PER TERRAM, PER MARE.
Seaborne Trade and the Distribution of Roman Amphorae in the Mediterranean

edited by

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Contents

List of contributors vii
Acknowledgements xi

Stella Demesticha
Introduction: amphorae per terram per mare xiii

EASTERN MEDITERRANEAN

1. George V. Koutsouflakis and Xanthie Argoris
Roman North African amphorae in the Aegean: the evidence of shipwrecks 3

2. Lucie S. Vidlčková
Roman amphorae from the Portolafia and Tourkolimano shipwrecks 23

3. Marek Palaczyk
Quite new in Eretria—not very new in the Aegean? Roman amphorae from the Swiss excavations: preliminary observations 31

4. Theotokis Theodoulou, Brendan Foley, Dimitris Kourkoumelis and Kalliopi Preka-Alexandri
Roman amphora cargoes in the sea of Chios—the 2008 mission 41

5. Stella Demesticha
Gone with the waves: scattered Roman amphorae in shallow waters around Cape Kiti, Cyprus 55

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6. Elena Yu. Klenina
Amphorae of the 1st century BC—4th century AD from Chersonesos Taurica: the issue of trade relations 79
Contents

7. Andrzej B. Biernacki and Elena Yu. Klenina
   Amphorae of the 4th—6th centuries AD from Novae (Moesia Secunda):
   typology and chronology 99

8. Anna V. Smokotina
   The import of LR 1 amphorae into Bosporus 121

CENTRAL MEDITERRANEAN

9. Rita Auriemma, Valentina Degrassi and Elena Quiri
   Eastern amphora imports in the Adriatic Sea: evidence from terrestrial and
   underwater contexts of the Roman Imperial age 139

10. Elena Quiri
    Imports of eastern transport amphorae to Turin (Italy) 161

11. Elena Quiri and Giuseppina Spagnolo Garzoli
    Imports of alum from Milos to Novara (Italy) 181

12. Tamás Bezeczky, Piero Berni Millet and Horacio González Cesteros
    New research on the Castrum villa, on the island of Brijuni (Croatia).
    Preliminary report 189

13. Jeffrey Royal
    Maritime evidence for overseas trade along the Illyrian coast: the eastern
    Mediterranean connections 199

14. Dimitris Kourkoumelis and Dimitris Sakellariou
    Two Late Roman shipwrecks from the north Ionian Sea 219

15. Rita Auriemma
    New data on eastern imports from the cargoes of Torre Santa Sabina (Brindisi,
    Italy) 229

16. Pavle Dugonjić
    Rhodian amphorae in the Adriatic: a preliminary report on the evidence
    from Croatia 245
17. Dino Taras
   Amphorae from the Roman port of Aenona

WESTERN MEDITERRANEAN

18. Guillermo Pascual Berlanga and Albert Ribera i Lacomba
   Eastern amphorae in València (1st century BC–3rd century AD) and Pompeii
   (1st century BC to AD 79)

19. Eliana Piccardi
   *Ex Oriente ad Tyrhenum Mare*. Preliminary notes for a synthesis of eastern
   Mediterranean amphora circulation in ancient Liguria, Corsica and
   Sardinia
New research on the Castrum villa, on the island of Brijuni (Croatia). Preliminary report

Tamás Bezeczky, Piero Berni Millet and Horacio González Cesteros

1 Introduction

A new research programme was started in the second half of 2011 with the support of the Austrian Science Fund (FWF). The stated goal of the project is to publish new Laecantius amphorae from the Castrum villa in Brijuni. The Laecantius Amphora Stamps and the Villas of Brijuni (Bezeczky 1998) documents the amphorae that were available until the middle of the 1990s, but at that time it was not possible to study all the amphorae in the Laecantius villa of Castrum. In the meantime, however, all the amphorae have been gathered from their various stores and are now held in the archaeological collection of the Brijuni National Park. The amphorae, which are in an extremely fragmented state, are kept in 1,554 boxes. Records of the amphora fragments were uploaded and saved in a database in the second half of 2013. An examination of 80% of the fragments (4,200 rims, bases, and handles (RBH)) allows us to give a preliminary report on this collection. The research group will publish a more detailed study soon, once the data collection has been completed.

2 Short history of the research

The Brijuni archipelago is in the northeastern part of the Adriatic Sea and is made up of 14 islands at the southern end of the Istrian peninsula (Fig. 1). The largest island is Veli Brijuni, where Anton Gnirs unearthed the ruins of three villas at the beginning of the 20th century. His excavations were published in the Jahrbuch für Altertumskunde and Jahreshefte des Österreichischen Archäologischen Institutes from 1901–1915. The Val Catena villa (Verige) was a luxurious maritime terrace villa with elegant peristyles and colonnades, atria, bathrooms, and an industrial area. Gnirs found another villa rustica on Monte Collisi (Kolci), on the northwestern part of the island. The third villa is at Castrum on the western part of the island, next to a small church called St. Mary’s.

The excavations in the Castrum villa and St. Mary’s church were started by Gnirs in 1908, continued by Mirabella Roberti in 1936, and finished by Stefan Mlakar from 1951–1952; 1976–1980 and then Anton Vitasović from 1980–1983 (Mlakar 1976; Matijašić 1993; Vitasović 2005). These excavations unearthed a central courtyard, a cistern, presses, mill stones, and a cella olearia in the early Imperial buildings. The villa is surrounded by a Late Roman/Byzantine fortress (Fig. 2).

It is difficult to define the chronology of the villa based on the excavations: ‘In the
Figure 1. Map of Fažana and Brijuni Island showing the Roman villas mentioned in the text

Figure 2. Plan of Castrum villa (after Mlakar 1976): A – Roman villa, B – Roman ruins, C – Late Roman and Byzantine villa, D – Middle Ages and modern ruins
period between 1976 and 1984 the entire territory of the castrum covering an area of more than 1 ha (11482 m²) was completely studied. Until 1979 research was conducted by Š. Mlakar and in the final period by A. Vitasović. Unfortunately, neither the construction phases nor strata were documented then’ (Vidrih Perko & Pavletić 2000). Based on the amphorae, we can say that the villa was used continuously from the first century BC to the seventh century AD. Three publications that examined the coins, fine ceramics, and some of the amphorae reached a similar conclusion (Miškec 2002; Pröttel 1996; Vidrih Perko & Pavletić 2000).

3 The chronology of the Castrum villa based on the amphorae

Late Republican and Early Roman period

The earliest amphorae belong to the Lamboglia 2 type (Ichnena 1986; Empereur & Hesnard 1987; Cipriano & Carre 1989; Bruno 1995; Bezeczky 2013) from the first century BC. Dressel 6A amphorae (Buch 1973; Carre 1985; Bezeczky 2013) replace the Lamboglia 2 amphorae in the early Augustan era. The first Laecanius amphorae (earliest Dressel 6B or ante 6B type) and the stamped roof tiles (all with the stamp LAECANI-P-E) must have been made around the middle of the first century BC (Matijašić 1998; Toniolo 2011). The Laecanius amphora workshop was excavated in 1910 and is located across from the island in the area of the modern village of Fažana. This was followed by two rescue excavations in 1990–1991 (Bezeczky & Pavletić 1996) and 2006–2009 (Bulić & Koncani Uhač 2009, 2010).

Few Laecanius amphorae have been found at the Castrum villa. Around 10–5 BC, the shape of the Laecanius amphorae changed somewhat, and the classic Dressel 6B shape developed. From that time, each amphora produced in the Laecanius workshop had two stamps on the rim (Bezeczky 1998). The stamp of Laecanius is at the centre (C• LAEC-BASSI), with the second stamp above the handle (FELIX-SER). The C• LAEC-BASSI stamp and its variants were used starting in the late Augustan/Tiberian period. The Laecanius family died out without a direct heir in 78 AD (Baldacci 1967–1968; Tassaux 1982). The adopted Caius Laecanius Bassus Caecina Paetus became the governor of Asia Minor in Ephesus (Taeuber 2011). Both the property and the workshop were taken over by Emperor Vespasian and were integrated into res privata, as evinced by the stamps (Baldacci 1967–1968). Because secondary stamps are always found on these amphorae, we can use them to keep track of the changing ownership (Bezeczky 1998). The Clymenus, Darius, Paganus, and Ptolemaeus stamps on the amphorae co-occur either with the stamp of Laecanius or that of Vespasian (IMP, IMPE VESP, IMP CAES VESP AVG). The export of amphorae containing olive oil can be demonstrated until the reign of Hadrian–Titus: IMP T CAES AVG; Domitian: IMP DOMITI; Trajan: IMP TRA; Hadrian: IMP HAD. No amphora has been found in Fažana with the stamp of the Emperor Nerva.

Also found in the villa were Dressel 2-4, Rhodian, Coan, Cnidian, and AC (Amphore Crétolse) 4 amphorae from the first and second centuries AD that contained imported wine (Fig. 3). Additionally, small quantities of Hispanian fish products (Dressel 8, Beltran IIA and Beltran IIB) amphorae (Beltran Lloris 1970; García Vargas 1998; Bernal Casasola & García Vargas 2008) and one or two amphorae of the types Porto Recanati and Agora G 199 were also recovered (Lund 2000; Bezeczky 2005) (Fig. 3.4).
Mid-Roman period

Amphora oil production ceased at the beginning of the second century during the reign of Hadrian, not just in Brijuni, but across the entire Istrian peninsula (Bezeczky 1998). Some olive trees were frozen, or production was so meagre that former customers could no longer be supplied. The market gap was filled by Baetica oil in Dressel 20 amphorae, which supplied the markets that had been dominated for over a hundred years by Istrian producers of Cisalpina, Noricum, Pannonia, and Raetia (Bezeczky 1998). One of the Baetica stamps (perhaps palm branch M[AF]; compare
with Martin-Kilcher 1987: 94) found at the Castrum villa can be dated to the beginning of the second century AD.

The villa was continuously in use from the middle of the first century AD to Hadrian’s era. We do not know what happened to the villae and servi living in the villa during the crisis following Hadrian’s reign. They probably replaced the frozen olive trees, but larger quantities of oil were produced only after 20–25 years (Bezzeczký 1998). A new producer, M. Aurelius Iustus, can be identified around the middle of the second century in the area around Castrum and Fažana (Gnirs 1910). His altar was found in the vicinity of the Castrum villa (Mlakar 1976), and many amphorae connected to him were found at the Fažana workshop, although relatively few of them were found in the villa. It is clear that he was unable to reconquer the lost markets. The amphorae (type Fazana 1) that M. Aurelis Iustus produced, as well as his stamp, differ from the classic Dressel 6B design (Bezzeczký 1998). It is impossible to estimate the period and quantity of his production because this amphora type has not been found elsewhere.

Very few amphorae can be dated to the end of the second or beginning of the third centuries. On a Baetican amphora dated to the period of Antoninus, P. Berni Millet read the following graffiti: Asiatici sec. / Kalendaris Martialis Alb. / II ante cocturam. There are a few one-handled amphorae, of the types Agora M 125-126 (Robinson 1959), and more Forlimpopoli types from the third century (Aldini 1989; Panella 2001). Local wine production cannot be ruled out in Castrum villa, but it is unclear whether the wine presses are from this or a later period. If there was a significant quantity of wine produced, as the number of wine presses suggests, then the wine could have been exported (Matijašić 2008). This issue, however, needs further investigation, as the shape, fabric, and distribution of the flat-bottomed local amphorae should be determined. This would resolve the various questions concerning olive oil and wine production in Brijuni (Tassauch 1982; Brun 2004: 53–54; Vitasović 2005; Matijašić 2008).

From the third century onwards, we find: MR 1 amphorae from Sicily or North Africa (Rizzo 2003; Bonifay 2004; Mazou＆Capelli 2011); Kapitan II amphorae from the Aegean (Peacock ＆ Williams 1986: Class 47; Bezzeczký 2013); Tripolitanian 3 amphorae from Libya and Africana I, II, and II.A amphorae from Tunisia (Bonifay 2004); Dressel 30 amphorae from Algeria and Beltran 68 amphorae from Hispania (Bernal Casasola 1996).

Late Roman period

In the fourth century, the number and composition of the amphorae change. Amphorae origins include:
- the Eastern Mediterranean: Agora M 240 and Agora M 273 (Robinson 1959; Peirce 2001; Bezzeczký 2013);
- a few from the Sinope area on the Black Sea: group C Sinope II-III (Kassab Tezgör 2010);
- a few from Lusitania: Almagro 50 and 51 A-C (Fabião 2008).

In the fifth century, various regions continued to export their wares to Brijuni. The amphorae from Tunisia and the Eastern Mediterranean are the most significant: types Keay 35A, Keay 57, Keay 64 small, Keay 36, and Spatheion 1 (Keay 1984; Bonifay 2004). Among the amphorae from the Eastern Mediterranean, the number of LR 1-2 amphorae is significant (Fig. 3.6–7); these may have started arriving in the
middle of the fourth century (Demesticha 2000; Williams 2005; Pieri 2005). As we have no chronological data, we can only conjecture. Ephesian amphorae also arrived continuously: namely, types Agora M 307, LR 3, and Ephesian 56 (Bezzeczy 2013) (Fig. 3.8). LR 4 amphorae from Gaza can also be identified (Fig. 3.9–10), which means that the LR 1-4 amphora group—as described by Riley with respect to the amphorae in Carthage (Riley 1982)—was found at Brijuni during the Late Roman period (fifth to seventh centuries).

The amphora types Keay 8B, Keay 55, Keay 62, Hammanet 2E/3A and Keay 59, Keay 61, Keay 55-57, Keay 61 A-D/Albenga 11-12, and Keay 34 are all represented in the group that can be dated from the fifth to seventh centuries AD. Type Keay 62A can be dated to the sixth century, while types Keay 61C, Keay 61/8A, Spathelion 3C, and Samos Cistern are from the seventh century (Bonifay 2004).

The eastern Mediterranean amphorae are a significant part of this group; thus far, 1,644 RHB fragments from the eastern Mediterranean and the Black Sea have been identified (Table 1). Amphorae from the best-known production areas of the Early Roman period (Rhodes, Cnidos, Cos, Crete) represent no more than 3.52% of the eastern Mediterranean total. Agora G 199, Kapitan II, and the Agora M 125-126 one-

<table>
<thead>
<tr>
<th>Rhodian</th>
<th>15</th>
<th>0.91%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coan</td>
<td>21</td>
<td>1.28%</td>
</tr>
<tr>
<td>Dressel 5</td>
<td>6</td>
<td>0.36%</td>
</tr>
<tr>
<td>Cnidian</td>
<td>14</td>
<td>0.85%</td>
</tr>
<tr>
<td>Cretan AC 4</td>
<td>2</td>
<td>0.12%</td>
</tr>
<tr>
<td>Agora G 199</td>
<td>1</td>
<td>0.06%</td>
</tr>
<tr>
<td>Kapitan II</td>
<td>3</td>
<td>0.18%</td>
</tr>
<tr>
<td>Agora M 125-126</td>
<td>4</td>
<td>0.24%</td>
</tr>
<tr>
<td>LR 1</td>
<td>1082</td>
<td>65.82%</td>
</tr>
<tr>
<td>LR 2</td>
<td>190</td>
<td>11.56%</td>
</tr>
<tr>
<td>LR 4/Gaza</td>
<td>67</td>
<td>4.08%</td>
</tr>
<tr>
<td>Egyptian</td>
<td>14</td>
<td>0.85%</td>
</tr>
<tr>
<td>Kuzmanov IX</td>
<td>3</td>
<td>0.18%</td>
</tr>
<tr>
<td>Carrot amphora</td>
<td>1</td>
<td>0.06%</td>
</tr>
<tr>
<td>Agora M 240, 255, 256</td>
<td>3</td>
<td>0.18%</td>
</tr>
<tr>
<td>Agora M 307</td>
<td>16</td>
<td>0.97%</td>
</tr>
<tr>
<td>LR 3</td>
<td>85</td>
<td>5.17%</td>
</tr>
<tr>
<td>Ephesus 56</td>
<td>53</td>
<td>3.22%</td>
</tr>
<tr>
<td>Agora M 273</td>
<td>54</td>
<td>3.28%</td>
</tr>
<tr>
<td>Samos Cistern Type</td>
<td>8</td>
<td>0.49%</td>
</tr>
<tr>
<td>Beirut 2</td>
<td>1</td>
<td>0.06%</td>
</tr>
<tr>
<td>LR 13</td>
<td>1</td>
<td>0.06%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1644</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Table 1. Percentages of the amphorae types discussed in the text*
handled jar type comprise 0.48% of this total in the mid-Roman period. The remaining 96% was produced from the fourth century onwards. LR 1 amphorae comprise the largest group with 65.82%, followed by LR 2 with 11.56%. Amphorae from Gaza (LR 4) and Egypt (LR 7) account for another 4.97%, whereas 0.24% are from Sinope. The proportion of Ephesian amphorae (Agora M 240, M 307; Carthage LR 3; Ephesus 56 [Bezeczky 2013: 167–170]) is 9.54%. Agora M 273 amphorae represent 3.28%, and Samos Cistern Type amphorae make up 0.49% (Fig. 3.11). In the Late Roman period, there is a single LR 13 amphora from Cos, with an imperial stamp (Diamanti 2012).

A preliminary overview of the material reveals a surprising quantity of LR 1 amphorae. The 248 rim and 718 handle fragments (which would correspond to 359 amphorae in an ideal case) were not produced in the same place. Furthermore, at least three different fabrics were identified.

4 Summary

Brijuni, and more particularly the Castrum villa, formed an important economic centre from the mid-first to the end of the second centuries AD (the Antoninian period). Despite the limited archaeological evidence concerning the following centuries, the amphora finds indicate that the villa was continuously in use. According to earlier publications, changes to the villa, such as the erection of fortification walls, occurred in the fourth century. These alterations were probably connected with military activity, the fleet at Ravenna, and the establishment of St. Mary’s church (Gnirs 1910; Matijašić 2008). A period of economic expansion followed, and the quantity of amphorae increased: particularly those containing wine, olive oil, and fish sauces from North Africa and the eastern Mediterranean.

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