

WARREN SCHULTZ
DEPAUL UNIVERSITY

The Syrian *Fulūs* of the Mamluk Sultan al-Ẓāhir Barqūq

One of the bedeviling aspects of the monetary history of the Mamluk Sultanate of Egypt and Syria is the role of copper coinage, *fulūs*, from the beginning of the ninth/fifteenth century until the end of the sultanate. A debate has been simmering for decades about whether this last 117 years of Mamluk history should be described as an “age of copper (coinage)” or not. Due to space considerations a full discussion of the appropriateness of the label “age of copper” cannot be presented here.¹ What must be mentioned, however, is that while contemporary Mamluk chronicles frequently mention exchange rates for copper coins, they tend to be silent or at best inconsistent about mentioning changes made to copper coins and minting practices and why those changes took place. In this situation, the surviving numismatic evidence must be incorporated into debates on this topic. This is not as easy as it sounds, however, for the following reasons.

The first is that for the period of the ninth/fifteenth century and after, the numismatic data available for the study of Mamluk copper coinage is limited. The known specimens of all *fulūs* from all mints dating from the beginning of the ninth/fifteenth century onward are far fewer in number than those known for the gold and silver coinages over the same period. The *fulūs* from the Syrian mint-cities (Damascus, Ḥamāh, Tripoli, and Aleppo) in the period are even more scarce. The second reason, related to the first, is that scholarship to date about Mamluk copper coins has focused primarily on the coins from Cairo. For example, this bias for the Egyptian capital is seen in the seminal work of Mamluk numismatics, Paul Balog’s *The Coinage of the Mamluk Sultanate of Egypt and Syria* (hereafter CMSES), where the coinage of Mamluk Syria is less well represented than that of Egypt.² Balog listed a total of 1219 types of Mamluk coins in CMSES

¹Many aspects of this debate are outlined in these three articles: Jere L. Bacharach, “Circassian Monetary Policy: Copper,” *Journal of the Economic and Social History of the Orient* 19 (1976): 32–47; Boaz Shoshan, “From Silver to Copper: Monetary Changes in Fifteenth Century Egypt,” *Studia Islamica* 56 (1982): 97–116; and my “‘It Has No Root Among Any Community that Believes in Revealed Religion, Nor Legal Foundations for its Implementation’: Placing al-Maqrīzī’s Comments on Money in a Wider Context,” *Mamlūk Studies Review* 7, no. 2 (2003): 169–81.

²Paul Balog, *The Coinage of the Mamluk Sultanate of Egypt and Syria* (New York, 1964). Balog supplemented this work with “*The Coinage of the Mamluk Sultans: Additions and Corrections*,” *American Numismatic Society Museum Notes* 16 (1970): 113–71. Balog’s 1964 work was based in large part on his personal collection, which was heavily skewed toward the Egyptian mints.



©2024 by Warren Schultz.

DOI: 10.6082/vr19-z492. (<https://doi.org/10.6082/vr19-z492>)

DOI of Vol. XXVII: 10.6082/msr27. See <https://doi.org/10.6082/msr2024> to download the full volume or individual articles. This work is made available under a Creative Commons Attribution 4.0 International license (CC-BY). See <http://mamluk.uchicago.edu/msr.html> for more information about copyright and open access.

and its supplement. (A type is a unique combination of factors such as ruler, mint, date, metal, and design.) Out of these 1219 types, only 40 are definitively linked to a Syrian mint from the beginning of the ninth/fifteenth century until the end of the sultanate. Almost half of these 40 were minted during the reigns of Sultan al-Nāṣir Faraj (801–8/1399–1405 and 808–15/1406–12). While more types and specimens have come to light since, this data has only just begun to be incorporated into wider Mamluk numismatic scholarship.³

In light of these observations, I think additional discussions of the “age of copper” require a careful study of as many surviving copper coins as possible. In addition, since changes in coinage rarely line up neatly with the dates of reigns or of regime changes,⁴ this approach should begin with an analysis of Mamluk copper coinage at the end of the eighth/fourteenth century. Thus, in this essay I am focusing on the *fulūs* of al-Zāhir Barqūq (784–91/1382–89 and 792–801/1390–99). In a previous study, I analyzed the production of large copper *fulūs* minted in Cairo (from 759/1357–58) and Alexandria (from 770/1368–69) through the end of Barqūq’s rule.⁵ The metrological data collected for that study supported the evidence from the chronicles that these copper coins were struck to a weight standard of one *mithqāl*.⁶ That study did not discuss Barqūq’s copper coinage struck in the Syrian mints, however.

Given the paucity of references from contemporary written sources about mint practices, the main approach of this study is via metrological analysis of the surviving coins themselves. This may seem counterintuitive, since copper coins are generally assumed to be petty coinage with little to no intrinsic value (i.e., the value of the metal bullion contained in each coin). This approach assumes their value was extrinsic to their metallic content, meaning the value was maintained by the issuing authority via guaranteed exchange rates with precious metal coinage or other means.⁷ This is in contrast to coins of gold and

³Lorenz Korn, *Bilād aš-Šām III Ḥamāh*, vol. IVc, *Sylloge Numorum Arabicorum Tübingen* (Berlin, 1998) (hereafter SNAT Ḥamāh); Alaa Aldin Al Chomari, *Sylloge Numorum Arabicorum Tübingen*, vol. IVE2, *Bilād aš-Šām V. Die Münzstätte Aleppo in Mamlūkischer und Osmanischer Zeit (ca. 1260–1760)* (Berlin, 2021) (hereafter SNAT Aleppo).

⁴The second Simone Assemani Symposium on Islamic coins was devoted to this topic. See Bruno Callegher and Arianna D’Ottone, eds., *The 2nd Simone Assemani Symposium on Islamic Coins* (Trieste, 2010).

⁵Warren Schultz, “Mahmud ibn ‘Ali and the “New Fulūs”: Late Fourteenth Century Mamluk Egyptian Copper Coinage Reconsidered,” *American Journal of Numismatics* 10 (1998): 127–48.

⁶Warren Schultz, “Mamluk Metrology and the Numismatic Evidence,” *Al-Masaq* 15, no. 1 (2003): 59–75, which suggests that the Mamluk-era *mithqāl* was likely slightly heavier than the oft-cited value of 4.25 grams and was perhaps as heavy as 4.30 grams.

⁷Carlo Cipolla’s “The Big Problem of the Petty Coins,” in *Money, Prices, and Civilization in the Mediterranean World, Fifth to Seventeenth Century* (Princeton, 1956), 27–37, remains a valuable intro-



silver, which always have the intrinsic value of their precious metal contained within. In other words, one repercussion of this assumption is that some publications do not record the weights of individual copper coins since it is commonly thought that the weight of individual copper coins was irrelevant to their value.⁸ In the case of Mamluk Egyptian *fulūs*, however, previous research has shown that for some periods the weight of individual Egyptian *fulūs* determined their value. These periods date from the origins of the sultanate through the reigns of Barqūq.⁹

Whether the weight of individual copper coins was a factor in the valuation of Mamluk Syrian *fulūs*, however, has not been determined. The numismatic record for these coins is much more complicated than the *fulūs* from Egyptian mints. There are many more surviving types from the main Syrian mints of Damascus, Ḥamāh, Tripoli, and Aleppo up to the end of the eighth/fourteenth century than from Cairo and Alexandria. These types have a very wide range of designs, inscriptions, and figural images unlike any contemporary *fulūs* minted in Egypt. Some of these Syrian types survive in large numbers and some do not. Since no one has investigated these topics, it is not possible to determine whether any weight standard was in place for Mamluk *fulūs* from any Syrian mint at any time period, nor whether, if in place, such a weight standard was consistent across the four main mints.

At the core of this analysis is the data presented in the accompanying appendix, which provides an overview of the current state of numismatic knowledge for Barqūq's Syrian *fulūs*. It contains information derived from more than six hundred weighed individual coins across forty-two known types of copper coinage bearing Barqūq's name or royal title.¹⁰ It is organized by mint series

duction to this topic.

⁸Contrast Stanley Lane-Poole's *Catalogue of Oriental Coins in the British Museum*, vol. 4, *The Coinage of Egypt* (London, 1879), and vol. 9, *Additions to the Oriental Collection, 1876–1888, Pt. I, Additions to Vols. I–IV* (London, 1889), which did not provide weights for Mamluk copper coins, with Henri Lavoix's *Catalogue des Monnaies Musulmanes de la Bibliothèque nationale: Égypte et Syrie* (Paris, 1896), which did.

⁹In addition to the 1998 study mentioned above, see Warren Schultz, "Mamluk Egyptian Copper Coinage before 759/1357–1358: A Preliminary Inquiry," *MSR* 5 (2001): 25–43; and idem, "How were Mamluk *Fulūs* Valued at the Beginning of the 9th/15th Century? Reflections on Two Passages from al-Maqrīzī and Some Archaeological Evidence," in *Second International Congress on the History of Money and Numismatics in the Mediterranean World, 5–8 January 2017, Antalya*, ed. Oğuz Tekin (Istanbul, 2018), 561–66.

¹⁰Note that some of the Syrian coin types attributed to Barqūq are anonymous and bear only the royal *laqab* al-Malik al-Zāhir. Nevertheless, these coins are attributed to Barqūq. Balog wrote the following referring to types 599–612 of this sultan: "A whole series of small copper coins, either with or without mint do not have the sultan's proper name, only his *laqab*, al-



and the types within each series are listed in chronological order to the extent possible.¹¹ In three cases, I have charted this metrological data via the common numismatic tool known as the frequency table. These are histograms in which the vertical axis tracks the number of known coins being analyzed and the horizontal axis is divided into units of ascending weight. While I do not believe frequency tables allow us to calculate an exact value for a weight standard, the resulting shape of a frequency table may reveal that a weight standard existed.¹² This occurs when two shapes appear. The first is a bell-shaped graph, which suggests that the mint produced a specific number of flans from a pre-determined weight of alloy. The second is when the chart shows a steady rise in weight followed by a sharp, cliff-like drop after a certain weight amount. This indicates not only the existence of a weight standard but a situation in which coins circulated by count and coins heavier than the weight standard would be removed from circulation. (This is an example of Gresham's law—that coinage with a face value greater than the value of its metal [known as “bad money”] will remain in circulation, while people will keep rather than spend coinage with a face value close to the actual value of the metal [“good money”]—in action.) The usefulness of a frequency table is directly linked to the sample size of the coin type plotted. Unfortunately, in all but three cases the sample sizes of most of these forty-two types are too small to make a frequency table useful. In those cases, I have summarized the weight range established by the coins in that sample. This analysis is presented in the order of the mints of Damascus, Ḥamāh, Tripoli, and Aleppo, followed by those coin types which are not yet attributed to one of those mints.

Zāhir. None of them is dated. Nevertheless, we attribute them without hesitation to Barqūq, for the following reasons: as we have already pointed out for the Aleppo *fals* type D, with fesse and lion passant with cup above it, the style of the legends, the composite blazons and the general appearance of the coins suggest Barqūq's period. Since Baybars I, no other Bahrī sultan had the same *laqab*, and after him al-Zāhir Ṭaṭar, who reigned a very short time, left no copper coins. The next al-Zāhir was Jaqmaq, and at his time the style and fabric of the copper coins had already changed to such an extent that mistaking the coins of the one for those of the other is quite unlikely. Finally, most of the coins in question are represented in the ‘Antioch Hoard’ of the American Numismatic Society. This hoard contains coins of a period not earlier than al-Ashraf Sha'bān and not later than Barqūq. Therefore, coins with the *laqab* al-Zāhir, which are similar to those of the Antioch hoard, can be attributed to Barqūq without any doubt.” Balog, CMSES, 274–75.

¹¹Not all 650 coins are included in my analysis since not all of them have a weight provided. It is still valuable to know that these specimens exist and may at some future point be weighed.

¹²Note that all metrological studies have inherent challenges. In this case, these Mamluk *fulūs* were weighed at different times in different locations using different scales and different scale technologies (e.g., balances or electronic scales), all of which affect the precision of the weight value obtained.



DAMASCUS

There are ten *fulūs* types from this mint. The sample sizes for these types range from one to forty-three. From Barqūq's first reign, Type 558 has fourteen weight values ranging from 1.26–2.713 grams. Type 559 has nine coins over the range of 1.77–3.31 grams. Type 560 has four coins from 1.36 to 2.58 grams. Type 560A is known by only one coin, which weighs 1.85 grams. Type 561 has eight coins ranging from 1.99 to 2.58 grams. These sample sizes are too small to provide any insight about possible weight standards or to justify the creation of frequency tables. The small data sets continue for three types from Barqūq's second reign. Type 562, which has been reattributed to the second reign, is represented by fifteen coins ranging from 2.33 to 3.166 grams.¹³ Type 588 has eighteen coins ranging from 1.931 to 4.0 grams. Type 589 has six coins ranging from 2.20 to 3.73 grams. All three types include heavier coins than seen in the preceding types (558, 559, 560, and 561), but like those, the sample sizes are so small that it is unwise to draw any conclusions at this point.

It is only with Types 590 and 591 from the second reign that we have sample sizes that justify a frequency table. These two types are dated 798 and 799, respectively. Both feature a large device on one face, which Balog described as a “fleur-de-lis chalice.”¹⁴ Together, these types may be studied as one sample set, since other than the date there is no difference in their design. The sample size for Table 1 is drawn from ninety-nine weighed coins. This includes thirty-eight for 590, forty-three for 591, and an additional eighteen coins of this design with either partial or missing dates. These coins are plotted in Table 1.

It is immediately apparent that these coins are much heavier than all other *fulūs* of Barqūq from this mint. The rough bell-shape of the graph suggests that a standard falling somewhere between 4.20 and 4.50 grams may have been present. Perhaps a standard close to the *mithqāl* weight unit was used. Many more coins would be necessary, however, to determine both that a weight-standard was in place and to refine what that weight was.

Taken together, this survey of Damascene types leads to the following comments. First, there are so few coins known from the first reign that it is impossible to determine whether weight affected the value of any of the known types of these *fulūs*. That said, the coins of the first-reign types have weights from 1.26 to 3.31 grams, with the majority falling below 2.60 grams. These weights are well below what is observed from the contemporary Egyptian issues of Barqūq. Second, the weight ranges of some types from the second reign are higher than

¹³This reattribution appears in Lutz Ilisch, “Beiträge zur mamlukischen Numismatik,” *Münster-sche Numismatische Zeitung* 65–66 (1975): 5–10. See coin number 9.

¹⁴Balog, CMSES, 266–77.



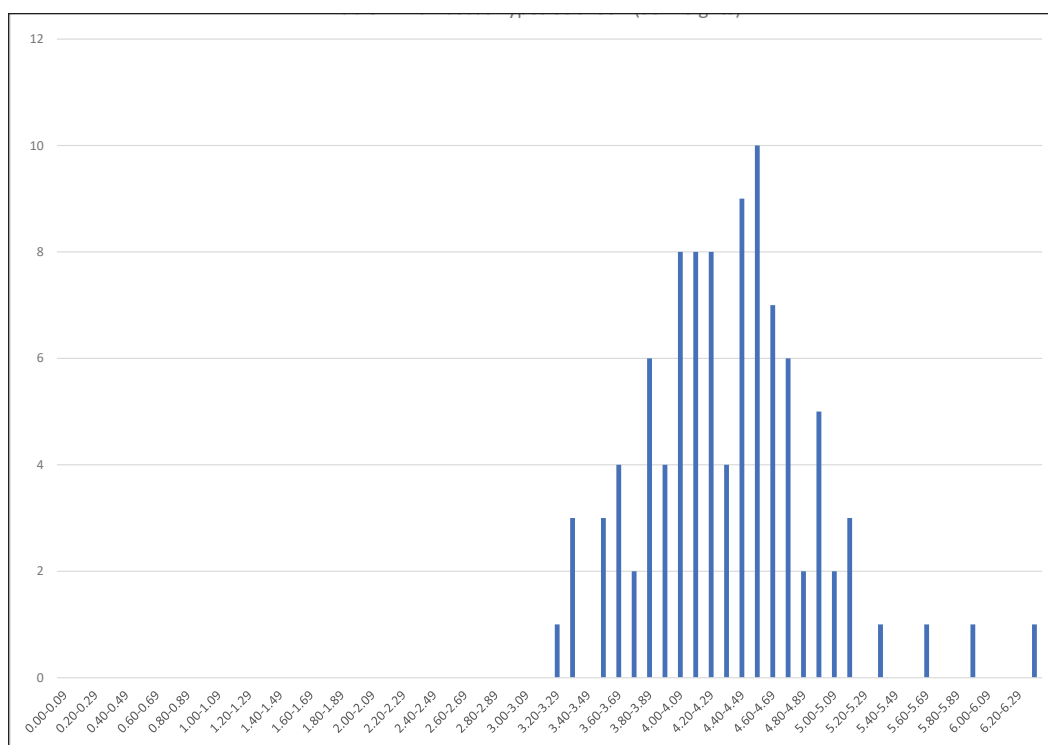


Table 1: Damascus Types 590–591 (99 Weights)

those seen in the first. This is seen for, for example, in Types 588–589, which, like Types 590 and 591, vary only in date and, while not plotted, have a range that has shifted about 1.00 gram to the heavier end of the spectrum. Finally, in the case of the “fleur-de-lis chalice” coins, Types 590–591, the evidence suggests that a weight standard may have been instituted toward the end of Barqūq’s second reign, and that standard could be at or above the *mithqāl* unit that was seen in contemporary Egyptian *fulūs*.

ḤAMĀH

There are nine types known from this mint, all with sample sizes too small to justify constructing a frequency table. From the first reign, Type 600 has twenty-four coin-weights, ranging from 1.19 to 2.89 grams. Thirteen weights of Type 601 coins are known, with a range of 1.44 to 2.60 grams. Type 607 has six coins ranging from 1.38 to 1.85 grams. In the second reign, Type 905 has seven coins ranging from 1.53 to 3.07 grams.¹⁵ Type 597 coins are the heaviest of those

¹⁵Type 905 is anonymous and undated but has been attributed to the beginning of Barqūq’s second reign. See Korn, SNAT Ḥamāh, 50.



known from this mint, with 15 coins ranging from 3.22 to 5.58 grams. Type 598 is known by only one coin, weighing 3.40 grams. Type 599 has eight coins ranging from 0.90 to 2.09 grams. SNAT coins 676–678, of a type not seen in Balog's CMSES, weigh 3.32, 3.35, and 3.45 grams, respectively. Type 596 has twenty-four coins, ranging from 2.43 to 5.17 grams.

As was the case for Damascus, these data sets suggest that with the exception of Type 599, the *fulūs* of the second reign trended heavier than those in the first. Given the small sample sizes, however, it is impossible at this point to determine how much heavier and whether a standard existed. As for the lower-weight Type 599 coins, they lack dates and were attributed to Barqūq's second reign in the Ḥamāh sylloge volume published by the Forschungsstelle für Islamische Numismatik Tübingen.¹⁶ The possibility that Type 599 might need to be attributed to the first reign due to metrological factors would require the addition of many more additional specimens of this and the other first-reign types.

TRIPOLI

Tripoli has the most meager numismatic evidence of all the Syrian mints for the *fulūs* of Barqūq. There are only six types known from this mint, all with small sample sizes ranging from a low of one to a high of seven weight values. Type 602, the only Tripoli coppers bearing a date (798), weigh 6.23 and 5.086 grams. This indicates a movement toward heavier *fulūs* at the end of Barqūq's second reign, as seen in Damascus and Ḥamāh. Given that for both of those mints, first-reign *fulūs* trended lighter than those from the second, it may be that the undated Tripoli Types 603 (seven weights from 1.79 to 2.76 grams), 604 (one weight of 2.16 grams), 605 (three weights from 1.42 to 1.83 grams), and 605A (three weights from 1.39 to 2.007 grams) may date from the first reign, but at this point that is speculation. That leaves Type 606 with only one weighed specimen (2.953 grams) about which no conclusions may be offered.

ALEPPO

The metrology of Aleppan *fulūs*, however, does not reflect the possible trend toward heavier coins during Barquq's second reign suggested by the discussions above. There are eleven types known from this mint, with all but one having sample sizes too small to derive any generalizations other than the fact that almost all known coins weigh less than three grams. From the first reign, type 593 has seventeen weighed coins (ranging from 1.61 to 2.64 grams). Type 563 is represented by only one coin, weighing 3.52 grams. Type 564, dated 788 (twelve

¹⁶Ibid.



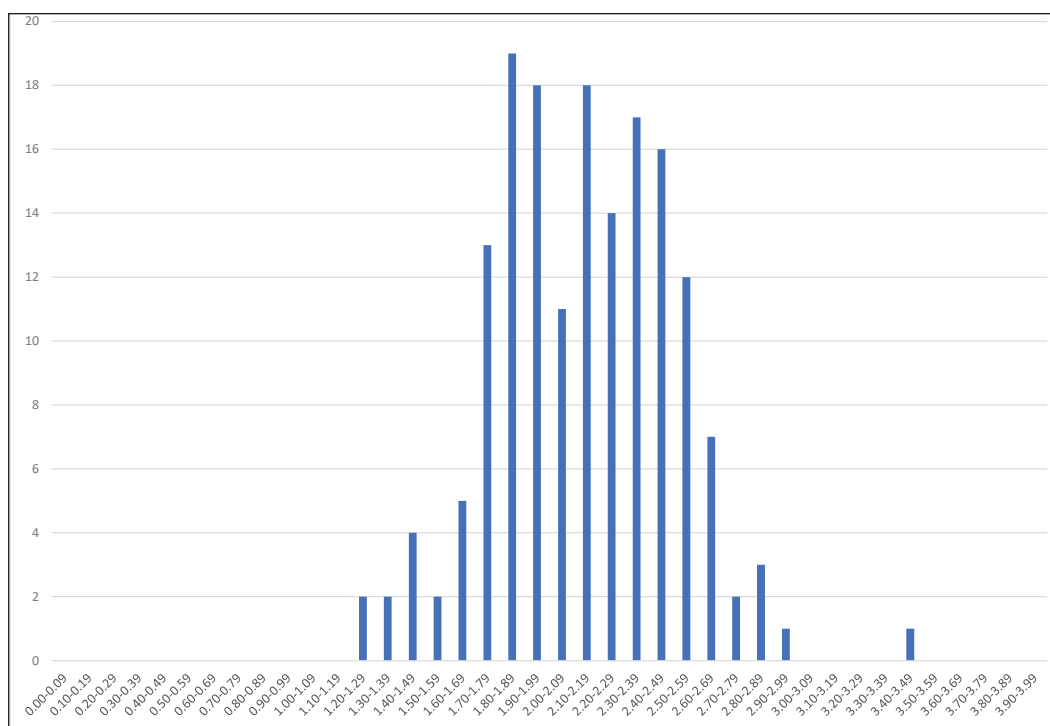


Table 2: Aleppo Types 564–565 (167 Weights)

weighed coins from 1.43 to 2.78 grams), and Type 565, dated 789 (two weights of 1.976 and 2.20), differ only in date. Since there are an additional 153 weighed coins (ranging from 1.241 to 3.410 grams, most of which come from the ANS Antioch hoard) of these two types with partial or missing dates, there is a data set large enough to be plotted on a frequency table. Table 2 charts those 167 weighed coins.

The weights all fall within a range of 1.20 to 3.40 grams, but the overwhelming majority fall between 1.70 and 2.70 grams. The graph has an emerging bell shape surrounding 2.0 grams, which raises the possibility that these coins were minted at a weight standard near that amount. A possible value for the hypothetical weight standard might be the half-*mithqāl*, but the sample size and curve shape only hint at that. At the very least, however, Table 2 indicates that these possibilities should be pursued.

Moving to the second reign, Type 592 has only three coins (2.18 to 4.68 grams) so it is unknown whether that heavier coin is representative of others of the type or merely an outlier. Type 592A has twelve weighed coins (1.259–2.367 grams). Type 594 has only one known example, and that coin was not weighed. SNAT number 443 has only one weighed specimen (2.70 grams), as does Type



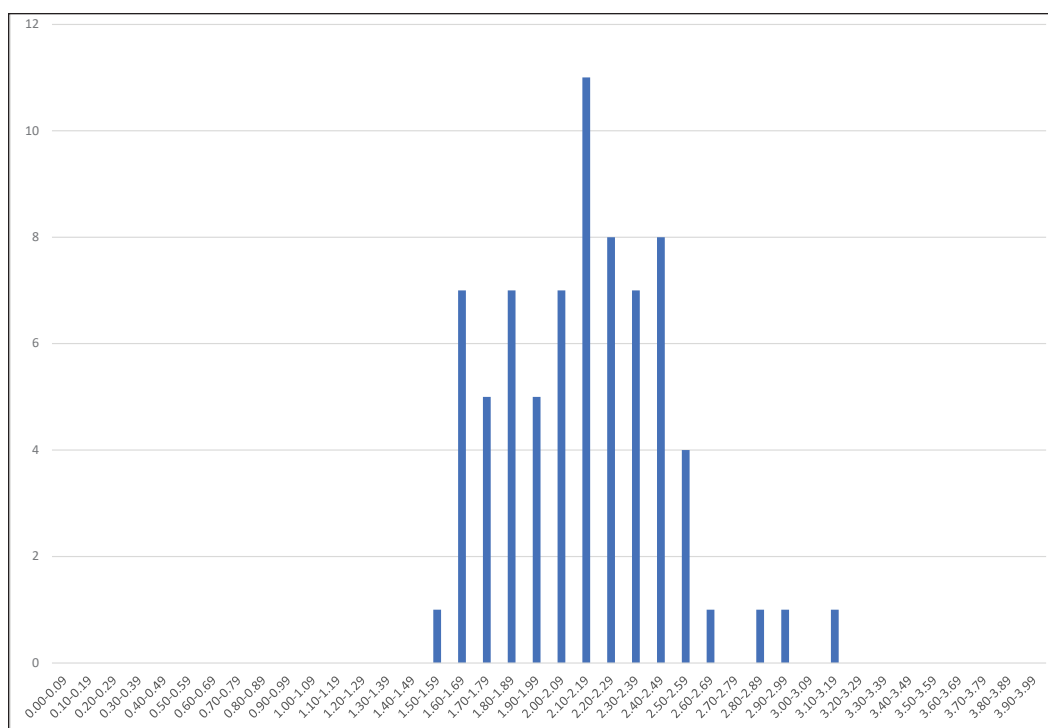


Table 3: Aleppo Type 595 (74 Weights)

595A (2.17 grams). Type 595B has two known weights (2.02 and 2.10 grams.) It is only with Type 595 that there is a sample size large enough to be plotted (seventy-four coins from 1.50 to 3.126 grams). This metrological evidence is presented in Table 3.

All weights fall between 1.50 and 3.20 grams. All but four of these coins, however, are lighter than 2.60 grams. That narrow range, plus the high peak occurring in the interval between 2.10 and 2.19 grams, may indicate that a possible weight standard of a half-*mithqāl* was in use. It is worth remembering that Type 595 is undated and that the SNAT Aleppo sylloge attributed it to the second reign. Given the overlapping weight ranges of Tables 2 (first reign) and 3 (attributed to the second reign), this may be a case where the metrological evidence of Type 595 suggests that a possible reattribution of this type to the first reign should at the very least be explored further. Whatever the case, other than the scanty evidence of Type 592, where one coin weighs 4.68 grams, the numismatic evidence from Aleppo indicates no movement toward heavier *fulūs* in either of Barqūq's reigns.



NO MINT OR MINT MISSING

There are seven types in this category. While these types lack mints—being either undated or having no known specimen on which a mint name is present or legible—there is general consensus that they come from the Syrian mints since they bear no resemblance at all to Barqūq’s Egyptian *fulūs*. In the first reign, Type 562A is represented by one coin weighing 2.25 grams. For the second reign, Type 608 has 13 coins ranging from 1.301 to 2.92 grams. Type 609 has six coins ranging from 1.41 to 2.867 grams. Type 610 has three coins ranging from 1.337 to 2.63 grams. Type 611 has only one coin, weighing 1.6 grams. Type 612 has thirty-two coins, ranging from 0.908 to 2.981 grams. It is perhaps significant that these coins all weigh less than 3.00 grams. While these small data sets make wider generalization unfounded, I include this data on the chance that future specimens may make possible a more precise attribution of these types.

CONCLUSION

While the evidence gathered here does not allow for definitive conclusions about the metrology of Barqūq’s Syrian *fulūs*, it nevertheless has value. This numismatic evidence suggests variance in metrological practice across the four mints, which may mean that there was no standard approach to the production of *fulūs* across Mamluk *Bilād al-Shām*. For example, Table 1 clearly shows that Damascus types 590 and 591, dated 798 and 799 respectively, were heavier than what is observed in the six types from the first reign. A majority of the specimens of Damascene Types 561 and 562 (also from the second reign) are also heavier than the first-reign types. A move to heavier copper coins suggests that a transition toward the Egyptian situation, where heavier copper coins were worth more than lighter ones, may have occurred.

This movement toward heavier *fulūs* is also suggested by the evidence from Ḥamāh, where the weight ranges for second-reign types—with the exception of Type 599—are heavier than those from the first. The scanty evidence from Tripoli, unfortunately, is an excellent example of how little we know about some aspects of Mamluk numismatics. The metrological data of the *fulūs* described as mint missing or no mint will only become useful if these coins are eventually attributed to known mints. The metrology of the surviving Aleppan *fulūs*, meanwhile, is inconclusive. Unlike the other Syrian mints, the overwhelming majority of specimens of all known types weigh below three grams regardless of where those types fall on the chronological spectrum. Thus far I have located only one known *fals* from Aleppo that weighs more than 3.00 grams.¹⁷ In addition, most coins from frequency Tables 2 (first-reign Types 564–565) and 3 (second-reign

¹⁷This coin, an example of Type 592 (second reign), weighs 4.68 grams.



Type 595) fall in ranges from less than 2.70 grams. If additional evidence were to reinforce these trends it might indicate that Barqūq's Aleppan *fulūs* remained lighter in weight as possibly based upon a standard near the half-*mithqāl* unit. At this point, however, this remains speculation.

This study also reinforces the great need for more numismatic evidence to be found and brought to bear on the study of Syrian *fulūs* of Sultan Barqūq as well on as the wider "age of copper" debate. The publication of coins from archaeological excavations will continue to bring more specimens to light, especially if hoards are found. In the meantime, a thorough harvesting of information scattered across already published archaeological field studies will certainly add to the corpus of evidence. In addition, there is other evidence in some institutions that would benefit from additional attention. Both of the two large copper hoards in the American Numismatic Society (the 1935 Antioch and the 1954 hoards mentioned by Balog) are good examples of this. While they have already provided valuable metrological data for this study, I know from my own experience working with them that additional information can be gleaned. A final example of known material in need of further study is the more than 200 kilograms of Mamluk *fulūs* from what is known as the Megadim hoard, recovered decades ago from a shipwreck south of Haifa, Israel. The majority of these coins survive in large, concreted blocks preserved by the Israel Antiquities Authority. While the hoard is unpublished, several years ago Mr. Ariel Berman informed me that he identified at least forty-three examples of Barqūq's *fulūs* amongst the loose material, specifically Types 558, 559, and 562 from Damascus; Types 564, 592, and 593 from Aleppo; Types 596, 600, and 905 from Ḥamāh; Type 603 from Tripoli; and Types 608 and 612 from the mint-missing or no mint category.¹⁸ There is clearly more work to do.

APPENDIX: SYRIAN *FULŪS* OF THE MAMLUK SULTAN BARQŪQ

There are three components of this appendix which require further contextualization. The first is the basic organizational scheme. As mentioned, the building block of Balog's catalogue of Mamluk coinage was the type, a unique combination of mint, metal, sultan, date, and design. Balog arranged those types according to a schema based on the descriptive categories of epigraphic and heraldic. In current numismatic practice, it is much more common to list types in chronological mint series, regardless of appearance. Thus, this list of coin types has mint of origin as the first category, followed by the known or suspected chronological order of each type. Types identified by Balog have been supple-

¹⁸I am indebted to Mr. Berman for this information.



mented and in some cases corrected based on subsequent studies.¹⁹ The second component is that I have not included extensive descriptions of coins' appearances. These descriptions are readily available in the major catalogues and sylloges listed in the notes. Third, it needs be clarified that in some cases the lists of coins following each type may include duplications. This is most commonly encountered when Balog listed his own coins in his catalogue and then the same coins appear attributed to the Israel Museum, to which Balog donated his coins. In these cases, I favored the Israel Museum data. Similarly, some later sources provide updated weight information which I take to supersede the weights provided by Balog. To avoid the possibility of double-counting coins, I have excluded these CMSES coins from the weight total listed after the type number and indicated that by striking through this weight value. The weight that then replaces it in subsequent calculations is underlined. This practice is followed throughout the remainder of this appendix.

In addition, the abbreviations and *sigla* used to identify the publications or collections from which this data derived need additional explanation. This information is presented in three lists.

The first list provides relevant abbreviations used by Balog in his CMSES.

ANS	American Numismatic Society, general collection
Antioch hoard	A large copper hoard acquired by the ANS in 1935
Ashmol.	Ashmolean Museum, Oxford
Balog	Balog's hitherto unpublished coins from his collection, appearing for the first time in CMSES
Berman	By this I speculate Balog meant the personal collection of Ariel Berman, but Balog did not include his name in his list of those whose collections he studied.
Blau	O. Blau, <i>Die Orientalischen Mŭnzen der K. Historisch-Archaeologisch Gesellschaft zu Odessa</i> , Odessa, 1876
BMC	Stanley Lane-Poole, <i>Catalogue of Oriental Coins in the British Museum</i> , v. IV, <i>The Coinage of Egypt</i> , London, 1879; and v. IX,

¹⁹Yet more comments are in order. I first started collecting this metrological data in the early 1990s and have continued to do so to the present. It is possible that additional coins have been added to some of these institutional collections since I last visited them and thus are not reflected here. At all the institutional collections visited I promised curators that I would use only the metrological data from their coins. I have held to that promise. Nor have I included data derived from some smaller institutional collections for which my access approval has expired. I have chosen not to include data from unpublished private collections, nor the Mamluk coins found at the Zeno.ru oriental numismatic database. Given the small sample size for the majority of the types found in this appendix, I may revisit both decisions in future studies.



	<i>Additions to the Oriental Collection, 1876–1888, Pt. I, Additions to vols. I-IV, London, 1889</i>
BM	British Museum, unpublished coins
Fraehn	<i>Recensio numorum muhammedanorum Academiae Imp. Scienti. Petropolitanae, Petropoli, 1855</i>
Jungfleisch	Marcel Jungfleisch collection, Cairo, dispersed prior to the publication of Balog's catalogue
Khedivial	Stanley Lane-Poole, <i>Catalogue of the Collection of Arabic Coins Preserved in the Khedivial Library in Cairo, 1897</i>
L	Henri Lavoix, <i>Catalogue des Monnaies Musulmanes de la Bibliothèque nationale: Égypte et Syrie, Paris, 1896</i>
Mayer SH	Mayer, L. A. <i>Saracenic Heraldry, Oxford, 1933</i>
Miles Antioch	George C. Miles, "Islamic Coins," in Frederick O. Waagé, ed., <i>Antioch-on-the-Orontes IV, Part One: Ceramics and Islamic Coins, Princeton, 1948</i>
München	Staatliche Münzsammlung, München
Thorburn	Phillip Thorburn collection, some of which later ended up in the Ashmolean collection
Welzl v.	
Wellenheim	<i>Verzeichnis der Münz- und Medaillensammlung, II, Pt. 2, Wien, 1845</i>

This second list identifies the sources of coins that appeared after the publication of Balog's CMSES and supplement.

A&C	Coins from Balog's " <i>The Coinage of the Mamluk Sultans: Additions and Corrections,</i> " <i>American Numismatic Society Museum Notes</i> 16 (1970): 113–71
ANS 1954:	Coins from this large hoard were not incorporated by Balog. The ANS accession numbers for these coins are 1954.176.1 to 1313. Only the digits after the second decimal point are listed below. Not all the coins attributed to this accession number had weights recorded in the ANS database at the time of my examination.
ANS Antioch	This replaces Balog's "Antioch hoard" in the list above. More weights are known from this hoard than those cited in CMSES. The ANS accession numbers for these coins are 1935.36.21 to 801. Only the digits after the second decimal point are listed below.
ARCE	Norman D. Nicol, Raafat el-Nabarawy, and Jere Bacharach, <i>Catalog of the Islamic Coins, Glass Weights, Dies and Medals in the</i>



	<i>Egyptian National Library, Cairo, Malibu, 1982. This publication supersedes the Khedivial catalogue listed above.</i>
Awad	Coins from the Awad collection, Cairo, now dispersed. See Jere L. Bacharach, “Coins” in <i>Fustat Finds: Beads, Coins, Medical Instruments, Textiles, and Other Artifacts from the Awad Collection</i> , Cairo, 2002 (pp. 44–87)
IM	Israel Museum. These coins were donated by Balog to the museum after the publication of CMSES. There are more coins in the museum than were mentioned in CMSES. A sylloge of these and other Syrian coins is forthcoming.
FINT	Coins from the collection of the Forschungstelle für Islamische Numismatik, Tübingen which have not yet appeared in a sylloge volume
Fitzwilliam	Fitzwilliam Museum, Cambridge
IAA Nizanim	“Nizanim (Coin Hoard),” <i>Hadashot Archeologiyot</i> 50 (1974): 15
JNB	Collection of the Jordan National Bank Numismatic Museum, Amman, Jordan. These coins did not have accession numbers at the time of my examination.
Mayer 1976	Ariel Berman’s catalog, <i>Islamic Coins: Exhibition Winter 1976</i> , Jerusalem, 1976
MB	Frédéric Bauden, <i>Catalogue des Monnaies Islamiques du Musée Bottacin</i> , [France], 2011
PAM	Coins from the Palestine Archaeological Museum in the Israel Antiquities Authority
PAM uncat.	Coins from PAM without registration numbers at the time of my research visit
PUL Antioch	Antioch excavation coins preserved in the Princeton University Library ²⁰
SICA 6	Norman D. Nicol, <i>The Egyptian Dynasties: Sylloge of Islamic Coins in the Ashmolean (SICA)</i> , vol. 6, Oxford, 2007
SNAT Ḥamāh	Lorenz Korn, <i>Bilād aš-Šām III Ḥamāh</i> , vol. IVc, <i>Sylloge Numorum Arabicorum Tübingen</i> , Berlin, 1998
SNAT Aleppo	Alaa Aldin Al Chomari, <i>Sylloge Numorum Arabicorum Tübingen</i> , vol. IVE2: <i>Bilād aš-Šām V, Die Münzstätte Aleppo in Mamlūkischer und Osmanischer Zeit (ca. 1260–1760)</i> , Berlin, 2021

Finally, the third list contains other abbreviations encountered in the appendix.

CMSES	Balog’s 1964 corpus
-------	---------------------

²⁰Searchable at Mamluk/Format: Coin—Princeton University Library Catalog Search Results https://catalog.princeton.edu/?f%5Bformat%5D%5B%5D=Coin&q=Mamluk&search_field=all_fields.



DM	Date missing, meaning illegible or off flan ²¹
MM	Mint missing, meaning illegible or off flan
ND	No date
NM	No mint
NWP	No weight provided. This is used when Balog or others did not provide a weight value for a coin.

DAMASCUS

Barqūq's First Reign:

Type 558. 784 H (14 weights of coins found)²²

Balog listed nine coins: L 968 **1.79**; Balog **2.02**; ANS ~~2.17~~, **2.11**, **1.88**, **2.06**, **1.26**, **2.07**, **2.05**
 ANS: 1002.1.1996, **2.68**; 1917.215.2509, **2.713**
 ANS Antioch: 1935.36.403, **2.341**
 FINT: CH7 A5, **2.43**
 IM: 8485, **2.39**
 PAM: 56765, **2.57**

Type 559. 786 H (9 weights)

Balog listed two coins: ANS **3.19**; Balog NWP
 ANS Antioch: 1935.36.388, **2.467**; 419, **1.982**
 FINT: CH7 A6, **3.31**
 IM: 8486, **2.38**
 JNB: **3.20**, **2.61**, **1.77**
 SICA 6: 8486, **2.38**

Type 560. 787 H (4 weights)

Balog listed one coin: ANS ~~2.58~~
 ANS: 0000.999.16278, **2.559**; 1919.256.5, **2.58**
 BM: 1967-12-19-5, **1.36**
 FINT: CH7 B1, **1.85**

²¹It is an unfortunate reality that Mamluk dies are always larger than the blank metal flans they strike. For many Mamluk coin types, mint and date information was often located in the marginal legends of the die, and these margins may transfer to the coin partially or not at all.

²²This initial number is that assigned to this type by Balog in CMSES. Types which have a capital letter after the last digit are from Balog's 1970 supplement. Additional information includes date and mint when possible. The bolded numbers following the *sigla* for each source give the weight of each coin, while the numbers in regular font reflect the internal cataloguing information—if any—of the collection of origin.



Type A&C 560A. 786–87 H (1 weight)

Balog listed one coin: Berman **1.85**

Type 561. 790 H (8 weights)

Balog listed five coins: L 963 **2.37**; Khedivial 1551 NWP; ANS **2.58**; two in Ashmolean NWP

ANS: 0000.999.16279, **2.464**; 0000.999.16280, **2.054**

ARCE: 2862, **2.08** (This is the same coin as Khedivial 1551 listed by Balog without a weight value.)

FINT: CH7 B2, **1.99**

Mayer 1976: 287, **2.38**

SICA 6: 1373, **2.35**

Type 562

This type has been moved to the second reign due to overstrike evidence.²³

Barqūq's Second Reign:

Type 562. 79x H (15 weights)

Balog listed seven coins: L 964 **3.05**, L 965 **2.82**; Blau NWP; BM 8-5-1936 NWP; Thorburn NWP; Balog two coins NWP

ANS: 1938.11.28, **2.492**

ANS Antioch: 1935.36.502, **3.166**

Awad: **2.62**, **2.93**

BM: 76-2-3-20, **2.39**; 1936-8-5-28, **3.02**

FINT: CH7 B5, **3.08**; CH7 C1, **2.54**

Fitzwilliam: 1114, **2.64**

IM: 8487, **3.09**; 8503, **2.94**

MB: 295, **2.963**

SICA 6: 1374, **2.33**

Type 588. 796 H (19 weights)

Balog listed eleven coins: BMC 636 NWP; L 959 **4.0**, L 960 **2.96**, L 961 **2.64**, L 962 **3.54**; ANS two specimens, **2.68**, **2.71**; Balog ~~**2.50**~~, ~~**2.82**~~, two NWP

ANS: 1949.163.902, **1.931**; 1977.274.118, **2.868**

BMC 636, **3.03**

IM: 8485, **2.39**; 8446, **2.84**; 8447, **2.29**; 8524, **2.49**; 8525, **3.03**

FINT: CH7 E3, **3.76**

JNB: **2.37**, **3.00**, **2.37**

²³As mentioned above, this reattribution is found in Ilisch, "Beiträge zur mamlukischen Numismatik," 5–10.



SICA 6: 1383, **3.20**

Type 589. 797 H (6 weights)

Balog listed one coin: Balog ~~3.15~~

ARCE 2863: **2.20**

FINT: CH7 E5, **2.62**

IAA Nizanim: 10095, **3.54**

IM: 8448, 3.17; 8526, **3.53**

JNB: **3.73**

Types 588–589. As above but partial or missing dates (2 weights)

ANS: 1949.163.902, **1.931**; 1977.274.118, **2.868**

Type 590. 798 H (38 weights)

Balog listed seven coins: Miles *Antioch* 192 NWP; ANS ~~4.46~~; München NWP; Thorburn NWP; Balog ~~4.20~~, **4.58**, NWP

ANS: 0000.999.16282, **4.097**; 0000.999.16283, 4.459

ANS 1954: 1954.176.851–886, **4.70**, **4.69**, **3.87**, **4.45**, **4.27**, **4.36**, **4.40**, **3.83**, **3.71**, **3.60**, **4.47**, **4.18**, **4.75**, **5.69**²⁴

Awad: **4.58**

BM: 1936-8-5-32, **4.48**

FINT: CH7 F1, **3.98**

IAA Nizanim: 10096, **5.12**; 10145, **3.78**

IM: 8527, **4.56**; 8528, 4.23; 8529, **4.23**; 8530, **4.96**; 8531, **4.68**; 8532, **4.54**; 8533, **4.42**; 8534, **4.26**; 8535, **4.53**

JNB: **4.00**, **4.77**, **3.98**

PAM uncat.: **3.98**, **4.45**

PUL Antioch: 10313, **4.75**; 10318, **4.15**

Type 591. 799 H (43 weights)

Balog listed sixteen coins: BMC 633 NWP, 644 NWP; Welzl v. Wellenheim 12386 NWP; ANS **4.92**, **4.23**; Miles *Antioch* 193 NWP; Ashmolean NWP; Thorburn NWP; Balog eight coins, **3.37**, ~~4.75~~, ~~4.13~~, ~~4.60~~, ~~4.35~~, **5.07**, ~~5.17~~, ~~4.67~~

ANS: 1954.130.38, **4.23**; 1954.139.3, **4.92**

ANS 1954: 1954.176.848, **4.85**; 1954.176.849, **3.27**

Awad: **4.70**

BM: 79-7-9-61, **4.00**

BMC 634, **4.67**

FINT: CH7 F3, **6.38**

²⁴Only fourteen of these thirty-five specimens had their weight provided in the ANS database. This is an example of the problem mentioned in note 11 above.



IM: 8536-8547: **4.58**, **4.57**, **4.66**, **4.34**, **5.90**, **5.18**, **4.76**, **4.14**, **4.37**, **4.15**, **3.89**,
4.05

JNB: **4.06**, **3.81**, **3.32**

PAM: 56849, **4.06**

PAM uncat.: **4.93**, **3.53**, **3.57**, **5.07**, **4.46**, **5.11**, **3.65**, **4.04**, **4.99**, **4.69**, **4.62**,
4.45

PUL Antioch: 10309, **4.48**; 10311, **4.81**

SICA 6: 1384, **5.31**

Types 590–591. As above but partial or missing dates (18 weights)

ANS: 0000.999.16284, **4.10**

ANS 1954: 1954.176.864-873: **4.04**, **4.18**, **3.63**, **4.14**, **3.35**, **4.69**, **4.39**, **3.96**,
3.89, **3.55**

BM: 1984-1-18-7, **4.16**; 1949-8-3-425, **4.23**

BMC: 633, **3.84**

IM: 8548, **3.66**; 8549, **4.47**; 8550, **4.57**

PAM uncat.: **4.21**

ḤAMĀH

Barqūq's First Reign:

Balog did not list any types for Barqūq's first reign. Several types were subsequently attributed to the first reign after the publication of CMSES.

Type 600. ND (24 weights)

Balog listed this type in Barqūq's second reign. SNAT Ḥamāh attributed it to the first reign.

Balog listed four coins: Fraehn NWP; three Balog NWP

ANS Antioch: 1935.36.242-250: **1.951**, **1.412**, **2.468**, **1.976**, **1.800**, **2.537**,
1.875, **1.601**, **1.781**

BM: 1967-12-19-8, **1.66**

Fitzwilliam: 1113, **1.17**

IM: 8572, **2.39**; 8573, **1.36**; 8574, **1.98**; 8575, **1.52**

JNB: **1.38**, **2.44**, **1.80**

SICA 6: 1382, **2.34**

SNAT Ḥamāh: 646, **1.98**; 647, **2.89**; 648, **1.65**; 649, **1.83**; 650, **2.20**

Type 601. ND (13 weights)

Balog listed this type in Barqūq's second reign. SNAT Ḥamāh attributed it to the first reign.

Balog listed seven coins: ANS **2.60**; six from 1935 ANS Antioch hoard NWP



ANS Antioch: 1935.36.298-304: **2.369, 2.376, 1.949, 1.730, 1.907, 1.988, 1.444**

JNB: **2.09**

SNAT Ḥamāh: 651, **2.26**; 652, **2.09**; 653, **1.75**; 654, **1.91**

Type 607. ND (6 weights)

Balog listed this type in Barqūq's second reign. SNAT Ḥamāh attributed it to the first reign.

Balog listed one coin: München **1.85**

SNAT Ḥamāh: 655, **1.38**; 656, **1.77**; 657, **1.44**; 658, **1.55**; 659, **1.59**

Barqūq's Second Reign:

Type 905. ND (7 weights)

Balog did not link this anonymous type to any sultan. SNAT Ḥamāh attributed this type to Barqūq, probably 792 H.

Balog listed two coins: Mayer SH plate XX, no. 6 NWP; Balog NWP

IM: 9056, **1.53**

SNAT Ḥamāh: 661, **2.34**; 662, **2.01**; 663, **1.54**; 664, **0.99**; 665, **3.07**; 666, **1.91**

Type 597. ND (17 weights)

SNAT Ḥamāh attributed this type to the second reign.

Balog listed five coins: Balog ~~4.52~~, **4.02, 4.36**, NWP; Miles *Antioch* 189

IM: 8565, **4.82**; 8566, **3.72**; 8567, **4.06**; 8568, **4.54**; 8569, **4.83**; 8570, **4.46**

PUL Antioch: 8751, **3.26**; 8753, **3.80**; 8753, **4.33**; 8754, **4.67**

SNAT Ḥamāh: 671, **4.68**; 672, **5.58**; 673, **3.22**; 674, **4.47**; 675, **3.50**

Type 598. ND (1 weight)

Balog listed one coin: Balog ~~3.40~~

IM: 8571, **3.43**

Type 599. ND (9 weights)

SNAT Ḥamāh attributed this type to the second reign.

Balog listed four coins: ANS **0.90**; three from 1935 ANS Antioch hoard NWP

ANS: 0000.999.34153, **1.255**

ANS Antioch: 1935.36.485-487: **1.944, 1.619, 1.997**

SNAT Ḥamāh: 667, **2.09**; 668, **1.73**; 669, **1.46**; 670, **1.62**

An undated type of a style not found in Balog (3 weights)

SNAT Ḥamāh attributed this type to the second reign.

SNAT Ḥamāh: 676, **3.32**; 677, **3.35**; 678, **3.45**



Type 596. 799 H (24 weights)

Balog listed ten coins: BM 8-5-1936 NWP; Ashmolean NWP; Thorburn NWP; Balog seven specimens **5.13**, **4.58**, **4.30**, **4.51**, **3.13**, **5.08**, **4.20**
ANS 1954: 1954.176.845, **4.17**; 1954.176.846, **4.50**; 1954.176.847, **5.02**; 1954.176.892, **3.98**
BM: 1936-8-5-33, **4.74**; 1957-9-7-12, **3.35**; OR 2497, **3.69**; 1957-9-7-13, **4.23**; OR 2498, **2.43**
IM: 8558, **4.61**; 8559, **5.17**; 8560, **4.55**; 8561, **4.31**; 8562, **3.16**; 8563, **5.11**; 8564, **4.21**
JNB: **4.25**
MB: 290, **2.136**
PUL Antioch: 10308, **4.37**; 10319: **4.08**
SNAT Ḥamāh: 679, **3.78**; 680, **2.42**; 681, **5.11**; 682, **2.98**

TRIPOLI

Type 602 is the only one from this mint to be linked to a specific date. It falls in the second reign.

Type 602. 798 H (2 weights)

Balog listed this date as 789 but this was corrected to 798 in A&C
Balog listed one coin: Balog **6.23**
FINT: CH8 C4, **5.086**
IM: 8576, **6.23**

Type 603. ND (7 weights)

Balog listed two coins: L 969 **1.79**; BMC 321 NWP
ANS: 0000.999.16295, **1.759**; 1917.216.2570, **2.249**
BM: 79-7-9-63, **2.64**
BMC: 321, **2.76**
FINT: CH8 C6, **2.182**
JNB: **2.14**

Type 604. DM or ND (1 weight)

Balog listed one coin: Ashmolean NWP
SICA 6: 1385, **2.16**

Type 605. ND (3 weights)

Balog listed two coins: two Balog NWP.
IM: 8577, **2.11**; 8578, **1.81**; 8579, **1.42**

Type A&C 605A (3 weights)

Balog listed one coin: Balog **1.39**



ANS Antioch: 1935.36.421: **2.007**

FINT: CH6 D4, **1.948**

Type 606. ND (1 weight)

Balog listed one coin: ANS NWP

FINT: CH8 D6, **2.953**

ALEPPO

Barqūq's First Reign:

Type 593. ND (17 weights)

SNAT Aleppo attributed this type to around 784 H.

Balog listed four coins: L 967 **1.78**; Jungfleisch **1.78**; Balog **2.15**, **2.20**

ANS: 1977.274.117, **1.887**

ANS Antioch: 1935.36.377, **2.221**

Awad: **1.74**

BM: OR 2495, **1.78**

IM: 8522, **2.03**; 8553, **1.85**; 8554, **2.16**

JNB: **1.88**

SNAT Aleppo: 350, **2.32**; 351, **1.99**; 352, **2.64**; 353, **1.80**; 354, **1.61**

Additional specimen from excavation at Ramla: **1.86**²⁵

Type 563. [78]6²⁶ (1 weight)

Balog listed one coin: Balog **3.52**

Type 564. 788 H (12 weights)

Balog listed four coins: BMC 322 NWP “erroneously listed under al-Zāhir Ghāzī”; .958 **1.91**; Miles Antioch 191 NWP; Balog **2.45**.

ANS: 0000.999.11446, **2.20**

BM: 65-1-5, **2.10**

BMC: 322, **2.17**

IM: 9489, **2.58**; 8490, **2.45**

PAM: 56766, **1.43**

SNAT Aleppo: 355, **2.78**; 356, **2.40**; 357, **2.41**; 358, **2.40**; 359, **1.85**

Type 565. 789 H (2 weights)

Balog listed one coin: ANS **2.18**

ANS: 1962.58.4, **1.976**; 1917.215.1891, **2.18**

²⁵This is coin number 24 in Robert Kool and Ariel Berman, “Coins from the Mamluk and Ottoman Period at Ramla,” *Atiqot* 67 (2011): 55–60.

²⁶The brackets indicate that the first two digits are not on this specimen but must be what they are due to other factors.



Types 564–565. As above but partial or missing dates (153 weights)ANS: 1002.1.1386, **2.476**; 1949.163.464, **2.689**

ANS Antioch: 1935.36.21–177: **2.220, 1.422, 1.929, 1.911, 1.851, 2.060, 2.217, 2.332, 1.892, 1.710, 2.234, 1.948, 2.105, 2.679, 1.908, 2.306, 1.818, 2.259, 1.878, 2.083, 2.120, 2.060, 2.611, 1.930, 2.024, 2.161, 2.406, 1.241, 1.878, 2.278, 1.919, 2.190, 1.894, 2.801, 2.344, 1.884, 2.613, 1.905, 2.380, 2.383, 1.803, 1.960, 1.757, 2.388, 1.898, 1.793, 2.064, 2.167, 2.434, 1.982, 2.158, 1.572, 1.344, 2.461, 1.820, 1.508, 2.090, 2.542, 1.794, 2.417, 2.476, 1.924, 2.524, 2.787, 1.688, 2.323, 2.113, 1.967, 2.462, 1.617, 2.127, 2.120, 1.382, 2.562, 1.702, 2.408, 2.375, 2.870, 2.008, 2.273, 1.630, 2.695, 2.515, 2.838, 1.843, 2.399, 2.578, 1.921, 2.505, 2.349, 2.440, 2.789, 2.144, 2.247, 2.560, 1.773, 1.870, 3.410, 2.539, 1.833, 1.858, 2.343, 1.855, 1.813, 2.090, 1.491, 1.627, 2.425, 2.131, 1.739, 2.613, 1.756, 1.959, 2.319, 2.389, 2.247, 2.215, 2.143, 1.813, 2.588, 2.200, 2.264, 1.651, 2.303, 2.531, 1.765, 2.343, 1.909, 2.374, 2.641, 2.115, 2.093, 2.375, 1.889, 2.577, 2.913, 2.200, 1.457, 1.764, 1.949, 2.121, 2.086, 1.776, 2.265, 1.744, 1.747, 2.098, 2.451, 2.199, 2.478, 1.976, 1.280** (Five coins from this span are not included: four (numbers 25, 107, 108, and 135) due to their being cut in half and one (number 63) due to a possible data entry error. Thus, there are 152 weight measurements from this hoard.

*Barqūq's Second Reign:*Type 592. DM (3 weights)Balog listed one coin: Balog **4.68**.IM: 8523, **2.18**; 8551, **4.68**; 8552, **2.93**Type A&C 592A. MM (12 weights)

Balog attributed this type to Aleppo.

Balog listed one coin: Balog **2.20**

ANS: 1959.115.2, **1.749**; 1973.277.3, **2.367**; 1973.227.4, **2.146**; 1973.227.5, **2.11**; 1917.215.1892, **2.053**; 1917.215.1893, **2.068**; 1917.215.1894, **1.879**; 1917.215.1895, **1.259**; 1917-2-5.896, **2.064**; 1949.163.465, **2.172**; 1959.165.317, **1.694**

Type 594. ND (1 weight)Balog listed one coin: Miles *Antioch* 190 NWP.Type 595. ND (72 weights)

The type attributed to the second reign by SNAT Aleppo.



Balog listed fifty-nine coins: BM TR Stewart 1946 NWP, Sir R Burn 1949 8-3-421 NWP; ANS ~~2.42~~, ~~2.13~~; Antioch hoard 53 coins NWP; Balog two coins

ANS: 1976.109.139, **1.942**; 0000.999.11447, **2.13**; 1917.215.1897, **2.558**; 1940.152.3, **2.43**

ANS Antioch: 1935.36.178–231: **2.457, 2.516, 2.405, 2.131, 2.254, 2.005, 1.654, 1.804, 2.541, 1.648, 2.230, 2.365, 2.104, 1.670, 2.129, 2.179, 1.665, 2.050, 1.822, 1.711, 2.072, 2.207, 1.786, 2.103, 2.203, 1.707, 1.976, 2.029, 1.629, 2.313, 2.234, 2.692, 2.486, 2.345, 2.012, 2.319, 3.126, 1.821, 2.101, 1.898, 2.271, 2.123, 1.619, 2.457, 1.855, 1.920, 2.853, 1.899, 2.459, 2.423, 2.457, 1.780, 2.388** (One coin, number 200, is left out since it was cut in half. Thus, there are 53 weight measurements from this hoard.)

Awad: **1.89**

BM: OR 2496, **1.70**; 65-1-6, **2.13**; 1949-8-3-424, **2.34**; OR 2500, **2.94**

IM: 8555, **2.15**; 8556, **2.17**; 8557, **1.60**

JNB: **2.07, 2.55**

Mayer 1976: 290, **1.50**

SNAT Aleppo: 436, **2.32**; 437, **2.28**; 438, **2.21**; 439, **2.03**; 440, **1.94**; 441, **1.92**

SNAT Aleppo lists one undated type not found in Balog (1 weight)

SNAT Aleppo: 443, **2.70**

Type A&C 595A. 79 (1 weight)²⁷

Balog listed one coin: Balog **2.17**

Type A&C 595B. ND (2 weights)

Balog listed one coin: Berman **2.10**

MB: 294, **2.02**

NO MINT OR MINT MISSING

Barqūq's First Reign:

Type A&C 562A. NM, ND (1 weight)

Balog listed one coin: Berman **2.25**

Type 607. MM, ND

Balog attributed this type to MM, but SNAT Ḥamāh moved it to Ḥamāh, first reign, where all specimens are now listed.

²⁷The dash indicates that the year digit is not visible on the coin.



Barqūq's Second Reign:

Type 608. NM, ND (13 weights)

Balog listed eleven coins: ten from ANS Antioch hoard NWP; one Balog NWP

ANS Antioch: 1935.36.232–241: **1.579, 1.983, 1.301, 1.606, 1.237, 2.121, 1.375, 1.414, 1.209, 1.841**

FINT: CH8 E2, **1.337**

IM: 8580, **2.92**

SICA 6 1390, **1.89**

Type 609. NM, ND (6 weights)

Balog listed nine coins: ANS **1.89**; eight from the ANS Antioch hoard with only one weight given, **1.84**

Awad: **1.41**

FINT: CH8 E4, **1.670**

JNB: **1.95**

MB: 291, **2.867**

Type 610. NM, ND (3 weights)

Balog listed two coins: one from ANS Antioch hoard NWP; München **1.61**

FINT: CH8 E6, **1.337**

JNB: **2.63**

Type 611. NM, ND (1 weight)

Balog listed one coin: München **1.61**

Type 612. NM, ND (32 weights)

Balog listed seventeen coins: sixteen from ANS Antioch hoard NWP; Balog NWP.

ANS Antioch: 1935.36.259–290: **2.098, 0.908, 2.981, 1.907, 1.691, 1.711, 1.076, 1.652, 1.392, 1.345, 2.044, 1.460, 1.292, 1.574, 1.047, 2.118, 1.716, 2.445, 1.565, 1.964, 1.287, 2.047, 2.181, 1.523, 1.623, 1.534, 1.508, 2.150, 1.919** (This list does not include the weights of coins 275, 276, and 282, which were all altered after minting. Thus there are only 29 weights included and not 32.)

FINT: CH8 F1, **1.413**

IM: 8581, **2.72**

Mayer 1976: 291, **1.95**

