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THE ROMAN *VILLA* OF CARDÍLIO (TORRES NOVAS, PORTUGAL) IN THE MEDITERRANEAN TRADE: THE IMPORT OF COMMODITIES IN AMPHORAE

Situated in the Tagus Valley, the Roman villa of Cardílio was positioned, during Roman times, on the borderlands between the territories of the civitates of Scallabis (Santarém) and Seilium (Tomar), as well as between mountainous and plain regions. Its proximity to the XVI road of Antonino's itinerary and to the Almonda and Tagus rivers facilitated connections to the coast, particularly to Olisipo (Lisbon), thus enabling participation in regional commercial networks and the acquisition of goods from distant regions. This study aims to present the assemblage of amphorae imported from various Mediterranean regions and to delineate the main trends and consumption patterns within the villa between the 1st and 4th/5th centuries AD.

Lusitania – Roman *villa* – Roman trade – amphorae – imports of foodstuffs

Introduction

Villa Cardílio is the most emblematic Roman site in the present-day territory of Torres Novas Municipality and one of the most renowned Roman *villae* in the Portuguese Extremadura. This is attributed, on one hand, to the various excavation campaigns carried out in the 1960s and 1980s, which uncovered an extensive area of the *domus*, and on the other hand, to some of the *villa*'s unique features, notably the quantity and quality of the *opus tessellatum* pavements. Among these pavements, the mosaic featuring an inscription of the landlords' names and their probable portrait representations is particularly noteworthy (Paço 1963; Monteiro 1999).

The project '*Villa* Cardílio and the Romanization of the Almonda basin' initiated in 2021, emerged within the framework of a cooperation agreement between the Municipality of Torres Novas and UNIARQ - Centre for Archaeology of the University of Lisbon, School of Arts and Humanities. It encompasses three primary research strands: the examination of artifacts and archaeological contexts from previous excavations at *Villa* Cardílio (1960s and 1980s); new archaeological excavations in the *pars rustica* and *pars fructuaria*; and an analysis of Roman influence in the territory of the hydrographic basin of the Almonda River (Filipe et al. 2021).

This paper aligns with the first research strand mentioned above, focusing on the study of the ceramics recovered during the earlier excavations. The objective is to analyse the collection of amphorae imported from various regions of the Mediterranean and to establish the main trends and consumption patterns in the *villa* commerce relations between the 1st and 4th/5th centuries AD.

It is worth noting that a summary publication of an amphorae assemblage from *Villa* Cardílio was published some years ago (Diogo and Monteiro 1999). However, this publication, besides being incomplete and not fully representative of

the overall imports discovered at the *villa*, lacks detailed characterization of some amphorae in terms of provenance and typology. This justifies a revision of the amphorae set's characterization, as well as the publication of the entire assemblage of imported containers (fig. 1).

Sample overview

The analysed amphora assemblage primarily originates from archaeological excavations conducted in the *pars urbana* of the *villa* by António Nunes Monteiro in the 1980s and, to a lesser extent, by Afonso do Paço in the 1960s.

Provenance	TS (total sherds)	% TS	MNI	% MNI	% MNI extra province
<i>Lusitania</i> , Tejo/Sado	515	84,3%	224	82,1%	
<i>Lusitania</i> , Peniche	2	0,3%	2	0,7%	
Total <i>Lusitania</i>	517	84,6%	226	82,8%	
<i>Baetica</i> , West coast	33	5,4%	17	6,2%	37,0%
<i>Baetica</i> , Guadalquivir Valley	34	5,6%	15	5,5%	32,6%
Total <i>Baetica</i>	67	11,0%	32	11,7%	69,6%
<i>Tarraconensis</i> , North coast	5	0,8%	2	0,7%	4,4%
<i>Gallia Narbonensis</i>	1	0,2%	1	0,4%	2,2%
<i>Italia</i> , Tyrrhenian coast	11	1,8%	4	1,5%	8,7%
<i>Sicilia</i> , Lipari Island	1	0,2%	1	0,4%	2,2%
North Africa	1	0,2%	1	0,4%	2,2%
Eastern Mediterranean	7	1,2%	5	1,8%	10,9%
Indeterminate	1	0,2%	1	0,4%	
TOTAL	611	100%	273	100%	100%

Tab. 1. Global quantification of *villa* Cardílio amphorae.

The overall sample comprises 611 classifiable amphora sherds and 273 MNI (Minimum Number of Individuals): 83% correspond to Lusitanian productions, and 17% to extraprovincial imports. Within the latter category, 77% represent amphorae from the Principate era, and 23% pertain to Late Antiquity containers, spanning a chronology from the beginning of the Principate of Augustus to the 4th/5th century (Table 1).

Principate

Imports are predominantly represented by products from *Baetica* (70.6%), with the Guadalquivir Valley (41.2%) particularly standing out in comparison to the coastal regions (29.4%). From the western coast of Baetica, examples of Dressel 7-11, dating back to the 1st century AD, along with Dressel 7 and Dressel 9 from the last decades of the 1st century BC

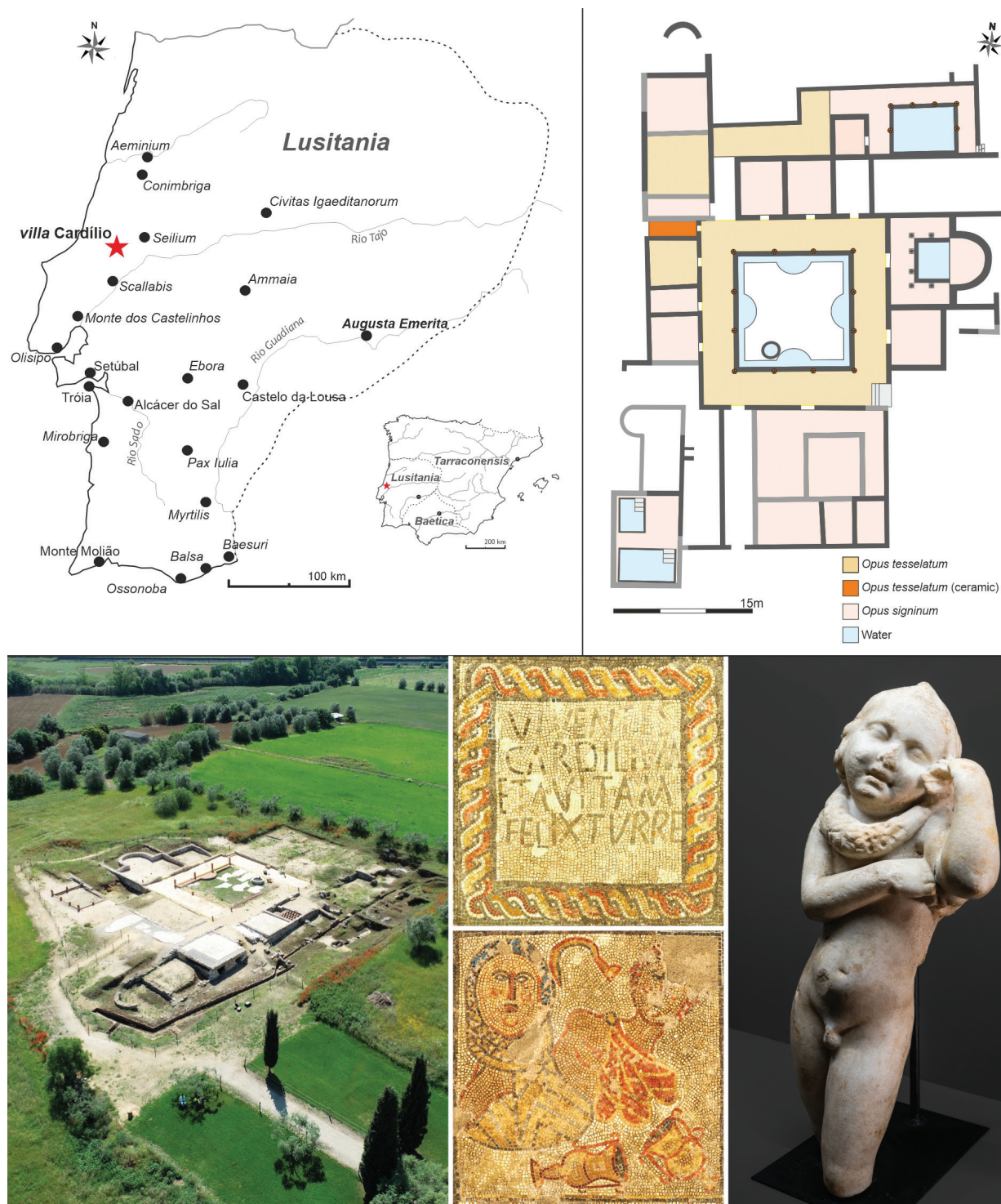


Fig. 1. Location of villa Cardilio; *pars urbana* plan; aerial photograph; details of some villa's *opus tessellatum*; and statue of Eros, recovered in the 1963/64 excavations.

Provenance	Amphora type	MNI	% MNI	% MNI in region	% MNI in province
<i>Baetica</i> , West coast	Dressel 7	1	2,9%	10%	4,2
	Dressel 9	1	2,9%	10%	4,2%
	Dressel 7-11	3	8,8%	30%	12,5%
	Dressel 28	1	2,9%	10%	4,2%
	Beltrán IIA	2	5,9%	20%	8,3%
	Beltrán IIB	2	5,9%	20%	8,3%
	Total	10	29,4%	100%	41,7%
<i>Baetica</i> , Guadalquivir Valley	Oberaden 83/Ovoid 7	1	2,9%	7,1%	4,2%
	Haltern 70 (Augustus-Tiberius)	3	8,8%	21,4%	12,5%
	Haltern 70 (Claudius-Nero)	1	2,9%	7,1%	4,2%
	Dressel 2-4	2	5,9%	14,3%	8,3%
	Dressel 20 (Julio-Claudian)	1	2,9%	7,1%	4,2%
	Dressel 20 (Nero-Vespasian)	1	2,9%	7,1%	4,2%
	Dressel 20 (Flavian-Trajan)	1	2,9%	7,1%	4,2%
	Dressel 20 (Antonin)	4	11,8%	28,6%	16,7%
	Total	14	41,2%	100%	58,3%
<i>Tarraconensis</i> , North coast	Dressel 3-2	2	5,9%	100%	100%
	Total	2	5,9%	100%	
<i>Gallia Narbonensis</i>	Gauloise 4	1	2,9%	100%	100%
	Total	1	2,9%	100%	
<i>Italia</i> , Tyrrhenian coast	Dressel 2-4	3	8,8%	100%	100%
	Total	3	8,8%	100%	
<i>Sicilia</i> , Lipari Island	Richborough 527	1	2,9%	100%	100%
	Total	1	2,9%	100%	
Eastern Mediterranean	Late Rhodian/Camulodunum 184	1	2,9%	33,3%	33,3%
	Dressel 2-4/5	2	5,9%	66,7%	66,7%
	Total	3	8,8%	100%	100%
TOTAL		34	100%		

Tab. 2. Extraprovincial imports quantification during the Principate, by provenance regions.

Content	Provenance	Amphora type	MNI	% MNI	% MNI in region	% MNI in province	% MNI in content
Fish products	<i>Baetica</i> , West coast	Dressel 7	1	2,9%	11,1%	11,1%	11,1%
		Dressel 9	1	2,9%	11,1%	11,1%	11,1%
		Dressel 7-11	3	8,8%	33,3%	33,3%	33,3%
		Beltrán IIA	2	5,9%	22,2%	22,2%	22,2%
		Beltrán IIB	2	5,9%	22,2%	22,2%	22,2%
		Total	9	26,5%			100%
	TOTAL		9	26,5%	100%	100%	100%
Wine	<i>Baetica</i> , West coast	Dressel 28	1	2,9%	100%	14,3%	6,3%
		Total	1	2,9%	100%	14,3%	6,3%
	<i>Baetica</i> , Guadalquivir Valley	Haltern 70 (Augustus-Tiberius)	3	8,8%	50%	42,9%	18,8%
		Haltern 70 (Claudius-Nero)	1	2,9%	16,7%	14,3%	6,3%
		Dressel 2-4	2	5,9%	33,3%	28,6%	12,5%
		Total	6	17,6%	100%	100%	37,5%
	<i>Tarraconensis</i> , North coast	Dressel 3-2	2	5,9%	100%	100%	12,5%
		Total	2	5,9%	100%	100%	12,5%
	<i>Gallia Narbonensis</i>	Gauloise 4	1	2,9%	100%	100%	6,3%
		Total	1	2,9%	100%	100%	6,3%
	<i>Italia</i> , Tyrrhenian coast	Dressel 2-4	3	8,8%	100,0%	100%	18,8%
		Total	3	8,8%	100,0%	100%	18,8%
	Eastern Mediterranean	Late Rhodian/Camulodunum 184	1	2,9%	33,3%	33,3%	6,3%
		Dressel 2-4/5	2	5,9%	66,7%	66,7%	12,5%
		Total	3	8,8%	100,0%	100%	18,8%
	TOTAL		16	47,1%			12,5%
Olive oil	<i>Baetica</i> , Guadalquivir Valley	Oberaden 83/Ovóide 7	1	2,9%	12,5%	12,5%	12,5%
		Dressel 20 (Julio-Claudian)	1	2,9%	12,5%	12,5%	12,5%
		Dressel 20 (Nero-Vespasian)	1	2,9%	12,5%	12,5%	12,5%
		Dressel 20 (Flavian-Trajan)	1	2,9%	12,5%	12,5%	12,5%
		Dressel 20 (Antonin)	4	11,8%	12,5%	12,5%	12,5%
		Total	8	23,5%	100%	100%	100%
	TOTAL		8	23,5%			100%
Alum	<i>Sicilia</i> , Lipari Island	Richborough 527	1	2,9%	100%	100%	100%
		Total	1	2,9%	100%	100%	100%
	TOTAL		1	2,9%			100%
TOTAL			34	100%			

Tab. 3. Extraprovincial imports quantification during the Principate, by content.

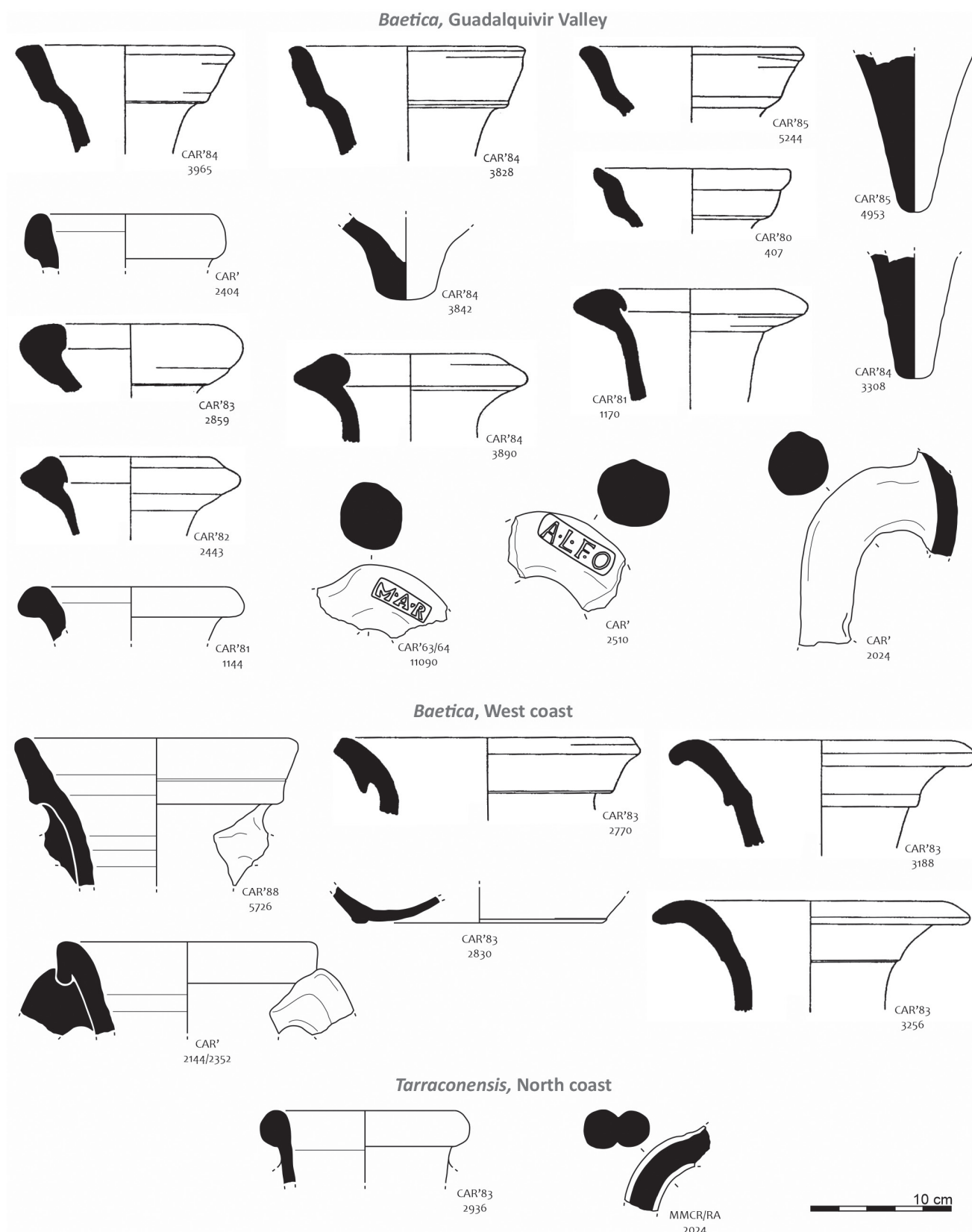


Fig. 2. Principate imports. *Baetica*, Guadalquivir Valley: Haltern 70 Augustus-Tiberius (3965*, 3828*, 407*), Haltern 70 Claudius-Nero (5244*), Haltern 70 (4953, 3308), Oberaden 83/Ovoid 7 (2404), Indeterminate Ovoid (3842), Dressel 20 Julio-Claudian (2859*, 11090), Dressel 20 Flavian-Trajan (1170*), Dressel 20 Antonin (3890*, 2443*, 2510, 2024), Dressel 2-4 (1144). *Baetica*, West coast: Dressel 7 (5726), Dressel 9 (2770*), Dressel 7-11 (3188*), Dressel 28? (2830), Beltrán IIA (2144/2352), Beltrán IIB (3256*). *Tarraconensis*, North coast: Dressel 3-2 (2936, 2024). * in Diogo and Monteiro 1999.

and early 1st century AD, have been identified. Additionally, Beltrán IIA and IIB, circulating primarily between the middle of the 1st and the 2nd century AD, are present in slightly smaller proportions. Dressel 28 is also noted from the western coast of *Baetica*.

Among imports from the Guadalquivir Valley, Oberaden 83/Ovoid 7 stands out, dating from the last two decades of the 1st century BC to the first decade of the 1st century AD. All the variants of Dressel 20 are attested, spanning from the Julio-Claudian Dynasty to the Antonine era, with a notable predominance of the latter. Haltern 70 is mainly represented by the Augustus-Tiberius variant and, to a lesser extent, by the Claudius-Nero variant. Additionally, two Dressel 2-4 specimens produced in the Guadalquivir Valley were identified.

Following Baetican imports in significance are those from *Italia* and the Eastern Mediterranean (8.8% each). From the former, only Dressel 2-4 was recorded, a common occurrence in Lusitanian sites, with exceptions noted in *Olisipo* (Filipe 2023) and *Augusta Emerita* (Almeida and Sánchez Hidalgo 2013) where other types from that region during the Empire period were observed.

Similarly, regarding imports from the Eastern Mediterranean, only the most common forms in the Western Iberian Peninsula are present: Late Rhodian/Camulodunum 184 and Dressel 2-4/5, the latter being more prevalent (Almeida and Sánchez Hidalgo 2013; Filipe 2023). Although less prominent, imports from *Tarraconensis* (5.9%), *Gallia* (2.9%), and *Lipari Island* (2.9%) are also documented, each represented by a single amphora type: Dressel 3-2, Gauloise 4, and Richborough 527, respectively.

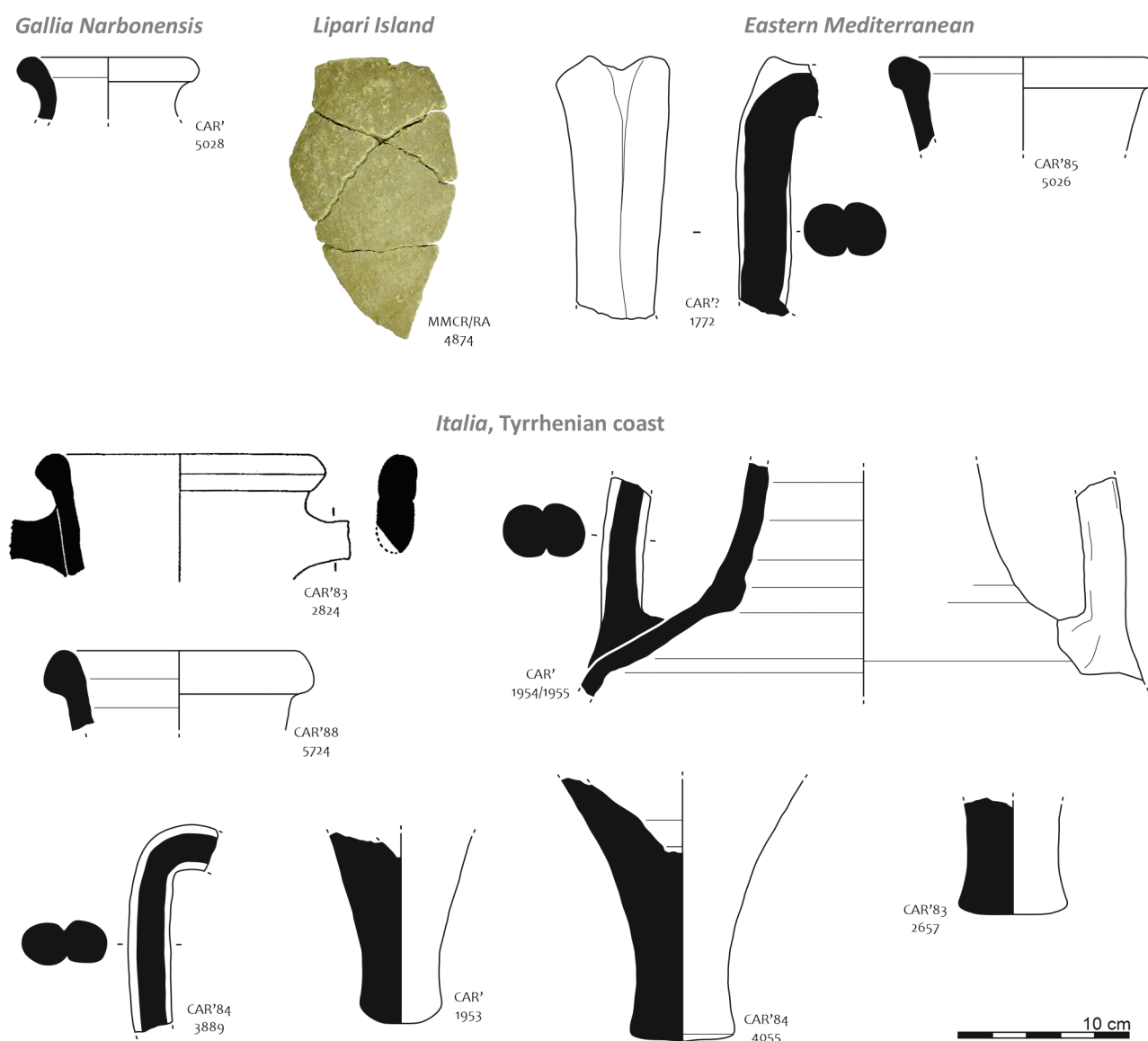


Fig. 3. Principate imports. *Gallia Narbonensis*: Gauloise 4 (5028). *Sicilia*, Lipari Island: Richborough 527 (4874). *Italia*, Tyrrhenian coast: Dressel 2-4 (2824*, 1954/1955, 5724, 3889, 1953, 4055, 2657). Eastern Mediterranean: Dressel 2-4/5 pinched handle (1772), Late Rhodian/Camulodunum 184 (5026). * in Diogo and Monteiro 1999.

Regarding foodstuffs, wine imports predominate (47%) over olive oil (23.5%) and fish products (26.5%). Unlike fish products and olive oil, wine imports come from various regions across the Mediterranean, primarily from the Guadalquivir Valley (37.5%), *Italia*, and the Eastern Mediterranean (18.8% each). Products from *Tarraconensis*, *Gallia*, and the western coast of *Baetica* are also included. Olive oil and fish product imports exclusively originate from the Guadalquivir Valley and the Baetican coast, respectively. Imports are supplemented with *alumen* from Lipari Island, comprising 2.9%.

Late Antiquity

During Late Antiquity, *Baetica* remains the predominant importer (70%), with products from the coastal area standing out in this period (60%) compared to those from the Guadalquivir Valley (10%). From the latter region, only the 3rd-century variant of Dressel 20 is attested, carrying olive oil, which continues to be imported exclusively from the Guadalquivir Valley.

The prevalence of imports from the Western coast of *Baetica* is primarily based on the prominence of Keay XVI, which, along with Almagro 51C, also from *Baetica*, constituted the only extraprovincial imports of fish products in *villa* Cardílio during this time. This resurgence of Baetican fish product

imports, in significant quantities, is also evident in other consumption centres in Lusitania, particularly in *Olisipo* (Filipe, Pimenta and Almeida 2021: 122; Filipe 2023: 549).

There are also imports from the Eastern Mediterranean (20%) and from North Africa (10%). From the former region, LRA 1 and LRA 3 are attested, both used for the transport of wine, providing valuable evidence of the continuity of food product imports in a later phase. They probably arrived at *villa* Cardílio between the 4th and 5th centuries, periods during which they were more common (Pieri 2005). From North Africa, only the presence of *Africana* IIA has been documented. The question regarding which product they carried has not yet been fully resolved, with both wine and fish currently being considered (Rizzo 2014; Bonifay 2021).

In summary, during Late Antiquity, fish products constitute the majority of food imports (67%), predominantly represented by Keay XVI type amphorae from the Baetican West coast. Wine (22%) came exclusively from the Eastern Mediterranean, and olive oil (11%) from the Guadalquivir Valley.

Final Remarks

Villa Cardílio, situated in the Tagus Valley, benefitted from significant fluvial and terrestrial trade routes within the territory, facilitated by the Tagus River and the XVI road

Provenance	Amphora type	MNI	% MNI	% MNI in region	% MNI in province
<i>Baetica</i> , West coast	Keay XVI	4	40%	66,7%	57,1%
	Almagro 51C	2	20%	33,3%	28,6%
	Total	6	60%	100%	
<i>Baetica</i> , Guadalquivir Valley	Dressel 20 (3rd century)	1	10%	100%	14,3%
	Total	1	10%	100%	100%
North Africa	<i>Africana</i> IIA	1	10%	100%	100%
	Total	1	10%	100%	100%
Eastern Mediterranean	LRA 1	1	10%	50%	50%
	LRA 3	1	10%	50%	50%
	Total	2	20%	100%	100%
TOTAL		10	100%		

Tab. 4. Extraprovincial imports quantification during Late Antiquity, by provenance regions.

Content	Provenance	Amphora type	MNI	% MNI	% MNI in region	% MNI in province	% MNI in content
Fish products	<i>Baetica</i> , West coast	Keay XVI	4	40%	67%	67%	67%
		Almagro 51C	2	20%	33%	33%	33%
		Total	6	60%	100%		100%
	TOTAL		6	60%			100%
Wine and wine products	Eastern Mediterranean	Late Roman 1	1	10%	50%	50%	50%
		Late Roman 3	1	10%	50%	50%	50%
		Total	2	20%	100%	100%	100%
	TOTAL		2	20%			100%
Olive oil	<i>Baetica</i> , Guadalquivir Valley	Dressel 20 (3rd century)	1	10%	100%	100%	100%
		Total	1	10%	100%	100%	100%
	TOTAL		1	10%			100%
Indet.	North Africa	<i>Africana</i> IIA	1	10%	100%	100%	100%
		Total	1	10%	100%	100%	100%
	TOTAL		1	10%			100%
TOTAL			10	100%			

Tab. 5. Extraprovincial imports quantification during Late Antiquity, by content.



Fig. 4. Late Antiquity imports. *Baetica*, West coast: Keay XVI (2074, 2195), Almagro 51C (989, 683, 765). *Baetica*, Guadalquivir Valley: Dressel 20 3rd century variant (557). North Africa: Africana IIA (3769). Eastern Mediterranean: Late Roman 1 (965), Late Roman 3 (8970).

of Antonino's itinerary (*Olisipo-Bracara Augusta*). This connected the *villa* to *Olisipo*, serving as a vital commercial hub for the inland regions. The accessibility to regional trade networks is evidenced by the diverse range of food products imported from across the Mediterranean.

It's important to note that the precise chronology of the *villa*'s establishment remains unclear. António Nunes Monteiro suggests a possible foundation in the 1st century AD (Monteiro 1999: 105), although current knowledge only definitively places it during the Principate of Claudius. This is supported by the volume of materials unearthed in earlier excavations, indicating a more substantial occupation during this period, with fewer artifacts from earlier periods.

Nevertheless, the presence of somewhat older amphorae among the extraprovincial imports is intriguing. These include Dressel 7, Dressel 9, Oberaden 83/Ovoid 7, and Haltern 70, Augustus-Tiberius variant, which circulated roughly between the last quarter of the 1st century BC and the Principate of Tiberius. Additionally, imports of *terra sigillata*, thin-walled ware, and coins from the Augustus and Tiberius periods have been documented, indicating an earlier occupation at the site, possibly related to a rural and agricultural nucleus.

Interestingly, 77% of the imported amphorae from *Villa Cardílio* are attributed to the Principate, with only 23% attributed to Late Antiquity, despite the known ruins at the *villa* mainly dating to the Late Period.

During the Principate, extraprovincial imports appear more significant during the 1st century AD, with a slight decline observed in the 2nd century AD. This decline coincides with the peak of the fish products industry and wine exploitation in Lusitania during the 2nd century AD, which

likely supplied regional markets. These trends are observable in consumption centers throughout the province.

In Late Antiquity, there is a noticeable decrease in imports, particularly in wine imports, which represent only 20% and originate exclusively from the Eastern Mediterranean in the 4th and 5th centuries. Baetican fish products are prevalent in the 3rd and 4th centuries, while the import of olive oil seems to be restricted to the 3rd century and to Baetican products. Though data for this period is limited, these trends are generally consistent with those observed in *Olisipo* (Filipe, Pimenta and Almeida 2021).

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