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# PRAETORIA LONGE LATEQUE LUCENTIA

*ZBORNIK RADOVA POSVEĆEN VLASTI BEGOVIĆ POVODOM 65. OBLJETNICE ŽIVOTA*



Zagreb, 2018.

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## PREDGOVOR

Prikupljanje radova za zbornik ponekad je nezahvalna zadaća, no u slučaju zbornika koji se nalazi pred čitateljem o tome se ne može govoriti: zainteresiranost i odaziv kolega s kojima je Vlasta Begović dijelila svoj znanstveni, ali i životni put, svjedoče o toplini i simpatiji s kojom je svima ostala u sjećanju.

Vlasta Begović rođena je u Zagrebu 1950. godine, gdje se i školovala te 1973. godine diplomirala na Arhitektonskom fakultetu u klasi prof. B. Rašice. Već tijekom studentskih dana pokazala je interes za arheološke teme te je u nekoliko navrata (1971.-1973.) sudjelovala na arheološkim istraživanjima Dioklecijanove palače u Splitu u organizaciji Urbanističkoga zavoda Dalmacije i Sveučilišta Minnesota (SAD). Spomenička baština profilirala se kao tema daljnjih stručnih usavršavanja i školovanja. Godine 1976. tako završava poslijediplomsku specijalizaciju na temu „Konzervacija povijesnih struktura“ na Sveučilištu u Yorku, Engleska. Godine 1979. završila je poslijediplomski studij „Arhitektonska konzervacija spomenika i spomeničkih cjelina“ u UNESCO-vom centru ICCROM u Rimu, a 1988. završava četverogodišnji poslijediplomski studij „Zaštita graditeljskog nasljeđa“ u organizaciji Centra za graditeljsko naslijeđe u Splitu i Arhitektonskoga fakulteta u Zagrebu. U sljedećim godinama stječe poslijediplomske titule na temama koje u središtu imaju antički kompleks u uvali Verige na Brijunima, što ostaje jedna od temeljnih odrednica njezinoga budućeg rada. Na Arhitektonskom fakultetu u Zagrebu magistrirala je 1991. godine iz područja arhitekture i urbanizma s temom *Rektifikacija planova antičke vile u uvali Verige na Brijunima*, pod mentorstvom prof. J. Marasovića. Doktorsku disertaciju *Antička arhitektura na Brijunima* stječe 1993. na Odsjeku za arheologiju Filozofskoga fakulteta Sveučilišta u Zagrebu pod mentorstvom prof. M. Suića.

Usporedo sa znanstvenim i stručnim usavršavanjem aktivno je radila na brojnim projektima kulturne i arhitektonske baštine. U Republičkom zavodu za zaštitu spomenika kulture u Zagrebu zaposlila se 1974. te je sudjelovala na nizu zahvata i istraživanja. Osam godina radila je na konzervatorskim snimanjima i izradi arhitektonske dokumentacije te dokumentacije nalaza tvrđave u Slavonskom Brodu, kao i izradi projekta konzervacije i prezentacije te nove namjene pojedinih objekata u sklopu tvrđave. Vodila je istraživanja na području zatrpanoga zdenca Manduševac na Trgu bana Jelačića u Zagrebu, nakon kojih je izradila projekt prezentacije nađenih dijelova vrela Manduševac te uklapanje nalaza u novi projekt arhitekta B. Silađina, uz provedbu nadzora izvedbe novoga zdenca. Sudjelovala je u hidroarheološkim istraživanjima otočja Brijuni

i maritimne vile na Vižuli, Medulin; lokaliteta Drevine kod Dubrovnika; Pakleni otoci, Sv. Klement, Izmetište; otok Šćedro; Stari Stani kod otoka Hvara; otok Gušteranski kod Šibenika; luka Unije na otoku Unije; luke Vis i Komiža na otoku Visu; Palmižana, Sv. Klement kod Hvara; uvala Verige i uvala Madona na otočju Brijuni. Bila je voditelj radova na istraživanjima maritimne vile u uvali Verige na Brijunima, pri čemu je i izradila dokumentaciju, izvršila rektifikaciju dotadašnjih planova (tlocrta, presjeka i fasada) te izradila idealnu rekonstrukciju vile u suradnji s M. Greglom, kao i projekt nove namjene unutar Nacionalnoga parka Brijuni. Radila je na kartiranju arheoloških lokaliteta, arheološkoj topografiji Hrvatske (arheološki lokaliteti unutar antičkih urbanih cjelina) te izrađivala dokumentaciju arheoloških i hidroarheoloških nalazišta (arhitektonska dokumentacija, dokumentacija pojedinačnih arheoloških nalaza, projekti statičke sanacije, idealne rekonstrukcije i projekti prezentacije lokaliteta). Izradila je dokumentaciju za rimsku vilu u Pomeni na otoku Mljetu, maritimnu vilu na poluotoku Katoro u Umagu, te dokumentaciju privatnih hidroarheoloških zbirki Meneghello, Kamenić, Pedrini i Borčić. Sudjelovala je u radu Komisije za ocjenu projektnih elaborata za zaštitne radove na spomenicima kulture za područje cijele Hrvatske, zatim vršila nadzor nad zaštitnim radovima te izradi godišnjih izvještaja.

Od 1991. godine radi u Ministarstvu prosvjete i kulture u Zagrebu kao viši savjetnik. Radila je na izdavanju dozvola za gradnju i uporabnih dozvola u zaštićenim urbanim cjelinama te na spomenicima kulture i spomeničkim kompleksima, a posebno povijesnoj urbanoj cjelini Dubrovnika. Od 1995. do 1998. radila je kao inspektor zaštite kulturne baštine, pojedinačnih spomenika kulture i povijesnih urbanih cjelina za područje cijele Republike Hrvatske. Ujedno je deset godina vodila Komisiju za žalbe u drugostupanjskom postupku te napisala ukupno 285 stručnih mišljenja za Ministarstvo.

Od 2000. svoj rad nastavlja u Institutu za arheologiju u Zagrebu, u kojem je i dočekala umirovljenje s najvišim znanstvenim zvanjem, onim znanstvene savjetnice u koje je izabrana 2011. godine. U navedenom razdoblju voditeljica je znanstvenoga projekta Ministarstva znanosti, obrazovanja i športa *Antička arheološka topografija Hrvatske* (2002.-2006., 2007.-2013.) na kojem radi sa suradnicima na upisu i provjeri podataka iz znanstvene literature i izradi atributnih kartica, očitanju zračnih snimaka i kartiranju arheoloških lokaliteta na digitalnu kartu Hrvatske. Sudjelovala je na arheološkim istraživanjima rimske maritimne vile na Katoru kod Umaga, maritimne vile Loron kod Poreča, maritimne vile u uvali Soline na otoku Sv. Klement te na lokalitetu Brezno, Mali Tabor kod Huma na Sutli.

Bogati znanstveni opus radova u stručnim i znanstvenim časopisima tiskanima u zemlji i inozemstvu dopunila je objavom dviju monografija. Kao suradnik sudjelovala je u izradi dokumentacije za knjigu D. Vrsalovića *Istraživanja i zaštita podzemskih arheoloških spomenika u Hrvatskoj* i u drugom ponovljenom i proširenom izdanju knjige M. Suića *Antički grad na istočnom Jadranu*. Sudjelovala je na brojnim međunarodnim i tuzemnim skupovima na kojima je predstavila arheološka istraživanja na temu antičke topografije i arhitekture te antičkih vila, ali i različite teme iz područja arhitekture, zaštite i očuvanja kulturne baštine te daljinskih istraživanja. Niz je godina redovno sudjelovala primjerice na godišnjim skupovima Hrvatskog arheološkog društva, međunarodnim skupovima „Brijuni-Medulin“, konferencijama GIS Forum, EARSeL-a te Arheološkog Instituta u Americi. Uz Nacionalnu i sveučilišnu knjižnicu u Zagrebu, suorganizator je zajedno s Državnim hidrometeorološkim zavodom, Filozofskim fakultetom Sveučilišta u Zagrebu i Građevinskim fakultetom Sveučilišta u Zagrebu, međunarodnoga znanstvenog skupa „Zaštita kulturne baštine od katastrofa / Protection of Cultural Heritage from Natural and Man-made Disasters“ održanog 2014. u Zagrebu i Šibeniku. Od 1978. delegirani je član Vijeća za daljinska istraživanja i fotointerpretaciju Hrvatske akademije znanosti i umjetnosti. Članica je Hrvatskoga arheološkog društva; Archaeological Institute of America; Društva arhitekata Hrvatske; European Archaeological Association; Međunarodnoga udruženja žena arhitekata UIEFA i Udruženja za zaštitu tvrđava Hrvatske. Od 2006. do 2010. predaje na Katedri za povijest umjetnosti Filozofskoga fakulteta Sveučilišta u Rijeci predmet *Osnove arhitekture*. Od 2010. mentorica je niza doktorata iz područja arheologije, povijesti umjetnosti i arhitekture.

Svojim je aktivnim djelovanjem na istraživanju, prezentaciji te očuvanju i dokumentiranju hrvatske arheološke i arhitektonske kulturne baštine Vlasta Begović svakako zadužila ne samo Institut za arheologiju, već i brojne domaće i međunarodne suradnike kao i hrvatske kulturne institucije. Iako brojni radovi ostaju kao trajni spomen njezinoga radnog vijeka, gospođu Vlastu će svakako svi s kojima je radila još više pamtiti po srdačnosti, osmijehu i pozitivnom pristupu.

Skupina autora čije radove okuplja ovaj zbornik pridružuje se kolegama iz Instituta za arheologiju u čestitkama povodom važne životne obljetnice te želi da na svom daljnjem putu pronađe vremena nastaviti svoje djelovanje, za koje joj zahvaljujemo ovim izdanjem.





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## HELLENISTIC AND ROMAN FINE-WARES FROM SOLINE BAY ON ST. CLEMENT ISLAND NEAR HVAR<sup>1</sup>

*The paper presents the ceramic fine ware finds from the excavations at the site St. Klement-Soline on Pakleni otoci in central Dalmatia. The material is introduced chronologically and morphologically, taking into consideration wares and typology. The finds span from the Hellenistic/Roman Republican period to Late Antiquity, presenting a cross-section of fine wares circulating within the central Adriatic area.*

*Keywords: Hellenistic fine wares, Roman fine wares, Late Antique fine wares, Pakleni otoci*

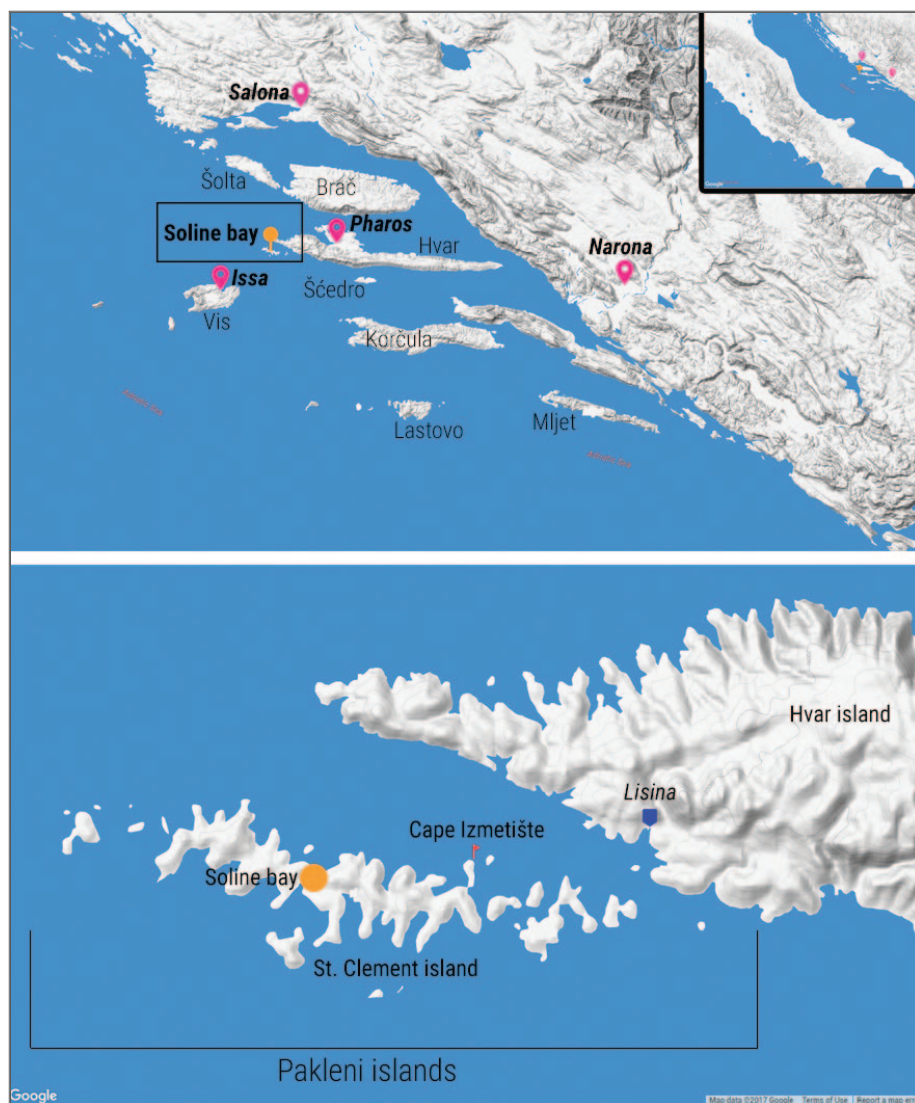
### INTRODUCTION<sup>2</sup>

The middle Dalmatian Pakleni archipelago (*Pakleni otoci*), that earned the status of protected landscape through its natural and unspoiled beauty, spreads three kilometres west from the island of Hvar and its capital city of the same name (Fig. 1). It consists of around twenty islets and rocks, while the largest is known as the island of Saint Clement (Sveti Klement). Therein two Roman villas are documented in Soline bay and Momića polje. The larger and better known is the villa located in the well sheltered southern bay of Soline, declared by Croatian state authorities as a protected archaeological heritage site in 2008 (Fig. 2). The remains of the villa are spread along the shore and the edge of the biggest fertile field on the island, today still under cultivation. Some portions of the remaining architecture are still visible in the landscape, while other parts are preserved ca 1 m below the modern surface or submerged under the sea, as the sea level has risen about 1- 2 m since antiquity. From 2007 onwards (ongoing) small scaled excavation and interdisciplinary research (geology, architecture, geophysics, archaeometry) have been conducted on this locality.<sup>3</sup> In short, these have uncovered a complex layout of structures and other material evidence that indicate a multi-period occupation of the site, from late 2<sup>nd</sup>-1<sup>st</sup> c. BCE until Late Antiquity, including spaces for production and storage area, and saltworks - as suggested by the name of the bay - as well as indications for residential spaces. Preliminary results are briefly presented through yearly reports and two articles, while the thorough publication is in preparation (Begović et al. 2012; Teichner, Ugarković 2014; Ugarković et al. 2016 and therein cited older bibliography). Pottery finds have received little attention so far, therefore this contribution aims to present the overview of the associated ceramic fine wares documented in the years 2007-2012, and the result of their analysis.

1 The article is dedicated to honour dr. sc. Vlasta Begović and her previous and current work conducted on Roman villas and beyond. We are grateful for all her professional and scientific contribution, but also her kind personality and all the support she continuously offered to all the colleagues, especially young researchers. The presented topic was deemed appropriate, as Vlasta started the cooperation that resulted in the archaeological project in Soline bay, and is studying the recovered architectural remains of the villa.

2 This paper stems from the activities carried out within the project RED - Roman economy in Dalmatia: production, distribution and demand in the light of pottery workshops (HRZZ, IP-11-2013-3973).

3 The investigations are run by the Museum of Hvar Heritage and the Institute of Archaeology in Zagreb, with co-operation of St. Thomas University in St. Paul, MN, USA.



**Fig. 1** Maps of central Dalmatia, in evidence Soline bay and its neighbouring sites (made by: A. Konestra).

## METHODOLOGY AND PROBLEMS

The ceramic material from Soline - St. Clement site shows a wide variety of Hellenistic, Republican, Imperial and Late-Antique fine ware classes, spanning from Italic, Aegean, Eastern Mediterranean, north African and local Adriatic productions, which can be seen as a “classical” mid-Mediterranean repertoire, while a novelty on the eastern Adriatic is the presence of late Italic painted wares. Thus, it presents a valuable cross-section of the products circulating the Adriatic, or at least its central part, in the aforementioned periods.

Nevertheless, the morphological characteristics of the sherds are often difficult to ascertain as the material is mostly in an extremely fragmentary state, while badly preserved surfaces often hinder a precise definition of productions as well, which is the result of centuries of agricultural exploitation of the area (Kirigin et al. 2010: 57).

Also, as the material comes from a wide range of stratigraphic situations, including surface finds, layers with many residuals, while closed contexts are rarely found (Ugarković et al. 2012: 77), it is difficult to apply a contextual analysis or a quantification method that would aim at estimating the number of vessels. A simple sherd count has thus been applied, while only in a few cases vessel's reconstruction was possible.

In the next paragraphs identified shapes will be presented divided by ware, and sorted chronologically. A catalogue of finds is provided in tabular form at the end of the paper, accompanied by the respective drawings.





Fig. 2 Aerial view of Soline - St. Clement site (made by M. Petrić, A. Konestra).

## HELLENISTIC FINE WARES

The recovered Hellenistic pottery is poorly preserved and quite fragmentary. Mostly, it is possible to define the type of vessel and the ware it belonged to. However, the production area can be suggested only in some cases.

### GNATHIA WARE AND WARE MADE IN GNATHIA TRADITION (PL. 1)

Some of the earliest sherds can be attributed to Gnathia pottery, the most widespread painted fine ware of Hellenistic times, easily recognized by a specific repertoire of shapes and distinguished red, yellow and white decoration over-painted on the black coating. This class of pottery originated shortly before the mid 4<sup>th</sup> c. BCE in the ceramic workshop(s) of the southern Apulian Greek colony of Taras, where it was manufactured until the 2<sup>nd</sup> c. BCE (Green 2001). Already in the 4<sup>th</sup> c. BCE the Apulian indigenous communities in Daunia, Messapia and Peucezia started to produce Gnathia pottery as well, while outside Apulia this type of ware was manufactured not only in different southern Italian regions (Calabria, Campania, Lucania and Sicily) but in Latium, Etruria, Egypt and Croatia as well (Green 2001; Lanza Catti 2018: 753). The latter was organized in central Dalmatia, in ceramic workshop(s) of the Greek urban settlement of Issa on the island of Vis, under the influence of Gnathia made in Canosa (Daunia) (Miše 2015 and therein cited older bibliography).

Fragments of Gnathia pottery from Soline bay are very poorly preserved remains of drinking cups, not found in great numbers. All were made from very fine levigated clay, pink or redish-yellow, without macroscopically visible inclusions. Along with three skyphoi rims (**nos. 1-3**) several fragments of ribbed walls, conceivably from skyphoi as well, were also found. In the Apulian tradition the ribbing appeared in the late production phase, towards the end of the 4<sup>th</sup> c. BCE, and continued during the 3<sup>rd</sup> c. BCE (Green 2001). One of the fragments (**no. 2**) has faint remains of painted decoration (in negative) under the outturned rim, indicating a very simple motif of red and white lines in combination with the short oblique lines otherwise known as the so-called "sawtooth". The latter appears on Issean skyphoi that show noticeable resemblan-

ce to Late Canosan examples (Miše 2015: 35, 158, 159). Although it is nearly impossible to seriously discuss the productions based on such small fragments, the morphology of the two rims (**nos. 2-3**), namely the curviness of the rim, could be suggestive of a local production at Issa. Moreover, the position of the double groove on fragment **no. 3** could be indicative for later production, earliest in the advanced 2<sup>nd</sup> c. BCE, when manufactured pottery can no longer be described as Gnathia ware but as Late Hellenistic ware made in Gnathia tradition (Miše 2015). **No. 1** could perhaps be an Apulian import.

The lower part of a black-coated jug, preserved in one piece, constitutes the biggest recovered portion of a Hellenistic vessel found so far in Soline bay (**no. 9**). Its ring base, including the zone above, has been left uncoated, while - as typical for the preserved part of the vessel - no painted decoration can be observed. Nevertheless, its morphology, together with fine pink fabric, could be consistent with locally produced Gnathia oinochoai or pelikai (see examples in Miše 2015; Ugarković 2015).

Another two jug fragments, like one of the above mentioned skyphos rim, should be attributed to advanced/late Issean production of the ware made in Gnathia tradition. One handle has an elongated section and a central rib (**no. 12**), while another had an attached rotelle, whose beginning has been preserved as well (**no. 13**). The latter feature is known from different forms and various manufacture traditions of Hellenistic pottery, while in the local Issean pottery rotelle on arch appears only on hearth shaped table amphoras, made in Late Hellenistic ware in Gnathia tradition, grey ware as well as white slipped ware with dark decoration (Ugarković, Šegvić 2017: note 6).

If some of the above-mentioned fragments do indeed originate in Apulia, these should belong to the 3<sup>rd</sup> or 2<sup>nd</sup> c. BCE; while conceivable Issean products can be dated to the second half of the 3<sup>rd</sup> or 2<sup>nd</sup> (**no. 2**) and late 2<sup>nd</sup> - 1<sup>st</sup> (**nos. 3, 12, 13**) c. BCE.

#### BLACK GLAZED WARE (PL. 1)

“Black glazed ware”, “black gloss ware” or “ceramica a vernice nera” are the usual terms employed to describe a range of fine wares, with black surface coating, used for various purposes in everyday life activities. The most renowned black glazed pottery, with high quality and appearance of the glaze, was produced in Athens, from Archaic until Late Hellenistic times (Sparkes, Talcott 1970; Rotroff 1997).<sup>4</sup> In Hellenistic times this type of fine wares were manufactured in ceramic workshops throughout the Mediterranean, and beyond, that developed their own specific traits (shapes, glaze, fabric), influenced both by the Attic tradition and regional/local impulses. The ceramic workshops in southern Italian Greek cities started with large-scale production already from the early 5<sup>th</sup> c. BCE (Lanza Catti et al. 2011: 143). The manufacture of black glazed pottery in different regional workshops on the Apennine peninsula intensifies towards the end of the 4<sup>th</sup> c. BCE, having its peak in the 3<sup>rd</sup> c. BCE (Di Giuseppe 2012).<sup>5</sup>

Fragments of black glazed ware from Soline bay are not found in great numbers, and differ in fabric and quality of the coating, indicating not only chronological diversity but variety of provenance as well. Poorly preserved sherds belonged to different shapes of tableware, from which drinking cups are the most common. Among these skyphos, kantharos and hemispherical cup can be identified.

One fragment of a short diagonally outturned rim, conceivably belongs to a plain hemispherical cup otherwise known as the mastoid bowl (**no. 4**). The clay is finely levigated and orange in colour, while the black coating turns to red at places. Different varieties of such a cup, both plain and relief decorated, were popular in the eastern Mediterranean (e. g. for a plain black glazed version from Athens see Rotroff 1997: 109- 110; for examples from Cyprus see Lund 2015: 110-112). The shape was introduced to the Apulian black gloss repertoire towards the end of the 3<sup>rd</sup> and beginning of the 2<sup>nd</sup> c. BCE (Yntema 1990) and is commonly appearing in the later Hellenistic period as well, also in grey gloss (Yntema 2005: 64-65, form 21; De Mitri 2016: 30). In central Dalmatia, several examples of plain grey slipped bowl/cup of this general type (although not with the same rim) have so far been documented in Diomedes sanctuary on cape Ploča (Šešelj 2009: 112-114).

Kantharoi are represented with several fragments, belonging to a minimum of four different vessels. One outturned thickened rim, with a straight collar-like upper part of the vessel, belongs probably to a ring handled kantharos (**no. 5**). It was made from fine levigated yellowish clay, with no macroscopically visible inclusions, while traces of badly preserved black coating are visible on both surfaces. In addition, three ring handles with semicircular profiles, from different kantharoi were also recovered (**nos. 15-17**). If we were to judge on the basis of the coating, one of these handles, **no. 16** that has a distinctively good quality and preservation of the lustrous black coating, is conceivably one of the two earliest ceramic

<sup>4</sup> The quality of glaze deteriorates in the Hellenistic period (Retroff 1997: 10, 11).

<sup>5</sup> The production continues into the late Hellenistic period as well, but with less intensity, according to recent studies made by H. Di Giuseppe who made a compendium of over 300 known ceramic workshops that produced black glazed ware in Italy.



fragments discovered at the site, probably from the 3<sup>rd</sup> c. BCE at latest.

The kantharos was a typical drinking cup of the middle 3<sup>rd</sup> c. BCE in Athens and many other areas (Rotroff 1997: 97). This form has a long tradition in southern Italy as well, where it appears in the 3<sup>rd</sup> c. BCE and soon after replaces the previously most popular drinking cup - the Apulian skyphos (Yntema 2005: 74). Therein it was common repertoire of Gnathia, black gloss and grey gloss wares (Yntema 2005: 74, 75 and therein cited bibliography). The popularity of various shapes of kantharoi (e. g. bell shaped or thorn kantharoi) in the eastern Ionic-Adriatic area is reflected in their appearance in different pottery classes throughout Hellenistic times (De Mitri 2016: 30, and distribution maps Figs. 7, 8 and therein cited bibliography). Kantharoi fragments from Soline bay are too small for provenance discussion. This being said, the profile of the preserved rim **no. 5** shows similarities to examples manufactured in the eastern Ionic-Adriatic area (e. g. from Phoinike see in Gamberini 2016: tav. 249, 42, 2<sup>nd</sup> c. BCE).

The profile of another small body sherd allow us to confirm it belonged to a so-called articulated kantharos (**no. 18**). This shape was indeed very popular amongst eastern Adriatic communities, especially in the southern and central areas, where it was produced as a part of black/brown glazed and grey slipped ware (Šešelj 2008; 2009: 138, 139; De Mitri 2016: 30, Fig. 9). Whole articulated kantharoi or/and their fragments have been found on more sites in central Dalmatia, within funeral, residential or cult contexts, both of Greek and indigenous communities (Šešelj 2009: 138, 139, also map no. 9 for distribution; Ugarković 2015: 405-407; Borzić 2017: 153, 181-183). The manufacture of such a shape in so-called Dalmatian ceramic workshop(s) has also been argued (Šegvić et al. 2012). Although not very common, the shape is known from Apulian grey gloss production as well (Yntema 2005: 76, form 37), and grey and red slipped variants of articulated kantharoi appear in the late Hellenistic wreck discovered in Torre Santa Sabina (De Mitri 2016: 30). In central Dalmatia this shape has rarely been found in securely dated context, and is usually broadly dated to Hellenistic times. However, one tomb in Issa, with two articulated kantharoi, is dated to the 2<sup>nd</sup> c. BCE (Ugarković 2015: 406).

One conical shaped foot with a convex underside, and a lower part of the vessel conceivably belonged to a skyphos (**no. 11**). Traces of black coating are visible on the uppermost preserved portion.

Another interesting body fragment of an unknown type of drinking vessel bears a graffito (**no. 19**; Fig. 3). The inscribed letters appear, perhaps, as 'N O', but are not preserved whole. The fragmentary state and lack of defined context does not allow us to shed more light on type of vessel and its use.<sup>6</sup>



Fig. 3 Microscopic photo of nos. 19, with graffiti (photo by: A. Kudelić)

One rope handle is probably from a smaller jug (**no. 14**), while one ring base with a concave underside, convex at its center, made from fine levigated pink clay, was conceivably also from a smaller locally produced jug (**no. 10**).

Two other black glazed shapes have been documented, a bowl and a plate.

A very popular form, the so-called echinus bowl, with a known long manufacture tradition, is represented with one rim frag-

ment (**no. 6**). The incurving rim, made in light brown fine levigated clay, has a very good quality of its lustrous coating covering whole surfaces. Based on the latter it could, perhaps, be considered, together with the above-mentioned kantharos

<sup>6</sup> For presence of inscribed pottery in tombs and sanctuaries of central eastern Adriatic see examples from Greek sanctuaries dedicated to Diomedes discovered on the island of Palagruža (Kirigin 2015) and cape Ploča (Šešelj 2009) or place of cult practiced by indigenous communities found in Nakovana cave (Forenbaher, Kaiser 2003); vessels found in tombs 90 and 218 from Vlaška njiva necropolis on Vis island (ancient Issa) (Ugarković 2015).



fragment, as one of the earliest pieces found on the site. It appears to be a moderate size shallow version of this bowl type that finds analogies to the so-called classical type that was, at least in Attic tradition, popular in the 4<sup>th</sup> c. BCE and replaced with a deeper version during the 3<sup>rd</sup> c. BCE (Rotroff 1997: 161-162). However, the production of incurving bowls, with some morphological and qualitative differences, appears throughout the whole Hellenistic period, and in the advanced times were manufactured all over the Mediterranean (De Mitri 2016: 30). A similar fragment, but semi-glazed on the outer surface, was recovered on cape Ploča (Šešelj 2009: 85-86), while an example of the so-called classical type was deposited in one of Issean tombs in Vlaška njiva necropolis (Ugarković 2015: 348-349).

One of the most common forms used in the Hellenistic period was a bowl with outturned rim (Rotroff 1997: 156). In Attic production it appears already since the 5<sup>th</sup> c. BCE, and continues to be manufactured throughout Hellenistic times (Sparkes, Talcott 1970: 128-130; Rotroff 1997: 157). This shape, again, has not only a very long manufacture tradition, but in Hellenistic times was common repertoire of different workshops along the Mediterranean (De Mitri 2016: 30; Morel 1981: series 2650). In Soline bay it is represented with one fragment of a rim and wall (**no. 7**) of the Hellenistic type of this form, whose remaining coating is of poor quality turning brown at places indicating a probable advanced or later Hellenistic production.

Only one black coated rolled rim of a plate (**no. 8**), unfortunately too fragmentary for further analysis, has been documented.

#### RED SLIPPED WARE (PL. 1)

A separate pottery class is Late Hellenistic red slipped ware whose shape repertoire is often similar to vessels produced with black coating, only covered with a thin layer of (matt) red coating.<sup>7</sup> Although the use of red slip is known to some pottery productions already since the 6<sup>th</sup> c. BCE (Ugarković 2015: note 300 and therein cited bibliography), it seems to have become popular from the 2<sup>nd</sup> half of the 2<sup>nd</sup> c. BCE onwards (Van Der Enden et al. 2016: 255). In Morgantina it appears at the beginning of the 1<sup>st</sup> c. BCE, becoming common only in the middle of the same century, and is by the end of it replaced by terra sigillata (Stone 2014: 169-192). In the eastern Adriatic the advanced 2<sup>nd</sup>-mid 1<sup>st</sup> c. BCE onward production of this type of pottery has been proposed for Dyrrachion (Shehi 2008: 9-13). Several shapes of red slipped ware have been documented in Greek and indigenous sites in central Dalmatia, e. g. *Issa* (Miše 2015: 59-60; Ugarković 2015: 439-444), Dragišić (Miše 2015: 60), Cape Ploča (Šešelj 2009: 176-188). Judging on the morphological traits alone a local Issean production for at least some of these shapes seems plausible (e. g. kantharos, pelike), but is subject to further inquiry.

The red slipped sherds from Soline bay are scarce and belong to fragments of tableware of the advanced/late Hellenistic period. One outturned kantharos rim (**no. 20**) made from orange fine levigated clay, has a groove and a mediocre quality of slip turning from darker to lighter red.<sup>8</sup> One handle (**no. 22**), also from a kantharos, and a ring shapes base (**no. 21**) probably from another tableware vessel (**no. 22**), have been documented as well. Both are made from light buff clay, with a thin red slip of mediocre quality.

#### GREY SLIPPED GREY WARE (PL. 2)

The distinctive 2<sup>nd</sup> and 1<sup>st</sup> c. BCE (early 1<sup>st</sup> c. CE) group of fine ware known as the "(Republican) grey gloss" or "grey slipped ware", "ceramica a pasta grigia", is characterised by fine levigated grey clayish substrate as a consequence of the reductive atmosphere during clay firing and grey coating.<sup>9</sup> In the central Mediterranean area this ware appears commonly on numerous sites, where it was produced in different workshops (Ugarković, Šegvić 2017: 162, including main bibliography cited in note 1).<sup>10</sup> Although these exhibit local/regional morphological and technological traits, the repertoire shows to a certain extent dependence on previous or contemporary black glazed tradition (Morel 1981; Di Giuseppe 2012). In central Dalmatia this pottery class was attested in several Greek and indigenous sites, while *Issa* offers, for now, the best regional testimony of such ware, also in the context of its production (Ugarković, Šegvić 2017: 162 and older bibliography cited in note 3).

Most of the Hellenistic sherds from Soline bay can be attributed to plain or relief decorated grey ware and refer almost exclusively to fragments of different tableware shapes such as plates, bowls, jugs and drinking cups.

The most common dish has vertical or slightly oblique rim (**nos. 23-27**). This comes as no surprise as this is also one of

7 Fragments of red slipped pottery with relief decoration are analysed as a separate pottery class.

8 The fragment is too small, and one can not exclude that it belonged to a misfired earlier type of ware (e. g. Gnathia).

9 Fragments of grey slipped grey ware with relief decoration are analysed as a separate pottery class.

10 For the discussion on south Italian grey ware, including chronology and production, based on examples from Metaponto, see Vittoria 2011: 272-274.

the most common grey ware forms at other sites, notably southern Italian cities like Metaponto (Vittoria 2011: 280-281), Herakleia (Giardino 1980: pl. 24, type A), Taranto (Hempel 2001: 14) as well as in Campana C production made in Morgantina (Stone 2014: 156). Our examples show analogies with the type that has a very low rim, dated in southern Italy to the middle 2<sup>nd</sup>-beginning of the 1<sup>st</sup> c. BCE (Vittoria 2011: 280-282). The form of shallow or carinated dish with slightly curving upright rim is attested in Apulian grey gloss production (AGG) (Yntema 2005: 26-29, forms 4 and 5). Therein more direct transition from the rim to the wall, like on our **no. 28**, is associated with Yntema form 4, of the second half of 2<sup>nd</sup> until early 1<sup>st</sup> c. BCE. The more gentle transition, like it appears to be the case on our **no. 29**, can be seen on Yntema form 5, dated to 90/70 BCE until the Augustean period (Yntema 2005: 28). In central Dalmatia a similar rim of a dish of the latter form was documented at Diomedes sanctuary on cape Ploča (Šešelj 2009: 111), while one example of the other form is found at Vlaška njiva necropolis in Issa (Ugarković, Šegvić 2017: 171-172), associated with rituals conducted around the tombs. Several fragments from excavations in Trogir settlement have been documented as well (personal inspection of the material).

Fragments of slightly convex rims (**nos. 28, 30**) could conceivably belong to a plate similar to examples with wide, horizontal rim illustrated in the mid 2<sup>nd</sup> until early 1<sup>st</sup> c. BCE form 2 of Apulian grey gloss ware (Yntema 2005: 22-23), but are too small for a safe identification.

Another fragment of a dish with a horizontal rim has been recovered (**no. 29**), although its top section is missing. Similar plates and platters are popular in Apulian production since the 4<sup>th</sup> c. BCE (Yntema 2005: 20), and form 1 of Apulian grey gloss ware, with wide curved rim and gently sloping wall is usually dated to 160-110 BCE (Yntema 2005: 20-21).<sup>11</sup> The form was apparently popular in central Dalmatia as well, at least in the city of Trogir where it appears commonly (personal inspection of the material).

Bowls are represented with two main shapes, with the out-turned (**nos. 31-33**) and simple rim (**nos. 34, 35**). The first mentioned is known also as having an S-shaped profile, and similar examples seem to be popular in Gravina in the period from 175 to 30 BCE (Prag 1992: 145-146). Analogies can be seen in the known forms of Apulian grey gloss production, notably in form 16 (Yntema 2005: 242-243). Triangular rims like on our **no. 32** are more characteristic of form 16 b, dated from 110 to 30 BCE (Yntema 2005: 42, 44). Bowls with straight rim find analogies in Apulian grey gloss production, as illustrated by Yntema form 19 (Yntema 2005: 50, 51).

One rim fragment with several grooves (**no. 36**) is similar to wide bowls that appear in AGG production (form 8) of the 1<sup>st</sup> c. BCE (Yntema 2005: 48-49). Moreover, this is considered to be a quite common shape in southern Italy and Sicily from the first half of the 1<sup>st</sup> c. BCE (Vittoria 2011: 288 and therein cited analogies).

Drinking cups are represented with three rims (**nos. 37-39**). One of these, **no. 39** is a skyphos, probably produced in Issa, while **no. 38** shows analogies to kantharoi, for example see kantharoi from Phoinike (Gamberini 2016: 58-62, especially 180 and nos. 44).

Two rims, as well as one neck fragment, are probably from table amphoras (**nos. 40-42**).

Several ring shaped or conical bases of jugs or cups (**nos. 43-45, 47-48**), ring base of a plate (**no. 46**), including a small fragment of a lower part of a lamp nozzle have been recovered (**no. 49**).

Some of the above-described sherds are conceivably locally produced in central Dalmatia. Nevertheless, it is difficult to discuss provenance of all finds with the evidence at hand and the current state of research.<sup>12</sup>

#### RELIEF WARE (PL. 3, 4)

Relief ware is separated as a particular class of pottery due to its distinctive decoration made in relief. Nevertheless, most of it is at the same time grey slipped grey ware, notably **nos. 50-65**.

Several wall fragments of craters have been identified among the studied material. Among the wall sherds these could also include two everted and thickened rims with a ridge below, although these would be rather small in size (**nos. 50, 51**).<sup>13</sup> Similar rims in shape but of grey ware craters, with relief decoration, have been documented in different indigenous sites in Liburnia (north-eastern Adriatic) where this appears to be the most popular shape of relief ware (Brusić 1999: 7-17, Figs. 18-20). These craters, for which regional production is assumed based on morphological traits, are bell shaped, usually between 20 and 25 cm in height (although one is 35 cm), and are standing on a high hollow foot, also with ridges (Brusić 1999: 11). One wall fragment from Soline bay, conceivably from a crater (**no. 54**), has a motif of a bead and reel, with

11 For an example of such a dish from Metaponto see Vittoria 2011: 284 and therein cited analogies.

12 The study of grey ware evidence from settlements in central Dalmatia, including the grey ware repertoire manufactured in the workshop at Issa (and Resnik) is currently in progress.

13 Similar profile of bowls have also been published from Salona, see Brusić 1999: 95, Fig. 40, nos. A 241, 243, 246, 247, 250, 252.

repeating horizontal double S motif and palmettes flanked by dolphins above, which is already documented on a crater fragment from Gradina near Dragišić (Brusić 1999: 69, nos. 58, Fig. 12). Although less common, crater fragments appear in central Dalmatia as well, e. g. from Diomedes sanctuary on cape Ploča (Šešelj 2009: 150-155) or Issa (Čargo 2007, 54, 55, nos. 9, 10, without secured context) and Resnik (Brusić 1999: 12; Kamenjarin 2016: 16, 17, nos. 3, from the harbour and settlement). Moreover, a fragment of a mould for production of this shape has also been documented in Resnik (Brusić 1999: 10; Resnik 2004: 16, sl. 20), where local craters appear to be hemispherical rather than bell shaped (Kamenjarin 2016: 9).

In central Dalmatia, however, the most common grey ware shape with relief decoration is a hemispherical bowl.<sup>14</sup> This handleless relief decorated and mould-made form constitutes the most widespread drinking cup of the Hellenistic Mediterranean that was introduced in Athens sometime around 220 BCE and soon after manufactured in different workshops (Rotroff 1982; 2006; Guldager Bilde 1996; Stone 2014: 274-277 and bibliography cited therein). Its popularity is also reflected in the material from Soline bay, where several fragments of minimum 10 relief mould made bowls have been recovered, which is the biggest amount of a single Hellenistic shape found at this site so far.

Two types of rim profiles are documented for grey wares. A thick, straight rim with quadruple groove below the outer surface, appears on a shallower bowl with a convex wall (**no. 52**; previously published in Teichner, Ugarković 2014: abb. 9, 1a, b). The form is similar to a somewhat shallower plain grey ware bowl from Ephesos (*runde Platte mit hohem aussen gerilltem Rand*) (Rogl 2004: 210, 213, 215, 217, 218, tab. 2, Kat Nr. 12). Some analogies to the rim itself are found, to the best of our knowledge, on Campana C vertical-rimmed cups (Stone 2014: 160, Morel 1981: espèce 2350) while a similar rim and bowl profile can be seen on a grey ware example from Adria of local/regional 2<sup>nd</sup> c. BCE production (Morel 1981: 186, espèce 2372). Wide bowls with grooves below the rim are known in AGG production, e. g. Yntema form 18, inspired by products from the Tyrrhenian coast (Yntema 2005: 48-49). On our example the decoration below the grooves is divided in two zones: the upper one consists out of a repeated elongated motif resembling a geometric motif of a ring or horn torus below which double spirals are horizontally laid; while the lower one is preserved only partially, having the same spiral motif. The same elongated motif appears on a bowl found in a grave from Velika Mrdakovica (Brusić 1999: 73, nos. 94, Fig. 15), this time in combination with egg pattern and arrows.

The other one is a common hemispherical cup with an outwared rim and grooves below it, for which a local/regional production is argued (**no. 53**). The preserved part of the decoration represents stylized acanthus leaves. An almost identical bowl was found in a grave from Velika Mrdakovica (Brusić 1999: 75, Fig. 15, nos. 99).

The remaining sherds belong to wall fragments with different figural, floral and ornamental motives. One of these depicts dolphins with their heads towards each other and a row of rosettes above (**no. 56**). Dolphins with rosettes, although in a bit different arrangement, are documented on a fragment of a mould for manufacture of relief bowls found in Issa (Čargo 2007: 52, no. 51). Bead and reel appear in combination with an indistinguishable motive (**no. 55**), while other recognizable motives include arrowheads (**nos. 61, 62**) and circular nodules (**no. 58**). The former is a very common motif on different presumed regionally manufactured relief bowls from Issa (e. g. Čargo 2007: 51, no. 1; Ugarković 2015: 438-439) and Resnik (e. g. Kamenjarin 2014), while the latter finds analogies on a bowl illustrated in Brusić 1999: 90, Fig. 34, A 204. Arrowheads moulds both found in Issa (Čargo 2007: 51, no. 1) and Resnik (Bilich 1994: 146, T. 1; Kamenjarin 2016: 15, 2) support the idea of local production.

These hemispherical cups were frequently standing on three feet, shaped in the form of theatre masks (see examples in Brusić 1999: 77, fig. 22, no. 121; Čargo 2007: 51, no. 1; Kamenjarin 2014) or less common of shells. One of such masks was recovered in Soline as well (**no. 64**). A die for impression of theatre masks as feet was found in Resnik (Bilich 1994: 146, T. 19), serving as an indication for regional/local production. The feet made with three elements that form the so-called tripod legs (clamshell or comic slaves mask) made in a mould appear already on 3<sup>rd</sup> c. BCE deep hemispherical cups, entirely covered in black coating, with overpainted decoration from Morgantina and Lipari (Stone 2014: 91-92, including bibliography in notes 60-62). In Attic tradition moulded feet in the shape of shells or masks are present on pine-cone relief bowls of the 3<sup>rd</sup> c. BCE (Rotroff 1997: 16).

The other base type documented in Soline bay is plain and slightly concave (**no. 65**).

In addition to relief grey ware, fragments of four different relief-made bowls are attributed to red slipped ware.

An interesting fragment is an import of an Asia Minor relief-bowl with vertical rim and a groove (**no. 66**). The light brown clay is distinctively micaceous, while reddish-brown glaze turns brownish-black on the top of the rim. Unfortunately, due to its size and preservation the motif present below the rim is indistinct. This shape of rim is usually connected with the so-called Delian or Ionian type of relief mould-made bowls. The term Delian was given by Courby (1922), basi-

<sup>14</sup> For a distribution map see Kamenjarin 2014: 135, Map 3.

cally because many examples were recovered on Delos. However, already Laumonier (1973) pointed out these were most probably imported from western Asia Minor. In fact, the rim finds direct analogies to type 2a of mould made relief bowls, produced in Ephesos, and the described fabric can match the morphology (Rogl 2014: 122, 125). This shape is associated with the ΠΑΡ workshop, where the best known and mostly widely distributed products of Ephesos were manufactured (Rogl 2014: 132).<sup>15</sup> The mentioned workshop started its activity around 167 BCE, and continued with production until the end of the century (Rogl 2014: 133). Although the general rim type 2 of Ephesos bowls can be possibly associated with some related later workshops, it appears that the particular 2a type is set in connection to the earlier production phase (Rogl 2014: 133), and is therefore dated to the last third of the 2<sup>nd</sup> c. BCE. This is not the first Hellenistic find of an Ephesian product in central Dalmatia (e. g. see a mould-made bowl from workshop of Menemachos found in Resnik in Kamenjarin 2014, or Ephesos lamps in Ugarković 2016), although this topic yet awaits more detailed study.

Further interesting examples are other two imported bowls, made from orange micaceous fabric, whose lower parts with decoration of raised rhomboids have been preserved (**nos. 67, 68**). Analogies of both fabric, slip and decoration are found on Delos, where this type of decoration ("bossettes") is present in almost all represented workshops, including the above-mentioned Ephesian Menemachos atelier (Laumonier 1977: 57, Pl. 12, 4150, 4152- 4153, Menemachos workshop, red-slipped; 4151- 62 (grey ware); 478-482, Pl. 111, 112). The motif shows also similarities to raised nodules that imitate pine cone scales that appear on mostly black glazed Attic pine-cone bowls of the later 3<sup>rd</sup> and earlier 2<sup>nd</sup> c. BCE, sometimes with the same base profile as seen on our no. 68 (Rotroff 1997: Pl.1, 2, for base profile see, Pl. 73, nos. 21, 26). It appears that the decoration of raised rhomboids was accepted in local environment, probably under the influence of eastern Mediterranean imports, as some presumed locally produced bowls from Resnik might indicate (Brusić 1999: 77, Fig. 22, no. 120; 79, Fig. 24, A 137; Kamenjarin 2016: 15, 1).

Additionally, one wall fragment preserves two lines of circular nodules below a double groove (**no. 69**). A very similar decoration, also in red-slip, is documented on a fragment of a bowl from Zadar (Brusić 1999: 76, Fig. 17, no. 113). This type of decoration finds analogies in a fragment from Phoinike, classified as undetermined production that was recovered from the late 3<sup>rd</sup>- 2<sup>nd</sup> c. BCE layer (Gamberini 2016: Tav. 50, 489). Bowls with circular nodules were produced in Cassope, and are most typical for Workshop B, starting from the 2<sup>nd</sup> c. BCE (Gravani 2001:126). However, these products are made in yellowish-pink clay, usually blackglazed, and have not been found outside Epirus (Gravani 2001: 122, 130).

Very interesting finds are three fragments of moulds for production of relief ware (**nos. 70-72**). All bear the same decoration of arrowheads, displayed in a different order while the wall thickness is from 0,3 do 1 cm. The first two fragments are made from fine levigated pink clay, while the third one is grey ware. So far, whole or fragmentary moulds for production of relief ware have been found on three sites in Dalmatia, in Issa (Brusić 1999: 77, Fig. 22, no. 121; Čargo 2007: 51-53), Resnik (Bilich 1994: 146, T. 1, 1,2 ; Brusić 1999: 77, Fig. 22, no. 120; Resnik 2004: 21; Kamenjarin 2016: 15, 1-2) and Zadar/ Iader (Brusić 1999: 14, for crater production; Čondić, Vuković 2017: 62). Most of these were used for manufacture of hemispherical cups, with the exception of two for craters. Although local production of relief ware is assumed on these localities, unfortunately, none of the currently published moulds have been recovered from a well documented and investigated context. For example, the Resnik finds are underwater discoveries (Kamenjarin 2014: 135).<sup>16</sup> The same has to be said for the examples from Soline bay that can therefore not be used to seriously consider potential ceramic production activities at this site.

#### UNGUENTARIA (PL. 5)

Unguentaria are small specifically shaped containers, suited for storing and dispensing liquid and powdered substances, mostly perfumed oils (Rotroff 2006a: 137). They are connected with commercial and secular use, but very frequently appear as grave goods in funeral contexts, and can be also associated with cult/religious activities. Consequently, in central Dalmatia unguentaria were discovered in all of these contexts (Ugarković 2015: 480, and therein cited references).

Two main forms, with numerous varieties, can be distinguished: fusiform and piriform unguentarium (Anderson Stojanović 1987). Among the four fragments of different unguentaria that were recovered at Soline bay, three are attributed to the Hellenistic fusiform shape (**nos. 73-75**), with an elongated body, long neck and high stem. The only preserved rim is thickened on the outer surface and has a smaller portion of the cylindrical elongated neck attached (Pl. 5, no. 73). Two flaring bases belong to different unguentaria (**nos. 74, 75**), one of which is grey ware, and whose elongated stem probably indicates a later Hellenistic date (**no. 74**).<sup>17</sup>

15 For a map that illustrates exports of Ephesian mouldmade bowls along the Mediterranean basin see Rogl 2014: 137, Fig. 22. Some examples are also illustrated in Jentel 1992: 61, no. 557, Fig. 26 (from Gravina) or Marković 2009 (from Budva).

16 Archaeological excavations on Bandirica hill on Vis brought forth evidence for late Hellenistic pottery production at Issa, including moulds for manufacture of relief ware, and their publication will bring forth valuable information; for current state of research see Čargo, Miše 2010.

17 For similar foot on unguentaria found in Issa see chapter on unguentaria in Ugarković 2015 and therein cited bibliography.



Additionally, a lower half of a footless piriform unguentarium, with a rounded- pear-shaped body, characteristic for the second half of 1<sup>st</sup> c. BCE as well as early Roman imperial period, is also present among the material (**no. 76**). This example is made from orange clay with visible fine white inclusions, and similar shaped grey ware unguetarium has been recovered in Salona, dated to the middle of the 1<sup>st</sup> c. (Mardešić 2002: 378, no. 3).

## ROMAN AND LATE ANTIQUE FINE WARES

### THIN-WALLED WARE (TWW, PL. 6)

The ware appears at Soline as early as the first decades of the 2<sup>nd</sup> c. BCE (Benoit 1954: 38, 1961: 103-104; Marabini Moevs 1973: 49-51), with the shape Marabini I/Ricci 1/1/Mayet 1/Vegas 23A /Schindler Kaudelka 20 (**no. 77**). The *situla*-like beaker draws parallels from Iron Age metalwork, both with its shape and decoration, being thus in clear contrast with the Hellenistic models of the time (Marabini Moevs 1973: 49-51). Soline's specimen presents only one row of dotted decoration which does not suffice to reconstruct the entire motive. The shape became popular during the 2<sup>nd</sup> c. BCE to then disappear by the second half/end of the 1<sup>st</sup> c. BCE (Marabini Moevs 1973: 50; Schindler Kaudelka 1975: 54-55; Lopez Mullor 1989: 96; Tassinari 1998: 45). Although originating in southern Etruria/northern Latium, the shape is present in both eastern and western Mediterranean, Italy and *Noricum*, while production is supposed in northern Italy and in the West. In Dalmatia is present at Salona, Cape Ploča and Krk town (von Gonzenbach 1975: 198, fig. C/60, 61; Šešelj 2009: 198; Konestra 2016: 348-349).

Another early shape appears to be **no. 78**, of which only a fragment of the outward neck and decorated shoulders is preserved. The fine buff fabric with black gloss could be indicative of an early date, just as the only analogy found at Cosa and dated to the 1<sup>st</sup> c. BCE (Marabini Moevs 1973: 89, n. 143). Marabini reconstructs the Cosa fragment as a rounded beaker with everted rim similar to some of the Ornavasso metal and ceramic pots, but none presents the Soline type of decoration.

The rim-fragment **no. 79** could belong to a whole range of beakers in orange-buff fabric with various types of *a la barbotine* decoration (i.e. Schindler Kaudelka 2, 5, 6) all datable within early/mid-Augustan times (Schindler Kaudelka 1975: 39-45). The size of Soline's fragment precludes exact analogies and further discussion. The fragment **no. 80** also belongs to an early 1<sup>st</sup> c. beaker, while to the same date (Augustan times) can be dated **no. 81**, which finds analogies to the cup/bowl Schindler Kaudelka Form 28 (Schindler Kaudelka 1975: 39, 61-64) with an almost whitish fabric and an incised horizontal line at mid-height. To these, two beaker bases could be added, seemingly pertaining to Fabrikat A: **no. 82** finds analogies with Schindler Kaudelka Form 1, and **no. 83** resembles morphologically Warner Slane 1990: cat. 200.

Within the first decades of the 1<sup>st</sup> c., if not earlier, **nos. 98, 10** might be dated and a bit later **no. 99**. Spanning fabrics similar to Fabrikat B, or central Italian fabrics, they mainly belong to bowls, while **no. 100** could not be determined, and has, in fact, the finest fabric and slip, almost *sigillata*-like, which, along with its decoration, points to an earlier date.

A peculiar fabric - darker red with white inclusions and a polished surface - is present with a series of rim and bottom fragments (**nos. 92-96**), probably belonging to two types of ovoid beakers. The bottoms are flat and fairly thick, with the walls departing convexly towards the rim, without any groove or other feature. The rims occur in two variants: more or less outward-turned, rounded and thinned at the top, and inward-turned, with distinct shoulder and neck. Though the shapes are fairly typical of TWW productions (i.e. Atlante 1/35, 1/36), the fabrics did not find analogies (*Atlante II* 1985: 252). The morphology of both shapes might point towards an early- to mid- 1<sup>st</sup> c. date.

Mid- and second half of the 1<sup>st</sup> c. TWW is present with fragments of bowls in Fabrikat D (**no. 84**) (Schindler Kaudelka 1975: 95-107) and rouletted decoration (**nos. 85, 86**), but none are preserved whole, while some examples of bottoms can also be linked to these shapes and fabrics (**nos. 90, 91**) or to the similarly dated Fabrikat C (**no. 89**). Nevertheless, they point to connections with north-Italic workshops which massively exported to the eastern Adriatic (Topić 2003; Konestra 2016). **Nos. 87** and **88** resemble this type but are much thicker and with a more deeply incised decoration. Their fabric is also much harder, perhaps even overfired or burnt.

To a central Italic production centre might be ascribed **nos. 110** and **111**, both belonging to bowls, though no precise analogy has been found. The decoration on **no. 111** does, however, remind that of central Italic products of the Augustan - Tiberian, or at the latest Neronian, times (Santrot, Santrot 1995: 126, fig. 38/317).

The supposed local eastern-Adriatic production is present with one decorated wall fragment (**no. 97**) similar to Brusić's 408-410 beakers (Brusić 1999: 30-31).

To the latest phase of TWW belong the sherds **nos. 101-106** which are rims of the so-called "ollette a collarino" (Tassinari 1998: 45, t. XX, 5-7) or Mugs Type 1 (Hayes 2000: 92), and can be dated to the 2<sup>nd</sup> c. Their provenience is still unclear (Hayes 2008: 102; Pellegrino 2009) but encompasses the Aegean/Eastern Mediterranean and Italy. The fragments from

Soline might rather be of eastern provenience due to a micaceous fabric. Their presence along the eastern Adriatic is very common, and have been found at cape Izmetište and Viganj shipwrecks (Ilakovac 1968: 183-185; Rapanić 1972: 144, 147), but also at port sites (Zaton/*Aenona's* port, Taras 2015: 206-208 and Pakoštane, Parica 2008: 88) and at several costal sites (for an overview see Konestra 2016: 429).

#### ITALIAN SIGILLATA (ITS, PL. 7)

In comparison with other *sigillata* types found at Soline bay, ITS is not very numerous and is mostly present with plain forms, while only a few fragments could belong to relief decorated vessels.

Plates and bowls, but also jugs are present among the reconstructable plain *sigillata* shapes. Provenience deducted on the basis of macroscopic fabric analysis points to both northern and central Italic workshops. A peculiarity of the Soline assemblage are jugs belonging to Italian *sigillata* types such as **nos. 117, 118** and perhaps the bottom **no. 124**. Jugs' shapes are very varied and there is no defined typology that might help with dating, though the Soline examples can be compared to K8 and K16/17 of the *Conspectus* typology (*Conspectus* 1990: 187-188).

More standard shapes are those of the bowls Cons. 22 (probably sub-form 6) (**no. 113**) datable from the end of the 1<sup>st</sup> c. BCE to the 30ies of the 1<sup>st</sup> c. CE, and Cons. 34 which might belong to a *tardo-italica* production (**no. 114**). The rim fragment **no. 112** can be recognised as an early Italic shape, Cons. 2, probably of central Italic origin and datable to the mid-Augustan period.

The presence of plates is testified by bottoms such as **no. 123** in ITS B belonging to the shape Cons. B 3.19 and thus perhaps to the later, *tardo-padana* shapes. The bottom **n. 125** might rather belong to a cup or bowl.

Only a fragment of relief decorated wall (**no. 115**) and a rim (**no. 116**) could belong to relief decorated types of ITS, primarily *Sarius* cups or ACO beakers.

A rim, with roulette decoration on the wall below it (**no. 119**), and three other plain rims (**nos. 120-122**) are too minute to allow definitive morphological analogies, though the first could belong to a cup (such as Cons. 33) or a beaker (Cons. 50).

The presence of ITS along the eastern Adriatic is wide-spread, usually in favour of its Padana productions, both plain and decorated, and favouring the earlier products, with few examples of *sigillata tarda* (for an overview see Konestra 2016: 204-342; see also Borzić, Eterović Borzić 2015: 29-30).

#### EASTERN SIGILLATA A, B AND UNIDENTIFIED EASTERN MEDITERRANEAN PRODUCTS (ES A, ES B, PL. 8)

The two early Imperial eastern Mediterranean *sigillata* productions, ES A and ES B, are present with few specimens, but they seem to have arrived at Soline from an early date and supply from the East seems to be constant at least until the mid-2<sup>nd</sup> c. when these wares ceased to be produced. Analogies will be presented on the bases of *Atlante II* (1985) typologies compiled by J.W. Hayes, with other references where needed.

To ES A, probably produced in the area of the bay of Iskenderun, or in any case along the mouths of the Orontes River, between Tarsos and Antioch from the mid-2<sup>nd</sup> c. BCE (Lund et al. 2006), two rims of Forma 3 (*Atlante II* 1985: 14, t. 1/7) can be ascribed (**nos. 126, 127**). The shape, very common throughout the Mediterranean, is dated within the 1<sup>st</sup> c. BCE, starting at the end of the previous as testified by the Athens Agora deposit (*Atlante II* 1985: 14-15). The rim **no. 128** is hard to assess due to its small dimension, but it might belong to Forma 65, or to a late shape, Forma tarda g of Antonine date, which is, though, mainly distributed in the East (*Atlante II* 1985: 42). In Dalmatia ES A has so far been identified at Osor, Krk, Bakar (Makjanić 1983: 53-54, t. 1), *Salona* (von Gonzenbach 1975: 188, fig. D), *Narona* (Topić 2003: 191), Lastovo and Šćedro islands (Maggi 2006: 192).

To the first phase of ES B production, a ware originating from the area of the Menander river (Tralles and Ephesos being the supposed production/distribution centres, for an overview see Lund 2003: 127-128), usually termed as B1, **nos. 129** and **130** can be ascribed. The first finds analogies with Forma 16 of Augustan date (*Atlante II* 1985: 56) while the second belongs to Forma 19, a predecessor of Forma 60 in B2, which places its date to the mid-1<sup>st</sup> c. (*Atlante II* 1985: 57). The bottom **no. 137** with all probability belongs to this production as well.

Among the shapes of ES B2, more widely distributed along the eastern Adriatic (Maggi 2006: 183), **no. 131** finds analogies with the plate Forma 58, although it lacks the roulette decoration on the rim and flange that J.W. Hayes notes for the *Atlante* prototype (*Atlante II* 1985: 63). The shape has so far not been noted on Dalmatian sites (as of the latest survey in Maggi 2006).

**Nos. 133** and **134** can be ascribed to the *Atlante* Forma 60 of the mid-1<sup>st</sup> - mid. 2<sup>nd</sup> c. (*Atlante II* 1985: 64). After the last



surveys of ES B on the eastern Adriatic (Jurišić 1997: 87-88; Maggi 2006) this shape resulted as the most common on the majority of Dalmatian sites (Rijeka, Bakar, Krk, *Asseria*, Satrić near Sinj, Danilo Gornje, Rogoznica, *Salona*, *Tilurium*, Čapljina and Mogorjelo) (von Gonzenbach 1975: 201, n. 77; Makjanić 1983: t. 4/26-27, t. 5/28-31; Jurišić 1997: 87-88; Šimić-Kanaet 2010: 27; Maggi 2006: 191-192; Borzić, Eterović Borzić 2015: 34-40). It is present, along with occurrences at coastal sites, within port assemblages (underwater finds) at: Zaton (*Aenona's* port), Polače (Mljet island), Verige (Brioni islands) (Jurišić 1997: 87) and Pakoštane (Parica 2008: 84).

To Atlante Forma 80, of the late 1<sup>st</sup> - mid 2<sup>nd</sup> c., being one of the latest ES B shapes (*Atlante* II 1985: 53-70), belongs **no. 134**. Numerous specimens of this shape have been found during underwater excavations at Zaton - *Aenona's* port (Nin near Zadar), Pakoštane (Parica 2008: 84-85; Brusić 2010) and Polače (Jurišić 1997: 87), as well as within the ship's equipments at the Ilovik shipwreck (Jurišić 1997: 87). On eastern Adriatic's land sites this shape occurs at Bakar, Krk, Omišalj, Osor, *Asseria*, *Burnum*, *Narona*, Čapljina, Mogorjelo (Zabelicky-Scheffenecker 1979: 27-28, t. 8/8; Makjanić 1983: 55, n. 18-25; Jurišić 1997: 88; Topić 2003: 192; Brusić 2010: 117; Borzić, Eterović Borzić 2015: 36-39, also for a distribution overview) and perhaps *Tilurium* (Šimić-Kanaet 2010: t. 47/505, 523). The date proposed for this shape spans from 80 to 150 CE, while the only dating evidence from the eastern Adriatic is that from the Bakar necropolis, where the vessel has been found along with a coin of Hadrianic date (Makjanić 1983: 55).

Fragment **no. 135** belongs to a series of shapes with outward and hanging lips (such as Atlante 62A, 74B, 75) (*Atlante* II, 1985: 53-70), but due to the very small dimension of the sherd the exact shape is difficult to define, just as is **no. 136**, which is morphologically close to rims of Forma 53, but finds also analogies with two examples from Pakoštane (Parica 2008: t. 2/6, 7). Shapes such as Atlante 62-63/74-75 occur at Bakar, Osor (Makjanić 1983: t. 2, 3), *Asseria* (Borzić, Eterović Borzić 2015: 36-39, also for a distribution overview), Čapljina (Jurišić 1997: 87), *Tilurium* (Šimić-Kanaet 2010: 27), *Fulfinum* (Konestra 2015: 161, see also Maggi 2006; fig. 7).

Three bottoms (**no. 137-139**) belong to ES B as well.

To an eastern Mediterranean production, but more probably to Pontic *sigillata*, could be ascribed the rim **no. 143**, as the only more precise analogy could be established with the latter and its Atlante Forma IV conical bowl with short vertical rim datable from the end of the 1<sup>st</sup> and throughout the 2<sup>nd</sup> c. (*Atlante* II 1985: 94). As this ware is rare in the Adriatic, but not absent (for occurrences see Lund 2007: 188), and it has recently been established on the eastern Adriatic as well (Bakar, Zaton, Nadin, *Aseria*, *Narona*, Borzić, Eterović Borzić 2015: 40-41, note 76), this analogy, though tentatively given primarily on the basis of morphology, is plausible.

The bottom **no. 144**, due to its poor state of preservation fails to provide enough information to allow ware determination. Its slip, presenting a brown (inner) and a red-orange shade (outer) and a dull look, is applied on a very soft, pale fabric with no visible inclusion. The minute wall fragment **no. 141**, probably belonging to the sharp angular passage between a vertical and oblique walls of a cup, also presenting a very shallow impressed decoration (such as ES A forma 46 or 49 or ES B forma 30), could not be ascribed with certainty to a ware, similarly to **no. 140** whose shape can be linked to various eastern Mediterranean productions. **No. 142** on the other hand presents a darker, more orange fabric and a browner slip, but its dimensions preclude precise determination. Only **no. 146's** dimension could lead to a more precise morphological determination, but its slip is almost totally lost and it would seem that some post-depositional change to the fabric had occurred as well (exposure to fire?).

#### AFRICAN SLIPPED WARE (ARS, PL. 9-10)

Following the sharp decline of imports from Italic pottery workshop and alongside imports from the eastern Mediterranean, mainly ES B2, African red slipped ware (ARS) started to appear on the Adriatic in the 2<sup>nd</sup> c. (see also Borzić, Eterović Borzić 2015: 43-45), and its import will last well into the 6<sup>th</sup> and early 7<sup>th</sup> c., a time-span visible within the Soline assemblage as well. A basic subdivision by production has been attempted, although some finds were too badly preserved (i. e. lacking slip, eroded surfaces etc.) to allow precise determination. The shape-types are mostly given after Hayes' typology (Hayes 1973) with additions from *Atlante* I, 1981 and Bonifay 2004. As the distribution of this ware on the eastern Adriatic is fairly capillary and would require a dedicated study, not all analogies will be given, but only those regarding Soline's neighbouring sites regarded as most significant.<sup>18</sup>

18 For eastern Adriatic distribution overviews see Jelinčić 2011; Borzić, Eterović Borzić 2015.

## ARS A

The earliest shapes identified with certainty are H 8 in both A and B variants (**nos. 148-150**), and H 9B, to which could belong the rather minute fragments **nos. 151-154**<sup>19</sup>. Decorated A-type H8 fragments could be dated from the Flavian era to the second half of the 2<sup>nd</sup> c., while plain ones follow from 150 to the end of the century. Dating of H 9 is more or less analogue, and both belong to the ARS A1-2 production of Carthage area. Both shapes are present at Luke near Škrip on the island of Brač (Jelinčić 2011: 132, see also for a distribution overview in Dalmatia).

To form H 4 might belong the fragment **no. 147** which lacks both rim and a defined continuation of the wall, so its attribution is uncertain, but due to the features of the fabric, coincident with ARS A1, this attribution is possible. This form is slightly earlier than H 8/9 but their chronological development is basically the same.

A series of vertical, slightly rounded or thickened rims, some preserved in very minute fragments often hindering precise definition of the form, have been grouped on the basis of fabric. Fragments **nos. 155** and **156**, have been attributed to H 14A, **nos. 158-160** to H 14B, while **nos. 161** and **162** would rather find analogies with H 15. **Nos. 163** and **164** are more hard to define and could belong to forms H 14, 14/17, 16 (in particular n. 5) or 18 in ARS A. The dating of H 14 spans from the mid-2<sup>nd</sup> to the mid-3<sup>rd</sup> c., while H 15 could continue into the 4<sup>th</sup> (Bonifay 2004: 159).

A series of bases have been assigned to ARS A production as well (**nos. 165-167**), but their morphology and state of preservation preclude attribution to a precise shape.

## ARS C

At Soline variants of form H 50 are present and all belong to the fabric C (central Tunisian workshops): **nos. 169** and **177**, while **no. 170**, in C2, is closer to H 50B. To H 50B in C3 could belong **no. 172** datable to the second half of the 4<sup>th</sup> c. The overall chronology of this form spans from 230 CE into the 5<sup>th</sup> c., but our fragment might belong to the later 4<sup>th</sup> c. variants. The shape is also present in nearby Hvar (*Lisina*), on the homonymous island, with multiple examples (Katić 1999/2000: IV/7, 8, 9). To the mid-3<sup>rd</sup> - 4<sup>th</sup> c. might belong **no. 168** in C, perhaps a rim of H 49 form, which, being uncommon (Hayes 1973: 67-69), is hard to ascertain with certainty on the bases of a small rim fragment.

Another shape in C3 present at Soline is H 62B (**nos. 175, 176**) (mid-4<sup>th</sup> - early 5<sup>th</sup> c.), but sherds dimension preclude a definitive attribution. To this timeframe, or rather the beginning of the 5<sup>th</sup> c., belongs the bowl H 73A var. (Hayes 1973: fig. 21, 73A, n.10) (**no. 173**) in C4 with notches on the rim's edge (*Atlante I*: 72-73). The shape has also been identified in Hvar (*Lisina*) (Katić 1999/2000: VII/8).

To a variant of H 82/Lamb. 55 in C5, probably belongs **no. 174**, showing most similarities with the *Atlante* XXIX/10 type (*Atlante I* 1981: 68; Saguì 490, fig. 14), but as only the rim is preserved no information pertaining wall decoration is available. Seemingly, a fragment from *Salona* - Marušinac presents the same characteristics as *Atlante* XXIX/10 (*Atlante I* 1981: 68). The shape is overall dated from 430 to the first half of the 6<sup>th</sup> c., the production (C5) being characteristic of the second half of the 5<sup>th</sup> c. (Cau et al. 2011: 4).

## ARS D

To the end of the 3<sup>rd</sup>-beginning of the 4<sup>th</sup> c. can be dated **no. 177** identified as H 32/58 (or a variant of 58B/Lamb. 52C with no groove on the flat rim) in D1 (*Atlante I*, 1981: 81-82).

Plates characteristic of the 4<sup>th</sup>-5<sup>th</sup> c. and of ARS D northern Tunisian productions, are present with forms H 67, with var. A in D1 (**no. 181**) and D2 (**nos. 182, 183**) datable to the second half of the 4<sup>th</sup> c., and perhaps the bottoms **no. 184** (D1) and **no. 185** (D2); H 61 A (**no. 180**, D1), and B (**no. 179, 178** - var. 2 in D2) of the first half of the 5<sup>th</sup> c. H 61 and 61 B have been identified in Hvar (*Lisina*) as well (Katić 1999/2000: t, IV/1, 2).

To H 91 variant with small flange (D) might belong **no. 186**, while **no. 187** (perhaps in D2) could belong to the same form but variant C. The latter spanned the 6<sup>th</sup> c., while D variant is dated to the 7<sup>th</sup>. Plates of the latest shapes are present with very small fragments whose types are hard to define with certainty. A variant of this shape is present at a rural site on the nearby island of Brač (Jelinčić Vučković 2014: 305, t. 1/6). **Nos. 189** and **190** might thus belong to H 105 in D2, and **191** to H 105/106, while **188** more probably belongs to H 104B/Bonifay 104A2 in D1 (Bonifay 2004: 181-183) - all to be dated within the first half of the 6<sup>th</sup> - early 7<sup>th</sup> c. To the same time-frame might be dated **no. 192**, whose shape is hard to define, but it is close to H 107, Sigillée 83 by Bonifay (Bonifay 2004: 205).

Two fragments of bottoms with stamped decoration are present within the material, one (**no. 185**) probably belonging to a H 67A in D2, while the typological determination of the second is doubtful (*Atlante I* 1981, LVII (a)/14), but its fabric

19 The bad preservation of some of the fragments' surface precludes a definitive attribution to A (decorated) and B (undecorated) variants of H 9.

might be defined as D1. Lastly, a hard to define wall of ARS, bearing a rouletted decoration on the inside, has been identified within the material (**no. 194**), but no analogy could be proposed.

#### LATE ROMAN C (LR C, PL. 8)

The late eastern Mediterranean fine ware production Phocian LR C is also present at Soline, accompanying the later shapes of ARS. This ware is present with Form 3 types H and F, with only one specimen bearing rouletted decoration on the outer rim surface (**nos. 195-198**). They are both dated to the 6<sup>th</sup> c., but F is earlier than the variant H, present in later deposits (Hayes 1973: 338). **No. 199** presents a different, pale fabric, a feature ascribed to discoloration during firing (Hayes 1973: 324), and whose shape's variant is hard to define, but it shows analogies with B or C.

To LR C and probably shape 3, being thus far the only identified on the site, could belong the bottom **no. 200**, presenting a fabric congruent with LR C (hard fired, tiny lime inclusion, smoothed surface with "scratches", see Hayes 1973: 324) and a shape comparable to foots of shape 3. In Soline's environs, LR C has been identified in Hvar (*Lisina*) with shapes Form 1, 2 and 2A, and multiple sherds of 3C and F (Katić 1999/2000: t. III/1, IV/10, V/1, 2, VII/1-5), but also at Lovrečina on Brač, Ubli on Lastovo, Split (Diocletian Palace), Dugopolje (in the hinterland of *Salona*) - Form 3/F - H and Gata in the hinterland of Omiš (Katić 1994: 202; Borzić, Jadrić 2007: 160).

#### OTHER FINE WARE PRODUCTIONS (PL. 11)

Some fragments of walls with red slip or paint might belong to later Italic productions, whose presence at Soline is confirmed by the well preserved upper part of a jug of the *dipinta a bande* Val Pescara type (**no. 204**) (Staffa 2004: fig. 8-2B). These table wares can be dated to the 6<sup>th</sup>-7<sup>th</sup> c., although similar productions characterize the entire south-Italian pottery manufacture of late Antiquity and the early Middle Ages (de Iure 2015). Their production is linked to the Abruzzo region, while distribution is mostly concentrated within Pescara and the Val Pescara.

Other fragments belong to plates with a barely distinct foot and oblique walls (**no. 201**), covered with a brownish slip irregularly applied to the inner walls, datable into the 7<sup>th</sup> c. (Cirelli 2015: 14, fig. 2/5, 10), and another shape of bowl with inward and thickened rim that does resemble some of the painted late, perhaps south Italic, productions, but no precise analogy has been pinpointed (**no. 202**).

### CONCLUSIONS

Hellenistic pottery from Soline bay is attributed to different wares typical for the period in question, and constitutes what one might see as an expected central Dalmatian assemblage. Although some of the fragments could have belonged to the 3<sup>rd</sup> c. BCE (e. g. some Gnathia and black glazed sherds), the recovered material shows clear emphasis on the advanced Hellenistic period, notably 2<sup>nd</sup> and 1<sup>st</sup> c. BCE (e. g. Issean ware made in Gnathia tradition, grey slipped grey ware, red slipped ware, relief ware). The documented shapes refer to various forms of drinking cups, jugs, bowls and plates, in other words tableware used in everyday life, with few examples of ointment containers. Some of these were, as expected, produced regionally, notably at least in workshop(s) of the Greek city of Issa, while a minor portion is defined as Asia Minor and Apulian products, testifying to typical imports that reached these areas as a consequence of dynamic seaborne Mediterranean interaction. Considering the findspots, contextual analysis could unfortunately not have been conducted, as Hellenistic sherds were discovered either in layers used in agricultural activities or in layers above the bedrock (with later finds). The latter assemblages indicate levelling of the site probably as a consequence of extensive building activities sometime during Late Antiquity, possibly in the 4<sup>th</sup> c. Therefore, the finds are of little use in offering plausible detailed explanation on the use of the site during the Hellenistic period. One could pose a question if these were deposited as part of discards conceivably from ship crews that engaged in different activities on the site, or do they indicate regular occupation of the site by the local indigenous community or perhaps even someone from neighbouring Issa? There is no contextual evidence to support the latter, but it remains a possibility that, perhaps, could be also indicated by some coin finds (Roman republican coins from 3<sup>rd</sup> c. BCE onwards, and coin of Illyrian king Ballaios), which were unlikely been just discarded. According to the current state of research no Iron Age hillforts were documented on the St. Clement island, although indigenous communities certainly used the space as indicated by several prehistoric burials, including one from the later Iron age (Novak 1959). The presence of moulds on this locality so close to Issa, poses a new question that cannot be sufficiently explained without the missing contextual evidence. However, it is indeed quite plausible that already in Hellenistic times Soline bay was a kind of a rural settlement, where the nearby substantial fertile field and fresh water supplies played a crucial role in

its development, similar to many rural Hellenistic sites recovered around the island of Vis that were strongly connected to agricultural activities (Kirgin et al. 2006). The proximity of Issa, keeping in mind its vital role in the region during the Hellenistic times, and the position of Soline bay on the maritime route from *Issa* to the mainland (along with the above mentioned), has certainly had an important impact in its use during the Hellenistic period.

The classes of Roman imported fine wares present at Soline on Pakleni otoci is what we might define as a typical eastern Adriatic assemblage spanning from the 1<sup>st</sup> c. BCE to the 7<sup>th</sup> c. CE as testified by the eastern Adriatic analogies provided within the paper, while only a minor number of vessels might be interpreted as local eastern Adriatic products (for a similar conclusion see Borzić, Eterović Borzić 2015). Imports first arrived from the workshops of central and northern Italy, to then, within Augustan times, coexist in parallel with eastern Mediterranean productions such as ES A and then shift to Aegean or eastern Mediterranean TWW and ES B. The latter is of particular interest due to finds from cape Izmetišće shipwreck off the eastern part of Pakleni otoci, whose cargo was composed by finely packed and assembled “services” of ES B and Aegean coarse ware (Ilakovac 1968; Jurišić 1997: 83-88, 90-100) datable to the last phase of ES B production (Maggi 2006: 183). It would seem that, although ITS “tarda” has been tentatively recognised at Soline, here too, as noted for the Upper Adriatic (Trieste, Bakar) (Maggi 2006 with earlier bibliography) and *Liburnia* (Borzić, Eterović Borzić 2015 with earlier bibliography) Italic fine wares give way, already during the Flavians, to fine ware imports from the East which last until the end of ES B production, within the central years of the 2<sup>nd</sup> c. (Lund 2003: 127, 130, 131-133). Not only *sigillata*, but also TWW from the East arrived to the Adriatic at this point, as proved by the “ollette a collarino” (although a variant originated from Italy as well, see Pellegrino 2009) present with numerous examples at Soline, widely distributed elsewhere in Dalmatia (Konestra 2016: 429) and the hinterland as well (Istenič, Schneider 2000). The mechanisms that caused this shift of trade trajectories (west to east as opposed to the later east to west), noticeable along the Adriatic, are yet to be explained probably in regards to a wider Adriatic and Mediterranean pictures (see also Borzić, Eterović Borzić 2015), and for Soline more data could certainly be gathered from cooking wares and amphorae analysis (for a preliminary production’s overview see Kirigin et al. 2010: 57). Nevertheless, this variety of wares is indicative of Soline bay’s favourable location along the eastern Adriatic sea routes (Maggi 2006: 183 with earlier bibliography), testified by the Izmetišće shipwreck as well, but also by its proximity to two major *emporía* - *Salona* and *Narona*.

As two fragments of Pannonian slipped ware (Pannonische Glanztonware) have tentatively been identified within the material, but are too minute to allow further elaborations, *Salona* could be seen as mediator in their trade as well (Ožanić Roguljić, Konestra 2017: 458). As diagnostic material at Soline is scarce due to extreme fragmentation and bad preservation of finds, quantities could not be defined, which hinders the possibility to establish a ratio between the various wares per period, and to provide a chronological comparison of fine ware productions. The mid- and late- Imperial repertoire is nevertheless marked by ARS, the most numerous Roman fine ware uncovered at the site. The latest shapes of ARS D, those of the 6<sup>th</sup> and 7<sup>th</sup> c., are accompanied by Phocian LR C, an Adriatic trend to which other pottery classes, such as cooking ware, could be added (Cirelli 2016: 35).

Contacts with the western Adriatic are once again noticeable at this latest times with a very well preserved Val Pescara jug and some other tableware shapes lacking more precise analogies. Their appearance at Soline can again be linked to its location along the sea-routes that connected *Salona*–Split/central Dalmatia to southern Italy (Cirelli 2016: 35, fig. 1: 2017: 304). This testifies to the importance of not only this site but of all central Dalmatian islands in the trade networks of the Adriatic (and beyond) well into the early Middle Ages (Brusić 2010).

Roman and Late Antique pottery, on the other hand, testifies to the longevity of the site, or rather, its constant occupation. In fact, within the material no *caesura* could be determined, leading to the supposition that the site, though going through various architectonic changes (Teichner, Ugarković 2014), the latest well visible and dated to Late Antiquity (Ugarković et al. 2013: 62), was in use for many centuries and survived much of antiquities turmoils. As testified by underwater surveys of the bay, salt working (Begović et al. 2012: 156-157), along with the fertile agriculture land to the east of the villa (Kirigin et al. 2011, fig. 4), must have provided the means to sustain its inhabitants, maybe rendering this site not only a consumer, but also a producer and active participant within ancient Adriatic’s trade.

## CATALOGUE

## HELLENISTIC POTTERY

Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
<b>Black glazed ware</b>				
1	340	Gnathia ware? Apulian import?	Skyphos, rim	Pl. 1
2	22, 2011, 6, 602b	Gnathia ware, probably Issean	Skyphos, rim	Pl. 1
3	209, 2013, 13, 13001	Late Hellenistic ware made in Gnathia tradition, Issean	Skyphos, rim	Pl. 1
4	143, 2013, 12, 12019	Black glazed ware, import?	Hemispherical cup, rim	Pl. 1
5	2007, S 6	Black glazed ware, regional/local?	Kantharos (?), rim	Pl. 1
6	96, 2012, 10, 1005	Black glazed ware	Echinus bowl, rim	Pl. 1
7	293, 2012, 10, 10004	Black glazed ware, advanced Helleni- stic production?	Bowl with outturned rim	Pl. 1
8	185, 2013, 12, 12019	Black glazed ware	Plate (?), rim	Pl. 1
9	323, 2010 2, 6	Gnathia (?) /Black glazed ware, proba- bly Issean	Jug, lower part of the vessel	Pl. 1
10	325, 2010	Black glazed ware	Jug (smaller), foot	Pl. 1
11	153, 2012, 12, 12012	Black glazed ware	Skyphos, foot	Pl. 1
12	314, 2012, 11, 11015	Late Hellenistic ware made in Gnathia tradition	Jug, handle	Pl. 1
13	16, 2011, 5, 506	Late Hellenistic ware made in Gnathia tradition	Table amphora, part of a handle-rotelle	Pl. 1
14	35, 2012, 7, clea- ning profile	Black glazed ware	Jug (?) (smaller), foot	Pl. 1
15	SF 21, 2010, 2, 6	Black glazed ware	Kantharos, handle	Pl. 1
16	33, 2012, 8, 802	Black glazed ware	Kantharos, handle	Pl. 1
17	297/299, 2012, 10, 10004	Black glazed ware?	Kantharos, handle	Pl. 1
18	281, 2012, 10, 10005	Black glazed ware, regional/local	Articulated kantharos, body	Pl. 1
19	346, 2012, 10, 1005	Black glazed ware, with graffiti	Drinking cup, body	Pl. 1
<b>Red slipped ware</b>				
20	186, 2013, 12, 12019	Red slipped ware	Kantharos, rim	Pl. 1
21	238, 2012, 10, 10005	Red slipped ware	Foot	Pl. 1
22	285, 2012, 10, 10005	Red slipped ware	Kantharos, handle	Pl. 2
<b>Grey slipped grey ware</b>				
23	42, 2010, 2, 6	Grey slipped grey ware	Plate with a vertical rim	Pl. 2
24	85, 2007-2010	Grey slipped grey ware	Plate with a vertical rim	Pl. 2
25	316, 2007-2010	Grey slipped grey ware	Plate with a vertical rim	Pl. 2
26	315, 2007-2010	Grey slipped grey ware	Plate with a vertical rim	Pl. 2
27	87, 2007-2010	Grey slipped grey ware	Plate with a vertical rim	Pl. 2
28	201, 2012, 12, 12026	Grey slipped grey ware	Rim of a plate?	Pl. 2
29	184, 2012, 12, 12019	Grey slipped grey ware	Plate	Pl. 2
30	196, 2013, 12, 12026	Grey slipped grey ware	Rim of a plate?	Pl. 2



Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
31	322, 2007-2010	Grey slipped grey ware	Bowl, with the outturned rim	Pl. 2
32	317, 2007-2010	Grey slipped grey ware	Bowl, with the outturned rim	Pl. 2
33	25, 2011, 6, between 604 and southern profile	Grey slipped grey ware	Bowl, with the outturned rim	Pl. 2
34	193 plus 194, 2013, 12, 12026	Grey slipped grey ware	Bowl, simple rim	Pl. 2
35	329, 2010, 2, 6	Grey slipped grey ware	Bowl, simple rim	Pl. 2
36	326, 2010, 2, 5/9	Grey slipped grey ware	Bowl	Pl. 2
37	177, 2013, 12, 12019	Grey slipped grey ware	Cup (?), rim	Pl. 2
38	236, 2012, 11, 11008	Grey slipped grey ware	Kantharos, rim	Pl. 2
39	328, 2010, 2, 6	Grey slipped grey ware	Skyphos, rim	Pl. 2
40	197,	Grey slipped grey ware	Table amphora, rim	Pl. 2
41	228, 2013, 13, 13002	Grey slipped grey ware	Table amphora (?), rim	Pl. 2
42	341, 2012, 10, 10005	Grey slipped grey ware	Table amphora, neck	Pl. 2
43	237, 2013, 11, 11008	Grey slipped grey ware	Jug, base	Pl. 2
44	327, 2010	Grey slipped grey ware	Jug, base	Pl. 2
45	86, 2007-2010	Grey slipped grey ware	Jug (?), base	Pl. 2
46	275, 2012, 10, 10005	Grey slipped grey ware	Plate, base	Pl. 2
47	345, 2010, 2, 6	Grey slipped grey ware	Drinking cup, foot	Pl. 2
48	249, 2012, 11, 11019	Grey slipped grey ware	Drinking cup (?), foot	Pl. 2
49	331, 2010	Grey slipped grey ware	Lamp, nozzle	Pl. 3
<b>Relief ware</b>				
50	89, 2012, 10, 1005	Grey slipped grey ware /reliefware?	Crater, rim	Pl. 3
51	24, 2007-2010	Grey slipped grey ware /reliefware?	Crater, rim	Pl. 3
52	2010	Grey slipped grey ware /reliefware	Bowl, rim	Pl. 3
53	339, 2010, 2, 6	Grey slipped grey ware /reliefware	Bowl, rim	Pl. 3
54	101, 2012, 8, 824	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
55	96, 2010, 2, 6	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
56	97, 2012, 10, 10005	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
57	95, 2012, 10, 10005	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
58	178, 2013, 12, 12009	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
59	187, 2013, 12, 12019	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
60	99, 2001, 4, 401	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
61	93, 2012, 10, 1005	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
62	198	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
63	195, 2013, 12, 120126	Grey slipped grey ware /reliefware	Bowl, wall	Pl. 3
64	340, 2010, 2, 6	Grey slipped grey ware /reliefware	Bowl, base	Pl. 3



Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
65	88, 2010, 2, 6	Grey slipped grey ware /reliefware	Bowl, base	Pl. 3
66	100, 2011, 6, 604, cleaning	Red-brown coated/reliefware	Bowl, rim	Pl. 3
67	91	Red coated reliefware	Bowl, wall/base	Pl. 3
68	282, 2012, 10, 1005	Red-brown coated reliefware	Bowl, wall/base	Pl. 3
69	146, 2013, 11, 11008	Red coated reliefware	Bowl, wall	Pl. 3
70	349, 2010, 3, 4	Mould		Pl. 4
71	348, 2010, 3, 4	Mould		Pl. 4
72	350, 2010, 2, 5/9	Mould		Pl. 4
<b>Unguentaria</b>				
73	117, 2013, 12, 12000	Plain ware	Unguentarium, rim and a neck	Pl. 5
74	25, 2012, 8, 820	Plain ware	Unguentarium, foot	Pl. 5
75	226, 2012, 13, 13002	Plain ware	Unguentarium, foot	Pl. 5
76	251, 2012, 11, 11015	Plain ware	Unguentarium, body and base	Pl. 5

## EARLY AND LATE ROMAN POTTERY

Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
<b>Thin-walled ware</b>				
77	92, 2010, 2, 6	TWW fabrikat A	Beaker (Marabini I/Ricci 1/1/ Mayet 1/Vegas 23A /Schindler Kaudelka 20)	Pl. 6
78	48, 2010, 2, 5/9	TWW	Beaker (Marabini Moevs 1973: 89, n. 143)	Pl. 6
79	41, 2010, 2, 5/9	TWW fabrikat A	Beaker (Schindler Kaudelka form 2, 5, 6)	Pl. 6
80	247, 2013, 11, 11015	TWW	Beaker	Pl. 6
81	305, 2010, 2, 5/9	TWW fabrikat A	Cup/bowl Schindler Kaudelka form 28	Pl. 6
82	115, 2013, 12, 12023	TWW fabrikat A	Beaker (Schindler Kaudelka form 1, 35)	Pl. 6
83	150, 2013, 12, 12019	TWW fabrikat A	Beaker ? (similar to Warner Slane 1990: 96/ cat. 200 but with no glaze)	Pl. 6
84	18, 2012, 8, 801	TWW fabrikat D	Bowl (Schindler Kaudelka 84)	Pl. 6
85	43, 2010, 2, 6	TWW fabrikat D	Bowl (Schindler Kaudelka Form 84)	Pl. 6
86	270, 2013, 11, 11021	TWW fabrikat D	Bowl	Pl. 6
87	49, 2010, 2, 5/9	TWW fabrikat D?	Bowl	Pl. 6
88	27, 2012, 7, 723	TWW fabrikat D?	Bowl	Pl. 6
89	23, 2010, 2, 6	TWW fabrikat C	Bowl	Pl. 6

Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
90	37, 2010, 3, 9	TWW fabrikat D	Bowl	Pl. 6
91	28, 2012, 8, 807	TWW fabrikat D	Bowl	Pl. 6
92	30, 2012, 10, 1005	TWW (unknown)	Beakers	Pl. 6
93	31, 2012, 10, 1005	TWW (unknown)	Beakers	Pl. 6
94	97, 2012, 10, 1005	TWW (unknown)	Beakers	Pl. 6
95	192, 2013, 12, 12026	TWW (unknown)	Beakers	Pl. 6
96	284, 2012, 10, 1005	TWW (unknown)	Beakers	Pl. 6
97	14, 2012, cleaning of wall B	TWW / Red fabric with red gloss (eastern Adriatic production?)	Beaker Red fabric with red gloss (eastern Adriatic production?)	Pl. 6
98	203, 2013, 12026	TWW fabrikat B? (pale fabric with traces of red gloss)	Bowl	Pl. 6
99	91bis, 2007-2010	TWW / Red fabric with many inclusions	Bowl	Pl. 6
100	204, 2013, 12, 12026	TWW Red fabric with red gloss, brown on the interior, very thin, almost "eggshell" like. Line of ruled decoration. Central Italian?	?	Pl. 6
101	122, 2013, 12, 12007	TWW/Aegean	Mugs/"Ollette a collarino"	Pl. 6
102	148, 2013, 12, 12001	TWW/Aegean	Mugs/"Ollette a collarino"	Pl. 6
103	164, 2013, 12, 12022	TWW/Aegean	Mugs/"Ollette a collarino"	Pl. 6
104	200, 2013, 12, 12026	TWW/Aegean	Mugs/"Ollette a collarino"	Pl. 6
105	357, 2009, 4	TWW/Aegean	Mugs/"Ollette a collarino"	Pl. 6
106	370, 2007, 4	TWW/Aegean	Mugs/"Ollette a collarino"	Pl. 6
107	210, 2013, 13, 13001	TWW/Aegean	Beakers? (similar to Bekić Višnjić 2008: t. 7/87,88, t. 8/76, 77, t. 10/108, 109 beakers with grooved body.	Pl. 6
108	233, 2013, 13, 13001	TWW/Aegean	Beakers? (similar to Bekić Višnjić 2008: t. 7/87,88, t. 8/76, 77, t. 10/108, 109 beakers with grooved body.	Pl. 6
109	78, 2011, 5, 500	TWW/Aegean	Beakers? (similar to Bekić Višnjić 2008: t. 7/87,88, t. 8/76, 77, t. 10/108, 109 beakers with grooved body.	Pl. 6
110	2010, 3, 7	TWW / Central Italy?	Bowl	Pl. 6
111	94, 2012, 10, 1005	TWW / Central Italy?	Bowl	Pl. 6
<b>Italian sigillata</b>				
112	93, 2011, 4, 405	ITS A	Consp. 2?	Pl. 7
113	17, 2012, 8, 801	ITS B	Consp. 22	Pl. 7

Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
114	80, 2012, 10, 1002	ITS? ( <i>tarda?</i> )	Consp. 34	Pl. 7
115	76, 2012, 10, 1006	ITS relief	Sarius or ACO	Pl. 7
116	162, 2013, 12, 12022	ITS relief	Sarius	Pl. 7
117	2009	ITS	Jug/Fabrikat B	Pl. 7
118	250, 2013, 11015	ITS	Jug/Fabrikat B	Pl. 7
119	372, 2010, 3, 7	ITS A	Beaker? With rulleated deco- ration	Pl. 7
120	365, 2010, 2, 5/9	ITS B	Undeterminable rim	Pl. 7
121	373, 2010, 3, 7	ITS C	Undeterminable rim	Pl. 7
122	375, 2009, 4	ITS A	Undeterminable rim	Pl. 7
123	273, 2013, 11, 11021	ITS B ( <i>tardo padana?</i> )	Bottom	Pl. 7
124	159, 2013, 12, 12022	ITS	Bottom	Pl. 7
125	246, 2013, 11, 11015	ITS	Bottom	Pl. 7
<b>Eastern sigillata A</b>				
126	364, 2010, 2, 5/9	ES A	Forma 3	Pl. 8
127	85, 2007-2010	ES A	Forma 3	Pl. 8
128	84-86, 2007-2010	ES A	Forma 65	Pl. 8
<b>Eastern sigillata B</b>				
129	67, 2012, 801	ES B1	Forma 16	Pl. 8
130	225, 2013, 13002	ES B1	Forma 19	Pl. 8
131	300, 2014, 1004, under tile floor	ES B2	Form 58	Pl. 8
132	131, 2013, 12005	ES B2	Form 60	Pl. 8
133	353, 2008	ES B2	Form 60	Pl. 8
134	199, 2013, 12, 12026	ES B2	Form 80	Pl. 8
135	9, S 2012, 700	ES B2	Form 62A, 74B, 75?	Pl. 8
136	308, 2010, 3, 7	ES B2	Form 53?, Parica 2008: t. 2/6, 7	Pl. 8
137	185, 2013, 12019	ES B1	Bottom	Pl. 8
138	78, 2011, 5, 500	ES B2	Bottom	Pl. 8
139	42, 2010, 2, 6	ES B2	Bottom	Pl. 8
<b>Eastern productions - unidentified</b>				
140	2007-2010	Eastern Mediterranean?	Plate?	Pl. 8
141	311, 2010, 2, 5/9	ES A? ES B1?	Bowl/Cup	Pl. 8
142	15, 2012, 10, 1004	ES C?	Plate with vertical rim	Pl. 8
143	-	Pontic sigillata?	Forma IV	Pl. 8
144	241, 2013, 11, 11013	Eastern Mediterranean?	Bottom	Pl. 8
145	83, 2007	Eastern Mediterranean?	Bottom	Pl. 8
146	29, S 2012, 10, 1005	Eastern Mediterranean?	Bowl	Pl. 8
<b>African red slip ware</b>				
147	234, 2013, 11, 11007	ARS A1	H 4?	Pl. 9
148	2009	ARS A1 / 1/2?	H 8	Pl. 9

Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
149	58, 2012, 8, 813	ARS A	H 8	Pl. 9
150	374, 2010, 3, 7	ARS A	H 8	Pl. 9
151	8, 2012, 7, 700	ARS A	H 9	Pl. 9
152	354, 2009	ARS A	H 9	Pl. 9
153	124, 2013, 12, 12008a	ARS A	H 9	Pl. 9
154	363, 2010, 3, 7	ARS A	H 9	Pl. 9
155	57, 2012, 8, 820	ARS A2	H 14A	Pl. 9
156	19, S 2012, 10, 1004	ARS A2	H 14A	Pl. 9
157	208, 2013, 13, 13001	ARS A2	H 14B	Pl. 9
158	6, S 2012, 7, 700	ARS A	H 14B	Pl. 9
159	9, S 2012, 7, 700	ARS A2	H 14B	Pl. 9
160	230, 2013, 11, 11001	ARS A2	H 14B	Pl. 9
161	3, 2010, 2, 3	ARS A2	H 15	Pl. 9
162	11, 2012, 7, 700	ARS A2	H 15	Pl. 9
163	5, 2012, 7, 700	ARS A	H 14, 14/17, 16, 18?	Pl. 9
164	227, 2013, 13, 13002	ARS A	H 14, 14/17, 16, 18?	Pl. 9
165	352, unknown	ARS A	Bottom	Pl. 9
166	334, 2007	ARS A?	Bottom	Pl. 9
167	263, 2013, 11, 11019	ARS A?	Bottom	Pl. 9
168	39, 2011, 5, 506	ARS C?	H 49?	Pl. 9
169	13, 2012, 7, 705	ARS C	H 50?	Pl. 9
170	unknown	ARS C	H 50	Pl. 9
171	116, 2013, 12, 12000	ARS C2	H 50B	Pl. 9
172	358, unknown	ARS C3	H 50B	Pl. 9
173	127, 2013, 12005/12007	ARS C4	H 73A var.	Pl. 9
174	45, 2010, 2, 6	ARS C5	Atlante XXIX/10 (var. Hayes 82/Lamb. 55A)	Pl. 9
175	118, 2013, 12, 12000	ARS C3	H 62B?	Pl. 9
176	207, 2013, 13, 13001	ARS C3?	H 62B?/50B late var.?	Pl. 9
177	1, 2011, 6, 600	ARS D1	H 32/58, Lamb. 52C	Pl. 10
178	144, 2013, 12, 12017	ARS D2	H 61B, var. 2	Pl. 10

Number	Old cat. nos./ year/ trench/layer	Ware type/production	Shape	Drawing
179	111, 2013, 12, 12020	ARS D2	H 61B, var. 2	Pl. 10
180	157, 2013, 12, 12024	ARS D1	H 61A	Pl. 10
181	113, 2013, 12, 12023	ARS D1	H 67A	Pl. 10
182	9bis, 2012, 7, 700	ARS D2	H 67A	Pl. 10
183	235, 2013, 11, 11006	ARS D2	H 67A	Pl. 10
184	169, 2013, 12, 12023	ARS D1	H 67? Bottom	Pl. 10
185	114, 2013, 12, 12023	ARS D2	Bottom, Style A (ii), Atlante 1, n. 22, t. XLI(a)/36	Pl. 10
186	18bis, unknown	ARS D (1?)	H 91D	Pl. 10
187	356, 2009	ARS D (2?)	H 91C (Atlante XLIX/10)	Pl. 10
188	306, 2007, surface find	ARS D1	H 104B	Pl. 10
189	2, 2012, 8, 815	ARS D2	H 105	Pl. 10
190	5, 2012, 7, 700	ARS D2	H 105	Pl. 10
191	20, 2012, 10, 1004	ARS D	H 105/106	Pl. 10
192	128, 2013, 12, 12005	ARS D	H 107? Sigillée 83?	Pl. 10
193	375, 2009, 4	ARS D1	Bottom, Style A(iii)?, Atlante I n. 74, t. LVII (a)/14	Pl. 10
194	170, 2013, 12, 12023	ARS C? or D??	?	Pl. 10
<b>Late Roman C</b>				
195	64-65, 2012, 800; 2012, 806	LR C	H Form 3/H	Pl. 8
196	359, 2010, 2, 6	LR C	H Form 3/H	Pl. 8
197	14, 2012, cleaning of wall B	LR C	H Form 3/H	Pl. 8
198	unknown	LR C	H Form 3/F	Pl. 8
199	129, 2013, 12, 12005	LR C	H Form 3/B-C?	Pl. 8
200	11, 2012, 7, 700	LR C	H Form 3?	Pl. 8
<b>Other fine ware productions</b>				
201	152, 2013, 12, 12021	Late Italic "painted" production?	Plate	Pl. 11
202	271, 2013, 11, 11022	Late Italic "painted" production?	Bowl	Pl. 11
203	361, 2009, 2, 13	Late Italic "painted" production?	?	Pl. 11
204	376, 2010, 2, 6	Val Pescara painted production	Jug	Pl. 11



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## SAŽETAK

**KERAMIČKO FINO STOLNO POSUĐE HELENISTIČKE, RIMSKE I KASNOANTIČKE DATACIJE  
IZ UVALE SOLINE NA OTOKU SV. KLEMENT KOD HVARA**

Ključne riječi: helenističko fino stolno posuđe, rimsko i kasnoantičko fino stolno posuđe, Pakleni otoci

U radu su prikazani nalazi keramičkog finog stolnog posuđa iz helenističkog, rimskog i kasnoantičkog perioda, otkriveni nedavnim arheološkim istraživanjima rimske vile u uvali Soline na otoku Sv. Klement kod Hvara. Riječ je o nizu karakterističnih keramičkih vrsta lokalno/regionalne, italske, egejske, istočno mediteranske ili sjevernoafričke proizvodnje, koji predstavljaju klasični repertoar posuđa koje je cirkuliralo Jadranom, odnosno njegovim središnjim i istočnim dijelom, dok je novina prisutnost kasno italske slikane keramike. Ovi nalazi svjedoče o važnosti ne samog lokaliteta već općenito središnjih dalmatinskih otoka u trgovačkim mrežama Jadrana (i šire) u spomenutim razdobljima. Iako je prostor vile očigledno prolazio kroz različite arhitektonske promjene, od kojih su najbolje dokumentirane i danas vidljive one iz razdoblja kasne antike, analizirani keramički materijal daje naslutiti kontinuiranu naseljenost uvale Soline od kasnog helenističkog doba do zalaza kasne antike. Pretpostavljene antičke solane, kao i najveće plodno polje na otoku koje se nalazilo uz rubove samog imanja, pružali su dovoljno sredstava za održavanje stanovništva, a ovaj se ruralni lokalitet zasigurno istaknuo kao proizvođač i aktivni sudionik u mrežama antičke trgovine na Jadranu.



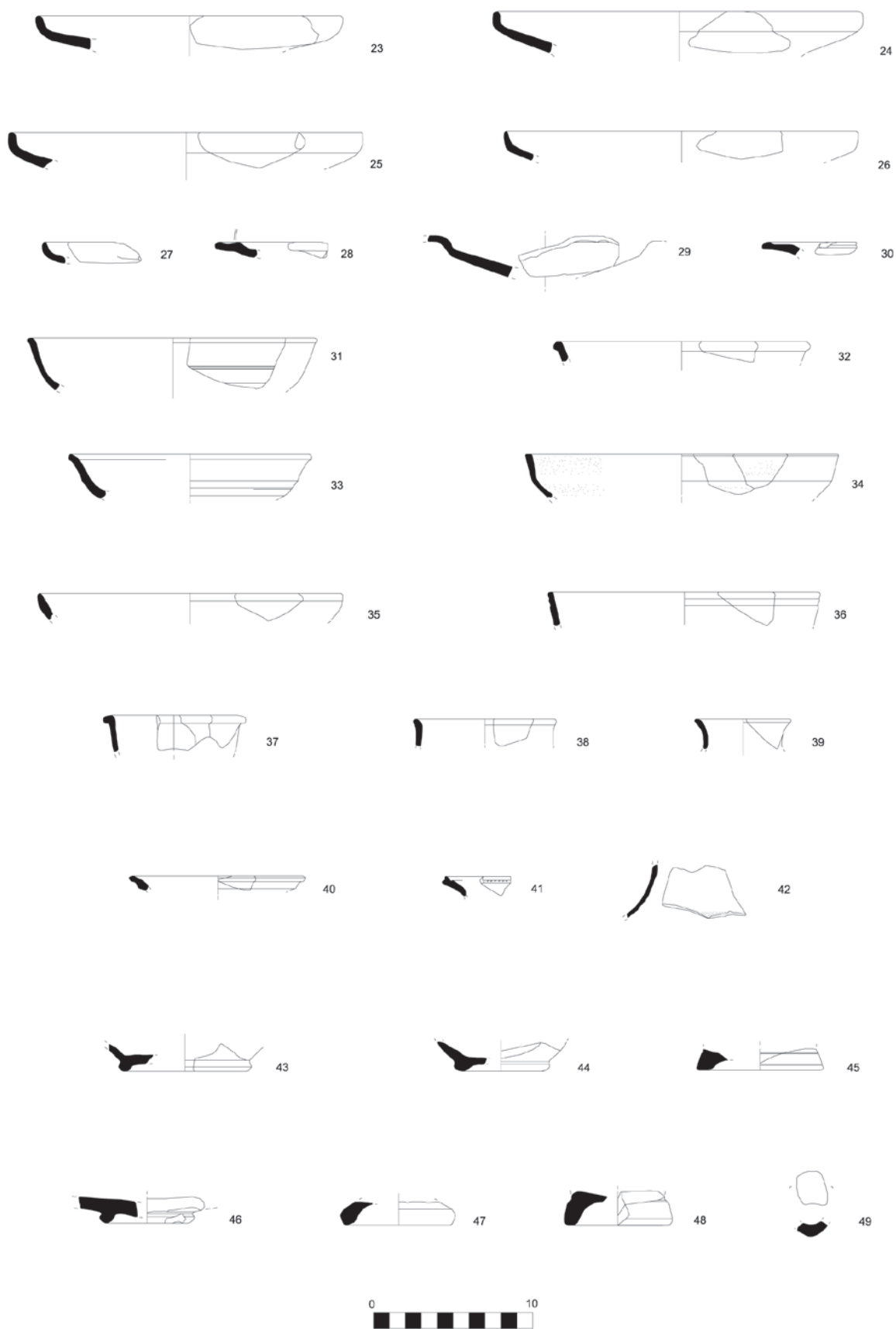
## Pl. 1



**Pl. 1** Gnathia ware and ware in gnathia tradition (1-3, 9, 12-13), Black glazed ware (4-8, 10, 11, 14-19), Red slipped ware (20-22) (made by: S. Čule and A. Konestra)



## Pl. 2



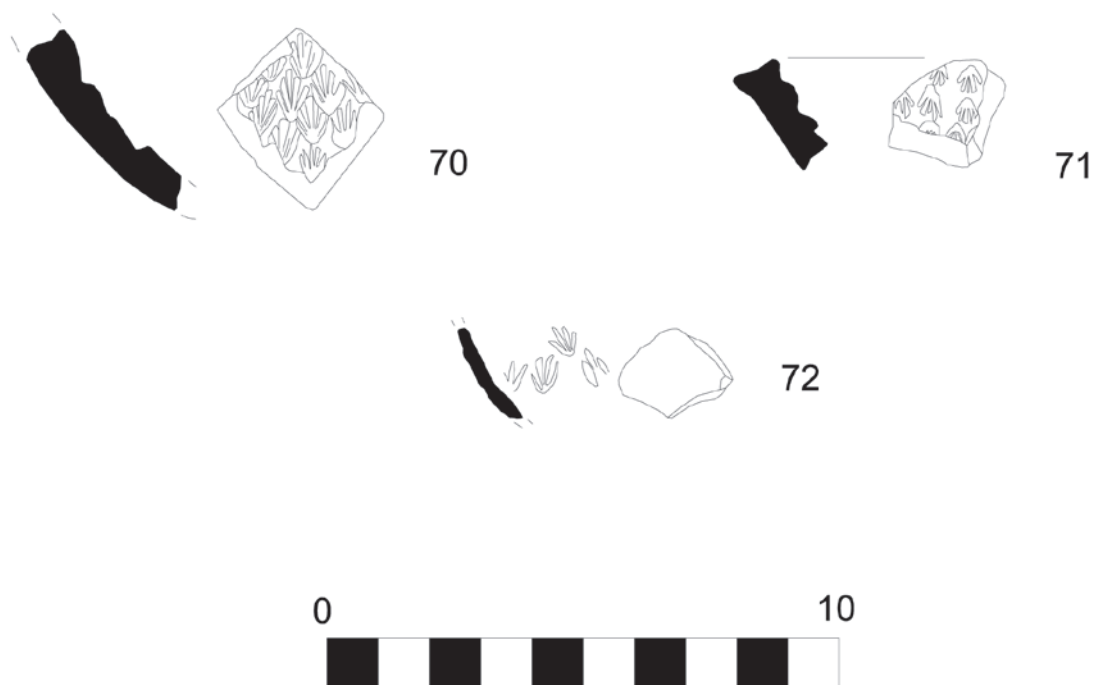
Pl. 2 Grey slipped grey ware (made by: S. Čule and A. Konestra)

## Pl. 3



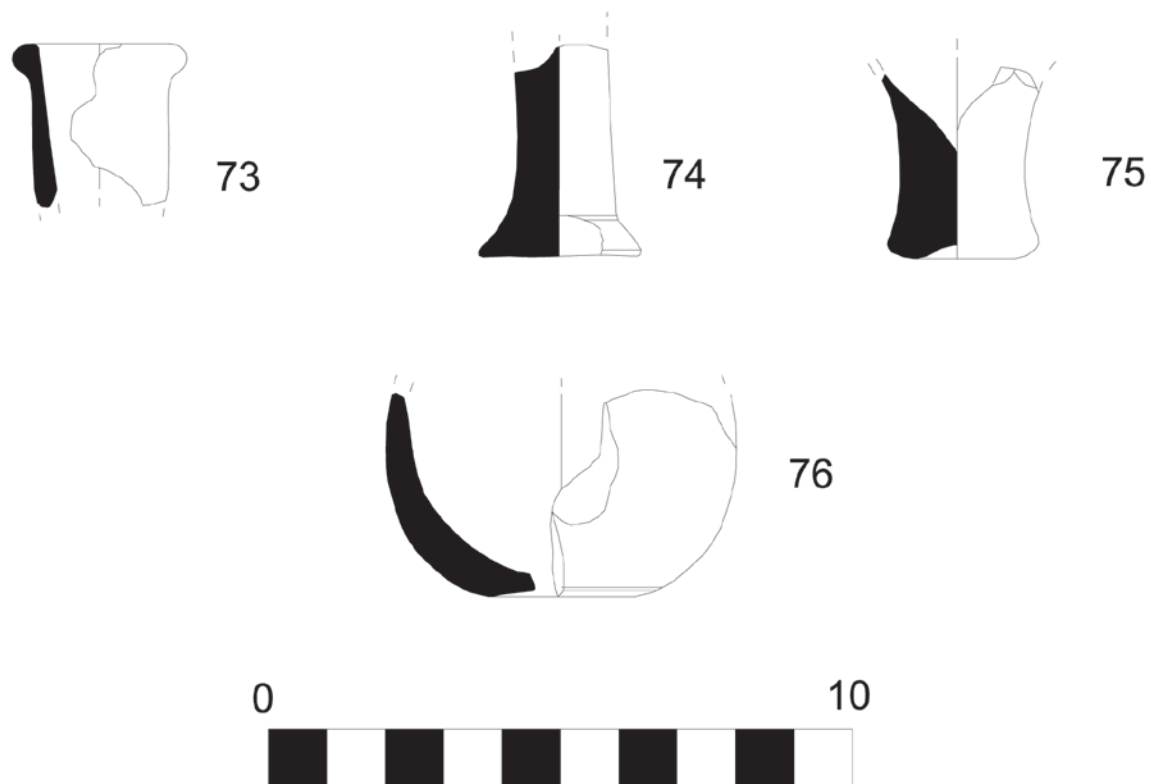
Pl. 3 Relief mouldmade grey ware (50-65) and red slipped ware (66-69) (made by: S. Čule and A. Konestra)

## Pl. 4



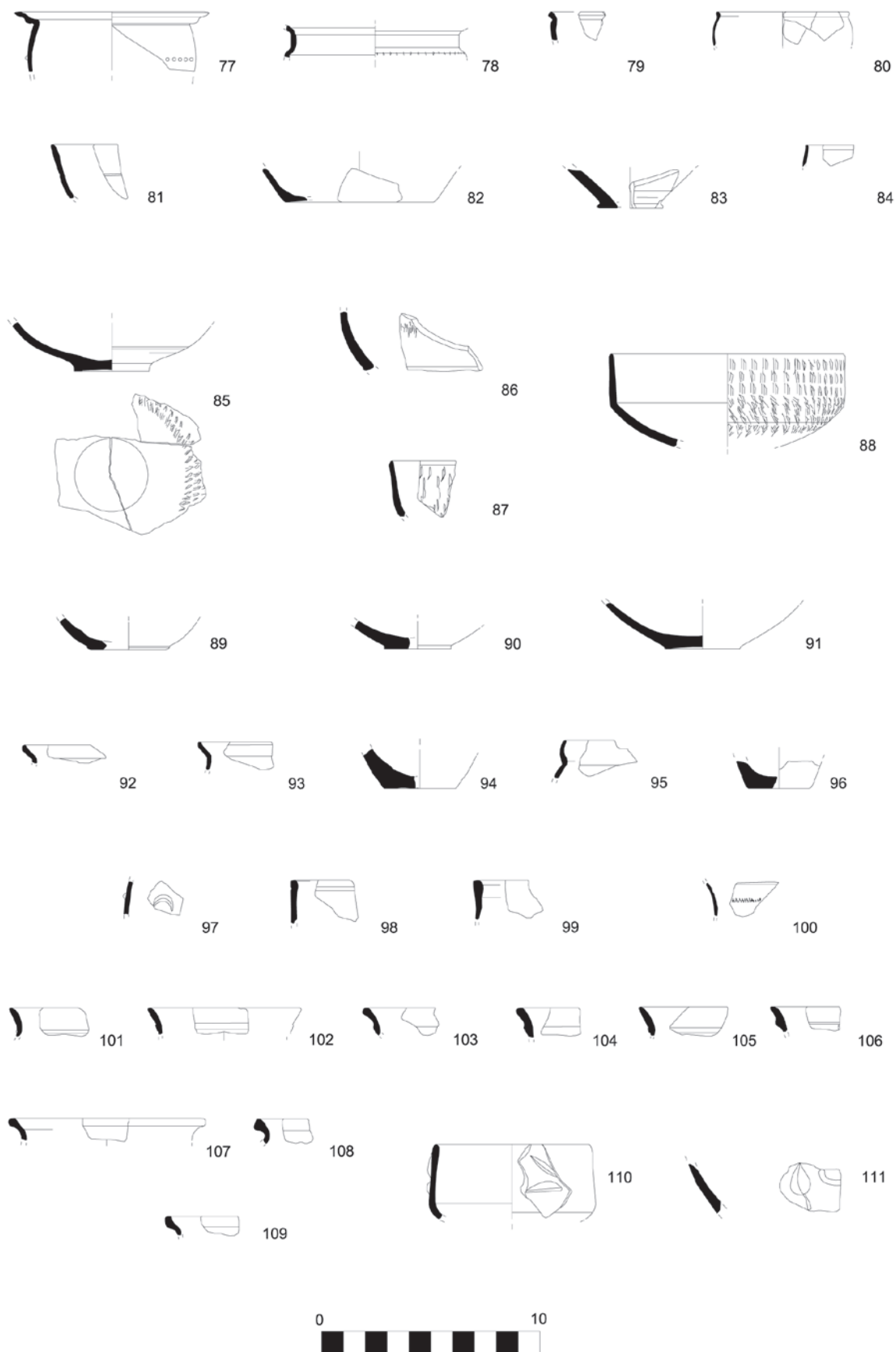
Pl. 4 Fragments of moulds for production of relief ware (made by: S. Čule and A. Konestra)

## Pl. 5



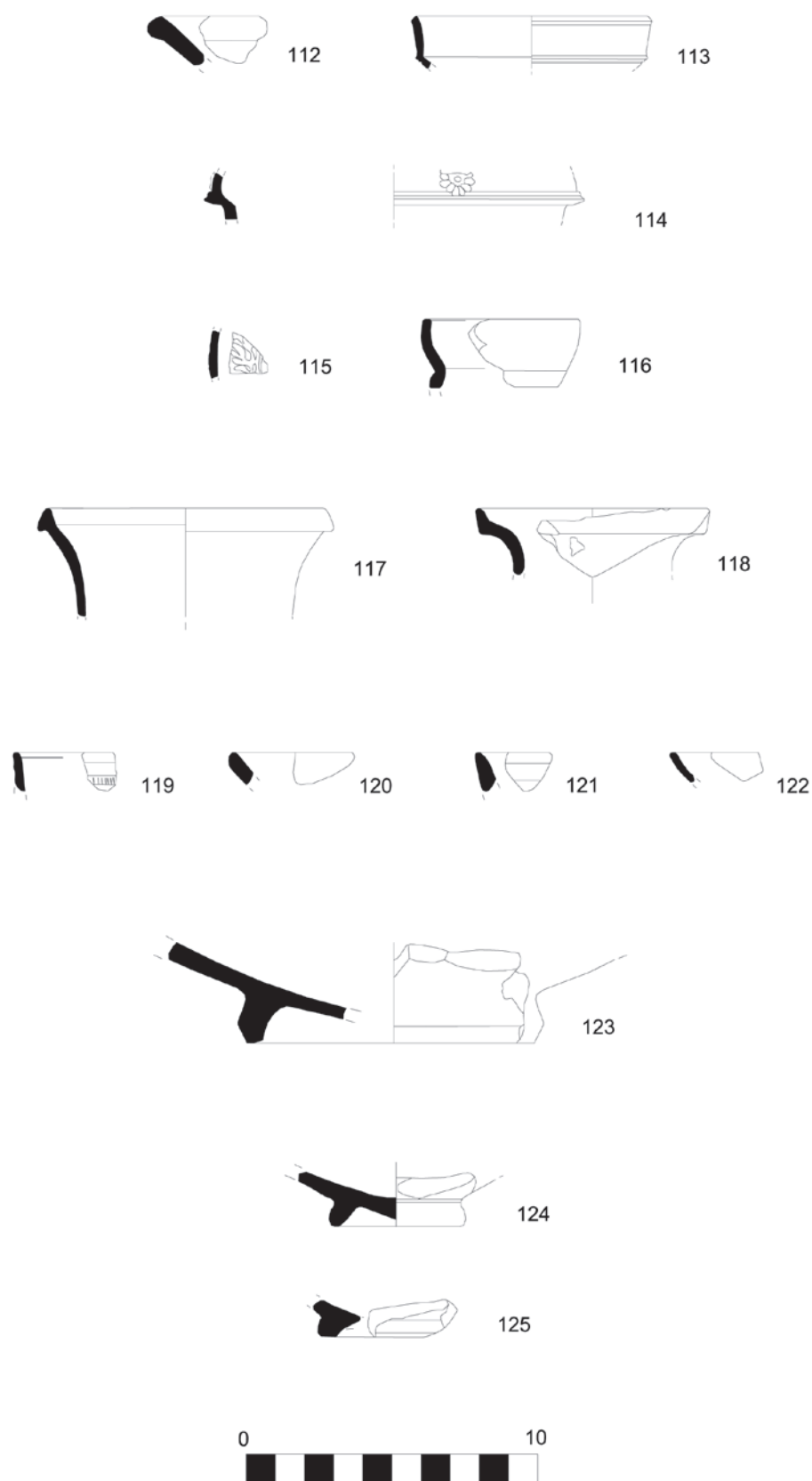
Pl. 5 Unguentaria (made by: S. Čule and A. Konestra)

## Pl. 6



Pl. 6 Thin-walled ware (made by: S. Čule and A. Konestra)

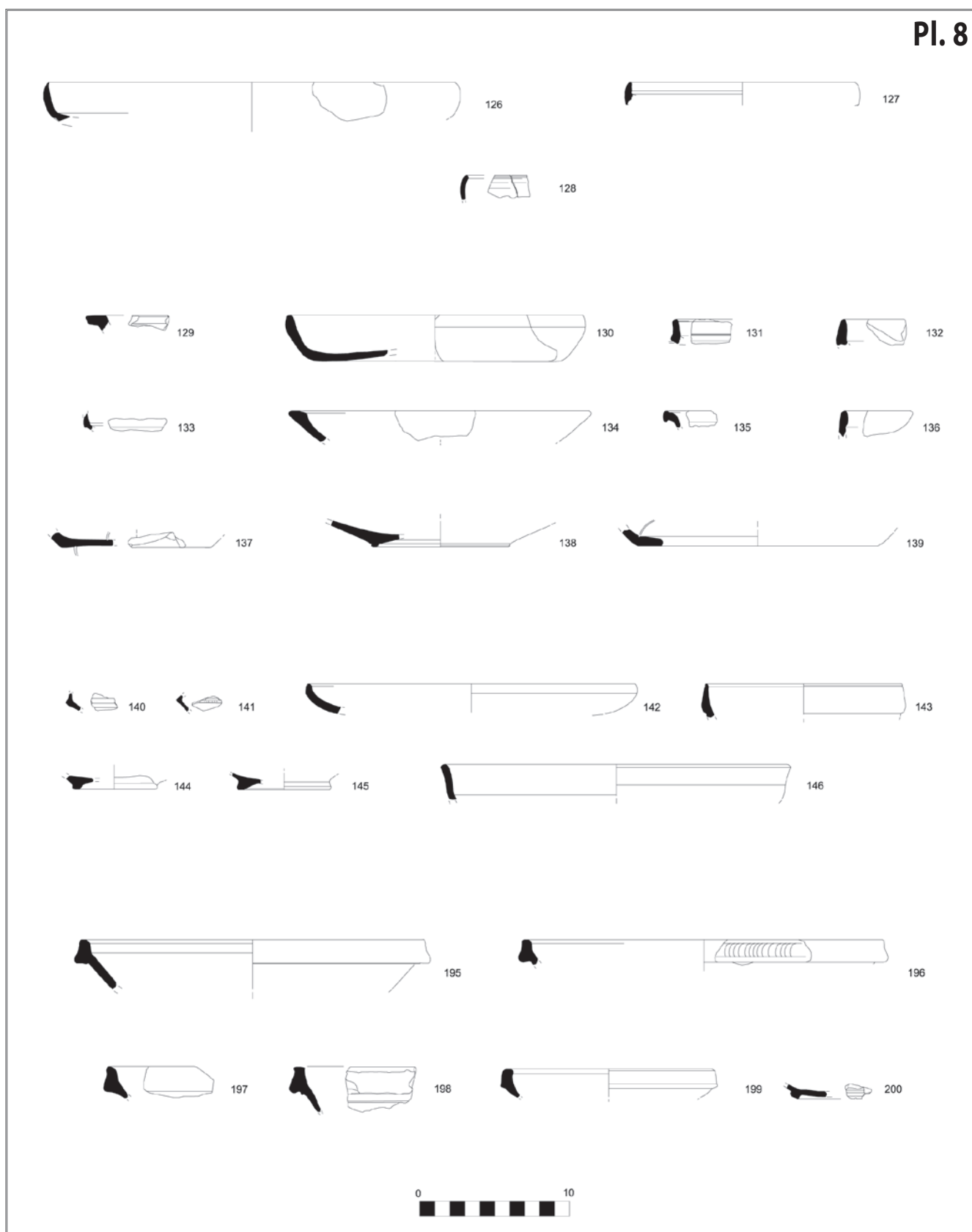
## Pl. 7



Pl. 7 Italian terra sigillata (made by: S. Čule and A. Konestra)

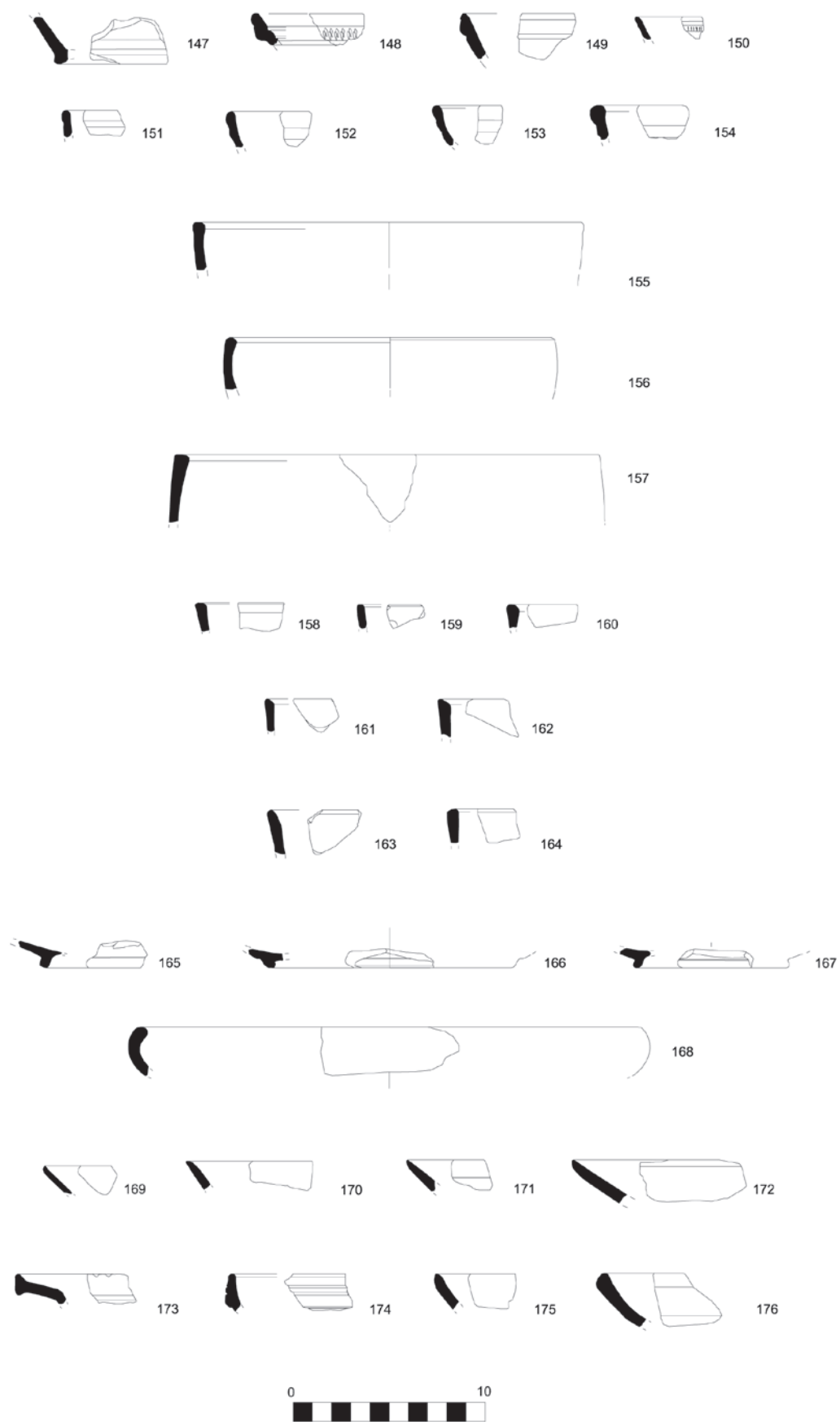


## Pl. 8



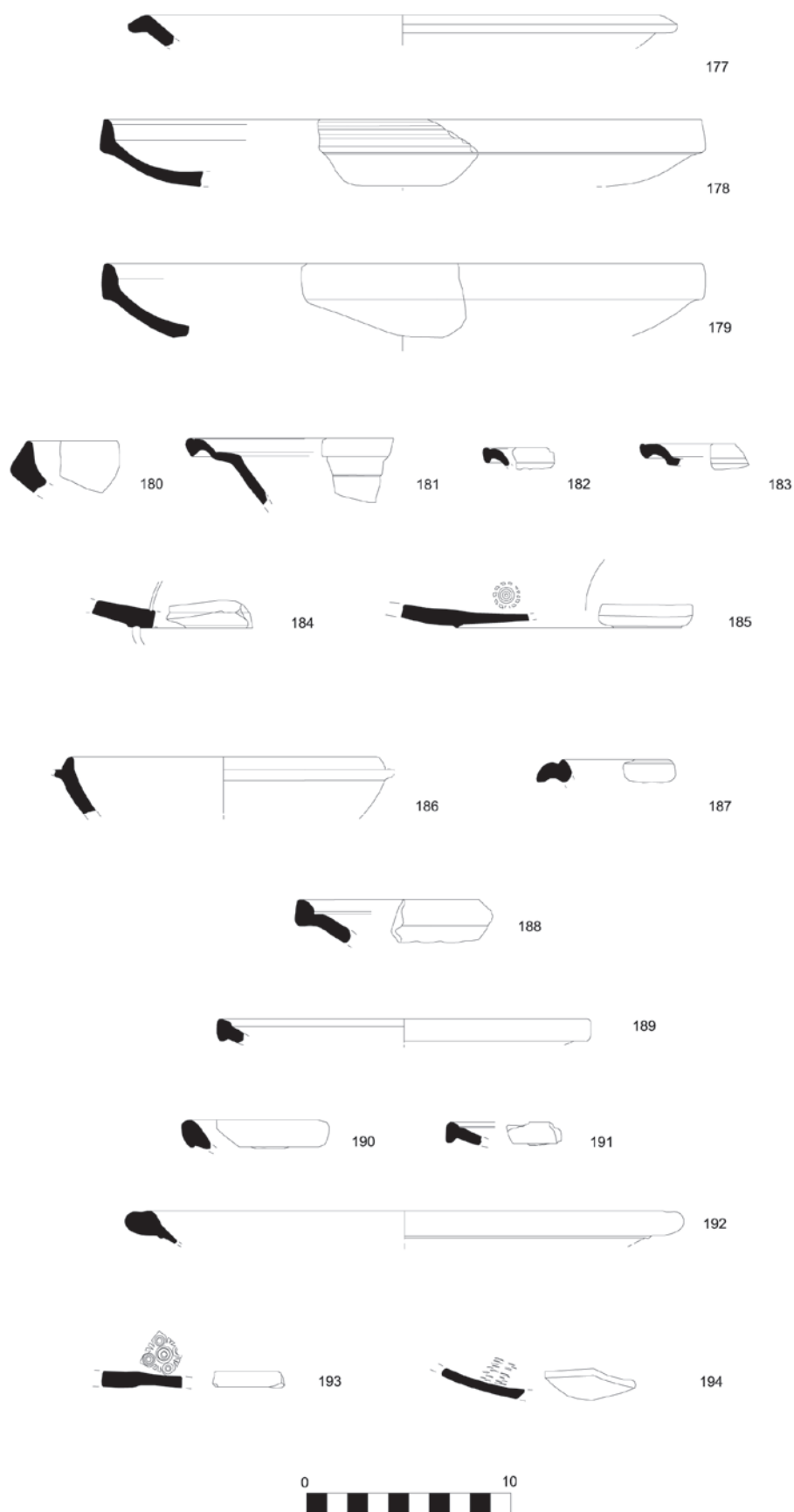
**Pl. 8** 123-128: Eastern sigillata A; 129-139: Eastern sigillata B; 139-146: Uncertain eastern Mediterranean productions; 195-200: Late Roman C (made by: S. Čule and A. Konestra)

## Pl. 9



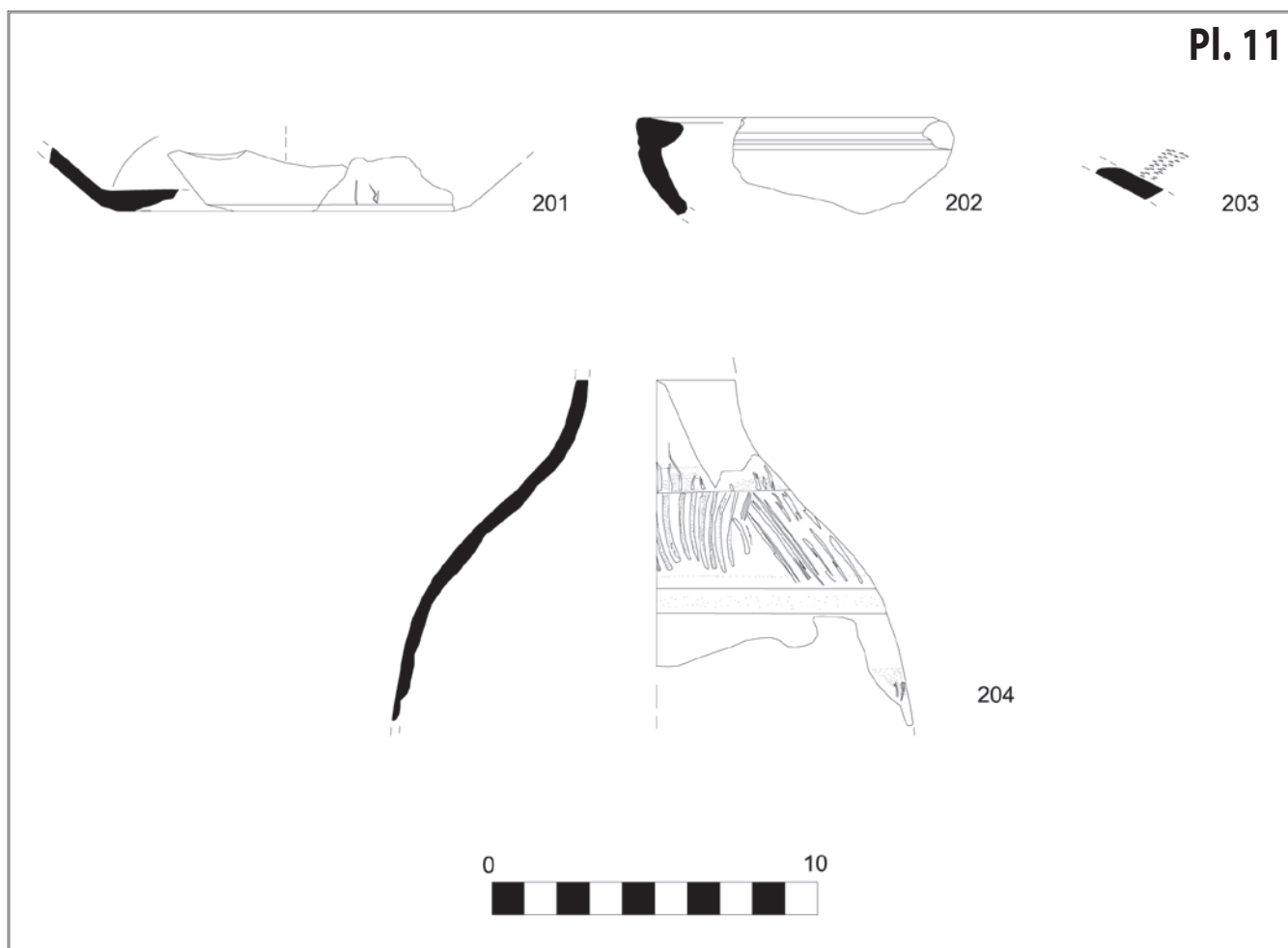
Pl. 9 African red slip ware (made by: S. Čule and A. Konestra)

## Pl. 10



Pl. 10 African red slip ware (made by: S. Čule and A. Konestra)

## Pl. 11



Pl. 11 201-203: Later Italic painted productions; 204: Val Pescara jug (made by: S. Čule and A. Konestra)

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