

OIL LAMPS FROM *TROESMIS*

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Abstract: 81 oil lamps originating from *Troesmis* are known nowadays. The oldest batch, currently preserved at the National Archaeology Museum in Paris and consisting in 21 items, resulted from the 1865's French archaeological mission in Romania. Most items, *i.e.* 60 pieces, are preserved in the museums in Tulcea and Galați. They have been mainly acquired 1977 during the rescue excavations. The oil lamps from *Troesmis* cover in terms of chronology the whole existence of the ancient site, since the 1st up to the 6th/7th centuries AD, ranging from volute decorated lamps, 'Firmalampen' and Loeschcke VIII types to the imported or local imitations of the products from *Africa* or *Asia minor*. Incomplete information on the find-spot resulted in a typology and chronology based compilation of a catalogue also with the help of the closest analogies. Most oil lamps are local products, definitely including the workshops from *Troesmis* even if there are no actual elements to clearly substantiate such allegation. The two large studied batches – preserved in Romania and France – confirm once more the importance of the site of *Troesmis*, providing significant elements for future research.

Keywords: *Troesmis*, oil lamps, 'Firmalampen', Loeschcke VIII, imports, local production.

The preliminary report on the preventive archaeological research carried out near the Eastern fortress of *Troesmis*, published in the 1980's eight edition of *Peuce Journal*, contains quite few references on oil lamps. Some more consideration was involved in the approach of three of the artifacts discovered in the squares 1-40, a sector being scientifically coordinated by V.H. Baumann, briefly described in the catalogue, two of them being also illustrated¹. In the squares 41-74, a sector coordinated by A. Opaîț, the presence of the lamps is only commented in few phrases, seven of them being presented as photo². It should be mentioned that two of those items were not found in the museum deposits³, and from those „about 10” mentioned as discovered on the second layer of square 45⁴ only four lamps with such markings have actually been found in the repositories of the Museum of History and Archaeology (MIA) within “Gavrilă Simion” Eco-Museum Research Institute from Tulcea. It seems we are also dealing with an inconsistency in the ink marking, as on 13 items there are present the notes “terme” (*thermae*) and “camera” (room) A-F, although the presence of such monument has not been explicitly pointed out either in writing or in pictures (!). Moreover, the 'Firmalampen'-type lamp bearing the CASSI stamp is also missing⁵.

Three of the oil lamps discovered at *Troesmis* were published in the catalogue of the *Romans in the Left Pontus* Exhibition, organised at MIA Tulcea in 2012⁶, therefore almost the entire inventory is unpublished.

Thence, 58 oil lamps are preserved in the MIA collections, out of which 48 originate from the 1977 campaign, according to the markings, and further 10 were purchased or *passim* found. Although

¹ Baumann 1980, 159, 189, no. 14-16, pl. 14/2, 24/1.

² Opaîț 1980a, 199, pl. 37/1-7; Opaîț 1980 B, 342.

³ Opaîț 1980a, pl. 37, no. 4, 6.

⁴ Opaîț 1980a, 199.

⁵ Opaîț 1980b, 342.

⁶ Paraschiv 2012, 120, no. 147, 126, no. 158, 130, no. 166.

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it wasn't found in the repositories, one oil lamp certainly originating from *Troesmis*, published without inventory number⁷, was however included in the catalogue. Finally, an item is kept in the collections of "Paul Păltânea" History Museum of Galați, therefore the studied batch consists in 60 generally common shape items, both complete and fragmentary, with a broad circulation within the area of today's Dobruja, where most proximal analogies are being found, as we shall see. In this respect, we emphasize the merit of C. Ionomu's works, which are of great relevance for all the material discovered within this area up to the end of the eighth decade of the last century⁸.

We fortunately add thereto 21 oil lamps (**fig. 1**) discovered by G. Boissière and A. Baudry during 1865 – 1866 in the Eastern citadel of *Troesmis* (Iglița) as part of a French archaeological mission sponsored by the emperor Napoleon III. Recorded since 1867 in the heritage of the National Museum of Archaeology from Saint Germain en Laye, Paris, the items were published quite recently, in 2005 and 2007, by C. Bémont and H. Chew. Although no information on the discovery circumstances was preserved, the batch is most valuable as it introduces to the scientific circuit several late period oil lamps (16 pieces) dated in the 5th-7th centuries AD together with five early items dating from the 1st-3rd/4th centuries AD. Thus, the 81 oil lamps from *Troesmis*, dated between 1st-6th/7th centuries AD, are chronologically covering the entire site history, rendering relevant guidelines both on imports and local production. In consideration of a unitary description of all oil lamps discovered at *Troesmis*, the French researchers' illustrations (**Pl. X-XII**) shall be reproduced within this article and the items shall be introduced in the final considerations'.

CATALOGUE⁹

A. VOLUTED NOZZLE OIL LAMPS OF LOESCHCKE IV, V TYPE

In the early Roman oil lamps' typology established by S. Loeschcke, the first six patterns feature volute decorations located mainly on the nozzle¹⁰. Following a Hellenistic type¹¹, the volute oil lamp prototypes were created in Italy and Greece and they were poached or imitated afterwards across the whole Empire starting from Augustus' period until around the 4th century AD. The three items discovered at *Troesmis* correspond to Loeschcke IV and V, largely spread in the 1st-2nd/3rd centuries AD, manufactured both in the western workshops and in the Moesian area.

Loeschcke IV; Broneer 1930, XXIII; Deneauve V A; Bailey 1980, C; Iványi 1935, VI

1. Fragmented *monolychnis* oil lamp, preserved nozzle; MIA, inv. no. 42641; TR. 1977, C 51, - 1.00 m (**Pl.I/1**).

Dimensions: Lp = 4.50 cm; Dof = 1.12 cm; Hp = 2.34 cm.

Technique/ fabric: formed with a high quality mould, carefully finished; fine, clean, cream coloured (2,5Y7/4) clay, heavily exfoliated black (GREY 1 3/10Y) engobe; worn, used.

Description/ ornamentation: ogival nozzle with round shaped wick perforation; partially doubled volute inlay and grain towards the burning hole.

Bibliography: unpublished.

⁷ Chiriac, Bounegru 1973-1975, 100-101, no. 4. pl. III/3, IV/1-3.

⁸ Ionomu 1967; Ionomu 1986.

⁹ I am deeply grateful to the colleagues that stood by me with professionalism for the making of the present publication: Camelia Geanbai (drawings), Gabriel Dincu (photography), Carmen Simionescu (layout) and Bogdan Căldăraru (translation into English).

¹⁰ Loeschcke 1919, 212-234, no. 1-637, pl. 3-17.

¹¹ Howland 1958, types 50-58.

Analogies: Loeschcke 1919, type IV, 225-228; Broneer 1930, type XXIII, 78-79; Deneauve 1969, type V A, 132, 134, no. 443, 458, pl. XLVII, XLVIII; Heres 1972, type C, 35-45, no. 125-205, pl. 17-25; Bailey 1980, type B, 153-183, Q 848-956, pl. 9-20; Ionomu 1986, type VII, var. II, 23-29, pl. II/2; Szubert 1987, group I, 232-235, no. 1-4; Čičikova 1987, group III, 157, no. 26, pl. IV; Bailey 1988, 281, Q 2295, pl. 57; Kuzmanov 1992, type XVIII, 19, no. 65; Bussi re 2000, type B III, 72-75, no. 248-370, pl. 30-37; Baumann 2009, type A 2.III, 226-228, no. 15-30, fig. 4; Dr ghici 2011, 69, no. 47, pl. 10/23.

Dating: 1st-2nd centuries AD.

Origin: Italy (?); Greece (?).

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Although only the nozzle has been preserved, the categorisation into Loeschcke IV type took into account as a distinctive element the prominences conserved in the lower part, partially visible past the volute edges as well. The Italian origin oil lamps with inward doubled volutes and grain dating from the 1st-2nd centuries AD were published in the same type framing¹². The soft clay and black engobe do not preclude the possibility of the lamp's moulding in a provincial workshop¹³.

Loeschcke V; Broneer 1930, XXIV; Iv nyi VI; Deneauve V D.

2. Fragmented *monolychnis* oil lamp, partially preserving the rim, nozzle and base; MIA, inv. no. 42642; TR. 1977, C 48, - 1.00 m (Pl. I/2).

Dimensions: Lp = 7.50 cm; Hp = 2.40 cm.

Technique/ fabric: formed with a slightly worn mould, carefully finished; fine, clean, cream coloured (2,5Y8/2) clay, black (GLE Y 2 2,5/5B) engobe – partially preserved on the nozzle and rim, and light red (2,5YR6/6) – partially preserved on the base and inside; without use traces on the nozzle.

Description/ ornamentation: ovoid reservoir, elongated nozzle; round, flat slightly profiled base; rim decorated with phytomorphic motifs, on the nozzle there is still preserved the lower edge of a volute, and the base was centrally stamped with *planta pedis*.

Bibliography: unpublished.

Analogies: Loeschcke 1919, type V, 230, fig. 6/1, 2; Deneauve 1969, type V D, 149–157, no. 578-636, pl. LX-LXIV; Heres 1972, type D, 49, no. 228, pl. 28; Bailey 1980, type C, 184-198, Q 957-992, pl. 21-25; Szubert 1987, type II/C, 240-243, no. 11-16, pl. III/5-6, IV/1-4; Kuzmanov 1992, type XIX, 20-21, no. 75-76; Mu  teanu 1992, type III, 183, no. 24-25, pl. 33; Bussi re 2000, type B IV, 75-77, pl. 37-43; Dr ghici 2011, 66-67, no. 38-39, pl. 7/15, 8/16.

Dating: 1st-2nd centuries AD.

Origin: Italy, Greece (?).

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Largely spread across the Empire, Loeschcke V type oil lamps originate from Italy¹⁴. The concave discus is smaller than in Loeschcke IV type, the rim is decorated and the base is stamped, mostly with *planta pedis*. Considering the sound quality of the clay, moulding and finishing, the fragment from *Troesmis* belongs to an imported oil lamp, probably from Italy or Greece¹⁵.

Loeschcke V – variant

3. Complete *monolychnis* oil lamp; MIA, inv. no. 809 (II A7/2312); TR. 1972 (acquisition).

Dimensions: L = 8.35 cm; D = 5.43 cm; Dd = 3.20 cm; Db = 3.12 cm; Doa = 0.68 cm; Dof = 0.98 cm; H = 2.55/3.96 cm (Pl. I/3).

¹² Walters 1914, shape 89; Waldhauer 1914, no. 187; Deneauve 1969, no. 443, 458; Ionomu 1986, pl. II/2; Bailey 1988, Q 2295; Kuzmanov 1992, no. 65.

¹³ Ionomu 1986, 23-24.

¹⁴ Loeschcke 1919, 230.

¹⁵ Ionomu 1986, 119-121.

Technique/ fabric: formed with a worn mould, loosely finished, slightly unbalanced; fine, light pink (7,5YR7/3) clay mixed with limestone particles, light red (10R6/6), unevenly applied engobe; without any traces of use.

Description/ ornamentation: ovoid reservoir, biconvex in sectional view, with a strong elongated nozzle; circular and concave discus, stamped with a double string; small, round shaped, centrally drilled filling hole; flat, short, horizontally punched handle; round, wide wick hole and flat base; the rim is decorated with a radially placed rosette around the discus, and the nozzle has simple volutes, tangent to the discus.

Bibliography: unpublished.

Analogies: Iványi 1935, type XV, 134, no. 1449, pl. XLVIII; Oziol 1977, 70, no. 160, pl. 10; Shier 1978, type B 2.4, 123-124, no. 345-346, pl. 6, 38; Mușețeanu, Elefterescu 1983, 113-114, 118, type II d, no. 7-18, fig. 1; Iconomu 1986, type VII, 23-29, var. III; Kuzmanov, Băvarov 1986, 45, no. 7, pl. I; Szubert 1987, type II, var. C, 240-243, no. 11-18, pl. I, II, IV, VI; Číčíková 1987, 157, 158, no. 29, 32, pl. IV/29, V/32; Kuzmanov 1992, type XIX, 21, no. 80; Mușețeanu 1992, 183, type III, var. c, no. 23, pl. 33; Djuric 1995, 61, C178; Bussiére 2000, type IV.4, 270, no. 522, pl. 42; Mușețeanu, Elefterescu 2008 (Conovici) 137, fig. 4; Baumann 2009, type V, var. 2, 231-232, no. 34-36, fig. 5; Gherghe, Cojoc 2011, 60, no. 3, pl. 43; Topoleanu 2012, 60-62, no. 18-19, pl. XXI.

Dating: 1st-3rd centuries AD

Origin: local / provincial workshop (?)

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The oil lamp is a variant of Loeschcke V type, with small discus, ornamented on the nozzle with simple, single edge twisted volutes, and the bar tangent to the discus. The density of this variant's discoveries across *Moesia inferior*, and the loose finish of the item from *Troesmis*, obvious at the moulding of the handle and of the base, might represent reasons for the assignment thereof to a local workshop within this area. The nearest similarities can be found at *Durostorum*¹⁶.

B. CIRCULAR RESERVOIR AND SMALL NOZZLE, LOESCHCKE VIII TYPE OIL LAMPS

Loeschcke identifies multiple variants of type VIII, mainly based on the nozzle shape separation rule. At *Troesmis* there have been revealed U-shaped nozzle oil lamps (VIII R), lamps with transverse incision splitting off the nozzle from the reservoir (VIII L), lamps with a semi-circular profile around the wick hole (VIII K) and lamps with cordate nozzle (VIII H). It has to be pointed out that due to an outstanding popularity of the type and also to numerous sub-variants, the oil lamps of Loeschcke VIII type are not being approached separately in certain catalogues, some using own typologies or taking into consideration the stratigraphic context of the discoveries¹⁷.

U-SHAPED NOZZLE OIL LAMPS (Loeschcke VIII R)

Walters Shape 97; Loeschcke VIII R; Deneauve VII A; Broneer XXV, XXVII; Iconomu 1986, XIX

4. Fragmented *monolychnis* oil lamp, missing parts from the discus and rim; MIA, TR. 1977; inv. no. 2663; C 49, -0.70 m (Pl. I/4)

Dimensions: L = 8.12 cm; D = 5.87 cm; Dd = 4.63 cm; Db = 3.70 cm; Dof = 0.90 cm; H = 2.51/4.05 cm.

Technique/ fabric: mould formed; fine, reddish (10R5/8) clay, red (2,5YR4/8) engobe; slightly worn, no traces of use.

¹⁶ Mușețeanu, Elefterescu 1983, no. 7-18.

¹⁷ Iványi type VII; Bailey 1980, type O, P; Bailey 1988, Cnidos, pl. 85-96; Bussiére 2000, type D.

Description/ ornamentation: large, round and concave discus, marked with three circular strings, with centrally positioned filling hole; short nozzle with U-shaped sides tangent to the discus and to the round, centrally drilled wick hole; annular handle, slightly sunken, flat ring-base surrounded by two incisions; on the rim there is still visible a very delicately imprinted egg array.

Bibliography: Opaiț 1980a, pl. 37/3 (photo).

Analogies: Sauciuc-Săveanu 1935-1936, 305, fig. 17 - identical; Severeanu 1936, 54, no. 33; Perlzweig 1961, 84, no. 133-134, pl. 5 and 89, no. 210, pl. 7; Ponsich 1961, form III B 2, 103, pl. XXIII without handle; Menzel 1969, 51, no. 282, fig. 44; Oziol 1977, 201, no. 583, pl. 33; Pavolini 1977, 39, pl. XXIV/28,29; Rosenthal, Sivan 1978, 37, no. 142; Sapelli 1979, 103-104, no. 212, pl. XXII; Bailey 1980, type O, 308, Q 1236, pl. 61; Iconomu 1986, 59-61, type XIX, var. II, pl. III/11; Bailey 1988, 312, Q 2535, pl. 68; Selesnow 1988, 150, no. 29, pl. 29/199; Di Filippo Balestrazzi 1988, 391, no. 1083, pl. 173; Djuric 1995, 45-47, C120-C 126; Bussi re 2000, type D VI, 28, 337-340, no. 2764-2877, fig. 9, 44/2d, pl. 75-76; Petitot 2000, 76, no. 269; Fioriello 2003, 53, no. 12; Casas-Genover, Soler-Fust , 2006, form D II 1, 307-308, E 857; B mont, Chew 2007, 191, IT 58, pl. 23; Georgescu 2016, type III.3.a., vol. II, 292-293, no.748-749, pl. 100.

Dating: 1st-3rd centuries AD.

Origin: local / provincial workshop (*Troesmis* ?).

5. Fragmented *monolychnis* oil lamp, missing parts from the discus, rim and base; MIA, inv. no. 25170; TR 1977; C 45, - 0.70 m (**PI.I/5**).

Dimensions: L = 8.59 cm; D = 6.19 cm; D = 4.88; Db = 3.22 cm; Dof = 0.96 cm; H = 2.48/4.04 cm.

Technique/ fabric: mould formed; fine, reddish (2,5YR7/8) clay, partially preserved red (10R5/8) engobe; no traces of use.

Description/ ornamentation and analogies: see cat. no. 4.

Bibliography: unpublished.

Dating: 1st-3rd centuries AD.

Origin: local/ provincial workshop (*Troesmis* ?).

6. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv. no. 25175; TR. 1977, C 43, - 0.70 m (**PI.I/6**).

Dimensions: Lp = 4.04 cm; Hp = 2.66 cm.

Technique/ fabric: see cat. no. 4.

Description/ ornamentation and analogies: see cat. no. 4.

Bibliography: unpublished.

Dating: 1st-3rd centuries AD.

Origin: provincial (*Troesmis* ?) workshop.

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The three tangent to the discus laterally U-shaped nozzle oil lamps belong to a variant of Loeschcke VIII type, dated starting on the middle of the 1st century AD up to the 3rd century AD¹⁸. Most of the published items are carefully formed and finished, with elaborate discus and rim decorations. Items with or without a handle are known. The oil lamps from *Troesmis*, discovered in the so-called *thermae*, lack decorations and they are fitted with annular handles, which are less known on this variant, therefore the dating might be later, at the end of the 2nd century or even at the beginning of the 3rd century AD. The similar dimensions, the clay's appearance and the similar layout of the ornaments on the rim are elements supporting the assignment thereof to the same mould/ workshop, maybe even from *Troesmis*.

¹⁸ Loeschcke 1919, 237-254, Type VIII, fig. 7/R; Bruneau 1965, 116, type XVII. 3; Iconomu 1967, 66, no. 211, fig. 97.

7. Fragmented *monolychnis* oil lamp, entire nozzle, partial rim and base are persevered; MIA, inv. no. 42645; TR. 1977, 'Terme, Camera E' (PI.I/7).

Dimensions: Lp = 7.12 cm; Dof = 1.18 cm; Hp = 3.36 cm.

Technique/ fabric: mould formed, carefully finished, thin walls; white (10YR8/1), fine, clean clay, partially exfoliated yellow reddish (5YR6/8) engobe; slightly worn, used.

Description/ ornamentation: large size oil lamp with concave discus bordered by a strong incision; the rugged laterally U-shape nozzle has a round wick hole.

Bibliography: unpublished.

Dating: 1st-3rd centuries AD.

Analogies: Severeanu 1936, 54, no. 33; Ionomu 1967, type XVIII, 66, no. 211, fig. 97; Ionomu 1986, type XIX, var. II, 59-61, pl. III/11; Bussi re 2000, type D VI, 28-29, pl. 75-76; Georgescu 2016, type III.3.a., vol. II, 283-284, no.724-725, pl. 97.

Origin: Italy (?); Greece (?).

8. Fragmented *monolychnis* oil lamp, parts of the rim and discus are preserved; MIA, inv. no. 42643; TR. 1977, civil settlement, *passim* find (PI.I/8).

Dimensions: Lp = 6.47 cm; Doa = 0.80 cm; Hp = 1.42 cm.

Technique/ fabric: high quality mould, carefully finished from fine, thin clay mixed with limestone and mica particles; brown reddish (2,5YR4/4) colour, red (2,5YR5/8) engobe with black (5YR4/2) insertions, only preserved on the discus; slightly worn.

Description/ ornamentation: the big concave discus is bordered by three successive circular strings, 45 degrees angled narrow rim.

Bibliography: unpublished.

Dating: 1st-3rd centuries AD.

Analogies: see cat. no. 7.

Origin: Italy (?); Greece (?).

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These two big size oil lamps of Loeschcke VIII R variant, carefully formed from high quality clay, are probably imported items, yet with notable presence in Dobrogea¹⁹.

LAMPS WITH TRANSVERSE INCISIONS ON THE NOZZLE (LOESCHCKE VIII L)

Loeschcke VIII L; Iv nyi VII; Deneauve VII A; Ionomu 1986, XX; Ponsich 1961, III B1; Bailey 1980, P.

9. Fragmented *monolychnis* oil lamp, missing parts of nozzle, rim and discus, restored; MIA, inv. no. 2662, TR. 1977 (PI.I/9).

Dimensions: L = 8.09 cm; D = 5.20 cm; Dd = 4.08 cm; Db = 3.18 cm; Dof = 0.82 cm; H = 2.82/3.98 cm.

Technique/ fabric: formed with a worn mould, from fine clay mixed with limestone and mica grains; light reddish (2,5YR6/8) colour, partially preserved reddish (10R4/6) engobe; no traces of use on the nozzle.

Description/ ornamentation: circular, cylinder-domed section reservoir, with elongated nozzle and concave discus, having the filling hole drilled towards the nozzle; the discus is bordered by three successive incisions, the flat ring base is bordered by an incision; on the discus there is still preserved

¹⁹ Ionomu 1986, type XIX.

an edgeless human mask (Medusa ?); the handle is decorated by two median incisions, and the nozzle is separated from the rim by and incised line.

Bibliography: unpublished.

Analogies: Walters 1914, shape 95, 145-156, pl. XXIX – XXX; Perlzweig 1961, 87, no. 171-172, pl. 7; Menzel 1969, 57, no. 322-323, fig. 47/13, 14; Bailey 1980, type P, 314-335, Q 1250 – 1326, pl. 64 -71 – *pass.*; Bailey 1988, *Ephesus*, 376–378, Q 3040 – Q 3068, pl. 101-102.

Dating: 1st-2nd centuries AD.

Origin: Moesian provincial workshop (?); Italy (?).

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Most oil lamps with an incision or transverse beam that separate the nozzle from the discus have elaborate decorations and they generally bear the workshop's stamp or mark imprinted on the base. Although it shows no traces of use on the nozzle, the item from *Troesmis* looks heavily worn, probably due to mould wear and soft clay. Therefore, based on the barely identifiable human mask on the discus, more likely common to 'Firmalampen', the lack of the stamp on the base and the slightly sunken transversal incision on the nozzle, we might presume the manufacturing of such oil lamp in a provincial or maybe even local workshop, where a worn out mould has been used.

10. Complete *monolychnis* oil lamp; MIA, inv. no. 42726; TR.1983 (acquisition).

Dimensions: L = 10.24 cm; D = 7.24 cm; Dd = 5.30 cm; Db = 3.63 cm; Doa = 0.47 cm; Dof = 0.74 cm; H = 2.96/4.81 cm (**PI.II/10**).

Technique/ fabric: mould formed, fine, clean, milky (10YR8/1) clay, partially secondary fired reddish (2,5YR4/8) engobe; slightly worn, with traces of use on the nozzle.

Description/ ornamentation: circular reservoir, narrow rim, heavily concave discus, centrally positioned small filling hole; small rounded nozzle; horizontally punched lamellar handle; flat ring-base; the discus is circled by three concentric incisions; the handle is double corrugated in the middle, the nozzle is confined by an incised line to the body, bordered on the rim by two slightly sunken circular incisions and the base is marked in the middle by a loosely imprinted *planta pedis*.

Bibliography: unpublished.

Analogies: Waldhauer 1914, 46, no. 279, pl. XXIX; Iványi 1935, 12-13, type VII, pl. XXVIII/3; Robinson 1959, 57, J 63; Perlzweig 1961, 83, no. 126, pl. 5 and 88, no.176, pl. 7-identical; Bovon 1966, 41-42, no. 225, pl. 6; Deneauve 1969, type VII A, 165-181, no. 697-818, pl. LXVIII-LXXV; Szentlélek 1969, 100, no. 162; Menzel 1969, 57, no. 320, fig. 47/11; Oziol 1977, 182, no.540, pl. 31; Pavolini 1977, 39, pl. XXIII/26 -identical; Sapelli 1979, 99-100, no. 20, 204, pl. XX, XXI; Hayes 1980, 51, no. 231-232, pl. 23; Bailey 1980, 300, type O, Q 1214, pl. 57; Rosenthal, Sivan 1978, 39, no.151; Kuzmanov, Salkin 1981, type XI, 56, no. 37, pl. V; Iconomu 1986, 61, type XX; Guarlandi Genito 1986, 211, 214, no.52-53, 57; Kuzmanov, Băčvarov 1986, type III, 45, no. 8, pl. II; Grella 1991, 46, no. 23, pl. 12; Hübinger 1993, 118, no. 220, pl.28; Djuric 1995, 47, C 126; Petitot 2000, 71, no. 226; Bussiére 2000, type D III 1, 28, 334-335, nr2686-2707, fig. 9, 44/4a, pl. 70-71; Heimerl 2001, group 9c, 121–122, no. 294–303, pl. 7-8; Meriç 2002, 132, L 95, pl. 104; Bémont, Chew 2007, 327-328, AF 7, pl. 77, 353-354, AS 32, pl. 87; Casas-Genover, Soler-Fusté 2006, 310, no. E 875; Georgescu 2016, type III.1.e., vol. II, 23, no.58-59, pl. 13.

Dating: 1st-3rd centuries AD.

Origin: Italy (?); Greece (?).

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Less numerous, the unornamented items with or without a handle, are being supported yet by a generous literature. Several close analogies, some of them even identical, are found across the southern provinces of the Empire, the most important manufacturing workshops being in Greece and Italy²⁰.

²⁰ Robinson 1959, J 57; Perlzweig 1961, no. 126, 176; Pavolini 1977, no. 26; Grella 1991, no. 23 etc.

LAMPS WITH A SEMI-CIRCULAR PROFILE AROUND THE WICK HOLE (Loeschcke VIII K-variant)

Walters Shape 103 and 104; Loeschcke VIII K; Deneauve VII D.

11. Fragmented *monolychnis* oil lamp. Partly missing discus: MIA, inv. no. 43805, TR, acquisition. Dimensions: L = 8.34 cm; D = 6.00 cm; Dd = 4.47 cm; Db = 2.96 cm; Dof = 0.94 cm; H = 2.72/4.20 cm.

Technique / fabric: mould formed, fine clay mixed with limestone particles and quite rarely silver mica particles; grey (GLEY 1 5/10Y) colour, partially preserved red (10R5/6) and dark grey (GLET 2 4/5PB) engobe; traces of use on the nozzle.

Description / ornamentation: circular, cylinder-domed section reservoir with heavily concave discus, bordered by a fine string; asymmetric rim, narrower towards the nozzle, annular handle and small, externally rounded nozzle; slightly embossed, flat ring-base; the discus has been probably decorated with a Nereid (?), the nozzle is semi circularly profiled around the burning hole, with two lateral incisions on the rim, and the handle was inwards with palmette.

Bibliography: unpublished.

Analogies: Bailey 1988, Cnidos, Q 2871 – 2884, pl. 90-91; Di Filippo Balestrazzi 1988, 335-336, no. 924-927, pl. 139; Kuzmanov 1992, type XXI, var. 3, 25, no. 127-129; Heimerl 2001, group 9 e (perg.), 126, no. 349, pl. 9. 1st-2nd centuries; Georgescu 2016, type III.2.c., vol. II, 240, no.618, pl. 622.

Dating: 1st-3rd centuries AD.

Origin: provincial workshop (Moesian ?).

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The semi-circular profile decorating the K variant nozzle of Loeschcke VIII type probably represents an interim stage towards the cordate nozzle H variant. On many occasions, those two ornamental motifs could not be accurately distinguished due to excessive wear or inappropriate conservation condition.

12. Fragmented *monolychnis* oil lamp, missing handle, cracks on the nozzle; MIA, inv. no. 2464, TR 1977, C 52, - 1.20, 'Gr(oapă ?)'. Dimensions: Lp = 7.25 cm; D = 5.96 cm; Dd = 3.75 cm; Db = 2.92 cm; Doa = 0.53 cm; Dof = 1.15 cm; H = 2.40 cm.

Technique/ fabric: mould formed, fine clay quite rarely mixed silver mica particles; reddish (10R6/8) colour, compact yellowish (5YR7/6) engobe; heavily worn, with traces of use on the nozzle.

Description/ ornamentation: circular reservoir, biconvex in sectional view; circular and concave discus bordered by a string, having the filling hole drilled towards the nozzle; slightly inclined rim, small, externally rounded nozzle, with the fire hole partly stepping into the rim; flat ring-base; the discus is decorated with a running deer rightwards, and the nozzle is semi circularly profiled around the wick hole.

Bibliography: Opaiț 1980a, pl. 37/7.

Analogies: Perlzweig 1961, 87, no. 165, pl. 6; Hayes 1980, 72, no. 297, pl. 37; Sanie 1981, 161, no. 5, pl. 42/3; Chrzanowski, Zhuravlev 1988, 81–84, no. 33–35; Bailey 1988, 363, Cnidos, Q 2982, fig. 88, pl. 96- 2nd century, same nozzle; Topoleanu 2012, no. 45...; Anson, Hannah 2013, 258-259, no. 468.

Discus ornament: Loeschcke , no. 256-266, 501-502, pl. XIII; Deneauve 1969, type IV A, 118, no. 353, pl. XL, type V D, 156, no.624, pl. LXIII; Menzel 1969, 41, no.195, pl. 32- Milet; Goethert – Polaschek 1985, 253, motif M 177; Bailey 1980, type E, 75, 228, fig. 81, Q 1085, pl. 37; Bailey 1988, 70, fig. 88.

Dating: 2nd-3rd centuries AD.

Origin: provincial (?); North Pontic (?).

The decoration imprinted on this lamp's discus, i.e. the running deer, less encountered at Loeschcke VIII H type, has been adopted and adapted from the early volute forms of Loeschcke I-IV type²¹.

CORDATE NOZZLE OIL LAMPS (Loeschcke VIII H)

Most Loeschcke VIII type lamps belong to the H variant, the peculiar element being the cordate ornament placed on the nozzle. The Mediterranean, Greek-Italic origin thereof is confirmed both by the consistency of discoveries within this area and the earliest dating starting around the half of the 1st century AD²². The basic time framing is in the 2nd-3rd centuries AD, some variants surviving the 4th century AD as well²³. The cordate nozzle oil lamps feature a great variety in terms of size, clay and finishing quality, ornamentation and marks, as they were not largely produced only in specialised, but in provincial, local and even peripheral workshops. Under such circumstances, the assignation thereof to a specific workshop or even manufacturing area is rather difficult. Therefore, the time framing within the stratigraphic context due to frequent discoveries appears to be more reliable.

Walters Shapes 100 and 101; Loeschcke VIII H; Deneauve VIII A, B; Ionomu 1967, XVIII; Bailey 1980, Q; Ponsich III C

13. Fragmented *monolychnis* oil lamp, partially missing enclosure; MIA, inv. no. 25687; TR. 1977, 'pass(im)' (Pl.II/13).

Dimensions: Lp = 7.33 cm; Dof = 1.10 cm; Db = 3.63 cm; H = 2.57 cm.

Technique/ fabric: formed with a high quality mould, carefully finished; fine clay with scattered limestone particles, reddish (2,5YR6/6) colour, brown-reddish (5YR4/3) engobe, compact on the enclosure, alternating with a light brown (7,5YR6/2) towards the bottom; without traces of use on the nozzle.

Description/ ornamentation circular, cylinder-domed section reservoir, the circular and concave discus bordered by a bold incision; small, externally rounded nozzle, with the fire hole partly stepping into the rim; slightly concave ring-base, marked by a circular incision; rim decorated with a spindle past the cordate nozzle; the discus features a rosette and the base was centrally stamped with *planta pedis*.

Bibliography: unpublished.

Analogies: Ionomu 1967, type XVIII, 17, 64-69, no. 199-234, fig. 31; Heres 1972, 72-73, no. 440-447, pl. 47-s. II-III; Hayes 1980, 107, no. 427, pl. 50-s. II; Bailey 1980, type Q; Goethert – Polaschek 1985, 274, motif M 239 -10 petal; Kuzmanov, Băčvarov 1986, 46, no. 19-20, pl. III/19, 20-s. II-III; Ionomu 1986, type XII, var. II-III, 56-57, pl. III/2, 3; Mușețeanu 1992, type V, var. b, 184, no. 40-41, pl. 34; Simion 1994-1995, 131, fig. 9/c; Georgescu 2016, type III.2.b., vol. II, 221, no.570, pl. 77.

Dating: 1st-2nd centuries AD.

Origin: Italy (?).

Loeschcke VIII H; Ionomu 1967, type XX.

14. Complete *monolychnis* oil lamp; MIA, inv. no. 2660; TR. 1977 (*passim*).

Dimensions: L = 8.28 cm; D = 6.13 cm; Dd = 4.24 cm; Db = 3.14 cm; Doa = 0.38 cm; Dof = 0.90 cm; H = 2.57/4.08 cm (Pl. II/14).

²¹ Chrzanowski, Zhuravlev 198, 82, notes 197-208.

²² Broneer 1930, 84; Menzel 1969, 49; Deneuue 1969, 16; Heres 1972, 66-73; Hübinger 1993, 119-123; Heimerl 2001, 58.

²³ Broneer 1930, 85; Ionomu 1986, 44.

Technique/ fabric: Formed with a high quality mould from fine clay featuring limestone particles within the mixture; cinnamon (10R5/3) colour, dark brown (7,5YR5/4) engobe; the right side of the reservoir was crooked in the firing process; without traces of use.

Description/ ornamentation: circular reservoir, large, heavily concave discus bordered by a strain and a small, centrally placed filling hole; narrow rim, annular handle, short, externally rounded nozzle with the fire hole partly stepping into the rim, circular, slightly concave base, marked by an incision, bearing the stamp OAH, loosely stamped in the middle.

Bibliography: unpublished.

Analogies: Michelucci 1975, type XXV, 53, no. 112, pl. IX.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (?).

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The crooked reservoir (obviously resulting from misplacing inside the kiln) is a proof of manufacture origin, placing the oil lamp in a local workshop. Another supporting element of this theory is the mark OAH, which lacks analogies throughout available literature.

15. Fragmented *monolychnis* oil lamp, partially missing reservoir, cracks at the bottom, restored; MIA, inv. no. 2661, TR (*passim*, acquisition ?), (Pl. III/15).

Dimensions: L = 7.57 cm; D = 5.66 cm; Dd = 3.80 cm; Db = 3.26 cm; Doa = 0.49 cm; Dof = 0.94 cm; H = 2.30/4.06 cm.

Technique/ fabric: mould formed, slightly careless finishing of the lower half; fine, sound clay, featuring limestone and mica particles; reddish (10R6/6) colour, red (10R5/8), unevenly applied engobe; without traces of use on the nozzle.

Description/ ornamentation: circular reservoir with elongated nozzle, narrow rim, heavily concave discus, confined by two incisions, and small, laterally placed filing hole; the round wick hole is partly stepping into the rim, annular handle, flat ring-base, outlined by a circular incision; pigeon standing on an olive branch (?) is embossed on the discus, cordate nozzle, base was loosely centrally stamped with *planta pedis*.

Bibliography: Paraschiv 2012, 126, no. 158.

Analogies: Iconomu 1967, type XXX, 18-20, 72, 120, no. 252, fig. 111; Kuzmanov, Salkin 1981, type XI, 56, no. 41-42, pl. V/41,42; Sanie 1981, 160, no. 2, pl. 45/2a, 2b; Iconomu 1986, type X, variant VI, 53, pl. II/11; Bailey 1988, fig. 102; Simion 1994-1995, 131, fig. 9/d.

Discus ornamentation: Loeschke, 404, no. 526-530, pl. XIV – type I, IV, V, –volute and VIII; Menzel 1969, 34, no. 143, pl. 28; Oziol, Pouilloux 1969, type 10, 55, no. 122, pl. III, XVII volute; Kuzmanov, Salkin 1981, type XI, 56, no. 41-42, pl. V – degenerative cordate; Goethert-Polaschek 1985, 262-263, motif M 204; Bailey 1988, fig. 102; Heimerl 2001, 198, motif 197; Casas-Genover, Soler-Fusté 2006, 180-182, no. E 95, fig. 64.

Dating: 2nd century AD.

Origin: local/provincial workshop (?).

16. Fragmented *monolychnis* oil lamp, missing handle; MIA, inv. no. 2665, TR 1977, C 52, -1.20 m, 'Gr(oapă)' (Pl. III/16).

Dimensions: Lp = 8.46 cm; D = 6.40 cm; Dd = 4.95 cm; Db = 3.75 cm; Doa = 0.58 cm; Dof = 1.04 cm; H = 2.69/3.02 cm.

Technique/ fabric: formed with a relatively worn mould, fine clay, scattered limestone particles in the mixture; light red (10R6/4) colour, red (2,5YR5/6) engobe; traces of use on the nozzle.

Description/ ornamentation: circular reservoir with elongated nozzle, large, heavily concave discus, small, centrally placed filling hole; slightly cambered and inclined narrow rim, flat, annular ring-base; the nozzle is decorated with cordate motif.

Bibliography: Opaiț 1980a, pl. 37/5.

Analogies: Djuric 1995, 46, C 125.

Dating: 2nd-3rd centuries AD.

Origin: local/ provincial (?).

Loeschcke VIII; Ionomu 1967, type XX; Ionomu 1986, type IX

17. Fragmented *monolychnis* oil lamp, missing handle; MIA, inv. no. 3775, TR 77, C 45, -0.60 m.

Dimensions: Lp = 7.41 cm; D = 6.02 cm; Dd = 4.56 cm; Db = 3.21 cm; Doa = 6.94 cm; Dof = 1 cm; H = 2.45/2.70 cm (Pl. III/17).

Technique/ fabric: formed with a high quality mould, fine clay, scattered limestone and mica particles; red brick (10R5/8) colour, specific engobe; traces of use on the nozzle.

Description/ ornamentation: circular reservoir, concave discus confined by two incisions, and laterally placed filling hole; narrow rim, elongated short nozzle, with the wick hole partly stepping into the rim; flat ring-base, outlined by a double incision; the discus features a kantharos ornamentation with reversed S handles, filled with fruits, cordate nozzle; on the circular, flat base outlined by a double incision there is loosely imprinted the mark *EYKTH(M) / (QN)EΠ(OI) / EI* laid out on three lines; text height 0.31 / 0.36 / 0.69 cm.

Bibliography: Opaiț 1980a, pl. 37/2.

Analogies: Waldhauer 1914, 58, no. 440, pl. 42; Severeanu 1936, 63, no. 57, fig. 52; Ionomu 1967, type XX, 18-20, 85, no. 346, fig. 121; Bârlădeanu-Zavatin 1977, 133, M6/1, pl. 6/1; Bailey 1980, type R, 374, Q1418, pl. 86, fig. 51; Rădulescu 1981, 184, 187, pl. 2/3; Sandu 1981, 168, no. 14, pl. 3; Ionomu, Bordeianu 1981, 270, no. 1, fig. 1a, b; Dragomir 1984, 168, no. 33, pl. 7; Matei 1985, 133, pl. 3/6; Lungu, Chera 1985, 216, pl. 1/4-6; Ionomu 1986, type IX, var. V, 46, pl. II/8; Bucovală, Pașca 1991, 203, M 6/3, pl. 1, 223, M21/15, pl. 2; Bucovală 1991, 195, fig. 12/c; Kuzmanov 1992, type XXI, var. 4, no. 147-148; Băluță 1994, 207, no. 60-62, pl. 5/1-3; Simion 1994-1995, 131, fig. 9/a; Baumann 1995, 368, pl. 60/6, 424,427, pl. 11/1-3; Oța, Gramaticu 2003, 73+74, no. 7, pl. 1, 2-7; Băjenaru, Dobrinescu 2008, 192, M9, no. 2, pl. 5/a; Rusu-Bolindeț 2010, 404+405, no. 4, pl. 7-13; Rusu-Bolindeț 2011, 275+276, no.4, pl. 7-13; Topoleanu 2012, 118-118, no. 58, pl. 8; Georgescu 2016, type III.2.a., vol. II, 107-124, no. 277-318, pl. 41-46 (*passim*).

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (Tomi ?).

18. Fragmented *monolychnis* oil lamp, there were preserved the nozzle and approx. 1/3 of the body; MIA, inv.no. 25180; TR. 1977, C 43, - 0.80 m (Pl. III/18).

Dimensions: Lp = 4.18 cm; Dof = 1.00 cm; H = 2.78 cm.

Technique/ fabric: formed, fine clay mixed with limestone particles; reddish (2,5YR6/8) colour, specific engobe in the upper part and dark brown in the lower part, partially preserved in the lower part (2,5YR4/2); traces of use on the nozzle.

Description/ ornamentation: see previous item– the stem of the kantharos is still preserved on the discus and the base still has the mark *EYKTHM / (QNE)ΠOI / (EI)*,

Bibliography: see no. 17.

Analogies: see no. 17.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (Tomi ?).

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Most of the cordate nozzle oil lamps discovered at *Troesmis* belong to a type that has been documented in the specialised literature by C. Iconomu. These are the 'Euctemon' type oil lamps²⁴, named so in consideration of the manufacturer's signature but also based on the particular shape and ornamentation. The mark has been applied only on the specimens featuring rooster, bunch of grapes, crater, kantharos and shell discus ornamentations²⁵. The oil lamps belonging to this type enter into a well-defined series, which, although inspired from the well-known Mediterranean workshop products, feature original models and moulds, thus proving the technical ability to provide the required lightning devices over a distinct geographical area for several generations (2nd-4th centuries AD). Due to the great number of discoveries, *Tomi* appears to be the main manufacturing centre²⁶, with the main branches in *Callatis* and *Histria*²⁷. The premium quality of the signed items, many of them discovered in stratigraphic context, allowed the dating thereof in the second half of the 2nd century AD²⁸. The popularity of the shape, particularly within the province between the Danube and the sea, resulted in the copying or imitation thereof in other local or even peripheral workshops, most of the discoveries lacking the signature of the Tomitan master. The oil lamps without mark are still important in building the collection of ornaments placed on the discus or on the rim, yet to the detriment of clay, moulding and finishing quality²⁹.

19. Fragmented *monolychnis* oil lamp, missing handle, cracks on the nozzle; MIA, inv. no. 4493, TR 1977, C14 bis, N 1 (**Pl. III/19**).

Dimensions: Lp = 7.74 cm; D = 6.15 cm; Dd = 3.92 cm; Db = 3.50 cm; Doa = 0.90 cm; Dof = 1.14/1.27 cm; H = 2.50/3.04 cm.

Technique/ fabric: formed with a worn mould, carelessly finished, unsteady; soft, fine clay, featuring silver mica; light reddish (5YR6/4) colour, partially preserved red (10R5/6) engobe; without traces of use on the nozzle.

Description/ ornamentation: circular reservoir with elongated nozzle, slightly concave discus having the filling hole laterally placed; ovoid wick hole, flat ring-base; the discus features a slight imprint of a bunch of grapes bound to the branch, while the cordate ornamentation of the nozzle is heavily worn.

Bibliography: Baumann 1980, 189, no. 15 (not illustrated).

Analogies: Severeanu 1936, 64, no. 59, fig. 54; Iconomu 1967, type XX, 18-20, fig. 36; Suceveanu 1967, 248, fig. 5/4; Bărlădeanu-Zavatin 1977, 131, M 3/12, pl. V/3; Sandu 1981, 163, no. 16, pl. 3/6; Sanie 1981 161, no. 5, 6, pl. 42/3 a-b, pl. 45/1 a-b; Rădulescu 1981, 184, 187-188, pl. 2/2, 3/5; Suceveanu 1982, 109, no. 100, pl. 10; Dragomir 1984, 168, no. 31, pl. 7; Iconomu 1986, type IX, var. III, 45-45, pl. II/6; Băluță 1994, 207, no. 63, pl. V/5; Vasiliu, Paraschiv 1999, 259, M 5, no. 3, pl. 5/2; Topoleanu 2012, 122-123, no. 64, pl. 9; Topoleanu, Croitoru 2015, 133-136, no. 34; Georgescu 2016, type III.2.a., vol. II, 91-106, no.237-275, pl. 36-40.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (Tomi ?).

20. Fragmented *monolychnis* oil lamp, there are preserved the handle and partly the rim, discus and base; MIA, inv. no. 4530; TR. 1977, C 45, - 0.70 m (**Pl. III/20**).

²⁴ Iconomu 1967, type XX, 18-20; Iconomu 1986, type IX, 44-51.

²⁵ Iconomu 1967, 20; Iconomu 1986, 44; Rusu-Bolindeț 2011, 279.

²⁶ Iconomu 1986, 126; Rusu-Bolindeț 2011, 280-281.

²⁷ Rusu-Bolindeț 2011, 280-281.

²⁸ Iconomu, Bordeianu 1981, 275; Iconomu 1986, 44-46.

²⁹ Topoleanu 2012, no. 59-65, 72-74; Topoleanu, Croitoru 2015, no. 33 and 39.

Dimensions: Lp = 5.80 cm; Doa = 0.61 cm; H = 2.43/4.30 cm.

Technique/ fabric: Formed with a heavily worn mould, loosely finished, poor firing; fine clay featuring limestone particles in the mixture, reddish (2,5YR5/8) colour, partially applied dark brown (2,5YR3/2) engobe.

Description/ ornamentation: circular reservoir, concave discus with laterally placed filling hole, loosely installed annular handle, flat ring-base; the discus ornamentation representing an eagle with partly spread wings is edgeless due to the worn mould.

Analogies: Băluță 1964, 281, pl. 1/6; Menzel 1969, 41, no. 198, fig. 32/16, 48, no. 245, fig. 32/17; Bârlădeanu-Zavatin 1977, 140, M 15/1, pl. V/5; Ionomu, Bordeianu 1981, 270, 273, fig. 4/ a, b; Topoleanu 1984, 189, no. 8, pl. 3/2, 6/3; Ionomu 1986, type IX, var. XI, 47; Kuzmanov 1992, type III, 46, no. 22, pl. III; Baumann 2009, 235-236, no. 50, fig. 7; Topoleanu 2012, 124-125, no. 66, pl. IX/66.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (Tomi ?).

21. Fragmented *monolychnis* oil lamp, missing handle, cracks on the discus and reservoir; MIA, inv. no. 4494, TR 1977, C 10, N 1 (PI. IV/21).

Dimensions: Lp = 6.73; Dd = 2.99 cm; Db = 2.72 cm; Dof = 0.98 cm; H = 2.43/2.67 cm.

Technique/ fabric: formed with a heavily worn mould, loosely finished, unsteady and poorly fired; fine clay with scattered limestone, iron oxide and silver mica particles, grey (7,5YR6/3) colour, brown (7,5YR4/2) engobe, applied on the enclosure only; without traces of use on the nozzle.

Description/ ornamentation: circular reservoir with short elongated nozzle, concave discus; flat ring-base, outlined by two incisions; the discus is decorated with a 16-petal rosette and the a degenerated cordate motif is still preserved on the nozzle.

Bibliography: Baumann 1980, 189, no.16, pl. 24/1.

Analogies: Kuzmanov, Salkin 1981, type XI, 57, no. 56, pl. VII/ 56; Topoleanu 2012, 157, no. 90, pl. XI-sec. 2-3; Georgescu 2016, vol. III, type III.2.a., 42, no.111, pl. 20.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

22. Fragmented *monolychnis* oil lamp, a part of the enclosure is preserved; MIA, inv. no. 42644; TR. 1977, 'C 43, N 5, + 41,12' (PI. IV/22).

Dimensions: Lp = 5.97 cm; Dd = 3.65 cm; Doa = 0.80 cm; Hp = 0.97 cm.

Technique/ fabric: formed with a worn mould, poorly fired; fine clay featuring limestone particles in the mixture, reddish (2,5YR6/8) colour, specific engobe; without traces of use on the nozzle.

Description/ ornamentation: circular reservoir, slightly concave large discus, with the filling hole drilled towards the nozzle, narrow rim; the discus' ornamentation is illegible due to mould wear (can Nereid riding a hippocampus?), the rim is decorated with eggs and the nozzle is of cordate shape.

Bibliography: unpublished.

Analogies: Ionomu 1967, type XX; Georgescu 2016, type III.2.a., vol. II, 76-91, no. 197-236, pl. 31-35.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

23. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv. no. 42646; Tr. 1977, 'C 43, N 3, + 41,45' (PI. IV/23).

Dimensions: Lp = 5.08 cm; Hp = 2.80/3.53 cm.

Technique/ fabric: formed with a worn mould, loosely finished; fine sound clay, scattered limestone particles in the mixture, reddish (2,5YR5/8) colour, specific engobe.

Description/ ornamentation: circular and concave reservoir lacking contour, slightly sloped and cambered narrow rim; the embossed ornamentation of the discus is illegible

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

24. Fragmented *monolychnis* oil lamp, the handle and a part of the reservoir are preserved; MIA, inv. no. 4529; TR. 1977, C 43, - 0.80 m (Pl. IV/24).

Dimensions: Lp = 3.70 cm; H = 2.46/4.38 cm.

Technique/ fabric: mould formed, loosely finished; fine clay, scattered mica in the mixture, reddish (10R5/8) colour, specific engobe.

Description/ ornamentation: circular reservoir, concave discus outlined by two fine incisions, cambered rim, annular handle, flat ring-base.

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

25. Fragmented *monolychnis* oil lamp, missing nozzle, discus and a portion of the reservoir; MIA, inv. no. 4527, TR 1977, 'Terme, Cam. C' (Pl. IV/25).

Dimensions: Lp = 6.00 cm; D = 5.33 cm; Dd = 3.78 cm; Db = 2.85 cm; H = 2.37/4.35 cm.

Technique/ fabric: formed with a heavily worn mould, loosely finished, unsteady; fine sound frangible clay, scattered limestone particles in the mixture, poorly fired; reddish (10R5/8) colour, specific engobe; traces of use on the nozzle.

Description/ ornamentation: circular reservoir, slightly concave discus and loosely installed annular handle; flat ring-base; the laterally drilled filling hole infers the existence of an ornamentation on the discus, which was not preserved.

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

26. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv. no. 4528; Tr. 1977, 'Terme, Camera F' (Pl. IV/26).

Dimensions: Lp = 4.47 cm; Db = 3.50 cm; H = 2.77/4.26 cm.

Technique/ fabric: formed with a relatively worn mould from fine clean clay, reddish (10R6/8) colour, specific engobe.

Description/ ornamentation: circular reservoir, cambered rim, concave discus lacking contour, annular handle, flat ring-base

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

27. Fragmented *monolychnis* oil lamp, the handle and a part of the reservoir are preserved; MIA, inv. no. 4531, TR. 1977, C 66, - 0.90 m (Pl. IV/27).

Dimensions: Lp = 4.65 cm; Hp. = 3.87 cm.

Technique/ fabric: formed with a slightly worn mould, loosely finished; fine clay, limestone particles in the mixture, reddish (2,5YR5/8) colour, specific engobe.

Description/ ornamentation: circular reservoir, concave discus, annular handle; the discus is outlined by two circular incisions.

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

28. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv. no. 25176; Tr. 1977, C 52, - 1.20 m, 'Gr(oapă)' (Pl. IV/28).

Dimensions: Lp = 4.94 cm; Db = 3.51 cm; H = 2.79 cm.

Technique/ fabric: mould formed, carefully finished, with thin walls; well selected fine clay, featuring quite few silver mica particles in the mixture, reddish (2,5YR5/8) colour, opaque red (10R5/8) engobe, partly present on the inner side and on the body, metallic gloss dark brown (5YR3/1) on the rim.

Description/ ornamentation: circular reservoir, concave discus outlined by a slightly embossed string, slightly sloped narrow rim; slightly concave ring-base, surrounded by a fine incision.

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

29. Fragmented *monolychnis* oil lamp, the nozzle and a part of the reservoir are preserved; MIA, inv. no. 42647; TR. 1977, 'Terme, Camera A, N 1, + 42,00' (Pl. IV/29).

Dimensions: Lp = 6.27 cm; Dof = 1.10 cm; Hp = 2.80.

Technique/ fabric: formed with a worn mould, loosely finished; semi coarse clay featuring limestone and mica particles as lean material, yellowish (5YR7/3) colour, partially applied, exfoliated reddish (2,5YR5/6) engobe; traces of use on the nozzle.

Description/ ornamentation: circular reservoir, relatively wide rim, concave discus lacking contour, short round nozzle with the burning hole, with the fire hole partly stepping into the rim; on the nozzle there is still preserved a heavily worn cordate ornament.

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

30. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, FNI 1; TR. 1977, C 43, N 2, - 0.80 m (Pl. IV/30).

Dimensions: Lp = 3.55 cm; Hp = 3.02 cm.

Technique/ fabric: formed with a slightly worn mould; fine clay, scattered mica in the mixture, light brown (7,5YR6/4) colour, specific engobe; secondary partial firing.

Description/ ornamentation: circular reservoir, concave discus outlined by two circular incisions.

Bibliography: unpublished.

Analogies: Iconomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

31. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, FNI 2; TR. 1977, C 47, - 0.60 m (Pl. IV/31).

Dimensions: Lp = 5.59 cm; Hp = 1.80 cm.

Technique/ fabric: formed with a worn mould; fine clay, scattered limestone particles, yellowish reddish (5Y6/8) colour, partially applied, exfoliated dark brown (10R4/2) engobe.

Description/ ornamentation: formed with a worn mould, straight rim, concave discus.

Bibliography: unpublished.

Analogies: Ionomu 1967, type XX.

Dating: 2nd-4th centuries AD.

Origin: local/provincial workshop (?).

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'Euctemon' type oil lamps progressed from carefully formed items towards those made with heavily worn moulds, loosely finished and with a degenerated cordate ornamentation on the nozzle. The latter might have been manufactured both by the followers of the Tomitan master and in local, even peripheral workshops³⁰. The early dating of such items, according to the stratigraphic context of the discoveries, might be explained by the simultaneous use thereof with the high quality ones³¹.

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32. Fragmented *polilychnis* oil lamp, missing handle; MIA, inv. no. 3777, TR. 77, C 50, - 0.70 m (Pl. IV/32).

Dimensions: Lp = 12.08 cm; D = 8.74 cm; Dd = 5.15 cm; Db = 4.84 cm; Doa = 1.05 cm; Dof = 1.12/1.07/1.15/1.16/1.03 cm; H = 3.73 cm.

Technique/ fabric: formed with a high quality mould and carefully finished from soft fine clay featuring scattered limestone, iron oxide and mics particles in the mixture; yellowish (7.5YR7/6) colour, specific engobe; slightly used, with traces of use on the nozzles.

Description/ ornamentation: circular reservoir, featuring five symmetrically placed nozzles and round wick holes, wide straight rim, slightly sunken circular discus with centrally positioned filling hole; flat ring-base; the nozzles feature cordate motifs ornamentation and embossed double outlined discuses with a dot in the middle, such motif being also present past the handle; the discus is outlined by a double string and the filling hole is outlined by a single string; the base is decorated with five concentric strings.

Bibliography: Opaî 1980a, pl. 37/1; Paraschiv 2012, 130, no. 166.

Analogies: Sanie 1981, 163-164, no. 25, pl. 41/4 a-c; Muşeteanu, Elefterescu 1983, type VI, 115, 121-122, no. 57; Kuzmanov, Băčvarov 1986, type IV, 48, no.36, pl. V/36; Muşeteanu 1992, 168, 189, type VII, no.97 identic; Drăghici 2011, 130-131, no. 284, pl. 25/69.

Dating: 2nd-3rd centuries AD.

Origin: provincial workshop (*Durostorum* ?).

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Only one five-nozzle oil lamp was discovered at *Troesmis* during the 1977 campaign. Such early pieces imitating the human palm are better known within the provinces, with very different variants³². The items featuring a cordate ornamentation on the nozzle are quite rare. In consideration of the crack of the handle, it probably had a palmette shape, as this was commonly found on the 'Firmalampen' type oil lamps from *Dacia*³³. In terms of general shape and material, the closest analogy is found at *Durostorum*³⁴.

³⁰ Ionomu 1986, 126-129; Rusu-Bolindeţ, 2011, 280-281.

³¹ Muşeteanu, Elefterescu 1983, type IV, 114-115, 119-121, no. 20-55, fig. 2-3; Topoleanu 2012, 130-132, no. 72-75.

³² Iványi 1935, type VIII, 90-92, pl. 29-30; Alram-Stern 1989, 272-273, pl.36; Alicu 1994, type XIV, etc.

³³ Băluţă 2003, *passim*.

³⁴ Muşeteanu 1992, no. 97.

C. 'FIRMALAMPEN' TYPE OIL LAMPS. LOESCHCKE X.

'Firmalampen' type oil lamps were called so due to the presence of the manufacturer's stamp thereon to a peculiar shape. The first classification was made following the excavations at *Vindonissa*³⁵, as amended and detailed by H. Menzel³⁶ and E. Buchi, the latter based on the finds from *Aquileia*, where the most important manufacturing workshops were attested³⁷.

The outstanding popularity of 'Firmalampen' type oil lamps across the entire Roman world for more than three centuries is credited to the prestige of the Italian manufacturer, the exquisite quality of the products and also the compact form, resilience and easy handling thereof. All these features caused their replication or imitation within provincial and local workshops and even the genesis of limited circulation new marks of some. Nineteen pieces belonging to the Loeschcke X type, both complete and fragmentary, originate from *Troesmis*, yet only thirteen thereof still bear the manufacturer's mark.

Loeschcke / Buchi X B; Bailey 180 N

33. Fragmented *monolychnis* oil lamp, the handle and a part of the reservoir are preserved; MIA, inv. no. 25173; TR. 1977, 'C 43, T – 473, *pass(im?)*' (Pl. V/33).

Dimensions: Lp = 5.57 cm; H = 2.65/3.55 cm.

Technique/ fabric: formed with a high quality mould, carefully finished; fine clay, scattered limestone particles, light beige (10YR6/3) colour, partially preserved hazel (5YR4/3) engobe; worn.

Description/ ornamentation: circularly carved discus, surrounded by a strong string; slightly sloped and cambered rim, double channelled wide handle; slightly sunken flat base, surrounded by two circular incisions; ARMENI stamp centrally impressed, featuring elaborate lettering, letter A without the horizontal line, RMEN in ligature; letter height of 0.90 - 0.93 cm; letters AT were loosely scratched on the rim after firing, probably in recent times (?).

Bibliography: Opaiț 1980b, 342 (he mentions the mark among the discoveries).

Analogies: Čičikova 1973, 351-352, no. 9, 10, fig. 8, 9; Mușețeanu, Culică, Elefterescu 1980, 298, no. 1, 7; Mușețeanu 1992, type X, 170, 190, no. 115, pl. 39; Popilian 1996, 81-82, no. 7, 13, 24; Georgescu 2016, type IV, 309, nr. 787, pl. 106.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (*Novae, Durostorum* ?).

34. Fragmented *monolychnis* oil lamp, missing the upper part of the nozzle and the discus, partly exfoliated; MIA, inv.no. 25183; TR 1977 'thermae, Cam. D, + 42,00/42,10' (Pl. V/34).

Dimensions: Lp = 9.23 cm; D = 6.38 cm; Dd = 3.73 cm; Db = 3.65 cm; H = 2.90 cm.

Technique/material: formed with a worn mould; semi coarse clay, with pebbles, limestone and mica particles in the mixture; redbrick (2,5YR6/6) colour, partially preserved red (10R5/8) engobe; worn, used.

Description/ ornamentation: circular and concave discus, rim decorated with three bifid bumps; slightly concave base circled by two incisions, heavily worn and loosely impressed stamp: ARMENI; 0.52 – 0.58 cm letter height.

Bibliography: Opaiț 1980b, 342 (he mentions the mark among the discoveries).

Analogies: Gostar 1961, 157-158, 191, 197-198, no. 20-26; Băluță 1961, 194; Čičikova 1973, no. 1-8; Čičikova 1974, 159-164; Iconomu 1986, type VIII, 31-32; Mușețeanu 1992, type X, 190-191, no. 116-124,

³⁵ Loeschcke 1919, type IX, X, 255-298, 427-446, no. 751-999, pl. 1, 3, 17, 19.

³⁶ Menzel 1969, 60-71, no. 357-474.

³⁷ Buchi 1975.

pl. 39; Kuzmanov 1992, 35, no. 230; Alicu 1994, type X, 14-15, 172, no. 488, fig. 13; Băluță 2003, 12-14; Popilian 1996; Topoleanu 2010, 152-156, 174, no. 1, pl. I/1; Topoleanu 2012, 69-70, 81, no. 25, pl. IV/25, XX/25; Topoleanu, Croitoru 2015, 108-114, no. 27.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (*Durostorum*?).

*

The oil lamps bearing Armenius' signature propagated only in *Dacia*, *Moesia Superior* and *Moesia inferior* provinces. The only mould cast known within this area was discovered in *Romula*, in a large handicraft neighbourhood³⁸. Several manufacture centres were suggested as Armeni oil lamps discovered north and south of the Danube differ in terms of size, clay colour and engobe³⁹. Item no. 33 from *Troesmis*, formed from a light beige clay, with hazel engobe, featuring carved discus and strip handle, has close analogies at *Durostorum* and *Madara*⁴⁰. Both the clay appearance⁴¹ and the number of discoveries (31 items⁴²) substantiate the manufacturing thereof at *Durostorum*. This last argument, also including the geographical factor, assigns as well the second Armeni oil lamp to *Durostorum* workshops (Farm 4). We do not exclude the scenario of the manufacturing of these oil lamps at *Troesmis* as well, even in the absence of clay analysis or kiln and mould discoveries⁴³.

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35. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv.no. 25878; TR. 1977, 'C 43, T – 472, N 2, - 0.80 m' (Pl. V/35).

Dimensions: Lp = 5.00 cm; Hp = 2.62 cm.

Technique/ fabric: high quality mould, fine clay, occasional iron oxide, limestone and mica particles in the mixture; yellowish (7,5YR7/6) colour, partially preserved reddish (2,5YR6/8) engobe; worn.

Description/ ornamentation: slightly cambered narrow rim, slightly sunken flat base, outlined by a circular incision; rim decorated with a spindle and a bunch of grapes, the motif is heavily worn due to intensive use; FLAVI stamp centrally impressed, with careful lettering, 0.98 – 1.16 cm letter height.

Bibliography: unpublished.

Analogies: Iványi 1935, 167, no. 2013-2014, pl. 54/3, 86/73-74; Gostar 1961, 161, 189, no. 133-135; Čičikova 1974, 163-164, pl. 36/1; Mușețanu, Culică, Elefterescu 1980, 300-301, no. 32-44, fig. 10-11; Jovanović 1985, 46-47; Iconomu 1986, type VIII, 36; Kuzmanov, Băčvarov 1986, type VI, 53, no. 74-77, pl. X; Kuzmanov 1992, 35, no. 234; Mușețanu 1992, 172, 194-195, no. 155-167, pl. 42; Alicu 1994, type X, 21-22, 172, no. 499, fig. 14; Băluță 2003, 73, no. 1; Krunic 1985, type IX, 62-63, 88, fig. 26-27, pl. III/10-12; Topoleanu 2010, 159-161, 175-176, no. 5, pl. 2/5 - with bibliography; Krunic 2011, type X, 92, 108-109, cat. no. 101-104; Topoleanu 2012, 71-73, 84-85, no. 29; Elefterescu 2016, 173, fig.3/8.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (*Troesmis* ?).

36. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv. no. 25177; Tr. 1977, 'C 43, T - 0.80 cm., T – 471' (Pl. V/36).

Dimensions: Lp = 4.52 cm; H = 2.64 cm.

³⁸ Popilian 1996.

³⁹ Topoleanu 2010, 154-155, with bibliography.

⁴⁰ Čičikova 1973, 351-352, no. 9 and 10, fig. 8 and 9.

⁴¹ Mușețanu, Culică, Elefterescu 1980, 286, 288-289.

⁴² According to Elefterescu 2016, 164-167.

⁴³ Opaît 1980b, 333, 342, 348.

Technique/ fabric: see no. 35.

Description/ ornamentation: see the previous item; base outlined by a single circular incision decorated with radial lines, the stamp is partially preserved FL(AVI).

Bibliography: unpublished.

Analogies: see no. 35; Bichir 1984, 40, pl. 33/8; Bondoc 2008, 55, no. 9, pl. 17/9 – for the hachure around the mark.

Dating: 2nd-3rd centuries AD.

Origin: local/provincial workshop (*Troesmis* ?).

*

Flavius was another oil lamp provincial manufacturer, his mark being known in *Pannonia*, *Dacia* and the two *Moesiae* only. The stamp's typography is conspicuous, featuring oblique upwards horizontal lines of F letter, short downwards horizontal line of L letter in ligature with the A letter, the latter lacking the horizontal line. As previously mentioned, there are several suggestions on the manufacturing centre(s)⁴⁴, as there are known variants in terms of clay, decoration and size, likewise the two items from *Troesmis*. The closest analogies are found at *Durostorum*, where the most discoveries are recorded as well (26 pcs. ⁴⁵). At the same time, the possibility of oil lamp moulding at *Troesmis* is substantiated by the discovery of a fragment belonging to a jug featuring the incised name of Flavi, with a very close lettering to our items'⁴⁶.

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37. Fragmented *monolychnis* oil lamp, approximately half of the bottom part of the reservoir is preserved; MIA, inv. no. 25171; TR. 1977, 'Terme, Camera E, N (?)' (Pl. V/37).

Dimensions: Lp = 4.45 cm; Doa = 0.67 cm; H = 3.13/3.60 cm.

Technique/ fabric: formed with a high quality mould, carefully finished, fine clay, scattered limestone and iron oxide particles in the mixture; brown grey (2,5Y6/2) colour, partially preserved brown (7,5YR4/4) engobe; incomplete firing; slightly worn.

Description/ ornamentation: high cylinder-domed reservoir with a heavily concave circular discus and two symmetrically laterally placed filling holes, narrow rim; slightly sunken flat ring-base, outlined by two circular incisions; a bifid bump is still preserved on the bottom part of the discus, the discus is decorated with a human mask; FORTIS stamp on the base, featuring well contoured ligature free embossed letters, 0.74 cm letter height.

Bibliography: Opaiț 1980b, 342 (he mentions the mark among the discoveries).

Analogies: Loeschke, 440, no.954, pl. XVIII/954 – identical mask; Čičikova 1974, 158, pl. 34/1; Buchi 1975, 78-91, pl. XXVII-XXXII, *pass*, for the mask; Iconomu 1986, type VIII, 36-37; Kuzmanov, Băčvarov 1986, type VI, 50, no. 50-53, pl. VII – featuring masks on the discus; Alicu 1994, type X, 171, no. 464-465 – identical mask; Băluță 2003, 74-96, *passim*.

Dating: 2nd-3rd centuries AD.

Origin: Italy (?).

38. Complete *monolychnis* oil lamp; MIA, inv. no. 807; TR *pass(im)*, acquisition?, (Pl. V/38).

Dimensions: L = 9.77 cm; D = 6.60 cm; Dd = 4.15 cm; Doa = 1.07 cm; Dof = 1.17 cm; Db = 4.06 cm; H = 3.21 cm.

Technique/ fabric: formed with a high quality mould from clean fine clay, extra light brown yellowish (10YR7/4) colour, reddish (2,5YR6/6) engobe with unevenly applied dark brown (7,5YR4/6) spots; worn, slight traces of use on the nozzle.

⁴⁴ Topoleanu 2010, 160-161; Topoleanu 2012, 72-73.

⁴⁵ According to Elefterescu 2016, 173.

⁴⁶ Opaiț 1980a, 207, pl. 36/1.

Description/ ornamentation: circular reservoir, long nozzle; circular, flat, sunken discus, rim decorated with two lateral bumps symmetrically placed, filling hole drilled towards the channel, slightly sunken ring-base circled by two incisions; FORTIS mark embossed in the middle with chippy letters and an dot inscribed overhead; 0.60 – 0.69 cm letter height.

Bibliography: unpublished.

Analogies: Gostar 1961, 162-165, 181-183, no. 136-260; Băluță 1961, 202-207; Čičikova 1974, 158, pl.35/4; Mușețeanu, Culică, Elefterescu 1980, 301, no. 45-75, fig. 11-12; Kuzmanov, Băčvarov 1986, type VI, 50-51, no. 54-58, pl. VII-VIII; Mușețeanu 1992, type X, 172, 195-199, no. 172-211, pl. 43-45; Alicu 1994, type X, 22-24, 57 pass.; Băluță 2003, 74-96; Topoleanu 2010, 161-165, 176, no. 6,7, pl. II/6,7 with bibliography; Topoleanu 2012, 85-86, no. 30-31, pl. V/30,31, XX/30, 31.

Dating: 2nd-3rd centuries AD.

Origin: Moesian provincial workshop (?).

39. Fragmented *monolychnis* oil lamp, missing nozzle and discus; MIA, inv. no. 25170; TR 1977, 'Terme, Camera E' (Pl. VI/39).

Dimensions: Lp = 7.55 cm; D = 6.60 cm; Dd = 4.36 cm; Db = 4.19 cm; H = 3.43 cm.

Technique/ fabric: slightly worn mould, fine clay, occasional pebbles, limestone and mica particles, yellowish (7,5YR7/4) colour, exfoliated reddish (2,5YR5/8) engobe; worn.

Description/ ornamentation: – see no. 38; letter height 0.63 – 0.68 cm.

Bibliography: unpublished.

Analogies: see no. 38.

Origin: Moesian provincial workshop (?).

40. Fragmented *monolychnis* oil lamp, a part of the base is preserved; MIA, inv. no. 16320; TR 1977, 'C 28, Gr(oapă) E(st) (?)' (Pl. VI/40).

Dimensions: Lp = 4.80 cm; Db = 3.32 cm; Hp = 0.15 cm.

Technique/ fabric: formed with a slightly worn mould, fine clay, occasional limestone particles in the mixture; yellowish (5YR7/4) colour, irregularly applied brown reddish (5YR5/4) engobe.

Description/ ornamentation: see no. 38; mark with well-defined capitals; (F)ORTIS stamp, letter height 0.61 cm.

Bibliography: unpublished.

Analogies: see no. 38.

Dating: 2nd-3rd centuries AD.

Origin: Moesian provincial workshop (?).

41. Fragmented *monolychnis* oil lamp, missing a part of the discus, rim and base, cracks on the nozzle; MIA, inv. no. 25184; TR 1977, 'C 70, Camera A (*thermae* ?), + 43,70' (Pl. VI/41).

Dimensions: Lp = 8.48 cm; D = 5.71 cm; Dd = 3.53 cm; Db = 3.80 cm; Doa = 1.06 cm; Dof = 1.21 cm; H = 2.85 cm.

Technique/ fabric: formed with a worn mould from soft, fine clay with scattered pebbles, limestone and mica particles in the mixture; yellowish (7,5YR7/6) colour, partially preserved reddish (10R5/6) engobe; heavily worn (rolled ?), without traces of use on the nozzle.

Description/ ornamentation: short, flat, rounded walls reservoir, slightly concave circular discus and central large filling hole; the channel on the nozzle narrows towards wick hole; ring-base outlined by two incisions; the rim is decorated by two laterally placed bifid bumps; on the base there is still preserved a heavily worn S letter, presumably (FORTI)S; letter height 0.82 cm.

Bibliography: unpublished.

Analogies: see no. 38.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (*Troesmis* ?).

42. Fragmented *monolychnis* oil lamp, bottom of the nozzle and partial base are preserved; MIA, inv. no. 4534; TR. 1977, 'Terme, N 2, + 41,80' (Pl. VI/42).

Dimensions: Lp = 6.24 cm; Hp = 2.08 cm.

Technique/ fabric: formed with a low quality mould, loosely finished, featuring irregular wall thickness; fine clay, scattered pebble, limestone, iron oxide and mica grains in the mixture; light redbrick (2,5YR6/6) colour, partially preserved brown reddish (2,5YR4/4) engobe; heavily worn.

Description/ ornamentation: heavily worn, slightly sunken ring-base is partially preserved; illegible stamp, presumably *Fortis* (?).

Bibliography: unpublished.

Analogies: see no. 38.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (*Troesmis* ?).

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The most wide spread impressed mark on the 'Firmalampen' type oil lamps manufactured in Northern Italy belongs to *Fortis*⁴⁷, the workshop being accounted as the very origin of type X⁴⁸. His products, known as far back as the end of the 1st century AD⁴⁹, featuring prevalent circulation during the 2nd century AD⁵⁰, surviving up to the 4th century AD⁵¹, dominate the discovery statistics especially in the European provinces⁵². Although the number of the oil lamps bearing *Fortis*' signature is significantly lower in Dobruja than those known in *Dacia*⁵³, it still places by far first among the marks known within this area, therefore the six items from *Troesmis* are only to confirm such statistics. The first oil lamp (cat. no. 37) can be assigned to a Northern Italy origin workshop, due to workmanship quality and decorations. Despite their high quality, the following two items (cat. no. 38 and 39) were probably formed in the same provincial workshop. This proposal is substantiated by the close sizes, the drilling of the filling hole towards the channel or by the presence of the same ornament inscribed overhead the mark. The same style is also present in the fragment distinguished by the elegance of the stamp execution (cat. no. 40). Failing reliable clay analysis or exact analogies, which are hardly identifiable due to mould and mark standardization, the three oil lamps may be assigned to Moesian workshops. Out of these, we mention in the first place those from *Oescus*, the prior garrison of the 5th Macedonian Legion, *Durostorum*, with 19 documented kilns, the largest number of *Fortis* discoveries and the closest big manufacturing centre (67 pcs.⁵⁴), without neglecting the possibility of the moulding thereof at *Troesmis*. Finally, the last two items are most probably local products, one with the nozzle channel narrowed towards the wick hole, presumably a clumsy imitation of Loeschcke IX C type (cat. no. 41) and the other, loosely formed, featuring completely unfinished inner side and barely hinted mark (cat. no. 42).

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⁴⁷ Loeschcke 1919, 496; Buchi 1975, 65.

⁴⁸ Menzel 1969, 61, no. 363; Băluță 2003, 75.

⁴⁹ Buchi 1975, 66.

⁵⁰ Buchi 1975, 66-70; Sapelli 1979, 123.

⁵¹ Iványi 1935, 19; Petru 1972, 53, Gr. 513, pl. 34/513 (with Magnentius coin - 350/353); Čičikova 1974, 158.

⁵² Topoleanu 2010, 161-162, notes 224-232.

⁵³ Topoleanu 2010, 162-163.

⁵⁴ According to Elefterescu 2016, 173-174.

43. Fragmented *monolychnis* oil lamp, missing nozzle edge and a part of the reservoir; MIA, inv. no. 25172; TR 1977, 'Terme, Cam. A, + 42, 11' (PI. VI/43).

Dimensions: Lp = 7.48 cm; D = 5.86 cm; Dd = 3.79 cm; Db = 3.64 cm; Doa = 0.99 cm; H = 3.22 cm.

Technique/ fabric: formed with a slightly worn mould; fine, pink redbrick (2,5YR6/6) clay, red (10R5/8) engobe featuring unevenly applied brown reddish (2,5YR4/4) spots; traces of use on the nozzle.

Description/ ornamentation: the slightly sunken circular flat discus is decorated with a heavily stylised and worn trunk of the Amor (Herakles ?) God; the filling hole placed towards the channel; the rim featuring two lateral bumps and the letter T marked with dye, height 0.50 cm, flat base surrounded by two incisions, embossed OCTAVI mark, letter height 0.74 cm.

Bibliography: Opaît 1980b (he mentions the mark among the discoveries).

Analogies: Loeschcke 1919, 439, 446, no. 912, 997, pl. XVIII – discus ornament; Gostar 1961, 168, 185, 191, no. 323-349; Băluță 1961, 211-212, no. 1-13, pl. VIII/4-5,7; Menzel 1969, 65, no. 390, fig. 53/5 – discus ornament; Čičikova 1974, 159, pl. 34/2; Buchi 1975, 126-131, pl. XLV-XLVI; Mușețeanu, Culică, Elefterescu 1980, 303, no. 96-113, fig. 14-15; Ionomu 1986, type VIII, 39; Kuzmanov, Băčvarov 1986, type VI, 51, no. 59-61, pl. VIII; Čičikova 1987, type IX, 168, no. 149, pl. XVII/149 a, b -Novae – with Amor; Mușețeanu 1992, 174, 201-203, no. 243-263, pl. 47-48; Alicu 1994, type X, 56, 174, no. 545-550, fig. 18; Băluță 2003, 137-142; Topoleanu 2010, 170-172, 178, no. 14-15, pl. IV/14,15 with bibliography; Topoleanu 2012, 79,91-93, no. 38-39, pl. XX/38,39.

Dating: 2nd-3rd centuries AD.

Origin: Italy (?); provincial workshop(?).

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Another major manufacturer from Northern Italy was Octavius, with an archaeological documented activity as early as Augustus' times⁵⁵, known all over the Empire both through the original stoneware and the local copies or imitations. It is of great relevance in this respect that the *Octavi* marked oil lamps are numerically situated on the second place across Dobruja, after *Fortis*, most of them being discovered at *Durostorum* (60 pcs.⁵⁶). The only item discovered at *Troesmis*, formed with a slightly used mould and featuring the stylised bust of Amor, might be a local / provincial product, hard to tell as the discus ornamentation is rarely present on the oil lamps of this mark discovered within the area.

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44. Fragmented *monolychnis* oil lamp, missing a part of the discus and of the nozzle; MIA, inv. no. 25174; TR. 1977, 'C 27, - 1.90 m' (PI. VI/44).

Dimensions: Lp = 9.77 cm; D = 7.00 cm; Dd = 4.95 cm; Db = 4.38 cm; H = 3.65 cm.

Technique/ fabric: formed with a high quality mould and carefully finished from fine clay, scattered limestone and mica particles in the mixture; grey (2,5Y5/1) colour, partly preserved brown (7,5YR4/3) engobe.

Description/ ornamentation: high, cylinder-domed section circular reservoir, featuring heavily inclined narrow rim, slightly concave, sunken discus; slightly concave ring-base outlined by two circular incisions; the rim is decorated by two laterally placed symmetrical bifid bumps, STROBILI stamp impressed on the base featuring well contoured letters, LI in ligature, letter height 0.70 cm.

Bibliography: Opaît 1980b (he mentions the mark among the discoveries).

Analogies: Loeschcke 1919, 288-290, 436, no. 870-874, pl. XIX; Gostar 1961, 186-187; Băluță 1961, 214-215, no. 1-12, pl. IX-X; Ionomu 1967, type XII, 14, 63, no. 187-188, fig. 24-25; Čičikova 1974, 158, 160, 162-163, pl.34-35; Buchi 1975, 147-152, no. 989-1020, pl. LI-LIII; Mușețeanu, Culică, Elefterescu 1980, 304, no. 121-125, fig. 16; Kuzmanov, Băčvarov 1986, type VI, 51, no. 62, pl. VIII; Ionomu 1986, type

⁵⁵ Buchi 1975, 127-table.

⁵⁶ According to Elefterescu 2016, 177.

VIII, 41-42; Čičikova 1987, type VII, 166, no. 120-122, pl. XIV; Mușețeanu 1992, 175, 204, no. 277- 281, pl. 49; Alicu 1994, type X, 32, 175, no. 552-556, fig. 19; Băluță 2003, 162- 168.

Dating: 2nd-3rd centuries AD.

Origin: Italy (?), provincial workshop (?).

45. Fragmented *monolychnis* oil lamp, missing nozzle and discus, secondary partially fired; MIA, inv. no. 1989, TR (acquisition/ donation ?), (Pl. VII/45).

Dimensions: Lp = 6.74 cm; D = 6.82 cm; Dd = 4.77 cm; Db = 4.32 cm; H = 3.38 cm.

Technique/ fabric: formed with a slightly worn mould; fine, yellowish reddish (5YR6/6) clay, reddish (2,5YR6/6) engobe featuring unevenly applied brown reddish (10R3/3) spots; worn.

Description/ ornamentation: sunken, slightly concave, circular discus; rim decorated with three bumps, the lateral ones close to the nozzle, ring-base surrounded by two incisions, embossed STROBILI mark, carefully defined letters yet flattened due to mould wear, ST and LI in ligature; letter height 0.73 cm.

Bibliography: unpublished.

Analogies: see cat. no. 44.

Dating: 2nd-3rd centuries AD.

Origin: provincial workshop (?).

*

Strobili is the last Northern Italy manufacturer present at *Troesmis*, less outspread in Moesia Inferior (11 items at *Durostorum*-Ostrov⁵⁷). We can notice the larger sizes of the two analysed oil lamps (diameter and height) generally compared to 'Firmalampen' type. Obviously manufactured in different workshops, they share the letters LI, impressed in ligature, an element that does not preclude their moulding by the second northern Italian potter generation⁵⁸. The high incidence of the mark in the western provinces, where it has been copied or imitated, makes the identification of the manufacturing workshop rather difficult.

The next six oil lamps (cat. no. 46-51) represent a dominant of quantitative relevance in the statistics of the finds. Therefore, although they preserve the reference shape, many 'Firmalampen' type items feature illegible marks or are anepigraphic, formed with worn moulds and loosely finished from poor quality clay. Such features are particularly prominent in the provinces where local workshops copied or imitated the northern Italian prototypes. It is therefore relevant that only approximately 30% of the 'Firmalampen' type oil lamps known at *Durostorum* (Farm 4) are stamped (information D. Elefterescu), and in *Dacia*, at *Ulpia Traiana Sarmizegetusa*, out of 307 published items, only 85 are stamped⁵⁹. Even in the absence of kiln or mould discovery at *Troesmis*, the manufacture of Loeschcke (IX) X type oil lamps here is very likely. We mention that the identification of precise analogies for such items is irrelevant.

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46. Fragmented *monolychnis* oil lamp, missing discus, handle, nozzle and a part of the reservoir; MIA, inv. no. 25686; Tr. 1977, 'Sc. m 40-46 (?), - 0.50 m, + 43,40' (Pl. VII/46).

Dimensions: Lp = 8.13 cm; D = 7.43 cm; Dd = 4.56 cm; Db = 4.70 cm; H = 3.30 cm

Technique/ fabric: high quality mould, carefully finished, fine clay, scattered limestone and mica particles; red brick (2,5YR5/8) colour, red (10R5/8) engobe featuring black grey (5Y4/2) spots on the bottom; secondary partial firing; slightly worn.

⁵⁷ Elefterescu 2016, 179-180.

⁵⁸ Čičikova 1974, 158.

⁵⁹ Alicu 1994, 54.

Description/ ornamentation: high, cylinder-domed section circular reservoir, wide handle; slightly concave ring-base outlined by two incisions; a lateral bump is still preserved on the rim.

Bibliography: unpublished.

Dating: 2nd-3rd centuries AD.

Origin: provincial workshop (?).

47. Fragmented *monolychnis* oil lamp, missing nozzle, cracks on the bottom part; MIA, Inv. no. 25181; TR 1977, 'Terme, Cam. D' (Pl. VII/47).

Dimensions: Lp = 7.07 cm; D = 5.72 cm; Db = 3.38 cm; Doa = 1.16 cm; H = 2.42 cm.

Technique/ fabric: formed with a worn mould, loosely finished; fine, milky (5YR8/2) clay, feebly adhesive, exfoliated red (10R5/8) engobe; heavily worn, with traces of use on the nozzle.

Description/ ornamentation: flat, circular reservoir, featuring gently asymmetric rim, flat, sunken discus and large filling hole placed towards the channel; loosely finished, flat ring-base; the rim is decorated with three symmetrically placed flattened bumps; a rectangular iron fragment (?) is preserved in the dorsal bump crack.

Bibliography: unpublished.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (?).

48. Fragmented *monolychnis* oil lamp, a part of the reservoir is preserved; MIA, inv. no. 42730; TR. 1977, 'Terme, Camera D, *passim*' (Pl. VII/48).

Dimensions: Lp = 5.67 cm.; H = 2.62 cm.

Technique/ fabric: worn mould, soft clay, scattered limestone particles in the mixture; yellowish (10YR6/6) colour, brown (2,5YR4/2) engobe on the enclosure and heavily exfoliated reddish engobe in the lower half; worn.

Description/ ornamentation: circular reservoir, asymmetric rim and slightly ovoid discus; sunken, flat ring-base; two bumps are still preserved on the rim, yet very flattened due to long-term use; heavily worn, completely illegible stamp.

Bibliography: unpublished.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (?).

49. Fragmented *monolychnis* oil lamp, a part of the nozzle and of the rim are preserved; MIA, inv. no. 19051; TR. 1977, C 28 (Pl. VII/49).

Dimensions: Lp = 5.66 cm.; Hp = 2.57 cm.

Technique/ fabric: formed in mould, loosely finishing, fine clay, scattered limestone particles and iron oxide in the mixture; light red (10R6/8) colour, partially exfoliated red (10R5/8) engobe; slightly worn, with traces of use on the nozzle.

Description/ ornamentation: narrow rim, the channel on the nozzle is slightly narrowed towards the burning hole; a loosely formed bump is still preserved on the rim.

Bibliography: unpublished.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (?).

50. Fragmented *monolychnis* oil lamp, a part of the rim and discus are preserved; MIA, FNI 3; TR. 1977, C 70, 'Chamber B, + 44,20/44,25, T – 230' (Pl. VII/50).

Dimensions: Lp = 4.24 cm.; Hp = 1.06 cm.

Technique/ fabric: formed with a worn mould, loosely finished, fine clay, scattered pebbles and iron oxide in the mixture; reddish (10R6/8) colour, partially preserved red (10R5/8) engobe; worn.

Description/ ornamentation: sunken, flat, circular discus; a heavily worn dorsal bump is preserved on the rim.

Bibliography: unpublished.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (?).

51. Fragmented *monolychnis* oil lamp, the lower part of the nozzle is preserved; MIA, FNI 4; TR. 1977, C 45, - 0.70 m (Pl. VII/51).

Dimensions: Lp = 5.53 cm.; Hp = 2.14 cm.

Technique/ fabric: worn mould and loose finishing, fine clay, scattered limestone and mica particles in the mixture; light brown (7,5YR6/4) colour, partially preserved brown (10YR5/3) engobe; heavily worn, used.

Description/ ornamentation: two circular incisions outlining the base are still preserved.

Bibliography: unpublished.

Dating: 2nd-3rd centuries AD.

Origin: local workshop (?).

*

The political, economic and administrative status of Dobruja changed around the end of the third century and even more significantly at the beginning of the 4th century along with Diocletian's reforms, the birth of *Scythia* province, the spread of Christianity and the progressive eastwards shift in the Empire's centre of gravity finalized with the capital's relocation in Constantinople. Within this new stage, until the half of the 7th century AD, imports shall almost entirely be directed towards the Greek ceramic ware centres located in the South-Eastern Europe and Asia Minor, and in the Northern Africa as well. The local oil lamp manufacturing copied, imitated or was influenced to the same extent by the prototypes from the acknowledged workshops within these areas, therefore a wide variety of types and variants circulated across Dobruja's territory.

D. NORTH AFRICAN LAMPS

Atlante I, form IV A

52. Fragmented *monolychnis* oil lamp, missing the edge of the nozzle and the upper part of the handle, restored; "Paul Păltânea" History Museum of Galați⁶⁰, inv. no. 723, acquisition ? (17.11.1951), (Pl. VIII/52).

Dimensions: Lp = 11.08 cm; Lt = 12.08 cm; D = 8.10 cm; Dd = 4.41/4.54 cm; Db = 4.11 cm; Doa = 0.87 – 0.90 cm; Dof = 1.42 cm; H = 3.33/4.30/4.49 cm.

Technique/ fabric: formed with a high quality mould, carefully finished; fine clay, light beige (7,5YR6/6) colour; dense, uniform, metallic gloss brown reddish (2,5YR4/8) engobe; the edges of the handle and of the nozzle, broken from immemorial times, faced plaster reconstruction and the whole item was varnished on such occasion (!).

Description/ ornamentation: discrete ovoid, massive and flat, double convex section reservoir, with elongated nozzle; the lamellar, upwards feather-edged, slantwise handle protracts to a string towards the base; the discrete ovoid concave discus featuring two laterally placed filling holes is

⁶⁰ I would like to thank the colleagues Cristian Căldăraru and Costel Ilie for the courtesy of allowing me to study the oil lamp held in the collections of Galați Museum.

confined by three concentric strings discontinued at the nozzle composing a parallel sided channel and also embedding the wick hole; the discrete cambered ring-base is outlined by a circular string; the discus is decorated with the highly stylised embossed image of a whale (?), and a Chrismon (?) was loosely scratched in the moist clay paste on the base.

Bibliography: unpublished.

Analogies: Solomonson 1968, 83, 88, type k, fig. 2k, 6k; Szentlélek 1969, 125, no. 232 – without ornament; Menzel 1969, 133, no. 756, fig. 142 – Tunisia; Deneauve 1969, type XII, 224, no. 1134, pl. CII; Atlante I, 1981, shape IV A, 190, pl. XCIV/4, CLV/8; Barbera, Petriaggi 1993, 17-18, no. 1; Bonifay 2004, type 38, 353, fig. 199; Bémont, Chew 2007, 334, AF 28, pl. 80; Bussiére, Rivel 2012, 218-219, 377, no. 257.

Dating: 4th century AD.

Origin: Northern Africa (Central Tunisia).

*

According to the archaeological literature, this oil lamp type manufactured in the Central Tunisia workshops is chronologically unanimously placed between the end of the 3rd century and the first half of the 4th century AD. The item from *Troesmis* seems to be unique in Dobruja and quite rare within the Eastern Empire. Its presence here indicates an early Christian penetration of the local culture, even though the oil lamp (certainly an import product) features a Chrismon incision in the moist clay paste after the mould forming. The available literature does not provide proximate analogies to the ornament impressed on the discus (whale?), although it is well known that the fish is a “classical” symbol of Christianity which is frequently found under various, mostly highly stylised illustrations. The Chrismon incised on the base is also found on other North African products of similar type⁶¹.

We do not exclude the eventuality of a fake, as there have not been preserved any information on the discovery circumstances of the oil lamp from Galați. This scenario is substantiated by the item's heavy weight, which is discretely excessive in relation to its size, by the minor finishing clumsiness, and above all by the ornament on the discus, without any analogies, featuring an elaborate, maybe even modern (!) stylisation.

*

Hayes II A

53. Fragmented *monolychnis* oil lamp, the handle is preserved; MIA, inv. no. 18687; TR. 1977 (Pl. VIII/53).

Dimensions: Lp = 4.44 cm.; Hp = 3.33.

Technique/ fabric: formed with a high quality mould, carefully finished; sound, fine clay paste, occasional limestone particles; red (2,5YR5/8), thick, opaque, specific engobe.

Description/ ornamentation: lamellar, upwards feather-edged, slantwise handle; a triangle decorated with line edged dots can be spotted on the rim fragment.

Bibliography: unpublished.

Analogies: Hayes 1972, 310-313, pl. XXI; Atlante I, 184-207, type X, pl. XCIV-CIII, CLV-CLXII;

Dating: 4th – 6th centuries AD.

Origin: North Africa (Tunisia ?).

*

J.W. Hayes performed the first major classification of the North African oil lamps, taking into consideration the common ornamentation to the table pottery from the same area⁶². The fragment found at *Troesmis* is consistent with Hayes IIA type, which had the largest propagation in the Roman

⁶¹ Bonifay 2004, type 40, 357/7, fig. 200 = Atlante VI.

⁶² Hayes 1972, 310-313.

world, being copied in European workshops or serving as a pattern for local imitations⁶³. The triangular shape ornament preserved on the rim is one of the most commonly used on the North African lamps⁶⁴.

E. ASIA MINOR TYPE OIL LAMPS

Broneer 1930, type XXIX; Miltner 1937, type III – variant.

54. Fragmented *monolychnis* oil lamp, the handle and a part of the rim and discus are preserved; MIA, inv. no. 4551; TR. 1977 (Pl. VIII/54).

Dimensions: Lp = 5.46 cm.; Hp = 2.61/3.90 cm.

Technique/ fabric: formed with a slightly worn mould from semi-coarse clay featuring pebbles and limestone particles; yellowish reddish (7,5YR6/6) colour, specific engobe; worn.

Description/ ornamentation: circular reservoir, with sloped, wide rim and a massive, vertical, rounded upwards, lamellar handle; the concave, circular discus is confined by two strings; the rim is decorated with a dot array, the discus features an embossed Latin cross, and the handle is decorated with three median incisions elongated up to the vertical line of the cross on the discus.

Bibliography: the item has been improperly published as originating from Topraichioi due to the marking "TR '77", although the archaeological research started on this site with a survey in 1978⁶⁵.

Analogies: Miltner 1937, type III, forma 4, 128, pl. IV; Szentlélek 1969, 113-114, no. 192; Menzel 1969, 97, no. 625, fig. 79/9; Guarlandi Genito 1977, 190, no. 521-523; Hayes 1980, 73, no. 303, pl. 38; Zaccaria Ruggiu 1980, 127, no. 241; Bailey 1988, 371, fig. 162, Eph. B, 384, Q 3123 MLA, pl. 106; Misopoulos – Leon 2007, 112, L 252-L 253, pl. 33; Anson, Hannah 2013, 102-103, no. 184.

Dating: 4th – 6th centuries AD.

Origin: *Ephesus* (?); provincial workshop (Moesian?).

*

Although fragmentary, the oil lamp preserves the shape and particularly the decoration specific to late ware from *Asia minor*. Therefore, the cross, the main Christian symbol, is present under different variants on almost every lighting devices within the epoch⁶⁶. Moreover, the fish tale ornament incised between handle and base can be nearly interpreted as a mark of workshops from *Asia minor*, mainly of those from *Ephesus* and *Milet*. Taking into account the mould wear and the clay quality, the oil lamp from *Troesmis* might have been formed in a local workshop, perhaps at Tomi(?). The extensive suggested dating around 4th-6th centuries is consistent with the closest analogies published, as we lack stratigraphic context.

Broneer 1930, type XXIX; Miltner X type – variant.

55. Fragmented *monolychnis* oil lamp, approximately half of the enclosure is preserved; MIA, inv. no. 42664; TR. 1982, *passim* (Pl. VIII/55).

Dimensions: Lp = 8.08 cm.; Doa = 1.17 cm.; Hp = 3.11 cm.

Technique/ fabric: formed with a slightly worn mould, loosely finished; fine clay, with limestone and mica particles in the mixture, brown (7,5YR4/4) colour, specific engobe; worn.

Description/ ornamentation: the reservoir is circular, featuring a slightly sloped and cambered, wide rim; the concave, relatively small discus featuring a centrally positioned, large filling hole is

⁶³ Iconomu 1986, type XLV, 89-92; Papuc 1976, 201-205; Topoleanu 2000, 189-194, 203-205.

⁶⁴ Ennabli 1976, 256, D/1,2.

⁶⁵ Opaît *et alii* 1991, 265. No. 2, pl. 75/2.

⁶⁶ Ennabli 1976, 188-226, no. 924-1168, pl. LI-LXII; Bailey 1988, fig. 36; Bémont, Chew 2007, 87-90, etc.

outlined by a string that splits past the nozzle thus composing a parallel sided, short, narrow channel; massive, lamellar, upright handle; the rim is decorated with two parallel dot arrays.

Bibliography: unpublished.

Analogies: Broneer 1930, type XXIX, 114-116, pl. XX; Miltner 1937, type 10, form 2, 165-166, no. 1658-1680, pl. IX – sec. 5; Perlzweig 1961, Scorpan 1978, 159, no. 10, pl. II/10, XV/10- for the general shape; Ionomu 1986, type XXXVIII, 83-85-variant, pl. VI/9-12, VII/1-4 ; Hayes 1992, type 11-12, 83, 86-88, no. 64-118, pl. 21-24; Hbinger 1993, 124, no. 234, pl. 29; Topoleanu 2000, 180, no. 458, pl. LVI – for the general shape; Topoleanu, Croitoru 2015, 168-171, no. 47- for the general shape.

Dating: 5th century AD.

Origin: Moesian provincial workshop (Tomi?).

*

The closest analogies for the oil lamp from *Troesmis* are also found at *Ephesus*⁶⁷, dating from the 5th century AD. The shape and the granular ornament on the rim were common in *Asia Minor* and Egypt starting from the Constantin's age⁶⁸. A manufacturing centre imitating prototypes from *Asia minor* was probably operational at Tomi⁶⁹.

*

Miltner type IX – variant; Ionomu 1986, LI type

56. Fragmented *monolychnis* oil lamp, missing approx. half of the enclosure and the upper edge of the nozzle; TR. 1973 (accidentally discovered in the east of the Western fortification, published without inventory number), it has not been preserved in the MIA's repositories (**Pl. IX/56**).

Dimensions: Lp = 9.20 cm.; D = 7.10 cm.; H = 3.30/6.20 cm.

Technique/ fabric: formed with a slightly worn mould and loosely finished, semi coarse clay (the authors do not indicate clay and engobe colour).

Description/ ornamentation: pyriform, double convex in section reservoir, with elongated nozzle; the pyriform discus featuring a central large filling hole is framed by a heavy string opened towards the nozzle, on which it forms a channel; the massive, slanting, cross shaped handle features round edges and the rim is inclined; pyriform concave base; lateral arms of the handle are decorated with concentric circles, the vertical arm is decorated with an ovoid motif, elongated towards the discus by a straight string, and the discus and rim are decorated with zigzag segments; the bottom of the oil lamp is decorated with 13 embossed small circles around the base.

Bibliography: Chiriac, Bounegru 1973-1975, 100-101, no. 4, pl. III/1, IV/1-3.

Analogies (selected): Miltner 1937, type IX- *pass*; Ionomu 1967, type XXXII, no. 758-763, fig. 57, 175-178; Ionomu 1986, type LI, var. I, subvar. II, III, 180-184; Bailey 1988, 398-400, Q 3229-Q 3236, pl. 115; Kuzmanov 1992, type XXXVIII, 43-44, NO. 315-320; Topoleanu 2000, 183-185, no. 463-172, pl. LVII-LVIII, 184, no.464, pl. LVII – identical base, with 13 small circles; Opreș 2003, type II, 168-172, no. 395-424, pl. LIX-LXII; Topoleanu 2012, 199-121, no. 116-121, pl. XIV-XV.

Dating: 6th century AD.

Origin: local Moesian workshop (?).

*

The prototypes of this oil lamp type originate from *Asia minor*, mainly manufactured in *Ephesus* and *Milet* starting on the 5th century AD. They shall become the most popular oil lamps since the 6th century AD in *Scythia minor* and *Moesia Secunda*, having an outstanding presence in Thracian province

⁶⁷ Miltner 1937, no. 1658-1680.

⁶⁸ Broneer 1930, 116.

⁶⁹ Ionomu 1986, 169.

and relatively modest or accidental ones in other areas⁷⁰. Therefore, the denomination of “Balkanica” type oil lamps reflects both the ultimate spread area and the large number of published discoveries originating especially from Romania, Bulgaria and Turkey. The popularity of ‘Balkanica’ type oil lamps resulted once more in the copying or imitation thereof in local workshops, such effect generally occurring for almost every shape of the 6th century AD, as the main types of the age include common morphological elements. The item from *Troesmis* belongs to the cordate discus variant, featuring an opening towards the nozzle where it forms an arched-sided channel, most frequently found in Dobruja⁷¹, where it most probably has been formed. Its manufacturing in a local workshop is substantiated both by clay quality & loose finish and particularly by the oil lamp decoration – the zigzag motif present on the rim and discus and the small circles around the base, the latter with a singular analogy in the area, at *Halmyris*⁷².

F. WHEEL-MADE LAMPS

The tradition of wheel-made oil lamps survives since the Greek-Hellenistic period, even after the series manufacture by the use of moulds was generalized. In the Roman period, wheel-made oil lamps were generally manufactured in the countryside or in poor, peripheral workshops, without great aesthetic expectations and designed to satisfy the needs of a narrow community or of social categories with modest material means. The wheel moulding technique offered the potters a great freedom of expression, mostly lacking aesthetic challenges; therefore, both the chronological time framing and the compilation of a typology are rather difficult due to the lack of a stratigraphic context. The potentially close analogies, some of them identified at great distances, should also be considered reservedly as there is hard to believe that the wheel-made oil lamps, most of them of poor quality, would have been exported. In the collections of Tulcea museum there are four wheel-made oil lamps originating from *Troesmis*, out of which only two were discovered in a stratigraphic context.

57. Complete *monolychnis* oil lamp, cracks on the reservoir; MIA, Inv. no. 4070, TR 77, square G 2, 'C 1 (cenotaph), N 1, - 1.40 m', cenotaph grave (Pl. IX/57).

Dimensions: L = 5.65 cm; D = 4.81 cm; Dd = 2.90 cm; Db = 2.75 cm; Doa = 0.33 cm; Dof = 0.88 cm; H = 2.23 cm.

Technique/ fabric: Wheel-formed, loosely finished from fine clay, with limestone and silver mica in the mixture; reddish (2,5YR5/6) colour, unevenly applied red (10R5/8) and brown (10R4/2) engobe; without traces of use.

Description/ ornamentation: miniature oil lamp, with circular reservoir, concave discus and centrally placed, discretely profiled, small filling hole; loosely applied small nozzle shorter than the enclosure, featuring a round, large wick hole; flat, discretely profiled ring-base.

Bibliography: Baumann 1980, 159, 189, no. 14, pl. 14/2; (end of the 2nd century AD); Paraschiv 2012, 120, no. 147.

Analogies: Alram - Stern 1989, 288, no. 596, pl. 4, 41; Kuzmanov 1992, type XLI, 47, var. 3, no. 362; Roman 2000, form IC, 111, no. 42-44, fig. 39-47; Casas-Genover, Soler-Fusté 2006, 283, E 725.

Dating: 2nd-4th centuries AD.

Origin: local workshop (?); *Dacia/Pannonia* (?).

*

⁷⁰ Topoleanu 2012, 193-197.

⁷¹ Iconomu 1986, type LI, var. I, subvar. II, group II, 181.

⁷² Topoleanu 2000, 184, no. 464, pl. LVII.

The miniature oil lamp is part of the inventory of a cenotaph grave featuring ceramic ware dating from the 2nd-3rd centuries AD⁷³. Close analogies of larger sizes dating from the 3rd-4th centuries AD and fitted with handles were discovered at *Durostorum*⁷⁴. For the finds on the territory of Bulgaria, a wider dating, 3rd-5th centuries, has been postulated⁷⁵. Close profiles were also found in *Dacia*, dating from the 2nd-3rd centuries AD⁷⁶, or in *Pannonia*, from the 3rd-4th centuries AD⁷⁷. Among the farther discoveries, this once without handles and featuring small filling holes, we mention those from *Carnuntum*⁷⁸ or from Catalonia⁷⁹. Thence the shape is common at least in the Eastern provinces of the Empire, between the 2nd and the 4th centuries AD, therefore the moulding of such oil lamp in the *Troesmis*' workshops is quite possible.

*

58. Fragmented *monolychnis* oil lamp, missing handle, cracks around the wick hole; MIA, Inv.no. 25182, TR 77, C 46, -0.70 m (Pl. IX/58).

Dimensions: Lp = 6.07 cm; D = 5.76 cm; Dd = 5.05 cm; Db = 3.36 cm; Doa = 0.94 cm; Dof = 0.85/0.94 cm; 2.61/3.05 cm.

Technique/ fabric: wheel-formed from fine clay, scattered pebbles and limestone particles; red brick (2,5YR6/6) colour, exfoliated black (GLE 1 3/5GY) engobe; without traces of use on the nozzle.

Description/ ornamentation: small sized oil lamp, circular reservoir, tall in proportion to the item's size, featuring a flat enclosure bordered by an incision; the round filling hole is centrally placed, the profiled edges wick hole is drilled on the rim; flat ring-base.

Bibliography: unpublished.

Analogies: Kuzmanov 1992, type XLII, var. 5, 49, no. 396-397; Man 2011, type VI, 186, no. 42, pl. CXXXI/42.

Dating: 3rd-4th centuries AD.

Origin: Moesian workshop (?).

*

The placement of the profiled edges wick hole on the rim is quite rare in the West Pontic Area. The closest analogies are found in the south of the Danube, yet of greater sizes, dating from the 3rd-4th centuries AD⁸⁰. A similar item dating from the 2nd-3rd centuries AD was discovered at *Cristești*⁸¹. We also mention the similarity between two items featuring engobe coating widely dating from 5th-6th centuries AD discovered at *Sucidava*⁸².

*

59. Complete *monolychnis* oil lamp; MIA, Inv. no. 2659, TR (?), (Pl. IX/59).

Dimensions: L = 7.68; D = 5.96 cm; Dd = 2.74 cm; 3.47 cm; Doa = 0.59 cm; Dof = 0.76 cm; H = 2.51/3.31 cm.

Technique/ fabric: Wheel-formed, loosely finished from fine clay with limestone and mica particles in the mixture; yellowish-reddish (5YR6/6) colour, partly applied reddish (2,5YR5/6) engobe; slight traces of use on the nozzle.

⁷³ Baumann 1980, 159, 189, no. 14, pl. 14/2.

⁷⁴ Kuzmanov, Băčvarov 1986, type XI, 60, no. 134-135, pl. XVII-XVIII; Mușețeanu 1992, type VIII A, 168, no. 101-102, pl. 38.

⁷⁵ Kuzmanov 1992, type XLI, var. 3, 362, no. 361-362.

⁷⁶ Roman 2000, forma IC, 111, no. 42-44, fig. 39-47.

⁷⁷ Iványi 1935. Type XXII, 294, no. 4210, pl. LVII/6.

⁷⁸ Alram-Stern 1989, 288, no. 596, pl. 41.

⁷⁹ Casas-Genover, Soler-Fusté 2006, 283, E 725.

⁸⁰ Kuzmanov, 1992, type XLII, no. 396-397.

⁸¹ Man 2011, type VI, 186, no. 42, pl. CXXXI/42.

⁸² Gherghe, Cojoc 2011, type XVII, 104-105, no. 195-196, fig. 189-190.

Description/ ornamentation: orbicular, round reservoir, slightly concave around the centrally drilled filling hole; the small and round nozzle is loosely applied, shorter than the enclosure, orbital sidelong handles, flat, profiled ring-base.

Bibliography: unpublished.

Analogies: Iványi 1935, type XXII, var. 5, pl. LVII/4; Kuzmanov 1992, type XLII, var. 2, 48, no. 378-384.

Dating: 3rd-4th centuries AD.

Origin: Moesian workshop (?).

60. Fragmented *monolychnis* oil lamp, missing handle; MIA, Inv. no. 43804, TR., acquisition (Pl. IX/60).

Dimensions: L = 8.94 cm; D = 7.74 cm; Db = 4.27 cm; Doa = 3.26 cm; Dof = 1.35 cm; H = 3.37 cm.

Technique / fabric: Wheel-formed from semi-coarse, harsh clay, with limestone and scattered silver mica particles; white-yellowish (2,5Y7/2) colour, specific engobe; traces of use on the nozzle.

Description / ornamentation: the reservoir is circular, double convex in section, featuring a nozzle "drawn" from the body; wide rim, centrally placed, profiled, rounded edge, large filling hole, profiled, flat, ring-base.

Bibliography: unpublished.

Analogies: Iványi 1935, type XXII, 293, no. 4197, pl. LVI /8; Ponsich 1961, type VI, 110; Bovon 1966, 85, no. 598, pl. 15; Topoleanu 1984, 190, no. 12, pl. VI/4; Kuzmanov 1992, type XLI, var. 1, 47, no. 356; Roman 2000, forma IG, 115-116fig. 137.

Dating: 4th-5th centuries AD.

Origin: Moesian workshop (?).

Final considerations

Iglița and its ruins identified quite soon as the ancient *Troesmis* were among the first to draw the specialists' attention upon the north-western corner of the Dobruja, yet the scientific centralization was far beyond the site's importance, despite the acknowledgment thereof. In consideration of the epoch's methodology, the four excavation campaigns from the late 19th century⁸³ were mainly focused on the recovery of inscriptions from the Eastern citadel, 55 such monuments being published by Th. Mommsen in 1873⁸⁴. It was only in the seventh decade of the last century when there have been published two synthetic research studies on the historical and topographic-archaeological topics, signed by Al.-S. Ștefan⁸⁵ and E. Doruțiu-Boilă⁸⁶, such works being praised by Gavrilă Simion not only as of reference, but the prelude to "the start of the systematic investigation of a new archaeological site at *Troesmis*"⁸⁷.

This start occurred 1977 due to the hapless, yet fortunately partial demolishing of the *thermae* located outside the walls of the Eastern fortification, as there a large irrigation system should have been built. The amendment of the initial project allowed the archaeologists of the Danube Delta Museum (today's I.C.E.M. Tulcea) to perform several rescue researches in 74 squares of 2.50 x 3.50 m (where concrete casting was scheduled for lining purposes), on a 900-meter long line, placed from the

⁸³ Simion 1980, 153-154.

⁸⁴ CIL III 6162 – 6217.

⁸⁵ Ștefan 1971.

⁸⁶ Doruțiu-Boilă 1972.

⁸⁷ Simion 1980, 154.

Danube northwards, neighbouring the Eastern fortification. The whole area was partitioned into 50-meter grid units labelled with letters ranging from A to U⁸⁸, yet such identification of excavation units was not clearly relevant in comments or maps and markings.

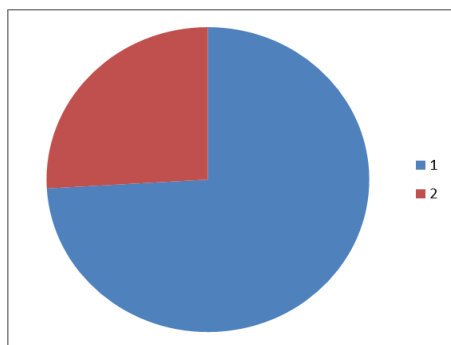


Fig. 1: Numerical ratio of oil lamps from *Troesmis* preserved in Romania to the items preserved in France Romania 60 items (74%), France 21 items (26%)

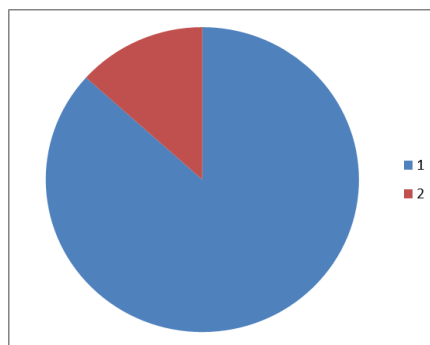


Fig. 2: State of conservation of the oil lamps from *Troesmis* preserved in Romania 52 items fragmentarily preserved (86,6%) 8 items entirely preserved (13,4%).

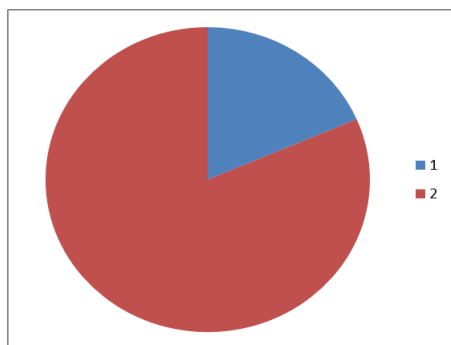


Fig. 3: State of conservation of the oil lamps from *Troesmis* preserved in Romania vs preserved in France 66 items fragmentarily preserved (81,5%) 15 items entirely preserved (18,5%)

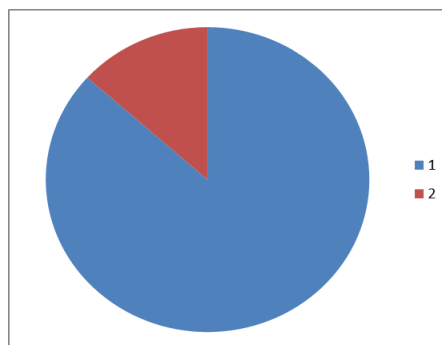


Fig. 4: Chronological ratio of the oil lamps from *Troesmis* preserved in Romania early oil lamps, 1st to 3rd/4th century AD - 52 items (86,7%) late oil lamps 4th-6th/7th century AD - 8 (13,3%).

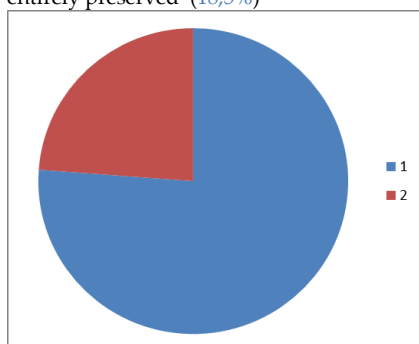


Fig. 5: Chronological ratio of the oil lamps from *Troesmis* preserved in France early oil lamps, 1st to 3rd/4th century AD - 5 (23,8%) late oil lamps 4th-6th/7th century AD - 16 (76,2%)

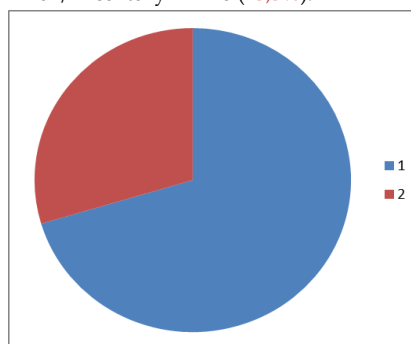


Fig. 6: Chronological ratio of the oil lamps from *Troesmis* preserved in Romania and France early oil lamps, 1st to 3rd/4th century AD - 57 (70,37%) late oil lamps 4th-6th/7th century AD - 24 (29,63%).

⁸⁸ Baumann 1980, 159.

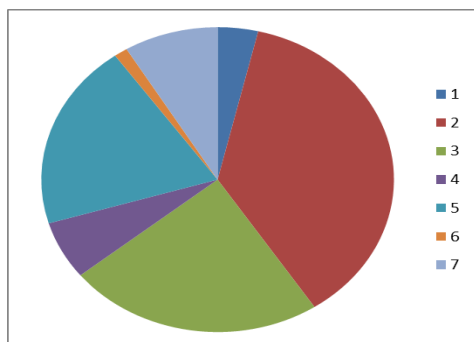


Fig. 7: Typological structure of the assembly of oil lamps from *Troesmis* preserved in Romania

volute - 3 items (5%)

Loeschcke VIII - 29 items (48,33%)

'Firmalampen' - 19 items (31,66%)

North African - 2 items (3,33%)

Asia minor - 3 items (5%)

wheel made - 4 items (6,66%).

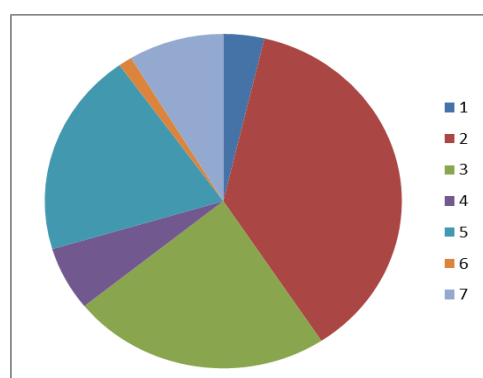


Fig. 8: Typological structure of the assembly of oil lamps from *Troesmis* preserved in Romania and France

volute - 3 items (3,7%)

Loeschcke VIII - 30 items (37,03%)

'Firmalampen' - 19 items (23,45%)

North Africa - 5 items (6,17%)

Asia minor - 16 items (19,75%)

wheel made - 7 items (8,64%)

plastic - 1 items (1,23%).

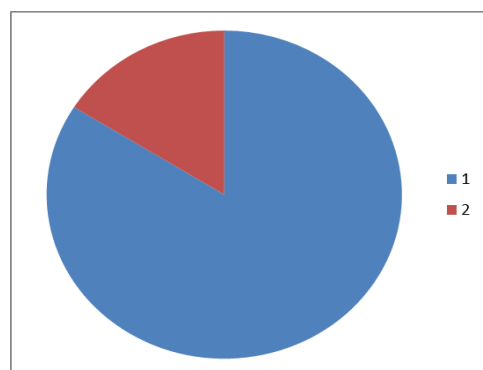


Fig. 9: Ratio local to import products within the oil lamps from *Troesmis* preserved in Romania and France
65 local items local (80,25%) vs 16 imported items (19,75%).

The acquired archaeological material, although scant in terms of quantity, yet scholarly prominent "... cannot answer so far the outnumbering questions, especially as not a single discovered dwelling has been thoroughly investigated" and therefore "the elucidation of the complexity of questions raised by *Troesmis* settlement would only produce the opportunity of making some hypothesis at this research stage"⁸⁹. Moreover, such final statement of the site's scientific coordinator were acknowledged in the preliminary-stated condition of the contributions published in 1980, obviously incomplete in terms of graphic representation of the area and of the investigated squares and also lacking proper marking of the archaeological material.

Therefore, the preserved markings would hardly contribute to potential stratigraphic interpretation only for 25 out of 49 oil lamps discovered in 1977. The coins confirm the suggested dating only in few cases⁹⁰. The markings found on the 13 oil lamps from the *thermae* indicate both the

⁸⁹ Simion 1980, 156-157.

⁹⁰ Oberländer-Târnoveanu 1980, 262-264; see here **Table II**.

'Camera = room A.....F' and the 'Caseta = square 70', so it is unclear if the thermal building was actually located on the alignment of the explored squares or in the vicinity thereof.

Under such herein briefly enounced circumstances, the final considerations shall be mainly of a statistic nature, even though the studied batch would be deemed representative for a site where no systematic archaeological research have been carried out yet (**Table I**).

We finally acknowledge that the structure of the two oil lamps batches discovered at *Troesmis*, *i.e.* the one preserved by Romanian museums and the one preserved in France, feature only few common elements, thus seeming of different origin. As the finding places – the Eastern fortification of *Troesmis* and its habitation outside the city walls – is beyond any reasonable doubt, we were surprised to notice the absolute absence of either early volute, 'Firmalampen' or 'Euctemon' oil lamps from the batch in France, taking into consideration that it was defined more than 150 years ago.

We considered typological and chronological criteria in the directly studied 'Romanian' batch's catalogue compilation, without ignoring the stratigraphic information conveyed by the reports on the preventive archaeological research carried out in 1977. Although most items are fragmentary (**figs. 2 and 3**), we mention that sufficient morphological references were preserved in all cases allowing the typological classification thereof. In terms of chronology, Tulcea's batch is definitely dominated by early oil lamps, thoughtfully dated in the 1st-3rd centuries AD (**fig. 4**), such situation being partly compensated by 'France' batch's structure (**figs. 5 and 6**). The 'Romania' batch, consisting in six clear types (**fig. 7**), is numerically dominated by the Loeschcke VIII type lamps, with 29 items, (cat. no. 4-32), followed by 'Firmalampen' type with 19 items (cat. no. 33-51), wheel-made oil lamps – four items (cat. no. 57-60), volute oil lamps (cat. no. 1-3), and the *Asia minor*-type lamps (cat. no. 54-56) – each having three items, and by the North African ones, with two items (cat. no. 52-53). This structure is modified by the contribution of the 'France' batch, so 13 more items are added to the *Asia minor* oil lamps, three more add to the African's, another three are wheel-made, one item belongs to Loeschcke VIII type and another one is a plastic execution (**fig. 8**).

LIST OF ABBREVIATIONS

L	– length	H	– (reservoir height) / (overall height)
Lp	– preserved length	MIA	– The Museum of History and Archaeology (within "Gavrilă Simion" Eco-Museum Research Institute from Tulcea).
Lat	– width		
D	– diameter	TR.	– Troesmis
Dd	– discus diameter	C	– square no.
Db	– base diameter	N	– level no
Doa	– filling hole diameter	Inv. no.	– inventory no.
Dof	– wick hole diameter	Cat. no.	– catalogue no.
H	– height	FNI	– without inventory no.
Hp	– preserved height	(ex. 2,5 YR6/8)	– colour, according to <i>Munsell Soil Color Charts</i> , 2000.

Table I

cat. no.	inv. no.	Plate	Provenance			Dating	Collection			Production	
			Trench	passim/ aquisition	Unknown		Tulcea	Galati	Paris	local	import
1	42641	I/1	C51			1 st -2 nd century	•				•
2	42642	I/2	C48			1 st -2 nd century	•				•
3	809	I/3		•		1 st -3 rd century	•			•	
4	2663	I/4	C49			1 st -3 rd century	•			•	
5	25170	I/5	C45			1 st -3 rd century	•			•	
6	25175	I/6	C43			1 st -3 rd century	•			•	
7	42645	I/7	Cam.E			1 st -3 rd century	•				•
8	42643	I/8		•		1 st -3 rd century	•				•
9	2662	I/9			•	1 st -2 nd century	•			•	
10	42726	II/10			•	1 st -3 rd century	•				•
11	43805	II/11		•		1 st -3 rd century	•			•	
12	2464	II/12	C52			2 nd -3 rd century	•			•	
13	25687	II/13		•		1 st -2 nd century	•				•
14	2660	II/14			•	2 nd -3 rd century	•			•	
15	2661	III/15			•	2 nd century	•			•	
16	2665	III/16	C52			2 nd -3 rd century	•			•	
17	3775	III/17	C45			2 nd -3 rd century	•			•	
18	25180	III/18	C43			2 nd -3 rd century	•			•	
19	4493	III/19	C14			2 nd -3 rd century	•			•	
20	4530	III/20	C45			2 nd -3 rd century	•			•	
21	4494	IV/21	C10			2 nd -4 th century	•			•	
22	42644	IV/22	C43			2 nd -4 th century	•			•	
23	42642	IV/23	C43			2 nd -4 th century	•			•	
24	4529	IV/24	C43			2 nd -4 th century	•			•	
25	4527	IV/25	Cam.C			2 nd -4 th century	•			•	
26	4528	IV/26	Cam.F			2 nd -4 th century	•			•	
27	4531	IV/27	C66			2 nd -4 th century	•			•	
28	25176	IV/28	C52			2 nd -4 th century	•			•	
29	42647	IV/29	Cam.A			2 nd -4 th century	•			•	
30	FNI 1	IV/30	C43			2 nd -4 th century	•			•	
31	FNI 2	IV/31	C47			2 nd -4 th century	•			•	
32	3777	IV/32	C50			2 nd -3 rd century	•			•	
33	25173	V/33	C43			2 nd -3 rd century	•			•	
34	25183	V/34	Cam.D			2 nd -3 rd century	•			•	
35	25878	V/35	C43			2 nd -3 rd century	•			•	
36	25177	V/36	C43			2 nd -3 rd century	•			•	
37	25171	V/37	Cam.E			2 nd -3 rd century	•				•
38	807	V/38			•	2 nd -3 rd century	•			•	
39	25170	VI/39	Cam.E			2 nd -3 rd century	•			•	
40	16320	VI/40	C28			2 nd -3 rd century	•			•	
41	25184	VI/41	C70			2 nd -3 rd century	•			•	
42	4534	VI/42		•		2 nd -3 rd century	•			•	

cat. no.	inv. no.	Plate	Provenance			Dating	Collection			Production	
			Trench	<i>passim/</i> aquisition	Unknown		Tulcea	Galati	Paris	local	import
43	25172	VI/43	Cam.A			2 nd -3 rd century	•				•
44	25174	VI/44	C27			2 nd century	•				•
45	1989	VII/45			•	2 nd -3 rd century	•			•	
46	25686	VII/46			•	2 nd -3 rd century	•			•	
47	25181	VII/47	Cam.D			2 nd -3 rd century	•			•	
48	42730	VII/48		•		2 nd -3 rd century	•			•	
49	19051	VII/49	C28			2 nd -3 rd century	•			•	
50	FNI 3	VII/50			•	2 nd -3 rd century	•			•	
51	FNI 4	VII/51	C45			2 nd -3 rd century	•			•	
52	723	VIII/52			•	4 th century		•			•
53	18687	VIII/53			•	4 th -6 th century	•				•
54	4551	VIII/54			•	4 th -6 th century	•				•
55	42664	VIII/55		•		5 th century	•			•	
56		IX/56			•	6 th century				•	
57	4070	IX/57	G2, C1			2 nd -4 th century	•			•	
58	25182	IX/58	C46			3 rd -4 th century	•			•	
59	2659	IX/59			•	3 rd -4 th century	•			•	
60	43804	IX/60		•		4 th -5 th century	•			•	
61/DA1	6753	X/DA1			•	3 rd -4 th century			•	•	
62/DA2	6743	X/DA2			•	5 th -6 th century			•	•	
63/DA3	6756	X/DA3			•	5 th -6 th century			•	•	
64/DA4	6755	X/DA4			•	5 th -6 th century			•	•	
65/DA5	6744	X/DA5			•	5 th -6 th century			•	•	
66/DA6	6758A	X/DA6			•	5 th -6 th century			•	•	
67/DA7	6758C	X/DA7			•	5 th -6 th century			•	•	
68/DA8	6758B	X/DA8			•	5 th -6 th century			•	•	
69/DA9	6758D	X/DA9			•	6 th century			•	•	
70/DA10	6745	XI/DA10			•	6 th century			•	•	
71/DA11	6754	XI/DA11			•	6 th century			•	•	
72/DA12	6749	XI/DA12			•	6 th century			•	•	
73/DA13	6746	XI/DA13			•	6 th century			•	•	
74/DA14	6742	XI/DA14			•	5 th -6 th century			•	•	
75/DA15	6750	XI/DA15			•	5 th -6 th century			•		•
76/DA16	6751	XI/DA16			•	6 th century			•		•
77/DA17	6752	XII/DA17			•	6 th century			•		•
78/DA18	6757	XII/DA18			•	2 nd century			•		•
79/DA19	6748	XII/DA19			•	2 nd -4 th century			•	•	
80/DA20	6747	XII/DA20			•	3 rd -4 th century			•	•	
81/DA21	6741	XII/DA21			•	4 th century			•	•	

Table II: Coin finds associated with oil lamp finds⁹¹

Trench	cat. no.	Coins
C27	44	Traian, Licinius I
C70 / Cam.A	41	Septimius Severus
C70 / Cam.B	50	Faustina Minor
C43	6, 18, 22, 23, 24, 30, 36, 38	Septimius Severus, Caracalla, Elagabal

Failing reliable clay analysis, it is hard to explain the local manufacture notion other than by using analogies and observing clay, forming and finishing quality of the studied oil lamps. According to Dobruja discoveries' expectations, most of *Troesmis* oil lamps were locally manufactured (fig. 9), being either original creations, as in 'Euctemon' type case, or copies and imitations of Italian, African or Greek-Middle East prototypes. As it concerns the local manufacturing centres, *Durostorum* is of reference due to the discoveries made thereon, especially in consideration of 'Firmalampen' type oil lamps⁹². The list definitely continues with *Halmyris*⁹³, *Noviodunum*⁹⁴, *Telița*⁹⁵, and, of course, *Tomi*⁹⁶. It would be hard to believe that *Troesmis* was not a strong handicraft centre of the Antiquity, too, with a diverse pottery production designed to satisfy both its inhabitants and the populations across the border it defended. This so far assumption may turn into certainty if we consider the presence of *legio V Macedonica* at *Troesmis*⁹⁷. If the military probably used the oil lamps moulded at *Oescus* during the early years of quartering, the existence of local workshops may be traced in our catalogue at least in respect of 'Firmalampen' type evolution (cat. no. 33-51). We also mention that the FLAVI mark (cat. no. 35-36), found on the same type of locally presumed oil lamps, can also be found incised with the same lettering on a jug fragment⁹⁸. If not a coincidence, such discovery might significantly contribute to the identification of the manufacturing centre(s) of this mark, as there are currently multiple opinions upon in this respect⁹⁹. Finally, three of the Loeschcke VIII R type oil lamps presented in this catalogue (cat. no. 4-6), featuring similar sizes, clay and decoration, without traces of use on the nozzle, seem to be formed with the same mould, probably within local workshops. I should also mention that, out of a natural carefulness, I did not point *Troesmis* as the certain manufacturing centre in this catalogue, yet I believe most of the items assigned to local/provincial workshops were moulded here. Moreover, A. Opaîţ also pleads for pottery manufacturing at *Troesmis*, analysing in a preliminary manner the discoveries of the 1977 campaign in terms of dough colour and aspect and of shapes, too¹⁰⁰.

⁹¹ It is to be pointed out the lacking correlation between the publication of archaeological and numismatic material from the 1977 campaign - see also previous note and Opaîţ 1980a; Opaîţ 1980b; Simion 1980.

⁹² Elefterescu 2016.

⁹³ Topoleanu 1996, 91-94; Topoleanu 2000, 208-215.

⁹⁴ Topoleanu, Chrzanowski 2016.

⁹⁵ Baumann 1995, 424-427.

⁹⁶ Ionomu 1967; Ionomu 1986; Georgescu 2016.

⁹⁷ Aricescu 1977, 32-37; Matei Popescu 2010, 35-76.

⁹⁸ Opaîţ 1980a, 207, pl. 36/1.

⁹⁹ Topoleanu 2012, 71-73.

¹⁰⁰ Opaîţ 1980b, 342. 345. 348.

Troesmis continued its existence and development in the Late Roman Period, when *Legio II Herculia* / *Legio I Iovia* was attested here¹⁰¹ and the fortifications were built, the information thereon coming mainly from the 19th century. The Eastern fortification is better known and it seems the oil lamps published by the French colleagues originate from here. Most of them are of common type in Dobruja, but also with a large circulation in the eastern provinces of the Empire, therefore the manufacturing thereof in local workshops is quite plausible, as in the case of the oil lamps featuring frequent grains on the rim¹⁰² which were also produced in Dobruja, at *Halmyris*¹⁰³. We are confident that future systematic archaeological research shall reevaluate the history of one of the most important sites on the Lower Danube.

¹⁰¹ Aricescu 1977, 112-114; see the contribution of M. Zahariade in this volume.

¹⁰² Bémont, Chew 2007, 359-360, DA 2-6.

¹⁰³ Topoleanu 2000, 208-209.

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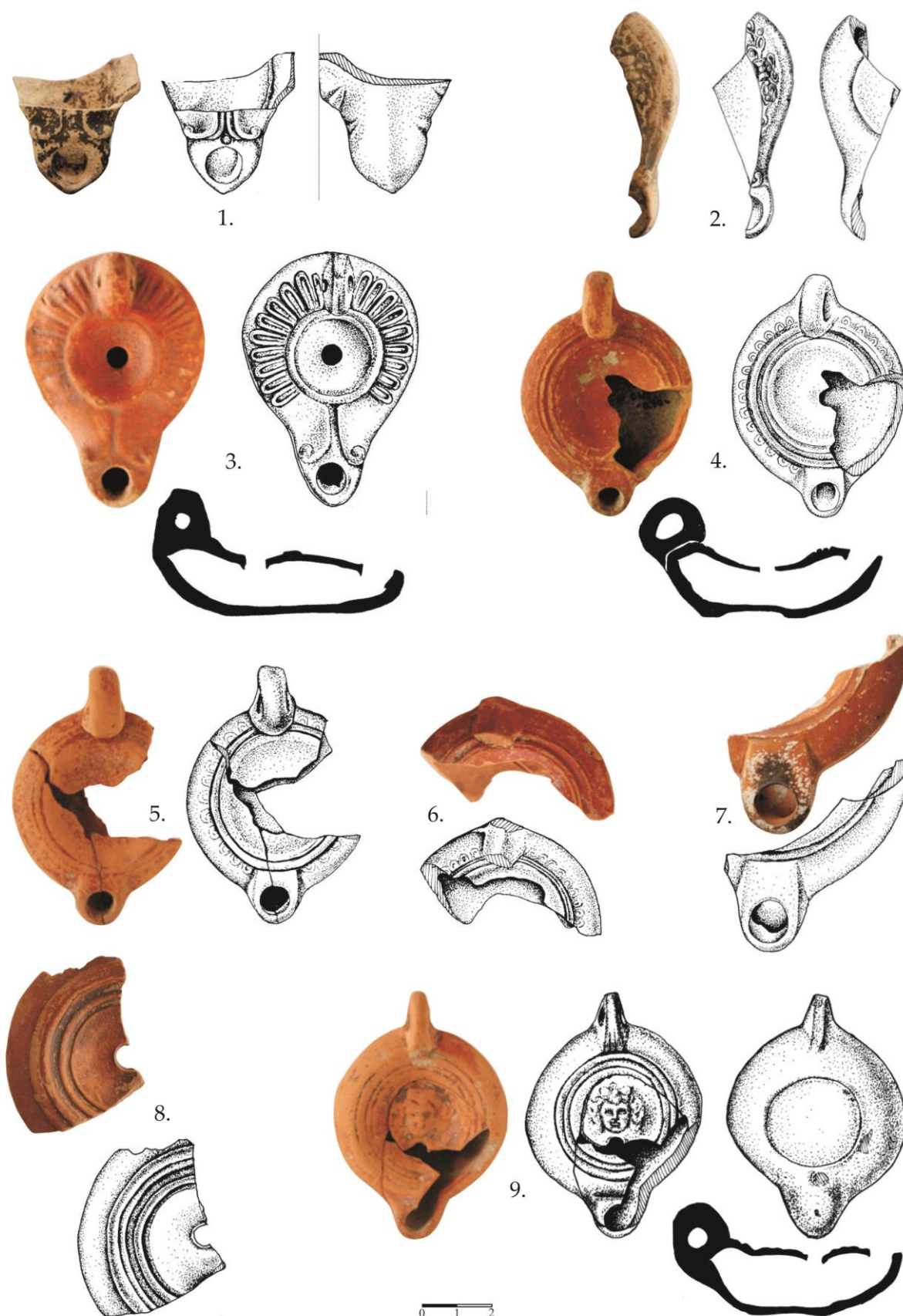


Plate I



Plate II

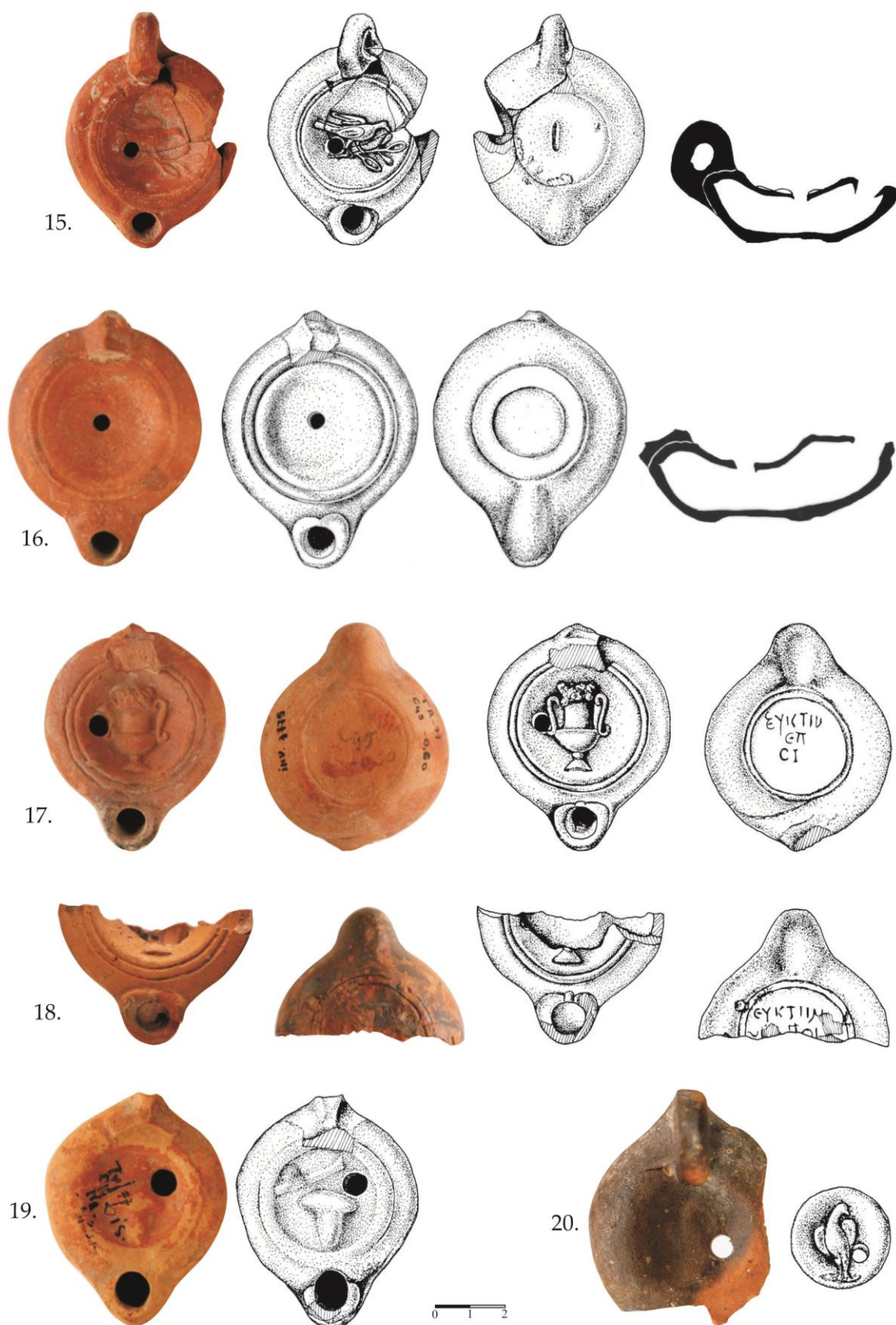


Plate III

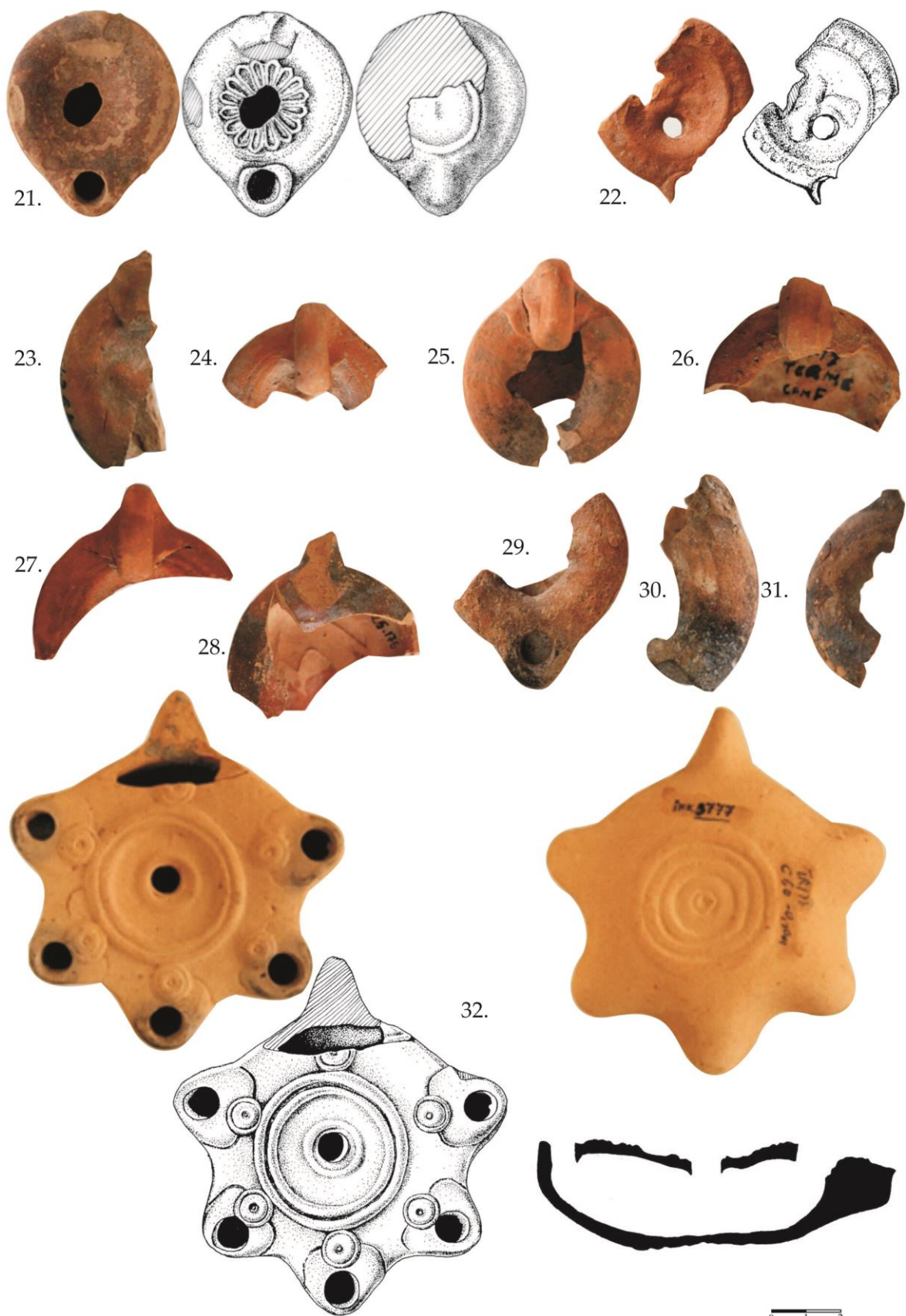


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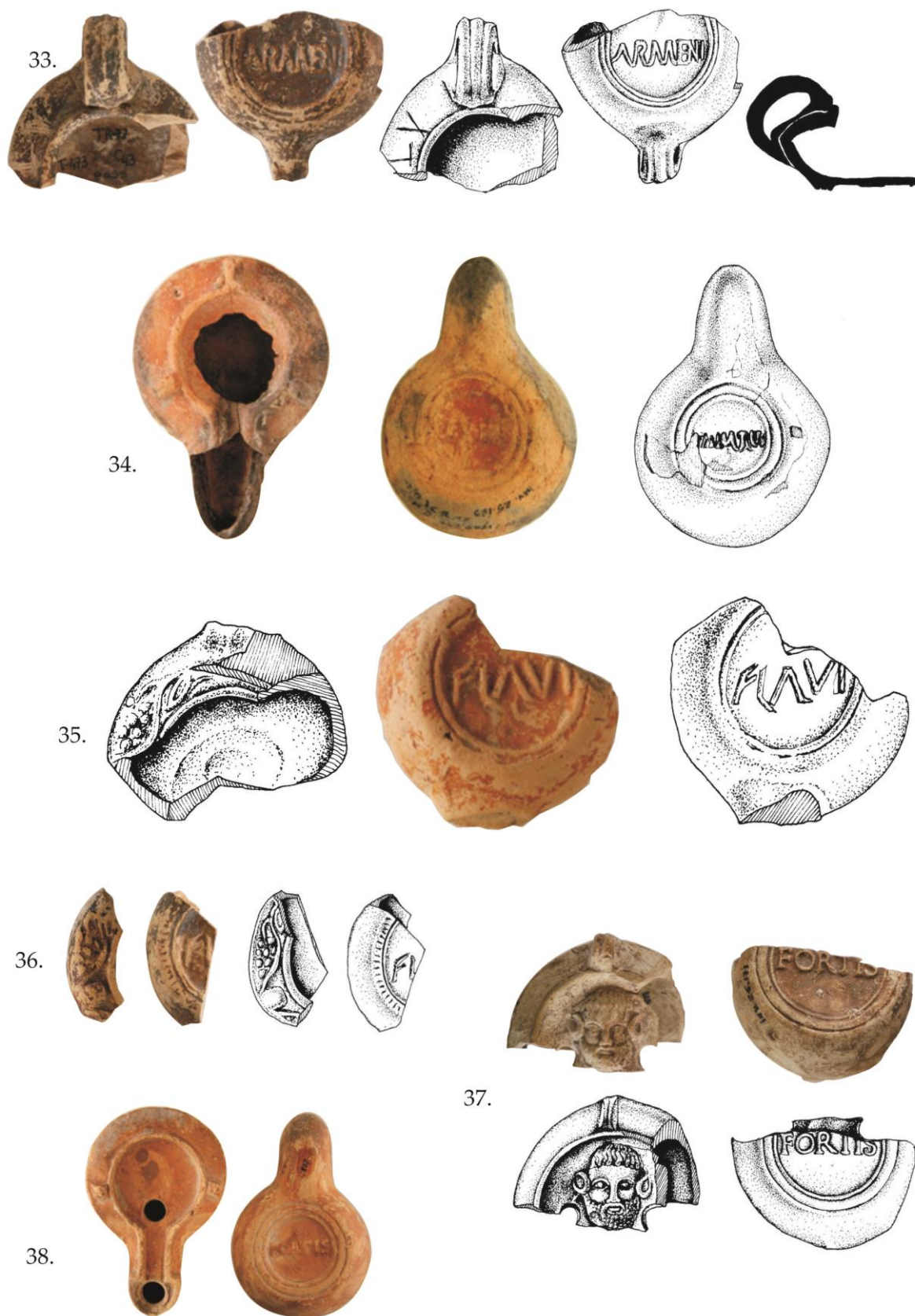


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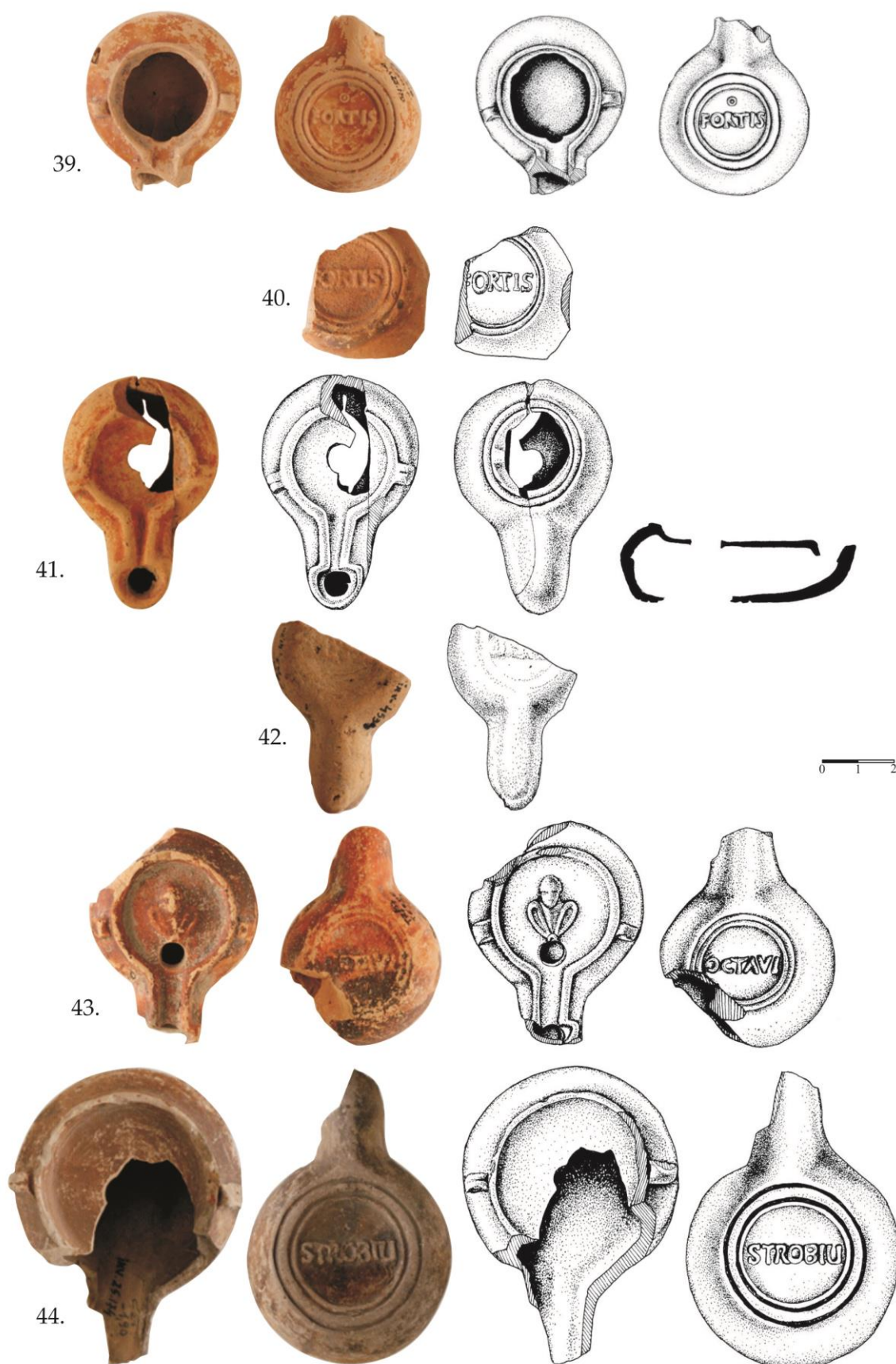


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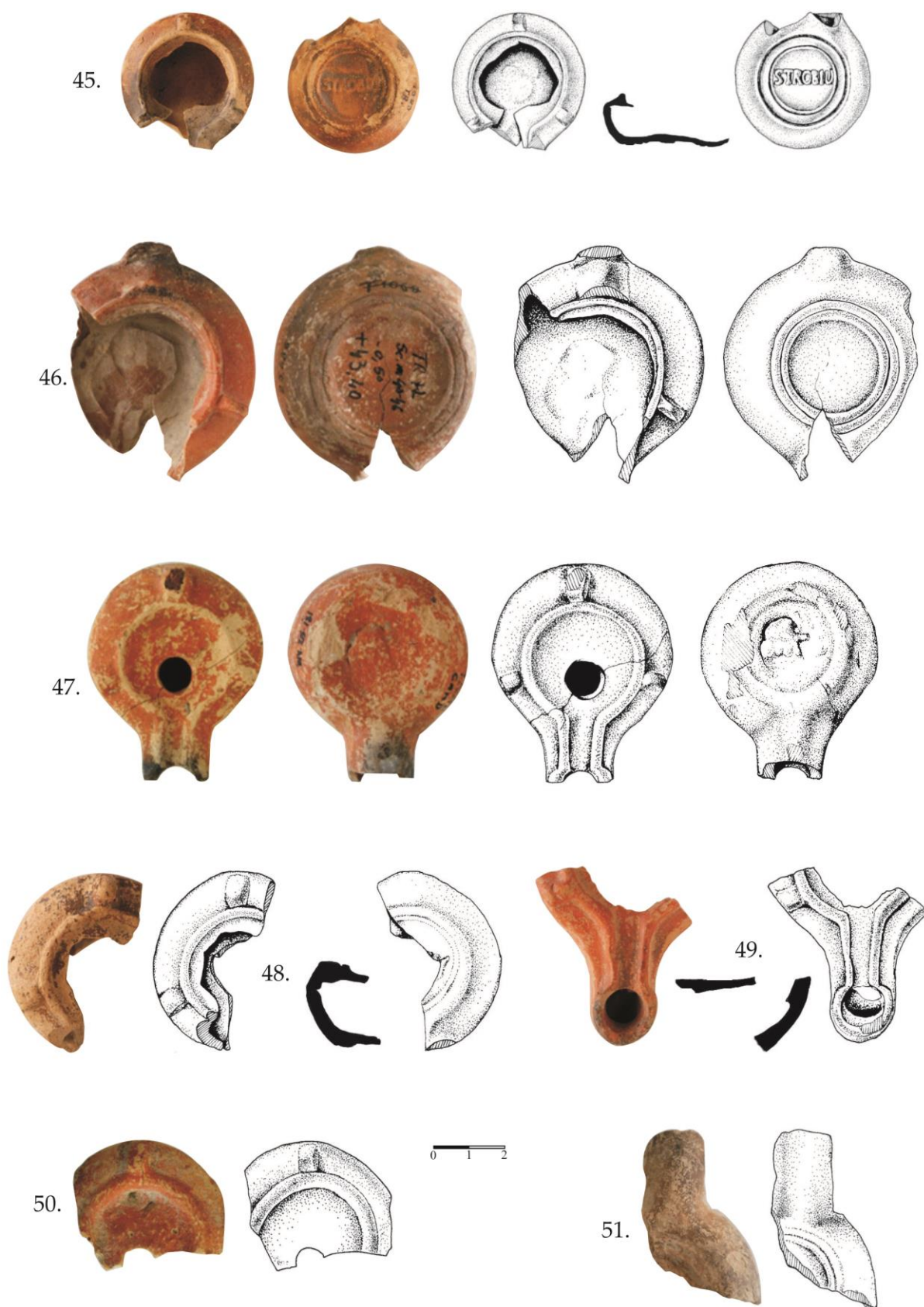
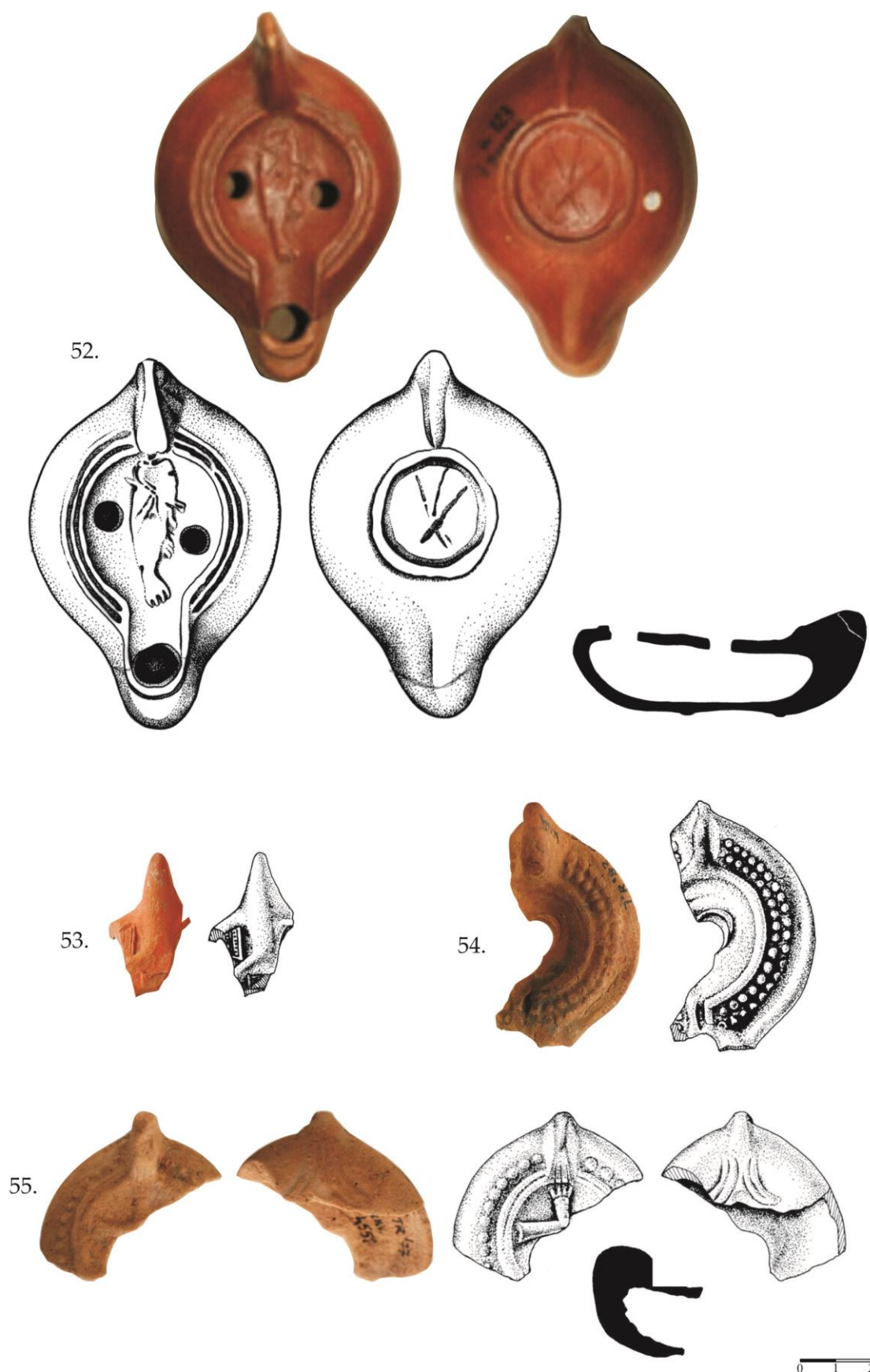


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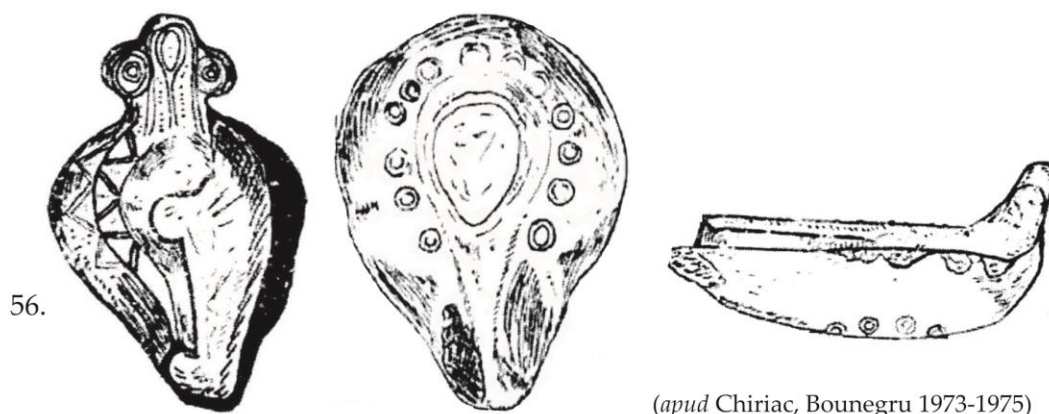
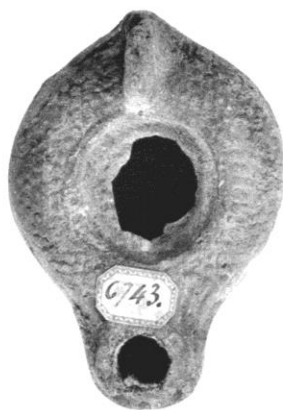


Plate IX



DA 1



DA 2



DA 3



DA 4



DA 5



DA 6



DA 7



DA 8



DA 9

Plate X (*apud* Beñmont, Chew 2007, pl.89)



DA 10



DA 11



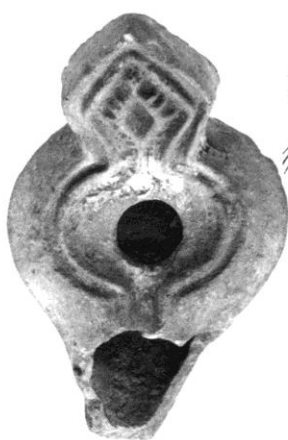
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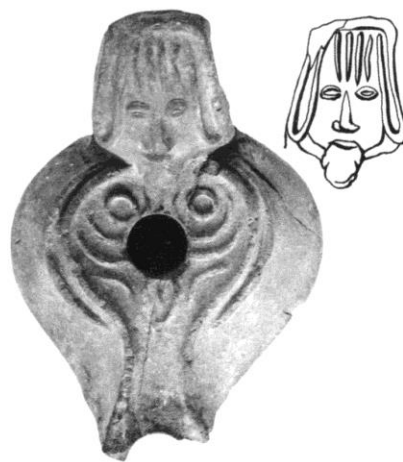
DA 13



DA 14



DA 15



DA 16



Plate XI (apud Bemont, Chew 2007, pl. 90)



DA 17



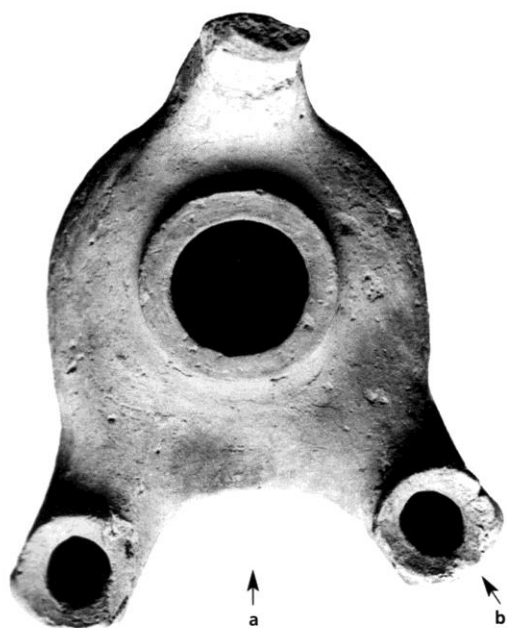
DA 18



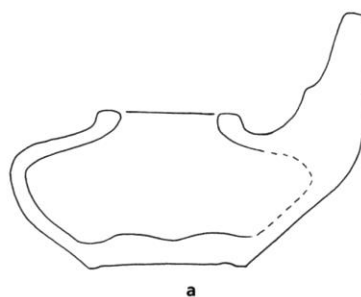
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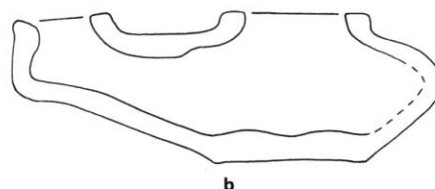
DA 20



DA 21



a



b

DA 21

Plate XII (*apud* Bemont, Chew 2007, pl. 91)