

# Roman Tripolitanian oil lamps found in Aquileia



**Abstract:** The paper discusses lamps of Tripolitanian production found in Aquileia during recent research projects (sewage-system rescue excavation between 1968 and 1972 in the city center and the excavation of the so-called Domus of Titus Macer at the site of the former Cossar property) as well as known otherwise from the northern Adriatic region. The authors present typologies and distribution maps, and consider on these grounds the trade routes traveled by Tripolitanian lamps to Aquileia. This leads them in turn to a look at commercial patterns reflected in this, including Aquileia's role as a rich harbor city rooted in the Adriatic distribution system and a hub for the distribution of goods to the hinterland settlements.

**Keywords:** Tripolitanian oil lamps, Aquileia, sewage-system excavations, Domus of Titus Macer, Adriatic distribution system

More than 25 years have passed since the latest study dedicated to the Tripolitanian lamps found in the northern Adriatic, the only one completed so far, which led Philipp Pröttel to speculate on the reasons why these lighting devices were transported such a long way from their regular area of distribution (Pröttel 1991). In Pröttel's study of Tripolitanian lamps in the region of the Adriatic Sea, Aquileia appears as an unexplainable void, despite its role as a commercial harbor and key redistribution hub in the Northern Adriatic. As a re-

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sult of recent studies on lighting devices discovered in archaeological contexts in Aquileia, which have identified some fragments of Roman Tripolitanian oil lamps, the gap has now been proved to be one in documentation rather than in real data.

The assemblage in question is composed of six fragments from rescue excavations carried out in 1968–1972, preceding the construction of a modern sewage system in the city of Aquileia. Added to this are a few finds from recent excavations by the University of Padua at the site of the former Cossar property. The sample presented here is small, yet noteworthy, because of their infrequency in regions away from where they were originally produced in Tripolitania.

The lamps are easily recognizable from a morphological point of view. The first to describe their technological and iconographical similarities with Tripolitanian Red Slip ware was John W. Hayes

(1972: 314–315). Their broad, flat shoulder, always abundantly decorated with geometric and/or vegetal motifs in relief,<sup>1</sup> is easily the most distinctive element of these lamps. The shape of the discus has been used by scholars as a criterion for typological classification:<sup>2</sup>

- discus with continuous ridge around it = Atlante form XIII;
- discus with a continuous ridge and parallel ridges forming a nozzle channel = Atlante form XIV;
- circular or elongated discus, bordered by a continuous ridge forming a nozzle channel opening onto the wick hole = Atlante form XV.

The Tripolitanian lamps were initially thought to be a product of workshops in southern Tunisia, but both archaeological<sup>3</sup> and archaeometric studies (Bonifay et al. 2013: 130) have led to the recognition of the microregion of Leptis Magna as the place of manufacture.<sup>4</sup> Production seems to have started shortly after

1 The variety of combinations observed in the iconographic repertoire of decorative motifs, despite the limited typology of the latter, often preclude direct parallels; for a detailed list of the main decorative motifs, see Joly 1974: 43.

2 Hayes (1972: 314–315) identified two types corresponding to Atlante forms XIII and XV, respectively (see *Atlante...* 1981). In her classification based on purely iconographic premises, Maria Rosaria La Lomia (1971: 9–19) proposed nine variants. Lucilla Anselmino introduced the classification into three variants that is still in use today (*Atlante...* 1981: 204–207). Publishing the hypogeum of Medina Doga in the late 1990s, Rosa Maria Bonacasa Carra (1998: 135–136) proposed a new sub-classification of Atlante forms XIII (31 variants) and XV (nine variants) based on criteria of an iconographic nature.

3 Furnace waste and very fragmented ceramics were found in the area of Uadi Taraglat (site 91) (Felici and Pentiricci 2002: 1877–1879 and 1885). For the preparation of Tripolitanian soil for ceramic production, see Forti 2010: 335–336.

4 Contrary to widespread opinion it was not Hayes who suggested that the Tripolitan Red Slip ware was actually produced in Tripolitania. He believed that the sandy soil of Tripoli was unsuitable for pottery-making (Hayes 1972: 304; in the same vein also Stefano Tortorella in *Atlante...* 1981: 137), and it was Sergio Fontana (1996: 89) who first suggested pottery production in Tripolitania based on a significant accumulation of finds in the territories there, a hypothesis later supported by Bonacasa Carra (1998: 137).



Fig. 1. Aquileia, general plan of the city showing the sites: dots mark the location of trenches with Tripolitanian lamp fragments excavated as part of the modern sewage construction project; box (in yellow) indicates the location of the former Cossar property; inset, hypothetical reconstruction of the so-called Domus of Titus Macer from the 3rd century AD (University of Padua | domus plan S. Berto and T. Luongo; map after Bertacchi 2003)

AD 310–320, as suggested by the limited available excavation data. The Atlante XIII form continued to be produced until the beginning of the 5th century AD (Pröttel 1991: Col. 93, fragment from the *castrum* of Ajdovščina from a “4th or early 5th century AD” context; Bonifay et al. 2013: 106), while the Atlante XV form appeared by the end of the 4th century AD and continued until the end of the 5th century AD. Some of the latest specimens were still being manufactured at the beginning of the 6th century AD (Bailey 1985: 87ff., unidentified fragments of Tripolitanian lamps from 5th and 6th century AD contexts in Sidi Khrebish/Benghazi).

One example each of forms Atlante XIII and XV has been recognized in the material from Aquileia, whereas the other four fragments are too poorly preserved for anything but a general classification in the broader group of Tripolitanian lamps. One example represents a Tripolitanian oil lamp, but made in common ware. The new data revises Pröttel’s distribution patterns of Tripolitanian lamps, setting the range of northern Adriatic discoveries in a new perspective. Even though the quantities of finds from Aquileia are not spectacular, it still raises the question of how these particular oil lamps got from Trip-

olitania to the upper Adriatic, which, in turn, makes the role of Aquileia within the Adriatic distribution system worth considering as well. [DD and SZ]

### TRIPOLITANIAN LAMPS FROM THE SEWAGE-SYSTEM EXCAVATION IN THE CITY CENTER

The construction of a modern sewage system in the center of Aquileia between 1968 and 1972 had the added value of producing considerable quantities of material, ceramic and non-ceramic. The assemblages were inventoried and stored at the National Archaeological Museum of Aquileia and not studied until 2010, when a new project aimed at publication (envisaged by Luisa Bertacchi already in 1993) commenced.<sup>5</sup> The limitations imposed on the material by the nature of the sewage-system excavations as such and the location—modern pipelines followed ancient Roman roads within the city—coupled with scarce excavation documentation of the finds, have hindered attempts at a reconstruction of contexts as well as mapping the finds on the plan of the ancient town [Fig. 1].

Included among the finds were 487 fragments of North African oil lamps, most of which (481 pieces) were attributed to Tunisian workshops, while the remaining six fragments were the product

5 The research project (initially focused on the study of the *instrumentum inscriptum*) was launched in 2010 by the University of Udine, under the direction of Maurizio Buora and Stefano Magnani, in collaboration with the Superintendence of Archaeology, Fine Arts and Landscape of Friuli Venezia Giulia and the National Archaeological Museum of Aquileia. One of the objectives of the project is the collection and study of all the available documentation for the purpose of reconstructing archaeological contexts wherever possible and locating them on a topographic plan of the ancient city in an effort to obtain data on the different urban sectors in a historical perspective (Bertacchi 1993: 246–247; Gerri and Magnani 2015).

of Tripolitanian potters.<sup>6</sup> The fragmented condition of most of the finds limited the typological classification. In the case of *Cat. 1*, the upper part was complete enough to identify it as an Atlante Form XIII [Fig. 2A:Cat. 1] featuring a plain concave disc surrounded by a ridge and sequences of concentric semicircles decorating the wide, flat shoulder. The body is thin-walled, the fabric dense despite a certain granularity, pale brown in color and speckled, both on the surface and in the break, with numerous whitish inclusions of considerable size.

Two other examples of Atlante Form XIII come from the Northern Adriatic: one from the modern city of Ajdovščina in Slovenia (known in ancient times by the name of *Castra*, within *Regio X* on the road to Emona) (Pröttel 1991: Col. 96, No. 27) and the other now in the National Museum at Zagreb, Croatia (Vikić-Belančić 1972: 61, No. 230 and Table XXIII, No. 12). The decoration of concentric semicircles on the shoulder does not find any published parallels except for a locally imitated specimen found in Egnatia (Fioriello 2003: 84, No. 54).

The remaining fragments are to be ascribed generically to Atlante Forms XIII–XV. Geometrical motifs are present on the shoulder of three of the five examples: a hook motif similar to the one adorning an example from the Museum of Sabratha (Joly 1974: Table XLII,

No. 993) [Fig. 2A:Cat. 2], three or four parallel bars alternating with relief circles adorned with a row of pearls around a central boss [Fig. 2A:Cat. 3], and short bars [Fig. 2B:Cat. 4]. Vegetal motifs, probably palm branches, appear on two specimens [Fig. 2B:Cat. 5, Cat. 6]. The well-fired fabric is from slightly grainy to very fine in texture and varies in color from pink and light brown. A generic dating between the second quarter of the 4th and the first quarter of the 6th century AD<sup>7</sup> can be suggested. [SZ]

#### TRIPOLITAN LAMPS FROM THE DOMUS OF TITUS MACER

An area of the ancient city of Aquileia known as “Fondo Cossar” was excavated between 2009 and 2015 by the University of Padua in agreement with the Superintendence of Friuli Venezia Giulia and in collaboration with the Aquileia Foundation. The project was focused especially on the so-called *Domus of Titus Macer*, a residential house occupied from the 1st century BC through the beginning of the 6th century AD (on the excavation results recently Bonetto and Ghiotto 2014) [Fig. 1 inset].

A large quantity of clay lamps (373 examples, including intact and fragmentary pieces) were recorded, representing a broad range of types produced from the late Republican period through the 6th century AD, which thus reflect the

6 African oil lamps and their imitations (a total of 575 fragments) were studied by Sabrina Zago for her Master’s thesis, written under the supervision of Prof. Monica Salvadori and Dr. Diana Dobreva and submitted to the University of Padua.

7 The later context is that of Sidi Khrebish (Bailey 1985); the chronological issues regarding this class were addressed in detail in Zago 2016.

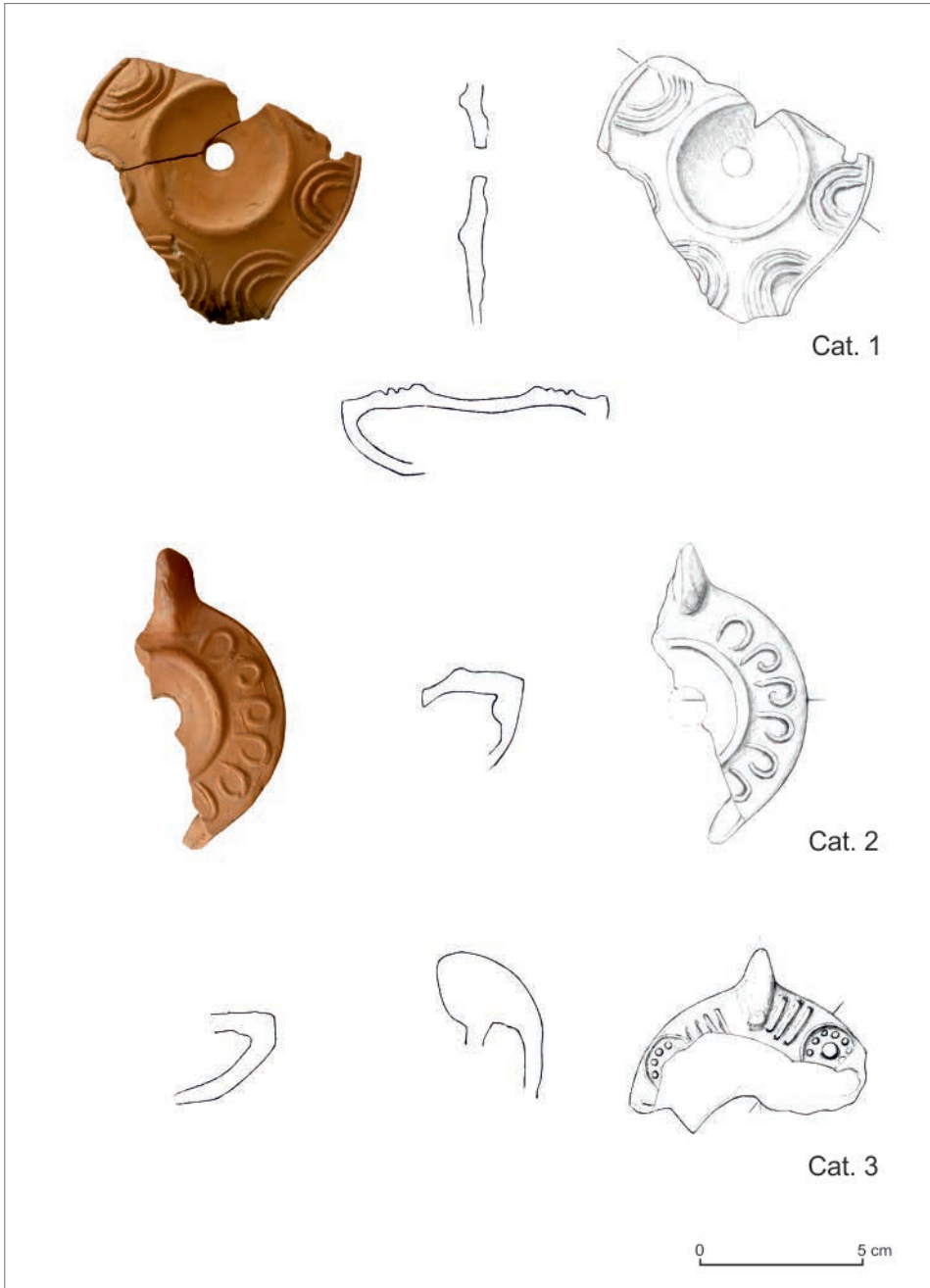
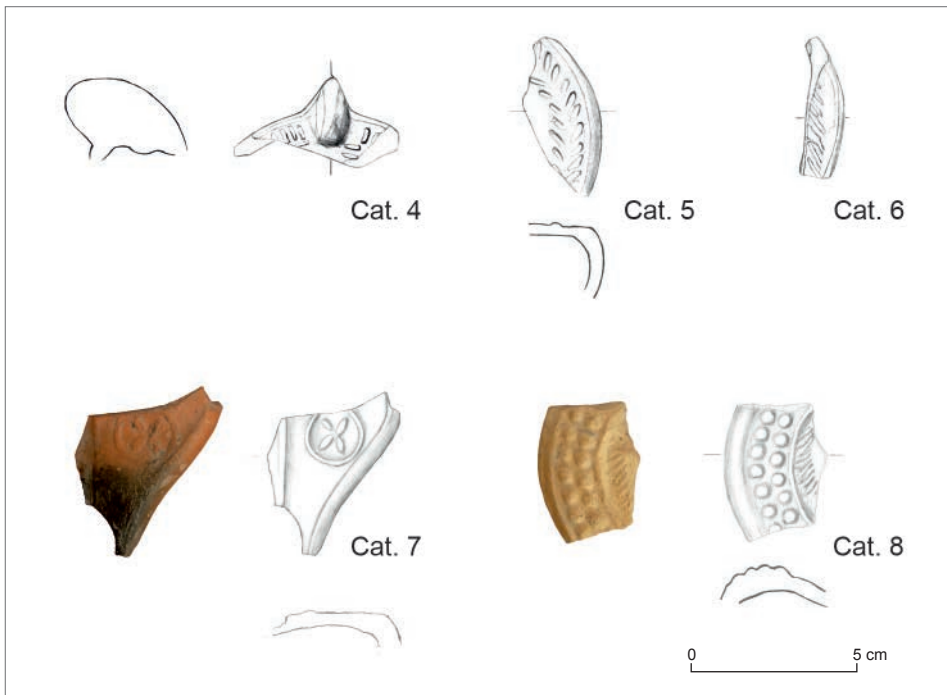


Fig. 2A-B. Roman Tripolitanian lamps from excavations in Aquileia: 1-3 and 4-6 (on the opposite page) - from trenches in the city center (1968-1972); 7-8 - from the so-called Domus of Titus Macer on the former Cossar property (Courtesy of the National Archaeological Museum of Aquileia [1-6] and the University of Padua, Project Cossar, Aquileia [1-8] | sphotos S. Zago; drawing S. Zago [1-6]; S. Tinazzo and M. Trivini Bellini [7-8])

phasing of the site. Of this number, 81 specimens, that is, 22%, come from late antique contexts [Fig. 3]. A significant part of this represents North African lamps produced in central and northern Tunisia. Interestingly, imitations or local copies of African models that seem to be contemporary are found in the same contexts from the mid 5th century AD as the original African lamps (on the subject, see Dobрева 2017). Factory lamps (*Firmalampen*), referring formally to products from at least the mid 4th century AD, make for a small percentage of the finds. Finally, there is a set of wheel-made oil lamps (types Iványi XXII or Magrini and Sbarra 1) amounting to 6% of the total assemblage [Fig. 3]. Some 1% of the discovered lamps are glazed products attributable to the Car-

lino atelier, typical of contexts dated to the end of the 4th and the 5th century AD on (for typological references, see Magrini and Sbarra 2005: 51–53).

A Roman Tripolitanian lamp with a typical wide and flat shoulder set flush with the nozzle is part of this set. A stylized rosette within a circle in relief has been preserved on the shoulder. The fabric is fine, dense, red in color, hard and coarse to the touch, the slip red-orange, glossy and homogeneous (similar to La Lomia 1971: 15, No. 775, Pl. 5 and Joly 1974: No. 980, Pl. XLI) [Fig. 2B:Cat. 7]. A provenance from the Tripolitanian area is not excluded also in the case of another lamp that has been classified as Deneauve VIII.4, Tripolitanian variant (see Bonifay 2004: 313–339, Fig. 175). The latter specimen



◀ Fig. 2B

preserves part of the discus, decorated with two palm branches in relief, and part of the shoulder decorated with two rows of closely spaced globules. This type seems to be a variant of the *Warzenlampen* type, which started to be produced in this form in the 4th century AD. An identical specimen, perhaps from the same mold, dated to the second half of the 3rd–early 4th century AD, was found earlier in Aquileia (Di Filippo Balestrazzi 1988: 347–350, 361, No. 998, Table 151). The variant is also

well represented in a mid-4th century AD archaeological context from the Eastern Baths of Leptis Magna (Bonifay et al. 2013: 93–103, Fig. 18, Nos 88–89). As far as the chronology of the said fragment is concerned, unfortunately its discovery in late fill, dated to the third quarter of the 5th century AD, does not aid in precise dating. While the type is generally attributable to the workshops of central Tunisia, we also know a Tripolitanian-made series of the same lamps (Bonifay 2004: 334,

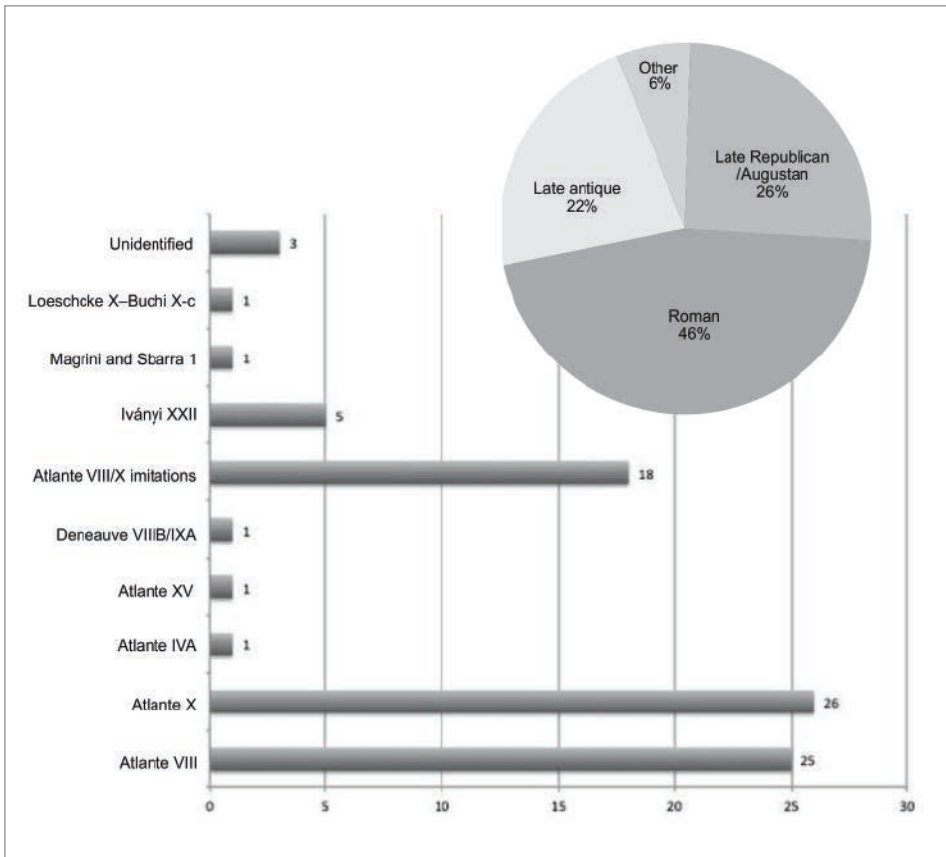


Fig. 3. The lamp assemblage from the excavation of the Domus of Titus Macer (former Cossar property): lamp types from late antiquity (n = 82); inset, the assemblage by chronological periods (n=373) (Processing D. Dobrova)



Type 13, Figs 187 and 339–341, Type 19, Figs 191, 349, Type 32, Fig. 196). In both cases they are common ware products.<sup>8</sup> The clean but coarse, very dense and yellowish fabric, as well as the heavy

whitish slip of the piece from the Cos-sar excavation raise many questions about its origin, which only further archaeometric analyses can help to clarify [Fig. 2B:Cat. 8]. [DD]

## DISTRIBUTION OF ROMAN TRIPOLITANIAN OIL LAMPS

Recent publications with photographic and drawing documentation have contributed data for a better understanding of the distribution of the Roman Tripolitanian lamps. The research has also highlighted the complexity of the issue and the limited usefulness of the publications [Fig. 4 and Table 1].

The distribution map reveals apparent clusters of finds, located mainly in production areas and their whereabouts (e.g., in nearby Cirenaica). Other regions of the Mediterranean show different concentrations of lamps, whether in topographical or quantitative terms, with Sicily being a notable exception with many finds (about 48 specimens)<sup>9</sup> recorded in cities along the southeastern coast. Small quantities of these lamps were discovered in Malta (at least eight) (Pröttel 1991: Col. 96, notes 23, 14), Latium, also eight, from

Rome (Provoost 1970: 22–23, 42–43, Type 2; Barbera and Petriaggi 1993: 332–333, Nos 290–291) and Ostia (Anselmino 1977: 95, No. 46 and Table IX; Barbera and Petriaggi 1993: 331–332, No. 289) and Friuli (at least eight: Aquileia, Bioni Island in the Marano lagoon). Aside from the above, lamp finds at Mediterranean sites are very rare and never exceed three per site (Spain: Alicante [3] and Tarragona [1]; Italy: Olbia [2], Porto Torres [1], Egnatia [2], Herdonia [1], Taranto [1];<sup>10</sup> Greece: Corinth [1], and Turkey: Miletus [1]).

The Northern Adriatic regions seem to vary significantly in terms of the numbers of lamp finds: beside ample finds attested in the capital of the *Venetia et Histria Regio X* (Aquileia), there are isolated finds from places like Bioni island (Pröttel 1991: Col. 96, No. 28) and Verona (Di Filippo Balestrazzi 2008: 355–356 and

8 A possible Tripolitanian provenance has also been ascertained for a Deneauve VIII.4 lamp (Bonifay 19A variant) from Castronovo di Sicilia near Palermo (see Malfitana and Bonifay 2016: 239, Fig. 61, No. 465, pp. 337, 680).

9 Libertini 1930: 292, No. 1459 and Table CXXIX; Fallico 1967: 407–408; Joly 1974: 44, note 5; Castellana and McConnell 1990; Patanè and Tanasi 2006: Figs 5a and 7, No. 108; Vitale 2012: 43, Nos 33–35; Patti 2013: 93–103, Nos 081–098; Malfitana and Bonifay 2016: sites 28, 34, 47, 50, 82, 84, 92, 94, 109. The preponderance of fragments in this area is very easily explained by “the privileged position of the island on the route Tripolitania–Ostia via Malta” (Bonacasa Carra 1998: 137).

10 The actual origin of the discovery from the territory of Mantua is uncertain (Ferraresi 2000: 339–340, No. 62), while the lamp from the Museum of Trento seems to be an imitation rather than an original from Tripolitania (Gualandi Genito 1986: 415, No. 232).

Table XXXII, No. 10). Further east, there are also single finds from Ajdovščina (Pröttel 1991: Col. 96, No. 29), the island of Veliki Brijun (Pröttel 1991: Col. 96, No. 27) and Zagreb city center (Vikić-Belančić 1972: 61, No. 230 and Table XXIII, No. 12), representing types attested in the Northern Adriatic, spanning time between the second quarter of the 4th and the beginning of the 6th century AD.<sup>11</sup> The clustering of finds in the vicinity of Aquileia, although not extensive, apparently matches the trade routes used for transporting goods to and from Aquileia, dispatching them to the Venetian and Slovenian hinterland and

other places along the Northern Adriatic coast. Verona was easily reached by the Via Postumia, whereas Iulia Emona is just a short distance away by the Via Gemina, passing through the *castrum* of Ajdovščina. Andautonia (modern village of Šćitarjevo in Croatia) lies just a little further away from this main road, which continued toward Poetovio. Lamps from the islands of Bioni, located halfway along the Northern Adriatic lagoon system, on the road that connected Aquileia with Iulia Concordia, and Veliki Brijun on the Istrian coast, probably reached these coastal centers by cabotage sailing. Indeed, for the latter site,

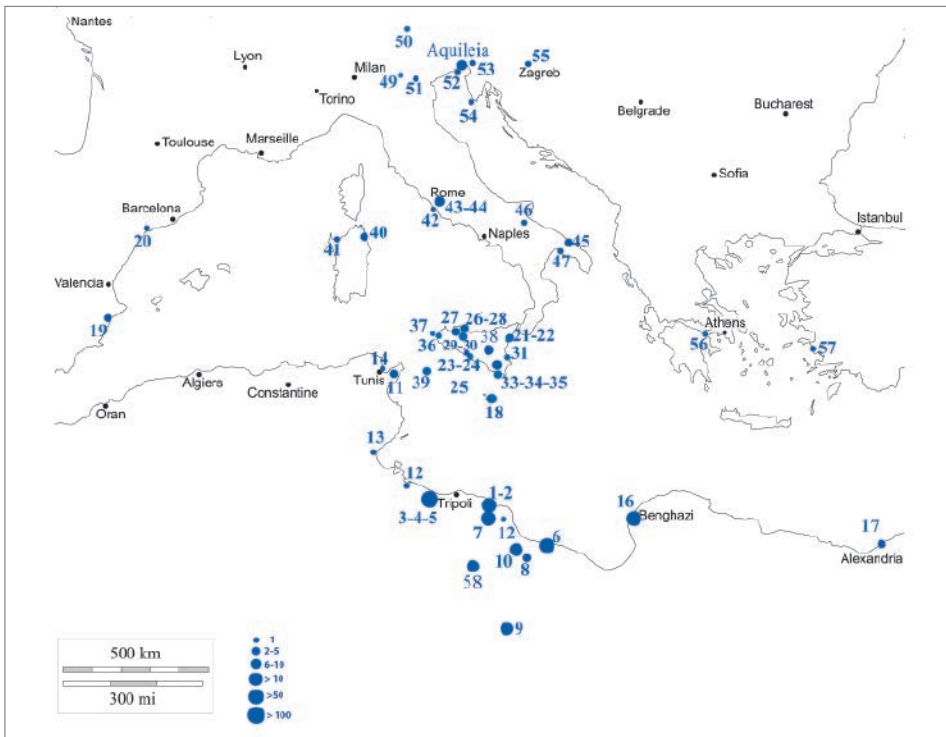


Fig. 4. Distribution of Roman Tripolitanian lamps in the Mediterranean (for sites indicated in the figure, see opposite page, Table 1) (Processing S. Zago)

11 The chronological usefulness of these finds is limited as they come from museum collections or from contexts in which they are residual.

Table 1. Summary distribution of finds of Roman Tripolitanian lamps in the Mediterranean (for location of the sites, see Fig. 5)

No.	Site	Feature	Atlante Form	Quantity	References
1	Leptis Magna (Libya)	Bath	XIII	3	Bonifay et al. 2013: 108, Nos 4.115–117
2	Leptis Magna (Libya)	Theater	XIII XV	30 28	Joly, Garraffo, and Mandruzzato 1992: 142–164
3	Sabratha (Libya)	Excavations 1948–1952	XII XIII/XV	5 9	Bailey 1994: 189, Fig. 46
4	Sabratha (Libya)	Museum	XIII XIV XV	101 1 31	Joly 1974: 41–43, Pls XXXVIII–XLV
5	Sabratha (Libya)	Mausoleum(?)	XIII	2	Procaccini 1974–1975: 29
6	Sirte (Libya)	Christian hypogeum	XIII XV	72 24	La Lomia 1971
7	Medina Doga (Libya)	Hypogeum	XIII XIV XV	62 1 31	Bonacasa Carra 1998
8	Bu Njem (Libya)	Temple of Jupiter Ammon	XIII ?	1 1	Rebuffat 1987: 85 and 89, No. 12
9	Germa (Libya)		?	?	Hayes 1972: 314, note 6
10	Ghirza (Tripolitania, Libya)	Necropolis	XIII XV XIII–XV ?	1 6 14 ?	Hayes 1984: 234–235, Pls 131a, 133a, 134, 135
11	Nabeul (Tunisia)	Fish sauce fabric	XV	2	Bonifay 2004: 427, type 82, No. 5 and Fig. 240
12	Henchir Daoui (Tunisia)		XIII	1	Bonifay et al. 2002–2003: 149, No. 102, Fig. 9
13	Skhira (Tunisia)	Christian basilica	XV	1	Fendri 1961: Pl. XXXVII, 3
14	Uadi el-Fani, Khom (Tunisia)	Mausoleum	?	?	Bonacasa Carra 1998: 137, note 18
15	Carthage (Tunisia)	Circus and necropolis	XIII/XV	1	Rossiter 1988: 548, Pl. 6
16	Benghazi (Cirenaica)		XV ?	1 56	Bailey 1985: 198, Pl. 16.4, No. 5
17	Alexandria (Egypt)	Museum	XIII	3	Breccia 1924: Pl. XXVIII, Nos 4–6
18	Malta	–	A.XIII A.XV ?	2 3 3	Hayes 1972: 315, note 1; Pröttel 1991: Col. 96, No. 14
19	Alicante (Spain)	–	XIII	3	<i>Atlante...</i> 1981: 205

No.	Site	Feature	Atlante Form	Quantity	References
20	Tarragona (Spain)	–	?	1	Pröttel 1991: Col. 96, No. 26
21	S. Agata la Vetere, (Catania, Sicily)	Necropolis area	XIII	1	Patanè and Tanasi 2006: Figs 5a, 7, No. 108
22	Biscari Museum (Catania, Sicily)	–	XIII	1	Libertini 1930: 292, No. 1459 and Pl. CXXIX
23	Agrigento (Sicily)	Necropolis	XIV	1	Malfitana and Bonifay 2016: 608, site 61
24	Saraceno district (Agrigento, Sicily)	Villa	XIII/XV	1	Castellana and McConnel 1990
25	Valle dei Templi (Agrigento, Sicily)	Necropolis	XIII/ XV(?)	1 to 5	Malfitana and Bonifay 2016: 783, site 61
26	Palermo Museum (Sicily)	–	?	5	Joly 1974: 44, note 5
27	Villagrazia di Carini (Palermo, Sicily)	Necropolis	XIII	3	Vitale 2012: 43, Nos 33–35
28	Monte Iato/letas (Palermo, Sicily)	–	XIII/XV	1	Malfitana and Bonifay 2016: 388, 818–819, site 92
29	Piana degli Albanesi, S. Agata district (Palermo, Sicily)	Necropolis	XV	1	Malfitana and Bonifay 2016: 388 and 819, site 94
30	Contrada Costa schiavo (Palermo, Sicily)	–	XV	?	Bonacasa Carra 1998: 136
31	Megara Hyblea (Sicily)	Old excavations	XIII	1	Malfitana and Bonifay 2016: 49–53, 369–370 and 760–765, site 28
32	Lardia, Sortino (Sicily)	–	?	1	Malfitana and Bonifay 2016: 371
33	S. Croce Camerina, Miro district (Ragusa, Sicily)	Necropolis	XIII	2	Malfitana and Bonifay 2016: 132–139, 374–375 and especially 776–777, site 47
			XV	2	
34	Modica (Ragusa, Sicily)	Museum	XIII/XV	5	Malfitana and Bonifay 2016: 375, note 1086
35	Petrulli quarter (Ragusa, Sicily)	Necropolis	XIII	4	Fallico 1967: 407–408
			XV	3	
36	Marsala/Lilibeum (Trapani, Sicily)	Urban excavations	XIII	1	Malfitana and Bonifay 2016: 384 and 807, site 82

No.	Site	Feature	Atlante Form	Quantity	References
37	Marettimo Island, Roman houses quarter (Trapani, Sicily)	-	XV	1	Malfitana and Bonifay 2016: 213-219, 385-910, site 28
38	Piazza Armerina (Enna, Sicily)	Villa	XIII	3	Patti 2013: 93-103, Nos 081-098
			XV	8	
			XIII/XV	7	
39	Scauri (Pantelleria, Sicily)	Shipwreck	XIII	1	Oliveri 2009: 167, No. 13, Fig. 13 and 166, No. 9, Fig. 9
			XIII-XV	1	
40	Olbia (Sardinia)	-	XIII	2	Pietra 2013: 130, Nos 48-49, Fig. 9
41	Porto Torres (Sardinia)	-	XIII/XV	1	Villedieu 1984: 213, Fig. 351
42	Ostia (Italy)	-	XIII	2	Anselmino 1977: 95, Pl. IX,46; Barbera and Petriaggi 1993: 331-332, No. 289
43	Rome (Italy)	-	XIII	4	Provoost 1970: 22-23, type 2; Barbera and Petriaggi 1993: 332-333, No. 290
44	Rome(?) (Italy)	-	XIII XV	1 1	Barbera and Petriaggi 1993: 333-334, Nos 291-292
45	Egnazia (Italy)	-	XV	1	Fioriello 2012: 100 and 111, Fig. 102
			XIII/XV	1	
46	Herdonia (Italy)	-	XIII/XV	1?	Delplace 1974: 78-81, No. 422
47	Taranto (Italy)	-	XV	1	D'Angela 1979: 120-121, Pl. VII 5,1
48	South Italy	-	XIII	1	Zaccaria Ruggiu 1980: 120-121 and 146, Nos 221-223
			XV	2	
49	Mantua(?) (Italy)	-	XV	1	Ferraresi 2000: 339-340, No. 62
50	Trento(?) (Italy)	-	XIII	1	Gualandi Genito 1986: 415, No. 232
51	Verona (Italy)	-	XV	1	Di Filippo Balestrazzi 2008: 355-356, Pl. XXXII, No. 10
52	Bioni Island (Italy)	-	XIII-XV	1	Pröttel 1991: Col. 96, No. 28
53	Ajdovščina (Slovenia)	<i>Castrum</i>	XIII	1	Pröttel 1991: Col. 96, No. 29
54	Veliki Brijun (Istria)	<i>Castrum</i>	XIII-XV	1	Pröttel 1991: Col. 96, No. 27
55	Zagreb (Croatia)	-	XIII	1	Vikić-Belancić 1972: 61, Pl. XXIII, No. 12
56	Corinth (Greece)	-	XIII/XV	1	Williams 1981: 85, No. 456 and Pl. 20,456 (cited in Pröttel 1991: Col. 96, No. 20)
57	Miletus (Greece)	-	XIII	1	Menzel 1954: 85, No. 556 and Fig. 90,13
58	Gheriat (Libya)	el-Garbia Fort	XIII	1	Mackensen 2010: 408-411
			XIII-XV	20	

it can be assumed that its position placed it squarely on the Northern Adriatic trade itineraries [Fig. 5].

Taking into consideration, where possible, the character of the sites which have yielded these lamps, it is worth noting that at least two of the six Adriatic sites, (Ajdovščina and Bioni Island) used to be military settlements; indeed, Bioni played a military role in the late antique period (end of 4th–beginning of 5th century AD), although it seems to have been limited to securing commercial traffic from the central part of the Friuli area toward the Venetian coastal centers (Buora 2002: 185; Possenti 2012: 150). Finds of fragments of oil lamps of this type at one of the sites on the *Claustra Alpium Iuliarum* (fortifications and linear defenses developed in the Iulian Alps from the 3rd century AD) made Pröttel ask himself how these items

reached the territory (Pröttel 1991: Col. 98, note 24).<sup>12</sup> This led him to suggest that the lamps would have traveled with the North African contingents that were transferred to the Alps and stationed there. The hypothesis is unverifiable to date, if we consider that in late antiquity the armies were characterized by less flexibility than in earlier periods (Possenti 2012; Rocco 2012: 454). The presence of African soldiers in the Upper Adriatic area, in particular in Pannonia, dates back to the 2nd to 3rd centuries AD, when soldiers from Mauritania reached the area (Pavan 1989); to date, there is still no data to confirm the presence of African soldiers in these territories in late antiquity. Archaeological evidence corroborates the presence of soldiers of Germanic origin, from the lower Danube, in the 4th and 5th centuries AD (Buora 2008: 158). In this context, the



Fig. 5. Distribution of Roman Tripolitanian lamps in the northern Adriatic area (Processing S. Zago)

12 For a review of the issue, see recently Vannesse 2007.

presence of a Tripolitanian lamp there is difficult, if not impossible, to explain. It may have traveled all this way along with other, commonly used goods (wheat, oil) and vessels of African terra sigillata.<sup>13</sup>

Therefore, it seems that the Tunisian oil lamps and the African terra sigillata might have, in general, been transported along similar routes: across the Adriatic and then inland along the Po and the Danube rivers. Inland destinations could

have also been reached by land (Via Postumia and the Via Gemina). Taking into consideration quantitative analyses, the high number of finds in Aquileia is easily related to the role of the city as a hub for redistribution to farther destinations. Aquileia kept this role not only during the 4th, but also in the 5th century AD, when, due to political and administrative changes, trade routes in the upper Adriatic moved south.<sup>14</sup> [DD and SZ]

## CONCLUSIONS

The distribution of Roman Tripolitanian oil lamps, especially in the Northern Adriatic, remains an open question. The lamps themselves were hardly a reason to undertake the hardships of trade exchange, but so far nothing that they could have traveled with and that would have constituted the goods traded along this route has been identified. The only data concern an earlier period when oil in Tripolitanian amphorae arrived sporadically in the 2nd to 3rd centuries AD, thus explaining the presence of the common ceramic lamps of type Deneauve VIII.4 found in the former Cossar property, assuming their origin is confirmed. However, later types of amphorae of Tripolitanian origin (e.g., type

Tripolitana III) ceased to be produced and circulated by the 4th century AD when the Tripolitanian terra sigillata lamps (see *Atlante Form XIII*) started to be manufactured.<sup>15</sup> Hence, the lamps must have traveled probably with commodities other than oil. At the end of the 4th and especially in the first half of the 5th century AD, the African coastal area supplied the Adriatic mainly with containers of types Key 25.2 and Spatheion 1, used for wine and fish sauce sent from Zeugetania and Byzacena (Rousse 2004: 610–612; Degrassi et al. 2010; Ventura and Donat 2010; Bueno, Novello, and Mantovani 2012; Bonetto et al. 2013: 156–161; Konestra 2015: 155–159, 197–198). Large quantities of African goods, fine

13 This hypothesis seems to be much more plausible, especially considering that these two centers were particularly supplied with North African goods, see Tassaux 2004: 30.

14 The vitality of the center in Friuli during the 5th century AD has been confirmed repeatedly by recent pottery discoveries (amphorae and terra sigillata foremost, Braidotti 2011; Trivini Bellini 2014; Dobrev and Riccato 2016) as well as evidence concerning urban planning (Marano 2012).

15 The Tripolitanian oil trade reached its peak in the Severan period before declining in the 4th century AD. Oil seems to have been purchased mainly by the capital municipality to provide for its annual festivities, while private consumption was fairly marginal (Rizzo 2014: 260).

tableware originating from the area of El Mahrine and Oudhna (African terra sigillata D) included, found in Aquileia, suggest the existence of privileged links with North Africa in this period (Ventura and Zulini 2012–2013; Trivini Bellini 2014).

One wonders to which distribution circuit the Northern Adriatic should be assigned. Sicily, where the finds of Tripolitanian oil lamps are particularly plentiful along the southeastern coast, seems to have been a favored destination for furnishings of Tripolitanian origin as well as other ceramics of African provenance, mainly due to its location along the trade routes (Malfitana and Bonifay 2016). This seems also to be attested by some finds of Sicilian amphorae (Mid

Roman 1A containers produced in Catania and the Keay 52 amphorae produced in Naxos) in 4th and 5th century AD contexts in Aquileia, which however may be the result of a more complex distribution mechanism that is still poorly understood.

Even we are still far away from completely understanding this phenomenon, the new data presented here may be of some help to the reconstruction of the Adriatic distribution system. The results emphasize yet again the importance of Aquileia in the maritime trade routes in the 5th century AD. They also open new perspectives for the study of the commercial links between the city and the North African coast. [DD]

## CATALOG

<b>Cat. 1</b> Inv. No. 69030	<b>Excavation context</b> Aquileia sewage-system excavations	<b>Fig. 2A:1</b>
<b>Type</b> Atlante Form XIII	<b>Date</b> Second quarter of 4th–beginning of 5th century AD	
<b>Fabric/slip</b> Granular appearance, but clean and dense with numerous whitish lumps on the surface and voids visible to the naked eye, hard and coarse to the touch, light reddish-brown color; light reddish-brown slip, semi-glossy, homogeneous.		
<b>Description</b> Fragment of the upper body with a small part of the body, handle and nozzle lost; plain discus, concentric semicircles on the shoulder.		<b>Dimensions</b> Preserved: H. 2.3; L. 6.9; W. 8.2 cm
<b>Parallels</b> Similar to Joly 1974: Table XLIV, No. 1003; Fioriello 2003: 84, No. 54		

16 For a summary of the types, see Franco and Capelli 2014a; 2014b. On the presence of these containers in Aquileia, see Dobрева forthcoming.



<b>Cat. 2</b> Inv. No. 75544	<b>Excavation context</b> Aquileia sewage-system excavations	<b>Fig. 2A:2</b>
<b>Type</b> Atlante Form XIII–XV	<b>Date</b> Mid 4th–5th century AD	
<b>Fabric/slip</b> Granular but clean, hard and coarse to the touch, pinkish orange color; opaque, pinkish-orange slip.		
<b>Description</b> Fragment of shoulder and discus with handle; plain discus, hook motifs on the shoulder.		<b>Dimensions</b> Preserved H. 3.1; L. 7.8; W. 4.7 cm
<b>Parallels</b> Similar to Joly 1974: Table XLII, No. 993		

<b>Cat. 3</b> Inv. No. 56475	<b>Excavation context</b> Aquileia sewage-system excavations	<b>Fig. 2A:3</b>
<b>Type</b> Atlante Form XIII–XV	<b>Date</b> Mid 4th–5th century AD	
<b>Fabric/slip</b> Fine, clean and dense, hard, coarse to the touch, reddish color; opaque orange-reddish coating		
<b>Description</b> Fragment of shoulder and handle with a section of the bottom. Shoulder decorated in relief with geometric patterns (groups of three to four vertical bars, alternating with circles with small globules around a central boss in a crown motif)		<b>Dimensions</b> Preserved H. 3.2; L. 4.4; W. 6.7 cm
<b>Parallels</b> For the circle, La Lomia 1971: Table 5, No. 768; Joly 1974: Table XLI, No. 973; Pröttel 1991: 90, Fig. 1, Nos 2–3		

<b>Cat. 4</b> Inv. No. 137304	<b>Excavation context</b> Aquileia sewage-system excavations	<b>Fig. 2B:4</b>
<b>Type</b> Atlante Form XIII–XV	<b>Date</b> Mid 4th–5th century AD	
<b>Fabric/slip</b> Very fine and clean, very dense, smooth to the touch, pinkish color; pink slip, not very glossy.		
<b>Description</b> Shoulder fragment with handle; short vertical bars near the edge and horizontal ones on the inside shoulder.		<b>Dimensions</b> Preserved H. 3.6; L. 2.4; W. 4.8 cm

<b>Cat. 5</b> Inv. No. 77750	<b>Excavation context</b> Aquileia sewage-system excavations	<b>Fig. 2B:5</b>
<b>Type</b> Atlante Form XIII–XV	<b>Date</b> Mid 4th–5th century AD	
<b>Fabric/slip</b> Granular but clean, hard, coarse to the touch, light reddish-brown color; reddish-brown slip, glossy.		
<b>Description</b> Shoulder fragment; palm branch motif on the shoulder		<b>Dimensions</b> Preserved H. 2.1; L. 3.6; W. 2.15 cm
<b>Parallels</b> July 1974: Table XXXVIII, No. 923 (Form XIII)		
<b>Cat. 6</b> Inv. No. 130474	<b>Excavation context</b> Aquileia sewage-system excavations	<b>Fig. 2B:6</b>
<b>Type</b> Atlante Form XIII–XV	<b>Date</b> Mid 4th–5th century AD	
<b>Fabric/slip</b> Fine, clean and dense, hard, coarse to the touch, reddish color; reddish, glossy slip		
<b>Description</b> Shoulder fragment; short relief bars (geometric or plant pattern?) on the shoulder.		<b>Dimensions</b> Preserved H. 1.2; L. 4.1; W. 1.1 cm
<b>Cat. 7</b> Inv. No. 545099	<b>Excavation context</b> Aquileia, former Cossar property excavation, US 14 (surface layer)	<b>Fig. 2B:7</b>
<b>Type</b> Atlante Form XV	<b>Date</b> Mid 4th–5th century AD	
<b>Fabric/slip</b> Fine, well purified and dense, hard and coarse to the touch, red color; red-orange, glossy and homogeneous slip.		
<b>Description</b> Fragment of the upper part with a section of the shoulder and discus; plain discus; rosette within a relief circle on the shoulder.		<b>Dimensions</b> Preserved H. 1.5; L. 4.6; W. 4.1 cm
<b>Parallels</b> Similar to La Lomia 1971: 15, No. 775, Table 5; July 1974: 980, Table XLI		
<b>Cat. 8</b> Inv. No. 560570	<b>Excavation context</b> Aquileia, former Cossar property excavation, US 3151 (fill, third quarter of the 5th century AD)	<b>Fig. 2B:8</b>
<b>Type</b> Deneauve VIII. 4, Tripolitana variant	<b>Date</b> Second half of 3rd–mid 4th century AD	
<b>Fabric/slip</b> Cleaned but coarse, very solid, yellowish color, heavy whitish slip.		
<b>Description</b> Fragment of the upper part with a section of the shoulder and discus; palm branch on the discus; two rows of relief globules on the shoulder.		<b>Dimensions</b> Preserved H. 1.1; L. 4.4; W. 3.0 cm
<b>Parallels</b> Di Filippo Balestrazzi 1988: 347–350, 361, No. 998, Table 151		

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