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Cătălin Cristescu & Gabriel Andreica

ROMAN COOKING WARES DISCOVERED AT *SARMIZEGETUSA REGIA*

The ceramic evidence from Sarmizegetusa Regia *comprises a relatively important number of Roman kitchen wares, discovered especially in the area of the stone fortress. They seem to belong to the so-called 'legionary pottery' and are represented by wheel-thrown cooking pots, lids and pans. Other recipients may be also ascertained to the Imperial ceramic production, as tableware, amphorae,* turibula*,* mortaria*, and even construction materials were unearthed during the excavations at Grădiștea de Munte. The cooking pots belong to archaeological contexts dated after the conquest of* Sarmizegetusa Regia*, at the beginning of the 2nd century. The vessel distribution reveals a concentration in the area of the fortification. Analogies are found in the province of* Dacia *and in the forts spreading on the Danube* limes*. We may presume that these cooking pots are linked to the presence of Roman legionary troops in the former capital of the Dacian Kingdom (epigraphic sources indicate the presence of soldiers from* Legio IV Flavia Felix*,* Legio VI Ferrata *and* Legio II Adiutrix Pia Fidelis*). The analysis of their fabric points to a local production for a part of the cooking pots and lids.*

Sarmizegetusa Regia – Roman Dacia – Cooking wares – Roman legionnaires – Pottery production

1. Introduction

We focus in this article on the topic of the Roman wheel-thrown cooking wares discovered at *Sarmizegetusa Regia*, the capital of the Dacian Kingdom. In our opinion, the current evidence points to the appearance of these ceramic vessels along with the Roman soldiers that have temporarily occupied the area of the ancient city. Moreover, there are several arguments to sustain the hypothesis of a local production for the respective Roman cooking pots.

1.2. A unique site

Sarmizegetusa Regia lies in South-western Transylvania, a mountainous region carefully chosen by the Dacians to build their fortresses, temples, towers, dwellings, and several other structures, linked by a network of roads and often supplied with water through a well thought system of water tanks, filters and distribution pipes (Daicoviciu and Ferenczi 1951; Daicoviciu 1972; Glodariu, Iaroslavschi and Rusu 1988; Daicoviciu, Glodariu and Ferenczi 1989; Glodariu et al. 1996; Gheorghiu 2005; Florea 2011).

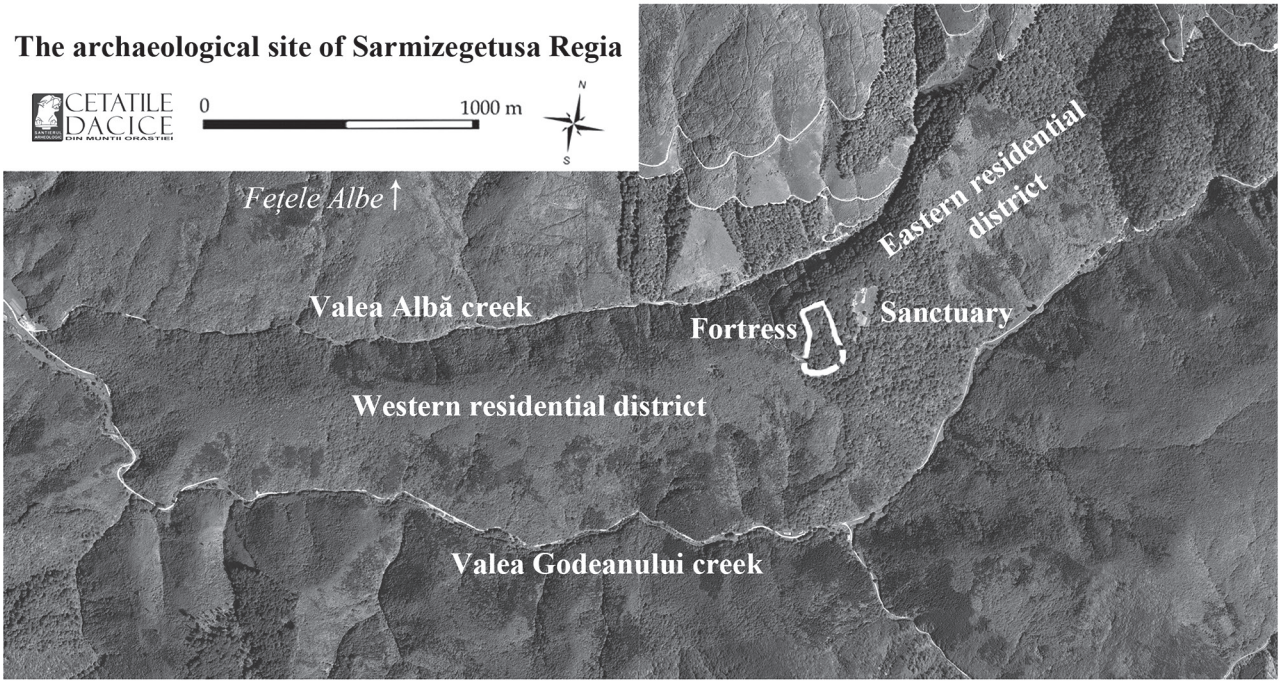
The capital of Decebalus stretched on 4,5 km (**fig. 1, 1**) and more than 260 anthropogenic terraces, an impressive amount of work that speaks of the power and prestige of the Dacian kings. From the data collected so far, the beginning of the settlement could be placed at the middle of the 1st century BC, when a major building project began in the so-called sacred area. In time, at least three large terraces supported by stone walls were prepared to house the monumental limestone and andesite temples, the andesite altar and additional structures. In the vicinity of the sanctuary, other stone and timber edifices complete the picture of a vivid religious landscape, connected to the stone fortress by a paved ceremonial alley.

The western and eastern quarters of the site comprised mainly private and public structures, rich in archaeological material. Local or imported pottery, glass, bronze, iron, stone, lead, and even gold objects have been unearthed by archaeologists, nature or illegal activities. Most of the features and items can be dated in the second half of the 1st century AD. If we were to choose some trademarks for this site, then painted pottery and the large amounts of gold artefacts are to be listed first (Florea 2017).

This complex and cosmopolite city would meet its end at the beginning of the 2nd century, as the Roman troops lead by Emperor Trajan conquered the Dacian Kingdom and formed the province of Dacia. The military efforts required two campaigns and their archaeological traces are starting to complete the puzzle of the Dacian Wars (Glodariu 1989-1993; Glodariu 2006; Florea et al. 2015: 26; for a critique of this view, see Protase 1997; Opreanu 1999-2000, 2017).

2.2. The conquerors

The Roman finds at *Sarmizegetusa Regia* are concentrated mainly in the area of the fortress and of the temples. Several stone buildings have been excavated, some documenting the use of mortar, such as the so-called 'Roman baths' (Daicoviciu et al. 1951: 106; Glodariu 1965: 127, Fig. 5) and a two room edifice inside the fortification (Daicoviciu et al. 1954: 150-151, Fig. 22; Glodariu 1965: 123). Another timber and earth construction was identified inside the fortress and it could be interpreted as Roman barracks (Florea et al. 2013: 64, Pl. 25; Florea et al. 2014: 112, Pl. 77, 1d). Some of the ceramic material presented below is coming out of this feature. Remains of such timber and earth military buildings have been constantly observed during the excavations, especially on the



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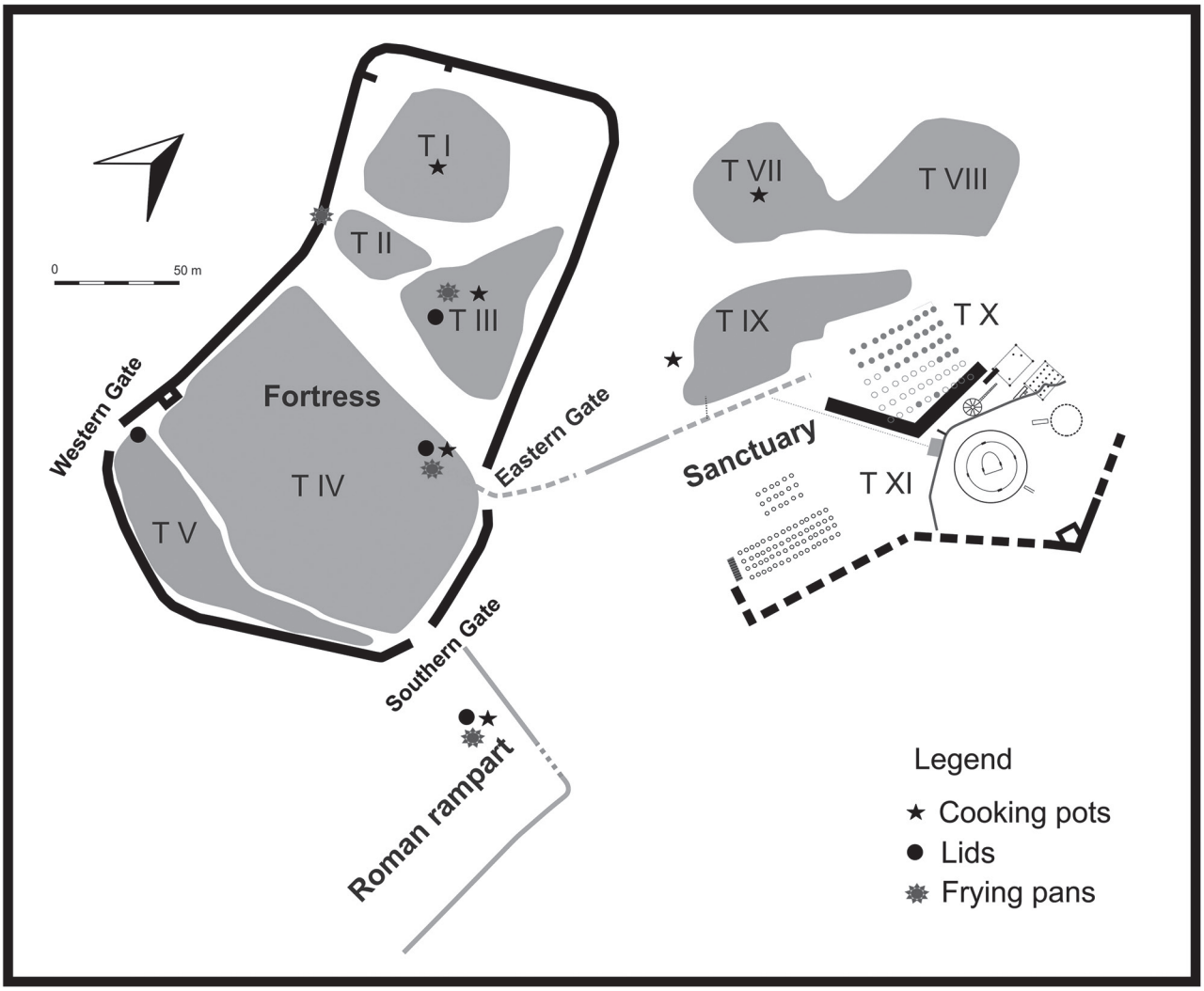

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Fig. 1. 1. Satellite view of the site Grădiștea de Munte – *Sarmizegetusa Regia* (processed after Florea 2017); 2. Plan of the fortress and of the sanctuary; T = Terrace (processed after Florea et al. 2015 and R. Mateescu).

3rd and 4th terraces (**fig. 1, 2**, T III and T IV) (Daicoviciu et al. 1951: 106, Fig. 8-9; Glodariu 1965: 124).

Defensive structures that may be linked with the Roman legionnaires are the fortress and the massive rampart (Glodariu 1989-1993: 23), yet additional investigations are needed in this respect. It must be mentioned that the stone wall seems to have been build in haste, using limestone blocks, channel elements or andesite column drums, but also Roman reliefs and inscriptions (Glodariu 1989-1993: 21-23). The embankment was known since the 1950s, but its entire plan was revealed by the LiDAR scan in 2012, resembling a fort (Oltean and Hanson 2017: 439-442, Fig. 7). It is important to mention that several Roman marching camps have been discovered in the area of the Dacian capital (Iaroslavschi 1989-1993; Popa 2011: 345-351; Oltean and Hanson 2017).

Archaeologists noticed the efforts of the Romans to modify the terrain in order to meet their needs as occupying force. Large amounts of soil have been moved, together with objects, probably from the places in which Dacian structures had functioned. The entire setting was changed: terraces, ramps, slopes, ditches, pavements, perhaps even roads appeared or were partially or entirely removed (Glodariu 1989-1993: 22-23; Florea and Suciu 2004: 66-67; Florea et al. 2015: 23-26).

The archaeological material indicates that the Roman occupation of the site should be placed only during the reign of Trajan (Glodariu 1989-1993). The epigraphic and sculptural evidence (reused limestone blocks and slabs) reveals the presence of soldiers from three legions at Sarmizegetusa Regia: *Legio IV Flavia Felix, Legio VI Ferrata* and *Legio II Adiutrix Pia Fidelis* (Glodariu 1965: 128-130; Daicoviciu, Ferenczi and Rusu 1988-1991; Glodariu 1989-1993: 21; Opreanu 1999-2000: 154-159).

After the defeat of the Dacians, *Legio II Adiutrix* returned to *Aquincum* in 106 (Maróti and Kalmár 2006: 27; Maróti and Kalmár 2007: 30), where it garrisoned after its periplus from *Batavodurum* (Nijmegen), in *Germania Inferior*, to Deva (Chester), in *Britannia* (Von Bogaers 1967: 54, 56, 60). *Legio IIII Flavia Felix* was present at *Ulpia Traiana Sarmizegetusa* and Berzovia (Étienne, Piso and Diaconescu 2002-2003: 59, 66, Pl. XIX, Tg. 1, 5; Matei-Popescu and Țentea 2017: 164), before returning to its headquarters at Singidunum (Whatley 2016: 64-65). The destination of the *vexillatio* from *Legio VI Ferrata* is still unknown. It is believed that it must have returned in Syria to join Trajan's campaigns against the Parthians (Urloiu 2011: 225). Based on the available data, it is difficult to ascertain the exact composition of the troops that garrisoned at Sarmizegetusa Regia in the first years of the new province of Dacia.

2. Ceramic evidence: literature review

The study of the ceramics discovered at *Sarmizegetusa Regia* has focused mainly on the Dacian material (Cristescu 2011; Cristescu 2018). Hence, there is no dedicated study for the Roman cooking wares found on the site, with only a few general observations made in the literature.

We should first mention the work of I. Glodariu, yet he focused on the imports during the pre-Roman period (Glodariu 1976). Recent studies have approached the same topic, emphasizing the imports, their imitations and influence (Cristescu 2014a; Cristescu 2014b). G. Florea and L. Suciu published for the first time a small number of Roman potsherds, including cooking pots, discovered on the upper plateau of the fortress, supporting their efforts in establishing the relative chronology of this area (Florea and Suciu 2004). The PhD thesis defended in 2012 by C. Cristescu comprised a few fragments of Roman cooking pots found on the 7th terrace (**fig. 1, 2**, T VII) (Cristescu 2011).

Still, the recent discovery of the bronze matrix from *Sarmizegetusa Regia* offered the possibility of an archaeological excavation in which large amounts of Roman artefacts have been discovered, among which several vessels have been published. The authors concluded that some Roman cooking pots were probably produced on site and that the function of these containers should be interpreted in connection to the Roman soldiers (Florea et al. 2015).

G. Andreica has recently defended his PhD thesis on the Roman presence at *Sarmizegetusa Regia* (Andreica 2019), thus a detailed overview on the Roman ceramic repertoire will be presented in the near future. Until then, here are the main categories which can be related to the occupying troops: amphorae, *dolia*, tableware (thin walled pottery, plates, bowls, cups, beakers), pitchers, jugs, *turibula*, cooking pots, deep bowls, *mortaria*, lids, baking trays. It must be noted that kitchen pottery represents more than a half of the Roman ceramic finds that were documented until now.

2.1. Vessels and analogies

We will present the cooking pots, lids, and frying pans. It should be noted that the material studied so far is mainly fragmentary and in secondary position. These wheel-thrown recipients could have been produced by and for the Roman soldiers that garrisoned at Sarmizegetusa Regia, thus a discussion concerning them and their analogies might prove of great importance, as it could provide new data on the Roman occupation of the site.

Several types of wheel-thrown Roman cooking pots were discovered at *Sarmizegetusa Regia*. Their flaring rim is flat, rounded, bevelled or rolled; the shoulder is well marked and the bottom is flat. Decoration consists in horizontal incisions, grooves and mouldings, performed on the rim, neck and upper part. The fabric is usually hard, coarse or semi-coarse, fired in a reducing or oxidizing atmosphere; temper includes grog, pebbles and sand. Traces of smoke and soot may be found on both sides of the walls, still there are no residual analyses to determine the substances that were cooked inside these containers.

The predominant pot type is the one with a flaring rim, wide mouth and well-marked shoulder (**fig. 2, 8** and **10**). At Carnuntum, these vessels have a narrow chronology, between 70-120 (Gugl, Radbauer and Kronberger 2015: 262, Pl. 25, M-568, 4). In Dacia, they are common in the archaeological discoveries from Tibiscum (Benea 1995: 153, Pl. X, 2) and Cristești (Popescu 1956: 175, Fig. 112, 6).

Pots with bevelled rim (**fig. 2, 11, 14**) have good analogies in the *vicus* of Napoca, dated in the first decade of the 2nd

century (Rusu-Bolindeț and Cociș 2005: 149, 152, Fig. 12, 58; Rusu-Bolindeț 2007: 412-413, Pl. XCVII, 581-584). Pots with bevelled flaring rim, almost angular (**fig. 2, 16**) or a bit rounded (**fig. 2, 12**), find similarities to some pots from Carnuntum, with the same chronological framing as the previous examples (Gugl, Radbauer and Kronberger 2015: 236, Pl. 12, L2-1620, 4). In Dacia there is a good analogy at Romula (Popilian 1976: 87, 179, Fig. XXXIV, 330-331). We should mention a variant with an almost rolled rim (**fig. 2, 5**), dated at Histria in the first two centuries AD (Suceveanu 2000: 124, 128, Pl. 48, 10) and at Napoca in the second half of the 2nd century (Rusu-Bolindeț 2007: 414, 422, Pl. XCVIII, 592).

Somehow similar, the variant with an almost straight and slightly flaring rim (**fig. 2, 6** and **9**), sometimes with a more pronounced neck (**fig. 2, 3** and **15**), finds analogies in Dacia at Cristești (Popescu 1956: 175, Fig. 112, 6), in Pannonia at Carnuntum, dated 70-150 (Gugl, Radbauer and Kronberger 2015: 262, 267, Pl. 25, M-568, 4, 26, R1-259-4), and *Aquincum*, with a large framing in the 1st-2nd centuries (Vámos 2002: 17-18, 29, Fig. 13, 2). The Italic samples were dated throughout the 1st and at the beginning of the 2nd century (Quercia 2008: 200, Type 8, Fig. 2, 8). In *Britannia*, those vessels are dated at Caerleon in the Flavian period (Zienkiewicz 1992: 97-98, 102, Fig. 5, 26, 7, 61) and at Northumberland Wharf (Brentford) at the middle of the 1st century (Laws 1976: 197, Fig. 10, 103). It must be noted that one fragment (**fig. 2, 4**) seems to belong to a category of pots from London, considered local products from the middle of the 1st century (Marsh and Tyers 1976: 228, Fig. 2, 19).

The type with a flat and slightly flaring rim (**fig. 2, 13**) is well documented in Roman Dacia. It is attested in the Romita camp (Matei and Bajusz 1997: 122-123, Pl. XL, 6), at Cristești (Popescu 1956: 175, Fig. 112, 25, 113, 18) and in the fort of Răcari (Bondoc and Gudea 2009: 163, Pl. XXXVI, 161), largely dated in the 2nd century. There is a variant of this type, decorated with grooves and mouldings in the upper part (**fig. 2, 2**), which has analogies in the legionary *canabae* from Colonia Ulpia *Traiana* (Xanten), dated at the end of the 1st and throughout the next century (Liesen 2003: 120, Fig. 3, 20), while in Dacia we find it at Tibiscum (Benea 1995: 153, Pl. X, 3).

Cooking recipients with rounded and slightly flaring rim (**fig. 2, 1**) have been discovered at *Singidunum* (Nicolić-Đorđević 2000: 77, Type II, 26) and Napoca (Rusu-Bolindeț 2007: 413, Pl. XCVII, 586), dated at the beginning of the 2nd century until the reign of Hadrian.

Pots with large flaring rims (**fig. 2, 17**) have a wider dating. Such vessels were discovered in the Roman camp of Nijmegen (Haalebos 1995: 64, Fig. 40, 1) or at Halbturn (Doneus 2014: 93, Pl. 84, 20). A similar variant, but with a rounded rim and groove decoration in the upper part (**fig. 2, 7**) can be found at Cristești (Popescu 1956: 157, 175, Fig. 112, 26) and Porolissum (Gudea 1996: 52, Pl. XII, 5).

Lids share the same fabrics with the cooking pots. Usually they do not bear any decoration, rarely horizontal incisions; their grabbing knob is flat or convex; the walls are straight or slightly arched, while the rounded rim is either straight or flaring.

Lids with straight walls (**fig. 3, 8**) were discovered in the first earth-and-timber phase of Napoca, from the period of Trajan (Rusu-Bolindeț 2007: 415, Pl. XCVIII, 594), but also in the nearby settlement from Florești – *Polus Center*, dated during the reign of Hadrian (Ciaușescu and Mustață 2009, Pl. VII, 2), and encountered among the common wares of Carnuntum (Grünewald 1979: 47-48, Pl. 33, 11).

Lids with arched walls and flaring rim (**fig. 3, 6**) are wide spread in Roman Dacia (Popilian 1976: 128, Pl. LXXII, 910, type 3), with analogies in the 1st-2nd centuries at Carnuntum (Grünewald 1979: 47, Pl. 33, 1). From the same site (Gugl 2007: 189, Pl. 27, 312-56) are the finds similar to the lids with arched walls and straight rim from *Sarmizegetusa Regia* (**fig. 3, 10**).

The grabbing knobs (**fig. 3, 7, 9** and **11**) are typical finds in Dacia (for example Popilian 1976: 127-128, Pl. LXXII, 900, Type 1, for the variant with flat knob with straight edge), but it is interesting to see the good analogies, for each of the three variants, from Mehadia (Macrea, Gudea and Moțu 1993: 125, Pl. LIV, 2, 4, 6).

Frying pans are less numerous, with two types identified so far, with bevelled flaring rim and rounded inverted rim. The former are decorated with grooves on the exterior, while the latter with an incision on the interior, close to the base; in both cases, the bottom is flat. Their hard fabric is semi-fine, fired in a reducing or oxidizing atmosphere, tempered with sand. Secondary firing traces are highly visible on the entire surface of these recipients.

The type with inverted rim (**fig. 3, 1-4**) usually has a large dating in the 2nd century until the first half of the 3rd century, at Napoca (Rusu-Bolindeț 2007: 403-404, Pl. XCI, 542, 546-547), Porolissum (Lăzărescu, Sidó 2018: 44, Fig. 12, 8) or Șibot (Bâltâc 2018: 138, Fig. 9, 5-6). Analogies are also found in the camps of Berzovia (Protase 2010: 40-41, Pl. 22) and Feldioara (Gudea 2008, 169, Pl. XVIII, 13-14) or in the Roman necropolis of Ruda-Brad – *La Petronești* (Rusu 1979: 219-223, Fig. III, 4). Earlier similar pans were also reported at *Verulamium* (Frere 1972: 352, Fig. 135, 1181), while the Italic examples are numerous in the 1st century (Bats 1988: 159-160, Pl. 38, 1088-1089; Olcese 2003: 27, 29, 86, Fig. 22, Tav. XV, 1-2; Leitch 2010: 14, Fig. 5a). We should also mention the local products from Emona (Istenič, Daszkiewicz and Schneider 2003: Fig. 3, 12, Tab. 1).

The second variant, with a flaring rim (**fig. 3, 5**), was considered a type of plate among the discoveries from Slăveni and Drobeta (Popilian 1976: 213, Pl. LXVIII, 830-831).

2.2. Find spots

Concerning the distribution map, Roman cooking pots have been discovered at *Sarmizegetusa Regia* predominantly within the fortress. Many of them were found on the upper plateau, on the 3rd and 4th terraces (**fig. 1, 2**, T III and T IV), following the line of the walls, and below the Southern Gate, but some samples were also discovered on the 7th terrace and above the 9th terrace (**fig. 1, 2**, T VII and T IX). Lids almost follow the same distribution pattern, being present on the 3rd and 4th terraces (**fig. 1, 2**, T III and T IV), at the Western Gate, and below the Southern Gate. Frying pans were found inside the fortress, on the 3rd and 4th terraces, in the emplecton of the western wall, and below the Southern Gate (**fig. 1, 2**).

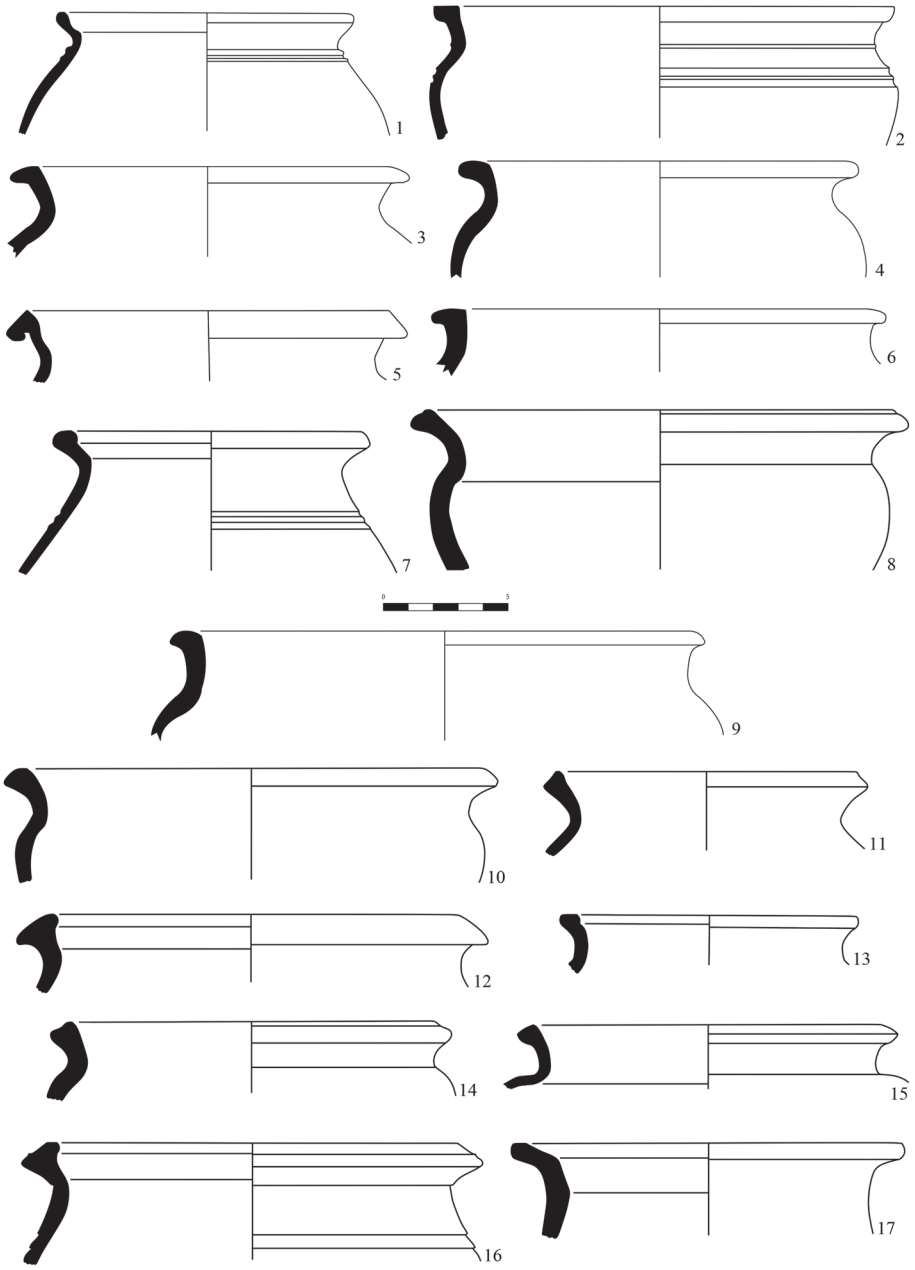

Fig. 2. Wheel-thrown cooking pots: 1st terrace (8, 11, 14), 3rd terrace (7, 13, 17), 7th terrace (1-2, 5), below the Southern Gate (3-4, 6, 9), Western Gate (10), without clear context (12, 15-16) (1-2, 5 after Cristescu 2011; 3-4, 6, 9 after Florea et al. 2015, Fig. 17, 7-10; 7-8, 10-17 drawn by G. Andreica).

2.3. Fabrics and local production

Macro- and microscopic observations have been made, backed up by laboratory analyses performed by a team lead by C. Ionescu. The study of the samples is still in progress, thus we will present only some preliminary observations. The samples have been fired at a temperature around 900º C. Their matrix has an oriented texture, with quartz and feldspar being the predominant clay minerals. Quartzite, mica schist and gneiss are some of the identified lithoclasts. It seems for now that the mica particles, often present in the fabric of the Dacian vessels, are not frequent in the matrix of Roman recipients.

Nevertheless, few exceptions exist as the clay used to manufacture a part of the cooking pots and lids probably came from a source down the valley, perhaps the clay quarry from Bucium, which was most likely used by the Dacians (Cristescu forthcoming) and still being in use nowadays (**fig. 4**). The respective source belongs to Badenian age deposits, part of a region characterised by Neogene marls, silts and mudstones, in the southern part of the Transylvanian Depression. Most probably, the frying pans arrived at Sarmizegetusa Regia as part of the soldiers' kitchen service.

We have no information on the other production stages of the cooking wares. There is no pottery kiln found on site, neither

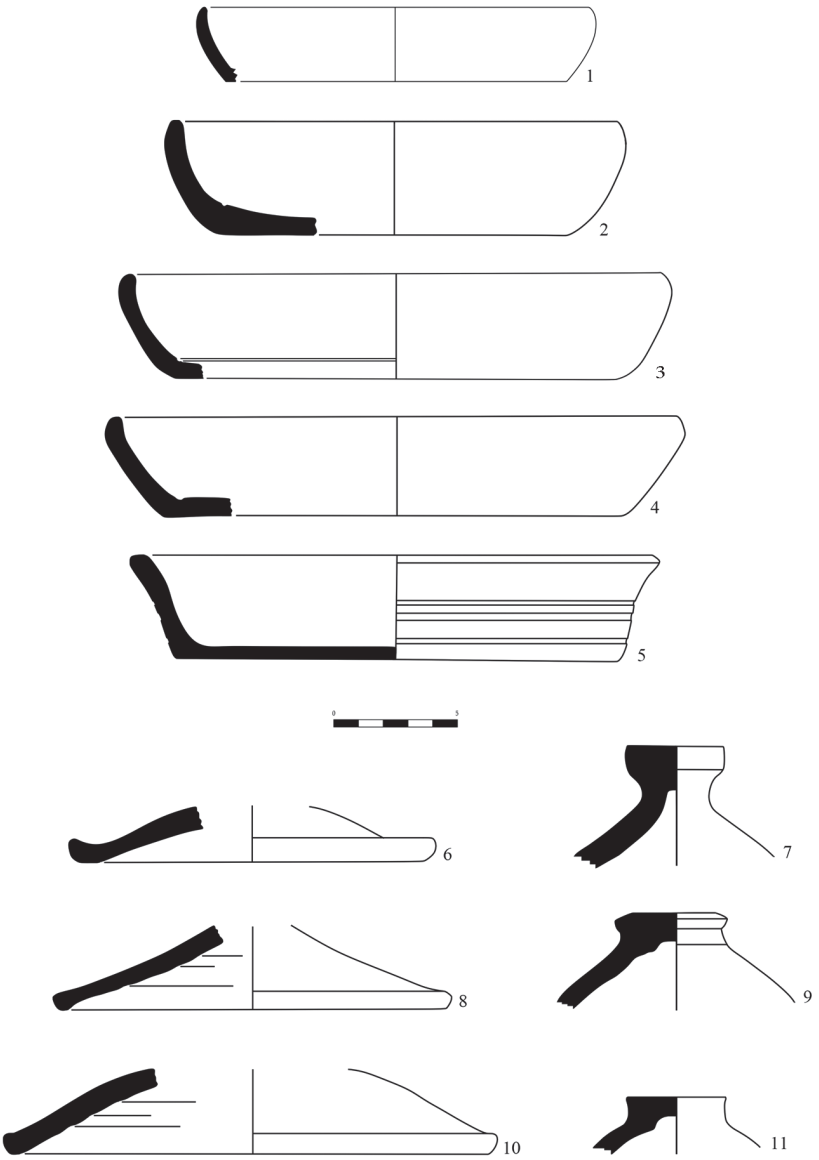

Fig. 3. Wheel-thrown frying pans (1-5) and lids (6-11): 3rd terrace (3, 6), 4th terrace (5, 7, 9, 11), inside the western wall (4), the north-western corner of the fortification (8), Western Gate (2, 10), below the Southern Gate (1) (1 after Florea et al. 2015, Fig. 17, 3; 2-4, 6, 8, 10 drawn by G. Andreica; 5, 7, 9, 11 drawn by A. Dima-Antal).

Dacian nor Roman (a pottery kiln was discovered nearby at Grădiștea de Munte – *Fețele Albe*, just across the Valea Albă creek, but it probably supplied only the respective Dacian settlement: Cristescu forthcoming). There is no evidence of wasters or waste pits or any manufacturing tools documented up to this moment. The situation might change during the processing of the unpublished materials, in connection to the progress of the excavations in the aforementioned areas.

The hypothesis of a local Roman ceramic production (without placing it exclusively in the post-war period) is enforced by the large number of Roman building materials discovered inside or near the stone fortress: *tegulae* and *imbrices*, bricks, pavement biscuits, ceramic tubes, even water pipe fragments, some sharing the same fabric features and firing conditions with a part of the cooking pots (Florea et al. 2015: 21).

2.4. The Dacian tradition

Judging by shape and fabric, the respective cooking recipients differ from the ones that were used before the conquest. Even the production technique is different, as the Dacian cooking jars were handmade only, just like a part of the local lids (Cristescu 2014b: 47). There are no frying pans that may be attributed to the Dacian layer, but we should always bear in mind the fact that the excavations inside and around the fortress revealed several stratigraphic layers containing both Roman and Dacian artefacts (Florea and Suciu 2004: 66), often deranged by modern interventions.

However, it must not be ascertained that handmade cooking wares were not used by the Romans soldiers at Sarmizegetusa Regia. There are a fair number of handmade jar fragments coming from the same areas like the Roman

Fig. 4. The clay quarry from Bucium (after Cristescu forthcoming).

kitchen containers. Recent studies have shown the presence and use of handmade jars of local tradition in the forts that were defending the province of Dacia (Pupeză, in this volume, with the bibliography). Notwithstanding, their characteristics are not the same in comparison to the traditional models, yet a final conclusion could be drawn only after the analysis of sufficiently clear ceramic assemblages at *Sarmizegetusa Regia*, found in well documented features or contexts.

3. Conclusions

Our efforts in finding analogies in the garrison forts of the Roman legions attested at Sarmizegetusa Regia proved to be, at least partially, fruitful. The finds mentioned at Mehadia, Tibiscum, Berzovia or Singidunum are showing that a part of these recipients were used by the soldiers of *Legio IIII Flavia Felix*. Those found in *Britannia* (Malone 2005: 18, 23, Tab. I.8) or at Nijmegen and Xanten might prove the usage of these vessels by the *Legio II Adiutrix*.

Even if the general chronology of the ceramic materials is the second half of the 1st century-2nd century, even the 3rd century, the discovery contexts at *Sarmizegetusa Regia* propose a narrower dating: the beginning of the 2nd century until the reign of Hadrian.

Whether or not the notion of 'legionary ware' is questionable (Petruț 2016), there is no doubt that the forms associated with it are present at *Sarmizegetusa Regia*. Our impression, based on more than 300 samples, is that most of the vessels are not manufactured here but arrived with the troops. For the vessels produced in the area, a plausible clay source is the Bucium quarry. All the recipients that were manufactured on-site (or in the vicinity) were wheel-thrown, so there may have existed a special building dedicated to this kind of labour, for instance a workshop.

We should not discuss only the pots themselves. In regards to material culture, a pot does not mean typology, but the process of cooking (Hodder 2005: 179).[1] It would be interesting to see if indeed the Roman culinary practices were so different in comparison with the ones from the royal court of Decebalus, where Roman soldiers and artisans had been active for quite a while (Rustoiu 2005: 82-83; Egri 2014).

We believe that the wheel-thrown cooking recipients from Grădiștea de Munte were produced by/for the Roman soldiers that garrisoned there. And there were the legionnaires as well who used them in the ruins of the former Dacian capital. Yet this archaeological chapter of *Sarmizegetusa Regia* is still rolling on...

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Cătălin Cristescu
Museum of Dacian and Roman Civilisation, Deva
catalincristescu01@yahoo.com

Gabriel Andreica
History Museum, Turda
andreica.gabriel@yahoo.com

[1] To put it in Ian Hodder's words, '...material culture, in its pragmatic innocence, should play a powerful ideological role. Our difficulty in recognizing this role is the basis of its success'.

Bibliography

Andreica, G. 2019. *Prezența romană la Grădiștea de Munte – Sarmizegetusa Regia (materialul ceramic)* [*Roman Presence at Grădiștea de Munte – Sarmizegetusa Regia (ceramic material)*]. Unpublished PhD Thesis, 'Babeș-Bolyai' University, Cluj-Napoca.

Bats, M. 1988. *Vaisselle et alimentation à Olbia de Provence (v. 350–v. 50 av. J.-C.). Modèles culturels et catégories céramiques* (Revue Archéologique Narbonnaise Suppl. 18). Paris, Éditions du Centre National de la Recherche Scientifique.

Bâltâc, A. 2018. The pottery workshops from Șibot - "În Obrej". In V. Rusu-Bolindeț, C. A. Roman, M. Gui, I. A. Iliescu, F. O. Botiș, S. Mustață and D. Petruț (eds.), *Atlas of Roman Pottery Workshops from the Provinces Dacia and Lower Moesia/Scythia Minor (1st – 7th centuries AD),* vol. I, 131-142. Cluj-Napoca, Mega Publishing House.

Benea, D. 1995. Orașul antic Tibiscum. Considerații istorice și arheologice. *Apulum* XXXII, 149-172.

Bogaers, J. E. von 1967. Die Besatzungstruppen des Legionslagers von Nijmegen im 2. Jahrhundert nach Christus. In *Studien zu den Militärgrenzen Roms. Vorträge des 6. Internationalen Limeskongresses in Süddeutschland* (Beihefte der Bonner Jahrbücher 19): 54-76. Köln-Graz, Böhlau.

Bondoc, D. and Gudea, N. 2009. *Castrul roman de la Răcari. Încercare de monografie*. Cluj-Napoca, Mega Publishing House.

Ciaușescu, M. and Mustață, S. 2009. Ceramica din așezarea romană/The pottery from the Roman settlement. In S. Mustață, F. Gogâltan, S. Cociș and A. Ursuțiu (eds.), *Cercetări arheologice preventive la Florești-Polus Center, jud. Cluj (2007) / Rescue excavations at Florești-Polus Center, Cluj County (2007)*, 243-278. Cluj-Napoca, Mega Publishing House.

Cristescu, C. 2011. *Ceramica dacică descoperită în complexe închise la Sarmizegetusa Regia (Grădiștea de Munte, Hunedoara)* [*The Dacian Pottery Discovered in Closed Complexes at Sarmizegetusa Regia (Grădiștea de Munte, Hunedoara)*]. Unpublished PhD Thesis, 'Babeș-Bolyai' University, Cluj-Napoca.

Cristescu, C. 2014a. Feasting with the King. The Tableware of Sarmizegetusa Regia. *Studia Universitatis Babeș-Bolyai – Historia* 59.1, 115-152.

Cristescu, C. 2014b. Tradition and Influence in the Dacian Pottery Discovered at Sarmizegetusa Regia. *Caiete ARA* 5, 15-31.

Cristescu, C. forthcoming. Pots and Potters in the Orăștie Mountains Before the Roman Conquest of Dacia. In V. Rusu-Bolindeț, C.-A. Roman, M. Gui, I.-A. Iliescu, F.-O. Botiș, S. Mustață and D. Petruț (eds.), *Atlas of Roman Pottery Workshops from the Provinces Dacia and Lower Moesia/Scythia Minor (1st – 7th Centuries AD) (II)*, 19-36. Cluj-Napoca, Mega Publishing House.

Daicoviciu, C. and Ferenczi, A. 1951. *Aşezările dacice din Munţii Orăştiei.* Bucureşti, Editura Academiei Republicii Populare Române.

Daicoviciu, C., Floca, O., Duka, P., Chirilă, E., Ferenczi, Ș., Manoliu, V., Pop, I., Rednic, M., Rusu, M. and Teodoru, H. 1951. Studiul traiului dacilor în Munții Orăștiei (Șantierul arheologic dela Grădiștea Muncelului. Rezultatul cercetărilor făcute de colectivul din Cluj, în anul 1950). *Studii și Cercetări de Istorie Veche* 2, 1, 95-129.

Daicoviciu, C., Floca, O., Macrea, M., Deac, A., Dediu, M., Duka, P., Ferenczi, Ș., Gostar, M., Ilieș, A., Mitrofan, D., Radu, D. and Winkler, I. 1954. Șantierul arheologic Grădiștea Muncelului (r. Orăștie, reg. Hunedoara). *Studii și Cercetări de Istorie Veche* 5, 1-2, 123-155.

Daicoviciu, H. 1972. *Dacia de la Burebista la cucerirea romană*. Cluj, Dacia.

Daicoviciu, H., Ferenczi, A. and Rusu, A. 1988-1991. Dovezi epigrafice referitoare la participarea legiunilor II Adiutrix și VI Ferrata la cucerirea Complexului cetăților dacice din Munții Sebeșului. *Sargetia* XXI-XXIV, 43-60.

Daicoviciu, H., Glodariu, I. and Ferenczi, Şt. 1989. *Cetăţi şi aşezări dacice în sud-vestul Transilvaniei I.* Bucureşti, Editura Științifică și Enciclopedică.

Doneus, N. 2014. Halbturn I – ein römerzeitliches Gräberfeld aus dem Burgenland. Struktur und Grabrituale eines ländlichen Gräberfeldes im Hinterland von Carnuntum zwischen dem 2. und 5. Jahrhundert. In N. Doneus (ed.), *Das kaiserzeitliche Gräberfeld von Halbturn, Burgenland* (Monographien des Römisch-Germanischen Zentralmuseums 122, 1): 1-230. Mainz, Verlag des Römisch-Germanischen Zentralmuseums.

Egri, M. 2014. Desirable Goods in the Late Iron Age – The Craftsman's Perspective. In S. Berecki (ed.), *Iron Age Crafts and Craftsmen in the Carpathian Basin*, 233-248. Târgu Mureș, Mega.

Étienne, R., Piso, I. and Diaconescu, A. 2002-2003. Les fouilles du *forum vetus* de Sarmizegetusa. Rapport general. *Acta Musei Napocensis* 39-40/I, 59-154.

Florea, G. 2011. *Dava et Oppidum. Débuts de la genèse urbaine en Europe au deuxième âge du Fer*. Cluj-Napoca, Centre d'Études Transylvaines.

Florea, G. 2017. Excavations in Sarmizegetusa Regia: Recent Results and Perspectives. In F. Mitthof and G. Schörner (eds.), *Columna Traiani. Traianssäule – Siegesmonument und Kriegsbericht in Bildern. Beiträge der Tagung in Wien anlässlich des 1900. Jahrestages der Einweihung* (9.–12. Mai 2013) (TYCHE Sonderband 9): 363-367. Wien, Holzhausen.

Florea, G. and Suciu, L. 2004. Considerații privind cercetările arheologice de pe platoul cetății de la Grădiștea de Munte. In A. Rusu-Pescaru and I. V. Ferencz (eds.), *Daco-geții: 80 de ani de cercetări arheologice sistematice la cetățile din Munții Orăștiei*, 63-75. Deva.

Florea, G., Suciu, L., Iaroslavschi, E., Gheorghiu, G., Pupeză, P., Bodó, C., Cristescu, C. and Mateescu, R. 2013. Grădiștea de Munte, com. Orăștioara de Sus, jud. Hunedoara [Sarmizegetusa Regia]. In *Cronica Cercetărilor Arheologice din România – Campania 2012*, 63-65. Iași, Editura Universității 'Alexandru Ioan Cuza'.

Florea, G., Suciu, L., Iaroslavschi, E., Gheorghiu, G., Pupeză, P., Bodó, C., Cristescu, C. and Mateescu, R. 2014. Com. Orăștioara de Sus, jud. Hunedoara. Grădiștea de Munte-Sarmizegetusa Regia. In *Cronica Cercetărilor Arheologice din România – Campania 2013*, 112-113. București.

Florea, G., Mustață, S., Mateescu, R., Cristescu, C., Bodó, C., Mateescu-Suciu, L., Iaroslavschi, E., Gheorghiu, G., Pupeză, P. and Cioată, D. 2015. *Matrița de bronz de la Sarmizegetusa Regia*. Cluj-Napoca, Mega Publishing House.

Frere, S. 1972. *Verulamium excavations, vol I* (Reports of the Research Committee of the Society of Antiquaries of London XXVIII). Oxford, The Society of Antiquaries.

Gheorghiu, G. 2005. *Dacii pe cursul mijlociu al Mureşului*. Cluj-Napoca, Mega Publishing House.

Glodariu, I. 1965. Sarmizegetusa dacică în timpul stăpânirii romane. *Acta Musei Napocensis* II, 119-133.

Glodariu, I. 1976. *Dacian Trade with the Hellenistic and Roman World* (BAR International Series 8). Oxford, BAR Publishing.

Glodariu, I. 1989-1993. Sarmizegetusa Regia durant le règne de Trajan. *Acta Musei Napocensis* 26-30, I/1, 19-25.

Glodariu, I. 2006. The destruction of sanctuaries in Sarmizegetusa Regia. In L. Mihăilescu-Bîrliba and O. Bounegru (eds.), *Studia historiae et religionis daco-romanae. In honorem Silvii Sanie*, 113-126. București, Editura Academiei Române.

Glodariu, I., Iaroslavschi, E. and Rusu, A. 1988. *Cetăți și așezări dacice în Munții Orăștiei*. București, Editura Sport-Turism.

Glodariu, I., Iaroslavschi, E., Rusu-Pescaru, A. and Stănescu, F. 1996. *Sarmizegetusa Regia, capitala Daciei preromane*. Deva, Acta Musei Devensis.

Grünewald, E. 1979. *Die Gefässkeramik des Legionslagers von Carnuntum (Grabungen 1968-1974)* (Der Römische Limes in Österreich XXIX). Wien, Verlag der Österreichischen Akademie der Wissenschaften.

Gudea, N. 1996. *Porolissum. Un complex arheologic daco-roman la marginea de nord a Imperiului Roman II. Vama romană. Monografie arheologică. Contribuții la cunoașterea sistemului vamal din provinciile dacice* (Bibliotheca Musei Napocensis XII). Zalău, Comitetul de Cultură si Educatie Socialistă al Judetului Sălaj, Muzeul Judetean de Istorie si Artă Zalău.

Gudea, N. 2008. *Castrul roman de la Feldioara – încercare de monografie arheologică / Das Römerkastell von Feldioara – Versuch einer archäologischen Monographie*. Cluj-Napoca, Mega Publishing House.

Gugl, C. 2007. Stratifizierte Fundkontexte des 1.-3. Jahrhunderts. In C. Gugl and R. Kastler (eds.), *Legionslager Carnuntum, Ausgrabungen 1968-1977* (Der Römische Limes in Österreich 45): 159-230. Wien, Verlag der Österreichischen Akademie der Wissenschaften.

Gugl, C., Radbauer, S. and Kronberger, M. 2015. *Die canabae von Carnuntum II: Archäologische und GIS-analytische Auswetung der Oberflächensurveys 2009-2010* (Der Römische Limes in Österreich 48). Wien, Verlag der Österreichischen Akademie der Wissenschaften.

Haalebos, J. K. 1995. *Castra und canabae. Ausgrabungen auf dem Hunerberg in Nijmegen, 1987-1994* (Libelli Noviomagenses 3). Nijmegen, Katholieke Universiteit.

Hodder, I. 2005. *Theory and practice in archaeology*. London / New York, Routledge.

Iaroslavschi, E. 1989-1993. Vestiges romaines dans la zone de Sarmizegetusa Regia. *Acta Musei Napocensis* 26-30, I/1, 27-32.

Istenič, J., Daszkiewicz, M. and Schneider, G. 2003. Local production of pottery and clay lamps at Emona (Italia, Regio X). In *Rei Cretariæ Romanæ Favtorvm Acta* 38, 83-91. Abingdon, Rei Cretariæ Romanæ Favtores.

Laws, A. 1976. Excavations at Northumberland Wharf, Brentford. *Transactions of the London & Middlesex Archaeological Society* 27, 179-205.

Lăzărescu, V. A. and Sidó, K. 2018. The ceramic production centre from Porolissum. In V. Rusu-Bolindeț, C. A. Roman, M. Gui, I. A. Iliescu, F. O. Botiș, S. Mustață and D. Petruț (eds.), *Atlas of Roman Pottery Workshops from the Provinces Dacia and Lower Moesia/Scythia Minor (1st – 7th Centuries AD) (I)*, 31-53. Cluj-Napoca, Mega Publishing House.

Leitch, V. 2010. Trade in Roman North African Cookwares. *Bollettino di Archeologia on line* 1, volume speciale B/B111/2, 11-23. <https://bollettinodiarcheologiaonline.beniculturali.it/wp-content/uploads/2019/01/2_LEITCH.pdf>

Liesen, B. 2003. Legionsware aus Xanten. In B. Liesen and U. Brandl (eds.), *Römische Keramik: Herstellung und Handel, Kolloquium Xanten* (15. – 17. 6. 2000) (Xantener Berichte 13): 117-127. Mainz, Philipp von Zabern.

Macrea, M., Gudea, N. and Moțu, I. 1993. *Praetorium. Castrul și așezarea romană de la Mehadia*. București, Editura Academiei Române.

Malone, S. J. 2005. *Legio XX Valeria Victrix. A prosopographical and historical study. Vol. I*. Unpublished PhD thesis, University of Nottingham, Nottingham.

Maróti, E. and Kalmár, J. 2006. About the stone material and mortar composition of the Roman buildings, Ulcisia Castra, Szentendre, Hungary. *Carpathian Journal of Earth and Environmental Sciences* 1/1, 27-40.

Maróti, E. and Kalmár, J. 2007. Római kori falak anyaga, szerkezete és az építkezés periódusai Ulcisia Castra (Szentendre) kantonai táborának területén. *Építőanyag* 59/2, 30-35.

Marsh, G. and Tyers, P. 1976. Roman Pottery from the City of London. *Transactions of the London & Middlesex Archaeological Society* 27, 228-244.

Matei, A. V. and Bajusz, I. 1997. *Castrul roman de la Romita – Certiae / Das Römergrenzkastell von Romita – Certiae*. Zalău.

Matei-Popescu, F. and Țentea, O. 2017. I primi insediamenti romani nella Dacia: il contributo dell'esercito. In C. Parisi Presicce, M. Milella, S. Pastor and L. Ungaro (eds.), *Traiano. Construire l'Impero, creare l'Europa*. *Catalogo della mostra*, 163-168. Roma, De Luca Editori d'Arte.

Nicolić-Đorđević, S. 2000. Antička Keramika Singidunuma. Oblici Posuda. In M. Popović (ed.), *Singidunum 2*, 11-244. Beograd, Arheološki Institut.

Olcese, G. 2003. *Le ceramiche comuni a Roma e in area romana (III secolo a.C.-I-II secolo d.C.). Produzione, circolazione, tecnologia (tarda età repubblicana – prima età imperiale)* (Documenti di Archeologia 28). Mantova, Editore S.A.P.

Oltean, I. A. and Hanson, W. S. 2017. Conquest strategy and political discourse: new evidence for the conquest of Dacia from LiDAR analysis at Sarmizegetusa Regia. *Journal of Roman Archaeology* 30, 429-446.

Opreanu, C.-H. 1999-2000. Castrul roman de la Grădiștea Muncelului (Sarmizegetusa Regia). Cronologia și semnificația sa istorică. *Ephemeris Napocensis* IX-X, 151-168.

Opreanu, C.-H. 2017. Roman Victory Symbolism at Sarmizegetusa Regia. In F. Mitthof and G. Schörner (eds.), *Columna Traiani. Traianssäule – Siegesmonument und Kriegsbericht in Bildern. Beiträge der Tagung in Wien anlässlich des 1900. Jahrestages der Einweihung* (9.–12. Mai 2013) (TYCHE Sonderband 9): 369-375. Wien, Holzhausen.

Petruț, D. 2016. The implications of indirect evidence regarding the military pottery production in Buciumi (*Dacia Porolissensis*) and the question of 'legionary ware'. In *Rei Cretariæ Romanæ Favtorvm Acta* 44, 643-649. Bonn, Rei Cretariæ Romanæ Favtores.

Popa, C. I. 2011. *Valea Cugirului din preistorie până în zorii epocii moderne. Monumenta archaeologica et historica*. Cluj-Napoca, Mega.

Popescu, D. 1956. Cercetări arheologice în Transilvania (I-IV). *Materiale și Cercetări Arheologice* II, 41-250.

Popilian, G. 1976. *Ceramica romană din Oltenia*. Craiova, Scrisul Românesc.

Protase, D. 1997. Quand la capitale de Décébale est-elle tombée aux mains des Romains ? Un nouveau point de vue. *Ephemeris Napocensis* VII, 89-100.

Protase, D. 2010. Castrul Legiunii IIII Flavia Felix de la Berzovia. Săpăturile arheologice din anii 1965-1968. *Analele Banatului* (Seria Nouă) XVIII, 33-62.

Pupeză, P., Isacu, A.and Cupșa, C. 2020. Dacian Pottery in Roman Contexts. The Fort from Cășeiu (*Samum*). In *Rei Cretariae Romanae Fautores Acta* 46. Oxford, Archaeopress.

Quercia, A. 2008. La ceramiche comuni di età romana. In F. Filipi (ed.), *Horti et Sordes. Uno scavo alle falde del Gianicolo*, 197-232. Roma, Quasar.

Rustoiu, A. 2005. Dacia și Italia în sec. I a.Chr. Comerțul cu vase de bronz în perioada republicană târzie (Studiu preliminar). In C. Cosma and A. Rustoiu (eds.), *Comerț și civilizație. Transilvania în contextul schimburilor comerciale și culturale în antichitate*, 54-117. Cluj-Napoca, Mega Publishing House.

Rusu, A. 1979. Cercetări în necropola Muncelu-Brad. *Materiale și Cercetări Arheologice* XIII, 219-223.

Rusu-Bolindeț, V. 2007. *Ceramica romană de la Napoca. Contribuții la studiul ceramicii din Dacia romană* (Bibliotheca Musei Napocensis XXV). Cluj-Napoca, Mega Publishing House.

Rusu-Bolindeț, V. and Cociș, S. 2005. Ceramica din *vicus*-ul roman de Napoca. Importuri și producție locală. In C. Cosma and A. Rustoiu (eds.), *Comerț și civilizație. Transilvania în contextul schimburilor comerciale și culturale în antichitate*, 149-184. Cluj-Napoca, Mega Publishing House.

Suceveanu, A. 2000. *La céramique romaine des I^er^-III^e^ siècles ap. J.-C.* (Histria X). București, Cimec.

Urloiu, R. 2011. Legio VI Ferrata în Arabia. *Studii și Cercetări de Istorie Veche și Arheologie* 62, 3-4, 209-231.

Vámos, P. 2002. Fazekasműhely az Aquincum canabae déli részén. *Archaeologiai* Értesítő 127, 5-87.

Whatley, C. 2016. *Exercitus Moesiae. The Roman Army in Moesia from Augustus to Severus Alexander* (BAR International Series 2825). Oxford, BAR Publishing.

Zienkiewicz, J. D. 1992. Pottery from excavations on the site of the Roman Legionary Museum, Caerleon 1983-5. *Journal of Roman Pottery Studies* 5, 81-109.