

Rui Roberto de Almeida

LOOKING THE OTHER WAY

Some old and new data on amphorae and trade from *Lusitania* in the territory of *Onuba Estuaria* (western Baetica)

The western part of Baetica is nowadays very well known, particularly its salt-fish industries. Naturally, investigation has focused on the local production, thereby relegating the matter of consumption into second place. A programme of regional research begun recently is studying some ancient collections (of unknown provenience) in the Museum at Huelva, some private collections from well-known sites (mainly El Eucaliptal) and several other individual finds collected by fisherman, the majority from the area between the mouths of the rivers Odiel and Guadiana (broadly from the coastal area of Punta Umbria). This work permits us to recognize a significant consumption of products from other areas, especially from the 'neighbouring' province of Lusitania.

The main goal of this paper is to set out the evidence of this trade, review some of the amphorae in the collections and present new finds, particularly from a petrographical angle. In this way one may secure a first impression on the evolution of the trade with Lusitania.

Introduction

That the western coastal part of *Baetica*, mainly the territory of *Onuba Estuaria*, has a direct connection with the east segment of southern Lusitania is geographically evident; another very well known fact is the existence of commercial links between them, particularly with regard to the salt-fish industries. The research developed in the last forty years started with the excavation and publishing of Huelva and La Orden in the late 1970s, and subsequently saw the publication of maritime settlements with fish-salting factories or kilns, as at El Eucaliptal, El Terrón, Pinguele and Cerro del Trigo. A detailed overview has thus been revealed for this part of the province.

The presence of Lusitanian amphorae here was only recognized in the last few years at a pair of sites; accordingly, such vessels have never yet been the subject of detailed studies. The difficulty in identifying the ceramic fabrics and the poor documentation of some finds and excavations throw up obstacles. The primary goals of this study are: to present a review of the data on some published material; to personally search through some collections of amphorae for any other Lusitanian amphora types (Dressel 14, Almagro 51a–b and Almagro 51c), particularly by means of petrography; and to incorporate new finds. Together this will yield an initial appreciation on the trade with Lusitania.

territory controlled by the city of *Onuba Aestuaria* (Huelva), the most important settlement between the mouths of these two rivers and the nearest to the province of Lusitania. Its privileged and strategic situation on the sea-coast where several rivers (Piedras, Odiel and Tinto) debouch has made it a major commercial seaport, well suited to handle the enshippment of the products coming from of the mines of the interior territories; its extensive seacoast was fundamental for the promotion of fish-salting industries¹. The *Onuba Aestuaria* territory thus included three large geographical and economic entities: the coast, the agricultural flat-lands and the interior highlands.

The archaeological research carried out over the last century in these sub-regions was prompted by different interests and achieved different levels of information. Most of the research done till the 1970s was centred on the prehistoric and Orientalizing periods. Only in the second half of that decade was the enormous task of studying the Roman times started under the guidance of J. M. Luzón² and M. del Amo³, mainly in the city of Huelva, and in settlements both nearby such as La Orden, and farther away such as Punta Umbria, Ayamonte or Niebla. However, this initial surge in knowledge languished over the next decade, which saw increased research in the hinterland mining areas, thanks to the support given by the mining company of Rio Tinto⁴.

The studies of M. del Amo in the capital were followed both by those of Ponsich⁵, who unveiled new settlements on

1. Geographical, historical and research overview

The southeast Atlantic area, namely the western area of *Baetica*, defined as the region between the north side of the Guadalquivir's mouth and the eastern bank of Guadiana, is a

¹ PÉREZ MACÍAS 2006, 63.

² J. M. LUZÓN NOGUÉ, *La romanización*. Huelva: Prehistoria y Antigüedad (Huelva 1974) 269–320.

³ AMO/DE LA HERA 1976.

⁴ PÉREZ MACÍAS 2006, 20–22.

⁵ PONSICH 1988.

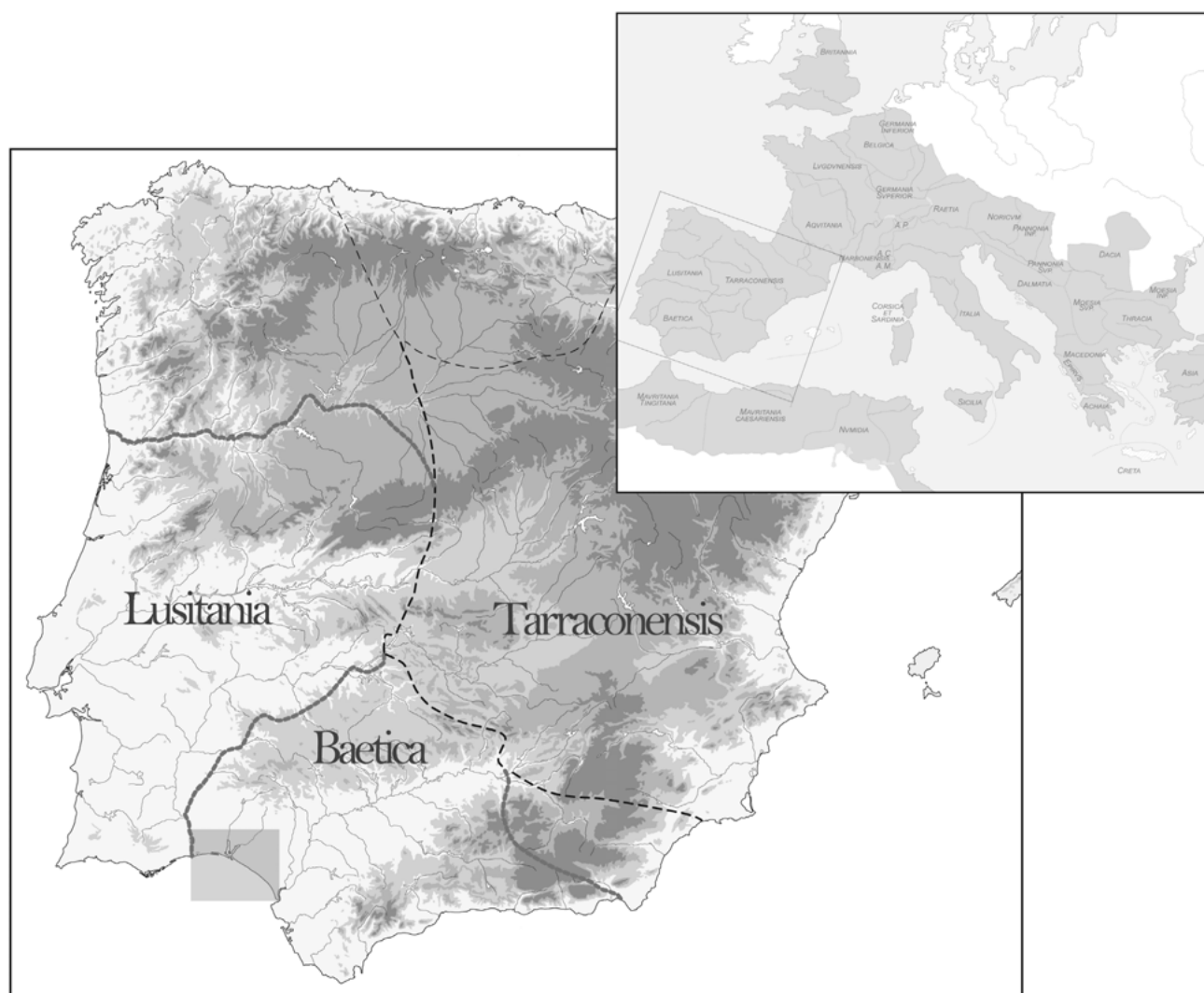


Fig. 1. The studied area as part of the Roman Empire and of Hispania.

the coast, Las Naves (Almonte), Torre del Loro (Moger), El Rincón (Huelva) and by surveys conducted in the 1990s⁶. This set of investigations showed an intense occupation existed along the entire coastline from the Early Roman times to Late Antiquity: it (re)discovered new settlements in the areas of the Odiel and Piedras rivers – such as El Terrón (Lepe), Mazagón III (Moguer), Fontanilla (Moguer), Las Cojillas (Aljaraque), Urberosa (Cartaya). Eucaliptal (Punta Umbria) is the best example⁷. This pattern of settlement seems to be reproduced in the vicinity of the mouth of the Guadalquivir river, involving sites like Cerro del Trigo or Las Naves (Almonte, Doñana)⁸.

Therefore, during the last decade of the 20th century and in the first of the present, there had accumulated an enormous literary volume of systematic work, identifying and cataloguing settlements (reaching nearly 300 examples) that properly

characterizes *Onuba* (Huelva) in Roman times⁹. The resulting picture was of a city/region marked by an important salting industry, surrounded by abundant agricultural settlements, such as La Almagra, one of a few sites excavated recently¹⁰. Because of its importance in the regional economy, most of the known and studied Roman sites on the coastal strip of the present province of Huelva are ones related to the exploitation and processing of marine resources, especially focusing on the transformation and exportation of fish products. Still, a diachronic appreciation of this industry around Huelva is yet to be better and more precisely defined, even though it is clearly tremendously significant when compared with the

⁶ CAMPOS CARRASCO ET AL. 1990; J. M. CAMPOS CARRASCO/J. CASTIÑEIRA/J. M. GARCÍA/F. BORJA, *Arqueología y evolución del paisaje. Un proyecto geoarqueológico en la Tierra Llana de Huelva*. Cuad. Suroeste 2, 1990; CAMPOS CARRASCO/GÓMEZ TOSCANO 2001.

⁷ CAMPOS CARRASCO/BERMEJO MELÉNDEZ/RODRÍGUEZ-VIDAL 2015, 76–77.

⁸ CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999; CAMPOS CARRASCO/VIDAL TERUEL/GÓMEZ RODRÍGUEZ 2014; CAMPOS CARRASCO/BERMEJO MELÉNDEZ/RODRÍGUEZ-VIDAL 2015.

⁹ CAMPOS CARRASCO/TEBA/CASTIÑEIRA/BEDIA 1990; CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999; N. DE LA O. VIDAL TERUEL, *La ocupación del territorio onubense en época Romana: estado de la cuestión*. Huelva en su historia 9, 2002, 55–76; N. DE LA O. VIDAL TERUEL, *Análisis Arqueológico de la Romanización del territorio onubense* (Huelva 2007); J. M. CAMPOS CARRASCO/J. BERMEJO MELÉNDEZ (eds.), *Roma en el occidente de la Baetica. Civitas et ager en el territorio onubense*. Hispania Ant. Ser. Hist. 8 (Roma 2013) among others.

¹⁰ N. DE LA O. VIDAL TERUEL/J. M. CAMPOS CARRASCO/A. GÓMEZ RODRÍGUEZ, *La ocupación del entorno rural de Onoba en época romana: la villa de 'la Almagra' (Huelva)*. Huelva en su historia 13, 2010.

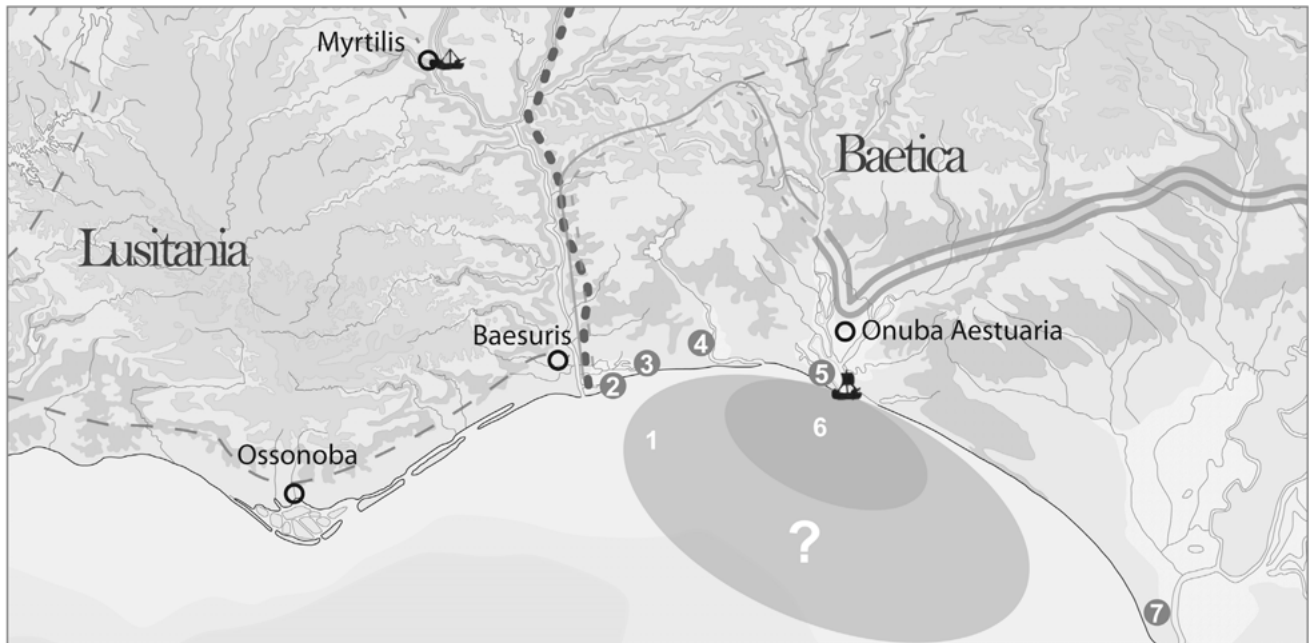


Fig. 2. Sites with Lusitanian amphorae: 1 underwater finds on the coast of Huelva; 2 Punta del Moral; 3 La Viña; 4 El Terrón; 5 El Eucaliptal; 6 underwater finds on the coast of Punta Umbria; 7 Cerro del Trigo.

area of Cadiz¹¹ or some regions of the Algarve and *Lusitania*. After more than twenty years of research and excavations on the coastline of Onuba '(...) it can be stated that the developed excavations are quite unequal; some very few settlements were widely excavated and provide large amount of data; others only sparsely excavated and very partially or not at all investigated/published (...) '.

2. The settlements/collections and Lusitanian amphorae

The identification in this area of imported amphorae, Lusitanian ones in particular, has proved to be quite difficult. On one hand, the investigation has focused mainly on the regional amphorae production¹², leaving the study of how and where they were consumed relatively ignored. On the other hand, the current knowledge on *Hispania* workshops and amphora types reveals that the production of some types or 'families of types' was not restricted to a single region or province. Many types, including the most typical and widely distributed ones considered to be 'Lusitanian' (Dressel 14, Almagro 50, Almagro 51c and Almagro 51a–b), were produced not only in *Lusitania*, but also in other areas of *Hispania*, for example in *Onuba*¹³, the area of Cadiz and the area of the Strait of Gibraltar – all in *Baetica*¹⁴.

At the same time, research in the immediately neighbouring area of southern Lusitania, as well as in other areas of *Hispania*, namely *Hispalis*, the Straits of Gibraltar, Cartagena, Tarragona or the northern *Tarraconensis* – to name just a few cases recently under review, has confirmed the presence of Lusitanian imports in a significant amount and scale. This shows that the Lusitanian products are a constant both at the consumption centres and along the transit routes to and from *Hispania*¹⁵. Given all this, the territory of Onuba cannot have been an exception. Accordingly, it was assumed that the apparent non-existence of Lusitanian amphorae resulted from the comparable lack of specific studies; targeted research was required to analyse and reassess the topic.

Therefore, the present study is a 'first step', towards the understanding of the 'why' and 'what' apropos the scarcity of data on Lusitanian amphorae in the neighbouring province of *Baetica*. Concerning published assemblages, the literature reveals a minimal number of publications containing specific ceramic studies, and even less references to amphorae. Leaving aside the kiln-sites and their ceramic production, no more than half a dozen places are mentioned.

It thus became necessary to reassess the published ceramic assemblages, in the light of the new data that could be achieved by studying unpublished excavations, and also by paying particular attention to unprovenanced finds, the sort that usually do not seize researchers' interest and are treated as matters of secondary value. Fortunately, it is precisely here that many times can be found complete pieces, yielding direct evidence of the maritime trade.

¹¹ CAMPOS CARRASCO/BERMEJO MELÉNDEZ/RODRÍGUEZ-VIDAL 2015, 75.

¹² See CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 2004.

¹³ CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999; Id 2004.

¹⁴ C. FABIÃO, Las Ánforas Romanas de Lusitania. In D. Bernal Casasola/A. Ribera I Lacomba (eds.), *Cerámicas Hispanorromanas: un estado de la cuestión* (Cádiz 2008) 725–745; D. BERNAL CASASOLA, La producción de ánforas en la Bética en el siglo III y durante el Bajo Imperio Romano. In: Congreso Internacional Ex Baetica Amphorae. Conservas, Aceite y Vino de la Bética en el Imperio Romano 3 (Écija-Sevilla 2001) 239–372; E. GARCÍA VARGAS/D. BERNAL CASASOLA, Ánforas de la Bética. In: D. Bernal

Casasola/A. Ribera I Lacomba (eds.), *Cerámicas Hispanorromanas: un estado de la cuestión* (Cádiz 2008) 661–687.

¹⁵ I. V. PINTO/R. R. DE ALMEIDA/A. MARTÍN (eds.), *Lusitanian Amphorae: Production and Distribution. Roman and Late Antique Mediterranean Pottery 10* (Oxford 2016).

2.1. The Museum collection at Huelva

The present study started by reviewing the ancient amphorae collection from the Archaeological Museum of Huelva. A major part of this collection had already been looked at and published in the early 1990s. Ironically, that paper was one of the few studies dedicated to amphorae. The collected information was minimal, typologically several mistakes were made, but the fundamentals were there. The assemblage was composed mainly of Dressel 7/11 and Beltrán IIB specimens of local regional production, but also included some imported types, with one Dressel 14 (= Beltrán IV)¹⁶.

In the current revision that specimen was recovered, and another one (not studied before) added to the tally; it is now confirmed that are both Lusitanian, with clays from the Tagus/Sado-basins kiln sites. From the same origin comes one complete Almagro 51C with fusiform morphology. They were all collected in drag-fishnets in the maritime area of Huelva (fig. 3,1)

2.2. Punta del Moral, mouth of river Carreras (Ayamonte, Isla Cristina)

The archaeological environment of the Guadiana river has become recognized mainly due to excavation in Punta del Moral, on the right bank of the Carreras River, where was found a Late Roman mausoleum, dug in 1981. Thanks to a long series of surveys (but few ceramic studies), it is known that the site was occupied at least between the 1st–4th centuries AD, with its important mausoleum and necropolis area: it is considered to be a small *vicus maritimus* or a private fish-salting operation¹⁷. However, the more important sets of amphorae come from the mouth of the Caño de la Moharra-Carreras river. There, in the years 2008–2010¹⁸ and 2011, were made several underwater surveys by dredging, in which were collected abundant ceramics of Roman date: they are interpreted as belonging to a Roman anchorage, possibly from submerged structures related both to the port area and a living quarter. These were published in three different papers.

The ceramics include frequent African sigillata (ARSW), African coarse ware and amphorae. The amphorae are mostly Baetican, attributable to the potteries from the area of Huelva (Beltrán IIA, Beltrán IIB, Keay 22 and 23, La Orden type), but also others coming from the Bay of Cádiz and the Guadalquivir Valley (Dressel 7–11 and Haltern 70). The amphorae generally belong to the Late Antique period, with a very

significant number of African imports. In one of the papers, the published drawings and photographs allow one to classify two fragments as Lusitanian (the top of one Algarve 1 and one Almagro 51C¹⁹; in another, the authors state categorically that some fragments of Almagro 51C are from a Lusitanian origin²⁰ (fig. 3,2)

2.3. La Viña (Isla Cristina)

The site of La Viña, located in the marshes of the river Carreras, apparently also with *cetariae*, is known only by surface surveys²¹. Among the published material, there are some fragments classified as Keay XIX, which may correspond to Algarve 1 amphorae²².

More recently, in 2009, an excavation recovered an industrial quarter and the necropolis, where were recovered several burials in amphorae. Among these, now deposited at the Museum of Huelva, are a pair of amphorae apparently of type Algarve 1.

2.4. El Terrón (Lepe):

This important site, actually located near the current mouth of the river Piedras, was identified by Bonsor in 1928, but only in the 1990s was it recognized as an important site concerned with marine-resource exploitation and a pottery-production centre²³. Its occupation seems to begin in the 2nd century AD, at which time the production of Beltrán IIB amphorae is known to be under way, and extends through the 3rd A.D. After a small hiatus, activity recommences in the 4th A.D. with a new industrial set-up, including canals and tanks. However, at the end of this same century, the whole site became covered over as the result of some natural phenomenon. After this, the site enjoys a fresh and prolonged occupation until the beginning of the 6th century AD.²⁴

Among the few published amphorae fragments, almost all attributable to the local production, one classified as *urceolus*²⁵ stands out. Its particular morphological characteristics make its classification as Lusitanian a possibility. If this judgment is correct, it would be a specimen of Almagro 50, almost for sure produced in the Algarve, for instance at the pottery workshops of Martinhal or Quinta do Lago (fig. 3,3)

¹⁶ J. BEDIA GARCÍA/M. ALZAGA/J. M. CUENCA/J. VALERA, Catalogación de los fondos del Museo Provincial de Huelva: Las ánforas de procedencia incierta. Cuad. Suroeste 3, 1992, 155–177.

¹⁷ M. DEL AMO, Panteón familiar romano en isla Canela (Ayamonte, Huelva) (Huelva, 2003); M. A. LÓPEZ/J. DE HARO/E. CASTILLA, El mausoleo romano de Punta del Moral (Ayamonte, Huelva). Arqueología y restauración. in: IV Encuentro de Arqueología del Suroeste Peninsular (Huelva 2009) 1121–1148.

¹⁸ M. ALZAGA GARCÍA, Los trabajos de dragado en Huelva y la arqueología. Puertos Antiguos y Comercio Marítimo. In: III Jornadas de Arqueología Subacuática (Valencia 1998) 156–165; B. CABACO ENCINAS/E. GARCÍA TEYSSANDIER, La Intervención Arqueológica Preventiva en el Caño de la Moharra de Punta del Moral. In: XIV Jornadas de Historia de la muy noble y leal ciudad de Ayamonte (Huelva 2010) 129–148.

¹⁹ B. CABACO ENCINAS/E. GARCÍA TEYSSANDIER, El fondeadero romano de Punta del Moral (Ayamonte, Huelva). in: I Congreso de Arqueología Náutica y Subacuática Española (Cartagena 2013) 845–857.

²⁰ J. A. PÉREZ MACÍAS/D. GONZÁLEZ BATANERO/M. J. RODRÍGUEZ MARTÍN, El fondeadero romano de Isla del Moral y el comercio marítimo en la desembocadura del Guadiana. Espacio, Tiempo y Forma. Huelva Ant. 26, 2013, 339–370.

²¹ F. GÓMEZ TOSCANO ET AL. Prospección arqueológica superficial en el Interfluvio Guadiana Piedras. Anu. Arqu. Andalucía 2, 1991 (1993), 239–246; J. M. CAMPOS CARRASCO/F. GÓMEZ TOSCANO, Lepe en el marco histórico de la Tierra Llana de Huelva: Prehistoria y Antigüedad. Historia de Lepe. Una Proyección hacia el futuro (Huelva 1996).

²² CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999, figure 24.

²³ CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999; CAMPOS CARRASCO/GÓMEZ TOSCANO 2001; CAMPOS CARRASCO/BERMEJO MELÉNDEZ/RODRÍGUEZ-VIDAL 2015.

²⁴ CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999.

²⁵ CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999, 192.

2.5. The Eucaliptal (Punta Umbria)

The site of Eucaliptal is located on the Punta Umbria peninsula, on the east bank of the Odiel river away from the sea. It is first referred to by M. Del Amo²⁶ and M. Beltrán Lloris²⁷, who speak of amphorae wasters. In the early 1990s, several archaeological campaigns were carried out that discovered important artisanal and industrial zones, as well as living quarters and necropolis areas²⁸. Investigations continued in 2002 and 2006, with new industrial and cemetery areas coming to light²⁹.

Despite several publications that pay some attention to ceramics, the amphorae studies do not go further than a morpho-typological analysis, with special emphasis, understandably, on local production. There are identified amphorae Keay 16/22, 23, 25 and 49, with a strong number of African imports between the 3rd–5th centuries AD. The most abundant forms are the amphorae Keay 22 and 23, almost certainly locally made. Still, some likely Lusitanian amphorae are among the materials described and drawn, namely the upper part of a possible Keay 78 and some Almagro 50.

Finally, among the sherds retrieved over time by the local historian J. Carrero, whose collection is currently held at the public school *Virgen del Carmen*, there can be documented several Lusitanian Almagro 51C, with clays from the Tagus/Sado area.

2.6. Coast of Punta Umbria

In this village, located on a sandy peninsula between the Odiel river and the Atlantic Ocean, where is also to be found the site of El Eucaliptal, finds of amphorae have been repeatedly made in the waters nearby. In fact, fragments or complete amphorae can be seen in public spaces and private homes, mostly recovered during fishing activities.

At the Municipal Tourism House and at the Culture Department store, there is a significant number of amphorae donated by local fishermen, with several examples of Lusitanian Almagro 51C amphorae, also from the region of Tagus or Sado (fig. 3,4).

2.7. Cerro del Trigo (Almonte)

Cerro del Trigo is a site occupied from the 2nd century till the 6th century AD. It is located in the Doñana National Park, near the mouth of Guadalquivir River. From the beginning of the investigations, by Bonsor and Shulten in the early 1920s, the importance of the fish-salting activities was always strongly evident, as well as its industrial, craft and necropolis areas. These data are now amplified³⁰, although excavations only restarted in the late twentieth century. Newly discovered areas have allowed the establishing of a new sequence, as well as a more detailed appreciation of the materials' development³¹.

From the imported amphorae referred to in various publications, including those of Bonsor, can be distinguished Dressel 23 from the Guadalquivir, Dressel 7–11, Beltrán IIB, Keay 19, 22 and 23 from the coast of Baetica and Keay 6, 7, 25, 30, 32 of African origin. Among the group of 'amphorae with orange clay', we can find some amphorae that are quite similar to Lusitanian Dressel 14.

3. Some concluding remarks

In this initial sample here discussed, most amphorae do not have secure archaeological contexts that allow an assessment of precise dating; other simply are not surely Lusitanian. Nonetheless, for those whose Lusitanian credentials are certain, their morphological characteristics allow one to establish general dates that make possible some conclusions regarding the circulation of Lusitanian products in the coastal area of the *Onuba Aestuarium* territory.

The few archaeological data now available indicate an effective presence of Lusitanian fish-product amphorae and the beginning of its reception/transport in Dressel 14 amphorae, with great probability, from the middle/second half of the 1st century AD onwards. The major presence of late types Almagro 50, Almagro 51c and Almagro 51a–b/Algarve 1 type indicate a continuity of the imports extending until at least the middle of the 5th century.

This regular and to be exception perception reading can be nuanced in some aspects. The first such deduction is that the Lusitanian products seem to constitute just a very low percentage of the trade, particularly in the Early Roman period. Nevertheless, this is quite interesting as in most important towns and villas of the Algarve region, in spite of their being in the ancient province of Lusitania, the consumption was dominated by the Baetican products; the Lusitanian ones were only present in low numbers³². Often the amphorae are not a regional production, but come also from Tagus/Sado Valeys.

The second point is that in Late Antiquity Lusitanian products look to rise in number, especially in the Almagro 51C amphorae group. Once again, the amphorae from the Tagus/Sado region dominate; nevertheless, most of them do

²⁶ AMO Y DE LA HERA 1976.

²⁷ M. BELTRÁN LLORIS, *Cerámica romana. Tipología y clasificación* (Zaragoza 1978).

²⁸ J. M. CAMPOS CARRASCO ET AL., *Factoría de salazones de El Eucaliptal (Punta Umbria, Huelva)*. Anu. Arqu. Andalucía 1993 (1997), 313–324; CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999; J. M. CAMPOS CARRASCO/J. A. PÉREZ MACÍAS/N. VIDAL TERUEL/A. GÓMEZ, *Las industrias salazoneras del litoral onubense: los casos de 'El Eucaliptal (Punta Umbria)' y 'El Cerro del Trigo' (Doñana, Almonte)*. Huelva Hist. 9, 2002, 77–96; CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 2004.

²⁹ M. A. LÓPEZ DOMÍNGUEZ/ E. CASTILLA REYES/J. DE HARO ORDOÑEZ, *Intervención arqueológica de urgencia en el yacimiento romano de El Eucaliptal (Punta Umbria, Huelva)*. Anu. Arqu. Andalucía 3/1, 2002 (2005), 562–572; M. A. LÓPEZ DOMÍNGUEZ/J. DE HARO ORDOÑEZ/ E. CASTILLA REYES, *Intervención arqueológica preventiva en la zona arqueológica de El Eucaliptal (Punta Umbria, Huelva)*. Anu. Arqu. Andalucía 2006 (2010), 2084–2089.

³⁰ PONSICH 1988; J. GONZÁLEZ/J. A. PÉREZ MACÍAS, *La romanización de Huelva. Huelva y su provincia II* (Huelva 1987) 247–299; J. M. CAMPOS CARRASCO ET AL., *La factoría romana de El Cerro del Trigo (Doñana, Almonte)*. Anu. Arqu. Andalucía 1999 (2002), 330–349.

³¹ CAMPOS CARRASCO/VIDAL TERUEL/GÓMEZ RODRÍGUEZ 2014.

³² VIEGAS 2011, 557–558; ALMEIDA ET AL. 2014

not come from contexts on dry land – here it seems that more amphorae were produced in the Lusitanian Algarve region (Almagro 50 and Algarve 1 types), but from underwater ones. Therefore, they tell us more about trafficking routes than actual places of consumption. Maybe both regions and their amphorae just have different markets, different routes and destinations? These are questions for the future.

What looks undeniable is that the south-western Atlantic arc, comprising western *Baetica* and southern *Lusitania*, seems to have a sense of unity greater than any artificial limits imposed by provincial borders.

rui.dealmeida@gmail.com

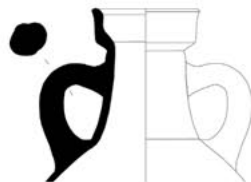
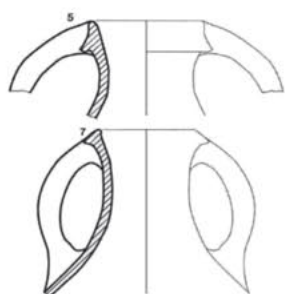
Bibliography:

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|---|--|
| AMO Y DE LA HERA 1976 | M. DEL AMO Y DE LA HERA, Restos materiales de la población romana de Onuba. <i>Huelva Arqu.</i> 2, 1976. |
| CAMPOS CARRASCO/BERMEJO | |
| MELÉNDEZ/RODRÍGUEZ-VIDAL 2015 | J. CAMPOS CARRASCO/J. BERMEJO MELÉNDEZ/J. RODRÍGUEZ-VIDAL, La ocupación del litoral onubense en época romana y su relación con eventos marinos de alta energía. <i>Cuaternario y Geomorfología</i> 29, 2015, 75–93. |
| CAMPOS CARRASCO/
GÓMEZ TOSCANO 2001 | J. M. CAMPOS CARRASCO/F. GÓMEZ TOSCANO, La Tierra Llana de Huelva: Arqueología y evolución del paisaje (Sevilla 2001). |
| CAMPOS CARRASCO/PÉREZ MACÍAS/
VIDAL TERUEL 1999 | J. M. CAMPOS CARRASCO/J. A. PÉREZ MACÍAS/N. VIDAL TERUEL, Las cetariae del litoral onubense en época romana (Huelva 1999). |
| CAMPOS CARRASCO/PÉREZ MACÍAS/
VIDAL TERUEL 2004 | J. M. CAMPOS CARRASCO/J. A. PÉREZ MACÍAS/N. VIDAL TERUEL, Alfares y producciones cerámicas en la provincia de Huelva. Balance y perspectivas. In: D. Bernal Casasola/L. Lagóstena Barrios (eds.), Congreso Internacional FIGLINA BAETICA. Talleres alfareros y producciones cerámicas en la Bética romana (ss. II a.C. – VII d.C.). BAR Internat. Ser. 1266 (Oxford 2004) 125–160. |
| CAMPOS CARRASCO ET AL. 1990 | J. M. CAMPOS CARRASCO/J. A. TEBA/J. CASTIÑEIRA/J. BEDIA, La documentación arqueológica para el estudio de la romanización en la provincia de Huelva. <i>Huelva Hist.</i> 3, 1990, 67–106. |
| CAMPOS CARRASCO/VIDAL TERUEL/
GÓMEZ RODRÍGUEZ 2014 | J. M. CAMPOS CARRASCO/N. VIDAL TERUEL/A. GÓMEZ RODRÍGUEZ, La cetariae de ‘El Cerro del Trigo’ (Doñana, Almonte, Huelva) (Huelva 2014). |
| PÉREZ MACÍAS 2006 | J. A. PÉREZ MACÍAS, La Huella de Roma (Huelva 2006). |
| PONSICH 1988 | M. PONSICH, Aceite de oliva y salazones de pescado. Factores geoeconómicos de Bética y Tingitana (Madrid 1988). |

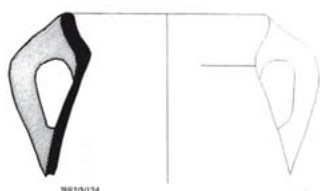
Fig. 3. Lusitanian amphorae: **1** Dressel 14 and Almagro 51C from the *Museo Arqueológico de Huelva* collection; **2** Almagro 51C and Algarve 1 from Punta del Moral (after PÉREZ MACÍAS/GONZÁLEZ BATANERO/RODRÍGUEZ MARTÍN 2013 and CABACO ENCINAS/GARCÍA TEYSSANDIER 2013); **3** Almagro 50(?) from El Terrón (after CAMPOS CARRASCO/PÉREZ MACÍAS/VIDAL TERUEL 1999); **4** Almagro 51C from the coast of Punta Umbria. ➤



1



2



3



4

