## ROMAN AND ROMAN-BYZANTINE POTTERY FROM HALMYRIS. NORTH-AFRICA IMPORTATIONS AND LOCAL IMITATIONS

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The ruins discovered near Murighiol Commune were in the scholars' attention since the end of the last century ${ }^{1}$ and generated discussions, sometimes contradictory, regarding the ancient name of this fortification ${ }^{2}$. After some fortuitous findings ${ }^{3}$ and rescue excavations ${ }^{4}$, the systematic archaeological investigation began in 1981 with significant result for the knowledge of the Danube-Pontic Romanity.

Thus, the ancient name of the city was identified - Halmyris' as well as the name of the neighbored civil settlement - vicus classicorum, the last one also found on many inscriptions ${ }^{6}$. In the same time, spectacular civil and military monuments were revealed ${ }^{7}$.

Besides tools, coins ${ }^{8}$ and art objects ${ }^{9}$, the most consistent category of findings is represented by the pottery, to which four studies were dedicated so far ${ }^{10}$.

The pottery discovered at Halmyris was the subject of a recent doctor's degree thesis ${ }^{11}$, being in the same time a chapter of the first monographic volume, unfinished yet. Out from the outstanding quantity of pottery discovered during 1981 - 1998, we selected for the present paper 2,106 whole, able to be restored or fragmentary vases, representing the main categories of recipients which were present in the Roman world during the $1^{\text {st }}$ and the $7^{\text {th }}$ centuries AD (see Table I). Taking into account the quantity and the complexity of the findings, as well as to the method of investigation, we were able to make a good identification and datation of the 13 levels of Roman and Roman-Byzantine inhabitation. The catalogue of the pottery was made accordingly to the typological criterion.

It is well known that any system of classification is submitted to discussion. Thus, since the archaeological investigation at Halmyris is far from being exhausted, our catalogue only represents a preliminary phase for the knowledge of the Roman pottery discovered in this site. We only have in view the incomplete investigation of the Early Roman levels, due to some objective conditions, situation that is mirrored by the statistics of the ceramics findings in which the Late Roman epoch is prevalent.

Among the main difficulties we were faced with in the study of the Roman pottery in general, including the Halmyris findings, we consider that the most important is the lack of some precise physical-chemical analysis of the clay. These analyses are the only ones that can reveal the difference between the imported products and the local ones. A good example in this respect is the store of lamps manufactured at Halmyris, containing many pieces made of good clay and well executed. These pieces, if found in other archaeological contexts, could be considered as being imported products ${ }^{12}$.

[^0]Another difficulty we were faced with in the study of the ceramics found at Halmyris consisted in the scarcity of the literature dedicated both to Dobrudja and to the neighbored regions. This is situation is due to the delay in the publishing of the findings, as well as to the lack of the complete research of the settlements, necropolises or centers of production. In the same time, it is necessary to have a methodology unanimously accepted by the specialists in the description of the findings, including the colour of the clay, the shape and the function of the vases. This was the main reason why artificially were created new types of pottery, often starting from insignificant morphological details. This is frequently due to small quantities of pottery or to the lack of experience and information of the researchers eager of quick affirmation.

In the goal of making the catalogue of the Roman pottery found at Halmyris we tried to use the best tools to reveal their features, chronological and typological framing and we illustrated each ceramics piece, intending to contribute to a unique typology for Dobrudja. In this respect, the site of Halmyris brings a significant contribution due to the discovery here both of some "classical" forms and to some rare ones in the West-Pontic area (and not only). Within each ceramics category we firstly distinguished (not without difficulty) the centers of production, if not accordingly to the workshops, at least accordingly to the zones unitary as economical, cultural and artistic phenomenon, within an area geographically defined, in our situation, by the analogies.

Thus, we could distinguish pottery having Oriental, Pontic, West-Pontic origin, as well as pottery manufactured at Halmyris. Due to the large quantity of material we could make the distinction between the Occidental and the North-Africa pottery, many times described together.

In the following pages we shall take into discussion the North-Africa pottery and the local imitations, introducing in the scientific circuit a large diversity of relatively rare findings in the Dobrudja sites. At Halmyris North-Africa pottery is represented by tableware, amphorae and lamps, the last category also being represented by imitations made in the local workshops.

North-Africa tableware occupies a special place in the general study of the Roman pottery. Workshops were identified spread on a large area from the Atlantic to the Nile. The archaeological investigation revealed a common artifact tradition developed between the $1^{\text {st }}$ and the $7^{\text {th }}$ centuries AD.

Many specialists dedicated special studies to this problem, the excavation reports also bringing an important contribution. Thus, an almost complete image was acquired regarding the main forms and types of decoration, the mutual influence and the circulation of the North-African tableware. We consider questionable the chronological framing, each new finding being a possibility of reinterpretation, which only are nuances of the elements gathered so far.

The first important study dedicated to the North-Africa tableware belongs to N. Lamboglia, who names this production "terra sigillata chiara", separating three main types, A, C and ${ }^{13}$. J.W. Solomonson published the findings in the necropolis of Raqquada in the Central Tunis, bringing chronological details for different forms, taking into discussion the relief decoration on plates and lamps and putting into evidence the unity of the North-Africa ceramics production ${ }^{14}$.

The excavations in Nuotatore Termac at Ostia allowed to follow the development of the ceramics forms between the $1^{\text {st }}$ century and the $5^{\text {th }}$ century AD , bringing to light new workshops and the relationships with the cooking vessels having Africa origin' ${ }^{15}$.

In his well-known work written in 1972, J.W. Hayes ${ }^{16}$ identifies 200 forms, also making a classification of the decoration of the North-Africa tableware. His chronological framings are often liable to be corrected, many times referring to quarters of century, decades, even years, having as basis for his analysis very old excavations in which rigorous stratigraphic observations were not put into discussion. Although many of the identified types represent in fact variants of certain prototypes, Hayes' catalogue is still considered as an indispensable tool for the study of the Roman pottery.

Important contribution for the knowledge of Africa pottery, relevant mainly for chronological details, brought the results gathered from the great archaeological sites Carthage, where the investigations were

[^1]developed by the American ${ }^{17}$, British ${ }^{18}$, Italian ${ }^{19}$ or Spanish ${ }^{20}$ archaeological missions, as well as Conimbriga ${ }^{21}$, Alexandria ${ }^{22}$ and Sidi Krebisc - Berenice ${ }^{23}$.

An important work is "Atlante delle forme ceramiche", with its two volumes published in 1981 and 1985, in which the Africa pottery is largely presented ${ }^{24}$.

In 1988 S . Tortorella publishes a synthesis of the investigations undertaken till that moment, making chronological annotation regarding some of the main forms presented in Hayes' catalogue ${ }^{25}$.

Finally, among the most valuable last contributions we note the investigations in Tunisia ${ }^{26}$, with special regard to those at El Mahrine, conducted by M. Mackensen ${ }^{27}$.

North-Africa amphorae are important for the study of the commercial relationships between the provinces of the Empire, especially during the Roman-Byzantine period when these relationships are certified both in Occident and in Orient. In comparison with similar products belonging to other workshops, NorthAfrica amphorae are distinguished through a more standardized form, having as a specific feature a cylindrical body. In the same time, in the most situations the size and therefore the capacity of the amphorae belonging to the same type are almost identical. Therefore, the chronological framing in short periods of time allow to use these amphorae as indubitable tools for the datation of the archaeological contexts.

Among the important studies published in the last few decades we have in view F. Zevi's work regarding the large capacity North-Africa amphorae ${ }^{28}$, J. Riley, who published the Roman pottery found at Berenice ${ }^{29}$ as well as D.P.S. Peacock and D.F. Williams who emphasize the role of the amphorae in the economy of the Empire ${ }^{30}$.

The most largely used typology regarding the North-Africa amphorae belongs to S.J. Keay who deals with the transportation vessels discovered in the settlements of Catalonia ${ }^{31}$.

North-Africa lamps, named in this way accordingly to the first findings at Alexandria, where a large number of moulds and patterns were discovered ${ }^{32}$, have features that render them outstanding among the late Roman lamps.

The classic form has pear-like flat body, having a long prolonged beak. The border is straight and the discus is small, rounded and slightly concave, having one or two holes. The discus is bounded by a border, which divides into two near the beak, making up a spout with parallel sides, containing the hole for burning. The handle is lamellar, angled at its upper side and oriented outwards. The basis is rounded and flat and is put into evidence by a brought out surrounding prominence, connected to the handle through a straight rib.

The clay, the fabrication and the finishing are of good quality. The discus and the border are always abundantly decorated with geometric, fitomorphic, antropomorphic and zoomorphic motifs or with Christian symbols.

The first important classification of North-Africa lamps was made by Hayes in 1972, who had in view mainly the decoration which was common with the one found on the tableware discovered in the same area ${ }^{33}$. According to the quality of the clay and of the engobe, as well as to the decoration and the size of the findings, the author distinguished two types, I and II, each having two variants, A and B. Similarly to the datations proposed for the other ceramics categories in the work Late Roman Pottery, the chronology of the lamps was detailed as a result of the subsequent researches and the publish of certain important studies regarding NorthAfrica pottery.

[^2]We refer to the general typology of the lamps discovered in Italy made by A. Prevoost, where NorthAfrica lamps are found as types $7-9$ of the species $\mathrm{V}^{34}$. We also have in view the important contribution of L. Aselmino and C. Pavolini who published in 1981 a unanimously accepted typology ${ }^{35}$, and the study regarding the researches at El Mahrine ${ }^{36}$, in which this ceramics category has an important place.

The aspects related with the chronology of the North-Africa lamps seem to have been entirely clarified, especially after the international excavation at Carthage, already specified above ${ }^{37}$. In the actual phase of the investigation it is considered that the lamps belonging to the type Hayes I appeared during the last quarter of the $4^{\text {th }}$ cent. AD . They are prevalent in the $5^{1 \mathrm{~h}}$ cent. $\mathrm{AD}{ }^{38}$. The type Hayes II appeared during the $5^{\text {th }}$ cent $A D$, being prevalent at the end of the same period and dominating the $6^{\text {th }}$ cent. $\mathrm{AD}^{39}$.

Due to the popularity and the large spreading of the North-Africa lamps they were imitated in the local West-Pontic workshops. The pear-like and flat aspect is kept. Modifications are remarkable related to the smaller discus and to the border made at the same level in horizontal plan. In the same time, the rib that joins the handle with the basis is not always present.

The decoration consists in radial lines, brought out circles with crosses or points circumscribed on the border or in a double border which surrounds the disc. The execution is often rough and the clay is inferior as quality.

The most findings in Dobrudja were discovered in undated archacological complexes ${ }^{40}$. Therefore, the chronological framing was established accordingly to the analogies.

Besides the coins, inscriptions and other categories of typical findings, the pottery from Halmyris brought an important contribution to the datation of the levels of inhabitation during the Roman and RomanByzantine periods ${ }^{41}$. This fact was possible due to the method of investigation that allowed drawing the pottery from stratigraphic contexts beyond doubt, verified whenever it was possible in the sections and the diggings made during the almost two decades of systematic archacological excavations (see Table II).

## CATALOGUE

## A. Tableware

I. Form Haycs 27

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> lllustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 |

The plates belonging to this form have vertical rim and bulging walls. The fragment found at Halmyris is probably a variant, due to the lack of the inside circular incision under the rim, usually found on the vases belonging to Form 27.

1. Fragmentary plate, rim. Inv. 43981, 口 X 18, -2,30-2,40 m, N 3 .
$\mathrm{Dg}=22 \mathrm{~cm}$. PI. I.
Fine light brick red clay, rare particles of limestone, red brick thin slip, rare particles of golden mica, slightly adherent outside.

Analogies: Hayes 1972, 49, 51, Form 27, fig. 8, 27/1, years $160-220 \mathrm{AD}$; Paz 1991, 176 - 177, fig. $73 / 1,2,3^{\text {rd }}$ cent. AD; Bourgeois, Mayet 1991, $237-238$, the second half of the $2^{\text {nd }}-$ the beginning of the $3^{\text {rd }}$ cent. $A D$
Datation: the end of the $2^{\text {nd }}-$ first half of the $3^{\text {rd }}$ cent. AD.

[^3]
## II. Form Hayes 45 C

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 | 1 |

These vases are wide and low, with horizontal large rim. The walls of the body are slightly rounded. Variant C, the only one discovered at Halmyris, has the edge of the rim flared outside. The fragment was found in an archaeological context dated closely to the datation proposed by Hayes.
2. Fragmentary dish, rim. Inv. 44388, western gate, corridor of the northern bulwark, $-2,30 \mathrm{~m}, \mathrm{~N} 6$ (?). $\mathrm{Dg}=$ undeterminable; Pl. I.
Red brick clay, rare particles of limestone and white mica, light brown red slip.
Analogies: Hayes 1972, $62-63,65$, Form 45, fig. 11/C, first half of the $4^{\text {th }}$ cent. AD; Kenrick 1985, 355 , Form B628.3, fig. 66, first half of the $4^{\text {th }}$ cent. $A D$; $\operatorname{Paz}$ 1991, 177, fig, $74 / 4-10,4^{\text {th }}$ cent. $A D$; Bourgeois, Mayet 1991, 272, pl. LV/29-36, $3^{\text {rd }}-4^{\text {th }}$ cent. AD .
Datation: first half of the $4^{\text {lh }}$ cent. $A D$.
III. Form Hayes 49

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Sludied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 |

The only piece fund at Halmyris that can belong to this form has thin walls, strongly curved and horizontal simple rim, with fine incisions outside, resulted from the manufacture process. The datation proposed by Hayes is close to the archaeological context of the finding.
3. Fragmentary plate, rim. Inv. 29642, S I, $\square 20,-2,10 \mathrm{~m}, \mathrm{~N} 3$.
$\mathrm{Dg}=20 \mathrm{~cm}$; Pl. I.
Fine clay, light red brick colour, rare grains of limestone and white mica, light chestnut thick slip.
Bibliography: Opaiţ 1991, 137, n. 43, pl. 6.
Analogies: Hayes 1972, 67, 69, Form 49, fig. 12/6, years 230/240-300; Atlante I, 61, tav. XXVI/12, years $240-300$ AD; Paz 1991, 177, 181, fig. 74/11, $4^{\text {th }}$ cent. AD; Bourgeois, Mayet 1991, 273, pl. LVII/49 - 51, years 230/240-300 AD.
Datation: end of the $2^{\text {nd }}$ cent. - first half of the $3^{\text {rd }}$ cent. $A D$.
IV. Form Hayes 61

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 | 1 |

The rim is narrow, almost vertical, inwards oriented. The limit with the body outside is in sharp angle. Largely spread in the Mediterranean basin, this form is represented at Halmyris by one fragment, discovered on a level dated in the first half of the $6^{\text {th }}$ cent. AD . The scarcity of this form at Halmyris could explain the lasting of almost a century after the datation proposed by Hayes, whether the piece was not trained from the upper levels. Still, we remark the possibility of the prolongation of the life of this form, suggested by the larger datation in Atlante I by M. Mackensen in comparison with Hayes' strict datation.
4. Fragmentary plate, rim. Inv. 37145, S II, $\square 89-90,-1,10 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Dg}=29 \mathrm{~cm}$; Pl. I.
Pink clay, rare white mica, brown red slip, slightly adherent outside.
Bibliography: Opait 1991, 162, n. 237, pl. 40.

Analogies: Hayes 1972, $100-107$, Form 61, fig. 16, 17, years $325-400 / 420 \mathrm{AD}$; Hayes 1976 B, 70. fig. 21/40, about 400 AD ; Atlante I, $83-84$, tav. XXXIV/4, tav. XXXV/3, $4^{\text {th }}-5^{\text {th }}$ cent. AD; Novak 1980, 100, tav. VII/8, 108, tav. VII/10, years 320 - 400/420 AD; Mackensen 1993, 401 - 403, 522, taf. $53 / 4.1,4.2,4.3,54 / 4.4,5^{\text {th }}$ cent. AD ; Uscătescu-Barrón 1992, 129, fig. 4/21-22, $4^{\text {th }}-5^{\text {th }} \mathrm{AD}$; Perko 1992, 97, fig. 2/5, about $400-420$ AD; Perko 1997, 252, fig. 2/12, fig. $6 / 2,3,4^{\text {th }}-5^{\text {th }} A D$.
Datation: first half of the $6^{\text {th }}$ cent. $A D$.
V. Form Mackensen 1993, 60.2

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | 1 | - | - |  |  |  |  | - | - |

The only fragment of this form discovered at Murighiol belongs to a bowl with curved walls, rounded rim, oblique inside. The piece was found on the level of the street at the western gate of the city. The typological framing was made accordingly to the analogies.
5. Fragmentary bowl, rim. Inv. 44389, western gate, street, N 8 (?).
$\mathrm{Dg}=13$; Pl. I.
Brown red clay, rare white mica, slip of the same colour, darker at outside.
Analogies: Mackensen 1993, 624, Form 60, taf. 79/60.2, ycars 425-450 AD; Fulford, Peacock 1984, 53, Form 7.1, fig. 13, about 425-450 AD.
Datation: first half of the $5^{\text {th }}$ cent. AD.
VI. Form Hayes 62 B

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | 1 | 2 | - | 5 |  |  |  |  |  | - | - |

Type B of the Form 62 is featured by almost vertical walls, oblique towards the basis, simple rim, sometimes slightly curved, thickened inside. At Halmyris eight ceramics fragments were discovered, having very similar features with the ones described by Hayes. Three of them were considered by the first editor as having Pontic origin, which usually refers to the products made in the workshops from the north of the Black Sea, where we also found analogies which determined this classification (Opaif 1985, 155. tip IV. sublype IV A, fig. 1/7, 9 - 11; Opait 1991, 165, n. 301 - 303, pl. 44; Opait 1996, 135, pl. 55/3, 4).

The texture of the clay and the slip of the plates are much closer to the North-Africa pottery, where we have also found almost identical analogies. Five out from the pieces discovered at Murighiol are almost half a century earlier than the datation proposed by Hayes. The best explanation for this is the continuation of the production of certain variants in other centers, or the end of the Form 62 could be uncertain. Anyway, the difficulty of the chronological framing is also well known in the situation of a discovery almost identical from Central Tunis, the author only referring to Hayes' catalogue for the form of the vase (Peacock, Bejaoui, Ben Lazreg, 1990, 76).
6. Fragmentary plate, rim. Inv. 29654, S I, $\quad$ 15-17, $-2,0 \mathrm{~m}, \mathrm{~N} 7$.
$\mathrm{Dg}=$ undeterminable; PI. I.
Red brick clay, rare particles of limestone, brown red slip.
Bibliography: Opait 1991. 165, n. 302, pl. 44.
7. Fragmentary plate, rim. Inv. 29680, S I, $\square 12-14, \mathrm{~N} 7$.
$\mathrm{Dg}=35 \mathrm{~cm}$; Pl. I.
Red brick clay, rare particles of limestone, red brick slip, slightly adherent to the rim.
Bibliography: Opait 1991, 165, n. 301, pl. 44.
8. Fragmentary plate, rim. Inv. 44390, $\square \mathrm{X} 20,-1,40 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Dg}=27 \mathrm{~cm}$; Pl. I.
Light brown red clay, brown red slip, slightly adherent outside.
9. Fragmentary plate, rim. Inv. 44391, $\square \times 20,-1,40 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Dg}=27,4 \mathrm{~cm}$; Pl. I.
Red brick clay, rare particles of limestone, red slip.
10. Fragmentary plate, rim. Inv. 44392, $\square \mathrm{X} 1$, corridon of the tower, N 9 .
$\mathrm{Dg}=28 \mathrm{~cm}$; Pl. I.
Red brick clay, rare particles of limestone, brown red slip.
Analogies: Waagé 1948, 55, pl. VIII, 834, pl. IX, 836, variants, $5^{\text {th }}$ cent. AD; Hayes 1972, $107-109$, Form 62, fig. 18/B 14, years $350-425$ AD; Atlante I, 65, tav. XXVIII/11, the same datation; all findings mentioned here belong to the Mediterranean basin, which is another argument for the African origin of the variants of the Form 62 from Halmyris; Gaidukevici 1952, 123, fig. $153 / 2,3^{\text {rd }}-4^{\text {th }}$ cent. AD; Knipovici 1952, $318-319$, tip 23 (T), fig. 12/1, $3^{\text {rd }}-4^{\text {th }}$ cent. AD; Karaiskaj 1980, 189, tab. IV/1, $4^{\text {th }}-6^{\text {th }}$ cent. AD, similar piece dated accordingly to the context of the finding; Peacock, Bejaoui, Ben Lazreg 1990, 76, fig. 11/9, identical piece, difficult to be framed chronologically, as the author himself admits, which finds its closest analogy in the Form Hayes 62, years $350-425$ AD; Perko 1992, 97, fig. 2/8, 9, years $360-420 \mathrm{AD}$.
Datation: the second half of the $4^{\text {th }}$ cent. - the second half of the $5^{\text {th }}$ cent. AD.
VII. Forma Hayes 67

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | 1 | 1 |  |  |  |  | - | - | - |

The main feature of this form is the rim, made of two wide horizontal planes. The outside one is higher, having a convex section, bounded by a circular incision. At Halmyris two fragments were discovered, having the same chronology with the one proposed by Hayes.
11. Fragmentary plate, rim. Inv. 29656, S I, $15-17,-2,0 \mathrm{~m}, \mathrm{~N} 8$.
$\mathrm{Dg}=$ indeterminable; Pl. I.
Pink clay, grains of limestone, brick red bright slip.
Bibliography: Opaif 1991, 162, n. 238, pl. 40.
12. Fragmentary plate, rim. Inv. 44393, sector $\mathrm{P},-3,05 \mathrm{~m}$, street, N 9 .
$\mathrm{Dg}=16 \mathrm{~cm}$; Pl. I.
Dark gray clay, grains of limestone, slip at the same colour, secondary burnt.
An alog ies: Hayes 1972, 112 - 116, Form 67, fig. 19, years 360-470 AD; idem 1976 B, 25, fig. 1/19; idem 1980, 485, Form 67/71, end of the $4^{\text {th }}$ - beginning of the $5^{\text {th }}$ cent. AD; Atlante I, $88-89$, tav. XXXVII/9-11, tav. XXXVIII/1-4, years 360-470 AD; Novak 1980, 100, tav. VI/7, 122, tav. VI/8, years 360-470 AD; Johnson 1981, 9, 46-47, n. 214-219, pl. 33-34, first half of the $5^{\text {tll }}$ cent. AD; Tortorella 1988, 305, first decades of the $5^{\text {th }}$ cent. AD; Mackensen 1993, 403-405, 595-596, Form 9, taf. $56 / 6-9$, taf. $57 / 1-6,5^{\text {th }}$ cent. $A D$; Uscătescu-Barrón 1992, 129-130, fig. $4 / 23,24$, fig. $5 / 25,26,5^{\text {th }}$ cent. AD; Adroher Auroux, Pocinã Lopez 1996, 232, fig. $1 / 21-22$, end of the $4^{\text {th }}-$ beginning of the $5^{\text {th }}$ cent. AD; Perko 1997, 252, fig. 3/26, middle of the $5^{\text {th }}$ cent. AD.
Datation: $5^{\text {th }}$ cent. $A D$.
VIII. Form Hayes 80 A

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | 2 | - | - | - | - | - | - | 2 | 2 |

The walls of the vase slightly curved, are obliquely oriented towards the basis. The rim is simple, rounded at the upper side, is decorated with two-three incisions outside, in the situation of the type A. The two fragments found at Halmyris on a level dated in the first half of the $5^{\text {th }}$ cent. AD are slightly earlier than the datation proposed by Hayes at the middle of this century.
13. Fragmentary plate, rim. Inv. 40807, S II, $\square 90-91,-1,55 \mathrm{~m}, \mathrm{~N} 8$.
$\mathrm{Dg}=$ undeterminable; Pl. I.
Pink red clay, rare grains of limestone and white mica, brownish red slip.
Bibliography: Opait 1991. 162. n. 239, pl. 40.
14. Fragmentary plate, rim. Inv. 44 396, $\square$ F $16,-3,0 \mathrm{~m}$ (pit), N 8.
$\mathrm{Dg}=$ undeterminable; PI. I.
Pink red clay, rare grains of limestone and white mica, red slip.
Analogics: Hayes 1972, 127-128, Form 80, fig. 22/A, 1, middle of the $5^{\text {th }}$ cent. AD; Atlante I, $104-$ 105, tav. XLVIII/2, at Carthage is dated between years 360 - 440 AD; Novak 1980, 112, tav. VIII/6, 118 , tav. VIII/7, the second half of the $5^{\text {th }}$ cent. AD; Tortorella 1988, 305, fig. 3, 4, first decades of the $5^{1 \mathrm{l}}$ cent. AD; Mackensen 1993, 330-331, $598-599$, Form 11, taf. 60/11.2, middle of the $5^{\text {th }}$ cent. AD.
Datation: first half of the $5^{\text {th }}$ cent. AD.
IX. Form Hayes 87 A

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 2 | 2 |

The type A of the Form Hayes 87 has vertical rim, triangle-shaped in section, slightly concave inside. The datation proposed by Hayes corresponds to the archacological context where the first fragment at Halmyris was found, that is the second half of the $5^{\text {th }}$ cent. AD. The second fragment, discovered in uncertain stratigraphic condition, having the rim slightly curved inside, seems to be a variant of the Form 87 A .
15. Fragmentary plate, rim. Inv. 38595, S II, $\square 90-91, \mathrm{~N} 9$.
$\mathrm{Dg}=29 \mathrm{~cm}$; Pl. II.
Pink red clay, white mica, brownish red slip, slightly adherent outside.
Bibliography: Opait 1991. 162. n. 240, pl. 40.
16. Fragmentary plate, rim. Inv. 40809, S I, $\square 5,-1,0 \mathrm{~m}, \mathrm{~N} 11$ (?).
$\mathrm{Dg}=37 \mathrm{~cm}$; PI. II.
Pink red clay, grains of limestone and mica, slip at the same colour.
Bibliography: Opait 1991, 162, n. 241, pl. 40.
Analogies: Hayes 1972, 135-136, Form 87, fig. 24, A, 1, the second half of the $5^{\text {th }}$ cent. AD ; Atlante I, 93 - 94, tav. XLI/5-7, the same datation, model for the Form Hayes 104 A; Eiwanger 1981, 32 - 34, taf. 3/II 18, II 19, years $460-475$ AD; Kenrick 1985, 363, Form 651.1, fig. 67, the second half of the $5^{\text {th }}$ cent. AD; Adroher Auroux, Pocină López 1996, 233, fig. 2/31, takes the piece for the Form 104 A, the second half of the $5^{\text {th }}$ cent. $A D$.
Datation: the second half of the $5^{\text {th }}$ cent. AD - the second half of the $6^{\text {th }}$ cent. AD .
X. Form Hayes 1976 , A 52 (variant)

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> tllustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | - | 2 | - | - | - | 1 | 3 | 2 |

At Halmyris were found three fragments belonging to dishes having oblique walls, slightly curved, slightly thickened and rounded rim at the upper side. The distinctive element is the wide groove, slightly deep, which decorates this form outside under the rim. The closest analogy is found at Carthage, for the datation Hayes refers to the Form 81. Due to the large diameter of the pieces discovered, we consider them as being variants of the North-Africa prototype.
17. Fragmentary dish, rim. Inv. 44394, $\square \mathrm{L} 16,-1,20 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Dg}=31 \mathrm{~cm}$; Pl. II.
Red brick clay, rare grains of limestone and white mica, light brown red slip.
18. Fragmentary dish, rim. Inv. 44395, $\square$ M $15,-1,20 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Dg}=31 \mathrm{~cm}$; Pl. II.
The same clay and slip with n. 17.
Analogies: Hayes 1976, 32, Form A 52, fig. 13/52, refers to the Form Haycs 81, dated in the second half of the $5^{\text {th }}$ cent. AD (Hayes 1972, 128).
Datation: the second half of the $6^{\text {li }}$ cent. AD.
XI. Form Hayes 94 A

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 | 1 |

Hayes' remark regarding the scarcity of this form is confirmed by the only piece found at Halmyris, which fits to the type A, having the rim almost horizontal, wide and with a small diameter. Perhaps our piece is a variant, due to its polygon-shaped rim. After an initial chronological datation at the end of the $5^{\text {th }}$ - the beginning of the $6^{\text {th }}$ cent. AD, Hayes proposes the end of the $5^{\text {th }}$ century, "even earlier" (Hayes 1980, 486), the form being also found n archaeological contexts belonging to the $6^{\text {th }}$ cent. AD at Carthage and Berenice.
19. Fragmentary plate, rim. Inv. 40390, $\square \mathrm{H} 20,-0,85-1 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Dg}=19 \mathrm{~cm}$; PI. II.
Dark brown clay, rare grains of limestone and white mica, slip at the same colour, thick and frosted.
Bibliography: Opaif 1991. 162, n. 242, pl. 40.
Analogies: Hayes 1972, 148, Form 94, fig. 27, 94, 1, the end of the $5^{\text {th }}$ cent. - the beginning of the $6^{\text {th }}$ cent. AD; Hayes 1980, 486, the end of the $5^{\text {th }}$ cent., even earlier; Atlante I, 110, tav. LI/9, at Carthage is found in archaeological contexts belonging to the $6^{\text {th }}$ cent. AD; Fremersdor 1958,17, taf. 4/10, abb. 10, similar piece found at Köln, having polygon-shaped rim and double outline stamped on the inside of the basis, $6^{\text {th }}$ cent. $A D$; Kenrick 1985, 367, 423, Form B656, fig. 68, the first half of the $6^{\text {th }}$ cent. $A D$; Tortorella 1988, 306, fig. 8, the first half of the $5^{\text {th }}$ cent AD .
Datation: the first half of the $6^{\text {th }}$ cent. $A D$.
XII. Form Atlante I, tav. XLVII, 10

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 | 1 |

The main feature of this type is the horizontal rim, almost as thick as the wall and the outside edge slightly flared out. An almost identical piece is illustrated in Atlante I, joined with a text which takes from Hayes the description of the Form 95, to which is similar from the typological point of view. At Halmyris only one fragment was found in an archaeological context that confirms the datation proposed by the closest analogies. We remark the scarcity of the findings in the Mediterranean basin.
20. Fragmentary plate, rim. Inv. 40806, S II, $\square 24-25,-1,50 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Dg}=30 \mathrm{~cm}$; Pl. II.
Brick clay, white mica, brownish red slip, slightly adherent outside.
Bibliography: Opait 1991. 162, n. 236, pl. 40, mistakes the chronology, by our opinion, of the piece of the Form Hayes 58, which is dated in the years 290/300-375, having horizontal rim, usually thinned towards the end, orientated downwards and without flared edge.

Analogies: Atlante I, $102-103$, tav. XLVII/10, years $500-550$ AD; Hayes 1972, 95, Form 95, the first half of the $6^{\text {th }}$ cent. AD; Mackensen 1984, 89, taf. 32/6, the first half of the $6^{\text {th }}$ cent. AD; Fulford, Peacock 1984, 61, Form 35, fig. 15/35.4, "common form in the $5^{1 \text { h }}$ cent", probably dated in $425-450$, lasting till 500 AD , similar piece; Uscătescu-Barrón 1992, p, 133, fig. 7/51, the first half of the $6^{\text {tl }}$ cent. AD , almost identical.
Datation: the second half of the $5^{\text {th }}$ cent. $A D$.
XIII. Form Haycs 99

| N 1 | N 2 | N 3 | N 4 | N 5 | N 6 | N 7 | N 8 | N 9 | N 10 | N 11 | N 12 | N 13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 2 | 3 | 1 | 2 | - | 3 | 11 | 6 |

The body of the plates belonging to this form is almost hemispherical, with thickened rim outside. Accordingly to the diameter and the shape of the rim, as well as to the decoration, Hayes distinguishes three types that were also found at Halmyris.

T уре A, although classified accordingly to the features of the basis, has the outside of the rim less offset, almost straight. The datation proposed by Hayes is the same of the datation of the level 9 from Halmyris, where the only piece or this type was found.
21. Fragmentary plate, rim. Inv. 44397, $\square$ X 1, corridor of the tower, N 9.
$\mathrm{Dg}=17 \mathrm{~cm} ;$ Pl. II.
Brown red clay, rare grains of limestone, slip at the same colour.
Analogies: Hayes 1972, 152 - 155, Form 99, fig. 28, A, 7, years 510 - 540 AD; Hayes 1980, 516, outruns the beginning of this type in the $6^{\text {th }}$ decade of the $5^{\text {th }}$ cent. AD; Atlante I, $109-110$, tav. L/11, this type is certified in 465 - 468 at Conimbriga; Johnson 1981, 10, 49, n. 244, fig. 38, found at Karanis in a context dated at the end of the $3^{\text {rd }}-4^{\text {th }}$ cent. AD; Fulford, Peacock 1984, 71, Form 60, fig. 19/60.1, 60.2 , years $475 / 500-500 / 525 \mathrm{AD}$; Kuhnen 1989, $85-86$, tar. $9 / 2$, the end of the $5^{\text {th }}$ cent. -540 AD ; Mackensen 1993, 415-418, 609, Form 29, taf. 67/29.1, $5^{\text {th }}$ cent. AD.
Datation: middle of the $5^{\text {th }}-$ first years of the $6^{\text {th }}$ cent. $A D$.
Type B, has a narrower and more outset rim, the diameter of the basis being smaller than the half of the rim's. These elements are also found at the three pieces discovered at Murighiol.
22. Fragmentary plate, rim. Inv. 44398, $\square$ S $17,-1,17 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Dg}=18 \mathrm{~cm}$; Pl. II.
Brownish red clay, small and rare grains of limestone, thick slip at the same colour.
23. Fragmentary plate, rim. Inv. $44399, \square \gamma 3,-1,10 \mathrm{~m}, \mathrm{~N} 10$.

Dg = 20 cm ; Pl. III.
Red brick clay, rare grains of limestone, slip at the same colour.
24. Fragmentary plate, full profile. Inv. 40722, U-3, tower, $-1,20 \mathrm{~m}, \mathrm{~N} 11$.
$\mathrm{Dg}=20 \mathrm{~cm} ; \mathrm{Db}=9 \mathrm{~cm} ; \mathrm{I}=5,5 \mathrm{~cm} ; \mathrm{Pl}$. III.
Brown red clay, rare grains of limestone, slip at the same colour, bright. In the center of the basis there is a rhombus filled with reliefed grains.
Bibliography: Opait 1991, 163, n. 247, pl. 25, 48, illustrates only the stamped motif; Topoleanu 1996 B, 149, nr. 25, decoration type III, pl. V/25.

Analogies for the decoration: Hayes 1972, 248, motif 112, fig. 46/112, a, b.
A nalogies: Hayes 1972, 152 - 155, Form 99, fig. 28, B, 13, 18, years $530-580$ AD; Atlante I, 109 110 , tav. LI/1, 3, years $530-580 \mathrm{AD}$; Mackensen 1984, 81, tal. 23/16, years $530-620 \mathrm{AD}$; Kenrick 1985, 367 - 368, Form B 658.1, 658.2, 658.3, fig. 68, years $530-580$ AD; Mackensen 1993, 415 - 418, 609, Form 29, taf. 67/29.2, years $530-620$ AD; Kuzmanov 1993, 36, type II, fig. 1 b, years $530-580$ AD.
Datation: first half of the $6^{\text {th }}$ cent. $A D$.
Type C, is featured by a ring-shaped low basis, the rim is narrow and outset, without stamped decoration. The two plates having full profile found at Halmyris, discovered on the levels 11 and 12, confirm Hayes' datation.
25. Fragmentary plate, full profile. Inv. 27947, S I, $\square 22,-0,80 \mathrm{~m}, \mathrm{~N} 11$.
$\mathrm{Dg}=19.5 \mathrm{~cm} ; \mathrm{Db}=7 \mathrm{~cm} ; \mathrm{I}=5 \mathrm{~cm}$; Pl. III.
Brick red clay, brown red slip inside the body and on the rim, brown at the outside.
Bibliography: Opait 1991. 162. n. 244, pl. 40.
26. Fragmentary plate, full profile. Inv. 27958, S I, $\square$ 20, N 12.
$\mathrm{Dg}=19 \mathrm{~cm} ; \mathrm{Db}=7 \mathrm{~cm} ; \mathrm{I}=5 \mathrm{~cm} ; \mathrm{Pl}$. III.
Brick clay, small and rare grains of limestone, brown red thick slip.
Bibliography: Opait 1991, 162. n. 245, pl. 40.
Analogies: Hayes 1972, $152-155$, fig. 28/99 c, 22, 23, years $560 / 580-620$ AD; Hayes 1976 B, 72 , fig. 21/58; Atlante I, 109-110, tav. LI/4, 5, years 560/580-620 AD; Johnson 1981, 10, 49, n. 245, pl. 38 , the end of the $3^{\text {rd }}-4^{\text {th }}$ cent. AD (?); Mackensen 1984, 77, taf. 19/11, 20/8, 78, taf. 20/25, 26, 79, taf. $21 / 22$, about $560 / 580-620 \mathrm{AD}$; Kenrick 1985, 368, Form B 658.4, fig. 68, years 560/580-620 AD; Perko 1995, 241, Abb. 1/5, years 560/580 - the beginning of the $7^{\text {th }}$ cent. AD.
Datation: the second half of the $6^{\text {th }}$ cent. / the end of the $6^{\text {th }}-$ the beginning of the $7^{\text {th }}$ cent. $A D$.
XIV. Form Hayes 103 B

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | - | 1 | - | - |  |  | - | 1 |

The plates belonging to the Form 103 have straight walls, oblique on the basis. The clay is rough, the slip is thick, semi-polished. Sometimes the body is decorated with fine incisions outside. The rim is similar to the one belonging to the Form 99, and attributes the fragment discovered at Halmyris to the type B, with a closer datation to the stratigraphic context of our finding.
27. Fragmentary plate, rim. Inv. 44400, $\square \mathrm{P} 16,-1,30 \mathrm{~m}, \mathrm{~N} 10$.

Dg = 34 cm ; Pl. III.
Red brick clay, small and rare grains of limestone and white mica, light chestnut slip, fine incisions outside.

Analogies: Hayes 1972, 157 - 160, Form 103, fig. 29/B, 6, years $500-575$ AD; Atlante I, 99, tav. XLV/6, years $500-575$; Johnson 1981, 10, 49, n. 245, pl. 39, at Karanis found in a context dated at the end of the $3^{\text {rd }}-4^{\text {th }}$ cent. AD (?); Whitehouse 1982, 63, fig. 3/21, about 500 AD ; Mackensen 1984, 81,
taf. 23/13, 84, taf. 25/13, about 500 - the third quarter of the $6^{\text {th }}$ cent. AD; Lopez 1994, 84, fig. 49/5471, $6^{\text {th }}$ cent. AD .
Datation: the first half of the $6^{\text {th }}$ cent. $A D$.
XV. Form Hayes 104

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 2 | 2 | 3 | - | - | - | 7 | 7 |

The plates of this form are wide, having a prominent rim, oval or rounded in section, separated from the body inside by a circular incision. The walls are slightly curved or straight, strongly oblique towards the basis. Hayes separates three types also found in the fragments discovered at Halmyris.

Type A, has strongly oval rim, vertically placed.
28. Fragmentary plate, rim. Inv. 38675, S II, $\quad 71-75,-1,40 \mathrm{~m}, \mathrm{~N} 9$.

Dg = 42 cm ; PI. III.
Pink brick clay, small and rare grains of limestone, light chestnut frosted slip.
Bibliography: Opaif 1991. 163.n. 248, pl. 41.
29. Fragmentary plate, rim. Inv. 40812, S II, $\square 60,-1,25 \mathrm{~m}$, street, N 9 .
$\mathrm{Dg}=34 \mathrm{~cm}$; Pl. III.
Red brick clay, rare white mica, brown red frosted slip.
Bibliography: Opait 1991. 163.n. 249, pl. 41.
30. Fragmentary plate, rim. Inv. 29708, S I, $\square 27$ - 38, square, N 10.
$\mathrm{Dg}=32 \mathrm{~cm}$; PI. III.
Red brick clay, small and rare grains of limestone, brownish frosted slip.
Bibliography: Opaif 1991. 163. n. 250, pl. 41.
Analogics: Hayes 1972, 160 - 163, Form 104 A, fig. 30/A, 3, 13, years $530-580$ AD; Delgado 1975, 267-268, pl. LXXIV/19-20, years 530-580 AD; Allante I, 94-95, tav. XLI/9, XLII/1-4, about $500-580 \mathrm{AD}$, the form is certified at Conimbriga in 465-468 AD; Eiwanger 1981, 32 - 33, taf. II/II 1 - II. 10, the end of the first quarter of the $6^{\text {th }}$ cent. - the end of the $6^{\text {th }}$ cent. $A D$; Whitehouse 1982, 63, fig. 2/7, about $530-580 \mathrm{AD}$; Mackensen 1984, 74, taf. 16/28, 82, taf. 24/2, about $530-580 \mathrm{AD}$; Fulford, Peacock 1984, 73 - 74, Form 65, fig. 20/65.6, about 500 AD; Kenrick 1985, 368, Form B.663, fig. 68/663.1, the end of the $5^{\text {th }}$ cent. AD; Tortorella 1988, 106, fig. 19, at Carthage and Rome the beginning of this form is certified in the first half of the $5^{\text {th }}$ cent. AD; Abadie-Reynal, Sodini 1992, 31, Form CF 168, CF 169, fig. 12, the second half of the $5^{\text {th }}$ cent. AD; Mackensen 1993, Form 33, 346 350, 611 - 612, taf. 68/33.1, 33.2, years 530 - 580 AD; Ramallo Asensio, Ruiz Valderas, Berrocal Caparros 1996, 183, years 475 - 525 AD; Opriş 1997. 210. fig. 1, 2, $6^{\text {th }}$ cent. AD.
Dat ation: the second half of the $5^{\text {th }}$ - the first half of the $6^{\text {th }}$ cent. $A D$.
Type B, the plates are deeper than the previous type, having an almost rounded rim in its section.
31. Fragmentary plate, rim. Inv. 37152, S II, $\square 11, \mathrm{~N} 11$.

Dg = 42 cm ; PI. III.
Red brick clay, rare white mica, brown and red slip, unevenly applied, frosted.
Bibliography: Opait 1991, 163, n. 251, pl. 41.
32. Fragmentary plate, rim. Inv. 44402, sector $\mathrm{P}, \square \propto 2, \mathrm{~N} 11$.
$\mathrm{Dg}=40,5 \mathrm{~cm}$; Pl. IV.
Brown red clay, rare grains of limestone and white mica, brown and brown red slip, unevenly applied, frosted.

Analogies: Hayes 1972, 160, 163, Form 104 B, fig. 30/B 15, 16, years $570-600$, with late variants some years after 625 AD ; Atlante I, 95, tav. XLII/5, 6, years 570 - 600 AD ; Johnson 1981, 10, 49, n. $246-247$, pl. 39, at Karanis in a context of the end of the $3^{\text {rd }}$ - middle of the $5^{\text {th }}$ cent AD (?); Eiwanger 1981, $32-33$, taf. II/II.11, the end of the first quarter of the $6^{\text {th }}$ - the end of the $6^{\text {th }}$ cent. AD ; Mackensen 1993, 351, 613, Form 37, taf. 70/9-11, years $570-600 \mathrm{AD}$; Uscătescu-Barrón 1992, 138 - 139, fig. 9/67, fig. 10/68, years 570-600 AD.

Type C, is represented by shallower plates than the previous types, having thickened rim, lower basis, triangular or squared in section. Two pieces were found at Halmyris.
33. Shallow bowl, full profile. Inv. 30196, S I, $\square$ 48, N 11.
$\mathrm{Dg}=32 \mathrm{~cm} ; \mathrm{Db}=13,3 ; \mathrm{I}=6,5 \mathrm{~cm} ; \mathrm{Pl}$. IV.
Fine brown red clay, rare grains of limestone and white mica, slip at the same colour, bright, partly exfoliated outside and with traces of subsequent burning.
Bibliography: Opait 1991. 166, n. 307, pl. 45, attributes this piece to the category "Local Red Slip Ware" (?).

## Variant

34. Shallow bowl, full profile, restored. Inv. 38402, S II, $\square 41-43, \mathrm{~N} 10$.
$\mathrm{Dg}=40 \mathrm{~cm} ; \mathrm{Db}=17 ; \mathrm{I}=8,4 \mathrm{~cm} ; \mathrm{Pl}$. IV.
Beige brick clay, grains of limestone, brown red slip outside, brown inside, slightly adherent, with traces of partly subsequent burning. This vase is framed in the general line of the Forme 104, the rough manufacture perhaps is due to the fact that it was made in a local peripheral workshop.
Bibliography: Opaiţ 1991. 166. n. 306, pl. 45, mistakes attributing it to the catcgory "Local Red Slip Ware".

Analogies: Hayes 1972, 160, 163 - 165, Form 104 C, fig. 30/C 23, about $550-625$ AD; Atlante I, 95, tav. XLII/7, years $550-625 \mathrm{AD}$, at Carthage the form is also certified in the second half of the $7^{\text {th }}$ cent. AD; Mackensen 1984, 64, taf. 11/57, 73, taf. 16/16, 74, taf. 17/23, 77, taf. 19/24, 78, taf. 20/28, the second half of the $6^{\text {th }}-625 \mathrm{AD}$; Neuru 1987, 179, fig. $2 / 16,17,6^{\text {th }}$ cent. AD; Abadic-Rcynal, Sodini 1992, 31, Form CF 170, fig. 12, years 530 - 600/625 AD; Perko 1995, 241, Abb. I/3, 9, 13, ycars 550 625 AD .
Datation: $6^{\text {th }}$ cent $A D$.

Ceramics fragment with stamped decoration
Besides the whole plate with stamped decoration, which could be typologically attributed accordingly to its shape, at Halmyris we also discovered a fragment of a stamped basis fragment (Topoleanu 1996 B, 149, n. 25, pl. V).
35. Fragmentary plate, basis. Inv. 43856, $\square$ P $16,-1,30 \mathrm{~m}, \mathrm{~N} 10$, Pl. IV.

Red brick clay, rare grains of limestone and white mica, red frosted slip. The decoration is centrally stamped representing the right side of the bust and of the head of a person, elements that allowed the identification of the motif "Bacchus with panther and amphora". The vine leaves figured above the shoulder represent an outstanding detail of the image stamped from Halmyris. This motif is found in the Africa pottery only above the left shoulder.

Analogies for decoration: Hayes 1972, 261, 263, motif 223, 224, fig. 50/a-e, years 530 600 AD ; Atlante I, 134, pl. LXVI/2-7, years $530-600 \mathrm{AD}$; Kenrick 1985, 375, fig. 69/672.2, years 530-600 AD.
Datation: the first half of the $6^{\text {th }}$ cent. $A D$.

## B. Amphorae

I. Keay 1984 , type XXV

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | 1 | 3 | - | - |  |  |  |  | - | - |

These amphorae have large mouth, thick flared out rim, cylindrical neck and body, handles oval in section, their both ends being stuck on the neck.

They are certified in the whole Empire, but in the Pontic and South-Danube provinces they are not numerous. These pieces are dated in the $4^{\text {th }}$ cent. AD and in the first half of the next.

Four fragments were found at Halmyris, one of them published by Opait (1991, 143/84, pl. 15/84). Another one has the mouth delimited from the neck through a groove. The last two ones are different through the colour of the cover (red-pink around the mouth, white-green on the rest of the body).

Although Keay (1984) establishes several tens of variants for this category of amphorae, taking into account the fact that our pieces are fragmentary, we are going to frame them in the general type Keay XXV.
36. Fragmentary, mouth and neck. Inv. H 528, ■ P, street, N 7.
$\mathrm{Dg}=12 \mathrm{~cm}$. Pl. V.
Brick clay, grains of limestone, iron oxide, silver mica, red-pink engobe on the rim and white-green on the neck.
37. Fragmentary, mouth and handles. Inv. H 529, $\square$ Y 19, N 8.
$\mathrm{Dg}=12,4 \mathrm{~cm} . \mathrm{Pl}$. V.
The same texture and colour of the clay as $n .36$, white-green engobe.
Analogies: Keay 1984, 184-198, fig. 23-24, 77-89, $4^{\text {th }}$ cent. - the end of the $5^{\text {th }}$ cent. AD; Böttger 1982, 52, type III, 3, cat. 169 - 173 (Period B), 341 - 345 (Period C), taf. 12 f, 28/169, 341, 343, the second half of the $4^{\text {th }}$ cent. - the first half of the $5^{\text {th }}$ cent. AD; Whitehouse 1982, 69, cat. $130-141$, fig. $10,4^{\text {th }}-5^{\text {t" }}$ cent. AD; Kuzmanov 1985, $14-15$, type VIII, cat. A 44-48, pl. 5/A 44-48, $4^{\text {th }}$ cent. the beginning of the $7^{\text {th }}$ cent. AD; Bonifay 1986, 278, type "Amphores cylindriques de moyenne dimension", fig. $5 / 9,7^{\text {th }}$ cent. AD; Bjelajac, 1996, $87-88$, without illustration, $4^{\text {th }}-5^{\text {th }}$ cent. AD.
Datation: $4^{\text {thg }}-5^{\text {th }}$ cent. $A D$.
II. Spatheia; Bercnice LR 8a

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> lllustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | - | 2 | 4 | 4 | 5 | - | 15 | 4 |

The mouth is small, the rim is thickened or rounded, the neck and the body are cylindrical, and the basis is cone-shaped.

Some specialists consider these amphorae as being a late variant of the type Keay XXV (Mackensen 1993, 245; Kuzmanov 1985, 14 - 15). In certain western sites both types are found in the same period (Pallares 1987, 241). Unlike the amphorae Keay XXV, these ones have smaller capacity.

The were in circulation throughout the Empire during the $4^{\text {th }}-7^{\text {th }}$ cent. AD. In Scythia Minor they are certified in the second half of the $6^{\text {th }}$ cent. AD and in the first decades of the next one at Histria and Argamum.

Fifteen pieces were fund at Halmyris. This figure represents $1.9 \%$ out from the whole number of the investigated amphorac. On the levels of inhabitation dated as belonging to the end of the $6^{\text {th }}$ cent. and the beginning of the $7^{\text {th }}$ cent. AD this type represents $5 \%$.
38. Fragmentary, mouth, handles.. Inv. H 530, $\square$ X 19, $-1,20 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Dg}=6 \mathrm{~cm}$. Pl. V.
Pink clay, limestone, silver mica, whitish engobe.
39. Complete, restored. Inv. 32496, S II, $\square$ 48, N 11.

Dg = $6,5 \mathrm{~cm} ;$ Dmax $=10 \mathrm{~cm} ; \mathrm{I}=43 \mathrm{~cm} . \mathrm{Pl} . \mathrm{V}$.
White yellow clay, engobe at the same colour.
Bibliography: Opait 1991, 144. n. 89, pl. 15.
40. Fragmentary, mouth, neck and lower side. Inv. H 555, $\square \mathrm{H} 17, \mathrm{~N} 11$.
$\mathrm{Dg}=7 \mathrm{~cm} . \mathrm{Pl}$. V.
Red brick clay, rare grains of limestone, white pink engobe.
41. Fragmentary, mouth, handles. Inv. H 556, S II, $\square 40, \mathrm{~N} 12$. $\mathrm{Dg}=6,4 \mathrm{~cm}$. Pl. V.
Pink yellow clay, rare limestone, whitish engobe.
Analogies: Riley 1979, $226-227$, LR Amph. 8 a, fig. $92 / 362-364,6^{\text {th }}-7^{\text {th }}$ cent. AD; Condurachi 1954, 460, fig. 388; Bass, Doorninck 1982, 181, cat. P $66-67$, lig. $8 / 18$, the end of the $6^{\text {thl }}$ cent. $-625 / 6$ AD ; Fulford, Peacock 1984, 135/66-69, fig. 42/100-103, undated; Kuzmanov 1985, 14 - 15, lype VIII, cat. A $49-54$, pl. V/A $49-54,6^{\text {th }}$ cent. - the beginning of the $7^{\text {th }}$ cent. AD; Bonifay 1986, 275 , 277, 286, type Spatheia, fig. $4 / 2-8,11 / 44,5^{\text {th }}-7^{\text {th }}$ cent. AD; Böttger 1990, 926 , Abb. $3 / 343,4^{\text {th }}-6^{\text {th }}$ cent. AD; Kuzmanov, Salkin 1992, $50-51$, type 29, cat. $131-132$, pl. X/131 - 132, $6^{\text {th }}-7^{\text {th }}$ cent. AD; Mackensen 1993, 245 - 252, type Spatheia, cat. 15-36, Abb. 3-4, taf. 52/4-9, 53/1-15, the second half of the $5^{\text {th }}$ - the first half of the $7^{\text {lit }}$ cent. AD; Hayes 1992, 67, type 13, no illustration, $5^{\text {l' }}-7^{\text {th }}$ cent. AD; Ramallo Asensio, Ruiz Valderas, Berrocal Caparros 1996, cat. 152 (Faze 10.5), 173 - 174 (Faze 10.4), 211-213 (Faze 10.3), fig. 8/152, 9/173-174, 11/211-213, 21, table 3, years 550-625 AD.

Datation: $6^{\text {th }}-7^{\text {th }}$ cent. $A D$.
III. Keay 1984 , lype LVII

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 | 1. |

The mouth is wide; the rim is rounded, thick, separated from the neck. Under the rim (about 1 cm ) there is a small groove. The neck is truncated-cone shaped, the body is cylindrical, having a foot also cylindrical. The handles are elliptical in section.

This type is certified especially in the western side of the Empire. In Schytia Minor we only have findings at Tomis, dated in the second hall of the $5^{\text {th }}$ cent. and the $6^{\text {th }}$ cent. AD.

At Halmyris we found a fragment of the mouth, in an archaeological context dated in the second half of the 5th cent. AD.
42. Fragmentary, mouth. Inv. H 524, $\square$ T $20,-1,50 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Dg}=15 \mathrm{~cm} . \mathrm{Pl} . \mathrm{V}$.
Whitish clay, engobe at the same colour.
A n a 1 o g i es: Keay 1984, 298 - 299, type LVII c, fig. 130/1, 2, the first half of the $5^{\text {th }}$ - the end of the $6^{\text {l" }}$ cent. AD; Rădulescu 1976, 104 - 106, type 5 d, pl. V/4 a, $5^{\text {th }}$ cent. AD; Fulford, Peacock 1984, 130, cat. 46, fig. 39/60, years $450-500$ AD; Peacock, Bejaoui, Ben Lazreg 1990, 64, fig. $3 / 26,5^{\text {th }}-6^{\text {th }}$ cent. AD. Datation: the second half of the $5^{\text {th }}$ cent. $A D$.
IV. Keay 1984 , type VII

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 2 | 1 |

These amphorae have wide mouth, thick rim separated from the neck, cylindrical body.
A. Opaiţ published two pieces discovered at Halmyris.

The type Keay VII is dated between the years $525-560 \mathrm{AD}$. One of the fragments was discovered on the last level of inhabitation, perhaps trained from a previous one.
43. Fragmentary, mouth. Inv. 29766, $\square$ U 8, N 13.
$\mathrm{Dg}=14 \mathrm{~cm}$. Pl. V.
Pink clay, silver mica, white yellow engobe.
Bibliography: Opaif 1991, 143, n. 86, pl. 15.
Analogies: Keay 1984, 121-123, 126, fig. 46/2-4, 8-10, the beginning of the $6^{\text {th }}$ cent. AD ; Peacock, Bejaoui, Ben Lazreg 1990, 190 - 191, fig. 13/13, $6^{\text {th }}$ cent. AD.
Datation: $6^{\text {th }}$ cent. $A D$.

## C. Lamps

I. Hayes 1972 , type II; Iconomu 1986 , type XLV; Ivanyi 1935 , type 12 ; Prevoost 1976 , species V; Bronner 1977, type XXXI; Atlante I, type VIII, X

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | 4 | 4 | 4 | 3 | 2 | - | 5 | 22 | 15 |

North-Africa lamps discovered at Halmyris, as wall the lamps found in Dobrudja, belong to the type Hayes II (Iconomu 1986, 89). The 22 pieces found in this region render Halmyris on the second lace after Tomis. The local imitations are joint to these ones, and will be described separately. The stratigraphic context of the findings confirm the datation proposed by the closest analogies.

Accordingly to the clay and the process of manufacture, the size of the body and analogies, we separated two variants.

Variant A. Hayes 1972, type II A.
The lamps belonging to this variant have middle size body and are manufactured of clay of very good quality, compact and thick, covered with thin bright engobe. The discus is perforated by two filling holes. The pieces discovered at Halmyris have used decoration due to the utilization. Accordingly to the stratigraphic context of the findings and analogies, these pieces can be dated in the $5^{\text {th }}-6^{\text {th }}$ cent. $A D$, being imported products.

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Sludied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | 1 | 4 | 2 | 2 | - | - | 4 | 13 | 9 |

44. Fragmentary, the beak and half of border and discus are missing.

Inv. 28548, S I, - 22, $-2,90 \mathrm{~m}, \mathrm{~N} 8$.
$\mathrm{Lp}=9,4 \mathrm{~cm} ; \mathrm{D}=6,2 \mathrm{~cm} ; \mathrm{Ibody}=2,9 \mathrm{~cm} ; \mathrm{I} \mathrm{tot}=3,6 \mathrm{~cm}$. PI. VI.
Fine clay, light beige, rare grains of limestone, engobe at the same colour, bright.
On the slightly concave disc, having two filling holes, a decoration is preserved representing a pigcon on the branch of a conic-shaped tree. On the border there are rhombus with volutes in alternation with flowers having four petals.

Analogies for the decoration: Enuabli 1967, 142, nr. 632, pl. XXXIII/632, $4^{\text {th }}-6^{\text {th }}$ cent. AD , identical piece.
Datation: the first half of the $5^{\text {th }}$ cent. $A D$.
45. Fragmentary, a part of the border, discus and the groove of the beak are preserved.

Inv. 28546, S II, $\quad 37,-1,00 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Lp}=6,3 \mathrm{~cm} ; \mathrm{D} \approx 6,4 \mathrm{~cm}$. PI. VI.

Fine brown red clay, rare grains of limestone, engobe at the same colour, bright, uniform and thick. Traces of utilization.
The discus, slightly concave, is decorated with a palm-tree with the trunk starting from the half of the groove. On the discus the rhombuses with volutes are in alternation with flowers with four petals.

Analogies for the decoration: Perlzweig 1961, 176, n. 2423, pl. 39, $5^{\text {th }}$ cent. AD; Bruneau 1965, 139, n. 4691, pl. 33, 5th cent. AD; Enuabli 1967, 164, n. 772, pl. XLI/772, 5th cent. AD; Papuc 1976, 203 - 204, fig. 4/1, the second half of the $5^{\text {th }}$ cent. AD; Hayes 1980, 68, n. 288, pl. 34, $5^{\text {th }}$ cent. AD; Garbsch, Overbeck 1989, 158 - 159, n. 172, 173, 176, $5^{\text {th }}$ cent. AD; Kuzmanov 1992, 42, n. 302, tip XXXVI, n. $302,4^{\text {th }}-5^{\text {th }}$ cent. AD.
Datation: the second half of the $5^{\text {th }}$ cent. AD.
46. Fragmentary, the handle and a part of the border and the basis are preserved.

Inv. 40373, S II, 口 $10-14$, pass.
$\mathrm{Lp}=6,9 \mathrm{~cm} ; \mathrm{D}=6,2 \mathrm{~cm} ; \mathrm{Ibody}=2,9 \mathrm{~cm}$. Pl. VI.
Fine brown red clay, rare particles of limestone, engobe at the same colour.
The same decoration on the border as n . cat. 45 .
47. Fragmentary, a part of the border and of the handle are preserved.

Inv. 43829, $\square$ X 20, $-1,25 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Lp}=7 \mathrm{~cm}$. Pl. VI.
Fine pink brick clay, rare silver mica, bright engobe at the same colour. Traces of utilization.
On the border is preserved a decoration consisting in rhombuses with volutes in alternation with double outlined squares with concentric circles.

Analogies for the decoration: Papuc 1976, 203-204, n. 7, fig. 4/1, the end of the $5^{\text {th }}$ cent. AD, identical decoration on the border; Mackensen 1980, 215, taf. 22/1, $5^{\text {th }}$ cent. AD; Guarlandi Genito 1986, 393 - 394, 402 - 403, n. 217, $5^{\text {lh }}$ cent. AD; Kuzmanov 1992, 42, n. 302, type XXXVI, n. $302,4^{\text {th }}-5^{\text {th }}$ cent. AD; Paleani 1993, 70, n. 63, years $450-500$ AD, $73-74$, n. 65 , years $460-480$ AD .
Datation: the second half of the $5^{\text {th }}$ cent. AD.
48. Fragmentary, a part of the border and the groove are preserved.

Inv. 43827, $\square \times 20,-1,40 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Lp}=4,3 \mathrm{~cm}$. PI. VI.
Fine pink brick clay, bright brick red engobe.
On the border two decorative motifs are preserved: double outlined square with concentric circles framed, in alternation with two concentric circles with middle point and framed rays.

Analogies for the decoration: Bravar 1964-1966, 118, fig. 9, motif $11 / \mathrm{b}, 5^{\text {th }}-6^{\text {th }}$ cent. $A D$; Papuc 1976, $203-204$, n. 7 , fig. $4 / 1,204$, n. 10 , fig. $6 / 2$, the second half of the $5^{\text {th }}$ cent. $A D$; Mackensen 1980, 215, taf. 22/1, $5^{\text {ll }}$ cent. AD; Williams 1981, pl. 19/412, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Lako 1984, $186-187$, fig. X/9, $4^{\text {th }}-5^{\text {th }}$ cent. AD, almost identical decoration on the border; Guarlandi Genito 1986, $402-403$, n. 217, $5^{\text {th }}$ cent. AD, identical decoration on the border; Abadie-Reynal, Sodini 1992, 80, L 69, fig. 34, the end of the $5^{\text {th }}$ - the first half of the $5^{\text {th }}$ cent. AD , identical decoration on the border; Băluṭă 1994, 223, n. 108, pl. VIII/5, $5^{\text {th }}$ cent. AD.
Datation: the second half of the $5^{\text {th }}$ cent AD .
49. Fragmentary, the handle and a part of the border are preserved.

Inv. 43835, $\square$ X $20,-1,08 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Lp}=5,1 \mathrm{~cm}$. Pl. VI.
Red brick fine clay, bright brick red engobe.
The border is decorated with a motif consisting in three concentric circles with a middle grain in relief, in alternation with a palm made up of three leaves on a double volute.
Analogies for the decoration: Hayes 1972, $235-236$, motif 27 , fig. $40,4^{\text {th }}-5^{\text {th }}$ cent. $\mathrm{AD}, 249$, motif 118 , fig. $44,46,6^{\text {lh }}$ cent. AD; Menzel 1969, 91, n. 598, Abb. 77/3, n. 603, Abb. 77/8, $5^{\text {th }}$
cent. AD; Vikic-Belancic 1971, 167, n. 283, pl. XXIV/3, $4^{\text {th }}$ cent. AD; Subic 1976, 82, pl. $5 / 19,5^{\text {th }}$ cent. AD; Mackensen 1980, 217, taf. 23/2, $5^{\text {th }}$ cent. AD; Williams 1981, pl. 19/428, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Guarlandi Genito 1986, $402-403$, n. 217, $5^{\text {th }}$ cent. AD; Peacock, Bejaoui, Ben Lazreg 1990, 70, fig. $9 / \mathrm{k}, 5^{\text {th }}$ cent. AD , identical decoration; Paleani 1993, $67-68, \mathrm{n} .61$, the second half of the $5^{\text {th }}$ cent. AD. Datation: the first half of the $6^{\text {th }}$ cent. $A D$.
50. Fragmentary, a part of the basis with the groove which joins with the handle are preserved.

Inv. 43484, S II, $\square 89-90,-1,00 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Lp}=5 \mathrm{~cm}$. Pl. VI.
Fine brick red clay, rare silver mica, bright engobe at the same colour.
The same type as the previous ones.
51. Fragmentary, the handle and a part of the border and handle are preserved.

Inv. 43235, $\square$ V 19. - $1,92 \mathrm{~m}$, groapă. pass.
$\mathrm{Lp}=7,8 \mathrm{~cm} ; \mathrm{D}=6,5 \mathrm{~cm} ; \mathrm{Ibody}=3 \mathrm{~cm} ; \mathrm{Itot}=3,9 \mathrm{~cm}$. Pl. VI.
Fine thick brown red clay, bright engobe at the same colour. Strongly burnt.
The border is decorated with rhombuses with volutes, in alternation with flowers with four petals. The handle is lamellar and joint by a straight groove to the ring-shaped round flat basis.

Analogies for the decoration: Menzel 1969, 93, n. 606, Abb. 77/11, $4^{\text {th }}-5^{\text {th }}$ cent. $A D$; Papuc 1976, 203 - 204, fig. 3/2, 4/1, the second half of the $5^{\text {th }}$ cent. AD; Fulford, Peacock 1984, 235, form $1 \mathrm{G}, \mathrm{pl} .2 / 8,9,5^{\mathrm{hh}}$ cent. AD; Garbsch, Overbeck 1989, 141, n. 101, 103, the second half of the $4^{\text {th }}$ cent. AD; Abadie-Reynal, Sodini 1992, $79-80$, L 68, fig. 34, $5^{\text {th }}$ cent. AD; Kuzmanov 1992, 42, tip XXXVI, n. 302, $4^{\text {th }} 5^{\text {l'h }}$ cent. AD.
Datation: $5^{\text {th }}$ cent. AD.
52. Fragmentary, the handle and a part of the border are preserved.

Inv. 43237, northern gate, pass.
$\mathrm{Lp}=5,7 \mathrm{~cm}$. PI. VI.
Fine orange clay, bright brown red engobe.
The border is decorated with a flower with six petals in alternation with a stylized bird (?).
The same type as the previous ones.

Variant B. Hayes 1972, lype II B.
The lamps belonging to this variant have a larger body the previous ones and are manufactured of an inferior clay, sometimes rough, with slightly adherent engobe. The discus has one filling hole. Though are generally considered as imported products, it is difficult to separate them from the provincial lamps.

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | 3 | - | 2 | 1 | 2 | - | 1 | 9 | 6 |

53. Fragmentary, the extremity of the beak is missing. Restored.

Inv. 42656, S II, ㅁ $10,-2,10 \mathrm{~m}, \mathrm{~N} 8$.
$\mathrm{L}_{\mathrm{p}}=12,5 \mathrm{~cm} ; \mathrm{D}=7,1 \mathrm{~cm} ; \mathrm{Ibody}=3,4 \mathrm{~cm} ; \mathrm{Itol}=4,9 \mathrm{~cm}$. PI. VI.
Soft fine brick red clay, rare particles of limestone and silver mica, red engobe, slightly adherent. Traces of usage.
The discus is large, slightly concave, perforated in the middle by the filling hole and edged by a groove in relief which makes up on the beak a wide channel with parallel sides, which surrounds the burning hole. The border is straight, lamellar, rounded at the upper side and is joint through a groove with the ring-shape rounded flat basis.
On the discus there is a square with decoration inside and outside consisting in double or spotted triangles as well as in five-lobed leaves. On the border there are hachured squares, treble outlined semicircles and double outlined triangles, with two spots on the basis.

Analogies for the decoration: Bravar 1964-1966, 117, fig. 6/a, fig. 9, motif n. 5, $4^{\text {th }}-$ $5^{\text {th }}$ cent. $A D$, identical decoration on the discus; Bovon 1966, $89-90$, n. 623, pl. $17,5^{\text {th }}$ cent. AD; Enuabli 1967, n. 1195, 1202, pl. LXIV, $4^{\text {th }}-5^{\text {th }}$ cent. AD; Menzel 1969, 91, n. 596, 597, Abb. 77/1, 2 , n. 599,600 , Abb. $77 / 4,5,5^{\text {th }}$ cent. AD; Papuc 1976, 203, fig. $3 / 1$, the second half of the $5^{\text {th }}$ cent. AD; Garbsch, Overbeck 1989, 159, n. 178, $5^{\text {th }}$ cent. AD; Vikic-Belancic 1991, 168, n. 294, pl. XVII/3, $4^{\text {th }}$ cent. AD.
Datation: the first half of the $5^{\text {th }}$ cent. AD .
54. Fragmentary, the upper side without the beak is preserved.

Inv. 42652, S II, $\square 85,-2,22 \mathrm{~m}, \mathrm{~N} 8$.
$\mathrm{Lp}=9,1 \mathrm{~cm} ; \mathrm{D}=6,8 \mathrm{~cm}$. Pl. VI.
Red clay, rare grains of limestone and silver mica, engobe at the same colour. Traces of usage.
The discus, slightly concave, has the filling hole perforated towards the channel.
The border is decorated with rhombuses with volutes, motif which is repeated five times on each side. On the discus there is the left bust of a feminine person, considered as being the empress Faustina.

Analogies for the decoration: Perlzweig 1961, 99 , n. 323, pl. 10, $5^{\text {th }}$ cent. AD; Enuabli 1967, 56, n. 96, pl. IV, $4^{\text {th }}-5^{\text {th }}$ cent. AD; Menzel 1969, 91, n. 598, Abb. 77/3, $5^{\text {th }}$ cent. AD; Dremsizova-Nelcinova 1988, 38, fig. 7, $5^{\text {th }}$ cent. AD; Garbsch, Overbeck 1989, $83-84$, n. 23, 25, $4^{\text {th }}-$ $5^{\text {th }}$ cent. AD; Paleani 1993, $70-74, \mathrm{n} .64,65,5^{\text {th }}$ cent. $A D$.
Datation: the first half of the $5^{\text {th }}$ cent. $A D$.
55. Fragmentary, the handle and a part of the border are preserved.

Inv. 43825, प X $20,-1,18 \mathrm{~m}, \mathrm{~N} 10$.
$\mathrm{Lp}=5,3 \mathrm{~cm}$. Pl. VII.
Rough red brick clay, engobe at the same colour, slightly adherent.
The border is decorated with treble outlined triangles, in alternation with concentric circles. On the discus the extremities of the monogram Chi-Rho are preserved.

Analogies for the decoration: Bravar 1964-1966, 115-116, fig. 8/a, $5^{\text {th }}$ cent. AD; Menzel 1969, 93, n. 609, Abb. 77/14, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Barnea 1979, 246, pl. 105/1, $4^{\text {th }}-5^{\text {th }}$ cent. AD; Fulford, Peacock 1984, 234, pl. I/19, $5^{\text {th }}$ cent. AD; Guarlandi Genito 1986, $403-404$, n. 218, $5^{\text {th }}$ cent. AD; Abadie-Reynal, Sodini 1992, $79-80$, L 68, fig. 34, $5^{\text {th }}$ cent. AD.
Datation: the first half of the $6^{\text {th }}$ cent. $A D$.
56. Fragmentary, a part of the border and of the channel is preserved.

Inv. 40399, $\square$ E 20, $-0,90 \mathrm{~m}, \mathrm{~N} 11$.
$\mathrm{Lp}=6,6 \mathrm{~cm}$. Pl. VII.
Light beige clay, grains of limestone, red rough slightly adherent engobe.
On the channel is preserved the lower part of a cross, decorated with small circles in relie斤 havin a spot on the middle.

Analogies for the decoration: Hayes 1972, $280-281$, motif 336, fig. $57 / 336 \mathrm{~h}, 6^{\text {th }}$ cent. AD; Eiwanger 1981, 108, n. II 561, taf. 78, $6^{\text {th }}$ cent. AD.
Datation: the second half of the $6^{\text {th }}$ cent. AD.
57. Fragmentary, the handle and a part of the border are preserved.

Inv. 40374, $\square$ F $20,-0,60 \mathrm{~m}, \mathrm{~N} 12$.
$\mathrm{Lp}=6,5 \mathrm{~cm}$. Pl. VII.
Fine brown red clay, engobe at the same colour.
The border is decorated with four petals flowers, in alternation with ovae having the shape of double outlined drops of water.

Analogies for the decoration: Bravar 1964-1966, 117, fig. 9, motif 6 a, $4^{\text {th }}-5^{\text {th }}$ cent. AD; Eiwanger 1981, 113, n. II 602, taf. VI/82, $5^{\text {th }}-6^{\text {th }}$ cent. AD, identical decoration on the border.
Datation: the end of the $6^{\text {th }}-$ the beginning of the $7^{\text {th }}$ cent. $A D$.
58. Fragmentary, a part of the boder and of the discus are preserved.

Inv. 42653, S II, ■87, pass.
$\mathrm{Lp}=4 \mathrm{~cm}$. Pl. VII.
Fine soft red clay, rare grains of limestone and silver mica, brown red engobe.
The border is decorated with flowers having the petals grouped in round or squared shape. On the discus the head of a bird (pigeon?) is preserved.

Analogies for the decoration: Bovon 1966, 89, n. 612, 613, pl. 16, $6^{\text {th }}$ cent. AD; Enuabli 1967, n. $496-673.4^{4^{\text {h }}}-6^{\text {th }}$ cent. AD; Fulford, Peacock 1984, 234, pl. 1/15-17, 236, pl. 2/14, $6^{\text {th }}$ cent. AD; Arasa 1995, $255-256$, fig. $2,6^{\text {th }}$ cent. AD.
Datation: $6^{\text {th }}$ cent. - the beginning of the $7^{\text {th }}$ cent. $A D$.
General analogies: Hayes 1972, $310-313$, pl. XXI, $4^{\text {th }}-6^{\text {th }}$ cent. $A D$; Iconomu 1967, 26, type XIX, n. $715-722$, fig. $51-52,4^{\text {th }} 7^{\text {th }}$ cent. AD; Iconomu 1986, $89-92$, type XLV, pl. VIII/5 $-7,4^{\text {th }}-$ $7^{\text {th }}$ cent. AD; Ivanyi 1935, $14-15$, type XII, $4^{\text {th }}-6^{\text {th }}$ cent. AD; Perlzweig 1961, $99-100$, n. $322-345$, $4^{\text {th }}-7^{\text {th }}$ cent. AD; Bruncau 1965, $138-139$, type VIII, n. $4687-4694$, pl. $32,33,5^{\text {th }}-6^{\text {th }}$ cent. AD; Bronner 1977, 81 - 82, type XXXI, pl. 35, 36, n. 3145-3169, $4^{\text {th }}-6^{\text {th }}$ cent. AD; Atlante I, $184-207$, type 10 , tav. XCIV - CIII, CLV - CLXII, $4^{\text {th }}-6^{\text {th }}$ cent. AD; Garbsch, Overbeck 1989, pass., $4^{\text {th }}-7^{\text {th }}$ cent. $A D$.
Datation: $5^{\text {th }}$ - the beginning of the $7^{\text {th }}$ cent. $A D$.

> Local imitations after North-Africa lamps
> 1. Iconomu 1986, type LXVI-LXVII

| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found <br> Studied | Described <br> Illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | - | - | - | - | - | - | 4 | - | - | 2 | 2 | - | 8 | 6 |

59. Fragmentary, the extremity of the beak is missing.

Inv. 43477, $\square$ X 18, -1,55 m, N 9.
$\mathrm{Lp}=10,2 \mathrm{~cm} ; \mathrm{D}=6,7 \mathrm{~cm} ; \mathrm{Ibody}=2,7 \mathrm{~cm} ; \mathrm{Itot}=4,3 \mathrm{~cm}$. Pl. VII.
Soft porous white yellow clay, rare grains of limestone and silver mica, engobe at the same colour.
The body is pear-like and flat, having the beak as a prolongation. The discus is small and rounded and has at its middle side a wide filling hole, with flared edges. The ridge, double and in relief and bounding the discus, is separated near the beak, making up a channel with parallel sides, having in its middle the burning hole. The border is straight and marked outside by a double groove. The handle is lamellar and the basis is ring-shaped, rounded and flat.
The border is decorated with radial lines, simple circles towards the beak, circles having a framed cross on the both sides of the handle. On the channel there is a cross in relief.
60. Fragmentary, a part of the border is preserved.

Inv. 42661, 口 K $20,-0,45 \mathrm{~m}, \mathrm{~N} 12$.
$\mathrm{Lp}=5.1 \mathrm{~cm}$. PI. VII.
The same clay, colour and decoration as n. cat. 59.
Analogies: Iconomu 1986, tip XLVII, variant III, 93 - 94, pl. VIII/12, $6^{\text {h }}$ cent. AD; Gomolka 1966, 298, n. 53, pl. VIII, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Barnea 1979, 248, pl. 106/2, $6^{\text {th }}$ cent. AD; Sandu 1981, 169, n. 21, pl. IV/5, $6^{\text {th }}$ cent. AD; Minčev, Georgiev 1991, 225, Abb. 29, $6^{\text {th }}$ cent. AD; Covacef, Corbu 1991, 295, fig. 1/15, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Kuzmanov 1992, type XXXVI, 42, n. 306, $6^{\text {th }}$ cent. AD; Popescu 1994, $350-351$, fig. $53,6^{\text {th }}$ cent. AD; Băluṭă 1994, $222-223$, n. 106, pl. VIII/2, $6^{\text {th }}$ cent. AD.
Datation: $5^{1 \mathrm{~h}}-6^{\mathrm{lh}}$ cent. AD.
61. Fragmentary, the upper half is preserved without the extremity of the beak.

Inv. 28545, S I, $\square 54-55, \mathrm{~N} 9$.
$\mathrm{Lp}=10,2 \mathrm{~cm} ; \mathrm{D}=6,6 \mathrm{~cm}$. Pl. VII.
White yellow clay, rare silver mica, engobe at the same colour, traces of red paint. Traces of usage.
The discus is small and rounded, outlined by a double reliefed ridge and separates at the beak, making a channel with parallel sides where the burning hole is made. The filling hole is wide and central. The same groove bounds the border outside.
The radial lines that decorate the border are finished towards the beak with two grains and two little circles with a spot on the middle. We can remark the clean clay, the thorough execution and the presence of the red paint, which can indicate the manufacture of this lamp in a famous workshop.
62. Fragmentary, the handle is missing.

Inv. 42662, S II, $\square 58,-1,20 \mathrm{~m}, \mathrm{~N} 9$.
$\mathrm{Lp}=9,9 \mathrm{~cm} ; \mathrm{D}=6,2 \mathrm{~cm} ;$ Ibody $=3 \mathrm{~cm}$. PI. VII.
Rough brick clay, grains of limestone and silver mica, engobe at the same colour. Traces of usage.
This lamp unskilfully imitates the previously described one. In addition, it is decorated with a groove that joins the flared edge of the filling hole with the burning hole on the middle of the channel. Another groove is between the handle and the oval flat basis. The radial lines on the border are unevenly placed and worn out. On the both sides of the channel two grains in relief are figured.

Analogies: Iconomu 1986, tip XLVII, variant VI, 94, pl. IX/2, $5^{\text {th }}-6^{\text {th }}$ cent AD; Gomolka 1966, 294, n. 15, pl. II, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Donceva-Petkova, Toptanov 1982, 109, 114, n. 59, pl. X/2, $5^{\text {th }}-6^{\text {th }}$ cent. AD; Kuzmanov, Băcvarov 1986, $56-57$, n. $110-111$, type VII, pl. XIV, $6^{\text {th }}-7^{\text {th }}$ cent. AD; AD; Muşeteanu 1992, 177 - 178, 210, n. 339, pl. 53, type XIII, $5^{\text {th }}-6^{\text {lh }}$ cent. AD.
Datation: the second half of the $5^{\text {th }}$ cent. AD.
63. Complete.

Inv. 43183, $\square \mathrm{D} 3,-0,50 \mathrm{~m}, \mathrm{~N} 12$.
$\mathrm{L}=9,5 \mathrm{~cm} ; \mathrm{D}=5,3 \mathrm{~cm} ; \mathrm{Ibody}=2,8 \mathrm{~cm} ; \mathrm{Itot}=4,3 \mathrm{~cm}$. Pl. VII.
Soft white yellow clay, rare grains of limestone and silver mica, engobe at the same colour.
The body is tall, oval, with the beak as a prolongation. The discus is small, oval along the long axis of the lamp. The ridge that surrounds the piece is prolonged on the beak, having inside the burning hole. Another finer groove surrounds the filling hole and is doubled on the channel till the burning hole. Another ridge bounds the border outside. The handle is lamellar, thick, and joint through a groove to the small rounded and ring-shaped basis.
The decoration is only placed on the upper side and consists in curved lines radial placed on the border and shorter lines on the discus and on the channel, marking the two grooves.

Analogies: Menzel 1969, 100, n. 647, Abb. $81 / 12,6^{\text {th }}$ cent. $A D$, similar shape of the body and of the discus.
Datation: the end of the $6^{\text {th }}$ cent. $A D$.
64. Complete.

Inv. 44406, western gate, $-1,20 \mathrm{~m}$, debris, N 12 .
$\mathrm{L}=9,5 \mathrm{~cm} ; \mathrm{D}=5,9 \mathrm{~cm} ;$ Ibody $=2,7 \mathrm{~cm}$; Itot $=4,2 \mathrm{~cm}$. Pl. VII.
Soft white yellow clay, silver mica, thick brown red engobe, slightly adherent. Traces of usage.
The same type as the previous ones, the border is decorated with radial lines. The basis is oval and shallow and joint with the lamellar handle and the beak with two grooves in relief. On the channel there is a cross, partially exfoliated.

Analogies: Iconomu 1986, tip XLVI, variant I, 92, pl. VIII/9, $6^{\text {th }}$ cent. AD; Gomolka-Fuchs 1982, 169, taf. $69 / 573,6^{\text {th }}$ cent. AD; Mușȩeanu 1992, $177-178,210$, n. 340, pl. 53, type XIII, $5^{\text {th }}-6^{\text {th }}$ cent. AD.
Datation: the end of the $6^{\text {th }}$ cent. $A D$.

General analogies: Iconomu 1967, $27-28$, type XXX, n. 723-755, fig. $53-56,4^{\text {th }} 6^{\text {th }}$ cent. AD; Iconomu 1986, type XLVI, XLVII, $92-94,143,171-172$, pl. VII/8-12, IX/1-3, $5^{\text {th }}-6^{\text {th }}$ cent. AD .

North-Africa pottery is well represented at Halmyris, with 88 pieces (including the local imitations), that is $4.18 \%$ out from the total number of ceramics pieces investigated (see Table III).

Tableware is the best represented, containing 44 pieces $-8.19 \%$ out from this category, $50 \%$ out from the total number of the North-Africa pottery and $2.08 \%$ out from the whole number of the investigated pottery. Vasa escaria is the only North-Africa ceramics category, though scarcely represented in the early Roman period with two plates discovered during the last campaigns (Hayes 27 and Hayes 49). Out from the 15 types identified, 13 have found their analogies in Hayes' catalogue, the most numerous of them belonging to the Form 99 and Form 104, each one having three variants (see Table IV).

Related to the whole quantity of the tableware, the weight of the North-Africa pottery on the RomanByzantine levels generally decreases. Thus, from almost $25 \%$ on N 6 it only reaches at $5 \%$ on N 12 , and on N 13 there is no piece. Unlikely, for the rest of the ceramics categories, containing mainly imported pieces, the situation is almost reversed. On the last level of inhabitation, N 13 , North-Africa amphorae represent almost 8 $\%$ out from the total number of the pieces investigated (see Table V).

In general, the datation proposed by the analogies is confirmed by the stratigraphic situation of the findings from Halmyris, except the only piece belonging to the Form 61 found on the level N 10, dated one century later than the most analogies. The survival can be explained by the rarity of this form or the piece was trained from the previous levels. The lasting of this form is also suggested by large datation proposed by Carandini ${ }^{42}$ and Mackensen ${ }^{43}$. We can remark the presence at Halmyris of a fragment belonging to the Form Atlante I, tav. XLVII/10 (Hayes 95), very rare in the Mediterrancan basin.

In the category of stamped pottery we could identify only one piece (cat. n. 35), unique as type of decoration.

At Halmyris only 22 amphorac having North-Africa origin were found. This quantity is rather modest if related to the total number of 898 pieces, out of which 8 are western, 536 oriental, 232 West-Pontic and Pontic, the rest being table amphorae, lids and fragments with inscriptions (see Table VI). North-Africa amphorae represent $2.75 \%$ out from the number of amphorae for transportation, $25 \%$ out from the North-Africa pottery and $1.04 \%$ out from the whole number of pieces investigated (see Table VII).

The pieces belonging to the types I (Keay XXV) and II (Spatheia) represent $86.36 \%$ from the number of the amphorae imported from the northern Africa ( 19 pieces). The continuous increasing presence of the amphorae belonging to Spatheia type on the last levels of inhabitation (on N 13 we found $7.69 \%$ out from the total number of the amphorac investigated) could suggest that these pieces contained a product that was indispensable for Scythia Minor (these findings were also identified in other sites of this province). This is the only explanation for the presence of the amphorac having such a small capacity that come from such a long distance. Since we have no prove that in the West-Pontic area the garum (fish sauce) was produced, it was possible that this had been the stuff transported in the amphorae Spatheia type. These pieces belong to the type II and are present on the level N 10 with two amphorae, on the level N 13 there are five, and the total of 15 represent $8.18 \%$ oul from the Africa amphorae and $1.88 \%$ from those investigated.

On the levels of inhabitation dated in the end of the $6^{\text {th }}$ - the first half of the $7^{\text {th }}$ cent. AD represent $5 \%$ out from the total number of the amphorae discovered.

From the 22 North-Africa amphorae only one could be completely restored. Our catalogue illustrates eight of the most representative pieces ( $36.36 \%$ ).

North-Africa lamps ( 22 whole and fragmentary pieces) represent $12.09 \%$ out from the total of this category. After Tomis, Halmyris site is situated on the second place in the top of the number of findings in Dobroudja (see Table VIII)

North-Africa lamps from Halmyris, as all the pieces belonging to this category found in Dobrudja, are framed within the type Hayes II, which begin their existence during the $5^{\text {th }}$ cent. $A D$, are prevalent at the end of this period, and reach the maximum point during the $6^{\text {th }}$ cent. AD . Variant A , of which we found 13 pieces, is remarkable due to the outstanding quality of the clay and execution. Unfortunately, no piece was completely

[^4]preserved, our fragments being very worn out, due to their usage. The stratigraphic context of finding confirms the datation proposed by the literature. The lamps of the variant B have a worse quality and seem to be manufactured as well in workshops in Italy or Panonia ${ }^{44}$ using North-Africa moulds and acquiring in time their own individuality ${ }^{45}$. The piece $n$. cat. 54 is remarkable, having as decoration on the discus the bust of a feminine person, unanimously admitted as being the empress Faustina.

From the whole number of lamps, only one was completely preserved. Due to the outstanding importance of this type, in our catalogue 15 lamps were described and illustrated ( $68.18 \%$ ).

The prestige of North-Africa lamps, considered as luxury objects, with a large circulation in the whole Roman world since the end of the $4^{\text {th }}$ cent. $A D$, determined the local pottery makers to imitate them. If for the oriental lamps, in the lack of the analyses of the clay, it is difficult to separate the imitations from the originals ${ }^{46}$, it is not the same thing regarding the local imitations of the North-Africa products. In this situation, the imitation of the prototype only had in view to copy the general aspect of the basin, the horizontality of the border and of the discus and sometimes the groove in relief, which joins the basis with the handle, was kept. The imitations have a specific decoration, more simple, having as permanent elements the radial lines on the border and many times small circles with framed cross or framed grain which decorate the border. At Halmyris the imitations of the North-Africa lamps represent $19.51 \%$ out from the West-Pontic provincial pieces and $4,39 \%$ out from the total. In our findings we can distinguish two variants. The first one, the most numerous (seven pieces), is featured by the soft porous white yellow clay, the elaborated mould and the thorough finishing. This variant keep in the most cases the Christian symbols (crosses framed in a small circle or placed on the channel) that feature the originals. The second variant, represented by one piece ( n . cat. 62) is a rough imitation perhaps of the pieces belonging to the previous variant, being made of brick rough clay and an almost improvised decoration.

We are obviously faced with two distinct centers of production. The first one had as models of inspiration the North-Africa originals, imitated taking into account their main fealures. The aspect and colour of the clay suggests the production of these variants perhaps in a traditional center in the eastern Mediterranean area, closer to the North-Africa workshops. Thus, the rough lamp belonging to the second variant could be, in fact, "an imitation of the imitation", mirroring the modest possibilities of some local workshops, probably rural. We make a special remark for the lamp n. cat. 63 for which we could not find any analogy, and which obviously imitates North-Africa prototypes.

Both the tableware and the lamps were brought to Dobrudja as objects that completed the delivery of amphorae, which had a more valuable content. This is certified as well by the statistics of the findings regarding the presence on the levels of these three ceramics categories.

Therefore, with the exception of two early plates ( $2.27 \%$ ), North-Africa pottery from Halmyris was discovered on the levels N $6-\mathrm{N} 13$ ( 86 pieces $=97.73 \%$ ), the maximum point being on the level N 9 with 18 pieces, representing $20.45 \%$ out from the total North-Africa pottery, followed by N 10 with 17 pieces representing $19.32 \%$ and N 11 with 12 pieces representing $13.63 \%$.

In many situations, when the ceramics lot at disposition was less numerous (collections, rescue excavations), usually North-Africa pottery is taken into discussion together with the western one. At Halmyris these two centers are in this situation represented by 100 findings, that is $4.74 \%$ out from the whole number of pieces investigated.

[^5]
## Abreviations catalogue

| cm | = centimeters | S I | = section I (east-west) |
| :--- | :--- | :--- | :--- |
| D | = diameter | S II | = section II (north-south) |
| Dmax | = maximum diameter | $\square$ | = caset |
| Dg | = mouth diameter | n. cat. | = number in the catalogue |
| Db | = basis diameter | AD | = Anno Domini |
| L | = lenght | N | = level |
| Lp | = preserved lenght | Pl | = plate |
| I | = height | fig. | = figure |
| Ip | = preserved height | taf | = taffel |
| Ibody | = height of the body | tav. | = tavola |
| Itot | = total height |  |  |

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TABLE I. ROMAN POTTERY FOUND AT HALMYRIS. GENERAL TOTAL

| Nr . crt. | Ceramics catcgories | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found studied |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1^{\text {si }}-3^{\text {rd }}$ cent. |  |  |  |  | $4^{\text {1/ }}-7^{\text {th }} \mathrm{ccnt}$. |  |  |  |  |  |  |  |  |  |
| 1. | Vasa escaria | 1 | 7 | 7 | - | 1 | 8 | 8 | 28 | 222 | 126 | 46 | 36 | 3 | 44 | 537 |
| 2. | Vasa po(ta)toria | - | 1 | - | - | - | 2 | 3 | 4 | 9 | 21 | 13 | 6 | 2 | 9 | 70 |
| 3. | Lavatory vases | - | - | - | $\square$ | - | - | - | - | - | - | - | - | 1 | 1 | 3 |
| 4. | Kitchen vases | - | 9 | 5 | 1 | 2 | 14 | 10 | 27 | 43 | 136 | 73 | 58 | 14 | 24 | 416 |
| 5. | Amphorac | 3 | 5 | 3 | 8 | 6 | 27 | 65 | 94 | 118 | 192 | 166 | 116 | 68 | 27 | 898 |
| 6. | Lamps | 1 | - | - | 1 | 4 | 7 | 3 | 12 | 21 | 25 | 23 | 57 | 12 | 16 | 182 |
|  | TOTAL | 5 | 23 | 15 | 10 | 13 | 58 | 89 | 165 | 413 | 500 | 321 | 273 | 100 | 121 | 2.106 |
|  | \% | 0,24 | 1,09 | 0,71 | 0,47 | 0,62 | 2.75 | 4,23 | 7.83 | 19.61 | 23,74 | 15,24 | 12,96 | 4,75 | 5,74 | 100 |

TABLE II. DATATION OF THE ROMAN AND ROMAN-BYZANTINE LEVELS

| Nr . crt. | Level | Datation | Number of findings | \% |
| :---: | :---: | :---: | :---: | :---: |
| 1. | N1 | The second half of the $1^{\text {s1 }}$ cent. AD | 5 | 0,24 |
| 2. | N2 | First threc quarters of the $2^{\text {nd }}$ cent. AD | 23 | 1,09 |
| 3. | N3 | The end of the $2^{\text {nd }}-$ the first half of the $3^{\text {rd }}$ cent. AD | 15 | 0,71 |
| 4. | N4 | Middle of the $3^{\text {rd }}$ cent. - years 275/276 AD | 10 | 0,47 |
| 5. | N5 | Years 275/276-295 AD | 13 | 0,62 |
| 6. | N6 | The first half of the $4^{\text {th }}$ cent. AD | 58 | 2,75 |
| 7. | N7 | The second hall of the $4^{\text {th }}$ cent. $A D$ | 89 | 4,23 |
| 8. | N8 | The first half of the $5^{\text {th }}$ cent. $A D$ | 165 | 7,83 |
| 9. | N9 | Middle of the $5^{\text {th }}$ cent. - the first years of the $6^{\text {th }}$ cent. AD | 413 | 19,61 |
| 10. | N10 | The first half of the $6^{\text {th }}$ cent. - year 575 (?) AD | 500 | 23,74 |
| 11. | N11 | The end of the $6{ }^{\text {th }}$ cent. AD | 321 | 15,24 |
| 12. | N12 | The first decades of the $7^{\text {lh }}$ cent. AD | 273 | 12,96 |
| 13. | N13 | Towards the middle of the $7^{\text {th }}$ cent. AD | 100 | 4,75 |
| 14. | Pass. |  | 121 | 5,74 |
| T O T A L |  |  | 2106 | 100 |

TABLE 1II. ROMAN POTTERY FROM HALMYRIS. CENTERS OF PRODUCTION

| Nr. <br> crt. | Center of production | Vasa <br> escaria | Vasa <br> po(ta)toria | Lavatory <br> vases | Kitchen <br> vases | Amphorac | Lamps | TOTAL | \% |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Oriental pottery | 482 | 5 | 1 | 31 | 557 | 46 | 1.122 | 53,27 |
| 2. | Western pottery |  | 4 |  |  | 8 |  | 12 | 0,56 |
| 3. | North-Africa pottery | 44 |  |  |  | 22 | 22 | 88 | 4,18 |
| 4. | Provincial pottery | 11 | 61 | 2 | 379 | 306 | 41 | 800 | 37,99 |
| 5. | Halmyris |  |  |  | 6 |  | 53 | 59 | 2,80 |
| 6. | Unidentified |  |  |  |  | 5 | 20 | 25 | 1,19 |
|  | TOTAL | 537 | 70 | 3 | 416 | 898 | 182 | 2.106 | 100 |
|  | \% | 25,50 | 3,32 | 0,14 | 19,75 | 42,64 | 8,64 | 100 |  |

TABLE IV. VASA ESCARIA. NORTH-AFRICA POTTERY

|  | Form | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| crt. |  | $2^{\text {nd }}-3^{\text {rd }}$ cent. |  |  | $4^{\text {th }}-7^{\text {th }}$ cent. |  |  |  |  |  |  |  |  | studied |
| 1. | I. Hayes 27 | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 2. | II. Hayes 45 | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 |
| 3. | III. Hayes 49 | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 4. | IV. Hayes 61 | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 |
| 5. | V. Mackensen 1993, 60.2 | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 |
| 6. | VI. Hayes 62 | - | - | - | 1 | 2 | - | 5 | - | - | - | - | - | 8 |
| 7. | VII. Hayes 67 | - | - | - | - | - | 1 | 1 | - | - | - | - | - | 2 |
| 8. | VIII. Hayes 80 | - | - | - | - | - | 2 | - | - | - | - | - | - | 2 |
| 9. | IX. Hayes 87 | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 2 |
| 10. | X. Hayes 1976 A, A 52 | - | - | - | - | - | - | - | 2 | - | - | - | 1 | 3 |
| 11. | XI. Hayes 94 | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 |
| 12. | XII. Atlante I, tav. XLVII/10 | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 |
| 13. | XIII. Hayes 99 | - | - | - | - | - | - | 2 | 3 | 1 | 2 | - | 3 | 11 |
| 14. | XIV. Hayes 103 | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 |
| 15. | XV. Hayes 104 | - | - | - | - | - | - | 2 | 2 | 3 | - | - | - | 7 |
| 16. | Stamped fragment | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 |
|  | TOTAL | 2 |  |  | 2 | 2 | 4 | 13 | 10 | 5 | 2 |  | 4 | 44 |
|  | \% | 4,54 |  |  | 4,54 | 4.54 | 9,09 | 29,55 | 22,73 | 11,36 | 4,54 |  | 9,09 | 100 |

table v. vasa escaria. total

| Nr. crt. | Zone of production | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found studied |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1^{\text {st }}-3^{\text {rdd }}$ cent. |  |  |  |  | $4^{\text {th }}-7^{\text {bh }}$ cent. |  |  |  |  |  |  |  |  |  |
| 1. | Oriental pottery | 1 | 2 | 3 | - | 1 | 5 | 6 | 24 | 209 | 116 | 41 | 34 | 3 | 37 | 482 |
| 2. | North-Africa pottery | - | - | 2 | - | - | 2 | 2 | 4 | 13 | 10 | 5 | 2 | - | 4 | 44 |
| 3. | Provincial potery | - | 5 | 2 | - | - | 1 | - | - | - | - | - | - | - | 3 | 11 |
|  | TOTAL | 1 | 7 | 7 | - | 1 | 8 | 8 | 28 | 222 | 126 | 46 | 36 | 3 | 44 | 537 |
|  | \% | 0,19 | 1,30 | 1,30 | - | 0,19 | 1,49 | 1,49 | 5,21 | 41,34 | 23,46 | 8,57 | 6,70 | 0,56 | 8,19 | 100 |

TABLE VI. AMPHORAE. TOTAL

|  | Ceramics categories | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| crt. |  | $1^{\text {st }}-3^{\text {rd }}$ cent. |  |  |  |  | $4^{\text {'h }}-7^{\text {ih }}$ cent. |  |  |  |  |  |  |  |  |  |
| 1. | Western amphorae | - | 4 | 1 | - | - | 1 | - | 2 | - | - | - | - | - | - | 8 |
| 2. | Oriental amphorae | 1 | - | 1 | 1 | 1 | 13 | 36 | 54 | 66 | 122 | 97 | 85 | 48 | 11 | 536 |
| 3. | North-Africa amphorae | - | - | - | - | - | . | 1 | 3 | 1 | 3 | 4 | 4 | 6 | - | 22 |
| 4. | Provincial amphorae | 2 | - | 1 | 7 | 4 | 7 | 23 | 27 | 43 | 42 | 38 | 17 | 11 | 10 | 232 |
| 5. | Table amphorae | - | - | - | - | - | 4 | 2 | 1 | 3 | 5 | 3 | 2 | - | - | 20 |
| 6. | Graffiti*** | - | - | - | - | - | - | 1 | . | 2 | 3 | 2 | - | - | - | 8 |
| 7. | Dipinti** | - | - | - | - | - | - | 1 | 6 | - | 3 | 3 | 3 | - | 2 | 18 |
| 8. | Lids | - | 1 | - | - | 1 | 2 | 1 | 1 | 3 | 14 | 19 | 5 | 3 | 4 | 54 |
|  | TOTAL | 3 | 5 | 3 | 8 | 6 | 27 | 65 | 94 | 118 | 192 | 166 | 116 | 68 | 27 | 898 |
|  | \% | 0,33 | 0,56 | 0,33 | 0,89 | 0,67 | 3,01 | 7,24 | 10,47 | 13,14 | 21,38 | 18,48 | 12,92 | 7,57 | 3,01 | 100 |

TABLE VII. NORTH-AFRICA AMPHORAE

| Nr. crt. | Type | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found studied | Described illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1^{\text {st }}-3^{\text {rd }}$ cent. |  |  |  |  | $4^{\text {ih }}-7^{\text {ih }}$ cent. |  |  |  |  |  |  |  |  |  |  |
| 1. | I | - | - | - | - | - | - | 1 | 3 | - | - | - |  | - | - | 4 | 2 |
| 2. | II | - | - | - | - | - | - | - | - | - | 2 | 4 | 4 | 5 | - | 15 | 4 |
| 3. | III | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 | 1 |
| 4. | IV |  | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 2 | 1 |
|  | TOTAL |  |  |  |  |  |  | 1 | 3 | 1 | 3 | 4 | 4 | 6 |  | 22 | 8 |
|  | \% |  |  |  |  |  |  | 4,54 | 13,64 | 4,54 | 13,64 | 18,18 | 18,18 | 27,27 |  | 100 | 36,36 |

TABLE VIII. NORTH-AFRICA LAMPS

| Nr. crt. | Variant | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 | N9 | N10 | N11 | N12 | N13 | Pass. | Found studied | Described illustrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1^{\text {si }}-3^{\text {rd }}$ cent. |  |  |  |  | $4^{\text {th }}-7^{\text {th }}$ cent. |  |  |  |  |  |  |  |  |  |  |
| 1. | II A | - | - | - | - | - | - | - | 1 | 4 | 2 | 2 | - | - | 4 | 13 | 9 |
| 2. | II B | - | - | - | - | - | - | - | 3 |  | 2 | 1 | 2 | - | 1 | 9 | 6 |
|  | TOTAL |  |  |  |  |  |  |  | 4 | 4 | 4 | 3 | 2 |  | 5 | 22 | 15 |
|  | \% |  |  |  |  |  |  |  | 18,18 | 18,18 | 18,18 | 13,64 | 9,09 |  | 22,73 | 100 | 68,18 |
| 3. | Local imitations | - | - | - | - | - | - | - | 4 | - | - | - | 2 | 2 | - | 8 | 6 |
|  | GENERAL TOTAL | - | - | - | - | - | - | - | 8 | 4 | 4 | 3 | 4 | 2 | 5 | 30 | 21 |
|  | \% | - | - | - | - | - | - | - | 26,67 | 13,33 | 13,33 | 10 | 13,33 | 6,66 | 16,67 | 100 | 70 |



6


7


13



Plate I


Plate II


Plate III


32


33


Plate IV


Plate V


Plate VI


Plate VII


[^0]:    1 Polonic 1898; Tocilescu 1898.
    2 Moisil 1909, 89; Netzhammer 1909, 206 - 207; Moisil 1910, 94; Netzhammer 1911, 15 - 16; Weiss 1911, $55-56$; Polonic 1935, 25.
    3 Moisil 1909, 89; Bujor 1954, 59-61, n. 1; Diescu 1974, 206-211.
    4 Bujor 1955, 572 - 580; Bujor 1956, 243 - 252; Bujor 1957, 247 - 254; Bujor 1958, 125 - 141; Bujor 1959 A, 373 378; Bujor 1959 B, 328 - 329; Bujor 1961, 297 - 300.
    5 Suceveanu, Zahariade 1987, 87-96.
    6 Suceveanu, Zahariade 1986 A, 109-120; Suceveanu, Zahariade 1986 B, 45 - 54; Zahariade 1990, 259 -. 266.
    7 Zahariade, Suceveanu, Opait, Opaiţ C., Topoleanu 1986, 180 - 186; Zahariade, Suceveanu, Opaiţ, Opaiṭ C., Topoleanu 1987, 97 - 106.
    8 Opait C. 1991, 457-483; Poenaru Bordea, Lungu 1991, 411-415; Popescu 1998, 142-143, 285 - 289.
    9 Topoleanu 1991, 101-103.
    10 Opait 1991, 133-181, 165-216; Opait 1996; Topoleanu 1996 A, $91-94$; Topoleanu 1996 B, 143-168.
    11 Topoleanu 1998.
    12 Topoleanu 1996 A.

[^1]:    13 Lamboglia 1963.
    Solomonson 1968.
    Ostia I - IV
    Hayes 1972.

[^2]:    17 Carthage I, II.
    18 Carthage I, 1; I, II.
    19 Tortorella 1983.
    ${ }_{20}$ Romallo Asensio, Ruiz Valderas, Berrocal Camparros 1996.
    Delgado 1975.
    Rodziewicz 1976.
    3 Kenrick 1985.
    4 Atlante I, II.
    25 Tortorella 1988.
    26 Peacock, Bejaoui, Ben Lazreg 1990.
    ${ }^{27}$ Mackensen 1993.
    ${ }^{28}$ Zevi 1969.
    29 Riley 1979.
    30 Peacock, Williams 1986.
    31 Keay 1984.
    32 Menzel 1969, 90; Iconomu 1986, 90 - 91.
    33 Hayes 1972, 310-313.

[^3]:    ${ }^{4}$ Prevoost 1976, 563 - 576
    35 Allante L tipurile VIII and X.
    ${ }^{36}$ Mackensen 1993, 95-165, 511-521.
    37 See above notes $17-20$.
    ${ }_{39}$ Atlante I, tip VII.
    39 Atlante I, tip X.
    40 Iconomu 1986, 92 - 94.
    41 Topolcanu 1998, 231-241.

[^4]:    42 Atlante I, 83-84.
    ${ }^{43}$ Mackensen 1992, 401-403.

[^5]:    44 Suceveanu, Barnea 1991, 246.
    45 Diaconescu 1995, 256.
    46 Topoleanu 1998, 191-192.

