

Penkalas Hoards from Aizanoi

Hüseyin KÖKER*

Öz *Aizanoi'den Penkalas Defineleri*

Bu çalışma, Aizanoi'da yürütülen 2019 yılı kazı sezonunda ele geçen, Penkalas I ve Penkalas II olarak adlandırılan definelere ilişkin ilk gözlem ve değerlendirmeleri sunmaktadır. Definelerden ilki olan Penkalas I, Roma Cumhuriyet ve İmparatorluk Dönemleri'ne ait denarius ve kistophorları içermekteyken ikinci define olan Penkalas II ise sadece Roma Cumhuriyet ve İmparatorluk Dönemleri kistophorlarını içermektedir. İlk define MÖ 76/75-7/6 yılları arasına tarihlenirken, ikinci define MÖ 39-19/18 yılları arasına tarihlenmektedir. Penkalas I, toplam 651 adet sikkeden oluşmaktadır ve bunların 435 adedi denarius, 216 adedi de kistophor birimli sikkelerdir. Bunlardan 295 adet denarius ile 42 adet kistophor Cumhuriyet Dönemi'ne tarihlenirken, 141 adet denarius ile 174 adet kistophor da İmparatorluk Dönemi'ne tarihlenmektedir. Cumhuriyet denariusları üzerinde sikke basımından sorumlu toplam 54 farklı magistrat ismi taşırken, imparatorluk denariuslarında ise 10

* Hüseyin KÖKER, *Assoc. Prof. Dr.*, Süleyman Demirel University, Faculty of Humanities and Social Sciences, Archaeology Department, East Campus, Isparta. E-posta: huseyinkoker@gmail.com; Orcid No: 0000-0003-0784-505X

I would like to express my gratitude to Prof. Dr. Elif Özer, the former head of the Aizanoi excavation, who permitted me to study the coin finds from the Aizanoi. I also extend my thanks to Dr. Lucia Carbone, who is supervising my TÜBİTAK 2219-2020/2 project on Penkalas Hoards at the American Numismatic Society (ANS) and to Prof. Dr. A. Tolga Tek for sharing his unpublished research on the Roman Republican coin finds in Turkey, which he presented in Friburg in 2016 on an international colloquium (Tek 2016). I am also grateful for the assistance provided by the excavation team during and after the excavation, and for the remarkable work done by my MA student Burçak Aydın on the Photoshop editing of the coins.

farklı magistrat ismi taşımaktadır. Penkalas II, 10 adet kistophordan oluşmaktadır, ki bunlardan 1 adedi Marcus Antonius ve geriye kalan 9 adedi de Augustus adına darp olunmuşlardır. Penkalas I Definesi dışında, benzer içeriğe sahip olan bir başka define MÖ 2. yüzyıl sonu-1 yüzyıl denarius ve kistophorlarından oluşan ve 1975 yılında bulunan Halikarnassos Definesi'dir. Söz konusu bu iki define, uzunca bir tartışmanın da konusunu oluşturan, özellikle Roma Cumhuriyet denariuslarının Provincia Asia sınırları içerisindeki dolaşımının boyutlarının anlaşılması bağlamında büyük önem arz etmektedir. Bu bağlamda, Penkalas I Definesi, Asia Minor'daki sikke sistemine Roma'nın müdahalesi ve dolayısıyla da Roma Cumhuriyet denariuslarının bu topraklarındaki dolaşımına ilişkin tartışmaya yeni bir katkı sunması bir yana, kistophor birimli sikkelerin Augustus döneminde hala önemini koruduğunu göstermesi bakımından oldukça önemli bir buluntu arz etmektedir. Roma para sisteminin MÖ 1. yüzyılın ikinci yarısında, Roma'nın Asia Minor'daki askeri varlığına ek olarak, İç Savaş mücadelelerinin bölgeye ve Anadolu'nun diğer bölgelerine yayılmasıyla aynı zamana denk gelmektedir, ki esas itibarıyla da Augustus'un Roma yönetiminin sorumluluğunu tek başına üstlendiği dönemde tam anlamıyla yerleşmiştir. Asia Minor ve doğusunda kalan Anadolu topraklarında ele geçen Roma Cumhuriyet sikkeleri; yani, buluntu yerlerinin bilinmemesi nedeniyle dolaşımda oldukları coğrafyaya ilişkin herhangi bir değerlendirme yapamamakla birlikte müze koleksiyonlarında yer alan örnekler, kazı buluntuları, Halikarnassos Definesi ve nihayet Aizanoi'da gün yüzüne çıkarılan Penkalas I Definesi de bu durumu desteklemektedir.

Anahtar Kelimeler: Aizanoi, Penkalas, Denarius, Kistophor, Asia Minor, Sikke Definesi.

Abstract

This study presents the initial evaluations and observations of the hoards unearthed during the 2019 excavation season at Aizanoi, called Penkalas I and Penkalas II. Penkalas I includes denarii and cistophori from both the Roman Republican and Imperial periods, whereas Penkalas II solely contains Roman Republican and Imperial cistophori. Penkalas I is comprised of 651 coins 435 of which are denarii and 216 are cistophori. Of the coins in the hoard, 295 denarii and 42 cistophori were minted during the Republican period, with 141 denarii and 174 cistophori from the Imperial period. The hoard dated between 76/75 - 7/6 BC. Penkalas II features only 10 cistophori, with 1 belonging to Marcus Antonius and the remaining 9 to Augustus, all minted between 39 BC and 19/18 BC. Apart from the Penkalas I hoard, another hoard of similar content is the Halikarnassos hoard of denarii and cistophori from the late 2nd-1st century BC, discovered in 1975. These two hoards are of significant importance in comprehending the scale of the circulation of Roman Republican denarii within the Provincia Asia, which has long been debated. In this context, the Penkalas I hoard is a significant find that has contributed to the discussion on Roman intervention in the coinage system in Asia Minor and the circulation of Roman Republican denarii in this region. Moreover, it is crucial in demonstrating the continued importance of cistophori in the Augustan period. Roman currency was fully established in the coinage system of Asia Minor during the second half of the 1st century BC. This coinciding with the spread

of Civil War struggles to Asia Minor and other parts of Anatolia, in addition to the Roman military presence there. Furthermore, this establishment took place during the period in which Augustus assumed sole responsibility for Roman administration. The Halikarnassos hoard, the Penkalas I hoard and the denarii findings from various excavations, as well as the denarii in museum collections (although their provenance is uncertain, they can at least be statistically evaluated), strengthen the idea that Roman republican coinage was established and that the denarius became the primary silver currency in the area, especially from the 40s BC onwards.

Keywords: Aizanoi, Penkalas, Denarius, Cistophori, Asia Minor, Coin Hoard, Circulation, Civil Wars.

Introduction

This study presents the preliminary observations and evaluations of the two hoards unearthed during the 2019 excavation season at Aizanoi, called Penkalas I and Penkalas II¹. Penkalas I contains denarii and cistophori from the Roman Republican and Imperial periods, whereas Penkalas II only contains Roman Republican and Imperial cistophori. The first hoard is dated to 76/75-7/6 BC, whilst the second hoard to 39-19/18 BC. Both hoards were discovered in different trenches located between the west wall of the Penkalas River and the wall of the agora, between the second and fourth bridges that were constructed over the Penkalas River. The first hoard was elaborately buried in a terracotta vessel formed khytra, surrounded and covered with terracotta bricks, while second was buried in a small terracotta vessel that was not encompassed by bricks².

Another hoard with a similar content to Penkalas I is the Halikarnassos hoard of denarii and cistophori whose burial date should be dated around 44 BC, discovered in 1975³. Apart from the Halikarnassos hoard there is one doubtful hoard which found in Gridia, Khios in 1959⁴. The importance of these two hoards, the Halikarnassos and Penkalas I, lies in the understanding of the introduction and the circulation of Roman Republican denarii within Provincia Asia, which has been widely debated⁵. The following pages will

1 The hoards of Penkalas I and Penkalas II were recorded by myself immediately after their discovery in September and December 2019, without any cleaning or conservation processes. However, I have not yet had the opportunity to examine the Penkalas I in person, as it was taken to Ankara for restoration and exhibition, so I have had to rely on photographs taken after the conservation process. Likewise, I did not have the opportunity to study the Penkalas 2 hoard, which is housed in the Kütahya Museum, as its conservation has not yet been completed.

2 Özer et al. 2021, 23-24; Excavation archives.

3 Overbeck 1978.

4 CH VI, no. 46=CH VII, no. 134=CH IX, 60 no. 558. The Gridia hoard, probably buried in 75 BC, consists of 14 drachms of Khios and 1 tetradrahm of Athens, and with the uncertainty inclusion of 2 cistophori of Pergamon and 1 denarius. The denarius in the hoard belongs to L. Piso Frugi dated to 90 BC (Crawford 1974, 340 no. 340.1). Because of this suspicious situation it will not be included in the comparison of the Penkalas I and Halikarnassos hoards here. For comparison of the Gridia and Halikarnassos hoards see Carbone 2021, 249, 254.

5 Kinns 1987; Carbone 2014; Meadows 2021; Carbone 2021.

provide further details.

Penkalas I

Penkalas I comprises a total of 651 coins, consisting of 435 denarii and 216 cistophori. Among these, 295 denarii and 42 cistophori dated to the Republican period, while 141 denarii and 174 cistophori dated to the Imperial period (fig. 1). The earliest coin in the hoard is a denarius signed by Cornelius Lentulus and dated to the year 76/75 BC, while the latest coin is another denarius belongs to Augustus and dated to the year 7/6 BC⁶. Apart from the denarii produced under Iulius Caesar, Marcus Antonius, and Octavianus/Augustus, the Republican denarii feature the names of 54 different moneyers, whereas Imperial denarii only bear the names of 10 different moneyers (fig. 7, 9). Moreover, all cistophori in the hoard belong to Marcus Antonius and Octavianus/Augustus, and none of them bear a proconsular name (fig. 8, 10). Three-quarters of the cistophori in the hoard are minted in the name of Marcus Antonius, represented by two different types, while the remainder are minted in the name of Octavianus, represented by seven different types⁷ (fig. 7-8). The Imperial cistophori minted in the name of Augustus are represented by seven different types as well⁸ (fig. 10).

Approximately 91% of the coins in the hoard date back to the second half of the 1st century B.C., a period that was marked by civil wars (fig. 1). To be precise, denarii appear predominately in the 40s and 10s BC, while cistophori are mostly seen in the 20s BC. However, an examination of the ratio of denarii to cistophori by period reveals that, unlike in the already mentioned Halikarnassos hoard, the number of cistophori slightly exceeds the number of denarii during the Imperial period (fig. 1).

For the Republican denarii, except an uncertain one, a total number of 17 different mints are represented in the hoard (fig. 2). Although the Western mints are well-represented, the mint of Rome is the most abundant among them, which is not unexpected. Amongst these mints, a number of them should be interpreted as moving ones. Of the 295 denarii, 51 are attributed to these moving mints, representing 17% of the total. The following issues from moving mints are represented in the hoard: the ones of Julius Caesar, who controlled Gaul, Hispania, and Africa, while Pompeius, Ahenobarbus, and Brutus held power in the East; Nasidius's ones from Sicily, Marcus Antonius's ones from Gaul and the East, and Octavianus's ones from Gaul and Africa (fig. 2, 7). Denarii from the aforementioned mints dated to approximately between 49

6 For the denarius of Cn. Cornelius Lentulus see Crawford 1974, 407 no. 393; Sydenham 1952, no. 752; BMCRR Spain no. 52. For the denarius of Augustus see RIC I, no. 207; BMCRE I, no. 519-535; CBN, no. 1651-1661.

7 For the cistophori of Marcus Antonius see Sydenham no. 1197-1198 (Type I-II); RPC I, 377 no. 2201-2202 (Type I-II); Hiltmann 2023, 141-158 no. 1-425 (Type I), 159-175 no. 1-411 (Type II); For the cistophori of Octavianus see Sutherland 1970, 40-44 Group I no. 1-72; RPC I, no. 2203.

8 For the cistophori of Augustus see Sutherland 1970, 44-84 Group II-VII no. 73-588; RPC I, no. 2204-2220.

and 27 BC. The only cistophori from the same period included in the hoard are from the Ephesus mint (fig. 2, 8). Despite decreasing numbers, the Western mints were the most prominent for the Imperial denarii, with the mint of Lugdunum standing out during this period (fig. 3, 9). For cistophori, the mint of Ephesus is highly represented, with the mint of Pergamon making up over half of other mints (fig. 3, 10).

There are several unusual coins in the hoard. The first one is a brockage⁹ depicting the bare head of young Octavianus on the obverse and negative impression of it on the reverse. There is a comparable piece in the Bibliothèque Nationale in Paris, documented by Giard¹⁰. He assessed this coin with the reverse type depicting young men seated on a rock and holding a lyre¹¹, based on the resemblance to its obverse type (Figs. 13a-b). This series dated to 32-29 BC and is thought to belong to mint of Brundisium or Rome. Besides the intaglio, the hoard contains several denarii, probably plated (fig. 14a-c)¹². Metallurgical analysis is essential to establish the authenticity of these coins, whether they are plated or debased. It is well known fact that plated coins were prevalent among almost all moneyers, with a few exceptions, between 124 and 37 BC¹³. From 37 BC onwards, plated coins became widespread¹⁴. All of the examples in Penkalas I are dated to the second half of the 1st century BC. It is important to note that a die study should be conducted on these specimens to determine whether they were produced from the original die or obtained from the coin itself.¹⁵ In addition to the plated examples, the hoard also contains two rare denarii which display a minting error in the form of clash of dies¹⁶, revealing insights into the production process. The first one is signed by Carisius, minted in Rome and dated to 46 BC (fig. 15)¹⁷ and the second one, from a mint moving with Octavian in Gaul, dated to 37 BC (fig. 16)¹⁸. The quality of silver and weight of the coins, despite their minting error and unusual appearance, provide convincing evidence that they are not counterfeits. Interestingly, these two coins were likely included in circulation as they went unnoticed during the production process. The punchmarks on the first coin

9 Brockages of Roman Republican denarii are seen from the end of the 2nd-beginning of the 1st century BC. For more specimens and comments on the brockages brockage see Crawford 1974, 582-583; Goddard 1993; Woytek 2006; Callataÿ 2023, 65.

10 Giard 1976, 70 no. 77.

11 This series features the obverse type of "bare head of Octavianus r."/Naked male seated r., on rock, wearing petasos which slung behind, and cloak; holding lyre in both hands; CAESAR - DIVI•F" (RIC I, 59 no. 257; Giard 1976, 70 no. 73-76, Pl. IV) (fig. 13b).

12 For the plated denarii see Campbell 1933; Lawrence – Sydenham 1940; Crawford 1968; Crawford 1974, 560-565 (with the list of plated examples); Crawford 1985, 189-191. For ancient imitation of Roman denarii see Woytek et al. 2012 (and its bibliography).

13 Only 4 moneyer out of 168 have not minted plated coins (Lawrence – Sydenham 1940, 192). The moneyers might struck coins for profit by stealing from the bullion or by mixing it with base metal. For details and Roman law on the subject see Lawrence – Sydenham 1940, 192-202; Crawford 1968, 57-58.

14 Lawrence – Sydenham 1940, 192.

15 For such examples see Lawrence – Sydenham 1940, 193; Crawford 1968, 56.

16 For similar minting errors on the elephant type of denarii of Caesar (Crawford 1974, 461 no. 443.1) and full discussion on the subject see Woytek 2006.

17 Crawford 1974, 475 no. 464.3a.

18 Crawford 1974, 537 no. 538.1.

provide an explanation for its condition, whereas the second coin's condition could be attributed to its production at a different mint. Due to military operations, there was a requirement for immediate coin production which led to the occurrence of errors more frequently in decentralized production facilities.

Besides the plated coins, numerous denarii and some cistophori are mutilated by punchmarks, graffiti, cuts and chisels. This is certainly explained to the need for controlling their authenticity. The punchmarks and graffiti consist of various symbols or letters in Latin or Greek, some of which may be numbers (fig. fig. 17a-f). Additionally, some coins have deep cuts or shallow scratches (fig. 18a-c). Such practices first emerged in the denarii hoards from the 1st century BC onward¹⁹. Crescent and circular punchmarks of various forms are much more common than other types, along with depictions of Greek letters and graffiti of Greek or Latin letters. Specifically, crescent and circular punchmarks first appeared on coins of Asia Minor in the 5th century BC. These repetitive designs also indicate their area of circulation.

Penkalas II

The Penkalas II hoard consists of only 10 cistophori, two of which belongs to Marcus Antonius and the rest to Augustus, all dating between 39 and 19-18 BC (fig. 12). They belong to the same types and mints as the first hoard²⁰.

Halikarnassos Hoard

The Halicarnassos hoard, discovered in 1975, is the only known hoard before the Penkalas I, and both share the common feature of Roman Republican denarii and cistophori²¹. In addition to these two hoards, there are also individual finds from the Provincia Asia and outside of the province as presented in following pages. All of these finds, particularly the aforementioned two hoards, are significant for understanding the introduction and circulation of Roman denarii in the Provincia Asia. The Halikarnassos Hoard consists of 1 drachm of Kibyra, 62 denarii and 32 cistophori dating between the 2nd and 1st centuries BC and 40 BC²² (fig. 4). The hoard dated to 41/40 BC and the burial was related to the military events of the time²³. It is important to note that 4 of

19 Crawford 1968, 56.

20 For the cistophori of M. Antony see RPC I, 377 no. 2201; Hiltmann 2023, 1-425. For the cistophori of Augustus see Sutherland 1970, 45-46 Group IIIa no. 77-82; 48-50 Group IIIγ no. 106-115; 57-58 Group Vy no. 190-196; 77-81 Group VIIβ no. 483-535.

21 There are number of hoards which contains both cistophori and denarii along with the royal or civic silver coins outside of the Asia: IGCH 352=RRCH 374=CH II, 125=CH IV, 76 (Hierapytna, Armenia. 42-41 BC), IGCH 1340 (Smyrna. 50 BC), IGCH 1746=CH I, 105 (Sarnakunk-Armenia. 31 BC). The existence of cistophori in these hoards found beyond the Provincia Asia is likely associate with by military campaigns (Carbone 2021, 255-256).

22 Overbeck 1978, 167-171 no. 1-99. It is known that the hoard recorded in commerce in Switzerland, therefore it is not possible to be certain about its contents.

23 Overbeck 1978, 165-166.

the cistophori in the hoard are early (dated between 128 and 111 BC) and 32 are the cistophori featuring the proconsular names (57-48 BC)²⁴, which are not represented in Penkalas I. On the other hand, there are 35 different moneyer names on the denarii in the hoard, 16 of which are common to those of Penkalas I (fig. 11). With regard to the mints represented in the Halikarnassos hoard, denarii and cistophori are represented by 8 and 4 different mints respectively (fig. 5, 11). Once again, as in the case of Penkalas I, the Halikarnassos hoard shows a strong representation of Western mints, with the mint of Rome being the most common. The denarii in the Halikarnassos hoard dated between 90/89 and 41/40 BC²⁵, with the 40s BC being particularly well represented, as in Penkalas I (fig. 6). The Halikarnassos hoard is in sharp contrast to the Penkalas I hoard in the absence of brockage and plated specimens, as well as specimens with punch marks, graffiti or cuts and chisels.

Notes on the Introduction and the Circulation of Republican Denarii in Provincia Asia

Before giving a general overview of the introduction and the circulation of Roman Republican denarii in Provincia Asia and beyond, it is essential to add the data on individual denarius, as well as aurei and bronze units found throughout Anatolia, in addition to two hoards mentioned above. From a number of published excavations finds and museum collections, I have documented total number of 71 denarii, 1 aureus, 3 quinarii and 3 bronze units²⁶. While the excavations of Ilion²⁷, Ephesos²⁸, Klaros²⁹, Priene³⁰, Iasos³¹, Aphrodisias³², Sardis³³, Aizanoi³⁴, Tokul Köyü (Kütahya)³⁵, Arykanda³⁶, Zindan Sanctuary

24 Overbeck 1978, 168-171 no. 68-99.

25 Overbeck 1978, 165. And also, Overbeck 1978, 172 (Table 1-2) gives, for comparison, dating of denarii by Sydenham 1952 and Crawford 1974, and according to them the denarii in the hoard dated between 90-36 BC (Table 1), and between 90-41 BC (Table 2) respectively.

26 The list given here is based on Prof. Dr. A. Tolga Tek's 2016 study, which has been expanded to include the new additions made by myself. I would like to thank him again for sharing his work with me.

27 Bellinger 1961, 171 no. 217 (L. Iuli; 101 BC. Ref. Crawford 1974, 327 no. 323).

28 Milne 1925, 387 (L. Rosci Fabati; 64 BC. Ref. Crawford 1974, 439 no. 412.1).

29 Çizmeli-Öğün 2007, 229 no. 74 (L. Sulla Imperator Iterum; 84-83 BC. Ref. Crawford 1974, 373 no. 359.2) and no. 75 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 540 no. 544.14).

30 Regling 1927, 183 (L. Marcus Philippus; 56 BC. Ref. Crawford 1974, 448 no. 425.1 and P. Clodius; 42 BC. Ref. Crawford 1974, 505 no. 494.21).

31 Levi 1972 (M. Silanus; 33 BC. Ref. Crawford 1974, 538 no. 542.1).

32 MacDonald 1976, 13 no. 428 (Rome/Quadriga; 3rd-2nd century BC?).

33 Bell 1916, 46 no. 421 (I. Caesar; 49-48 BC. Ref. Crawford 1974, 461 no. 443.1).

34 Köker 2013, 141 no. 22 (L. Torquatus; 65 BC. Ref. Crawford 1974, 439 no. 411.1a) and no. 23 (L. Valerius Acisculus; 45 BC. Ref. Crawford 1974, 483 no. 474.1a).

35 Türkütüzün et al. 2014, 56 and 78 fig. 44 (Scribonius Libo; 62 BC. Ref. Crawford 1974, 441 no. 416.1a).

36 Tek 2002, 330 no. 991 (L. Censor; 82 BC. Ref. Crawford 1974, 377 no. 363.1c).

(Timbriada)³⁷, Oluz Höyük (Amaseia)³⁸, Kurul Castle³⁹, and Karatepe⁴⁰ yielded 18 denarii findings, the museum collections of İstanbul⁴¹, Yapı Kredi⁴², Bursa⁴³, Amasya⁴⁴, Sinop⁴⁵, Ankara⁴⁶, A. Özkan⁴⁷, Suna-İnan

37 The only one Roman Republican denarius was found during the excavation in 2002 (L. Marcius Philipus; 56 BC. Ref. Crawford 1974, 448 no. 425.1). For the excavation see Dedeoğlu 2005. The coin finds housed in the Isparta Archaeology Museum and is preparing to publish by the author.

38 Öztürk 2017, 320 no. 16 (C. C. Trigeminus; 135 BC. Ref. Crawford 1974, 271 no. 240.1a) and no. 18 (L. Proculus; 80 BC. Ref. Crawford 1974, 396 no. 379.2). See also Öztürk 2021, 422-423.

39 Akgünül 2018, 42 no. 408 (M. Cippus; 115 or 114 BC. Ref. Crawford 1974, 303 no. 289.1).

40 Fischer-Bossert 2014, 165 no. 14 (C. Porcius Cato; 123 BC. Ref. Crawford 1974, 294 no. 274.1).

41 Bosch 1951, 123-125 no. 484 (Anonymous; from 211 BC. Ref. Crawford 1974, 154 no. 44.5?), no. 485 (Anonymous; 3rd-2nd century BC?), no. 486 (Victoriatius; 3rd-2nd century BC?), no. 493 (Q. Marc Libo; 148 BC. Ref. Crawford 1974, 255 no. 215.1), no. 488 (T. Q; 126 BC. Ref. Crawford 1974, 291 no. 267.1), no. 489 (C. Pulcher; 110 or 109 B. Ref. Crawford 1974, 313 no. 300), no. 491 (Q. Therm M. F; 103 BC. Ref. Crawford 1974, 324 no. 319.1), no. 487 (L. Tiruri L. F. Sabinus; 89 BC. Ref. Crawford 1974, 352 no. 344.1), no. 490 (Q. Anto Balb PR; 83-82 BC. Ref. Crawford 1974, 379 no. 364.1), no. 492 (M. Scaur, P. Hupsaeus; 58 BC. Ref. Crawford 1974, 446 no. 422.1), no. 494 (Caesar; 47-46 BC. Ref. Crawford 1974, 471 no. 458.1), no. 495 (C. Maridianus; 44 BC. Ref. Crawford 1974, 490 no. 480.15 or 16?), no. 496 (Caepio Brutus; 43-42 BC. Ref. Crawford 1974, 514 no.501.1), no. 500 (Caesar; 41 BC. Ref. Crawford 1974, 526 no. 517.7?), no. 499 (M. Antonius; 32 BC. Ref. Crawford 1974, 539 no. 543.1), no. 497 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 541 no. 544.38). Besides these individual coins Crawford also mentioned a hoard of denarii, which was shown to him, dated the late 30's BC (Crawford 1985, 252).

42 Tekin 1994, 146 no. 516 (C. Publicius; 78-77 BC. Ref. Crawford 1974, 396 no. 380), no. 517 (Scribonius Libo; 62 BC. Ref. Crawford 1974, 441 no. 416.1a), no. 518 (Caesar; 48 BC. Ref. Crawford 1974, 467 no. 452.2) (There are 2 pieces in the Penkalas I), no. 519 (T. Carisius; 46 BC. Ref. Crawford 1974, 475 no. 464.5), no. 523 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 540 no. 544.14). There are also 3 cistophori of Octavia, wife of M. Antonius (no. 520-522. Ref. RPC I 2201, 2202).

43 Okçu et al. 2010, 89-90: inv. no. 13194 (M. Auf. Rus.; 140 BC. Ref. Crawford 1974, 262 no. 227.1c), inv. no. 4875 (Q. Fabi Labeo; 124 BC. Ref. Crawford 1974, 294 no. 273.1), inv. no. 4141 (L. Senti; 101 BC. Ref. Crawford 1974, 327 no. 325.1b), inv. no. 4227 (L. Sulla / L. Manli; 82 BC. Ref. Crawford 1974, 386 no. 367.5), inv. no. 12530 (L. Furi Cn.f. Brocchi; 63 BC. Ref. Crawford 1974, 440 no. 414.1), inv. no. 11503 (Mn. Acilius; 49 BC. Ref. Crawford 1974, 461 no. 442.1b) and inv. no. 12531 (P. Clodius; 42 BC. Ref. Crawford 1974, 506 no. 494.23).

44 Ireland 2000, 53 no. 2080 (L. Cupienius; 147 BC. Ref. Crawford 1974, 257 no. 218), no. 2082 (Magn. Procos with Cn. Piso; 49 BC. Ref. Crawford 1974, 463 no. 446), no. 2083 (L. Plautius Plancus; 47 BC. Ref. Crawford 1974, 468 no. 453) (There are 11 pieces in the Penkalas I), no. 2084 (P. Accoleius Lariscolus; 43 BC. Ref. Crawford 1974, 497 no. 486.1) (There is 1 piece in the Penkalas I) and no. 2085 (P. Clodius; 42 BC. Ref. Crawford 1974, 506 no. 494.23) (There are 19 pieces in the Penkalas I). There is also one quinarus: no. 2081 (Q. Titius; 90 BC. Ref. Crawford 1974, 344 no. 341.3).

45 Casey 2010, 45 no. 470 (P. Sepullius Macer; 44 BC. Ref. Crawford 1974, 488 no. 480.5) (There are 2 pieces in the Penkalas I) and no. 471 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 539 no. 544.8).

46 Arslan 1992, 19-21: no. 1 (L. Rusti; 76 BC. Ref. Crawford 1974, 404 no. 389.1), no. 2 (L. Furi Cn.f. Brocchi; 63 BC. Ref. Crawford 1974, 440 no. 414.1), no. 3 (Cn. Plancius; 55 BC. Ref. Crawford 1974, 455 no. 432.1), no. 4 (Brutus; 54 BC. Ref. Crawford 1974, 455 no. 433.1), no. 5 (Q. Sicinius; 49 BC. Ref. Crawford 1974, 461 no. 444.1a), no. 6 (Caesar; 49-48 BC. Ref. Crawford 1974 461 no. 443.1), no. 7 (Q. Voconius Vitilus; 40 BC or later. Ref. Crawford 1974, 530 no. 526.2) and no. 9 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 541 no. 544.35).

47 Kumandaş 2023, 7 no. 2 (L. Licinius Crassus and Cn. Domitius Ahenobarbus; 118 BC. Ref. Crawford 1974, 298 no. 282.4). This coin is incorrectly dated to 112-109 BC, although the reference used, Crawford 1974, 298 no. 282 suggests 118 BC. On the other hand, the other reference used, BMCRR 186 no. 1191 suggests 92 BC for this coin, but this date is not accepted. Furthermore, Kumandaş 2023, 85 states that the two magistrates whose names appear on this coin were consuls in 94 BC for L. Licinius Crassus and in 32 BC for Cn. Domitius Ahenobarbus. But actually, the former was consul in 95 BC and the latter in 96 BC (Crawford 1974, 299). On the other hand, the obverse and reverse legends of the same coin are given in different forms to the way they appear on the coin, even though the legends contain reversed or slanted

Kıraç⁴⁸, Side⁴⁹, Burdur⁵⁰, Isparta⁵¹ and Erzurum⁵² contain 54 denarii in their collections. Besides these denarii finds there is a gold foil impression from a denarius unearthed from the Kocakızlar Tumulus (Midaion)⁵³ and 1 quinari find from Oluz Höyük (Amaseia)⁵⁴ and 1 quinari from museums of Amasya (Amaseia)⁵⁵. In addition to the denarii and quinarii finds, there are several aurei and bronze coin finds from different excavations. One aureus was unearthed from the Beştepeler Tumulus 1⁵⁶ in Caesarea. Another find is a large aurei hoard from Antiochia ad Pisidiam dating back to the 30s BC, which was smuggled from in the 1970s and then sold on the market⁵⁷. Republican bronze coin finds are also so scarce and there are only 3 specimens unearthed from the excavations of Ilion⁵⁸, Pergamon⁵⁹, Sardis⁶⁰ and one from a private collection⁶¹. Of the finds listed here, 18 denarii, 1 quinarii, 1 aureus and 3 bronzes

letters, ligatures and a dot (·) between some letters. The correct spelling should be as follows: Obv. L·POꝛ PONI· CNF (lower part of the first P's crescent is open, the second P is like horizontal II facing right and the right leg is half length, and NF is ligature). Rev. L·LIC·CN·DOM (CN is ligature and D facing left).

48 Tekin 2009, no. 152 (M. Aemilius Scarus and P. Hypsaesus; 58 BC. Ref. Crawford 1974, 446 no. 422.1b). 49 Inv. No. 8273 (PVR; 169-158 BC. Ref. Crawford 1974, 238 no. 187.1), Inv. No. 8166 (D. Silanus L. F.; 91 BC. Ref. Crawford 1974, 338 no. 337.3), Inv. No. 8164 (Cn. Lentulus; 88 BC. Ref. Crawford 1974, 356 no. 345.1), Inv. No. 3344 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 541 no. 544.35) (Tek – Köker ongoing studies).

50 Inv. No. 39715 (Caesar; 49-48 BC. Ref. Crawford 1974, 461 no. 443). This coin was purchased in 2015 and there is no information on where it was found.

51 Inv. No. 4.1.96 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 541 no. 544.25). There is also one quinarius: Inv. No. 1.7.93 (C. Egnatuleius; 97 BC. Ref. Crawford 1974, 332 no. 333.1). (Tek – Köker ongoing studies)

52 Keleş 2009, 30-31: no. 1 (Anonymous; 157-156 BC. Ref. Crawford 1974, 244 no. 197.1b), no. 2 (Caesar; 44 BC. Ref. Crawford 1974, 489 no. 480.7a) and no. 3 (M. Antonius; 32-31 BC. Ref. Crawford 1974, 541 no. 544.35?).

53 Atasoy 1974, 262 no. 1 (Gold impression of denarius of M. Aemilius Scaurus, P. Hypsaesus; 58 BC. Ref. Crawford 1974, 466 no. 422.1b); Atasoy 1981, 12.

54 Öztürk 2017, 320 no. 17 (Cn. Lentulus; 88 BC. Ref. Crawford 1974, 356 no. 345.2). See also Öztürk 2021, 422-423.

55 Ireland 2000, 53 no. 2081 (Q. Titius; 90 BC. Ref. Crawford 1974, 344 no. 341.3).

56 Eskioğlu 1989, 198 (Inv. No. 2147: Caesar; 46 BC. Ref. Crawford 1974, 478 no. 466.1). Additionally, although Eskioğlu 1989 does not mention the coin, Oliver 1980, 155 refers to an aureus belonging to M. Antonius, but gives no further information (This also quoted by Crawford 1985, 252). Moreover, Eskioğlu 1989, 192 mentioned an Augustan aureus (Inv. No. 71/117-1) was found in Garipler Tumuli (RIC I, 54 no. 198).

57 Crawford 1985, 252 (no further information on the coins in the hoard).

58 Bellinger 1961, 171 no. 216 (C. Numitori; 133 BC. Ref. Crawford 1974, no. 246.2?).

59 Voegtli 1993, 45 no. 636 (S. Pompeius; 45 BC onwards. Ref. Crawford 1974, 487 no. 479.1).

60 Bell 1916, 46 no. 420 (Anonymous; 225-217 BC. Ref. Crawford 1974, 147 no. 351).

61 Kumandaş 2023, 6 no. 1. This coin has been misidentified. It is an anonymous triens and the date given for it is 214-212 BC. The obverse of the coin depicts a head of Minerva in Corinthian helmet, as opposed to a helmeted Rome head as stated on the catalogue. Additionally, the reverse of the coin features three dots (•••) below the prow, while given reference Crawford 1974, 153 no. 42.4 mentions an ear of corn above and a single dot (•) below the prow. On the contrary, given reference BMCRR Rome 109 mentions a dot (•) on the left side on the obverse of the coin and the reverse a single dot (•) beneath the prow. No examples of the “Minerva/Prow” series with three dots below the prow on the reverse have been recorded in either reference as of yet (Crawford 1974, 147-224 nos. 35-121). All examples featuring head of Minerva in Corinthian helmet have four dots (••••) above the head on the obverse and below the prow on the reverse, while all examples with three dots (•••) below the prow on the reverse have the head of Herakles on the obverse. Therefore, the four dots above Minerva's head on the obverse of the coin are obscured due to wear

were excavated, while 53 denarii and 2 quinarii are currently in museum collections. Due to their uncertain provenance, it is not possible to make a precise evaluation of the specimens in museum collections, but they are of importance in terms of their geographical distribution. These Republican coins dated between the last quarter of the 3rd century BC and before 27 BC. Approximately 20% of these denarii are dated before the 1st century BC, with a slight increase in the number of finds after the first Mithradatic War, and finally a significant increase from the 40s BC onwards, specifically during and after the Civil War.

The scarcity of finds in Asia Minor and outside that dated before 50 BC suggests that the role of Roman Republican denarii in the region during the first half of the 1st century BC was rather limited.⁶² This is in stark contrast to the situation in Greece⁶³. Apart from the Halikarnassos and Penkalas I hoards, there is additional evidence to support this perspective, specifically hoards containing denarius⁶⁴. Hence, it appears that the Roman monetary system had a negligible impact in these territories prior to the Civil War⁶⁵. However, starting from the 40s BC, the Roman Republican denarius (and to a much lesser extent the aureus and bronze series) were minted in significant amounts in the area. For example, the denarius was minted in the name of Lentulus⁶⁶, Brutus and Cassius⁶⁷, Marcus Antonius and Octavianus⁶⁸ and circulated with the cistophori⁶⁹. In conclusion, Roman currency was fully established in the coinage system of Asia Minor during the second half of the 1st century BC. This occurred following Cicero's letter to his brother Quintus Atticus in 59 BC, coinciding with the spread of Civil War struggles to Asia Minor and other parts of Anatolia, in addition to the Roman military presence there. Furthermore, this establishment took place during the period in which Augustus assumed sole responsibility for Roman administration⁷⁰.

of the coin, while one of the four dots below the prow on the reverse is similarly indiscernible. In addition, a number of symbols above or to the right of the prow can be seen on the reverse of this series. Regrettably, the reverse die of the coin in question was shifted to the right during the minting process, so it is not possible to tell whether there is a symbol on the right. If there is no symbol on the right side of the reverse, as seems to be the case, then this coin most likely belongs to the series dated 211 BC (Crawford 1974, 159 no. 56.4).
62 Another reason for the lack of representation of Republican denarii may be their removal from circulation during the Imperial period.

63 Hoard evidence indicate that denarius finds began to appear in Greece in the mid-2nd century BC, while epigraphic evidence dated to 150 BC (Carbone 2021, 253 and note 92)

64 See note 21 above.

65 Crawford 1985, 252; Kinns 1987, 112.

66 These denarii minted by Proconsul Lentulus represent the inaugural minting of denarii in Asia Minor, most likely in Ephesus during the year 49 BC (Ref. Crawford 1987, 462 no. 445.3).

67 Crawford 1987, 513-518 no. 498-508.

68 Crawford 1987, 524-526 no. 516-517.

69 IGCH 352=RRCH 374=CH II, 125=CH IV, 76 (Hierapytna, Crete); IGCH 1340 (Smyrna); IGCH 1746=CH I, 105 (Sarnakunk, Armenia); Overbeck 1978. For the circulation of cistophori before and after the 133 BC see Carbone 2021, 241-257.

70 Kinns 1987, 112; Carbone 2014, 12, 14; Carbone 2021, 234 and 238. For the epigraphic evidence of the Roman currency in Asia see Carbone 2021, 234-239 and 264-271.

Conclusion

The political control of Rome in Asia Minor commenced when the Provincia Asia was established subsequent to Attalos III's bequest of his kingdom to Rome⁷¹. Until this period, Rome's monetary requirements for military operations in the region were met by the posthumous coinage of Alexandros by some cities in western Anatolia⁷², and it was only after the establishment of the Provincia Asia (after 129 BC) that Rome intervened in the coinage of the region⁷³. It suggests that, as in other eastern provinces, Rome did not directly introduce its own monetary system in the Provincia Asia, but preferred to use the system already in use, namely the Attalid system of cistophori⁷⁴. Following the establishment of Provincia Asia, the Roman name appears on a gold stater that was struck at Ephesus as early as 122/121 BC⁷⁵, a series of proconsular cistophori were produced between 58-49 BC⁷⁶, along with cistophori of Marcus Antonius⁷⁷ and Octavianus-Augustus⁷⁸. On the other hand, the presence in Asia Minor as early as 88 BC of coins minted in orichalcum (brass), typical of the Roman monetary system, and the Romanization of the local coinage and its appearance, are the clearest signs of Roman intervention and effect in the monetary system of the region⁷⁹.

The Penkalas I hoard is a significant find, as it not only enriches the ongoing discussion about the Roman involvement in the monetary system in Asia Minor and the resulting circulation of Roman republican denarii in the area, but also demonstrates that coins with cistophoric units continued to play an important role in the Augustan period. Following the military and political dominance of Rome in Asia Minor and beyond, its impact on the coinage was evident as early as the 1st century BC. According to the hoard evidence and excavation finds, especially before the 40s BC some denarii have already entered the circulation pool, but only very scantily. So that means the Roman Republican coinage never played an important part in the monetary system in the area before that date. Besides that, until the 40s BC, cistophori dominate the scene in Asia Minor. Again, the hoards of Halikarnassos and Penkalas I, show us the 40s BC is the turning point for the denarii's presence and circulation in the region. However, the vast majority of denarius finds are dated from the last two decades of the Republic and related to their minting in Asia Minor in order to monetary requirements arising by military activities as a consequence of the series of wars between Caesar and Pompeius, the wars between the Libarators and the supporters of Caesar, the struggles between Marcus Antonius

71 For more information on Roman involvement in Anatolia, see Sherwin-White 1977.

72 Crawford 1985, 154 note 3; Kinns 1987, 105.

73 For further information and debate on this issue, see Kinns 1987, 105 ff.

74 Carbone 2021, 239.

75 Eskioğlu 1989, 203-204, fig. 40. Inv. No. 4062; Jenkins 1987, 184 Pl.B, 4; French 1991, 201-203 Pl.7.1.

76 Kinns 1987, 108ff; Metcalf 2017.

77 RPC I, 2201-2202.

78 Sutherland 1970.

79 Bellinger 1956, 139-140; Crawford 1985, 196-197, 243, 258; Kinns 1987, 112; Carbone 2021, 238-239.

For the intervention and effect of the Roman monetary system to civic silver issues, see also Meadows 2002; Carbone 2014; Köker 2017; Carbone 2020; Meadows 2021.

and Octavianus, and ultimately, the foundation of the empire by Octavianus/Augustus. In conclusion, the Halikarnassos hoard, the Penkalas I hoard and the denarii findings from various excavations, as well as the denarii in museum collections (although their provenance is uncertain, they can at least be statistically evaluated), strengthen the idea that Roman Republican coinage was established and that the denarius became the primary silver currency in the area, especially from the 40s BC onwards.

Bibliography and Abbreviations

- Akgönül 2018 Akgönül, S. O., Kurul Kalesi 2010-2017 Yılları Sikke Buluntuları, Gazi Üniversitesi Yayınlanmamış Yüksek Lisans Tezi, Ankara.
- Arslan 1992 Arslan, M., Museum of Anatolian Civilizations Roman Coins, İstanbul.
- Atasoy 1974 Atasoy, S., "The Kocakızlar Tumulus in Eskiehir", *AJA* 78, 255-263.
- Atasoy 1981 Atasoy, S., Eskişehir-Alpu Kocakızlar Tumülüsü, *Arkeoloji ve Sanat Dergisi* 11, 7-13.
- Bell 1916 Bell, H. W., Sardis Volume XI Coins Part I 1910-1914, Leiden.
- Bellinger 1956 Bellinger, A. R., Greek Mints under the Roman Empire, *Esseys in Roman Coinage Presented to Harold Mattingly* (ed. R. A. G. Carson – C. H. V. Sutherland), London, 137-148.
- Bellinger 1961 Bellinger, A. R., Troy. The Coins, Supplementary Monograph 2, Princeton.
- BMCRE I Mattingly, H., Coins of the Roman Empire in the British Museum, Volume 1: Augustus to Vitellius, London, 1976.
- BMCRR Grueber, H. A., Coins of the Roman Republic in the Birtish Museum I. Coinages of Rome, Roman Campania, Italy, the Social War and the Provinces, London, 1970 (1st Pub. 1910).
- Bosch 1951 Bosch, C. E., İstanbul Arkeoloji Müzeleri Eski Yunan Sikkeler Rehberi I. Bölüm. Yunan – Roma – Bizantin ve Avrupa Sikkeleri, İstanbul.
- Callataÿ 2023 Callataÿ, F. de, Les cas de brockages dans le Monde Grec: Massalia, Dyrrachion, Apollonia et les Autres... sur la Piste des Romains, Απρίδιον. La Monnaie grecque entre guerre et commerce. Mélanges de numismatique, d'épigraphie et d'histoire offerts à Olivier Picard (ed. E. Markou – S. E. Psöma), Athens, 62-77.
- Campbell 1933 Campbell, W., "Greek and Roman Plated Coins", *NNM* 57, 1-174.
- Carbone 2014 Carbone, L. F., "Money and Power: The Disappearance of Autonomous Silver Issues in the Roman Province of Asia", *OMNI* 8, 10-34.
- Carbone 2020 Carbone, L. F., "Mark Antony and the Bronze Revolution in the East", *Coins of the Roman Revolution, 49 BC – 14 AD Evidence Without Hindsight* (eds. A. Powell – A. Burnett), Wales, 44-77.
- Carbone 2021 Carbone, L. F., "The Introduction of Roman Coinages in Asia", *Graecia capta? Rome et les monnayages de l'Egée aux IIe-Ier s. av. J.-C.* (eds. R.H.J. Ashton – N. Badoud), Basel, 233-293.
- Casey 2010 Casey, J., Sinope. A Catalogue of the Greek, Roman and Byzantine Coins in Sinop Museum (Turkey) and Related Historical and Numismatic Studies, London.
- CH I Coin Hoards Volume I (ed. M. J. Price), 1975, London.
- CH II Coin Hoards Volume II (ed. M. J. Price), 1976, London.
- CH IV Coin Hoards Volume IV (ed. M. J. Price), 1978, London.
- CH VI Coin Hoards Volume VI (ed. M. J. Price), 1981, London.
- CH VII Coin Hoards Volume VII (ed. M. J. Price), 1985, London.
- CH IX Coin Hoards Volume IX. Greek Hoards (eds. A. Meadows – U. Wartenberg), 2002, London.
- Crawford 1968 Crawford, M. H., "Plated Coins – False Coins", *NC* 8, 55-69.
- Crawford 1974 Crawford, M. H., Roman Republican Coinage I-II, Cambridge.
- Crawford 1985 Crawford, M. H., Coinage and Money under the Roman Republic, Berkeley.
- Çizmeli-Öğün 2007 Çizmeli-Öğün, Z., "Les Monnaies Découvertes à Claros, Sanctuaire d'Apollon en Ionie", *RN163*, 215-235.
- Dedeoğlu 2005 Dedeoğlu, J., "The Sanctuary at Zindan Mağarası in the Light of the New Archaeological Evidence", *Gephyra* 2, 95-102.
- Eskioğlu 1989 Eskioğlu, M., "Garipler Tümülüsü ve Kayseri'deki Tümülüs Tipi Mezarlar", *TAD* 48, 189-224.
- Fischer-Bossert 2014 Fischer-Bossert, W., "Kleinfunde un Münzen", *Karatepe-Aslantaş. Azatiwaya* (ed. H. Çambel), *Archäologische Forschungen* 29, Wiesbaden, 155-176.
- French 1991 French, D., "C. Atinius C.f. on a Coin of Ephesos", *Recent Turkish Coin Hoards and Numismatic Studies* (ed. C. S. Lightfoot), Oxford.

- Giard 1976 = CBN Giard, J. B., Bibliothèque nationale (Paris): Catalogue des monnaies de l'empire romain, I Auguste, Paris.
- Goddard 1993 Goddard, J. P., Roman brockages: a preliminary survey of their frequency and type, *Metallurgy in Numismatics 3* (eds. M. M. Archibald – M. R. Cowell), London, 71-85.
- Hiltmann 2023 Hiltmann, B., Les Cistophores de Marc Antoine un Monnayage Hellénistique en Contexte Romain, *Numismatika Antiqua 14*, Bordeaux.
- IGCH An Inventory of Greek Coin Hoards (ed. M. Thompson – O. Mørkholm – C. M. Kraay), 1973, New York.
- Ireland 2000 Ireland, S., Greek, Roman, and Byzantine Coins in the Museum at Amasya (Ancient Amaseia), Turkey, London.
- Jenkins 1987 Jenkins, G. K., "Hellenistic Gold Coinage of Ephesos", *Anatolia 21* (1978-1980), Akurgal'a Armağan, 183-188.
- Keleş 2009 Keleş, V., Erzurum Arkeoloji Müzeleri Roma Sikkeleri, İstanbul.
- Kinns 1987 Kins, P., "Asia Minor", The Coinage of the Roman World in the Late Republic. Proceedings of a colloquium held at the British Museum in September 1985 (ed. A. M. Burnett – M. H. Crawford), BAR International Series 326, Oxford, 105-120.
- Kleiner 1972 Kleiner, F. S., "The Dated Cistophori of Ephesus", *ANSMN 18*, 17-32.
- Köker 2013 Köker, H., Aizanoi Kazısı 2011-2012 Yılları Sikke Buluntuları", *Aizanoi I. 2012 Yılı Kazı ve Araştırmala Raporları*, Ankara.
- Köker 2017 Köker, H., "Komama Gümüş Sikkeleri", *OLBA XXV*, 227-239.
- Kumandaş 2023 Kumandaş, H., Aydın Özkan Koleksiyonu Roma Cumhuriyet ve Roma İmparatorluk Dönemi Sikkeleri, İstanbul.
- Lawrence – Sydenham 1940 Lawrence, L. A. – Sydenham, E. A., "On Roman Plated Coins", *NC 20*, 190-202.
- Levi 1972 Levi, D., "La campagna di scavo 1969-1970", *Annuario della Scuola Archeologica di Atene Notizie degli Scavi Volume XLVII-XLVIII Nuova Serie XXXI-XXXII* (1969-1970), Roma, 1970, 461-532.
- MacDonald 1976 MacDonald, D. J., *Coins from Aphrodisias*, Oxford.
- Meadows 2002 Meadows, Meadows, A. R., "Stratonikeia in Caria: The Hellenistic City and its Coinage", *NC 162*, 79-134, *Lev. 19-30*.
- Meadows 2021 Meadows, A., The Penetration of the Denarius and Quinarius Standarts into Asia Minor in the 1st Century BC, *Graecia capta? Rome et les monnayages de l'Egée aux Ile-Ier s. av. J.-C.* (eds. R. H. J. Ashton – N. Badoud), Basel, 127-185.
- Metcalf 2017 Metcalf, W., *The Later Republican Cistophori*, New York.
- Milne 1925 Milne, J. T., *Wood's Coins from Ephesos*", *NC 5*, 385-391.
- Okçu et al. 2010 Okçu, R. – E. Dumlupınar – A. Artar, *Bursa Arkeoloji Müzesi Sikke Teşhir Kataloğu*, Bursa
- Oliver A. Oliver Jr., "A Set of Ancient Silverware in the Getty Museum", *JPGMJ 8*, 155-166.
- Overbeck 1978 Overbeck, B., "Ein Schatzfund der späten Republik von Halikarnassos", *SNR 57*, 164-173, *Tafel 45-51*.
- Özer et al. 2022 Özer, E. – A. Türkan – Z. Erdiç, "Aizanoi Antik Kenti 2019 ve 2020 Kazı Sezonları ve Araştırmaları", *2019-2020 Yılı Kazı Çalışmaları*, Ankara, 19-36.
- Öztürk 2017 Öztürk, B., "Amasya Oluz Höyük 2009 - 2013 Dönemi Kazılarında Bulunan Sikkeler", *Amasya-Oluz Höyük II. Kuzey-Orta Anadolu'da Bir Akhamenid (Pers) Yerleşmesi. 2009-2013 Dönemi Çalışmaları Genel Değerlendirmeler ve Ön Sonuçlar*, Amasya, 313-337.
- Öztürk 2021 Öztürk, B., "The coins found at the excavations at Amasya/Oluz Höyük , 20009-2013", *The Greeks and Romans in the Black Sea and the Importance of the Pontic Region for the Greco-Roman World (7th Century BC-5th Century AD): 20 Years On (1997-2007). Proceedings of the Sixth International Congress on Black Sea Antiquities (Costanța – 18-22 September 2017)*, Oxford, 420-428.
- Regling 1927 Regling, K., *Die Münzen von Priene*, Berlin.
- RIC I The Roman Imperial Coinage Volume I (Revised Edition). From 31 BC to AD 69, by C. H. V. Sutherland, 1984, London.
- RPC I Roman Provincial Coinage Volume I. from the death of Caesar to the death of Vitel-

- lius (44 BC-AD 69). Part I: Introduction and Catalogue, Part II. Indexes and Plates, A. Burnett – M. Amandry – P. P. Ripollès, 1992, London-Paris.
- RRCH Crawford, M., Roman Republican Coin Hoards, London, 1969.
- Sherwin-White 1977 Sherwin-White, A. N., “Roman Involvement in Anatolia”, JRS 67, 62-75.
- Stumpf 1985 Stumpf, G., “C. Atinius C.F., praetor in Asia 122-121 v. Chr., auf einem Kistophor”, ZPE 61, 17-32.
- Sutherland 1970 Sutherland, C. H. V., Cistophori of Augustus, London.
- Sydenham 1952 Sydenham, E. A., The Coinage of the Roman Republic, London.
- Tek 2002 Tek, A. T., Arykanda Kazılarında Bulunan Antik Sikkeler Üzerine Yeni İncelemeler: 1971-2000 Sezonları, Ankara Üniversitesi Yayınlanmamış Doktora Tezi, Ankara.
- Tek 2016 A. T. Tek, “Roman Republican Coinage in Turkey and its Influence on the Coinages of Lycia, Pisidia and Pamphylia”, Colloque international. Graecia capta? Rome et les monnayages de l’Egée aux IIe-Ier s. av. J.-C., 14-15 avril 2016, Université de Fribourg (Suisse).
- Tekin 1994 Tekin, O., Yapı Kredi Koleksiyonu. Grek ve Roma Sikkeleri, İstanbul.
- Tekin 2009 Tekin, O., Suna ve İnan Kıraç Vakfı Pierre Willemart Sikke Koleksiyonu, İstanbul.
- Türktüzün et al. 2014 Türktüzün, M. – R. Karaca – S. Akduğan – S. Gürbüz, “Tokul Köyü Kilise Kurtarma Kazısı ve Temizlik Çalışmaları”, Kütahya Müzesi 2013 Yıllığı, Ankara, 47-83.
- Voegtli 1993 Voegtli, H., Die Fundmünzen aus der Stadtgrabung von Pergamon, Berlin.
- Woytek 2006 Woytek, B., Die Verwendung von Mehrfachstempeln in der antiken Münzprägung und die “Elefantendenare” Iulius Caesars (RRC 443/1), SNR 85, 69-90.
- Woytek et al. 2012 Woytek, B. E. – M. Rodriges – F. Cappa – M. Schreiner – M. Radtke – U. Reinholz, “Imitations of Roman Republican Denarii: New Metallurgical Data”, AJN 24, 133-162.

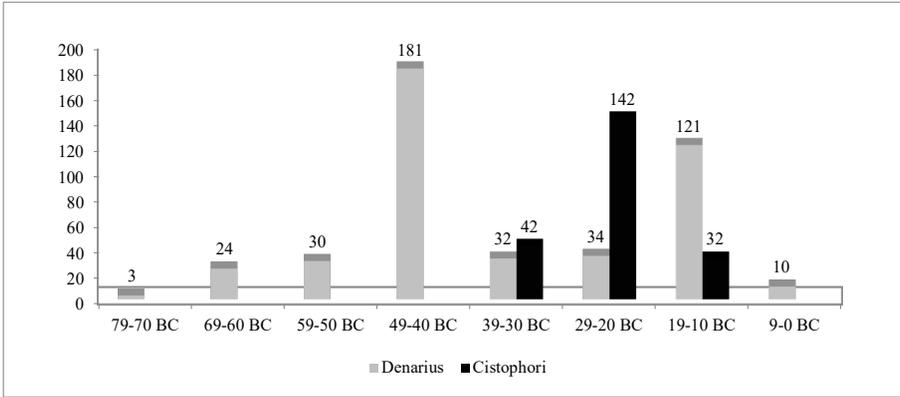


Fig 1. Distribution of the Republican and Imperial denarii and cistophori in Penkalas I by date.

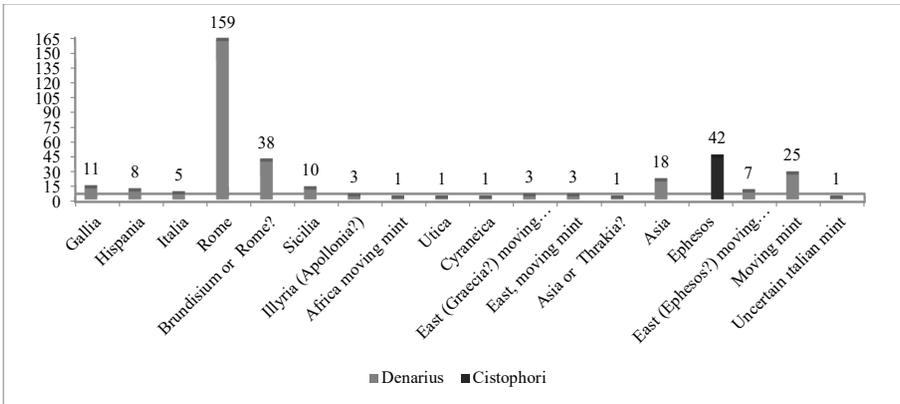


Fig. 2. Distribution of the mints represented on Republican denarii and cistophori in Penkalas I hoard.

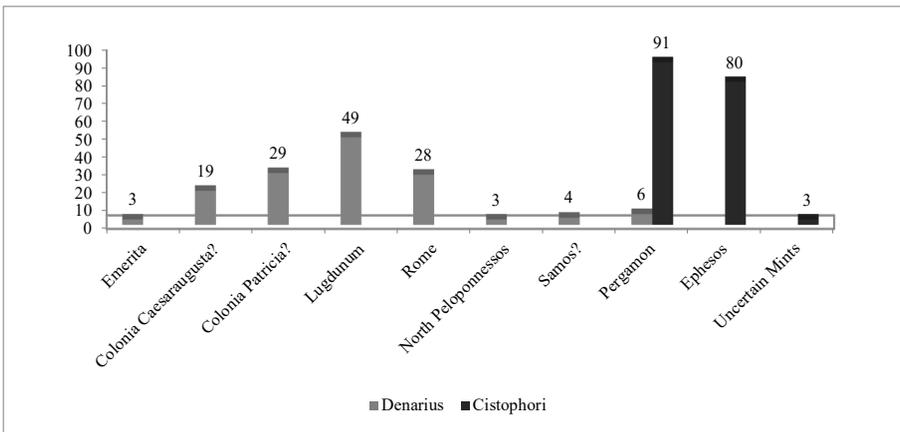


Fig. 3. Distribution of the mints represented on Imperial denarii and cistophori in Penkalas I hoard.

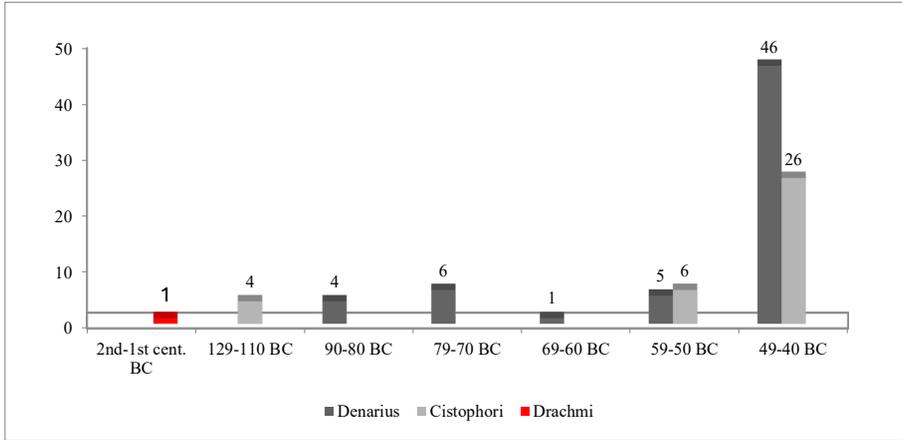


Fig. 4. Distribution of the coins in Halikarnassos hoard by dates.

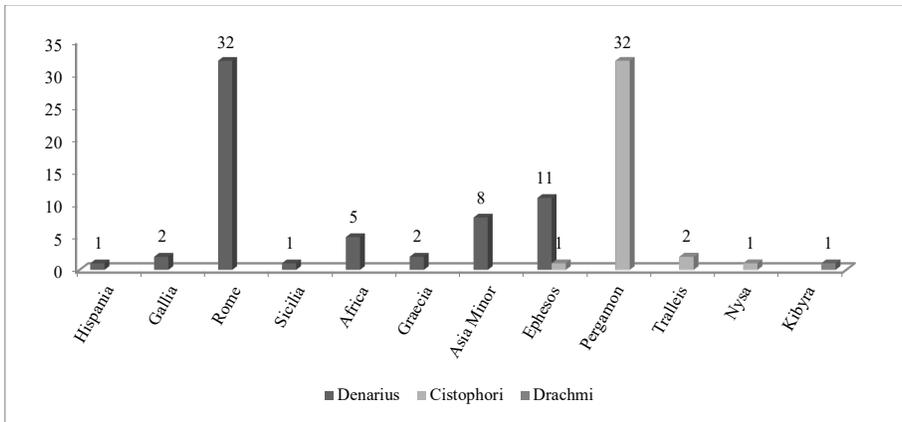


Fig. 5. Distribution of the mints represented in Halikarnassos hoard.

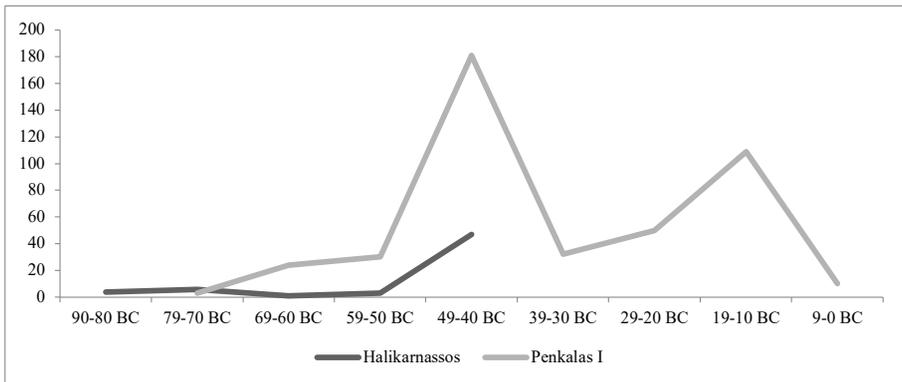


Fig. 6. Distribution of the denarii in Halikarnassos and Penkalas I hoards.

Author	Date (BC)	Mint	Ref.
Cn. Cornelius Lentulus (3)	76-75	Hispania	Crawford 393.1a
C. Piso Frugi (2)	67	Rome	Crawford 408.1a
M. Plaetorius Cestianus (3)	67	Rome	Crawford 409.1; 409.2
Q. Pomponius Musa (4)	66	Rome	Crawford 410.1; 410.3; 410.4; 410.8
L. Cassius Longinus (5)	63	Rome	Crawford 413.1
Paulus Lepidus (3)	62	Rome	Crawford 415.1
L. A. Scrbonianus Libo (7)	62	Rome	Crawford 416.1a
M. A. Scaurus & P. Hypsaesus (11)	58	Rome	Crawford 422.1b
L. Marcius Philippus (4)	56	Rome	Crawford 425.1
Faustus Cornelius Sulla (1)	56	Rome	Crawford 426.3
C. Memmius (1)	56	Rome	Crawford 427.1
Q. Cassius Longinus (3)	55	Rome	Crawford 428.1; 428.3
P. Fonteus Capito (1)	55	Rome	Crawford 429.1
P. Licinius Crassus (1)	55	Rome	Crawford 430.1
A. Palutius (4)	55	Rome	Crawford 431.1
M. Iunius Brutus (2)	54	Rome	Crawford 433.1
Q. Pompeius Rufus (2)	54	Rome	Crawford 434.2
Q. Sicinius (2)	49	Rome	Crawford 440.1
Mn. Acilius Glabrio (11)	49	Rome	Crawford 442.1a
Iulius Caesar (24)	49	Moving mint	Crawford 443.1
Q. Sicinius & C. Coponius (1)	49	Asia (West shore)	Crawford 444.1a
L. Hostilius Saserna (5)	48	Rome	Crawford 448.1a; 448.3
C. Vibius Pansa (5)	48	Rome	Crawford 449.1b; 449.2
Albinus Brutus (4)	48	Rome	Crawford 450.1a; 450.2
Iulius Caesar (3)	48 July	Illyria (Apollonia?)	Crawford 452.2
Iulius Caesar (14)	48/47	Asia	Crawford 458.1
L. Plautius Plancus (11)	47	Rome	Crawford 453.1
A. Allienus (1)	47	Sicilia	Crawford 457.1
M. Porcius Cato (1)	47-46	Utica	Crawford 462.1b
Mn. Cordius Rufus (12)	46	Rome	Crawford 463.1a-b; 463.2
T. Carisius (8)	46	Rome	Crawford 464.2; 464.3a
C. Considius Paetus (4)	46	Rome	Crawford 465.1b, 2b; 465.3
C. Iulius Caesar (3)	46	Sicilia?	Crawford 467.1a
C. Iulius Caesar (4)	late 46-early 45	Hispania Ulterior	Crawford 468.1; 468.2
Iollius Palikanus (1)	45	Rome	Crawford 473.1
Sextus Pompeius (1)	44?	Southern Hispania	Crawford 477.3a
L. Aemilius Buca (1)	44	Rome	Crawford 480.4
P. Sepulcius Macer (2)	44 Feb.-March	Rome	Crawford 480.5b; 480.10
C. Cossutius Maridianus (1)	44 April	Rome	Crawford 480.19
Q. Nasidius (1)	c. 44-43	Sicilia	Crawford 483.2
P. Accoleius Lariscolus (1)	43	Rome	Crawford 486.1
Petillius Capitolinus (1)	43	Rome	Crawford 487.2a
P. Clodius Turrinus (21)	42	Rome	Crawford 494.19; 494.21; 494.23
L. Livienius Regulus (5)	42	Rome	Crawford 494.24; 494.27, 28; 494.30
M. Antonius & C. Vibius Varus (1)	42	Rome	Crawford 494.32
C. Vibius Varus (3)	42	Rome	Crawford 494.36; 494.38
L. Mussidius Longus (5)	42	Rome	Crawford 494.42
M. Antonius (3)	42	Italia?	Crawford 496.1
Octavianus (1)	42	Italia	Crawford 497.2d
C. Cassius & Lentulus Spinter (1)	42 Spring	Asia	Crawford 500.1
M. Iunius Brutus & L. Spinter (1)	42 Spring	Asia	Crawford 500.7
Q. Caepio Brutus & L. Sestius (1)	42 Spring	Asia	Crawford 502.2
M. Iunius Brutus & P. Costa (1)	42 Mid-October	Asia M. or Thrakia?	Crawford 506.2
Sextus Pompeius (5)	42-40	Sicilia	Crawford 511.3a; 511.4a
C. Clodius Vestalis (1)	41	Rome	Crawford 512.2
M. Antonius (2)	41	Gallia, moving mint	Crawford 516.2; 516.5
M. Antonius & M. Barbatius (6)	41	Ephesos?	Crawford 517.2
Cn. Domitius Ahenobarbus (1)	41	East, moving mint	Crawford 519.2
M. Antonius & L. Plancus (1)	40	Ephesos?	Crawford 522.2
M. Antonius (3)	38	Graecia?	Crawford 533.2
Octavianus & M. Agrippa (3)	38	Gallia, moving mint	Crawford 534.2; 534.3
M. Antonius (1)	37	East, moving mint	Crawford 536.3
Octavianus (6)	37	Gallia, moving mint	Crawford 537.1; 538.1
Octavianus (1)	36	Africa, moving mint	Crawford 540.2
M. Antonius & Marcus Silanus (1)	33	East, moving mint	Crawford 542.1
M. Antonius (1)	31	Moving mint	Crawford 545.2
Octavianus & M. P. Scarpus (1)	31	Cyrenaica	Crawford 546.6
Octavianus (15)	32-29	Brundisium or Rome?	RIC I, 250a; 251; 252; 253; 254b; 256 257; CBN 77
Octavianus (23)	29-27	Brundisium or Rome?	RIC I, 265a; 267; 269a; 270; 271; 272; 274
Octavianus (1)	before 27	Uncertain Italian mint	RIC I, 543a

Fig. 7. The list of authority/moneyers, (number of coins), date, mints and references of the Republican denarii in Penkalas I hoard.

<u>Author</u>	<u>Date (BC)</u>	<u>Mint</u>	<u>References</u>
M. Antonius (32)	39	Ephesos?	Sydenham (Type I-II) 1197-1198; RPC I, 2201-2202; Hiltmann 2023, (Type I-II) 1-425, 1-411.
Octavianus (10)	28	Ephesos	Sutherland I 1-72 RPC I, 2203

Fig. 8. The list of authority/moneyers, (number of coins), date, mints and references of Republican cistophori in Penkalas I hoard.

<u>Author</u>	<u>Date (BC)</u>	<u>Mint</u>	<u>References</u>
Augustus & P. Carisius (3)	25-23	Hispania, Emerita	RIC I, 4b; 7a
Augustus (19)	c. 19-18	Hispania, Uncertain 1	RIC I, 36a; 37a; 38b; 42a; 47a ; 77a; CBN 1328
Augustus (10)	19	Hispania, Uncertain 2	CBN 1098; RIC I, 75a; 86a
Augustus (4)	18	Hispania, Uncertain 2	RIC I, 105a, b; 120;
Augustus (2)	c. July 18-17/6	Hispania, Uncertain 2	RIC I, 130
Augustus (3)	6.27.18-6.26.17	Hispania, Uncertain 2	RIC I, 134a; 142; 150a
Augustus (31)	15-13	Lugdunum	RIC I, 165a; 167a, b; 169; 171a
Augustus (5)	12	Lugdunum	RIC I, 174
Augustus (4)	11-10	Lugdunum	RIC I, 180; 189b; 193a; 197a
Augustus (9)	8	Lugdunum	RIC I, 199
Augustus (1)	7-6	Lugdunum	RIC I, 207
Augustus & P. P. Turpillianus (11)	19	Rome	RIC I, 281; 287; 288; 292; 297; 299
Augustus & L. A. Florus (3)	19	Rome	RIC I, 303; 309; 310
Augustus & M. Durmius (2)	19	Rome	RIC I, 315; 318
Augustus & Q. Rustius (2)	19	Rome	RIC I, 322
Augustus & L. Vinicius (3)	16	Rome	RIC I, 359; cf. 360, 361; 362
Augustus & C. Marius (1)	13	Rome	RIC I, 403
Augustus & C. S. Platorinus (2)	13	Rome	RIC I, 407
Augustus & C. A. Reginus (2)	13	Rome	RIC I, 410
Augustus & L. C. Gallus (2)	12	Rome	RIC I, 416
Augustus (3)	27	North Peloponnese?	RIC I, 472
Augustus (4)	27	Samos?	RIC I, 475
Augustus (12)	after 27	Pergamon	RIC I, 541; CBN 1354-57
Augustus (1)	c. 19-18	Pergamon	RIC I, 515
Augustus (5)	c. 17?	Pergamon	RIC I, 540

Fig. 9. The list of authority/moneyers, (number of coins), date, mints and references of Imperial denarii in Penkalas I hoard.

<u>Author</u>	<u>Date (BC)</u>	<u>Mint</u>	<u>References</u>
Augustus (32)	27-26	Pergamon	Sutherland IIIa 77-82; RPC I, 2207 Sutherland IIIβ 87-98; RPC I, 2208 Sutherland IIIγ 99-105, 106-115; RPC I, 2206, 2209 Sutherland IVβ 123-136; RPC I, 2211 Sutherland IVγ 137-153; RPC I, 2212
Augustus (32)	c. 19-18	Pergamon	Sutherland VIIa 448-78; RPC I, 2218 Sutherland VIIβ 483-535; RPC I, 2219 Sutherland VIIγ 536-588; RPC I, 2220
Augustus (63)	25-20	Ephesos	Sutherland Va 154-173; RPC I, 2213 Sutherland Vβ 174-189; RPC I, 2214
Augustus (44)	24-20	Ephesos	Sutherland Vγ 190-196; RPC I, 2215 Sutherland Vγ 344-445; RPC I, 2215
Augustus (3)	after 27	Uncertain mint	Sutherland II 73-76

Fig. 10. The list of authority, (number of coins), date, mint and references of Imperial cistophori in Penkalas I hoard.

Author	Date (BC)	Mint	References
L. Calpurnius Piso Frugi (1)	90	Rome	Crawford 340.1
C. Marcius Censorinus (1)	88	Rome	Crawford 346.1d
C. Mamilius Limetanus (1)	82	Rome	Crawford 362.1
Q. Antonius Balbus (1)	82	Rome	Crawford 364.1d
C. Naevius Balbus (2)	79	Rome	Crawford 382.1a-b
L. Papius (1)	79	Rome	Crawford 384.1
M. Volteius (1)	78	Rome	Crawford 385.3
L. Cassius (1)	78	Rome	Crawford 386.1
L. Rustius (1)	76	Rome	Crawford 389.1
P. A. Lepidus & L. S. Libo (1)	62	Rome	Crawford 417.1a
Mn. Acilius Glabrio (2)	49	Rome	Crawford 424.1a
C. Memmius (1)	56	Rome	Crawford 427.2
M. Iunius Brutus (1)	54	Rome	Crawford 433.1
Q. Pompeius Rufus (1)	54	Rome	Crawford 434.2
Iulius Caesar (1)	49	Moving mint	Crawford 443.1
C. Vibius Pansa (3)	48	Rome	Crawford 449.1a-b; 449.2
C. V. Pansa & D. P. A. Bruti (1)	48	Rome	Crawford 451.1
Iulius Caesar (1)	48-47	Gallia	Crawford 452.4
C. Iulius Caesar (5)	47-46	Africa	Crawford 458.1
M. Cordius Rufus (2)	46	Rome	Crawford 463.1a; 463.3
T. Carisius (1)	46	Rome	Crawford 464.3a
C. Considius Paetus (2)	46	Rome	Crawford 465.2a
C. Iulius Caesar (1)	47-46	Hispania	Crawford 468.1
L. Valerius Acisculus (1)	45	Rome	Crawford 474.2a
Q. Nasidius (1)	44-43	Sicilia	Crawford 483.2
P. Accoleius Lariscolus (1)	43	Rome	Crawford 486.1
P. Clodius (5)	42	Rome	Crawford 494.23
C. C. Longinus & P. C. L. Spinter (7)	43-42	Asia Minor	Crawford 500.3; 500.5
M. I. Brutus & P. C. L. Spinter (1)	43-42	Asia Minor	Crawford 500.7
Q. Caepio Brutus (1)	43-42	Graecia	Crawford 501.1
M. Iunius Brutus & P. Costa (1)	43-42	Graecia	Crawford 506.2
M. Antonius & M. Barbatius (10)	41	Ephesos	Crawford 517.2
M. Antonius & M. Gellius (1)	41	Ephesos	Crawford 517.8

Fig. 11. The list of authority/moneyers, (number of coins), date, mints and references of Republican denarii in Halikarnassos Hoard.

Authority	Date (BC)	Mint	References
M. Antonius (2)	39	Ephesos	RPC I, 2201
Augustus (1)	27-26	Pergamon	Sutherland IIIa 77-82; RPC I, 2207
Augustus (1)	27-26	Pergamon	Sutherland IIIb 83-98; RPC I, 2205, 2208
Augustus (2)	27-26	Pergamon	Sutherland IIIγ 106-115; RPC I, 2209 Sutherland
Augustus (1)	c. 19-18	Pergamon	VIIb 479-535; RPC I, 2219 Sutherland Vγ
Augustus (3)	24-20	Ephesos	190-196 RPC I, 2215

Fig. 12. The list of authority, (number of coins), date, mint and references of Republican and Imperial cistophori in Penkalas II hoard.



Fig. 13a. Inv. No. 26293



Fig. 13b. CBN no. 76-77



Fig. 14a. Inv. No. 26273



Fig. 14b. Inv. No. 26206



Fig. 14c. Inv. No. 26056



Fig. 15. Inv. No. 26471



Fig. 16. Inv. No. 26395



Fig. 17a.
Inv. No. 26035



Fig. 17b.
Inv. No. 26069



Fig. 17c.
Inv. No. 26105



Fig. 17d.
Inv. No. 26262



Fig. 17e.
Inv. No. 26521



Fig. 17 f.
Inv. No. 26359



Fig. 18a.
Inv. No. 26080



Fig. 18b.
Inv. No. 26013