

NOTAE NUMISMATICAE

ZAPISKI NUMIZMATYCZNE



Tom XX

MUZEUM NARODOWE W KRAKOWIE
SEKCJA NUMIZMATYCZNA
KOMISJI ARCHEOLOGICZNEJ PAN
ODDZIAŁ W KRAKOWIE

Kraków 2025

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ISSN 1426-5435

SPIS TREŚCI / CONTENTS

- 9 Od redakcji
10 From the Editors

ARTYKUŁY / ARTICLES

- WIOLETTA PAZOWSKA
13 A New Specimen of the Krakow Type Stater
Nowy egzemplarz statera typu krakowskiego
- ŁUKASZ KIEFERLING
23 Comments on the Technology of Production of Krakow Type Staters
Uwagi na temat technologii produkcji staterów typu krakowskiego
- BARBARA ZAJĄC
45 The Cultural Identity of the “City of the Blind”. Roman Provincial Coinage in Calchedon
Tożsamość kulturowa „miasta ślepców”. Rzymskie mennictwo prowincjonalne Chalcedonu
- SZYMON JELLONEK
67 Coins from the *Retentura* (Sector XIII) of the Legio I Italica Fortress in Novae
Monety z retentury (sektor XIII) obozu legionowego Legio I Italica w Novae
- LAJOS JUHÁSZ
81 A Miscast Denarius from the Hungarian Barbaricum
Wadliwie odlany denar z węgierskiego Barbaricum
- KRZYSZTOF JARZECKI
103 A Gold-plated Barbarian Imitation of a Roman Coin Found in Karczyn-Wieś in Kuyavia
Brązowe pozłacane barbarzyńskie naśladownictwo rzymskiej monety znalezione w Karczynie-Wsi na Kujawach
- JACEK PIKULSKI, KYRYŁO MYZGIN, JAROSŁAW BODZEK
125 A New Find of a Solidus of Constantine I from the Vicinity of Jakuszowice
Nowe odkrycie solidu Konstantyna I z okolic Jakuszowic

- STEPAN STEPANENKO, ERIC OLLIVIER, HENNADII SVYSTUN,
IEVHENIIA KALUHINA
- 147 Tracing Early 9th-Century Islamic Silver Flows: New Evidence from Tsarino (Mayaki) on the Donets River, Ukraine
Śledzenie napływów islamskiego srebra na początku IX wieku: nowe dowody z Tsarino (Mayaki) nad Dońcem, Ukraina
- PAWEŁ MILEJSKI, RADOSŁAW ZDANIEWICZ
- 199 Coins from the Archaeological Research at the Church of St. George in Czechowice
Monety z badań archeologicznych kościoła św. Jerzego w Czechowicach
- DARIUSZ F. JASEK
- 249 A Reassessment of the Attribution of the BB Dies of Sigismund III Vasa's 100 Ducats Issue
Rewizja atrybucji autorstwa stempli BB studukatówki Zygmunta III Wazy
- JAROSŁAW BODZEK
- 273 Zygmunt Mineyko (1840–1925) and His Gift of Ancient Greek, Roman, and Byzantine Coins to the Jagiellonian University
Zygmunt Mineyko (1840–1925) i jego dar starożytnych monet greckich, rzymskich oraz bizantyńskich dla Uniwersytetu Jagiellońskiego
- BARBARA ZAJĄC
- 311 The Paper Money Collection of the Numismatic Cabinet of the National Museum in Krakow between 1919–1949
Kolekcja pieniądza papierowego Gabinetu Numizmatycznego Muzeum Narodowego w Krakowie w latach 1919–1949

RECENZJE / REVIEWS

- JAROSŁAW BODZEK
- 343 STEFAN KRMNICEK and EREN-CAN MERAL, *Sylloge Nummorum Graecorum Deutschland. Münzsammlung der Universität Tübingen 7. Heft Ägypten: Alexandria und Gaumünzen. Augustus–Diocletianus. Nr 1–1154*, Propylaeum, Heidelberg 2025
- PAWEŁ KOCHAŃSKI
- 346 PIERLUIGI DEBERNARDI, *Roman Republican Silver Coins*. Vol. 1: *Beginnings – 200 BC*, Artemide Aste s.r.l., San Marino 2024

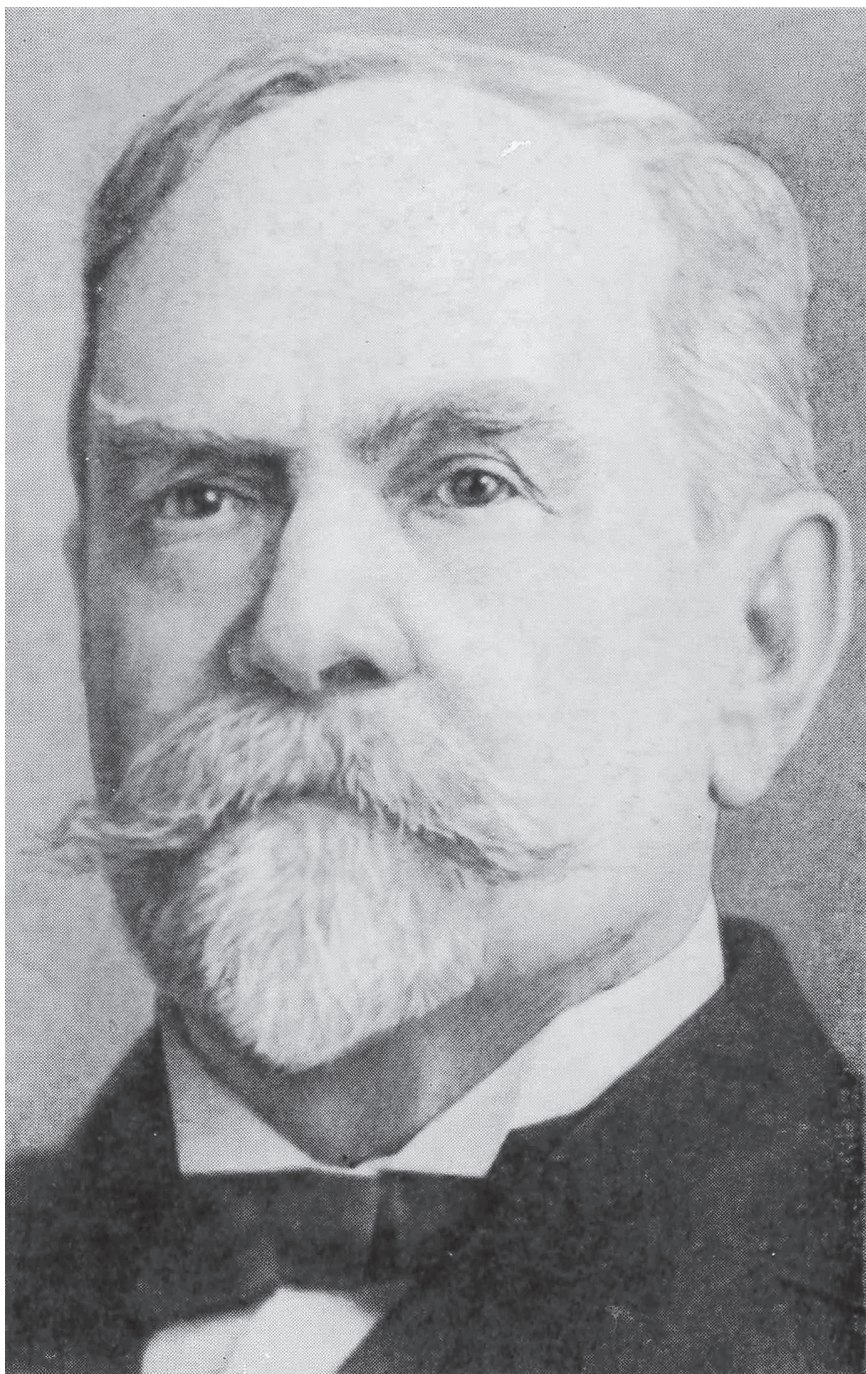
- JAROSŁAW BODZEK
350 BARTŁOMIEJ BARTECKI, ANNA HYRCHAŁA and KYRYLO MYZGIN
(eds.), *Skarb z Cichobórze. Studia nad depozytem rzymskich denarów oraz ich naśladownictw / The Cichobórz Hoard. A Study of the Deposit of Roman Denarii and Their Imitations*, Muzeum im. ks. Stanisława Staszica w Hrubieszowie, Hrubieszów 2023
- SZYMON JELLONEK
355 AGATA ALEKSANDRA KLUCZEK, *Ktistes i inni. Bohaterowie mitów i legend w rzymskim mennictwie prowincjonalnym (235–276)*, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2025
- BARBARA ZAJĄC
358 CHRISTOPHER HOWGEGO, *Roman Provincial Coinage*. Vol. IV.4: *Antoninus Pius to Commodus (AD 138–192). Egypt*. Part 1: *Introduction and Catalogue*. Part 2: *Indexes and Plates*, British Museum Press, Bibliothèque nationale de France, London–Paris 2023
- KATARZYNA BALBUZA
364 JEROME MAIRAT, *The Roman Imperial Coinage*. Vol. V.4: *The Gallic Empire (AD 260–274)*, Spink & Son Ltd, London 2023

KRONIKI / CHRONICLES

- MATEUSZ WOŹNIAK
371 *Kronika Gabinetu Numizmatycznego Muzeum Narodowego w Krakowie (2024)*
379 *The Chronicle of the Numismatic Cabinet of the National Museum in Krakow (2024)*
- JAROSŁAW BODZEK
389 *Kronika Sekcji Numizmatycznej Komisji Archeologicznej Polskiej Akademii Nauk Oddział w Krakowie (2025)*
391 *The Chronicle of the Numismatic Section of the Archaeological Commission of the Polish Academy of Sciences, Krakow Branch (2025)*

NEKROLOGI / OBITUARIES

- NATHAN T. ELKINS
397 William E. Metcalf (1947–2025)
399 Bibliography of William Edward Metcalf
- HELLE W. HORSNÆS, JENS CHRISTIAN MOESGAARD
411 Jørgen Steen Jensen (Frederiksberg, 1 November 1938–Frederiksberg, 1 February 2025)



Zygmunt Mineyko (1840–1925). Fot. Archiwum Muzeum Narodowego w Krakowie
Zygmunt Mineyko (1840–1925). Photo: Archives of the National Museum in Krakow

Szanowni Państwo,

oddajemy w Państwa ręce tom XX *Notae Numismaticae – Zapisków Numizmatycznych*. Zgodnie z przyjętymi przez nas zasadami wszystkie teksty publikujemy w językach kongresowych, z angielskimi i polskimi abstraktami. Zawartość obecnego tomu oraz tomy archiwalne są zamieszczone w formie plików PDF na stronie internetowej Muzeum Narodowego w Krakowie (<https://mnk.pl/notae-numismaticae-zapiski-numizmatyczne-1>). Na stronie dostępne są ponadto wszelkie informacje ogólne o czasopiśmie oraz instrukcje dla autorów i recenzentów.

Sto lat temu 27 grudnia 1925 roku zmarł w Atenach Zygmunt Mineyko (1840–1925), człowiek o niezwykłym życiorysie, oddany Ojczyźnie patriota, weteran Powstania Styczniowego, emigrant, a jednocześnie filhellen i honorowy obywatel Grecji. Jego zasługi na polu walki z rosyjskim zaborcą, emigracyjna tułaczka i wkład w budowę Państwa Greckiego są dosyć dobrze znane, głównie dzięki spisany przez niego samego pamiętnikom przechowywanym w Bibliotece Jagiellońskiej w Krakowie, w części wydanych drukiem w 1971 roku pod tytułem *Z Tajgi pod Akropol*. Dzięki publikacjom polskich i greckich archeologów znane są również dokonania Mineyki na polu archeologii, a w szczególności jego udział w badaniach na terenie położonego w Epirze słynnego sanktuarium Zeusa w Dodonie.

Zygmunt Mineyko interesował się również numizmatyką i nie były to zainteresowania powierzchowne. Spod jego pióra wyszło – niestety nigdy nieopublikowane – dzieło poświęcone jak sam pisał „objawom numizmatyki”. Rękopis tej pracy przechowywany obecnie we Lwowie, w dawnych zbiorach Zakładu Narodowego im. Ossolińskich, pozwala uznać ją za bardzo nowoczesne i wyprzedzające swe czasy opracowanie. Zygmunt Mineyko jest również ściśle powiązany z historią zbiorów numizmatycznych Muzeum Narodowego w Krakowie. W latach 1924 i 1926 do zbiorów krakowskiego Muzeum Narodowego trafiło w dwóch transzach prawie sto antycznych monet podarowanych przez Stanisława Mineykę (1875–1924), syna Zygmunta. Choć formalnie ofiarodawcą był Stanisław najprawdopodobniej inspiratorem daru był jego ojciec, który z powodzeniem realizował ideę wzbogacania polskich instytucji naukowych i muzeów zespołami starożytnych monet. Dary takie zostały lub miały zostać przekazane Muzeum Narodowemu w Warszawie, Uniwersytetowi Wileńskiemu, Uniwersytetowi Jagiellońskiemu oraz jak wspomniano Muzeum Narodowemu w Krakowie. Niniejszy tom naszego czasopisma pragniemy dedykować pamięci Zygmunta i Stanisława Mineyków.

Redakcja

Dear Readers,

We are delighted to present you with volume 20 of *Notae Numismaticae – Zapiski Numizmatyczne*. As is our policy, we publish all texts in the congress languages, with English and Polish abstracts. The contents of current volume and archive numbers are available as PDF files on the website of the National Museum in Krakow (<https://mnk.pl/notae-numismaticae-zapiski-numizmatyczne-1>). The website also provides all general information about the journal, along with guidelines for authors and reviewers.

One hundred years ago, on 27 December 1925, Zygmunt Mineyko (1840–1925) died in Athens. He was a man with an extraordinary life story, a devoted patriot, a veteran of the January Uprising, an emigrant, and at the same time a philhellene and honorary citizen of Greece. His achievements in the fight against the Russian invader, his wanderings as an emigrant, and his contribution to the building of the Greek state are quite well known, mainly thanks to his memoirs, stored in the Jagiellonian Library in Krakow, some of which were published in 1971 under the title *Z Tajgi pod Akropol* (From the Taiga to the Acropolis). Thanks to publications by Polish and Greek archaeologists, Mineyko's achievements in the field of archaeology are also well known, in particular his participation in research at the famous sanctuary of Zeus in Dodona, located in Epirus.

Zygmunt Mineyko was also interested in numismatics, and this interest was far from superficial. He wrote a work devoted to what he called “the manifestations of numismatics”, which, unfortunately, was never published. The manuscript of this work, currently stored in Lviv, in the former collections of the Ossoliński National Institute, allows us to consider it a very modern and ahead-of-its-time study. Zygmunt Mineyko is also closely associated with the history of the numismatic collections of the National Museum in Krakow. In 1924 and 1926, almost a hundred ancient coins donated by Stanisław Mineyko (1875–1924), Zygmunt's son, were added in two tranches to the collection of the National Museum in Krakow. Although Stanisław was formally the donor, it was most likely his father who inspired the donation, as he had successfully implemented the idea of enriching Polish scientific institutions and museums with collections of ancient coins. Such donations were or were to be donated to the National Museum in Warsaw, Vilnius University, the Jagiellonian University in Krakow, and, as mentioned, the National Museum in Krakow. We would like to dedicate this volume to the memory of Zygmunt and Stanisław Mineyko.

The Editors

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A Miscast Denarius from the Hungarian Barbaricum¹

ABSTRACT: Törtel, Nyilas-dűlő at first appears to be a typical ancient settlement site of the Hungarian Barbaricum. However, this is the first instance in which a miscast denarius has been identified in the region. Even more remarkably, its metal composition closely matches that of official Roman issues. Additional numismatic finds could indicate a local coin production in the area, including several cast denarii and imitations of antoniniani. These exhibit die-linked parallels, particularly with material from the nearby site of Tószeg, Sapi-halom. This connection is further reinforced by local pendants, which show close similarities to the star-and-crescent type imitations widely distributed in the Hungarian Barbaricum.

KEY WORDS: cast denarius, Barbaricum, Sarmatian imitations, miscast, lead pendants

ABSTRAKT: *Wadliwie odlany denar z węgierskiego Barbaricum*

Törtel, Nyilas-dűlő na pierwszy rzut oka wydaje się typowym osadniczym stanowiskiem archeologicznym na terenie węgierskiego Barbaricum. Jest to jednak pierwszy przypadek, w którym w tym regionie zidentyfikowano denar z nadlewem powstałym w wyniku wadliwego procesu odlewania. Co jeszcze bardziej niezwykle, skład stopu, z którego został wykonany, ściśle odpowiada temu znanemu z oficjalnych monet rzymskich. Dodatkowe znaleziska numizmatyczne mogą wskazywać na lokalną produkcję monet, w tym odlewanych denarów i imitacji antoninianów. Wykazują one poprzez powiązania matryc paralele, szczególnie z materiałami z po-

¹ This research was made possible thanks to the support of the National Research, Development and Innovation Office – NKFIH (143188).

bliskiego stanowiska Tószeg, Sapi-halom. Powiązanie to dodatkowo potwierdzają lokalne zawieszki, które wykazują bliskie podobieństwa do imitacji typu gwiazda i półksiężyc, szeroko rozpowszechnionych na terenie węgierskiego Barbaricum.

SŁOWA KLUCZOWE: odlewany denar, Barbaricum, imitacje sarmackie, wadliwy odlew, ołowiane zawieszki

The Ferenczy Museum Center is one of the leading institutions in the collaboration with community archaeology that also incorporated Törtel, Nyilas-dűlő site, 2 km west of the centre of Törtel and some 80 km southeast of Budapest (Map 1).² During a metal detecting survey in 2020, István Steuer and Péter Kubon unearthed coins and various other Roman artefacts. The research was later repeated in 2023 and 2024 leading to finds of numerous brooches, mirror fragments, pendants, etc. as well as ceramics, indicating a settlement.³ Among the rare finds was the bolt of a non-Roman padlock⁴ and a Roman seal-box cover with phallic decoration.

In addition, 46 Roman and four medieval coins were discovered, which in itself would not necessarily merit this preliminary publication.⁵ However, the discovery of one specific find made it instantly clear that the site is of particular importance. The piece in question is a miscast denarius of Marcus Aurelius, minted in Rome in 168–169 (Fig. 1; no. 11), that was not subsequently cut out from the excess metal. Its overall size of 33 × 20 mm explains its greater weight of 5.8 g. The long end of the excess metal terminates in a straight line with rounded edges on the obverse side, the coin clearly protruding from the background. This makes it likely that this side had been the top part in the mould. The reverse, on the other hand, is irregular and rough with the excess metal, not being able to flow away, built up thicker than the coin. The other part of the coin contains only a small casting burr. The cast itself is quite nicely executed with the legend still legible in full, albeit somewhat blurred. Even the cracks in the original struck flan were reproduced. The small holes resulting from the bubbles in the molten metal, together with the rough surface of the denarius, further strengthen the imitative nature of this piece. Copies of denarii, both plated and cast, are not uncommon in the Hungarian Barbaricum, but this is the first time that this type of semi-finished product has been discovered in these parts.

² Archaeology Database of the Hungarian National Museum Site ID 47798.

³ I am thankful for Dániel Antoni for his support in working with the finds, who also participated in the metal detecting survey.

⁴ The complete blocking bolt (6 cm long) of the padlock is of the type found most often in the Przeworsk and Chernyakhov cultures, but some are also known from the Sântana de Mureş culture, and dated to the C1-D period. Previously only Roman type locks were known Hungary, this is the first one of its kind in the Carpathian Basin. The combination of a lock and a coin production site is also attested at Frientstedt, where many keys, but no locks were uncovered. Cf. CZARNECKA 2020: 235–250.

⁵ The medieval denier of Stephen I of Hungary and three frizatihs will not be discussed in detail, since they do not belong to the ancient site.

What was peculiar from the outset was the stark contrast in colour between the shiny coin and the dark matte colour of the material around it. The difference and the irregular production technique were confirmed by the XRF-analysis conducted by Sz. Emma Horváth.⁶ This revealed that the cast coin to basically have the same composition as a genuine denarius of Marcus Aurelius, which was also measured as a control reference (Tab. 1).⁷ In turn, the excess material only consisted of 32.81% silver, 32.5% silicon, 11.49% sulfur, 7.15% scandium, 5.71% copper, 3.7% iron and 2.07% lead.

Metal next to the coin	%	Cast coin	%	Reference denarius	%
Ag	32.81	Ag	76.17	Ag	78.77
Si	32.5	Cu	8.2	Cu	6.9
S	11.49	Sn	3.98	Sn	4.35
Sc	7.15	Si	5.22	Si	4
Cu	5.71	Pb	2.169	Pb	2.15
P	4.2	Au	0.99	Au	0.85
Fe	3.7	Zn	0.79	Zn	0.79
Pb	2.07	S	0.76	S	0.67
Other	0.37	Other	1.72	Other	1.52

Table 1. The XRF-analysis of the cast and an original reference Marcus Aurelius denarius (by Sz. E. Horváth)

According to Horváth, the reason for this stark contrast is that the silver was melted at too high a temperature, so when poured into the (sand) mould, the alloying elements with different specific gravities had time to separate in the slower cooling parts. As a result, the heavier silver concentrated in the coin area, while the lighter alloying components (fluxes, impurities, etc.) migrated toward the casting sprue area.⁸

Similar miscasts and production wastes are growing in numbers thanks to metal detecting activities, but are still rare in the Barbaricum. A primary concentration can be observed in the Middle- and West-Ukrainian territories. The best parallel for our piece is a silver sheet with a coin of Septimius Severus, possibly from the

⁶ I am indebted to her for her analysis which was conducted using an Olympus Vanta C-Series Handheld XRF Analyzer (4W, 200µA), the property of the Hungarian Money Museum and Visiting Center.

⁷ The reference denarius is part of the numismatic collection of the Ferenczy Museum Center.

⁸ This is also seen in the differences of the elemental composition of two sprues from Abrykosivka (Ukraine) with a very high content of silicon in one case and aluminum in the other lead. Here the authors attributed the unusual quantities to a definitive batch. Cf. BUHAY et AL. 2024: 171.

Khmelnitskyi region.⁹ It shows the same straight edge, here on the reverse side, and an irregular, rough surface on the other, with an overflow of metal on all sides. It seems probable that this piece and that from Törtel were made with the same technique. Unfortunately, we do not know the metal composition of the Ukrainian find, only its weight of 7.1 g, which is not that far off from the Hungarian piece. A further good parallel is the bronze slab from Nemyriv district, Vinnytsia region imitating an antoninianus of Gordian III, and where the casting sprues are clearly visible.¹⁰ This again has a nice obverse and a completely distorted reverse side.

Also very interesting are the mirrors decorated with cast denarii, again from Ukraine.¹¹ These are usually round sheets of metal with protruding rim and a relief ornament on one side only. This means that no real coin was incorporated, they were just imprinted into the mould. However, their metal composition showed over 98% copper with some Ni and Zn.¹² Fragments of silvered bronze mirrors were also discovered at Törtel, Nyilas-dűlő, although none had coin décor.

Apart from these pieces, an ever-growing number of cast denarii and production waste or unfinished products are coming to light. Struck and cast coins as well as clay moulds are numerous in Gaul, Germania, but also more east e.g. in Brigetio.¹³ From outside the empire, their concentration is greatest in western and central Ukraine, where five production centres were recently identified (Korzhivtsi, Zagintsi, Klishchiv, Kormylche, and Abrykosivka).¹⁴ Evidence of non-official Roman coins are also known from Poland¹⁵ and Belarus, but primarily on the territory of the Chernyachov culture.¹⁶

Similar finds have been made in North-Germany at Raguth, Lkr. Ludwigslust-Parchim, where four cast denarii came to light at a Germanic settlement during a metal detecting survey in 2021.¹⁷ The two for Faustina the Younger were quite well executed, unlike the miscasts for Antoninus Pius and Hadrian. There were also two cut silver sheet fragments as well as casting waste that point to local metal working. On the territory of modern Germany, the phenomenon was not that widespread as further to the east; the Antike Fundmünzen in Europa database only records 25

⁹ NADVIRNYAK and POHORILETS 2024: 164–165, Fig. 8.5 j.

¹⁰ *Ibidem*: 164–165, Fig. 8.5 i.

¹¹ ANOKHIN 2015: 11; MYZGIN 2024: 197, Fig. 10.11.

¹² NADVIRNYAK and POHORILETS 2024: 157, fn. 6–7.

¹³ PILON 2024: 25–31; GOHL 1904: 79.

¹⁴ NADVIRNYAK and POHORILETS 2024: 157–161; MYZGIN 2024: 190–192.

¹⁵ BODZEK, JELLONEK and ZAJĄC 2024: 112–115.

¹⁶ SIDAROVICH 2024: 135–139.

¹⁷ Cf. <https://www.kulturwerte-mv.de/Landesarchaeologie/Fund-des-Monats/Bisherige-Beitr%C3%A4ge/2023-06-muenzwerkstatt/> (last accessed on 17 November 2024); 500 m from the find spot, a hoard of 70 denarii was unearthed in 2015.

cast examples.¹⁸ In addition to these, 10 cast denarii were discovered in Frienstedt (Thuringia) alongside 14 plated ones and two barbarous pieces at a Germanic settlement site (1st–4th century), making local production likely.¹⁹ Scotland has provided casting moulds from three sites but here the copies were most likely made for use within the Empire and not outside.²⁰

The metal composition of the cast Marcus coin from Törtel has no exact parallels in the published material. The closest is a piece from the excavations at Rubel'-Berezhnoe, Klimavichy (Belarus), Chan'kiv and at Klischiv (Ukraine) with a copper content of 3.3–13%, but with a higher percentage of silver (84–90%).²¹ One has to bear in mind the small number of measured cast denarii and the heterogenous technique of the analysis, providing various results. It is interesting to note that tin is completely absent in the metal around the coin of Törtel, where most cast pieces from Barbaricum are dominated by copper (53–61%) and tin (27–41%) with a very low silver content and some lead (3%).²² It is remarkable, how close the copy of Törtel came to the original composition of the metal mixture of the official denarii. This is even more exciting, if we suppose that this cast was done several decades or perhaps even a century later.²³ This would point to very highly skilled metal worker, who intended and managed to replicate the official denarius very accurately. This was not done by simply melting perhaps older, worn pieces, since the miscast metal has a completely different composition. This is especially true if we consider the casting sprue and the production waste in other parts of Barbaricum have the same metal composition as the coins themselves.²⁴ A casting sprue from Klischiv with 83.75% silver and 9.8% silicon is an exception, although we also have a coin with almost as high silver content from the same site.

The preliminary examination of the material showed four other cast denarii found at Törtel, Nyilas-dűlő, all with a porous surface, but with varying degree of details and silver content.²⁵ The coin of Hadrian (no. 3 – Fig. 2) is of copper, with no silver traces visible, still the legend on both the obverse and reverse are legible. The Faustina the Elder coin (no. 7 – Fig. 3) is much the same but almost no legend present, except for the DIVA on the obverse. The one copying Lucius Verus or Marcus Aurelius (no. 12 – Fig. 4) was cast with even less success, with approximately one

¹⁸ These also include the ones from Raguth, but not the ones from Frienstedt. Cf. <http://afe.dainst.org/index.php> (last accessed on 27 November 2025).

¹⁹ SCHLAPKE 2024: 49–51.

²⁰ FRASER 2024: 39–45.

²¹ MYZGIN 2024: 198–199, no. 3; BUHAY et AL. 2024: 176–177, no. 2, 178–179, no. 1.

²² BUHAY et AL. 2024: 170–171.

²³ Cf. struck and cast denarii in Châteaubleau were produced in the 260s and 270s. Cf. PILON 2024: 28–35.

²⁴ BUHAY et AL. 2024: 176–179.

²⁵ Unfortunately, the material composition of these coins was not measured.

fourth of it missing, without legible letters, but it seems to contain some silver. The most accomplished cast was modelled after Severus Alexander (no. 14 – Fig. 5) with a legible legend and clear signs of silver content.

THE GENERAL SCOPE OF THE COINS AT TÖRTEL

Half of the 46 ancient coins found at Törtel, Nyilas-dűlő were antoniniani, followed by nine denarii (20%), six AE3 (13% – three of them Barbarian/barbarous imitations), five cast denarii (11%) and three AE 4 (7%) (Chart 1, Tab. 2). The at least eight non-official pieces reach 17%, however, these are only preliminary results. Because of the cast Marcus coin, the metal composition of the other ones has to be analyzed as well in order to shed more light onto the activity of the workshop.

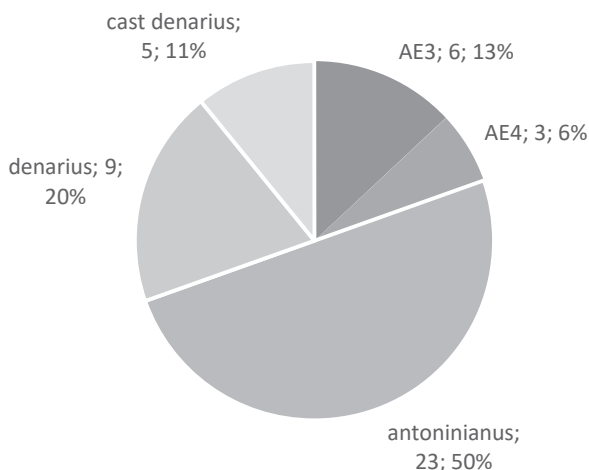


Chart 1. Distribution of the coin denominations found at Törtel, Nyilas-dűlő

The Roman mint can only be attributed to the production of 1st to 3rd century coins, and to none of the Late Roman pieces. Two specimens from Mediolanum could be identified as having been minted in the 260s. The 4th century coins were produced in Siscia (five pcs), Heraclea (four pcs), Cyzicus (two pcs), and one each in Alexandria, Nicomedia and Thessalonica. 12 could not be attributed to any mint. Siscia, as a very productive local Pannonian mint, is not surprising in the dataset, while Heraclea, Cyzicus and Alexandria are all of the CONCORDIA MILITVM type.

The earliest coin is the Divus Vespasianus, the only one from the 1st century, while the 2nd century is represented by 11 coins (Chart 2): two of Hadrian, four of Antoninus Pius and five under the rule of Marcus Aurelius. A denarius of Severus

Alexander is the only piece from the first half of the 3rd century. The majority of the coin finds are concentrated in the second half of the 3rd century. After the initial pieces of Trebonianus Gallus and Valerian I, the peak is reached in the 260s with the lowest quality antoniniani. One has to draw attention to the imitation of Victorinus (no. 26), since the products of the Gallic Empire rarely occur in Pannonia as well as the Barbaricum.²⁶ A radiate of Aurelian and two of Probus are quite common, as opposed to one of Numerian as Caesar.²⁷ Another peak is seen at the end of the century represented by the CONCORDIA MILITVM types and its imitations minted between 295–299.

The end of the coin circulation is represented by the six specimens from the 330s. This is general accordance with the overall monetary picture of Pest county, but differs from the territories further to the southeast, between the Tisza and Körös Rivers.²⁸ However, in both areas later coins from the 4th century are usually present, therefore it is plausible that these will be discovered during a subsequent survey of Törtel, Nyilas-dűlő.

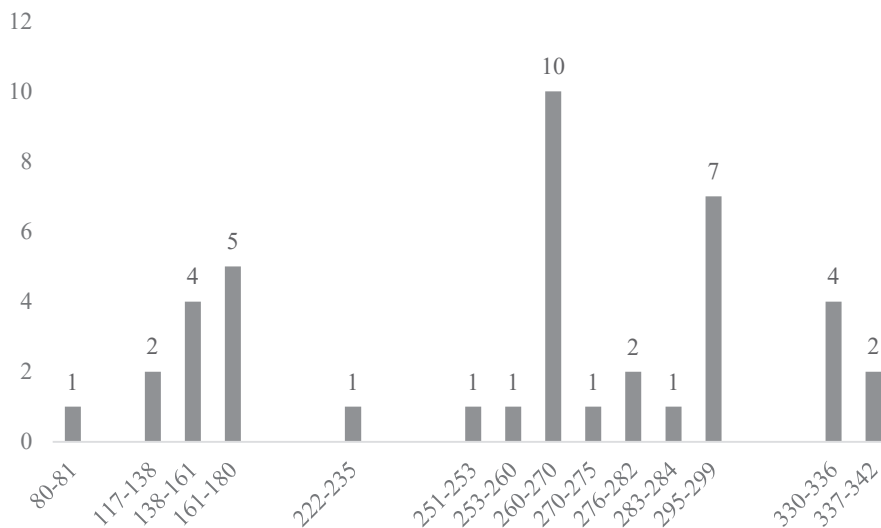


Chart 2. The chronological distribution of the coins from Törtel, Nyilas-dűlő

²⁶ Only two Tetricus imitations are known from the Hungarian Barbaricum. Cf. http://barbaricoin.elte.hu/AFE_HU/show_coin?coin_id=2039; http://barbaricoin.elte.hu/AFE_HU/show_coin?coin_id=5559 (last accessed on 6 January 2026). The imitations of the Gallic Empire are only recorded in the Pila hoard: one Victorinus, two Tetricus and one unidentifiable (CIOLEK 2020: 187). The official coins of the Gallic Empire in the Barbaricum are only numerous on the territory of modern Netherlands. Cf. BEMMANN 2014: 183–184.

²⁷ This is only the second coin Numerian found in the Hungarian Barbaricum. Cf. http://barbaricoin.elte.hu/AFE_HU/show_coin?coin_id=2705 (last accessed on 6 January 2026).

²⁸ JUHÁSZ 2025: 814–815. Cf. IDEM 2021a: 111.

It is worth comparing the data with the neighbouring Törtel, Czakó-halom site, where over 400 coins were uncovered and 369 of them identified.²⁹ 45% were antoniniani (167 pcs), 22% were AE3 (79 pcs), 15% AE4 and denarii (55 pcs) and 2% AE2 (7 pcs). So, the area of Törtel is overrepresented with antoniniani compared to the general Hungarian Barbaricum, where this number is around 30%. The reasons for this are different at the two Törtel sites. While at Czakó-halom it is explained by the great number (117 pcs) of the CONCORDIA MILITVM types, at Nyilas-dűlő it is owed to the coins from the 260s. Of course, the two datasets are very different in size, and this is due to the strange nature of the Czakó-halom, where there is a great number of coins, while almost no other archaeological material, except for a few brooches. However, it cannot be considered a scattered hoard based on the metal detectorists' observations and the very heterogenous composition.

PECULIAR COINS AND IMITATIONS

Apart from the cast denarii, other pieces could also be of a local production. Particularly interesting is the coin of Aurelian (Fig. 6 – no. 27) that was elongated behind the portrait to make more room for a loop or a hole. The superfluous material behind the bust that was folded back is somewhat curious, giving its nice droplet shape.³⁰ The owner or the craftsman went to great lengths to produce this pendant. A similar specimen is known from the vicinity, from the area of Dabas.³¹ However, the almost complete lack of a legend and the too worn state, especially on the opposite side of the perforation, could indicate casting. If so, the folded back material could be the overflowing material from casting. The question can hopefully be answered in the future with the help of metal analysis.

The question of local production also arises in the case of Gallienus' coin from Mediolanum (Fig. 7 – no. 18) that shows a small protrusion resembling the remains of a casting sprue. This is also supported by that the coin only shows sharp features on this end, and very weak ones on the opposite. This could indicate that the molten metal could not fill the entire mould.³²

²⁹ These pieces are included in the publication of the coins from Pest county. Cf. JUHÁSZ 2025. Interestingly enough here we also find a coin minted for Divus Vespasianus. Cf. http://barbarico.elte.hu/show_coin?coin_id=1419 (last accessed on 16 January 2026).

³⁰ Interesting to note is also the vertical line left of the hole, most likely the remnant of the fastening of the coin, while the piercing was done with a drill. The material around the hole protruded but could not expand in that direction.

³¹ A coin of Gallienus was prepared in this manner but was looped. Cf. http://barbarico.elte.hu/AFE_HU/show_coin?coin_id=5270 (last accessed on 16 January 2026).

³² A similar piece is known from the vicinity of Dabas, a Claudius II with two sprue remains on the opposite side of the coin. This would then indicate the use of the coin tree method. Ferenczy Museum Center, Inv. no. 2023.1.2.167. For the method in Ukraine see NADVIRNYAK and POHORILETS 2024: 161–163.

Four copper-alloy barbarous issues also appear at Törtel Nyilas-dűlő of two well-known variants. No. 44 (Fig. 8) is based on the *CONCORDIA MILITVM* types minted by the first tetrarchy between 295–299, and are also present at the site in six original examples (nos. 31–36). The piece is die-linked with a coin found in a Sarmatian grave of a 35–44-year-old man at Jászfényszaru, Hatvani-határ (some 55 km to the north as the crow flies) and a single find from Tószeg, Sapi-halom (Fig. 9), only some 15 km away.³³ It does not seem far-fetched to assume that these were produced by at the same time, by the same artisan in the area of Törtel.

Peculiar is also no. 37 (Fig. 10) with the obverse legend *IMP C MAXIMINVS P F AVG* and the *CONCORDIA MILITVM* / Δ / *ALE* reverse. This would indicate the issuer to be Maximinus Daia as Augustus but the type was only minted for him as Caesar in 305–306.³⁴ This does not seem to be a minting error or mule, since he only became senior emperor in 310. Taking into consideration the imitation of these coins at the site, this piece would fit into this category as well.

The two star and crescent imitations are of two different obverse and reverse types. The first one (no. 45 – Fig. 11) has a left facing laureate, cuirassed and draped (?) busts, holding a sceptre (?) ending in a circle. The pseudo-legend only consists of is broken by the portrait. Peculiar details are the pronounced shoulders, the unnaturally long neck and the frontally shown eye, i.e. not in profile. The reverse bears a star in the middle ending in four dots with circles around, surrounded by two rings of pearl with small dots in between the two lines. The original star and crescent depiction was combined with the Roman *VOT* and wreath reverses, popular in the 4th century. The piece is part of the subtype of the Sarmatian imitations with a single star in the middle surrounded by the legend running all around it. These are primarily found in the south of the Hungarian Barbaricum, next to the Danube.³⁵ The hole was made with an interesting tool otherwise rarely seen on coins, but it is known from the vicinity of Törtel.³⁶ Interestingly enough the obverse is die-linked with a piece again found at Tószeg, Sapi-halom (Fig. 12). It even has the same peculiar perforation at the back of the head. Interestingly enough, its reverse design, with the crescent terminating in dots, with a central star and three dots above next to each other in a line, can be seen on no. 46 (Fig. 13), although they are not die-linked.

³³ Grave 11. MARSÍ et AL. 2025: 291–292, Fig. 16/4. Here another *CONCORDIA MILITVM* imitation came to light from grave 10, next to a 2–5-year-old child.

³⁴ RIC VI Alexandria 60b. The *IMP C MAXIMINVS P F AVG* legend is only attested in Thessalonica in 312–313 but with a laureate portrait and for the *IOVI CONSERVATORI AVGG NN* type. Cf. RIC VI 52a, 61a.

³⁵ JUHÁSZ 2024: 173.

³⁶ Cf. http://barbaricoin.elte.hu/AFE_HU/show_coin?coin_id=5406 (last accessed on 29 December 2025).

The last barbarous issue (no. 46 – Fig. 13) shows a laureate, cuirassed, draped bust left with a long head and pronounced nose. As opposed to the reverse legend, here we see different pseudo-letters apart from the usual I and O. The reverse portrays a crescent ending in two dots and three dots above, with the legend running all around. The obverse very much resembles two coins from Törtel, Czakó-halom³⁷ and one from the Khmelnytsky region in Western-Ukraine.³⁸ The portrait recalls the laureate, draped and cuirassed busts of Constantine and his sons in the 320s.³⁹

Thus, it seems likely that apart from denarii, antoniniani and so-called Sarmatian imitations were also produced locally, which was previously not observed at other sites to the north or east. Without further finds, we cannot be certain if this was Törtel, Nyilas-dűlő or Czakó-halom with its plethora of coin finds or somewhere else, but the unfinished products do not tend to travel far. On the other hand, the miscast denarius, due to its high silver content, could also have been valued as scrap silver and thus has a greater traveling potential. This in turn also indicates a completely different attitude towards coins. Here, not just denarii but copper pieces were valued and therefore copied as well. This reflects well the whole general picture in the Hungarian Barbaricum, where antoniniani and Late Roman coins are numerous, as opposed to other parts outside of the Empire. This also point to a more regular monetization and the use of coins strongly influenced by the proximity of the limes and (the expeditions of) the Roman army.

Without a secure archaeological context, it is impossible to tell at which time the different denominations were reproduced in the Barbaricum. It is possible that at least some were manufactured in the same period, but denarii, antoniniani and AE3-4 were in use in the same time as attested by the grave finds. However, we can attempt to determine after which time the different denominations were produced. The most likely date for the miscast denarius is some time after the inflow from the Roman Empire stopped and thus a shortage occurred, i.e. from the middle of the 3rd century onwards. The antoniniani could also have exited the Empire during one of the many wars in the last third of the 3rd century. The CONCORDIA MILITVM type was likely produced in the beginning of the 4th century, most probably before the greater influx of small change in the 320s and especially in the 330s. The Sarmatian imitations are somewhat later, most likely in the second third or the middle of the 4th century since they draw their obverse inspiration from the Constantinian pieces. One has to bear in mind that these are the only ones not intended for a monetary function but rather an apotropaic one.

³⁷ Cf. http://barbaricoin.elte.hu/AFE_HU/show_coin?coin_id=2947; http://barbaricoin.elte.hu/AFE_HU/show_coin?coin_id=2948 (last accessed on 29 December 2025).

³⁸ ANOKHIN 2015: 205–206.

³⁹ JUHÁSZ 2024: 173.

It is also worth mentioning the great similarities in the material from Tószeg, Sapi-halom and that of Törtel, Nyilas-dűlő. In total nine coins were found, including the imitations: one cast denarius of Hadrian and Faustina the Younger, one radiate of Claudius II, one GLORIA EXERCITVS.⁴⁰ The difference is that here we also have a falling horseman type FEL TEMP and a coin from Valens, representing the usual late 4th century horizon of the Hungarian Barbaricum.

THE PENDANTS

Attention has to be drawn to another type of artefact discovered at Törtel, Nyilas-dűlő, not previously discussed in connection with the coins. The pieces in question are two small pendants, a two-sided in lead and a one-sided in bronze. The first one (d=13 mm) on the one side has a central dot surrounded by a narrow band and further 8 somewhat smaller dots, encircled by a ring of pearls (Fig. 14). The reverse is very similar, although flatter and not as nicely executed. The encircled central dot is delimited from below by a semicircle. The whole is framed by six additional dots, the top one is also framed by a circle. The top right one is indicated but due to casting deficiencies, is almost non-existent. The whole composition is again framed by a row of pearls. The thick loop seems to consist of three bands, the two shallow ridges can best be seen on the flat top.

The middle of the second, one-sided bronze pendant (d=14 mm) is occupied by a bigger, protruding dot, surrounded by six, evenly spaced smaller ones, all encircled by a thin ring (Fig. 15). These smaller ones are all connected by thin semi-circular lines. The framing of the pendant consists of two lines of pearls. The reverse is flat, except for its concave centre that protrudes on the other side in the form of the big dot. It seems as this deformation was made subsequent to the casting of the disc, but still in a malleable state. The loop was made of the same material, cast in one piece and folded back towards the reverse. Despite the minor differences, the two pieces show a great degree of similarity and above all, a common ideological background.

These finds are especially intriguing because we encounter the same combination of Sarmatian coin imitations together with a similar lead pendant again from Tószeg, Sapi-halom. The piece is slightly bigger (d=16.38 mm) and shows the same decoration on both sides (Fig. 16). It consists of a central big dot surrounded by many smaller ones, delimited by a ring of pearls and a broad band of densely placed, left slanting lines. This is again framed by the outermost ring, made up of small pearls. The two sides of the pendant only differ in that the central dot is surrounded by two rows of small dots on one side, while on the other they are distributed randomly. This

⁴⁰ In total there were nine coins recovered, including the imitations.

particular design recalls the Late Roman VOT in wreath reverses that are also seen on Sarmatian coin imitations.⁴¹

The encircled dots on the bronze pendant recall the outer decoration of the lead medallion from Martfű, Csesz-dűlő and those of the reverse of no. 45 (Fig. 11), as well as on the reverse under the crescent at Tószeg (Fig. 13).⁴² This again was an elaborate version of the Sarmatian coin imitations with star and crescent, further strengthening the connection between these simple pendants and the monetary imitations worn as amulets. We have similar one-sided lead pendants from Csabacsúd and Vrbas (Vojvodina), where there were also found with Sarmatian coin imitations.⁴³

The dots and circles arranged around a larger central piece, despite their various shapes and sizes, all recall the wide-spread stars and crescent reverses among the Sarmatian coin imitations. These are primarily known from copper alloy but were occasionally also produced in lead providing us with a very important link between the various metals.⁴⁴ We do not know much about the Sarmatian religion, but based on the many lunulae finds as well as their preference for these depictions on coins, it is safe to assume an astral belief. One silver lunula was also discovered at Törtel, Nyilas-dűlő. The coin imitations with star and crescent are always pierced or looped, suggesting an apotropaic function. On the other hand, the CONCORDIA MILITVM imitations are usually not secondarily modified, indicating a regular monetary use.⁴⁵

Evidence of a Sarmatian bronze workshop is known from Tiszaföldvár-Téglagyár, dated to the 2nd century, where several hundred objects connected to such activities (miscast, casting moulds, crucibles etc.) were discovered.⁴⁶ The primary focus was the production of brooches, jewellery, pins, but there is a halved aes of Hadrian and another bronze coin heavily damaged by fire that could have been used as raw material. A possible workshop has recently been discovered in neighbouring Mesterszállás, and its material will be published soon. We also have indirect evidence of metal working in the form of fragmented Roman finds likely used as raw material at a Germanic settlement at Ipolytölgyes-Tsz-major.⁴⁷ Otherwise our sources are very limited, so the discovery of Törtel, Nyilas-dűlő sheds new light on the role and use of the coin imitations and the various techniques employed. Determining the ethnicity of the Törtel, Nyilas-dűlő is not possible at the moment, since it is located

⁴¹ JUHÁSZ 2024: 173.

⁴² IDEM 2021b: 136–140. A similarly elaborate lead medallion but with slightly different obverse was sold at auction. Cf. <https://www.ma-shops.com/monetarium/item.php?id=6602> (last accessed on 7 January 2026).

⁴³ The finds are yet unpublished.

⁴⁴ JUHÁSZ 2021b.

⁴⁵ Coin no. 34 of the same type but seemingly original Roman is pierced.

⁴⁶ VADAY 2005a: 155–161, nos. 29–30.

⁴⁷ SOÓS et AL. 2020.

at the unclearly demarcated border between the Sarmatians and the Quadi. Yet it is perhaps more important that several objects point to a local production center in the area, located approximately 70 km from the Danube, so a safe distance from the Romans, which supplied the surrounding territories up to 60 km away with sought after denarii and barbarous imitations.

ABBREVIATIONS

RIC = H. MATTINGLY et AL., *The Roman Imperial Coinage*, vols. I–X, London 1923–2025.

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TABLE 2	Coins from Törtel, Nyilas-dűlő: the dating of the non-original pieces refers to the genuine ones they were modelled after – or in the dating (of the original)
MAP 1	Törtel, Nyilas-dűlő, Törtel, Czakó-halom and Tószeg, Sapi-halom
PLATE 1	Fig. 1. Miscast denarius of Marcus Aurelius Fig. 2. Cast denarius of Hadrian (no. 3) Fig. 3. Cast denarius of diva Faustina the Elder (no. 7) Fig. 4. Cast denarius of Marcus Aurelius/Lucius Verus? (no. 12) Fig. 5. Cast denarius of Severus Alexander (no. 14) Fig. 6. Coin of Aurelian with secondary modification (no. 27) Fig. 7. Coin of Gallienus with a possible casting sprue (no. 18)
PLATE 2	Fig. 8. CONCORDIA MILITVM imitation (coin no. 44) Fig. 9. Imitation from Tószeg, Sapi-halom with die-link to coin no. 44 – Fig. 5 Fig. 10. CONCORDIA MILITVM imitation of MAXIMINVS (sic!) (no. 37) Fig. 11. Sarmatian coin imitation with star and crescent (no. 45) Fig. 12. Coin imitation from Tószeg, Sapi-halom die-linked with coin no. 45 – Fig. 8 Fig. 13. Sarmatian coin imitation with star and crescent (no. 46) Fig. 14. Lead pendant from Törtel, Nyilas-dűlő Fig. 15. Bronze pendant from Törtel, Nyilas-dűlő Fig. 16. Lead pendant from Tószeg, Sapi-halom Photos nos. 2–9, 11–12 and 14–16 by D. Antoni; Photos nos. 10, 13 and 17 by T. Négycsü

TABLE 2

No.	Issuer	Denomination	Dating	Mint	Officina	Die-axis	Weight	RIC
1	Divus Vespasianus	denarius	80–81	Rome		7 h	2.97	RIC 357 (RIC [1962] 63)
2	Hadrian	denarius	128–129	Rome		6 h	2.63	RIC II.3 916
3	Hadrian	cast denarius	129–130	?		6 h	1.88	RIC II.3 1123
4	Antoninus Pius	denarius	138	Rome		6 h	3.36	RIC 7
5	Antoninus Pius	denarius	140–144	Rome		6 h	2.61	RIC 78
6	Diva Faustina I	denarius	141–161	Rome		7 h	2.98	RIC 358
7	Diva Faustina I	cast denarius	141–161	?		8 h	1.93	?
8	Marcus Aurelius	denarius	161–162	Rome		6 h	3.11	RIC 33
9	Lucius Verus	denarius	161–162	Rome		7 h	3.15	?
10	Lucilla	denarius	164–169	Rome		6 h	3.1	RIC 772
11	Marcus Aurelius	cast denarius	168–169	?		6 h	5.8	RIC 206
12	Marcus Aurelius / Lucius Verus ?	denarius	161–180	Rome		1 h	2.15	?
13	?	cast denarius	2 nd century	?		10 h	1.63	?
14	Severus Alexander	cast denarius	227	?		12 h	2.85	RIC 67
15	Trebonianus Gallus	antoninianus	251–253	Rome		6 h	2.64	RIC 34
16	Valerian I	antoninianus	256–257	Rome		6 h	2.85	RIC 128
17	Gallienus	antoninianus	260–268	Rome		12 h	2.74	RIC 207
18	Gallienus	antoninianus	260–268	Mediolanum		7 h	2.23	RIC 516

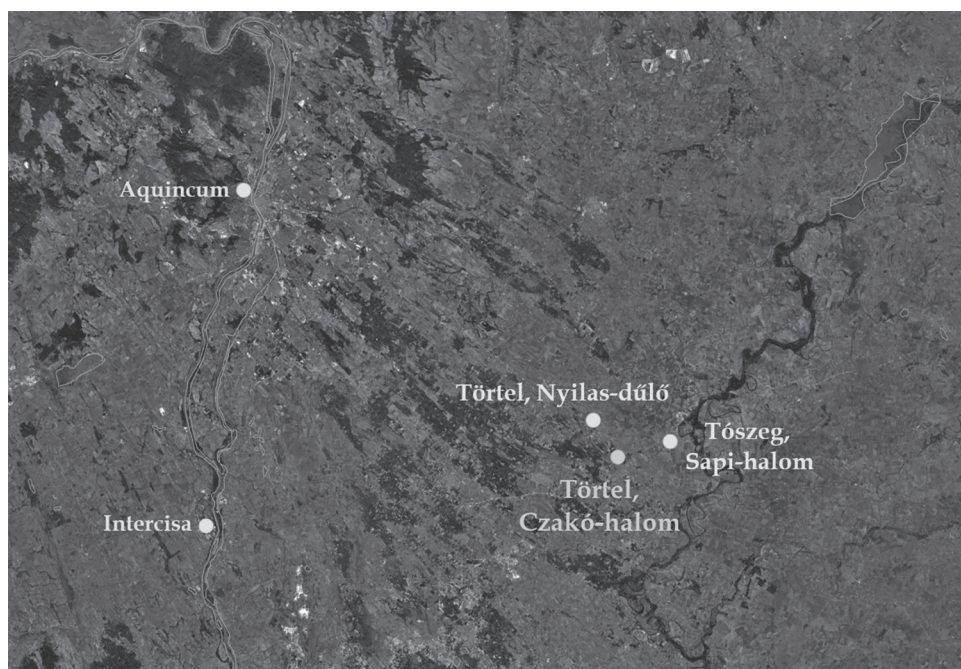
TABLE 2

19	Gallienus	antoninianus	260–268	Rome		6 h	1.83	RIC 236
20	Gallienus	antoninianus	260–268	Rome		11 h	2.25	RIC 317
21	?	antoninianus	260–270	?			2.32	?
22	Claudius II	antoninianus	268–270	?			2.19	?
23	Claudius II	antoninianus	268–270	Rome		12 h	2.05	RIC 91 v. 92
24	Claudius II	antoninianus	270	Mediolanum		7 h	2.66	RIC 149var, https://ric.mom.fr/en/coin/761
25	Claudius II	antoninianus	270	Siscia		12 h	2.78	RIC 193, https://ric.mom.fr/en/coin/82
26	Victorinus	antoninianus imitation	269–271	?			1.91	?
27	Aurelian	antoninianus	270–275	?		12 h	3.4	?
28	Probus	antoninianus	276–282	Siscia		7 h	3.09	RIC 656
29	Probus	antoninianus	276–282	?	T	7 h	2.56	?
30	Numerian	antoninianus	282–283	Rome		1 h	4.18	RIC 360
31	Diocletian	antoninianus	295–296	Heraclea	Δ	1 h	2.9	RIC 13
32	Diocletian	antoninianus	295–296	Heraclea		7 h	2.7	RIC 13
33	Maximian	antoninianus	295–296	Heraclea	Γ	5 h	3.71	RIC 14
34	Maximian	antoninianus	295–299	Cyzicus	Δ	12 h	3.27	RIC 16b
35	Diocletian	antoninianus	295–299	Cyzicus		7 h	2.82	RIC 15a, 16a
36	Maximian	antoninianus	295–299	Heraclea		6 h	2.47	?

TABLE 2

37	Maximinius Daia	antoninianus imitation	296–297	Alexandria	Δ	6 h	2.04	RIC 46b
38	Constantius II	AE3	330–333	Siscia	A	2 h	2.09	RIC 221
39	Constantine I	AE3	330–335	Nicomedia	Δ	11 h	2.49	RIC 196
40	Constantine I	AE3	330–336	?		12 h	3.04	?
41	Constantine II	AE4	335–336	Siscia		6 h	1.52	RIC 253
42	Constans	AE4	337–342	Siscia		12 h	1.39	RIC 78
43	Constantius II	AE4	337–342	Thessalonica		6 h	1.08	RIC 56
44	Maximianus	antoninianus imitation	–	?	A	1 h	2.18	–
45	–	Sarmatian imi- tation	–	?			1.61	–
46	–	Sarmatian imi- tation	–	?			1.57	0

Table 2. Coins from Törtel, Nyílas-dűlő: the dating of the non-original pieces refers to the genuine ones they were modelled after – or in the dating (of the original)



Map 1. Törtel, Nyilas-dűlő, Törtel, Czakó-halom and Tószeg, Sapi-halom



1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16