

## Greek, Roman, and Byzantine Weights from the Ephesus Museum

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**Abstract:** This article, part of the *Corpus Ponderum Antiquorum et Islamicorum* (= CPAI) project, introduces 302 balance weights from the collection of the Ephesus Museum, located in Selçuk (Efes), İzmir. The majority of the weights are made of lead, with a smaller number made of bronze. Among these, 115 weights follow the Greek system, while 187 belong to the Roman system, of which some are classified as Byzantine weights. The find spots of these weights are primarily in and around Selçuk and nearby archaeological sites, providing important data for their provenance or attribution. Although some weights bear ethnics, most only feature unit marks; however, their find spots enable accurate attribution. The Roman system weights, especially the librae, range from the theoretical 12 unciae to as much as 25 unciae, indicating adjustments over time due to inflation and devaluation. Among the Byzantine weights, the glass ones, dating from the 5th to 7th centuries AD, are also notable for the monograms they bear. Additionally, a weight made from a coin dates to the 10th-11th centuries AD.

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### Introduction

This study covers the scale weights housed in the Ephesus Museum, which hosts the richest weight collection of the ancient Ionia<sup>1</sup>. The catalog includes 302 weights, most of which are lead, with a smaller portion being bronze. These weights are of particular significance as nearly all of them were found in the vicinity of archaeological sites in the Ionia region and subsequently recorded in the museum's collection. However, there are weights that have been found in the excavations at Ephesus but are not included in this study or have never been published. These will certainly be addressed in future studies by other researchers. Here, only a small portion of the weights from the Ephesus excavations was added to the catalog. The number of weights found in the Ephesus excavations and included in the catalog is 37, representing ca. 12% of the total, some of which

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<sup>1</sup> My initial work on the weights in the museum began more than ten years ago and has continued intermittently until today. First and foremost, I would like to express my gratitude to the former Museum Director, Cengiz Topal, for granting permission to study and publish the weights in question. His positive approach to my research allowed me to conduct my work in the museum in a comfortable environment. I would also like to remember with gratitude the late excavation director of Ephesus, Sabine Ladstätter, who granted permission to study and publish the weights found in the excavations. This permission enabled me to include many, though not all, of the weights found in the excavations in this study, even though some had been previously published. The first phase of my work was successfully completed thanks to the positive and facilitating environment provided by the former curator, Feride Kat, to whom I am deeply grateful. During my interim work at the Ephesus Museum, I would like to thank Lale Pancar for her support in facilitating communication on the subject and Esra Bideci for her assistance in the study of the weights on display. The process of completing and preparing my work for publication was made possible by the extraordinary support and facilitation provided by Ramazan Çetin, the curator responsible for weights; I owe him my gratitude. Finally, I would like to thank the new Museum Director, Murat Taşkıran, for his positive approach to my recent work during my last visit. I would also like to thank Orkun Kurumer for doing the decupé of the images and Emrullah Can for drawing of the monograms, both are from AKMED. Last but not least, I am indebted to Yavuz Selim Güler from Pera Museum and Eleni Theodorou from the University of Vienna for sharing their thoughts and offering suggestions on some of the weights; undoubtedly, I am responsible for what has not been done.

Note: The dimensions of the weights are not in a 1:1 scale.

have been previously published. Therefore, the majority of the weights published here from the museum's collection entered the collection through purchase, donation, or confiscation. Weights found in other archaeological sites affiliated with the Ephesus Museum, except the ones from the Ephesus excavation, were not included in this study.

The weights are categorized into two main groups: those from the Greek system and those from the Roman system. The Greek system weights are further divided into two subgroups: those with and those without ethnics and parasema. The weights with identifiable ethnics and parasema include examples from Colophon (10 pcs), Ephesus (3 pcs), and Smyrna (2 pcs). While many of the Greek system weights lack ethnics or parasema, this does not imply that their places of production and use are unknown. Most of these weights have been recorded as “found in Selçuk-Ephesus”, where the Ephesus Museum is located, or in nearby sites such as Bayındır, Tire, Değirmendere-Colophon, and Torbalı-Metropolis. In summary, the provenance of the weights in the collection is limited to the Ionia region, leaving no doubt that they belong, at least, to the Ionia region. The weights in the Roman system in the collection are based on the libra and uncia units and generally do not bear ethnics or parasemons, with some exceptions. However, most weights of Hellenistic Asia Minor had parasemon or ethnic, and therefore could be easily attributed. The weights of the cities under the Roman rule in western Asia Minor, particularly those within the Ionia region, were produced in a specific form and style (ie bearing common characteristics), and were therefore termed “Ionic” or “Ionian” type<sup>2</sup> and as you will see majority of the libra and uncia weights in the catalog are in this category. Likely due to a sense of imperial belonging and under the imperial framework, the production of weights that were more prototypical or primarily focused on the unit and function of the weight became more preferable. However, the names of magistrates as well as offices on the reverses or on the handles provide rich data for their attribution. So, the examples in this catalog will also contribute to the understanding of magistracies or offices in the Ionia region. In the catalog, there are approximately 15 officials: one eirenarkhes, six paraphylakes, and eight agoranomoi. This data shows that, in the narrow context of Ephesos and more broadly in Ionia, the positions of agoranomos and paraphylax were almost equally prevalent. These two roles had such a significant impact on market practices that they are incomparable to the more rarely observed offices<sup>3</sup>. There is no doubt that the agoranomoi served in the city agorai, but it has also been emphasized in recent years that the paraphylakes operated outside the city center, in the chora, where they were responsible for weights and shopping. Brélaz<sup>4</sup>, citing the duties of the paraphylakes in the chora, presents numerous epigraphic documents. Weiß<sup>5</sup>, after emphasizing that the duties of the paraphylakes were as mounted security officers operating in rural areas (chora), also highlights that the paraphylakes were responsible for the production of weights. Even though it may be somewhat off-topic, here, I should note in parentheses that for the people of cities under Roman rule, mna and libra referred to the same thing to some extent that is if a weight bears the unit name mna, it can be said to imply libra<sup>6</sup>. The people were not quick to give up the name mna, to which they had been accustomed since the Hellenistic period.

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<sup>2</sup> Weiß 2016, 247-48; Weiß 2017, 312.

<sup>3</sup> For magistrates responsible for security and control, see Brélaz 2005. For the office of agoranomos, the agoranomoi, and weights in Ephesus during the Imperial period, see Theodorou 2022.

<sup>4</sup> Brélaz 2005, 123-145 and 381-401; Brélaz 2021, 39-55.

<sup>5</sup> Weiß 2016, 256-57.

<sup>6</sup> See also, Weiß 2016, 248.



A good example of this is a 6-libra weight in the Eskinazi collection which bears both the unit names *mna* and *libra*<sup>7</sup>, but while no value is specified for *mna*, the value 6 (ΕΞ) is indicated for *libra*. Thus, it is understood that the names of *mna* and *libra* could be used interchangeably, to some extent!

## Greek System

### With Ethnic & Parasemon

1. Colophon. Hemimnaion. Pb 250.85 g, 55x54x10 mm. Inv. no. 68.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form with corners slightly folded inwards. On the obverse, lyre and unit mark H – M to the bottom left and right corners which stands for Hemimnaion - Ἡμιμναῖον (*mna* of 501.7 g); all in relief. The reverse is blank. It dates to the Hellenistic period<sup>8</sup>.



2. Colophon. Hemimnaion. Pb 234.45 g, 49x50x10 mm. Inv. no. 2.6.18. Find place: uncertain. Acquired in 2018. Lead weight, square in form with rounded corners. On the obverse, lyre; to the bottom left and right corners, Δ – Η for Δημόσιον (= demosion, “of the state”); all in relief. Its mass corresponds with hemimnaion in unit (*mna* of 468.9 g) The reverse is blank. It dates to the Hellenistic period.



3. Colophon. Triton. Pb 164.65 g, 44x47x8 mm. Inv. no. 34.18.91. Find place: Değirmendere-Colophon. Acquired in 1991. Lead weight, square in form. On the obverse, lyre; at bottom left and right corners, unit mark T – P which refers to triton (Τρίτον – Τρίτη, ie *mna* of 493.95 g); all in relief. The reverse is blank. The lyre, being the symbol of Colophon, indicates that this weight might have been produced and used there. It dates to the Hellenistic period<sup>9</sup>.



4. Colophon. Triton? Pb 163.55 g, 46x47x8 mm. Inv. no. 2.25.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, lyre; at bottom left and right corners, unit mark [T] – [P] Triton? (*mna* of 490.65 g); all in relief. The reverse is blank. The obverse type and find place refer to Colophon. It dates to the Hellenistic period.



<sup>7</sup> Tekin 2024a, no. 61 (corrected as 6-libra see Tekin 2024b, 18-19).

<sup>8</sup> Published in Tekin 2016, 112, table 41, no. 4, fig. 229 (= Pondera 13285) For similar examples see Tekin 2016, 112, table 41, nos. 1-3, figs. 226-228 (fig. 228 also appears in Tekin 2019, 71, no. 58 = Pondera 13284). See also for the concept of lyre and music in Colophon, Doğan Gürbüzler 2020.

<sup>9</sup> Published in Tekin 2016, 113, table 41, no. 8, fig. 233 (= Pondera 13289).

5. Colophon. Tetarton. Pb 132.70 g, 41x45x7 mm. Inv. no. 5.61.92 g. Find place: in the vicinity of Colophon. Acquired in 1992. Lead weight, square in form; the upper edge is concave. On the obverse, lyre; at the bottom left and right corners, unit mark T – E which stands for Τέταρτον - Tetarton (mna of 530.8 g); all in relief. The reverse is blank. The lyre, being the symbol of Colophon, indicates that this weight has been produced and used there. It dates to the Hellenistic period<sup>10</sup>.



6. Colophon. Tetarton. Pb 123.70 g, 35x35x10 mm. Inv. no. 69.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form with rounded corners. On the obverse, lyre, flanked by T – E on the top left and right corners which stands for Τέταρτον - Tetarton (mna of 494.8 g); all in relief. The reverse is blank. It dates to the Hellenistic period<sup>11</sup>.



7. Colophon. Tetarton. Pb 120.70 g, 45x49x6/8 mm. Inv. no. 3.32.93. Find place: Bayındır. Acquired in 1993. Lead weight, irregular square in form. On the obverse, lyre flanked by bow to l. and quiver (or club?) to r., below, unit mark T which stands for Τέταρτον - Tetarton (mna of 482.8 g); all in relief. The reverse is blank. It dates to the Hellenistic period.



8. Colophon. Dodekaton? Pb 44.70 g, 27x27x7 mm. Inv. no. 91.11.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, lyre; on the bottom left, Δ and on the bottom right, Ω or A. So, the two letters on the bottom left and right is either Δ – Ω (for Δωδέκατον - Dodekaton) or Δ – Α (for Δαμόσιον – Damosion). However, we know that Colophon was a city of Ionia and used Ionian dialect; furthermore, in the inscriptions it appears as 'demos' instead of 'damos' for the Colophonian assembly<sup>12</sup>. Besides, no. 2 of Colophon in this catalog it reads Δ – Η. Therefore, it is more likely that the letter at the bottom right is omega rather than alpha. The unit could also be interpreted as distater since its mass corresponds to a distater. In summary, it seems that these two letters are Δ – Ω and denote a dodekaton (1/12 mna, mna of 536.4 g). The lyre, being the symbol of Colophon, indicates that this weight might have been produced and used there. It dates to the Hellenistic period<sup>13</sup>.



9. Colophon. Distateron or Dodekaton? Pb 44.35 g, 28x28x5 mm. Inv. no. 92.11.90. Find place: Değirmendere-Colophon. Acquisition in 1990. Lead weight, square in form. On the obverse, lyre, Δ on the left bottom corner and illegible letter on the right bottom due to the dent over it; all in relief. This two-letter group must be one of the following: Δ – Η (Δημόσιον-demosion, “belonging to the state”, ie public weight), Δ – Ι (Διστάτηρον-distateron), or Δ – Ω (Δωδέκατον-Dodekaton). So, in terms of its unit, it is either a distateron (stater of 22.17



<sup>10</sup> Published in Tekin 2016, 113, table 41, no. 10, fig. 235 (= Pondera 13291) For a similar example see Pondera 13303.

<sup>11</sup> Published in Tekin 2016, 113, Table 41, no. 11, fig. 236 (= Pondera 13292).

<sup>12</sup> *IEry* 430; McCabe, *Erythrai* 220 and 252; McCabe, *Notion* 1.

<sup>13</sup> Published in Tekin 2016, 113, table 41, no. 14 (= Pondera 13295). For a similar one see Pondera 17057.

g) or dodekaton (1/12 mna, mna of 532.2 g). The reverse is blank. The lyre, being the symbol of Colophon, indicates that this weight has been produced and used there. It dates to the Hellenistic period<sup>14</sup>.

**10.** Colophon. Distateron? Pb 38.57 g (in second weighing at a different occasion, 38.55 g), 21x21x9. Inv. no. 93.11.90. Find place: Değirmendere-Colophon. Acquisition: 1990. Lead weight, square in form. On the obverse, lyre in relief. The reverse is plain and blank. Its weight corresponds with a distateron (stater of 19.285 g). It dates to the Hellenistic period<sup>15</sup>.



**11.** Ephesus. Mna. Pb 479 g, 53x54x18 mm. Inv. no. 1.7.94 g. Find place: Bayındır. Acquired in 1994. Lead weight, square in form with beveled edges. On the obverse, unit mark M which refers to Mvā - Mna; below, bee; all in relief. The reverse is blank. It is a production of Ephesus since the bee is the parasemon of this city. It dates to the Hellenistic period<sup>16</sup>.



**12.** Ephesus. Hemimnaion. Pb 247.65 g, 44x45x12 mm. Inv. no. 332.22.93. Find place: Torbalı-Metropolis. Acquired in 1993. Lead weight, square in form. On the obverse, bee and below, unit mark H which stands for Ἡμιμναίων (mna of 495.3 g); all in relief. But to left and right of the H there are some traces of "letters" which may be completed as MNA but it is illegible and not certain since it is too worn. On the other hand, in Ephesus hemimnaion units, full spelling like "HMNA" is not observed; rather, it should be considered that only "H" appears. And also, H is positioned centrally. If there are other letters related to "MNA" alongside "H", it would be an unusual situation. The reverse is blank. The bee, being the symbol of Ephesus, indicates that this weight must have been produced and used there. It dates to the Hellenistic period<sup>17</sup>.



**13.** Ephesus. Tetarton. Pb 120.10 g, 32x33x11 g. Inv. no. 26.61.90. Find place: Ephesus excavation, agora 57/90, year 1991. Lead weight, square in form. On the obverse, bee above TE (retrograde) which stands for Τέταρτον in unit (mna of 480.4 g); all in relief. The reverse is blank. It dates to the Hellenistic period.



<sup>14</sup> Published in Tekin 2016, 113, table 41, no. 15, fig. 239 (= Pondera 13296).

<sup>15</sup> Published in Tekin 2016, 113, no. 16 (no photo) (= Pondera 13297).

<sup>16</sup> Published in Tekin 2016, 115, no. 5, fig. 246 (= Pondera 13309).

<sup>17</sup> Published in Tekin 2016, 116, no. 8, fig. 249 (= Pondera 13311).



14. Smyrna. Mna. Pb 502 g, 70x70x12 mm. Inv. no. 3.61.92. Find place: Değirmendere-Colophon. Acquired in 1992. Lead weight, square in form. On the obverse, tripod and unit mark M – N on the bottom left and right corner; all in relief. The reverse is blank. It dates to the Hellenistic period.



15. Smyrna. Hemimnaion? Pb 318.5 g, 51x56x13 mm. Inv. no. 49.30.94. Find place: Tire. Acquired in 1994. Lead weight, square in form with concave edges and rounded corners. On the obverse, tripod; to r., ZMY[P] which refers to Ζυμυναίων; all in relief. Its mass corresponds with hemimnaion in unit (mna of 637 g). It dates to the 1st century BC or late Hellenistic period<sup>18</sup>.



#### Without Ethnic & Parasemon

16. Mna? Pb 516.73 g, 59x23 mm. Inv. no. 2.53.89. Find place: Yazıbaşı Village. Acquired in 1989. Lead weight? discoid in form. On the obverse, male face in relief. The reverse is blank but there is a dent. Its mass corresponds with mna. It could be a weight but doubtful. It may be dated to 4th -1st centuries BC. However, I must say that I am unsure about its origin or dating, as the face evokes also an Islamic feeling rather than Greek, Roman, or Byzantine features!



17. Hemimnaion. Pb 306.5 g, 52x51x11 mm. Inv. no. 23.44.89. Find place: Ayrancılar. Acquired in 1989. Lead weight, square in form with rounded corners. On the obverse, there is a punched H, which may refer to Ἡμυμναίων (mna of 613 g). It dates to the Hellenistic period.



18. Hemimnaion. Pb 244.60 g, 42x46x9 mm. Inv. no. 23.5.00. Find place: Tire. Acquired in 2000. Lead weight, square in form with slightly rounded corners; dents on one edge and surface. On the obverse, unit mark H in relief which stands for Ἡμυμναίων (mna of 489.2 g). The reverse is blank. It dates to the Hellenistic period.



<sup>18</sup> Published in Tekin 2016, 107, no. 4, fig. 207 (= Pondera 13365). For similar example see CPAI 3.1, no. 51= Tekin 2016, 107, no. 5, fig. 208 (= Pondera 1841).

**19.** Hemimnaion. Pb 228.50 g, 54x51x9 mm. Inv. no. 1.21.12. Find place: uncertain. Acquired in 2012. Lead weight, square in form with slightly raised edges and rounded corners; dent on one edge. On the obverse, unit mark H in relief which stands for Ἡμισναίων (mna of 457 g). The reverse is blank. It dates to the Hellenistic period.



**20.** Hemimnaion? Pb 258.10 g, 44x45x12 mm. Inv. no. 102.17.09. Find place: Selçuk. Acquired in 2009. Lead weight, square in form; both faces are blank. Its mass corresponds with hemimnaion (mna of 516.2 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**21.** Hemimnaion? Pb 238.45 g, 40x40x15 mm. Inv. no. 133.19.92. Find place: Tire. Acquired in 1992. Lead weight, square in form with slightly rounded corners. Both faces are blank. It may be a hemimnaion in unit (mna of 476.9 g). It dates to the Hellenistic period.



**22.** Hemimnaion? Pb 224.70 g, 40x42x14 mm. Inv. no. 22.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, square in form, both faces are blank but in one face, dents and in the other face, a circular engraving. Its mass corresponds with hemimnaion (mna of 449.4 g). It dates to the Hellenistic period.



**23.** Hemimnaion? Pb 216.60 g, 42x48x11 mm. Inv. no. 70.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, rectangular in form with slightly rounded corners. Both faces are blank. Its mass corresponds with hemimnaion (mna of 433.2 g). It dates to the Hellenistic period.



**24.** Hemimnaion? Pb 213.75 g, 35x49x14 mm. Inv. no. 3.25.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, rectangular in form with slightly raised edges and rounded corners. Both faces are blank. It may be hemimnaion (mna of 427.5 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



25. Hemimnaion? Pb 252.35 g, 70x72x75x9 mm. Inv. no. 333.22.93. Find place: Torbalı-Metropolis. Acquired in 1993. Lead weight, triangular in form with a hole on the top but it has filled up over time. Considering this hole, this piece may be a loom weight, but not certain. On the obverse, relief inscription in rectangular stamp: [..]XEPICHPON[OC]; a certain Chersiphron is attested in Smyrna<sup>19</sup>. The reverse is blank. Its mass corresponds with the hemimnaion (mna of 504.7 g) or commercial hemilitron (libra of 504.7 g). It may be dated to the Hellenistic or Roman Imperial period.



26. Triton. Pb 255.50 g, 61x61x65x13 mm. Inv. no. 33.44.89. Find place: Ayrancılar. Acquired in 1989. Lead weight, triangular in form. On the obverse, IPT (TPI but reversed) in relief for Τρίτον or Τρίτη. It is a triton in unit (1/3 stater, stater of 766.5). The reverse is blank. It dates to the Hellenistic period.



27. Triton. Pb 219.30 g, 60x62x63x12 mm. Inv. no. 1.16.93. Find place: Bayındır. Acquired in 1993. Lead weight, triangular in form. On the obverse, TPI in relief which stands for Τρίτον or Τρίτη. It is a triton in unit (1/3 stater, stater of 657.9 g). Reverse is blank. It dates to the Hellenistic period.



28. Triton. Pb 166.65 g, 41x41x10 mm. Inv. no. 4.5.93. Find place: Tire. Acquired in 1993. Lead weight, square in form. On the obverse, TPI in relief which stands for Τρίτον (mna of 499.95 g) in unit. The reverse is blank but dent. It dates to the Hellenistic period.



29. Triton. Pb 155.60 g, 37x47x9 mm. Inv. no. 4.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, square in form with rounded corners. On the obverse, TP in relief which stands for Τρίτον in unit (mna of 466.8 g) The reverse is blank. It dates to the Hellenistic period.



30. Triton. Pb 154.35 g, 35x46x9 mm. Inv. no.145.5.96. Find place: Tire. Acquired in 1996. Lead weight, rectangular in form with corners folded inwards. On the obverse, TP in relief which stands for or Τρίτον or Τρίτη in unit (1/3 mna, mna of 463.05 g). The reverse is blank. It dates to the Hellenistic period.



<sup>19</sup> McCabe, Smyrna 54; I.Smyrna 697.



31. Triton. Pb 151.85 g, 38x41x10 mm. Inv. no. 2.50.91. Find place: near Ephesus. Acquired in 1991. Lead weight, square in form with slightly concave edges. On the obverse, TP in relief which stands for Τρίτον or Τρίτη in unit (mna of 455.55 g). The reverse is blank. It dates to the Hellenistic period.



32. Triton. Pb 150.15 g, 37x37x10 mm. Inv. no. 55.18.92. Find place: uncertain. Acquired in 1992. Lead weight, square in form with rounded corners. On the obverse, TP in ligature and in relief. It is a Τρίτον or Τρίτη in unit (mna of 450.45 g) The reverse is blank. It dates to the Hellenistic period.



33. Triton? Pb 199.15 g, 34x37x16 mm. Inv. no. 2.12.02. Find place: Tire. Acquired in 2002. Lead weight, square in form with slightly beveled edges. On the obverse, illegible letters and scene; Its mass corresponds to triton (mna of 597.45 g) or tetarton (796.6 g) or even commercial hemilitron (libra of 398.3 g) but all not certain. However, when the object is rotated 90 degrees to the right, it gives the impression that there is a T on the left! It dates to the late Hellenistic period.



Both are the same face rotated 90 degrees right

34. Tetarton. Pb 175.71 g, 36x38x13 mm. Inv. no. 5.27.94. Find place: Tire. Acquired in 1994. Lead weight, square in form. On the obverse, TE (reversed) and in relief which stands for Τέταρτον (mna of 702.84 g) but its mass is too high for a tetarton. The reverse is blank. It dates to the late Hellenistic period or later<sup>20</sup>.



35. Tetarton. Pb 171.10 g, 52x52x8 mm. Inv. no. 38.17.96. Find place: Ephesus excavation (38 MK. FN. 71/96) Acquired in 1996. Lead weight, square in form with slightly raised edges. Some part is missing on the reverse. On the obverse,



TE / TAP in relief and in two lines. It refers to Τέταρτον (mna of 684.4 g) On the reverse, A[...]/ ΠΙΑΔΟΥ (Α[σκλη]πιάδου) in relief and in two lines. Since this weight was found in Ephesus and a certain Asklepiades who was responsible for the issuing of the weight is attested in Ephesus<sup>21</sup>, it seems that it belongs to Ephesus. Undoubtedly, the name Asklepiades is not only seen in Ephesus but also in other cities. However, considering both the weight being found in Ephesus and the fact that the name was used in Ephesus, when both are evaluated together, Ephesus stands out. In the space after the last line, there are some traces, but they seem to be the

<sup>20</sup> For a similar example with a retrograde TE see *CPAI* 3.1, nos. 196 (Pondera 2178) and 213 (= Pondera 2195).

<sup>21</sup> Cf. McCabe, *Ephesus* 671, 2521 (*IEph* 2298), 2716 (*IEph* 2123), 3185 (*IEph* 2900.64), 3715 (*IEph* 1889).



result of deformation or impacts rather than following a sequence of letters. It dates to the late Hellenistic period.

**36.** Tetarton. Pb 168.90 g, 36x41x11 mm. Inv. no. 1.28.92. Find place: Torbalı-Metropolis. Acquired in 1992. Lead weight, thick square in form. On the obverse, TE in relief which stands for Τέταρτον in unit (mna of 675.6 g); below, illegible circular stamp. The reverse is blank. It dates to the late Hellenistic period<sup>22</sup>.



**37.** Tetarton. Pb 161 g, 33x35x12 g. Inv. no. 3.2.15. Find place: uncertain. Acquired in 2015. Lead weight, square in form. On the obverse, TE in relief which refers to Τέταρτον (1/4 mna, mna of 644 g). The reverse is blank. It dates to the late Hellenistic period.



**38.** Tetarton. Pb 158.62 g, 36x38x14 mm. Inv. no. 1.53.91. Find place: Torbalı-Metropolis. Acquired in 1991. Lead weight, thick square in form with slightly beveled edges. On the obverse, TE in relief which refers to Τέταρτον in unit (mna of 634.48 g) The reverse is blank but irregular circular relief. It dates to the late Hellenistic period<sup>23</sup>.



**39.** Tetarton. Pb 144.60 g 35x35x14 mm. Inv. no. 46.72.92. Find place: Tire. Acquired in 1992. Lead weight, square in form with beveled edges. On the obverse, TE (reversed) in relief which refers to Τέταρτον (mna of 578.4 g) The reverse is blank but irregular circular relief. It dates to the Hellenistic period.



**40.** Tetarton? Pb 125.40 g, 29x32x15 mm. Inv. no. 4.25.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, uncertain symbol or letters. Its mass corresponds with tetarton (mna of 501.6 g) but not certain since unit mark is illegible. It dates to the Hellenistic period.



**41.** Tetarton? Pb 120.48 g, 32x29x13 mm. Inv. no. 27.44.89. Find place: Ayrançılar. Acquired in 1989. Lead weight, square in form. Both faces are blank and plain but there are four engraved short lines on one face. Its mass corresponds with a tetarton (mna of 481.92 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



<sup>22</sup> For a similar example see *CPAI* 3.1, 206 (= Pondera 2188), 207 (= Pondera 2189), 216 (= Pondera 2198).

<sup>23</sup> Cf. Pondera 15565.

42. Tetarton? Pb 116.95 g, 32x33x11 mm. Inv. no. 25.44.89. Find place: Ayrancilar. Acquired in 1989. Lead weight, square in form. Both faces are blank and plain. Its mass corresponds with a tetarton (mna of 467.8 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



43. Tetarton? Pb 113.80 g, 24x30x18 mm. Inv. no. 23.61.92. Find place: Colophon. Acquired in 1992. Lead weight, cubic rectangular in form. Both faces are blank but on one face, engaved with T which may stand for Τέταρτον (mna of 455.2 g). It dates to the Hellenistic period.



44. Tetarton? or a counterfeit two-uncia. Pb 110.90 g, 38x39x9 mm. Inv. no. 59.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form with slightly raised and beveled edges; pierced on one corner. The obverse bears a B-like letter. The reverse is blank. Its mass corresponds with a tetarton (mna of 443.6 g) but not certain since the unit mark is illegible (if any). Its weight corresponds to the *tetarton*, but the style and the letter B-like letter suggest it could represent two-uncia; and it might be a counterfeit. It dates to the late Hellenistic or early Roman Imperial period.



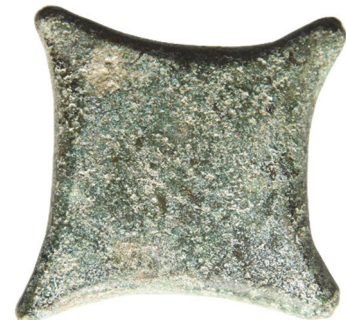
45. Tetarton? Pb 102.75 g, 35x35x9 mm. Inv. no. 72.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form with slightly concave edges and rounded corners. Both faces are blank. Its weight corresponds to a tetarton (mna of 411 g) but not certain since it doesn't bear any unit mark. It may be dated to the 4th century BC or early Hellenistic period.



46. Tetarton? Pb 105.08 g, 28x30x13 mm. Inv. no. 33.3.91. Find place: Tire. Acquired in 1991. Lead weight, square in form with rounded corners. The obverse is illegible, the reverse is blank. It may be a tetarton (mna of 420.32 g) but not certain since it doesn't bear a unit mark or illegible. It dates to the Hellenistic period.



47. Tetarton? AE 105.10 g, 42x41x8 mm. Inv. no. 81.32.82. Find place: Ephesus excavation, agora, year 1992. Copper alloy weight with concave edges; both faces are blank. Its mass corresponds with a tetarton (mna of 420.4 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**48.** Hemitriton? Pb 99.95 g, 27x29x12 mm. Inv. no. 7.13.93. Find place: Torbalı-Metropolis. Acquired in 1993. Lead weight, square in form with raised edges; dents on the edges as well as a deep dent on one profile. On the obverse, H in relief which may stand for hemitriton (1/6 mna, mna of 599,7 g) but not certain. The reverse is blank. It dates to the Hellenistic period.



**49.** Hemitriton? Pb 99.30 g, 31x31x12 mm. Inv. no. 5.5.93. Find place: Tire. Acquired in 1993. Lead weight, square in form. The obverse is illegible, maybe a H which may stand for “hemi”, “eight” or hemitriton (1/6 mna, mna of 595.8 g). The most suitable one is hemitriton but not certain. The reverse is blank. It dates to the Hellenistic period.



**50.** Hektemorion. Pb 111 g, 30x30x12 mm. Inv. no. 2.18.90. Find place: Torbalı-Metropolis. Acquired in 1990. Lead weight, square in form. On the obverse, engraved with E which stands for “Εκτη”. It may be a hektemorion (1/6 heavy mna, mna of 666 g). On the reverse, incised N? or M? It may be dated to the late 1st cent. BC or early 1st cent. AD<sup>24</sup>.



**51.** Heksamorion? Pb 83.40 g, 28x32x10 mm. Inv. no. 50.72.92. Find place: Tire. Acquired in 1992. Lead weight, square in form. On the obverse, club and quiver; to r., ΕΞ[.] in relief which may stand for heksamorion (1/6 mna, mna of 500.4 g) but the last letter at the end is not clear; it looks like the letter O. The reverse is blank. It dates to the Hellenistic period.



**52.** Hektemorion. Pb 83.30 g, 33x34x8 mm. Inv. no. 10.8.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, E in relief which refers to “Εκτη” or Hektemorion in unit (1/6 mna, mna of 499.8 g). The reverse is blank. It dates to the Hellenistic period<sup>25</sup>.



**53.** Hektemorion. Pb 79.45 g, 30x32x9 mm. Inv. no. 48.18.91. Find place: Değirmendere-Colophon. Acquired in 1991. Lead weight, square in form. On the obverse, E in relief which refers to “Εκτη” or Hektemorion in unit (1/6 mna, mna of 476.7 g). The reverse is blank. It dates to the Hellenistic period.



<sup>24</sup> Cf. CPAI 3.1, 226 (= Pondera 2208).

<sup>25</sup> Cf. CPAI 3.1, 229 (= Pondera 2211) and 230 (= Pondera 2212). Same ref. for cat. nos. 52-57.



54. Hektemorion. Pb 78.75 g, 27x32x10 mm. Inv. no. 2.20.92. Find place: Tire. Acquired in 1992. Lead weight, square in form with slightly raised and beveled edges. On the obverse, E in relief which refers to Ἑκτη. It is a hektemorion in unit (1/6 mna, mna of 472.5 g) The reverse is blank. It dates to the Hellenistic period.



55. Hektemorion. Pb 75.60 g, 29x29x9 mm. Inv. no. 55.9.91 g. Find place: Bayındır. Acquired in 1991. Lead weight, square in form with slightly rounded corners. On the obverse, E in relief which refers to Ἑκτη or hektemorion in unit (1/6 mna, mna of 453.6 g). The reverse is blank. It dates to the Hellenistic period.



56. Hektemorion. Pb 74.85 g, 29x31x8 mm. Inv. no. 71.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form with rounded corners. On the obverse, E in relief which stands for “eight” (Ἑκτη). It is a hektemorion in unit (1/6 mna, mna of 449.1 g) The reverse is blank. It dates to the Hellenistic period.



57. Hektemorion. Pb 71.41 g, 29x30x9 mm. Inv. no. 49.18.91. Find place: Değirmendere-Colophon. Acquired in 1991. Lead weight, square in form. Bottom right and left corners are broken. The original mass should be slightly greater due to the absence of the corners. On the obverse, E in relief which refers to Ἑκτη or hektemorion in unit (1/6 mna, mna of 428.46 g). The reverse is blank. It dates to the Hellenistic period.



58. Hektemorion. Pb 70.15 g, 31x32x7 mm. Inv. no. 50.18.91. Find place: Değirmendere-Colophon. Acquired in 1991. Lead weight, square in form with raised edges. There are round hollow stamps on two diagonal corners. On the obverse, E in relief which refers to Ἑκτη or hektemorion in unit (1/6 mna, mna of 420.9 g). The reverse is blank. It dates to the Hellenistic period.



59. Hektemorion? Pb 82 g, 32x26x10 mm. Inv. no. 249.9.23. Find place: Ephesus excavation, EDP23-3003-3027. Lead weight, cutted pyramidal in form. Faces are blank. Its mass corresponds with hektemorion (1/6 mna, mna of 492 g) but not certain since it doesn't bear a unit mark. It may be dated to the Hellenistic period.



60. Ogdoon. Pb 92.10 g, 33x35x9 mm. Inv. no. 2.18.93. Find place: Bayındır. Acquired in 1993. Lead weight, square in form with slightly rounded corners. On the obverse, ΟΓΔ in relief which stands for Ὀγδοον - Ogdoon (1/8 mna, mna of 736.8 g) The reverse is blank. It



dates to the 1st century BC or late Hellenistic period since the high-mass mna is suitable for late Hellenistic<sup>26</sup>.

**61.** Ogdoon. Pb 55.35 g, 25x25x10 mm. Inv. no. 11.8.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, thick square in form with beveled edges. On the obverse, ΟΓ in relief (1/8 mna, mna of 442.8 g) The reverse is blank. It dates to the Late Hellenistic period.



**62.** Ogdoon? Pb 61.33 g, 33x33x5 mm. Inv. no. 26.44.89. Find place: Ayrancılar. Acquired in 1989. Lead weight, square in form. Both faces are blank and plain but there is a dent on one face. Its mass corresponds with an ogdoon (1/8 mna, mna of 490.64 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**63.** Ogdoon? Pb 61.12 g, 31x31x7 mm. Inv. no. 12.11.06. Find place: Tire. Acquired in 2006. Lead weight, square in form; both faces are blank. Its mass corresponds with ogdoon (1/8 mna, mna of 488.96 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**64.** Ogdoon? Pb 66.00 g, 26x28x9 mm. Inv. no. 1.79.92. Find place: Torbalı-Metropolis. Acquired in 1992. Lead weight, square in form with raised edges and slightly rounded corners. Both faces are blank. Its mass corresponds with an ogdoon (1/8 mna, mna of 528 g) but it is not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**65.** Ogdoon? Pb 68.95 g, 25x30x10 mm. Inv. no. 28.44.89. Find place: Ayrancılar. Acquired in 1989. Lead weight, square in form. Both faces are blank and plain. Its mass corresponds with an ogdoon (mna of 551.6 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**66.** Dodekaton. Pb 45.40 g, 35x36x37x7 mm. Inv. no. 95.11.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, triangular in form with corners folded inwards. On the obverse, Ω in relief. The triangular form resembles a Δ. So, Δ and Ω (ΔΩ) refer to the Δωδέκατον in unit (1/12 mna, mna of 544.8 g). The reverse is blank. It dates to the Hellenistic period.



<sup>26</sup> Cf. CPAI 3.1, 237 (= Pondera 2219).

67. Dodekaton. Pb 41.35 g, 30x27x28x10 mm. Inv. no. 96.11.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, triangular in form. On the obverse, a raised-edge  $\Delta$  with an  $\Omega$  inside in relief (ie  $\Delta\Omega$ ). It is a  $\Delta\omega\delta\acute{\epsilon}\kappa\alpha\tau\omicron\nu$  / Dodekaton in unit (1/12 mna, mna of 496.2 g). The reverse is blank. It dates to the Hellenistic period<sup>27</sup>.



68. Dodekaton. Pb 40.55 g, 32x34x34x7 mm. Inv. no. 6.25.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, triangular in form with corners folded inwards. On the obverse,  $\Omega$  in relief. The triangular form resembles a  $\Delta$ . So, the  $\Delta$ -like triangular form and  $\Omega$  ( $\Delta\Omega$ ) refer to the  $\Delta\omega\delta\acute{\epsilon}\kappa\alpha\tau\omicron\nu$  in unit (1/12 mna, mna of 486.6 g). The reverse is blank. It dates to the Hellenistic period.



69. Dodekaton. Pb 40.20 g, 32x31x31x8 mm. Inv. no. 97.11.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, triangular in form. On the obverse,  $\Delta\Omega$  in relief. It is a  $\Delta\omega\delta\acute{\epsilon}\kappa\alpha\tau\omicron\nu$  in unit (1/12 mna, mna of 482.4 g). The reverse is blank. It dates to the Hellenistic period.



70. Dodekaton. Pb 39.95 g, 20x29x7 mm. Inv. no. 11.24.89. Find place: Değirmendere-Colophon-Menderes. Acquired in 1989. Lead weight, rectangular in form with corners folded inwards. On the obverse,  $\Delta\Omega$  in relief. It is a  $\Delta\omega\delta\acute{\epsilon}\kappa\alpha\tau\omicron\nu$  in unit (ie 1/12 mna, mna of 479,4 g). The reverse is blank. It dates to the Hellenistic period<sup>28</sup>.



71. Tristateron? Pb 85.95 g, 34x35x8 mm. Inv. no. 6.61.92. Find place: Değirmendere-Colophon. Acquired in 1992. Lead weight, square in form. On the obverse, TP in ligature and in relief which may stand for  $\tau\rho\iota\sigma\tau\acute{\alpha}\tau\eta\rho\omicron\nu$  (stater of 28.65). The reverse is blank. It dates to the Hellenistic period.



72. Tetrastateron or tristateron Pb 48.75 g, 22x24x10 mm. Inv. no. 9.40.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, T in relief which may refer to tetrastateron (or tessares stateres) so 4-stater (stater of 12.18 g) or tristateron (stater of 16.25 g). The reverse is blank. It dates to the Hellenistic period.



73. Distateron. Pb 44.95 g, 22x23x10 mm. Inv. no. 28.26.93. Find place: Tire. Acquired in 1993. Lead weight, square in form with beveled edges. On the obverse,  $\Delta$  in relief which may denote to  $\delta\acute{\upsilon}\omicron$  /  $\delta\iota\varsigma$  or  $\delta\iota\sigma\tau\acute{\alpha}\tau\eta\rho\omicron\nu$ . It may be a



<sup>27</sup> Cf. CPAI 2, no. 46.

<sup>28</sup> Cf. CPAI 2, 45 (square in form).



distateron in unit (stater of 22.47 g) The reverse is blank but slightly hollowed. It dates to the Hellenistic period.

74. Distateron. Pb 39.50 g, 23x23x9 mm. Inv. no. 135.19.92. Find place: Tire. Acquired in 1992. Lead weight, square in form with slightly beveled edges. On the obverse, Δ in relief which may denote to δύο / δις or διστάτηρον; in relief. It may be a distateron in unit (stater of 19.75 g). The reverse is blank. It dates to the Hellenistic period.



75. Distateron. Pb 26.05 g, 19x20x7 mm. Inv. no. 94.11.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, engraved with the unit mark ΔΙ which stands for Διστάτηρον - distateron (stater of 13.02 g, a little low weight). The reverse is blank. It dates to the Hellenistic period<sup>29</sup>.



76. Distateron? or Two-Uncia or One-Uncia? Pb 26.20 g, 20x16x8 mm. Inv. no. 13.61.92. Find place: Colophon. Acquired in 1992. Lead weight, rectangular in form. On the obverse, B in relief. Considering the unit mark on it, this appears to be a two-uncia but considering its current mass, it is half than that of a two-uncia; it would be more suitable for a one-uncia instead; but it reads B (two) inexplicably. Distater possibility should also be considered but its mass is a little bit low for this unit. This weight may be a forgery of its time! It dates to the Hellenistic or early Roman Imperial period.



77. Distateron? Pb 38.60 g, 24x25x6 mm. Inv. no. 5.25.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. It may be a distateron (stater of 19.3 g) in unit but not certain since it doesn't bear a unit mark. Both faces are blank. It dates to the Hellenistic period.



78. Distateron? Pb 49.35 g, 31x32x6 mm. Inv. no. 73.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form with slightly raised edges. Both faces are blank. Its weight corresponds with distateron (stater of 24.67 g) but not certain since it doesn't bear any unit mark. It may be dated to the Hellenistic period.



79. Distateron? Pb 41.30 g, 23x24x7 mm. Inv. no. 11.61.92. Find place: Colophon. Acquired in 1992. Lead weight, square in form. Both faces are blank. It may be a distateron (stater of 20.65 g) in unit. It dates to the Hellenistic period.



<sup>29</sup> Cf. Tekin 2013, 331, no. 10, fig. 10 (= Pondera 3197); CPAI 3.1, 282 (= Pondera 2264).



**80.** Distateron? Pb 39.45 g, 25x25x7 mm. Inv. no. 10.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, square in form with rounded corners. Both faces are blank. It may be a distateron (stater of 19.72 g) in unit. It dates to the Hellenistic period.



**81.** Distateron? Pb 37.60 g, 21x21x9 mm. Inv. no. 9.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, square in form. Both faces are blank. It may be a distateron (stater of 18.8 g) in unit. It dates to the Hellenistic period.



**82.** Distateron? Pb 37.00 g, 25x24x7 mm. Inv. no. 12.8.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. Both faces are blank. It may be a distateron (stater of 18.5 g) but not certain since it doesn't bear a unit mark or illegible. It dates to the Late Hellenistic period.



**83.** Distateron? Pb 36.30 g, 20x20x9 mm. Inv. no. 76.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form, both faces are blank. It may be distateron (stater of 18.15 g) but not certain since it doesn't bear any unit mark. It may be dated to the Hellenistic period.



**84.** Distateron? Pb 36.15 g, 30x30x32x8 mm. Inv. no. 7.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, triangular in form with rounded corners. Both faces are blank. It may be a distateron (stater of 18.07 g) in unit. It dates to the Hellenistic period.



**85.** Stater? Pb 20.45 g, 18x18x6 mm. Inv. no. 14.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, square in form. Both faces are blank. It may be a stater in unit. It dates to the Hellenistic period.



**86.** Stater? Pb 32.85, 24x24x6 mm. Inv. no. 29.44.89. Find place: Ayrancılar. Acquired in 1989. Lead weight, square in form with rounded corners. Both faces are blank and plain but dents. Its mass corresponds with a stater but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**87.** Stater? Pb 29.25 g, 20x21x7 mm. Inv. no. 77.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form, both faces are blank. Its unit is uncertain since it doesn't bear any unit mark. It may be dated to the Hellenistic period.



**88.** Stater? Pb 30.75 g, 19x19x7 mm. Inv. no. 50.16.09 g. Find place: Ephesus excavation, PAN 2009 sondage 2/09, Tagebuch eintragung SE 202 Pb 903. 3.06.2004. Panayırdağ. So 2/09, year 2009. Lead weight, square in form; both faces are blank. Its mass corresponds with a stater but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**89.** Stater? (or One-Uncia) Pb 21.40 g, 20x20x5 mm. Inv. no. 16.90.92. Find place: Çayırılı Köy. Acquired in 1992. Lead weight, square in form. Both faces are blank. It may be a stater or one-uncia but not certain since it doesn't bear a unit mark. It may be dated to the Hellenistic period or 1st century AD.



**90.** Stater (or One-Uncia?) Pb 25.75 g, 19x19x7 mm. Inv. no. 15.61.92. Find place: Colophon. Acquired in 1992. Lead weight, square in form with rounded corners. Both faces are blank. Its unit is uncertain since it doesn't bear a unit mark. It may be a stater (or one-uncia); form rather suits for stater. It dates to the Hellenistic (or Roman Imperial period).



**91.** Stater or One-Uncia? Pb 20.84 g, 17x19x6 mm. Inv. no. 16.61.92. Find place: Colophon. Acquired in 1992. Lead weight, square in form. Both faces are blank. Its unit is uncertain since it doesn't bear a unit mark. It may be a stater or one-uncia. It dates to the Hellenistic or Roman Imperial period.



**92.** Stater? Pb 17.85 g, 18x21x4 mm. Inv. no. 19.61.92. Find place: Değirmendere-Colophon. Acquired in 1992. Lead weight, square in form. Both faces are blank. Its unit is uncertain since it doesn't bear a unit mark. It may be a stater. It dates to the Hellenistic period.



**93.** Stater? Pb 16.95 g, 15x21x6 mm. Inv. no. 18.61.92. Find place: Değirmendere-Colophon. Acquired in 1992. Lead weight, rectangular in form. Both faces are blank. Its unit is uncertain since it doesn't bear a unit mark but it may be a stater. It dates to the Hellenistic period.



**94.** Stater or Eight-Drachm? AE 35.21 g, 23x23x8 mm. Inv. no. 18.67.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy weight, square in form. Both faces are blank but engraved on the three profiles with ΣΤΑ / ΘΜΙ / Η (στάθη) which stands for "weight". It seems that it belonged to the state (standard weight). However, the unit of weight is not clear; it must either be a stater or considering the 'H' at the end as 'eight,' it could also be suggested as eight drachms (drachm of 4.40 g). If the H had been placed in a separate profile (edge), although there is still sufficient space to place it immediately after ΘΜΙ (i.e. ΘΜΙΗ), one might consider that the H had a distinct meaning, possibly a numeric value. In any case, this weight appears to be an interesting and unique example. It may be dated to the late 5<sup>th</sup> or early 4<sup>th</sup> centuries BC.



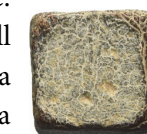
**95.** Hemistateron? Pb 14.35 g, 16x16x5 mm. Inv. no. 20.61.92. Find place: near Colophon. Acquired in 1992. Lead weight, square in form. Both faces are blank. Its unit is uncertain since it doesn't bear a unit mark. It may be a hemistateron (stater of 28.7 g). It dates to the Hellenistic period.



**96.** Hemistateron or Half-Uncia? Pb 12.55 g, 14x16x5 mm. Inv. no. 17.90.92. Find place: Çayırılık Köyü. Acquired in 1992. Lead weight, square in form. On the obverse, illegible letter or symbol. Its mass corresponds with hemistateron (stater of 25.1 g) or half-uncia (uncia of 25.1 g). It may be dated to the Hellenistic period or 1st century AD.



**97.** Hemistateron? Pb 8.75 g, 10x10x7 mm. Inv. no. 21.61.92. Find place: Değirmendere-Colophon. Acquired in 1992. Lead weight, cubic square in form. All faces are blank. Its unit is uncertain since it doesn't bear a unit mark. It may be a hemistateron (stater of 17.5 g) but its mass corresponds with two-nomismata (nomisma of 4.37 g), too. It dates to the Hellenistic period.



**98.** Decadrachmon. Pb 45.30 g, 28x29x7 mm. Inv. no. 103.17.09. Find place: Selçuk. Acquired in 2009. Lead weight, square in form. On the obverse, Δ in relief which stands for Δέκα (= ten) or Δεκάδραχμων in unit (heavy drachm of 4.53 g). On the reverse, O-like object (wreath?). It dates to the Hellenistic period<sup>30</sup>.



**99.** Decadrachmon. Pb 44.70 g, 22x22x10 mm. Inv. no. 52.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form. On the obverse, Δ in relief which stands for Δέκα (= ten) or Δεκάδραχμων in unit (heavy drachm of 4.47 g). The reverse is blank but slightly hollowed. It dates to the Hellenistic period<sup>31</sup>.



**100.** Decadrachmon. Pb 44.30 g, 22x23x9 mm. Inv. no. 1.35.94. Find place: Tire. Acquired in 1994. Lead weight, square in form. On the obverse, Δ in relief which stands for Δέκα (= ten) or Δεκάδραχμων in unit (drachm of 4.43 g). The reverse is blank. It dates to the Hellenistic period<sup>32</sup>.



**101.** Decadrachmon. Pb 43.55 g, 26x27x5 mm. Inv. no. 445.16.22. Find place: Ephesus excavation, EDP22-3025-3156. Acquired in 2022. Lead weight, square in form. On the obverse, Δ in relief which stands for Δέκα (= ten) or Δεκάδραχμων in unit (drachm of 4.35 g). The reverse is blank. It dates to the Hellenistic period<sup>33</sup>.



**102.** Decadrachmon. Pb 42.20 g, 22x24x9 mm. Inv. no. 54.16.03. Find place: in the vicinity of Ephesus. Acquired in 2003. Lead weight, square in form. On the obverse, Δ in relief which stands for Δέκα (= ten) or Δεκάδραχμων in unit (drachm of 4.22 g). The reverse is blank but a dent. It dates to the Hellenistic period.



<sup>30</sup> Cf. *CPAI* 3.1, nos. 251-281; *Pondera*, search "10 Drachmas".

<sup>31</sup> Cf. *CPAI* 3.1, nos. 251-281; *Pondera*, search "10 Drachmas".

<sup>32</sup> Cf. *CPAI* 3.1, nos. 251-281; *Pondera*, search "10 Drachmas".

<sup>33</sup> For this weight and the following decadrachmons cf. *CPAI* 3.1, nos. 251-281; *Pondera*, search "10 Drachmas".



**103.** Decadrachmon. Pb 40.40 g, 25x27x7 mm. Inv. no. 93.20.09. Find place: Tire. Acquired in 2009. Lead weight, square in form. On the obverse, engraved with  $\Delta$  which stands for Δέκα (= ten) or Δεκάδραχμον in unit (drachm of 4.04 g). The reverse is blank. It dates to the Hellenistic period.



**104.** Decadrachmon. Pb 39.55 g, 27x26x5 mm. Inv. no. 2.21.12. Find place: uncertain. Acquired in 2012. Lead weight, square in form. On the obverse,  $\Delta$  within a square frame, all in relief.  $\Delta$  stands for Δέκα (= ten) or Δεκάδραχμον in unit (drachm of 3.95 g). The reverse is blank. It dates to the Hellenistic period.



**105.** Decadrachmon. Pb 39.00 g, 20x22x8 mm. Inv. no. 54.7.10. Find place: Tire. Acquired in 2010. Lead weight, square in form. On the obverse,  $\Delta$  in relief which stands for Δέκα (= ten) or Δεκάδραχμον in unit (drachm of 3.9 g). The reverse is blank. It dates to the Hellenistic period.



**106.** Decadrachmon. Pb 33.45 g, 24x25x7 mm. Inv. no. 22.5.00. Find place: Tire. Acquired in 2000. Lead weight, square in form. On the obverse,  $\Delta$  in relief which stands for Δέκα (= ten) or Δεκάδραχμον in unit (drachm of 3.34 g). The reverse is blank but slightly hollowed. It dates to the Hellenistic period.



**107.** Decadrachmon? Pb 38.50 g, 21x21x9 mm. Inv. no. 12.61.92. Find place: Kolophon. Acquired in 1992. Lead weight, square in form with slightly raised edges. On the obverse, engraved with I which may refer to “ten”, ie. decadrachmon (drachm of 3.85 g). The reverse is blank. It dates to the Hellenistic period.



**108.** Decadrachmon? Pb 40.17 g, 21x24x8 mm. Inv. no. 105.17.09. Find place: Selçuk. Acquired in 2009. Lead weight, square in form. Both faces are blank or illegible. Its mass corresponds with a decadrachmon (drachm of 4.01 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**109.** Decadrachmon or Distateron? Pb 39.85 g, 30x30x5 mm. Inv. no. 1.5.02. Find place: in the vicinity of Colophon. Acquired in 2001. Lead weight, square in form. Both faces are blank but on one face some edges are raised. Its mass corresponds with decadrachmon (drachm of 3.98 g) or distateron (stater of 19.92 g) in unit. It dates to the Hellenistic period.



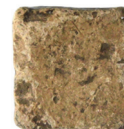
**110.** Four-Drachm? (of Persian standard) Pb 22.25 g, 18x25x5 mm. Inv. no. 24.61.92. Find place: Colophon. Acquired in 1992. Lead weight, thick square in form. On the obverse, TE in relief which may stand for tessares. Otherwise, the unit mark (TE) doesn't correspond with the standard tetarton unit of mna; therefore, it may be a four-drachm (drachm of 5.56 g) unit of the Persian standard, but it's not certain. For four-drachm, many weights bear a  $\Delta$  or four-drachm mark as a unit; so the idea that TE refers to tessares is not certain. The reverse is blank. It dates to the Hellenistic period.



**111.** Two-Drachm? Pb 7.95 g, 20x20x3 mm. Inv. no. 6.5.94. Find place: Tire. Acquired in 1994. Lead weight, square in form, both faces are plain and blank. Its mass corresponds with two-drachm in unit (drachm of 3.97 g) but not certain since it doesn't bear a unit mark. It dates to the Hellenistic period.



**112.** One-Drachm? Pb 4.10 g, 10x10x4 mm. Inv. no. 29.26.93. Find place: Tire. Acquired in 1993. Lead weight, square in form; both faces are blank. It may be a one-drachm in unit but not certain since it doesn't bear a unit mark. It may be dated 4th century BC or early Hellenistic period.



**113.** One-Drachm? Pb 2.90 g, 8x8x4 mm. Inv. no. 30.26.93. Find place: Tire. Acquired in 1993. Lead weight, square in form; both faces are blank. It may be a drachm in low weight (in Chian standard) but not certain. It may be dated 4th century BC or early Hellenistic period.



**114.** One-Drachm? Pb 3.18 g, 13x14x3 mm. Inv. no. 37.9.95. Find place: Tire. Acquired in 1995. Lead weight, square in form. On the obverse, A-like letter? in relief which may stand for one-drachm (in Chian standard); the reverse is blank. The reverse is illegible. It dates to the Hellenistic period.



**115.** Six-Obol? Pb 4.05 g, 11x17x3 mm. Inv. no. 15.21.99. Find place: Tire. Acquired in 1999. Lead weight, rectangular in form. On one face, six punched dots which may refer to six-obol (obol of 0.68 g) but not certain. It may date to the 4th-1st centuries BC.



## ROMAN SYSTEM

### With Ethnic

**116.** Colophon. One-Libra. Pb 346.7 g, 85 mm (+handle, 20 mm). Inv. no. 10.1.98. Find place: in the vicinity of Ephesus. Acquired in 1998. Lead weight, disc-shaped with raised and beveled edges, handle at the top. On the obverse, ΛΕΙΤΡΑ in a circular line. On the reverse, ΑΙΜ / CENΠΦΡ / ΟΝΤΩΝΟC / ΕΙΡΗΝΑΡΧΟ / ΥΚΟΛΟΦΩΝ / ΙΩΝΜΕΤΑΤ / ΩΙΝCΥΝ / ΑΡΧΟΝ Αἰμ(ιλίου) Σεμπ(ρωνίου) Φρόντωνος εἰρηνάρχου Κολοφωνίων μετὰ τῶν συναρχόν(των)?

It is a heavy italic libra (x ca. 13 unciae) of Colophon since it bears the ethnic as well as the name of a certain Aem(ilius) Semp(ronius) Fronto who served as eirenarches<sup>34</sup>. It dates to the 3rd century AD.

<sup>34</sup> Published previously in *SEG* 42, 1038; *SE* 3262.6; İçten – Engelmann 1992, 285-286, no. 4; Weiß 2016, 252-253, II.2; Weiß 2017, 317, no. 35; Brélaz 2005, 357, no. 30 (= Pondera 18160).



#### Without Ethnic & Parasemon

**117.** One-Libra. Pb 684 g, 88x89x15 mm. Inv. no. 1.91.92. Find place: Efes-Çukuriçi Mevki. Acquired in 1992. Lead weight, square in form with raised and beveled edges, handle at the top but missing; trace of a stamp but illegible. On the obverse, ΛΕΙ / ΤΡΑ in relief and in two lines. On the reverse, inscription in five lines:

ΙΜ[.]ΒΙ / ΟΥΠΙΑΡ / ΔΑΛΑ / ΑΓΟΡΑ / ΝΟΜΟΥ

Ιμ[.]βίου Παρδαλα ἀγορανόμου

It gives the name of a certain “Pardalas” who served as agoranomos.

Its mass is too high for a commercial libra; it makes ca. 25 unciae. Commercial librae above 20 unciae are very rare. It may be dated to the late 3rd century AD.



**118.** One-Libra. Pb 552.4 g, 72x90x15 (including handle) Inv. no. 1.48.91. Find place: Tire. Acquired in 1991. Lead weight, square in form with raised and beveled edges, pierced handle at the top. On the top, ΛΕΙΤ / ΤΡΑ in relief and in two lines. It is a commercial libra (x ca. 20 uncia). The reverse is blank or illegible. It may date to the 3rd century AD.





**119.** One-Libra. Pb 468.8 g, 80x79x11 mm. Inv. no. 41.7.88. Find place: Torbalı-Metropolis. Acquired in 1999. Lead weight, square in form with raised and beveled edges. On the obverse, ΛΕΙ / ΤΡΑ in relief and in two lines. It is a commercial libra in unit (x ca. 17 unciae). On the reverse, ΑΥΡ ΖΩ / ΤΙΩΝΟΣ / ΠΑΡΑΦΥ / ΛΑΚΟΣ Αὐρ(ηλίου) Ζωτίωνος παραφύλακος. It gives the name of a certain Zotion who served as paraphylax and this name is attested in Ionia<sup>35</sup>. It may be dated to the 2nd-3rd centuries AD.



**120.** One-Libra. Pb 388 g, 53x53x16 mm. Inv. no. 4.44.91. Find place: Bayındır. Acquired in 1991. Lead weight, square in form with slightly raised and beveled edges. ΑΙΤ / ΡΑ (retrograde) in relief and in two lines. The reverse is blank. It may be a heavy italic libra of ca. 14 unciae. It dates to the 3rd century AD.



<sup>35</sup> Cf. McCabe, *Priene* 155, 753, 819, 1013, 1015-1017, 1019-1020; *IKPriene* 325 (1st c. BC or later), 354.388 (1st c. BC/1st c. AD) ff.



**121.** One-Libra. Pb 388 g, 54x58x13 mm. Inv. no. 3.5.93. Find place: Tire. Acquired in 1993. Lead weight, square in form with slightly raised and beveled edges. On the obverse, ΛEI / TPA in relief and in two lines. On the bottom left corner, illegible monogram. It may be a heavy italic libra of ca. 14 unciae. The reverse is blank. It may be dated to the 3rd century AD<sup>36</sup>.



**122.** One-Libra? Pb 377.3 g, 60x58x11 g. Inv. no. 60.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form. On one face, six (seven?) identical monograms ΠΑ; the other face is blank. It may be an heavy italic libra (of ca. 14 unciae). It dates to the 3rd century AD<sup>37</sup>.



**123.** One-Libra. Pb 371.3 g, 59x62x12 mm. Inv. no. 4.21.87. Find place: Selçuk. Acquired in 1987. Lead weight, square in form, with beveled edges. There is an illegible stamp, too. Two small holes on the obverse and reverse. On the obverse, ΛEI / TPA in relief and in two lines. On the reverse, illegible inscription in four lines: T[...] / C[...] / NEIN / O[Y] It may be a heavy italic libra of ca. 14 unciae. It may be dated to the 3rd century AD.



**124.** One-Libra. Pb 358.3 g, 55x72x11 mm (including handle). Inv. no. 1.8.88. Find place: Yedi Uyurlar. Acquired in 1988 (donated) Lead weight, square in form, plain profile. On the obverse, ΛEI / TPA in relief and in two lines. The reverse is plain and blank. It may be a heavy italic libra of ca. 13 unciae. It may be dated to the 2nd-3rd centuries AD.



<sup>36</sup> For a similar example but without stamp cf. Aybek and Dreyer 2012, 205, no. 1, fig. 3 (= Pondera 17973).

<sup>37</sup> Published in Pülz 2020, G63.

125. One-Libra. Pb 351.2 g, 58x59x11 mm. Inv. no. 3.49.91. Find place: Deliincir Mevki. Acquired in 1991. Worn. Lead weight, square in form with raised and beveled edges, handle is missing, so its weight should be a little heavy. On the top, ΛΕΙΤ / ΤΡΑ in relief and in two lines. It may be a heavy italic libra of ca. 13 unciae. The reverse is blank. It dates to the 2nd-3rd centuries AD.



126. One-Libra. Pb 337.3 g, 83x83x11 mm. Inv. no. 2.18.89. Find place: Izmir. Acquired in 1989. Lead weight, square in form with raised and beveled edges, handle at the top with illegible stamp. On the obverse, ΛΕΙ / ΤΡΑ in relief and in two lines. On the reverse, [...] ΦΟ / [...] ΠΑΡΑ / ΦΥΛΑ / ΚΩΝ (παραφυλάκων) in relief and in three lines, surrounded by another illegible inscription [.ΙΟΝΩΝΟ[.] which includes the names of the certain magistrates served as paraphylakes. It is a standard italic libra of ca. 12 unciae. It may be dated to the 1st-2nd centuries AD.



127. One-Libra. Pb 327.2 g, 65x66x14 mm. Inv. no. 169.4.81. Find place: Torbali-Metropolis-Yeniköy<sup>38</sup>. Acquired in 1981. Lead weight, square in form with raised and beveled edges, decorated with herringbone pattern; handle at the top but it is broken. On the obverse, ΛΕΙ / ΤΡΑ in relief and in two lines. On the reverse, blundered inscription in which some letters are retrograde, in relief in six lines:

ΤΙΒΚΛΑΠΙΟΛ[ΛΙ] / ΩΝΟC ΠΙΠΙ / ΚΟΥΑΠΙΟΧΕΙ / ΑCΦΙΛΟCΕΒ / ΜΟΝΟΥΑΓΟ /  
ΡΑΝΟΜΟΥ

Τιβ(ερίου) Κλαυδίου Πολ[λί]ωνος ἰππικουῦ ἀπὸ χει<λιαρχεί>ας φιλοσεβ(άστου) μόνου ἀγορανόμου

The inscription gives the name of a certain Tiberius Claudius Pollio who served as agoranomos, most probably in Ephesus. It may be dated to the 1st century AD<sup>39</sup>.

<sup>38</sup> Meriç reports that during a research trip, a local in Tepeköy gave him this weight and mentioned that it was found on the acropolis of Metropolis (Meriç 1981, 213, note 8).

<sup>39</sup> Published in Meriç 1981, 213-214, no. 2, Pl. VII, figs. 6-7; *IK Ephesus* III 707 B and VII, 1, 3493; *SEG* 31, 975; Devijver 1983, 273 (= *Pondera* 17879).





**128.** One-Libra. Pb 326.1 g, 64x68x13 mm. Inv. no. 6.13.93. Find place: Torbalı-Metropolis. Acquired in 1993. Lead weight, square in form with raised and beveled edges; decorated by herringbone pattern on profiles. On the obverse, ΔΕΙ / ΤΡΑ in relief and in two lines. It is a italic libra of standard mass. On the reverse, inscription in relief and in four lines:

ΑΥΡΕΥΠΛΟ / [Ο]ΣΑΤΤΑ / ΛΟΥΠΑΡΑ / ΦΥΛΑΚΟΣ

Αὐρ(ηλίου) Εὐπλο(ο)ς Ἀττάλου παραφύλακος

It gives the name of a certain Aurelius Euplous Attalus who served as paraphylax.

It may be dated to the 2nd century AD.



**129.** One-Libra. Pb 315.5 g, 67x72x10 mm. Inv. no. 680. Find place: uncertain. Acquired in 1950s. Lead weight, square in shape with raised and beveled edges, decorated with a herringbone pattern but most of them are faint; handle is missing. Unpublished. On the obverse, ΔΕΙ / ΤΡΑ in two lines, in relief. On the reverse, inscription in relief, in four lines:

ΑΥΛΟΥ / ΚΟΡΝΗ / ΛΙΟΥ / ΦΛΑΚΚΟΥ

Αὔλου Κορνηλίου Φλάκκου

It gives the name of a certain Aulus Cornelius Flaccus who was responsible for the issuing of the weight. It is a italic libra of ca.12 unciae. It may be dated to the 1st century AD.



**130.** One-Libra. Pb 313.8 g, 85x89x9 mm. Inv. no. 4.36.89. Find place: Torbalı-Metropolis. Acquired in 1989. Lead weight, square in form with raised and beveled edges, handle at the top. On the obverse, ΛΕΙ / ΤΡΑ in relief in two lines. On the reverse,

ΓΑΙΟΥ / ΙΟΥΛΙΟΥ / ΦΙΛΙΠ / ΠΟΥ

Γαίου Ιουλίου Φιλίππου

It gives the name of a certain Gaius Iulius Philippus who was responsible for the issuing of the weight.

It is a italic libra of ca.12 unciae. It may be dated to the late 2nd cent. – early 3rd cent. AD<sup>40</sup>.



**131.** One-Libra. Pb 297.60, 65x65x11 mm. Inv. no. 104.41.91. Find place: Tire. Acquired in 1991. Lead weight, square in form with raised and beveled edges, handle is missing. Small oval hole on the obverse. On the obverse, ΛΕΙ / ΤΡΑ in relief and in two lines. On the reverse, inscription in relief and in four lines: [...] / [...] / ΑΓΟΡΑ / ΝΟΜΟ[Υ] It is a italic libra of ca.11 unciae (one-uncia lower than the standard mass). It dates to the 1st century AD.

<sup>40</sup> Cf. McCabe, *Ephesus* 1236 (IEph 3049) AD c. 180/212.





**132.** One-Libra. Pb 295.50 g, 90x100 mm+handle 7 mm. Inv. no. 5.40.93. Find place: Bayındır. Acquired in 1993. Lead weight square in form with raised and beveled edges, handle at the top with illegible circular stamp. Bottom left corner is missing (so, low mass) On the obverse, ΛΕΙ / ΤΡΑ in relief and in two lines. On the reverse, inscription in relief and circular and in six lines: ΜΗΤΡΟΔΩΡΟΥΚΟ[...]/ ΜΑΚΕΔΟΝΟΣ ΜΑΡΙΑΝΟ[.] / ΠΑΡΑ / Φ[.]ΛΑ / Κ[.]

Μητροδώρου Κο[...] Μακεδόνας Μαρριανο[ὸ] παραφ[υ]λάκ[ων]

It is a italic libra of ca.11 unciae (one-uncia lower from the standard). It dates to the 1st century AD.



**133.** One-Libra? Pb 322 g, 115x69x6 mm. Inv. no. 1.9.94. Find place: Bayındır. Acquired in 1994. Lead weight, triangular in form with a hole at the top. Its mass corresponds with one-libra although it might be a loom weight, too. It dates to the 1st century AD.



**134.** One-Libra? AE 318.7 g, 55x55x12 mm. Inv. no. 138.6.15. Find place: Ephesus excavation, EVH 15. 9014/9151. So 9/15; year 2015. Copper alloy weight, square in form. Both faces are plain and blank. Its mass corresponds with a libra but not certain since it doesn't bear a unit mark (or illegible). It may be a italic libra of ca.12 unciae. It may be dated to the late 1st century AD.



**135.** Hemilitron. Pb 216.25 g, 55x59x9 mm. Inv. no. 1.10.86. Find Place: Selçuk. Acquired in 1986. Lead weight, square in form with raised and beveled edges, handle on the top. On the obverse, HMI / ΛEIT / PON in relief and in three lines. On the reverse, illegible inscription in relief and in four lines: ΑΛ[E]/ΞΑΝ[Δ] / [P]ΟΥΑ / ΓΟΡΑ / ΝΟΜΟ[Y]. It gives the name of a certain Alexandros who served as agoranomos. It is commercial hemilitron (libra of 432.5 g of 16 unciae). It may be dated to the 1st – 2nd centuries AD.



**136.** Hemilitron. Pb 167.05 g 39x41x12 mm. Inv. no. 17.15.93. Find place: Bayındır. Acquired in 1993. Lead weight, square in form. On the obverse, HMI / ΛEIT in relief which refers to hemilitron (libra of 334.1 g of ca.13 unciae). The reverse is blank but small cavity. It may be dated to the 1st - 3rd centuries AD.



**137.** Hemilitron. Pb 155.12 g, 52x56x9 mm. Inv. no. 17.37.86. Find place: Torbalı-Metropolis. Acquired in 1986. Lead weight, square in form with raised and beveled edges. On the obverse, HMI / ΛEI in relief in two lines. It is a hemilitron in unit (libra of 310.24 g of ca. 11 unciae). On the reverse, in relief and in four lines, but the last line is illegible:

[Α]ΤΤΑΛΟ[Υ] / ΤΟΥ ΑΤ[Τ] / ΑΛΟΥΠ[Α] / [Ρ]ΑΦΥΛ[ΑΚΟΣ]

[Α]ττάλο[υ] τοῦ Ἀτ[τ]άλου π[αρ]αφύλακος

The name Attalos is attested in the inscriptions from Ephesus<sup>41</sup>. It may be dated to the 1st - 3rd centuries AD.

<sup>41</sup> Cf. McCabe, *Ephesus* 388 (*IEph* 2039), 1906 (*IEph* 923 col. 2), 1907 (*IEph* 923 col. 1).





**138.** Hemilitron. Pb 151.60 g, 65x70x6 mm. Inv. no. 1.79.87. Find place: in the vicinity of Ephesus. Acquired in 1987. Lead weight, square in form with raised and beveled edges with a handle on the top but it is missing. On the obverse, ΗΜΙ / ΛΕΙ / ΤΡΟΝ in relief in three lines. There is an illegible stamp above. It is a hemilitron in unit (libra of 303.2 g of 11 unciae). On the reverse, in relief and in three lines: ΠΟ ΒΗ[.] / ΓΑΛΑΤ[Ο] / ΥΠΡΕC

Πο(πλίου) Βη(δίου) Γαλάτου Πρέσ[...]

A certain Publius Vadius Galates is attested in Ephesus<sup>42</sup>. It may be dated to the 1st century AD.



**139.** Hemilitron. Pb 146.25 g, 72x75x8 mm. Inv. no. 100.20.99. Find place: Ephesus excavation, Yamaçevler (Hanghaus 2), 99/123. Acquired in 1999. Lead weight, square in form with raised and beveled edges, protrusion on the bottom right corner with stamp. Hole on the top left and right corners; dent and break on the top left corner. Corroded and worn. On the obverse, ΗΜΙΛΙ / ΤΡΟΝ in relief and in two lines. It is a hemilitron (Ημιλιτρον) in unit (libra of 292.5 g of ca. 11 unciae). Its current mass is a little bit low due to the missing parts. On the handle, ΤΦΛΑ / ΚΛΗΠΙ / ΙΟΔΩΡ / ΟΥΑΓΟ

Τ(ίτου) Φλ(αυίου) Άσκληπιοδώρου άγο(ρανόμου)

On the reverse, ΤΦΛΑC / ΚΛΗΠΙΟ / ΔωΡΟΥ / ΑΓΟΡΑ / [N]ΟΜ

Τ(ίτου) Φλ(αυίου) Άσκληπιοδώρου | άγορανόμ(ου)

It gives the name of a certain Titus Flavius Asklepiodoros who served as agoranomos in Ephesus<sup>43</sup>. It dates to the 2nd-3rd centuries AD but it may be earlier since its mass is low.

<sup>42</sup> Cf. *IEph* 729 (McCabe, *Ephesus* 1434); *SEG* XLVIII.

<sup>43</sup> Published in Theodorou 2022, 258-260, pl. 1.16, figs. 1-2 (= *Pondera* 17867).





140. Hemilitron. Pb 136.95 g, 62x64x6 mm. Inv. no. 97.38.81. Find Place and date: Ephesus excavation, terrace houses (Yamaç Evler), 1981. Lead weight, square in form with raised and beveled edges, pierced in two places<sup>44</sup>. On the obverse, HMI / ΛΕΙΤ / ΠΟΝ in relief and in three lines. On the reverse, the same inscription has been repeated, ie HMI / ΛΕΙΤ / ΠΟΝ. It is a hemilitron in unit (libra of 273.9 g of 10 unciae) It may be dated to the 1st century AD.



141. Hemilitron. Pb 178.05 g, 90x68x8 mm. Inv. no. 6.27.94. Find place: Tire. Acquired in 1994. Lead weight, heart-shaped with raised and beveled edges, handle at the top. On the obverse, HMI / ΛΕΙ / ΤΡΟ / Ν in relief and in four lines.

On the reverse,  
Π[.]ΑΝ / ΤΩΝΕΙΝ / ΟΥCΥΝ /  
[Κ]ΛΗΤ[Ι] / ΚΟΥ

Π[.....] Ἀνωείνου συν[κ]λητ[ι]κοῦ



<sup>44</sup> Published in Rathmayr 2016, pl. 239, B 346; Tauber 2016, 253, IKL 32; Theodorou 2022, table 1, no. 2 (= Pondera 17877).

He may not be the same person, but a certain Publius Veditus Antoninus is attested in Ephesus<sup>45</sup>, a magistrate responsible for issuing the weight. It is a libra of 356.1 g (libra of ca. 13 unciae). It may be dated to the 2nd century AD (or time of Hadrian).

**142.** Hemilitron? Pb 164.30 g, 47x48x8 mm. Inv. no. 13.21.99. Find place: Tire. Acquired in 1999. Lead weight, square in form with beveled edges. On the obverse, ΖΩΠΙ / ΥΡΟΥ (Ζωπύρου) in circular stamp. The reverse is blank. Its mass corresponds with hemilitron (libra of 328.6 g of 12 unciae). The name Zopyros (Ζώπυρος), who must have been the magistrate responsible for issuing the weight, is attested in some cities of western Asia Minor and in Ephesus<sup>46</sup>. It dates to the 1st-2nd centuries AD.



**143.** Five-Uncia? Pb 130.60 g, 36x37x11 mm. Inv. no. 47.72.92 g. Find place: Tire. Acquired in 1992. Lead weight, square in form with raised and beveled edges; dent on the upper right corner. On the obverse, either Γ Ε (ligatured and retrograde) or just Ε with a vertical bar to r., all in relief, which may stand for five uncia (uncia of 26.12 g) It may be dated to the 3rd-4th centuries AD.



**144.** Four-Uncia. Pb 111.39 g, 37x40x8 mm (including handle). Inv. no. 33.75.92. Find place: Ephesus excavation, Yamaçevler 1, H1 (Atrium-well), year 1992. Lead weight, square in form with slightly raised edges, handle at the top. On the obverse, Δ in relief which stands for four-uncia (uncia of 27.84 g). The reverse is blank. It dates to 1st-3rd centuries AD.



**145.** Four-Uncia. Pb 105.02 g, 36x38x8 mm. Inv. no. 91.20.09. Find place: Tire. Acquired in 2009. Lead weight, square in form with slightly raised edges; pierced. On the obverse, Δ in relief which stands for “four” It is a four-uncia in unit (uncia of 26.25 g). It dates to the 1st – 3rd centuries AD.



**146.** Four-Uncia. Pb 100.75 g, 54x50x7 mm (including handle). Inv. no. 2.12.89. Find place: Çayırılık Village-Tire. Acquired in 1989. Lead weight, square in form with raised and beveled edges, handle at the top. Small tear in center. On the obverse, Δ in relief. It is a four-uncia in unit (uncia of 25.18 g). On the reverse, ΤΩΝ / ΠΕΡΙΑΥΡ[.] / ΠΙΟΡΟΝ / τῶν περὶ Αὐρήλιον [Εὔ]πορον (under the presidency of Aurelius Euporos) The name Euporos is attested in the inscriptions in Ephesus<sup>47</sup>. It may be dated to the 2nd-3rd centuries AD.

<sup>45</sup> Cf. McCabe, *Ephesus* 290 (*IEph* 429), 293 (*IEph* 460.2), 1385 (*IEph* 732).

<sup>46</sup> McCabe, *Ephesus* 485 (*IEph* 1038), 562 (*IEph* 4103), 563 (*IEph* 903), 591 (*IEph* 903A), 1300 (*IEph* 3032).

<sup>47</sup> McCabe, *Ephesus*, 242, 267 (*IEph* 20, 2302).





147. Four-Uncia. Pb 99.40 g, 49x45x8 mm. Inv. no. 22.5.87. Find place: Selçuk. Acquired in 1987. Lead weight, square in form, with raised and beveled edges, handle on the top but it is missing. On the obverse, Δ in relief. It is a four-uncia in unit (uncia of 24.85 g). On the reverse, IOYΛΙ / ΟΥΠΡΟ / ΚΛΟΥ

(Ιουλίου Πρόκλου) in relief and in three lines. It gives the name of Iulius Proclus who was responsible for issuing the weight. The name Proclus is attested in Ephesus as well as in some other cities in western Asia Minor. It may be dated to the 1st-3rd centuries AD.



148. Four-Uncia. Pb 92.10 g, 56x51x5 mm. Worn and break in body. Inv. no. 1.58.78. Find place: Selçuk. Acquired in 1978. Lead weight, square in form with raised and beveled edges, handle on the top is missing. On the obverse, unit mark Δ in relief. It is a 4-uncia in unit (uncia of 23.02 g). On the reverse, inscription in relief in six lines:



[...] ΕΡΜ / Δ [...] ΝΠΙΟ / Ψ [...] ΝΙΝΖ / CYPON ΦΙΛ[.] / CEB ΠΑΡΑΦ / ΨΔΑΚΩ<N>

[...] Φιλ[ο]σεβάστων παραφυλάκων

The four first lines of the inscription seem to give the illegible names of magistrates who served as paraphylakes. It may be dated to the 1st - 3rd centuries AD<sup>48</sup>.

<sup>48</sup> Published in Pülz 2020, G65 (but no identification and comment).



**149.** Four-Uncia? Pb 104.25 g, 37x38x9 mm. Inv. no. 4.44.93. Find place: Bayındır. Acquired in 1993. Lead weight, square in form with raised and beveled edges. On the obverse, large O or plain wreath. Its mass corresponds with four-uncia (uncia of 26.06 g) but not certain. On the reverse, only part of the wreath is visible with illegible letters inside. It may be dated to the 1st - 3rd centuries AD.



**150.** Three-Uncia. AE filled with lead, 80.44 g, 26x21 mm. Inv. no. 23.11.06. Find place: Tire. Acquired in 2006. Flattened sphere, doubly truncated in form; centring point on the top and bottom, no unit mark but its mass corresponds with three-uncia (uncia of 26.81 g) It may be dated to the 3rd - 5th centuries AD.



**151.** Three-Uncia. AE filled with lead, 75.94 g, 26x22 mm. Worn. Inv. no. 31.32.82. Find place: Ephesus excavation, Yamaç Saray, 1994. Acquired in 1994. Flattened sphere, doubly truncated in form; centering point on the top and bottom. Engraved on the top with 8 Γ which stands for three-uncia (uncia of 25.31 g), probably originally inlaid but inlay is missing. It may be dated to the 3rd - 5th centuries AD<sup>49</sup>.



**152.** Three-Uncia. AE 85.41 g, 27x24 mm. Inv. no. 24.11.06. Find place: Tire. Acquired in 2006. Spherical in shape with only the bottom flattened. It doesn't bear a unit mark or illegible. Its mass corresponds with three-uncia (uncia of 28.47 g) It dates to the 1st to 3rd centuries AD.



**153.** Three-Uncia. Pb 84.75 g, 35x36x8 mm. Inv. no. 4.32.93. Find place: Bayındır. Acquired in 1993. Lead weight, square in form with slightly raised and beveled edges; handle on the top but it is missing. On the obverse, Γ in relief which stands for "three". It is a three-uncia in unit (uncia of 28.25 g). The reverse is blank. It dates to the 1st - 3rd centuries AD<sup>50</sup>.



**154.** Three-Uncia. Pb 83.90 g, 39x43x9 mm (including handle). Inv. no. 2.28.12. Find place: uncertain. Acquired in 2012. Lead weight, square in form with raised and beveled edges, handle at the top. On the obverse, Γ in relief which stands for "three". It is a three-uncia in unit (uncia of 27.96 g). On the reverse, ΤΙΤΦ / ΣΑΤ / ΝΕΙΝ



Τίτ(ους) Φ(λαοῦίου) Σατ[ορ]νεῖν[ου]

<sup>49</sup> Cf. CPAI 3.2, no. 19 (= Pondera 10346).

<sup>50</sup> CPAI 3.2, 463.

Although the name Saturninus is seen in the inscriptions in the cities of western Asia Minor, a certain Titus Flavius Saturninus who was responsible for issuing the weight, is attested in Ephesus<sup>51</sup>. It dates to the Roman Imperial period.

**155.** Three-Uncia. Pb 78.65 g, 54x45x6 mm (including handle). Inv. no. 13.27.79. Find place: Selçuk. Acquired in 1979. Lead weight, square in form with raised and beveled edges, handle on the top. The bottom left corner is curved inward. On the obverse, unit mark  $\Gamma$  in relief. It is a 3-uncia in unit (uncia of 26.21 g). On the reverse,  $\text{TPY} / \Phi\Omega / \text{NO}\Sigma$  ( $\text{Τρύφωνος}$ ) in relief and in three lines, who was responsible for issuing the weight. The name Tryphonos frequently appears in the inscriptions of Ephesus<sup>52</sup>, but it also appears in some cities of Western Asia Minor. It may be dated to the 1st - 3rd centuries AD.



**156.** Three-Uncia. Pb 72.40 g, 42x39x8 mm. Inv. no. 53.16.03. Find place: in the vicinity of Ephesus. Acquired in 2003. Lead weight, square in form with raised and beveled edges, handle at the top but it is missing. On the obverse,  $\Gamma$  which stands for “three”; it is a three-uncia in unit (uncia of 24.13 g). On the reverse,



A [...] /  $\text{APTE[MI]} / \Delta\Omega\text{P} / \text{ΓOPA}$  ( $\text{A}[\acute{\upsilon}\rho\eta\lambda\acute{\iota}\omicron\upsilon] \text{Ἀρτε[μ]ιδώ[ρ]ου} [\acute{\alpha}]\gamma\omicron\rho\alpha\nu\acute{\omicron}\mu\omicron\upsilon$ ) in relief and in four lines. It gives the name of a certain Aurelius Artemidoros who served as agoranomos and a similar name is attested in Ephesus<sup>53</sup>. It dates to the 2nd-3rd centuries AD.

**157.** Three-Uncia? Pb 72.85 g, 29x32x8 mm. Inv. no. 74.33.93. Find place: Değirmendere-Colophon. Acquired in 1993. Lead weight, square in form. On the obverse, a punched  $\Gamma$  which may stand for “three”, then three-uncia in unit (uncia of 24.28 g) but not certain since the punched dots are irregular. It may be dated to the Roman Imperial period.



<sup>51</sup> Cf. McCabe, *Ephesus* 466 (*IEph* 1028).

<sup>52</sup> Cf. McCabe, *Ephesus* 242 (AD late 2nd cent.), 267 (*IEph* 20) AD 1st cent., 454 (*IEph* 1008) AD 1st cent., 470 (*IEph* 1021) AD early 2nd cent., 521 (*IEph* 941A), 548 (*IEph* 971 col. 1, 584) AD early 3rd cent., 2328 (*IEph* 2523).

<sup>53</sup> Cf. McCabe, *Ephesus* 1125 (*IEph* 624).



**158.** Three-Uncia. Pb 69.70 g, 43x45x7 mm. Inv. no. 48.72.92. Find place: Tire. Acquired in 1992. Lead weight, square in form with raised and beveled edges. Hole at the top left corner. On the obverse, Γ in relief which stands for three-uncia (uncia of 23.23 g). On the reverse in square incuse: ΟΔΟ / ΝΕΦΙ / [.]ΕΡΑ but also there are illegible letters around. It may be dated to the 1st - 3rd centuries AD.



**159.** Three-Uncia. Pb 59.90 g, 44x47x7 mm. Inv. no. 75.42.93. Find place: from Ephesus excavation, Olympieion sond. 1/93, year 1993. Acquired in 1993. Lead weight, square in form but ca. 1/3 cut off, missing, so its original mass should be over 75 g. Pierced. Its current mass corresponds with two-uncia but it should not be considered. On the obverse, Γ in relief which refers two “three”. There is a round stamp on the protruding handle below. On the stamp, Hermes, standing, holding purse and caduceus surrounded by the inscription [...]\ABIOY NEIKHΦ[...]

[Φου]λβίου Νεικηφ[όρου]

On the reverse, [.]ΟΥΠΙΑΙ[...]/ ΝΟΥ Ν[.] / [...]

Πουπλι[κία]νοῦ Νε[ικηφόρου]

Fulvius Publicianus “Neikephoros”?

In the last line traces of letters: below the hole a P and then something circular; at the beginning of the line two parts of illegible letters; they could belong to the name Νεικηφόρος. Considering that the names of magistrates are repeated on the stamps of the handles and on the reverses, this is reasonable. So, it gives the name of a certain Fulvius Publicianus “Neikephoros” as the magistrate responsible for issuing the weight, maybe he served in Ephesus<sup>54</sup>. It dates to late 2nd cent. – early 3rd cent. AD



<sup>54</sup> Fulvius Publicianus Neikephoros is attested in Ephesus, see McCabe, *Ephesus 393* (*IEph* 444) AD ca. 200, 397 (*IEph* 2079), 400 (*IEph* 2082.6-12), 402, 403 (*IEph* 445), 1236 (*IEph* 3049) AD c. 180-212, 1252 (*IEph* 632) AD 222/235, 1408 (*IEph* 739) AD 218/222, 1768 (*IEph* 1087A).



**160.** Two-Uncia. Basalt or serpentine 60.26 g, 37x26 mm. Inv. no. 44.61.80. Find place: Ephesus excavation, stadium street, Std 80/6. Basalt or black serpentine weight; flattened sphere, doubly truncated in form; two punched dots on the top referring “two”, ie. two-uncia in unit (uncia of 30.13 g); the bottom is blank. It may be dated to the 1st – 2nd centuries AD.



**161.** Two-Uncia. Pb 76.35 g, 35x47 mm (including handle). Inv. no. 82.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form with raised and beveled edges; handle at the top with a circular illegible stamp. On the obverse, B in relief which stands for “two”. It is a two-uncia (heavy uncia of 38.17 g) in unit according to the unit mark but its mass corresponds with a three-uncia (uncia of 25.45 g) too. On the reverse, illegible inscription in four lines. It dates to the 1st – 3rd centuries AD.



**162.** Two-Uncia. Pb 59.35 g, 33x33x7 mm. Inv. no. 24.5.00. Find place: Tire. Acquired in 2000. Lead weight, square in form with raised edges. On the obverse, B in relief which stands for “two”. It is a two uncia in unit (uncia of 29.67 g) On the bottom right corner, a circular stamp inscribed with a monogram  $\overline{\square} \ominus \overline{\square}$ . It dates to the 2nd-3rd centuries AD.



**163.** Two-Uncia? Pb 58.70 g, 26x26x9 mm. Inv. no. 2.40.94. Find place: Tire. Acquired in 1994. Lead weight, square in form with slightly raised edges. On the obverse, incised with A but it appears to have been added later, not original. Its mass corresponds with two-uncia (uncia of 29.35 g) but not certain. It dates to the 1st – 3rd centuries AD.



**164.** Two-Uncia. Pb 57.15 g, 33x37x7 mm. Inv. no. 28.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form with raised and beveled edges. On the obverse, B in relief which stands for “two” (uncia of 28.57 g). On the reverse, illegible letters in two lines. It dates to the 1st – 3rd centuries AD.



**165.** Two-Uncia. Pb 56.55 g, 30x39x8 mm. Inv. no. 40.5.80. Find place: Selçuk. Acquired in 1980. Lead weight, square in form with raised and beveled edges, handle on the left edge but is missing. On the obverse, unit mark B in relief. It is a 2-uncia in unit (uncia of 28.27 g) On the reverse, illegible inscription but partly visible letters A[K]A[.] / ETA in relief and in two lines. It may be dated to the 1st-3rd centuries AD.



**166.** Two-Uncia? Pb 55.60 g, 32x33x6 mm. Inv. no. 2.28.93. Find place: in the vicinity of Bayındır. Acquired in 1993. Lead weight, square in form. On the obverse, two illegible identical monogram in circular stamp. Its mass corresponds with two-uncia (uncia of 27.8 g) but not certain since it doesn't bear any unit mark. It dates to the 1st-3rd centuries AD.



**167.** Two-Uncia. Pb 54.80 g, 34x38x5 mm. Inv. no. 25.5.00. Find place: Tire. Acquired in 2000. Lead weight, square in form with raised and beveled edges, handle at the top with a hole. On the obverse, B in relief which stands for "two". It is a two uncia in unit (uncia of 27.4 g). The reverse is blank. It dates to the 1st-3rd centuries AD.



**168.** Two-Uncia. Pb 54.25 g, 37x40x6 mm (+ 17 mm handle). Inv. no. 1.41.87. Find place: Tire. Acquired in 1987. Lead weight, square in form with raised and beveled edges, handle at the top with a circular stamp: anchor? in center, possibly same magistrate's name as on the reverse. On the obverse, B in relief which stands for "two". It is a two uncia in unit (uncia of 27.12 g). On the reverse, AYP CTA / TIAIANO / YAΓOPA / NOMOY.

Αὐρ(ηλίου) Στατιλιανοῦ ἀγορανόμου. It gives the name of a certain Aurelios Statilianos serving as agoranomos, probably in Ephesus<sup>55</sup>. It dates to the 2nd century AD.



**169.** Two-Uncia. Pb 54.25 g, 42x36x6 mm. Inv. no. 128.1.81. Find place: Selçuk. Acquired in 1981. Lead weight, square in form with raised and beveled edges, handle on the top, with a circular illegible stamp. On the obverse, unit mark B in relief. It is a two-uncia in unit (uncia of 27.12 g) On the reverse, Γ [..]E / ΛΙ[O] in relief in two lines. It may be dated to the 1st - 3rd centuries AD.



<sup>55</sup> The name of Aurelios Statilianos also appears on a hemilitron weight found at Ephesus: cf. Eichler 1966, 14, Anm. 9) = *Ieph* II, 558.1 = Jilek 2003, 270 and 311 no. B 322, pl. 144 no. B 322 and pl. 149 no. B 322 = Theodorou 2022, table 1, no. 1 (= Pondera 17878).



**170.** Two-Uncia. Pb 53.20 g, 37x42x7 mm. Inv. no. 188.28.81. Find place: in the vicinity of Ephesus. Acquired in 1981. Lead weight, square in form with raised and beveled edges with one corner protruding with  $\Lambda$  / ΚΑΡ (or ΚΑΡ) / ΠΡΟΚ / ΛΟΥ (Πρόκλου) in dotted circular stamp which gives the name of a certain Proclus who must have been the magistrate responsible for issuing the weight. On the bottom, handle. On the obverse, unit mark B in relief. It is a 2-uncia in unit (uncia of 26.6 g) On the reverse, [A]K / ΠΗ[.] It may be dated to the 1st - 3rd centuries AD.



**171.** Two-Uncia. Pb 52.85 g, 47x39x6 mm (including handle). Inv. no. 124.30.12. Find place: Selçuk. Acquired in 2012. Lead weight, square in form with raised and beveled edges, handle at the bottom. On the obverse, B in relief which stands for “two”. It is a two-uncia in unit (uncia of 26.42 g). On the reverse, there is a hard-to-read inscription in relief in four lines:



ΑΥΡΝ[Α] / ΡΚΙC[C] / ΟΥ[.] / [...]

Αὐρ(ηλίου) Ν[α]ρκίσσου [.....]

It gives the name of a certain Aurelios Narkissos as the magistrate responsible for issuing the weight. It dates to the 2nd-3rd centuries AD.

**172.** Two-Uncia. Pb 49.25 g, 33x35x6 mm. Inv. no. 91.22.95. Find place: İzmir (Smyrna). Acquired in 1995. Lead weight, square in form with raised and beveled edges. On the obverse, B in relief which stands for two-uncia in unit (uncia of 24.62 g). On the reverse, YPC or YPΦ. It dates to the 1st – 3rd centuries AD.



**173.** Two-Uncia. Pb 48.10 g, 36x40x7 mm. Inv. no. 95.64.92. Find place: Selçuk. Acquired in 1992. Lead weight, square in form with raised and beveled edges with the protruding top edge with illegible stamp. On the obverse, unit mark B in relief. It is a two-uncia in unit (uncia of 24.05 g) On the reverse, [...] / ΠΗΛΙ / ΟΥΠΑ ([Αὐ]ρηλίου or [Αὐ]ρηλι[ων]ου Πα-) in relief and in three lines. It may be dated to the 1st - 3rd centuries AD.





**174.** Two-Uncia. Pb 44.45 g, 24x25x9 mm. Inv. no. 8.61.92. Find place: Değirmendere-Colophon. Acquired in 1992. Lead weight, square in form. On the obverse, B? in relief. It stands for two-uncia (uncia of 22.22 g) The reverse is blank but hollow in center. It dates to the 1st-3rd centuries AD.



**175.** Two-Uncia? Pb 43.45 g, 20x23x10 mm. Inv. no. 75.33.93. Find place: Değirmendere-Colophon. Acquired in: 1993. Lead weight, square in form; both faces are blank. Its weight may correspond with two-uncia (uncia of 21.72) but it is a low weight, so the unit is not certain. Its mass is also suitable for distateron (stater of 21.72 g) It may be dated to Hellenistic or Roman Imperial period.



**176.** Two-Uncia. AE 46.47 g, 35x8 mm. Inv. no. 2.41.77. Find place: from the excavation at Eski Türk Yapısı (Old Turkish Building). Acquired in 1977. Copper alloy weight, discoid in form with convex double-grooved profile; raised rim and centring points on the top and bottom. Corroded. Engraved and punched on the top with a unit mark  $\Gamma$  B which refers to “two-uncia” in unit (uncia of 23.23 g); originally inlaid, but the inlay is partly extant. Above, cross flanked by two christograms, all engraved. It dates to the 4th-7th centuries AD.



**177.** One-Uncia. AE 26.95 g, 18x15 mm. Inv. no. 72.23.07. Find place: Torbalı-Metropolis. Acquired in 2007. Flattened sphere, doubly truncated in form (barrel-shaped), centring points on the top and bottom. On the top, no unit mark or illegible. It may be dated to the 3rd - 5th centuries AD.



**178.** One-Uncia. AE filled with lead, 26.10 g, 20x11 mm. Worn. Inv. no. 2.19.72. Find place: Location of Kızlar Sarayı at Ephesus. Acquired in 1972. Flattened sphere, doubly truncated in form; centring point on the top, no unit mark or illegible; the bottom is blank. It may be dated to the 3rd - 5th centuries AD.



**179.** One-Uncia. AE filled with lead, 23.89 g, 18x13 mm. Worn. Inv. no. 13.27.94. Find place: Tire. Acquired in 1994. Flattened sphere, doubly truncated in form with centring point on the top. Corroded. Engraved and copper inlaid on the top with 8 A. It may be dated to the 3rd - 5th centuries AD.



**180.** One-Uncia. Pb 28.50 g, 24x30 mm (+handle 12 mm). Inv. no. 1.29.93. Find place: Bayındır. Acquired in 1993. Lead weight, square in form with raised and beveled edges, handle at the top. On the obverse, A in relief which stands for “one”-uncia. On the reverse, K [Φ] / ΦΛ / [..] in three lines but the last line remains outside



the mold. It may be dated to the 3rd - 5th centuries AD.

**181.** One-Uncia. Pb 28.75 g, 29x30x6 mm. Inv. no. 92.22.95. Find place: İzmir (Smyrna). Acquired in 1995. Lead weight, square in form with raised and beveled edges; handle at the top but it is missing. On the obverse, A in relief which refers to “one”. The reverse is blank. It dates to the 1st – 3rd centuries AD.



**182.** One-Uncia. Pb 26.85 g, 24x25x4 mm. Inv. no. 5.33.82. Find place: Torbalı-Metropolis. Acquired in 1982. Lead weight, square in form with plain profile. On the top, in center, square stamp with inscription in relief and in five lines: M AYP / IOYAI / ANOY / ΑΓΟΡΑ / ΝΟΜΟ

M. Αὐρ. Ἰουλιανοῦ ἀγορανόμο(ν). So, it gives the name of a certain Marcus Aurelius Iulianus who served as agoranomos. A similar name is attested in an inscription in Aphrodisias<sup>56</sup>. No unit mark. The reverse is plain and blank. It may be dated to the 2nd - 3rd centuries AD.



**183.** One-Uncia. Pb 28.65 g, 32x40x4 mm (including handle). Inv. no. 7.20.91. Find place: the vicinity of Ephesus. Acquired in 1991. Lead weight, square in form, with raised and beveled edges, handle at the top. On the obverse, A in relief. It is a one-uncia in unit. On the reverse, APA / TYX in relief and in two lines. It dates to the 1st-3rd centuries AD.



**184.** One-Uncia. Pb 28.40 g, 30x34 mm (including handle) Inv. no. 148.5.96. Find place: Tire. Acquired in 1996. Lead weight, square in form with raised and beveled edges; handle with hole on the top. On the obverse, A in relief which stands for “one”. Its mass corresponds with one-uncia. On the reverse, illegible inscription with three or four lines with NOYΔ [or A] in the last line. It dates to the 1st – 3rd centuries AD.



**185.** One-Uncia. Pb 27.50 g, 20x20x10 mm. Inv. no. 3.12.02. Find place: Tire. Acquired in 2000. Lead weight, square in form (truncated pyramidal). On the top, A in relief which stands for “one”. The bottom is blank. It dates to the 1st-3rd centuries AD.



<sup>56</sup> Cf. McCabe, *Aphrodisias* 451.



**186.** One-Uncia. Pb 27.20 g, 24x27x6 mm. Inv. no. 12.10.99. Find place: in the vicinity of Ephesus. Acquired in 1999. Lead weight, square in form with raised and beveled edges; handle at the bottom. On the obverse, an odd “A” or worn B in relief which stands for “one” or “two”. Its weight corresponds with one-uncia. On the reverse, a quarter part of a circle or wreath is visible. It dates to the 1st – 3rd centuries AD.



**187.** One-Uncia. Pb 27.20 g, 30x35x5 mm (including handle). Inv. no. 12.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form with raised and beveled edges; handle at the top. On the obverse, A in relief which stands for “one”. The reverse is blank. It dates to the 1st – 3rd centuries AD.



**188.** One-Uncia. Pb 26.55 g, 24x25x4 mm. Inv. no. 51.72.92 g. Find place: Tire. Acquired in 1992. Lead weight, square in form. On the obverse, engraved with Γο [A] which stands for one-uncia. The reverse is blank. It may be dated to the 4th – 6th centuries AD.



**189.** One-Uncia? Pb 26.15 g, 20x21x6 mm. Inv. no. 2.5.02. Find place: in the vicinity of Colophon. Acquired in 2001. Lead weight, square in form. Both faces are blank. Its mass corresponds with one-uncia but not certain. It dates to the 1st-3rd centuries AD.



**190.** One-Uncia. Pb 26.00 g, 32x35x4 mm. Inv. no. 24.68.89. From Ephesus excavation, 1989; embolos BY 7. EM 89/K6/704. Lead weight, square in form with raised and beveled edges, handle at the top but is missing. On the obverse, unit mark A in relief. On the reverse, ΘΕ[.] / OM / [Y] A[.] It may be dated to the 1st - 3rd centuries AD.



**191.** One-Uncia. Pb 25.95 g, 26x28x5 mm (including handle). Inv. no. 1661. Find place: in the vicinity of Torbalı-Metropolis. Acquired in 1966. Lead weight, square in form with raised and beveled edges, handle at the top. On the obverse, unit mark A in relief. On the reverse, ΦΑΓ[.] / OY in two lines. It may be dated to the 1st - 3rd centuries AD.





**192.** One-Uncia. Pb 25.95 g, 30x32x5 mm. Inv. no. 16.22.86. Find place: Selçuk. Acquired in 1986. Lead weight, square in form with raised and beveled edges, handle on the top with stamp inscribed KAA or KAE [...On the obverse, unit mark A in relief. It is a one uncia in unit. On the reverse, [K]AE / [.]BOY in relief in two lines. It may be dated to the 1st - 3rd centuries AD.



**193.** One-Uncia. Pb 25.25 g, 27x33x5 mm (including handle). Inv. no. 11.10.99. Find place: in the vicinity of Ephesus. Acquired in 1999. Lead weight, square in form with raised and beveled edges; handle with a hole at the top. On the obverse, A in relief which stands for "one". On the reverse, YPH / [...] in two lines. It dates to the 1st - 3rd centuries AD.



**194.** One-Uncia. Pb 25.35 g, 27x27x5 mm. Inv. no. 5.6.94 g. Find place: Tire. Acquired in 1994. Lead weight, square in form with raised and beveled edges. On the obverse, A in relief. On the reverse, EΦ in relief which may stand for Ephesus. It dates to the 1st - 3rd centuries AD.



**195.** One-Uncia. Pb 25.10 g, 22x23x5 mm. Inv. no. 56.23.93. Find place: Tire. Acquired in 1993. Lead weight, square in form, both faces are blank. Its mass corresponds with one-uncia. It dates to the 1st - 3rd centuries AD.



**196.** One-Uncia? Pb 25.43 g, 23x25x5 mm. Inv. no. 104.17.09. Find place: Selçuk. Acquired in 2009. Lead weight, square in form with rounded corners. Its mass corresponds with one-uncia but not certain since it doesn't bear a unit mark. It dates to the late Hellenistic or early Roman Imperial period.



**197.** One-Uncia? Pb 25.31 g, 20x18x10 mm. Inv. no. 106.17.09. Find place: Selçuk. Acquired in 2009. Lead weight, square in form but deformed. Both faces are blank (maybe A on the obverse). Its mass corresponds with one-uncia but not certain since it doesn't bear a unit mark or illegible. It dates to the 1st - 3rd centuries AD.



**198.** One-Uncia. Pb 24.88 g, 30x32x4 mm. Inv. no. 92.20.09. Find place: Tire. Acquired in 2009. Lead weight, square in form with raised and beveled edges. On the obverse, A in relief which stands for "one" as well as an illegible stamp above. On the reverse, illegible letters. It dates to the 1st - 3rd centuries AD.



**199.** One-Uncia. Pb 24.85 g, 25x26x5 mm. Inv. no. 6.5.93. Find place: Tire. Acquired in 1993. Lead weight, square in form. Both faces are blank but irregular incisions on one face. It may be dated to the 1st - 3rd centuries AD.



**200.** One-Uncia. Pb 24.80 g, 27x28x5 mm. Inv. no. 70.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form with raised and beveled edges; handle at the top but is missing. On the obverse, A in relief which stands for "one". On the reverse, inscription in three lines: [...] / NATI / ... It dates to the 1st - 3rd centuries AD.



**201.** One-Uncia. Pb 24.30 g, 30x32x3 mm. Inv. no. 49.72.92. Find place: Tire. Acquired in 1992. Lead weight, square in form with raised and beveled edges. On the obverse, A in relief which stands for one uncia. On the reverse, NE[.] / [...] It may be dated to the 1st - 3rd centuries AD.



**202.** One-Uncia. Pb 24.00 g, 26x28x5 mm. Inv. no. 10.21.93. Find place: Tire. Acquired in 1993. Lead weight, square in form with raised and beveled edges, small handle on the top but it is missing. On the obverse, A in relief which stands for one-uncia. The reverse is blank. It dates to Late Roman period.



**203.** One-Uncia. Pb 22.95 g, 18x17x8 mm. Inv. no. 444.16.22. Find place: Ephesus excavation, EDP22-3025-3171. Lead weight, square in form, both faces are blank. Its mass corresponds with one-uncia but not certain. It dates to 1st-3rd centuries AD.



**204.** One-Uncia? Pb 23.20 g, 24x26x6 mm. Inv. no. 99.11.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, heart-shaped. On the obverse, illegible letter in relief. The reverse is blank. It may be dated to the 1st - 3rd centuries AD.



**205.** One-Uncia or Stater? Pb 29.18 g, 15x25x8 mm. Inv. no. 107.17.09. Find place: Selçuk. Acquired in 2009. Lead weight, rectangular in form. Its mass corresponds with both stater and one-uncia but not certain since it doesn't bear a unit mark. It may be dated to the Roman Imperial period.



**206.** Half-Uncia. Pb 15.75 g, 24x27 mm (including handle). Inv. no. 2.28.92. Find place: Torbalı-Metropolis. Acquired in 1992. Lead weight, square in form with raised and beveled edges, handle at the top. On the obverse, S in relief which stands for semis (= half) It is a half-uncia in unit (uncia of 31.5 g). On the





reverse, a vertical line in relief and 8MO. It dates to the 2nd-3rd centuries AD.

**207.** Half-Uncia. Pb 14.75 g, 25x32x4 mm (including handle). Inv. no. 29.10.97. Find place: Tire. Acquired in 1997. Lead weight, square in form with raised and beveled edges; handle at the top and protrusion on the upper left corner; both have illegible stamp. On the obverse, S in relief which stands for “semi” (= half) (uncia of 29.5 g). On the reverse, OY / Y in two lines. It dates to the 2nd-3rd centuries AD.



**208.** Half-Uncia. Pb 14.20 g, 17x17x5 mm. Inv. no. 3.11.89. Find place: in the vicinity of Ephesus. Acquired in 1989. Lead weight, square in form with beveled edges. On the obverse, S (=semi) in relief. It is a ½ uncia in unit (uncia of 28.4 g). The reverse is blank. It may be dated to the 2nd-3rd centuries AD.



**209.** Half-Uncia. Pb 13.90 g, 28x30x3 mm. Inv. no. 4.12.02. Find place: Tire. Acquired in 2002. Lead weight, square in form with raised and beveled edges, handle at the top. On the obverse, S which stands for “semi” (half); it is a half-uncia in unit (uncia of 27.8 g). On the reverse, illegible inscription in relief in two lines. It dates to the 2nd-3rd centuries AD.



**210.** Half-Uncia. Pb 13.25 g, 30x31x3 mm. Inv. no. 13.10.99. Find place: in the vicinity of Ephesus. Acquired in 1999. Lead weight, square in form with raised and beveled edges, left edge is concave; handle at the top with illegible stamp. On the obverse, S in relief which stands for “semi” (=half) (uncia of 26.5 g). On the reverse, EP[I] in relief. It dates to the 2nd-3rd centuries AD.



**211.** Half-Uncia. Pb 12.60 g, 17x19 mm. Inv. no. 48.21.99. Find place: Tire. Acquired in 1999. Lead weight, square in form with raised and beveled edges, handle at the top but is missing. On the obverse, S which stands for “semi” (half); it is a semuncia in unit (uncia of 25.2 g) The reverse is blank. It dates to the 2nd-3rd centuries AD.



**212.** Half-Uncia. Pb 12.90 g, 27x3 mm (+4 mm handle). Inv. no. 96.64.92. Find place: Selçuk. Acquired in 1992. Lead weight, discoid in form with raised and beveled edge, handle at the top. On the obverse, S in relief which stands for semi (half), it is a half-uncia (uncia of 25.8 g). The reverse is blank. It may be dated to the 1st - 3rd centuries AD.





**213.** Six-Gramma (=Six-Scrupuli) Pb 6.70 g, 16x18x3 mm. Inv. no. 9.21.93. Find place: Tire. Acquired in 1993. Lead weight, square in form with raised and beveled edges. On the obverse, S in relief which stands for six grammata or scrupuli (gramma /scrupulus of 1.11 g) The reverse is blank. It dates to Late Roman imperial period.



## BYZANTINE

**214.** One-Uncia. AE 27.15 g, 20x20x13 mm. Inv. no. 2.16.19. Find place: Ephesus excavation, EVH16 2004/2024 23.05.2016. Copper alloy, square in form. Engraved on the top with wreath enclosing the large cross flanked by the denominational mark Γ A which stands for one-uncia. The reverse is blank. It dates to the 4th-7th centuries AD.



**215.** One-Uncia. AE 26.45 g, 28x27x5 mm. Inv. no. 250.9.23. Find place: Ephesus excavation, EDP23-4022-4021. Acquired in 2023. Copper alloy weight, square in form with plain profile. Engraved on the top with an A. The bottom is blank. It dates to the 4th-7th centuries AD.



**216.** One-Uncia. Pb 20.45 g, 31x4 mm. Inv. no. 115.41.86. From the Ephesus excavation MK 86.115. Acquired in 1986. Lead weight, discoid in form, with raised edges. On the obverse, punched with the unit mark A within circular punched border of dots. On the reverse, large punched dots along the edge and in center. It may be dated to the 3rd-5th centuries AD.



**217.** One-Uncia. AE 27.42 g, 26x7 mm. Inv. no. 221.8.07. Find place: Torbali-Metropolis. Acquired in 2007. Copper alloy weight, discoid in form with raised rim and convex double grooved on the profile; groove along the rim. Central prominent boss on the top; centring point and thin groove along the rim on the bottom. Engraved and punched on the top with the unit mark Γ A; cross above the denominational mark. The gamma letter has a double outline. It dates to the 6th – 7th centuries AD<sup>57</sup>.



**218.** One-Uncia. AE 26.2 g, 28x6 mm. Inv. no. 2.31.93. Find place: Torbali-Metropolis. Acquired in 1993. Copper alloy weight, discoid in form with raised rim and double groove on the convex profile; centring points on the top and bottom. Engraved on the top with Γ A, floral pattern at below. The bottom is blank. It dates to the 6th-7th centuries AD.



**219.** One-Uncia. AE 25.90 g, 22x20x7 mm. Inv. no. 24.5.90. Find place: İzmir. Acquired in 1990. Copper alloy weight, square in form with beveled edges. Engraved on the top with Γ A, not inlaid or inlay is missing. The bottom is blank. It dates to the 6th-7th centuries AD.



<sup>57</sup> Published in Pülz 2020, G29.

**220.** One-Uncia. AE 25.70 g, 25x6 mm. Inv. no. 1.21.92. Find place: Tire. Acquired in 1992. Copper alloy weight, discoid in form with slightly raised rim and plain but convex profile; concentric circles near the edge and in center around centring point on the top. Engraved and punched on the top with reverted A (on left) and 8 (on right) which refers to one-uncia. A deep cut in center. On the reverse, concentric circles near the edge and in center around centring point; to left, engraved and punched N̄ and to right, [S] which refers to six-nomisma in unit. On this weight, two unit marks with theoretically equal masses are indicated: uncia and six-nomisma. It dates to the 6th – 7th centuries AD.



**221.** Twelve-Nomisma. Pb 53.80 g, 31x6 mm. Inv. no. 11.20.06 g. Find place: Ephesus excavation, KFA 40 Strat. einh. Lfd. Nr. 6017/ KF 40. 21.08.06 pkt. Nr. 9489 grabungsobjekt SO 6. Lead weight, disc-shaped. On the obverse, punched with the unit mark I B which stands for 12. It is a twelve nomismata in unit (nomisma of 4.48 g). The reverse is blank. It dates to the 6th- 7th centuries.



**222.** Eight-Nomisma. AE 35.90 g, 30x6 mm. Inv. no. 1.8.91. Find place: Belevi. Acquired in 1991. Copper alloy, discoid in form with raised edge on both faces; convex double-grooved profile and centring point on the top and bottom. Engraved on the top with unit mark N̄H which stands for eight nomismata (nomisma of 4.48 g); above, six-petaled flower. The bottom is blank but groove along the edge. It dates to the 4th-7th centuries AD.



**223.** Six-Nomisma. AE 26.20 g, 29x6 mm. Inv. no. 25.41.12. Find place: Ephesus excavation, ARK 806/24 KF8/12. Arkadiane 2012 27.04.2012. Copper alloy, discoid in form with raised rim and centring points on the top and bottom. Engraved and punched on the top with N̄ S which stands for six nomismata (nomisma of 4.36 g) The bottom is blank. It dates to the 4th-7th centuries AD<sup>58</sup>.



**224.** Five-Nomisma. 21.75 g, 19x19x 6 mm. Inv. no. 24.49.90. Find place: Değirmendere-Colophon. Acquired in 1990. Lead weight, square in form. On the obverse, engraved/punched with the unit mark E which stands for five nomismata (nomisma of 4.35 g). The reverse is blank. It dates to the 4th-7th centuries AD.



**225.** Three-Nomisma. AE 12.82 g, 17x17x5 mm. Inv. no. 239.8.07. Find place: Ephesus excavation, MK Meryem Kilise, MK Grab 6, year 1986 (inventoried in 2007). Copper alloy weight, square in form with plain profile. Engraved on the top with an arch supported by two columns; within the arch a large cross flanked by the denominational mark N̄ Γ which stands for three nomismata (nomisma of 4.27 g) The bottom is blank. It dates to the 5th - 7th centuries AD<sup>59</sup>.



<sup>58</sup> Published in Pülz 2020, G30.

<sup>59</sup> Published in Pülz 2020, G33.

**226.** Three-Nomisma. AE 12.76 g, 20x20x4 mm. Inv. no. 3.28.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form. Engraved on the top with a herringbone wreath enclosing the denominational mark  $\text{N}\Gamma$  which stands for three nomismata (nomisma of 4.25 g), cross above, all hardly visible; originally inlaid but inlay partly extant. The bottom is blank. It dates to the 4th-7th centuries AD.



**227.** Two-Nomisma. AE 9.20 g, 19x4 mm. Inv. no. 19.67.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy, discoid in form with raised rim and centring points on the top and bottom; engraved on the top with a wreath enclosing the denominational mark  $\text{N}\text{B}$ . It is a two nomismata in unit (nomisma of 4.6 g) The bottom is blank. It dates to 6th-7th centuries AD.



**228.** Two-Nomisma. AE 8.47 g, 19x4 mm. Inv. no. 83.25.81. Find place: Muğla. Acquired in 1981. Copper alloy weight, discoid in form with raised rim and plain profile; centring points on the top and bottom; groove along the rim. Punched on the top with  $\text{N}\text{B}$ , cross above. It is a two nomismata in unit (nomisma of 4.23 g). The bottom is blank. It dates to 6th-7th centuries AD.



**229.** Two-nomisma. AE 8.10 g, 21 mm. Inv. no. 15.6.10. Find place: Torbalı-Metropolis. Acquired in 2010. Copper alloy weight, octagonal in form. Engraved and punched on the top with the denominational mark  $\text{N}\text{B}$  which stands for two nomismata (nomisma of 4.05 g) and engraved circle around the centering point. On the reverse, engraved circle around the centering point. It dates to the 4th-7th centuries AD.



**230.** Two-1.5 Nomismata or Two-Sicilicus. AE 17.81 g, 18x18x6 mm. Inv. no. 93.22.95. Find place: Tire. Acquired in 1995. Copper alloy, square in form. Engraved and punched on the top with a christogram and B. Since christogram may refer to 1.5 nomismata<sup>60</sup> and although its mass is a little high, it may correspond to two 1.5 nomismata or two-sicilicus (sicilicus of 8.90 g) The reverse is blank. It dates to the Late Roman imperial Period.



**231.** One-1.5 Nomismata or One-Sicilicus. AE 7.80 g, 14x14x4 mm. Inv. no. 1.1.15. Find place: uncertain. Acquired in 2015. Copper alloy, square in form. Engraved and punched on the top with a christogram which stands for 1.5 nomismata or sicilus. The bottom is blank. It dates to the Late Roman imperial Period.



**232.** One-Nomisma. AE 4.70 g, 12x14x3 mm. Inv. no. 5.14.94. Find place: Bayındır. Acquired in 1994. Copper alloy weight, square in form with plain profile. Engraved on the top with a small square pattern, no unit mark but its mass corresponds with one-nomisma. The bottom is blank. It dates to the 4th-7th centuries AD.



**233.** One-Nomisma. AE 4.60 g, 12x12x3 mm. Inv. no. 113.6.15. Find place: Ephesus excavation, EVH 15-1003-1062. Acquired in 2015. Copper alloy weight, square in form. Engraved and punched on the top with  $\text{N}$ . The bottom is blank. It dates to the 4th-7th centuries AD.



<sup>60</sup> Pink 1938, col. 29; Kisch 1965, 154 (quoting from Pink) See also CPAI 3.2, no. 461.



234. One-Nomisma. AE 4.43 g, 13x14x3 mm. Inv. no. 92.64.92. Find place: Selçuk. Acquired in 1992. Copper alloy weight, square in form with plain profile. Engraved and punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



235. One-Nomisma. AE 4.43 g, 14x15x3 mm. Inv. no. 3.6.96. Find place: Tire. Acquired in 1996. Copper alloy weight, square in form with plain profile. Engraved and punched on the top with  $\aleph$ . The reverse is blank. It dates to the 4th-7th centuries AD.



236. One-Nomisma. AE 4.40 g, 12x12x3 mm. Inv. no. 12.14.18. Find place: Ephesus excavation, EVH 16-5017-5201. Acquired in 2018. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



237. One-Nomisma. AE 4.39 g, 13x14x3 mm. Inv. no. 14.23.97. Find place: Ephesus excavation, H2 kanal 97/14 (H2 /Stg. 3/ kanal 122/97) year, 1997. Acquired in 1997. Copper alloy weight, square in form. Engraved on the top and bottom with a monogram  $\chi\psi$  and  $\phi\chi$ . It dates to the 4th-7th centuries AD.



238. One-Nomisma. AE 4.38 g, 14x15x3 mm. Inv. no. 25.5.90. Find place: İzmir. Acquired in 1990. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$  and a cross. The bottom is blank. It dates to the 4th-7th centuries AD.



239. One-Nomisma. AE 4.35 g, 15x15x3 mm. Inv. no. 23.9.95. Find place: Tire. Acquired in 1995. Copper alloy weight, square in form. Punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



240. One-Nomisma. AE 4.31 g, 11x13x4 mm. Inv. no. 94.64.92. Find place: Selçuk. Acquired in 1992. Copper alloy weight, square in form with carinated profile. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



241. One-Nomisma. AE 4.31 g, 11x11x4 mm. Inv. no. 3.44.91. Find place: Bayındır. Acquired in 1991. Copper alloy weight, square in form. Engraved on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



242. One-Nomisma. AE 4.30 g, 13x14x3 mm. Inv. no. 15.10.97. Find place: Tire. Acquired in 1997. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



243. One-Nomisma. AE 4.27 g, 13x14x3 mm. Inv. no. 10.18.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$  and dot-patterns (cross). The bottom is blank. It dates to the 4th-7th centuries AD.



244. One-Nomisma. AE 4.25 g, 13x13x3 mm. Inv. no. 40.44.89. Find place: Ayrancılar. Acquired in 1989. Copper alloy weight, square in form. Engraved on the top with N. On the bottom, engraved with X. It dates to the 4th-7th centuries AD.



**245.** One-Nomisma. AE 4.25 g, 13x13x2 mm. Inv. no. 23.14.18. Find place: Ephesus excavation, ECS18-10003-10011. Acquired in 2018. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**246.** One-Nomisma. AE 4.21 g, 11x12x3 mm. Inv. no. 5.67.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**247.** One-Nomisma. AE 4.21 g, 12x12x3 mm. Inv. no. 139.5.96. Find place: Tire. Acquired in 1996. Copper alloy weight, square in form with plain profile. Engraved and punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**248.** One-Nomisma. AE 4.20 g, 11x12x4 mm. Inv. no. 4.14.94. Find place: Bayındır. Acquired in 1994. Copper alloy weight, square in form with plain profile. Engraved and punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**249.** One-Nomisma. AE 4.20 g, 13x14x3 mm. Inv. no. 138.5.96. Find place: Tire. Acquired in 1996. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**250.** One-Nomisma. AE 4.18 g, 12x14x3 mm. Inv. no. 4.28.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form with carinated convex profile. Engraved on the top with an obscure  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**251.** One-Nomisma. AE 4.16 g, 12x12x3 mm. Inv. no. 33.7.95. Find place: Tire. Acquired in 1995. Copper alloy weight, square in form. Engraved on the top with  $\aleph$ , inlaid with copper. The bottom is blank. It dates to the 4th-7th centuries AD.



**252.** One-Nomisma. AE 4.15 g, 12x12x2 mm. Inv. no. 6.9.11. Find place: uncertain. Acquired in 2011. Copper alloy weight, square in form. On the obverse, engraved and punched with  $\aleph$ . On the reverse, engraved and punched with a christogram flanked by three-dot patterns. It dates to the 4th-7th centuries AD.



**253.** One-Nomisma. AE 4.10 g, 11x12x3 mm. Inv. no. 2.1.15. Find place: uncertain. Acquired in 2015. Copper alloy weight, square in form. Engraved and punched on the top with a wreath enclosing the denominational mark  $\aleph$ , originally inlaid but inlay is missing. The bottom is blank. It dates to the 4th-7th centuries AD.



**254.** One-Nomisma. AE 4.00 g, 13x14x3 mm. Inv. no. 10.12.99. Find place: Kuşadası. Acquired in 1999. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**255.** One-Nomisma. AE 3.96 g, 12x12x3 mm. Inv. no. 16.10.97. Find place: Tire. Acquired in 1997. Copper alloy weight, square in form. On the obverse, engraved and punched with  $\aleph$ . The reverse is blank. It dates to the 4th-7th centuries AD.



**256.** One-Nomisma. AE 3.95 g, 11x12x3 mm. Inv. no. 140.5.96. Find place: Tire. Acquired in 1996. Copper alloy weight, square in form with plain profile. Engraved and punched on the top and bottom with an  $\aleph$ . It dates to the 4th-7th centuries AD.



**257.** One-Nomisma. AE 3.93 g, 13x14x3 mm. Inv. no. 26.5.90. Find place: İzmir. Acquired in 1990. Copper alloy weight, square in form. Punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**258.** One-Nomisma. AE 3.90 g, 12x12x3 mm. Inv. no. 3.1.15. Find place: uncertain. Acquired in 2015. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**259.** One-Nomisma. AE 3.9 g, 13x13x3 mm. Inv. no. 4.6.96. Find place: Tire. Acquired in 1996. Copper alloy weight, square in form with plain profile. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**260.** One-Nomisma. AE 3.90 g, 14x15x3 mm. Inv. no. 24.9.95. Find place: Tire. Acquired in 1995. Copper alloy weight, square in form; one corner is broken. Engraved and punched on the top with  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**261.** One-Nomisma. AE 3.77 g, 12x13x3 mm. Inv. no. 7.29.95. Find place: Torbalı-Metropolis. Acquired in 1995. Copper alloy weight, square in form with plain profile. Engraved and punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**262.** One-Nomisma. AE 3.71 g, 11x12x4 mm. Inv. no. 2.29.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form with slightly convex profile. Engraved and punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**263.** One-Nomisma. AE 3.68 g, 13x14x4 mm. Inv. no. 3.14.94. Find place: Bayındır. Acquired in 1994. Copper alloy weight, square in form. Engraved and punched on the top with an obscure  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**264.** One-Nomisma? AE 3.66 g, 13x13x3 mm. Inv. no. 93.64.92. Find place: Selçuk. Acquired in 1992. Copper alloy weight, square in form with plain profile. Engraved on the top and bottom with a cross, the arms of which terminate in a v-shape. Although its mass is low, it corresponds with a one-nomisma. It dates to the 4th-7th centuries AD.





**265.** One-Nomisma. AE 3.61 g, 12x13x3 mm. Inv. no. 13.28.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy weight, square in form. Engraved and punched on the top with an  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**266.** One-Nomisma. AE 3.60 g, 14x15x3 mm. Inv. no. 4.6.94. Find place: Tire. Acquired in 1994. Copper alloy weight, square in form. Engraved and punched on the top with  $\aleph$  and rosette-pattern (cross) above. The bottom is blank. It dates to the 4th-7th centuries AD.



**267.** One-Nomisma. AE 3.36 g, 10x11x5 mm. Inv. no. 21.31.95. Find place: Tire. Acquired in 1995. Copper alloy weight, square in form with plain profile. Engraved and punched on the top and bottom with  $\aleph$ . It dates to the 4th-7th centuries AD.



**268.** One-Nomisma. AE 3.29 g, 14x14x3 mm. Inv. no. 3.29.94. Find place: Bayındır. Acquired in 1994. Copper alloy weight, square in form with plain profile. Punched on the top with  $\aleph$ , with another o in the lower angle. The bottom is blank. It dates to the 4th-7th centuries AD.



**269.** One-nomisma. AE 3.2 g, 13x12x2 mm. Inv no. 1.11.20. Find place: Selçuk. Acquired in 2020. Engraved and punched on the top with denominational mark  $\aleph$ . The bottom is blank. It dates to the 4th-7th centuries AD.



**270.** One-Nomisma. AE 4.14 g, 18 mm. Inv. no. 25.9.95. Find place: Tire. Acquired in 1995. Copper alloy weight, discoid in form. Engraved on the top with denominational mark A. The bottom is blank. It dates to the 4th-7th centuries AD.



**271.** Four-Gramma? Pb 4.00 g, 10x10x5 mm. Inv. no. 3.16.93. Find place: Bayındır. Acquired in 1993. Lead weight, square in form. On the obverse, four bird's eye motifs which may refer to "four". It may be a four grammata in unit (gramma of 1.00 g) but not certain. The reverse is blank. It dates to the 4th-7th centuries AD.



**272.** Four-Gramma or One-Nomisma? AE 3.46 g, 11x11x4 mm. Inv. no. 13.5.00. Find place: Tire. Acquired in 1999. Copper alloy weight, square in form with carinated profile. On the obverse, four punched dots which may refer to four grammata (gramma of 0.86 g) or it may be one-nomisma in unit. The bottom is blank. It dates to the 4th-7th centuries AD.



**273.** Three-Gramma? AE 2.05 g, 10x11x2 mm. Inv. no. 6.67.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy weight, square in form. Engraved on the top with an odd  $\Gamma$  which may stand for three grammata (gramma of 0.68 g) but its mass is too low for this unit, so the unit is not certain. The bottom is blank but soldered with lead. It dates to the 4th-6th centuries AD.



**274.** Twelve-Keration. AE 2.20 g, 9x10x3 mm. Inv. no. 7.67.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy weight, square in form with plain profile. Engraved and punched on the obverse with the denominational mark I B which stands for twelve keratia (keration of 0.18 g)<sup>61</sup> The reverse is blank. It dates to the 4th-7th centuries AD.



**275.** Twelve-Keration. AE 2.15 g, 10x11x2 mm. Inv. no. 14.5.00. Find place: Tire. Acquired in 2000. Copper alloy weight, square in form with plain profile. Engraved and punched on the obverse with the denominational mark I B which stands for twelve keratia (keration of 0.17 g) The reverse is blank. It dates to the 4th-7th centuries AD.



**276.** Twelve-Keration. AE 2.15 g, 9x9x3 mm. Inv. no. 13.18.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form with plain profile. Engraved and punched on the obverse with the denominational mark I B which stands for twelve keratia (keration of 0.17 g) The reverse is blank. It dates to the 4th-7th centuries AD.



**277.** Twelve-Keration. AE 2.15 g, 9x8x3 mm. Inv. no. 12.18.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form with plain profile. Engraved and punched on the obverse with the denominational mark I B which stands for twelve keratia (keration of 0.17 g)<sup>62</sup> The reverse is blank. It dates to the 4th-7th centuries AD.



**278.** Twelve-Keration. AE 2.10 g, 11x10x2 mm. Inv. no. 27.5.90. Find place: İzmir. Acquired in 1990. Copper alloy weight, square in form with plain profile. Engraved on the obverse with the denominational mark B I (reversed) which stands for twelve keratia (keration of 0.175 g) The reverse is blank. It dates to the 4th-7th centuries AD.



**279.** Twelve-Keration. AE 2.06 g, 12x13x2 mm. Inv. no. 99.20.09. Find place: Tire. Acquired in 2009. Copper alloy weight, square in form. Engraved and punched on the top with I B which stands for twelve keratia (keration of 0.17 g). The bottom is blank. It dates to the 4th-7th centuries AD.



**280.** Twelve-Keration. AE 2.05 g, 9x10x3 mm. Inv. no. 3.29.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form with plain profile. Engraved and punched on the obverse with the denominational mark I B which stands for twelve keratia (keration of 0.17 g) Because the punched dots forming the double circles of B have been erased, it gives the impression as if there are only two vertical lines to the left. It dates to the 4th-7th centuries AD.



**281.** Twelve-Keration. AE 2.05 g, 10x10x2 mm. Inv. no. 11.18.93. Find place: Bayındır. Acquired in 1993. Copper alloy weight, square in form with plain profile. Engraved and



<sup>61</sup> Cf. Pondera 13345.

<sup>62</sup> Cf. Pondera 14073.



punched on the obverse with the denominational mark I B which stands for twelve keratia (keration of 0.17 g)<sup>63</sup> The reverse is blank. It dates to the 4th-7th centuries AD.

**282.** Eight-Keration, Eight-Gramma or 1/8 Uncia? AE 3.38 g, 13x13x3 mm. Inv. no. 40.17.91. Find place: Bayındır. Acquired in 1991. Copper alloy weight, square in form. On the obverse, H in relief which may refer to “eight”. Its unit mark corresponds with eight keratia (keration of 0.42 g) but its mass doesn’t correspond with its unit; it is too high for eight keratia. It may also refer to eight grammata (gramma of 0.42 g) but it is too low for eight grammata and it also corresponds with 1/8 uncia (uncia of 27.04 g). The reverse is blank. It dates to the 4th-7th centuries AD.



**283.** Eight-Keration. AE 1.54 g, 9x9x2 mm. Inv. no. 8.67.92. Find place: Torbalı-Metropolis. Acquired in 1992. Copper alloy weight, square in form with plain profile. Engraved on the obverse with the denominational mark H which stands for eight keratia (keration of 0.19 g) The reverse is blank. It dates to the 4th-7th centuries AD.



**284.** Eight-keration. AE 1.50 g, 8x8x3 mm. Inv. no. 3.9.97. Find place: in the vicinity of Ephesus. Acquired in 1997. Copper alloy weight, square in form with plain profile. Punched on the obverse with unit mark H which stands for “eight”. It is a eight keratia in unit (keration of 0.18 g) The reverse is blank. It dates to the 4th-7th centuries AD.



**285.** Eight-Keration. AE 1.80 g, 9x9x2 mm. Inv. no. 5.1.15. Find place: uncertain. Acquired in 2015. Copper alloy weight, square in form with plain profile. Engraved on the obverse with the denominational mark H which stands for eight keratia (keration of 0.22 g)<sup>64</sup>. The reverse is blank. It dates to the 4th-7th centuries AD.



**286.** Six-keration. AE 1.20 g, 9x9x2 mm. Inv. no. 13.14.18. Find place: Ephesus excavation, EVH16-4008-4078. Acquired in 2018. Copper alloy weight, square in form. Punched on the obverse with S which stands for “six”, ie six keratia. The reverse is blank. It dates to the 4th-7th centuries AD.



**287.** Nomisma / Solidus. Glass, 4.25 g, 29x24x5 mm. Inv. no. 35.8.97. Find place: Ephesus excavation, Lower Agora 97/006. Year 1997. Blue-greenish, discoid in form with raised rim. On the obverse: monogram  $\overline{\text{NA}}$  in relief. The reverse is plain and blank. It is a nomisma (solidus) in unit. It dates to the 5th-7th centuries AD.



**288.** Nomisma / Solidus. Glass, 3.80 g, 21x4 mm. Inv. no. 1.4.08. Find place: Ephesus excavation; year, 2008. Greenish, discoid in form with raised rim; green. On the obverse, monogram  $\overline{\text{NA}}$  in relief. The reverse is plain and blank. It is a nomisma (solidus) in unit. It dates to the 5th-7th centuries AD.



<sup>63</sup> Cf. Pondera 13342.

<sup>64</sup> Cf. Pondera 13428.

**289.** Semissis. Glass, 2.15 g, 20x3 mm. Inv. no. 245.9.23. Find place: Ephesus excavation, EDP23-003-1346, year 2023. Brownish green (dark green), discoid in form with raised rim. On the obverse, facing bust of eparch, legend illegible EΠI+name illegible; all in relief. It is a semissis in unit (1/2-nomisma, nomisma of 4.30 g). The reverse is plain. It dates to the 5th-7th centuries AD.



**290.** Semissis. Glass, 1.90 g, 19x4 mm. Inv. no. 31.8.97. Find place: Ephesus excavation, Lower Agora 97/012.b. Silvery-colored, discoid in form with raised rim. On the obverse, monogram  $\overline{\text{N}}\overline{\text{E}}$  in relief. The reverse is plain. It is a semissis in unit (1/2-nomisma, nomisma of 3.80 g). It dates to the 5th-7th centuries AD.



**291.** Semissis. Glass, 1.80 g, 20x2 mm. Inv. no. 246.9.23. Find place: Ephesus excavation, EDP23-11003-1349. Brownish with occasional white gilt; discoid in form with raised rim. On the obverse, monogram  $\overline{\text{N}}\overline{\text{E}}$  in relief. It is a semissis in unit (1/2-nomisma, nomisma of 3.6 g) in unit. The reverse is plain. It dates to the 5th-7th centuries AD.



**292.** Semissis. Glass, 1.80 g, 20x2 mm. Inv. no. 247.9.23. Find place: Ephesus excavation, EDP23-4011-4276. Year, 2023. Glass weight, discoid in form with raised rim; dark green-yellowish. On the obverse, monogram  $\overline{\text{N}}\overline{\text{E}}$  in relief. It is a semissis in unit (1/2-nomisma, nomisma of 3.6 g). The reverse is plain. It dates to the 5th-7th centuries AD.



**293.** Semissis. Glass, 1.80 g, 20x3 mm. Inv. no. 33.8.97. Find place: Ephesus excavation, Lower Agora 97/017.a. Acquired in: 1997. Silver-colored but the middle part is dark gray. On the obverse, monogram  $\overline{\text{N}}\overline{\text{E}}$  in relief. It is a semissis in unit (1/2-nomisma, nomisma of 3.6 g). The reverse is plain and blank. It dates to the 5th-7th centuries AD.



**294.** Tremissis. Glass, 1.50 g, 16x2 mm. Inv. no. 244.9.23. Find place: Ephesus excavation, EDP23-1001-1222. Dark green, discoid in form with raised rim. On the obverse, facing bust of eparch, legend illegible; all in relief. It is a tremissis in unit (1/3-nomisma, nomisma of 4.5 g). The reverse is plain. It dates to the 5th-7th centuries AD.



**295.** Tremissis. Glass, 1.55 g, 19x2 mm. Inv. no. 29.8.97. Find place: Ephesus excavation, Lower Agora Acquired in 1997. Silvery coloured, discoid in form with raised rim. On the obverse, monogram  $\overline{\text{N}}\overline{\text{E}}$  in relief. The reverse is plain and blank. It is a tremissis in unit (1/3-nomisma, nomisma of 4.65 g). It dates to the 5th-7th centuries AD.



**296.** Tremissis. Glass, 1.37 g, 17x3 mm. Inv. no. 34.8.97. Find place: Ephesus excavation, Lower Agora, 97/107.b. RW Stoa Ī-shop; year, 1997. Honey color /light brown, discoid in form with raised rim. On the obverse, monogram  $\overline{\text{NY}}$  in relief. It is a tremissis in unit (1/3-nomisma, nomisma of 4.11 g). The reverse is plain. It dates to the 5th-7th centuries AD.



**297.** Tremissis. Glass, 1.10 g (broken), 18x2 mm. Inv. no. 30.8.97. Find place: Lower Agora 97/006.a. Acquired in 1997. On the obverse, monogram  $\overline{\text{NY}}$  in relief. It is a tremissis in unit (1/3-nomisma, nomisma of 3.3 g). There is a missing part on the edge (it's broken), so its mass is low. The reverse is plain and blank. It dates to the 5th-7th centuries AD.



**298.** Tremissis or “Quadrans”? Glass, 1.03 g, 20x17x3 mm. Inv. no. 36.8.97. Find place: Ephesus excavation, Lower Agora 97/002, RW Stoa L-shop. Acquired in 1997. On the obverse, monogram  $\overline{\text{NY}}$  in relief. The reverse is plain and blank. The mass of this glass weight is too low for the tremissis. Could we be facing something new here? Because, the units known so far are nomisma, semissis, and tremissis for weighing gold coins or precious material. However, the weight of this glass weight here is extremely low. Such a low mass would not be expected for tremissis. There doesn't appear to be any significant damage or break on the weight, meaning there is no deficiency substantial enough to cause a loss in weight. So, it rather corresponds to a quadrans. Therefore, this glass weight might have been produced as a quadrans, meaning a quarter of a nomisma. However, since this is unique one, the unit name “quadrans” should be used cautiously<sup>65</sup>; it might not be accurate. It dates to the 5th-7th centuries AD.



**299.** Three-Gramma? AE 4.09 g, 12x5 mm. Inv. no. 238.8.07. Find place: Ephesus excavation, MK Nekropole, Meryem Kilise, from the soil atop the Grab 87; year 1997 (2007). Copper alloy weight, square in form with plain profile; three bird's eye motifs on the top and bottom which may refer to “three”, ie three grammata (gramma of 1.36 g) but not certain; it may be a one-nomisma, too. It may be dated to 8th – 10th centuries AD<sup>66</sup>.



**300.** One-Nomisma. AE 4.20 g, 16x3 mm. Inv. no. 2.9.91. Find place: Bayındır. Acquired in 1991. Copper alloy weight, discoid in form with concentric grooves around a central boss on the top; the bottom is blank. Contrary to its physical appearance, its mass is quite low (but certainly suitable to its unit), giving the impression that it might be made of glass! It dates to the 9th-10th centuries AD.



**301.** One-Semissis (1/2 Nomisma). AE 2.10 g, 16x2 mm. Inv. no. 52.9.91. Find place: Bayındır. Acquired in 1992. Copper alloy weight, discoid in form with concentric grooves around a central boss on the top; the bottom is blank. Contrary to its physical appearance, its mass is quite low (certainly suitable to its unit), giving the impression that it might be made of glass! It dates to the 9th-10th centuries AD.



<sup>65</sup> In our email communication with Bendeguz Tobias, he mentioned that there are more than 25 weight records under 1.00 gram (majority are between 0.80-1.00 g). Therefore, it is worth considering the existence of a unit/units smaller than 1/3 (tremissis) unit.

<sup>66</sup> Published in Pülz 2020, G40.39.8.07



**302.** Half-Uncia. AE 14.47 g, 27x7 mm. Inv. no. 3.31.93. Find place: Torbalı-Metropolis. Acquired in 1993. Copper alloy weight, made from a Byzantine coin of 10th/11th century AD, with raised rim and plain profile. On the obverse, facing bust of Christ. On the reverse, + IHSUS / XRISTUS / BASILE/ BASIL[E] Its mass corresponds with a half-uncia (uncia of 28.94 g) It dates to the 10th / 11th century AD.



### General Evaluation

Since all 302 weights listed in the catalog originate from within the borders of the Ionia region, they provide valuable data for attribution to the cities that produced them. Although the number of weights with ethnikon or parasemon is small, their find spots suggest that they belong to the cities of the Ionia region and, in many cases, to Ephesus, the capital of the Province of Asia. The units are quite diverse; the collection includes numerous examples of commercial and coin-weight units from both the Greek and Roman systems. In the Greek system, there are 115 weights, ranging from the mna to the drachm (or six-obol). Five dodekaton weights (nos. 66-70) are also rare examples. A bronze, square weight (no. 94) with the legend ΣΤΑ / ΘΜΙ / Η (στάθμι-η) on its profile is a rare example of its kind. In the Roman system, there are 187 weights (including Byzantine ones), ranging from the libra (litra) to the uncia and even to the smallest units (such as the six-keration). There is also a variety in the names and titles of the magistrates responsible for the market on the librae (litrai) and their subunits. Among the Byzantine glass weights, one example (no. 298) appears to be a unique quarter solidus (quadrans).

The 684-gram commercial libra (no. 117) is remarkable with its 25 unciae weight. Likewise, there are several Italic librae that weigh far above 12 unciae. It seems that over time, due to factors such as inflation and devaluation, new values for the weight of the libra emerged, and as a result, its weight increased from 12 unciae in the 1st century AD to over 20 unciae by the end of the 3rd century AD. The 4th century AD, however, represents a different era where the standard or traditional weight production style of the empire gave way to a different approach.

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### **Efes Müzesi'nden Yunan, Roma ve Bizans Ağırlıkları**

#### **Özet**

Bu makale, *Corpus Ponderum Antiquorum et Islamicorum* (= CPAI) projesi kapsamında olup İzmir'in Selçuk ilçesinde yer alan Efes Müzesi koleksiyonundaki 302 adet terazi ağırlığını ele almaktadır. Ağırlıkların çoğunluğu kurşundan yapılmıştır, az bir kısmı ise bronzdur. Bunlar arasında 115 ağırlık Yunan sistemi birimlerinde üretilmişken, 187'si Roma sistemine aittir ve Roma sistemindekilerin de bir kısmı Bizans ağırlıkları olarak sınıflandırılmaktadır. Ağırlıkların buluntu yerleri ağırlıklı olarak Selçuk (Efes) ve çevresindeki arkeolojik alanlardır ve bu da onların provenansı veya atübüsyonu açısından önemli veriler sağlar. Bazı ağırlıklar etnikon taşırken, çoğunda sadece birim işaretleri bulunur; ancak buluntu yerleri atübüsyonlarını mümkün kılmaktadır. Roma sistemi ağırlıkları, özellikle libra'lar, 12 uncia'lık teorik ağırlıktan 25 uncia'ya değin değışiklik gösterir, bu da zamanla enflasyon ve devalüasyon nedeniyle yapılan ayarlamaları işaret eder. Bizans ağırlıkları arasında, MS 5.-7. yüzyıllara tarihlenen Bizans cam ağırlıkları, taşıdıkları monogramlar açısından dikkat çekicidir. Ayrıca, sikkeden yapılmış bir ağırlık MS 10.-11. yüzyıllara tarihlenmektedir.

**Anahtar Sözcükler:** Antik ağırlıklar, Ephesos, Efes, libra - litra, cam ağırlıklar.