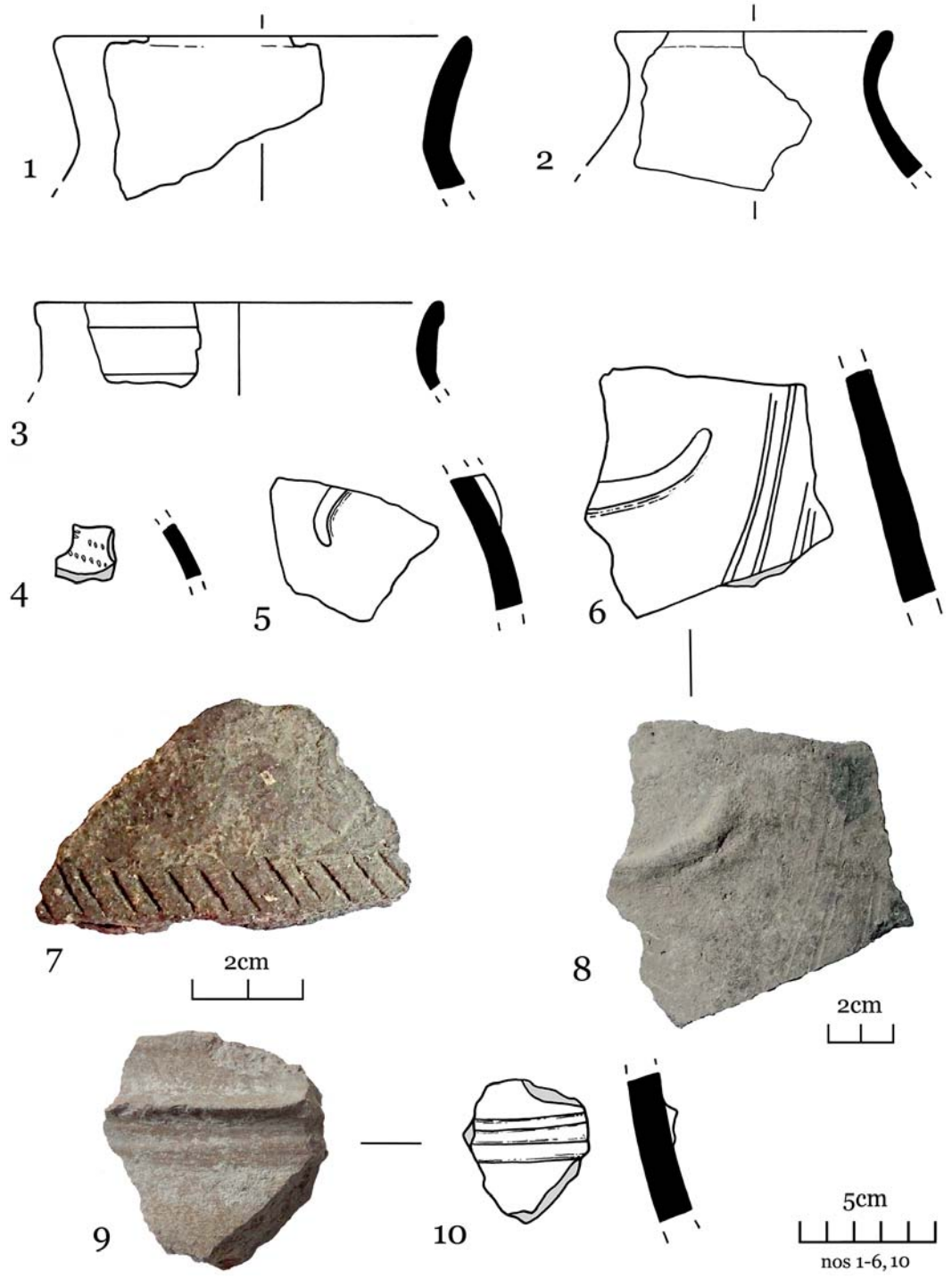


Fig. 40:

1. RSPF 153/1, E10.2 [153] bag 133 (2018); jar with sloping neck and simple rounded lip; HR-sl ware; HM coil technique, hard-fired fabric; gritty crackle; small-fine white inclusions in the paste; smoke blackened light red 10R 6/6 exterior with traces of burnishing; matte reddish grey 7.5YR 6/1 interior, slightly blackened and self-slipped; laminations evident in section; pale red 7.5YR 6/3 near the exterior surface; pale red 10R 6/4 interior surface.
2. RSPF 508/19, D9.4 [508] bag 39 (2016); well-made neck from a closed jar with curved wall to the rounded lip; unusual surface finish; Hard Red (red slip) Ware; HM, with coil seams visible on the interior; medium coarse fabric with fine to large gritty inclusions; grey 2.5YR 3/1 through core, firing browner 7.5YR 6/3 near the surfaces; well-burnished interior and exterior of the neck; red 7.5R 5/4 slip that burnished to a dark 'hazel nut' brown 2.5YR 4/4 hue; heat damaged. RD 12.
3. RSPF 102/48, D10.1 [102] bag 15 (2016); collared rim and tall neck fragment from a small jar; groove under the rim; Hard Red Ware; slow WM with fine striations near the rim; gritty fabric with evenly distributed fine to small mixed gritty particles in the paste; well-levigated and evenly red-brown 5YR 6/3 through the section; self-slipped matte 5YR 5/3 surfaces that mask but not completely obscuring the underlying paste. RD 15.
4. RSPF 102/38, D10.1 [102] bag 3 (2016); thin and small fragment from a bowl or jar; Brown Ware; HM coil technique; some voids and fine to small gritty inclusions in the paste; even coloured 10YR 5/3 through the section; streaky and undulating 10YR 6/2 interior surface; burnished and decorated 10YR 6/2 exterior; burnished exterior, decorated with punctured comb lines.
5. RSPF 103/12, D10.1 [103] bag 6 (2016); RSPF 103/12, D10.1 [103] bag 6 (2016); body fragment from a jar with an applied curved motif is on the exterior (possibly a tendril from the lower end of a handle); Brown Ware; HM; hard-fired; even red-brown 5YR 6/4 paste through the section; medium coarse, sharp breaks; a large amount of fine to medium mixed gritty inclusions in the fabric; slipped and burnished surfaces, 2.5YR 5/4 interior; 7.5YR 7/3-4/3 exterior.
- 6, 8. RSPF 102/47, D10.1 [102] bag 13 (2016); fragment from the body of a large jar; HM coil and lamination seams are evident in the section; Brown Ware; dark grey 2.5YR 3/1 core; a moderate amount of fine gritty inclusion; paddle smoothed 2.5YR 5/2 interior; drab 2.5YR 6/1 exterior; applied curved motif and very shallow vertical lines on the exterior.
7. RSPF 119/32, D10.4 [119] bag 62 (2016); body fragment probably from near the shoulder of a vessel; incised hatched band on the exterior; Brown Ware; HM brown-grey 7.5YR 5/3 to N5/ fabric; very fine to small mixed gritty inclusions; smoothed and slipped 7.5YR 4/1 exterior; rough 7.5YR 5/2 interior with seam line from a coil.
8. As for 6.
- 9-10. RSPF 103/9, D10.1 [103] bag 6 (2016); RSPF 103/9, D10.1 [103] bag 6 (2016); body fragment from a jar with ridges (one sharply formed) on the exterior; Brown Ware; WM; heavy and dense red-brown 5YR 5/3 fabric; some fine voids and small gritty inclusions in the paste; flaking once smoothed 5YR 6/3 interior; slipped 5YR 6/2 exterior.

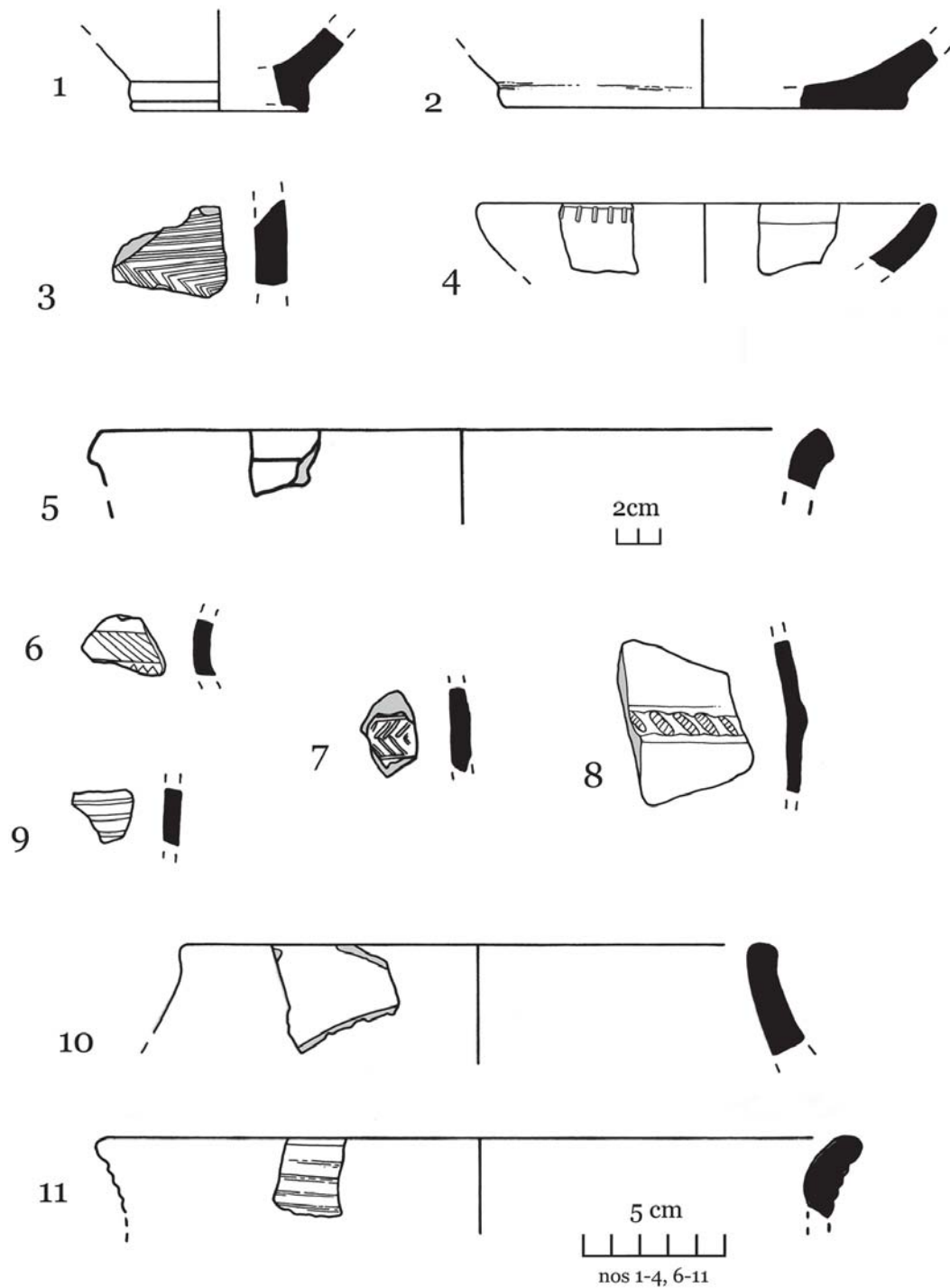


Fig. 41:

1. RSPF 300/24, F10.4 [300] bag 68 (2016); poorly formed ring base; Mid Grey Ware; WM; fine wheel striations on the interior; even dark 5Y 2.5/1 through section; mixed small gritty inclusions; self-slipped N4/ but dirty surfaces; smoothed surfaces including base. BD c.6.
2. RSPF 508/5, D9.4 [508] bag 44 (2016); base fragment with slight off-set in the lower wall; Mid-Grey Ware (medium); HM; medium textured gritty fabric; slipped and smoothed underside; slipped and smoothed pale brown interior.
3. RSPF 151/7, D11.4-E11.3 [151] bag 127 (2018); Ware Mid Grey Ware; body fragment with combing on both sides, chevrons on exterior, horizontal on interior; reddish brown 7.5YR 5/3 exterior; grey 7.5YR 5/1 interior; grey 7.5YR 5/1-5/2 compact and dense clay with a small amount of fine gritty inclusions; well levigated.
4. RSPF 548/6, D9.4 [548] bag 138 (2018); small rim fragment from a shallow and thick-walled bowl; HM, coil technique; Mid Grey Ware (coarse); decorated with short angular cuts on the outer face, coil lines on interior; matte surfaces; blackened on the lip and exterior rim (possibly paint); mid-grey N5/ through section; medium-coarse, hard-fired clay; medium coarse breaks; fine dark inclusions. RD 16.
5. RSPF 306/1, F9.1 [306] bag 18 (2016); fragment from a large bowl or jar; angular lip; likely WM and hard fired; Black Ware; even dark grey N4/ through core; Iron Age; very fine inclusions; sharp breaks; black burnished over the exterior rim and matte on the lower wall; the lower finely striated interior. RD 34.
6. RSPF 102/31, D10.1 [102] bag 4 (2016); two joining fragments from a thin-walled vessel; Black Ware; HM; even black N2.5/ through core; a moderate amount of minute to fine gritty inclusions; very finely incised linear and zigzag decoration on the exterior post firing; high black burnished exterior; moderately burnished interior.
7. RSPF 151/4, D11.4-E11.3 [151] bag 127 (2018); small body fragment; finely incised band with herringbone pattern; Black Ware; HM from 10YR 5/1 fabric; a moderate amount of fine gritty inclusions; black burnished interior and exterior; the interior is largely eroded.
8. RSPF 310/5, F9.2 [310] bag 53 (2016); body fragment from a thin-walled jar; WM and wheel-rilled interior; Black Ware; very dark brown-black 7.5YR 3/1 fabric; a moderate amount of fine gritty inclusions; applied ridge impressed with oblique dashes on the exterior; plain and drab interior with throwing ridges; black burnished exterior.
9. RSPF 151/3, D11.4-E11.3 [151] bag 127 (2018); body fragment with shallow decorative grooves with white paste in-fill; Black Ware; HM; grey brown gritty fabric; burnished exterior; matte, plain interior; the section is divided between dark grey and red corresponding to the surfaces.
10. RSPF 523/7, D9.4 [523] bag 126 (2018); Large jar fragment; HM; Compact Red Ware (coarse) ware; slightly flaring rim; pink 7.5YR 7/4 exterior with wipe marks under rim; matte surfaces. RD 28.
11. RSPF 151/6, D11.4-E11.3 [151] bag 127 (2018); Rim from a jar with ridged exterior neck; Compact Red Ware (burnished); micaceous 5YR 6/4 slip on interior and exterior; HM, medium textured clay; thick-walled; a moderate amount of fine mixed gritty inclusions; brown 5YR 5/4 through the section; well-levigated. RD 24.

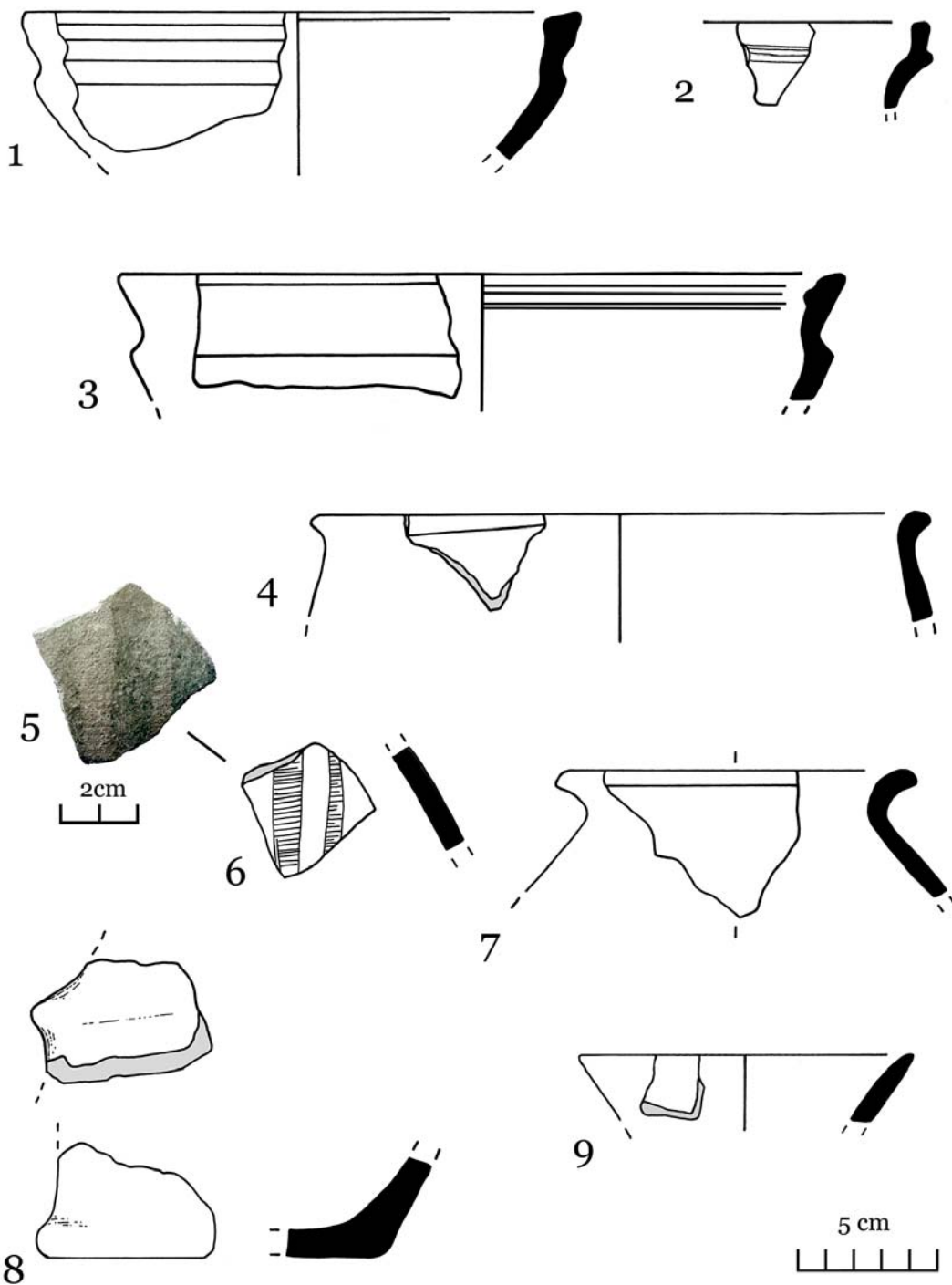


Fig. 42:

1. RSPF 508/12, D9.4 [508] bag 25 (2016); bowl with high and angular shoulder; thickened rim angling into the bowl; Compact Red Ware, likely an Iron Age date; WM and lightly striated; fine textured; a moderate amount of fine to small gritty inclusions; self-slipped 2.5YR 6/6, slurry on the interior and exterior; sharp and medium-coarse breaks. RD 20.
2. RSPF 314/3, F10.4 [314] bag 77 (2016); vertical rim encircled with a ridge; Compact Red Ware (red-slipped); red-slipped rim; darker under the ridge; red slipped interior. RD not determined.
3. RSPF 308/1, F9.1 [308] bag 74 (2016); fragment from a large open bowl; thickened rim with thin groove on the inner mouth; slightly undulating rim top; angular high shoulder; WM and striated surfaces; Grey Brown Ware, clinker crisp firing; brown 5YR 5/4 clay with a small amount of fine gritty inclusions; sharp breaks; smoke blackened; drab and plain 5YR 6/4 surfaces. RD 26.
4. RSPF 151/5, D11.4–E11.3 [151] bag 127 (2018); rolled and rounded rim fragment from a pot; thickening on left side probably due to a handle attachment (missing); Grey Brown Ware; HM, minute to fine mixed gritty inclusions; well-levigated 7.5YR 6/2 clay; pale brown 7.5YR 6/3 on the lip; dark 5YR 2.5/1 burnished exterior; matte brown 7.5YR 6/3 interior; slipped on both sides; smoothed interior. RD 22.
- 5–6. RSPF 102/45, D10.4 [102] bag 39 (2016); body fragment from a jar; Grey-Brown Ware; thin-walled; excellent quality; decoration consists of vertical bands (darker lines) between what appears to be scratched wide bands (pale lines); WM; compact grey N5/–N4/ clay through the section; a small amount of fine gritty inclusions; matte and thin 5YR 6/3 wash on the interior; greenish grey 2.5Y 5/2 slipped exterior.
7. RSPF 508/13, D9.4 [508] bag 25 (2016); thin-walled, flaring jar rim with flattened outer edge; closed form; Grey Brown (drab) Ware; likely WM; some striations on the interior; very dark grey N3/ through the core; clinker crisp firing; fine to small gritty inclusions; slipped pale brown 7.5YR 7/3 on the exterior and over the rim; smoke-blackened on the inner mouth; 7.5YR 6/3 interior. RD 13.
8. RSPF 523/9, D9.4 [523] bag 126 (2018); Top view, side view and profile; possibly an open tray with a pointed front; Grey Brown Ware (hand-made variety); buff burnished interior; plain 10YR 6/3 exterior; some smoke blackening on the interior; thin self-slipped surfaces; friable and sandy textured grey 10YR 6/2 clay; fine to small mixed gritty inclusions.
9. RSPF 310/6, F9.2 [310] bag 53 (2016); Bowl with very thin rim; HM, even red 2.5YR 5/4 through the section; Grey Brown Ware (red brown); sharp breaks; fine to small gritty inclusions; red 7.5YR 4/4 slipped and burnished interior; 10R 4/4 exterior. RD 12.

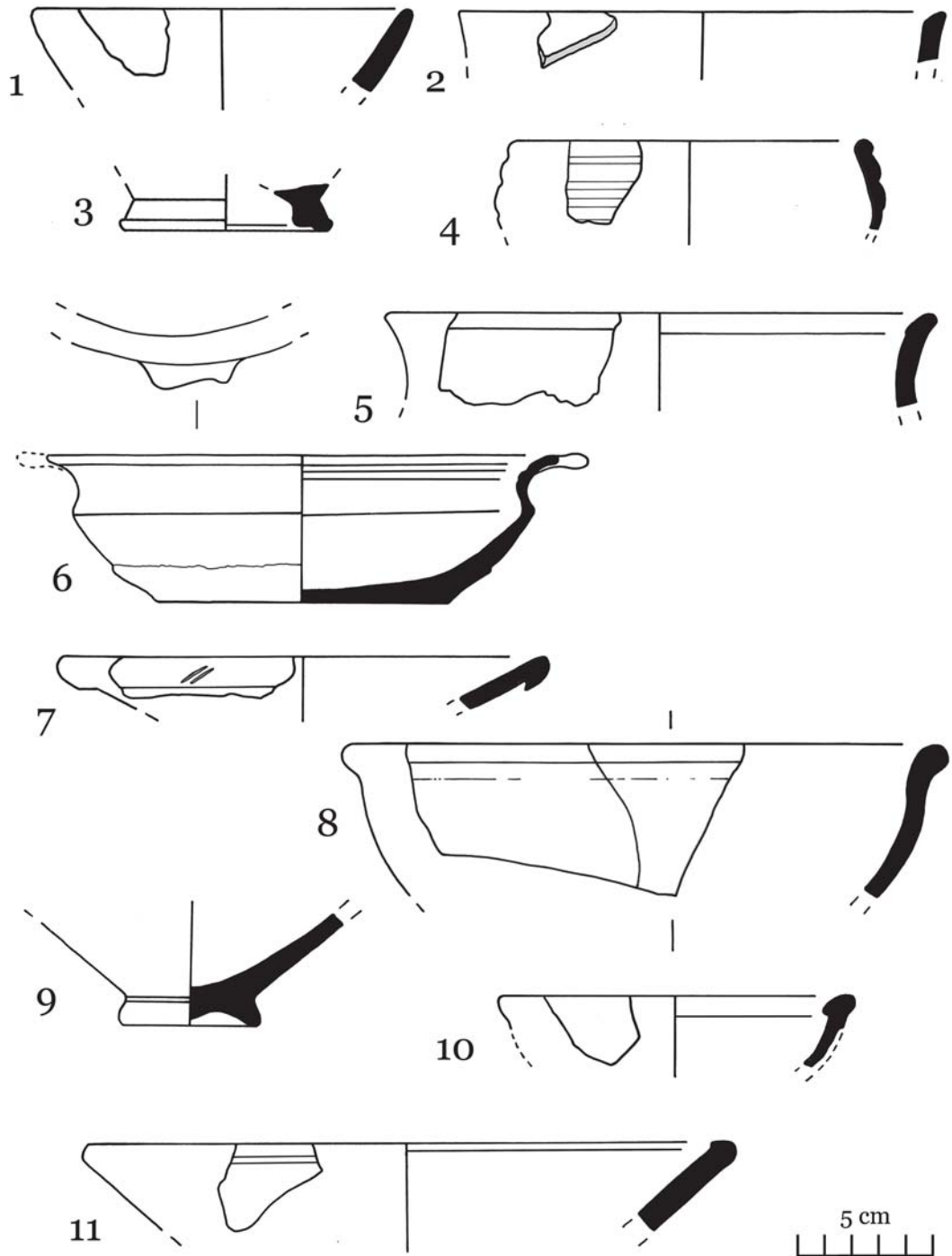


Fig. 43:

1. RSPF 102/34A, D10.1 [102] bag 3 (2016); bowl rim; Red-Slipped on Dark Ware; HM coil technique; pale brown section near the exterior and black near the interior; a moderate amount of mixed small gritty inclusions; drab interior; black-slipped and burnished 7.5YR 6/3 exterior. RD 14.
2. RSPF 102/9, D10.1 [102] bag 2 (2016); bowl rim; obliquely angled lip; Red-Slipped on Dark Ware; medium coarse textured grey N4/ clay; mixed fine gritty inclusions; medium sharp breaks; thick red-slipped 10R 5/6 and burnished surfaces. RD 18.
3. RSPF 507/26, D9.4 [504] bag 25 (2016); deeply concave ring base; Red-Slipped on Dark Ware; WM; grey at core; medium textured and small for medium angular grits; matte red slipped surfaces. BD 7.5.
4. RSPF 102/12, D10.1 [102] bag 2 (2016); small bowl or cup rim; rounded lip; ridged exterior; WM (slow?) and striated perhaps wiped interior; possibly Iron Age; compact and even brown 5YR 5/4 through the core; some minute gritty inclusions; brown 5YR 5/3 slipped interior and exterior; not burnished drab surfaces. RD 13.
5. RSPF 105/4, D10.1 [105] bag 8 (2016); jar fragment with small offset formed on the inner mouth; Crisp Brickly (coarse and yellow slipped) Ware; medium-coarse fabric; grey N6/ at the core firing pink 5YR 6/4 toward the surfaces; medium amount of mixed gritty inclusions; hard fired; thin and eroding yellowish grey 10YR 7/2–6/2 wash on both sides; gritty surfaces. BD 20.
6. RSPF 548/4, D9.4 [548] bag 138 (2018); small cooking pot; a lid gallery is formed at the mouth; a small irregular ledge handle survives on the rim; WM from medium-coarse fabric; mixed gritty inclusions in the paste; thin-walled; Crisp Brickly Ware; cut edge around the base; rough and ground base and extensively blackened walls from use; a small area of red 2.5YR 4/6 surface survives at the mouth. RD 13.7, H 5.4, BD 10.9.
7. RSPF 801/2, A10.1-A11.4 [801] bag 5 (2018); Crisp Brickly (yellow-slipped) Ware; shallow open bowl or plate; WM; folded rim, pendent on the lower edge; two oblique notches on the outer rim face; grey N4/ core firing very pale brown 10YR 6/2 near the surfaces; surfaces; compact, medium textured clay; a moderate amount of fine to medium gritty inclusions. RD 18.
8. RSPF 806/6, A11.4 [806] bag 18 (2018); bowl with thickened rounded rim (two fragments); Mid Red Ware; WM; self-slipped interior and exterior; grey 5YR 5/6 and 6/4 core in the thickest part of the rim; a slight line of colour variation from firing, red 5YR 6/4 surface; refined clay with some very fine voids and minute particles in the paste; fine wheel striations on both sides. RD 24.
9. RSPF 804/2, A11.4 [804] bag 83 (2018); wheel-made ring base; Mid Red micaceous ware; plain surfaces, lightly wheel striated.
10. RSPF 314/4, F10.4 [314] bag 73 (2016); small bowl rim with thickened lip; WM with slightly grey 7.5YR 6/1 core; Mid Red (red slip) Ware; a large amount of very fine gritty inclusions; matte surfaces; red 10R 5/6 burnished slip is evident on the rim and on the largely eroded exterior; 5YR 6/4 interior. RD 13.
11. RSPF 153/3, E10.2 [153] bag 133 (2018); Bowl fragment, sharply formed groove on the inner lip; shallow form; ware Mid Red yellow slip; WM from reddish-grey 5YR 5/2 clay; medium sandy looking texture; hard fired; matte yellow-brown 10YR 6/4 slip on both sides. RD 24.



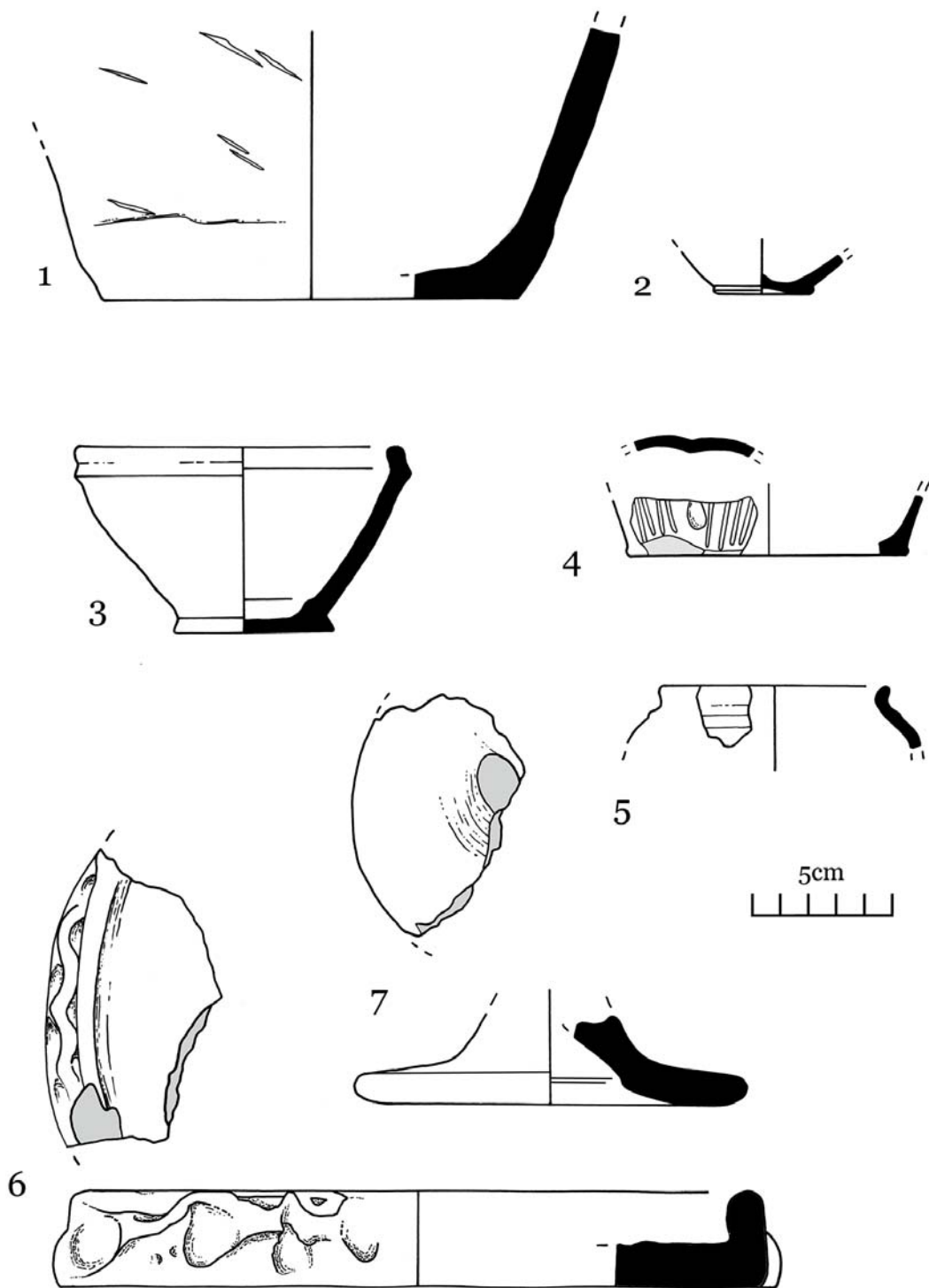


Fig. 44:

1. RSPF 548/2, D9.4 [548] bag 138 (2018); likely cooking pot flat base, which has been ground smooth from use; Wheel-Made (red) Ware; drab exterior, smoothed and smoke blackened; the lower edges were cut to trim around the base; red 5YR 6/4 interior not showing signs of heat damage; medium-coarse texture; fine to small gritty inclusions; red 5YR 6/4 half way through the section, grey in the remaining part; crisply fired; diagonal drag lines mar the exterior surface. BD c.14.
2. RSPF 105/1, D10.1 [105] bag 8 (2016); concave base fragment with a band eroded around the edge and burnished on the outer edge of the resting surface; the edges were cut and string cut marks are on the resting surface; Pale Pink (refined); WM striated interior with a peak formed at the centre of the floor; highly refined and very pale pink 7.5YR 8/2 clay; matte mid-brown 7.5YR 6/3 and flaking interior slip; streaky and glossy, vertically burnished, pale grey-brown 10YR 6/4 slip on the exterior. BD 3.4.
3. RSPF 801/16, A11.4 [801] bag 11 (2018); two thirds of a small bowl or cup; high shoulder and rounded lip; Wheel-Made (brown) Ware; WM, coarse fabric with grey 7.5YR 5/1 core firing red near the surfaces; flat base with string cut marks from when it was cut from the wheel; matte and finely striated; self-slipped 5YR 6/3 exterior. RD 12, H 6.8, BD 5.
4. RSPF 103/1, D10.2 [103] bag 6 (2016); highly refined base fragment; the wall has been pressed into a dimple in one place Pale Pink Ware; WM; distinct string cut marks on the resting surface; even pinkish yellow through the section; lustrous 5YR 6/8 slip on the exterior; plain but encrusted interior; parallel lines, perhaps fugitive paint in shallow grooves, run down the exterior wall. BD 10.
5. RSPF 300/2, F9.1 [300] bag 2 (2016); small closed pot fragment with everted rim; WM from refined clay, 5YR 6/3 throughout; Pale Pink Ware; and thin-walled; heavy throwing ridges on the exterior; plain smoothed surfaces. RD 8.
6. RSPF 103/6, D10.1 [103] bag 6 (2016); shallow and very poorly formed pan; flattened and roughly smoothed 10YR 4/1 base; very coarse and poorly levigated 7.5YR 5/2 fabric; Hand-made Coarse Ware (1); folds, voids and grits of mixed size and gritty inclusions in the paste; the floor of the pan has a thin slurry and wet-smoothed 10YR 7/1 surface; poorly formed and pinched pie-crust decoration on the outer face.
7. RSPF 102/55, D10.4 [102] bag 52 (2016); lid fragment; remnant of a conical and hollow knob handle; HM; red 5YR 5/4 clay; poorly levigated with chaff and small to large mixed gritty inclusions; smoothed and slipped 7.5YR 8/2 upper surface though encrusted; very rough chaff scars on the 7.5YR 6/1-5/1 underside; sharp breaks. Edge Dm 14.

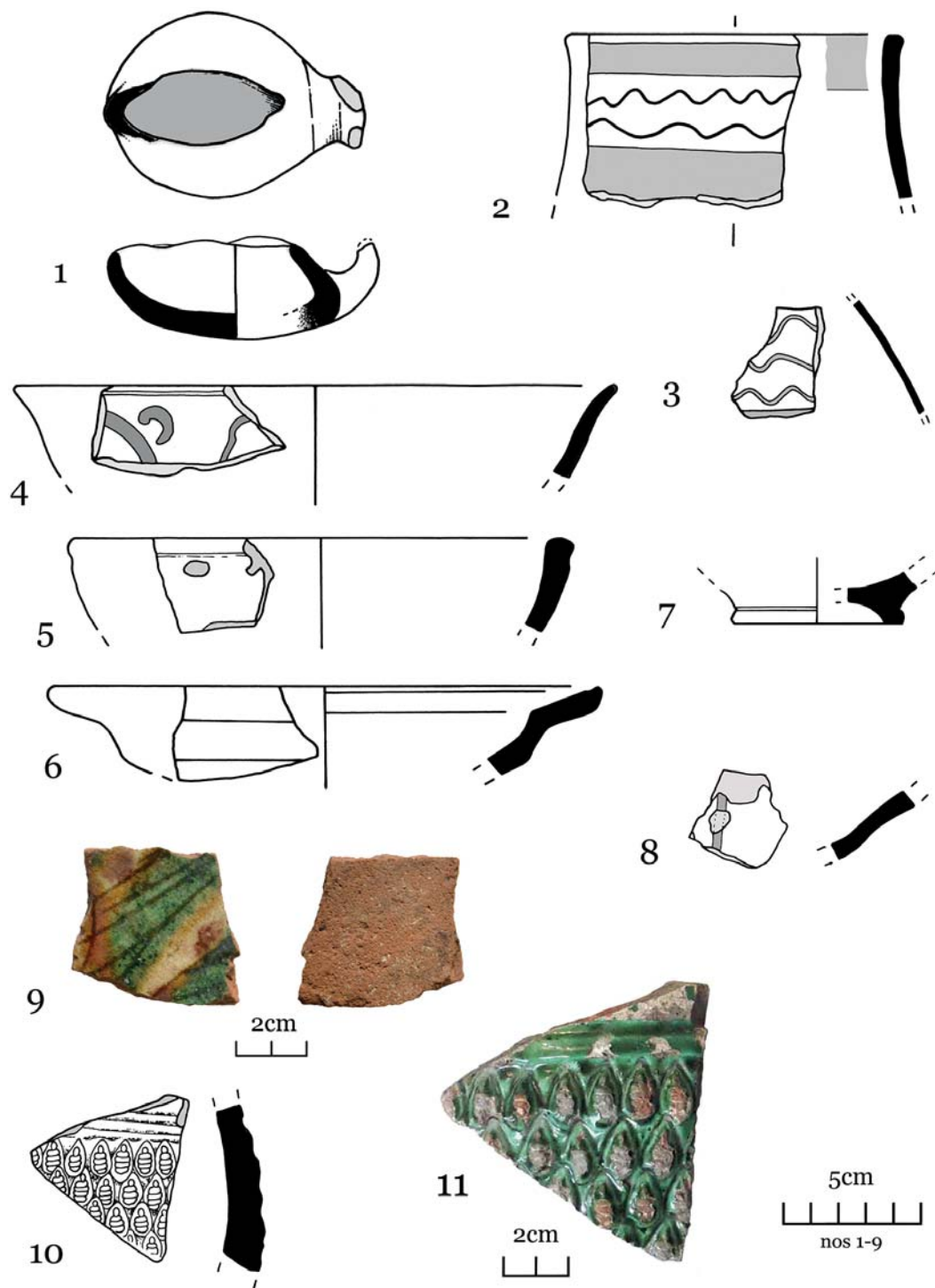
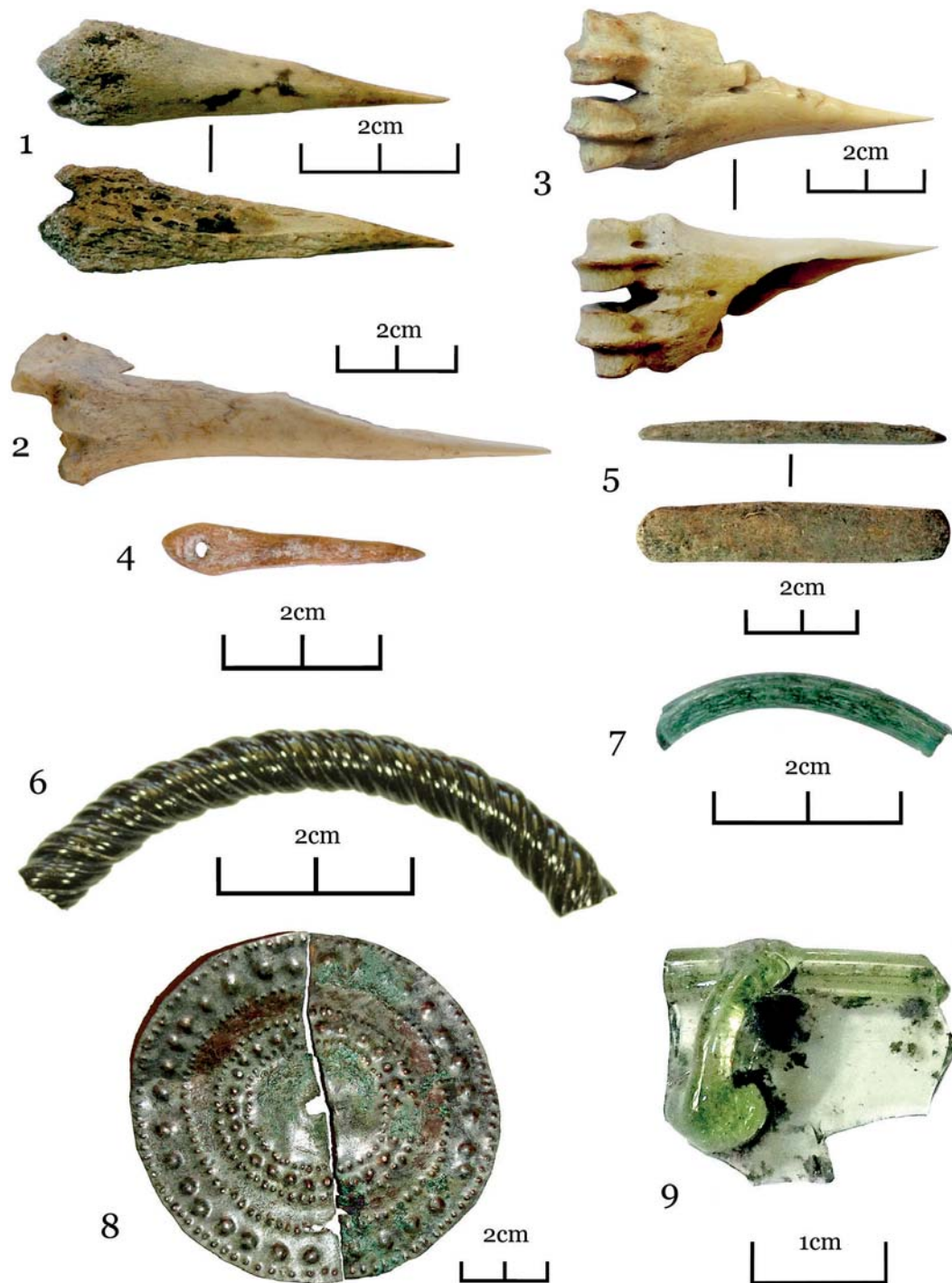


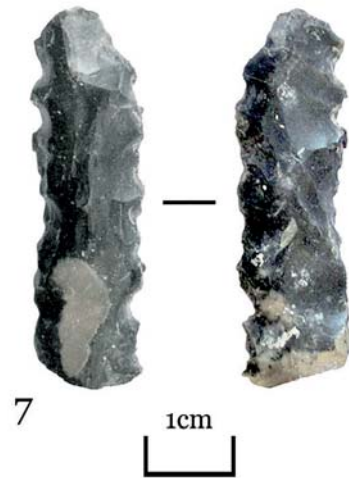
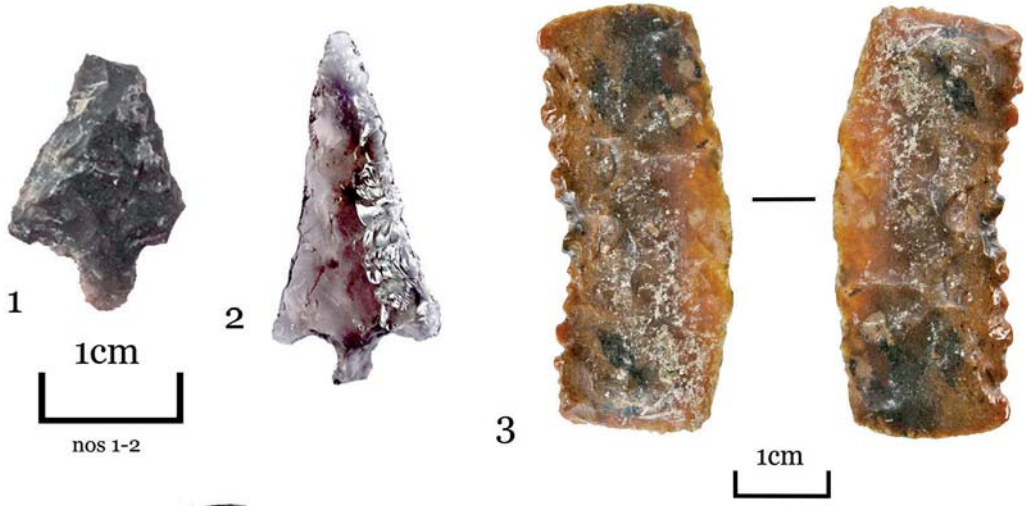
Fig. 45:

1. Slipper-shaped lamp, open top, damaged thumb-plate handle, blackened nozzle from use, RSPF 501/2, D9.4 [501] bag 21 (2016); Complete lamp; extensively smoke blackened lip and down the front of the lamp from use; slightly damaged thumb plate; open top; simple construction with rounded underside; HM from medium coarse red 5YR 5/6 clay; Common Ware (red slip); ware; a large amount of small mixed gritty inclusions; red-slipped 2.5YR 5/6 and matte surface; possible date range 12-13<sup>th</sup> century AD.
2. Tall neck from a jug or flask, thin-walled, pattern burnished bands and wavy lines on the exterior, RSPF 548/1, D9.4 [548] bag 138 (2018); tall narrow neck from a jar; surface treatment has obscured manufacturing technique; uncertain period (Medieval?); grey core firing red 2.5YR 6/6; fine textured clay with fine gritty inclusions in the paste; excellent quality pottery; glossy slip on the exterior in a range of hues-pink to red 2.5YR 6/6 and grey 10YR 5/1; single stroke pattern burnish in wavy lines and burnished wide bands on the exterior and inner mouth; the lower inner 7.5YR 5/2 wall is abraded.
3. RSPF 507/28, D8.1 [507] bag 35 (2016); pattern burnished body fragment probably from the shoulder of a closed vessel; possibly WM, fine reddish 2.5YR 5/4 clay; very thin-walled; smoothed exterior with three burnished 7.5YR 4/4 wavy lines on 7.5YR 4/4 ground; edged by a wide burnished band in the lower section; drab interior.
4. Glazed open bowl fragment, RSPF 103/13, D10.1 [103] bag 9 (2016); glazed rim fragment from a bowl, shallow grooves around the inner mouth; dark brown 7.5YR 2.5/2 ground; paint work in pale peppermint green; WM; highly refined pink 2.5YR 7/6 clay, evenly fired through section; exterior is matte, greenish, mottled 5Y 5/2-4/1 and streaky. RD 22.
5. Glazed open bowl fragment, RSPF 800/1, A10.9 [800] bag 3 (2018); glazed bowl fragment with slightly thickened lip, flattened on the top; WM; mustard-coloured 10YR 6/6 glaze on the interior and exterior; red 10R 6/4 medium-coarse fabric; fine mixed gritty inclusions; hard-fired with sharp breaks.
6. RSPF 153/7, E10.2 [153] bag 129 (2018); Rim from an open shallow plate; broad and sloping rim with a shallow groove on the lip; carinated shoulder; WM, hard fired; semi-fine paste with few visible inclusions, some fine to small white particles; Glazed ware; pale red 10R 6/4 fabric; light red 10R 6/5 self-slipped lower exterior wall; solid green vitreous glaze on the interior over the lip and forming a band around the rim edge. RD 20.
7. Glazed ring base, RSPF 300/14, F9.1 [300] bag 1 (2016); two fragments from a green-glazed vessel, a body and ring foot; Glazed-Green Ware (apple green hue); WM and striated; the glaze has dribbled down onto the exterior of the foot; plain smoothed 5YR 7/4 exterior surface; the fabric is similar to Mid Red Ware; compact red 5YR 6/6 throughout; moderately large amount of mixed fine gritty inclusions; a cream-coloured matte underglaze is exposed in places. BD 6.
8. RSPF 109/5, D10.4 [109] bag 78 (2016); glazed body fragment probably from an open plate, or bowl; decorated on the interior with very pale yellow c.2.5Y 8/1-8/2 ground, dark brown 7.5YR 3/2 line painted obliquely across the wall; WM; even red 2.5YR 6/6 through section; very fine texture with occasional gritty inclusions in the paste; one small dribble line of clear glaze on the smoothed exterior; glazed interior.
9. RSPF 157/1, D10.1 [157] bag 61 (2018); glazed fragment; WM, red gritty clay; streaks of green, yellow and pale reddish glaze on the exterior; plain exterior surface.
- 10-11. RSPF 108/2, D10.1 [108] bag 20 (2016); fragment from a closed vessel with repeating relief pattern; glazed green ware; white underglaze (engobe); deep relief pineapple-like design on the exterior; below two ridges and grooves; WM; very thick walls; plain 10YR 6/3, wheel-striated interior; even pale grey-brown N7/ through the core with red-fired patches; come voids and a small amount of very fine gritty inclusions.



**Fig. 46:**

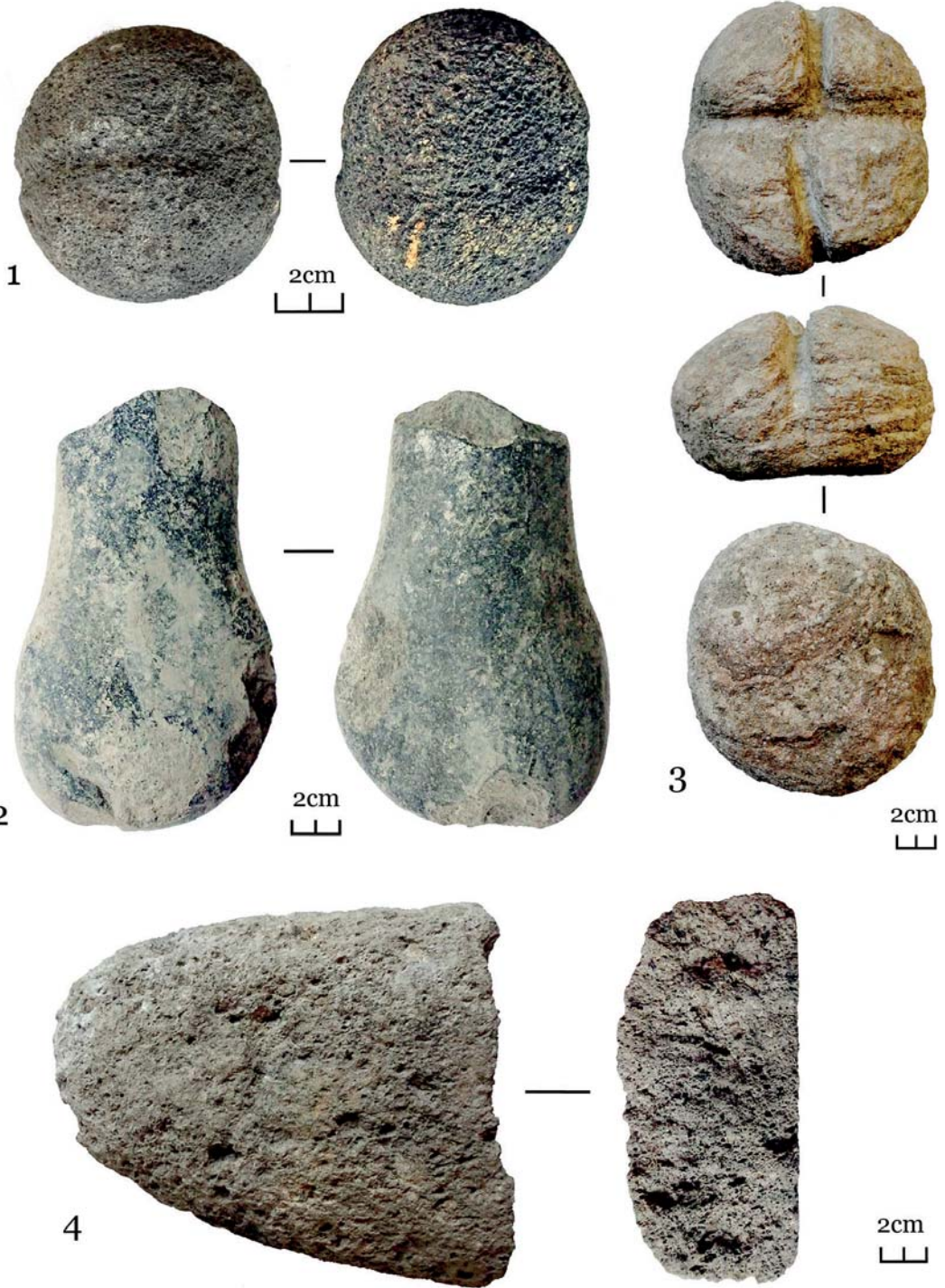
1. Bone point, Art. 132, D10.4 [121] bag 80, obj. 7 (2016).
2. Bone point, Art. 133, D9.4 [510] bag 52, obj. 16 (2016).
3. Bone point, Art. 189, D9.2 [521] obj. 37 (2018).
4. A bone needle, Art. 191, B11.3 [829] bag 87 (2018).
5. Small and thin antler segment, perhaps a clothing toggle, Art. 213, A11.4 [816] bag 75, obj. 25 (2018).
6. Twisted, black glass bangle fragment, Art. 140, D10.1 [130] obj. 10 (2016).
7. Clear pale blue-green possible a bottle handle, Art. 146, D8.1 [507] bag 42 (2016).
8. Bronze boss with concentric circles formed by small raised spots of different sizes, Art 193, D9.4 [548] obj. 45 (2018).
9. Glass cup rim and small handle, Art. 221, D9.2 [212] bag 49, obj. 15 (2018).



**Fig. 47:**

1. Near complete black obsidian tanged arrowhead, tip and possible barbed sides are broken, Art. 187, D9.2 [200] obj. 8 (2018).
2. Complete obsidian arrowhead, pressure-flaked, tanged and barbed, Art. 173, B11.3 [821] bag 76, obj. 24 (2018).
3. Red flint blade with traces of resin and use wear sheen on the denticulate edge Art. 185, A11.4 [804] bag 17, obj. 4 (2018).
4. Black obsidian point, tip broken, Art. 188, B11.3 [806] bag 36, obj. 14 (2018).
5. Red flint blade with denticulate edges, Art. 120, F10.4 [314] bag 73 (2016).
6. White flint denticulate blade, Art. 110, D10.4 [119] bag 54, obj. 4 (2016).
7. Black flint blade with irregular denticulate edges, Art 134, D9.4 [501] bag 14 (2016).



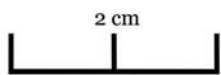


**Fig. 48:**

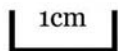
1. Basalt hammer stone with ground groove around the middle, Art. 206, D9.4 [548] obj. 44 (2018).
2. Hammer stone, ground one end to form a handle, broken end and chipped hammer head, Art. 237, B11.3 [806] bag 36, obj. 17 (2018).
3. Basalt cobble with a deeply ground and irregular cross worn in one face, Art. 125, F9.4 [317] bag 88, obj. 44 (2016).
4. Bun-shaped vesicular basalt grinding stone, Art. 177, A10.4 [801] obj. 7 (2018).



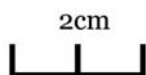
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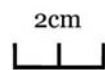
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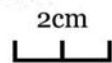
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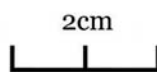
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**Fig. 49:**

1. Miniature hand-made ceramic pot, Art. 112, D9.4 [501] bag 19, obj. 5 (2016).
2. Ceramic object with central hole, possibly a funnel concave top and bottom, hand-made, Art. 194, B11.3 [821] obj. 26 (2018).
3. Weight for textile production, waisted shape with straight hole through the centre, Art 223, F9.2 [200] obj. 12 (2018).
4. Tiny pottery disc, perhaps a stopper for a small flask or a gaming piece, Art. 195, A11.4 [806] bag 44 (2018).
5. Ceramic cylindrical weight with straight hole through the centre, Art. 197, D9.2 [206] bag 11 (2018).
6. Pottery disc, ground smooth on one side from use as a whetstone, Art. 172, A11.4 [804] bag 43 (2018).
7. Pipe, red slipped with comb-impressed and relief, mould-made design, for opium, Art. 108, F9.2 [309] bag 58, obj. 33 (2016).
8. Pipe, refined clay and red-brown slipped and burnished, for opium, Art. 109, F9.2 [309] bag 58, obj. 32 (2016).

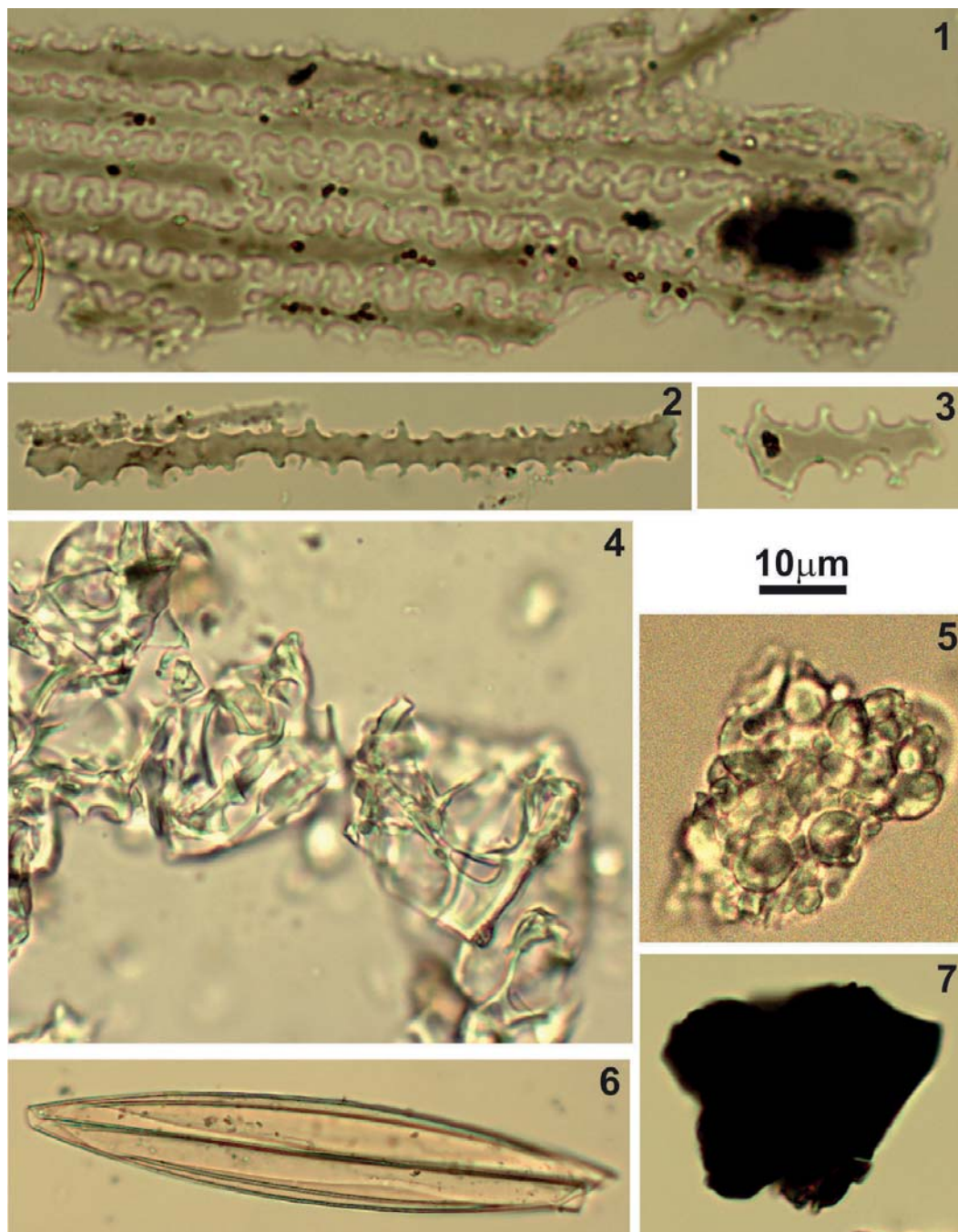


Fig. 50. Rabati settlement NPP of organic samples from the Ovens: 1-3. Dendritic phytoliths; 4. Tephra; 5. Starch; 6. *Spirogyra*; 7. Parenchymal cells of wood.

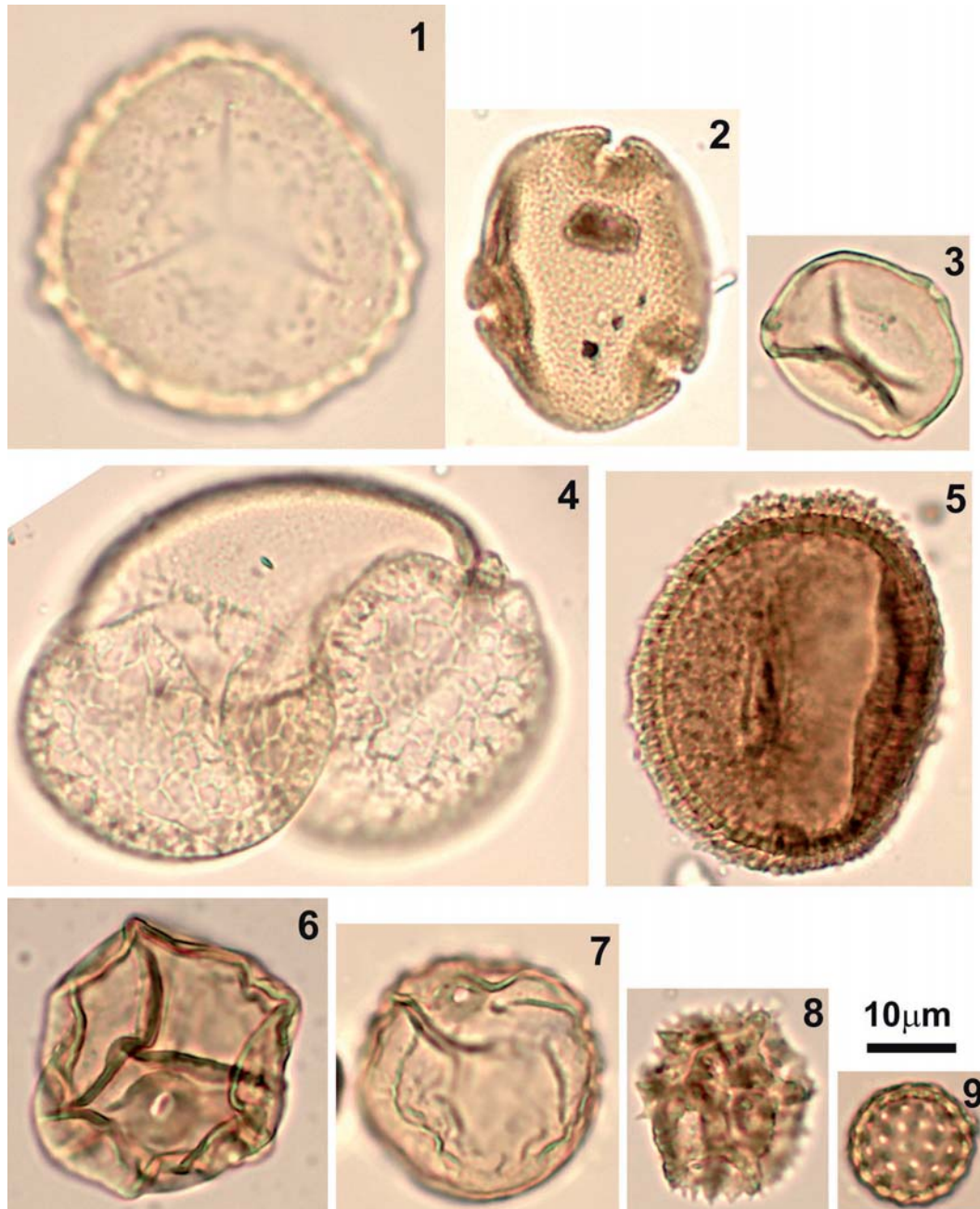


Fig. 51. Rabati settlement Pollen grains and spores on the samples from Pit 1 and 2: 1. *Ophioglossum vulgatum*; 2. *Tilia*; 3. *Corylus*; 4. *Pinus*; 5. *Scabiosa*; 6, 7. Cerealia; 8. Cichorioideae; 9. Chenopodiaceae.