

LUSITANIAN AMPHORAE: PRODUCTION AND DISTRIBUTION

edited by

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Foreword

Excavations and studies in recent decades on the Lusitanian production of salted fish and on the amphorae that carried those products have discovered many new sites and data and brought a better insight into the importance of these complementary economic activities.

The site of Tróia, in particular, commonly considered the paradigm of Lusitanian salt-fish production and exportation, was shown to be the most important fish-salting production centre of the western Roman Empire by R. Étienne, Y. Makaroun and F. Mayet in 1994 in their monograph *Un grand complexe industriel à Tróia, Portugal*. Through recent works carried out by the archaeologists of Troia Resort, 25 production units are now known on the site. Thousands of amphorae must have departed annually to carry away such an abundant production.

Where did these amphorae leaving from an island in the estuary of the Sado River go, and where also the many vessels filled in the estuary of the Tagus River, in the city of Olisipo (Lisbon) and other workshops on the shore of that river, as well as those carrying the products of the coastal area of Peniche or the Algarve fish-salting facilities?

These questions have been raised since the first scholarly meeting on Lusitanian amphorae held in Conimbriga in 1988. Already then, an important exporting activity seemed the only explanation for such an extensive production, and all Lusitanian amphorae were considered containers for fish products.

Although Lusitanian amphorae have been known in Ostia and Rome from the 1970s, and they have been registered subsequently on many sites around the Mediterranean and on shipwrecks, they still seemed scarce along the coasts of Italy, France or Spain, and definitely rare in northern Africa and in the eastern Mediterranean, not to speak of the Atlantic territories, such as the British Isles. They certainly did not appear to be the result of massive exportation, as was the case of the Baetican amphorae that inundated the Mediterranean markets with wine, olive oil and fish products.

Yet the doubt persisted: were Lusitanian amphorae really scarce or were they not being recognized and therefore underestimated?

Work carried out in the recent decades privileged the production and characterization of these amphorae with the publication of numerous amphora workshops, such as Porto dos Cacos, Quinta do Rouxinol, Garrocheira, Pinheiro, Abul, Peniche, São João da Venda, Quinta do Lago, Martinhal, among others, while the data on the distribution of these amphorae were very scattered in many different publications, and in most cases, not even published.

The scholarly meeting *Lusitanian Amphorae – Production and Distribution* held in Tróia in October 2013 had two main aims: on the one hand, to make known the Lusitanian amphorae according to their production centres and, on the other hand, to encourage researchers to study and present the amphorae from Lusitania they had been finding in consumption contexts in many different areas of the former Roman Empire - in a word, to discuss and update the information on Lusitanian amphorae. This explains the studies presented in this volume which approach the study of Lusitanian amphorae from different perspectives.

The articles in Part I, dedicated to amphora production, list and characterize the amphora types from pottery workshops at Peniche, in the Tagus Valley (Quinta do Rouxinol and Garrocheira), the Sado Valley (Estrada da Parvoíce, Largo da Misericórdia, Abul and Pinheiro) and on the coast of the Algarve (S. Bartolomeu de Castro Marim, Manta Rota, Martinhal, S. João da Venda, Quinta do Lago, Salgados and Lagos). This constitutes an important contribution toward the easier recognition of these amphorae in consumption contexts. The early Lusitanian products, which are not very well known, are the focus of several articles that describe those from Lisbon, from the Sado Valley and from the early Roman settlements of Alto Alentejo.

Part II is also dedicated to a better understanding of Lusitanian products and presents the chemical characterization of fabrics from a number of amphora workshops, a study on the estimation of the capacity of Lusitanian amphorae and several studies on the contents of Lusitanian amphorae. A residue analysis of four early Lusitanian amphorae from Castro de Vigo (Pontevedra, Spain) and Braga revealed sweetened fish-based products, and two Dressel 14 amphorae from Setúbal are the first 1st and 2nd-century amphorae to reveal a sardine content, one of which certainly contained *salsamenta* (salted sardine). A *titulus pictus* on the neck of a Dressel 14 *parva* from the Arles-Rhône 3 shipwreck was the stimulus for unravelling the mystery of *laccatum*, the supposed fish sauce that turns out to be the designation of a fish, *lacertus catulus* (small mackerel).

The studies dedicated to the distribution of Lusitanian amphorae have also brought major new information, even if it is the scarcity of their presence in certain areas, as this also contributes to the real picture of their distribution.

At the level of the province of Lusitania itself (Part III.1), many questions needed an answer. When did Lusitanian amphora-borne products gain a stable position in the market? What was their share in the cities of Lusitania?

The studies on the amphorae from Alto Alentejo, Merida, Lisbon, Ammaia (S. Salvador de Aramenha) and Conimbriga show that Lusitanian amphorae and their products conquered the market in the province during the first half of the 1st century AD and gained a preponderant place in Lusitania from the mid 1st century.

The overview of the amphorae from Merida suggests that the capital of the province, and the interior in general, may have been a primary market for the products of the west coast, and was much more significant than was previously thought for inland territories.

Yet the exportation of products in amphorae beyond Lusitania is undeniable, even if their distribution is very irregular in Hispania (Part III.2) and beyond (Part III.3) and their presence is minimal in some regions, as is shown by a number of articles from the Northwest of the Iberian Peninsula to Adriatic Italy.

The Northwest of the Iberian Peninsula, first in Tarraconensis and from Diocletian the new province of Gallaetia, was certainly not a primary market for Lusitanian products, even if they reached this region and had a significant share at Braga during the early Empire. The development in the Northwest of a regional industry in the late Empire imposed its products and caused the decline of Lusitanian imports, even if very late contexts in Vigo, from the end of the 5th century to the beginning of the 7th, reveal amphorae that put the end of Lusitanian products in the 5th century into question.

Nor were exports of Lusitanian amphorae significant in the continental Atlantic territories or in the British Isles. In the northern provinces of Germania Superior, Germania Inferior and Gallia Belgica in particular, easily reached by Mediterranean products from Baetica, Lusitanian amphorae are also very scarce or absent. They did not take part in supplying the military camps of the *limes* in the late 1st century BC and 1st century AD, nor did they compete with Baetican and Gaulish amphorae in the 2nd century, even if they appeared occasionally. In fact, Lusitanian Almagro 50 and Almagro 51c appear in Germania Superior in the second third of the 3rd century and in the 4th century, but always sporadically and on key administrative and military sites, suggesting they were highly prized goods.

The scarcity of Lusitanian amphorae in the Atlantic markets definitely points to a preferential Mediterranean exportation.

In Baetica, one of the neighbouring provinces, Lusitanian amphorae are well distributed and continuously present from Flavian times until the 6th century, but in low quantities, as should be expected in a major fish-sauce and salted-fish production and exporting area. Yet the excavations and ceramic studies of recent decades have revealed an unsuspected dominance of imports of the small, flat-bottomed Lusitana 3 amphora between the late 2nd and the mid 3rd century in the lower Guadalquivir Valley. Here we may see the replacement of Gaulish wine by Lusitanian imports, if Lusitana 3 is confirmed as a wine-carrying amphora, which seems very likely.

In Tarraconensis, a survey of the early imperial Lusitanian amphorae registered on the eastern Iberian coast demonstrates the wide distribution of Dressel 14 amphorae in small quantities, probably on their way to other Mediterranean destinations. In Carthago Nova, this presence, even if in a low percentage, ranges from the middle of the 1st century until the middle of the 5th century. In Tarraco, on the other hand, Lusitanian amphorae are not evident before the 3rd century, but they gain some weight and have a non-negligible presence, including Algarve 1 (a particular variant of Almagro 51a-b produced in the Algarve), until the end of the 5th century.

The underwater site of Escolletes 1 offers an assemblage of Lusitanian amphorae corresponding to a homogeneous cargo of the early 4th century AD, where the distinctive Keay 78/Sado 1 amphora, so significant in the production area of the Sado Valley, plays a part, along with the predominant Almagro 51c, Variant B and some Almagro 50 and Dressel 28 *similes*.

Beyond Hispania, in Arles, the recovery in the dump above the Arles-Rhône 3 shipwreck of Dressel 14 amphorae with canonical *tituli picti* of C. Publici Macri, indicating the content (*liquamen*), provides rare, important evidence for the labelling of Lusitanian amphorae supplied via established trade networks. Yet Lusitanian products are very scarce in Arles in the early Empire, with their regular commerce not being attested until the 3rd century, prior to a significant increase in the 4th-5th centuries.

In the Strait of Bonifacio, the Punta Sardegna A is a new shipwreck with a cargo in which Dressel 14 were the main amphorae, on their way to Italy.

But was Rome, and Italy in general, a truly important outlet for the fish products from Lusitania? The studies of Rome, Ostia and the Vesuvian region and Naples contribute important data to the discussion of this major issue.

The evidence at Ostia shows that by the Neronian-Flavian period, Lusitanian amphorae were an established part of the ceramic record, corresponding to an increased level of trade. They continued to be present until the end of the 2nd century and reappeared from the second half of the 3rd century into the 4th. In Rome, Lusitanian amphorae also appeared in the Neronian period and they may attain a share of 5% during the early Empire. Almagro 51c appears for the first time in Severan contexts, but imports from the Iberian Peninsula decrease with its replacement by Africa as the main food supplier of Rome. It is more difficult to judge the Lusitanian share in the late Empire since Baetican and Lusitanian amphorae from that period are hard to distinguish in publications, but Lusitanian amphorae continue to be present until the 5th century, if not the 6th century, confirming the continuing commercial ties between Rome and the Iberian Peninsula.

According to these data, Lusitania was definitely a minor supplier of the capital of the Empire, but taking into account the enormous quantity of imported foodstuffs, the question remains: might not Rome and its region have been an important outlet for the production area of Lusitania?

In the Vesuvian region, Lusitanian amphorae are isolated finds, but the famous amphora from Oplontis mentioning Poppaea is a Dressel 14, raising the possibility that Lusitanian fish products were niche goods at that time, appearing, as in Ostia, when the levels of trade rise overall. In Naples, Lusitania was the third regional source for the city from the 3rd to the 5th centuries, and from the end of the 4th century to the first half of the 5th century Lusitania gradually became the main supplier of fish sauce.

The studies on the *Octava* and *Decima Regiones* in Adriatic Italy show a different picture. Lusitanian containers are scarce, and in the early Empire they appear mainly in the large emporium of Aquileia. They decline in the following periods, unable to compete with local, Eastern and African fish products.

Finally, an updated survey of a selection of shipwrecks provides evidence for the circulation of Lusitanian fish products along the main navigation routes in the western Mediterranean.

According to these studies, and even if the eastern Mediterranean is not considered, the distribution of Lusitanian amphorae appears to have been focused on the province of Lusitania itself and on the western Mediterranean, although Lusitanian products sporadically reached many different and distant regions. Italy seems to have been a major destination, even if their share of the local market was never very great, and the Mediterranean coasts of Spain and France seem to have benefited from this trade much more than the southern coasts.

In conclusion, even though Lusitanian amphorae may be scarce in most regions beyond Lusitania, they have a very wide distribution...

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