



INSTITUTE OF ARCHEOLOGY
AND ART HISTORY OF ROMANIAN
ACADEMY CLUJ-NAPOCA



UNIVERSITATEA TEHNICĂ
DIN CLUJ-NAPOCA

JAHA
JOURNAL OF ANCIENT HISTORY
AND ARCHAEOLOGY

editura
MEGA

Journal of Ancient History and Archaeology



Scopus®



Clarivate
Analytics



Central and Eastern European Online Library

EBSCO



No. 12-3/2025

CONTENTS

STUDIES

ANCIENT HISTORY

Serkan DEMIREL

HORSES IN HITTITE SOCIETY: STATUS, SYMBOLISM AND UTILITY... 3

Stanislav GRIGORIEV

THRACIANS IN THE EAST. CULTURAL TRANSFORMATIONS IN THE LATE BRONZE AGE OF KAZAKHSTAN... 13

Erdal KAYA

LEGIONARY GARRISON AND AUXILIARY FORTS OF THE ROMAN EMPIRE IN ARMENIA MINOR... 39

Mihaela IACOB, Daniela Florina LUNGU, Flavia

Maria BARBU, Constantin Viorel MARIAN

MUNICIPIUM *NOVIODUNUM* (IN MOESIA INFERIOR) DURING THE PRINCIPATE PERIOD: ARCHAEOLOGICAL PRESENTATION USING COMPUTER SOLUTIONS, EPIGRAPHIC AND NUMISMATIC DOCUMENTATION... 55

ARCHAEOLOGY

Cristian Ioan POPA

CUGIR III BRONZE HOARD. AND SOME ADDITIONS REGARDING THE BRONZE HOARDS FROM CUGIR... 72

Zhuldyzay KISHKENBAYEVA, Sergey YARYGIN, Sergazy SAKENOV

IMAGES IN THE SAKA ANIMAL STYLE OF TAUSAMALY (EASTERN ZHETYSU REGION, KAZAKHSTAN)... 101

Jerónimo SÁNCHEZ-VELASCO, Leticia TOBALINA-PULIDO

THE LATE ROMAN MAUSOLEUM OF SÁDABA (ZARAGOZA, SPAIN). NEW SCIENTIFIC INTERPRETATIONS OF THE MONUMENT... 118

ARCHAEOLOGICAL MATERIAL

Roxana CIRT

POST-FIRING INTERVENTIONS ON LA TÈNE POTTERY FROM THE EASTERN CARPATHIAN BASIN: MENDING PRACTICES... 129

Alexandru BERZOVAN, Bogdan PETRU,

NICULICĂ, Constantin APARASCHIVEI

REVISITING OLDER DISCOVERIES. THE LATE IRON AGE FINDS FROM BOSANCI AND VORNICENII MICI (SUCEAVA COUNTY)... 144

Hasan Ertuğ ERGÜRER, Deniz Berk TOKBUDAK

A NEW ROMAN IMPERIAL PORTRAIT FROM SYEDRA... 155

Aleksandr SYMONENKO

THE TERRA SIGILLATA TABLE AMPHORAE AMONG NORTH PONTIC BARBARIANS OF ROMAN AGE... 162

Dávid PETRUȚ, Sorin COCIȘ

DOMESTIC LIGHTING IN ROMAN NAPOCA (II). LAMPS DISCOVERED ON VARIOUS SITES IN AND AROUND THE ROMAN CITY (CLUJ-NAPOCA, ROMANIA)... 170

Salih SOSLU

A GROUP OF GOLD EARRINGS FROM BURDUR MUSEUM AND ARCHAEOOMETRY ANALYSIS (TÜRKIYE)... 184

Fevziye EKER, Kasım EKER

A GROUP OF BOTTLES FROM THE LATE ANTIQUE GLASS COLLECTION OF TOKAT MUSEUM... 200

ARCHAEOLOGICAL MATERIAL AND REPORTS

Radu OTA, Ilie LASCU

ARCHAEOLOGICAL RESEARCH IN CANABAE/MUNICIPIUM SEPTIMIUM APULENSE-SOUTHERN SECTOR... 206

ARCHAEOLOGICAL MAPPING

Ana ODOCHICIUC, Alin MIHU-PINTILIE, Lucrețiu MIHAILESCU-BÎRLIBA

MAPPING HINTERLAND RESOURCES IN THE RURAL LANDSCAPE OF GREEK POLEIS ISTROS AND TOMIS DURING THE ROMAN PERIOD... 225

ARCHAEOOMETRY

Ioan Alexandru BĂRBAT, Corina Anca SIMION, Tiberiu Bogdan

SAVA, Oana GĂZA, Cristian MĂNĂILESCU, Maria Valentina ILIE

DISCOVERING A NEW EARLY STARČEVO-CRIȘ SITE IN SOUTHWESTERN TRANSYLVANIA AT FOLT-SUB VII (HUNEDOARA COUNTY, ROMANIA) AND A PROCEDURE FOR DATING EARLY NEOLITHIC SHARD SAMPLES... 243

EPIGRAPHY AND PAPYROLOGY

Peter ROTHENHÖFER, Florian MATEI-POPESCU

A NEW FRAGMENT OF A MILITARY DIPLOMA FOR THE *EQUITES SINGULARES AUGUSTI*... 256

Ioan PISO, Sorin COCIȘ, Vlad-Andrei LĂZĂRESCU,

Sergiu-Traian SOCACIU

TWO ROMAN INSCRIPTIONS FROM JIBOU, SĂLAJ COUNTY... 259

NUMISMATICS

Cristian GĂZDAC, Claudiu PURDEA

NUMISMATICS AND FORENSICS: OPERATION DACIAN GOLD. THE HOARD GRĂDIȘTEA DE MUNTE – "TIMIȘOARA AIRPORT"... 266

KASIM OYARÇIN, YAVUZ YEĞİN

AN EVALUATION OF THE OLBA NYMPHAEUM AND COINS... 294

REVIEWS

Dan DEAC

Isis, Sarapis And The Waves Of The Black Sea. V. Atanassova, L. Bricault (eds.), *Egyptian Cults on the Black Sea Coast / Египетските култове по крайбрежието на Черно море*, Institute of Balkan Studies with Center of Thracology, Bulgarian Academy of Sciences / École française d'Athènes Sofia, ISBN 978-619-7179-45-3; ISBN 978-2-86958-630-7, "Paradigma" Publishing House, 2024, 194 p... 304

ISSN 2360 266x

ISSN-L 2360 266x

Design & layout: Francisc Baja



EDITURA MEGA | www.edituramega.ro

e-mail: mega@edituramega.ro

ARCHAEOLOGICAL RESEARCH IN CANABAE/MUNICIPIUM SEPTIMIUM APULENSE-SOUTHERN SECTOR

Radu OTA

The National Museum of Alba Iulia, Romania
eractum@yahoo.com

Ilie LASCU

The National Museum of Alba Iulia, Romania
lascuia@yahoo.com

Abstract: A preventive archaeological survey of the southern sector of the civil settlement developed near the Castrum of Apulum has revealed vestiges that reveal a dense habitation, in three stages, between the second half of the second century and the third century AD. The third-century habitation shows the expansion to the south of the settlement that was urbanised at the end of the second century AD., in the time of Septimius Severus. The Severan dynasty is probably the most prosperous period in the history of Roman Dacia. Due to the fidelity of the legions XIII Gemina and V Macedonica in the long civil war waged against Pescenius Niger and Clodius Albinus the civil settlements developed around the Apulum and Potaissa legionary fortresses, along with other important settlements of Dacia such as Porolissum, Ampelum, Tibiscum and Dierna were urbanized. In addition to the rather common archaeological material, a torso of a votive statuette representing Dionysus/Liber Pater was recovered—a genuine import piece most likely brought through trade, probably from Asia Minor, similar to the other sculptural masterpieces of the god discovered in the well-known sanctuary erected in the first city of Apulum, colonia Aurelia Apulensis, located beneath the modern Partoș district of Alba Iulia. The discovery of clay oil lamps with the marks (Firmalampen) Atimetus, Festus, Fronto and Strobilus shows once again the development of oil lamp production in the Apulum urban centre. A fragment from a zoomorphic fibula in the form of a rooster shows cultural influences from the Western world, Britannia or Gallia, or even a colonisation. It is the only fibula of this type discovered in Apulum. Last but not least, a few beef bones and a deer horn with traces of cutting and grinding attest to the existence of the third workshop for bone and horn processing in the civil settlement near the fortification, dated to the last quarter of the second century AD.

Keywords: *canabae/municipium Septimium Apulense, rescue archaeological research, urban settlement, Roman building*

I. INTRODUCTION

The preventive archaeological research took place in the spring of 2024, in an area particularly rich in archaeological remains—more precisely, in the southern sector of the civilian settlement (*canabae*) that developed near the fortress of the XIII Gemina legion, which was granted municipal status after AD 197 (*municipium Septimium Apulense*)¹ (Pl. I/1). The location is on Izvorului street, no. 5A, 550 m south of the Roman camp (Pl. I/2).

A polygonal surface, designated as Sp 1, was laid out, measuring 15.75 × 12.6 metres (Pl. II/1–2; III/1; VII/1–2), along with a 4 × 3 metre excavation

¹ OTA 2012, 133–140; CIULAVU/BLEOANĂ 2018, 171–218.

(Pl. VII/3–4). Within surface Sp 1, wall foundations from two buildings were identified, along with a pathway and 15 sunken complexes. Excavation 1 is 4 × 3 m in size. It was located to the south of surface Sp 1 (Pl. II/1–2; III/1). Fragments of roof tiles and a floor made of *opus signinum* were discovered at a depth of 0.25 m, across a length of 2.3 m. Here, the locations where the hypocaust pillars were installed can be observed. The ditch following the dismantling of wall Z5 is visible to the south. After removing the tiles and researching the layer, sterile soil was observed at a depth of 0.55 m.

II. DESCRIPTION OF COMPLEXES

Cx. 1. A pit, outlined at a depth of 0.6 metres, extends down to a depth of 2.6 metres below the current walking surface. Upon outlining, it appeared as a patch of yellow soil in which Roman-period tegular materials were visible. It had a circular shape with a diameter of 1.5 m and straight walls. From a depth of 2 m, the walls of the pit are slightly collapsed, which led to the emptying of the pit to a depth of 2.6 m. The fill is made of yellow soil, bounded by lenses of black soil. Tegular materials and ceramic materials, fragments from clay pots and fragments from glass vessels were observed only in the upper part of the pit (Pl. V/1–4).

Cx. 4. Rectangular pit with dimensions of 1.1 × 0.8 m. It was outlined at a depth of 0.8 m and deepens to 1.1 m below the current walking surface. When sectioned, two levels of filling made of black soil and black soil mixed with yellow soil were observed. Very little Roman-era ceramic material has been discovered inside the pit. It predates the Roman building attested by Z1, Z2 and Z5.

Cx. 5. Pit, outlined at a depth of 0.6 m, deepens to a depth of 2.8 m from the current walking surface. At the time of outlining, it appeared as a patch of yellow soil containing Roman-period tegular materials. It had a circular shape with a diameter of 1.1 m and straight walls. From a depth of 2.4 m, the walls of the pit are slightly collapsed, which led to the emptying of the pit to a depth of 2.8 m. The fill is made of yellow soil, to a depth of 1.6 m, then black soil. Tegular materials and ceramic materials were observed only in the lower part of the pit. It partially affects the Z4 complex.

Cx. 9. Oval-shaped pit with dimensions of 1.2 × 0.9 m, outlined at a depth of 0.8 m, deepens up to 1.1 m from the current walking surface. When sectioned, a single level was observed, made of black soil. The bottom of the pit and the walls are irregular. The inventory consists of very few archaeological materials from the Roman era.

Cx. 11. Small kiln, partially captured in the western profile of the surface, on dimensions of 1 × 0.7 m, at -0.55 m and extends down to 0.95 metres. The kiln is built upon the sterile yellow soil. The dome is made of yellow clay and is 0.4 m thick. The furnace plate is slightly carved out, is 5 cm thick and is made of yellow soil. When sectioned, it was found that there was only one level of fill, made of black soil mixed with ash and very few Roman-era ceramic materials (Pl. VI.3–4).

Cx. 13. Circular pit, with a diameter of 1.1 m, outlined at a depth of 0.8 m, with a maximum depth of 3 m, from the current walking surface. When sectioned, the existence of two levels of fill was observed, made of black soil mixed with gravel and black soil mixed with ash. Roman-era ceramic materials and Roman-era building materials were discovered in the fill of the pit. The pit has straight walls. At the bottom of the pit, intense burning of the base and walls can be observed. It partially affects the complex Cx. 6 and is affected by Cx. 12 and a lair. The emptying was carried out up to a depth of 3m, at a depth of 2.6 m, the natural gravel layer was observed. The walls of the pit have collapsed on the west side of the pit. It dates to the Roman period; it overlaps Z3.

Cx. 14. Large pit, observed at a depth of 0.5 m, in the central area of the surface. It is overlaid by the Z1 wall and by the alley arranged next to it, made of two rows of bricks, which led to its partial research. It was outlined immediately below the arable level and had dimensions of 10.3 × 5.6 m, of which 10.3 × 3.6 m were surveyed. In the central zone, from a depth of 1.8 m, two pits were outlined that extend to 2.8 m; the pits have identical stratigraphy (Pl. IV). The complex was divided into four quadrants, with two cross profiles being made. The stratigraphy is uniform to a depth of 1.8 m, and five levels of fill are observed. Roman period archaeological materials have been observed throughout the depth (Pl. III/2). A bronze coin from Antoninus Pius was discovered at the top of the pit. Bone needles and also four long bone fragments with traces of processing were discovered at different depths. This prompts us to consider the possibility of a bone processing workshop. The ceramic material is diverse and includes both fragments of pots of common pottery and glazed pottery. Two oil lamps with a complete stamp were identified, one bearing the mark ATIMETVS, the other STROBILVS. It is superimposed by the Z1 wall and the alley arranged outside the wall.

Cx. 15. Rectangular pit, observed with dimensions of 2x1.7 m, at a depth of 0.8 m and extends down to 2.2 m from the current walking surface. The filler is made of five layers; it consists, north-south, of: black soil mixed with ash to a depth of 1.2 m; burn to a depth of 1.35 m; black soil mixed with burn, to the maximum depth of the pit. On the west side of the pit, there are two layers 0.4 m thick, made of black soil and black soil mixed with burnt materials. The inventory consists of Roman-era ceramic material, fragments of glass vessels and osteological material. A fragment of a support used for holding glazed vessels during the firing process was identified (Pl. III/2–3).

Cx. 16. Circular pit, with a diameter of 1.6 m, at a depth of 0.8 m and extends down to 2.1 m from the current walking surface. The fill is made of four tiers: black soil mixed with ash; yellow soil mixed with black soil; black soil mixed with burnt materials, and black soil mixed with yellow (Pl. III/4; VI/1–2). The inventory consists of Roman-era ceramic material.

Cx. 17. Circular pit with a diameter of 0.9 m. It was

outlined inside the Cx. 14 complex and was emptied to a depth of 3.4 m, from the current walking surface. Inside the pit were discovered Roman-era archaeological materials, and a vessel that could be completed was found. Overlaps pit Cx. 14.

Cx. 18. Alley made of Roman bricks, in the northern part of the Z1 wall. It is composed of two rows of bricks, laid on a thin bed of gravel. It was best preserved in the area where it was compacted in the pit. It was found at a depth of 0.5 m and has a width of 0.8 m. The palm print is visible on one of the bricks in the alley.

A Roman building, in which Z1 and Z2 (in Sp 1) and Z5 (in Trench 1) were uncovered, overlaps a large pit, designated Cx. 14. A brick alley (Cx. 18) was identified near Z1.

Z1 is located in the central part of the surface, over pit Cx. 14, which led to its tilt; oriented E-W; dimensions: length – 9 m, width – 0.6 m; height – 0.3 m. It was observed at a depth of 0.3 m, being affected by agricultural work. It is made of river stones, small blocks of limestone and tegular material bound with mortar. In the western area, it was compacted in the pit. Across a length of 2 meters, only the gravel arrangement for the foundation of the wall was observed. The foundation bed is 0.2 m thick, and it is wider than the wall by 0.2 m.

Z2 is located in the central part of the surface, being oriented NE-SW; dimensions: length – 0.6 m; width – 0.45 m. Made of river stones bound with mortar, it is a compartment wall almost entirely destroyed by post-Roman interventions. It was built on a gravel bed 0.2 m thick.

Z3. Foundation bed for a wall foundation, observed at a depth of 0.6 m; dimensions: length – 4.6 m; width – 0.5 m; height – 0.1-0.15 m; is superimposed by CX. 13 (Pl. V/5).

Z4. Foundation bed for a wall foundation, observed at the depth of 0.6 m; dimensions: length – 1.9 m; width – 0.5 m; height – 0.1-0.15 m; oriented E-W; intersects with Z3, at a right angle; is superimposed by CX. 5 (Pl. V/5).

Z5. Foundation bed for a perimeter wall oriented E-W, parallel with Z1. It was part of the same building as Z1 and Z2; dimensions: length – 3.25 m, width – 0.7 m.

Z1, Z2 and Z5 are part of an edifice called Building I, and Z3 and Z4 are part of an edifice called Building II, whose surface continues on the adjoining property, where it was surveyed in 2017 by F. Ciulavu and M. Bleoancă².

III. ARCHAEOLOGICAL MATERIAL

III.1. Coins³

1. Sestertius Antoninus Pius, Inv. no. 9184, discovered in Sp 1, Cx. 14 (Pl. X/6).

² CIULAVU/BLEOANCĂ 2018, 171–219.

³ The coins identification was carried out by our colleague Ovidiu-Maxim Oargă, PhD, to whom we would like to extend our gratitude in this manner.

Obv: Laureate head facing right.
ANTONINUS AVG PI-VS PP TR P COS III
Rv: Felicitas or Pax (?); Branch and the horn of plenty (?)
(hardly legible)
140–143 AD.

2. Denarius Antoninus Pius: Marcus Aurelius (Caesar), discovered in enclosure 1 (Pl. X/7).

Obv: Marcus Aurelius' head to the right, Inv. no. 9186
AVRE [LIVS CAES. ANTON. AVG. PII F]
Spes advances to the left; holds a flower in his right hand, and with his left hand holds his garment
Rv: TR. POT. XII COS. II
RIC 476/89
Years 157–158 AD.

3. As Marcus Aurelius: Faustina II (Augusta), discovered in Sp 1, Cx. 14, Inv. no. 9185 (Pl. X/8).

Obv: FAUSTINA AUGUSTA. Bust of Faustina II to the right, with wavy hair caught in a bun at the back
Rv: Juno? who stands to the left, holds in his right hand the patera and in his left hand the sceptre, at his feet on the left side is a peacock
RIC 1647/345
Years 161–175 AD.

III.2. Bronze artefacts

1. Zoomorphic fibula, in the form of a rooster; fragmentary; fitted with an eight-coil spring; only the “tail” of the bird and the spring are preserved; discovered in Sp 1, at -0.5 m; dimensions: length – 2.2 cm, width – 1.7 cm (Pl. IX/1).

These fibulae are found mostly in the western provinces, Britannia and Gallia. They are also found in the barbarian world. It is part of the type 22h Cociş and 29a21 Feugère⁴, which has the body in the form of a rooster. They circulated in the second century AD. Such artefacts are found in Dacia, at Bandu de Câmpie⁵, in Pannonia Superior at Wiener-Neustadt, Carnuntum⁶, Vindobona⁷, in Britannia⁸ and Gallia⁹.

2. Belt end, consisting of a middle ring and a rod with a rivet at the top; discovered in Sp 1, Cx. 3 (complex dated in the 10th–11th centuries), at -0.7 m; size: L–7.9 cm; ring diameter – 1.1 cm (Pl. IX/3).

Analogues of this type of artefact are discovered quite often. Thus, we have the discoveries from Potaissa – the thermae of the legionary fortress¹⁰, Micia – pagus¹¹, Apulum – municipium Septimium Apulense, colonia Aurelia Apulensis

⁴ FEUGÈRE 1985, 388.

⁵ COCIŞ 2004, 116, 118–119, Pl. CII/1432.

⁶ MATOUSCHEK/NOWAK 1985–1986, 135–136, nos. 1–3, Tafel 15.

⁷ SCHMID 2010, 59, 124, Taf. 40, no. 320.

⁸ BAYLEY/BUTCHER 2004, 174–175, T214; MACKRETH 2011, nos. 8012, 14798, Pl. 126.

⁹ FEUGÈRE 1985, 388.

¹⁰ FODOREAN 2019, 276, nos. 3–4, Pl. LXXIV.

¹¹ PETCULESCU 2024, 408, Pl. 5/35.

and the southern necropolis¹², Porolisum¹³ and Slăveni¹⁴. They are dated after the Marcomannic Wars until at least the mid-third century AD.¹⁵ J. Oldenstein dates them between the end of the second century. mid-third century AD., in the Rhine limes area¹⁶. Their number is much higher than in Germany and Raetia¹⁷.

3. Hairpin with a conical head, almost complete, with a broken tip; uncovered in Sp 1, at -0.5 m; dimensions: length – 11.1 cm (Pl. IX/4). Very similar analogues are in colonia Aurelia Apulensis, on Gemenilor street¹⁸.

It is a common artefact, very often discovered in Roman sites. Close analogues are in colonia Aurelia Apulensis¹⁹, municipium Septimium Apulense²⁰, Ulpia Traiana Sarmizegetusa²¹, Porolisum²².

4. Ring/link with simple bar, with a circular section; shows a slight protuberance; discovered in Sp 1, Cx. 2 (complex dated in the 10th–11th centuries), at -1.85 m (Pl. IX/2). It has a secondary context of discovery.

It is a common artefact, very often discovered in Roman sites. Good analogues are found in Apulum – colonia Aurelia Apulensis²³, municipium Septimium Apulense²⁴, Praetorium consularis²⁵, Micia, pagus²⁶, Ulpia Traiana Sarmizegetusa²⁷, Potaissa -the baths of the legionary fortress²⁸ and Porolisum²⁹.

III.3. Ceramics

Building material

1. Roman brick with the trace of a right palm made before burning; dimensions: 38 × 29 × 4 cm (Pl. VI/5; X/9).

Pottery

1. Cup with a single handle, made of coarse grey-black fabric containing sand, with a part of the slightly flared rim missing (Pl. VIII/1), was discovered in Cx 17 at a depth of -3.5 m; its dimensions are 11.1 cm in height, 7.3 cm in rim diameter, 3.5 cm in base diameter, and 10.8 cm in maximum diameter. It is part of type II/9 Nikolić-Đorđević concerning the Singidunum, Moesia Superior³⁰ discoveries, and Type 4 Popilian, and its close analogues are found in Dacia at

Sucidava, Drobeta, Romula and Bumbești³¹, Apulum, southern necropolis (in a cremation tomb from Gordian III that contained a coin)³² and Slăveni³³.

Oil lamps

1. complete monolychnis oil lamp, type VIII Loeschcke, made of brick-red, semi-fine fabric with traces of secondary burning, decorated on the disc with a rosette, featuring a discoidal handle, a spout separated from the body by a bifid incised bar, and equipped with a wick insertion hole; its dimensions are 6.4 cm in length, 2.8 cm in base diameter, and 3.8 cm in height; it was discovered in Sp 1, Cx. 14 at a depth of -0.6 m (Pl. VIII/6).

2. fragmentary monolychnis oil lamp, with the disc and part of the spout missing, made of fine brick-red fabric with a red slip, featuring a border ornamented with simple protrusions, and bearing the mark STROBILUS in the variant STROBILI; its dimensions are 9 cm in length, 4.3 cm in base diameter, 6.2 cm in reservoir diameter, and 3.2 cm in height; it was discovered in Sp 1, Cx. 14, at a depth of -1.1 m (Pl. VIII/2).

3. fragmentary monolychnis oil lamp, type X Loeschcke, made of semi-fine brick-red fabric with a red slip, with part of the reservoir and the disc missing, featuring a border ornamented with simple protrusions, and bearing the Atimetus mark in the variant ATIMETI; its dimensions are 10.3 cm in length, 4.8 cm in base diameter, and 3.4 cm in height; it was discovered in Sp 1, Cx. 14, at a depth of -1.6 m (Pl. VIII/3).

4. fragmentary monolychnis oil lamp, made of semi-fine brick-red paste, with part of the reservoir preserved, featuring a barely legible stamp, and bearing the Festus mark in the variant FEST[I]; its dimensions are 7.2 cm in length and 3.3 cm in height; it was discovered in Sp 1, Cx. 14, at a depth of -1.6 m (Pl. VIII/5).

5. fragmentary monolychnis lamp, made of fine brick-red paste, with a barely legible mark – FRO[NTO F]; its dimensions are 5.3 cm in length and 2.3 cm in height; it was discovered in Sp 1, Cx. 14, at a depth of -2 m (Pl. VIII/4).

6. fragmentary monolychnis oil lamp, type X Loeschcke, made of fine red paste with a red slip, with the disc and border preserved, the latter ornamented with a bifid protrusion and two simple protrusions; its dimensions are 7.2 cm in length and 5.6 cm in disc diameter; it was discovered in Sp 1, Cx. 14, at a depth of -1.8 m (Pl. VIII/7).

7. Ivy leaf-shaped oil lamp handle (*palma*), with dorsal aial crest; fragmentary; made of red fine paste with a red slip; its dimensions are 5.6 × 5.3 cm; discovered in Sp 1, Cx. 14, at -1.8 m (Pl. VIII/10).

8. Oil lamp ring-shaped handle; fragmentary; made of

¹² BOUNEGRU/OTA 2010, 444, Fig. 5/6–8; CIUGUDEAN 2021, 218, nos. 14–17, Pl. IX/14–17.

¹³ GUDEA 1989, 657, nos. 31–37, Pl. CCXII.

¹⁴ TUDOR *ET alii* 2011, 204, no. 350, Pl. LVIII.

¹⁵ PETCULESCU 2024, 408.

¹⁶ OLDENSTEIN 1977, 150.

¹⁷ CIUGUDEAN 2021, 178.

¹⁸ DAU 2008, nos. 23–24; LUX 2011, nos. 9–10.

¹⁹ DAU 2008, nos. 23–24.

²⁰ BOUNEGRU/OTA 2010, 441, Fig. 5/13.

²¹ ALICU *et alii* 1995, 108, no. 724, Pl. 39.

²² GUDEA 1989, 718, nos. 15–16, Pl. CCXLV.

²³ DAU 2008, no. 10; LUX 2011, no. 112.

²⁴ BOUNEGRU/OTA 2010, 441, Fig. 5/12; OTA 2012, 162, Annexes VI/no. 5; 158, Annex I, no. 20, Pl. XVII/3.

²⁵ LUX 2011, nos. 111, 115, 126.

²⁶ PETCULESCU 2024, 414, no. 58, Pl. 7.

²⁷ ALICU *et alii* 1994, 101, Pl. 29/633–636.

²⁸ NEMETI 2019, 287–288, nos. 1–5, pl. LXXXI/6–10.

²⁹ GUDEA 1989, 712–713, Pl. CCXLIII/1–35.

³⁰ NIKOLIĆ-ĐORĐEVIĆ 2000, 69.

³¹ POPILIAN 1976, 107, Pl. LVII/665–679.

³² BOLOG 2017, M242, 48, Pl. 58, 51, Pl. 60, 70, Pl. 71, 113, Pl. 92.

³³ TUDOR *et alii* 2011, 176, nos. 107–108, Pl. XXV.

grey paste; its dimensions are 4.8 × 3.5 cm, orifice diameter 0.6 cm; *passim*.

9. fragmentary oil lamp rim, with a bifid protrusion preserved, made of fine brick-red paste; its length is 4.9 cm; it was discovered in Cx. 1, at a depth of –2.4 m (Pl. VIII/9).

10. fragmentary oil lamp border, with a bifid protrusion and part of the spout preserved, made of fine red paste; its length is 7 cm; it was discovered in Cx. 1, at a depth of –2.4 m (Pl. VIII/8).

Atimetus' works are found in northern Italy, in Rome and Pompeii from the second half of the first century onwards, and his stamp was copied in many places throughout the Empire, being used until the first half of the 2nd century AD³⁴. We find copies of lamps bearing this mark in Dacia in contexts datable in the 2nd century in numerous sites such as Apulum³⁵, Romula, Potaissa, Napoca, Micia and Ulpia Traiana Sarmizegetusa³⁶.

Festus' *officina* is located in northern Italy³⁷, and in Dacia it is found only in contexts from the 2nd century AD. at Ulpia Traiana Sarmizegetusa, Tibiscum, Porolissum, Ampelum, Micia etc³⁸. The dating of some lamps from Apulum in the first half of the third century AD, as proposed by C. L. Băluță³⁹ must be viewed with reservation because the context of discovery has not been published.

Oil lamps with the mark of Fronto are very rare, having been discovered so far in only a few settlements in Dacia: Apulum – colonia Aurelia Apulensis⁴⁰, Ulpia Traiana Sarmizegetusa⁴¹, Corpadea, and Cristești⁴². The original *officina* was located in northern Italy, and oil lamps with this mark were spread to other provinces⁴³. Our artefact is the first from the municipium Septimium Apulense and is dated according to the context of discovery in the final quarter of the 2nd century AD.

The manufacturer Strobilus began his work in northern Italy during the Flavian dynasty⁴⁴. Its stamps continued to be copied until the 4th century AD., being quite widespread in the Empire. In Dacia, it is often found in Apulum, Tibiscum, Ulpia Traiana Sarmizegetusa, Napoca, Potaissa, Micia, Slăveni etc⁴⁵.

The three stamped oil lamps discovered by us were found in a large domestic pit – Cx. 14 – alongside two coins from Antoninus Pius and Faustina II, which date the archaeological complex to the last quarter of the 2nd century. This

confirms the period of circulation of oil lamps bearing the marks Atimetus and Festus during the second century AD.

Votive terracottas

1. votive statuette of Genius⁴⁶ Cucullatus, made of fine brick-red paste, with only the back portion preserved; it was discovered in Sp 1, Cx. 17, at a depth of –3 m; its dimensions are 14.5 cm in height, and the base measures 6.3 × 4.7 cm (Pl. VIII/1).

Terracotta analogues of this deity are present at Apulum in the municipium Septimium Apulense⁴⁷, Porolissum⁴⁸ and Valea Chintăului (*villa rustica* from the territory of the city of Napoca)⁴⁹ in Roman Dacia. A lead statuette recently discovered near Tomis represents a beautiful analogy⁵⁰. It is a deity originating from the Celtic world, a protector of childhood, fertility, that also has healing properties. It is spread from Britannia and Gallia to Asia Minor (due to the Galati tribe). It is less often encountered in Dacia and Pannonia⁵¹.

Toys

1. a small wheel from a toy, made of brick-red paste, which could have belonged to a horse-shaped toy, with or without a rider, or a miniature cart; its maximum diameter is 8.9 cm, with a hole diameter of 1.6 cm; it was discovered in Sp 1, Cx. 15, at a depth of –2.2 m; five spokes are visible (Pl. VIII/12). It is a common item, frequently found in Roman sites across the Empire; several analogies are found at Apulum, from the old collections of the Alba Iulia museum⁵², in the extramural area north of the municipium Septimium Apulense⁵³, in the southern necropolis, most likely from a domestic refuse pit where several filling layers were identified⁵⁴, as well as in Potaissa, Cristești, Ulpia Traiana Sarmizegetusa⁵⁵, and Porolissum⁵⁶.

III.4. Bone artefacts

Hair pins

1. Hairpin with a spherical head, almost whole; Type 1.1 Ciugudean; discovered in Sp 1, Cx. 14; with a length of 10 cm, the diameter of the head is 0.7 cm (Pl. IX/5).

2. Hairpin with a spherical head, almost whole; discovered in Sp 1, Cx. 14, at a depth of 0.9 m; Type 1.1 Ciugudean; with a length of 8.9 cm and the diameter of the head of 0.7 cm (Pl. IX/6).

3. Hairpin with a spherical head, complete; type 1.1 Ciugudean; discovered in Sp 1, Cx. 15, at a depth of 1.7 m;

³⁴ BUCHI 1975, 9–10.

³⁵ We have reservations about the context dated during the Severan dynasty by C. L. Băluță (BĂLUȚĂ 2003, 15).

³⁶ ALICU 1994, 16; BĂLUȚĂ 2003, 15; BOCAN/NEAGU 2015, 138–130, nos. 14, 19–20, Pl. III/14, IX/3–4.

³⁷ BUCHI 1975, 61.

³⁸ BENEĂ 1990, 148, nos. 51–52; ALICU 1994, 21; BĂLUȚĂ 2003, 67–68; BOCAN/NEAGU 2015, 141, no. 24, Pl. IV/24.

³⁹ BĂLUȚĂ 2003, 67.

⁴⁰ BĂLUȚĂ 2003, 97–98.

⁴¹ ALICU 1994, 73.

⁴² BĂLUȚĂ 2003, 97–98.

⁴³ BUCHI 1975, 94.

⁴⁴ BUCHI 1975, 147–148.

⁴⁵ BENEĂ 1990, 150; ALICU 1994, 32, BĂLUȚĂ 2003, 162; TUDOR *et alii* 2011, 184, Pl. XL/182; BOCAN/NEAGU 2015, 143, no. 34, Pl. V/34.

⁴⁶ The iconography is difficult to establish. In some works such statuettes are considered as belonging to Telesphorus. See GRANDJOUAN 1961, 75, nos. 943, 949, 954, Plate 27; VARGA 2016.

⁴⁷ ANGHEL *et alii* 2011, 55–56, nos. 56, 58.

⁴⁸ GUDEA 1989, 514, no. 15, pl. CIX/15.

⁴⁹ ENE 2014, 133, no. 25.

⁵⁰ PETCU/PETCU-LEVEI 2024, 377–378, Fig. 3.

⁵¹ ANTAL 2016, 6; PETCU/PETCU-LEVEI 2024, 382–383.

⁵² ANGHEL *et alii* 2011, 81, 85–86, nos. 109–110, 120–123.

⁵³ OTA *et alii* 2021, 367, 372, nos. 24–25, 27, Fig. 9.

⁵⁴ BOLOG 2017, 124, 241.

⁵⁵ ENE 2014, 270–271, nos. 427–434, Pl. 44.

⁵⁶ GUDEA 1989, Pl. CVII/3.

with a length of 10.4 cm, and the diameter of the head of 0.4 cm (Pl. IX/7).

4. Hairpin with a conical head, fragmentary; type 1.2 Ciugudean; discovered in Sp 1, at a depth of 0.6 m, in the culture layer; with a length of 10.3 cm (Pl. IX/8).

5. Hairpin with a conical head, fragmentary; type 1.2 Ciugudean; discovered in Sp 1, Cx. 14; with a length of 8.4 cm (Pl. IX/9).

6. Hairpin with a conical head, fragmentary; type 1.2 Ciugudean; discovered in Sp 1, Cx. 1, at a depth of 1.1 m; with a length of 6 cm (Pl. IX/10).

7. Hairpin, fragmentary; discovered in Sp 1, Cx. 14, at a depth of 1.7 m; with a length of 5.6 cm (Pl. IX/11).

Hairpins come in two types: with a spherical head or a conical one. They are common types in Roman settlements throughout the Empire. Several analogues with the spherical head type 1.1 Ciugudean and II, variant 6 Gudea, Bajusz, are found in the cities of Apulum⁵⁷, Porolissum⁵⁸, Ulpia Traiana Sarmizegetusa⁵⁹ and the Slăveni camp⁶⁰. Conical-headed analogues, which are part of type 1.2 Ciugudean and type I, variant 2 Gudea, Bajusz, are found in urban settlements at Apulum⁶¹, Porolissum⁶² and Ulpia Traiana Sarmizegetusa⁶³.

Sewing needles

1. complete sewing needle, with a rounded head and an eye shaped like the number 8, type II, variant 2 Ciugudean; it was discovered in Sp 1, Cx. 14, at a depth of -0.9 m; its length is 12.7 cm (Pl. IX/12).

2. fragmentary sewing needle, with the head broken; its length is 8.6 cm; it was discovered in Sp 1, Cx. 14 (Pl. IX/13).

Sewing needles are common household utensils in Roman settlements throughout the Empire, so there is no need to give analogies. We used the typology put forward by Daniela Ciugudean almost three decades ago for the Apulum artefacts. Thus, the piece preserved in its entirety is part of type II, which has the eye in the shape of the figure 8, variant 2, with a rounded head⁶⁴.

III.5. Glass

1. glass bead, green in colour; it was discovered in Sp 1, Cx. 14, at a depth of -2.1 m; its maximum diameter is 1.4 cm, height 1.2 cm, and the hole diameter is 0.5 cm; the body of the bead features vertical grooves (Pl. X/1).

It belongs to the type X Benea, shaped like a "melon". At

Tibiscum, they were found in the vicus' early habitation level, dated to the time of Trajan-Hadrian⁶⁵. Beads of this type were spotted in the area of the southern necropolis at Apulum⁶⁶, where the context of discovery is not specified, and at Porolissum⁶⁷.

2. fragmentary glass/bowl, with part of the rim and body preserved; made of colourless glass; with a vertical profile and rounded rim; free-blown; its height is 3.3 cm; it was discovered in Sp 1, Cx. 14, type 96 Isings⁶⁸ (Pl. X/2).

These glasses/ hemispherical bowls have close analogues to Potaissa – the thermae of the legionary fortress⁶⁹, Durostorum/Ostrov (Farm 4)⁷⁰, the collection "Maria and Dr. George Severeanu"⁷¹, Cologne and Noviomagus⁷². Other glass artefacts are common, so we will not dwell on analogues.

3. fragmentary glass cup, with part of the circular base of the foot preserved; made of colourless, opaque glass; its length is 3.6 cm; it was discovered in Sp 1, Cx. 15, at a depth of -2 m (Pl. X/3).

4. fragmentary unguentarium, with part of the neck preserved; light green colour; it has a height of 6.3 cm; discovered in Sp 1, Cx. 14 (Pl. X/4).

5. handle of a vessel, applied to the body through blowing; made of colourless, translucent glass; the dimensions are 5.8 cm in height, 2.2 cm in length; discovered in Sp 1, Cx. 15, at a depth of -1.5 m (Pl. X/5).

A glass production workshop is attested in the north-western area of the colony Aurelia Apulensis, inside a large building researched by Adalbert Cserni in 1911–1912. In the area of the sanctuary of Dionysos/Liber Pater, located nearby, glass debris has been found, which could confirm the existence of a glass-working workshop in the⁷³ vicinity. It is known that three ceramic workshops named officina A, officina B and officina C operated near the said sanctuary⁷⁴. Their furnaces could also be used by glass blowers. Another workshop most likely operated from the civil settlement (*canabae*), without being able to specify the exact place of discovery. It is attested by a stone mould and a prismatic glass vessel base bearing the name of the same producer, M(arcus) Au(relius) Iustus. They were found in the latera praetorii sinistrum of the camp (the mould) during the demolition of a medieval church in 1898. The glass vessel was discovered to the northwest of the fort (most likely on Aurel Vlaicu street), but without a context of discovery⁷⁵.

⁵⁷ CIUGUDEAN 1997, 18, 53–55, pl. II/1–4, 7–8, 10–17, III/21–23; OPREA 2015, 153, Pl. II/24–33.

⁵⁸ GUDEA/BAJUSZ 1990–1991, 85, 96–97, Fig. 1, Pl. XIV–XV.

⁵⁹ ALICU/NEMEŞ 1982, 352, Pl. I/1, 5–7; ALICU *et alii* 1994, Pl. 56/815–816, 822.

⁶⁰ TUDOR *et alii* 2011, 214–215, Pl. LXXXIV/463–464, 469.

⁶¹ CIUGUDEAN 1997, 19, 55–57, Pl. IV/9, 12–13, OPREA 2015, 152–153, Pl. I/12–20, Pl. II/21–23.

⁶² GUDEA/BAJUSZ 1990–1991, 84, Fig. 1, Pl. III–IV.

⁶³ ALICU *ET alii* 1994, Pl. 56/815–816, 822.

⁶⁴ CIUGUDEAN 1997, 31, Pl. XV/6, 9–10.

⁶⁵ BENEA 2004, 157, 201, Fig. 31.

⁶⁶ BOLOG 2017, 220, nos. 1654, 1656, Pl. 155.

⁶⁷ GUDEA 1989, 753, nos. 14, 16, Pl. CCLXIV/14, 16; Pl. CCLXV, tip I.

⁶⁸ ISINGS 1957, 113.

⁶⁹ FÁBIÁN 2019, 255–256, nos. 1–14, Pl. LXII/10–13, LXIII/1–8.

⁷⁰ BOŢAN/ELEFTERESCU 2018, 58, no. 52, Pl. XX/10a-b.

⁷¹ STREINU 2019, 83–84, no. 40, Pl. XIII/40.

⁷² ISINGS 1957, 113–114.

⁷³ PÁNCZEL 2011, 178–182, nos. 1–16.

⁷⁴ EGRI 2018, 116, fig. 3–4; ANGHEL 2023, 236/237, Pl. I, II/1.

⁷⁵ IDR III/6, 425, 434.

III.6. Animal bones under processing⁷⁶ (Pl. IX/14–17)

1. Cattle bone with cutting marks and polishing, in the course of being processed; fragment, discovered in Sp 1, Cx. 14; dimensions: length – 9.7 cm.

2. Cattle bone with cutting marks; it is polished all across its surface; fragment; in the course of being processed; discovered in Sp 1, Cx. 14; dimensions: length–19 cm.

3. Cattle bone with cutting marks; fragment; in the course of being processed; discovered in Sp 1, Cx. 14; dimensions: length–17.3 cm.

4. deer horn; discovered in Sp 1, Cx. 14; dimensions: length–9 cm.

III.7. Dionysus/Liber Pater votive statuette

A votive statuette made of marble depicting Dionysos/Liber Pater, of which only the torso remains, was found in a secondary context (household pit Cx. 3/Sp 1) from the 10th–11th centuries⁷⁷.

IV. ARCHAEOLOGICAL CONTEXTS

Three stages of Roman-era habitation have been identified. A first phase is represented by pit Cx. 14, inside which was discovered a complex inventory including two bronze coins, a sestertius from Antoninus Pius (138–161 AD.) and an as from Faustina II (161–175 AD.), which dates the complex to the last quarter of the second century AD. The second stage is represented by a stone construction from the end of the second century or the beginning of the third century. Segments from two perimeter walls (Z1/Sp. 1 and Z5/Cas. 1), oriented E-W, and a fragment from the partition wall (Z2/Sp. 1), oriented NNE-SSW, are preserved. This is called Building I. The construction arrangement over the large pit resulted in the subsidence of the perimeter wall in the northern area. Nearby, to the west, Building II belongs to the same habitation phase. It consists of two walls (Z3 and Z4) of which only the foundation beds made of gravel have been preserved. In Box 1, with dimensions of 4 × 3 m, a floor made in the technique of *opus signinum*, on which the traces from the hypocaust pillars and the wall Z5, with a perimeter role, oriented E-V. They are part of the same stone construction related to the Z1 and Z2 walls, called Building I.

The third habitation stage includes the pits Cx. 1, Cx. 17, Cx. 5 and 13. Pit Cx. 17 overlaps the large complex Cx. 14. Pit Cx. 5 overlaps Z4, and the pit Cx. 13 overlaps Z3. Several Roman period complexes with very little material could not be included in any stage of the habitation: Cx. 4, Cx. 9, Cx. 11, Cx. 15, Cx. 16.

If we connect it to the discoveries in the adjoining property made by F. Ciulavu and M. Bleoancă in 2017, we can say that the building from the west (Building II-Z 3 and Z4/Sp. 1) is related to a wall in which a sestertius from Commodus, issued after 187 AD, had been embedded⁷⁸, an aspect that

makes us consider a date at the end of the second century AD. or the beginning of the third century AD. for Building II and probably for Building I. If both constructions are contemporary, they could have belonged to the civil settlement (*canabae*) shortly before municipalisation, and continued to exist during the Severan dynasty. The presence of plaster fragments, along with roofing tiles and tegulae in the household pit Cx. 1, indicates that the demolition of these buildings occurred during the third century AD., most likely towards the middle or its second half. Household pits Cx. 5 and Cx. 13 overlaying Z4 and Z3, respectively, are part, along with pit Cx 1, of the last stage of Roman-era habitation.

Also, the buildings we discovered can be connected with other edifices investigated in 1995 and 1997 by the archaeologists from the Alba Iulia Museum on Izvorului and Dealul Furcilor streets. Thus, we can state that Building I was aligned to the same street front as the L1 house investigated in 1995⁷⁹ and the “small thermae” excavated in 1997⁸⁰. This street, oriented E-W (*decumanus*) intersects with another, oriented N-S (*cardo*), which passed by the mentioned thermal edifice. More than a decade ago, we analysed the dating of the stone buildings investigated in 1995 and 1997, establishing that they had been built between the end of the second century – first two decades of the third century AD⁸¹.

Some tibia fragments belonging to some cattle and a deer horn were recovered from the domestic pit Cx. 14, corresponding to the first level of habitation. The visible traces of cutting and polishing on their surfaces indicate the existence of a bone-processing workshop in this area, which adds to those already known within the *canabae* settlement. Thus, three workshops are confirmed in this settlement: 1. north of the camp, where animal bones were recovered during manufacturing during the municipal works of the early 1980s⁸²; 2. in a building south-west of the camp, on “1 Decembrie 1918” boulevard, near the college “Horea, Cloșca și Crișan”, were discovered numerous fragments of animal bones under processing, which led to the conclusion of the existence of a bone and horn processing workshop, dated from the second quarter of the third century AD.⁸³, when the civil settlement near the camp received urban status; 3. the workshop we identified indirectly through the discovery of these bones in the course of processing.

The pits called Cx. 2, Cx. 3 and Cx. 13 are part of an early medieval settlement attested on Dealul Furcilor for a long time⁸⁴.

V. CONCLUSIONS

Roman-period vestiges have been identified, distributed across three phases of habitation. The state of preservation is very poor, but some of the discovered artefacts hold significant documentary or artistic value. The first stage of habitation is dated to the last quarter of the second century AD. The second stage is given by the existence

⁷⁶ We express our gratitude to colleague Alexandra-Paula Sicoe, PhD student at the University “1 Decembrie 1919” Alba Iulia, for the determinations made on the osteological material being processed.

⁷⁷ This votive statuette was proposed for publication to the editorial board of the yearbook *Terra Sebus. Acta Musei Sabasiensis*, 17, 2025.

⁷⁸ CIULAVU/BLEOANCĂ 2018, 177, Pl. 14–17.

⁷⁹ CIOBANU/RODEAN 1997, 180.

⁸⁰ CIOBANU *et alii* 2000, 296, 317, fig. 8–9; CIOBANU 2004.

⁸¹ OTA/BOUNEGRU 2009, 87–88.

⁸² CIUGUDEAN 1997, 50, 82, pl. XXXVII/4, XI/1.

⁸³ CIUGUDEAN 2003, 278–279.

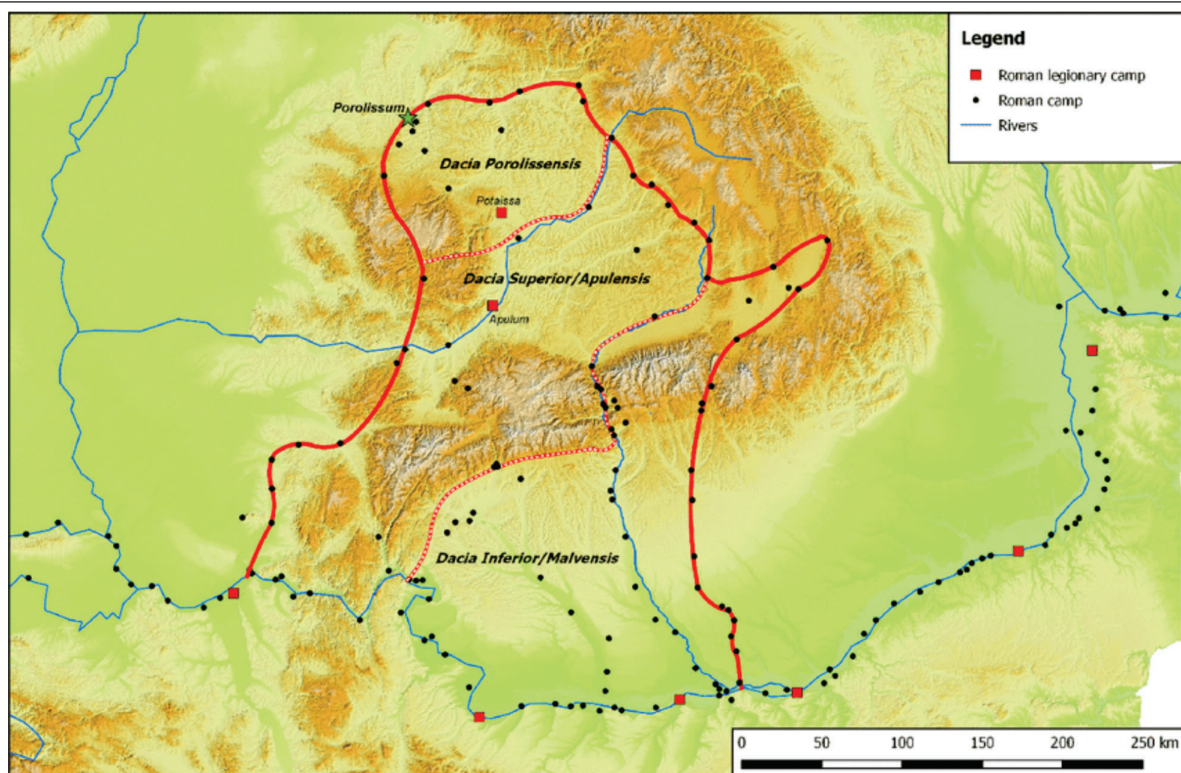
⁸⁴ See a recent study: OTA *et alii* 2022.

of two buildings marked Building I and II, dated to the turn of the second and third centuries AD. The third stage corresponds to the middle or the second half of the third century AD. Building I was aligned to the same street line as the stone dwelling L1 investigated in 1995, and with the bath building unveiled in 1997 by a team of archaeologists from the Alba Iulia Museum. It appears that following the granting of urban status to the canabae settlement after the year 197, several stone buildings were constructed and the urban features were redefined to align with the settlement's new urban status. The rare, even singular appearance at Apulum of a zoomorphic fibula fragment with a rooster-shaped body shows cultural influences coming from the western part of the Empire, from Gallia and Britannia. Although the enamel is no longer preserved on this fragment, it remains plausible that it belonged to a colonist originating from the aforementioned provinces. Found in a secondary context (a medieval pit), the white marble votive statuette of Dionysos/Liber Pater confirms the economic strength of the communities in this urban centre, their connections with the Hellenized regions of Asia Minor, and the vitality of this cult at Apulum and in Roman Dacia. The discovery of three fragments of cattle bones and a deer horn with traces of cutting and grinding in the domestic pit Cx. 14 indicates the existence of the third bone and horn processing workshop in the civil settlement developed near the fort (canabae/municipium Septimium Apulense). The archaeological complex corresponds to the first phase of habitation, from the last quarter of the second century AD. The habitation from the third century AD. shows the extension of the civil settlement also to the south, at a distance exceeding 500 meters from the legionary fortress. Clay oil lamps bearing the stamps of Atimetus, Festus, Fronto, and Strobilus have been recovered. This confirms the large-scale production of oil lamps in the civilian settlement (canabae/ municipium Septimium Apulense) that developed around the castrum of the legion XIII Gemina.

REFERENCES

- DAU 2008
Moga, V./Timofan, A./Bounegru, G./Bălan, G./Lascu, I./Ota, R./Anghel D. (eds.), *Descoperă arheologia urbană. Apulum 2007*. Exhibition catalogue (Alba Iulia: Altip publishing house).
- IDR III/6
Băluță, C. L. (ed.), *Inscripțiile Daciei romane (IDR), III/6, Apulum – instrumentum domesticum* (Bucharest: Romanian Academy Publishing House).
- Lux 2011
Bounegru, G./Ciobanu, R./Ota, R./Anghel, D. (eds.), *Lux, util și estetic la Apulum. Podoabe și accesorii vestimentare*. Catalog de expoziție (Alba Iulia: Altip publishing house).
- RIC
Mattingly, H./Sydenham, M. A., *Roman Imperial Coinage*, vol. III. Antoninus Pius to Commodus (London: Spink & Son).
- ALICU 1994
Alicu, D., *Opațiile romane/Die Römischen Lampen-Ulpia Traiana Sarmizegetusa*, (Bucharest: Museion Publishing House).
- ALICU/NEMEȘ 1982
Alicu, D./Nemeș, E., Obiecte de os descoperite la Ulpia Traiana Sarmizegetusa, *Acta Musei Napocensis* 19, 1982, 345–365.
- ALICU *et alii* 1994
Alicu, D./Cociș, S./Ilieș, C./Soroceanu, A., *Small finds from Ulpia Traiana Sarmizegetusa*, Bibliotheca Musei Napocensis 9 (Cluj-Napoca).
- ANGHEL 2023
Anghel, D. G., Olăritul la Apulum – ateliere, inventar tehnologic și produsele ceramice specifice, *Apulum* 60/1, 235–297.
- ANGHEL *et alii* 2011
Anghel, D./Ota, R./Bounegru, G./Lascu, I., *Coroplastica, medalioane și tipare ceramice din colecțiile Muzeului Național al Unirii Alba Iulia* (Alba Iulia: Altip Publishing House).
- ANTAL 2016
Antal, A., Risus, Cucullatus, Venus. Divine Protectors and Protective Divinities of Childhood in Dacia and Pannonia. In: *And deus, and dea. New perspectives in the study of Roman religion in Dacia, Studia Universitatis Babeș-Bolyai*. *Historia* 61 (1), 1–16.
- BAYLEY V BUTCHER 2004
Bayley, J./Butcher, S., *Roman Brooches in Britain* (London: Society of Antiquaries)
- BĂLUȚĂ 2003
Băluță, C. L., *Lămpile antice de la Alba Iulia (Apulum), I. Lămpile epigrafice*, Alba Iulia: Altip Publishing House).
- BENEA 1990
Benea, D., Lampes romaines de Tibiscum, *Dacia*, N.S. 34, 139–168.
- BENEA 2004
Benea, D., *Die Römischen Perlenwerkstätten aus Tibiscum. Atelierele romane de mărgele de la Tibiscum* (Timișoara: Excelsior Art Publishing House).
- BOCAN/NEAGU 2015
Bocan, I./Neagu, C.-M., Opațiile romane din castrul de la Micia, păstrate în colecțiile Muzeului Național de Istorie a României, *Cercetări Arheologice* 22, 115–174.
- BOLOG 2017
Bolog, A. C., *Necropola romană de la Apulum, Dealul Furcilor – „Podei” (campaniile 2008–2012)* (Cluj-Napoca: RisoPrint Publishing House).
- BOȚAN/ELEFTERESCU 2018
Boțan, S.-P./Elefterescu, D., *Vase de sticlă de epocă romană descoperite la Durostorum/Ostrov – Ferma 4 (secolele I p. Chr. – IV p. Chr.)*, Bibliotheca Archaeologica Moldaviae 27 (Iași).
- BOUNEGRU/OTA 2010
Bounegru, G./Ota, R., Cercetări arheologice în canabele legiunii a XIII-a Gemina. Sectorul de nord-vest (str. Timotei Cipariu, nr. 25). I, *Apulum* 47, 427–447
- BUCHI 1975
Buchi, E., *Lucerne del Museo di Aquileia, vol. I. Lucerne romane con marchio di fabbrica*, (Aquileia: Associazione Nazionale).
- CIUGUDEAN 1997
Ciugudean, D., *Obiectele din os, corn și fildeș de la Apulum*, Bibliotheca Musei Apulensis V (Alba Iulia)
- CIUGUDEAN 2003
Ciugudean, D., Despre funcționarea unor ateliere de prelucrare a osului la Apulum, *Patrimonium Apulense* 3, 278–281
- CIUGUDEAN 2021
Ciugudean, D., Roman bronze military equipment and harness in the collections of the Alba Iulia Museum II. Personal equipment and harness gear fittings, *Apulum* 58/1, 165–266
- CIULAVU/BLEOANCA 2018
Ciulavu, E./Bleoancă, M., Contribuții la studiul sectorului sudic al canabelor romane de la Apulum/Municipium Septimium Apulense. Raport preliminar privind cercetările arheologice preventive de la Alba Iulia, str. Izvorului, nr. 5, *Apulum* 55/1, 171–218.

- CIOBANU 2004
Ciobanu, R., Les petits thermes d'Apulum. Typologie et décor. In: Borhy, L. (ed.), *Plafonds et voûtes à l'époque antique* (Budapest: Pytheas Publishing), 333–337
- CIOBANU 2005
Ciobanu, R., Sala cu picturi și hypocaust din așezarea romană Apulum II, *Apulum* 42, 123–137
- CIOBANU/RODEAN 1997
Ciobanu, R./Rodean, N., Raport preliminar privind cercetările arheologice de salvare din Dealul Furcilor-Alba Iulia. Campania 1995 (1), *Apulum* 34, 1997, 177–197
- CIOBANU et alii 2000
Ciobanu, R./Gligor, A./Drîmbărean, M./Rodean, N., Raport privind cercetările arheologice de salvare din Dealul Furcilor și str. Arhim. Iuliu Hossu (Brandusei)-Alba Iulia. Campaniile 1996–1999 (2), *Apulum* 37/1, 2000, 293–339
- COCIȘ 2004
Cociș, S., *Fibulele din Dacia romană. The brooches from Roman Dacia* (Cluj-Napoca: Mega Publishing House)
- EGRI 2018
Egri, M., The Pottery Production at Apulum. In: Rusu-Bolindeț, V./Roman, C.-A./Gui, M./Iliescu, I.-A./Botiș, F.-O./Musteață, S./Petruț, D. (eds.), *Atlas of Roman pottery workshops from the Provinces Dacia and Lower Moesia/Scythia Minor (1st–7th Centuries AD) (I)*, Bibliotheca Musei Napocensis, 50, 2018 (Cluj-Napoca: Mega Publishing House), 115–130
- ENE 2014
Ene, S. E. I., *Arta coroplastică în provincia Dacia (sec. II–III p. Chr.)*, doctoral thesis, (Bucharest University)
- FÁBIÁN 2019
Fábrián, I., Sticla. In: Bărbulescu, M. (coord.), *Termele din castrul legionar de la Potaissa* (Cluj-Napoca: Mega Publishing House), 249–259
- FEUGERE 1985
Feugère, M., *Les fibules en Gaule méridionale, de la conquête à la fin du Ve s. ap. J.-C.*, Revue Archéologiques de Narbonnaise Suppl. 12 (Paris: Centre National de la Recherche Scientifique).
- FODOREAN 2019
Fodorean, F. Gh., Arme și piese de echipament militar. In: Bărbulescu, M. (coord.), *Termele din castrul legionar de la Potaissa* (Cluj-Napoca: Mega Publishing House), 266–277
- GRANDJOUAN 1961
Grandjouan, C., *The Athenian Agora. Vol VI. Terracottas and Plastic Lamps of the Roman Period*, (Princeton/New Jersey: The American School of Classical Studies at Athens).
- GUDEA 1989
Gudea, N., Porolissum. Un complex daco-roman la marginea de nord a Imperiului Roman, 1, *Acta Musei Porolissensis* 13, 1–1178.
- GUDEA/BAJUSZ 1990–1991
Gudea, N./Bajusz, I., Ace de păr de la Porolissum, *Acta Musei Porolissensis* 14–15, 81–126.
- ISINGS 1957
Isings, C., *Roman glass from dated finds* (Groningen/Djakarta: J. B. Wolters)
- LOESCHCKE 1919
Loeschcke, S., *Lampen aus Vindonissa. Ein Beitrag zur Geschichte von Vindonissa und des antiken Beleuchtungswesens* (Zürich).
- MACKRETH 2011
Mackreth, D. F., *Brooches in Late Iron Age in Roman Britain*, 2 (Oxford and Oakville: Oxbow Books).
- MATOUSCHEK/NOWAK 1985–1986
Matouschek, J./Nowak, H., Unpublizierte Tierfibeln und Fibeln mit Thermiomorphen Gestaltungselementen aus Österreichischen Privatsammlungen, *Römisches Österreich*, *Jahresschrift der Österreichischen Gesellschaft für Archäologie* 13/14, 101–207.
- NEMETI 2019
Nemeti, I., Accesorii vestimentare și podoabe. In: Bărbulescu, M. (coord.), *Termele din castrul legionar de la Potaissa* (Cluj-Napoca: Mega Publishing House), 290–301.
- NIKOLIĆ-ĐORĐEVIĆ 2000
Nikolić-Đorđević, S., Antička keramika Singidunuma. Oblici posuda, *Singidunum* 2, 11–244.
- OLDENSTEIN 1977
Oldenstein, J., Zur Ausrüstung römischer Auxiliareinheiten. Studien zu Beschlägen und Zierat an der Ausrüstung der römischen Auxiliareinheiten des obergermanisch-raetischen Limesgebietes aus dem zweiten und dritten Jahrhundert n. Chr., *Bericht der Römisch-Germanischen Kommission des Deutschen Archäologischen Instituts* 57, 49–284.
- OPREA 2015
Oprea, I., New Bone Hairpins Discovered in the Territory of Colonia Aurelia Apulensis, *Ziridava. Studia Archaeologica* 29, 149–156.
- OPREANU/LĂZĂRESCU 2020
Opreanu, C. H./Lăzărescu, V.-A. The Roman headquarters in the northern limes of Dacia: Porolissum (jud. Sălaj/RO) in the light of recent research, *Archäologisches Korrespondenzblatt* 50, 2, 225–240.
- OTA 2012
Ota, R., *De la canabele legiunii a XIII-a Gemina la Municipium Septimium Apulense* (Alba Iulia: Altip Publishing House).
- OTA/BOUNEGRU 2009
Ota, R./Bounegru, G., Opaițele din lut descoperite în așezarea de tip canabae de la Apulum, *Bibliotheca Historica et Archaeologica Universitatis Timisiensis* 11, 65–107.
- OTA et alii 2021
Ota, R./Lascu, I./Anghel, D. G., Piese de coroplastică și ceramică cu decor aplicat descoperite la Apulum. In: Ailincăi, S.-C./Nuțu, G./Micu, C./Mocanu, M./Stănică, A.-D. (eds.), *Studii de arheologie și istorie antică în onoarea lui Victor Heinrich Baumann cu ocazia celei de a 80-a aniversări* (Cluj-Napoca: Mega Publishing House), 349–376.
- OTA et alii 2022
Ota, R./Oargă, O.-M./Matiș, A., Două locuințe medievale timpurii descoperite recent la Alba Iulia-Dealul Furcilor-Podei, *Terra Sebus. Acta Musei Sabesiensis* 14/II, 117–132.
- PÁNCZEL 2011
Pánczel, S. P., The Production of Prismatic Glass Bottles in Roman Apulum, *Marisia. Arheologie XXXI*, 175–188.
- PETCU/PETCU-LEVEI 2024
Petcu, R./Petcu-Levei, I., A led votive statuette depicting a Genius cucullatus discovered near Tomis (Moesia Inferior), *Apulum* 61/1, 377–393.
- PETCULESCU 2024
Petculescu, L., Roman Military Equipment From Micia Pagus. I., *Cercetări Arheologice* 31, 2, 397–430.
- SCHMID 2010
Schmid, S., *Die römischen Fibeln aus Wien* (Wien: Monografien der Stadtarchäologie Wien Band 6).
- STREINU 2019
Streinu, A., *Vase antice de sticlă din colecția „Maria și Dr. George Severeanu”* (Târgoviște: Cetatea de Scaun Publishing House).
- TUDOR et alii 2011
Tudor, D./Popilian, Gh./Bondoc, D./Gudea, N., *Castrul roman de la Slăveni* (Cluj-Napoca: Mega Publishing House).
- VARGA 2016
Varga, T., Telesphorus. A healing child god in Roman Dacia, *Studia Universitatis Babeș-Bolyai. Historia* 61 (1), 17–40.



1

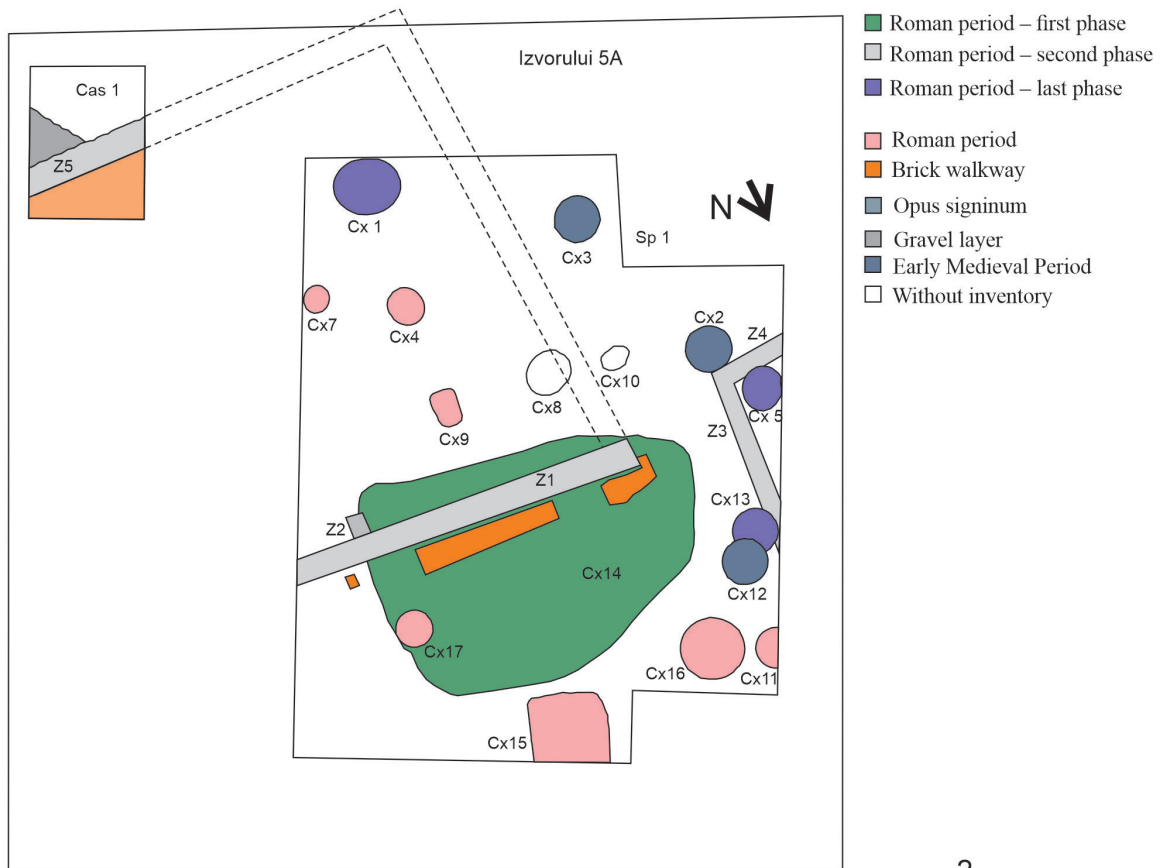


2

Pl. I. 1. Location of the Apulum site on a map of Roman Dacia (by V.-A. Lăzărescu; see Opreanu/Lăzărescu 2020, fig. 1); 2. Location of the archaeological research area with the marking of the Roman fortress.

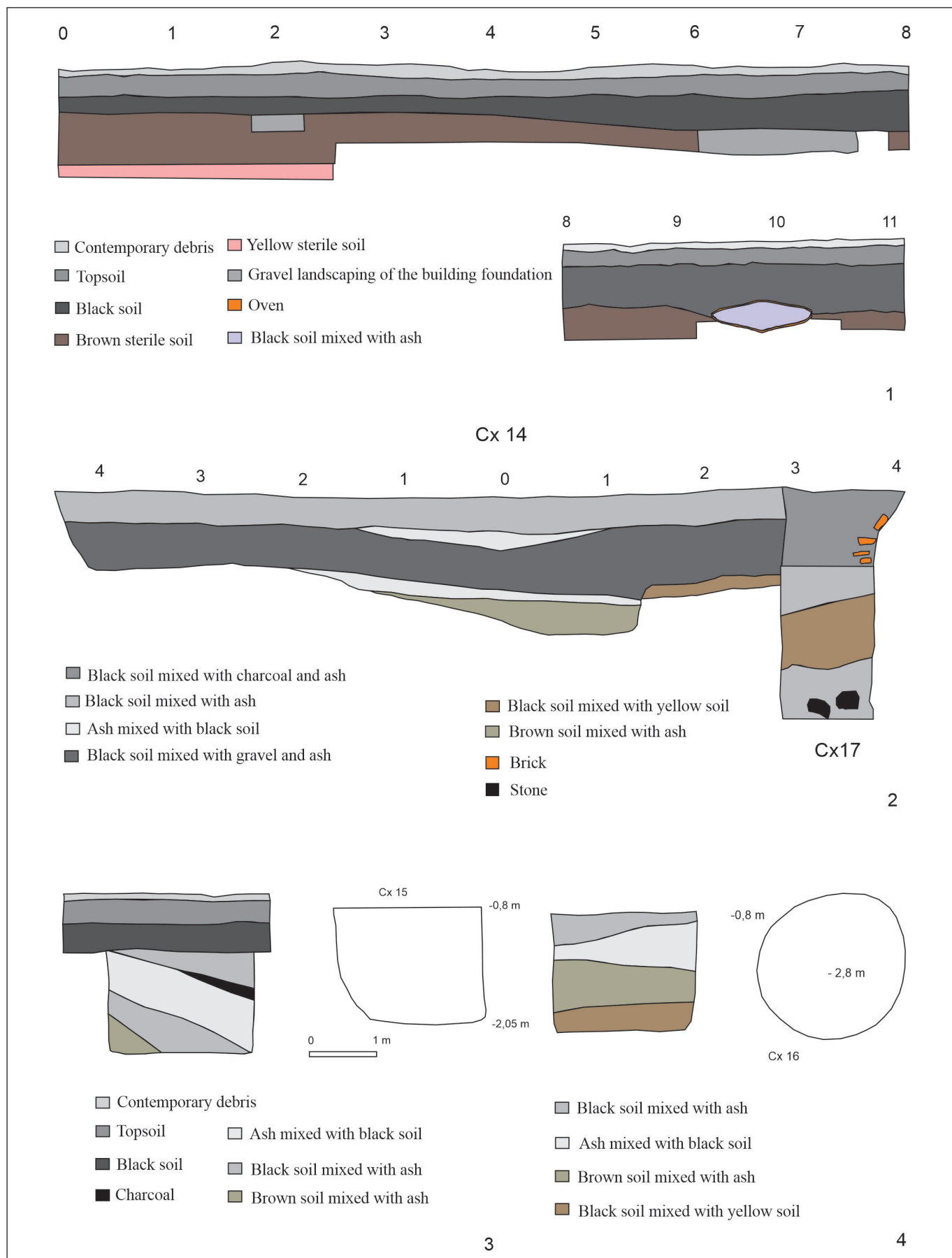


1



2

Pl. II. 1. Location of the research carried out on Izvorului Street: 1. No. 5C (Research conducted by G. Bounegru); 2. Alley from Izvorului Street (Research conducted by F. Ciulavu); 3. No. 5B (Research conducted by F. Ciulavu); 4. No. 5 (Research conducted by F. Ciulavu); 5. No. 5A (Research conducted by I. Lascu); 6. No. 7 (Research conducted by R. Ciobanu); 7. No. 9 (conducted by R. Ciobanu); II. 2. Plan of the archaeological research.



Pl. III. 1. Western surface profile; 2. Northern profile of complexes Cx 14 and Cx 15; 3. Plan and profile of the complex Cx 15; 4. Plan and profile of the complex Cx 16.



1



2

Pl. IV. Cx 14 complex when outlined and upon completion



1



2



3



4



5

Pl. V. 1–4. details from the research of the Cx 1 Complex; 5. Walls Z3 and Z4 when outlined.



1



2



3



4



5

Pl. VI. 1-2. Complex Cx 16 when outlined and upon completion; 3-4. Complex Cx 11 when outlined and upon completion; 5. Roman brick bearing the imprint of a palm, *in situ*.



1



2



3

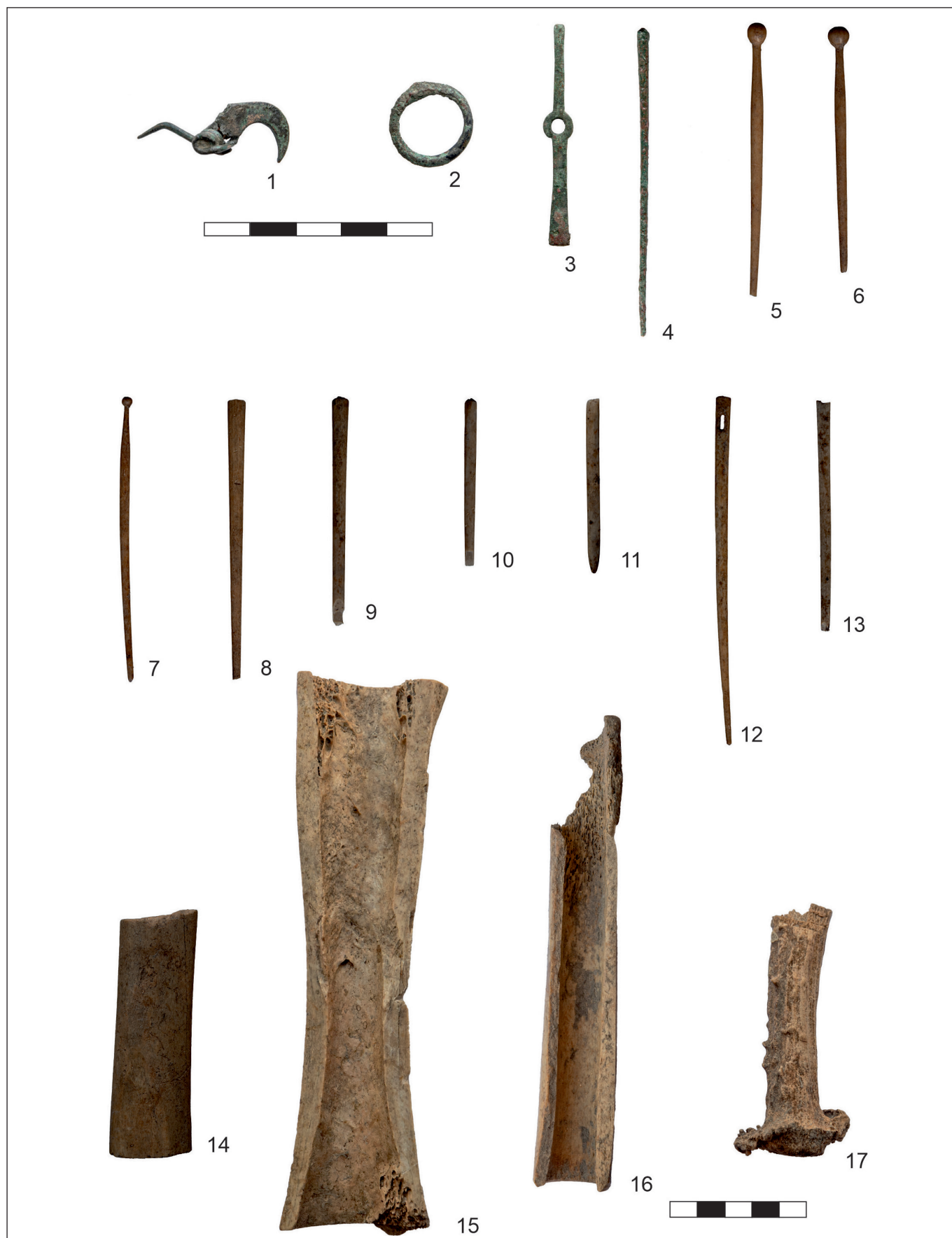


4

Pl. VII. 1-2. Surface Sp 1 upon completion; 3-4. Enclosure Cas 1 during research and upon completion.



Pl. VIII. 1. Cup with a handle discovered in Sp. 1 Cx 17; 2. Oil lamp discovered in Sp 1, Cx. 14; 3. Oil lamp discovered in Sp 1, Cx. 14; 4. Oil lamp discovered in Sp 1, Cx. 14; 5. Oil lamp discovered in Sp 1, Cx. 14; 6. Oil lamp discovered in Sp 1, Cx. 14; 7. Oil lamp discovered in Sp 1, Cx. 14; 8. Oil lamp discovered in Sp 1, Cx. 14; 9. Oil lamp discovered in Sp 1, Cx. 1; 10. Oil lamp discovered in Sp 1, Cx. 14; 11. Votive statuette discovered in Sp 1, Cx. 17; 12. Wheel from a toy discovered in Sp 1, Cx. 15.



Pl. IX. 1. Zoomorphic fibula discovered in the surface Sp 1; 2. Ring/link discovered in Sp 1, Cx. 2; 3. Belt end discovered in Sp 1, Cx. 3; 4. Hairpin with conical head discovered in Sp 1; 5. Hairpin with spherical head discovered in Sp 1, Cx. 14; 6. Hairpin with spherical head discovered in Sp 1, Cx. 14; 7. Hairpin with spherical head discovered in Sp 1, Cx. 15; 8. Hairpin with conical head discovered in Sp. 1; 9. Hairpin with conical head discovered in Sp 1, Cx. 14; 10. Hairpin with conical head discovered in Sp 1, Cx. 1; 11. Fragmentary needle discovered in Sp. 1, Cx 14; 12. Sewing needle discovered in Sp 1, Cx. 14; 13. Sewing needle discovered in Sp 1, Cx. 14; 14–17. Animal bones in the course of processing.



Pl. X. 1. Glass bead discovered in Sp 1, Cx. 14; 2. Fragmentary glass/bowl discovered in Sp 1, Cx. 14; 3. Fragmentary glass discovered in Sp 1, Cx. 15; 4. *Unguentarium* discovered in Sp 1, Cx. 14; 5. Container handle discovered in Sp 1, Cx. 15; 6. Coin discovered in Sp 1, Cx. 14; 7. Currency discovered in Enclosure 1; 8. Coin discovered in Sp 1, Cx. 14; 9. Roman brick with the imprint of a palm.