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## MONETARY CIRCULATION IN LOWER MOESIA IN THE LIGHT OF COIN FINDS FROM THE TIME WHEN THE *LEGIO VIII AUGUSTA* STATIONED IN NOVAE (BULGARIA)

**Abstract:** The present paper discusses finds of Roman coins dating to the earliest phase of the legionary camp in Novae (Bulgaria). It addresses the question of coin emissions from the times of the Julio-Claudian Dynasty. Its conclusions are based on an attached catalogue of numismatic finds dated up to the end of the reign of Nero, which coincided with the end of the *legio VIII Augusta*'s stationing in Novae. The study covers also published coins found in other excavated areas within Novae. When the assemblage of finds published so far and those obtained during the latest excavations conducted by the Antiquity of Southeastern Europe Research Centre (University of Warsaw) was compared to the monetary system functioning in Rome in that historical period it became clear that the coins were closely related to the beginnings of the camp, its construction, and the general coming of the Romans to the Lower Danube. The paper presents also some numismatic specimens which are crucial for understanding the whole monetary background recorded so far. This group includes: a "bronze" coin of Cassander, a Macedonian ruler; a Bosporan coin worth 12 *nummi* issued for Gepaepyris, a Thracian princess and Queen of the Bosporus; "legionary" *denarii* of Marcus Aurelius; as well as three "bronze" coins with countermarks.

**Keywords:** *legio VIII Augusta*, Novae, Lower Danube limes, Moesia, Julio-Claudian Dynasty, Roman coinage, countermarks, "legionary" coins

The Roman Empire under the Julio-Claudian Dynasty was composed of many provinces, unified by a common currency serving as the driving wheel behind the very efficient economic system of the state.<sup>1</sup> The political subordination of the Roman provinces entailed also their incorporation into the complex economy of the Empire. The region of interest in this study is Moesia, conquered by Marek Licinius Crassus in 29 BC and later transformed into a Roman province. In AD 86, during the reign of Emperor Domitian, Moesia was divided into two separate provinces: Moesia Superior and Moesia Inferior.<sup>2</sup> However, due to the chronological frame of the paper, the present focus will be on the whole province of Moesia, because the overarching goal is to discuss numismatic finds from Novae which date from the time when the *legio VIII Augusta* stationed there, that is, up until AD 69.

<sup>1</sup> Publication co-financed from the state budget under the program of the Minister of Education and Science under the name "Science for Society", project number NdS/549035/2022/2022, co-financing amount PLN 94,700, total project value PLN 1,295,867.00.

<sup>2</sup> Cf. KOLENDO 1976; BOTEVA 1996; IVANOV 1999 (= IVANOV 1997, pp. 469–640).

Moesia was not recognised as a Roman province until AD 6, during the reign of Octavian Augustus. This region was of utmost strategic importance for the Empire, but it was also threatened by very bellicose tribes from the other bank of the Danube. Hence, up to five legions would station there permanently, supported by numerous auxiliary units. Moesia was incorporated into the Roman economic zone during the reign of Claudius, who separated the Moesian administration from the Macedonian in AD 44. A year later, in AD 45, the *legio VIII Augusta* came to Novae with the urgent task of setting up a legionary camp along the Danube. The legionaries constructed a wooden-earthen camp which, by necessity, left few recognisable traces.<sup>3</sup> After the death of Nero, many military units were moved to other locations in the Empire. The *legio VIII Augusta* sided with Otho and then with victorious Vespasian. In the spring of AD 69, the unit was moved to northern Italy and took part in the Battle of Bedriacum.<sup>4</sup> Then, *ca.* AD 70, the *legio VIII Augusta* was relocated to the western border on the Rhine, whereas Novae was garrisoned by the *legio I Italica*,<sup>5</sup> with which it is typically associated today.<sup>6</sup>

After the relocation to Novae, the *legio I Italica* conducted a complete overhaul of the legionary camp. The previous wooden buildings were replaced with masonry structures. In practice, it means that we have very few relics of the original camp built by the *legio VIII Augusta*.<sup>7</sup> One of such lasting traces of this legion's presence in Novae are relatively numerous early-imperial coins found at the site. As mentioned above, once the Roman province of Moesia was established the region started to partake in the interdependencies, regularities, and connections related to the monetary system of the "heart" of the contemporary world. Therefore, an analysis of the early-imperial coins as linked to the presence of the *legio VIII Augusta* in Novae requires taking into account the monetary system and policies existing in the Empire at the time.

It is worth emphasising that an important role in this analysis is played by the archaeological investigation by the Antiquity of Southeastern Europe Research Centre (University of Warsaw) conducted since 2011 on the so-called Section XII, located between the eastern wall of the *principia* and Via Sagularis, running behind the eastern wall, as well as Via Principalis (from the north) and Via Quintana (from the south).<sup>8</sup> Based on the plans of other known legionary camps, the investigators expected to find masonry barracks of the first cohort of the *legio I Italica*.<sup>9</sup> However, instead they found well-preserved traces of the wooden camp of the *legio VIII Augusta*. This interpretation is supported by radiocarbon dating as well as an analysis of the interrelations between archaeological finds and cultural layers. Stratigraphic examination led to distinguishing two phases when the oaken barracks were constructed, providing shelter to legionaries setting up the camp *ca.* AD 44/45.<sup>10</sup> It was established that initially the camp was built in haste and negligently, only to be reconstructed later.<sup>11</sup> The legionaries of the *legio I Italica* dismantled the wooden camp in a deliberate, systematic way, removing beams supporting the roofs orderly to prevent the buildings from collapsing.<sup>12</sup>

In those places where traces of the wooden barracks of the *legio VIII Augusta* were found in Section XII the seven seasons of archaeological excavations (2011–2018) yielded 33 early-imperial coins [Table 1]. For comparison, only a slightly greater number of coins were retrieved in Section IV in the course of 50 years of investigation.<sup>13</sup> In turn, of all the coins discovered in the

<sup>3</sup> DYCZEK 2019a, pp. 55–64.

<sup>4</sup> WELLS 1995, pp. 123–152; MORGAN 2006, *passim*.

<sup>5</sup> RITTERLING 1925, coll. 1407–1417.

<sup>6</sup> SARNOWSKI 1976, pp. 50–65; SARNOWSKI 1977, pp. 415–424; DYCZEK 2003, pp. 7–20; DERDA, DYCZEK, KOLENDO 2008; DYCZEK 2008, pp. 65–78.

<sup>7</sup> DYCZEK 2015, pp. 169–177; DYCZEK 2018, pp. 27–71; LEMKE 2018, pp. 74–82; DYCZEK 2019b, pp. 115–126.

<sup>8</sup> DYCZEK 2018.

<sup>9</sup> DYCZEK 2018, pp. 28–29.

<sup>10</sup> DYCZEK 2019a, pp. 55–64.

<sup>11</sup> DYCZEK 2016, pp. 563–570; DYCZEK 2018, pp. 29, 36.

<sup>12</sup> DYCZEK 2018, pp. 41–42.

<sup>13</sup> CIOLEK, DYCZEK 2011.

whole legionary camp, 161 published specimens are known to have come from the time when the *legio VIII Augusta* departed from Novae [Table 1]. It has been established that the annual military expenses of the Roman state in the discussed period were extremely high, amounting to as much as one trillion sestertii. Current calculations indicate that 2/3 of the state funds were spent on building legionary camps.<sup>14</sup>

### General statistics

The statistics [Table 1] clearly show that an extraordinary large number of coins of Claudius I was found, which certainly is not a coincidence. These are followed by relatively numerous coins of his predecessor, Gaius, and his successor, Nero (respectively, 23 and 26 specimens). Coins of the two latter rulers were found significantly less frequently in comparison to those issued by Claudius. Therefore, the number of coins at the site increased gradually, as only several coins of Octavian were recorded (5 specimens) whereas already more than a dozen was issued by his successor, Tiberius (16 specimens). How do the percentages look like? The prevailing group are clearly the coins of Claudius, amounting to 41% of all the early-imperial coins from Novae. However, the second most common emission, by Nero, constitutes only 16.2%, while the coins of Claudius' predecessor, Gaius, no more than 14.3%. Nearly 10% are bronzes of Tiberius, with the coins of Octavian (3.1%) and those predating the Christian era amounting to less than 4% of all early-imperial numismatic finds.

When it comes to denominations, bronze coins clearly prevail over denarii. Only eight denarii were found, which equals 5% of all the investigated coins. It is, then, easy to calculate that the bronze issues form a vast majority. We will return to this question later, during an analysis of the monetary system of the Roman Empire up to AD 69, that is, until the legionary “changing of the guard” in Novae. Such structure is a simple reflection of the period's monetary system and policy. Nevertheless, the numismatic finds included in the analyses can be convincingly linked to the beginnings of the legionary camp in Novae and other breakthrough episodes at the earliest stage of its construction.

Table 1. Compilation of coins from the times until the end of the Julio-Claudian Dynasty (the “changing of the guard” in Novae)

Issuer	Denominations	Sector IV	Sector VIII	Sector X <sup>15</sup>	Sector XI	Sector XII	Novae	Denominations in total	Coins in total
Cassander	AE					1		1	1
Mark Antony	D			1	2			3	3
Octavian	D						1	1	5
	As	2				1	1	4	
	Dp								
	S								

<sup>14</sup> DUNCAN-JONES 1994, pp. 36, 45; WOLTERS 2012, pp. 347–349.

<sup>15</sup> GENČEVA 2002, pp. 111–116.

<b>Tiberius</b>	<b>As</b>	<b>4</b>		<b>2</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>14</b>	<b>16</b>
	<b>Dp</b>				<b>2</b>			<b>2</b>	
	<b>S</b>								
<b>Gepaepyris (37–39)</b>	<b>AE</b>	<b>1</b>						<b>1</b>	<b>1</b>
<b>Gaius</b>	<b>Qu</b>						<b>1</b>	<b>1</b>	<b>23</b>
	<b>As</b>	<b>1</b>	<b>1</b>			<b>1</b>	<b>13</b>	<b>16</b>	
	<b>Dp</b>						<b>5</b>	<b>5</b>	
	<b>S</b>			<b>1</b>				<b>1</b>	
<b>Claudius I</b>	<b>As</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>10</b>	<b>44</b>	<b>66</b>
	<b>Dp</b>	<b>1</b>			<b>3</b>	<b>1</b>	<b>4</b>	<b>8</b>	
	<b>S</b>	<b>6</b>	<b>1</b>		<b>1</b>	<b>3</b>	<b>3</b>	<b>14</b>	
<b>Nero</b>	<b>D</b>		<b>1</b>		<b>2</b>		<b>1</b>	<b>4</b>	<b>26</b>
	<b>Qu</b>					<b>1</b>		<b>1</b>	
	<b>As</b>			<b>2</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>9</b>	
	<b>Dp</b>			<b>1</b>		<b>1</b>	<b>1</b>	<b>3</b>	
	<b>S</b>	<b>1</b>		<b>1</b>	<b>1</b>		<b>6</b>	<b>9</b>	
<b>Julio-Claudian Dynasty</b>	<b>As</b>	<b>11</b>				<b>2</b>		<b>13</b>	<b>20</b>
	<b>Dp</b>	<b>1</b>						<b>1</b>	
	<b>S</b>	<b>3</b>				<b>3</b>		<b>6</b>	
		<b>37</b>	<b>9</b>	<b>12</b>	<b>18</b>	<b>33</b>	<b>51</b>	<b>161</b>	<b>161</b>

### Exceptional coins

Before we move to a detailed analysis of the assemblage of coins discovered in Sector XII of the legionary camp in Novae it is worth discussing several unique and historically important coins. Perhaps the most surprising new find is a “bronze” coin of Cassander, a Macedonian king from the Antipatrid Dynasty.<sup>16</sup> As of now, it is the oldest antique coin registered in Novae. The obverse of the coin of Cassander bears a depiction of the head of Hercules looking to the right and wearing a lion’s skin headdress, while the reverse shows a rider going to the right and crowning the horse with a laurel wreath [Fig. 1]. The legend on the Novae specimen is illegible, if it was there at all. This type are the most commonly-found coins of Cassander. They were struck from 305 BC, the year when he ascended to the throne, to the end of his rule.

Another coin which should be seen as unusual in Moesia is a Bosporan issue worth 12 *nummi* and struck for Gepaepyris, a Thracian princess and Queen of Bosporus. The coin was manufactured between AD 37 and AD 39, in Panticapaeum. Hence, it comes from the times of Caligula

<sup>16</sup> For more on the “bronze” coins of Cassander, see VALAS-SIADIS 2005, pp. 405–413.



Fig. 1. “Bronze” coin of Cassander found in Novae, Sector XII, inv. no. 64/12 (photo by R. Ciolek)

and was discovered in Sector IV (*thermae legionis / valetudinarium*).<sup>17</sup> It seems safe to assume that the coin appeared in Novae most likely in relation to the expedition of Claudius (*bellum Mithridaticum*) to Crimea in the years AD 45–49 (Tac. *Ann.* 12.5–21), led by Didius Gallus, the governor of Moesia.<sup>18</sup>

The relative non-Romanness of the site before the coming of the *legio VIII* is attested by the lack of Republican coins. Therefore, it may seem all the more surprising that the finds include three “legionary” denarii of Mark Antony.<sup>19</sup> Even though they can be considered “exceptional” in Novae, due to the precious metal used to make them and their dating, certainly deserving a brief commentary, they do not in any way contradict our previous remarks about the history of the legionary camp and the monetary circulation in the Danubian territories.<sup>20</sup> It is known that these coins circulated for a long time, because they appear in assemblages from the early third century. They can be found in hoards dated to the reign of Septimius Severus.<sup>21</sup> The hoards of coins containing older specimens, namely the “legionary” denarii of Mark Antony, are fairly common both in the Roman Empire and beyond. It is related to the specificity of monetary circulation in the second and third centuries and the quality of the aforementioned Republican coins.<sup>22</sup>

Understanding the idiosyncrasies of the “legionary” denarii struck for Mark Antony would be impossible without remembering why they were issued, as well as the reasons behind their epithet — “legionary”. It is a modern conventional name. These denarii come from the years 32/31 BC, predating the Battle of Actium, which is intrinsically linked to the decision about emission of these silver coins. Depictions shown on the obverses and reverses of these coins are characteristic. The main side would always bear a Roman galley and the legend ANT AVG III VIR R PC, whereas the opposite side would always have the legionary eagle (*aquila*) between two banners. It was also where the legend was placed, informing which of the legions supporting the cause of Mark Antony were awarded with this type of denarii.

<sup>17</sup> CIOLEK, DYCZEK 2011, p. 51.

<sup>18</sup> PAUNOV 2013, p. 374.

<sup>19</sup> For more on the “legionary” denarii of Mark Antony, see GRANT 1954, p. 200; BOLIN 1958, pp. 52–65, 178, 179; MATTINGLY 1967, p. 179; KUNISZ 1979, pp. 13–14.

<sup>20</sup> CIOLEK, DYCZEK 2011; PAUNOV 2013; CIOLEK 2017.

<sup>21</sup> The hoard from Unterammergau (Germany, Upper Bavaria) closed with a denarius of Commodus contained 21 “legionary” denarii of Mark Antony. A similar

chronological range was found in the hoards from Dellstedt (Germany, Schleswig-Holstein), Bingen (Germany, Rhineland), Middels-Osterloog (Germany, Lower Saxony), Owczarnia (Poland, Pomerania), Bajót (Lower Pannonia), Sîngeorgiu de Cîmpie (Dacia).

<sup>22</sup> Cf. BOLIN 1958.

Mark Antony needed considerable funds to support his conflict with Octavian, the future Augustus. Hence, he decided to lower the weight of a denarius in comparison to the contemporaneously circulated monetary mass. The coins were also made of worse-quality silver. Through these means, he could strike a greater number of denarii from the same amount of precious metal. The coins were issued in large quantities for the standards of the time. It was also a way to honour the legions fighting for Mark Antony's cause against Octavian. Apparently, denarii bearing numbers of particular legions were not used to pay soldiers only from these specific military units but rather distributed randomly.<sup>23</sup> It helped to bolster the troop's morale, as the legionaries would see how many legions were supporting Mark Antony.

Why is this information important for the present considerations on the three "legionary" denarii of Mark Antony in the camp at Novae? These coins were circulated for a long time — until the late second or even early third century, as mentioned before. The process responsible for it was the rule that "bad money drives out good". The "legionary" denarii were of worse quality and smaller size than other Republican denarii or coins of the Julio-Claudian Dynasty issued prior to the reform of Nero in AD 64. The Danubian territories during the civil war after the death of Julius Caesar had not yet been incorporated into the Roman state. The "legionary" denarii of Mark Antony were undoubtedly brought to this region much later. However, giving an exact date would be pure speculation.

### Countermarked coins

The numismatic assemblage excavated in Sector XII contains three countermarked coins. These include a coin of Claudius (inv. no. 293/14) and two non-specific, poorly-preserved "bronzes" (inv. nos. 47/15 and 368/14). In both non-specific cases, it can be assumed that the coins come from the times of Claudius and are presumably asses and/or dupondii. Up to date, during excavations conducted since 1960, only four countermarked coins have been registered in Novae. All of them come from the times of Claudius: an as from Principia (Sector XI) dated to 41–42;<sup>24</sup> a dupondius from Sector IV (*thermae legionis / valetudinarium*);<sup>25</sup> another example considered to be an imitation of the Claudian sestertius,<sup>26</sup> and an actual Claudian sestertius of the type SPES AVGVSTA.<sup>27</sup> Paunov notes that none of the countermarked coins found in Novae predate the reign of Claudius.<sup>28</sup> The presence of countermarks on Roman coins along the Danubian limes had been noticed long ago.<sup>29</sup> However, for various reasons, this topic was ignored or treated as something unworthy of explanation — it was seen as a simple self-explanatory fact. The countermarked coins were treated with greater attention by R. Martini<sup>30</sup> and, later, E. Paunov.<sup>31</sup>

Three types of countermarks were distinguished, based on their place of discovery: (A) Pannonian types alone, (B) Pannonian and Moesian types associated together and (C) Moesian types alone. From our perspective, Type (C), most frequent, is of greatest interest. It was divided into three subgroups: (C1) "Associated" countermarks, (C2) "Isolated" countermarks of only a few types, (C3) "Uncertain" countermarks.<sup>32</sup> It has been established that coins started to be coun-

<sup>23</sup> As indicated, for instance, by the hoard of "legionary" denarii found near Actium and containing denarii of almost every legion supporting Mark Antony, see ROWAN 2019, pp. 181–184.

<sup>24</sup> PAUNOV 2013, p. 375. Personal communication with Prof. T. Sarnowski in 2009.

<sup>25</sup> CIOLEK, DYCZEK 2011, p. 52, cat. no. 10.

<sup>26</sup> CIOLEK, DYCZEK 2011, p. 55, cat. no. 21; PAUNOV 2013, p. 375.

<sup>27</sup> PAUNOV 2013, p. 375.

<sup>28</sup> CIOLEK, DYCZEK 2011, *passim*; PAUNOV 2013, p. 375.

<sup>29</sup> MARTINI, PAUNOV 2004, pp. 159–174; MIŠKEC 2005, pp. 1005–1012.

<sup>30</sup> MARTINI 2002; MARTINI 2003; MARTINI 2005; MARTINI, PAUNOV 2004.

<sup>31</sup> PAUNOV 2013.

<sup>32</sup> PAUNOV 2013, pp. 426–427.



termarked in the years AD 45–46, when considerable efforts were undertaken to reorganise the Balkans and incorporate them into the Roman state. It remains unknown, however, how long this process was. If we assume that countermarking was a response to a developing monetary crisis, manifested in gradual resignation from issuing “bronzes”, then it could be expected that the countermarked coins were forgotten immediately after the reform of Nero implemented in AD 64.

The sole existence of the mixed Type (B), combining the Pannonian and Moesian types, corroborates the connections between the legions stationed in these two provinces under the Julio-Claudian Dynasty, and especially during the reign of Claudius.

All the three newly-found countermarked coins from Novae (inv. nos. 293/14, 368/14 and 47/15) are heavily-worn [Figs. 2–4]. The coin with the inventory number 47/15 [Fig. 4] has three countermarks, two on the obverse and one on the reverse. On the first side, these countermarks are AVG, TI•CÆ and T•C•A, whereas on the other TI•CÆ or T•C•A. Therefore, it is Type C1, a Moesian variant occurring relatively often. The TI•CÆ countermark is known from more than 520 specimens.<sup>33</sup>



Fig. 2. “Bronze” coin of Claudius with a countermark found in Novae, Sector XII, inv. no. 293/14 (photo by R. Ciołek)



Fig. 3. “Bronze” coin with countermarks found in Novae, Sector XII, inv. no. 368/14 (photo by R. Ciołek)

<sup>33</sup> MARTINI 2002, pp. 63–81; PAUNOV 2013, p. 430.



Fig. 4. “Bronze” coin with countermarks found in Novae, Sector XII, inv. no. 47/15 (photo by R. Ciołek)

Another countermarked coin (inv. no. 293/14) [Fig. 2] with an outline of the head of Claudius is worn very heavily. It is not corroded. However, it is worn so much that the reverse is entirely smooth. Its obverse bears an image of the emperor, above which there is an oval countermark with the head facing towards the right. The iconography of this countermark is described as the head of bearded Hercules facing right and classified as Type C2b.<sup>34</sup> Such countermarks are also known from asses of Claudius.<sup>35</sup> It is worth emphasising that although the image on the coin is heavily-worn, the countermark is easily-discernible. The discussed coin demonstrates clearly that countermarking was used to return into circulation those coins which were worn due to the intensity and time of use.

Identification is problematic in the case of the third countermarked coin (inv. no. 368/14). On one side, the coin undeniably bears a countermark AVG. Presumably, its right side must have had another stamp, currently barely visible, unlike the element seen on the left. The stamp resembles the letter A or V (depending on the vantage point) and was struck deep into the planchet [Fig. 3]. All the evidence, thus, suggests that this coin is also a Moesian type. Nevertheless, it has to be highlighted that other elements seen on the discoid coin are difficult to interpret. The other side of the coin is so worn that no traces of the stamp could be found.

In result, the excavations conducted in Sector XII provided new data on the countermarked coins. All the specimens of this kind registered so far come exclusively from military areas. The heavy wear seen on the countermarked coins unambiguously reveals the reason behind this practice. Under the reigns of Caligula, Claudius, and Nero the Empire experienced severe deficit of coins, including the “bronze” ones. Even a heavily-worn coin would still be circulated, whereas the stamp of the person or institution warranting its quality would be replaced with a countermark. As indicated by the available data, the countermarked coins were very common in the Roman Balkan territory. Eugeni Paunov believes that the practice of stamping worn coins was ordered and supervised by the military administration of the legions stationed in the province. He found that countermarking, as well as the imitations of Roman “bronzes” related to it, must have started in AD 44/45 and continue until the reform of Nero in AD 64.<sup>36</sup> This provides solid evidence showing that a typical legionary was paid in “bronze” coins, since we lack any silver coins with stamps.

Many clues indicate that countermarking was practiced in the legionary camps in Viminacium, Ratiaria, and Oescus, but not in Novae.<sup>37</sup> As demonstrated, the stamped coins reached Novae and were used as a legitimate medium of exchange defined by the monetary system of the Empire.

<sup>34</sup> PAUNOV 2013, p. 431.

<sup>35</sup> MARTINI 2002, p. 34; PAUNOV 2013, pp. 431–432.

<sup>36</sup> PAUNOV 2013, pp. 435–436.

<sup>37</sup> PAUNOV 2013, pp. 436–437.



These coins are also excellent for dating, because the exact time of stamping is known. This practice was limited exclusively to early Imperial coins, mostly from the time of Emperor Claudius. There is considerable evidence showing that the vast majority of early Imperial coins registered so far were not brought to Novae before the arrival of the *legio VIII*.

### Monetary system in the Roman Empire under the Julio-Claudian Dynasty

Everything seems to indicate that the monetary circulation in the Danubian legionary camps in the early Imperial Period looked analogously to that seen in the natively Italic territories. The province of Moesia was not integrated into the Roman economy and politics until the reign of Claudius. Therefore, it is this period and the reign of Emperor Nero which deserve careful attention.

Under Claudius, “bronze” coins were struck mainly in the Roman mint and, despite their relative lack of typological diversity, they were issued in large quantities by the standards of the period. The most prevalent among them were asses, followed by sestertii, whereas dupondii were less frequent compared to other “bronze” denominations. A particular role in the monetary policy of Claudius was reserved for quadrantes, nota bene minted already earlier for Gaius. The quadrantes circulated for a short time but a great number of them was manufactured.<sup>38</sup> Nevertheless, it should be expected that they were used mostly in the city of Rome and its vicinity. They were either rare or entirely unseen in Roman provinces.

Already during the reign of Caligula, and Claudius after him, there is an observable decrease in minting of silver coins. The reasons behind this tendency stemmed from the economics of the state, because it was simply uneconomical to strike such coins according to the official rate of mintage, introduced already in the Republican Period. The monetary system of Claudius assigned an important role to re-struck “bronzes” issued in the earlier times. Particular attention was paid to coins of Caligula, condemned to *damnatio memoriae*, but Claudius’ stamp and portrait have been identified also on coins minted for Tiberius.<sup>39</sup> In general, except for Italy, during the reign of Julio-Claudian Dynasty the whole Roman Empire suffered from an acute monetary deficit. It was particularly pronounced after the closure of the mint in Lugdunum and later, under Caligula, suppression of the autonomic coinage of the Iberian towns, which led to the lack of everyday currency, that is, the “bronze” denominations in the Western provinces of the Empire.<sup>40</sup> A well-proven solution was used to counter-act the said gap in circulation — imitation coins would be produced, which was by necessity tolerated by the provincial Roman administration. The mint in Rome could guarantee a steady and sufficient supply of monetary mass. An alternative way to cope with the situation was to countermark older coins with the stamp of the current ruler. Admittedly, it did not introduce new mass to the circulation, but enabled the continued use of coins which should otherwise be withdrawn from the market due to their heavy wear.

At the time when Moesia was incorporated into the Empire, the monetary system relied on “bronze” coins — especially asses and sestertii were manufactured on a mass scale [Table 2]. The production of denarii and aurei was much smaller. All in all, the coinage of Claudius was very diverse, since the emperor re-established the mints on the western coast of Asia Minor as well as that in Alexandria. Some coins were even struck in Lugdunum, but this was largely limited to commemorative emissions.

<sup>38</sup> KING 1975, pp. 82–84.

<sup>39</sup> LABROUSSE 1977, pp. 176–177.

<sup>40</sup> KUNISZ 1978, pp. 69–71.

Table 2. “Bronze” coinage of Claudius — frequencies of finds

Denominations	Emission years	Coin type	Frequency	Number of types
As	41–50	<i>RIC 95</i>	C	3
		<i>RIC 97</i>	C	
		<i>RIC 100</i>	C	
	50–54	<i>RIC 106</i>	C	4
		<i>RIC 111</i>	C	
		<i>RIC 113</i>	C	
		<i>RIC 116</i>	C	
Dupondius	41–50	<i>RIC 92</i>	C	3
		<i>RIC 94</i>	C	
		<i>RIC 101</i>	R2	
	50–54	<i>RIC 104</i>	S	3
		<i>RIC 107</i>	R4	
		<i>RIC 110</i>	C	
Sestertius	41–50	<i>RIC 93</i>	C	4
		<i>RIC 96</i>	C	
		<i>RIC 98</i>	S	
		<i>RIC 99</i>	C	
	50–54	<i>RIC 102</i>	C	8
		<i>RIC 103</i>	R3	
		<i>RIC 105</i>	R4	
		<i>RIC 108</i>	R4	
		<i>RIC 109</i>	S	
		<i>RIC 112</i>	S	
		<i>RIC 114</i>	S	
<i>RIC 115</i>	C			

C – Common, very common, or extremely common

S – Scarce

R – Rare, up to *ca.* 20 specimens

R2 – Rare, up to *ca.* 15 specimens

R3 – Rare, up to *ca.* 10 specimens

R4 – Rare, up to *ca.* 5 specimens

R5 – Very rare or unique

A breakthrough in Roman coinage undoubtedly came with the reform undertaken during the reign of Nero, in AD 64. As a matter of fact, it was inevitable given the evolution of the economy of the Empire. The weights of denarii and aurei were significantly reduced and the use of coloured metals as additives was officially recognised in silver alloys. While the pre-reform denarii were made of almost pure silver (98%), after the reform the same coins contained up to 10% of additives<sup>41</sup> and this percentage would gradually and unnoticeably grow year by year. The mutual relations between denominations were left unchanged.

Since the reform of the year 64, the volume of production of coins increased for all three metals. Moreover, a greater number of coin types were minted in parallel [Table 3]. The subsequent years saw a steadily developing upward trend in the production volume of silver and “bronze” coins. The pre-reform coins were officially withdrawn from circulation in AD 107 by a decree of Trajan.<sup>42</sup>

There is a considerable amount of evidence indicating that Nero experimented a little with the monetary system. On a provisional basis, all of the “bronze” denominations would be manufactured from *orichalcum*. However, apparently it must have been a mistake and soon the sestertii and dupondii would again be made from brass, whereas asses from copper. It was at the time of this emperor that a situation occurred which had not happened in the Empire before and would never happen after Nero. During the first decade of Nero’s reign, no “bronze” coins were minted whatsoever [Tables 3–4]. It was justified by the unprofitability of the process due to the volatile price of *orichalcum*.<sup>43</sup> However, it has to be noted that after AD 64 brass coins of all denominations started to be manufactured on a mass scale, as mentioned earlier. Hence, if it was indeed so unprofitable, Nero would not have decided to mint asses made of brass. An alternative explanation to this decision may be that the market was already saturated with “bronze” currency.<sup>44</sup>

After AD 64, the “bronze” coins would enter circulation in large quantities, issued by the mints of both Rome and Lugdunum. Under Nero, the autonomic coinage rapidly developed in the East as well as in Alexandria. Simultaneously, large emissions of semisses and quadrantes were also observed [Table 4]. A single quadrans of Nero was found in Novae [Fig. 5]. It is dated to AD 64 and bears iconography congruent with the tradition which did not include the portrait of a ruler.

Table 3. Coinage of Nero **up until** the monetary reform of the year 64 — frequencies of finds<sup>45</sup>

Denomination	Emission year	Coin type	Frequency	Number of types	Total number of types	Frequency statistics
Denarii	54	<i>RIC</i> 2 <i>RIC</i> 5	R2 R3	2	20	R: 1 = 1 Au R2: 14 = 4 D + 10 Au R3: 20 = 11 D + 9 Au R4: 8 = 5 D + 3 Au R5: 0
	55	<i>RIC</i> 7	R3	1		
	56	<i>RIC</i> 9	R3	1		
	57	<i>RIC</i> 12	R2	1		
	58	<i>RIC</i> 15	R2	1		
	59	<i>RIC</i> 17	R2	1		
	60	<i>RIC</i> 18 <i>RIC</i> 20	R4 R3	2		

<sup>41</sup> *RIC*, vol. I/5; see also BOLIN 1958, pp. 336–357; LUCHELLI 1998, pp. 160–161; BUTCHER, PONTING 2005, p. 195; BURSCHE 2008, p. 53.

<sup>42</sup> DUNCAN-JONES 1994, pp. 195–196; KUNISZ 2001, pp. 350–351.

<sup>43</sup> H. MATTINGLY, E. A. SYDENHAM, [in:] *RIC*, vol. I, p. 138.

<sup>44</sup> KUNISZ 1978, pp. 87–89.

<sup>45</sup> Based on *RIC*, vol. I, second edition.

	61	<i>RIC</i> 22 <i>RIC</i> 24 <i>RIC</i> 26 <i>RIC</i> 28	R3 R3 R3 R3	4	
	62	<i>RIC</i> 30 <i>RIC</i> 32 <i>RIC</i> 34	R4 R3 R3	3	
	63	<i>RIC</i> 37 <i>RIC</i> 39	R4 R4	2	
	64	<i>RIC</i> 41 <i>RIC</i> 43	R3 R4	2	
Aurei	54	<i>RIC</i> 1–2 <i>RIC</i> 3 <i>RIC</i> 4	R R4 R2	3	23
	55	<i>RIC</i> 6	R3	1	
	56	<i>RIC</i> 8 <i>RIC</i> 10	R2 R4	2	
	57	<i>RIC</i> 11 <i>RIC</i> 13	R2 R4	2	
	58	<i>RIC</i> 14	R2	1	
	59	<i>RIC</i> 16	R2	1	
	60	<i>RIC</i> 19	R2	1	
	61	<i>RIC</i> 21 <i>RIC</i> 23 <i>RIC</i> 25 <i>RIC</i> 27	R3 R2 R2 R2	4	
	62	<i>RIC</i> 29 <i>RIC</i> 31 <i>RIC</i> 33	R3 R2 R3	3	
	63	<i>RIC</i> 35 <i>RIC</i> 36 <i>RIC</i> 38	R3 R3 R3	3	
	64	<i>RIC</i> 40 <i>RIC</i> 42	R3 R3	2	

Table 4. Coinage of Nero **after** the monetary reform of the year 64 — frequencies of finds<sup>46</sup>

Denomination	Emission year	Coin type	Frequency	Number of types	Frequency statistics
Denarii	64–65	<i>RIC</i> 45, 47, 49, 51, 53, 55	R R R2 R4, R R	6	R: 10 R2: 4
	65–66	<i>RIC</i> 57, 60, 62	R R R	3	R3: 1 R4: 2

<sup>46</sup> Based on *RIC*, vol. I, second edition.

	66–67	<i>RIC</i> 64, 65, 67	R3, R4, R	3	
	67–68	<i>RIC</i> 68, 69, 70, 71, 72	R2 R R2 R R	5	
Aurei	64–65	<i>RIC</i> 44, 46, 48, 50, 52, 54	R2 R R R R R	6	R: 9 R2: 3 R3: 0 R4: 0
	65–66	<i>RIC</i> 56, 58, 59, 61,	R2 R R R	4	
	66–67	<i>RIC</i> 63, 66	R R2	2	
	67–68	–	–	0	
Asses	62–68	<i>RIC</i> 73–87	S S S R R C S S C C R R R C R	15	R: 78 R2: 136 S: 127 C: 193
Semisses		<i>RIC</i> 88–92	S R S S S	5	
Quadrantes		<i>RIC</i> 93–94	S S	2	
Sestertii	63	<i>RIC</i> 95–108	S S S C C S S S R R R2 R C C	14	C: 74 S: 45 R: 27 R2: 56
Dupondii		<i>RIC</i> 109–120	R S S R2 S R2 R2 S R2 R R R2	12	
Asses		<i>RIC</i> 121–125	C S R2 S R2	5	
Quadrantes		<i>RIC</i> 126–129	R2 R2 R2 S	4	
Sestertii	64	<i>RIC</i> 130–183	S R R R2 R S R2 C C C S C R C C C R2 C C C S S R2 R R R2 R2 S R R2 S C S S S C C C S C C C C S R R2 R2 R C S R2 C C R	54	C: 47 S: 19 R: 18 R2: 27
Dupondii		<i>RIC</i> 184–204	S S R2 S R R2 C C R C C S C R S C C C C S C	21	
Asses		<i>RIC</i> 205–220	S R R R S S S S S C C R S S R2 S	16	
Semisses		<i>RIC</i> 221–248	C R S R2 C C S R2 S R2 S R C C R2 R S S S S S R2 C S S S S C S	29	
Quadrantes		<i>RIC</i> 249–262	R2 C S S R2 R2 C R2 R2 C R2 C S S	14	C: 43 S: 27 R: 24 R2: 28
Sestertii	65	<i>RIC</i> 263–282	S C C C S C R C C R C C C C R R2 C R S S	20	
Dupondii		<i>RIC</i> 283–299	R2 C C R2 R2 R2 C S C R2 C C R2 C C S R	17	

Asses		<i>RIC</i> 300–316	C R R R C R2 C C R2 C R R2 C C S R2 S	17
Quadrantes		<i>RIC</i> 317–322	C C C R2 R2 S	6
Sestertii	66	<i>RIC</i> 323–336  <i>RIC</i> 489–517	S S R2 R2 S S C C R2 R2 C C R R2  R2 S C S R2 R C S R R2 R C R2 C C R2 R2 S R2 C S C S R R2 R2 R2 C C	43
Dupondii		<i>RIC</i> 337–346  <i>RIC</i> 518–25	R2 R2 S R R C S C C R2  C C C S C C C C	18
Asses		<i>RIC</i> 347–352  <i>RIC</i> 526–548	C C C C C C  C C R2 C S R2 R2 C C R R S C S R R2 R2 C C C R R2 R2	29
Semisses		<i>RIC</i> 549–563	C R2 S R2 R R S C R2 S R2 C R R2 S	15
Sestertii	67	<i>RIC</i> 353–361  <i>RIC</i> 564–594	R2 C R2 C S S R2 S S  R2 R2 R R2 R2 C S C R R2 R2 S R2 R2 R2 C R2 S C C R2 R2 R2 R2 R2 C R2 C S R2 R	40
Dupondii		<i>RIC</i> 362–365  <i>RIC</i> 595–604	C C R2 R2  R2 C C R C R R C R R	14
Asses		<i>RIC</i> 366–368  <i>RIC</i> 605–606	R2 C C  C C	5
Sestertii	68	<i>RIC</i> 369–370	R2 R2	2
Sestertii	64–67	<i>RIC</i> 371–372  <i>RIC</i> 386–398  <i>RIC</i> 429–443	R2 R R2 S C R2 C C C C R2 R C  R2 C C C C R2 S S C C C C C R2  C S	29



Dupondii	<i>RIC</i> 373–379	R R2 R2 S R2 S C	29
	<i>RIC</i> 399–413	C C R C R2 R2 S C C R2 R C C C R2	
	<i>RIC</i> 444–450	R2 S C C R C C	
Asses	<i>RIC</i> 380–385	R2 R R2 R2 S S	44
	<i>RIC</i> 414–423	R R2 C C R2 S R2 R C C	
	<i>RIC</i> 451–478	R2 R2 R2 C R2 R2 R2 C C C C R R C C C C R2 C S S R S C C C C C	
Semisses	<i>RIC</i> 424–428	R2 S R2 S S	15
	<i>RIC</i> 479–488	C C R S R2 R R2 S C S	



Fig. 5. Quadrans of Nero found in Novae, inv. no. 150/13  
(photo by R. Ciołek)

### Conclusions: summary of research analyses

What is significant and exceptionally important is the relatively large percentage of coins of the Julio-Claudian Dynasty among the published numismatic finds from the area of Novae excavated thus far and those from the unpublished research in Sector XII. It has crucial implications in the light of the latest archaeological investigation conducted by the Antiquity of Southeastern Europe Centre of the University of Warsaw.<sup>47</sup>

It is known that Novae came into the Roman sphere of influence during the reign of Claudius. The coins of Octavian and Tiberius registered at the site were certainly brought there during the construction of the legionary camp. A total of five coins of Octavian were found in Novae, along with a much greater number — 16 specimens — minted for Emperor Tiberius. These are mostly

<sup>47</sup> DYCZEK 2018.

asses. Not a single sestertius of these rulers have been discovered so far, which is not surprising given that these are generally rare finds. More asses have been issued by Tiberius, as evidenced in the analysed numismatic assemblage. It has to be noted that Tiberius ruled for a relatively long period (AD 14–37). Taking the length of his rule into account, the volume of his emissions is actually very small. The coinage of Tiberius' successor, Emperor Gaius, also known as Caligula, looks even worse in this regard. In the Roman numismatic corpus, he is referred to as Gaius, so the same nomenclature is adopted here. In the course of less than four years of his rule, Gaius had several series of “bronze” coins struck: sestertii, dupondii, asses, and quadrantes, among which only the asses were issued in larger quantities. The remaining “bronze” coins are rare finds.<sup>48</sup> Presumably, the coins of this emperor fell out of circulation quite quickly, especially after his *damnatio memoriae*.<sup>49</sup> The 23 specimens found in Novae, the majority of which are asses, seem to witness an inflow of these coins in the period very close to the reign of Gaius. If we remember that the legionary camp in Novae started being constructed under Claudius, it may be proposed that the coins were likely brought there no later than the coming of legionaries of the *legio VIII Augusta*.

If we consider the general situation of coinage in this period, then a clear deceleration in emissions is observed, especially under Claudius.<sup>50</sup> It is worth remembering here that the majority of excavated coins from the time when the camp was being constructed in Novae were struck during the Claudian rule [Table 1]. The later progressing decline of the Roman mint was caused by the lack of precious metals and enormous costs of manufacturing pure-silver coins. It was not until the aforementioned monetary reform undertaken by Nero in AD 64 that the monetary system recovered. After the reform, in turn, the volume of numismatic production increased significantly. Naturally, the objective of withdrawing all higher-quality coins was not entirely met, but still it allowed to remove the best specimens from circulation.

No hoards of denarii dated to the Claudian rule have been recorded in Moesia so far.<sup>51</sup> Two such assemblages were registered in Thracia, closed with Claudian denarii. For the period discussed here, that is the reign of the Julio-Claudian Dynasty, the majority are hoards of denarii closed with coins of Octavian — nine assemblages in total. The origins of hoards has to be kept in mind. In most cases, it was hidden wealth. Hoarding was a strategy applied in times of strife, military activity, movement of armies, or civil wars.

Considerable sums had been allocated for the construction of the camp in Novae, thanks to which the newly-founded province saw a slow dissemination of the Roman currency. It is, therefore, logical that Claudian coins should prevail in Novae. Their number is indeed impressive, with the current count of 66 specimens. The vast majority are asses (66% of all Claudian coins), followed by sestertii (21%) and several dupondii (12%). Interestingly, the numismatic assemblage from Novae lacks any precious metal coins of this emperor. In the current state of research on the coinage of Claudius the large number of numismatic finds linked to his name is not at all self-explanatory. The minting activity of Claudius decreased over time. The emperor owned a mint in Rome, which was responsible for producing the bulk of the monetary mass. In addition, other mints operated in Lugdunum (issued just a single series of quadrantes),<sup>52</sup> Ephesus and Pergamum (emissions of several types of cystophorus),<sup>53</sup> and Cappadocian Caesarea (five series of didrachmae of unspecified dating).<sup>54</sup> All the coins struck outside Rome are very rare finds nowadays. But how is it for the coins from the Roman mint? The silver and gold coins were minted throughout the reign of the emperor. Over time, the number of types issued by the Roman mint decreased,

<sup>48</sup> *RIC*, vol. I, pp. 110–112.

<sup>49</sup> MROZEWICZ 2011, pp. 11–16.

<sup>50</sup> DUNCAN-JONES 1994, pp. 220–222.

<sup>51</sup> PAUNOV 2013, p. 330.

<sup>52</sup> *RIC*, vol. I, p. 121.

<sup>53</sup> *RIC*, vol. I, pp. 130–131.

<sup>54</sup> *RIC*, vol. I, pp. 131–132.

until only two types of aurei and two types of denarii remained, both very rare today. There is also a group of Claudian coins of unspecified dating, but these are scarce specimens and also considered unique. No coins of this category, neither silver nor gold, have been discovered in Novae, which is not surprising given that they were struck in very small quantities.

The Claudian “bronze” coins do not belong among mass emissions either. They are usually considered rare [Table 2]. In the first period of the reign of Claudius, a slightly larger batch entered circulation, but in the second part, after AD 50, the volume of emissions dropped significantly. It clearly reflects a general decrease in minting activity in the Roman state and its gradual “suffocation”. The dupondii were clearly the least frequent denomination. The most commonly-issued coins throughout the Claudian rule were asses, as well as sestertii during the first decade of his reign [Table 2].

If these conclusions are compared to the statistics on coins found in Novae, one observation comes to the fore. If we remember that the output of mints during the reign of Claudius lagged behind the demand for coins, it is justified to note that the number of coins of this emperor in Novae is extraordinarily high. It appears to be linked to the coming of the *legio VIII Augusta* and the large financial investments related to setting up the camp in this important site at the Empire’s frontier. Perhaps a small fraction of these coins were brought there in the later period, but the majority certainly came with the legionaries of the *legio VIII*. These men stayed there until the breakthrough which happened in AD 69, namely the power struggle leading to the change of ruling dynasty and military movement along the Roman limes. It is all the more important in this context to scrutinise the assemblage of Neronian coins found in Novae.

The legionaries of the *legio VIII* stationing in Novae had an opportunity to familiarise themselves with coins minted for Nero. The coins of this emperor amount to no more than 16% of all the coins of the Julio-Claudian Dynasty found in Novae, whereas the Claudian issues constitute 41%. Does the significantly smaller share of Neronian coins correspond to the monetary structure of the Empire? Let us note that 4 out of 26 coins of Nero found in Novae were denarii (2.5% of all the Julio-Claudian coins) whereas 22 specimens were “bronzes”. The sestertii and asses appear with the same frequency. On the other hand, dupondii are much rarer. The assemblage contains also a single quadrans. The Neronian finds in Novae cannot be properly understood without discussing the monetary system of AD 54–68.

At the beginning of his reign, Nero did not mint “bronze” coins. Until AD 62/63, the Roman mint issued exclusively coins made from precious metals — denarii and aurei struck collaterally [Table 3]. Statistics indicate that these emissions were very small or, in some years, even of purely symbolic character, both before [Table 3, frequency statistics] and after the reform of AD 64 [Table 4, frequency statistics]. It must have resulted in a monetary crisis which was stopped by the reform. In the earlier period, the monetary system made use only of the previously-issued asses, dupondii, and sestertii, as well as the less common “bronze” quadrantes, which were in low supply in the Roman state.

Four Neronian denarii have been found so far in Novae, in addition to a single quadrans, three dupondii, nine asses, and the same number of sestertii. As demonstrated [Table 4], the quadrantes were issued very rarely. The largest group of known coins are sestertii, while the asses and dupondii were struck in parallel. The dupondii are rare finds in the camp of the *legio VIII*. In general, this denomination belongs to numismatic finds relatively uncommon in the Danubian territories. Asses enjoyed significantly greater popularity, being often minted in Rome, just like the dupondii [Table 4].

## CATALOGUE

numismatic finds from Sector XII in Novae from the years 2011–2018 minted up until AD 69

### CASSANDER, KING OF MACEDONIA

Cat. no.	Metal / denomination	Emission date	Mint	Identification
1	AE20	319–297 BC	Pella or Amohipolis	SNG Cop 1148
<b>Cassander, King of Macedonia</b>				
Inv. no. 46/12				
Obv. Head of Heracles right, wearing lion's skin headdress				
Rev. Horseman riding right, crowning horse with a wreath, legend illegible				
State of preservation III	Diameter 20 × 20 mm	Weight 6.73 g	Axis 6	
Sector XII	Hectare XI	Square 385	Depth 45.69 m a.s.l.	
Remarks: Poorly-preserved				

### OCTAVIAN

Cat. no.	Metal / denomination	Emission date	Mint	Identification
2	AE, as	11–14	Rome	e.g., <i>RIC</i> 471
<b>Octavianus Augustus</b>				
Inv. no. 118 <sub>1</sub> /17				
Obv. ....GVSTVS head r.				
Rev. Encircling S / C				
State of preservation III	Diameter 23 × 24 mm	Weight 9.87 g	Axis 6	
Sector XII	Hectare XVIII	Square 10	Depth 47.08 m a.s.l.	
Remarks: Unspecified				

### TIBERIUS

Cat. no.	Metal / denomination	Emission date	Mint	Identification
3	AE, as	22–30	Rome	<i>RIC</i> 81
<b>Tiberius (for Augustus)</b>				
Inv. no. 327/14				
Obv. DIVVS AVGVSTVS PATER Augustus, radiate, left.				
Rev. S / C to left and right, PROVIDENT (in exergue), altar enclosure with double panelled door				
State of preservation I	Diameter 26 × 25 mm	Weight 9.44 g	Axis 6	
Sector XII	Hectare XVIII	Square 88	Depth 46.87 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
4	AE, as	22–30	Rome	<i>RIC</i> 81
<b>Tiberius (for Augustus)</b>				
Inv. no. 332/14				
Obv. Head to right				
Rev. S / C, altar				
State of preservation V	Diameter 24 × 23 mm	Weight 8.12 g	Axis 6	
Sector XII	Hectare XVIII	Square 88	Depth 46.85 m a.s.l.	
Remarks: Heavily-worn				

Cat. no.	Metal / denomination	Emission date	Mint	Identification
5	AE, as	22–30	Rome	<i>RIC</i> 81
<b>Tiberius (for Augustus)</b>				
Inv. no. 482/14				
Obv. DIVVS AVGVSTVS PATER Augustus, radiate, left.				
Rev. S / C to left and right, PROVIDENT (in exergue), altar enclosure with double panelled door				
State of preservation II	Diameter 24 × 24 mm	Weight 8.38 g	Axis 6	
Sector XII	Hectare XVIII	Square 8	Depth 46.96 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
6	AE, as	22–23	Rome	<i>RIC</i> 81
<b>Tiberius (for Augustus)</b>				
Inv. no. 44/13				
Obv. DIVVS AVGVSTVS PATER, head of Augustus rad. l.				
Rev. S / C to left and right, PROVIDENT (in exergue), altar enclosure with double panelled door, uncertain ornaments on top				
State of preservation III	Diameter 25 × 26 mm	Weight g	Axis 6	
Sector XII	Hectare XVIII	Square 85	Depth 47.79 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
7	AE, as	22–30	Rome	<i>RIC</i> 81 (?)
<b>Tiberius (for Augustus)</b>				
Inv. no. 1/14				
Obv. [...]STVS, head to left				
Rev. Obliterated, new outbreaks of corrosion				
State of preservation V	Diameter 24 × 25 mm	Weight 6.92 g	Axis 7	
Sector XII	Hectare XVIII	Square 85	Depth 48.28 m a.s.l.	

**GAIUS (CALIGULA)**

Cat. no.	Metal / denomination	Emission date	Mint	Identification
8	AE, as	38	Rome	<i>RIC</i> 58
<b>Gaius (for Agrippa)</b>				
Inv. no. 318/14				
Obv. MAGRIPPA L F COS III, bust to left				
Rev. Neptune facing left, S / C				
State of preservation II	Diameter 25 × 24 mm	Weight 9.33 g	Axis 7	
Sector XII	Hectare XVIII	Square 9	Depth 47.15 m a.s.l.	

**CLAUDIUS I**

Cat. no.	Metal / denomination	Emission date	Mint	Identification
9	AE, as	50–54	Rome	<i>RIC</i> 100
<b>Claudius I</b>				
Inv. no. 206/16				
Obv. TI CLAVDIVS CAESAR AVG P M TR IMP, bare head left				
Rev. S / C across the field, Minerva standing right, brandishing a spear, and holding shield on the left arm				
State of preservation I	Diameter 27 × 27 mm	Weight 16.39 g	Axis 6	
Sector XII	Hectare XVIII	Square 106	Depth 47.10 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
10	AE, as	50–54	Rome	<i>RIC</i> 113
<b>Claudius I</b>				
Inv. no. 213/14				
Obv. TICLAVDIVSCAESRA[...], head to left				
Rev. LIBERTAS AVGVSTA, S / C, Libertas dr., stg. facing, head r., holding a pileus				
State of preservation III	Diameter 26 × 26 mm	Weight 17.05 g	Axis 6	
Sector XII	Hectare XVIII	Square 29	Depth 47.13 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
11	AE, as	50–54	Rome	<i>RIC</i> 113
<b>Claudius I</b>				
Inv. no. 232/14				
Obv. TICLAVDIVSCAESARAVG P M TR P IMP PP, head to left				
Rev. LIBERTAS AVGVSTA, S / C, Libertas dr., stg. facing, head r., holding a pileus				



State of preservation I	Diameter 26 × 25 mm	Weight 19.04 g	Axis 6
Sector XII	Hectare XVIII	Square 49	Depth 47.52 m a.s.l.
Remarks: the same type as above, except that this specimen is preserved in a much better condition			

Cat. no.	Metal / denomination	Emission date	Mint	Identification
12	AE, sestertius	50–54	Rome	<i>RIC</i> 113
<b>Claudius I</b>				
Inv. no. 562/14				
Obv. [TICL]AVDIVSCAESARAVG [P M TR P IMP PP], head to left				
Rev. LIBERTAS [AVGVST]A, S / [C], Libertas dr., stg. facing, head r., holding a pileus				
State of preservation IV	Diameter 32 × 32 mm	Weight 26.85 g	Axis 7	
Sector XII	Hectare XVIII	Square 29	Depth 47.02 m a.s.l.	
Remarks: broken, only 1/3 of the coin was preserved				

Cat. no.	Metal / denomination	Emission date	Mint	Identification
13	AE, as	50–54	Rome	<i>RIC</i> 113
<b>Claudius I</b>				
Inv. no. 336/14				
Obv. TICLAVIDIVSCAESARAVG P M TR P IMP PP, head to left				
Rev. LIBERTAS AVGVSTA, S / C, Libertas dr., stg. facing, head r., holding a pileus				
State of preservation I	Diameter 26 × 25 mm	Weight 10.47 g	Axis 6	
Sector XII	Hectare XVIII	Square 69	Depth 47.71 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
14	AE, sestertius	41–54	?	?
<b>Claudius I</b>				
Inv. no. 37/13				
Obv. Bust to right				
Rev. Obliterated				
State of preservation V	Diameter 35 × 34 mm	Weight 27.63 g	Axis 6	
Sector XII	Hectare XVIII	Square 27	Depth 47.27 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
15	AE, sestertius	50–54	Rome	?
<b>Claudius I</b>				

Inv. no. 156/13			
Obv. Head to right			
Rev. Obliterated			
State of preservation VI	Diameter 36 × 36 mm	Weight 28.26 g	Axis 7
Sector XII	Hectare XVIII	Square 67	Depth 46.72 m a.s.l.

Cat. no.	Metal / denomination	Emission date	Mint	Identification
16	AE, sestertius	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 205 <sub>2</sub> /14				
Obv. Head to left				
Rev. Obliterated				
State of preservation V	Diameter 27 × 26 mm	Weight 18.30 g	Axis 6	
Sector XII	Hectare XVIII	Square 85	Depth 47.65 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
17	AE, sestertius	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 248/14				
Obv. Head to right				
Rev. Obliterated				
State of preservation V	Diameter 23 × 23 mm	Weight 27.28 g	Axis 6	
Sector XII	Hectare XVIII	Square 49	Depth 47.16 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
18	AE, sestertius	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 207/16				
Obv. Bust to right				
Rev. Obliterated				
State of preservation V	Diameter 30 × 28 mm	Weight 8.75 g	Axis 6	
Sector XII	Hectare XVIII	Square 124	Depth 47.55 m a.s.l.	
Remarks: severely-damaged, advanced corrosion				

Cat. no.	Metal / denomination	Emission date	Mint	Identification
19	AE, dupondius	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 395/14				
Obv. Head to left, <i>corona radiata</i>				
Rev. Women standing left, S / C				
State of preservation V	Diameter 25 × 25 mm	Weight 10.00 g	Axis 6	
Sector XII	Hectare XVIII	Square 88	Depth 46.67 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
20	AE, as	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 16/13				
Obv. Head to right, the legend visible but illegible				
Rev. Obliterated				
State of preservation V	Diameter 18 × 19 mm	Weight 7.90 g	Axis ?	
Sector XII	Hectare XVIII	Square 67	Depth 47,65 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
21	AE, as	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 205 <sub>1</sub> /14				
Obv. Claudius I, head to left				
Rev. Obliterated				
State of preservation IV	Diameter 22 × 23 mm	Weight 8.93 g	Axis ?	
Sector XII	Hectare XVIII	Square 85	Depth 47.65 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
22	AE, as	41–54	Rome	?
<b>Claudius I</b> <span style="float: right;"><b>countermark</b></span>				
Inv. no. 293/14				
Obv. Bust to right (?)				
Rev. Obliterated				
State of preservation IV	Diameter 24 × 24 mm	Weight 7.87 g	Axis 5	
Sector XII	Hectare XI	Square 388	Depth 46.60 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
23	AE, as	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 337/14				
Obv. Bust to left				
Rev. Obliterated				
State of preservation V	Diameter 22 × 23 mm	Weight 8.29 g	Axis ?	
Sector XII	Hectare XVIII	Square 87	Depth 47.19 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
24	AE, as	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 479/14				
Obv. [...]VI[...], head to left				
Rev. Obliterated				
State of preservation V	Diameter 23 × 23 mm	Weight 9.52 g	Axis ?	
Sector XII	Hectare XVIII	Square 29	Depth 47.93 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
25	AE, As	41–54	Rome	?
<b>Claudius I</b>				
Inv. no. 159/11				
Obv. [...]CL[...], head to right				
Rev. S / C, women standing to left				
State of preservation IV	Diameter 24 × 25 mm	Weight 11.85 g	Axis 6	
Sector XII	Hectare XI	Square 382	Depth 46.29 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
26	AE, as	41–54	?	?
<b>Claudius I</b>				
Inv. no. 84/15				
Obv. Bust/head to left				
Rev. Obliterated				
State of preservation V	Diameter 26 × 26 mm	Weight 8.65 g	Axis ?	
Sector XII	Hectare XVIII	Square 106	Depth 47.48 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
27	AE, as	41–54	?	?
Claudius I				
Inv. no. 38/16				
Obv. Head to right				
Rev. Obliterated				
State of preservation VI	Diameter 26 × 27 mm	Weight 8.30 g	Axis ?	
Sector XII	Hectare XVIII	Square 67	Depth 46.26 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
28	AE, as	41–54	?	?
Claudius I				
Inv. no. 106/18				
Obv. Head to right				
Rev. Obliterated				
State of preservation VI	Diameter 25 × 26 mm	Weight 5.53 g	Axis ?	
Sector XII	Hectare XVIII	Depth 48.12 m a.s.l.	Depth 48.12 m a.s.l.	

## NERO

Cat. no.	Metal / denomination	Emission date	Mint	Identification
29	AE, dupondius	64	Rome	<i>RIC</i> 198
<b>Nero</b>				
Inv. no. 91/11				
Obv. NEROCLAVDCAESARAVGGERPMPTRPIMPPP, head in <i>corona radiata</i> facing right				
Rev. VICTORIA AVGVSTI, S / C in exergue II, Victoria walking towards the left				
State of preservation I	Diameter 31 × 31 mm	Weight 10.77 g	Axis 6	
Sector XII	Hectare XI	Square 365	Depth 46.16 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
30	AE, quadrans	64	Rome	<i>RIC</i> <sup>2</sup> 251–255
<b>Nero</b>				
Inv. no. 150/13				
Obv. NERO[...], column				
Rev. PMTR P IMP PP, S / C, branch				
State of preservation II	Diameter 16 × 16 mm	Weight 1.52 g	Axis 6	
Sector XII	Hectare XVIII	Square 65	Depth 47.24 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
31	AE, as	64–68	Rome	?
<b>Nero</b>				
Inv. no. 223/13				
Obv. Head to right				
Rev. Obliterated				
State of preservation V	Diameter 27 × 27 mm	Weight 12.59 g	Axis ?	
Sector XII	Hectare XVIII	Square 85	Depth 46.41 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
32	AE, as	62–64	Rome	?
<b>Nero</b>				
Inv. no. 314/14				
Obv. NEROCLAVDI[.....], head to right				
Rev. Obliterated				
State of preservation IV	Diameter 24 × 5 mm	Weight 10.91 g	Axis ?	
Sector XII	Hectare XVIII	Square 67	Depth 46.60 m a.s.l.	

#### UNDETERMINED, FIRST CENTURY

Cat. no.	Metal / denomination	Emission date	Mint	Identification
33	as / sestertius (?)	1st c.	?	?
<b>Early Imperial</b>				
Inv. no. 12/13				
Obv. Obliterated				
Rev. Obliterated				
State of preservation VI	Diameter 30 × 30.5 mm	Weight 9.49 g	Axis ?	
Sector XII	Hectare VIII	Square 67	Depth 47.70 m a.s.l.	
Remarks: very obliterated				

Cat. no.	Metal / denomination	Emission date	Mint	Identification
34	sestertius	1st c.	?	?
<b>Undetermined from the first century</b>				
Inv. no. 249/14				
Obv. Obliterated				
Rev. Obliterated				



State of preservation VI	Diameter 26 × 27 mm	Weight 7.11 g	Axis ?
Sector XII	Hectare XVIII	Square 49	Depth 47.20 m a.s.l.
Remarks: Completely-worn obverse and reverse damaged by new outbreaks of corrosion, with the obverse fully corroded. The identification was based on the shape of the coin, its size, and external appearance of the metal.			

Cat. no.	Metal / denomination	Emission date	Mint	Identification
35	AE undetermined	1st c. (?)	?	?
<b>Undetermined from the first century</b>				
Inv. no. 341/14				
Obv. Obliterated				
Rev. Obliterated				
State of preservation VI	Diameter 22 × 25 mm	Weight 6.44 g	Axis ?	
Sector XII	Hectare XVIII	Square 82	Depth 47.05 m a.s.l.	
Remarks: worn, blank planchet				

Cat. no.	Metal / denomination	Emission date	Mint	Identification
36	AE, as	1st c. (?)	?	?
<b>Undetermined from the first century</b> <span style="float: right;"><b>countermarks</b></span>				
Inv. no. 368/14				
Obv. Obliterated				
Rev. Obliterated				
State of preservation VI	Diameter 22 × 23 mm	Weight 7.43 g	Axis ?	
Sector XII	Hectare XVIII	Square 87	Depth 47.03 m a.s.l.	
Remarks: heavily-damaged				

Cat. no.	Metal / denomination	Emission date	Mint	Identification
37	AE, sestertius	1st–2nd c.	?	?
<b>Undetermined</b>				
Inv. no. 169/11				
Obv. Head to the left				
Rev. Illegible				
State of preservation VI	Diameter 30 × 29 mm	Weight 8.47 g	Axis ?	
Sector XII	Hectare XI	Square 389	Depth 46.32 m a.s.l.	

Cat. no.	Metal / denomination	Emission date	Mint	Identification
38	AE	1st c.	?	?
<b>Unspecified from the 1st century countermarks</b>				
Inv. no. 47/15				
Obv. Illegible, with two countermarks, one with the legend AVG				
Rev. Obliterated				
State of preservation VI	Diameter 26 × 26 mm	Weight 5.43 g	Axis ?	
Sector XII	Hectare XVIII	Square 110	Depth 48.12 m a.s.l.	
Remarks: Two or three countermarks				

### Abbreviations

<i>RIC</i>	C. H. V. SUTHERLAND, <i>The Roman Imperial Coinage</i> , London 1984, vol. I (revised edition).
SNG Cop	<i>Sylloge Nummorum Graecorum: The Royal Collection of Coins and Medals, Danish National Museum</i> , Copenhagen, 1942–.

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