

PRELIMINARY DATA REGARDING THE NEWLY DISCOVERED 6TH CENTURY NECROPOLIS AT NÄDLAC, ARAD COUNTY*

Vlad-Andrei Lăzărescu**, Claudia Radu***, Adrian Ursuțiu****

Cuvinte cheie: Nădlac (jud. Arad), Banat, perioada migrațiilor, necropolă, cronologie

Keywords: Nădlac (Arad County), Banat region, Migration Period, necropolis, chronology

Preliminary Data Regarding the Newly Discovered 6th Century Necropolis at Nădlac, Arad County (Abstract)

The article presents a newly discovered site identified during a rescue excavation performed in 2014 as part of the project for the construction of the motorway Nădlac – Arad, Arad County. With this occasion, two graves belonging to the Migration Period dated during the middle of the 6th century AD were discovered. Due to the topographical position of these two graves it is believed that they are part of a bigger necropolis belonging to the so-called *Reihengräberfeld* type of cemeteries, typical for the 6th century AD in this geographical and cultural area. Strong connections with the Merovingian milieu are observed while studying the composition of their funerary inventories, testifying for the complexity and heterogeneity of the 6th century AD group of discoveries linked with the eastern Germanic tribes known, from the ancient literary accounts, to have inhabited this region. This newly identified necropolis can be associated with the group of similar discoveries documented in the western part of Romania, the Tisza region and in the northern part of nowadays Serbia generally connected with the presence of the Gepids.

1. Description of the site

The tombs presented with this occasion were discovered during a rescue excavation performed in 2014 by a team from the Institute of Archaeology and History of Art Cluj-Napoca of the Romanian Academy (IAIA Cluj-Napoca) as part of a bigger project that ensured the necessary research and documentation for the construction of the motorway Nădlac – Arad, Arad County¹.

* The authors gratefully acknowledge support from the Romanian National Authority for Scientific Research, UEFISCDI, Project number PN-II-ID-PCE-2011-3-0158 (V.-A. L.), while this work was also possible due to the financial support of the Sectoral Operational Programme for Human Resources Development 2007–2013, co-financed by the European Social Fund, under the project POSDRU/187/1.5/S/155383 – “Quality, excellence, transnational mobility in doctoral research” as well as from the project PNII-PCCA-2011-3.1-1153 (C. R.).

** Institute of Archaeology and History of Art Cluj-Napoca, Romanian Academy Cluj Branch, M. Kogălniceanu 12–14, 400084, Cluj-Napoca, Romania; e-mail: lazarescu_vlad@yahoo.com.

*** Faculty of History and Philosophy; Interdisciplinary Research Institute in Bio-Nano Sciences, Molecular Biology Center, “Babeș-Bolyai” University Cluj-Napoca, M. Kogălniceanu 1, 400084, Cluj-Napoca, Romania; e-mail: claudia.radu20@gmail.com.

The rescue excavations undertaken here had as their main objective the research and documentation of possible archaeological features given the fact that several stray finds were known as coming from this region². The site is situated eastwards from the modern town, approximately 2.6 km north of the Mureș River (Fig. 1–2). The site was first identified in October 2012 during a field evaluation survey, occasion with which the site was also roughly delimited. Eight trenches having variable dimensions were excavated out of which four archaeological features were successfully identified and researched. The site was

**** Institute of Archaeology and History of Art Cluj-Napoca, Romanian Academy Cluj Branch, M. Kogălniceanu 12–14, 400084, Cluj-Napoca, Romania; e-mail: ursutia@yahoo.com.

¹ The archaeological excavation was performed between the 11th and the 26th of April 2014 for the construction of the access road connecting Nădlac to the motorway km 0+000–5+911 and the research team was led by Dr. Adrian Ursuțiu together with Dr. Sorin Cociș, Szabolcs Ferencz, Urak Malvinka, Gelu Copos (IAIA Cluj-Napoca), Victor Sava, Florin Mărginean and Luminița Szilagyi (Arad County Museum).

² Barbu *et alii* 1999, 87.

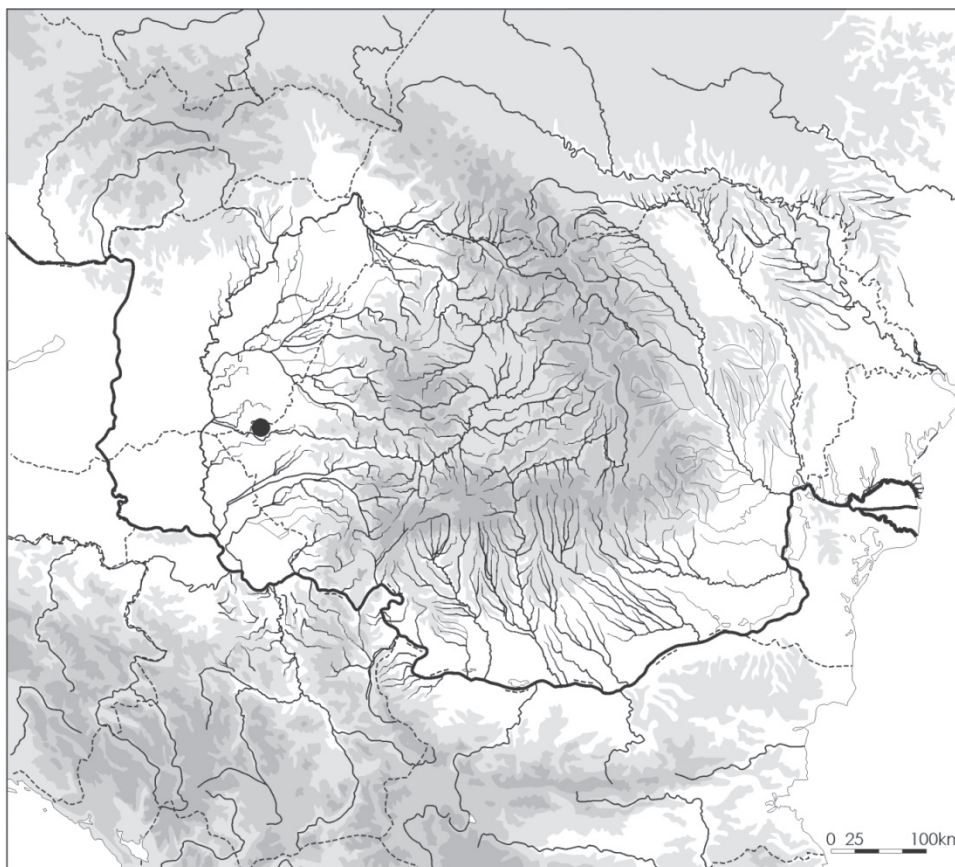


Fig. 1. Location of the site at Nădlac, Arad County.

entirely excavated³ in April 2014 when a total of 52 archaeological features were documented, ranging from Neolithic to the Medieval Period.

Out of the 52 features, five belong to the so-called Szakálhát group from the middle Neolithic – one dwelling and four pits, while another dwelling with its associated pits were unearthed

³ We refer here at the entire area affected by the construction of the junction road connecting Nădlac to the motorway comprising a total surface of 2400 m².

in 2012. Other 39 archaeological contexts are related to a medieval settlement (16th–17th century during the Ottoman occupation of this region) known both from the literary evidence and from previous field surveys performed by the Arad County Museum. Two sunken buildings, four wells, two household kilns and 32 waste pits were documented, while another 7 pits having no archaeological inventory were attributed also to the medieval settlement based on their

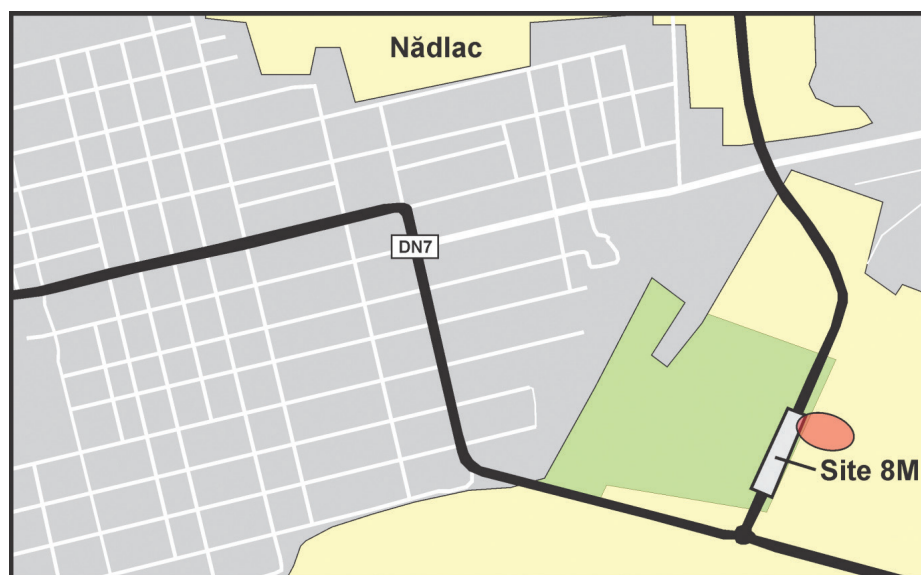


Fig. 2. Position of the 8M site at Nădlac, Arad County and the possible location of the 6th century AD necropolis (red) (scale 1:20.000).

topographical relation with the other datable features.

The funerary contexts identified as part of the 8M site refer to a 6th century AD necropolis out of which only two inhumation graves were discovered (Pl. 1). Due to their position in the north eastern side of the excavated area, it is most likely that the necropolis is expanding towards the east. The actual topography together with the stratigraphic data recorded point toward the fact that the site was actually situated on a slight terrace of an older tributary stream of the Mureş, now silted up.

These assumptions are supported by the highly detailed Second Military Survey of the Habsburg Empire (1806–1869) map depicting a plateau-like

with the *Reihengräberfelder* horizon⁴, may point toward the same hypothesis that the area was flooded several times through time making it possible for the necropolis to be undisturbed⁵.

2. Anthropological and biological analysis

The anthropological analysis focused on the identification of standard biological attributes along with specific and non-specific indicators for disease. As both individuals are adults, age at death was determined using the morphology of the sternal rib ends⁶, pubic symphysis⁷, auricular surface⁸, along with the synostosis of the cranial sutures and dental wear⁹, depending on which elements were available. Sex was deter-



Fig. 3. Position of the 6th century AD necropolis (red) overlapped on the Second Military Survey of the Habsburg Empire (1806–1869); original base map data retrieved from www.mapire.eu.

geographical feature in the area of the site (Fig. 3). Such a reality confirms that the extent of the necropolis is to be found eastwards from the actual junction road, but only on a slightly NW-SE axis, meaning that the two graves actually represent the north-western edge of the graveyard, but accounting also for the internal structure of the medieval settlement.

The two graves were found approximately at the same depth, namely -0.90 m. The stratigraphy of the site is relatively uniform, no consistent archaeological layers being identified under the topsoil. This situation can be correlated to the former topography of the area and possibly with several flooding caused by the two already mentioned streams. If such an assumption is correct, it would mean that the state of preservation of the entire necropolis could be in excellent condition. The fact that no secondary disturbances were observed, although such a phenomenon is largely associated

with the *Reihengräberfelder* horizon⁴, may point toward the same hypothesis that the area was flooded several times through time making it possible for the necropolis to be undisturbed⁵.

⁴ The western European archaeological milieu approached this topic quite systematic during recent years, see Roth 1978; Aspöck 2003; Klevnäs 2007; Aspöck 2008; Kümmel 2009; Aspöck 2011; Klevnäs 2013; Klevnäs 2015; Klevnäs 2015a, while for the Romanian archaeological literature we can clearly observe that the few mentions that we may count refer to punctual case studies, see Stanciu *et alii* 2007; Bârză, Harhoiu 2008, 523; Ferencz *et alii* 2009; Bârză 2010; Dobos, Opreanu 2012.

⁵ This assumption remains only as a working hypothesis until further excavations will prove otherwise.

⁶ Işcan – Loth – Wright 1984.

⁷ Buikstra, Ubelaker 1994; Steckel *et alii* 2011; Meindl *et alii* 1985.

⁸ Buikstra, Ubelaker 1994; Steckel *et alii* 2011.

⁹ White *et alii* 2012.

¹⁰ Buikstra, Ubelaker 1994–1994.

lated using the formulae derived by Trotter and Gleser¹¹ due to the fact that in one case only the humeral length could be assessed and thus the formulae published by Breitingner (1937)¹² could not be used.

Pathological changes were analysed following the guidelines from Ortner¹³, Steckel *et alii*¹⁴, Buikstra and Ubelaker¹⁵, Aufderheide and Rodriguez-Martin¹⁶, and Waldron¹⁷. Each skeleton was screened with regard to a series of diseases: osteoarthritis, subperiosteal inflammation, *cribra orbitalia* and porotic hyperostosis, and Schmorl's nodes. With regard to osteoarthritis, we observed the following skeletal elements: temporomandibular joint, glenoid cavity, proximal and distal humerus, proximal and distal radius, proximal and distal ulna, the bones of the hands, acetabular cavity, proximal and distal femur, proximal and distal tibia, proximal and distal fibula, the bones of the feet, and the vertebrae (the cervical, thoracic, and lumbar segments). For the identification of periosteal reactions, we observed the following long bones: clavicle, humerus, radius, ulna, femur, tibia and fibula.

Dental inventory together with the identification of dental pathologies were undertaken according to the protocols proposed by Buikstra and Ubelaker¹⁸ and Steckel *et alii*¹⁹. Trauma and fractures were analysed using the methods described by Lovell²⁰ and Buikstra and Ubelaker²¹.

Cx33

The skeleton presents a moderate degree of preservation. Based on the morphology of the cranial and pelvic elements the skeleton was assigned to a male individual. Age at death was estimated based on the morphology of the pubic symphysis and auricular surface, the result being an age at death between 39 and 44 years. Stature was calculated based on the femoral length (483 mm) and by using the formulae from Trotter and Gleser (1958). The result is 176.364 cm with a standard deviation of 3.72 cm.

No teeth were preserved. Out of the 27 joint elements available for analysis, 5 were affected by

moderate osteoarthritis: both joints of the right clavicle, the thoracic segment of the vertebral column, and both joints of the left clavicle. Periosteal inflammation was not seen on the 12 long bones preserved.

On the C7 and T4-L2 vertebrae we could see inflammation of the vertebral plateau. Schmorl's nodes were present on T7-T10 and T12-L3 vertebrae.

Although the orbital roofs were not preserved and thus could not be assessed with regard to the presence of pathological porosity (*cribra orbitalia*), the cranial surface displayed moderate porotic hyperostosis on the occipital and parietal bones. Furthermore, the zygomatic bone also shows unusual porosity.

On both femoral necks, anteriorly, we could see a cervical imprint, also known as the fossa of Allen²². The sacrum is composed of 6 vertebrae, although there are no signs of lumbar sacralisation and the vertebral column is composed of all the 24 elements. One proximal hand phalange shows a broadened proximal articular facet. The base of the proximal hallucial phalanx is also broadened with remodelling and one healed cavity.

Cx49

The skeleton displays a similar degree of preservation as the one from Cx33. For sex determination we used the diagnostic elements from both the skull and pelvic bones. As so, the skeleton belongs to a male individual. Age at death was approximated based on the morphology of the auricular surface and the degree of synostosis for cranial sutures, the result being an age at death between 40 and 48.8 years. Neither the femur nor the tibia could be measured in order for stature to be calculated. Consequently, this was determined based on humeral length (344 mm) by using the formulae from Trotter and Gleser (1958). The result is 176.402 mm with a standard deviation of 4.05 cm.

A number of 27 teeth were available for observation. Of these, 5 teeth presented carious lesions: the left mandibular third molar (occlusal caries), the left mandibular first molar (interproximal caries), the left mandibular second premolar (interproximal caries), the left maxillary first premolar (interproximal caries) and the right maxillary third molar (cervical caries). A further number of 4 teeth were lost antemortem and all six maxillary molars were affected by abscesses. Dental calculus and periodontitis were in severe forms. Additionally,

¹¹ Trotter, Gleser 1958, 84–85.

¹² Vercellotti *et alii* 2009, 138.

¹³ Ortner 2003.

¹⁴ Steckel *et alii* 2011.

¹⁵ Buikstra, Ubelaker 1994.

¹⁶ Aufderheide, Rodriguez-Martin 1998.

¹⁷ Waldron 2009.

¹⁸ Buikstra, Ubelaker 1994.

¹⁹ Steckel *et alii* 2011.

²⁰ Lovell 1997.

²¹ Buikstra, Ubelaker 1994.

²² Capasso *et alii* 1999, 113.

Individual no.	Sex	Age at death	AMTL ^a	DC ^a	Dental abscesses ^a	Dental calculus ^b	DEH ^b	PI ^b	CO ^b	PH ^b
CX33	M	39–44	0	0	0	0	0	1	0	2
CX49	M	40–48.8	4	5	6	3	2	1	1	1

^a AMTL – antemortem tooth loss; DC – dental caries; DEH – dental enamel hypoplasia; PI – subperiosteal inflammation; CO – *cribra orbitalia*; PH – porotic hyperostosis.

^a the numbers in columns represent the number of affected teeth.

^b the numbers in columns represent scores given in the observation, where 0 means the feature could not be examined; 1 – the feature presents no pathological changes; 2 – the feature presents slight pathological changes; 3 – the feature presents severe pathological changes.

Table 1. Summary of dental and pathological features.

linear enamel hypoplasia was noted on both the maxillary and mandibular canines and incisors.

Out of the 25 preserved joint elements, 8 were affected by osteoarthritis to a moderate degree: the left temporo-mandibular joint, the right radius proximally and distally, the bones of the right hand, the cervical and thoracic segments of the vertebral column, the left acromio-clavicular joint, and the bones of the left hand. Additionally, both articular surfaces of the right clavicle and the sternoclavicular joint of the left clavicle displayed more extensive changes. Periosteal inflammation was not noted on any of the available long bones (n=10). With regard to musculoskeletal stress markers, the insertion site of the costoclavicular ligament on both clavicles presented advanced modifications.

represent an osseous reaction to disc herniation²³. In the case of the individual from Cx49, on the 10th and 11th thoracic vertebrae the lesions seen on the vertebral plateau are suggestive for a stronger physical stress, possibly leading to a mild, wedge fracture of the vertebral body. Moreover, the presence of the fossa of Allen on both femora of the individual from Cx33 is indicative for prolonged extension due to walking or running, but also for squatting or hyperflexion²⁴. Consequently, in the case of both individuals, the presence of Allen's fossa, wedge vertebral fractures, Schmorl's nodes, inflammation of the vertebral plateau, moderate and severe osteoarthritis and the musculoskeletal stress markers are all indicative for a physical activity which was more demanding for the upper part

Individual no.	Sex	Age at death	Shoulder girdle	Pelvic girdle	Vertebral column	Upper limbs	Lower limbs
CX33	M	39–44	2*	1	2	1	1
CX49	M	40–48.8	3	1	2	2	1

* 0 – the joint elements were not preserved; 1 – the joint elements showed no pathological alterations; 2 – the joint elements showed slight to moderate pathological alterations; 3 – the joint elements showed severe pathological alterations.

Table 2. Distribution of osteoarthritic changes.

In addition to degenerative changes on vertebral bodies, 18 vertebrae (C5–C7, T2–T12, L2–L5) displayed inflammation and destruction of the vertebral plateau. Schmorl's nodes were present on the T7–L3 and L5 vertebrae.

From the anthropological point of view, the skeletal changes observed on the two skeletons are indicative mainly for the physical activity performed by these individuals in the course of their lifetime. Degenerative joint disease affected only the elements of the upper limbs and vertebral column, which is suggestive for specific physical activities performed with the hands which would leave a skeletal response on the clavicles and vertebral column. The presence of Schmorl's nodes is consistent with this type of activities, as they

of the body. However, in the case of the individual from Cx33 the long bones of the arms do not show any modification at the insertion sites for muscles and ligaments, as opposed to the individual from Cx49 who presents moderate and severe degenerative changes. This would point to a possible difference in the physical activities performed by the two individuals in the course of their lifetime.

3. Archaeological Analysis

Due to the limited number of tombs identified it is quite obvious that we will not be able to make an elaborate analysis of the cemetery to which the

²³ Capasso *et alii* 1999, 38.

²⁴ Capasso *et alii* 1999, 113.

graves belong. However, some of the artefacts discovered illustrate quite clearly the approximate dating of the funerary contexts. The tombs do not show special internal arrangements, lacking any trace of a wooden coffin. They are simple graves of approximately oval shape oriented on a W-E axis and disposed very close to one another. The bodies of the deceased were placed directly inside the grave-pit and laid on their back facing eastwards. No post disturbances were noticed and the funerary inventory present inside the tombs is quite scarce representing only objects of personal use or adornments.

Cx 33 (male, Adultus, 39–44 years old) – (Pl. 2). Description: a) Identification depth: -0.90 m; b) Identified at ca. 2.5 meters south-east of grave Cx 49 approximately on the same line, towards the north-eastern limit of the excavation area (Pl. 1). The tomb was dug into yellow sandy clay and was filled with the same soil that resulted after the grave-pit was excavated. The filling of the grave contained also fragments of burnt clay and shells belonging to the layers associated to the Neolithic settlement also documented by the rescue excavations performed in this area. Orientation: WNW-ESE. Ground plan shape of the tomb: slightly prolonged oval in shape. Section shape of the tomb: slightly concave. Dimensions: 2.02 × 0.70 × 0.37 m. Position of the skeleton: dorsal decubitus. The skeleton is intact and in its initial anatomical position; the arms are positioned along the body. The head is slightly reverted towards the south and the chin is situated in the vicinity of the shoulder. State of preservation of the skeleton: the skeleton was well preserved due to the local geological conditions, not suffering from post-depositional disturbances. Disturbances: no post-depositional disturbances were identified. Observations: no traces of a wooden coffin have been noted. Funerary inventory: the funerary inventory that Cx 33 contained is rather scarce being formed by only few items as follows: 1) bronze tweezers (Pl. 2/1) discovered in the area of the pelvis being found under the skeleton. The upper part is relatively narrow but in the inferior part the tweezers widens quite considerably forming the active part of the implement. No decorative motives were identified on the surface of the artefact. Dimensions: L.: 61.22 mm, W.u.e.: 3.81 mm, W.i.e.: 14.46 mm, T.: 6.19 mm. Good state of preservation. 2) 14 bronze rivets (Pl. 2/2) of approximately the same size discovered around the tweezers ca. under the left hip of the skeleton probably part of a small bag/purse which contained

the deceased items of personal use (tweezers and antler comb). Dimensions: L.: 7.852 mm, W.u.e.: 3.94 mm, W.i.e.: 1.16 mm, T.: 1.16 mm. Good state of preservation. 3) bronze belt buckle (Pl. 3/1) of oval shape having a faceted pin with a shield termination. The buckle was found also in the pelvic region but was not in connection with the other elements that were presumably deposited inside the small bag/purse. No decorative motifs were identified on the surface of the artefact. Dimensions: L.: 34.76 mm, W.: 20.36 mm, T.e.: 7.70 mm, T.i.: 3.91 mm, T.pin: 7.24 mm. Good state of preservation. 4) bronze belt applique (Pl. 3/2) found in connection with the above mentioned belt buckle. The shape of this item resembles a double shield plate being decorated with a central longitudinal spine. Dimensions: L.: 20.65 mm, W.: 8.19 mm, T.: 3.90 mm. Good state of preservation. 5) bronze belt applique (Pl. 3/3) found in connection with the above mentioned belt buckle. The shape of this item resembles a double shield plate being decorated with a central longitudinal spine. Dimensions: L.: 20.39 mm, W.: 7.75 mm, T.: 3.85 mm. Good state of preservation. Together with the other applique and the belt buckle they form the belt set of the deceased. 6) double-sided comb (Pl. 3/4) composed of three antler plates fixed together with four iron rivets. The comb is decorated on one side with incisions which form a wave-like motif. We can presume due to the position of the comb that it was also initially positioned inside the small bag/purse of the deceased. Dimensions: L.: 109.41 mm, W.: 48.96 mm, T.: 9.70 mm. Good state of preservation. Together with the already mentioned artefacts a probably oval shape iron buckle and several iron fragments were observed but they could not be further studied due to their poor state of conservation.

Cx 49 (male, Adultus, 40–49 years old) – (Pl. 5). Description: a) Identification depth: -0.90 m; b) Identified at ca. 2.5 meters north-west of grave Cx 33 approximately on the same line, towards the north-eastern limit of the excavation area (Pl. 1). The tomb was dug into yellow sandy clay and was filled with the same soil that resulted after the grave-pit was excavated. The filling of the grave contained also fragments of burnt clay belonging to the layers associated to the Neolithic settlement also documented by the rescue excavations performed in this area. Orientation: WNW-ESE. Ground plan shape of the tomb: slightly prolonged oval in shape. Section shape of the tomb: slightly concave. Dimensions: 1.10 × 0.70 × 0.30 m. Position of the skeleton:

dorsal decubitus. The skeleton is disturbed by another archaeological feature (Cx 35), the only intact part of the grave being its western side. The deceased was initially placed in anatomical position; the arms being positioned along the body. State of preservation of the skeleton: the skeleton was well preserved due to the local geological conditions. Disturbances: the tomb was partially destroyed by a later feature – Cx 35, probably a medieval or modern pit. Observations: no traces of a wooden coffin have been noted. Funerary inventory: the funerary inventory is composed of: 1) small oval bronze belt buckle (Pl. 5/1) discovered in the right part of the pelvic area. The buckle has an iron pin which might indicate a later repair undertaken by the item. No decorative motifs were identified on the surface of the artefact. Dimensions: L.: 27.79 mm, W.: 16.58 mm, T.e.: 5.43 mm, T.i.: 4.31 mm, T.pin: 5.68 mm. Good state of preservation. 2) double-sided comb (Pl. 6/1) composed of three antler plates fixed together with four iron rivets. The comb is decorated on one side with incisions which form a wave-like motif. The comb was found on the left side of the deceased approximately in the same place as the one found in Cx 33, therefore we might presume that also this item was initially positioned inside a small bag/purse that the deceased was carrying. Dimensions: L.: 115.74 mm, W.: 46.15 mm, T.: 10.57 mm. Good state of preservation. On one of the sides of the antler comb one might find traces of bronze oxide which might indicate that the artefact came in contact with other items that were not preserved, being indicative for the already mentioned possibility that the deceased might have carried a small bag/purse.

4. Discussion

The limited number of artefacts does not allow for a thorough typological analysis of the artefacts. The identified objects are items that quite frequently appear in graves belonging to male persons and can be included in the category of objects related to the personal use. The only observation related to the initial position of the artefacts concerns Cx 33 where we can presume the existence of a small bag/purse in which all the personal items were stored, something like a personal small kit.

The identified antler combs show high similarities with regard to size and decoration, a fact that could indicate that they both came from the same workshop. The decorations were made only on one side of the comb, on the central part, and they consist of a series of vertical cuts placed near the edges

of the central piece and a series of two parallel rows of punched decorated double lines delimiting one central decorative register in which a wavy line can be identified. This type of decoration was probably obtained using an instrument having a very sharp chisel-like peg in the middle that produced in the end a linear drawing resembling punching and has strong parallels in the punched manufacturing of the metal objects²⁵. Such kind of decoration can be attributed to Mária T. Bíró's type I./3. of double-sided combs with punched decoration which is extremely common with double-sided "Gepidic" combs²⁶. The same type of combs can be included in the Group C established by Ligia Bârză for the settlement at Bratei 1²⁷. Such double-sided combs represent typical funerary inventory all across Gepidic milieu and the Merovingian world found in both female and male graves and they started to appear in the 5th century AD and remained in use until the 7th century AD²⁸ while being representative of the local fashion²⁹. Having a large dating, such discoveries are useless for the attempt of narrowing down the chronology of certain contexts, but can be seen as rather good indicators for the period in general.

A certain similarity in the technique or of the decorative motifs could indicate not just the stylistic taste but also the existence of several comb manufacturing workshops. If the comb identified in Cx 49 has a very common decorative pattern of wavy lines which can be well-documented across the Carpathian Basin³⁰, the comb in Cx 33 has a much more elaborated decoration that can be encountered for instance in Grave 188 from Szentes-Berekhát³¹. A quick look at the spatial distribution of the double-sided combs with punched decoration in the Carpathian Basin (Fig. 4) will show that we can speak about two different clus-

²⁵ Bíró 2002, 43; Bóna, Nagy 2002, 98. For this type of decoration on metallic objects coming from the same cultural milieu, see more recently Dobos 2015.

²⁶ Bíró 2002, 43–44; Figs. 76–81. Attempts to classify the decorations of the double-sided combs were previously made by D. Csallány where one can find good parallels for the two combs from Nădlad, see Csallány 1961, Taf. CCLXVI/4 and CCLXVII/9 as well as by Sofija Petković especially for the territory of Upper Moesia, see Petković 1995.

²⁷ Bârză 1994–1995, 258–259.

²⁸ Hica-Cîmpeanu 1978, 291–292; Cseh 1990; Harhoiu 1998, 60; Harhoiu, Baltag 2006, 354; Bârză 2010, 72.

²⁹ Bóna, Nagy 2002, 95–98.

³⁰ For example the cemetery at Hódmezővásárhely-Gorzsa, see Csallány 1961, Taf. CCXXX/11 but from the sites at Szolnok-Szanda, Hódmezővásárhely-Kishomok, see Bóna, Nagy 2002 or Szőreg-Téglagyár, see Cseh *et alii* 2005.

³¹ Csallány 1961, Taf. LXXXVI/2.

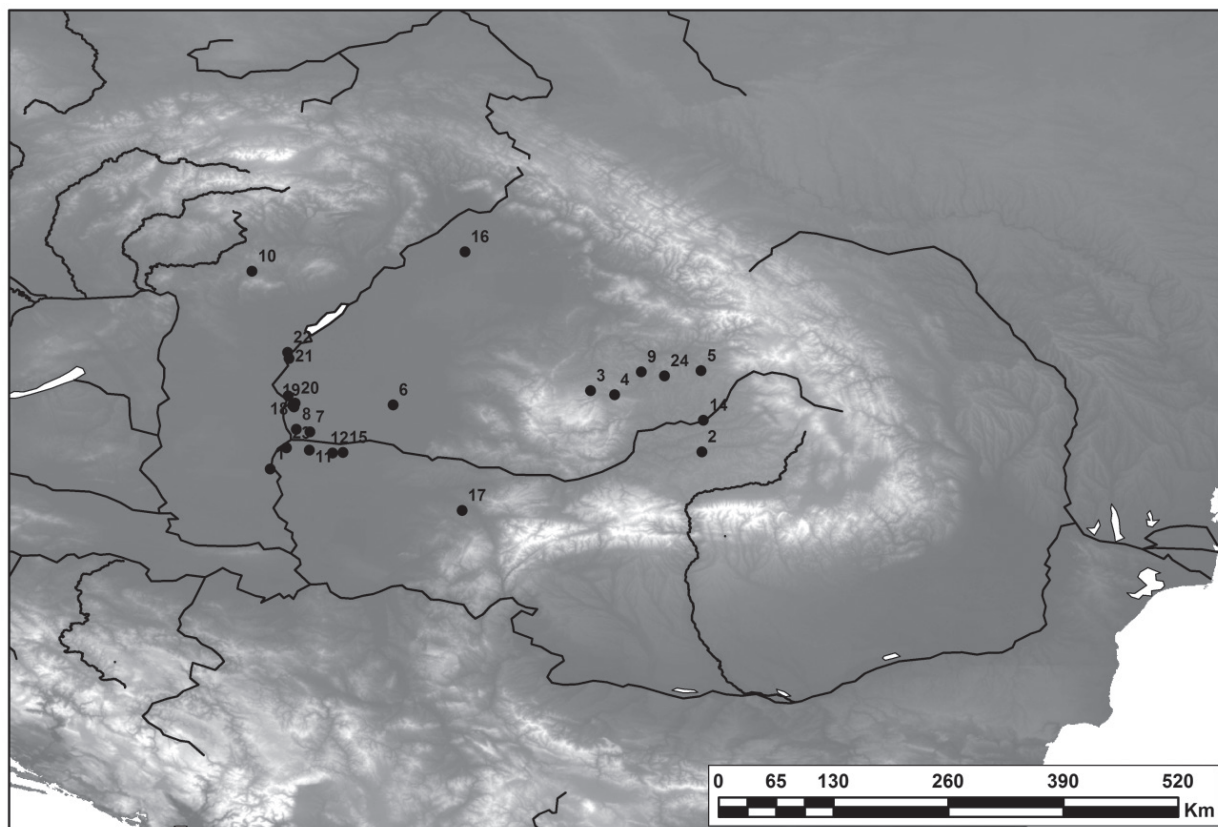


Fig. 4. Distribution of the double-sided combs with punched decoration in the Carpathian Basin (see List 1).

ters, one having its centre of gravity in Transylvania and the other one in the region where the Mureş meets the Tisza River. As mentioned previously, the best parallels for the combs at Nădlac can be found in the second cluster of finds, but good analogies for this kind of decoration can be mentioned also for the first cluster such as the finds from Căpuşu Mare³², Țaga³³, Floreşti-Plous Center³⁴ (Cluj County), Galaţii Bistriţei³⁵ (Bistriţa-Năsăud County), Moreşti³⁶ (Mureş County) or Bratei³⁷ (Sibiu County).

The tweezers found in Cx 33 represents a category of objects that are usually associated with male funerary inventory³⁸. From a typological point of view, this kind of tweezers is most commonly found in the Merovingian cultural milieu of the 6th century AD³⁹, where they are part of

the so-called type of “*pinces à épiler en bronze à large mors*”⁴⁰ or to the Type 12.3 defined for the cemeteries at *Viminacium*⁴¹. Good parallels can be found in several sites such as for example the cemetery at Bulles (Oise), where the male grave no. 65 dated during the phases MA2 or in the internal chronology of the site during stages B/C/D which correspond to the interval 520/530–560/570 AD contained also a bronze shield-shaped buckle⁴², grave no. 14 at Sannerville (Normandie) dated during the first half of the 6th century AD⁴³ or grave no. 21 at Brunn am Gebirge (Niederösterreich)⁴⁴ to give only some examples. A similar combination of shield-shaped buckle having shield-shaped appliques with a tweezers similar in shape with the one at Nădlac, can be mentioned also for grave no. 886 at Cutry (Meurthe-et-Moselle)⁴⁵, graves no. 314, 1042, 1247 at Breny (Aisne)⁴⁶, the

³² Dobos 2009, 220; 226, Fig. 4/10.

³³ Protase 2003, 71, Fig. 24/2; 73, Fig. 27/3.

³⁴ Ferencz *et alii* 2009, 472, Pl. XVI/1; 474. Pl. VXIII/4; Lăzărescu 2011.

³⁵ Harhoiu 2008, 189; 223, Abb. 20/Typ 06.

³⁶ Horedt 1979, 155; Fig. 5.

³⁷ Bârză 1994–1995, 291, Fig. 17/9; 11.

³⁸ Koch 2001, 85; Barbiera 2008, 408, Fig. 3; Bóna, Horváth 2009, 185; Hilger 2010, 60; Legoux 2011, 112; 276, Pl. 33.

³⁹ Kazanski 2002, 46–47; Legoux 2011, 112.

⁴⁰ Legoux 2011, 112.

⁴¹ Ivanišević *et alii* 2006, 162–163; Pl. 11/103–4; 196–198; Pl. 30/151–5; Fig. 17/5–6.

⁴² Legoux 2011, Fig. 128/65; Pl. 23.

⁴³ Pilet 2002, 252, Fig. 4/14–7.

⁴⁴ Aspöck, Stadler 2003, 188; Taf. 17/2.

⁴⁵ Legoux 2005, 404–406, Pl. 106–108.

⁴⁶ Kazanski 2002, Pl. 3/314–7; Pl. 13/1042–10 and Pl. 17/1247/10, where in the same grave a number of weapons were also found.

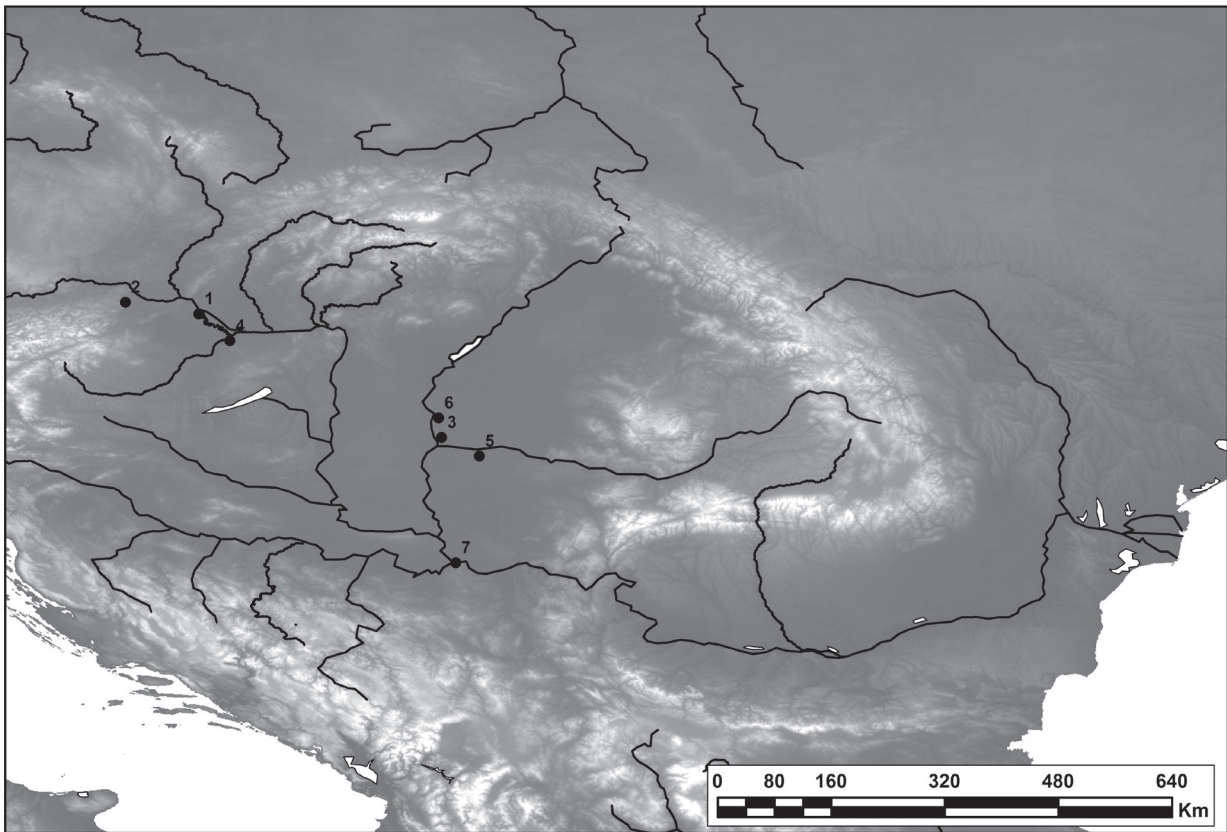


Fig. 5. Distribution of the tweezers with trapezoidal end in the Carpathian Basin (see List 2).

princely grave no.1 at Planig⁴⁷ or grave no. 120 at Pleidelsheim with a dating in SD Phase 4 roughly between ca. 510–530 AD⁴⁸. Approximately the same dating is offered for this type of tweezers in the Lower Rhine Area, namely during the Rheinland Phase 3 (480/490–530 AD)⁴⁹.

For the Carpathian Basin region we can account only for few cases of this type of finds, namely grave no. 60 in the necropolis at Szentek-Kökenyzug⁵⁰, grave no. 82 at Hódmezővásárhely-Kishomok⁵¹, Ménfőcsanak⁵² or a similar item at Bezenye in grave no. 19⁵³ such tweezers representing to a certain extent imports coming from the Merovingian world judging by their spatial and quantitative distribution across Europe (Fig. 5).

Regarding the dating of these artefacts, each chronological system used should be understood and regarded as highly regional thus providing us with different chronological groupings which are to be treated with great caution if one tries to

date a single find or archaeological context coming from outside the framework that the original system was created for. Recently, important attempts to pinpoint more accurately the dating of certain funerary contexts have been made especially for the Austrian territory by means of ¹⁴C dating⁵⁴. Luckily for us, one of the contexts analysed with this occasion was grave no. 21 from Brunn am Gebirge containing an identical tweezers with the one we are presenting and dated during the Stage SP3 (553–570 AD)⁵⁵; therefore we can presume to some extent that the item found at Nădlac should have a similar dating.

The buckles found in both tombs represent quite typical objects that are associated with graves dated during the 6th century AD and are of no use for the attempt to date more accurately the site. The only exception would be the bronze shield-shaped buckle found in Cx 33 together with the appliques that it was found in connection with (Pl. 3/1–2). The shield-shaped buckles either having shield-shaped appliques or not are also artefacts that are commonly found in the

⁴⁷ Hilgner 2010, 85, Taf. 10/11.

⁴⁸ Koch 2001, 83–85; Taf. 45.

⁴⁹ Nieveler, Siegmund 1999, 10, Fig. 1.6/Ger–2.2, 3–7.

⁵⁰ Csallány 1961, Taf. XV/6.

⁵¹ Bóna, Nagy 2002, 297, Taf. 23/82–4.

⁵² Vaday 2015, 169; 171, Fig. 3/5; 224–225.

⁵³ Werner 1962, Pl. 65/19–1.

⁵⁴ Stadler *et alii* 2003.

⁵⁵ Stadler *et alii* 2003, Tab. 3; Abb. 10–15.

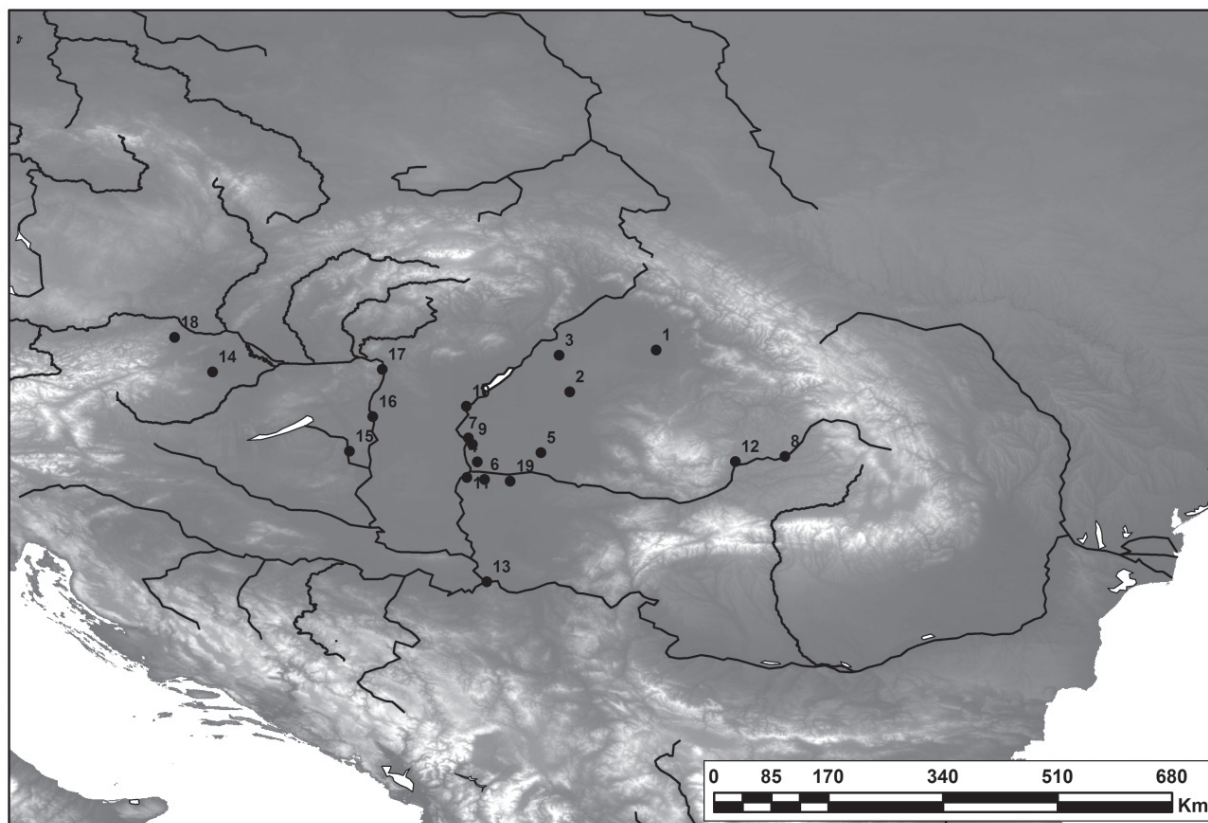


Fig. 6. Distribution of the shield-shaped buckles in the Carpathian Basin (see List 3).

Merovingian world⁵⁶ and as well as in the case of the tweezers they must be interpreted as imports in this area. Such items are generally encountered in male graves and are usually associated with several types of weapons⁵⁷. The dating of this type of buckles is largely accepted to be in the 6th century AD with different regional differences while their origins are thought to be represented by the Late Roman belts with animal decorations⁵⁸. Several typologies were elaborated in the hope to narrow down the dating of each variant of these shield-shaped buckles; the artefact that we are dealing with would fit the types LPV-118 for the site at Louviers (Eure) dated in France generally in the 6th century AD and more narrowly during phases MA2-MA3 (520/530–600/610 AD)⁵⁹, while in the Swiss area they are dated in the second third or during the third quarter of the 6th century AD⁶⁰. In western Germany the dating for this type of “Schilddornschnallen”, namely Schnallen A6, would be during the Stufe III (ca.

525–600 AD) judging by the typology elaborated by K. Böhner⁶¹. In south and south-east Germany such items were also dated approximately in the same period⁶² or with an even more narrow and slightly earlier chronology during SD Phase 4 (ca. 510–530AD) and SD Phase 6 (ca. 530–555 AD)⁶³ while in the Lower Rhine area they would be dated along with the shield-shaped appliques in the Rheinland Phase 4 (520/530–550/560 AD)⁶⁴. Even though the general type appears during the late 5th century AD, similar buckles to the one at Nădlac have a general accepted dating during the second third of the 6th century AD⁶⁵.

The combination of shield-shaped buckle with shield-shaped appliques⁶⁶ can be documented for numerous sites especially in Western Europe such as Louviers (Eure) in grave no. 198⁶⁷, Grande

⁵⁶ Urlacher *et alii* 1998, 140; Kazanski 2002, 27–28.

⁵⁷ Kazanski 2002, 27.

⁵⁸ Martin 1989, 132–135.

⁵⁹ Carré, Jimenez 2008, 137; Legoux 2005, 142; 279, Pl. 39; Legoux 2011, 118; 179–188.

⁶⁰ Martin 1986, 106, Fig. 23/7 and 17–20.

⁶¹ Böhner 1958, 181–183.

⁶² Roth, Theune 1988, Pl. 7.31.

⁶³ Koch 2001, 83–85.

⁶⁴ Nieveler, Siegmund 1999, 11, Fig. 1.7/Gür-2.6/7c4 and Fig. 1.7/Gür-2.10b4.

⁶⁵ Martin 1989, 132–138; Martin 2000, 166; Martin 2008, 154–155; 160, Abb. 9.

⁶⁶ For a reconstruction of the way in which such belts looked like, see Siegmund 1995, 698, Abb. 570/4.

⁶⁷ Carré, Jimenez 2008, Pl. 53/S198–323, 324.

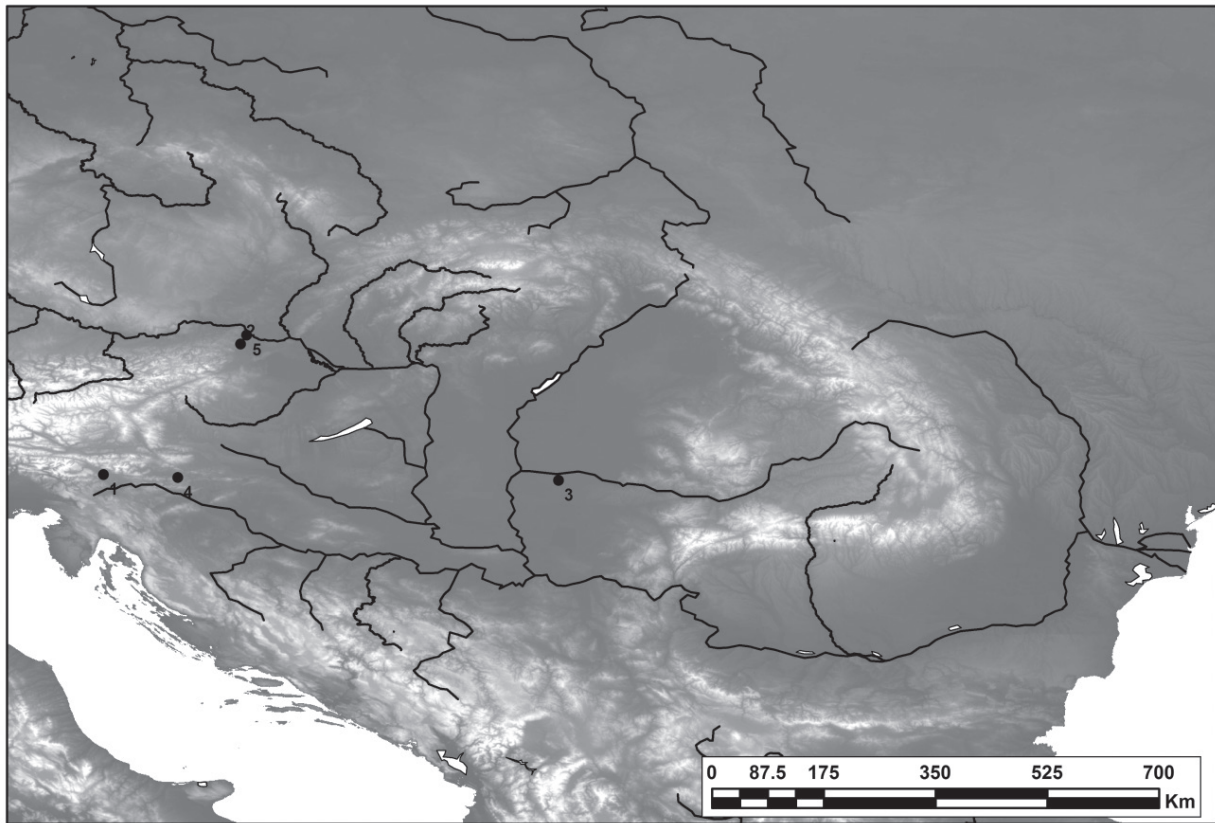


Fig. 7. Distribution of the “double shield-shaped” appliques in the Carpathian Basin (see List 4).

Oye à Doubs (Doubs) in grave no. 238⁶⁸, Bulles (Oise)⁶⁹, Sannerville⁷⁰, Giberville⁷¹, Saint-Martin-de-Fontenay⁷², Saint-Dizier (Haute-Marne)⁷³ in several graves for example, but also in few cases for the Carpathian Basin, namely in grave no. 353 at Kiszombor⁷⁴, grave no. 9 at Szőreg-Teglagyár⁷⁵, grave no. 42 at Hódmezővásárhely-Kishomok⁷⁶, at Szólád⁷⁷ or in grave no. 23 at *Viminacium*⁷⁸.

Several shield-shaped buckles were also found in the Carpathian Basin in sites associated either with the Lombards, like for example graves no. 33 at Kajdacs-Homoklánya⁷⁹, grave no. 16 at Rácalmás-Ujtelep⁸⁰

and grave no. 10 at Szentendre-Pannoniatelep⁸¹ or with the Gepids⁸².

Much more interesting are the two appliques which should be discussed in close connection with the buckle as they were all part of the same belt-set and usually appear in pairs but in some cases there can be more than two such appliques⁸³. They also have a large distribution across Europe and can be found ranging from Spain and the north of Africa to the Carpathian Basin⁸⁴. Most commonly their shape is similar to the pin of the buckles, but several variants might occur like in our case where a more elaborate decoration appears. We might argue that a link between the first variants (shield-shaped) and the more elaborate ones might be represented by the cases in grave no. 500 at Bulles (Oise)⁸⁵ where the shield-shaped appliques present a spine typical for the variants similar to those at Nádlač that have a more complex body. Other such artefacts belonging to the same variant of more elaborated shield-shaped appliques come from sites like

⁶⁸ Urlacher *et alii* 1998, 289; 364, Pl. 15/S238–1.

⁶⁹ Legoux 2011, 119–120.

⁷⁰ Pilet 2002, 252, Fig. 4/14–10; 254, Fig. 6/25–3; 255, Fig. 7/90–7 for example.

⁷¹ Pilet 2002, 258, Fig. 8/113–4.

⁷² Pilet 2002, 263, Fig. 14/107–11.

⁷³ Truc *et alii* 2009, 320, Fig. 7/14; 321, Fig. 8/19.

⁷⁴ Csallány 1961, Taf. CL/10.

⁷⁵ Csallány 1961, Taf. CLXIII; CSEH *et alii* 2005, this kind of buckles being classified as Schnallentypen 1, 154–156; 157, Abb. 18; 278, Taf. 48/9–2, 3.

⁷⁶ Bóna, Nagy 2002, 288, Taf. 14/42–2, 4.

⁷⁷ von Freeden – Vida 2007, 375–376, Abb. 9.

⁷⁸ Ivanišević *et alii* 2006, 231, Pl. 45/23.

⁷⁹ Bóna, Horváth 2009, 260, Taf. 25/33.

⁸⁰ Bóna, Horváth 2009, 269, Taf. 34/16–6.

⁸¹ Bóna, Horváth 2009, 273, Taf. 38/10–6.

⁸² For a thorough list of such discoveries, see Kiss 2015.

⁸³ Legoux 2005, 143; 280, Pl. 40; Legoux 2011, 121.

⁸⁴ Hübener 1962; Stadler 1979, 44.

⁸⁵ Legoux 2011, 120, Fig. 133/500.

Lunel-Viel-St. Vincent in grave no. 1⁸⁶, Romans d'Isonzo in grave no. 77⁸⁷ or Helmitzheim in grave no. 16, the grave containing also two *solidi*, one issued by Justinian⁸⁸.

Important typological classifications were developed especially for the so-called Visigothic discoveries in Spain where numerous analogies for such appliques considered to be of "Germanic tradition" and dated during Nivel III (ca. 525–560 AD) in the local chronological system appear⁸⁹. Similar items were identified in numerous cemeteries among which some of the more important are Duraton, Alcala de Henares, Palazuelos, Alarilla, or Bracana⁹⁰. An interesting case regarding the dating of such appliques concerns tomb no. 1 discovered at Cubillejo de la Sierra (Guadalajara) where they were found in connection with a rectangular buckle⁹¹ dated usually during Nivel IV (ca. 560/582–600/640 AD) but might have started to be produced slightly earlier⁹². However, a recent complex micro-regional approach focused upon the cemeteries in the province of Guadalajara amended the previous chronological systems by enlarging it, and opted for a rather later dating of these types of artefacts, thus the shield-shaped buckles and appliques were included in Fase II (ca. 530–580 AD) and the rectangular buckles in Fase III (ca. 580–640 AD)⁹³.

For the Carpathian Basin (Fig. 7), the best analogy for the variant of appliques that we are dealing with comes from a stray find probably from Hungary (?), currently being kept in the collections of the Hungarian National Museum⁹⁴, but also from Mödling in grave no. 2 dated in the second third of the 6th century AD⁹⁵, Wien-Mariahilfer Gürtel in a grave dated around the middle of the third quarter of the 6th century

AD⁹⁶, Kranj in grave no. 130⁹⁷ or Rifnik in grave no. 24⁹⁸.

The general chronological tendency that one might discern after studying all the above mentioned archaeological contexts regards the dating during the third quarter of the 6th century AD for such combination of artefacts, a fact supported also by the correlated approach between the ¹⁴C analysis and the archaeological contexts performed for the Lower Austrian territory, analysis which also showed that grave no. 2 at Mödling is to be dated before 568 AD, during Stage SP3 (553–570 AD)⁹⁹; an extremely important fact having in mind the historical implications of such a dating.

5. Conclusions

The two graves presented here offer a limited, yet consistent array of data with regard to the population inhabiting the Transylvanian region during the 6th century AD. We relate here to a series of theoretical issues that might be addressed through the analysis of the funerary inventory from the above discussed graves, keeping in mind that any conclusions should be regarded as working hypotheses until further work should be carried over in this newly discovered necropolis.

The fact that the graves were not affected by secondary disturbances allowed us to undertake a thorough analysis of the funerary inventory, particularly with regard to its chronological dating and to the way in which the identified items are associated. This is especially important taking into consideration that the great majority of the 6th century necropolises connected with the Germanic milieu are heavily disturbed, consequently underlying the great potential of this site for further archaeological and cultural implications.

As such, the discovered objects represent a combination of artefacts typical for male graves dated in the second third of the 6th century AD, being associated with the eastern Germanic tribes inhabiting the area while showing strong connections with the western Merovingian cultural area¹⁰⁰. It has been noted that the Merovingian imports, being understood as an expansion of the Merovingian world eastwards¹⁰¹, occur in the Carpathian Basin unevenly, although their main route of diffusion seems to be represented by the

⁸⁶ Pinar Gil, Ripoll 2007, 68, Abb. 3/A.

⁸⁷ Martin 2000, 175, Abb. 12/1.

⁸⁸ Martin 2000, 192 no. 8; 189, Abb. 14/13; Martin 2008, 170, Abb. 9.23.

⁸⁹ Ripoll López 1986, 155; 309; Ripoll López 1998, 50–52; 51, Fig. 2/20; Ebel-Zepezauer 2000, 77–78. For a slightly longer dating of Nivel III (ca. 525–568/580 AD) see Barroso, De Pablos 2006, 724–729.

⁹⁰ Ripoll López 1986, 423; 463; 483; 503/4–5; 586/24. For a comprehensive list of all the cemeteries containing such artefacts see more recently Ebel-Zepezauer 2000, 309, Liste 13k.

⁹¹ Cerdeño *et alii* 2015, 219–221.

⁹² Ripoll López 1998, 56–60; 57, Fig. 3.

⁹³ Pardo, Ramos 2010, 138–140; 142, Fig. 16; Baztán 2010, 218.

⁹⁴ Csallány 1961, Taf. CCI/7.

⁹⁵ Stadler 1979, 35, Abb. 5–206; 46. In this particular case we are dealing with a grave belonging to a woman.

⁹⁶ Tobias *et alii* 2010, 289–291; 289, Abb. 8/1–2.

⁹⁷ Martin 2000, 166 note 96; 167, Abb. 6/7.

⁹⁸ Martin 2000, 173, Abb. 11/9.

⁹⁹ Stadler *et alii* 2003, 268; Tab. 1; Tab. 3; Abb. 15–15.

¹⁰⁰ Bóna 1992, 89; Curta 2001, 198–200.

¹⁰¹ Quast 2008.

Danube¹⁰². Although we are dealing with a limited number of funerary contexts, parallels for this assemblage can be found in the “Hegykő horizon”, typical for northern Hungary, southern Austria, and the Burgenland region¹⁰³.

This discovery allows for future investigations regarding topics such as population movement, cultural and social identity, ways of self-representation, or group membership and integration, all of which can contribute to the modern way of approaching the sensitive subject of Early Medieval ethnicity. Therefore, one should understand the Early Medieval kingdoms not necessarily as ethnical and cultural entities, but rather as a political entity driven by certain unitary political goals¹⁰⁴.

The dating of the funerary assemblages from Nădlac therefore reflects the turbulent environment which can be connected to the political and military events that took place before the settling of the Avar rule in this region and which were described by the ancient narrators as taking place around the years 567/568 AD¹⁰⁵. In this context, taking into consideration the account of Paulus Diaconus regarding the migration of the Lombards to Italy¹⁰⁶ and also the defeat of the Gepids by the Avars¹⁰⁷, one should address the problem of the surviving Germanic elements as part of the Early Avar kingdom¹⁰⁸, but also the problem of this entire region seen as a “no man’s land” or buffer zone between different Barbarian populations and the Byzantine Empire.

Having all these in mind, it is quite clear that future work carried over at this necropolis is obviously necessary and should be undertaken with great caution, given the fact that, at least at a

¹⁰² Koncz 2014, 91–92.

¹⁰³ Bóna, Horváth 2009, 199; Tobias *et alii* 2010, 285; Koncz 2014, 89–90.

¹⁰⁴ Barbiera 2008, 403; Kazanski, Périn 2009, 161; Alt *et alii* 2014; Koncz 2015, 335; Pinar Gil 2015, 261–262.

¹⁰⁵ Curta 2001, 191–195; Tobias *et alii* 2010, 301–303.

¹⁰⁶ Paulus Diaconus, *Historia Langobardorum* II, 7: «Tunc Alboin sedes propias, hoc est Pannoniam, amicis suis Hunnis contribuit, eo scilicet ordine, ut, si quo tempore Langobardis necesse esset reverti, sua rursus arva repeterent. Igitur Langobardi, relicta Pannonia, cum uxoribus et natis omnique supellectili Italiam properant possessuri. Habitaverunt antem in Pannonia annis quadraginta duobus. De qua egressi sunt mense aprili, per indictionem primam, alio die post sanctum Pascha, cuius festivitas eo anno iuxta calculi rationem ipsis Kalendis aprilis fuit, cum iam a Domini incarnatione anni quingenti sexaginta octo essent evoluti.»

¹⁰⁷ *IstRom*, vol. 2, 837–841; Stanciu 2002; Stanciu 2011, 68.

¹⁰⁸ Stadler *et alii* 2003; Bârză, Harhoiu 2008, 528–530; Vida 2008; Dobos 2009a; Dobos 2012; Dobos 2013; Koncz 2015.

theoretical level, the graves seem to be in a good state of preservation and therefore its research can offer valuable information regarding the general trends typical for the 6th century AD in this micro-region.

List 1. Distribution of the double-sided combs with punched decoration in the Carpathian Basin

1. Adorjan (see Bíró 2002, 43)
2. Bratei (see Bârză 1994–1995, 258–259; 291, Fig. 17/9; 11)
3. Căpușu Mare (see Dobos 2009, 220; 226, Fig. 4/10.)
4. Florești-Polus Center (see Ferencz *et alii* 2009, 472, Pl. XVI/1; 474. Pl. VXIII/4)
5. Galații Bistriței (see Harhoiu 2008, 189; 223, Abb. 20/Typ 06)
6. Gyula-Kalvaria Flur (see Csallány 1961, Taf. CXCI/18)
7. Hódmezővásárhely-Gorzsa (see Csallány 1961, Taf. CCXXX/11)
8. Hódmezővásárhely-Kishomok (see Bóna, Nagy 2002, 98)
9. Iclod (see Hica-Cîmpeanu 1978, 289; Cseh 1990, 55)
10. Kisterenye (see Csallány 1961, Taf. CCXXVI/3)
11. Kiszombor (see Csallány 1961, Taf. CXVIII/3; CXXIV/21; CXXV/1; CXXVI/10)
12. Magyarcsanak-Bokény (see Cseh *et alii* 2005, 255; Taf. 25/36–1)
13. Magyartés (see Bíró 2002, 43)
14. Morești (see Horedt 1979, 155; Fig. 5)
15. Nădlac
16. Rétközberecs (see Bíró 2002, 43)
17. Ebendorf (see Csallány 1961, Taf. CCLXVIII/3)
18. Szentés-Berekhát (see Csallány 1961, Taf. LI/5; LII/1; LIII/17; LXI/1; LXXIV/9; LXXXII/1; LXXXIII/11; LXXXVI/2)
29. Szentés-Kökényzug (see Csallány 1961, Taf. VI/2)
20. Szentés-Nagyhegy (see Csallány 1961, Taf. XXXVI/14)
21. Szolnok-Szanda (see Bóna, Nagy 2002, Taf. 32/12–1, 22–1; 35/47–1, 50–1, 60–1; 36/62–2, 64–1; 37/71–1, 75–2; 38/78–1, 79–1; 39/82–2; 42/100–1, 102–1, 103–1, 107–1; 43/112–1; 44/119–1)
22. Szolnok-Zagyva-part (see Cseh *et alii* 2005, Taf. 39/18–5; 40/21–2; 48/9–1; 60/75–3)
23. Szőreg-Téglagyár (see Cseh *et alii* 2005, 145–149)
24. Ţaga (see Protase 2003, 71, Fig. 24/2; 73, Fig. 27/3)

List 2. Distribution of the tweezers with trapezoidal end in the Carpathian Basin.

1. Bezenye (see Werner 1962, Pl. 65/19–1)

2. Brunn am Gebirge (see Aspöck, Stadler 2003, 188; Taf. 17/2)
3. Hódmezővásárhely-Kishomok (see Bóna, Nagy 2002, 297, Taf. 23/82–4)
4. Ménfőcsanak (see Vaday 2015, 171, Fig. 3/5)
5. Nädlac
6. Szentcsanak (see Csallány 1961, Taf. XV/6)
7. *Viminacium* (see Ivanišević *et alii* 2006, Pl. 11/103–4; Pl. 30/151–5)

List 3. Distribution of the shield-shaped buckles in the Carpathian Basin

1. Császló (see Kiss 2015)
2. Derecske (see Kiss 2015)
3. Hajdúnánás (see Kiss 2015)
4. Hegykő (see Bóna – Horváth 2009, 240–250)
5. Hódmezővásárhely (see Kiss 2015)
6. Kajdacs-Homoklány (see Bóna, Horváth 2009, 260, Taf. 25/33)
7. Kétegyháza (see Kiss 2015)
8. Kiszombor (see Kiss 2015)
9. Mödling (see Stadler 1979)
10. Magyartés (see Kiss 2015)
11. Morești (see Horedt 1979, 186; 168, Abb. 83/4)
12. Nädlac
13. Rácalmás-Ujtelep (see Bóna, Horváth 2009, 269, Taf. 34/16–6)
14. Szentendre-Pannoniatelep (see Bóna, Horváth 2009, 273, Taf. 38/10–6)
15. Szentcsanak (see Kiss 2015)
16. Szolnok (see Kiss 2015)
17. Szőreg (see Kiss 2015)
18. Unirea-Vereșmort (see Roska 1934, Abb. 4/E.4)
19. *Viminacium* (see Ivanišević *et alii* 2006, Pl. 11/103–4; Pl. 30/151–5)

List 4. Distribution of the “double shield-shaped” appliques in the Carpathian Basin

1. Kranj (see Martin 2000, 166 note 96; 167, Abb. 6/7)
2. Mödling (see Stadler 1979, 35, Abb. 5–206; 46)
3. Nädlac
4. Rifnik (see Martin 2000, 173, Abb. 11/9)
5. Wien-Mariahilfer Gürtel (see Tobias *et alii* 2010, 289–291; 289, Abb. 8/1–2)

ABBREVIATIONS:

- L. = length
 T. = thickness
 T.e. = thickness of the exterior part
 T.i. = thickness of the interior part
 T.pin = thickness of the pin
 W.u.e. = width of the upper extremity
 W.i.e. = width of the inferior extremity

REFERENCES

- Alt *et alii* 2014
 K. W. Alt, C. Knipper, D. Peters, W. Müller, A.-F. Maurer, I. Kolling, N. Nicklisch, C. Müller, S. Karimnia, G. Brandt, C. Roth, M. Rosner, B. Mende, B. R. Schöne, T. Vida, U. Von Freeden, Lombards on the move – an integrative study of the Migration Period cemetery at Szólád, Hungary. *PlosOne* 9, 11, (2015), 1–15.
- Aspöck 2003
 E. Aspöck, Graböffnungen im Frühmittelalter und das Fallbeispiel der langobardenzeitlichen Gräber von Brunn am Gebirge, Flur Wolfholz, Niederösterreich. *ArchAustr* 87, (2003), 225–264.
- Aspöck 2008
 E. Aspöck, What Actually is a ‘Deviant Burial’? Comparing German-Language and Anglophone Research on ‘Deviant Burials’. (E. M. Murphy), *Deviant Burial in the Archaeological Record*, Oxford (2008), 17–34.
- Aspöck 2011
 E. Aspöck, Past ‘Disturbances’ of Graves as a Source: Taphonomy and Interpretation of Reopened Early Medieval Inhumation Graves at Brunn am Gebirge (Austria) and Winnall II (England). *OJA* 30, 3, (2011), 299–324.
- Aspöck, Stadler 2003
 E. Aspöck, P. Stadler, Die Langobardenzeitlichen Gräber von Brunn am Gebirge, Flur Wolfholz, Niederösterreich. *ArchAustr* 87, (2003), 169–223.
- Aufderheide, Rodriguez-Martin 1998
 A. C. Aufderheide, C. Rodriguez-Martin, *The Cambridge Encyclopedia of Human Paleopathology* (3rd edition), Cambridge (1998).
- Barbiera 2008
 I. Barbiera, Gender, age and social construction in Lombard period cemeteries in Hungary. *Antaeus* 29–30, (2008), 403–413.
- Barbu *et alii* 1999
 M. Barbu, P. Hügel, G. P. Hurezan, E. D. Pădureanu, *Repertoriul arheologic al Mureșului Inferior. Județul Arad, Timișoara* (1999).
- Barroso, De Pablos 2006
 R. Barroso, J. M. De Pablos, Arqueología funeraria de época visigoda en la Comunidad de Madrid: la toréutica. *ZA* 8, vol. III, Madrid (2006), 716–732.
- Baztán 2010
 P. O. Baztán, La necrópolis altomedievales de Loranca (Fuenlabrada, Madrid). (J. Pinar Gil and T. J. Villena), *Contextos funeraris a la Mediterrània nord-occidental (segles V–VIII)* [Gausac 34–35], Sant Cugat del Vallès (2010), 211–222.

Bârză 1994–1995

L. Bârză, La station no 1 de Bratei, dép. de Sibiu (IV^e–VII^e siècles) avec une expertise de Maria Bulai-Știrbu. *Dacia (N.S.)* 38–39, (1994–1995), 239–295.

Bârză 2010

L. Bârză, *Ein gepidisches Denkmal aus Siebenbürgen. Das Gräberfeld 3 von Bratei (bearbeitet von Radu Harhoiu)*, Cluj-Napoca (2010).

Bârză, Harhoiu 2008

L. Bârză, R. Harhoiu, Gepiden als Nachbarn der Langobarden und das Gräberfeld von Bratei. (J. Bemmann und M. Schmauder), *Kulturwandel in Mitteleuropa. Langobarden – Awaren – Slawen. Akten des Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008*, Bonn (2008), 513–578.

Bíró 2002

M. T. Bíró, Combs and comb-making in Roman Pannonia: ethnical and historical aspects. (J. Tejral), *Probleme der frühen Merowingerzeit im Mitteldonauraum*, Brno (2002), 31–71.

Böhner 1958

K. Böhner, *Die Fränkischen Altertümer des Trierer Landes*, Berlin (1958).

Bóna 1992

I. Bóna, *Histoire de la Transylvanie*, Budapest (1992).

Bóna, Nagy 2002

I. Bóna, M. Nagy, *Gepidische Gräberfelder am Theissgebiet*, vol. I, Budapest (2002).

Bóna, Horváth 2009

I. Bóna, J. B. Horváth, *Langobardische Gräberfelder in West-Ungarn*, Budapest (2009).

Buikstra, Ubelaker 1994

J. E. Buikstra, D. H. Ubelaker, *Standards For Data Collection from Human Skeletal Remains. Arkansas Archaeological Survey Research Series No. 44*, Arkansas (1994).

Capasso et alii 1999

L. Capasso, K. A. R. Kennedy, C. A. Wilczak, *Atlas of Occupational Markers on Human Remains*, Teramo (1999).

Carré, Jimenez 2008

F. Carré, F. Jimenez, *Louviers (Eure) au haut Moyen Âge. Découvertes anciennes et fouilles récentes du cimetière de la rue du Mûrier*, Saint Germain-en-Laye (2008).

Cerdeño et alii 2015

L. Cerdeño, E. Gamo, M. Chorda, Una nueva necropolis de época visigoda en Cubillejo de la Sierra (Guadalajara, España). (G. Branco, L. Rocha, C. Duarte, J. de Oliveira and P. B. Ramírez), *Arqueologia de Transição: O Mundo Funerário. Actas do II Congresso Internacional Sobre Arqueologia de Transição (29 de Abril a 1 de Maio 2013)*, Chaia (2015), 217–223.

Csallány 1961

D. Csallány, *Archäologische Denkmäler der Gepiden im Mitteldonaubecken: (454–568 u. Z.)*, Budapest (1961).

Cseh 1990

J. Cseh, Adatok az V–VII. századi gepida emléktárgy egységéhez. *SzMMÉ* 7, (1990), 29–77.

Cseh et alii 2005

J. Cseh, E. Istvánovits, E. Lovász, K. Mesterházy, M. Nagy, I. M. Nepper, E. Simonyi, *Gepidische Gräberfelder am Theissgebiet*, vol. II, Budapest (2005).

Curta 2001

F. Curta, *The Making of the Slavs. History and Archaeology of the Lower Danube Region (c. 500–700)*, Cambridge (2001).

Dobos 2009

A. Dobos, Gepidic finds from Căpușu Mare (Cluj County). *EphNap* 19, (2009), 219–242.

Dobos 2009a

A. Dobos, The Reihengräberfelder in Transylvania after 100 years of archaeological research. *ActaArchCarp* 44, (2009), 1–36.

Dobos 2012

A. Dobos, Gepidák vagy avarok? Az erdélyi kora avar kori soros temetők kutatásának Kérdésről / Gepids or Avars? Problems related to the research of the row-grave cemeteries from the Early Avar Period in Transylvania. *DolgCluj* 16–17, (2011–2012), 93–116.

Dobos 2013

A. Dobos, Gepizii din Transilvania în epoca avară timpurie din perspectiva arheologiei. Probleme legate de cercetarea cimitirelor cu morminte dispuse în șiruri paralele. *ActaMP* 35, (2013), 247–270.

Dobos 2015

A. Dobos, Notes on artefacts with punched decoration discovered in the late row-grave cemeteries in Transylvania. (S. Cociș, V.-A. Lăzărescu, M. Gui and D.-A. Deac), *Ad Finem Imperii Romani. Studies in honour of Coriolan H. Opreanu*, Cluj-Napoca (2015), 107–128.

Dobos, Opreanu 2012

A. Dobos, C. H. Opreanu, *Migration Period and Early Medieval Cemeteries at Fântânele (Bistrița-Năsăud County)*, Cluj-Napoca (2012).

Ebel-Zepezauer 2000

W. Ebel-Zepezauer, *Studien zur Archäologie der Westgoten vom 5.–7. Jh. n. Chr.*, Mainz (2000).

Ferencz et alii 2009

Sz. Ferencz, Sz. Nagy, V.-A. Lăzărescu, Necropola din secolul al VI-lea p. Chr. / The sixth century AD necropolis. (S. Mustață, F. Gogâltan, S. Cociș and A. Ursuțiu),

Cercetări arheologice preventive la Florești – Polus Center, jud. Cluj (2007) / Rescue excavations at Florești – Polus Center, Cluj County (2007), Cluj-Napoca (2009), 419–474.

von Freeden – Vida 2007

U. von Freeden, T. Vida, Ausgrabung des langobardenzeitlichen Gräberfeldes von Szólád, Komitat Somogz, Ungarn. *Germania* 85, 2, (2007), 359–384.

Harhoiu 1998

R. Harhoiu, *Die frühe Völkerwanderungszeit in Rumänien*, București (1998).

Harhoiu 2008

R. Harhoiu, Das gepidische Gräberfeld von Galații Bistriței. *RevB* 22, (2008), 183–241.

Harhoiu, Baltag 2006

R. Harhoiu, Gh. Baltag, *Sighișoara „Dealul Viilor”*. *Monografie arheologică*, vol. I, Bistrița – Cluj-Napoca (2006).

Hica, Cîmpeanu 1978

I. Hica-Cîmpeanu, Un grup de morminte din secolul al VII-lea e.n. la Iclod (jud. Cluj) / Eine Gräbergruppe aus dem 7. Jh. u. Z. in Iclod (Kreis Cluj). *ActaMN* 15, (1978), 287–294.

Hilger 2010

A. Hilger, Das Prunkgrab von Planig. Neuarbeitung eines Altfundes. *MZ* 105, (2010), 41–86.

Horedt 1979

K. Horedt, *Morești. Grabungen in einer vor- und frühgeschichtlichen Siedlung in Siebenbürgen*, Bukarest (1979).

Hübener 1962

W. Hübener, Schildförmige Gürtelhaften der Merowingerzeit in Spanien und Mitteleuropa. *MM* 3, (1962), 152–176.

Işcan et alii 1984

M. Y. Işcan, S. R. Loth, R. K. Wright, Metamorphosis at the Sternal Rib End: A New Method to Estimate Age at Death in White Males. *AJPA* 65, (1984), 147–156.

Ivanišević et alii 2006

V. Ivanišević, M. Kazanski, A. Mastykova, *Les nécropoles de Viminacium à l'époque des Grandes Migrations*, Paris (2006).

Kazanski 2002

M. Kazanski, *La nécropole gallo-romaine et mérovingienne de Breny (Aisne) d'après les collections et les archives du Musée des Antiquités Nationales*, Montagnac (2002).

Kazanski, Périn 2009

M. Kazanski, P. Périn, “Foreign” objects in the Merovingian cemeteries of Northern Gaul. (D. Quast), *Foreigners in Early Medieval Europe. Thirteen International Studies on Early Medieval Mobility*, Mainz (2009), 149–167.

Kiss 2015

C. Kiss, Pajzstövisek csatok a Kárpát-Medencei gepida területeken (az avar foglalásig). *DolgCluj* 18, (2015), 5–36.

Klevnäs 2007

A. M. Klevnäs, Robbing the dead at Gamla Uppsala, Sweden. *ArchRevC* 22, 1, (2007), 24–42.

Klevnäs 2013

A. M. Klevnäs, *Whodunnit? Grave Robbery in Anglo-Saxon England and the Merovingian Kingdoms*, Oxford (2013).

Klevnäs 2015

A. M. Klevnäs, Abandon Ship! Digging out the Dead from the Vendel Boat-Graves. *NAR* 48, 1, (2015), 1–20.

Klevnäs 2015

A. M. Klevnäs, Give and take: grave goods and grave robbery in the early middle ages. (A. M. Klevnäs and C. Hedenstierna-Jonson), *Own and be owned. Archaeological approaches to the concept of possession*, Stockholm (2015), 157–188.

Koch 2001

U. Koch, *Das alamansich-fränkische Gräberfeld bei Pleidelsheim*, vol. I–II, Stuttgart (2001).

Koncz 2014

I. Koncz, A hegyköi 6. századi temető időrendje és kapsolatrendszer. *ArchÉrt* 139, (2014), 71–98.

Koncz 2015

I. Koncz, 568 – A historical date and its archaeological consequences, *ActaArchHung* 66, (2015), 315–340.

Kümmel 2009

C. Kümmel, *Ur- und frühgeschichtlicher Grabraub. Archäologische Interpretation und kulturantropologische Erklärung*, Münster-New York-München-Berlin (2009).

Lăzărescu 2011

V.-A. Lăzărescu, A funerary assemblage belonging to the Great Migration Period from Florești „Polus Center”, Cluj County, RO. *Instrumentum* 33, juin, (2011), 16–18.

Legoux 2005

R. Legoux, *La nécropole mérovingienne de Cutry (Meurthe-et-Moselle)*, Saint Germain-en-Laye (2005).

Legoux 2011

R. Legoux, *La nécropole mérovingienne de Bulles (Oise)*, vol. I–II, Saint Germain-en-Laye (2011).

Lovell 1997

N. C. Lovell, Trauma Analysis in Paleopathology. *YPA* 40, (1997), 139–170.

Martin 1986

M. Martin, Le Haut Moyen Age. In *Chronologie*.

- Datation archéologique en Suisse*, Bâle (1986), 99–117; 178–191.
- Martin 1989
M. Martin, Bemerkungen zur chronologischen Gliederung der frühen Merowingerzeit. *Germania* 67, 1, (1989), 121–141.
- Martin 2000
M. Martin, Mit Sax und Gürtel. Ausgestattete Männergräber des 6. Jahrhunderts in der Nekropole von Kranj (Slowenien). (R. Bratož), *Slowenien und die Nachbarländer zwischen Antike und Karolingischer Epoche. Anfänge der Slowenische Ethnogenese*, Ljubljana (2000), 141–198.
- Martin 2008
M. Martin, Die absolute Datierung der Männergürtel im merowingischen Westen und im Awarenreich. *Antaeus* 29–30, (2008), 143–173.
- Meindl *et alii* 1985
R. S. Meindl, C. O. Lovejoy, R. P. Mensforth, R. A. Walker, A Revised Method of Age Determination Using the Os Pubis With a Review and Tests of Accuracy of Other Current Methods of Pubic Symphyseal Aging. *AJPA* 68, (1985), 29–45.
- Nieveler, Siegmund 1999
E. Nieveler, F. Siegmund, The Merovingian chronology of the Lower Rhine Area: results and problems. (J. Hines, K. Høilund Nielsen and F. Siegmund), *The Pace of Time. Studies in Early-Medieval Chronology*, Oxford (1999), 3–20.
- Ortner 2003
D. J. Ortner, *Identification of Pathological Conditions in Human Skeletal Remains* (2nd edition), London (2003).
- Pardo, Ramos 2010
E. D. Pardo, R. C. Ramos, Las necropolis de época visigoda en la provincial de Guadalajara. Una revisión crítica. (J. Pinar Gil and T. J. Villena), *Contextos funeraris a la Mediterrània nord-occidental (segles V–VIII)* [Gausac 34–35], Sant Cugat del Vallès (2010), 131–143.
- Petković 1995
S. Petković, *Rimski predmeti od kosti i roga sa teritorije Gornje Mezije / The Roman Items of Bone and Antler from the Territory of Upper Moesia*, Beograd (1995).
- Pilet 2002
C. Pilet, Réflexions sur le fibules en «S» découvertes en Normandie. (J. Tejral), *Probleme der Merowingerzeit im Mitteldonauraum*, Brno (2002), 247–272.
- Pinar Gil 2015
J. Pinar Gil, Local realities and continental – wide fashions. Some paradoxes on 5th–6th century clothing ornaments in the west Mediterranean Provinces (and beyond). (D. Boschung, M. Danner and Ch. Radtki), *Politische Fragmentierung und Kulturelle Kohärenz in der Spätantike*, Paderborn (2015), 249–290.
- Pinar Gil, Ripoll 2007
J. Pinar Gil, G. Ripoll, Männergräber in Aquitanien, Septimanien und Hispanien (ca. 450–520). Neue Überlegungen. *APA* 39, (2007), 65–92.
- Protase 2003
D. Protase, *Țaga. Două așezări din perioada finală a etnogenezei românilor (sec. IV–VI și sec. VII–VIII)*, Cluj-Napoca (2003).
- Quast 2008
D. Quast, Funde aus dem fränkisch-alamannischen Gebiet im langobardenzeitlichen Pannonien. (J. Bemmann), *Kulturwandel in Mitteleuropa. Langobarden – Awaren – Slawen. Kolloquien zur Vor- und Frühgeschichte 11.*, Bonn (2008), 399–413.
- Ripoll López 1986
G. Ripoll López, *La Ocupación visigoda en época romana a través de sus necrópolis (Hispania)*, Barcelona (1986).
- Ripoll López 1986
G. Ripoll López, *Toréutica de la Bética (siglos VI y VII D.C.)*, Barcelona (1998).
- Roska 1934
M. Roska, Das gepidische Gräberfeld von Verešmort-Marosveresmart (Turda-Tordaaranys, Siebenbürgen). *Germania* 18, (1934), 123–130.
- Roth 1978
H. Roth, Archäologische Beobachtungen zum Grabfrel im Merowingerreich. (H. Jankuhn, H. Nehlsen und H. Roth), *Zum Grabfrel in vor- und frühgeschichtlicher Zeit. Untersuchungen zu Grabraub und „haugbrot“ in Mittel- und Nordeuropa*, Göttingen (1978), 53–84.
- Roht, Theune 1988
H. Roth, C. Theune, *Zur Chronologie merowingerzeitlicher Frauengräber in Südwestdeutschland*, Stuttgart (1988).
- Siegmund 1995
F. Siegmund, Kleidung und Bewaffnung der Männer im östlichen Frankenreich. (A. Wiczorek, P. Périn, K. v. Welck und W. Menghin), *Die Franken – Wegbereiter Europas. Vor 1500 Jahren: König Chlodwig und seine Erben. Ausstellungskatalog 2.*, Mainz (1995), 691–706.
- Stadler 1979
P. Stadler, Das langobardische Gräberfeld von Mödling, Niederösterreich. *ArchAustr* 63, (1979), 31–47.
- Stadler *et alii* 2003
P. Stadler, H. Friesinger, W. Kutschera, A. Priller, P. Steier, E. M. Wild, Ein Beitrag zur Absolutchronologie der Langobarden Aufgrund von ¹⁴C-datierungen und ein

Versuch zur Datierung der Beraubung Langobardischer Gräber. *ArchAustr* 87, (2003), 265–278.

Stanciu 2002

I. Stanciu, Gepizi, avari și slavi timpurii (sec. V–VII p. Chr.) în spațiul vestic și nord-vestic al României. *EphNap* 12, (2002), 203–236.

Stanciu 2011

I. Stanciu, *Locuirea teritoriului nord-vestic al României între antichitatea târzie și perioada de început a epocii medievale timpurii: (mijlocul sec. V – sec. VII timpuriu) / The habitation of the north-western territory of Romania between the Late Antiquity and the beginning period of the Early Middle Ages: (the middle of the 5th century – early 7th century)*, Cluj-Napoca (2011).

Stanciu et alii 2007

I. Stanciu, F. Gogâltan, E. Apai, M. Ardeleanu, Sz. Ferencz, V. Sava, T. Daroczi, A. Dobos, Zs. Komaromi, G. Fodor, F. Ardelean, I. Marchiș, D. Tanasiciuc, V. Lăzărescu, L. Irimuș, D. Culic, A. Cociș, T. Kiss, E. Marchiș, A. Moraru, A. Sucala, A. Antal, M. Gui, E. Zalomi, F. Milașan, M. M. Diacu, Vlaha, com. Săvădisla, jud. Cluj, Punct: Pad (Autostrada Brașov-Borș, tronson 2B, km. 43+000–44+000). *CCA. Campania 2006*, București (2007), 393–395.

Steckel et alii 2011

R. H. Steckel, C. S. Larsen, P. W. Sciulli, P. L. Walker, *Data Collection Codebook for the Global History of Health Project*. (http://global.sbs.ohio-state.edu/new_docs/Codebook-01-24-11-em.pdf).

Tobias et alii 2010

B. Tobias, K. Wiltshcke-Schrotta, M. Binder, Das Langobardenzeitliche Gräberfeld von Wien-Mariahilfer Gürtel. *JRZM* 57, (2010), 279–337.

Trotter, Gleser 1958

M. Trotter, G. C. Gleser, A re-evaluation of estimation of stature based on measurements of stature taken during life and of long bones after death. *AJPA* 16, (1958), 79–123.

Truc et alii 2009

M.-C. Truc, B. Bell, H. Cabart, T. Calligaro, S. Fischer, C. Paresys, W. Tegel, J.-H. Yvinec, Trois riches

tombes du VI^e siècle sur le site de «La Tuilerie» à Saint-Dizier (Haute-Marne). (J. Guillaume et É. Peytremann), *L'Austrasie. Société, économies, territoires, christianisation. Actes des XXVI^e Journées internationales d'archéologie mérovingienne, Nancy 2–25 septembre 2005, Mémoires publiés par l'AFAM*, tome XIX, Nancy (2009), 313–329.

Urlacher et alii 1998

J. P. Urlacher, F. Passard, S. Manfredi-Gizard, *La nécropole mérovingienne de la Grande Oye à Doubs, Département du Doubs*, Saint Germain-en-Laye (1998).

Vaday 2015

A. Vaday, The Langobard cemetery at Ménfőcsanak. *Antaeus* 33, (2015), 163–242.

Vercellotii et alii 2009

G. Vercellotti, A. M. Agnew, H. M. Justus, P. W. Sciulli, Stature Estimation in an Early Medieval (XI–XII c.) Polish Population: Testing the Accuracy of Regression Equations in a Bioarchaeological Sample. *AJPA* 140, (2009), 135–142.

Vida 2008

T. Vida, Conflict and coexistence: the local population of the Carpathian Basin under Avar rule (sixth to seventh century). (F. Curta), *The other Europe in the Middle Ages. Avars, Bulgars, Khazars and Cumans*, Leiden – Boston (2008), 13–46.

Waldron 2009

T. Waldron, *Palaeopathology*, Cambridge (2009).

Werner 1962

J. Werner, *Die Langobarden in Pannonien*, München (1962).

White et alii 2012

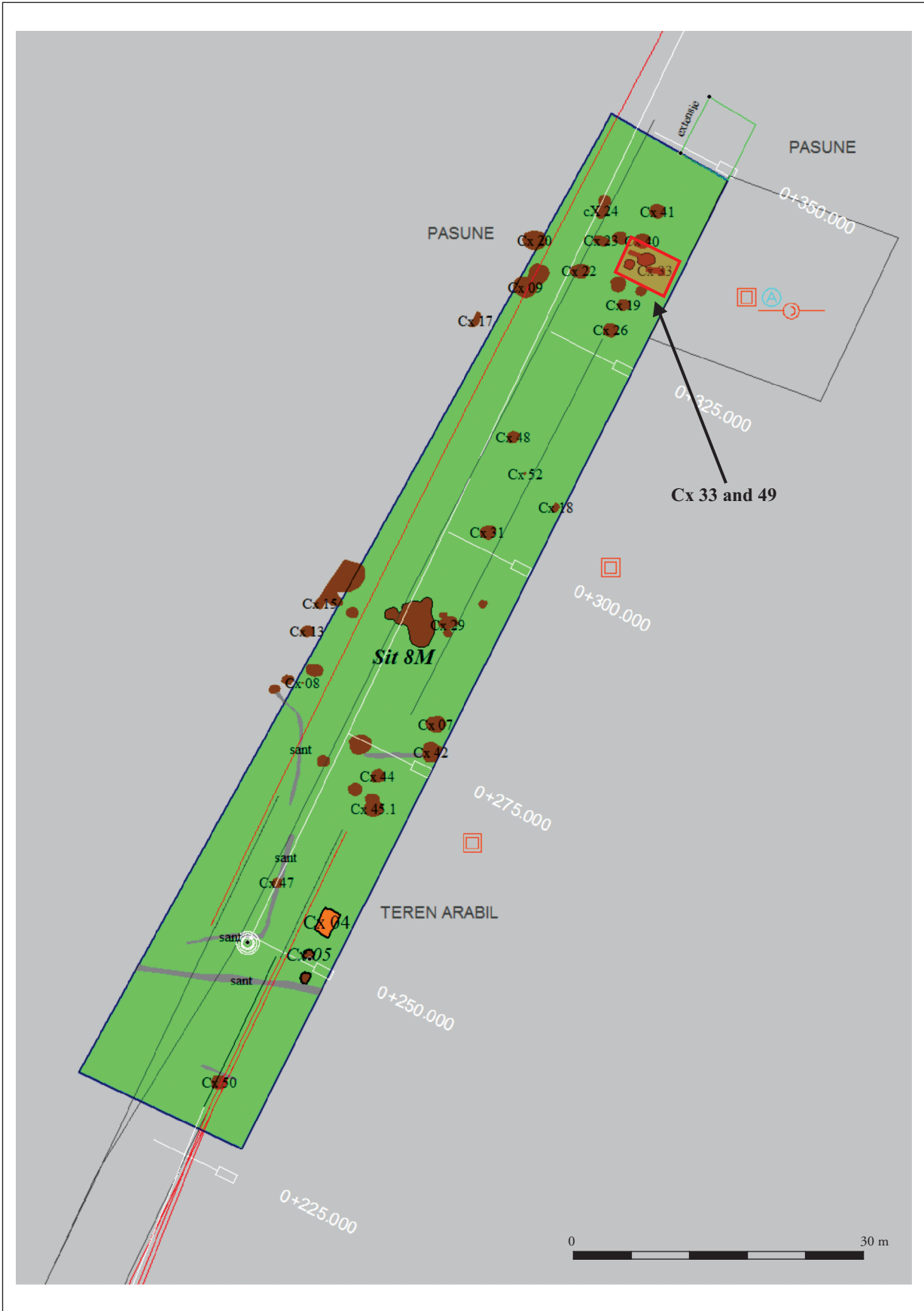
T. D. White, M. T. Black, P. A. Folkens, *Human Osteology* (3rd edition), Oxford (2012).

IstRom,

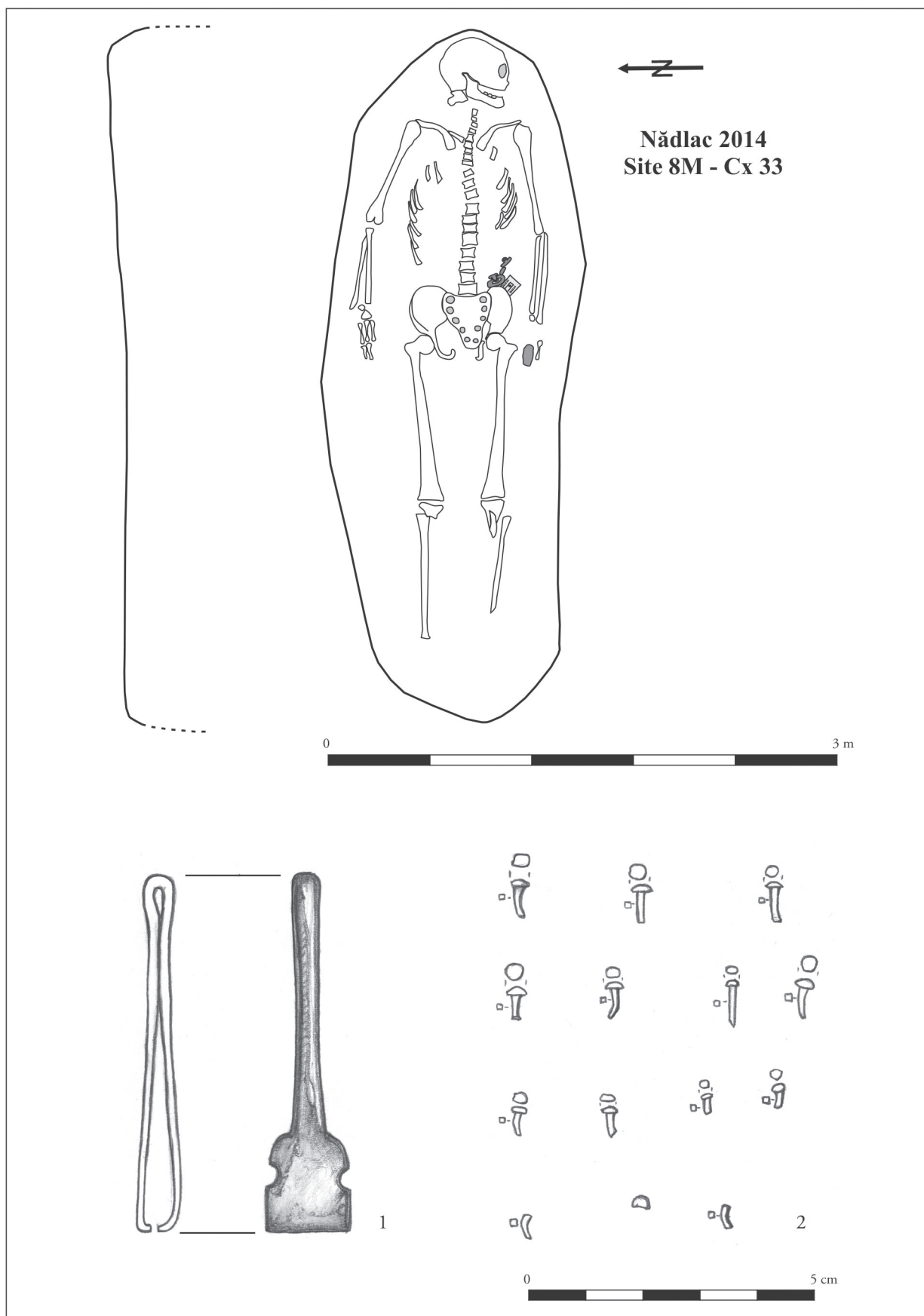
Istoria Românilor, vol 2, București (2010).

ANCIENT SOURCES

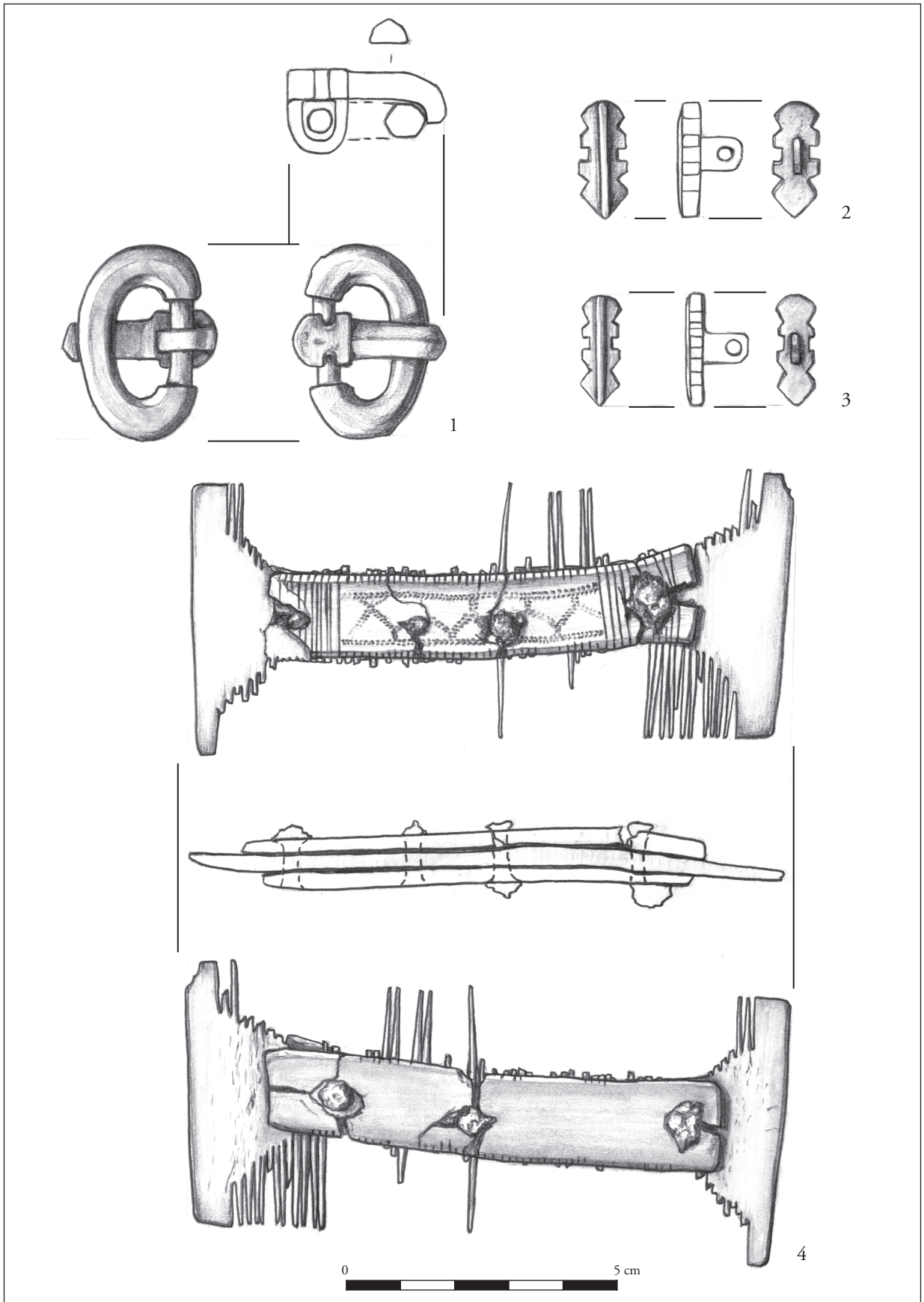
Paulus Diaconus, *Historia Langobardorum / Istoria Longobarzilor*, București (2011).



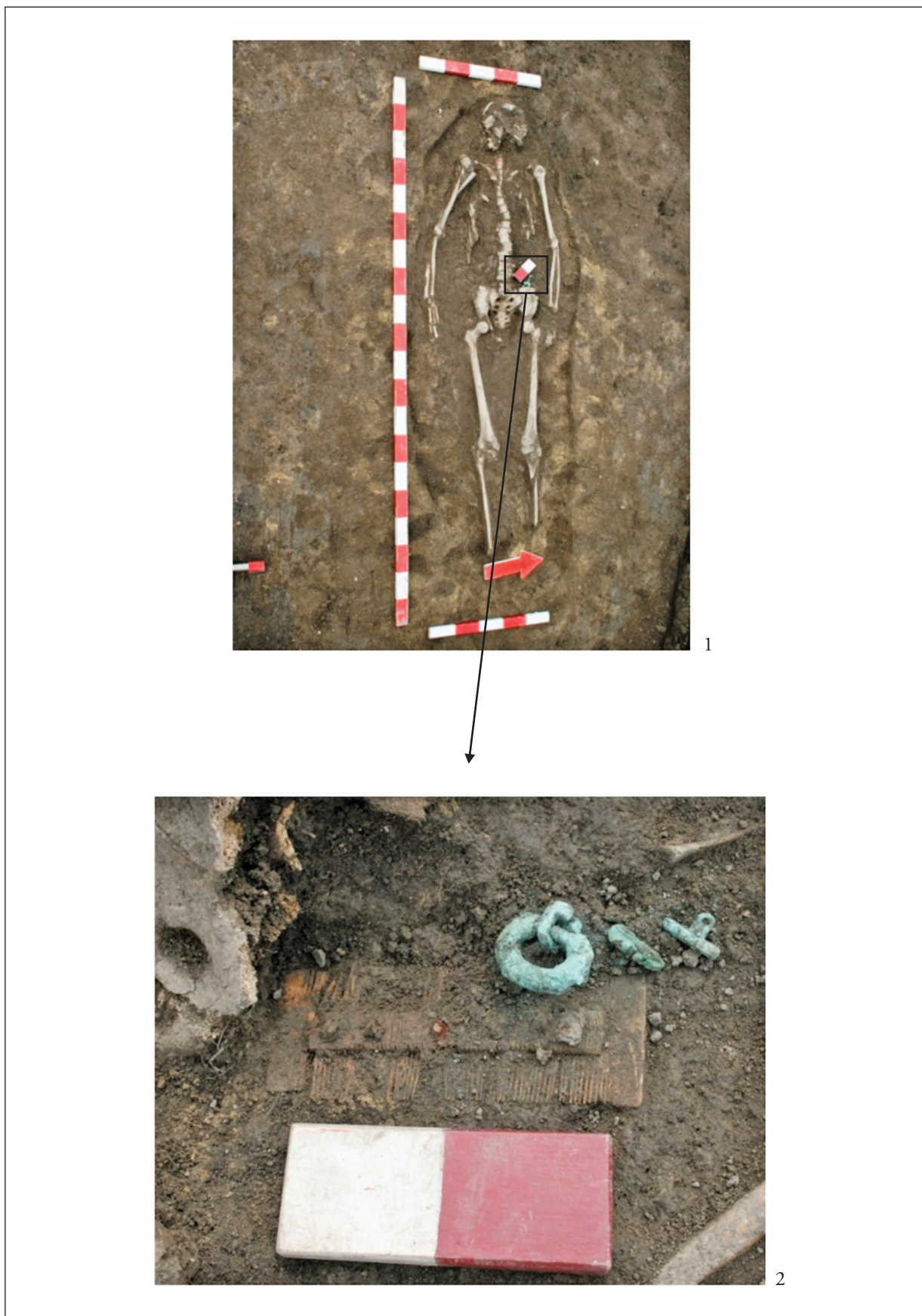
Pl. 1. Topographic plan of Site 8M at Nădlac (Arad County).



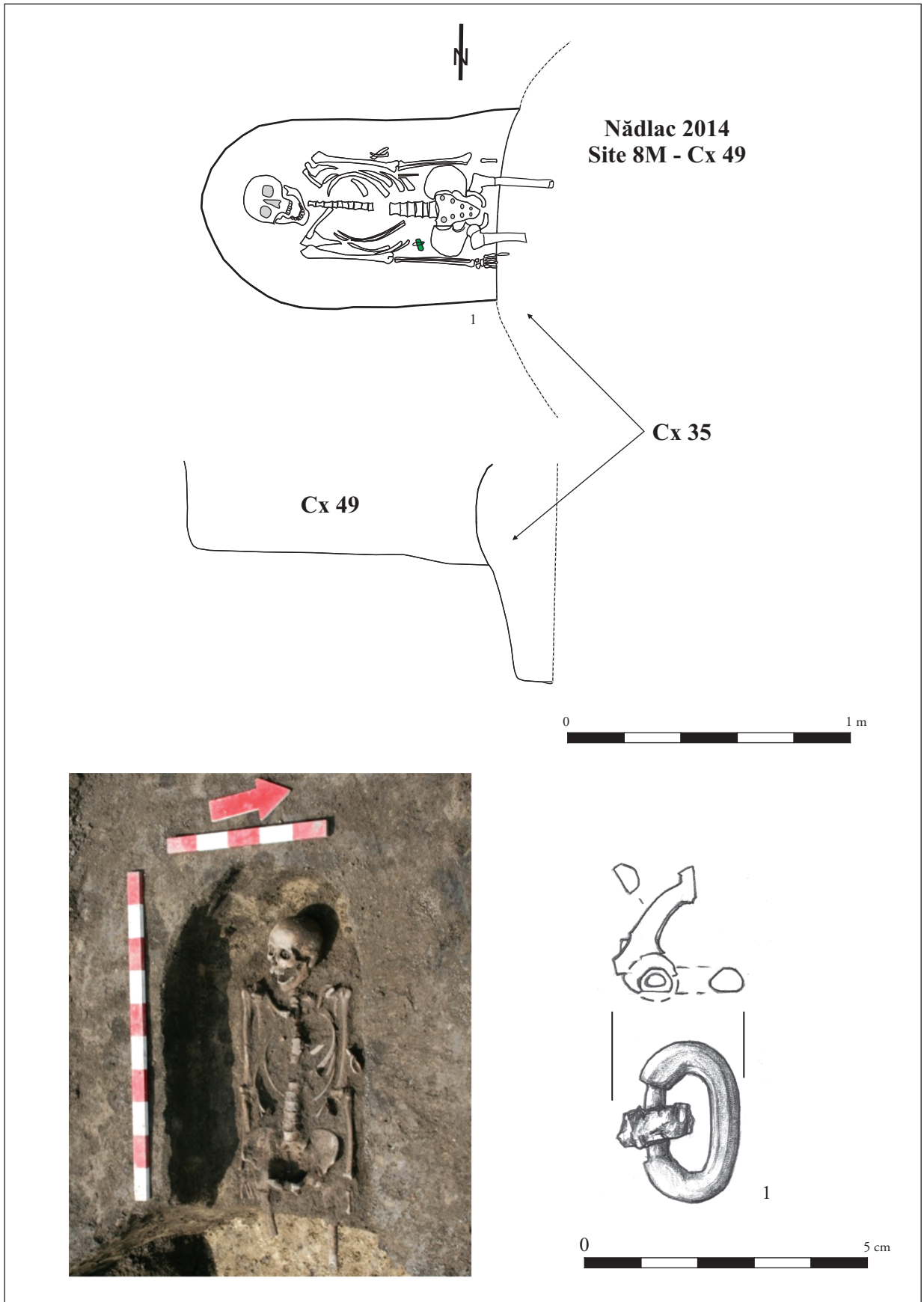
Pl. 2. Ground plan and funerary inventory of grave Cx 33.



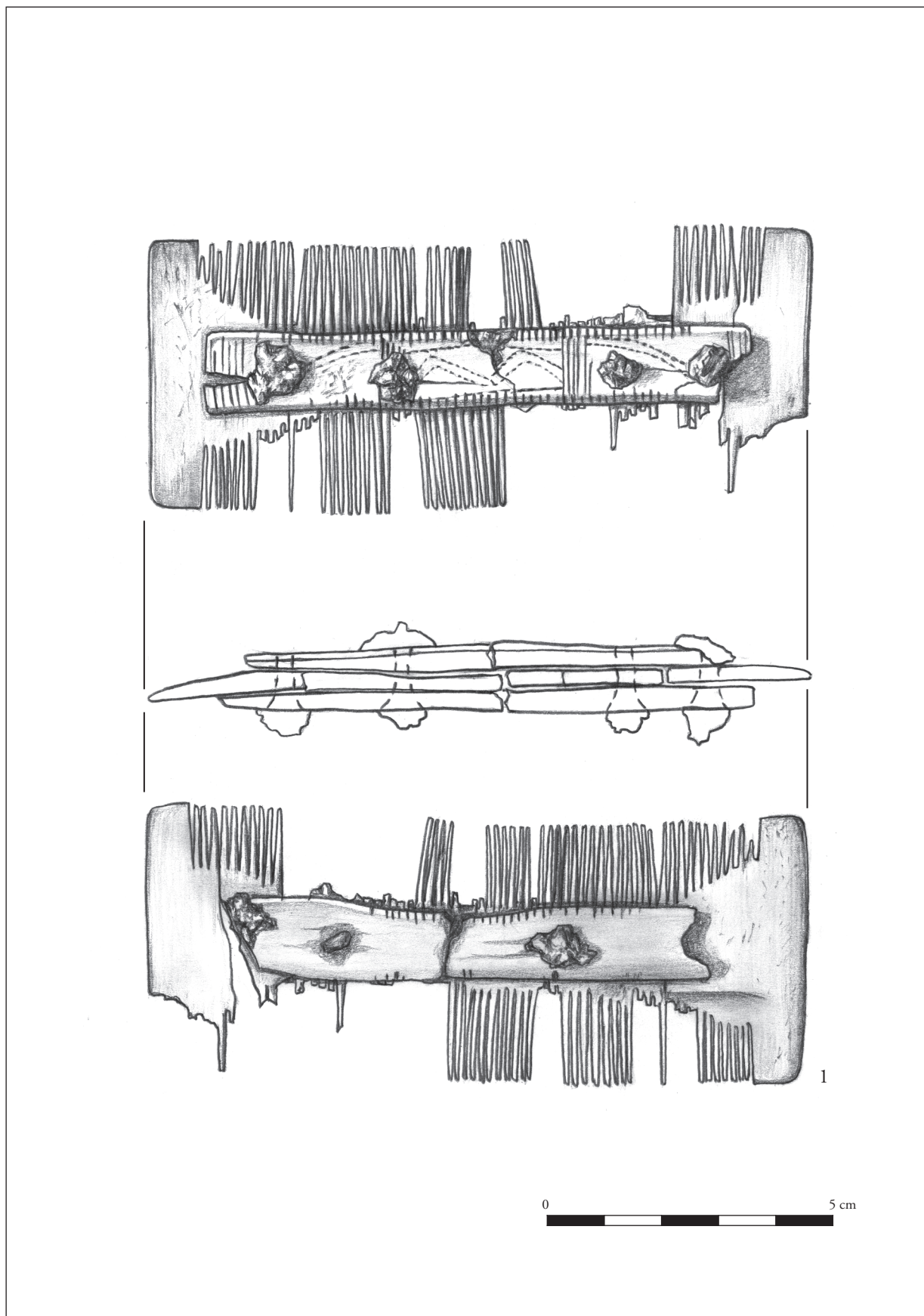
Pl. 3. Funerary inventory of grave Cx 33.



Pl. 4. Photographs of grave Cx 33 *in situ*.



Pl. 5. Ground plan, funerary inventory and *in situ* photograph of grave Cx 49.



Pl. 6. Funerary inventory of grave Cx 49.