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# Srednjovjekovno naselje na položaju Stara Vodenica kod Jurjevca Punitovačkog

## The mediaeval settlement at the location of Stara Vodenica near Jurjevac Punitovački

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*Na dionici autoceste Đakovo – Osijek 2008. godine istražen je višeslojni lokalitet na položaju Stara Vodenica, kod Jurjevca Punitovačkog, u Osječko-baranjskoj županiji. U radu se donosi pregled keramičkog posuđa i tri metalna nalaza iz srednjovjekovnog horizonta na temelju čijih se odlika ostaci ovoga ruralnog naselja datiraju u 12. i početak 13. stoljeća.*

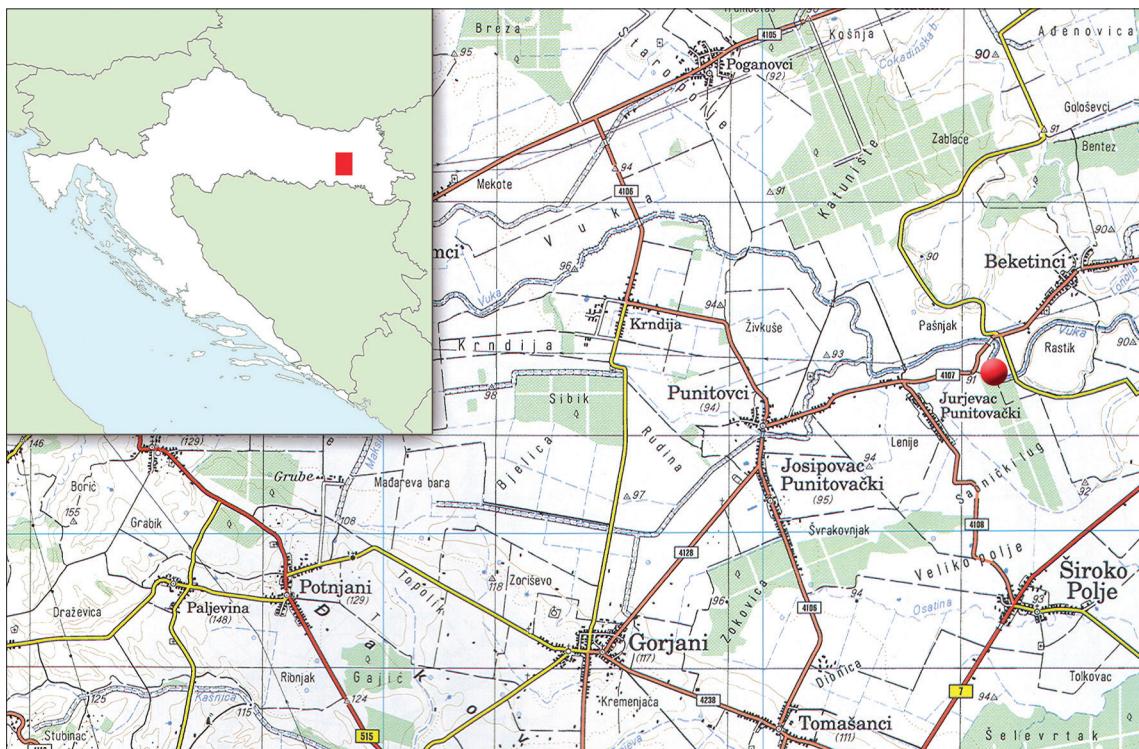
*Ključne riječi: Slavonija, zaštitno istraživanje, razvijeni srednji vijek, naselje, bunar, keramika, metal*

Arheološko istraživanje na položaju Stara Vodenica kod Jurjevca Punitovačkog, u plodnoj ravnici između Đakova i Osijeka, obavljeno je u proljeće 2008. godine u vrijeme intenzivnih radova na brojnim lokalitetima na trasi autoceste Beli Manastir –

*In 2008, a multistrata site at the location of Stara Vodenica, near Jurjevac Punitovački in the county of Osijek-Baranja was excavated on the section of the Đakovo – Osijek motorway. This work presents an overview of pottery and three metal finds from the mediaeval period, on the basis of which the remains of this rural settlement can be dated to the 12<sup>th</sup> and early 13<sup>th</sup> century.*

*Keywords: Slavonia, rescue excavation, High Middle Ages, settlement, well, pottery, metal*

The archaeological research of the site at Stara Vodenica near Jurjevac Punitovački, located in the fertile valley between Đakovo and Osijek, was conducted in 2008 during the period of intensive works on numerous localities located on the section of the Beli Manastir – Osijek – Svilaj



Slika / Figure 1: Položaj lokaliteta / Position of the site (prema / according to: *Veliki atlas Hrvatske*, Zagreb, Mozaik knjiga, 2002, M 1:100 000)

Osijek – Svilaj (sl. 1).<sup>1</sup> Na površini od 16.000 m<sup>2</sup> pronađeni su ostaci naselja iz razdoblja eneolitika, brončanog doba i srednjeg vijeka.<sup>2</sup> Srednjovjekovni objekti, iako raspršeni, više su koncentrirani u sjevernom dijelu iskopa, s pretpostavkom da je dio objekata ostao neistražen izvan zadane trase u smjeru zapada (sl. 2).<sup>3</sup> Na temelju pokretnih nalaza i radiokarbonskih analiza, evidentirano je 44 manjih ili većih, uglavnom plitkih jama i jedan bunar. O samoj strukturi naselja nije moguće donositi čvrste zaključke budući da je ono definirano samo djelomično. Zbog strogo ograničene površine iskopa, riječ je o uobičajenoj pojavi koja je zabilježena na ve-

motorway (Figure 1).<sup>1</sup> Remains of a settlement from the period of the Copper Age, Bronze Age and Middle Ages were found on an area of 16,000 m<sup>2</sup>.<sup>2</sup> Although dispersed, the mediaeval objects are largely concentrated in the northern part of the excavation site, assuming that one part of the objects remained unexcavated beyond the designated section in the direction of the west (Figure 2).<sup>3</sup> On the basis of mobile finds and radiocarbon analyses, 44 pits (of differing size, most of them shallow) and one well were recorded. As for the structure of the settlement itself, it is not possible to come to any definite conclusions as the settlement has been defined

<sup>1</sup> Ispred Arheološkog muzeja u Zagrebu voditeljica istraživanja bila je dr. sc. Jacqueline Balen kojoj zahvaljujem na ustupljenoj gradi i terenskoj dokumentaciji. Crteže keramike (T. 1-10), kao i uzorke ukrasa u akvarelu (T. 11), izradio je Krešimir Rončević, osim crteža na T. 5: 7 i T. 10: 4-6 koje je izradila Miljenka Galić.

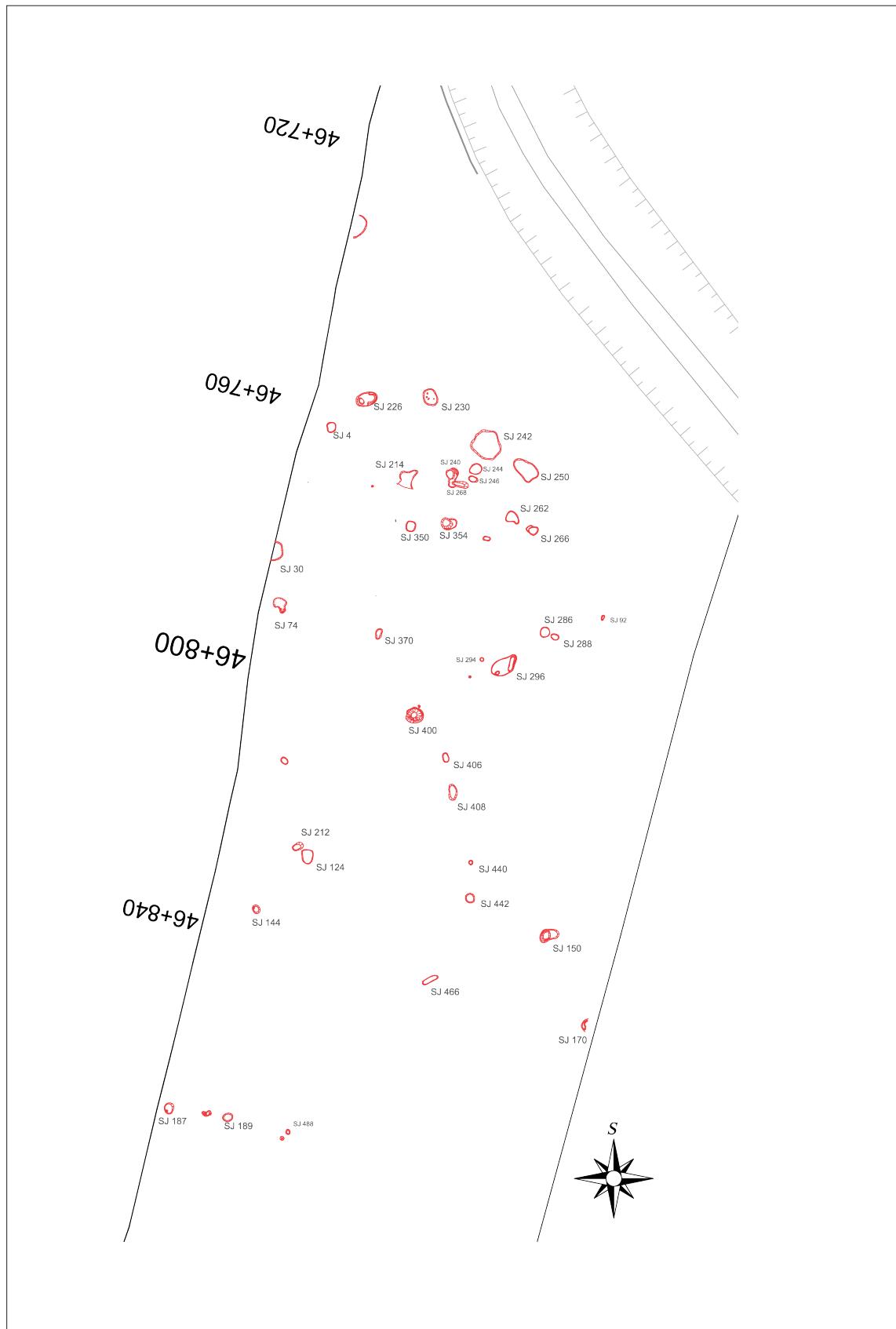
<sup>2</sup> Balen 2008, 33, 34; 2009, 56, 58.

<sup>3</sup> Na planu se nalazi broj stratigrafske jedinice ukopa objekta, koji je uvijek za jedan broj veći od zapune istog objekta, čiji se brojevi navode uz tabele. Prikazani su samo srednjovjekovni objekti. Cjelokupan plan istraženog lokaliteta prikazan je u Bunčić 2012, 196, sl. 2.

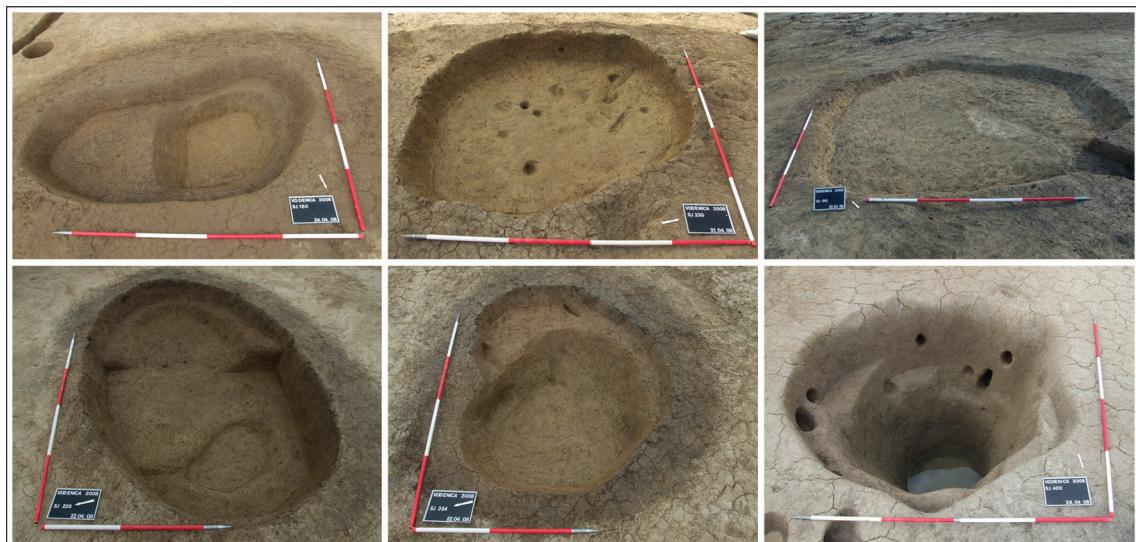
<sup>1</sup> In front of the Archaeological Museum in Zagreb, the research leader was dr. sc. Jacqueline Balen, who I would like to thank for the materials and field documentation she provided. The pottery drawings (Pl. 1-10) and the sketches of the ornamentations in watercolour (Pl. 11) were created by Krešimir Rončević, with the exception of the drawings on Pl. 5: 7 and Pl. 10: 4-6, which were created by Miljenka Galić.

<sup>2</sup> Balen 2008, 33, 34; 2009, 56, 58.

<sup>3</sup> The plan provides the number of the stratigraphic unit of the object burial, which is always greater than the fill of the same construction by one, the numbers of which are stated by the tables. Only mediaeval objects are depicted. The entire plan of the researched locality is shown in Bunčić 2012, 196, Fig. 2.



Slika / Figure 2: Plan naselja / Settlement plan (izradila / created by A. Solter)



Slika 3: Oblici objekata / Structure shapes (Sj 150, 230, 242, 226, 354, 400) (snimila / photo by I. Turčin)

čini lokaliteta takvoga tipa.<sup>4</sup> Prethodni poljoprivredni radovi, kao i strojno uklanjanje humusa, također su djelomično pridonijeli uništavanju originalnih srednjovjekovnih površina. Posljedica toga je mali broj evidentiranih stupova, a kada se govori o vrstama objekata, također je teško precizno odrediti njihovu namjenu. Dodatno pitanje otvara se i zbog sadržaja jama, odnosno velike količine keramičkih projektila u njima, zbog kojih je i ranije proizašla interpretacija o perifernom dijelu nekoga većeg naselja ili o privremenom staništu.<sup>5</sup>

Riječ je uglavnom o okruglim, ovalnim ili izduženim ukopanim objektima, s ravnim ili lagano zakošenim stijenkama, najčešće ravnim dnom i ukopanim stupom ili manjom jamom u jednom dijelu objekta. Dubine istraženih objekata iznose od 20 cm do pola metra, osim bunara čija dubina prelazi 2 m. Smješten je otprikljike u sredi-

only partially. Due to the strictly limited area of the excavation site, this is a commonplace occurrence that has been recorded at most localities of this type.<sup>4</sup> Previous agricultural works and the machine removal of humus also contributed to the devastation of the original mediaeval areas. The small number of recorded posts is a consequence of this, and it is also difficult to ascertain the purpose of certain types of objects. The content of the pits, i.e. the large quantities of clay projectiles found inside them, open additional questions – ones from which the hypothesis of it being a peripheral part of a larger settlement or temporary habitat has already stemmed.<sup>5</sup>

These are mostly round, oval or elongated sunken structures with straight or mildly slanted walls, mostly with flat bottoms and a dug post or smaller pit in one part of the structure. The depth of the examined objects is between 20 cm and half a metre, with the exception of the

<sup>4</sup> U Peštanskoj županiji (Mađarska) ustanovljena je situacija koja se djelomično može usporediti i sa situacijom na našim autocestama. Istraženo je mnogo lokaliteta, osobito onih iz ranog i razvijenog srednjeg vijeka, koji se pojavljuju svakih nekoliko stotina metara te je teško reći gdje jedno naselje počinje, a gdje završava. No tamo je ustanovljen naseobinski fenomen velikog intenziteta, grupiranje kuća koje zajedno čine središta obližnjih nalazišta ili veće naseobinske jedinice. Karakterizira ih i sustav pravokutnih kanala koji su okruživali kuću ili nekoliko njih (Racz 2010, 79). Općenito, objekti su puno jasnije definirani i bolje sačuvani.

<sup>5</sup> Bunčić 2012, 207.

<sup>4</sup> In the Pest County (Hungary), a situation that is, in part, similar to the condition on our motorways has been ascertained. Numerous sites were investigated, particularly localities from the Early and High Middle Ages, which appear every several hundred metres and make it difficult to determine where one settlement begins and the other ends. However, a settlement phenomenon of great intensity was determined there, with house groupings that create the centres of the nearby finding sites or larger settlement units. They are also characterised by a system of rectangular canals that surrounded one or several houses (Racz 2010, 79). Generally speaking, the objects are much more clearly defined and better preserved.

<sup>5</sup> Bunčić 2012, 207.

ni lokaliteta, dok se prema jugu smanjuje intenzitet objekata. Bunar je jednostavna okrugla jama (vel. 2,3 x 2,7 m), bez čvrste unutarnje konstrukcije, odnosno oplate, ali s nekoliko rupa za kolce u gornjem dijelu koji su vjerojatno bili sastavni dio sustava za vađenje vode. S obzirom na problem izbijanja vode prilikom iskopa, on je ispranžnjen do dubine od 2,23 m.<sup>6</sup> Iako su izvori blizu, bunari se kopaju u naseljima, i to često uz izvore. Također, nije neobično da se u jednome naselju nalazi više bunara. Na trasi su spomenute autoceste pronađeni bunari istoga tipa u obližnjim Stružanima (iako bez konkretne datacije i plana naselja, gdje bismo vidjeli u kojem je odnosu prema pretpostavljenim stambenim objektima)<sup>7</sup> i u Beketincima (naselju koje je kronološki mlađe, ali su bunari tipološki isti – bez sačuvane drvene konstrukcije).<sup>8</sup> Izravne analogije potječu i s istraživanja kod mjesta Lebény (okolica Győra, Mađarska), gdje su pronađeni srednjovjekovni bunari istoga oblika – kružni tlocrt i cilindričan ukop bez drvene konstrukcije, a čije su dubine iznosile između tri i pet metara. Prema sadržaju zapuna, njihov se nastanak smješta najranije na prijelaz s 11. u 12. stoljeće. Nekoliko je takvih objekata u kojima se pojavljuje i keramika koja se datira i do početka 13. stoljeća.<sup>9</sup> U srednjovjekovnom naselju kod Kisunkfélegyháze (Bačko-kiškunska županija, Mađarska) istražena su četiri bunara dati-

well whose depth exceeds 2 metres. It is located near the centre of the site, and the intensity of structures decreases towards the south. The well is a simple round pit (dimensions 2.3 x 2.7 m) without any solid interior construction, i.e. lining, though it features several holes for stakes on the upper part, which were most likely a part of the system for grabbing water. To resolve the problem of water spurting out during excavation, the well was emptied down to a depth of 2.23 m.<sup>6</sup> Although sources are located nearby, wells are dug in villages, and often in close proximity to a source. Likewise, it is not unusual for one settlement to have several wells. Wells with the same features were discovered on the section of the aforementioned motorway, in the nearby settlement of Stružani (through without any definite dating or settlement plan that would provide insight into its relationship with the assumed residential objects)<sup>7</sup> and Beketinci (a settlement that is chronologically later, but has the same type of wells – without any preserved wooden construction).<sup>8</sup> Direct parallels can be drawn to the research near the site of Lebény (Győr surroundings, Hungary), where mediaeval wells of the same shape were found – circular layout and cylindrical hole without a wooden construction, and with a depth between three and five metres. According to the content of the fill, their creation can be dated to the turn of the 12<sup>th</sup> century. There are several

<sup>6</sup> Bunčić 2012, 196, Sl. 3. Bunari su u posljednje vrijeme postali jednim od standardnih interpretacijskih pitanja srednjovjekovnih naselja. Značaj bunara (njihova brojnost, raznolikost oblika i struktura, kronološki okviri i sl.) posebno je istaknut zahvaljujući iskopavanjima velikih površina na zaštitnim istraživanjima – pokazalo se to osobito u Mađarskoj, ali i u Hrvatskoj. Stoga je bilo moguće na temelju velikog uzorka napraviti morfološku klasifikaciju bunara prema nekoliko kriterija (Vaday 2003, 25, 30, 31; Takács 2010, 67).

<sup>7</sup> Pronađeno je ukupno 6 bunara ovalnih u tlocrtu, promjera 2 – 2,5 m i dubine 3 – 5 m. Često su ljevkasti prema dnu. Većina je bez unutrašnje konstrukcije dok uokolo imaju stupove – dakle, postojala je neka nadzemna konstrukcija. Samo je jedan imao unutrašnju drvenu oplatu. Lozuk 2011, 21, 22.

<sup>8</sup> Istraženo je pet bunara u radioničkom dijelu naselja. Tlocrtno su kružni, promjera 1,5 – 2 m, bez drvene konstrukcije. Međutim, i oni su iskopani samo do 1,5 m dubine, što otvara mogućnost da su oplate ipak postojale jer je u tome periodu ipak njihova pojавa češća (primjerice, u Stariim Perkovcima, Petrijevcima i Josipovcu – Filipec 2009, 31, 55, 63). Minichreiter, Marković 2013, 232.

<sup>9</sup> Nemeth-Takacs 2003, 104, 107.

<sup>6</sup> Bunčić 2012, 196, Fig. 3. Recently, wells have become one of the standard questions of interpretation when it comes to mediaeval settlements. The importance of wells (their number, differences in shape and structure, chronological framework etc.) is particularly prominent due to the excavation of large areas as part of rescue excavations – and this has proven to be the fact both in Hungary and in Croatia. Thus, owing to the size of the sample, it was possible to create a morphological classification of wells according to several criteria (Vaday 2003, 25, 30, 31; Takács 2010, 67).

<sup>7</sup> A total of 6 oval wells were found in the layout, with diameters ranging between 2 and 2.5 m and a depth of 3 to 5 m. They are often funnel-shaped towards the bottom. Most of them do not feature any internal construction and are surrounded by posts – meaning that some kind of above-ground construction had existed. Only one of the wells featured a wooden lining. Lozuk 2011, 21, 22.

<sup>8</sup> Five wells in the workshop part of the settlement were investigated. They feature a circular layout and a diameter ranging between 1.5 to 2 metres, without any wooden constructions. However, they were excavated only down to a depth of 1.5 metres, which opens the possibility that a lining existed after all, as they began appearing more frequently during this period (for example, in Stari Perkovci, Petrijevci and Josipovac – Filipec 2009, 31, 55, 63). Minichreiter, Marković 2013, 232.

rana u drugu polovinu 12. stoljeća. Njihove su konstrukcije sadržavale oplate od plete-ra i dasaka,<sup>10</sup> a bunari su bili smješteni da-lje od kuća. Zanimljiva je činjenica da su zapune tih bunara oskudijevale materijalom, što prije svega ukazuje na važnost njihova čišćenja kako bi se održala čistoća vode za stanovništvo i stoku.<sup>11</sup> U tome smislu, kada je riječ o bunaru iz naselja na Staroj Vodenici, može se ustavoviti da je bio namjerno zatrpan. Sadržavao je više od deset kila keramičkih projektila, više od 300 ulomaka keramike te manji broj kamenog i koštanog materijala.<sup>12</sup> Razlozi zatrpanja mogu biti razni, a pojedine su mađarske situacije do-kazale da su zatrpanje ili kontaminacije bunara vezane uz određene ratne epizode.<sup>13</sup>

Ulomci keramičkog posuđa čine najbrojniju skupinu nalaza u zapunama objekata iako njihova zastupljenost u odnosu na veličinu objekta nije uvijek proporcionalna. Tako su, primjerice, pojedini objekti, koji se mogu opisati kao srednje veliki (Sj 370, 406, 408) ili veliki (Sj 296), sadržavali manje od 10 ulomaka keramike.<sup>14</sup> Kao specifičnost, u ovome se naselju ističu velike količine cijelih i fragmentiranih keramičkih projektila za praćku koji su bili tema zasebnog rada pa se o njima ovdje neće raspravljati.<sup>15</sup> Za-stupljeni su još i rijetki metalni (karičica, nož, strelica) i keramički (ulomci pršljena) nalazi.

Najviše je keramičkog materijala pronađeno u zapuni bunara (Sj 399) smještenoga u sredini istražene površine, a uokolo njega, iako udaljene, upravo su se nalazile gore navedene jame s vrlo malo keramike. Kao najbogatija zatvorena cjelina, s četvrtinom

such structures that feature pottery that can be dated to the early 13<sup>th</sup> century.<sup>9</sup> In the mediaeval settlement near Kiskunfélegyháza (Bács-Kiskun County, Hungary), four wells dating to the sec-ond half of the 12<sup>th</sup> century were excavated. Their constructions featured a lining made of wicker and planks,<sup>10</sup> while the wells themselves were located at a distance from the houses. It is interesting that the fills of these wells were scarce in material which, above all, indicates the importance that was bestowed upon their cleaning in order to keep water for human and cattle consumption uncontaminated.<sup>11</sup> In this sense, when it comes to the well from the settle-ment in Stara Vodenica, it can be said that it was filled on purpose. It contained more than ten kilos of clay projectiles, over 300 pottery sherds and a smaller amount of stone and bone materi-al.<sup>12</sup> The reasons for its filling can be numerous, while some examples from Hungary proved that the filling or contamination of wells was related to certain military events.<sup>13</sup>

Pottery sherds comprise the most numerous group of finds in the object fills, though their presence in relation to the size of the structure is not always proportional. Thus, for example, certain structures that can be described as me-dium-size (Sj 370, 406, 408) or large (Sj 296), contained less than 100 pottery sherds.<sup>14</sup> A specific feature by which this settlement distin-guishes itself is the large amount of whole and fragmented clay projectiles for slings, which were the topic of a separate paper and therefore shall not be discussed here.<sup>15</sup> Few metal (cir-clet, knife, arrow) and ceramic (spindle whorls) finds were also present.

Most of the ceramic finds were discovered in the fill of the well (Sj 399) located in the centre of the excavated area while, at a certain distance

<sup>10</sup> Upravo je ovaj tip bunara najčešći u razdoblju od 10. do 13. stoljeća i, prema M. Takácsu, pripada drugoj skupini (Takács 2010, 67).

<sup>11</sup> Somogyvari 2003, 187, 190.

<sup>12</sup> Bunčić 2012, 196-199.

<sup>13</sup> Vaday 2003, 42.

<sup>14</sup> Ukupno je 36 objekata sadržavalo keramičke ulomke, od kojih je u 16 bilo manje od 10 ulomaka.

<sup>15</sup> Bunčić 2012. U tome se radu donose detaljniji podaci o ovome lokalitetu, a koji se stoga neće ovdje ponavljati, barem ne u potpunosti. Primjerice, popis drugih srednjovjekovnih lokaliteta u okolini, tablica s popisom objekata i nalaza unutar njih i sl.

<sup>9</sup> Nemeth-Takacs 2003, 104, 107.

<sup>10</sup> This type of well appeared most frequently between the 10<sup>th</sup> and 13<sup>th</sup> century and, according to M. Takács, belongs to the second group (Takács 2010, 67).

<sup>11</sup> Somogyvari 2003, 187, 190.

<sup>12</sup> Bunčić 2012, 196-199.

<sup>13</sup> Vaday 2003, 42.

<sup>14</sup> A total of 36 structures contained pottery sherds, out of which 16 contained less than 20 sherds.

<sup>15</sup> Bunčić 2012. This paper provides more detailed informa-tion on this site, and therefore I will not reproduce all this information here, at least not in its entirety. It, for example, provides a list of other mediaeval sites in the vicinity, a table with a list of finds discovered in them, etc.



Slika / Figure 4: Rekonstruirani lonci iz zapune bunara / Reconstructed pots from the well fills (Sj 399) (snimila /photo by M. Bunčić)

ukupno pronađene keramike,<sup>16</sup> ovaj bunar daje dobar pregled zastupljenosti oblika i ukrasa na posudu. Od 309 ulomaka keramike, 60 ih pripada rubovima, 218 ulomcima tijela, a 28 je ulomaka dna posuda. Tri su lonca koje je moguće rekonstruirati (T. 1: 1-3). Rubovi su lonaca jednostavne profilacije, ravno ili koso odrezani prema van, a pojavljuju se i raščlanjeni rubovi s plitkim žlijebom i zaobljenom donjom usnom (T. 1-3). Prevladava grublja faktura, kao uostalom i u cijelokupnom inventaru, s primjesama većih ili manjih kamenčića. Boje su posuda pretežno tamnije, smeđe ili tamnosive, no površine lonaca često su neujednačene i imaju širok spektar boja i nijansi. Od funkcionalnih oblika najzastupljeniji su lonci koji mogu imati najveću širinu u gornjem dijelu, na prijelazu ramena u trbuš ili na sredini (T. 1: 1-2, 4, 5; T. 2:7) te izduženi oblici s nenaglašenim trbušom (T. 1: 3; T. 2: 6; T. 3: 4). Razlikuju se svojim dimenzijama pa se mogu izdvojiti mali lonci (T. 1: 7, 8; T. 2: 2, 4; T. 3: 2, 6), srednje veliki lonci (T. 1: 1-3; T. 2: 3, 5-9; T. 3: 3) i veliki lonci (T. 1: 6; T. 3: 1, 4, 5, 8, 9).<sup>17</sup> Više od polovice rubnih ulomaka lonaca imaju dovoljne dimenzije za izmjjeru promjera posude (38 kom.), stoga je najveća količina rubova svrstana u kategoriju

<sup>16</sup> Ulomci posuda iz bunara znatno su veći u odnosu na većinu ulomaka iz drugih objekata pa, iako brojčano oni čine četvrtinu ukupnog broja ulomaka, volumenom je njihov odnos podjednak.

<sup>17</sup> Mali lonci imaju promjer otvora manji od 15 cm, srednje veliki 15 – 20 cm, a veliki veći od 20 cm. Podjela je malo pojednostavljena u odnosu na podjelu prema Sekelj et al. 2005, 150, gdje je uključena još jedna kategorija između srednjih i velikih lonaca.

around it, the aforementioned pits containing a very small amount of pottery were located. As the richest closed unit that contained a quarter of all of the discovered pottery,<sup>16</sup> this well provides a good overview of the representation of pottery forms and decorations. Out of the 309 pottery sherds, 60 of them are rim sherds, 218 are body sherds and 28 are base sherds. Three pots can be reconstructed (Pl. 1: 1-3). The pot rims are of a simple profile, cut straight or at an outwards angle, while fragmented rims with a shallow groove and rounded lower lip also appear (Pl. 1-3). As in the entire inventory, a coarser facture dominates, with the admixture of smaller and larger pebbles. The vessels are largely darker in colour, i.e. brown or dark grey, but the pot surfaces are often irregular and feature a broad spectrum of colours and shades. When it comes to the functional forms, pots that are widest in the upper part, at the transition from the shoulder to the body or at the centre (Pl. 1: 1-2, 4, 5; Pl. 2:7) and elongated forms with an unaccentuated body (Pl. 1: 3; Pl. 2: 6; Pl. 3: 4) appear most frequently. They are of different dimensions and can be grouped into small pots (Pl. 1: 7, 8; Pl. 2: 2, 4; Pl. 3: 2, 6), medium-size pots (Pl. 1: 1-3; Pl. 2: 3, 5-9; Pl. 3: 3) and large pots (Pl. 1: 6; Pl. 3: 1, 4, 5, 8, 9).<sup>17</sup> More than a half of the rim sherds of the pots are large enough to measure the diameter of the

<sup>16</sup> The pottery sherds from the well are significantly larger than that from other structures and therefore, though they number only one quarter of the total number of fragments, they are equal in volume.

<sup>17</sup> The diameter of the opening is under 15 cm on the smaller pots, between 15 to 20 cm on the medium pots and over 20 cm on the larger ones. This is a somewhat simpler classification than that by Sekelj et al. 2005, 150, which includes another category between medium and large pots.

srednjih lonaca (16), dok je udio malih i velikih jednak (11). Kod velikih lonaca ističu se pak dva vrlo velika lonca (pitosa) za čuvanje hrane (T. 3: 8, 9). Drugi oblik posuđa, koji se pojavljuje u ovoj cjelini, ali i u nekim drugima, jest poklopac (T. 4: 1-3). Riječ je o jednostavnim koničnim formama, s ravnim vrhom bez drške, a takvo je posuđe moglo imati dvostruku funkciju i služiti također kao zdjela.<sup>18</sup> Najviše je ulomaka ukrašeno jednostrukom valovnicom, dok su u manjoj mjeri prisutni ukrasi jednostrukе vodoravne linije, kotačića i oznake na dnu lonca u obliku križa. Radiokarbonska analiza načinjena je iz dva uzorka zapune bunara koja su dala vrlo širok raspon od početka 10. do sredine 13. stoljeća (95% vjerojatnosti), odnosno od kraja 10. do početka 13. stoljeća (68% vjerojatnosti) (tab. 2).

Ukratko, slijedi još kratak pregled objekata koji su sadržavali veći broj keramičkih ulomaka. Jama, koja se nalazila u jugoistočnom dijelu lokaliteta (Sj 150), također je, kao i bunar, prilično izolirana. Ovalnog je oblika, s dubljim ukopom u zapadnom dijelu (sl. 3). Dužine 3 m i širine 1,6 m, orijentirana je u smjeru istok – zapad. U zapuni jame (Sj 149) pronađeno je 85 ulomaka keramike, od kojih je 17 rubova, 62 ulomka tijela i 6 dna posuda. Profilacija rubova također je jednostavna, koso su odrezani prema van ili s blagim žlijebom. Zastupljeni su lonci manjih (T. 4: 10) i srednjih dimenzija (T. 4: 9, 11) i jedan vrlo veliki s promjerom većim od 30 cm (T. 4: 8). Četiri rubna ulomka pripadaju dvama poklopциma (T. 4: 5, 7). Od ukrasa prevladava valovnica, a tek je nekoliko ulomaka ukrašeno vodoravnom linijom i jedan s njihovom kombinacijom. Radiokarbonska analiza za ovaj je objekt također dala širok raspon s najstarijim datumom od sredine 11. stoljeća te najmlađim oko sredine 13. stoljeća (95% vjerojatnosti) odnosno 1160. – 1220. godine (68% vjerojatnosti) (tab. 2).

<sup>18</sup> O ovome će biti još kasnije riječi, no činjenica je kako su posrijedi malobrojni nalazi, i to uglavnom ulomci. Prema M. Takácsu, svi navedeni pripadali bi vjerojatnije zdjelama tipa 1 i 2, a ne poklopциma čiji se razvoj intenzivnije prati od 13. stoljeća, iako se već i ranije na unutrašnjim stranama lonaca pojavljuju utori za poklopce. Takács 1996, 163, 167, 179-181, 184, Abb. 19.

pot (38 pieces), thus the greatest part of the rims were sorted into the category of medium-size pots (16), while the number of small and large pots is equal (11). Out of the large pots, two very large pots (pithoi) for storing food distinguish themselves (Pl. 3: 8, 9). The other form of pottery that appears in this unit (and some other units, as well), is the lid (Pl. 4: 1-3). These are very simple conical forms with a flat top and without a handle, and such vessels might have been dual-purpose and also served as bowls.<sup>18</sup> A greater part of the sherds are decorated with a single wavy line, while single horizontal line ornaments, wheel and cross-shaped marks at the bottom of the pot are present to a lesser extent. Radiocarbon analysis was performed for two well fill samples, and the results indicated a wide time frame – from the early 10<sup>th</sup> century to the mid-13<sup>th</sup> century (95% probability), i.e. from the late 10<sup>th</sup> century to the early 13<sup>th</sup> century (68% probability) (Table 2).

To summarise, a short overview of the structures that contained the greater part of the pottery sherds will now be presented. The pit that was located in the southeast part of the site (Sj 150) was, just like the well, quite isolated. Its shape is oval, deeper dug in the western part (Fig. 3). Its length is 3 m and its width is 1.6 m, and it is oriented east to west. 85 pottery sherds were found in the fill of the pit (Sj 149), out of which 17 were rim sherds, 62 were body sherds and 6 were bottom sherds. The profiling of the rims is simple, they are cut at an outwards angle or with a slight groove. Smaller (Pl. 4: 10) and medium-size pots (Pl. 4: 9, 11), together with one very large pot with a diameter over 30 cm (Pl. 4: 8) are represented. Four rim sherds belong to two lids (Pl. 4: 5, 7). Wavy lines dominated in the ornamentation, with only several sherds decorated with a horizontal line, and one decorated with a combination of the two. Radiocarbon analysis for this object also yielded a wide time frame, with the oldest period dating to the mid-11<sup>th</sup> century and the youngest dating to approximately the mid-13<sup>th</sup> century (95%

<sup>18</sup> There will be more word about this later, but the fact remains that these finds are few, and most of them are sherds. According to M. Takács, all of the aforementioned would most likely be classified as type 1 and 2 bowls, and not lids, as the development of the latter became more intense in the 13<sup>th</sup> century, though grooves for lids appear on the inside of pots earlier than this, as well. Takács 1996, 163, 167, 179-181, 184, Abb. 19.

U sjevernom je dijelu lokaliteta koncentriрано неколико objekata. Najveći je među njima Sj 242, plitko (28 cm) ukopana velika jama (vel. 4,78 x 4,34 m) ravnog dna i blago ukošenih stijenki. Od 104 keramička ulomka u zapuni jame (Sj 241), opet najveći broj pripada ulomcima tijela posuda (83), dok su rubni (13) i dna (8) zastupljeni u manjem broju. Rubovi lonaca i ovdje su jednostavne forme – ravno odrezani ili s plitkim žlijebom, ali je prisutan i jedan zaobljeni rub (T. 5: 7). Lonci pripadaju skupini srednje velikih, a jedan manji ulomak finije fakture, ukrašen plitkom češljastom valovnicom, mogao bi pripadati poklopcu (T. 5: 3). U ovom je objektu, uz prevladavajuću valovnicu, prisutno ukrašavanje vodoravnom linijom i gustim linijama utisnutog kotačića. Radiokarbonska je analiza uzorka iz ove zapune ovoga puta dala nešto manji raspon datuma od početka 11. do druge polovine 12. stoljeća (tab. 2).

Uz istočni rub sjevernog dijela naselja smještila se plitka (34 cm), ovalna jama (Sj 250), dužine 3,94 m i širine 2,98 cm, pružajući se u smjeru sjeveroistok – jugozapad. Zapuna je jame (Sj 249) sadržavala 114 ulomaka keramike od kojih samo 10 rubova i 10 dna, dok je ostalih 94 pripadalo dijelovima tijela posuda. Rubovi lonaca i jednog poklopca (ili zdjele) najjednostavnije su forme – izvučeni i koso su odrezani prema van (T. 5: 8, 10; T. 6: 2) ili zaobljeni i malo zadebljani na vanjskoj strani (T. 5: 9; T. 6: 5). Dva su ulomka dio velikih lonaca, ali prisutni su i ulomci srednje velikih te malih lonaca. Najčešćaliji su ukras razne varijante valovnice (38), a slijede je vodoravni urezi (16) i ukras kotačićem (3). Fakтура je pojedinih ulomaka nešto drugačija od većine, meša je i s primjesama više sitnijih kamenčića te rupicama od pljeve.

Objekt, koji se oblikom razlikuje od okolnih, nepravilnog je oblika, sastavljen od dvije spojene jame smjera sjever – jug (Sj 240) i istok – zapad (Sj 268), dubine ukopa pola metra. Ukupno su sadržavale 82 ulomka keramike, od kojih 20 pripada rubnim dijelovima posuda, 4 dnima posuda, a 58 ulomaka

probability) i.e. to the period 1160 – 1220 (68% probability) (Table 2).

Several structures are concentrated in the northern part of the site. The largest among them is Sj 242, a shallowly (28 cm) sunken large pit (dimensions 4.78 x 4.34 m) with a flat bottom and mildly slanted walls. Out of the 104 pottery sherds in the fill of the pit (Sj 241), the majority once again belong to body sherds (83), while rim (13) and bottom (8) sherds are represented to a lesser extent. These pot rims are also simple in form – cut straight or with a shallow groove, though there is also one rounded rim (Pl. 5: 7). The pots belong to the group of medium-size pots, and one sherd with a finer fature, decorated with a shallow, comb-shaped wavy line, could belong to a lid (Pl. 5: 3). In addition to the dominant wavy lines, ornamentation with horizontal lines or thick lines impressed with wheels is also present. This time around, radiocarbon analysis for the samples from this fill yielded a somewhat more limited time frame, between the early 11<sup>th</sup> century to the second half of the 12<sup>th</sup> century (Table 2).

Along the eastern border of the northern part of the settlement, there is a shallow (34 cm), oval-shaped pit (Sj 250) with a length of 3.94 m and a width of 2.98 cm that stretches in the direction northeast-southwest. The fill of the pit (Sj 249) contained 114 pottery sherds, out of which only 10 were rim sherds and 10 were base sherds, while the remaining 94 were body sherds. The rims of the pots and one lid (or bowl) are very simple in form – inverted and cut at an outwards angle (Pl. 5: 8, 10; Pl. 6: 2) or rounded and slightly thickened on the exterior (Pl. 5: 9; Pl. 6: 5). Two of the sherds are part of large pots, but there are also sherds from medium-size and small pots. Different variations of the wavy line (38) are the most common ornamentation, followed by horizontal engravings (16) and wheel decorations (3). The fature of certain fragments differs to that of the others, as it is softer and features a greater number of smaller pebbles and chaff holes.

The structure, which differs from the surrounding structures, is of irregular shape and composed of two connected pits oriented north to south (Sj 240) and east to west (Sj 268), with a

dijelovi su tijela posuda. Uz samo 3 ulomka ukrašena vodoravnim linijama i jednog s kotačićem, svi ostali (39) ukrašeni su valovnicom. Lonci malih i srednjih dimenzija jednostavnih su profila, rubova odrezanih ravno ili koso prema van (T. 6: 6, 8-11, 13). Jedan je ulomak trbuha vjerojatno pripadao posudi s ručkom (T. 6: 12).

U krajnjem sjeverozapadnom dijelu lokaliteta dva su ovalna objekta sličnih dimenzija, ali drugačije orijentacije, koja svojim keramičkim inventarom ukazuju na mlađi horizont ovoga naselja. Zapadni (Sj 226), orijentiran zapad – istok dužine je 3,3 m i širine 2,14 m s najvećom dubinom od 64 cm u svome zapadnom dijelu, gdje je ukopana manja ovalna jama. Zapuna (Sj 225) je sadržavala 99 ulomaka keramike, od kojih je 17 rubova, 13 dna i 71 ulomak tijela posuda. Tipološki, zastupljeni su samo lonci, i to srednjih i velikih dimenzija. Rubovi su nešto razvedeniji, ali i dalje su prilično jednostavnii (T. 9; T. 10: 1-2). Riječ je o tzv. kaležastim rubovima (njem. *Kelchförmig*) koji su izvijeni prema van i imaju zaobljenu donju usnu ili pak o onima s izvučenom donjom usnom (tzv. kragn-rub).<sup>19</sup> Faktura ovih posuda, odnosno ulomaka, manje je gruba na dodir jer su izrađeni od pročišćenije gline s primjesama finog pijeska i tinjca. Ukrasheno je 59 ulomaka, a najzastupljeniji su ukras urezane, plitke, vodoravne linije i ukras izveden kotačićem. Prema loncu, koji je (u crtežu) rekonstruiran (T. 9: 1), vidljivo je da ukras počinje na ramenima i završava u donjoj polovici lonca, ispod najšireg dijela trbuha. Lonac je to koji ima dvije rupice na vratu, a koje su vjerojatno nastale kako bi se popravila napuklina. Motiv je valovnice potpuno isčezaao. Istočni je objekt (Sj 230) orijentiran sjever – jug, dok su se na dnu, raspoređeni u polukrug, nalazili ukopi sedam stupova. Nepravilnog je ovalnog oblika, dubine 55 cm, dužine 2,68 i širine 2,12 cm. Sadržavala je znatno manje materijala (23 ulomka keramike) nego susjedna jama, ali značajke keramičkih ulomaka (T. 10: 2, 3) ukazuju na njihovu istovremenost.

<sup>19</sup> Sekelj Ivančan 2001, 235.

hole depth of half a metre. They contained 82 pottery sherds in total, out of which 20 were rim sherds, 4 were base sherds and 58 were body sherds. Three of the sherds are decorated with wavy lines and one of them with a wheel, while all the rest (39) are decorated with a wavy line. The profiles of the smaller and medium-size pots are simple, with rims that are cut straight or at an angle to the outside (Pl. 6: 6, 8-11, 13). One body sherd most likely belonged to a vessel with a handle (Pl. 6: 12).

At the far southwest end of the site, two oval structures with similar dimensions were found, but they were oriented differently, and the pottery finds suggests a settlement of a later date. The western one, (Sj 226) is oriented west to east and is 3.3 m long and 2.14 m wide, with a maximum depth of 64 cm in its western part, where a smaller oval pit has been dug. The fill (Sj 225) contained 99 pottery sherds, out of which 17 were rim sherds, 13 were base sherds and 71 were body sherds. Typologically, only pots are represented, and their size varies from medium to large. The rims are somewhat more developed, but still quite simple (Pl. 9; Pl. 10: 1-2). There are those featuring so called cup-shaped rims (*Kelchförmig* in German) that protrude outwards and have a rounded lower lip, or those with a drawn out lower lip (a so-called collar rim).<sup>19</sup> The fabric of these vessels, i.e. fragments is less coarse to the touch as they have been made from more purified clay, with the admixture of fine sand and mica. 59 of the sherds are decorated, and engraved shallow horizontal lines and wheel-made ornamentation dominate. According to the pot that has been reconstructed (in the drawing) (Pl. 9: 1), it is visible that the ornamentation begins at the shoulders and ends in the lower part of the pot, below the widest part of the body. This pot features two holes at the neck, which were most likely made to repair a crack. The wavy line motif is completely absent. The eastern structure (Sj 230) is oriented north to south while, with seven post holes placed semicircular at its bottom. It is of an irregular oval shape and 55 cm deep, 2.68 long and 2.12 cm wide. It contained significantly less finds (23 pottery sherds) than

<sup>19</sup> Sekelj Ivančan 2001, 235.

Sveukupno, lonci raznih dimenzija najzastupljeniji su keramički oblik. Njihove, ne tako značajne, razlike očituju se u oblikovanju ruba i obliku tijela, ovisno o položaju najveće širine lonca. Rubovi lonaca jednostavnih su formi, a razlikuju se u visini i načinu na koji je izvučen vrat. Može biti lučno izvučen, s manjim ili većim nagibom (npr. T. 1: 1-3; T. 2: 2; T. 3: 1; T. 10: 1) ili pod obično oštrim kutem (npr. T. 1: 7; T. 3: 5-7; T. 4: 8; T. 5: 1). Sam je rub zaobljen (T. 5: 7; T. 7: 5), ravno (T. 1: 1; T. 2: 6; T. 3: 8) ili koso odrezan prema van (T. 1: 7; T. 2: 3, 4, 7, 8; T. 3: 5, 6, 9 itd.). Kod razvijenijih rubova javlja se varijanta sa zaobljenom ili izvučenom donjom usnom (T. 1: 6; T. 3: 9; T. 7: 2, 8, 9; T. 9), a sam rub može imati plitki žlijeb (T. 1: 2; T. 3: 4; T. 4: 9, 11; T. 5, 2; T. 9: 2, 5, 7 itd.) ili također biti ravno odrezan. Sve su te vrste rubova karakteristične za rani i razvijeni srednji vijek.<sup>20</sup> Najveća širina lonaca u pravilu je u gornjoj polovici ili na samoj sredini, dok rijetki slučaj ukazuje da je to moguće i u donjem dijelu posude (T. 1: 3).

Samo je desetak rubnih ulomaka koji vjerojatno pripadaju poklopцима. Rubovi su, kao i kod lonaca, vrlo jednostavni – zaobljeni i koso ili ravno odrezani. Obično su ukrašeni valovnicom koja se može nalaziti i na unutrašnjoj strani (T. 7: 13). Neki su primjeri dodatno ukrašeni okomitim urezima duž cijelog ruba (T. 7: 4, 13). Dva ulomka vjerojatno pripadaju gornjim dijelovima poklopaca (T. 4: 1, 2).<sup>21</sup> Tipološki, riječ je o zvonolikim poklopцима koji nemaju vrh, odnosno bilo kakav oblik drške, već se dijele prema obodu koji priliže na usta posude i one koji ulaze u posudu.<sup>22</sup> Svi primjeri imaju takav oblik i nagib ruba koji je mogao ući

<sup>20</sup> Sekelj Ivančan 2001, 234-236.

<sup>21</sup> Prilikom izbora ulomaka za crtanje, još 2011. godine, ta su dva ulomka izdvojena kao dna. Naknadnom obradom materijala pojавila se sumnja da bi moglo biti riječi upravo o gornjim dijelovima poklopaca, a ne o dnu lonaca. Usposrednom fakture, boje i veličine ulomka ruba poklopca (T. 4: 3) i gornjeg dijela (T. 4: 1) ustanovaljeno je da su dva ulomka s velikom vjerojatnošću dijelovi istoga poklopca. Treba također napomenuti da je moguće da su ti oblici dna pripadali zdjelama kako je to interpretirano za ulomke iz Vinkovaca (Sekelj Ivančan 2001, 86, 257, T. LXI, 381; 269, T. LXVI, 409; T. LXVIII, 430).

<sup>22</sup> Sekelj Ivančan 2001, 86; 2001a, 237.

the neighbouring pit, but the characteristics of the pottery sherds (Pl. 10: 2, 3) point towards their contemporaneity.

All in all, pots of various dimensions are the most common form of pottery. They do not differ that significantly between themselves, with most of the differences relating to rim and body shape, depending on the position of the greatest width of the pot. The pot rims are simple in form, and differ between themselves in the height and manner in which the neck has been drawn out. It is drawn out in an arch with a smaller or bigger curve (e.g. Pl. 1: 1-3; Pl. 2: 2; Pl. 3: 1; Pl. 10: 1) or at a regularly sharp angle (e.g. Pl. 1: 7; Pl. 3: 5-7; Pl. 4: 8; Pl. 5: 1). The rim itself is rounded (Pl. 5: 7; Pl. 7: 5), flat (Pl. 1: 1; Pl. 2: 6; Pl. 3: 8) or cut at an outwards angle (Pl. 1: 7; Pl. 2: 3, 4, 7, 8; Pl. 3: 5, 6, 9 etc.). Among the more developed rims, variants with a rounded or drawn out lower lip appear (Pl. 1: 6; Pl. 3: 9; Pl. 7: 2, 8, 9; Pl. 9), while the rim itself may have a shallow groove (Pl. 1: 2; Pl. 3: 4; Pl. 4: 9, 11; Pl. 5, 2; Pl. 9: 2, 5, 7 itd.) or also be cut straight. All these rim types are typical of the Early and High Middle Ages.<sup>20</sup> As a rule, the greatest width of the pot is in the upper part or right in the middle, while rare examples also indicate that this is possible in the lower part of the pot (Pl. 1: 3).

There are only about ten or so rim sherds that most likely belong to lids. These rims are, as with the pots, very simple – rounded and cut straight or at an angle. They are usually decorated with a wavy line that can also be located on the inside (Pl. 7: 13). Some examples are additionally decorated with vertical engravings along the entire rim (Pl. 7: 4, 13). Two of the sherds most likely belong to the upper parts of lids (Pl. 4: 1, 2).<sup>21</sup> Typologically speaking, they are bell-shaped lids without a top, i.e. without any kind of handle, and are divided into those lids

<sup>20</sup> Sekelj Ivančan 2001, 234-236.

<sup>21</sup> During the selection of sherds for drawing in 2011, these two sherds were selected as base sherds. After they were processed at a later date, the suspicion appeared that they could actually be upper parts of lids, and not pot bases. By comparison of the factures, colours and sizes of the lid rim sherds (Pl. 4: 3) and the upper part (Pl. 4: 1), it was determined that these two shards most likely used to be part of the same lid. It should also be stressed that it is possible that these base forms used to belong to bowls, as it was interpreted for sherds from Vinkovci (Sekelj Ivančan 2001, 86, 257, Pl. LXI, 381; 269, Pl. LXVI, 409; Pl. LXVIII, 430).

u lonac. Gornji je dio ravan, što omogućava korištenje tih posuda i u drugu svrhu, kao zdjelu.<sup>23</sup> Najbliža analogija nalazi se u susjednom Josipovcu Punitovačkom.<sup>24</sup> Uz približno iste dimenzije, oblik, fakturu i ukras razlikuje ih sam rub koji je na josipovačkom primjeru izvučen i koso odrezan prema van. Promjer poklopca od nešto manje od 20 cm odgovarao bi srednje velikim loncima. Velika količina istoga tipa poklopaca pronađena je u Vinkovcima. Iako je na vinkovačkim primjercima rub češće zaobljen i uvijen prema unutra, a ukras bogatiji, izveden ili (češljastim) valovnicama ili snopovima vodoravnih linija, ima i onih s ravno odrezanim rubom i oblikom sličnjim vodeničkim. Datirani su od druge polovine 12. do sredine 13. stoljeća.<sup>25</sup>

Od ukupno 1043 ulomaka keramike,<sup>26</sup> ukrašeno ih je 530, odnosno 50,81%, i to tehnikama žljebljenja i utiskivanja (tab. 1). Najzastupljeniji je ukras valovnica koja se javlja samostalno, a samo je nekoliko primjera gdje je u kombinaciji s vodoravnom linijom ili kotačićem (T. 2. 3). Varijante ukrašavanja valovnicom su različite (T. 11), ovisno o njihovoj amplitudi i razmaku od sljedećeg niza. Nije neuobičajeno da se nizovi i preklapaju. Na dva se ulomka valovnica nalazi i na unutrašnjoj strani – na poklopцу (T. 7: 13) i na loncu iz Sj 211 (T. 7: 8).<sup>27</sup>

<sup>23</sup> Upravo su posude sličnih odlika i vremenskog okvira s obližnjeg lokaliteta Ivandvor – šuma Gaj (Balen et. al 2009, 48; 70, T. 9: 4; 71, T. 10: 3,4) interpretirane kao zdjele. One nisu rijetka forma u razvijenom i kasnom srednjem vijeku, no kada su sačuvani samo manji rubni ulomci posude, posebno je nezahvalno ispravno odrediti njihovu funkciju.

<sup>24</sup> Janeš 2010, 238, sl. 7; 245, T. 4: 1.

<sup>25</sup> Sekelj Ivančan 2001, 249, T. LVII, 363; 309, T. LXXXVI, 533; 273, T. LXVIII, 427; 2001a, 237, bilj. 8; 238; 267, T. III; 270, T. VI: 24, 25.

<sup>26</sup> Broj je keramičkih ulomaka uvećan za 29 u odnosu na podatak iz Bunčić 2012, 197, Tab. 1 jer je prilikom ponovnog pregleda materijala primjećeno da ranije pogreškom nisu ubrojni ukrašeni ulomci tijela posuda iz Sj 149.

<sup>27</sup> Ukrašavanje unutrašnje strane otvora lonca uobičajeno je za razdoblje ranog srednjeg vijeka i tada je najčešće riječ o češljastoj valovnici (Sekelj Ivančan 2001, 89; Filipčić 2010, 262, sl. 4, 263, 281, T. 4). Ovdje je rub lonca ukrašen dvjema jednostrukim valovnicama s manjom razmakom. Nasuprot ranom datiranju te vrste ukrasa, primjer je iz Banata (Kovin, lok. Grad), gdje se u horizontu druge polovine 12. i 13. stoljeća pojavljuju ukrašeni unutrašnji otvori lonaca valovnicama ili zarezima (Zečević 2007, 186, 192, T. 1: 9, 11). Kao

whose rim sits on top of the pot opening, and those lids that were placed inside the pot.<sup>22</sup> All of the examples feature a form and rim tilt that indicates that they fit inside the pot. The upper part is flat, which allowed these vessels to also be used for another purpose – as bowls.<sup>23</sup> The closest analogy can be found in the neighbouring settlement of Josipovac Punitovački.<sup>24</sup> They feature very similar dimensions, shape, facture and ornamentation, with the only difference being the rims, which are drawn out and cut at an outwards angle in the Josipovac example. The lid diameter of slightly under 20 cm would correspond to pots of a medium size. A large number of the same type of lid was found in Vinkovci. Although the rim is more commonly rounded and curved to the inside in the Vinkovci specimens and their decorations are more lavish, executed either with (comb-shaped) wavy lines or groups of horizontal lines, there are also those with a straight cut rim and shape more similar to the examples from Vodenica. They have been dated to the period between the second half of the 12<sup>th</sup> century and the mid-13<sup>th</sup> century.<sup>25</sup>

Out of the total of 1043 pottery sherds,<sup>26</sup> 530 (i.e. 50.81%) of them are decorated with grooving and impressing techniques (Table 1). Wavy lines are the most common form of ornamentation and appear independently, and only in several examples are they combined with a horizontal line or wheel-made ornamentation (Pl. 2. 3). The variations of wavy line ornamentation are diverse (Pl. 11), with different amplitudes and spaces between rows. Overlapping rows are also not unusual. On two sherds, a wavy line is also located on the inside – on the lid (Pl. 7: 13)

<sup>22</sup> Sekelj Ivančan 2001, 86; 2001a, 237.

<sup>23</sup> Bowls with similar features and from a similar time frame from the nearby locality Ivandvor –Gaj forest (Balen et. al 2009, 48; 70, Pl. 9: 4; 71, Pl. 10: 3,4) were interpreted as bowls. This is not a form that appears seldom in the High and Late Middle Ages; however, as only smaller rim sherds of the vessel have remained preserved, determining their precise function is not an easy task.

<sup>24</sup> Janeš 2010, 238, Fig. 7; 245, Pl. 4: 1.

<sup>25</sup> Sekelj Ivančan 2001, 249, Pl. LVII, 363; 309, Pl. LXXXVI, 533; 273, Pl. LXVIII, 427; 2001a, 237, footnote 8; 238; 267, Pl. III; 270, Pl. VI: 24, 25.

<sup>26</sup> The number of pottery sherds is increased by 29 compared to the information found in Bunčić 2012, 197, Tab. 1 as, during the re-examination of materials, it was noted that the decorated body sherds from Sj 149 were not included by mistake.

Valovnica je često vrlo plitko urezana i slabo vidljiva na manjim ulomcima pa je ponekad teško razlučiti je li on ukrašen valovnicom ili linijom jer je očito korišten isti alat za ukrašavanje. Vodoravna linija kao ukras prisutna je na 26,6% ulomaka. Samo je pet objekata u kojima je ovaj ukras dominantan. Ukras obično započinje na samome vratu i ide gotovo do dna lonca u pravilnim razmacima između linija. Ukrašavanje utiskivanjem nazubljenog kotačića zastupljeno je na nešto manje od 10% ukrašenih ulomaka, i to isključivo na loncima. Kao i kod ostalih vrsta ukrasa, na nekim ulomcima djeluje manje ili više bogat, ovisno o razmaku između nizova. Budući da instrument kojim je ukras izведен nije sasvim precizno izrađen, a vjerojatno niti utiskivanje istom jačinom, uzorci su na loncima kvadratični, pravokutni, trokutasti ili pak trapezoidni (T. 11). Jedan se ulomak ističe među njima jer je precizno i jednolično izведен utiskivanjem pomoću alata s trokutastim završetkom (T. 11, Sj 293). U kombinaciji s valovnicom također je prisutan samo na jednome ulomku ruba lonca. Iako ova vrsta ukrasa ima dugi vijek trajanja, nije riječ o primarnom ukrasu.<sup>28</sup>

jednostruka ili češljasta, pojavljuje se i u Zalskoj županiji, u Mađarskoj, u naselju datiranom na prijelaz s 11. u 12. stoljeće (Kvassay 2008, 104: 7,8).

<sup>28</sup> Kao primjere s nekih relativno obližnjih lokaliteta, treba spomenuti naselja u okolini Virovitice, gdje se ukras s kotačićem pojavljuje u objektima datiranim od druge polovine 9. do 10. stoljeća (Sekelj Ivančan, Tkalcec 2008, 117, 127: 29-31, 128: 35, 37, 38) i primjerice susjedne Beketince, gdje se takav ukras pojavljuje i u ranosrednjovjekovnom horizontu (Minichreiter, Marković 2013, 167, T. 19: 4, 5, 170, 172, tab. bez broja). Iako najčešći u razdoblju razvijenoga srednjeg vijeka (Bekić 2010, 229, 236, T. 1, 237, T. 2), prisutan je, ponekad s drugačijom vrstom kotačića, i na kasnosrednjovjekovnim posudama (Balen 2009a, 47, 70, T. 9: 5; Minichreiter, Marković 2013, 261; T. 30, 273, T. 36, 279, T. 39, 3).

and on the pot from Sj 211 (Pl. 7: 8).<sup>27</sup>

Wavy lines are frequently very shallowly engraved and poorly visible on smaller sherds, thus it is sometimes difficult to determine whether a sherd has been decorated with a wavy or a regular line because the same ornamentation tool was obviously used. Ornamentation in the form of a horizontal line appears on 26.6% of sherds, and there are only five objects where this type of ornamentation dominates. The ornamentation most commonly begins at the neck and reaches almost to the bottom of the pot, with regular spaces between the lines. Decoration with a notched wheel is present in slightly under 10% of the decorated sherds, and exclusively on pots. As with other types of decorations, its lavishness differs between sherds, depending on the space between the rows. As the instrument with which the ornamentation was made was not entirely precise and was probably not always pressed with the same strength, the pot decorations are square, rectangular, triangular or trapzeoid in shape (Pl. 11). One sherd among them particularly distinguishes itself, as its ornamentation has been precisely and evenly fashioned with a tool with a triangular ending (Pl. 11, Sj 293). In combination with a wavy line, it is also present on only one rim potsherd. Although this type of ornament has a long life, it is not the primary ornament.<sup>28</sup>

In addition to the previously described motifs,

<sup>27</sup> Decoration of the interior of the pot opening is commonplace for the period of the Early Middle Ages, and is usually in the form of a comb-shaped wavy line (Sekelj Ivančan 2001, 89; Filipčić 2010, 262, Fig. 4, 263, 281, Pl. 4). Here the pot rim is decorated with two single wavy lines with a smaller space in between. In contrast to the early dating of this type of ornament, the example is from Banat (Kovin, -Grad), where in the horizon of the second half of the 12<sup>th</sup> century and the 13<sup>th</sup> century internal pot openings decorated with wavy lines or incisions (Zečević 2007, 186, 192, Pl. 1: 9, 11). As single or comb-shaped, it also appears in the Zala County in Hungary, in a settlement dated to the turn of the 12<sup>th</sup> century (Kvassay 2008, 104: 7,8).

<sup>28</sup> As examples from some sites located in the relative vicinity, it bears mentioning the settlements in the surroundings of Virovitica, where wheel-made ornaments appear on objects dated between the second half of the 9<sup>th</sup> century and the 10<sup>th</sup> century (Sekelj Ivančan, Tkalcec 2008, 117, 127: 29-31, 128: 35, 37, 38) and, for example, the neighbouring settlement of Beketinci, where this kind of ornament also appears in the period of the Early Middle Ages (Minichreiter, Marković 2013, 167, Pl. 19: 4, 5, 170, 172, numberless plate). Although most frequent in the period of the High Middle Ages (Bekić 2010, 229, 236, Pl. 1, 237, Pl. 2) it is also present on Late Mediaeval vessels, sometimes with a different type of wheel (Balen 2009a, 47, 70, Pl. 9: 5; Minichreiter, Marković 2013, 261; Pl. 30, 273, Pl. 36, 279, Pl. 39, 3).

UKRAS ORNAMENTATION	BROJ ULOMAKA NUMBER OF SHERDS	%
Valovnica / wavy line	339	63,96
Vodoravna linija / horizontal line	141	26,6
Kotačić / wheel	44	8,3
Ostalo / other	6	1,13

Tablica / Table 1: Pregled zastupljenih ukrasa na keramici / Overview of ornamentation on the pottery

Uz opisane prevladavajuće motive samo je nekoliko ulomaka koji nose neko drugačije obilježje. Dva dna u sredini imaju reljefno izveden tanki križ (T. 4: 4). Sličan je i na ulomku dna s lokaliteta Letenye – Korongytábla koje je datirano na prijelaz s 11. u 12. stoljeće.<sup>29</sup> Na velikom loncu / pitosu iz bunara (T. 3: 9) na vratu se nalazi urezan Andrijin križ, za koji je vjerojatnije da predstavlja neku oznaku nego isključivo ukras. Zanimljiva je poveznica s istim znakom na poklopcu koji je pronađen u nekoliko kilometara udaljenom Josipovcu Punitovačkom.<sup>30</sup> Na tome su poklopcu dva križa, jedan pored drugoga, a s obzirom na to da je sačuvan manji ulomak, nije jasno je li on ovde ipak u funkciji ukrasa. U svakom slučaju, s obzirom na blizinu naselja i njihovu djelomično istu vremensku odrednicu, sasvim je izvjesna mogućnost da je posude izrađivao isti majstor, odnosno radionica. Još jedan veći lonac (T. 8: 12) nosi specifičan ukras urezanih kosih linija koje su vjerojatno bile u kombinaciji s još nekim ukrasom.

Metalnih je nalaza vrlo malo, no zastupljeni su s po jednim primjerkom nakita, oruđa i oružja. S-karičica pronađena je u zapuni objekta (Sj 240) u sjevernom dijelu nase-

there are only several other sherds that bear some kind of different feature. Two bases have a thin cross motif in relief in the centre (Pl. 4: 4). A similar feature can be found on the base sherd from the locality of Letenye – Korongytábla dated from the turn of the 12<sup>th</sup> century.<sup>29</sup> On the neck of the large pot/pithos from the well (Pl. 3: 9) a St Andrew's cross is engraved, and more probably served merely as decoration than as some kind of marking. It is interesting to connect it with the same marking on a lid that was found several kilometres away in Josipovac Punitovački.<sup>30</sup> This lid features two crosses, one next to the other, and since the smaller sherd has remained preserved, it is unclear whether it serves as decoration here. In any case, considering the proximity of the settlement and their relatively identical time frame, it is quite likely that this pottery was created by the same craftsman, i.e. workshop. Another large pot (Pl. 8: 12) bears the specific decoration of engraved slanted lines, which were probably combined with some other ornamentation.

Metal finds are very few, but they are represented with one example of jewellery, one tool and one weapon. An S-circlet was found in the fill of the structure (Sj 240) in the northern part of the

<sup>29</sup> Kvassay 2008, 106: 17, 18. Na mađarskim se lokalitetima (Zapadna Transdanubija) takvi znakovi na dnu posuda obično ne pojavljuju nakon sredine 12. stoljeća (Takács 1996, 156).

<sup>30</sup> Janeš 2009, 238, sl. 7; 245, T. 4: 1.

<sup>29</sup> Kvassay 2008, 106: 17, 18. At Hungarian sites (Western Transdanubia), such symbols on vessel bases do not usually appear after the mid-12<sup>th</sup> century (Takács 1996, 156).

<sup>30</sup> Janeš 2009, 238, Fig. 7; 245, Pl. 4: 1.

lja. Riječ je o velikoformatnoj (G. I, 10/2)<sup>31</sup> brončanoj karičici okrugloga presjeka, s oštećenjima na krajevima (T. 10: 5). Pojava takvih karičica nije neuobičajena početkom 12. stoljeća.<sup>32</sup> Na groblju u Đakovu – Župna crkva u nekoliko su grobova pronađene karičice sličnih dimenzija.<sup>33</sup> Željezni nož s trnom, kojemu je oštećen vrh sječiva, pronađen je u zapuni jame (Sj 243) nepravilnoga kružnog oblika ravnih stijenki i dna, koja se nalazila u sjevernom dijelu lokaliteta, zapadno od objekta u kojoj je pronađena strelica. Dužina noža iznosi 17,2 cm, širina sječiva 1,8 cm, a debljina sječiva 1,5 cm (T. 10: 6).<sup>34</sup> Prema istovjetnim nalazima pronađenima na mađarskom lokalitetu Kána (u Budimpešti), moguće ga je datirati u vremenski raspon od sredine 12. do sredine 13. stoljeća.<sup>35</sup> U okolini su slični noževi pronađeni na lokalitetu Bekteinci – Bentež (manje dimenzije), u starijem (sjeveroistočnom) dijelu naselja koje se datira od sredine 13. stoljeća<sup>36</sup> i (također manjih dimenzija) u Đakovu na lokalitetu Župna crkva, unutar objekta koji egzistira u 12. ali i u 13. stoljeću.<sup>37</sup> Dvoroga strelica s trnom za nasad nalazila se u zapuni jame (Sj 249) u sjeverozapadnom dijelu lokaliteta (T. 10: 4). Na prijelazu plosnatoga rašljastog lista u trn okruglog presjeka nalazi se (slabo očuvan) prsten. Ukupna dužina iznosi 7,418 cm, najveća širina rogova 3,26 cm, a promjer trna 0,637 cm.<sup>38</sup> Prema Ruttkayevoj tipologiji, pripada tipu B-5b. Ovakve su se strelice uglavnom koristile za lov, a najčešće se pojavljuju u 9. i 10. stoljeću.<sup>39</sup> No različite varijante strelice s listom rašljastog oblika

settlement. This is a large-format (G. I, 10/2)<sup>31</sup> bronze circlet with a round cross-section, with damaged endings (Pl. 10: 5). The appearance of such circlets is not unusual for the early 12<sup>th</sup> century.<sup>32</sup> At the cemetery in Đakovo – Parish Church, hoops with similar dimensions were found in some of the graves.<sup>33</sup> An iron hilt tang knife with a damaged blade tip was found in the fill of the pit (Sj 243) of an irregular circular shape with flat walls and bottom that was located in the northern part of the locality, to the west of the object where the arrow was found. The length of the knife is 17.2 cm, the width of the blade is 1.8 cm, and the thickness of the blade is 1.5 cm (Pl. 10: 6).<sup>34</sup> According to equivalent finds discovered at the Hungarian site of Kána (in Budapest), it can be dated to the time frame between the mid-12<sup>th</sup> and mid-13<sup>th</sup> century.<sup>35</sup> In the vicinity, similar knives were found at the site of Bekteinci – Bentež (smaller dimensions), in the older (northeast) part of the settlement that is dated to the mid-13<sup>th</sup> century,<sup>36</sup> and (also of smaller dimensions) in Đakovo at the locality of Parish Church, within the object that exists both in the 12<sup>th</sup> and 13<sup>th</sup> century.<sup>37</sup> A two-horned arrow with a tang for hafting was located in the fill of the pit (Sj 249) in the northwest part of the site (Pl. 10: 4). At the transition of the flat forked leaf into the tang with a circular cross-section there is a (poorly preserved) ring. The total length is 7.418 cm, the greatest prong width is 3.26 cm, and the tang diameter is 0.637 cm.<sup>38</sup> According to Ruttkay's typology, it can be classified as type B-5b. Arrows of this type were mostly used for hunting, and they largely appear in the 9<sup>th</sup> and 10<sup>th</sup> century.<sup>39</sup> However, different variations of arrows with a forked leaf would go

<sup>31</sup> Giesler 1981, 40, sl. 7a. Dimenzije karičice iznose: vel. 3,45 x 3,24 cm, pr. žice 0,17 cm i tež. 1,504 g.

<sup>32</sup> Giesler 1981, 105, 106.

<sup>33</sup> Grobovi 93A, 321, 391, 397a. Filipec 2012, 51, 77, 85, 86.

<sup>34</sup> Bunčić 2012, 207, bilj. 90.

<sup>35</sup> Terei, Horváth 2007, 240, sl. 17: 29, 245, 246.

<sup>36</sup> Minichreiter, Marković 2013, 314, 315, Z. 50: 1, 362, 364.

<sup>37</sup> Filipec 2012, 171, 178, sl. 78: 4, 206.

<sup>38</sup> Zbog oštećenosti i konzervatorskog zahvata, nije mjerena težina jer podatak ne bi bio valjan.

<sup>39</sup> Ruttkay 1976, 327, sl. 54, 330, 331. Jedna je takva strelica pronađena na groblju bijelobrdske kulture u Vukovaru na položaju Lijeva Bara (Demo 2009, 215, 429).

<sup>31</sup> Giesler 1981, 40, Fig. 7a. The dimensions of the circlet are: 3.45 x 3.24 cm, wire diameter 0.17 cm, weight 1.504 g.

<sup>32</sup> Giesler 1981, 105, 106.

<sup>33</sup> Graves 93A, 321, 391, 397a. Filipec 2012, 51, 77, 85, 86.

<sup>34</sup> Bunčić 2012, 207, footnote 90.

<sup>35</sup> Terei, Horváth 2007, 240, Fig. 17: 29, 245, 246.

<sup>36</sup> Minichreiter, Marković 2013, 314, 315, Z. 50: 1, 362, 364.

<sup>37</sup> Filipec 2012, 171, 178, sl. 78: 4, 206.

<sup>38</sup> Due to damage and conservation interventions, the weight was not measured as the results would not have been valid.

<sup>39</sup> Ruttkay 1976, 327, sl. 54, 330, 331. One such arrow was found at the cemetery of the Bijelo Brdo Culture in Vukovar, at the site of Lijeva Bara (Demo 2009, 215, 429).

pojavljuju se sve do 14. stoljeća, kada dobivaju tuljac za nasad umjesto trna.<sup>40</sup> Strelica istoga tipa pronađena je i na lokalitetu Beketinci – Bentež.<sup>41</sup>

U neposrednoj okolini ovoga naselja istraženi su, ili pak samo registrirani, brojni lokaliteti iz istog, ali i ranijih i kasnijih srednjovjekovnih razdoblja.<sup>42</sup> Keramička građa, pronađena tijekom iskopavanja ovoga lokaliteta, uklapa se u tipičan kulinjski inventar ruralnih naselja u razvijenom srednjem vijeku. O pojavi i razvoju pojedinih ukrasa, oblika rubova posuda, keramičkih oblika (npr. poklopaca) i o sličnim temama vezanim uz srednjovjekovnu keramiku, na nekoliko je mjestu opširno pisano pa se ovdje na taj način neće ponavljati.<sup>43</sup> Analogije s obližnjih lokaliteta u Đakovštini i Vinkovcima, uz radiokarbonske datume, čine temelj za smještaj naselja u vremenski okvir. Već je spominjano prostorno najbliže naselje koje se nalazilo u susjednom Josipovcu Punitovačkom, na položaju Veliko Polje I, gdje se uočava dosta sličnosti u keramičkom materijalu. Naselje je datirano u 13. stoljeće.<sup>44</sup> U naselju na položaju Župna crkva u Đakovu istraženo je više poluukopanih objekata, a keramički su se ulomci nalazili i u zasipima grobova te u tzv. srednjovjekovnom humusnom sloju.<sup>45</sup> Većina poluukopanih kuća datirana je u 14. ili 15. stoljeće, osim kuće J-67 koja datira od 11./12. do sredine 13. stoljeća, a potom je vjerojatno opet obnovljena.<sup>46</sup> U tom su objektu uočena dva sloja pa tako iz onoga starijeg potječe lonac<sup>47</sup> koji se može usporediti oblikom ruba i tijela te ukrasom s nekim ulomcima iz starije faze ovoga naselja (primjerice u Sj 399). Više je ulomaka

on to appear all the way up to the 14<sup>th</sup> century, when they obtained a socket for hafting in place of a tang.<sup>40</sup> An arrow of the same type was also found at the site of Beketinci – Bentež.<sup>41</sup>

In the immediate vicinity of this settlement, numerous sites from the same mediaeval period, as well as earlier and later periods, were either investigated or merely registered.<sup>42</sup> The ceramic materials discovered during the excavation of this site fit the typical kitchen inventory of rural settlements in the High Middle Ages. The appearance and development of certain ornaments, shapes of vessel rims, pottery forms (e.g. lids) and similar topics pertaining to mediaeval pottery have been described in great detail elsewhere, therefore it is not necessary to repeat everything here.<sup>43</sup> Analogies with neighbouring sites in the Đakovo area and Vinkovci, in addition to the radiocarbon dating, provide the foundation for placing the village within a certain time frame. The geographically closest settlement located in Josipovac Punitovački at the site of Veliko Polje I has already been mentioned, and quite a few similarities in the ceramic materials can be noted. The settlement is dated to the 13<sup>th</sup> century.<sup>44</sup> In the settlement at the site of Parish Church in Đakovo, several semi-sunken structures have been investigated, and pottery sherds were also found in the fills of the graves and the so-called mediaeval humus layer.<sup>45</sup> The majority of the semi-sunken houses are dated to the 14<sup>th</sup> or 15<sup>th</sup> century, with the exception of house J-67, which is dated between the 11<sup>th</sup>/12<sup>th</sup> century and the 13<sup>th</sup> century, after which it was most likely renovated once again.<sup>46</sup> Two strata were recorded for this feature, where a pot was found that dates from the older one,<sup>47</sup> and whose shape of rim and body and ornamenta-

<sup>40</sup> Ruttkay 1976, 327, sl. 54, 328; Medvedev 1966, 72, 73.

<sup>41</sup> Ta je strelica pronađena izvan konteksta, odnosno u sjevernom dijelu lokaliteta gdje je bilo smješteno prapovijesno naselje, pa se može, ali i ne mora, dovesti u izravnu vezu s ovdasnjim rano srednjovjekovnim ili onim većim kasno srednjovjekovnim naseljem. Minichreiter, Marković 2013, 348, 349, T. 67: 10.

<sup>42</sup> Bunčić 2012, 194.

<sup>43</sup> Takács 1996; Sekelj Ivančan 2001; 2001a; 2005.

<sup>44</sup> Janeš 2009.

<sup>45</sup> Filipc 2012, 158-208.

<sup>46</sup> Filipc 2012, 205, 206.

<sup>47</sup> Filipc 2012, 171, 173, Sl. 67: 1.

<sup>40</sup> Ruttkay 1976, 327, sl. 54, 328; Medvedev 1966, 72, 73.

<sup>41</sup> This arrow was found outside the context, i.e. in the northern part of the site where a prehistoric settlement was located, and therefore it may be directly related to the Early Mediaeval settlement at the same location or the later Late Mediaeval one, but not necessarily so. Minichreiter, Marković 2013, 348, 349, Pl. 67: 10.

<sup>42</sup> Bunčić 2012, 194.

<sup>43</sup> Takács 1996; Sekelj Ivančan 2001; 2001a; 2005.

<sup>44</sup> Janeš 2009.

<sup>45</sup> Filipc 2012, 158-208.

<sup>46</sup> Filipc 2012, 205, 206.

<sup>47</sup> Filipc 2012, 171, 173, Fig 67:1

iz mlađe faze<sup>48</sup> koji su također usporedivi s mlađom fazom ovoga naselja. Osim keramičkih ulomaka, drugi su nalazi, koji ukazuju na istovremenost đakovačkog objekta i naselja na položaju Stara Vodenica, keramički grijaci<sup>49</sup> i dva željezna noža.<sup>50</sup> Ivandvor – šuma Gaj još je jedno naselje u okolini koje egzistira i u razvijenom srednjem vijeku, a uočljive su mnoge podudarnosti u oblikovanju i ukrašavanju keramičkih posuda.<sup>51</sup> S lokaliteta Borinci kod Vinkovaca potječe manji uzorak keramičkog materijala iz istovremenog naselja (12. i 13. stoljeće) u kojem se, uz određene sličnosti u oblikovanju posuda i njihovih rubova, ipak uočava i razlika u ukrašavanju. Na Borincima, primjerice, nema ulomaka ukrašenih utiskivanjem kotačića, a također je primjetno da se preferira ukrašavanje većih površina, odnosno češljastih motiva.<sup>52</sup> Veliki korpus keramike ranog i razvijenoga srednjeg vijeka s područja međurječja Save i Drave objavljen je u monografiji T. Sekelj Ivančan, gdje je upravo najviše analogija moguće naći s ovdje predstavljenom gradom.<sup>53</sup> Na osnovu keramičkih nalaza iz zapadnih dijelova Mađarske (Transdanubija), ovi se nalazi mogu usporediti sa srednjim horizontom Arpadovskog doba, odnosno razdobljem od 12. do početka 13. stoljeća.<sup>54</sup> To se odnosi na glavne karakteristike keramike, kao što su oblici lonaca i njihove jednostavne profilacije rubova<sup>55</sup> i ukrašavanje jednostavnim valovnicama ili vodoravnim linijama, ali i kotačićem (dakle, horizont gdje se već rijetko pojavljuju snopovi valovnica ili vodoravnih linija karakteristični za ranije horizonte, a još ne dolazi do reduciranja ukrasa i stan-

tion can be compared with certain sherds from the earlier phase of this settlement (for example in Sj 399). There are several sherds from the later phase<sup>48</sup> that are also comparable to the later phase of this settlement. Besides pottery sherds, other findings that also indicate the contemporaneity of the Đakovo object and the settlement on the site of Stara Vodenica are ceramic heaters<sup>49</sup> and two iron knives.<sup>50</sup> Ivandvor – šuma Gaj is another settlement in the vicinity that also exists in the High Middle Ages, and many similarities can be noted in the shape and ornamentation of pottery.<sup>51</sup> A smaller sample of ceramic material from a contemporaneous settlement (12<sup>th</sup> and 13<sup>th</sup> century) was found at the site of Borinci near Vinkovci and in which, alongside certain similarities in the shaping of vessels and their rims, differences in ornamentation can also be noted. At Borinci, for example, there are no sherds with wheel-made ornamentation, and it can also be noted that the ornamentation of larger surfaces is preferred, i.e. comb-shaped motifs.<sup>52</sup> The large body of pottery from the Early and High Middle Ages from the area between the rivers Sava and Drava has been published in the monograph of T. Sekelj Ivančan, and it is the materials that are presented here that are the most analogous to them.<sup>53</sup> Based on the pottery analyses from the western part of Hungary (Transdanubia), these findings can be compared with the middle period of the Arpad era, i.e. the period between the 12<sup>th</sup> and early 13<sup>th</sup> century.<sup>54</sup> This refers to the main features of the pottery, such as the shapes of pots and their simple rim profiles<sup>55</sup> and ornamentation with simple wavy lines or horizontal lines, and also with wheel-made ornaments (therefore, the horizon where groups of wavy lines or

<sup>48</sup> Filipec 2012, 174, Sl. 68: 1, 2; 175, Sl. 69: 4, 5; 176, Sl. 70: 2.

<sup>49</sup> Već je spomenuto da je unutar naselja Stara Vodenica pronađena iznimna količina te im je posvećen poseban rad, a autorica koristi termin projektili (Bunčić 2012).

<sup>50</sup> Filipec 2012, 171, 178, Sl. 72.

<sup>51</sup> Balen 2009, 70, T. 9, 71, T. 10, 1-4.

<sup>52</sup> Filipec 2010, 270, 271, T. I-III.

<sup>53</sup> Sekelj Ivančan 2001, 96-97 s referencama na katalog.

<sup>54</sup> Takács 1996, 143, 189.

<sup>55</sup> Takács 1996, 151, 152, Abb.5: 8-10, 154, Abb.7: 4, 7; 155, Abb.8: 1,2 – tip 1, 151, 157, 158.

<sup>48</sup> Filipec 2012, 174, Fig. 68: 1, 2; 175, Fig. 69: 4, 5; 176, Fig. 70: 2.

<sup>49</sup> It has been noted that, within the village of Stara Vodenica, an exceptional quantity of materials was found on the topic of which the author has written a separate paper, and there the author uses the term projectiles (Bunčić 2012).

<sup>50</sup> Filipec 2012, 171, 178, Fig. 72.

<sup>51</sup> Balen 2009, 70, Pl. 9, 71, Pl. 10, 1-4.

<sup>52</sup> Filipec 2010, 270, 271, Pl. I-III.

<sup>53</sup> Sekelj Ivančan 2001, 96-97 with references to the catalogue.

<sup>54</sup> Takács 1996, 143, 189.

<sup>55</sup> Takács 1996, 151, 152, Abb.5: 8-10, 154, Abb.7: 4, 7; 155, Abb.8: 1,2 – type 1, 151, 157, 158.

dardizacije, kao posljedice masovne proizvodnje od 13. stoljeća nadalje).<sup>56</sup>

Apsolutni su datumi dali širok raspon od 10. do druge polovine 13. stoljeća (tab.1).<sup>57</sup> S obzirom na to da neki datumi pokazuju 10. i 11. stoljeće, svakako je moguće korištenje ili formiranje ovoga naselja već u 11. stoljeću, dok za 10. stoljeće na osnovu pokretnih građe nema valjanih argumenata. Oblici su, vidjelo se već, vrlo jednostavnii, a njihovom usporedbom iz jama, koje imaju drugačije datume, uočljivo je da se određene forme dugo zadržavaju i da nisu toliko kronološki osjetljive. Keramika je prilično jednoobrazna pa jedino razlika u fakturi, koja se osjeća kod Sj 225 i 229, i postupna promjena u odnosu zastupljenosti ukrasa jasnije ukazuju na mlađu fazu 13. stoljeća. Iako ta dva objekta imaju manji uzorak keramike nego oni iz starije faze, uočljivo je da je valovnica kao ukras napuštena i da prevladava ukrašavanje urezanom vodoravnom linijom te kotačićem. U konačnici, na temelju iznesenih sličnosti sa susjednim lokalitetima i karakteristikama keramike razvijenoga srednjeg vijeka u Mađarskoj, određenih specifičnosti unutar objekata na samome nalazištu te apsolutnih datuma iz pojedinih stratigrafskih jedinica, datume koji pokazuju 10. stoljeće, ali i 11. trebalo bi odbaciti te prihvatići one od 12. i 13. stoljeća i tako datirati naselje (12. i početak, tj. prva polovina 13. stoljeća), u kojemu je primjetna jasna distinkcija između starije i mlađe faze.

<sup>56</sup> Takács 1996, 158, 159.

<sup>57</sup> Serije datuma nisu rađene po obradi materijala, već neposredno nakon istraživanja pa tako, primjerice, dva objekta iz kojega su uzeti uzorci, nažalost, nemaju nikakvih nalaza, a njihovi su datumi upravo omogućili najuže datiranje unutar stotinjak godina, i to vrlo rani datum 10. i prva polovina 11. stoljeća te druga polovina 12. do druge polovine 13. stoljeća (tab. 2).

horizontal lines typical of earlier horizons start appearing infrequently, without the reduction of ornamentation and standardisation that was a consequence of mass production from the 13<sup>th</sup> century onwards).<sup>56</sup>

The absolute dates yielded a wide time frame between the 10<sup>th</sup> century and the second half of the 13<sup>th</sup> century (Table1).<sup>57</sup> As certain dates indicate the 10<sup>th</sup> and 11<sup>th</sup> century, the use or formation of this settlement in the 11<sup>th</sup> century is certainly possible, while there are no valid arguments for dating it to the 10<sup>th</sup> century on the basis of the mobile finds. The forms are, as we have seen, very simple, and by comparing them to the pits, which are of a different date, it is evident that certain forms persist for a longer period of time and are not that chronologically sensitive. The pottery is quite uniform, therefore the only difference can be noted in the fabric, as can be seen in Sj 225 and 229, and in the gradual changes in the representation of ornaments, which clearly point towards the later phase of the 13<sup>th</sup> century. Although these two objects feature less pottery samples than those of the earlier phase, it is evident that the wavy line has been abandoned as a form of ornamentation, and that ornamentation with engraved horizontal lines and wheel-made ornaments dominates. Finally, on the basis of the similarities with the neighbouring sites and characteristics of the High Middle Ages in Hungary that have been presented, certain specific features within the objects on the site itself and the absolute dates from certain stratigraphic units, the dates that point towards both the 10<sup>th</sup> and 11<sup>th</sup> ought to be rejected, and those from the 12<sup>th</sup> and 13<sup>th</sup> century should be adopted, meaning that the village should thus be dated (to the 12<sup>th</sup> century and the beginning, i.e. first half of the 13<sup>th</sup> century) where there is a clear distinction between the earlier and later phase.

<sup>56</sup> Takács 1996, 158, 159.

<sup>57</sup> The series of dates were not created according to the processing of the materials, but immediately upon research. Therefore, no finds were, unfortunately, discovered in the two objects from which samples were taken, while their dates allowed for their dating to a period of about a hundred years – to the very early date of the 10<sup>th</sup> century and first half of the 11<sup>th</sup> century, and between the second half of the 12<sup>th</sup> century and the second half of the 13<sup>th</sup> century. (Plate 2).

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STRATIGRAFSKA JEDINICA STRATIGRAPHIC UNIT	LABORATORIJSKI BROJ UZORKA SAMPLE NUMBER	$\delta^{13}\text{C}$	RADIOKARBONSKI DATUM CONVENTIONAL RADIOCARBON DATE	KALIBRIRANI DATUM (95% VJEROJATNOSTI / PROBABILITIY)	KALIBRIRANI DATUM (68% VJEROJATNOSTI / PROBABILITIY)	NALAZI FINDS
SJ / SU 149	Beta - 246769 (ugljen / charred material)	-25.4	860 +/- 40 BP	Cal AD 1040 to 1100 Cal AD 1120 to 1260	Cal AD 1160 to 1220	Pl. 4
SJ / SU 184	Beta - 246770 (ugljen / charred material)	-25.2	790 +/- 40 BP	Cal AD 1170 to 1280	Cal AD 1220 to 1270	/
SJ / SU 241	Beta - 246774 (kost / bone)	-20.9	960 +/- 40 BP	Cal AD 1010 to 1170	Cal AD 1020 to 1060 Cal AD 1080 to 1150	Pl. 5
SJ / SU 253	Beta - 246775 (ugljen / charred material)	-25.8	1040 +/- 40 BP	Cal AD 900 to 920 Cal AD 950 to 1040	Cal AD 980 to 1020	/
SJ / SU 399	Beta - 246780 (ugljen / charred material)	-25.2	1030 +/- 40 BP	Cal AD 900 to 920 Cal AD 960 to 1040	Cal AD 980 to 1030	Pl. 1-4
SJ / SU 399	Beta - 246779 (kost / bone)	-19.2	880 +/- 40 BP	Cal AD 1040 to 1240	Cal AD 1060 to 1080 Cal AD 1150 to 1210	Pl. 1-4

Tablica / Table 2: Apsolutni datumi dobiveni AMS metodom / Absolute dates obtained with the AMS method (Beta Analytic / Miami, FL, USA)

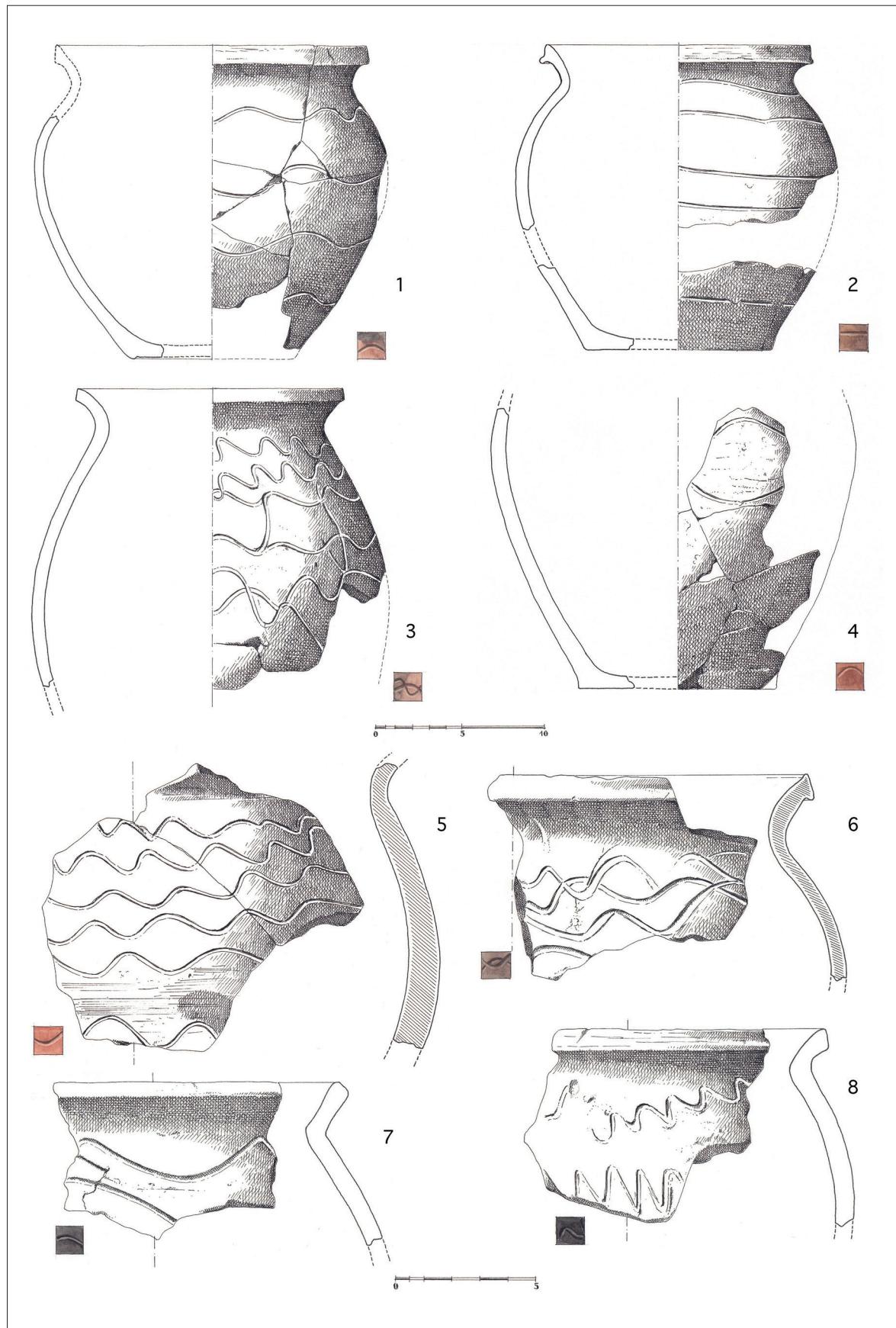


Tabla / Plate 1: 1-8 Sj 399

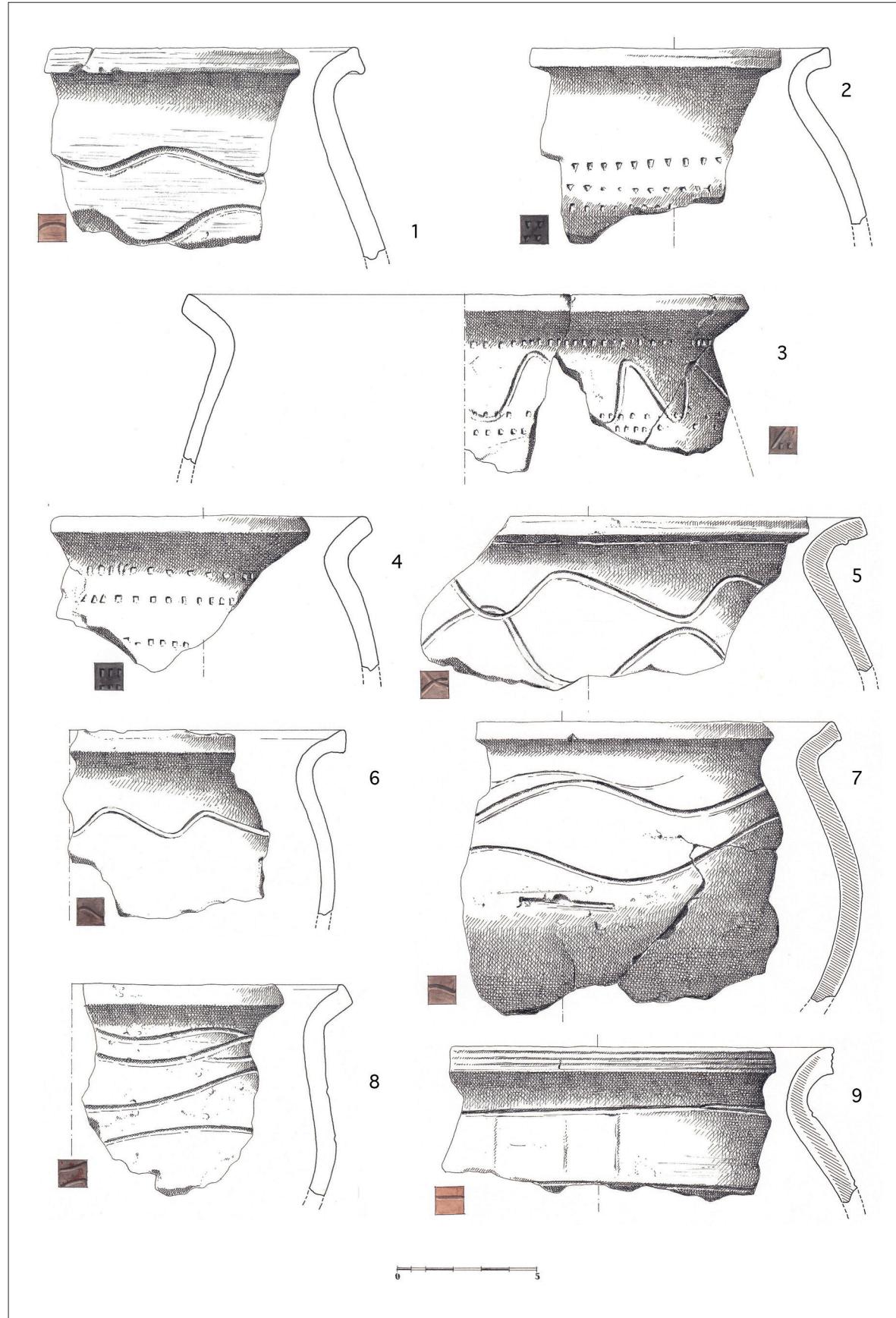


Tabla / Plate 2: 1-9 Sj 399

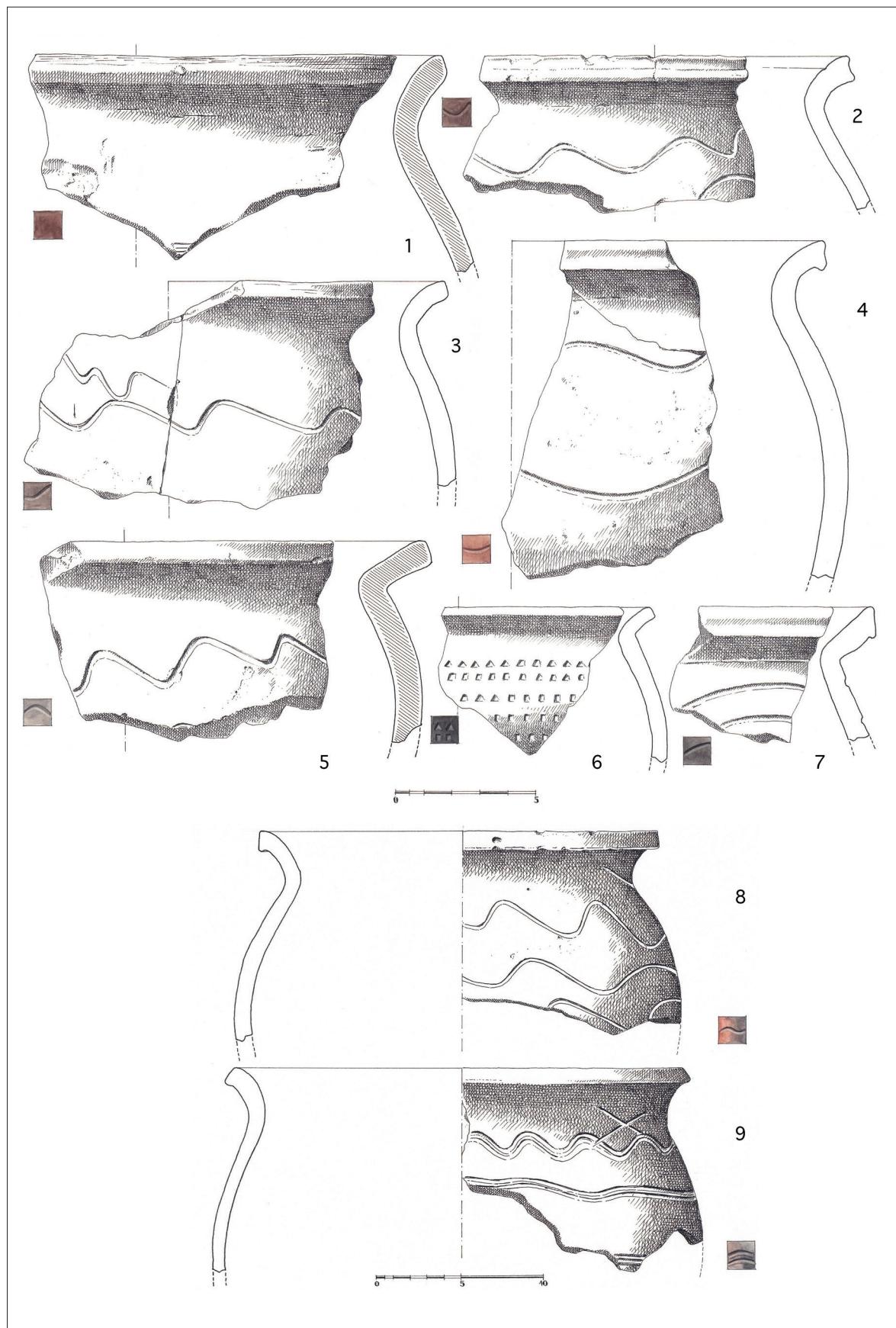


Tabla / Plate 3: 1-9 Sj 399

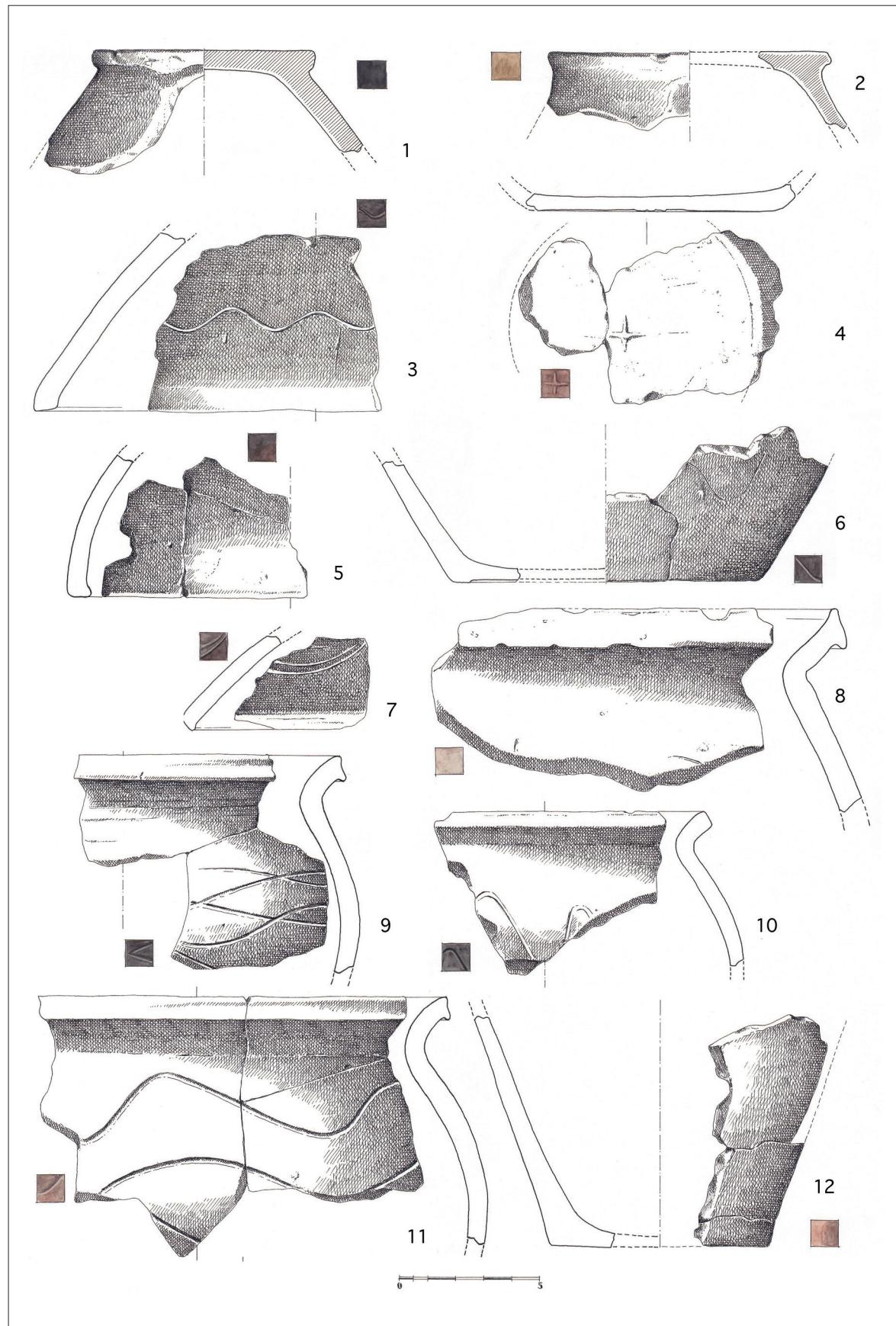


Tabla / Plate 4: 1-4, 6 Sj 399; 5, 7-12 Sj 149

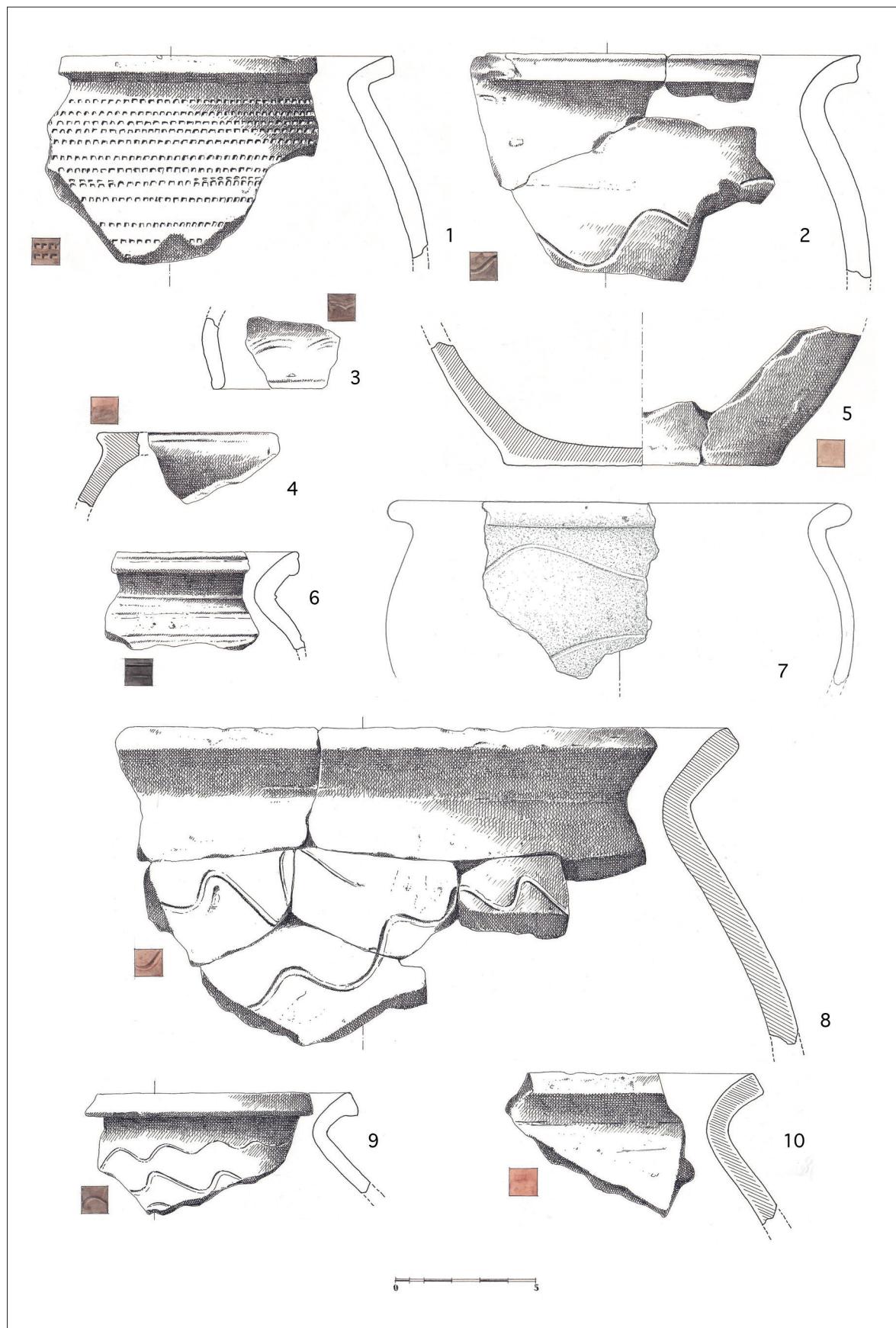


Tabla / Plate 5: 1-7 Sj 241; 8-10 Sj 249

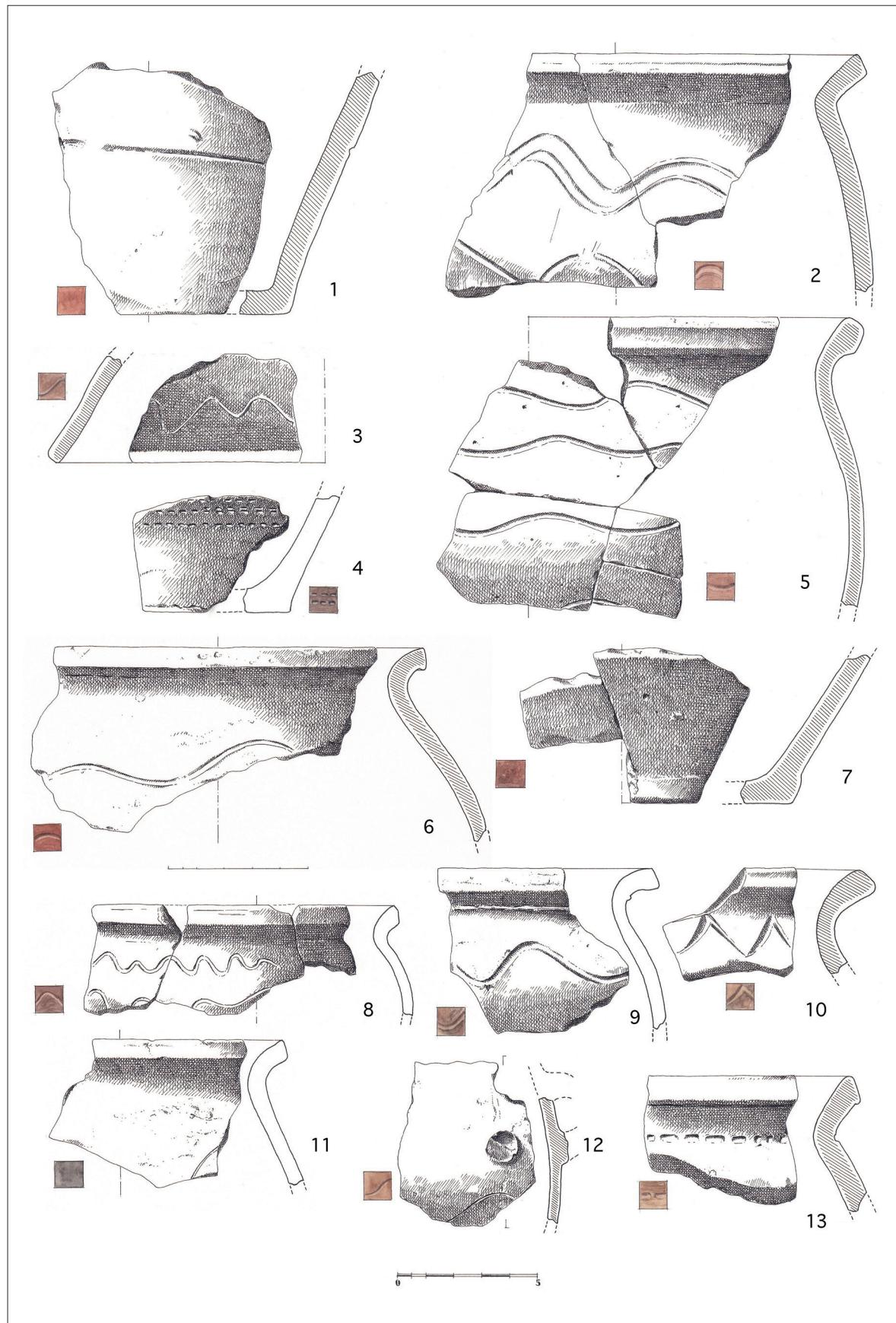


Tabla / Plate 6: 1-5, 7 Sj 249; 6, 8, 11 Sj 267; 9, 10, 12, 13 Sj 239

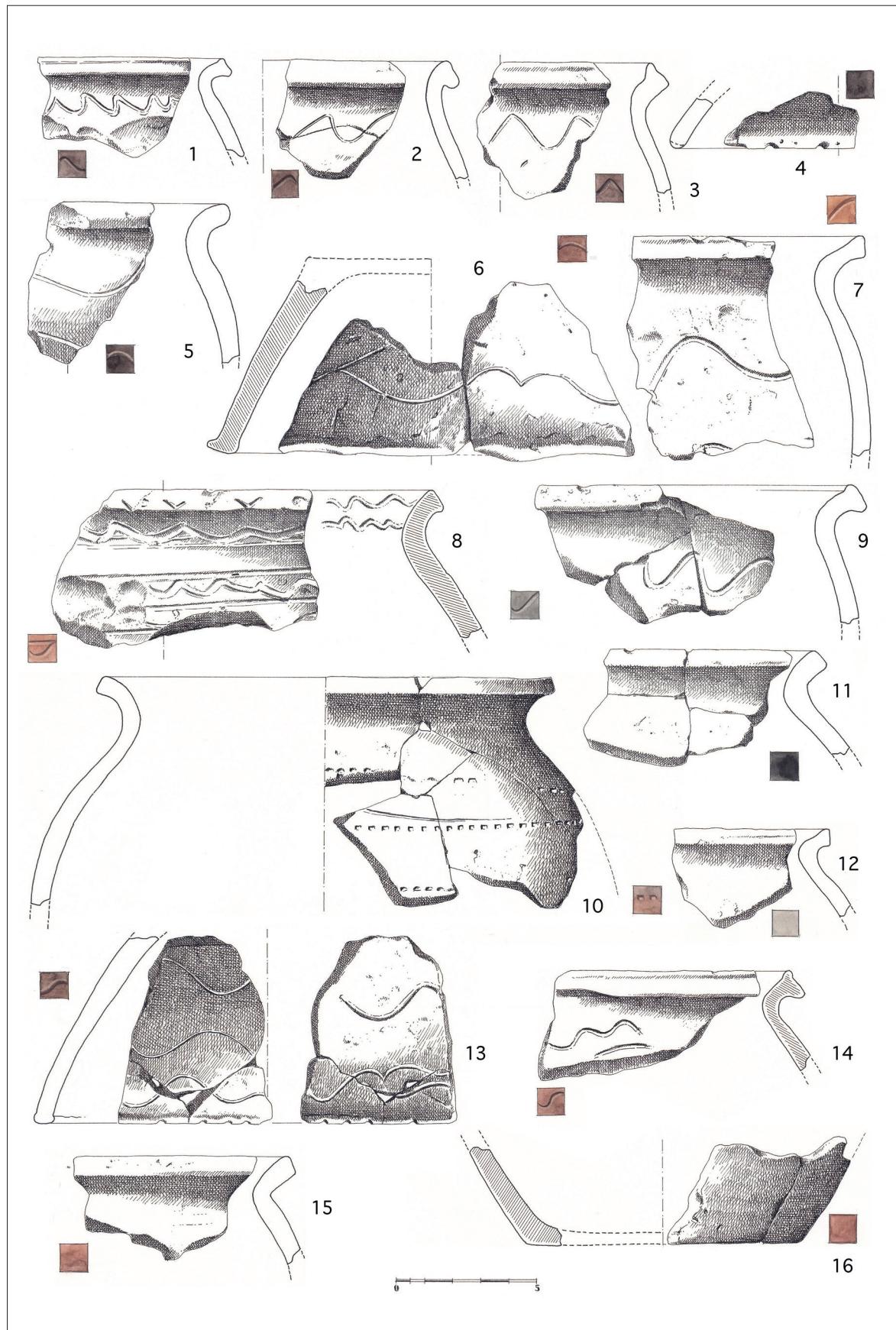


Tabla / Plate 7: 1 Sj 3; 2-4 Sj 123; 5-7 Sj 188; 8, 9, 11 Sj 211; 10, 12-16 Sj 213

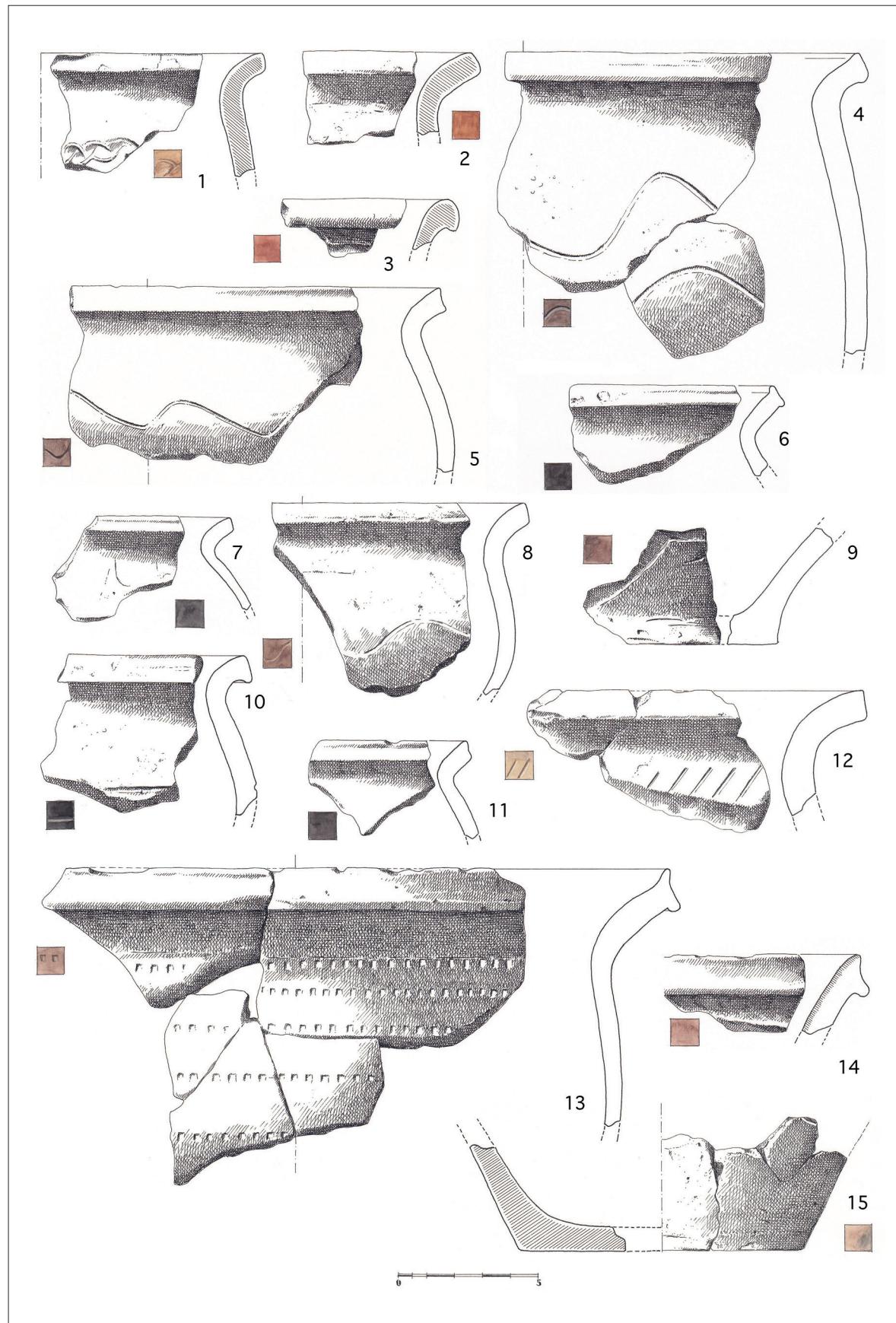


Tabla / Plate 8: 1 Sj 243; 2 Sj 245; 3,4 Sj 285; 5,6 Sj 293; 7 Sj 349; 9-11 Sj 353; 8 Sj 369; 12 Sj 487; 13 Sj 169; 14 Sj 73; 15 Sj 407

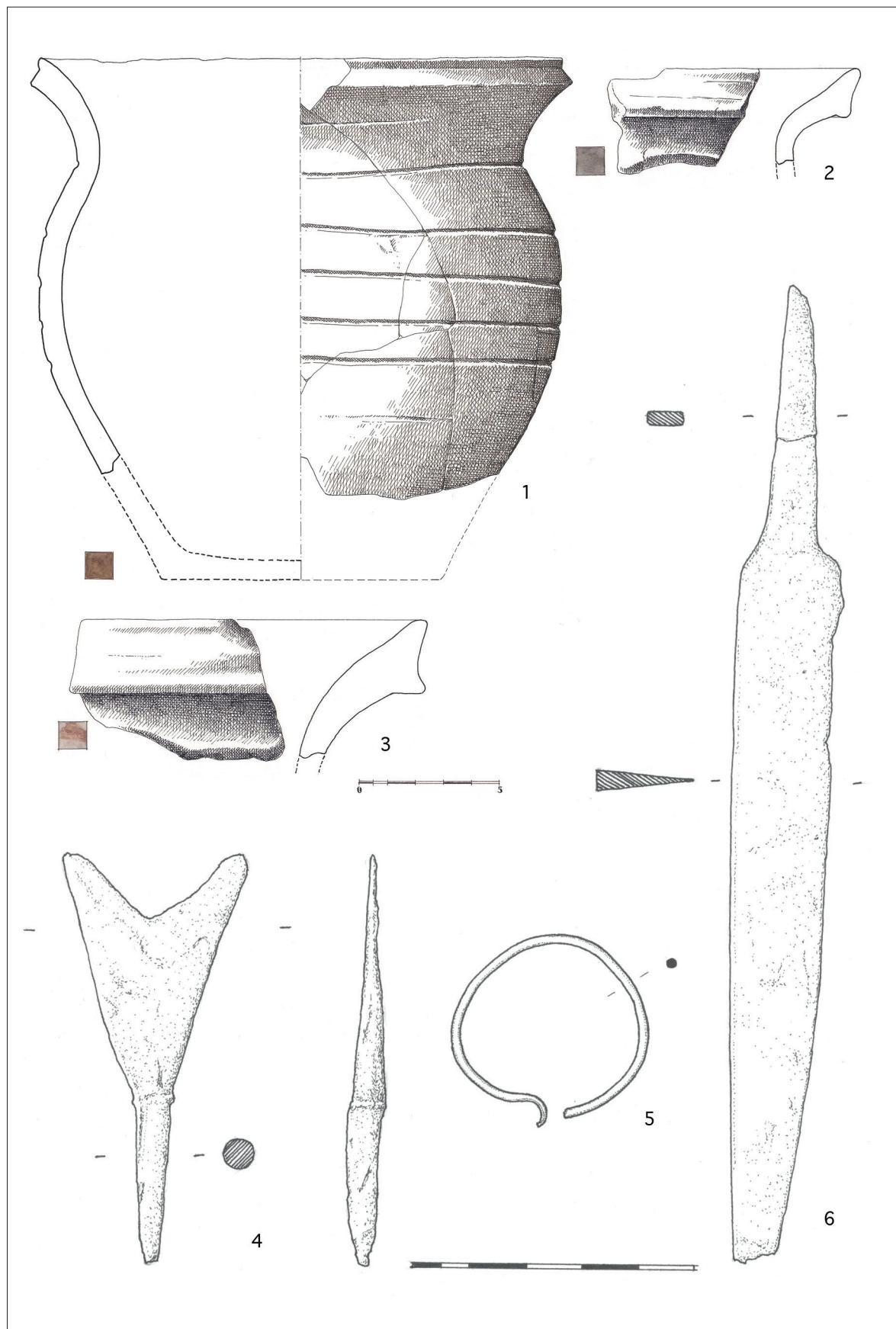


Tabla / Plate 9: 1-9 Sj 225

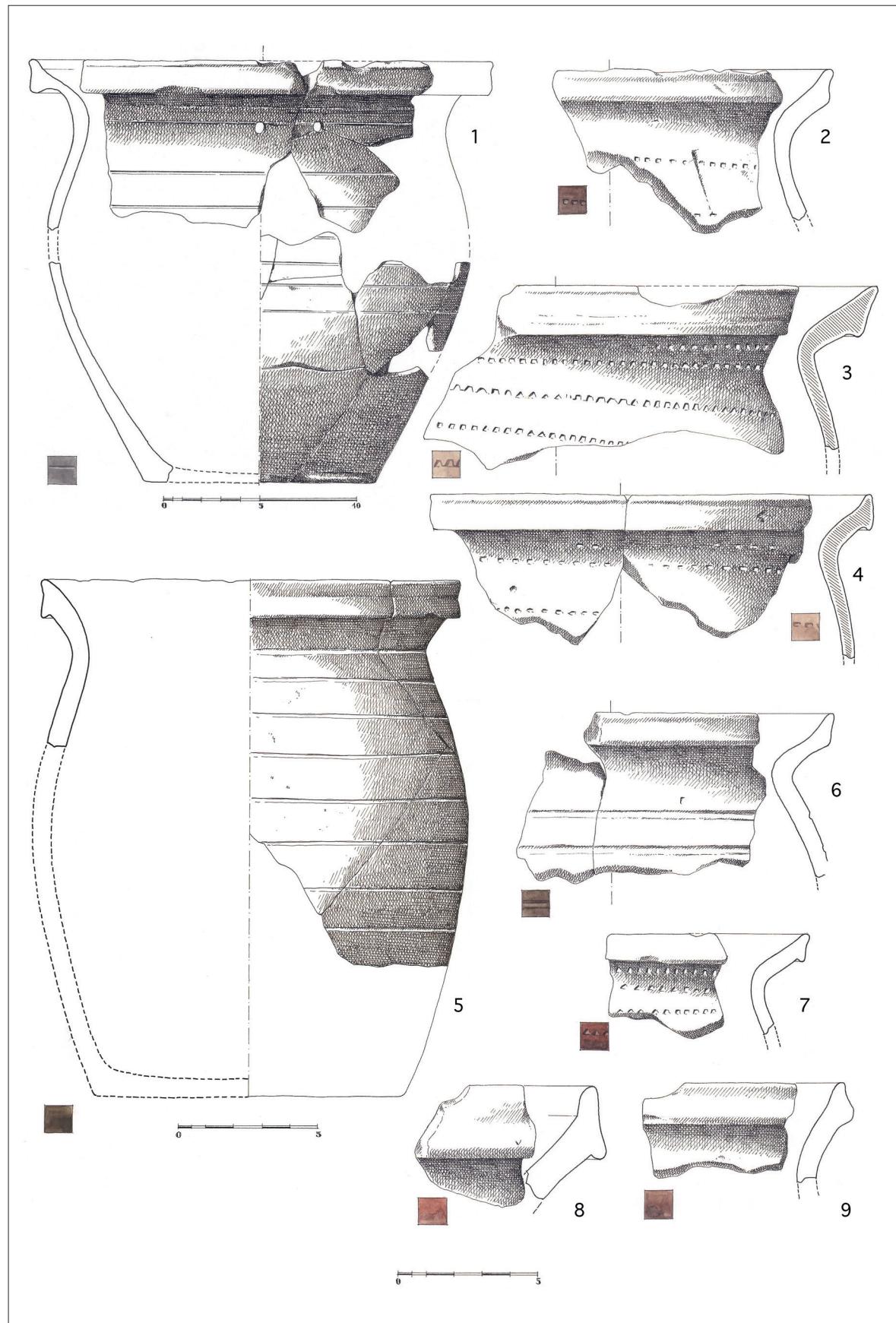


Tabla / Plate 10: 1 Sj 225; 2-3 Sj 229; 4 Sj 239; 5 Sj 243; 6 Sj 249

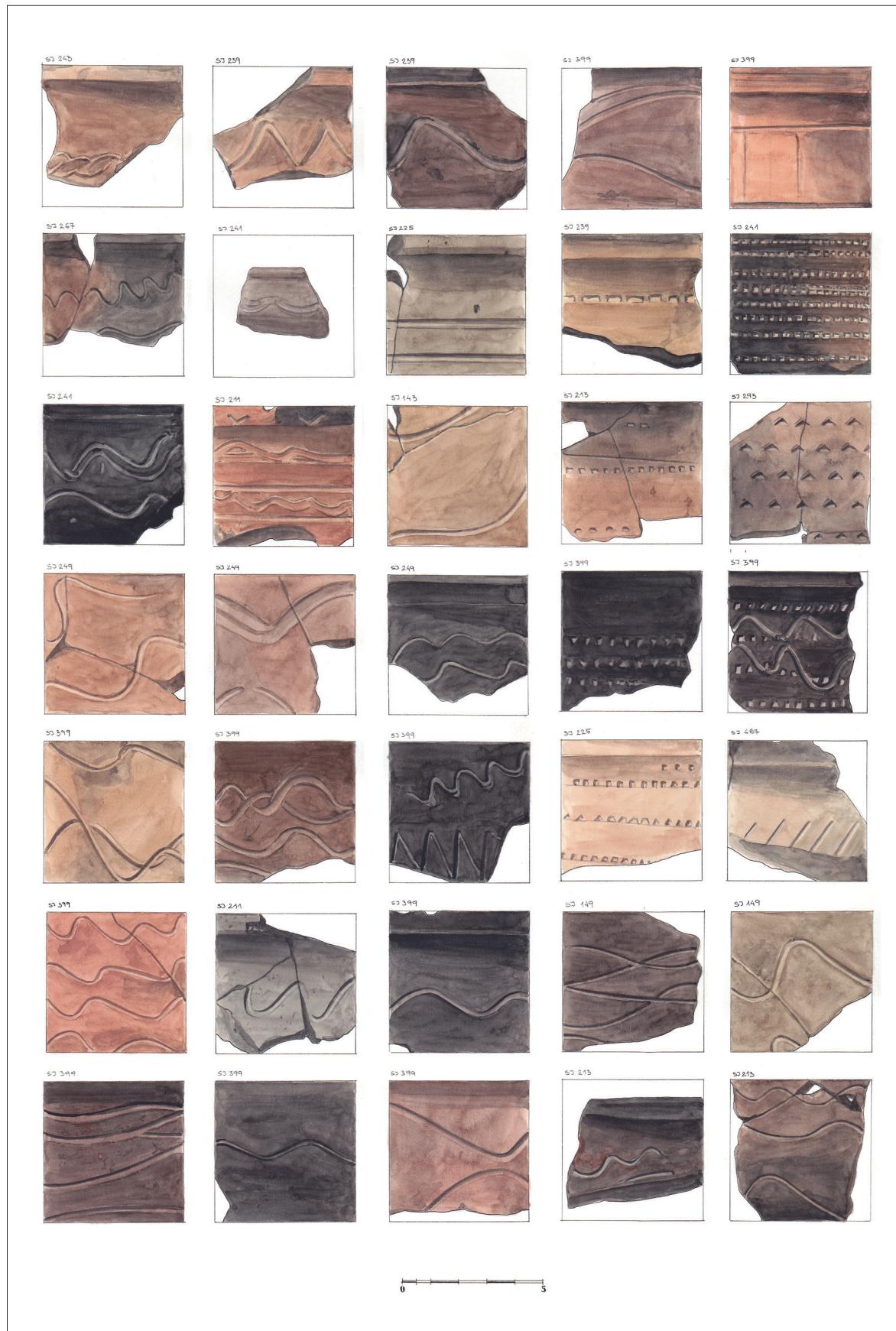


Tabla / Plate 11: Uzorci ukrasa na keramici / Ornamentation patterns on the pottery