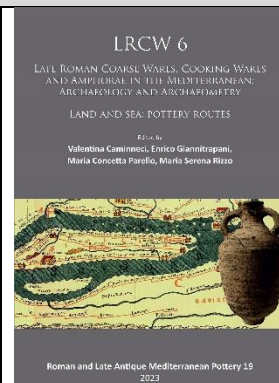


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Francesc Rodríguez Martorell ; Josep Maria Macias Solé



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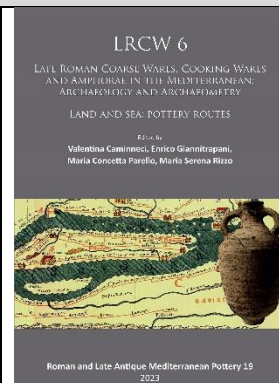
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Tarracona: **Pottery and trade in the 7th and 8th centuries**

Francesc Rodríguez Martorell and Josep Maria Macias Solé

Abstract: The study of new 7th- and early 8th-century pottery contexts in the port area of Tarragona has allowed us to update our archaeological knowledge of the trading networks involving this Hispanic Mediterranean town in the late Visigothic period. The results show that the Tarraconensian port was connected by sea with the main focal points and distribution routes for food supplies and consumer items in North Africa and the Near East.

Keywords: TARRACONA, LATE ROMAN AND EARLY BYZANTINE POTTERY, 7TH AND EARLY 8TH CENTURY, LATE ROMAN WARES, NORTHEASTERN SPAIN

Introduction

The Visigothic city of *Tarracona –Colonia Iulia Urbs Triumphalis Tarraco* during the Roman period and the coastal capital of *Hispania Tarraconensis*– is located in the northeast of the Iberian Peninsula, between the Pyrenees and the River Ebro. Numerous publications of pottery assemblages excavated in Tarragona have provided us with excellent knowledge of ceramic trends and imports in the Late-antique period, particularly those of the 5th and 6th centuries (Keay 1984; Aquilué 1992; Macias 1999; Remolà 2000). However, the absence of precise stratigraphic contexts in the centuries that concern us (the 7th and 8th) and the generalised idea of the town's decline and its abandonment by the elites during the Islamic conquest has not allowed us to propose a rich and dynamic situation during this period.

The main objective of this paper is not to offer an exhaustive or detailed study of the different pottery typologies that reached the port of Tarracona. We want to show the advances made within the framework of a doctoral thesis (Rodríguez, 2020). Based on new contexts from the late Antique port, we document the evolution of amphorae, fine tableware, cooking and coarse ware, as well as the inherent question of the long-distance trade routes and connections and the evident regionalisation of cooking/coarse ware production (a general perspective in Reynolds 2010; 2015 and 2016).

The contexts

Between 1995 and 2017, the archaeological excavations in the port suburb near the mouth of the River Francolí confirmed the existence of a notable peri-urban settlement during the late Visigothic period. It is attested by the maintenance and repaving of the ancient Roman roads and the localisation of various port warehouses, iron and glass-making workshops (smithies, kilns and vats), a small number of private *balnea* linked to residential areas that are difficult to identify, and domestic buildings

(Lasheras 2017 and 2018; Macias and Remolà 2005; Remolà and Sánchez 2010; Rodríguez et al. 2020).

Here we present four pottery deposits with different compositions (Fig.1). Firstly, we reviewed the preliminary study presented in the year 2000 of the fill of a small pit adjacent to the 'maritime road' dated to the second half of the 7th century (P2-7-22a/1, Macias and Remolà 2000). We included the five fill strata of the pit, disregarding the three covering levels of the private *balnea*. These events occurred at different times and need to be dealt with independently. This decision resulted in a small assemblage of 42 individuals, which does not allow their percentage to be compared to the other port contexts; nevertheless, we have maintained this study as it is an almost complete example of pottery profiles. Secondly, we documented a constructive horizon in two port warehouses between the second half and two port buildings dated 650/675-700 (TVB27/1) (Díaz and Roig 2016; Rodríguez and Macias 2016). Finally, on the same site, another building expansion is attested. They have been linked to the appearance of productive and domestic areas in the 8th century (TVB27/2.1 and TVB27b/2.1) (Rodríguez 2020; Rodríguez et al. 2020).

Fine tableware, amphorae, cookware and lamps: type- tendencies

As we see in other regions on the western Mediterranean coast (Reynolds 2010 and 2016), fine tableware is represented mainly by the latest forms of ARSW D principally Hayes Types 105 (Figures 3.3-6; 4.4-5;

5.6-10) and 109 (Figure 3.7-8; 5.12-14), although there are also examples of Hayes 99D (Figure 3.9-10), 91D, 106 (Figure 5.11). At first, it was thought that the imports of this production on the coasts of the Iberian Peninsula had all but ceased around the 7th century (Aquilué 2003; Járrega 2013). However, we can now confirm that in Tarraco, ARSW D maintained a stable presence in the 7th and early 8th-century contexts, although in lower quantities if we compare it to that of amphorae and cooking/coarse ware. As a whole, we attest a majority consumption of Hayes 105 large plates (23 vessels), closely followed by Hayes 109 dishes (12 vessels) and late Hayes 99D (16 vessels). This proportion is similar to Marseille Phase 1-4 (Bien 2007) and probably also Arles, although the sample is small (Mukai et al. 2017). Otherwise, it moves further away from Crypta Balbi (Sagui 1998) and Sant'Antonino di Perti (Bertolotti and Murialdo 2001), where Hayes forms 109 and Hayes 99D seem to be more numerous.

Amphorae held a pre-eminent position in the trade networks of the 7th and 8th centuries (P2-7-22a/1: 35,71%; TVB27/1: 31,13%; TVB27/2.1: 29,64%; TVB27b/2.1: 24,49%). Those from North Africa were the most numerous, particularly the large and cylindrical vessels, such as the Keay 61 (Figure 2.1; 3.11-16; 4.6-7; 5.16-17) and Keay 8A (Figure 3.17-18; 4.8-9; 5.18-19) types. Besides, we document an essential group of globular amphorae, like Bonifay Globular type 2 (Figure 2.4; 3.19; 4.10; 5.24-25) and type 3/Castrum Perti (Figure 3.21-23; 5.26-27) and, maybe, a type 47A-B of S. Antonino di Perti from Moknine 2 (cf. Nacef 2017: 509, figure 10). In contrast, we attest a more minor but representative number of Spatheia type 3 (Figure 3.24; 5.15), Keay 50 (Figure 5.20), Orlo a Fascia/ Bonifay type 52 (Figure 2.2; 5.22-23) and Ech Chekaf IV / LRA 1B1 similis (Figure 2.3; 5.21).

Western amphorae share the centre stage with containers of an eastern Mediterranean origin, mainly the LRA 1B1

(Figure 2.5; 3.25; 5.31-32) and LRA 4C/LRA 4b3 (Figure 2.6; 3.26; 5.33-35). On the other hand, the LRA 5/Pieri "bag-shaped" type 3 (Figure 5.36-38) and LRA 6/Pieri "bag-shaped" type 2A/Hayes 7B Sarçane type (figure 3.28-29), Pieri LRA 2C (Figure 3.27; 4.11; 5.28) and two different eastern globular amphorae appear in the early 8th-century contexts (Figure 5.29-30). Further, we should mention the minority finds of the Samos Cistern Type and the LRA 7. Local/regional amphorae are limited to the Remolà Tipo Tardío B (Figure 3.30). Finally, it also attests to some globular indeterminates copies (Sicilian?) (Figure 4.12-13).

Concerning the cooking ware, we attest a considerable number of vessels (P2-7-22a/1: 64,29%; TVB27/1: 60,08%; TVB27/2.1: 72,62%; TVB27b/2.1: 57,14%). Among them, we document a prominent percentage of pottery from the eastern Mediterranean, specifically Aegean and Levantine, but also Asian Minor forms.

Those that stand out most are the Sarçane Cooking Ware 3B / Oc/Or/62 (Figures 3. 39-41; 4. 25-26; 5. 47-48) and the Reynolds and Waksman 4.1 / Oc/Or/69 (2007: 63) (Figure 3.37-38; 5.50). However, it is also worth highlighting the presence of sliced-rim casseroles (Ca/Or/66-67: Figure 3.36; 5.43; and Cb/Or/63: Figure 5.44) and lips (T/Or/11.2: Figure 5.45-46), which can be included in the extensive Workshop X group. We also documented the presence of Oc/Or/65 types (Figure 5.49), late variants of Fulford Casserole 35 and similar to the form documented in Chios (Boardman 1989: 104, Figure 35.220).

Nevertheless, the data from this pottery category indicate many local and/or regional productions. This phenomenon can be linked to the culmination of a progressive and complex regionalisation initiated at the end of the 5th century AD (Macías 2003: 30), which led to the potteries near the town increasing their output. In this context, we can document the Oc/Gre/64 and 66 families, globular pots with a convex base, a straight rim with a rounded rim face, and an internal lid seat (Figure 2.18-21; 3.42-44; 4.28-29; 5.51). Previously, it had been suggested that these examples were of eastern Mediterranean origin, as they had a morphology close to Sarçane grey gritty ware (cf. Hayes 1992). Among them, we document forms like Ca/Gre/50, Ca/Gre/65, Cb/Gre/6 and Cb/Gre/7, with convex bases, protruding rims, flat or with central depressions and internal ridges to support the lip (Figure 2.8-10; 3.31-34; 4.14-20; 5.39- 42). Similar morphological profiles have been detected in two archaeological excavations in Barcelona, Arxiu Administratiu and the Pedralbes Workshop, dated to the Andalusian horizon (García Biosca et al., 2003; Beltrán de Heredia et al., 2018).

Other pottery categories also need to be mentioned here. On the one hand, very few late-Roman *unguentaria* are documented, mainly Early Byzantine ampullae and Ephesian early-Byzantine amphoriskoi. Nevertheless, we should be cautious concerning such finds in 8th-century contexts, as their presence may be residual. On the other hand, of particular note are the finds of numerous lamps of a different typology to

the known African productions, such as the last Hayes IIB/Atlante X types found in the areas under Visigothic or Byzantine control (Járrega 2013: 60; Vizcaino 2009: 630-636). The new finds are in keeping with the typological diversity of other Mediterranean areas, including the Italian Peninsula/Sicilian (Figure 4.1-3; 5.3-5), Syrian-Palestinian (Figure 5.2), and Balcan lamps (Figure 3.1-2; 5.1) have been identified. Thus, the Tarragona data do not bear out the idea of an ‘African monopoly’ in lamps, as already indicated by the eastern examples in such museographic collections as the M.A.N (Modrzewska 1998: 25-58), the reoccupation strata of the early-Roman baths of Lliria (Valencia) (Escrivà *et al.* 2005: 276, I.3) and the stratigraphy of Vigo (Galicia) (Fernández and Capelli 2014).

We have identified some eastern Mediterranean lamps with parallels in the Byzantine camp of Kranevo, Sucidava, Depost 30 of Sapaçane (Hayes 1992: 426, note 25 and 25) and Yassi Ada shipwreck (Vitelli 1982). We can add the so-called “Sicilian” or “a Rosario” lamps. These examples have only been documented in early 8th-century contexts (TVB27/2.1 and TVB27b/2.1). We can thus confirm the economic and commercial vitality of the port emporium of Tarragona in the far northwest of the Mediterranean

Preliminary conclusions

Late 7th-century stratigraphies still need to be clarified from those of the early 8th century. Despite the progress made, we cannot compare our knowledge of this period with that of the preceding centuries. Many doubts still need to be resolved regarding the identification of these vessels’ geographical origin, chronology, content and functionality. We also have to consider the difficulties intrinsic to the process: Mediterranean regionalisation and political fragmentation, the coast-inland dichotomy, the diminishing value of Tunisian tableware as a guide, and the absence of coins or absolute dates.

Moreover, from the historical point of view, recent studies point to a certain persistence of the city of *Tarragona* after the Arab-Berber expansion (Lasheras and Rodríguez forthcoming). Traditionally, the end of the Visigothic town has been dated to 713-714, but current thought suggests there was a *madinat Tarrakūna* during an uncertain period in the 8th century (Gonzalo 2013; Pérez 2013; Lasheras and Rodríguez forthcoming). The historical and toponymic sources indicate a stable Islamic presence in the town’s territory. The liturgical text known as the Verona oration must have been removed from the town before 730-740. Finally, the expansion of places of worship dedicated to the Tarraconensian martyr, Saint Fructuosus, in the northern Hispanic territories, in theory, a result of the abandonment of the episcopal see, is dated to the middle of the Carolingian period and during the entire 8th century (Muñoz 2013: 261s). In this respect, we conclude that there is no concise historical evidence to show whether or not the town continued following the arrival of the new political power. We can only establish a theoretical framework for *madinat Tarrakūna* in the 8th-century and place the burden of resolving this question on future pottery studies.

One possible way of establishing a clear distinction between these centuries could be the choice of the deposit according to how it was formed, with priority given to closed contexts, dumps or building fills, rather than levels of abandonment or slow sedimentation. In this case, the contextualised analyses of the pottery assemblages are based on successive building fills. Thus, Context TVB27/1, dated from the second half to the end of the 7th century, creates a *post-quem* limit for situating the subsequent building in a chronology closer to the 8th century. This stratigraphic distinction allows us to separate similar pottery repertoires chronologically (TVB27/2.2, TVB27/2.3 and TVB27b/2.3), with the interpretative challenges they represent.

Regarding the evolution of the main pottery categories attested in the studied contexts, the percentages of amphorae, fine tableware and cooking/coarse ware demonstrate typical behaviour during the two centuries (Figures 6 and 7). Thus, if we take an average percentage based on Contexts TVB27/1, TVB27/2.1 and TVB27b/2.1, we see a high ratio of cooking ware (64%), while amphorae and fine tableware maintain constant proportions (29% and 7% respectively). These data reflect two aspects: the continuity of the long-distance trading circuits in the western Mediterranean around the 8th century and the complex regionalisation of cooking/coarse ware productions.

In the case of the regionalisation of cooking ware, we are beginning to see evidence of the introduction of a new culture of domestic utensils that links the local and regional production centres to the evolution and transfer of technology in the Mediterranean. While it is true that cooking/coarse ware is challenging to

pinpoint chronologically (Alba and Gutiérrez 2008: 607), adopting or imitating vessels for everyday use manufactured in distant provinces becomes a chronological factor to take into account. This is the case, for example, of cooking pots Oc/Gre/64 and 66, but also other similar like Oc/ Gre/72-75, 78-82 or 126. At the same time, we have also shown the proliferation of similar profiles to the casseroles forms Ca/Gre/50 and 65 or Cb/Gre/6 and 7 in the contexts TVB27/2.1 and TVB27b/2.1, which indicate greater diversity formally in the stages of transition between the 7th and the early 8th-centuries. This dynamic is reinforced in the succession contexts of the eighth century, TVB27/2.2, TVB27/2.3 and TVB27b/2.3, which for reasons of space, we have not been able to introduce in this paper (see in Rodríguez 2020).

On the other hand, as already stated by P. Reynolds (2010: 130-135), Tarragona's data are perfectly similar to those detected in Marseille (Bonifay et al. 1998; Bien 2005 and 2007), Arles (Mukai et al. 2017), Sant'Antonino di Pertini (Murialdo 1995a-b; 1996; Mannoni and Murialdo 2001; Gandolfi et al. 2010), Naples (Arthur 1985; Carsana 1994; Carsana et al. 2007), Rome (Sagui 1998) and Carthage (Hayes 1978). In the same way, we also find similarities in the shipwrecks of Saint-Gervais 2 (Jézégou 1998) and Yassi Ada (Bass and Van Doorninck 1982), but also in Saraçhane (Hayes 1992), Chios (Boardman 1989), Eupalino's tunnel in Samos (Hautumm 1981 and 2004), Paphos (Hayes 2003: deposit 12 and 14) and Malta (Bruno 2004).

The presence or absence of certain imported individuals in a specific context can also help us fit the 8th century into the western Mediterranean. Of particular interest are the data affected by the fire in the fortified house of Sant-Peyre in Gard (Citter et al., 1996) and the association of Keay 61 and 50 African amphorae with a seal in Kufic characters (Bonifay 2004: 485). These amphorae in TVB27/1, TVB27/2.1 and TVB27b/2.1 are very revealing. Likewise, the Bonifay Globular type 2 and type 3 containers also increase in percentage in the later deposits of Tarragona. However, they continue prioritising large and medium format cylindrical containers (perhaps due to their easy recognition during the classification). As regards the eastern amphorae, LRA 1B1 continues to be predominant in these contexts (it also appears in Crypta Balbi), and we document a higher number of LRA 5 than in Marseille. LRA 6, LRA 4C, Agora M334 and Workshop X ware indicate an essential connection with Gaza/ Palestine to be analysed in more detail.

Regarding "Workshop X/Tell Keisan?" products, we documented these during the second half and the transition between the 7th and 8th centuries. As P. Reynolds points out (2011: 131), we also believe that their absence in Marseille may be fortuitous, and we draw attention to a strong connection between the north-east coast of Hispania, southern Gaul and Italy (Procop. Goth. 6.12.29). Also noteworthy is the presence for the first time in Tarragona of Pieri's form LRA 2C and eastern globular amphorae, along with Saraçhane Cooking Ware 3B / Oc/Or/62.

Finally, concerning ARSW D, the presence of Hayes 109B and 109C in the context is remarkable. However, it was not possible to document the differentiation of flat bases or progressively flatter and more expansive floors, as Hayes suggested (after Reynolds 2011: 107). In Tarragona, Hayes 109B has a thickness of about 4mm and Hayes 109C of 3-4mm. Likewise, they have been differentiated to the morphology of the rim: Hayes 109B is slightly flattened with a minor internal groove, and Hayes 109C is of triangular section. A rare variant of approximately 26 cm in diameter and 4,2mm in thickness has also been identified. However, as mentioned above, Hayes 105 and 99D prevail quantitatively.

Bibliography

Aquilué, X. 1992. *Relaciones económicas, sociales e ideológicas entre el Norte de Africa y la Tarraconense en época romana. Las cerámicas de producción africana procedentes de la Colonia Iulia Urbs Triumphalis Tarraco*. Unpublished PhD dissertation, University of Barcelona.

Aquilué, X. 2003. Estado actual de la investigación de la Terra Sigillata Africana en la Península Ibérica en los siglos VI-VII, in L. Caballero, P. Mateos and M. Retuerce (eds), *Cerámicas tardorromanas y altomedievales en la Península Ibérica : ruptura y continuidad* (Anejos de Archivo Español de Arqueología 28): 11-20. Madrid.

Alba, M. and S. Gutiérrez 2008. Las producciones de transición al mundo islámico: el problema de la cerámica paleoandalusí (siglos VIII y IX), in D. Bernal and A. Ribera (eds), *Cerámicas hispanorromanas. Un estado de la cuestión*: 585-613. Cádiz: Universidad de Cádiz.

Arthur, P. 1985. Naples: notes on the economy of a Dark Age city, in C. Malone and S. Stoddard [eds.] *Papers in Italian Archaeology IV* (BAR International Series 246). Oxford: BAR.

Arthur, P. 2010. Riflessioni intorno alla produzione e circolazione della ceramica nel basso adriatico, in *LRCW* 3: 79-88.

Augenti, A. and E. Cirelli 2007. Classe: Un osservatorio privilegiato per il commercio della tarda antichità, in *LRCW* 3: 605-615.

Bailey, D.M. 1988. *A catalogue of the lamps in the British Museum, III. Roman provincial lamps*, London.

Bass, G.F. 1982. The Pottery, in G.F. Bass and F. H. Van Doorninck (eds), *Yassi Ada: A Seventh-century Byzantine Shipwreck*: 155-188. Texas: A&M University Press

Bass, G. F. and F. H. Van Doorninck 1982. *Yassi Ada: A Seventh-century Byzantine shipwreck*, Texas: A&M University Press.

Beltrán de Heredia, J., J. Buxeda i Garrigós, M. Madrid Fernández and M. Valls Llorens 2018. El taller de Pedralbes i els gresols ceràmics de la plaça del rei per la fosa de plata. Evidències ceràmiques de la Barcelona del segle VIII: arqueologia i arqueometria. *Quarhis* 14: 96-121. Barcelona.

Bertolotti, F. and G. Murialdo 2001. La ceramica fine da mensa: sigillata Africana (e sue imitazioni), in T. Mannoni and G. Murialdo (eds.), *S. Antonino: un insediamento fortificato nella Liguria bizantina*. Istituto Internazionale di Studi Liguri: 317-337. Bordighera.

Bien, S. 2005. Des niveaux du VIIe siècle sous le Music-Hall de l'Alcazar à Marseille, in *LRCW* 1: 285-298.

Bien, S. 2007. La vaisselle et les amphores en usage à Marseille au VIIe siècle et au début du VIIIe siècle: première ébauche de typologie évolutive, in *LRCW* 2: 263-274.

Boardman, J. 1989. The finds, in M. Ballance, J. Boardman, S. Corbett and S. Hood [eds.] *Excavations in Chios 1952-1955. Byzantine Emporio*, The British School of Archaeology at Athens, Supplementary volume no. 20. Oxford.

Bonifay, M., M.B. Carre and Y. Rigoir 1998. *Fouilles à Marseille. Les mobiliers (Ier - VIIe siècles ap. J.-C)*. Marseille.

Bruno, B. 2004. L'arcipelago Maltese in età romana e bizantina. Attività economiche e scambi al centro del Mediterraneo, Edipuglia. Bari.

Carsana, V. 1994. Ceramica da cucina tardo-antica e alto- Medievale, in P. Arthur (ed.) *Il complesso archeologico di Carminiello ai Mannesi, Napoli (scavi 1983-1984)*, Collana del Dipartimento di Beni Culturali, settore storico-Archeologico, Università de Lecce: 221-258. Galatina.

Carsana, V., V. D'Amico and F. Del Vecchio 2007. Nuovi dati ceramologici per la storia economica di Napoli tra tarda antichità ed altomedioevo, in *LRCW* 2: 423-437.

Ceci, M. 1992. Note sulla circolazione delle Lucerne a Roma nell'VIII secolo: i contesti della Crypta Balbi. *Archeologia Medievale* XIX: 749-764.

Citter, C., L. Paroli, C. Pellecuer and J.M. Pène 1996. Commerci nel Mediterraneo nell'Alto Medioevo, in G.P. Brogiolo (ed.), *Early Medieval Towns in the Western Mediterranean*. Actes du Colloque (Ravello, 22-24 septembre 1994): 126-132. Firenze: All'Insegna del Giglio.

Diaz, M. and J.F. Roig 2016. Els edificis portuaris tardoantics de l'àrea fluvial de Tarraco i les seves tècniques constructives. *Quaderns d'Arqueologia i Història de la ciutat de Barcelona* 12: 78-92.

Escrivà, V., C. Martínez and X. Vidal 2005. Edeta en la Antigüedad tardía (Llíria, València), in J.M. Gurt and A. Ribera (eds), *Les ciutats tardoantiques d'Hispania. Cristianització i topografia. VI Reunió d'Arqueologia Cristiana Hispànica, València (2003)*: 267-277. Barcelona: Institut d'Estudis Catalans.

Fernández, A. and C. Capelli 2014. Una producción de cerámica común y de lucernas del medio oriente (Antioquia?) identificadas en Vigo (Galicia, Spain). *Rei Cretariae Romanae Fautorum Acta* 43: 681-690.

- Fraiegarì, P. 2008. *Le lucerne tardoantiche e altomedievale siciliane, egizie e del vicino oriente nel Museo Nazionale Romano*. Roma: Instituto Poligrafico e zecca dello stato.
- Gandolfi, D., G. Murialdo, C. Capelli and M. Bonifay 2011. Anfore africane di tardo V- VII secolo in Liguria (Italia): un aggiornamento dei dati archeologici e archeometrici, in *LRCW 3*: 33–56.
- Garcea, F. Appunti sulla produzione e circolazione delle lucerne nel Napoletano tra VII e VIII secolo. *Archeologia Medievale XIV*: 537-544.
- Garcia Biosca, J., N. Miró and E. Revilla 2003. Un context paleoandalusí a l'excavació de l'arxiu administratiu de Barcelona (1998), *Actes del II congrés d'Arqueologia Medieval i Moderna a Catalunya*, vol. 1: 383-380.
- Gonzalo, X. 2013. La integraci3n de Tarrakūna y su territorio en al-Andalus. *Arqueologia y Territorio Medieval 20*: 11-30.
- Hautumm, W. 1981. *Studien zu Amphoren der spätromischen und frühbyzantinischen Zeit*. Fulda.
- Hautumm, W. 2004. Keramik, in H. J. Kienast [ed.], *Die Wasserleitung des Eupalinos: die Funde*. Samos Band 20. Bonn.
- Hayes, J. W. 1972. *Late Roman Pottery*. London.
- Hayes, J. W. 1978. Pottery Report, 1976, in J. H. Humphrey [ed.] *Excavations at Carthage, 1976. Conducted by the University of Michigan IV*: 23-98. Ann Arbor.
- Hayes, J.W. 1992. *Excavations at Sarāçhane in Istanbul*. Princeton: Princeton University Press.
- Hayes, J. W. 2003. Hellenistic and Roman Pottery deposits from “Saranda Kolones” castle site at Paphos, *The Annual of the British School at Athens 98*: 447-503.
- Járrega, R. 2013. Las últimas importaciones romanas de cerámica en el este de Hispania Tarraconensis: una aproximaci3n. *Spal 22*: 143-172.
- Jézégou, M.P. 1998. Le mobilier de l'épave St-Gervais 2 (VIIe s.) à Fos-sur-mer (B-d-Rh), in M. Bonifay, M. B. Carre and Y. Rigoir (eds.), *Fouilles à Marseille. Les mobiliers (Ier - VIIe siècles ap. J.-C)*: 343-351. Marseille.
- Keay, S. 1984. *Late Roman Amphorae in the Western Mediterranean. A Typology and Economic Study: the Catalan Evidence* (BAR International Series 196). Oxford: BAR.
- Lasheras, A. 2017. El suburbio portuario de Tarraco en la Antigüedad tardía: modelos de ocupaci3n y evoluci3n urbana entre los siglos III y VIII, in S. Panzram [ed.] *Oppidum, civitas, urbs. Städteforschung auf der Iberischen Halbinsel zwischen Rom und al-Andalus*, Geschichte und Kultur der Iberischen Welt 13: 787-810. Münster: LIT Verlag.
- Lasheras, A. 2018, *El suburbi portuari de Tarraco a l'Antiguitat tardana (segles III - VIII)*. Unpublished PhD dissertation, University of Rovira and Virgili.
- Lasheras, A. and F. Rodríguez, forthcoming. Tarragona in the 8th century: new issues for discussion, in S. Esders, S. Polla, T. S. Richter and C. Wickham [eds.] *The 8th Century. Patterns of Transition in Economy and Trade Throughout the Late Antique, Early Medieval and Islamicate Mediterranean*. De Gruyter, Berlin.
- Leo Imperiale, M. 2004. Otranto, cantiere Mitello: un centro produttivo nel Mediterraneo Bizantino, in S. Patitucci (ed.) *Atti del V Congresso di Archeologia Medievale (Roma, CNR, 26-27 Novembre de 2001)*: 327 – 342. Firenze.
- Macias, J.M. 1999. *La ceràmica comuna tardoantiga a Tàrraco. Anàlisi tipològica i històrica (segles V-VII)*. Monografies Tarraconenses 1. Tarragona.
- Macias, J.M. 2003. Cerámicas tardorromanas de Tarragona: economía de mercado versus autarquía, in L. Caballero, P. Mateos and M. Retuerce (eds), *Cerámicas tardorromanas y altomedievales en la Península Ibérica: ruptura y continuidad* (Anejos de Archivo Español de Arqueología 16): 21-39. Madrid.
- Macias, J.M., I. Fiz, Ll. Piñol, M.T. Miró and J. Guitart 2007. *Planimetria Arqueològica de Tàrraco*, Tarragona.
- Macias, J.M. and J.A. Remolà 2000. Tarraco Visigoda: caracterizaci3n del material cerámico del siglo VII dC. *V Reuni3 d'Arqueologia Cristiana Hispànica. Cartagena (1998)*: 485-498. Barcelona: Institut d'Estudis Catalans.
- Macias, J.M. and J.A. Remolà 2005. El port de Tarraco a l'Antiguitat tardana. *VI Reuni3 d'Arqueologia Cristiana Hispànica: València*: 175-185. Barcelona: Institut d'Estudis Catalans.

- Mannoni, T. and G. Murialdo 2001. *S. Antonino: un insediamento fortificato nella Liguria bizantina*. Bordighera: Istituto Internazionale di Studi Liguri.
- Modrzewska, I. 1998. Lucernas tardoantiguas en la colección del M.A.N. *Boletín Museo Arqueológico Madrid* 6: 25-58.
- Mukai, T., J. -C. Trégliá, E. Dantec and M. Heijmans 2017, Arles, enclos Saint-Césaire. La céramique d'un dépotoir urbain du Haut Moyen Âge. Milieu du VIIe - début du VIIIe siècle apr. J.-C., in *LRCW* 5: 171-200.
- Muñoz, A. 2013. *Sant Fructuós de Tarragona. Aspectes històrics i arqueològics del seu culte, de l'antiguitat a l'actualitat*, Unpublished PhD dissertation, University of Rovira and Virgili.
- Murialdo, G. 1995a. Alcune considerazioni sulle anfore africane di VII secolo dal Castrum di S. Antonino nel Finale. *Archeologia Medievale* 22: 433-453.
- Murialdo, G. 1995b. Anfore tardoantiche nel Finale (VI-VII secolo). *Rivista di Studi Liguri* 59-60, 213-246.
- Nacef, J., 2017, Moknine 2 (Tunisie). Nouvelles données sur un atelier de potier d'époque tardive en Byzacène, in D. Dixneuf [ed.] *LRCW* 5: 491-515.
- Pavolini, C. 1998. Le Lucerne in Italia nel VI-VII secolo d.C.: alcuni contesti significativi, in Sagui, L. (ed.), *Ceramica in Italia: VI- VII secolo. Atti del Convegno in onore di John W. Hayes (Roma 1995)*, 123-139. Roma: Biblioteca di Archeologia Medievale.
- Pérez, M. 2013. Tarraco a l'època visigòtica. Història política i eclesiàstica, in J.M. Macias and A. Muñoz (eds.), *Tarraco christiana ciuitas*, Serie Documenta 24, Tarragona: 97-110.
- Remolà, J.A. 2000. *Las ánforas tardo-antiguas en Tàrraco (Hispania Tarraconensis)*. Barcelona: Universitat de Barcelona.
- Remolà, J.A. and J. Sánchez 2010. El sector occidental del suburbí portuari de Tarraco. *Butlletí Arqueològic* 31: 535-558.
- Reynolds, P. 2010, *Hispania and the Roman Mediterranean, AD 100- 700: Ceramics and Trade*. London: Duckworth.
- Reynolds, P. 2011. A 7th century pottery deposit from Byzantine Carthago Spartaria (south-eastern Spain), in M. A. Cau, P. Reynolds and M. Bonifay [eds.] *LRFW* 1: 99-127.
- Reynolds, P. 2015. Material culture and the Economy in the Age of Saint Isidore of Seville: the 6th and 7th centuries, in J. -P. Caillet, I. Velázquez and G. Ripoll [eds.] *Isidore de Séville et son temps*, *Antiquité Tardive* 23: 163-210. Paris: Brepols.
- Reynolds, P. 2016. From Vandal Africa to Arab Ifriqiya: tracing ceramic and economic trends through the 5th to the 11th centuries, in S. T. Stevens and J. P. Conant [eds.] *North Africa under Byzantium and Early Islam*: 129-171. Washington DC: Dumbarton Oaks.
- Reynolds P. and S.Y. Waksman 2007. Beirut cooking wares, 2nd to 7th centuries: local forms and north Palestinian imports, *Berytus* 50: 59-81.
- Rodríguez, F. 2020. *El comerç mediterrani a Tarraco a les portes de l'Islam (segles VII - VIII dC)*. Unpublished PhD dissertation, University of Rovira and Virgili.
- Rodríguez, F. and J.M. Macias 2016. Un nuevo contexto cerámico de la segunda mitad del siglo VII dC en Tarraco (Tarraconensis, Regnum Visigothorum), in R. Járrega and P. Berni (eds.), *III Congreso Internacional de la SECAH- Ex officina Hispana. Amphorae ex Hispania. Paisajes de producción y consumo*: 936-952. Tarragona.
- Rodríguez, F., M. Díaz, J. M. Macias, J.F. Roig and I. Teixell 2020. Los últimos edificios domésticos, de servicio portuario y productivos del suburbio de Tarraco (s. VII - VIII): un ensayo holístico, in C. Doménech and S. Gutiérrez [eds.] *El sitio de las cosas. La alta Edad Media en contexto*, Publicacions Universitat d'Alacant: 67-82.
- Sagui, L. 1998. Il deposito della Crypta Balbi: una testimonianza imprevedibile sulle Roma del VII secolo?, in L. Sagui (ed.), *Ceramica in Italia: VI-VII secolo. Atti del Convegno in onore di John W. Hayes (Roma 1995)*, 305-330. Roma: Biblioteca di Archeologia Medievale.
- Tonceva, G. 1954. Un atelier de céramiques près du village de Kranevo. *Izu Varna* 9: 81-98.
- Vitelli, K.D. 1982. The Lamps, in G.F. Bass and F.H. Van Doorninck (eds.), *Yassi Ada: A Seventh Century Byzantine Shipwreck*: 189-201. Texas: A&M University Press.
- Vizcaino, J. 2009. *La presencia bizantina en "Hispania" (siglos VI- VII): la documentación arqueológica*, Murcia: Universidad de Murcia.

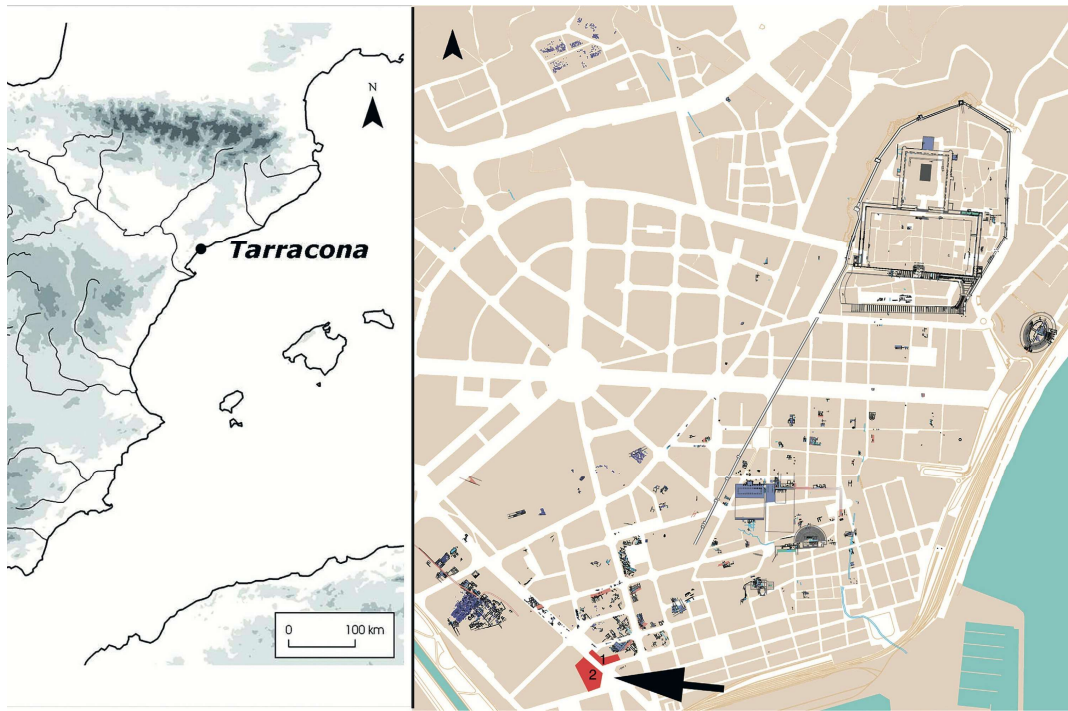


Figure 1. Map of the sites/deposits mentioned in the text: (1: P2-7-22a/1; 2: TVB27/1, TVB27/2.1 and TVB27b/2.1) (from Macias *et al.* 2007).

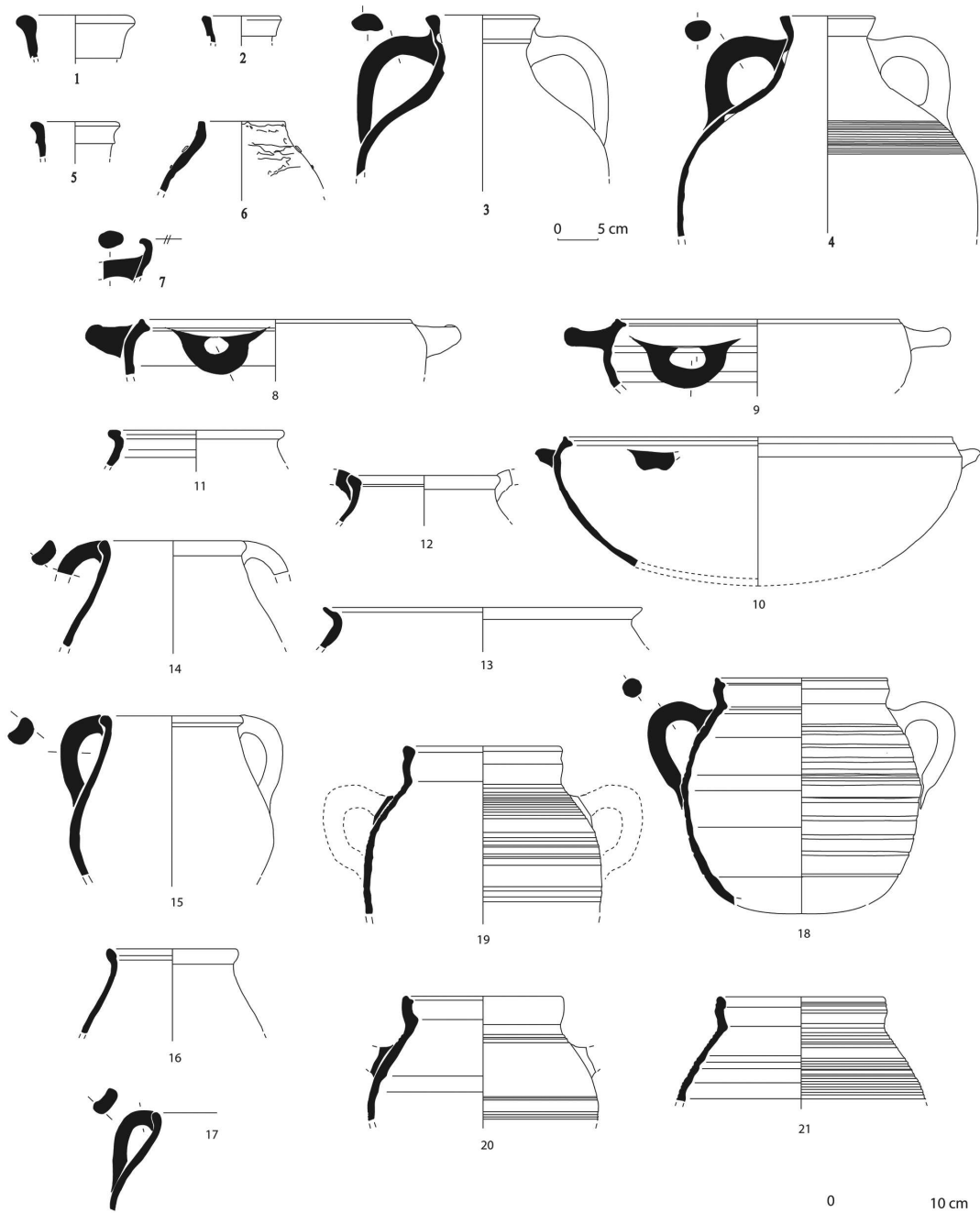


Figure 2. P2-7-22a/1. 1: Keay 61/8a. 2: Orlo a fascia / Bonifay type 52. 3: Ech Chekaf IV / LRA 1B1 similis. 4: Bonifay Globular type 2. 5: LRA1B1. 6: LRA 4C. 7: Amphorae Unknown. 8: Cb/Gre/6. 9: Cb/Gre/6.2. 10: Cb/Gre/7. 11: Oc/ Gox/8.5. 12: Oc/Gre/8.4. 13: Oc/Gre/24. 14 - 15: Oc/Gre/55. 16: Oc/Gre/55.2. 17: Oc/Gre/56. 18: Oc/Gre/66.2. 19: Oc/Gre/66.4. 20: Oc/Gre/66.5. 21: Oc/Gre/66.6.

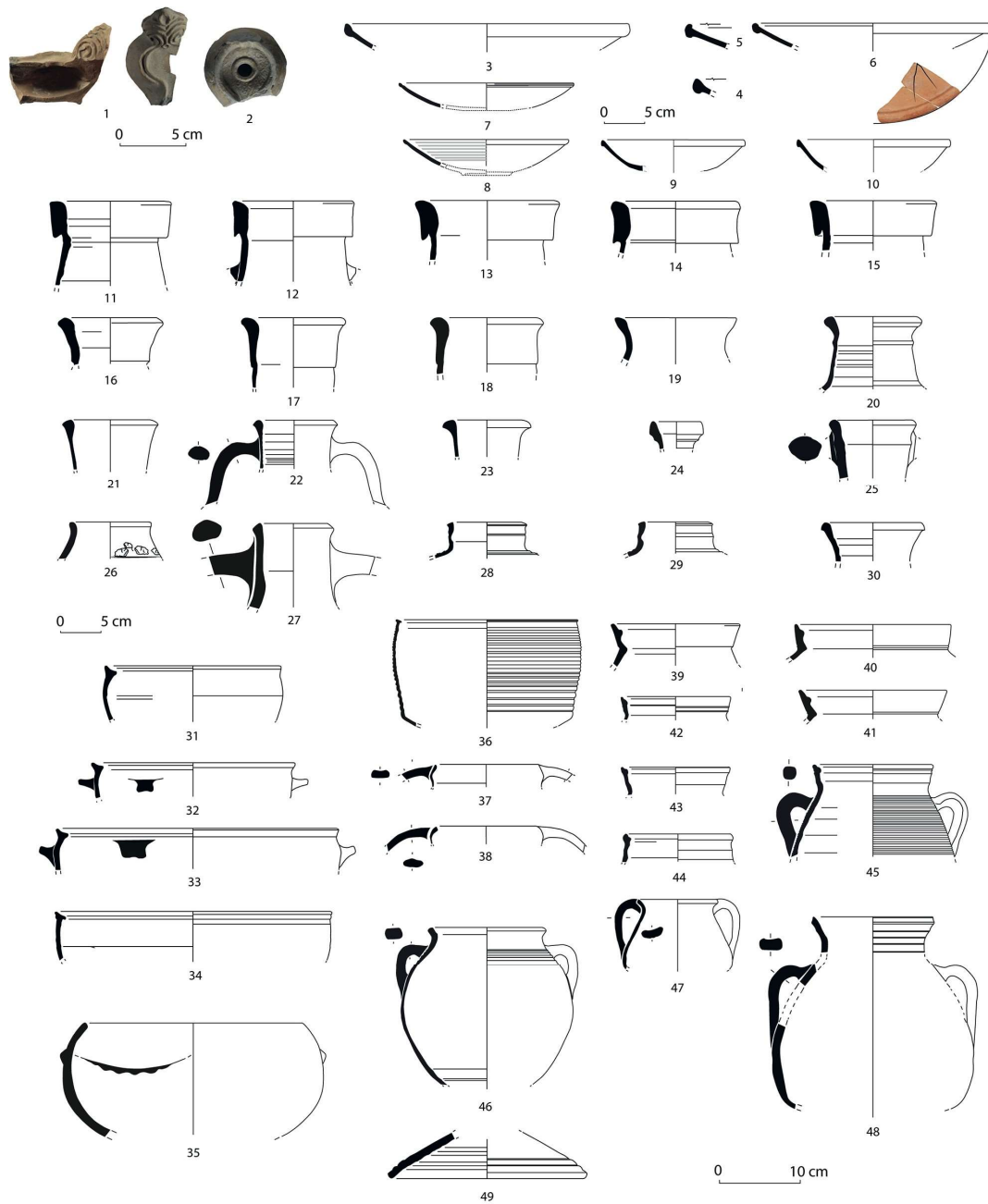


Figure 3. TVB27/1. 1: LI/Or/1. 2: LI/Or/2. 3 - 4: Hayes 105. 5: Hayes 105a. 6: Hayes 105b similis. 7: Hayes 109b. 8: Hayes 109c. 9 - 10: Hayes 80b/99 (=99d). 11-15: Keay 61a/d. 16: Keay 61/8a. 17 - 18: Keay 8a. 19: Bonifay Globular type 2. 20: type 47A-B de S. Antonino? 21-23: Bonifay Globular type 3/Castrum Perti. 24: Spatheion 3B. 25: LRA 1B1. 26: LRA 4C. 27: Pieri LRA 2C. 28-29: LRA 6 – bag shaped 2a/Hayes Saraçhane 7B. 30: Remolà tipo Tardío B. 31- 33: Ca/Gre/50. 34: Ca/Gre/65. 35: Ca/Gox/75. 36: Sliced-rim casserole / Ca/Or/67. 37-38: Reynolds and Waksman 4.1 / Oc/Or/69. 39-41: Saraçhane cooking ware 3B / Oc/Or/62. 42-43: Oc/Gre/64. 44: Oc/Gre/66. 45: Oc/Gre/73. 46: Oc/Gre/70. 47: Oc/Gre/55.5. 48: Oc/Gox/125. 49: T/Gre/42.

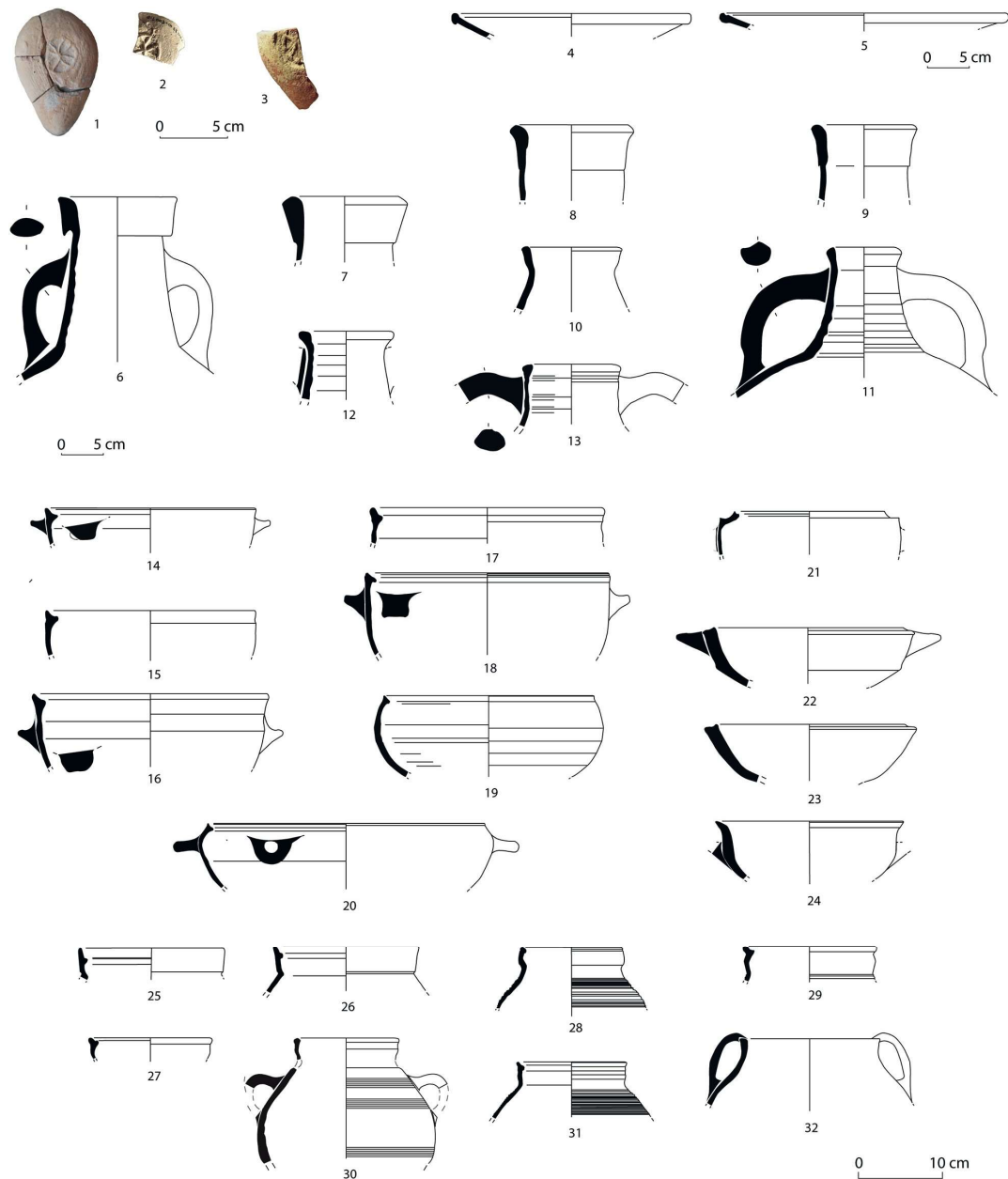


Figure 4. TVB27/2.1. 1-3: Ll/Ros/8.2. 4-5: Hayes 105. 6: Keay 61A 7: K. 61 var. Tarragona. 8-9: Keay 8a. 10: Bonifay Globular type 2. 11: Pieri LRA 2C. 12-13: Globular amphorae unknown. 14-16: Ca/Gre/50. 17: Ca/Gre/55. 18: Ca/Gre/65.2. 19: Cb/Gre/7.2. 20: Cb/Gre/6. 21: Cb/Gre/68. 22-23: Cb/Gox/67. 24: Cb/Gox/74. 25-26: Saraçhane cooking ware 3B / Oc/Or/62. 27: Oc/Or/111. 28: Oc/Gre/66.6. 29: Oc/Gre/66.12. 30: Oc/Gre/75.3. 31: Oc/Gre/73. 32: Oc/Gre/100.

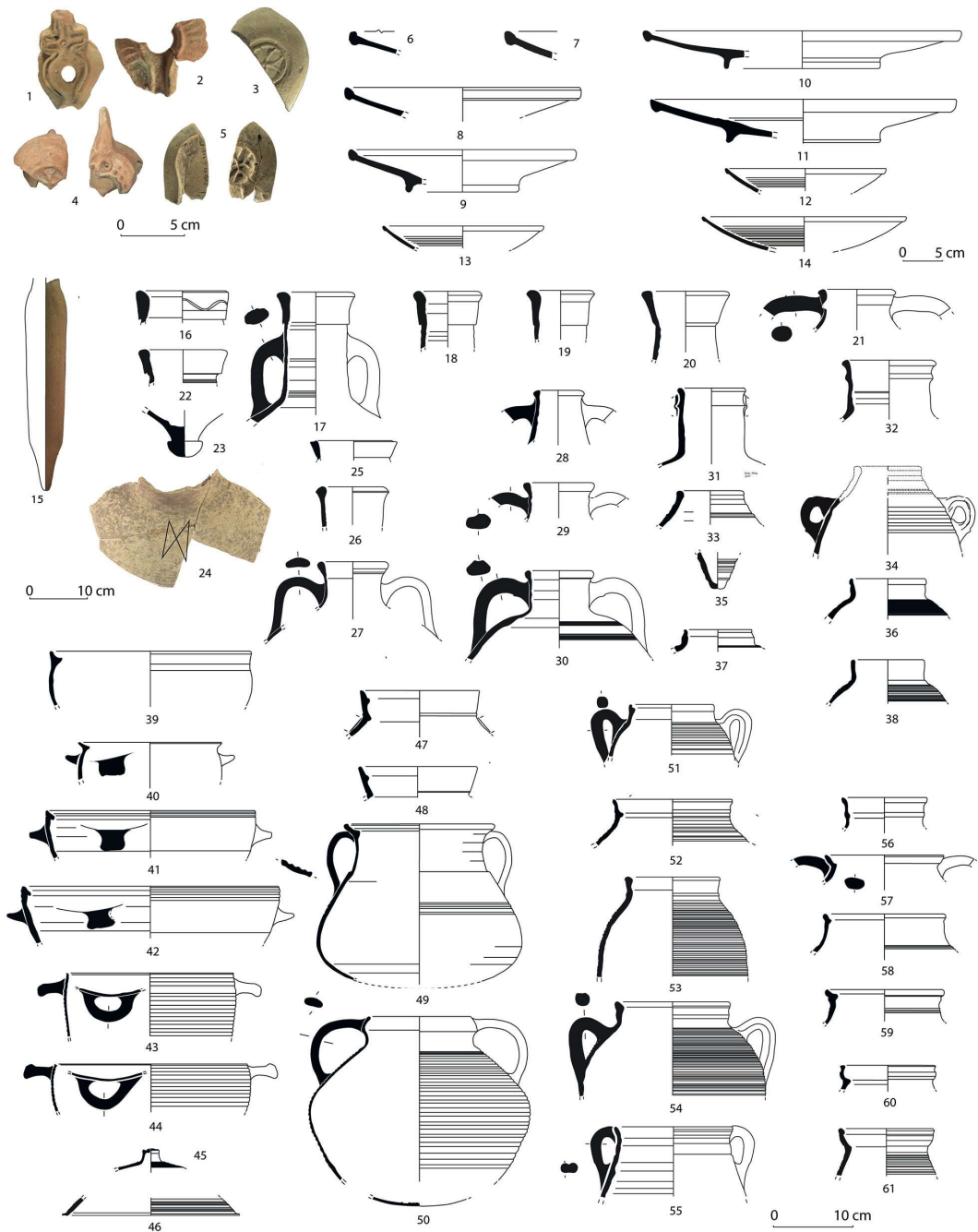


Figure 5. TVB27b/2.1. 1: Ll/Or/1.3. 2: Ll/Or/5. 3: Ll/Ros/8.1. 4-5: Ll/Ros/8.3. 6: Hayes 105b. 7-9: Hayes 105C. 10: Hayes 105 var. Tarragona. 11: Hayes 106. 12-13: Hayes 109c. 14: Hayes 109 var. Tarragona. 15: Spatheion 3c. 16: Keay 61B?. 17: Keay 61/8a. 18-19: Keay 8a. 20: Keay 50. 21: Ech Chekaf IV / LRA 1B1 similis. 22-23: Orlo a fascia / Bonifay type 52. 24-25: Bonifay Globular type 2. 26-27: Bonifay Globular type 3. 28: Pieri LRA 2C. 29-30: Eastern Globular amphorae?. 31: LRA 1B1. 32: LRA 1B1 sous-modules. 33-35: LRA 4C. 36-38: LRA 5 – bag shaped 3. 39: Ca/Gre/50. 40: Ca/ Gre/51. 41-42: Ca/Gre/65. 43: Sliced-rim casserole / Ca/Or/66. 44: Sliced-rim casserole Cb/Or/63. 45-46: Reynolds and Waksman lids / T/Or/11. 47-48: Saraçhane cooking ware 3B / Oc/Or/62. 49: Fulford CW 35 / Oc/Or/65.2. 50: Reynolds and Waksman 4.1 / Oc/Or/69. 51: Oc/Gre/64.5. 52: Oc/Gre/72.3. 53: Oc/Gre/75.2. 54: Oc/Gre/78. 55: Oc/ Gre/107.2. 56: Oc/Gre/127. 57: Oc/Gre/128. 58: Oc/Gre/129. 59: Oc/Gre/123. 60: Oc/Gre/79. 61: Oc/Gre/80.

	Form	P2-7-22a/1	%	TVB27/1	%	TVB27/2.1	%	TVB27b/2.1	%
Lamps	Ll/Or/1	-	-	1	50	-	-	2	28,57
	Ll/Or/2	-	-	1	50	-	-	-	-
	Ll/Or/5	-	-	-	-	-	-	3	42,86
	Ll/Or?/6	-	-	-	-	-	-	2	28,57
	Ll/Ros/8	-	-	-	-	3	100	4	57,14
	Ll/Ros/9	-	-	-	-	-	-	2	28,57
	Ll/Ros/10	-	-	-	-	-	-	1	14,29
	TOTAL	-	-	2	100	3	100	14	100
LRU	Hayes LRU 1	-	-	4	100	-	-	3	75
	Oieri LRU type 2	-	-	-	-	-	-	1	25
	TOTAL	-	-	4	100	-	-	4	100
Amphorae	Eastern Globular?	-	-	-	-	-	-	2	1,65
	Samos C.T.	-	-	2	9,09	-	-	-	-
	LRA 1B1	2	40	10	45,45	2	50	10	8,26
	LRA 7	1	20	2	9,09	-	-	3	2,48
	LRA 6	-	-	2	9,09	-	-	-	-
	LRA 5	1	20	-	-	-	-	6	4,96
	LRA 4C	1	20	5	22,73	1	25	6	4,96
	AA M-344	-	-	-	-	-	-	1	0,83
	Pieri LRA 2C	-	-	1	4,55	1	25	3	2,48
	Ech Chekaf IV / LRA 1B1 similis	3	42,86	2	3,64	5	16,13	3	2,48
	Keay 61	2	28,57	32	58,18	17	54,84	39	32,23
	Keay 8A	-	-	5	9,09	3	9,68	2	1,65
	Keay 50	-	-	-	-	-	-	2	1,65
	<i>Spatheion</i> type 3	-	-	1	1,82	-	-	1	0,83
	Orlo a Fascia/Bonifay type 52	1	14,29	-	-	-	-	3	2,68
	Bonifay Globular type 2	1	14,29	10	18,18	5	16,13	27	22,31
	Bonifay Globular type 3	-	-	4	7,27	-	-	6	4,96
	African unknown	-	-	1	1,82	1	3,23	2	1,65
	Keay 52	1	6,67	2	2,5	1	2,56	4	3,31
	Remolà Tardía B	1	6,67	1	1,25	1	2,56	1	0,83
Globular unknown	1	6,67	-	-	2	5,13	-	-	
TOTAL	15	100	80	100	39	100	120	100	
Fine Ware	H. 99D	-	-	5	31,25	2	28,57	9	25,71
	H. 91D	-	-	2	12,5	-	-	1	2,86
	H. 105	-	-	7	43,75	4	57,16	11	31,43
	H. 106	-	-	-	-	-	-	5	14,29
	H. 109	-	-	2	12,5	1	14,29	9	25,71
	TOTAL	-	-	16	100	7	100	35	100

Figure 6. Summary of Lamps, LRU, Amphorae and Fine Wares (Minimum Number of Vessels and %)

P2-7-22a/1	MNV.	Oc/Gre/55	1	Oc/Gox/26.3	1	D/Gox/7.5	1
Cb/Gre/6	1	Oc/Gre/55.3	1	Oc/Gox/30	1	D/Gox/8	1
Cb/Gre/6.2	1	Oc/Gre/55.5	1	Oc/Gox/31	1	D/Gox/9	1
Cb/Gre/7	2	Oc/Gre/57	1	Oc/Gox/48.5	1	G/Gox/57	1
D/Gox/4	1	Oc/Gre/57.3	1	Oc/Gox/7.2	1	G/Or/51	1
Oc/Gox/8.5	1	Oc/Gre/6	1	Oc/Gre/1	2	I/Gre/41	1
Oc/Gre/24	2	Oc/Gre/64	18	Oc/Gre/100	1	I/Or/?	3
Oc/Gre/55	2	Oc/Gre/64 o 66	1	Oc/Gre/113	1	M/Gre/56	1
Oc/Gre/55.2	1	Oc/Gre/64.2	1	Oc/Gre/23.6	1	Oc/Gox/1	2
Oc/Gre/56	3	Oc/Gre/64.6	1	Oc/Gre/24	1	Oc/Gox/100.2	1
Oc/Gre/57	1	Oc/Gre/66.2	3	Oc/Gre/55	1	Oc/Gox/100.3	1
Oc/Gre/63	1	Oc/Gre/66.8	1	Oc/Gre/64	17	Oc/Gox/101	1
Oc/Gre/66.2	1	Oc/Gre/68	1	Oc/Gre/64.4	1	Oc/Gox/107	3
Oc/Gre/66.3	1	Oc/Gre/7.9	2	Oc/Gre/64.8	2	Oc/Gox/2.19	1
Oc/Gre/66.4	4	Oc/Gre/70	4	Oc/Gre/66.12	1	Oc/Gox/23	3
Oc/Gre/66.5	1	Oc/Gre/71	2	Oc/Gre/66.2	2	Oc/Gox/24	1
Oc/Gre/66.6	1	Oc/Gre/73	2	Oc/Gre/66.6	2	Oc/Gox/47	1
Oc/Gre/8.4	1	Oc/Gre/77	1	Oc/Gre/7.5	1	Oc/Gox/64	1
Oc/Or/65	1	Oc/Or/62	4	Oc/Gre/72.2	1	Oc/Gox/74	2
T/Gox/21	1	Oc/Or/65.3	1	Oc/Gre/73	1	Oc/Gox/89	1
TOTAL	27	Oc/Or/69	2	Oc/Gre/73.2	1	Oc/Gre/1.19	1
TVB27/1	MNV	T/Gox/41	2	Oc/Gre/75.3	1	Oc/Gre/102	1
Ca/Gox/33	3	T/Gre/42.2	1	Oc/Gre/81.2	2	Oc/Gre/107.2	1
Ca/Gox/33.3	1	T/Gre/44	1	Oc/Gre/82.3	1	Oc/Gre/108	2
Ca/Gox/75	1	TOTAL	155	Oc/Or/?	1	Oc/Gre/124.2	1
Ca/Gre/33	1	TVB27/2.1	MNV	Oc/Or/111	1	Oc/Gre/126	1
Ca/Gre/33.10	1	B/Gox/31	1	Oc/Or/62	2	Oc/Gre/126.2	1
Ca/Gre/33.3	1	B/Gox/32	1	T/Gox/51	1	Oc/Gre/127	1
Ca/Gre/33.9	2	Ca/Gre/33.4	1	TOTAL	130	Oc/Gre/128	1
Ca/Gre/35.15	2	Ca/Gre/35.2	1	TVB27b/2.1	MNV	Oc/Gre/129	1
Ca/Gre/36.4	1	Ca/Gre/35.7	1	Ca/Gox/51	1	Oc/Gre/2.6	1
Ca/Gre/47.2	1	Ca/Gre/36.4	1	Ca/Gre/33.22	1	Oc/Gre/23.3	1
Ca/Gre/50	9	Ca/Gre/50	14	Ca/Gre/35.16	1	Oc/Gre/26.8	1
Ca/Gre/65	1	Ca/Gre/50.3	1	Ca/Gre/36	1	Oc/Gre/47	1
Ca/Gre/69	1	Ca/Gre/50.4	1	Ca/Gre/36.2	2	Oc/Gre/48	1
Ca/Or/67	1	Ca/Gre/53	1	Ca/Gre/36.4	1	Oc/Gre/48.5	2
Cb/Gox/14	1	Ca/Gre/55	1	Ca/Gre/50	11	Oc/Gre/49	1
Cb/Gox/14.3	1	Ca/Gre/65.2	2	Ca/Gre/50.3	2	Oc/Gre/53 o 54	1
Cb/Gox/15	1	Ca/Gre/65.5	1	Ca/Gre/51	1	Oc/Gre/54	1

Cb/Gox/24.2	1	Ca/Gre/65.7	1	Ca/Gre/51.6	1	Oc/Gre/55	3
Cb/Gox/34.2	1	Cb/Gox/11.2	1	Ca/Gre/54	1	Oc/Gre/55.3	1

Figure 7. Summary of Cooking/Coarse Wares (Minimum Number of Vessels)

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Títol:
Tema:
Autor: Francesc Rodríguez Martorell
Paraules clau:
Comentaris:
Data de creació: 19/10/2023 9:43:00
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Desat la darrera vegada el: 19/10/2023 10:09:00
Desat la darrera vegada per: Francesc Rodríguez Martorell
Temps total d'edició: 15 Minuts
Imprès la darrera vegada el: 20/10/2023 16:32:00
A partir de l'última impressió completa
Nombre de pàgines: 16
Nombre de paraules: 5.776 (aprox.)
Nombre de caràcters: 31.772 (aprox.)