

OBSERVATIONS ON SOME ARCHAEOLOGICAL DISCOVERIES FROM THE CIVILIAN SETTLEMENT OF RĂCARI ROMAN FORT

GAMUREAC Ștefan - Emilian*

Abstract. *The present paper draws attention on some archaeological discoveries from civilian settlement near the Roman fort of Răcari, Dolj County, during a field survey in 2014. Despite the incipient stage of research of the civilian settlement, the Roman objects found are similar with those discovered inside the Roman fort. This situation can be explained by the economical relationship between the military presence and the civilian habitation in the vicinity of the Roman fort.*

Rezumat. *Prezentul articol atrage atenția asupra câtorva descoperiri arheologice din așezarea civilă aflată aproape de castrul roman de la Răcari, județul Dolj, din timpul cercetărilor arheologice din 2014. În ciuda stadiului incipient al cercetării așezării civile, obiectele romane descoperite sunt similare cu cele descoperite în castrul roman. Această situație poate fi explicată prin relațiile economice dintre militarii și civilii din vecinătatea castrului.*

Keywords: Roman pottery, economy, military administration, *canabae*, vicus, wheat supply.

The archaeological excavations done by Grigore Tocilescu,¹ Grigore Florescu,² Cristian Vlădescu, Silviu Teodor and Dorel Bondoc led to establishing the main features of the Roman fort from Răcari and also to setting the chronology and the main constructive stages of the fortification. Built during the Dacian wars, the Roman fort from Răcari has a few important constructive stages, starting from a simple earthen defense and ending by a stone fort stage, being used by the military presence until the middle of the 3rd century AD.

The civilian settlement was severely affected by the modern constructions, and its size, even unexcavated by the archaeologists, is estimated, together with the Roman fortification, at 30 hectares. In this way, according to the field surveys, taking as main point the fortification, the civilian settlement size was 200 to the West, South West, south and south-East from the fort, and 300 meters to the East. To the south of the railroad, the roman settlement size was 800 meters on the axis North-West – South –East and 400 meters on the axis North-East-South-West. The same surveys notified a wall as the North-West limit of the civilian settlement.³

The artifacts presented into the catalogue were discovered during a field survey on the north of the Răcari Roman fort, on a square between the exterior limit of the fort and National Road 6. In the following pages we will take into account the economical meaning of the pottery discoveries from the civilian settlement, considering that the production of the pottery artifacts was an industrial and commercial activity inside the Roman free market economy⁴ and also some aspects related to the economic and administrative relation between the military presence from the fort and the civilians from the settlement. We will not insist on the theoretical and juridical arguments, already explained by other specialists.⁵

The civilian settlement from Răcari was, at least initially, inside the military administration area of the military unit from the fortification, but the size of this area is difficult to estimate. From the beginning it is important to distinguish between the *prata legionis* and *territorium*, which were assigned only to legions,⁶ and the minor military fortifications, as Răcari fort, which are not the main camp of a Legion. Generally speaking, the juridical status of these areas, known as *prata legionis* and also *territorium* is less known. An example for *prata legionis* we may found at Burnum, where in the first century AD, the Legio XI Claudia owned a *territorium* of 455 kilometers.⁷ It is also possible that the term *territorium* is used in connection with the area administrated by

* Ministry of Culture – Department for Cultural Heritage.

¹ Dumitru Tudor. *Castra Daciae Inferioris (I'III). Săpăturile lui Gr. G. Tocilescu în castrul roman de la Răcari (raion Filiași. Reg. Oltenia)*, in *Apulum*, V, 1965, pp. 233-56.

² Grigore Florescu. *Castrul roman de la Răcari-Dolj*. Craiova, 1931.

³ S. Teodor, D. Bondoc et alii. in *Cronica Cercetărilor Arheologice* 2004, p. 255.

⁴ P. Temin. *The Labor Market of the Early Roman Empire*, in *Journal of Interdisciplinary History*, xxxiv: 4 (Spring, 2004), p. 515.

⁵ For some aspects about *prata* or *territorium* of the military forts in Britaina. D.J.P. Mason, *Prata Legionis in Britain*, in *Britannia*, vol. 19, 1988, pp. 163-189.

⁶ R. Ota. *De la canabele Legiunii a XIII-a Gemina la Municipium Apulense*, Alba Iulia, 2012, p. 26.

⁷ M. Zaninović. *Prata legionis u Kosovom polju kraj Knina s osvrtom na teritorij Tilurija*, in *Opuscula Archaeologica*, vol. 10, no. 1, Prosinac, 1985, pp. 63-79: *T(erminus) pra(t)i leg(ionis) XI C(laudiae) p(iae) f(idelis)*.

the military authorities, and *prata* is only a part of this area, especially the lands used by the military for the livestock and farming activities.⁸

It is known the fact that the military unit can exercise some administrative power in some areas used by the civilians in the territory, the administrative tasks being accomplished by *offici praefecti territorii*.⁹ There is also an autonomous administration of the rural settlements from the legion *territorium*, which is made by local magistrates as *magistri*, *princeps loci* or *quinquennalis*.¹⁰

The civilian agglomerations near legions forts, having the status of *canabae* or *vici militaris*¹¹ were, in many cases, settlements depending on the vicinity of the military bases, considering that the military were regularly paid with the main source of coins on the local or regional market.

Canabae or *Canabae legionis* were civilian settlements near the roman castra – headquarters of legions, populated by the relatives or families of the military but also civilian contractors¹², having economical relations with the military unit stationed in the fortification. In terms of the evolution of the civilian settlements, some of these receive the official status, being recognized by the process of συνοικισμός with other communities,¹³ but also observed by the mixed attribution, civilian and military of the necropolis.¹⁴ This process must not be mistaken with the civilian presence inside the Răcari military fort, this hypothesis being accepted only for the moments of external danger.¹⁵

The military presence inside the Răcari fort offered some economical opportunities to the local community. Only from the perspective of wheat need of supply, the necessary quantity was big enough comparing with the size of local communities and is possible that the supply routes was initially far away. It is clear enough that the lands directly administrated by the military in the area of the forts (*prata legionis*) could not supply the entire necessary of foodstuffs, oil and wine needed by the Roman soldiers. Considering the wheat ration of a Roman soldier (*frumentum*) was 2 *sextari* daily = 546 ml x 2 = 1.092 ml, this thing being equivalent with approximately 4 *modii* of wheat monthly, respectively 48 *modii* of wheat annually for every soldier, at this necessary must be added other foodstuffs as vegetables, olive oil or meat (*cibaria*).¹⁶

The Roman army necessary of supplies, especially wheat, conducted in one's opinion, to influencing the army organization. The smallest organizing unit of the Roman army was *contubernium*, including 8 soldiers, who were supplied with 2 *sextari* x 8 soldiers = 1 *modius* (8,70 l) of wheat daily. One *centuria* consumed 10 *modii*, one *cohort* 60 *modii* and one *legio* 600 *modii* of wheat daily, simplifying very much the calculations for the suppliers tasks. And because the centurions had a bigger ration of wheat and the first cohort became double in the first century AD, it reaches the amount of 120 *modii* of wheat daily for the first double cohort and 660 *modii* for one legion.¹⁷

The formula can be theoretically applied even for the Roman fort of Răcari, where some detachments from Legio V Macedonica and Legio XIII Gemina are attested, but the main unit stationed here was *Numerus Maurorum*, or *Numerus Maurorum* Σ,¹⁸ unity of *equites* and *pedites* which included, considering the calculations in relation to the size of the fort, appreciatively 1.000 soldiers.¹⁹ Under these conditions, the necessary supply for the 1.000 soldiers was 125 *modii* of wheat daily, meaning 3.750 *modii* of

⁸ P. Southern, *The Roman Army: A Social and Institutional History*, Oxford University Press, 2006, pp. 113-114.

⁹ S. Dušanić, *The Legions and the Fiscal Estates in Moesia Superior: Some Epigraphical Notes*, Arheoloski vestnik. 41. 1990, pp. 585-595 concerning *Ulp(ius) Aquilinus mil(es) leg(ionis) VII Cl(audiae) librarius officii praefecti terit(orii)*. Also the example: *primus pilus legionis I' Macedonicae* supervising as prefect civitates *Moesiae et Treballiae*.

¹⁰ M. Munteanu, *Cu privire la organizarea administrativă a teritoriului capidavens (sec. I – III)*, in Pontica, no. 3, 1970, pp. 211-222; p. 214, about the civilian settlement of Capidava which was from the begining under military administration. Also, *Caius Iulius Quadratus, loci princeps, quinquennalis territorii Capidavensis*.

¹¹ R. Ota, *op. cit.*, pp. 21-26.

¹² Arrian, *Periplus* 12 ...καὶ ὅσα ἔξω τοῦ φρουρίου κατοικεῖτο ὑπὸ τε τῶν πεπαυμένων τῆς στρατείας καὶ τινῶν καὶ ἄλλων ἐμπορικῶν ἀνθρώπων... (so the area outside fort is inhabited by the people retired from military service and a number of merchants).

¹³ The term συνοικισμός, *sunokismos* originally designated the housing together (*syn*) in the same house (*oikos*).

¹⁴ Constantin Inel, *Piese de echipament militar în morminte din necropola romană de la Apulum – Stadion*, pp. 185-204 in C. Cosma (Editor), *Studii de arheologie și istorie. Omagiu profesorului Nicolae Gudea la 70 de ani/Studies in archaeology and history. An anniversary volume to professor Nicolae Gudea on his 70th birthday*, Editura Mega, Cluj-Napoca, 2011, pp. 185-204.

¹⁵ D. Bondoc, N. Gudea, *Castrul roman de la Răcari: încercare de monografie*, Cluj-Napoca, 2009, p. 52; S. Teodor, D. Bondoc *et alii*, *op. cit.*, p. 254.

¹⁶ J.P. Roth, *The logistics of the Roman army at war (264 B.C.-A.D. 235)*, Boston: Köln: Brill, 1999, p. 19, 48.

¹⁷ *Ibidem*, pp. 21-23.

¹⁸ C.M. Vlădescu, *Armata romană în Dacia Inferior*, București, 1983, pp. 40-41.

¹⁹ D. Bondoc, N. Gudea, *op. cit.*, p. 57.

wheat monthly, and 45.000 *modii* annually. Considering the logistic dimension of the Roman army, we don't know the differences between the diet of the legionary and the auxiliary contingents.

Generically, it is considered that in the first stage of a military unit fixation in the territory, the supply was based first on the imports, and later the soldiers were supplied by the locals. As an example, the Roman army camped in the forts from Rhine Delta was firstly supplied with foodstuffs from other areas, and later, can be observed a transition to local sources of supply, including a specialization of the local farms for growing species of animals requested by the Roman army, as cattle and sheep.²⁰ Also, the production of sheep for wool, and horses for unities of *alae* were fluctuating in the communities from the Northern limes, according to the demands of the Roman army.²¹

It is possible that the civilian settlement of Răcari was not only a market for the necessary *instrumentum domesticum* and some kinds of food for the soldiers and military unit, but an area used by the military personal for economic activities, alone or with their families. Considering that some economic activities were held inside the fortification, as treshing,²² we may presume that many of the military economic activities were held outside, as some agricultural activities and farming, quarrying and many others as metalworking²³ or ceramic production especially for construction materials.²⁴

Considering this, the interaction between soldiers and civilians was not only inevitable, but it probably had an economic dimension of association. We also notice some *negociatores* probably having contracts with Roman army, from Syrian or Gallic provinces, already attested in Dacia.²⁵ Finally, the more urbanized the province where the troops are, the smaller effect of the army is, but in the case of some less developed regions, the beneficial effect on the economical evolution of the local communities is bigger.

*

The pottery from the civilian settlement is similar from many points of view with the pottery discovered inside the Roman fort of Răcari. It is probably that the origin of the earthen vessel was diverse, these vessels being acquired on the market by the civilians and the military personal.²⁶ It is also known that the price of the common vessel was very small, 1 *patella* or 1 *olla* valuing 1 *as*. For a theoretical exemplification, in the conditions that in the period until Septimius Severus, a legionary soldier earned a wage of 1.200 *sestertii* annually, this can easily buy almost 100 earthen vessels every week, making without sense to try producing himself his own common vessel. Contrary, the luxury vessel as *terra sigillata* cost much more, and fragments of these were found inside the fort of Răcari,²⁷ and in the area of civilian settlement (catalogue no. 2). Still, the Roman soldiers were certainly the possessors of metallic vessel²⁸ especially used during the military campaigns, being more solid and lighter.²⁹

The most part of the pottery discovered with this occasion in the civilian settlement of Răcari are atypical fragments of amphorae, representing over 90% of the total of the discoveries. These recipients, initially purchased by the military for their content (olives oil or wine), could be reused in the civilian settlement, eventually by changing their functionality, from recipients of transport into vessel to store water

²⁰ Chiara Cavallo, Laura I. Kooistra and Monica F. Dütting, *Food supply to the Roman army in the Rhine delta in the first century A.D.*, in Sue Stallibrass, Richard Thomas (ed.), *Feeding the Roman Army: The archaeology of Production and Supply in NW Europe*, Oxbow Books, Oxbow, UK, 2008, pp. 69-82.

²¹ M. Groot, *Surplus production of animal products for the Roman army in a rural settlement in the Dutch River Area*, Sue Stallibrass, Richard Thomas (ed.), *op. cit.*, Oxbow Books, Oxbow, UK, 2008, pp. 83-98.

²² J.P. Roth, *op. cit.*, pp. 46-47; App. Mac. 9,13.

²³ D. Benea, *Metalurgia și prelucrarea fierului în Dacia*, pp. 11-95, in *Dacia în sistemul socio-economic roman. Cu privire la atelierele meșteșugărești locale*, Timișoara, 2008, pp. 30-31 referring to the military protection with some units into the exploitations of the metal ores. The processing of the iron to obtain the finished products as weapons or tools is an activity accomplished both by the military and civilians. See also. Dušanić, *op. cit.*, pp. 585-595 about the relations between the military administration and *territoria metallorum* in Illiricum.

²⁴ D. Bondoc, N. Gudea, *op. cit.*, pp. 58-60.

²⁵ C. Petolescu, *Les relations économiques de la Dacie romaine*, in *Memorias de Historia Antigua* 4, 1980, pp. 51-59: *Suri neg(ioc)iatores* at Sarmizegetusa or *Fabius Iblomarus domo August(ia) Treve[r](orum) quond(am) dec[ur(io)] [k]lanabar(um)*. Also, F. Matei-Popescu, *The origin of the tradesmen in Dacia*, pp. 85-98, in *Pax Romana: Kulturaustausch und Wirtschaftsbeziehungen in den Donauprovinzen des römischen Kaiserreichs Akten der Tagung in Varna und Tulcea 1.-7. September, 2008*, pp. 85-98.

²⁶ J. Poblome, *Money makes pottery go round*, *Exempli Gratia*, Sagalassos, Marc Waelkens and Interdisciplinary Archaeology 2013, p. 86: *Tabula Vindolandensis* 588 (97-102/3 d. Hr.) about a set of cooking vessel purchased by the militaries by Adiutor from Londinium. Also. *Tabula* 596 from the same period, mentioning the price of 1 *as* for one *trullas*.

²⁷ D. Bondoc, N. Gudea, *op. cit.*, p. 61 about the examples brought from Middle Gallia (Lezoux) and Raetia (Westendorf).

²⁸ Including precious metals. Plutarh, *Moralia*, 16 is mentioning the permission from Scipio Aemilianus granted to the soldiers to own one silver vessel lighter than 2 libras: *argenteorum poculorum nulum duabus libris maius permisit habere volentibus*.

²⁹ Personal communication dr. Liviu Petculescu, to whom I thank.

or other liquids. Another explanation may be brought by considering the commercial circuit of the amphorae – the products were purchased by the military unit *via* civilian settlement. In this case, the merchants living in the civilian settlement act like an intermediary between the seller (producer or another merchant) and the buyer (military unit).

Another characteristic of the pottery discovered in the civilian settlement is the diversity of the shapes and fabrics. This fact suggests a few centers of production, which can be presumed from around, from the province or imports from other provinces, especially in the case of amphorae. Not last it may be mentioned that in the actual stage of research, there are no pottery kilns or *officinae* found in the area of Răcari, and the incipient stage of research for the *extramuros* areas does not offer any clues about a possible local production of some part of the pottery.

Organising the catalogue, especially for analogies, we tried to follow the catalogue from the existent monographic study³⁰ dedicated to the Roman fort of Răcari, but also the work of G. Popilian, dedicated to the Roman pottery from Oltenia.³¹

Catalogue

Imports (*terra sigillata* and vessels decorated in the technique of *barbotine*)

1. Fragment of the median part possibly bowl or cupe with scales decoration by the technique of *barbotine*, the fabric is semifine, yellow with rare lithic particles, the slip of the same color, Munsell³² 7.5YR 8/4 pink. Analogies: Răcari³³; Romula³⁴; Oescus³⁵; Buciumi³⁶; Novae³⁷.
2. Fragment of the median part *terra sigillata*, l. p. 3,8, î.p. 4,5 cm, fine reddish fabric, the slip is red, decorated with oves and animal running to the right, probably a deer, followed by another animal, Munsell 10 R 4/8 red. Analogies: Rheinzabern³⁸.

Amphorae

3. Fragment of handle, preserved height 5 cm, the fabric is semifine, light gray, with rare limestone particles and silver mica flakes, slip of the same color, Munsell 10YR 7/1 light gray.
4. Fragment base of amphora type Kapitan II or amphoroidal pitcher, preserved height 6 cm, the fabric is light reddish, semi-coarse, porous, with limestone particles, Munsell 7.5YR 7/8 reddish yellow³⁹.
5. Fragment of amphora rim, rim diameter 20 cm, preserved height 4 cm, the fabric is semi-coarse, reddish, with sand particles in composition, Munsell 7.5YR 7/6 reddish yellow. Analogies: Răcari⁴⁰. Variant, possibly Dressel 14A⁴¹.
6. Fragment of amphora handle preserved length 4 cm, the fabric is reddish, semi-coarse with fine sand and limestone particles, the core is light gray, Munsell 10R 7/6 light red.

Mortaria

7. Fragment of *mortarium*, preserved length 11,5 cm, preserved height 5,5 cm, the fabric is light reddish, semi-coarse, with abundant sand and limestone particles, Munsell 7.5YR 7/6 reddish yellow. Analogies: Răcari⁴²; Napoca⁴³, Cristești⁴⁴.

³⁰ D. Bondoc, N. Gudea, *op. cit.*

³¹ Gh. Popilian, *Ceramica romană din Oltenia*, Craiova, 1976.

³² Munsell Soil Color Charts 1994, Revised Edition.

³³ D. Bondoc, N. Gudea, *op. cit.*, p. 161, pl. XXXIV/145.

³⁴ Gh. Popilian, *Les centres de production céramique d'Olténie*, pp. 7-21, in *Études sur la céramique romaine et daco-romaine de la Dacie et de la Mésie Inférieure*, Timișoara, 1997, fig. 13/8-9.

³⁵ Gergana Kabakchieva, *Oescus. Castra Oescensia*, Sofia, 2000, pl. XII/35-37.

³⁶ N. Gudea, *Materialul arheologic*, in E. Chirilă, N. Gudea, V. Lucăcel, C. Pop. *Castrul roman de la Buciumi*, Cluj, 1972, pl. XIV/6.

³⁷ A. Dimitrova-Milceva, *Terra Sigillata und dünnwandige Keramik aus Moesia Inferior*, Sofia, 2000, pp. 69-90, Tafel 24/388.

³⁸ H. Ricken, *Die Bilderschüsseln Der Römischen Topfer Von Rheinzabern. Textband Mit Typenbildern Zu Katalog V1 Der Ausgrabungen Von Wilhelm Ludowici in Rheinzabern. 1901-1914*, Bonn: R. Habel Verl, 1963, Tafel 53/11F Cerialis II, Tafel 58/2aF Cerialis III, Tafel 64/11 Cerialis V, Tafel 69/4 Cerialis II.

³⁹ Analogies: Mircea Negru, Alexandru Bădescu, Romeo Avram, *Kapitan II amphorae in Roman Dacia*, in *RCRFacta*, 38, Abingdon, 2003, Fig. 2/17-32.

⁴⁰ D. Bondoc, N. Gudea, *op. cit.*, p. 159, pl. XXX/129 Dressel 14.

⁴¹ E. Lapadula, *The chora of Metaponto 4: the late Roman farmhouse at San Biagio*, Austin, 2012, p. 153. 2.1.1.

⁴² D. Bondoc, N. Gudea, *op. cit.*, p. 160, pl. XXXII/140.

Common pottery

Pots

8. Fragment of rim, rim diameter 20 cm, preserved height 4 cm, the fabric is semi-fine, light gray with rare microparticles of limestone and silver mica, slip of the same color, Munsell 1 for Grey 8/1 light greenish gray. Analogies: Răcari⁴⁵.
9. Fragment of rim from a storage pot, rim diameter 18 cm, preserved height 3 cm, the fabric is semi-fine, light gray, with particles of limestone and silver mica in composition, slip of the same color, Munsell 1 for Gley 6/gray. Analogies: Răcari⁴⁶.
10. Fragment of rim from a storage pot, rim diameter 28 cm, preserved height 2,6 cm, the fabric is semi-fine with silver mica, light reddish, the core and the slip are light grey, Munsell 1 for Gley 5/gray. Analogies: Răcari⁴⁷; Porolisum⁴⁸.
11. Fragment of rim, rim diameter 22 cm, preserved height 4 cm, the fabric is coarse with sand and limestone particles in composition, light gray, the slip is light grey, Munsell 1 for Gley 5/1 greenish gray. Analogies: Răcari⁴⁹.

Jugs

12. Fragment of rim from a small mug or cup, rim diameter 2,8 cm, preserved height 1, 5 cm, fine white porous fabric, slip of the same color, rare black microparticles, Munsell 2.5Y 8/2 pale yellow.
13. Fragment of rim from a big jug, rim diameter 20 cm, preserved height 4 cm, the fabric is semi-coarse, light gray, porous, with microparticles of limestone, slip of the same color, traces from the handle, Munsell 1 for Gley 6/gray. Analogies: Răcari⁵⁰; Florești⁵¹.

Turribulla

Analogies⁵². The presented fragments are parts from few exemplars, representing variants of the type II from the Gh. Popilian catalogue. We remarks that the decoration with vertical incisions on the profiled rim, specific to the type I, Popilian, is completed by the decoration with large alveoli realized by unification of the two edges of the vessel rim, specific of the type II⁵³.

14. Fragment of the rim *turribullum*, rim diameter 25,5 cm, preserved height 2,5 cm, the fabric is gray, coarse with sand and silver mica, double decoration with the wheel, Munsell 1 for Gley 5/1 greenish gray.
15. Fragment rim *turribullum*, preserved length 5 cm, the fabric is light reddish with limestone particles, the core is gray, decorations with oves, Munsell 7.5 7/6 reddish yellow
16. Fragment of the rim *turribullum*, rim diameter 27 cm, preserved height 2,5 cm, the fabric is semi-fine, reddish colour the gray core, particles of limestone and silver mica in composition, Munsell 7.5YR 7/6 reddish yellow.
17. Fragment of the rim *turribullum*, rim diameter 27 cm, preserved height 4,5 cm, the fabric is semi-fine, reddish, with sand particles, the core is gray, decoration with oves and wheel, Munsell 7.5YR 7/6 reddish yellow.
18. Fragment of the median part of a *turribullum*, (?) preserved height 3 cm, semifine light gray fabric with sand and silver mica in composition, the core is gray, decoration with vertical incisions manually traced, Munsell 7.5YR 7/6 reddish yellow.

⁴³ Viorica Rusu-Bolindeț, *Ceramica romană de la Napoca: contribuții la studiul ceramicii din Dacia romană*. Cluj - Napoca, 2007. p. 420, pl. XCIV/561, sec. II-III.

⁴⁴ Nicoleta Man, *Așezarea romană de la Cristești*, Cluj-Napoca, 2011, pl. CII/65.

⁴⁵ D. Bondoc, N. Gudea, *op. cit.*, p. 171, pl. XLVII/217; p. 171, pl. XLVIII/221.

⁴⁶ *Ibidem*, p. 177, pl. LVII/272, dated at the middle of the 3rd century AD.

⁴⁷ *Ibidem*, p. 177, pl. LVII/272, middle of the 3rd century AD.

⁴⁸ N. Gudea, *op. cit.*, pl. XXXVII/7.

⁴⁹ D. Bondoc, N. Gudea, *op. cit.*, p. 171, pl. XLVII/218, pl. XLIII/220-221, first half of the 3rd century AD.

⁵⁰ *Ibidem*, p. 178-179, pl. LIX/280-281, pl. LX/282, with rim diameter considerably smaller.

⁵¹ Mihaela Ciușescu, Silvia Mustăță, *Ceramica din așezarea romană*, pp. 243-278, in S. Mustăță, F. Gogâltan, S. Cociș, A. Ursuțiu (ed.), *Cercetări arheologice preventive la Florești-Polus Center, jud. Cluj*, Cluj-Napoca, 2009, p. 273, Pl. XIII/1.

⁵² Gh. Popilian, *Ceramica romană* ..., type II, pl. LXI-LXII/752-755 (first half of the 3rd century AD).

⁵³ Andrei Opaît, *Considerații preliminare asupra ceramicii romane timpurii de la Troesmis*, in Peuce, VIII, 1980, pp. 357-358, pl. XX/3 (2/2 2nd century AD).

Big bowls - bowls

19. Fragment of rim, rim diameter 28 cm, preserved height 3 cm, the fabric is semi-fine, light gray with black microparticles and silver mica, the slip is of the same color, Munsell 1 for Gley 4/1 dark greenish gray. Analogies: Răcari⁵⁴.

20. Fragment of rim big bowl, rim diameter 22 cm, preserved height 3,5 cm, the fabric is semi-fine, light reddish with rare particles of fine sand, the slip is greenish gray, Munsell 1 for Gley 5/1 greenish gray (the slip). Analogies: Răcari⁵⁵.

21. Fragment of rim, rim diameter 26 cm, preserved height 2,5 cm, the fabric is semi-fine, pink, with black microparticles and silver mica, the slip of the same color, Munsell 5YR 7/8 reddish yellow. Analogies: Răcari⁵⁶.

Lids

22. Fragment of the upper part, diameter 4 cm, preserved height 2 cm, the fabric is semi-coarse, gray, with limestone and silver mica particles, the slip of the same color, Munsell 2.5Y 4/1 dark gray. Analogies: Răcari⁵⁷.

23. Fragment of the upper part, diameter of the button 2,5 cm, preserved height 2 cm, the fabric is semi-fine, reddish, with micro flakes of silver mica in composition, self slip, Munsell 7.5YR 7/6 reddish yellow. Analogies: Răcari⁵⁸.

24. Fragment of the upper part, diameter of the button 3,2 cm, preserved height 2 cm, the fabric is gray, semi-fine, with silver mica, self slip, Munsell 1 for Gley 4/dark gray. Analogies: Răcari⁵⁹.

Metallic artifacts

25. Fragmentary key, preserved length 6 cm, made of iron. Analogies: Răcari⁶⁰.

26. Fragmentary nail, preserved length 5,5 cm, made of iron, rectangular in section. Analogies: Răcari⁶¹.

27. Metallic fragment, preserved length 5 cm, made of iron, rectangular in section. Analogies: Răcari⁶².

BIBLIOGRAPHY

Benea, Doina, *Metalurgia și prelucrarea fierului în Dacia*, pp. 11-95, in *Dacia în sistemul socio-economic roman. Cu privire la atelierele meșteșugărești locale*, Timișoara, 2008.

Bondoc, Dorel; Gudea, Nicolae, *Castrul roman de la Răcari: încercare de monografie* (Cluj-Napoca 2009).

Cavallo, Chiara, Kooistra, Laura I. and Dütting, Monica K., *Food supply to the Roman army in the Rhine delta in the first century A.D.*, in Sue Stallibrass, Richard Thomas (ed.), *Feeding the Roman Army: The archaeology of Production and Supply in NW Europe*, Oxbow Books, Oxbow, UK, 2008, pp. 69-82.

Ciașescu, Mihaela; Mustață, Silvia, *Ceramica din așezarea romană*, pp. 243-278, in S. Mustață, F. Gogâltan, S. Cociș, A. Ursuțiu (ed.), *Cercetări arheologice preventive la Florești-Polus Center, jud. Cluj*, Cluj-Napoca, 2009.

Dimitrova-Milceva, A., *Terra Sigillata und dünnwandige Keramik aus Moesia Inferior*, Sofia, 2000.

Dušančić, S., *The Legions and the Fiscal Estates in Moesia Superior: Some Epigraphical Notes*, *Arheoloski vestnik*, 41, 1990, pp. 585-595.

Florescu, Grigore, *Castrul roman de la Răcari-Dolj*, Craiova, 1931.

Groot, Maaïke, *Surplus production of animal products for the Roman army in a rural settlement in the Dutch River Area*, in Sue Stallibrass, Richard Thomas (ed.), *Feeding the Roman Army: The archaeology of Production and Supply in NW Europe*, Oxbow Books, Oxbow, UK, 2008, pp. 83-98.

⁵⁴ D. Bondoc, N. Gudea, *op. cit.*, p.188, pl. LXXII/352, 2nd – 3rd century AD.

⁵⁵ *Ibidem*, p. 187, pl. LXXI/346, p. 188, pl. LXXII/350, 353, 2nd – 3rd century AD.

⁵⁶ *Ibidem*, p.188, pl. LXXIII/355.

⁵⁷ *Ibidem*, p.194, pl. LXXXI/399, 401.

⁵⁸ *Ibidem*, p.194, pl. LXXXI/400.

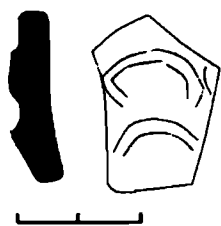
⁵⁹ *Ibidem*, p. 194, pl. LXXXI/401.

⁶⁰ *Ibidem*, p. 252, pl. CXXXV/880.

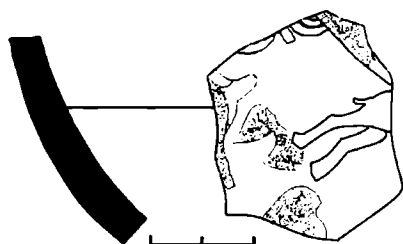
⁶¹ *Ibidem*, p. 257, pl. CXXXVII/934.

⁶² *Ibidem*, p. 266, pl. CXLVIa/1016.

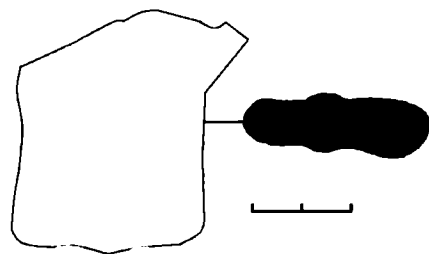
- Gudea, Nicolae, *Materialul arheologic*, in E. Chirilă, N. Gudea, V. Lucăcel, C. Pop, *Castrul roman de la Buciumi*, Cluj, 1972.
- Idem, *Porolissum II. Vama romană*, Cluj-Napoca 1996.
- Inel, Constantin, *Piese de echipament militar în morminte din necropola romană de la Apulum – Stadion*, pp. 185-204, in C. Cosma (editor), *Studii de arheologie și istorie. Omagiu profesorului Nicolae Gudea la 70 de ani/Studies in archaeology and history. An anniversary volume to professor Nicolae Gudea on his 70th birthday*, Editura Mega, Cluj-Napoca, 2011.
- Kabakchieva, Gergana, *Oescus. Castra Oescensia*, Sofia, 2000.
- Lapadula, E., *The chora of Metaponto 4: the late Roman farmhouse at San Biagio*, Austin, 2012.
- Man, Nicoleta, *Așezarea romană de la Cristești*, Cluj-Napoca, 2011.
- Mason, D. J. P., *Prata Legionis in Britain*, in *Britannia*, vol. 19, 1988, pp. 163-189.
- Matei-Popescu, Florian, *The origin of the tradesmen in Dacia*, in *Pax Romana: Kulturaustausch und Wirtschaftsbeziehungen in den Donauprovinzen des römischen Kaiserreichs Akten der Tagung in Varna und Tulcea 1.-7. September 2008*, pp. 85-98.
- Munteanu, M., *Cu privire la organizarea administrativă a teritoriului capidavens (sec. I – III)*, in *Pontica* no. 3, 1970, pp. 211-222.
- Negru, Mircea; Bădescu, Alexandru; Avram, Romeo, *Kapitän II amphorae in Roman Dacia*, in *RCRFActa*, 38, Abingdon, 2003, pp. 209–214.
- Opaiț, Andrei, *Considerații preliminare asupra ceramicii romane timpurii de la Troesmis*, in *Peuce*, VIII, 1980, pp. 328-366.
- Ota, Radu, *De la canabele Legiunii a XIII-a Gemina la Municipium Apulense*, Alba Iulia, 2012.
- Petolescu, Constantin, *Les relations économiques de la Dacie romaine*, *Memorias de Historia Antigua* 4, 1980, pp. 51-59.
- Poblome, J., *Money makes pottery go round*, *Exempli Gratia. Sagalassos*, Marc Waelkens and *Interdisciplinary Archaeology* 2013, pp. 81-95.
- Popilian, Gheorghe, *Ceramica romană din Oltenia*, Craiova, 1976.
- Idem, *Les centres de production céramique d'Olténie*, in *Études sur la céramique romaine et daco-romaine de la Dacie et de la Mésie Inférieure*, Timișoara, 1997, pp. 7-21.
- Ricken, H., *Die Bilderschusseln Der Romischen Topfer Von Rheinzabern. Textband Mit Typenbildern Zu Katalog VI Der Ausgrabungen Von Wilhelm Ludowici in Rheinzabern, 1901-1914*, Bonn: R. Habel Verl, 1963.
- Roth J. P., *The logistics of the Roman army at war (264 B.C.-A.D. 235)*, Boston; Köln: Brill, 1999.
- Rusu-Bolindeț, Viorica, *Ceramica romană de la Napoca: contribuții la studiul ceramicii din Dacia romană*, Cluj - Napoca, 2007.
- Southern, P., *The Roman Army: A Social and Institutional History*, Oxford University Press, 2006.
- Temin, P., *The Labor Market of the Early Roman Empire*, in *Journal of Interdisciplinary History*, xxxiv: 4 (Spring, 2004), pp. 513-538.
- Teodor, Silviu; Bondoc, Dorel; Duțescu, Magda; Ștefan, Dan; Răduță, Silviu, in *Cronica Cercetărilor Arheologice* 2004, pp. 251-255.
- Tudor, Dumitru, *Castra Daciae Inferioris (VIII). Săpăturile lui Gr. G. Tocilescu în castrul roman de la Răcari (raion Filiași. Reg. Oltenia)*, *Apulum* V, 1965, pp. 233-56.
- Vlădescu, C.M. *Armata romană în Dacia Inferior*, București, 1983.
- Zaninović, M., *Prata legionis u Kosovom polju kraj Knina s osvrtom na teritorij Tilurija*, *Opuscula Archaeologica* vol. 10, no. 1, Prosinac 1985, pp. 63-79.



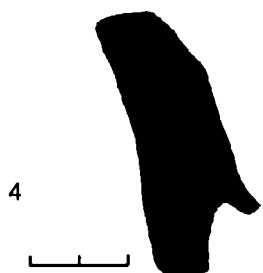
1



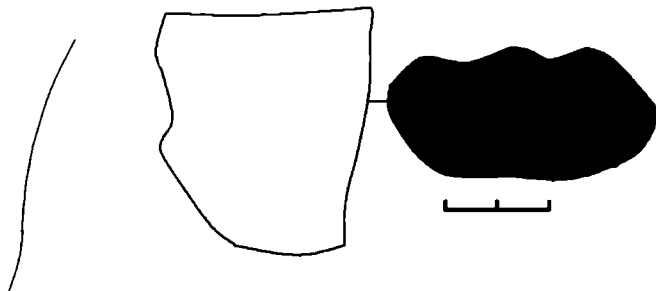
2



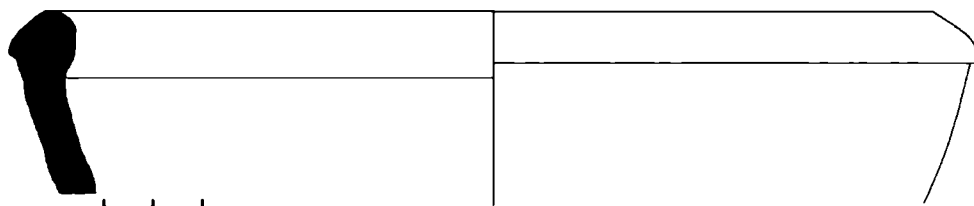
3



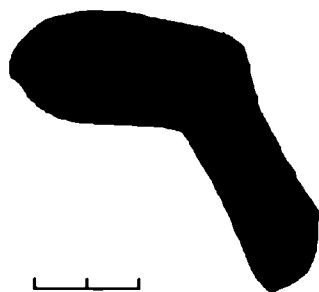
4



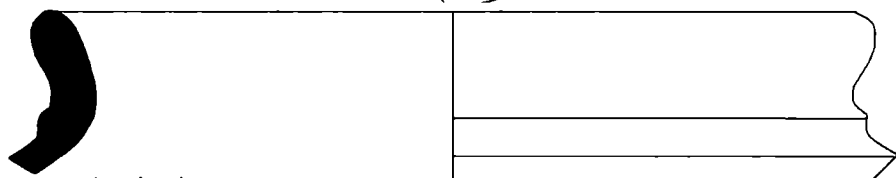
6



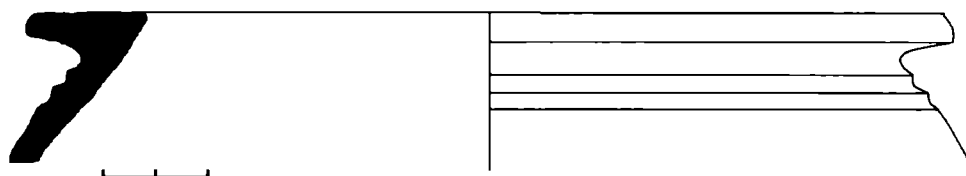
5



7

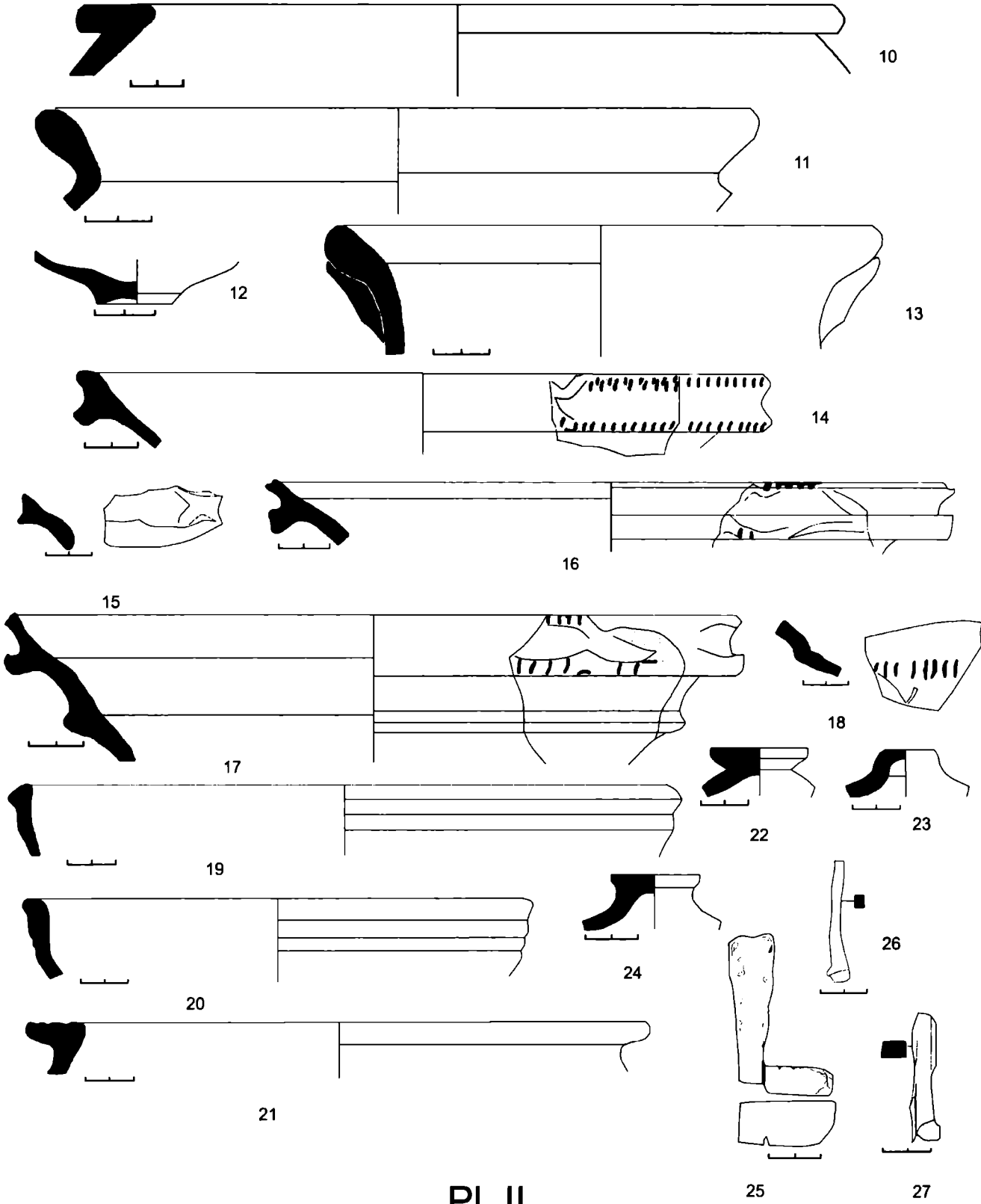


8



9

Pl. I



Pl. II