Daryoosh Akbarzadeh – Nikolaus Schindel

SYLLOGE NUMMORUM SASANIDARUM IRAN

A late Sasanian Hoard from Orumiyeh



ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN

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SYLLOGE NUMMORUM SASANIDARUM

Herausgegeben von

Michael Alram und Rika Gyselen



DARYOOSH AKBARZADEH - NIKOLAUS SCHINDEL

Sylloge Nummorum Sasanidarum Iran

A late Sasanian Hoard from Orumiyeh



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EDITORS' FOREWORD

The present volume presents for the first time within the SNS series a complete coin hoard. It was found in 2007 in the Piran-Shahr region in North-Western Iran, and ranks among the largest and most important hoards ever found on the territory of the Islamic Republic of Iran. Containing altogether 1267 drachms, it provides interesting insights not only into the monetary system of the Late Sasanian period, but also into its economic history.

The publication of this hoard was made possible through the cooperation between the Austrian Academy of Sciences and the Iran Cultural Heritage, Handcrafts and Tourism Organization (ICHTO). It is to be hoped that this successful collaboration will stimulate further joint projects on Iranian numismatics in the near future.

Daryoosh Akbarzadeh would especially like to thank Ms. Afsaneh Ranjbar for photographing the coins, as well as to Mr. Ghorbani (Head of ICHTO Azarbayjan Province) and Ms. N. Rezaee (Curator of Orumiyeh Museum). His special thanks go to Mr. Mahdi Asgari, Mr. Ahmadi Sharif, Mrs. Soraya Sheerafkan, Mr. Farhang Abedi, Mr. Sh. Saberi and Ms. Zehtab (National Museum of Iran), as well as Dr. K. Shadmihr. He would like to sincerely thank Prof. K. Ahmadi (Materials and Research Centre) who kindly conducted XRF analyses. He furthermore appreciates the work of Mrs. Raheleh Allaverdi (Computer Department, Qazvin Univ.), who generously prepared charts. Finally, thanks to Carlo Cereti for kind discussion and support, to Robert Schaaf for help with the English text, and Wolfgang Szaivert for arranging the plates.

Michael Alram, Rika Gyselen

Wien - Paris, Winter 2017



1. THE ORUMIYEH HOARD IN CONTEXT

OVERVIEW

We start with an overview of the content of the hoard, giving the rulers attested, in chronological order (*tab. I*).

Tab. 1. Kings

King	No. of specimens
Khusro I	95
Ohrmazd IV	203
Khusro II / 1st reign	1
Khusro II / 2 nd reign	963
Ohrmazd VI	3
Azarmigdukht	1
Khusro II / posthumous	1

Next, we present the attested mints, in alphabetical order (tab. 2).

Tab. 2. Mints

Signature	Localization	No. of specimens
AHM	Ahmadan, Media	32
AL	?	2
ALM	Armenia (?)	2
AM	Amul, Tabaristan (?)	13
APL	Abarshahr, Khorasan	4
ART	Ardashir-khwarrah, Fars	46
AS	Asuristan	2
AT	Adurbadagan	23
AW	Ohrmazd-Ardashir, Khuzistan	52
AY	Eran-khwarrah-Shapur, Khuzistan	114
AYL	?	8
AYLAN	?	18
BBA	Mobile mint	14
BHL	Balkh, Khorasan	2
BN	?, Kirman	14
BYŠ	Bishapur, Fars	109
DA	Darabgird, Fars	63

Signature	Localization	No. of specimens
GD	Jay, Media	64
GW	Gurgan	7
HL	Herat, Khorasan	1
HWC	Khuzistan	3
KL	Kirman	24
LAM	Ram-Ohrmazd, Khuzistan (?)	29
LD	Ray, Media	44
LYW	Rew-Ardashir, Khuzistan	24
ML	Marw, Khorasan	20
MLWWNALT	Marw-win(n)ard	1
MY	Meshan	57
NAL/WAL (?)	?	25
NY	?	11
PL	Forat-Meshan, Meshan (?)	13
SK	Sakastan	13
SML	Samarkand, Khorasan (?)	1
ST	Stakhr, Fars	40
ŠY	Shiraz, Fars	76
WH	Weh-Andiyok-Shapur, Khuzistan	65
WYH	Weh-Kawad, Asuristan (?)	80
WYHC	Weh-az-Andiyok-Khusro, Asuristan	89
YZ	?	59
ZL	Zaranj, Sakastan (?)	2
Mint unclear	_	1

Apart from the abbreviations as they occur on the coins, the most probable localizations are also given; for details, SNS 3 should be consulted. The signatures not attested there will be discussed in more detail, on a still larger material basis, in both SNS 4 and SNS 5. Because of this, we prefer to leave the question of some of the more problematic signatures open, rather than make suggestions which might have to be recalled in the near future.

Another important topic is the distribution of regnal years. These are the distributions for Khusro I, Ohrmazd IV, and Khusro II (*tab. 3–5*).

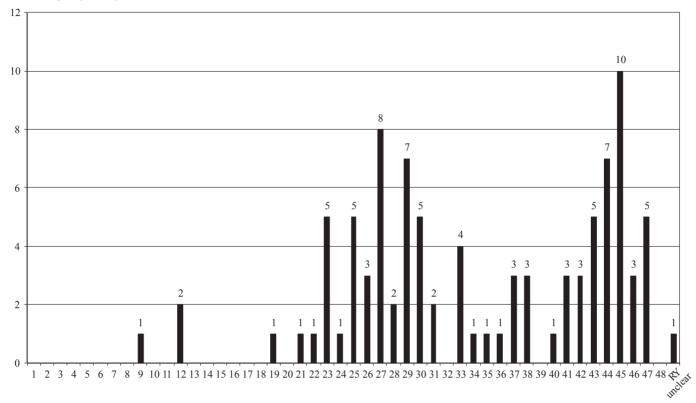
All of the coins are silver drachms. Their weights will be discussed in some detail below. Suffice it to say that the entire weight is 5,120.04 g. These 1,267 drachms make up about one third of the yearly income of a high-ranking knight,² a lot of money for an average Iranian of the 7th century, but not a really big fortune. According to Tabari, in the 13th regnal year of Khusro II, there were 800 million drachms in the royal treasury; by year 30, that amount had doubled.³ The Orumiyeh hoard represents but 0.00015% of the former amount!

¹ Schindel 2004, vol. 1, p. 128–178 for reading and localization of the majority of signatures; a shorter, but more complete overview is also given in Schindel 2013, p. 818, 822–824. The recent overview in Malek 2013, p. 474–484, which is purely derivative in nature (one assumes, since the authors fails to provide references), is of very limited value both due to its lack of methodological rigor, and its failure to incorporate recent suggestions on individual signatures, be it only to refute them.

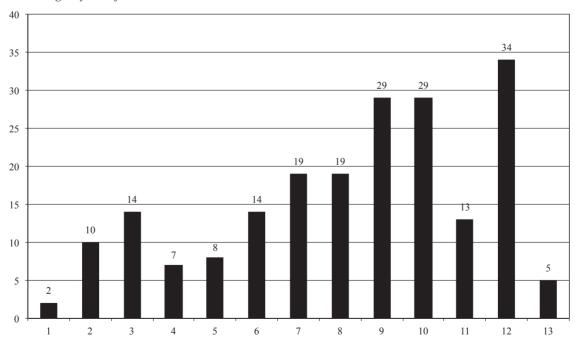
² Schindel 2004, vol. 1, p. 125, note 561.

³ Tabari p. 376 f.

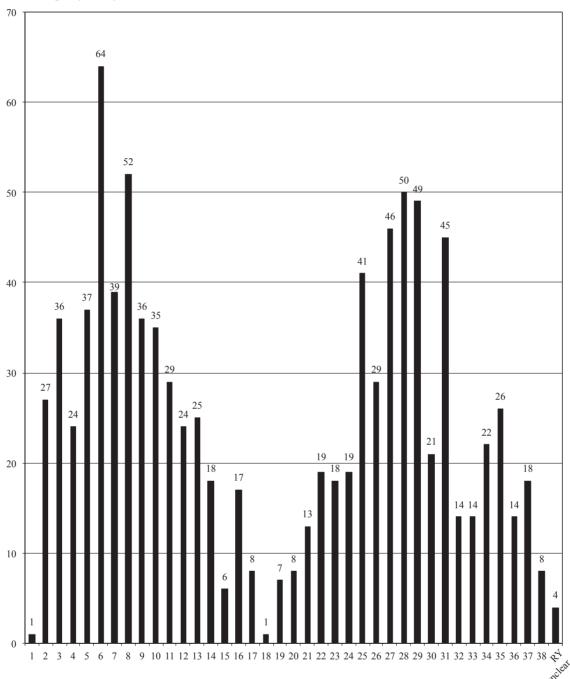
Tab. 3. Regnal years of Khusro I



 $\it Tab.~4.~Regnal~years~of~Ohrmazd~IV$



Tab. 5. Regnal years of Khusro II



THE DISCOVERY OF THE HOARD

On 29th August 2007, the head of the border police in charge of the province of West-Azarbayjan decided to build the new border sentry post of "Havār-Barxāh-loh" in the Piran-Shahr region (fig. 1), located near the frontier village of Tamar-Chin, about 35 kilometres from Piran-Shahr. This town belongs to the district of Orumiyeh, which covers an area of about 120 square kilometres in the central part of the Iranian region of West-Azarbayjan, According to reports, in the course of the work carried out by military personnel of the frontier guard's regiment, two or three jars were unearthed. Most unfortunately, all jars broke when hit by the spade. Furthermore, since the spot where the jars were discovered is within a military area, no one from the ICHTO (Azarbayjan Province) was able to see them in situ. Neither were we able to see the contents of the jars before relocation to the Museum of Orumiyeh, According to our colleague, Mr. Ghorbani, all he was shown was a broken piece said to belong to one of the jars. Supposedly, robbers had hidden these valuable objects inside the jars, waiting for the earliest opportunity to smuggle them out of the country. To date, it has not been possible to determine whether the jars belongs to the Sasanian period or to a later one (perhaps even the modern period). The Orumiyeh Museum staff has registered 1,267 Sasanian coins as the jars' contents (Museum numbers 8493 to 9759). When Mr. Ghorbani, the General Director of West-Azarbayian Museums, kindly proposed a study of this parcel of coins, Daryoosh Akbarzadeh went eagerly to the Museum of Orumiyeh. With the kind assistance of the Conservation Department of the museum, cleaning and conservation work was carried out, all coins registered, and finally photographed. During a visit to Iran in spring 2012, Nikolaus Schindel also saw the coins in the Orumiyeh Museum and together with Daryoosh Akbarzadeh and Dimitrios Boulasikis completed the record of the technical data of the hoard.

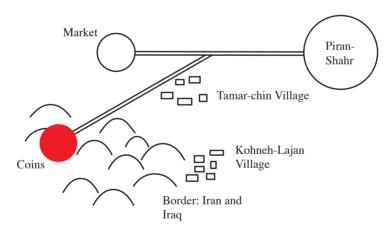


Fig. 1. Schematic plan of the region



Fig. 2. Find spot



Fig. 3. Coins during restoration

METAL ANALYSIS

Altogether 120 coins from the Orumiyeh Hoard, about 10% of the entire find, were analysed by Prof. Kamran Ahmadi and the academic staff of the Materials and Energy Research Centre, Karaj, by surface XRF analysis. The results for the individual coins, arranged by kings, are shown in *tab.* 6–8. Drachms of Khusro II featuring the word APD on the obverse are marked with a star (*) in *tab.* 8.

Tab. 6. Metal analysis: Khusro I

Cat no.	Ag	Au	Си	Pb	Fe	Zn	Ti	Нд	Mn
1	95.68	0.53	3.44	0.35	0.06	_	_	_	_
2	97.47	0.55	1.31	0.67	0.05	_	_	_	_
4	95.62	0.38	3.50	0.50	0.04	_	_	_	_
9	95.41	0.74	3.58	0.27	0.04	_	_	_	_
26	98.68	0.60	0.47	0.25	0.07	0.06	0.02	_	_
28	98.55	0.59	0.32	0.54	0.03	0.02	0.09	_	_
29	97.66	0.52	1.42	0.40	0.03	_	_	_	_
34	95.26	0.53	3.57	0.39	0.07	_	0.25	_	_
43	97.36	0.57	1.45	0.62	0.05	_	_	_	_
45	97.84	0.56	1.05	0.55	_	_	_	_	_
46	98.65	0.60	0.54	0.21	0.05	_	0.03	_	_
49	98.67	0.53	0.43	0.37	0.03	_	_	_	_
51	98.27	0.55	0.79	0.39	0.04	_	_	_	_
53	98.08	0.45	0.67	0.80	0.06	_	_	_	_
54	98.32	0.55	0.85	0.28	0.04	_	_	_	_
55	96.27	0.52	2.28	0.93	0.06	_	_	_	_
57	93.90	0.44	4.47	1.19	0.03	_	_	_	_
63	95.18	0.45	4.07	0.30	0.05	_	0.06	_	_
67	94.18	0.43	4.27	1.12	0.05	_	_	_	_
73	95.90	0.52	2.84	0.74	0.07	0.06	_	_	_
84	92.00	0.53	6.01	0.94	0.05	_	0.52	_	_
86	96.40	0.63	2.13	0.84	0.04	_	_	_	_
88	88.56	1.04	7.15	3.25	0.03	_	_	_	_
89	96.54	0.49	2.19	0.78	0.05	0.07	-	_	_
93	95.67	0.04	2.11	2.22	0.05	-	_	_	_
95	95.13	0.02	3.87	1.00	0.05	_	_	_	_

Tab. 7. Metal analysis: Ohrmazd IV

97 98.62 0.76 0.62 0.06 0.07 0.09 -	Cat no.	Ag	Au	Си	Pb	Fe	Zn	Ti	Нд	Mn
101 98.84 0.63 0.53 0.09 0.03 0.07 - - - - 128 95.33 0.50 3.60 0.57 0.05 - - - - 144 96.60 0.46 1.87 1.07 0.04 - - - 147 98.68 0.67 0.43 0.22 0.06 - - - 152 98.26 0.54 0.55 0.65 0.05 - - - 160 97.53 0.76 1.18 0.53 0.06 0.08 0.05 - 166 99.28 0.16 0.33 0.23 0.01 0.07 0.02 - 167 96.99 0.61 2.05 0.35 0.03 - - - 170 98.06 0.51 0.40 1.03 0.03 - - - 176 98.18 0.26 0.39 1.17 - - - - 183 97.52 0.67 1.26 0.55 0.06 0.06 - - - 197 98.52 0.44 0.53 0.51 0.05 - - - 201 98.25 0.61 0.76 0.38 0.08 - - - 208 97.38 0.33 1.36 0.93 0.02 0.07 - - 212 97.33 0.51 1.15 1.01 0.05 - - - 213 98.78 0.32 0.50 0.44 0.03 - - - 224 81.23 - 0.53 0.44 0.03 - - - 224 81.23 - 0.53 0.44 0.05 0.05 - - - 255 98.13 0.62 0.94 0.31 0.06 - - - 266 98.13 0.60 0.64 1.55 0.02 - - - 266 98.13 0.67 0.61 0.59 0.04 - - - 276 94.89 1.31 1.65 2.15 0.05 - - - - 277 98.13 0.67 0.61 0.59 0.04 - - - - 288 98.40 - 0.11 1.49 0.06 - - - - 284 99.35 0.04 0.08 0.57 0.05 - - - - 285 97.90 - 1.19 0.91 0.04 0.03 - - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - 295 97.90 - 1.19 0.91 0.04 0.03 - - 296 97.90 - 1.19 0.91 0.04 0.03 - -	97	98.62	0.76	0.62	0.06	0.07	0.09	_	_	_
128 95.33 0.50 3.60 0.57 0.05 -	99	99.2	0.20	0.45	0.15	_	_	_	_	_
144 96.60 0.46 1.87 1.07 0.04 -	101	98.84	0.63	0.53	0.09	0.03	0.07	_	_	_
147 98.68 0.67 0.43 0.22 0.06 -	128	95.33	0.50	3.60	0.57	0.05	_	_	_	_
152 98.26 0.54 0.55 0.65 0.05 -	144	96.60	0.46	1.87	1.07	0.04	_	_	_	_
160 97.53 0.76 1.18 0.53 0.06 0.08 0.05 — — 166 99.28 0.16 0.33 0.23 0.01 0.07 0.02 — — 167 96.99 0.61 2.05 0.35 0.03 — — — — 170 98.06 0.51 0.40 1.03 0.03 — — — — 176 98.18 0.26 0.39 1.17 — — — — — 183 97.52 0.67 1.26 0.55 0.06 0.06 — — — 186 97.51 0.55 1.17 0.59 0.03 — 0.18 — — 201 98.25 0.61 0.76 0.38 0.08 — — — — 208 97.38 0.33 1.36 0.93 0.02 0.07 — —	147	98.68	0.67	0.43	0.22	0.06	_	_	_	_
166 99.28 0.16 0.33 0.23 0.01 0.07 0.02 — — 167 96.99 0.61 2.05 0.35 0.03 — — — — 170 98.06 0.51 0.40 1.03 0.03 — — — — 176 98.18 0.26 0.39 1.17 — — — — — 183 97.52 0.67 1.26 0.55 0.06 0.06 — — — 197 98.52 0.64 0.53 0.51 0.05 — — — — 201 98.25 0.61 0.76 0.38 0.08 — — — — 201 98.25 0.61 0.76 0.38 0.08 — — — — 208 97.38 0.33 1.36 0.93 0.02 0.07 — — —	152	98.26	0.54	0.55	0.65	0.05	_	_	_	_
167 96.99 0.61 2.05 0.35 0.03 -	160	97.53	0.76	1.18	0.53	0.06	0.08	0.05	_	_
170 98.06 0.51 0.40 1.03 0.03 -	166	99.28	0.16	0.33	0.23	0.01	0.07	0.02	_	_
176 98.18 0.26 0.39 1.17 - - - - - - 183 97.52 0.67 1.26 0.55 0.06 0.06 -	167	96.99	0.61	2.05	0.35	0.03	_	_	_	_
183 97.52 0.67 1.26 0.55 0.06 0.06 - - - 197 98.52 0.44 0.53 0.51 0.05 - - - - 201 98.25 0.61 0.76 0.38 0.08 - - - - 208 97.38 0.33 1.36 0.93 0.02 0.07 - - - 212 97.33 0.51 1.15 1.01 0.05 - - - - 215 96.30 0.64 2.23 0.83 0.06 0.09 - - - 218 95.12 0.06 3.27 1.61 0.05 - - - - 244 81.23 - 0.53 0.44 0.03 - - 17.8 - 233 98.78 0.32 0.50 0.40 0.05 0.04 0.04 - - </th <th>170</th> <td>98.06</td> <td>0.51</td> <td>0.40</td> <td>1.03</td> <td>0.03</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>	170	98.06	0.51	0.40	1.03	0.03	_	_	_	_
186 97.51 0.55 1.17 0.59 0.03 — 0.18 — — 197 98.52 0.44 0.53 0.51 0.05 — — — — 201 98.25 0.61 0.76 0.38 0.08 — — — — 208 97.38 0.33 1.36 0.93 0.02 0.07 — — — 212 97.33 0.51 1.15 1.01 0.05 — — — — 215 96.30 0.64 2.23 0.83 0.06 0.09 — — — 218 95.12 0.06 3.27 1.61 0.05 — — — — 244 81.23 — 0.53 0.44 0.03 — — — — 243 96.78 0.60 1.59 1.03 0.05 — — — — <	176	98.18	0.26	0.39	1.17	_	_	_	_	_
197 98.52 0.44 0.53 0.51 0.05 -	183	97.52	0.67	1.26	0.55	0.06	0.06	_	_	_
201 98.25 0.61 0.76 0.38 0.08 -	186	97.51	0.55	1.17	0.59	0.03	_	0.18	_	_
208 97.38 0.33 1.36 0.93 0.02 0.07 - - - 212 97.33 0.51 1.15 1.01 0.05 - - - - - 215 96.30 0.64 2.23 0.83 0.06 0.09 - - - - 218 95.12 0.06 3.27 1.61 0.05 - - - - - 224 81.23 - 0.53 0.44 0.03 - - 17.8 - 233 98.78 0.32 0.50 0.40 0.05 0.04 0.04 - - - 243 96.78 0.60 1.59 1.03 0.05 - - - - - 252 97.81 0.61 0.70 0.88 0.05 - - - - - 266 98.13 0.70 0.26	197	98.52	0.44	0.53	0.51	0.05	_	_	_	_
212 97.33 0.51 1.15 1.01 0.05 —	201	98.25	0.61	0.76	0.38	0.08	_	_	_	_
215 96.30 0.64 2.23 0.83 0.06 0.09 - - - - 218 95.12 0.06 3.27 1.61 0.05 - - - - - 224 81.23 - 0.53 0.44 0.03 - - 17.8 - 233 98.78 0.32 0.50 0.40 0.05 0.04 0.04 - - - - 243 96.78 0.60 1.59 1.03 0.05 - - - - - 252 97.81 0.61 0.70 0.88 0.05 - - - - - 265 98.13 0.62 0.94 0.31 0.06 - - - - - 266 98.13 0.70 0.26 0.91 0.09 - - - - 276 94.89 1.31 <th< th=""><th>208</th><td>97.38</td><td>0.33</td><td>1.36</td><td>0.93</td><td>0.02</td><td>0.07</td><td>_</td><td>_</td><td>_</td></th<>	208	97.38	0.33	1.36	0.93	0.02	0.07	_	_	_
218 95.12 0.06 3.27 1.61 0.05 - - - - - 224 81.23 - 0.53 0.44 0.03 - - 17.8 - 233 98.78 0.32 0.50 0.40 0.05 0.04 0.04 - - 243 96.78 0.60 1.59 1.03 0.05 - - - - 252 97.81 0.61 0.70 0.88 0.05 - - - - - 265 98.13 0.62 0.94 0.31 0.06 - - - - - 266 98.13 0.70 0.26 0.91 0.09 - - - - - 269 97.21 0.60 0.64 1.55 0.02 - - - - - 276 94.89 1.31 1.65 2.15	212	97.33	0.51	1.15	1.01	0.05	_	_	_	_
224 81.23 — 0.53 0.44 0.03 — — 17.8 — 233 98.78 0.32 0.50 0.40 0.05 0.04 0.04 — — 243 96.78 0.60 1.59 1.03 0.05 — — — — 252 97.81 0.61 0.70 0.88 0.05 — — — — 265 98.13 0.62 0.94 0.31 0.06 — — — — — 266 98.13 0.70 0.26 0.91 0.09 — — — — 269 97.21 0.60 0.64 1.55 0.02 — — — — 276 94.89 1.31 1.65 2.15 0.05 — — — — 277 98.13 0.67 0.61 0.59 0.04 — — —	215	96.30	0.64	2.23	0.83	0.06	0.09	_	_	_
233 98.78 0.32 0.50 0.40 0.05 0.04 0.04 - - 243 96.78 0.60 1.59 1.03 0.05 - - - - - 252 97.81 0.61 0.70 0.88 0.05 - - - - - 265 98.13 0.62 0.94 0.31 0.06 - - - - - - 266 98.13 0.70 0.26 0.91 0.09 - - - - - 269 97.21 0.60 0.64 1.55 0.02 - - - - - 276 94.89 1.31 1.65 2.15 0.05 - - - - 277 98.13 0.67 0.61 0.59 0.04 - - - - 282 95.28 0.03 3.55 <th< th=""><th>218</th><td>95.12</td><td>0.06</td><td>3.27</td><td>1.61</td><td>0.05</td><td>_</td><td>_</td><td>_</td><td>_</td></th<>	218	95.12	0.06	3.27	1.61	0.05	_	_	_	_
243 96.78 0.60 1.59 1.03 0.05 -	224	81.23	_	0.53	0.44	0.03	_	_	17.8	_
252 97.81 0.61 0.70 0.88 0.05 -	233	98.78	0.32	0.50	0.40	0.05	0.04	0.04	_	_
265 98.13 0.62 0.94 0.31 0.06 -	243	96.78	0.60	1.59	1.03	0.05	_	_	_	_
266 98.13 0.70 0.26 0.91 0.09 -	252	97.81	0.61	0.70	0.88	0.05	-	_	_	_
269 97.21 0.60 0.64 1.55 0.02 -	265	98.13	0.62	0.94	0.31	0.06	-	_	_	_
276 94.89 1.31 1.65 2.15 0.05 -	266	98.13	0.70	0.26	0.91	0.09	-	_	_	_
277 98.13 0.67 0.61 0.59 0.04 -	269	97.21	0.60	0.64	1.55	0.02	-	_	_	_
282 95.28 0.03 3.55 1.17 0.04 - - - - - 283 96.55 0.07 2.17 1.28 0.05 - 0.07 - - 284 99.35 0.04 0.08 0.57 0.05 - - - - 0.04 286 98.40 - 0.11 1.49 0.06 - - - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - - -	276	94.89	1.31	1.65	2.15	0.05	-	_	_	_
283 96.55 0.07 2.17 1.28 0.05 - 0.07 - - 284 99.35 0.04 0.08 0.57 0.05 - - - 0.04 286 98.40 - 0.11 1.49 0.06 - - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - -	277	98.13	0.67	0.61	0.59	0.04	_	_	_	_
284 99.35 0.04 0.08 0.57 0.05 - - - 0.04 286 98.40 - 0.11 1.49 0.06 - - - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - - -	282	95.28	0.03	3.55	1.17	0.04	_	_	_	_
286 98.40 - 0.11 1.49 0.06 - - - - 295 97.90 - 1.19 0.91 0.04 0.03 - - -	283	96.55	0.07	2.17	1.28	0.05	_	0.07	_	_
295 97.90 - 1.19 0.91 0.04 0.03	284	99.35	0.04	0.08	0.57	0.05	_	_	_	0.04
	286	98.40	_	0.11	1.49	0.06	_	_	_	_
298 97.61 - 1.22 1.17	295	97.90	_	1.19	0.91	0.04	0.03	_	_	_
	298	97.61	_	1.22	1.17	-	-	_	_	_

Tab. 8. Metal analysis: Khusro II, Ohrmazd VI (nos. 1263–1265), Azarmigdukht (no. 1266), Khusro II/posthumous (no. 1267)

Cat no.	Ag	Au	Си	Pb	Fe	Zn	Ti	Нд	Mn
321*	92.61	0.79	6.26	0.13	0.07	0.21	_	_	_
328	96.47	0.29	2.46	0.78	0.05	0.08	_	_	_
341*	99.41	0.59	_	_	_	_	_	_	_
364	96.48	0.44	2.63	0.45	0.04	_	_	_	_
368*	99.23	0.64	0.03	0.02	0.04	0.13	_	_	_
380	95.78	0.52	3.36	0.34	_	_	_	_	_
390	98.72	0.23	1.05	0.04	0.05	0.05	_	_	_
428*	98.39	0.55	0.23	0.83	0.07	_	_	_	_
434	96.29	0.66	2.48	0.57	0.04	_	_	_	_
448	96.41	0.54	2.59	0.46	0.05	_	_	_	_
462	94.57	0.23	4.14	1.06	0.04	_	_	_	_
536	96.44	0.32	2.15	1.09	0.03	_	_	_	_
543	96.13	0.51	2.83	0.52	0.06	_	_	_	_
591	96.44	0.59	1.27	1.70	0.02	_	_	_	_
602	95.74	0.51	3.15	0.60	0.04	_	_	_	_
607	95.37	0.49	2.46	1.68	0.04	_	_	_	_
622	97.60	0.55	0.73	1.12	0.05	_	_	_	_
629*	98.88	0.65	0.26	0.21	0.03	0.09	_	_	_
638*	99.65	0.13	_	0.11	_	0.11	_	_	_
655*	99.73	0.13	_	0.14	_	_	_	_	_
706*	99.56	0.20	0.04	0.13	0.02	0.11	_	_	_
707*	99.26	0.38	0.10	0.26	_	_	_	_	_
712	97.96	0.31	1.05	0.68	0.05	0.04	_	_	_
716	64.97	_	0.78	0.09	0	0.18	_	34.06	_
774	98.28	0.22	1.5	0.02	0.04	_	_	_	_
783	93.97	0.67	4.95	0.40	0.05	_	_	_	_
790	96.90	0.68	2.19	0.23	0.03	_	_	_	_
798*	99.31	0.69	_	_	0.04	_	_	_	_
803*	99.26	0.30	0.13	0.31	0.08	_	_	_	_
826	97.22	0.45	1.77	0.45	0.07	0.11	_	_	_
841	96.17	0.60	2.81	0.42	0.05	_	_	_	_
903	96.50	0.58	2.52	0.40	0.08	_	_	_	_
922	97.13	0.55	1.75	0.57	0.05	_	_	_	_
958	98.12	0.55	0.90	0.43	0.04	_	0.03	_	_
960	99.12	0.19	0.46	0.23	0.05	0.05	0.03	_	_
993	95.06	0.43	3.54	0.97	0.05	_	-	_	_
1009*	99.7	0.08	_	0.20	0.03	0.1	_	_	_
1055*	99.85	0.15	0.04	0.03	0.06	_	_	_	_
1069	96.48	0.50	2.30	0.72	0.05	0.05	-	_	0.02
1076	96.54	0.52	2.37	0.57	0.05	_	_	_	_

Cat no.	Ag	Au	Си	Pb	Fe	Zn	Ti	Нд	Mn
1086	97.16	0.53	1.38	0.92	0.03	-	-	_	_
1087	95.44	0.47	3.52	0.57	0.06	-	-	_	_
1105*	99.41	0.37	0.06	0.22	0.06	0.06	-	_	_
1108	96.14	0.69	2.57	0.60	0.04	_	_	_	_
1114	95.18	0.62	3.92	0.28	0.07	_	_	_	_
1123	94.51	0.59	4.54	0.36	0.07	_	0.07	_	_
1136*	99.15	0.55	0.04	0.30	0.05	_	_	_	_
1155*	99.42	0.58	_	-	0.04	-	-	_	_
1173*	99.28	0.61	0.11	0.02	0.06	-	-	_	-
1195	94.66	0.50	4.22	0.43	0.07	0.19	_	_	_
1199	92.72	0.57	5.33	0.77	0.08	-	0.41	_	_
1221	97.53	0.45	1.35	0.67	0.05	-	_	_	_
1251	96.77	0.47	2.21	0.55	0.06	-	_	_	_
1263	97.75	0.52	1.28	0.45	_	-	_	_	_
1264	97.03	0.55	1.86	0.56	0.05	-	_	_	_
1265	96.87	0.46	2.48	0.19	0.04	-	_	_	_
1266	96.32	0.49	2.45	0.74	0.04	-	_	_	_
1267	98.03	0.04	1.31	0.66	0.05	-	-	_	_

Now let us compare the silver contents of the three well-attested kings with each other (Tab. 9).

Tab. 9. Comparison of silver content (in %)

Despite the basic problems with surface XRF-analysis, *tab.* 9 shows a discernible trend: the coins of Khusro I have a slightly lower silver content than those of his successors. Except for one (no. **960**), all coins of Khusro II with a silver content of at least 99% bear the legend APD in the obverse margin. This topic will be discussed below in more detail. However, in the present sample, three out of 35 drachms of Ohrmazd IV also have a silver content of more than 99.00% (nos. **99, 164, 284**) which clearly proves that the employment of such a remarkably high silver content is not an innovation of Khusro II. It should be added that the average silver content is 96.20% for Khusro I, 97.13% for Ohrmazd IV, and 96.64% for Khusro II. Comparing these results with the data from SNS 1,⁴ 2,⁵ and 3⁶ shows that the silver content apparently remained stable throughout the entire Sasanian period; if there had been changes and fluctuations, they must have been either minor, or merely local, so that they have not been discerned in previous statistical analyses. This stability is a typical feature of Sasanian coinage which sets it apart not only from Roman coinage,⁷ but from its Parthian precursor⁸ as well.

THE ORUMIYEH HOARD COMPARED WITH OTHER LATE SASANIAN COIN HOARDS

GENERAL REMARKS

To draw a more comprehensive picture of the Orumiyeh hoard and its importance for the monetary history of the Late Sasanian Empire, some further thoughts might be useful. The conclusions below are no way final; until the publication of SNS 4 and SNS 5, they must necessarily remain somewhat conjectural. Still, we hope that these analyses and comparisons might be of some use for the reader, and stimulate further research.

The most important tool for making sense of the Orumiyeh hoard is the comparison with other, already published hoards of Late Sasanian drachms. Even if it is impossible to cover everything, we are still optimistic that the 14,047 coins reported here (including the Orumiyeh hoard itself) form a sufficiently large material basis for at least some preliminary observations on the monetary history of the Late Sasanian period.

THE MATERIAL BASIS

A short overview over the hoards entered into the SNS project database is given below, arranged alphabetically by find spot, irrespective of whether the find spot is certain or only approximate (but marked as such in the entries). At the end (under "Unknown"), those hoards are listed for which no information on the find spot was available. The various hoards from unknown find spots are arranged in ascending order by their date of publication. If not stated otherwise, lists of regnal years and mints belong to the reign of Khusro II.

⁴ Alram/Gyselen 2003, p. 70-90.

⁵ Alram/Gyselen 2012, p. 88–110.

⁶ Schindel 2004, vol. 1, p. 197–209.

⁷ Woytek et al. 2007.

⁸ Alram/Gyselen 2003, p. 162.

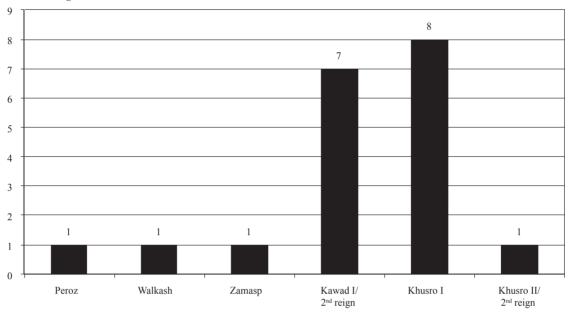
Alevi

Find spot: Alevi (Georgia)

Closing date: 592/593 (RY 3 of Khusro II)⁹
Published: Tsotselia 2003, p. 59 f., pl. 8 f.

This small hoard contains 19 Sasanian drachms plus one copper coin, found in the course of archaeological excavations. There is only one issue of Khusro II (YZ, RY 3). Of the 20 coins, 19 (i.e. all the drachms) are reproduced in the plates (95%).

Tab. 10. Kings in the Alevi Hoard



Apeni

Find spot: Apeni (Georgia) Closing date: 833/834 (218 AH)

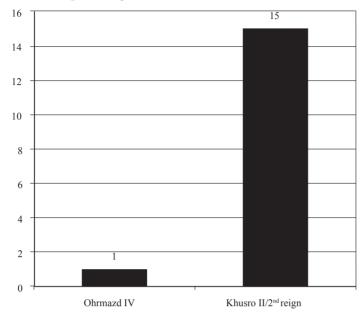
Published: Tsotselia 2003, p. 88 f., pl. 16

This large hoard, consisting of 394 Umayyad and Abbasid dirhams, also contains 16 Sasanian drachms, the latest of which is attributed to RY 36 of Khusro II (625/626). Seven coins are reproduced in the plates (46.7%).

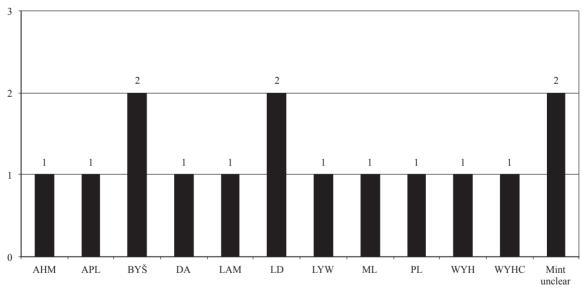
⁹ Tsotselia 2003, p. 60 describes the RY as illegible, but a look at Tsotselia 2003, pl. 9, no. 20 makes it very likely that the numeral in question is *TLTA*, "3". Without doubt, the coin features type SN II/2.

¹⁰ Tsotselia 2003, p. 88, no. 15.

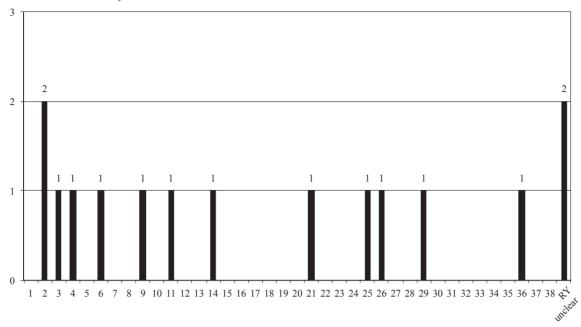
Tab. 11. Kings in the Apeni Hoard



Tab. 12. Mints in the Apeni Hoard



Tab. 13. Years in the Apeni Hoard



Bab Tuma

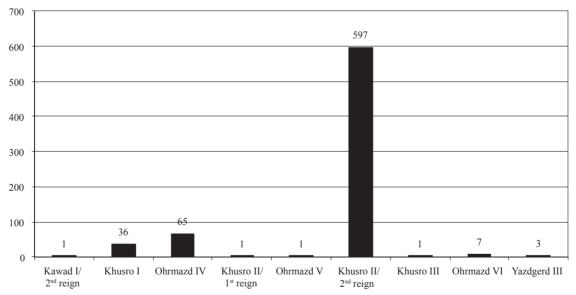
Find spot: Bab Tuma, Damascus (Syria)

Closing date: 747/748 (130 AH)¹¹

Published: Gyselen/Kalus 1983, p. 19–29, 82–99

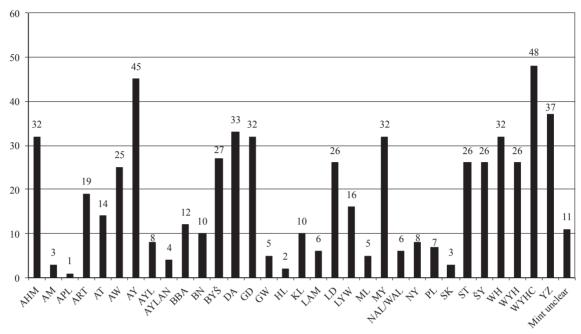
This hoard contains 712 Sasanian coins, 65 Arab-Sasanian issues, and 77 Umayyad post-reform dirhams, totalling 854 coins. The study by Gyselen and Kalus features 27 coin photos (3.8%).

Tab. 14. Kings in the Bab Tuma Hoard

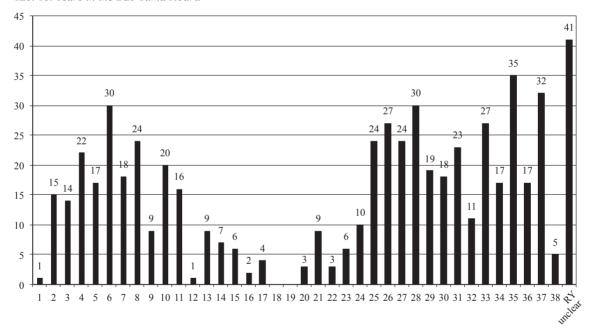


¹¹ Gyselen/Kalus 1983, p. 99, nos. 852-854.

Tab. 15. Mints in the Bab Tuma Hoard



Tab. 16. Years in the Bab Tuma Hoard



Babylon

Find spot: Babylon (Iraq) Closing date: Abbasid period Published: Simon 1977

Simon's publication covers only the 441 Sasanian coins from this huge hoard of more than 9,600 coins. Since the majority of this find, the Islamic coins, are listed only in the most basic form by Simon,¹² it is impossible to provide an accurate end date. This presents no impediment, since we

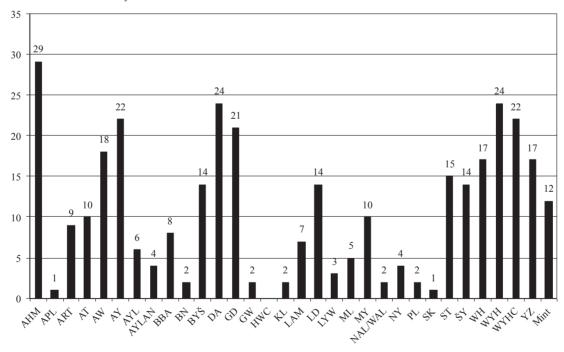
¹² Simon 1977, p. 154.

are focussing on the Sasanian coins. The large number of Sasanian coins with an uncertain date in *tab*. 19 can be explained by the fact that no distinction between RY 31 and RY 33 is possible; these two years, therefore, are left without any entry. There are 43 photos (9.8%).

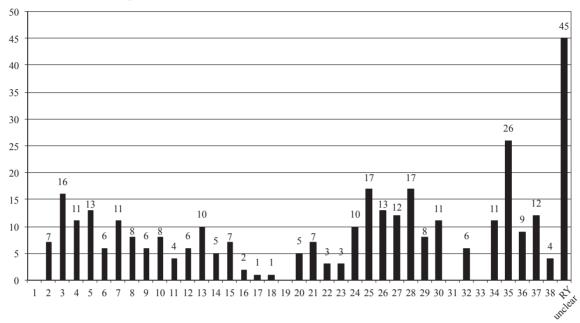
341 350 300 250 200 150 100 42 50 13 6 1 1 2 0 Peroz Khusro I Ohrmazd IV Khusro II/ Ardashir III Buran Ohrmazd VI Yazdgerd III $2^{nd} \ reign$

Tab. 17. Kings in the Babylon Hoard





Tab. 19. Years in the Babylon Hoard



Bishapur

Find spot: Unknown, probably Bishapur area Closing date: 602/603 (RY 13 of Khusro II)

Published: Szaivert 1978/79

This group of 174 coins seen in trade contains, with one exception, only drachms of Khusro II from the mint of Bishapur, all dated RY 13. In Szaivert's study, which also contains a die analysis, photos of all 12 obverse and 11 reverse dies attested here are shown, but only one coin (the single issue from GD) is shown with both sides (so strictly speaking the percentage is just 0.6%).

Damascus

Find spot: Tahrir Square, Damascus (Syria)

Closing date: 748/749 (131 AH)
Published: al-'Ush 1972/1

This large hoard contains, in our reckoning, 1,314 Sasanian coins. Al-'Ush gives the total as 1,309,¹³ but after entering all the Sasanian coins into the database, and carefully double-checking these entries, we arrived at this slightly higher total of 1,314 pieces. That al-'Ush has often added coins numbered A, B and so on into the numerical order running from 1 to 1,179 complicates the count. Four coins are mentioned by al-'Ush, but not included in his detailed count; they raise the total of the hoard to 3,819. If they were all Sasanian, they would raise his number to 1,313, reducing the difference to just one coin. Three hundred coins (22.8%) are depicted on the plates, of which three show only the reverse.¹⁴ In addition to the Sasanian issues, al-'Ush catalogues 128 Arab-Sasanian coins, 1 Khwarezmian issue, and 2,377 Umayyad post-reform dirhams, giving a total of ca. 3,819 coins. The latest coins are dirhams from the year 131 AH from Dimashq, ¹⁵ al-Samiyah, ¹⁶ and Wasit.¹⁷

¹³ Al-'Ush 1972/1, p. 1.

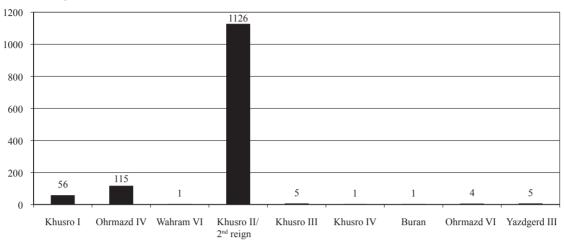
¹⁴ Al-'Ush 1972/1, pl. 22, nos. S.791–S.794.

¹⁵ Al-'Ush 1972/1, p. 259, no. 150: 62 pieces.

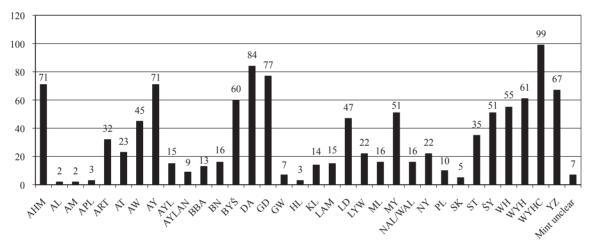
¹⁶ Al-'Ush 1972/1, p. 264, no. 167: 6 pieces.

¹⁷ Al-'Ush 1972/1, p. 297, no. 287: 4 pieces.

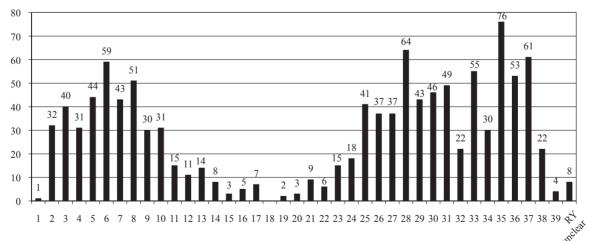
Tab. 20. Kings in the Damascus Hoard



Tab. 21. Mints in the Damascus Hoard



Tab. 22. Years in the Damascus Hoard



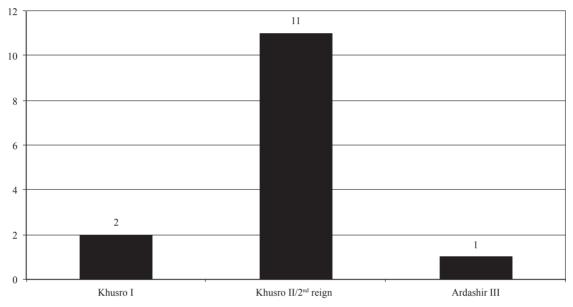
Gubayra

Find spot: Gubayra, Kirman (Iran) Closing date: 628/629 (RY 2 of Ardashir III)

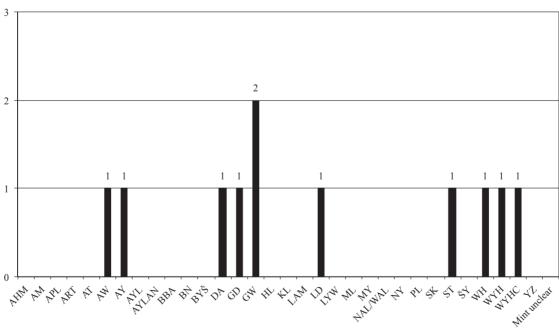
Published: Bivar 1976

This small hoard of 14 Sasanian drachms was found in an archaeological context. Twelve coins are shown on the plates (85.7%).

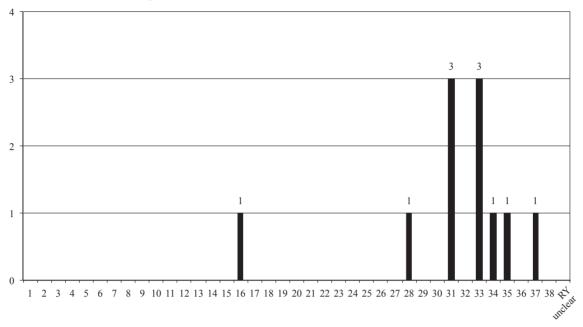
Tab. 23. Kings in the Gubayra Hoard



Tab. 24. Mints in the Gubayra Hoard



Tab. 25. Years in the Gubayra Hoard



Kisarabad

Find spot: Kisarabad (NW Iraq)

Closing date: 625/626 (RY 36 of Khusro II)
Published: Mikolaczyk/Lowick 1976

The remains of an originally larger hoard are three drachms of Khusro II from the mints GD, NY, and ŠY, two from RY 35, and from RY 36, as well as some jewellery. All three coins are depicted (100%).

Kohp

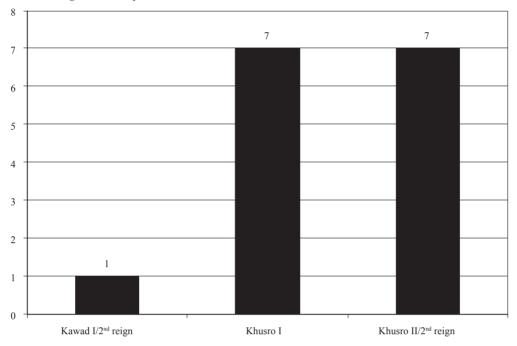
Find spot: Kohp (Armenia)

Closing date: 596/597 (RY 7 of Khusro II)¹⁸
Published: Tsotselia 2003, p. 71 f., pl. 12 f.

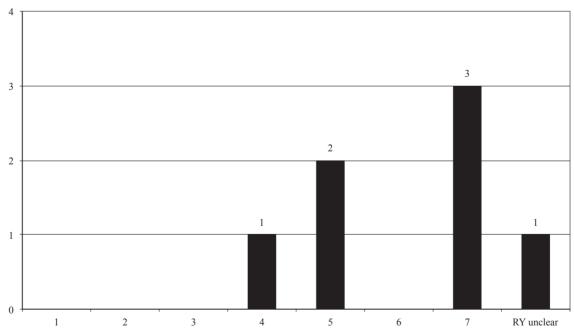
Only 15 coins out of an originally larger hoard of unknown size have been recorded by Tsotselia. The distribution of the Khusro II drachms makes it likely that the original hoard did not extend beyond the introduction of reverse type SN 3, since all seven catalogued coins feature the early variant SN 2. All 15 surviving coins are shown in the plates (100%).

¹⁸ Tsotselia 2003, p. 71 f., nos. 10–12.

Tab. 26. Kings in the Kohp Hoard



Tab. 27. Years in the Kohp Hoard



Kufa

Find spot: Kufa (Iraq)
Closing date: 808/809 (193 AH)
Published: *CH* 2, p. 97, no. 369

This largely Islamic hoard contains among its 178 pieces three drachms of Khusro II from the mints DA, WYH, and WYHC, dated RY 21, 35, and 36. No photos.

Magraneti

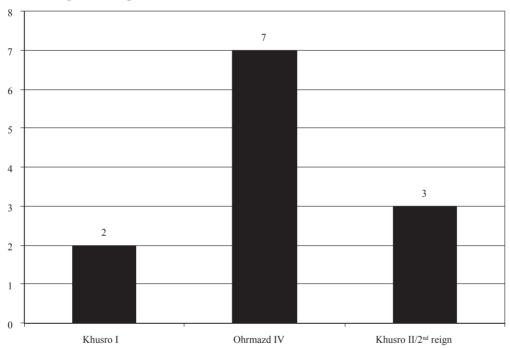
Find spot: Magraneti (Georgia)

Closing date: 625/629

Published: Tsotselia 2003, p. 74 f., pl. 13

This small hoard consists of 12 Sasanian drachms and four hexagrams of Heraclius, which also provide the closing date.¹⁹ The latest Sasanian drachms, struck in RY 10 of Khusro II (599/600),²⁰ are a quarter century earlier than the latest hexagrams. Of 12 Sasanian coins, 11 are shown on the plates (91.7%).

Tab. 28. Kings in the Magraneti Hoard



¹⁹ Tsotselia 2003. p. 75, nos. 15 f.; Hahn 1981, Prägetabelle 2.

²⁰ Tsotselia 2003, p. 75, nos. 10, 12.