

# ROMAN AMPHORAE IN NEUSS

## AUGUSTAN TO JULIO-CLAUDIAN CONTEXTS

**Horacio González Cesteros and Piero Berni Millet**



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## Preface

Strategically situated at the junction of the Erft and a bend of the Rhine, the site of *Novaesium* is undoubtedly one of the major military sites of the frontier in *Germania Inferior*, not least in its initial phases from 16 BC. The advantageous position of the site was later assimilated by the adjacent medieval towns of Neuss and Düsseldorf. Since Constantin Koenen started his extensive excavations of the main legionary fortress in 1887, the site has gradually revealed its rich and complex history. Apart from a civil settlement, no. less than 8 fortresses, and many more occupation phases were brought to light. Fortresses A to F belong to the Augustan-Tiberian period, whereas fortress G, the so-called 'Koenenlager' was created for Legio XVI Gallica around the time when Claudius invaded Britain. Shortly after its abandonment in 103 AD the site was re-occupied by a smaller fortress H, lingering to the middle of the 3rd century AD. Partial information on the legions and the auxiliaries that were stationed in these fortresses arises from the ancient sources and the local epigraphy. Neuss at the beginning of the campaigns of Drusus and Tiberius in 12 BC was the stand-place of the *Legiones* XIX and XVII or XVIII which all met their legendary fate in the Teutoburger Wald disaster. *Legio XX Valeria Victrix* found accommodation here before its transfer to Britannia in 43 AD. The site of *Novaesium* yielded numerous notable finds, such as the distinctive tombstone of the cavalry signifer Oclatius originating from the nearby *civitas Tungrorum*. Oclatius belonged to the *Ala Afrorum* which is probably related to the Flavian occupation of fortress G.

Much earlier is the gorgeous Italic terra sigillata cup signed by Perennius of Arezzo. The relief decoration on this high quality Dragendorff 11 type cup of the Augustan period shows an appropriate scene of satyrs trampling winegrapes. no. doubt this precious drinking vessel belonged to an officer who used it to taste the various Mediterranean wines exported to the North.

The Perennius cup brings us to the remarkable collection of amphorae which were retrieved from the excavations of the early fortresses A to F, now studied by our Spanish colleagues. no. doubt these amphorae can be considered the material testimony *par excellence* of an intensive export of Mediterranean foodstuffs to the North. Beside olive-oil and fish products, wines from far-flung locations such as Italy, Iberia, southern Gaul and Greece, made their appearance in the early military settlements of the Rhine region. If the material of *Novaesium* is not overwhelming in quantity, it stands out for its diversity and the presence of some peculiar types. But before discussing the amphorae and their significance, it is useful to turn first to some methodological issues concerning the contexts in which they were found.

The continuous resettlement of troops and the refurbishing of the structures on the site has resulted in the frequent disturbance of previous archaeological levels. Moreover, in the light of the invasion of *Germania*, one should be aware that in this period of continuous military movements, the armies settled and broke up quickly leaving minor traces of structures, reflecting most probably the settlement of different army divisions for short periods. Confronted with these problems of disturbed layers and the invisibility of the settlement structures, and also because a certain amount of amphora material was not recorded within its context at the time of the excavations, the authors made the resolute and wise decision not to try to link the finds to specific contexts. Therefore, the counting system of Minimum Number of Individuals (MNI) of the diagnostic fragments seemed the best approach for the quantification. The fine-tuning of the amphora chronology is external and depends on other, well-dated site contexts, or on the information an amphora type itself can provide with the additional epigraphical data of *tituli picti* and stamps. In addition, this amphora research will also serve as a valuable contribution to the refinement of the occupation phases of the different fortress settlements of *Novaesium*, maybe even for the partial reconstruction of several disturbed contexts. Finally, it was also the right decision for the authors to take into consideration the stamps of the Baetican Dressel 20 olive-oil amphoras, even if nearly all of them date from the post-Tiberian period. Indeed, many ended up as intrusions in early layers and they remind us of the dangers when interpreting the chronology of stratigraphical contexts. Apart from this, the examples of *Novaesium* represent an appreciable addition to the corpus of Dressel 20 stamps.

That the majority of the amphora imports are Iberian in origin is no. surprise and shows clearly the importance of that region of the Roman Empire in the economy of supply in the North; but their typological variety is remarkable: 5 from the Baetican Guadalquivir valley, 4 from the Baetican coast and 3 from the province of *Tarraconensis*. Apart from the well-known Dressel 20, there is the striking amount of Tarraconesian wine amphorae (particularly the stamped Oberaden 74); and the high number of Baetican containers for fish-products which probably related to the need for salt in the diet of the soldiers. The crowning-piece is undoubtedly the forerunner of the Baetican Oberaden 83 type for olive-oil, bearing the oldest known *titulus pictus* from that region and assigned to the earliest fortress occupation of *Novaesium*. Special mention should be made of the important presence of the Haltern 70 type for two reasons: As previous research proved, its production reached its peak during the Augustan and Tiberian principates, and points apparently to the fact that the contents were not restricted to olives preserved in *defrutum*, but also other wine-products, as well as fish-based products.

The second main group of amphorae is formed by the Gaulish amphorae produced in three main regions. Although a substantial group consists of Italian and Iberian imitations for the transport of wine- and fish-products, the bulk of the productions of Marseille and the *Narbonensis* are represented by flat-bottomed wine amphorae. These popular types seemed to be designed especially for transport by river boats. The Lyon group is very peculiar. Besides a wide array of Mediterranean imitations, the most commonly occurring amphora type seems to have been the Lyonnaise 3A, carrying fish-products. There is an on-going debate about the origin of the fish-sauce, presumably from southern Gaul, and how it was transported in bulk to the Gaulish capital, where it was put in the locally produced amphorae to be distributed to the northern markets. In light of this, one should consider the importance of wooden caskets as a possible major transport device, an observation most likely also valid for the bulk transport of Mediterranean wines.

In the early phases of the *Novaesium* military installations, the presence of Greek and Italian amphorae is considerable; they constitute respectively 15.9 % and 11.8 % of the recorded imports. Rhodian wines form the lion's share, followed by Koan amphorae (type Dressel 5). One handle fragment of Rhodian origin shows an extremely rare stamp of a woman's head in profile. Very rare also are some fragments of Knidian amphorae, and above all of Chian, known for its quality wines. The recent pacification of the Alpine regions made the imports from Northern Italy and the Adriatic more convenient. *Novaesium* proves to have been one of the sites with the widest range of amphora sources, with additional Adriatic amphorae carrying wine and olive-oil. Of these, different types, such as Dressel 6A, Dressel 6B and the Brindisian Giancola 6 are present, as well as some stamped examples, including the ubiquitous T H B stamp. Amongst the Tyrrhenian classic Dressel 1 and Dressel 2-4 types for wine transport, a very strange and exceptional Campanian imitation of a Knidian wine amphora deserves attention. Even though little is known of their production and typology, we also see arise the first groups of regionally made amphorae from *Gallia Belgica* and the Rhineland. Finally, there is the presence of some amphora fragments from the Levant and North Africa, possibly to be considered as casual or exotic imports.

The wide range of amphora forms and associated foodstuffs occurring on this significant military site is impressive. We are indebted to our Spanish colleagues for their sagacious research in sometimes difficult conditions. Their contribution to the knowledge of the dynamics of the military logistics and the economy of the Roman Empire in the Augustan-Tiberian period can hardly be overstated. Apart from the comparison with early sites, such as Haltern and the Kops Plateau at Nijmegen, the publication of the amphorae of *Novaesium* is of vital importance for the coming studies that will bring the complete typo-chronological spectrum of Mediterranean amphorae in *Germania Inferior*, and more specifically in the Rhineland military settlements of the Augustan-Tiberian period.

Patrick Monsieur  
Easter 2018  
Sint-Lievens-Houtem, Belgium



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We remember with special gratitude the granting of permission to work in the stores of the Rheinisches Landesmuseum Bonn in Meckenheim (Nordrhein-Westfalen, Germany). We are forever grateful to Dr Susanne Willer, in charge of Roman Provincial Archaeology, who allowed us to work on the interesting material from Neuss in 2010.

Many years have passed since our labours in Meckenheim, which have seen the publication of some preliminary reports. To complete this research work successfully was arduous: it took many hours, much travel and endless discussion, but finally we are here able to present a full account. We hope this study serves as a solid and up-to-date work on which to build the next stage of study into the amphora distribution of early Roman times in northern Europe.

We would like to especially thank Prof Michael Gechter, who has worked for many years on the Roman military camps at Neuss, and for the interest he took in us, as visiting scholars, together with Joost van den Berg and César Carreras in Bonn. This publication was made possible by the dual collaboration between a group of Spanish archaeologists of the Catalan Archaeological Institute (ICAC) and their German colleagues of the Rheinisches Landesmuseum in Bonn, namely Dr S. Willer, Prof M. Gechter and the master's student A. Wiegert.<sup>1</sup>

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<sup>1</sup> We are very grateful to our German colleagues for allowing us to review the material of the Museum's stores in Meckenheim (Nordrhein-Westfalen, Germany), as well as for their useful remarks about the history and historiography of the Neuss archaeological site. We would like to thank in particular Prof M. Gechter who worked for many years on the military camps of Neuss. Within this academic framework, two papers have already been published: Carreras – González Cesteros 2013; Carreras – Berni 2015.



### 3. Introduction

The Roman presence on the Rhine started at the beginning of the second decade BC, as a result of Agrippa's second command of the Gallic provinces (20-19 BC), after the end of the Cantabrian wars in north Spain. From that moment the oldest dated Roman military settlement on the Rhine, on the Hunerberg hill, is Nijmegen.<sup>1</sup> Archaeological finds establish a wider Roman presence from 16-15 BC after the Roman defeat in the so-called *Clades Lolliana* and the conquest of the Alps and Alpine foothills territory in modern Switzerland. From this moment on, Augustan politics pays more attention to Gallic and Germanic events, as is reflected in the new administrative organisation of *Gallia Comata* and the formation of the *Tres Galliae*, whose capital was to be the colony of *Lugdunum*; but also in the preparations for military campaigns east of the Rhine border, conducted from 12 BC by Augustus' adoptive sons and the recent conquerors of the Alpine regions, Drusus and Tiberius.

After the events of 16-15 BC, Rome reconsidered her Germanic policy. From then on the continuous security problems that affected the Gallic regions near the Rhine were to be solved through punishment and the submission of the aggressive Germanic tribes. Further, the establishment of a support system within Gaulish territory, with connections to the Rhine region and the conquered Alps, made the movement of troops to the border area easier, with the connection of these areas to north Italy via the Alpine passes.

It is at this moment in history when the foundation of the first military settlement at the mouth of the Erf in the Rhine near the town of Neuss, takes place.<sup>2</sup>

We present here our in-depth study of the amphora evidence retrieved from the different military camps settled in Neuss before the construction of the so-called

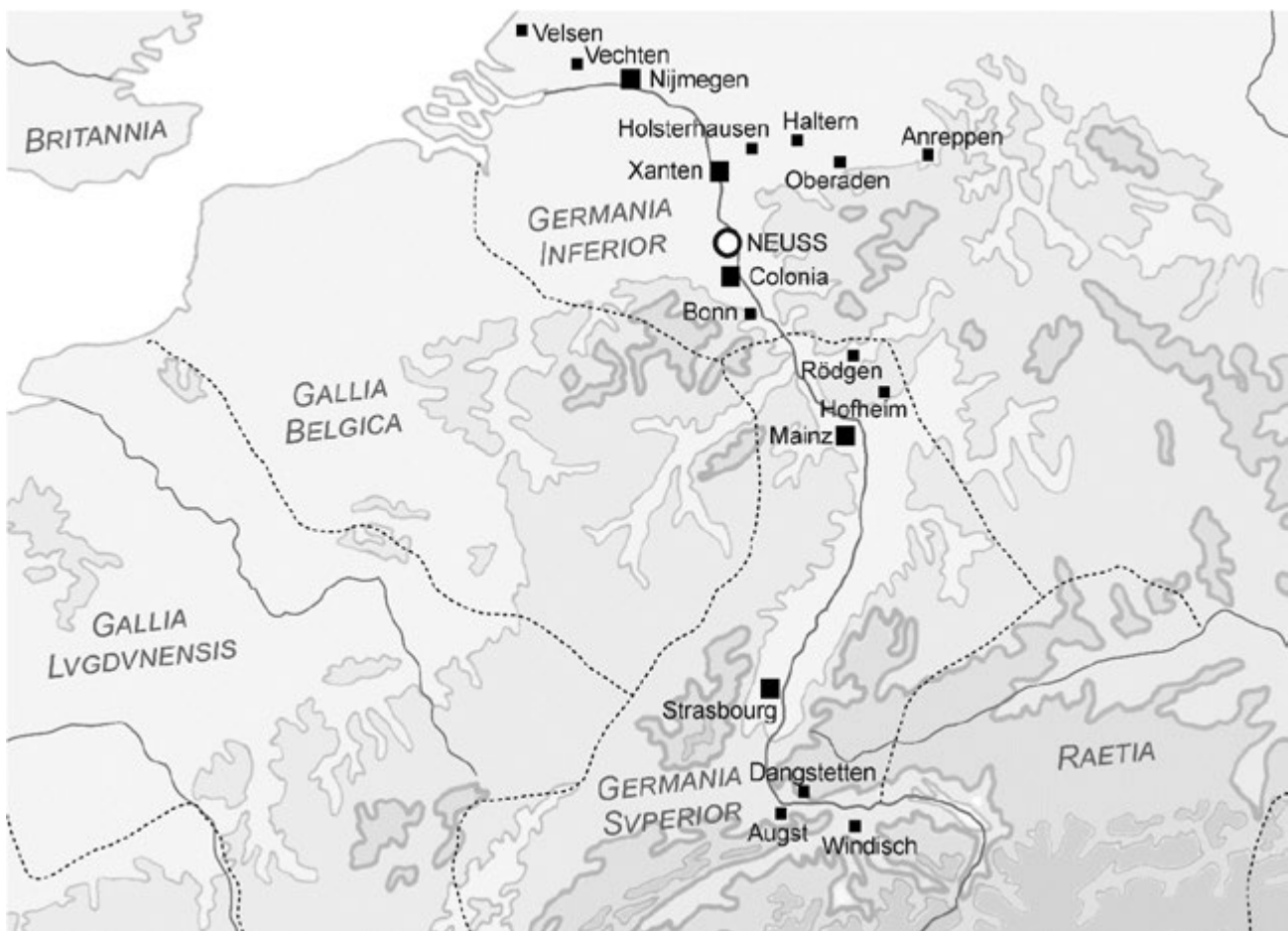


FIGURE 3.1: MAP OF THE GERMAN FRONTIER WITH SOME OF THE MOST IMPORTANT MILITARY SETTLEMENTS OF THE EARLY ROMAN PERIOD

<sup>1</sup> Willems – van Enckevort 2009.

<sup>2</sup> Gechter 2003; 2010.



FIGURE 3.2: MAP OF THE RHINE FRONTIER WITH SOME OF THE MAIN ROMAN SITES NEAR NEUSS.

'Koenen' legionary fort, which was built around 43 AD in the classical 'playing-card' format, with some buildings partially of stone.

The complexity of the stratigraphical sequence of Neuss, due to the presence of several subsequent military settlements in an area no. larger than one kilometre, makes it very difficult to determine the chronology of material which otherwise can be associated with specific time periods. Recently, Gechter has tried to establish the chronological evolution of the different Roman forts,<sup>3</sup> but it is clear that the continuous use and rebuilding at Neuss prevents any secure links between the different stratigraphical layers and the various occupational periods. The complexity of the archaeological stratigraphy is further demonstrated by the presence of material from different periods in one single layer. The evidence and the retrieved finds arguably related to one phase rather than another on the basis of quantities is not always verifiable from the archaeological remains. Thus, in the absence of dendrochronological dates and of closed layers, Neuss does not enjoy

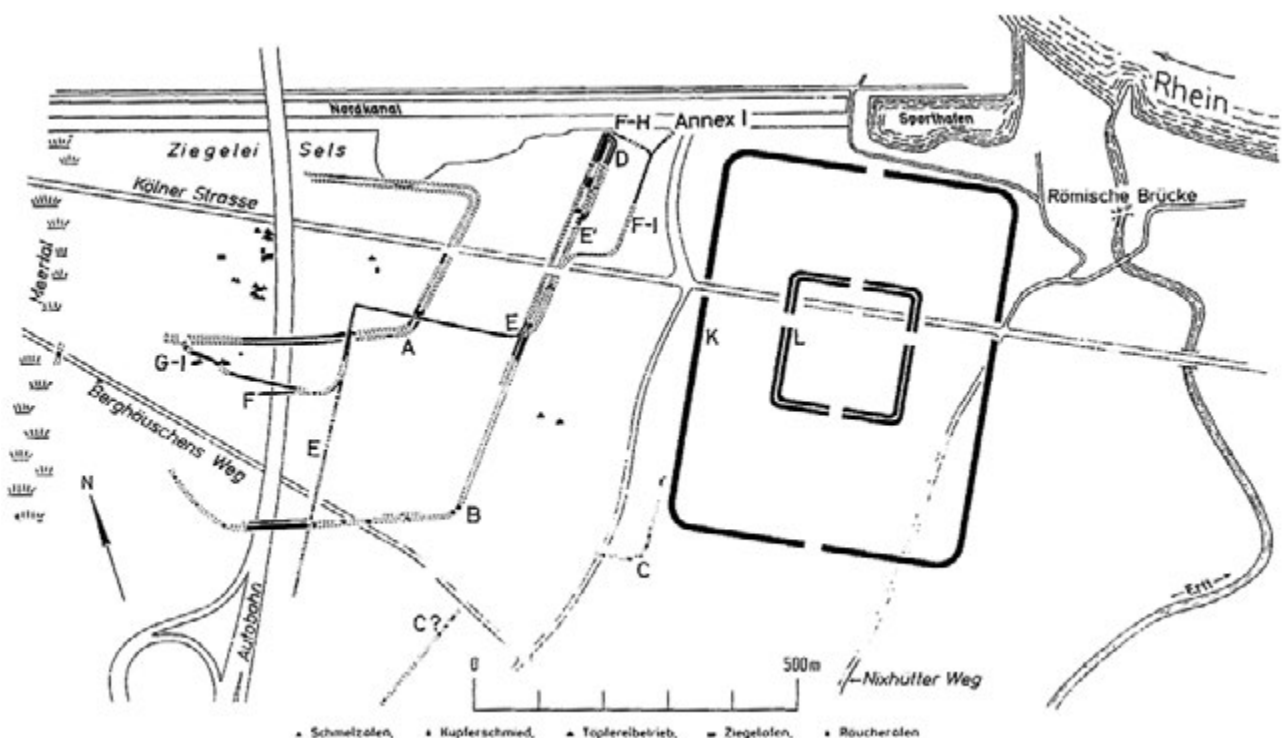


FIGURE 3.3: MAP OF THE ROMAN MILITARY CAMPS OF NEUSS (MÜLLER 1975).

<sup>3</sup> Gechter 2010.



FIGURE 3.4: MAP OF THE ROMAN MILITARY CAMPS OF NEUSS (CHANTRAINE 1985)

Camp 1	16-12 BC
Camp 2	12-8 BC
Camp 3	8-4 BC
Camp 4	4 BC-16 AD
Camp 5	16-28 AD
Aux. Camp 6	16-28 AD

TABLE 1: CHRONOLOGICAL SEQUENCE OF THE AUGUSTAN AND TIBERIAN MILITARY SETTLEMENTS OF NEUSS (AFTER GECHTER 2007; 2010).

the same chronological precision as do other military settlements on the Main and the Lippe. However, it is possible to establish a linear occupational sequence of several phases, in theory linked to the quick restructuring and changes of the tumultuous Augustan and Tiberian period in the Rhine area.<sup>4</sup> These circumstances are certainly reflected in the amphorae; though we must be cautious in (or even simply forget about) promoting any direct association between them and the different occupational

phases. Further, another serious problem in asserting a chronology is the lack of any stratigraphical references for around 40% of the material stored in Meckenheim.

Nevertheless, despite the several chronological disadvantages, we are firmly convinced that a profitable study of the Roman amphorae found in Neuss can be of great relevance for the understanding of the import dynamics, involving the arrival Mediterranean foodstuffs into the Rhine in the early years of the Roman occupation. Further, it will provide a valuable comparative point in the establishment of a well-grounded developmental sequence for the amphora imports into Germania Inferior that is to come.

From 16/15 BC to 43 AD, ten different military settlements were sited at Neuss, six of them supposedly of the Augustan-Tiberian period (Figure 1). The external *fossae* of the diverse camps confirm the establishment of these settlements, but in our opinion, even if it were to prove possible to stipulate which are earlier than which, the absence of a good closed stratigraphy makes it nigh impossible to determine the time each was active. This factor makes us hesitant to attempt separate studies, each concerning the material supposedly linked with one single camp. Rather we believe that the only sensible and defendable way to manage this material is to develop a

<sup>4</sup> In a previous article (Carreras – González Cesteros 2012, 749) we underlined what we thought then was the excellent chronological frame of Neuss. After studying the stratigraphical background of Neuss, we have to acknowledge that this advantage does not exist in fact; the stratigraphical problems that were observed from the first archaeological excavations in Neuss at the end of the 19<sup>th</sup> century continue to this day.

general study of all the amphora fragments, and to refrain from establishing any temporary subdivisions.<sup>5</sup>

Most of the forts at Neuss have left no traces of internal structures to house the soldiers, such as barracks or houses for the tribunes. In fact, the first surviving building, made of wood and associated with some porticoed courtyards and postholes, appears to belong to the fifth camp which is said to date from 16 AD to 28 AD.<sup>6</sup> The absence of building evidence for the accommodation leads us to think that most of the camps relied on leather or canvas tents. Furthermore, we should also think about the degree of continuity and manner of occupation of these military forts, to ensure as accurate a calibration and evaluation of the amphora quantities of Neuss as possible.

According to Gechter, the practical absence of buildings in the earlier camps is also reflected in other military emplacements in the Rhine area. This pattern likely has to do with the continuous mobility of the Roman army during the expansion, consolidation and reorganization of the German border, which demanded plentiful and fast troop movements.<sup>7</sup> We must take into the account the tasks carried out by the military other than the scouting expeditions and raids, namely those related to the construction of infrastructure to connect the new territories with central Gaul and to insert them into the administrative framework of the Roman Empire. In this context, it is quite

probable that the early camps of Neuss housed a series of different military units, but always for short periods. Thus, it was not considered necessary, or even possible, to put up permanent buildings.

To a degree, the existence of some artisanal or production areas, characterised by the presence of pottery kilns and metalworking workshops, is to be expected. They served to supply and/or repair the soldiers' equipment once they had returned from expeditions. In Neuss large quantities of archaeological material, especially pottery, have been found, which is something that can also argue in support of continuous troop movements, a consequence of which would be the constant breaking and abandonment of unwanted artefacts when on the move.<sup>8</sup>

Lastly, one must emphasize that the first evidence of accommodation in buildings is supposed to date to the Tiberian period, which could reflect the changes in the German policy, implemented once Germanicus' campaigns had ended in 16 AD. The abandonment of any desire to expand into the territories east of the Rhine changed the perspective on the military positions on the western bank of the river, which then tended to become consolidated, as happened in Neuss and other important places. The continuation of this process is visible during the Claudian phase when the first permanent forts built with stone, or at least with stone foundations, appear.

<sup>5</sup> An illustrative example of the serious difficulties faced in carrying out a correct chronological division is the presence of pieces clearly linked with different epochs within the material of the same fort, alongside fragments that clearly belong in the late Julio-Claudian and Flavian periods.

<sup>6</sup> Gechter 2010; Von Petrikovits 1961.

<sup>7</sup> Gechter 2003, 150.

<sup>8</sup> Gechter 2010, 156.

## 4. Previously published amphora material

Studies on the military settlement of Neuss reached a high point in the 1970s and 80s with the monographs of the *Limesforschungen* dedicated to *Novaesium*. Within this framework, M. Vegas published, in 1975, an important study of the common wares, amphorae and other ceramic forms, with exception of the terra sigillata, all linked to the earlier phases of Neuss.<sup>1</sup> This work was preceded by another study by P. Filtzinger in 1972 on the pottery supposedly linked to the second quarter of the first century AD, which analysed some amphorae fragments and complete vessels.

These two studies were carried out by researchers that were not primarily specialists in Roman amphorae, at a time when knowledge about this subject was still in an early state of research. Nevertheless, it is right to emphasize the graphic contribution of both publications with respect to the amphorae, in particular that published by Vegas. After these works, Gechter published some Augustan and Tiberian pieces from Neuss in a large article about the beginning of the Roman frontier in *Germania Inferior*.<sup>2</sup> Gechter also presents material from other military sites such as Xanten, but always within a notional Augustan or Tiberian chronological frame. In the recent past, Wegert has published his master's degree about the amphorae from Neuss.<sup>3</sup>

We have re-studied most of the pieces reviewed in these interesting papers during our stay in the Rheinisches Museum in Meckenheim in 2010. Accordingly, some of the drawings here represent the same material. The exercise was undertaken to ensure that the drawing process gave us a full and personal appreciation of the material, as part of comprehending its context. Unfortunately, some of the earlier published fragments were not available during our stay in Meckenheim; particularly one of the M. Porcius stamps on a Pascual 1 amphora published by Vegas and Gechter,<sup>4</sup> and the EVT stamp on a Tarraconensian Dressel 2-4.

Despite these set-backs, we have amassed a much larger corpus of amphorae than available in the Vegas publication, in which only 29 amphorae were presented. On the other hand, if we compare our number with Wegert's inventory, then the number is slightly lower. We think this disparity must be due to the different quantification system used by Wegert and us.

The following drawings are included Filtzinger and Vegas amphora drawings, with two special figures dedicated to the Hispanic material of both publications.

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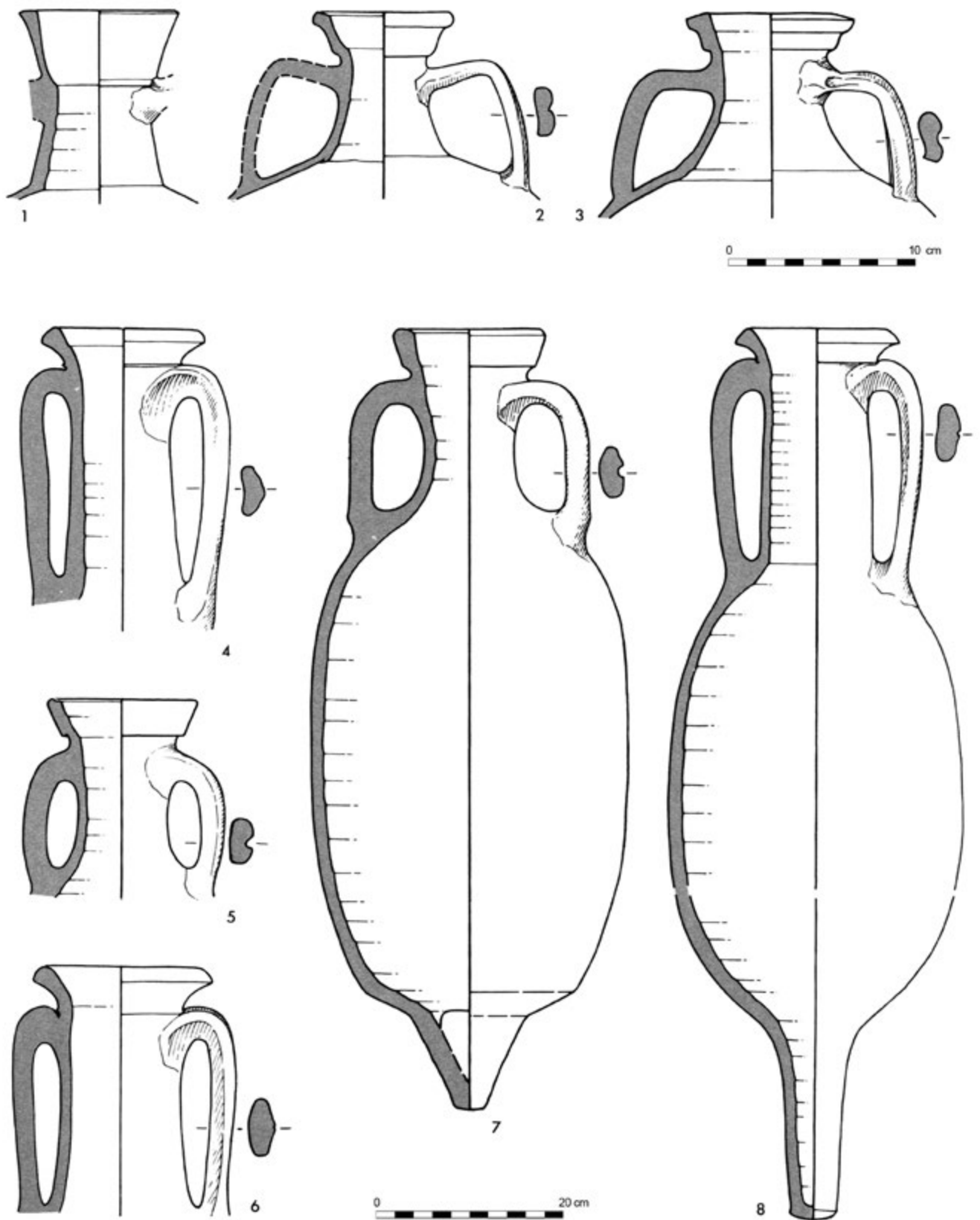
<sup>1</sup> Vegas 1975.

<sup>2</sup> Gechter 1979.

<sup>3</sup> Wegert 2011.

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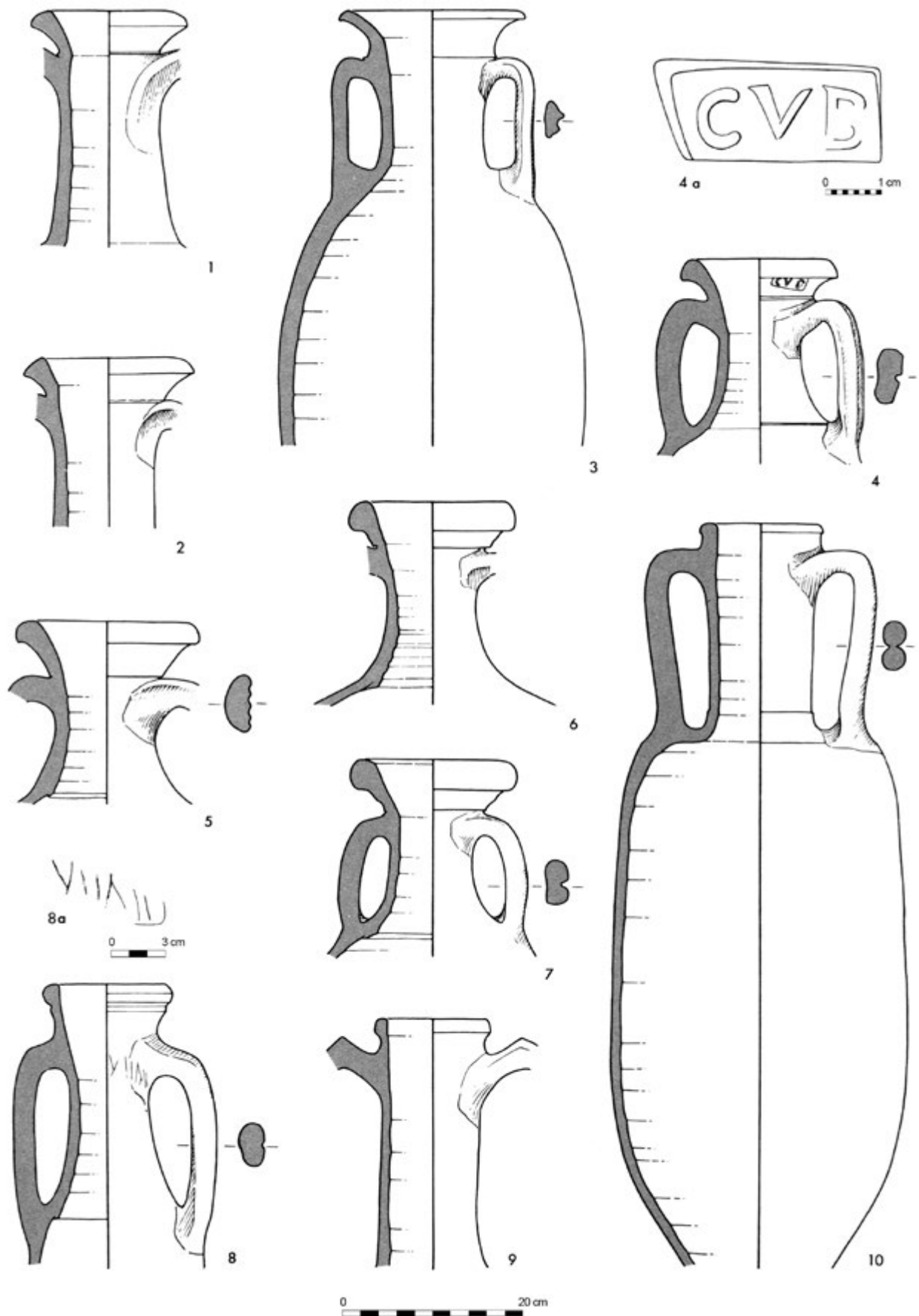
<sup>4</sup> Gechter 1979, 69, fig. 30, no. 2; Vegas 1975, 72, pl. 29,4.



Zweihenkelkrug mit glatter trichterförmiger Mündung, Abb. 1. — Zweihenkelkrug mit glattem Dreiecksrand, Abb. 2. 3. — Amphore mit Dreiecksrand, Abb. 5. 7. — Amphore mit trichterförmig ausladender Mündung, Abb. 4. 6. 8. (S. 13 ff.).

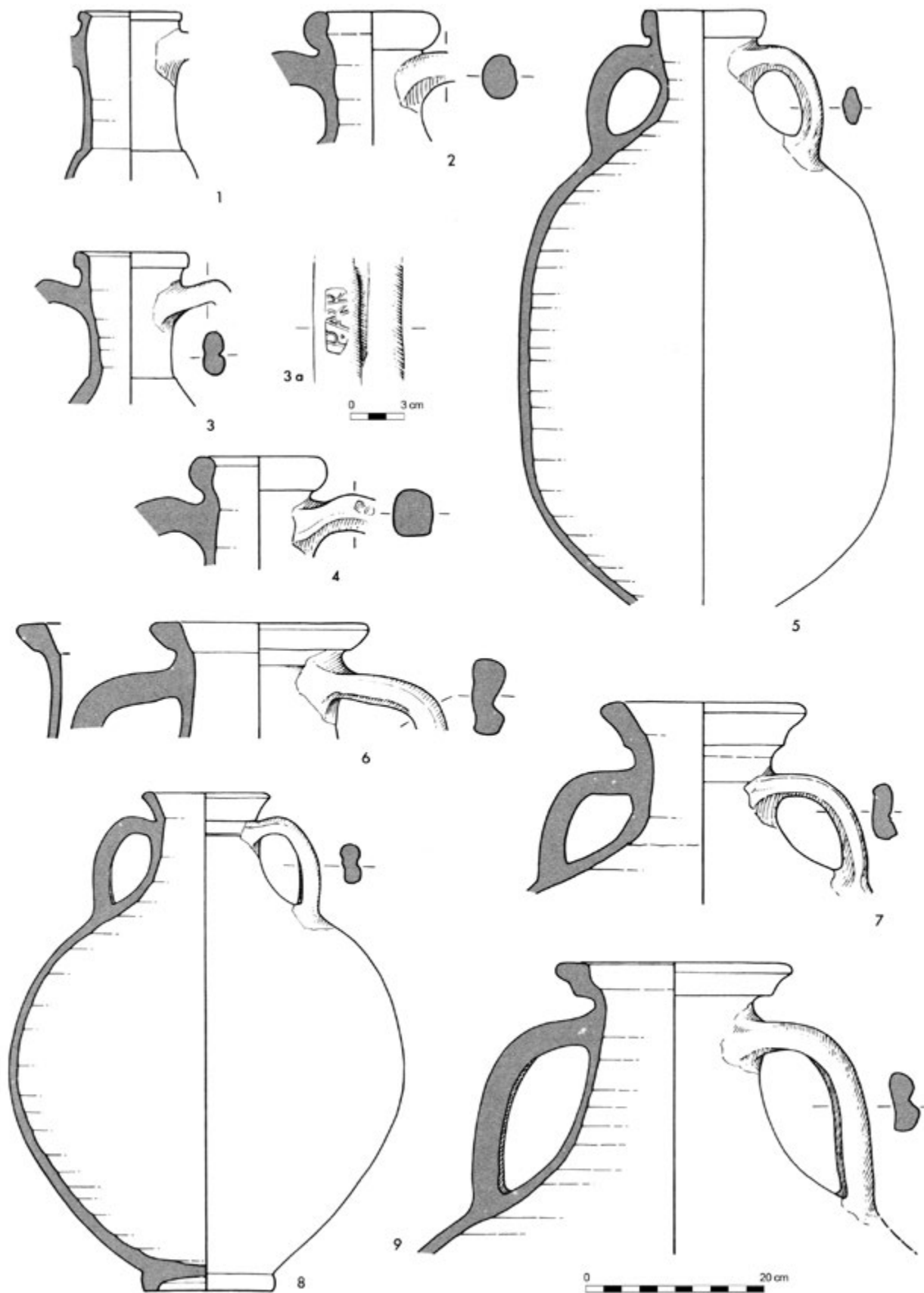
FIGURE 4.1: PUBLISHED AMPHORAE FROM NEUSS (FILTZINGER 1972).





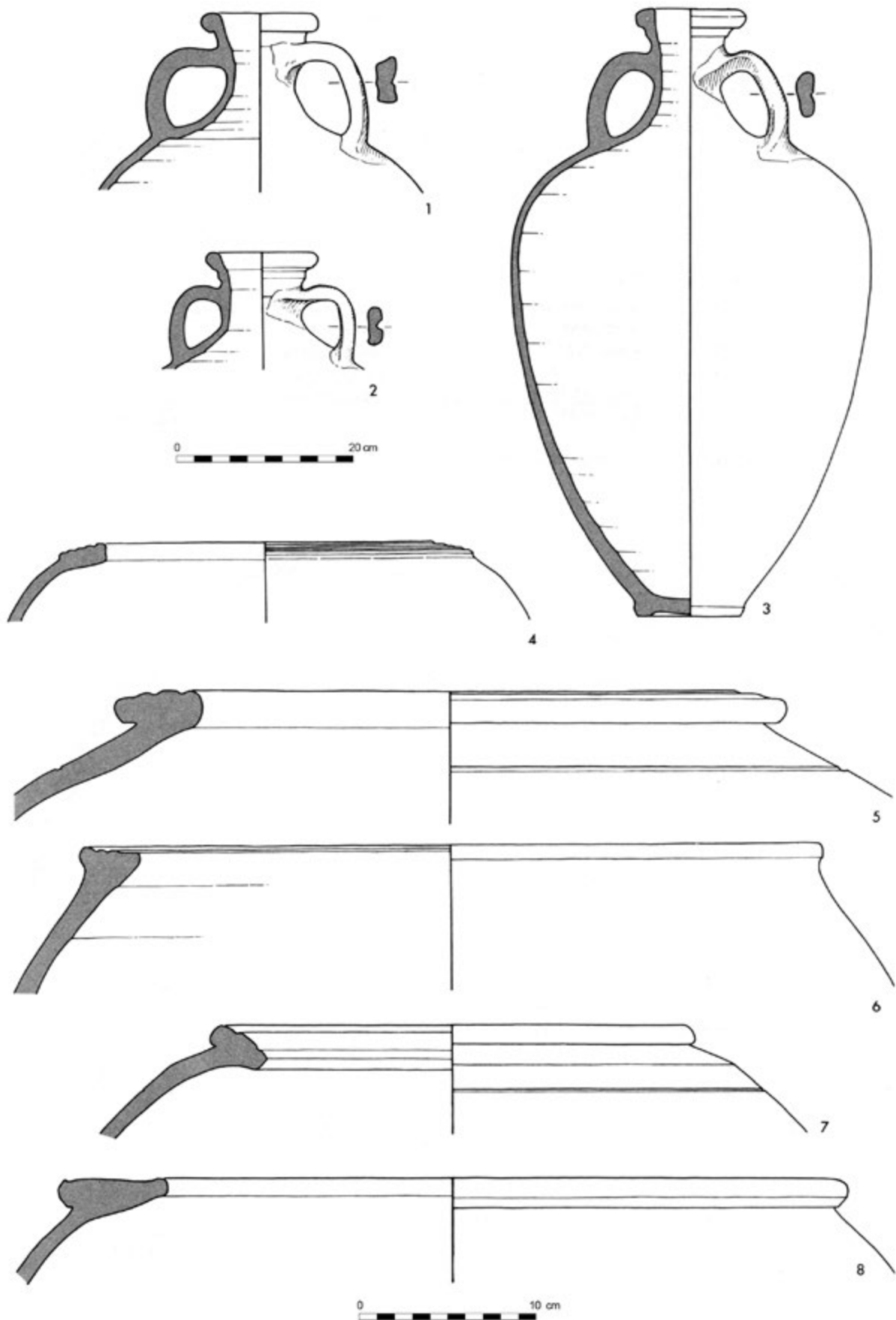
Amphore mit trichterförmig ausladender Mündung, Abb. 1–7. — Amphore mit Rundstabrand, Abb. 8–10

FIGURE 4.2: PUBLISHED AMPHORAE FROM NEUSS (FILTZINGER 1972).



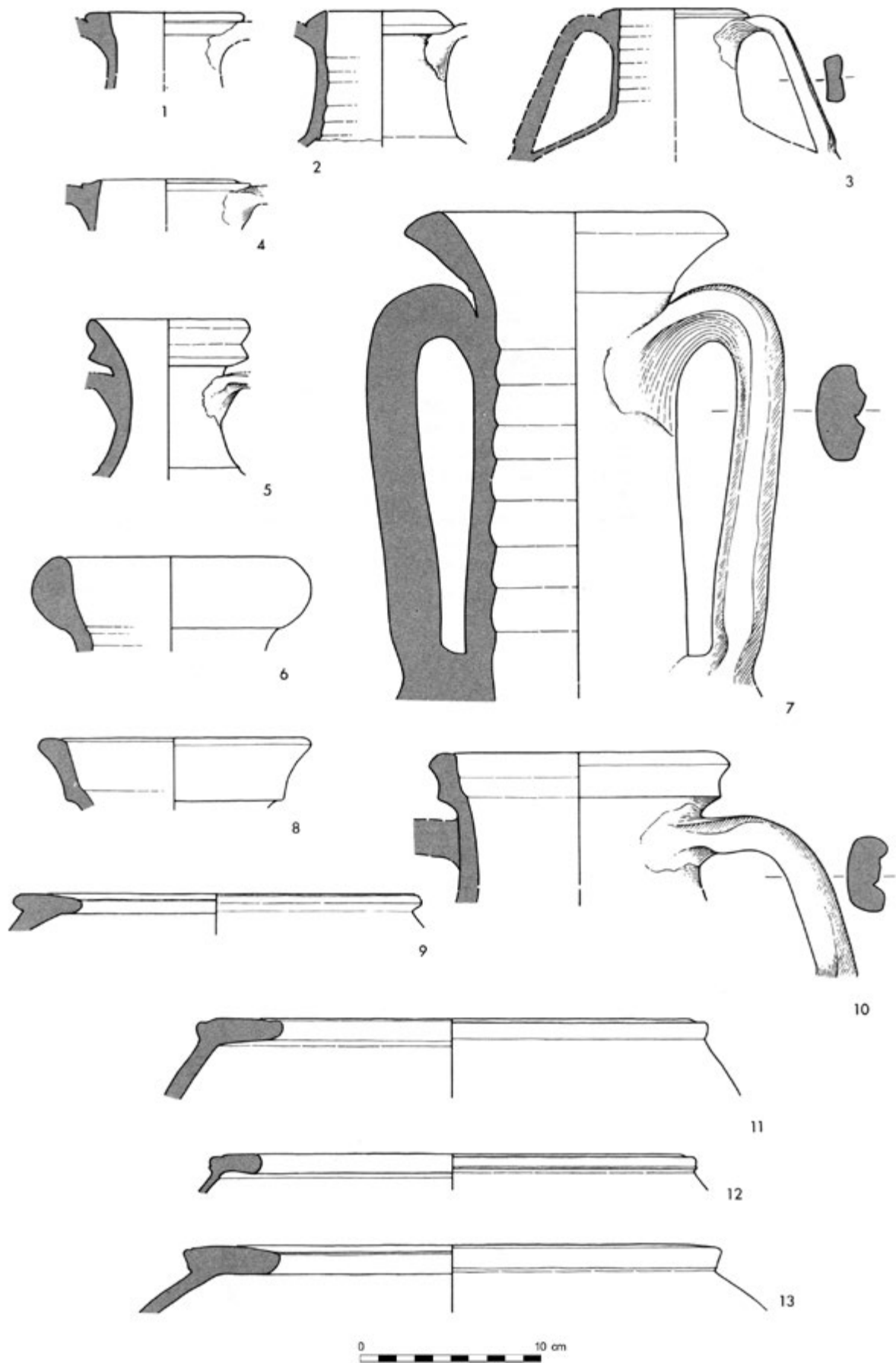
Amphore mit Rundstabrand, Abb. 1. 3. — Kugelamphore mit Wulstrand, Abb. 2. 4. 5. — Standamphore mit Dreiecksrand, Abb. 6—9 (S. 15 f.).

FIGURE 4.3: PUBLISHED AMPHORAE FROM NEUSS (FILTZINGER 1972).



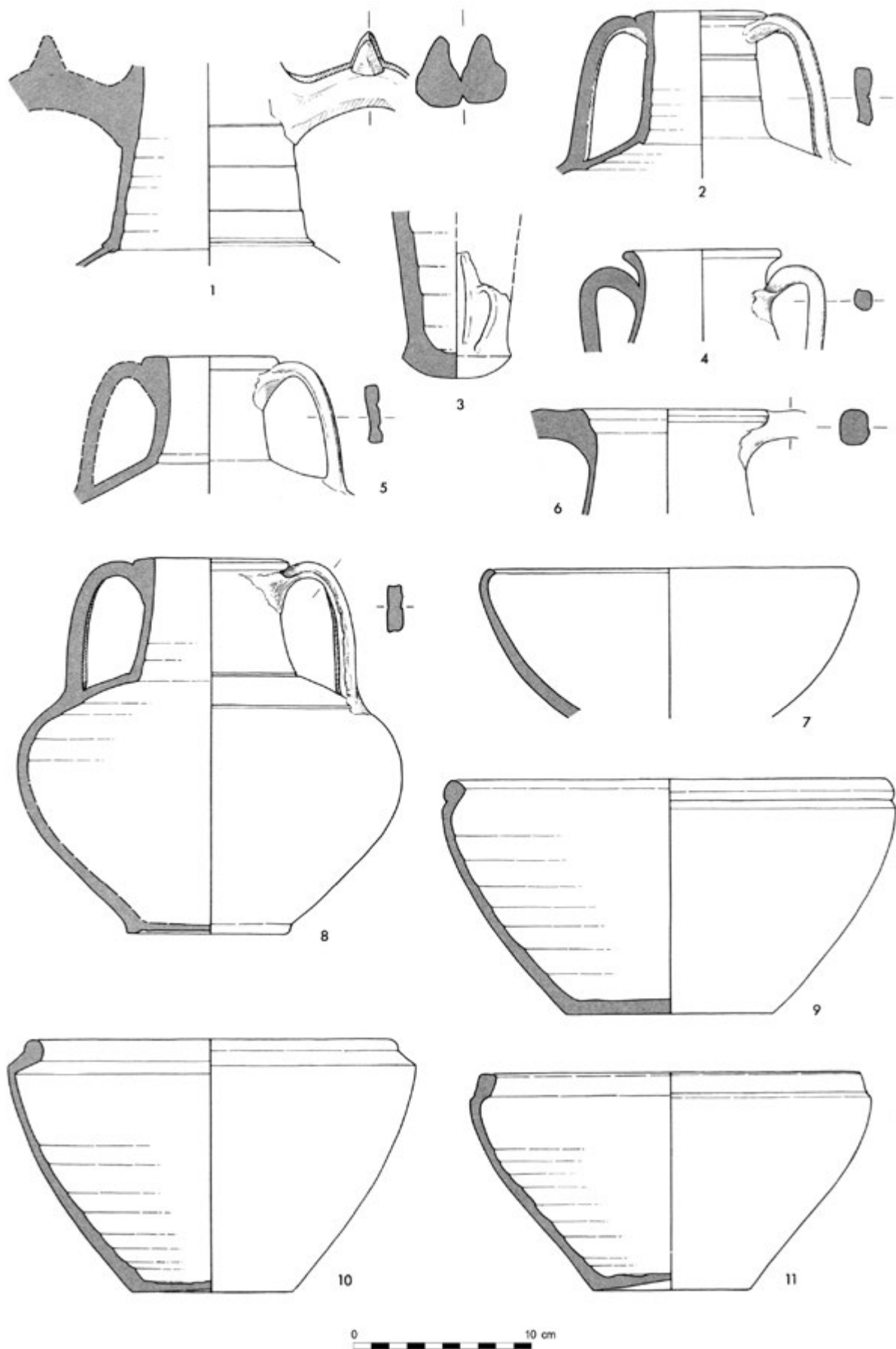
Standamphore mit Wulstrand, Abb. 1–3. — Dolium, Abb. 4–8. — Abb. 1–3 (S. 16 f.)

FIGURE 4.4: PUBLISHED AMPHORAE AND STORAGE JARS/DOLIA FROM NEUSS (FILTZINGER 1972).



Keramikformen aus der Neusser Töpferei am »Gagelweg«. Töpferofen 1 und 2 (S. 53 ff.).

FIGURE 4.5: PUBLISHED AMPHORAE AND OTHER FINDS FROM NEUSS (FILTZINGER 1972).



Keramikformen aus der Neusser Töpferei »Neusser Ring«, südlich der Kölner Straße. Töpferöfen 3–7 (S. 71 ff.)

FIGURE 4.6: PUBLISHED AMPHORAE FROM NEUSS (FILTZINGER 1972).

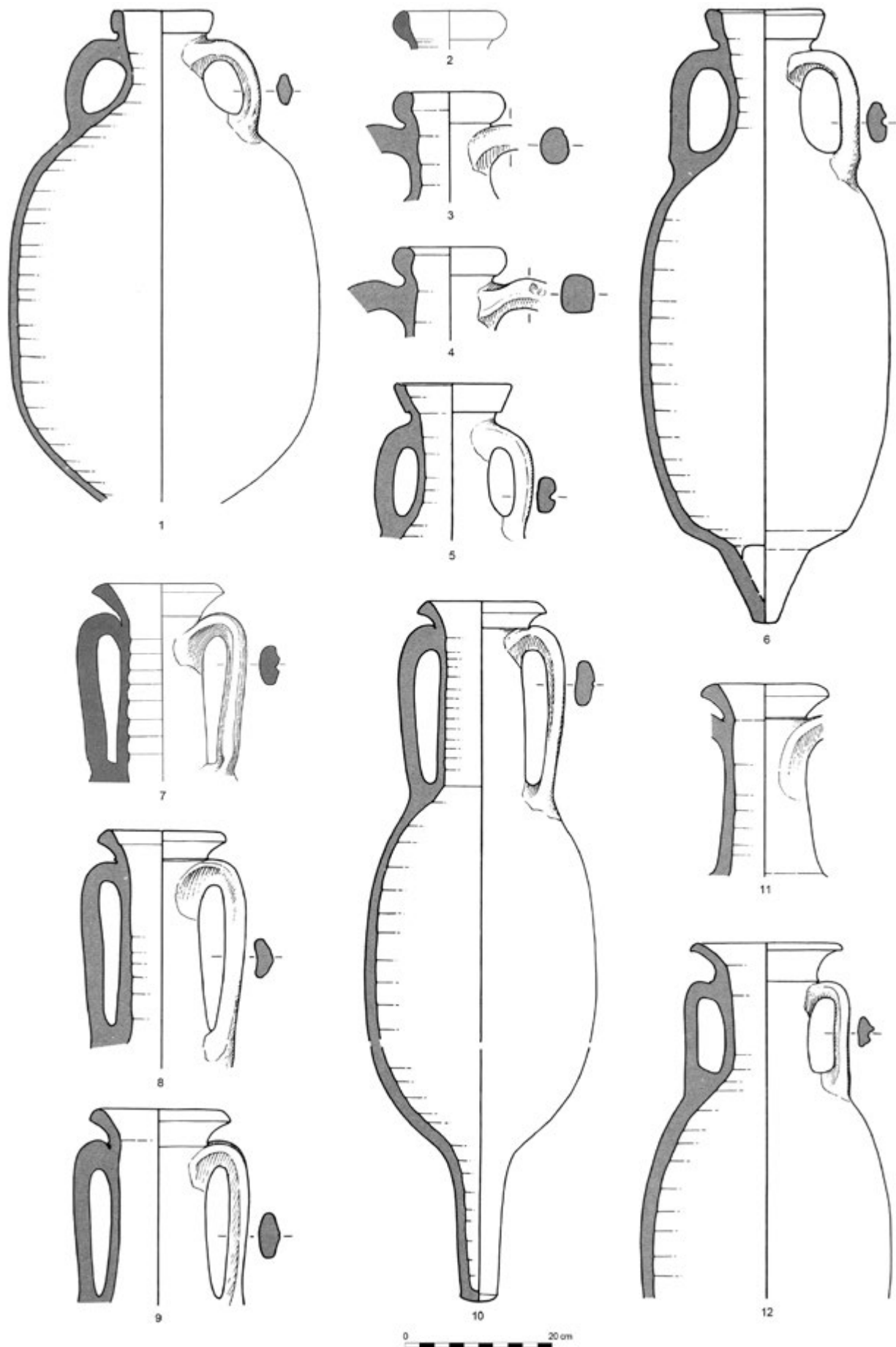


FIGURE 4.7: A SELECTION OF THE HISPANIC AMPHORAE,  
FROM THE LIMESFORSCHUNGEN VOLUME PUBLISHED BY FILTZINGER (1972).

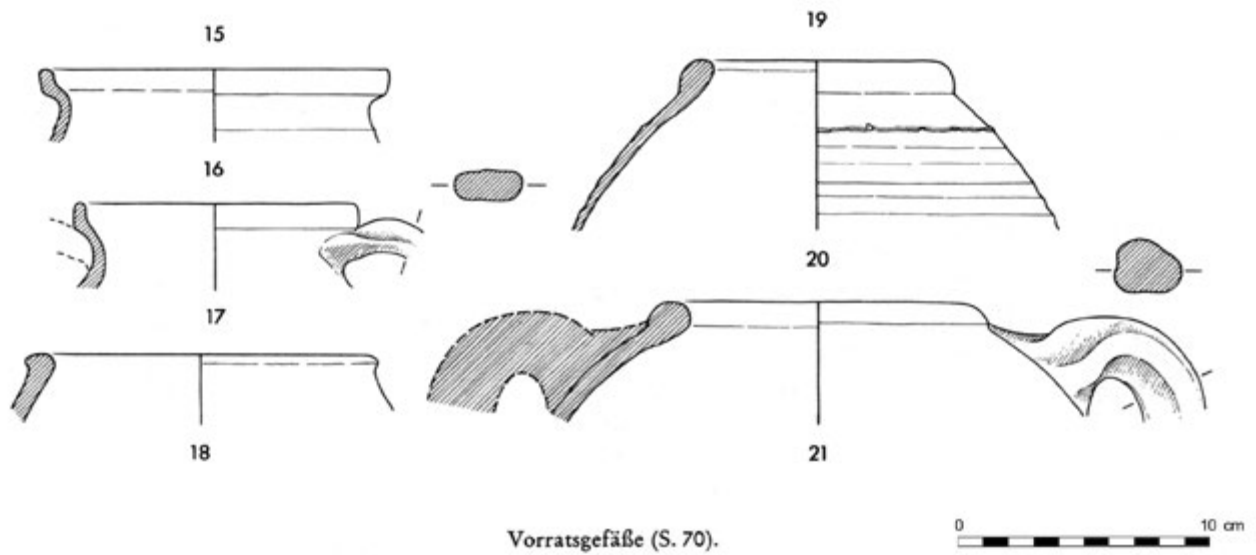


FIGURE 4.8: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).

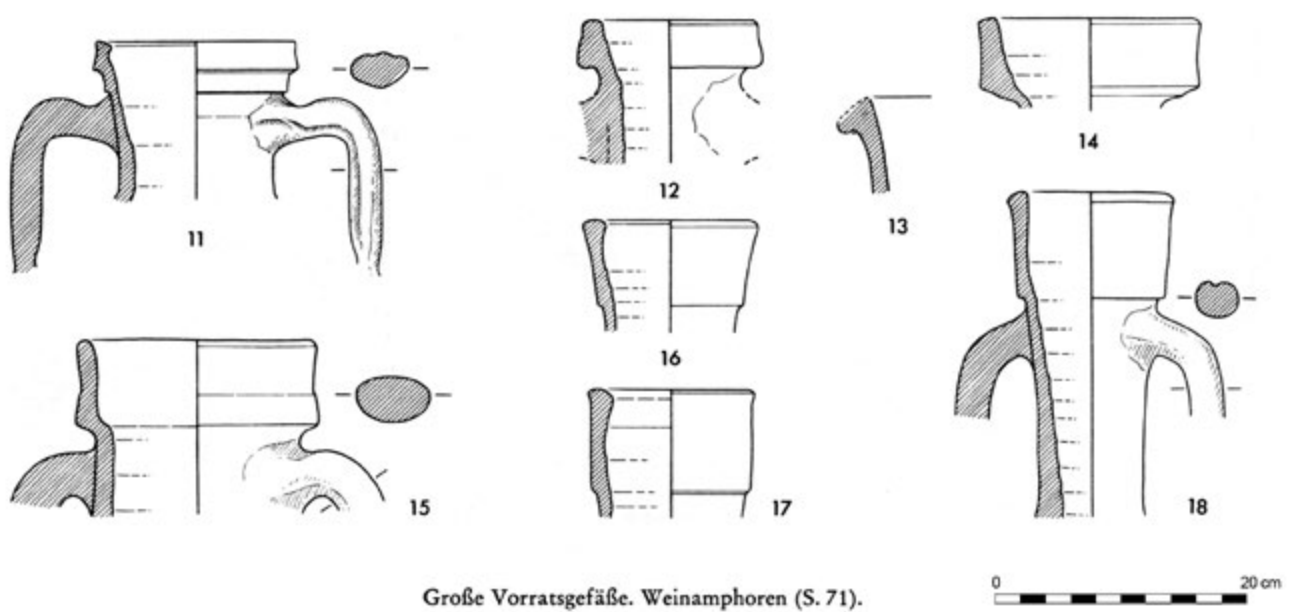
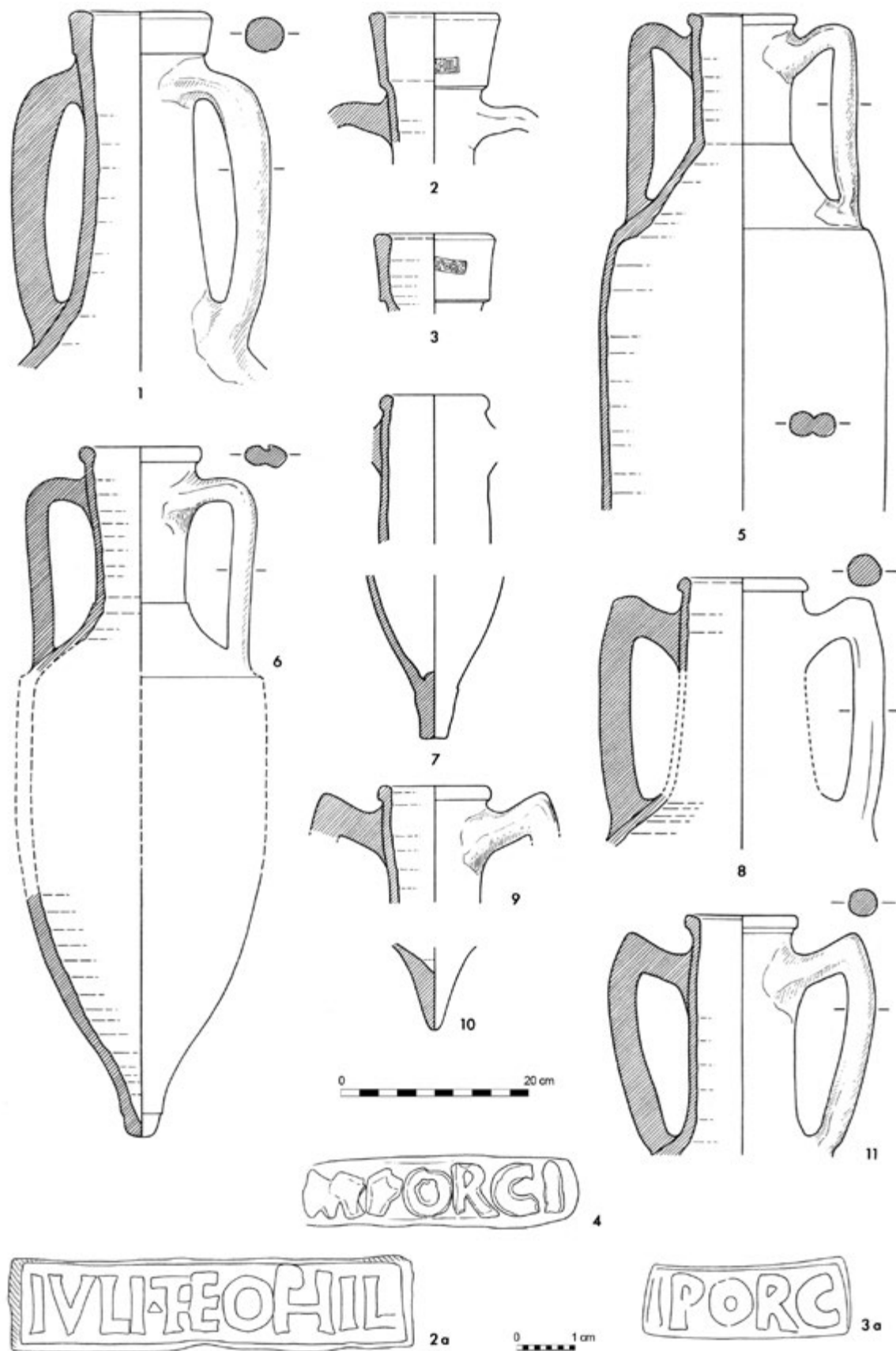


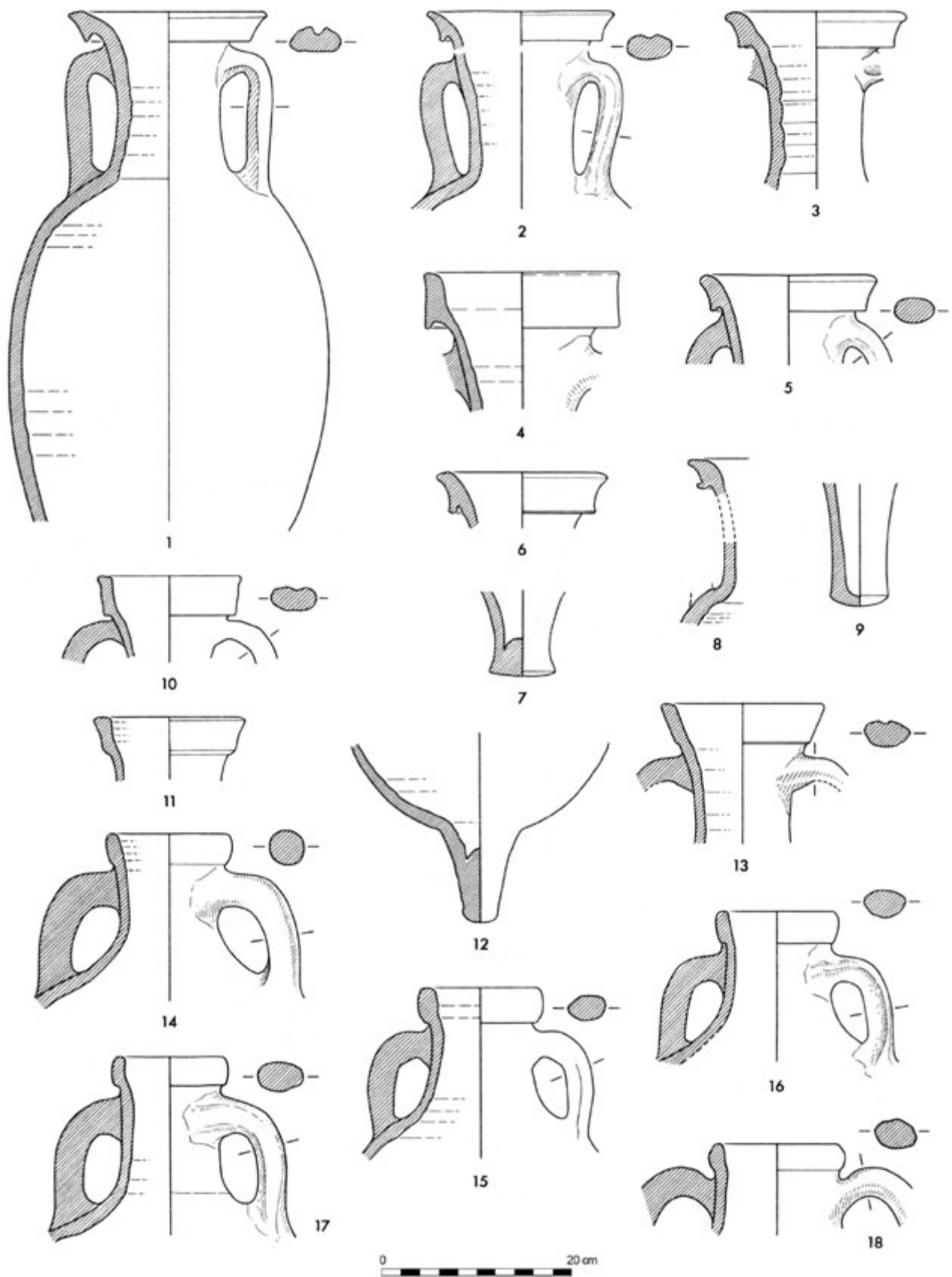
FIGURE 4.9: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).



Weinamphoren (S. 71 f.).

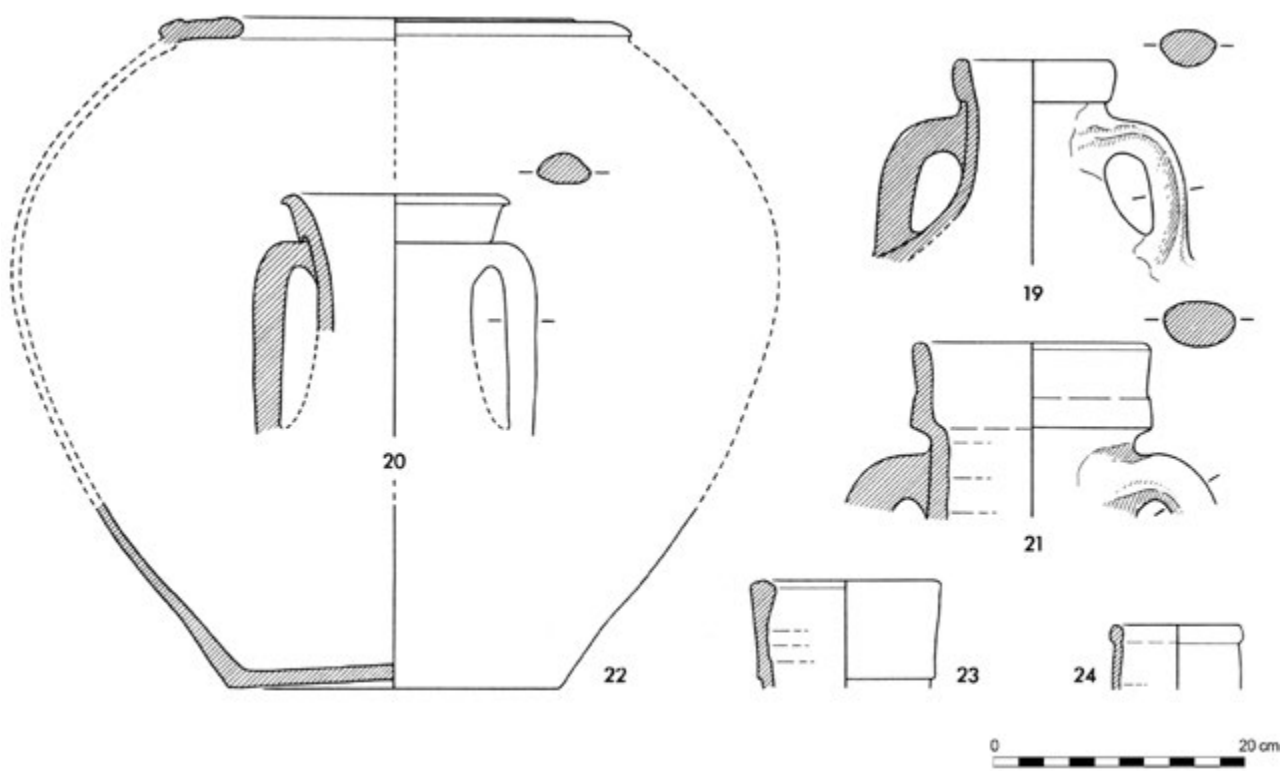
FIGURE 4.10: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).





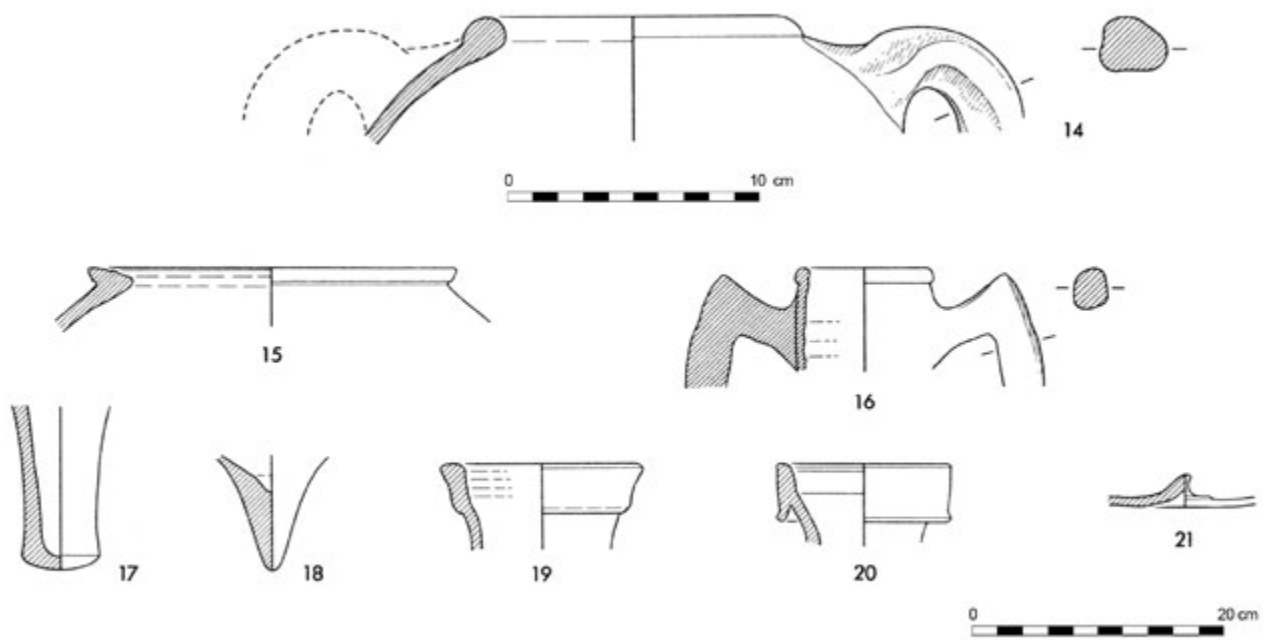
Saucenamphoren. Ūlamphoren (S. 72 f.).

FIGURE 4.11: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).



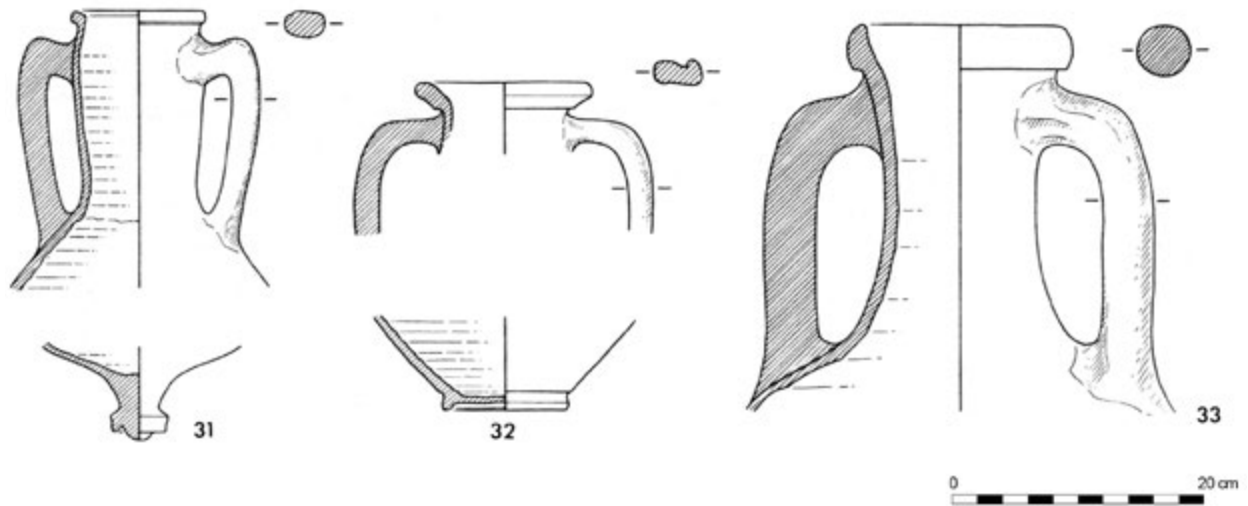
Augustischer Fundzusammenhang: AN 17049 (S. 74).

FIGURE 4.12: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).



Augustischer Fundzusammenhang: AN 14171 (S. 75).

FIGURE 4.13: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).



Klaudischer Fundzusammenhang: AN 19748. 19749 (S. 76).

FIGURE 4.14: PUBLISHED AMPHORAE FROM NEUSS (VEGAS 1975).

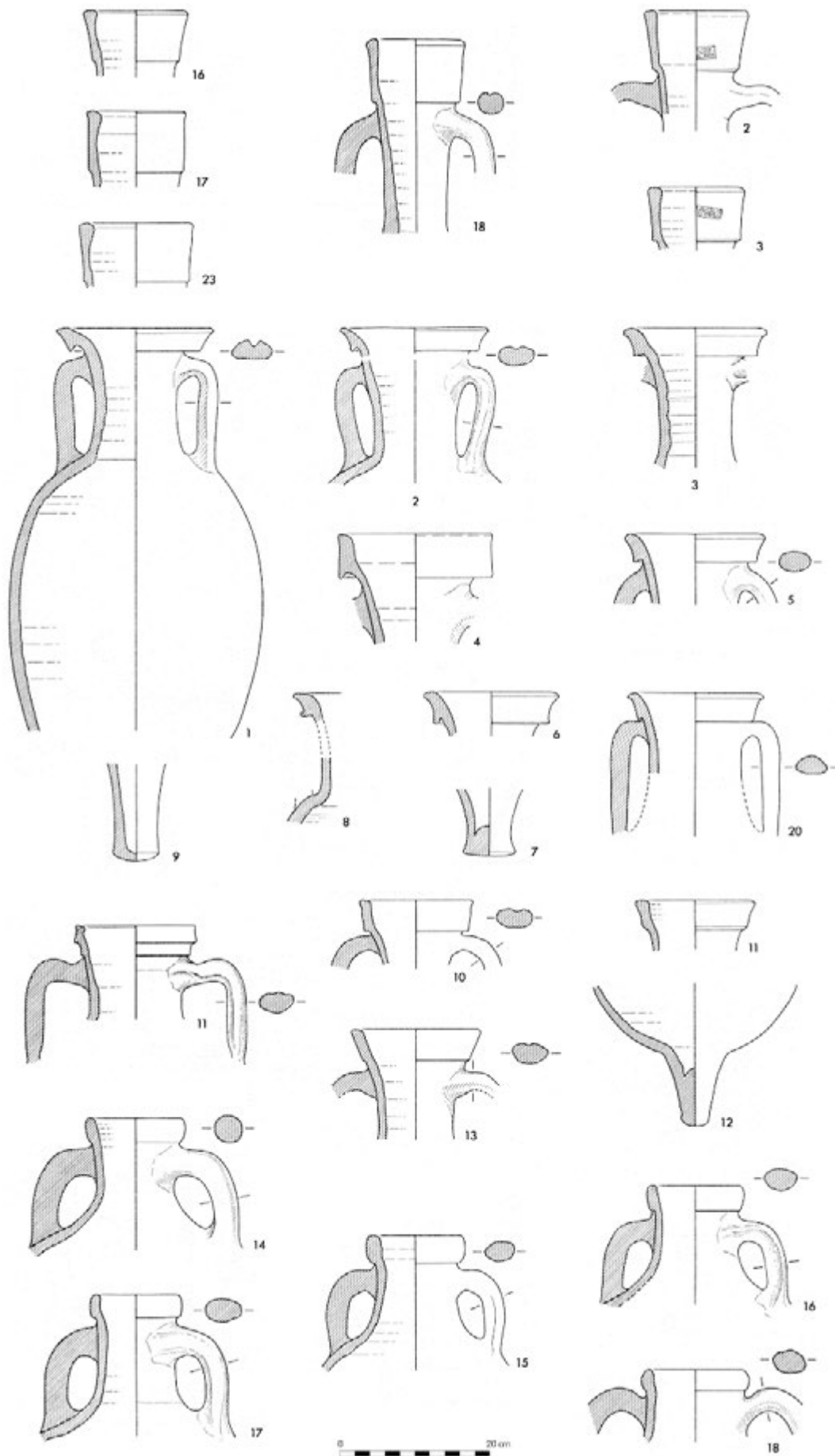
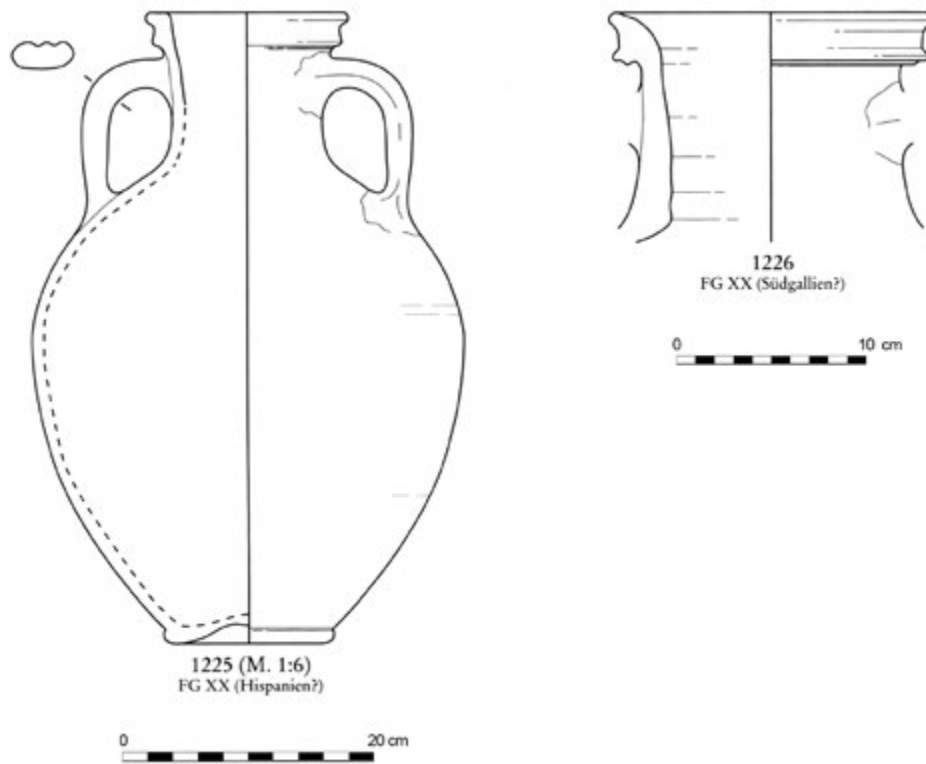


FIGURE 4.15: HISPANIC AMPHORAE SELECTION, AFTER M. VEGAS (1975).



Amphoren für Wein: 1225–1226: Dressel 28 Var., Fabrikatsgruppe XX.

FIGURE 4.16: OBERADEN 74 PREVIOUSLY PUBLISHED AS DRESSEL 28 FROM NEUSS (VEGAS 1975).

## 5. General assessment of Neuss material

The problems just broached, about the safe allocation of the Neuss material to secure stratigraphic levels, and thus a definite chronological period, had been previously signalled by other scholars, such as E. Ettinger, H. Chantraine and N. Hanel, who worked at Neuss.<sup>1</sup> Recently F. Kemmers, in a brilliant study on the numismatic evidence of the military camp on the Hunerberg in Nijmegen,<sup>2</sup> felt unable to utilize the earliest material at Neuss for comparison purposes with the Nijmegen coins, stating the difficulties of separating the different phases of Neuss as the reason.

These problems of stratigraphy and chronology have prompted us to choose to not deal with the material based on its tenuous association with a particular phase in the series of forts. In doing so, we wish to avoid presenting any false information on, or making any incorrect interpretations of the material. Analysis of the material based on the phase of use of the various forts at Neuss should only occur if, and when, Neuss were to fall within the category of well-dated military settlements of the Rhine, presenting a well-established chronological development. At present, this is unfortunately far from the case.

Accordingly, we opted to make an encompassing assessment of all the material we could locate in Meckenheim that is classified as dating to prior to the creation of the ‘Koenen’ fort of 43 AD. We firmly believe that this is the only honest way to approach the archaeological material and problems at Neuss.

One last matter that has emerged with the material from Neuss is that within the ‘pre-Claudian’ amphorae we have found some types and forms that are undoubtedly later. These must be considered intrusions, linked to the use of the area during the second half of the first century AD, or even later. The clearest example is the presence of several Dressel 20 fragments bearing stamps of late Julio-Claudian, Flavian and Antonine times. Alongside the Dressel 20, we also find some forms, such as the Beltrán IIA and the Gauloise 4, whose production origins fall in the first half of the first century AD, but whose production reached its peak in the middle of the first century, or even later for some pieces produced in the Rhine regions and *Gallia Belgica*. For this reason, even if most of the material seems to be Augustan and early Julio-Claudian, we must accept a later date of the context from the presence of the later material.

Since we shun any separation of the material based on a theoretical system of occupational phases, we perforce adopt a broad-based amphora grouping (Table 2) that mixes some of the earliest amphora forms, as documented in

*Germania*,<sup>3</sup> with the previously mentioned later material. Due to their elevated numbers and their well-established chronological development, the Gallic and, above all, the Hispanic amphorae can provide some information about the temporal evolution of the imports in Neuss. Nevertheless, we can only argue that within the *Baetica*, *Narbonensis*, and Lyon amphorae we observe a predominance of pieces from late Augustan and Tiberian times.

The quantification follows the Minimum Number of Individuals (MNI) method, based on the diagnostic fragments.<sup>4</sup> Even if each quantitative method presents its own difficulties and all are quite far from perfect,<sup>5</sup> our personal experience rejects any quantification system based on the weight of the sherds. Accordingly, a single all-embracing assessment of the Neuss material based on the MNI emerges as the only viable way to calculate and express an ‘objective’ valuation. The results obtained are presented in the next table, according to their production regions.

PROVENANCE	MNI (523)	%
HISPANIA	263	50.2
GALLIA	103	19.6
EAST MEDITERRANEAN	82	15.9
ITALY	62	11.8
GALLIA BELGICA	12	2.3
AFRICA	1	0.2

TABLE 2: QUANTITIES OF AMPHORAE AND PLACES OF ORIGIN, BASED ON THE MNI

As is normal in pre-Flavian Roman sites on the Rhine,<sup>6</sup> the Hispanic amphorae comprise by far the majority at Neuss. However, their elevated presence does not reach the extreme levels that they occupy in other Augustan sites in *Germania*, thus leaving room for the presence of Italian, Eastern Mediterranean, and above all, Gallic imports. We believe that this is caused by the broad chronological framework we are forced to adopt at Neuss. Evidence elsewhere shows that the imports from the closest regions, such as Gaul, increase from the first quarter of the first century AD onwards.

These questions are going to be reviewed in other parts of the book. First, we will examine the different production regions that took part in the supply of amphora-borne goods to the military contingents quartered in Neuss.

<sup>1</sup> Chantraine 1982; Ettinger 1983; Hanel 2000.

<sup>2</sup> Kemmers 2008: 169.

<sup>3</sup> A good example is the presence of some Brindisian amphorae, Campanian Dressel 1 and some early olive oil forms from *Baetica*. All of them will be analysed in depth in the following pages.

<sup>4</sup> Arcelin – Tuffreau-Libre eds. 1998.

<sup>5</sup> For this question see: Orton – M. Hughes 2013.

<sup>6</sup> González Cesteros 2014.

## 6. Imports from the Iberian Peninsula

Hispanic imports into the lower Rhine before the Batavian revolt of 69 AD was the subject of the doctoral thesis of one of the present authors.<sup>1</sup> Within that study the material from Neuss was included and some peculiarities were observed, for example the presence of some very early Baetican types, and the relatively high number of Tarraconensian imports. However, overall, the general trend and patterning of Hispanic imports seen elsewhere also holds true for Neuss.

The strong commercial relationship between the Iberian Peninsula and the Rhine region was already mentioned in the pioneering studies by S. Loeschke at Haltern and Oberaden;<sup>2</sup> but it was J. Remesal who first dealt with

this question through the study of the stamps present on Dressel 20 amphorae found along the Northern frontiers.<sup>3</sup> Progress in research over the last thirty years has made it imperative to carry out new studies, designed along different approaches and based also on fresh quantitative evaluations. An example of one of the advances made is that we now actually know that as the first Dressel 20 did not appear till the 30s or early 40s AD,<sup>4</sup> they should not be present in the finds of the early military settlements of Neuss. However, due to the continuous occupation of the area and the resulting 'mixed' stratigraphy, we have found several examples of Dressel 20 in Meckenheim. Further, the regular use of stamps on Baetican olive oil amphorae only occurs from the 40s AD, and therefore we should



FIGURE 6.0.1: MAP OF THE WESTERN ROMAN EMPIRE IN EARLY IMPERIAL TIMES, WITH HISPANIA AND ITS MAIN EXPORTING REGIONS.

<sup>1</sup> González Cesteros 2014.

<sup>2</sup> Loeschke 1909; 1942.

<sup>3</sup> Remesal 1986; 1997.

<sup>4</sup> Berni 2008: 59; González Cesteros 2014: 381 and 455; Van der Werff 1984: 355.

HISPANIC REGIONS	NMI (263)	%	AMPHORA TYPES					
<b>BAETICA</b>	217	82.5						
GUADALQUIVIR VALLEY	130	49.4	Indet.: 6	Olive oil: 79	Haltern 70: 40	Dr. 7-11: 2	Dr. 28: 2	Urceus: 1
BAETICAN COAST	87	33.1	Dr. 7-11: 79	Dr. 12: 3	Beltrán IIA: 2	Dr. 2-4: 3		
<b>TARRACON.</b>	46	17.5	Indet.: 5	Pascual 1: 27	Ob. 74: 10	Dr. 2-4: 4		

TABLE 3: HISPANIC AMPHORA PERCENTAGES, ACCORDING TO ORIGIN AND FORM.

have almost none in our material from Neuss,<sup>5</sup> but that is not the case.<sup>6</sup>

In Vegas' publication of the *Limesforschungen*, the supremacy of the Iberian imports within the overall number of amphorae was observed, but the information available to her was limited and based on the state of research in the early 1970s, which prevented her from gaining a true image of the Neuss material. Therefore through our work in Meckenheim, we were able to provide the first accurate and comprehensive account of the Hispanic imports. We documented an overall Hispanic amphora presence of around 50% of all the amphorae found at Neuss: one for every two. This elevated percentage indicates, unequivocally, the dependence on Hispanic amphora-borne products at Neuss, which is in keeping with other military places on the Rhine from the beginning of the Roman conquest.

This economic link remained intact for the entire period of the Roman occupation, demonstrating that the Iberian Peninsula, above all the Guadalquivir Valley and the coastal region of *Baetica*, was a massive producer and exporter of foodstuffs and raw materials to the Roman settlements placed along the frontier.<sup>7</sup>

Even if Tarraconensian amphorae are present in significant quantities, *Baetica* emerges as by far the most important Hispanic province supplying Neuss, as it also is for the whole Rhine region.<sup>8</sup> Four of every ten containers were produced in the southern part of the Iberian Peninsula, with several different products from the Guadalquivir Valley and the coastal area being present.

### 6.1. Products from *Baetica*: the Guadalquivir valley

The interior region of *Baetica* was responsible for the export to the Rhine of huge quantities of amphora products, mainly olive oil; initially in the ovoid forms, Oberaden 83 and Haltern 71,<sup>9</sup> and later in the globular amphora Dressel 20. At Neuss, we have some olive oil amphorae from very

early days, with most being classified as allegedly Haltern 71. Yet if we only go by rims, handles or base fragments, it is really difficult to distinguish between the Oberaden 83 and Haltern 71 forms.<sup>10</sup>

Of particular importance, is the presence of some examples that must be classified as Oberaden 83, though they still present some archaic features that keep them close to the first Baetican olive oil amphora prototype, the Ovoid 6,<sup>11</sup> as is also seen in examples from Lyon, dated to 30-20 BC.<sup>12</sup> Vegas has already published some of these early types at Neuss.<sup>13</sup> Additionally, we must note that among the pieces published by Filtzinger in material supposedly dating to the second quarter of first century AD we can behold an almost complete Oberaden 83.<sup>14</sup> Once more, this unambiguously demonstrates the problems in unravelling the sequence of the separate camps from their complicated and intercutting stratigraphy.<sup>15</sup>

Within the group of early ovoid olive oil amphorae comes an exceptional example that still preserves pale traces of an ink inscription in red (*rubrum*).<sup>16</sup> This piece was previously published by Vegas in 1975,<sup>17</sup> but she does not mention the presence of the *titulus pictus*. The morphological details identify it as a very early Baetican olive oil amphora.<sup>18</sup> Essentially it is a transitional form that should maybe be defined as a (precursor of Oberaden 83?) 'primigenious Oberaden 83', and may date to before 15-10 BC, since we have not found parallels at Dangstetten, Roedgen or Oberaden. The inscription is particularly important, as it is the first epigraphic evidence on a Baetican olive oil amphora in *Germania*. The epigraphic system on this vessel has nothing in common with that documented on the Dressel 20 of Monte Testaccio: the colour of the ink is *rubrum* rather than *atramentum*; and the tall, thick lettering traces are very different from the black, short handwriting typical of the Dressel 20. Unfortunately, the letters in this case are difficult to make out – just some pale remnants.

<sup>10</sup> García Vargas *et al.* 2011: 237-242.

<sup>11</sup> Almeida 2008, 145-149; García Vargas *et al.* 2011: 228-235.

<sup>12</sup> Desbat – Lemaître 2000.

<sup>13</sup> Figure 4.1.5. Vegas 1975: Taf. 30.

<sup>14</sup> Figure 4.7, 1; Filtzinger 1972: Taf. 25

<sup>15</sup> During our stay in Meckenheim we could not see this piece, because we had only access to the material supposed to be from pre-Claudian layers.

<sup>16</sup> Epigraphic *appendix* no. 128.

<sup>17</sup> Figure 4.11, 17; Vegas 1975: 73. no. 17. Taf. 30.17.

<sup>18</sup> Figure 6.1.0.

<sup>5</sup> There are some exceptions of stamps on olive oil amphorae previous to the Dressel 20: Berni 2008, 82-83; García Vargas *et al.* forthcoming; González Tobar – Mauné forthcoming.

<sup>6</sup> See the epigraphic *appendix*.

<sup>7</sup> González Cesteros 2010; Remesal 1997.

<sup>8</sup> González Cesteros 2014; Martin-Kilcher 1994.

<sup>9</sup> Figure 6.1.3.





FIGURE 6.1.0: OBERADEN 83 WITH TITULUS PICTUS IN RUBRUM.

For this reason, we are not able to present any conclusive reading here. The inscription consists of two different parts: the first on the neck; and the second, crossways on the lower part of the handle. The neck inscription seems to be the end part of a numeral, probably a small unit. The part on the handle presents two possible lines of script and seems to be a personal name, a *duo* or *trianomina* divided by dots. We could interpret this name as that of the officer in charge of the oil filling in *Baetica*. We would then have the earliest example of a *titulus pictus* concerned with controlling the olive oil supply from southern Spain. The formal features of the amphora and the early date of the Roman presence in Neuss (ca. 16 BC) indicate that this *titulus* is earlier than those in black ink (*atramentum*) documented at the Monte Testaccio.

The other epigraphic examples on Baetican olive oil amphorae at Neuss are stamps or graffiti on Dressel 20. The production of these globular amphorae starts around 30 AD and finishes with the latest depositions on Monte Testaccio, ca. 270 AD.<sup>19</sup> The number of Dressel 20 stamps at Neuss is 38, from both the old and new collections. This is a small number when compared with the 350 stamps we studied in Nijmegen,<sup>20</sup> or the close to 500 documented in Xanten.<sup>21</sup> Even so, the Dressel 20 stamp collection of Neuss covers a time-frame from the Julio-Claudian dynasty until the middle third century AD.

Our work done on the Meckenheim storage collections adds 20 new stamps to those already known from Neuss. All examples have been studied under the current standard criteria – registering all of them in accordance with the

typological characteristics of rims, handles etc., as we have already done in Nijmegen.<sup>22</sup> The typological dating is essential for the stamps of the first century AD that are still not documented in the dated deposits of Monte Testaccio.

In the Nijmegen publication we have presented a chart of the chronological evolution of Dressel 20 rims and handles, and their relation to the stamps. We reproduce it here in association with the corpus of our stamps and graffiti.

In the next table all the stamped Dressel 20 from Neuss are presented in chronological order. It is important to mention that the time-sequence is quite complete, running from the reign of Tiberius to the post-Severan years.

The earliest Dressel 20 stamp documented in Neuss is LVALS, which must be dated to the 30s in the first century AD, and is already linked to the rounded Dressel 20 form and no longer to the ‘ovoid’ ones. First-century stamps are predominant at Neuss, with twelve dated from Tiberius to Nero, five from Nero to Vespasian, and three to late Flavian times. Eight pieces must be placed in the second century AD: four of likely Trajan-Hadrian date, three of Antoninus Pius and one of Marcus Aurelius. The last five examples belong to the third century AD, mostly to the first quarter.

The relatively small epigraphic assemblage at Neuss does not by itself shed any light on relevant questions linked to the supply of Baetican commodities to the military. The stamps’ chronological distribution must be viewed as a random sample rather than one linked to any stratigraphical data and thus historical development. Some of the stamps of the Julio-Claudian period, such as PHILO

<sup>19</sup> Berni 2008: 64.

<sup>20</sup> Berni 2017.

<sup>21</sup> The material from Xanten is still in the process of publication by Remesal and his team.

<sup>22</sup> Berni 2017: 185-188.

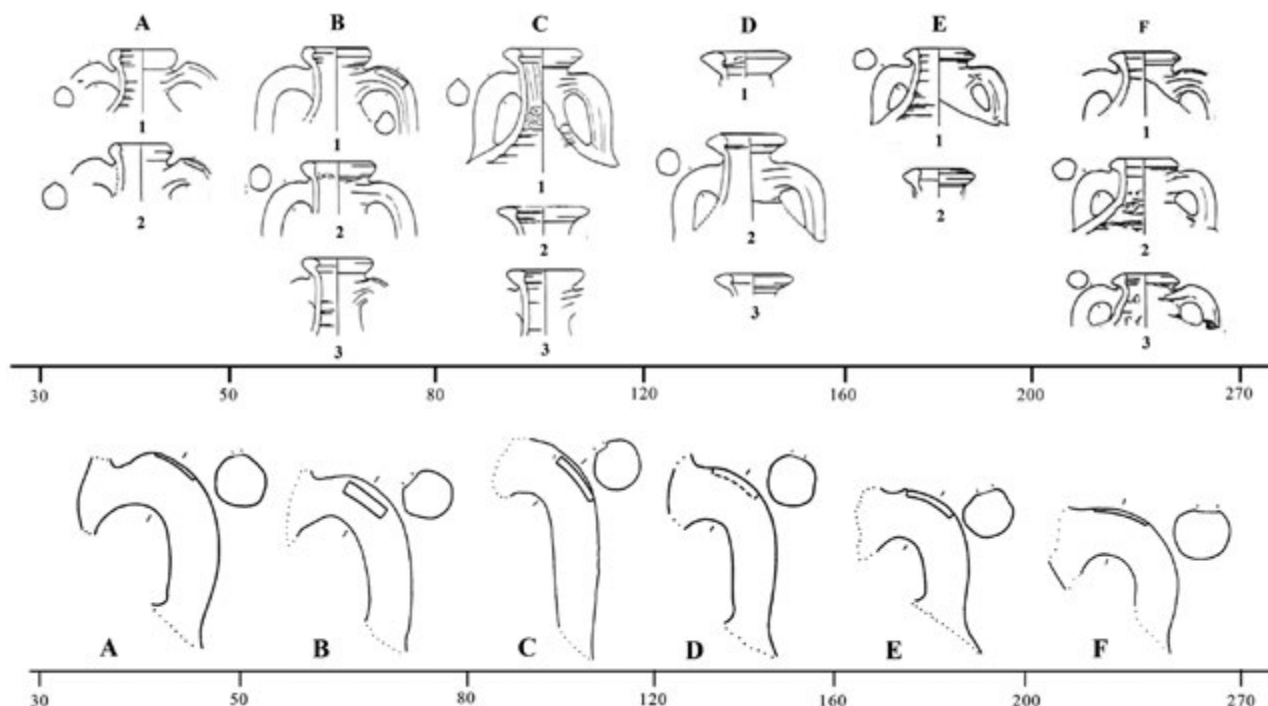


FIGURE 6.1.1. DESCRIPTIVE CHART OF DRESSSEL 20 RIMS AND HANDLES, WITH THE SIX DIFFERENT PROPOSED STAGES (A-F) (BERNI 2017 FIGS. 1-2).

or C·SEMPOL, are supposed to belong to Camp 7, which, after Gechter, must be dated together with camps 8, 9 and 10 to between 28/30 and 44 AD.<sup>23</sup> However, most of our assemblage is supposed to belong to phases of occupation that are much later than the well-documented chronology of the stamps.

Neuss, as other frontier military settlements, has provided a good number of graffiti *post cocturam* placed on rims, handles and body sherds of Dressel 20.<sup>24</sup> This kind of graffiti is distinctive of Roman military sites. The significance of the graffiti remains unknown; it may refer to the olive oil consumed, or even to the secondary use of these containers – complete or fragmented, a kind of small *dolium*. Sometimes, names are found in the first part of the graffiti, which must be referred to the final owner of the product.<sup>25</sup> The typical numbers that appear in these graffiti are linked to a specific capacity expressed in *modii* and their fractional *sextarii*. For example, 103 in the catalogue displays the numbers VII *modii* and XII *sextarii* on one handle. These graffiti can be a very useful tool for understanding distribution in the Roman army.

Leaving the interesting aspects of the epigraphical assemblage on Dressel 20 amphorae and returning to

the study of forms and amphora types present in Neuss, other types produced in the Guadalquivir valley and used for the transport of other commodities can be identified. Of special significance is the large number of Haltern 70, over 7.5% of the total amphorae, and over 15% of the Hispanic products. The quantity of the Haltern 70 was even greater during Augustan and Tiberian times, as the typological characteristics of most of the examples should be placed within the production of this period (Figure 6.1.5), when their production reached its maximum.<sup>26</sup> Nevertheless, there are some pieces whose form places their production within the middle decades of the first century AD (Figure 6.1.6). The fabric of most of the vessels points to a production area around the middle and, even more so, the lower Guadalquivir valley, being brown-red or orange in colour, hard and coarse, with semi-rounded quartz inclusions and occasionally hematite fragments. Nevertheless, one piece presents a white and softer fabric, with several semi-rounded quartz inclusions, similar to both the flat-bottomed Guadalquivir amphorae, found occasionally in the Rhine area,<sup>27</sup> and to the coarse wares of this region.

The content or contents of the Haltern 70 have been a controversial topic for many years: the debate is still not yet closed. That this discussion continues is somewhat surprising because numerous *tituli picti* exist that mostly mention two kinds of linked contents. These are *defrutum*, a kind of sweet grape must, and olives (normally black olives, but we have some examples of green/white olives)

<sup>23</sup> Gechter 2007; 2010: 98.

<sup>24</sup> For Nijmegen: Berni 2017: 289-320; Augst: Martin-Kicher 1987; for Mainz and this region: Ehlig 2003; 2007.

<sup>25</sup> The inscription of 'PAVLI MACEDONIS' on a Dressel 20 of the Flavian period from Nijmegen is extremely important for a better understanding of the food distribution in the Roman legions settled in Germania. In this case Macedo is the final receiver of the olive oil, that should be shared among the soldiers of the century of Paulus: Bogaers – Haalebos 1990: 56, Afb.7.1; Berni 2017: 311 no. 332.

<sup>26</sup> Berni 2011; García Vargas *et al.* 2011: 242-248.

<sup>27</sup> González Cesteros 2014: 385-387.

Corpus Number	Find Number	Stamp	Chronology
46	29932n	L·VAL·[S]	Tiberius-Caligula
30a	29766n	PHILO	Claudius
30b	7196n, lager 7	PHILO	Claudius
40	29761n	L·S·P[YR]	Second quarter 1st AD
44a	'Grimmlinghausen'	L·V[·]·IVC·	Second quarter 1st AD
44b	29720	L·V·IVC	Second quarter 1st AD
43a	1771n, lager 7	[C]SEMPOLYCLITI	Claudius
43b	7196n, lager 7	C·SEMPOL	Claudius
43c	3660n	PO[LYCLITI]	Claudius
33	'Gef. im Praetorium'	M·I·M	Claudius-Nero
49	1951n	[---]VB ((hedera)) ?	Julio-Claudian
25	29521n	Q·C·R·	Nero
21	28362n	ATITTAE	Nero-Vespasian
22	'Gef. im Praetorium'	BROCODV	Nero-Vespasian
45	28520n	VRITTI·FES (VRITI·FES)	Nero-Vespasian
47	Neuss	[L·VAL]TROPHIM[I]	Nero-Vespasian
31	Neuss	MFLAVIT	Julio-Claudian or early Flavian
29	Neuss	L·F·O	Second half 1st AD or early 2nd AD
19	28730n	POLAR (PORAR)	Flavian
26	28343n	CALPVRNIA[NI]? (CALPVRIA[NI])	Flavian
41	'Grimmlinghausen'	[RO·S]AENIANE	Flavian
23	'Grimmlinghausen'	L·C·F·P·C·O	End 1st AD or first quarter 2nd AD
32	Neuss	MIAPMA	Trajan-Hadrian
42	'Gef. im Praetorium'	LSELEN	Trajan-Hadrian
28	Neuss	[IIIENNOR]IVLSAE	Hadrian-Antoninus Pius
34	2168n, lager 6-7	Q·I·M[F]	Antoninus Pius
38	6717n	LM[---]	Antoninus Pius
39	28468n	MAR	Antoninus Pius
24	'Grimmlinghausen'	LCM	Marcus Aurelius
35	6745n	LISILV/ESTRI	Late 2nd or early 3rd AD
20	'Südwestlich der Ortslage Hoeonigen'	ACIRGI	End 2nd century to begin 3rd century AD
36	28489n	LIT	Severan
37	'Gef. wie f.'	L·IVNIM/ELIS[·SI]	ca. 220-224 AD
27	'Grimmlinghausen'	CAPXIV	2nd quarter 3rd AD

FIGURE 6.1.2. STAMPS ON DRESSSEL 20 AMPHORAE FROM NEUSS, IN CHRONOLOGICAL ORDER.

preserved in *defrutum* or in a similar product. The analysis of the content remains found in a Haltern 70, and another made by N. Garnier from one piece from the famous Port-Vendres 2 shipwreck, confirms the interpretation presented by the ink inscriptions.<sup>28</sup> Olives have also been found in the Sud-Lavezzi shipwreck and at other locations, such as Arras, London and Fos-sur-Mer, among others, always in contexts with a Haltern 70 presence.<sup>29</sup>

Nevertheless, it has also been suggested that some Haltern 70 carried other kinds of contents, such as fish-products. One controversial piece found in Zaragoza bears a *titulus pictus* that could mention *muria*, a kind of salted product, or *mulsum*, a sweet sub-wine product. A similar inscription was also found in Celsa.<sup>30</sup> J. Van der Werff thought it could be read as *mulsum* because of the example from Zaragoza,<sup>31</sup> but it could also be *muria*, as in one example found in Mainz and published by U. Ehlig which describes a kind

of crushed olive product, preserved in *muria*.<sup>32</sup> *Muria* was a saltwater concentrate, normally used for fish-product conservation or as part of fish sauce recipes. Another use could also have been to preserve olives, in a similar way to how these brine concentrates are still being used today in the Mediterranean region. Recently, D. Djaoui has developed a study of the ink inscriptions on Haltern 70, paying attention to those inscriptions that mention alternative products to olives and *defrutum* and arguing for a secondary use of those vessels.<sup>33</sup>

Together with the olive-oil amphorae and the controversial Haltern 70, other commodities arrived from the interior of Baetica, mainly wines transported in flat-bottomed amphorae, of the Dressel 28 type and its formal predecessor, the 'Urceus' amphora.<sup>34</sup> All the fragments of these forms have the typical whitish, coarse fabric already mentioned. At the same time, at Neuss we have documented some Dressel 7-11 fragments whose fabrics indicate a production source in the lower Guadalquivir region, around ancient *Lacus Ligustinus*.

<sup>28</sup> We would like to thank Garnier for his kind information during the Amphorae Contents Workshop celebrated in Cádiz in October 2015. We expect this preliminary result will be published soon.

<sup>29</sup> Laubenheimer – Marlière 2010: 52; Marty – Zaaraoui 2009: 406; Marty *et al.* 2016; Sealey – Tyers 1989; See: Bernal *et al.* forthcoming.

<sup>30</sup> Beltrán Lloris 1998.

<sup>31</sup> Van der Werff 2001.

<sup>32</sup> Ehlig 2003.

<sup>33</sup> Djaoui 2016.

<sup>34</sup> Almeida – González Cesteros 2017; García Vargas *et al.* 2011: 248-252; Morais 2007.

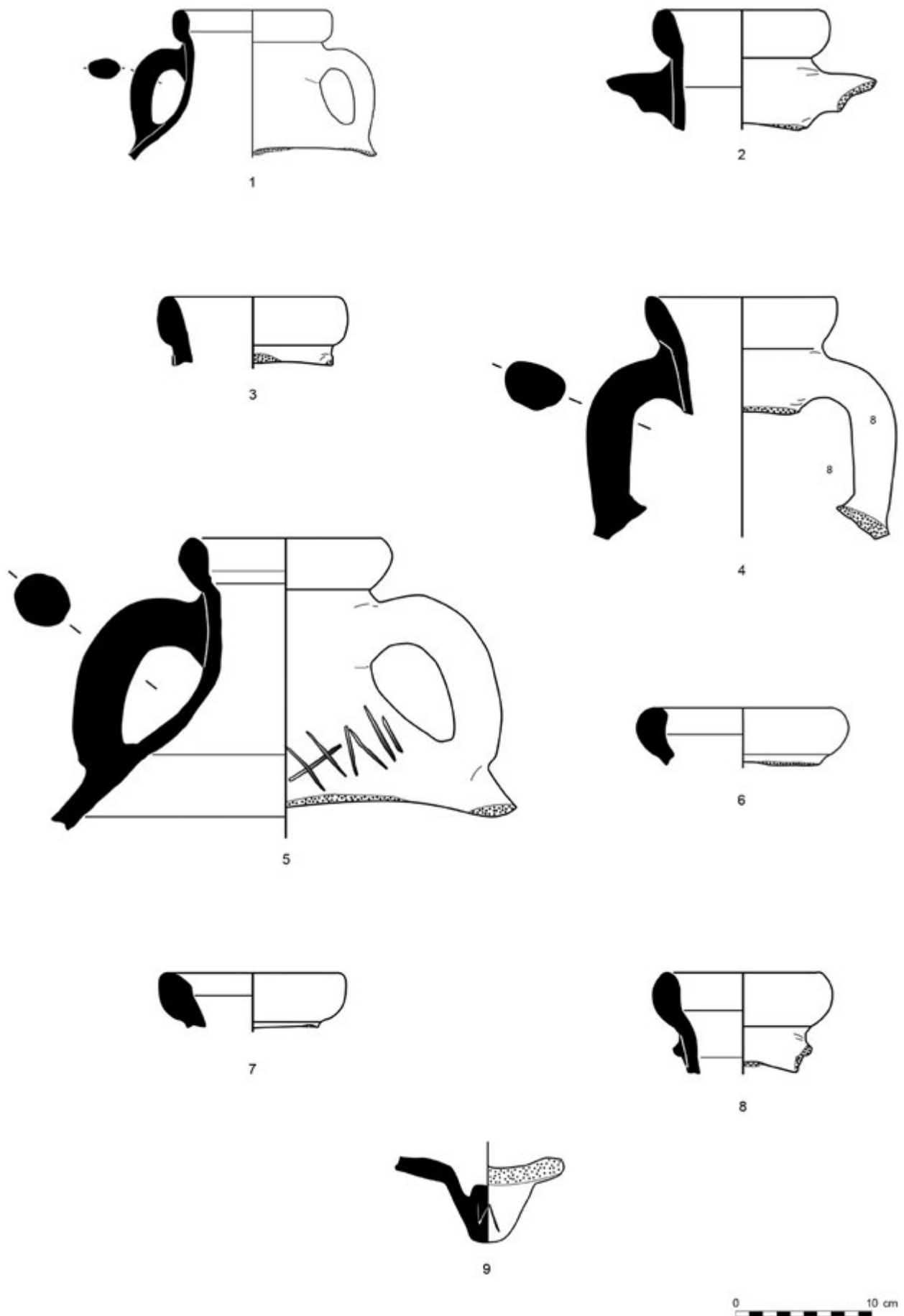


FIGURE 6.1.3: NEW DRAWINGS OF NEUSS AMPHORAE. GUADALQUIVIR OLIVE OIL CONTAINERS (OBERADEN 83, 1-4; HALTERN 71, 5-8).

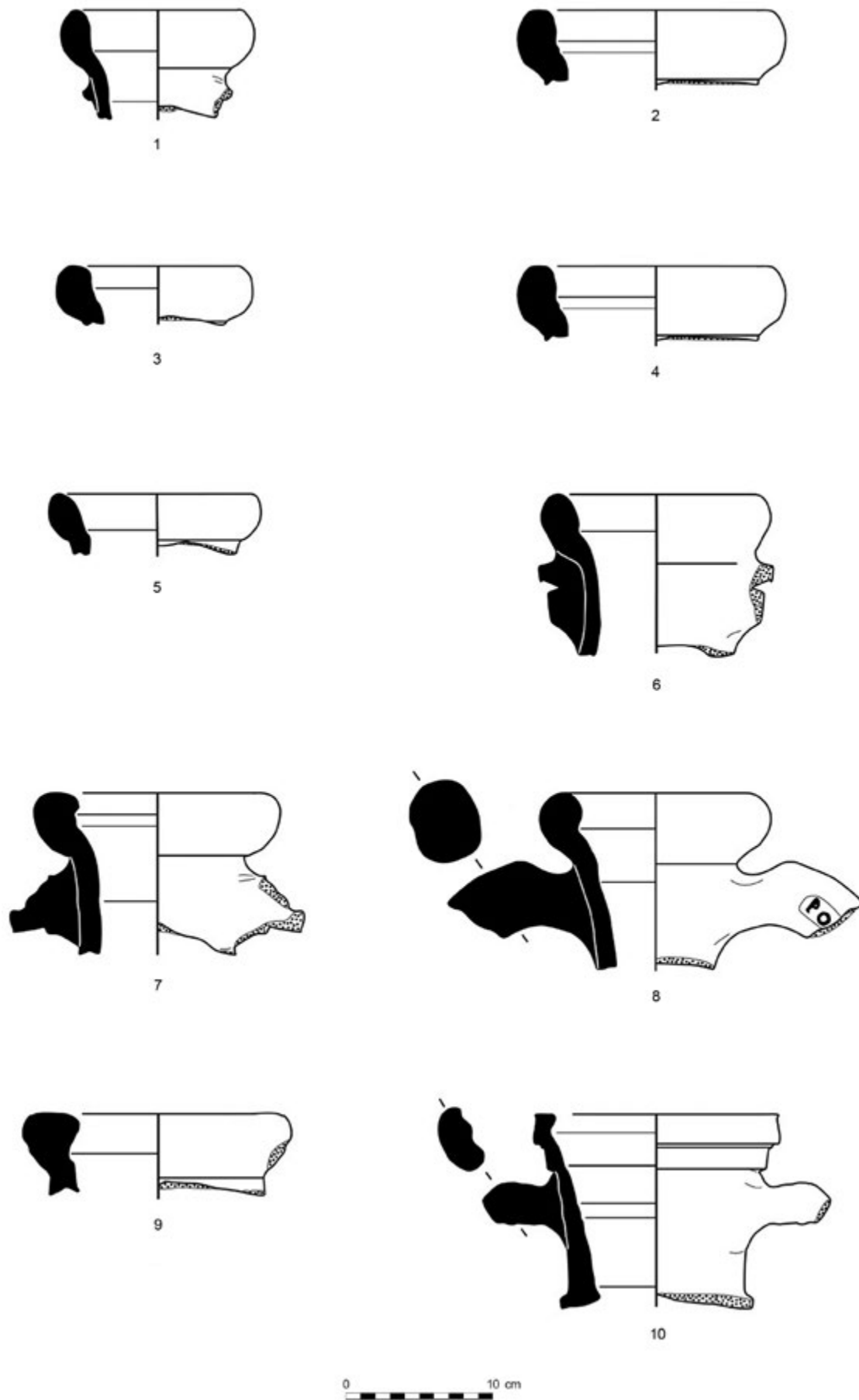


FIGURE 6.1.4: NEW DRAWINGS OF NEUSS AMPHORAE. GUADALQUIVIR OLIVE OIL (EARLY DRESSSEL 20, 1-9) AND WINE CONTAINERS (URCEUS 10).

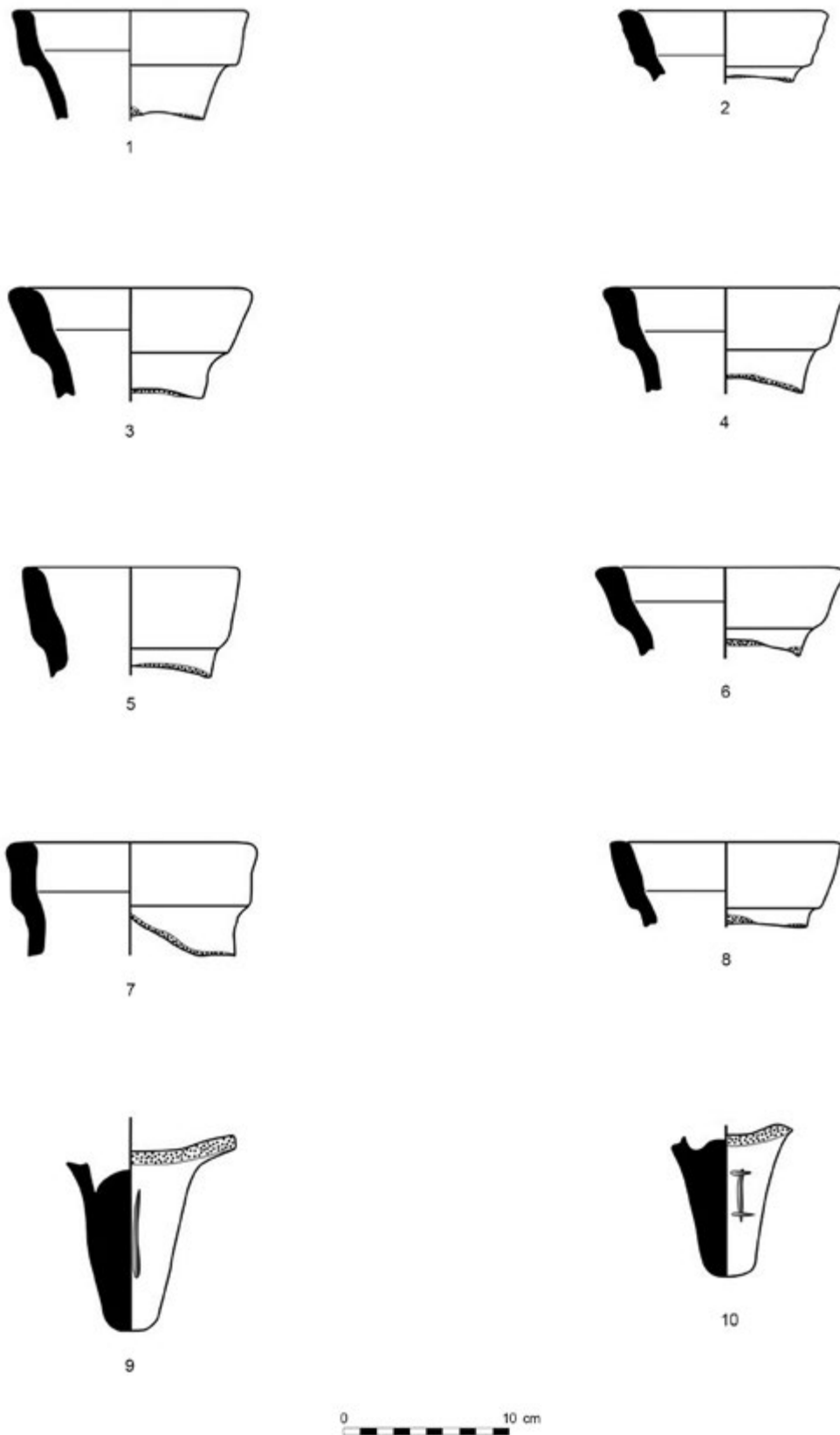


FIGURE 6.1.5: NEW DRAWINGS OF NEUSS AMPHORAE. GUADALQUIVIR EARLY HALTERN 70 (1-10).

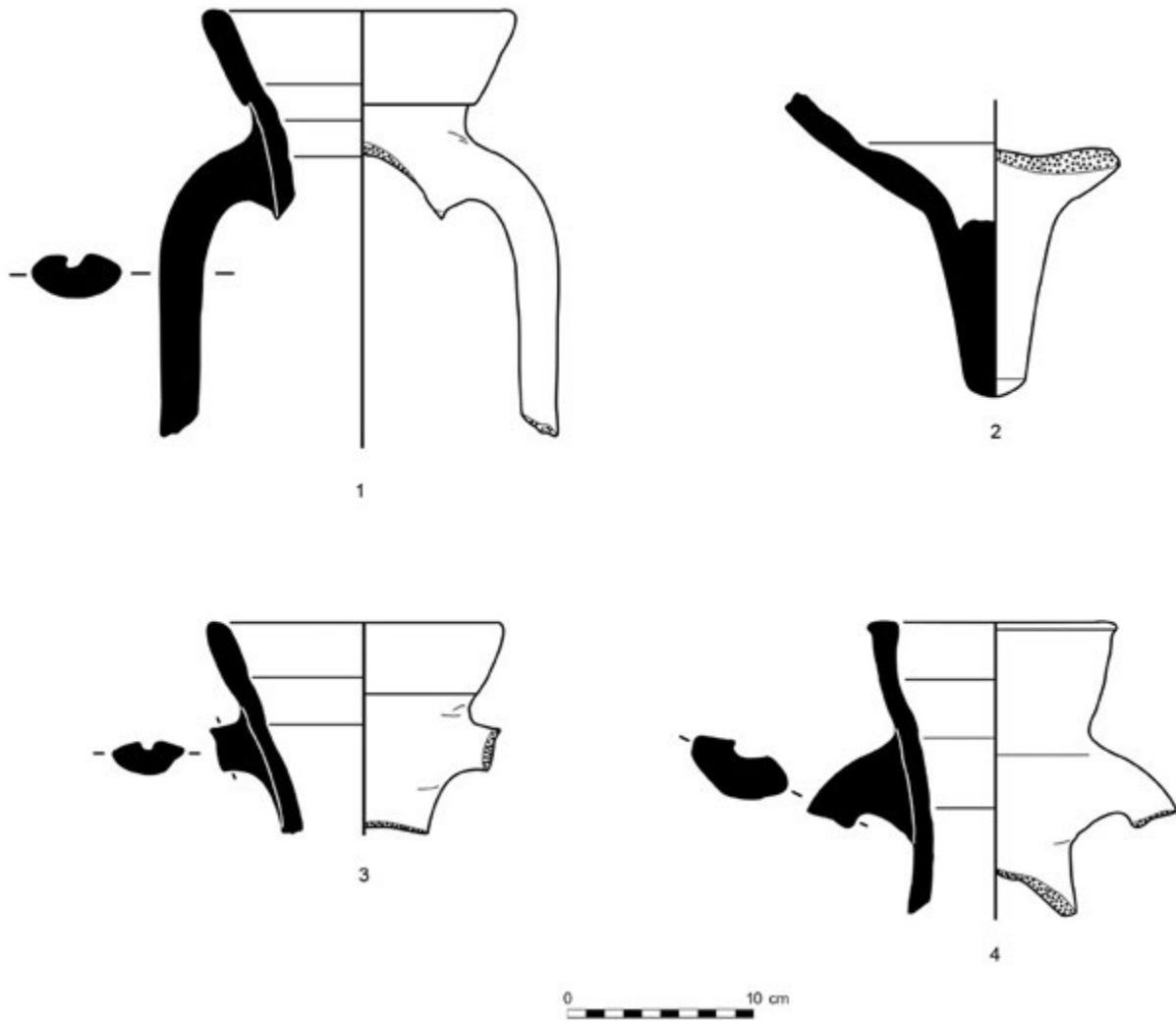


FIGURE 6.1.6: NEW DRAWINGS OF NEUSS AMPHORAE. GUADALQUIVIR JULIO-CLAUDIAN (1-2) AND LATE FIRST- EARLY SECOND CENTURY HALTERN 70 (3-4).

## 6.2. Products from *Baetica*: the Baetican coast

The arrival of salted fish and fish sauces at Neuss is well documented due to the high presence of amphorae from the *conventus Gaditanus*.<sup>35</sup> They reached Neuss in similar levels as did the olive oil amphorae.

If we compare the different forms we have found, we see once again some early examples, very close to the ovoid amphorae produced in the Bay of Cádiz (Figures 6.2.1, 1-3), with rims that could correspond to forms preceding the early Dressel 7-11 production. The example presented in Figure 6.2.1, no. 1 has obvious similarities with the piece found in the Roman military fort of La Chaussée-Tirancourt (Somme, France) in a context of 60-40 BC.<sup>36</sup> The other examples presented in this chart are also close to the ovoid forms, as well as to the early Dressel 7-11 types, particularly with the first Dressel 10 and Dressel 7, in this case variants 7A and 7C.<sup>37</sup>

From a quantitative point of view, the Baetican fish amphorae ought to have been the main amphora import in Augustan and Tiberian times, seeing as most of the amphorae are forms typical of this period. Thus, the presence of Dressel 7 dominates, accompanied by some Dressel 9, and the typical Dressel 8 type from the first quarter of first century AD.

It is worth noting that within the Dressel 7-11 set are also documented some with epigraphical evidence. On one body and neck fragment, with an orange fabric full of angular quartz and calcareous inclusions and with some large rounded pieces of hematite, we find a quadrangular stamp placed just under the junction of the body and neck.<sup>38</sup> Unfortunately, due to the surface erosion it was not possible to read the stamp. Nevertheless, its size indicates that it should have had just a few letters or small symbols.

Other epigraphic evidence, in this case ink inscriptions, was observed on a couple of Dressel 7-11 produced in the Cádiz Bay. We could only see one of them; it presents several letters in black ink under the start of the neck. While the fragile state of preservation does not allow a complete and satisfactory reading, it was a merchant's name, with *tria nomina* separated by dots. This placement on the amphora is the normal position of the *tituli*  $\beta$  associated with the Baetican fish amphorae, referring to the merchant's name. With some hesitation, the following text may be offered: + · Co++ [·] F++[---].<sup>39</sup> There are some traces of a *praenomen* letter, followed by a rounded dot and after it a *nomen* that starts with Co and some letters that could not be identified. The *cognomen* starts with an F and is followed by other unreadable letters. The

inscription has been already published by J. Kütter in a monograph about the pottery *graffiti* found in Neuss,<sup>40</sup> with the doubtful reading [---]CO[---]FM (?), assigning to it a date in the middle of the first century AD. We believe the date proposed by Kütter does not correspond to the shape of the piece, as the rim seems to us much closer to the early productions of Dressel 7-11, especially to early Dressel 7 and Dressel 10.

Another inscribed Dressel 7-11, probably from southern Spain, was published by Kütter in his book.<sup>41</sup> This inscription seems to have been in a much better state of preservation and is almost complete, written in black ink (*atramentum*), and placed on the neck.<sup>42</sup> We believe this inscription could be the result of two different writing events. One of them was made at the delivery point in *Baetica*, with the name *Luconis* in a horizontal position and *Prisci* in the vertical. The largest letters in the vertical set seem to be different to the rest of the inscription: they could refer to a monetary value and have been added later, being related to the transport or handling of the product. Unfortunately, we did not have access to this piece while working in Meckenheim.

Within the material from Neuss, other fish amphorae, produced in pre-Flavian times, have appeared. This includes some Dressel 12 fragments (Figure 6.2.2, 1-2) and a couple of fragments of Beltrán IIA (Figure 6.2.3, 7-8). Although the Dressel 12 should be classified within the Augustan and Tiberian material, the presence of the Beltrán IIA should be placed later, in the second or third quarters of the first century AD onwards.

Concluding this discussion of the Baetican imports, it is also important to mention the presence of three Dressel 2-4, whose fabrics seem similar to the majority of the Baetican fish containers, though not identical.<sup>43</sup> These Baetican wine amphorae are rare in the Rhine area, but they are also documented in other military sites. Some fabrics point to a source in the Guadalquivir valley and *Lacus Ligustinus*, while others display the typical fabric of the Cádiz region.

<sup>35</sup> See table 3.

<sup>36</sup> Even if this date seems too early, it is to certainly a pre-Augustan production. Laubenheimer – Marlière 2010: 433; Martin-Kilcher 1994: 2003.

<sup>37</sup> García Vargas 1998.

<sup>38</sup> Epigraphic appendix no. 18.

<sup>39</sup> Epigraphic appendix no. 130.

<sup>40</sup> Kütter 2008: no. 704.

<sup>41</sup> Kütter 2008: no. 754. Taf. 50, 70.

<sup>42</sup> Epigraphic appendix no. 131.

<sup>43</sup> Unfortunately, it was not possible to carry out any kind of archaeometrical analysis to confirm our hypothesis.



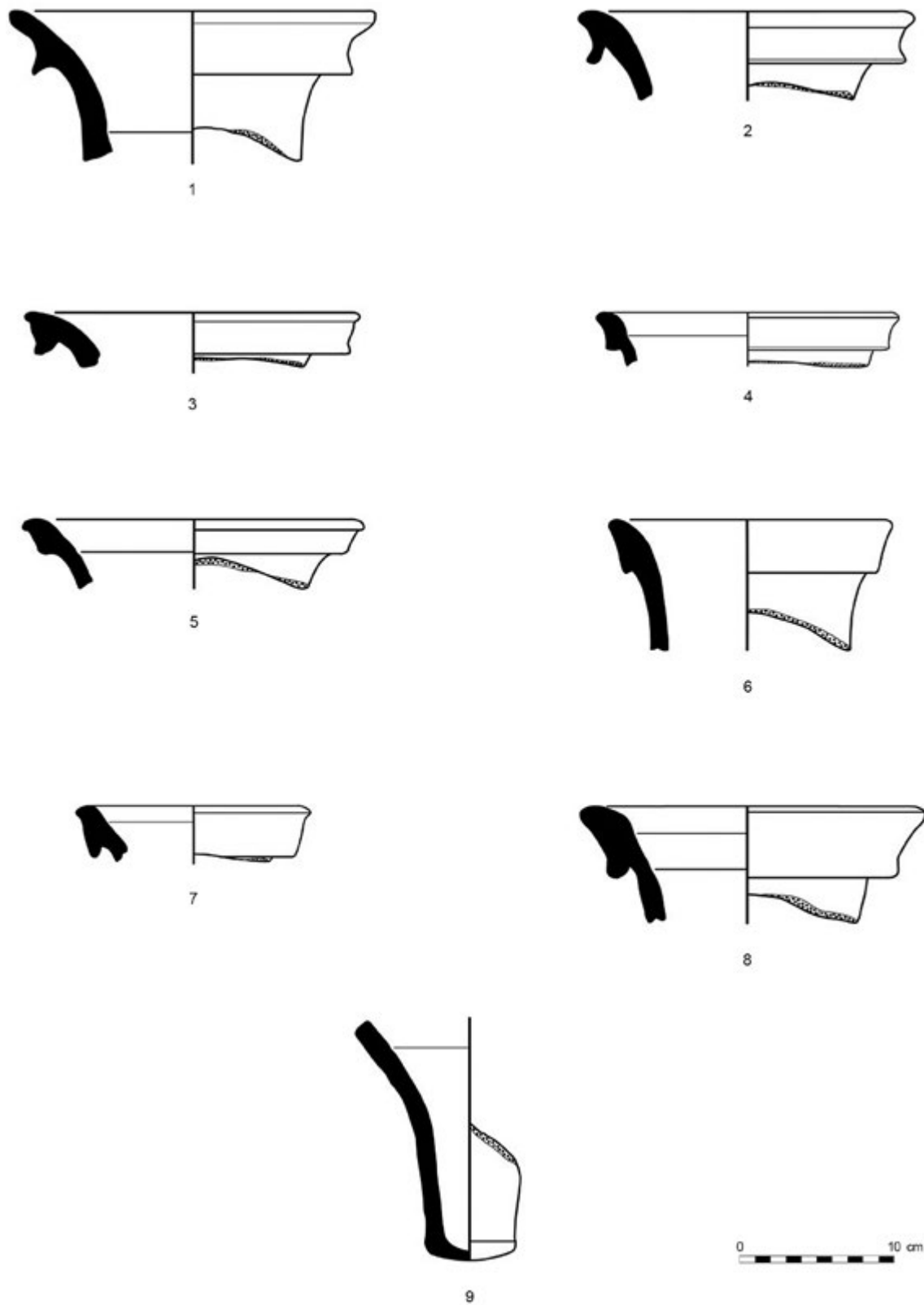


FIGURE 6.2.1: NEW DRAWINGS OF NEUSS AMPHORAE. BAETICAN COASTAL FISH CONTAINERS (EARLY DRESSEL 7-11: 1-9).

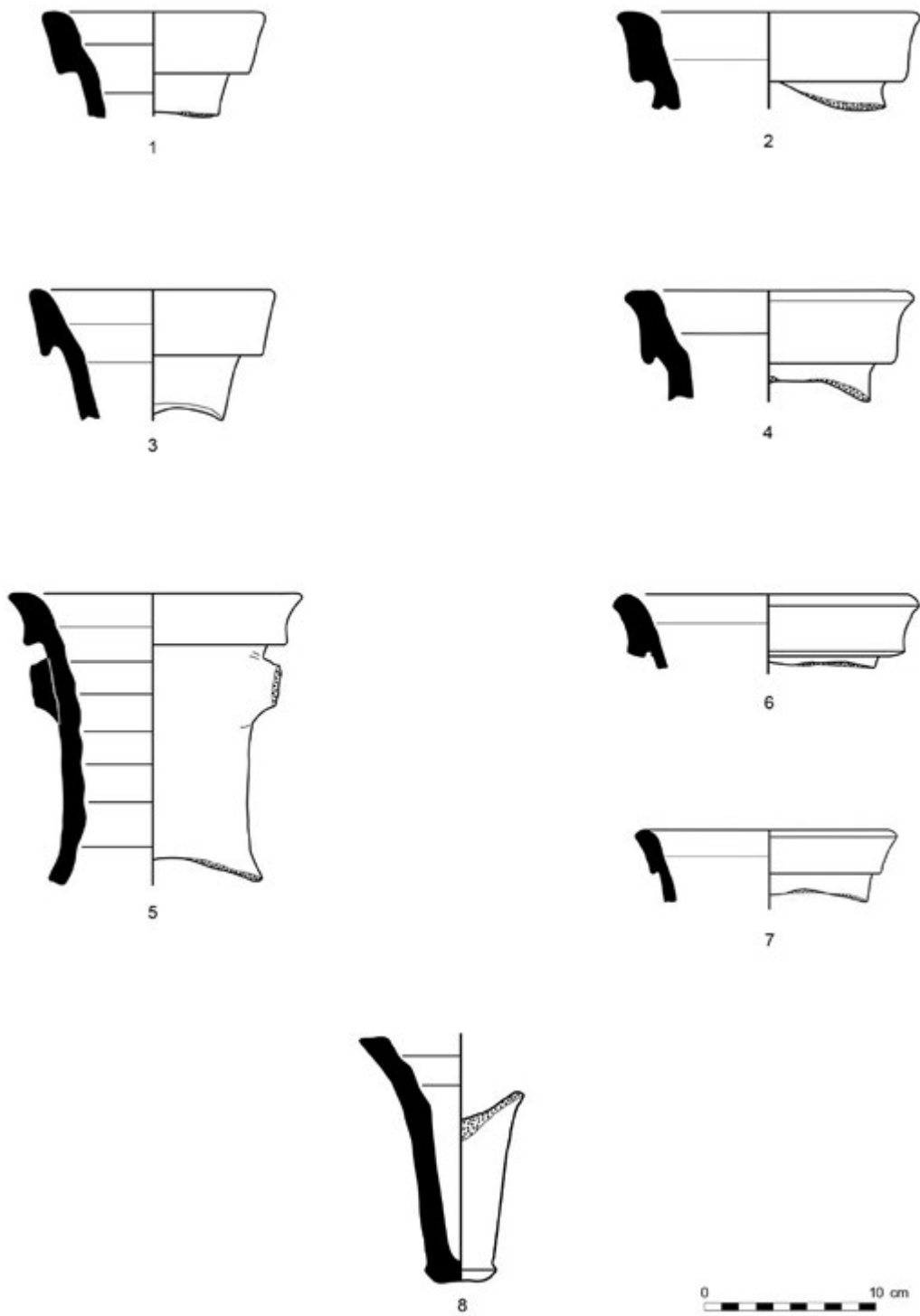


FIGURE 6.2.2: NEW DRAWINGS OF NEUSS AMPHORAE. BAETICAN COASTAL FISH CONTAINERS (DRESSEL 12: 1-4; EARLY DRESSEL 7-11: 5-8).

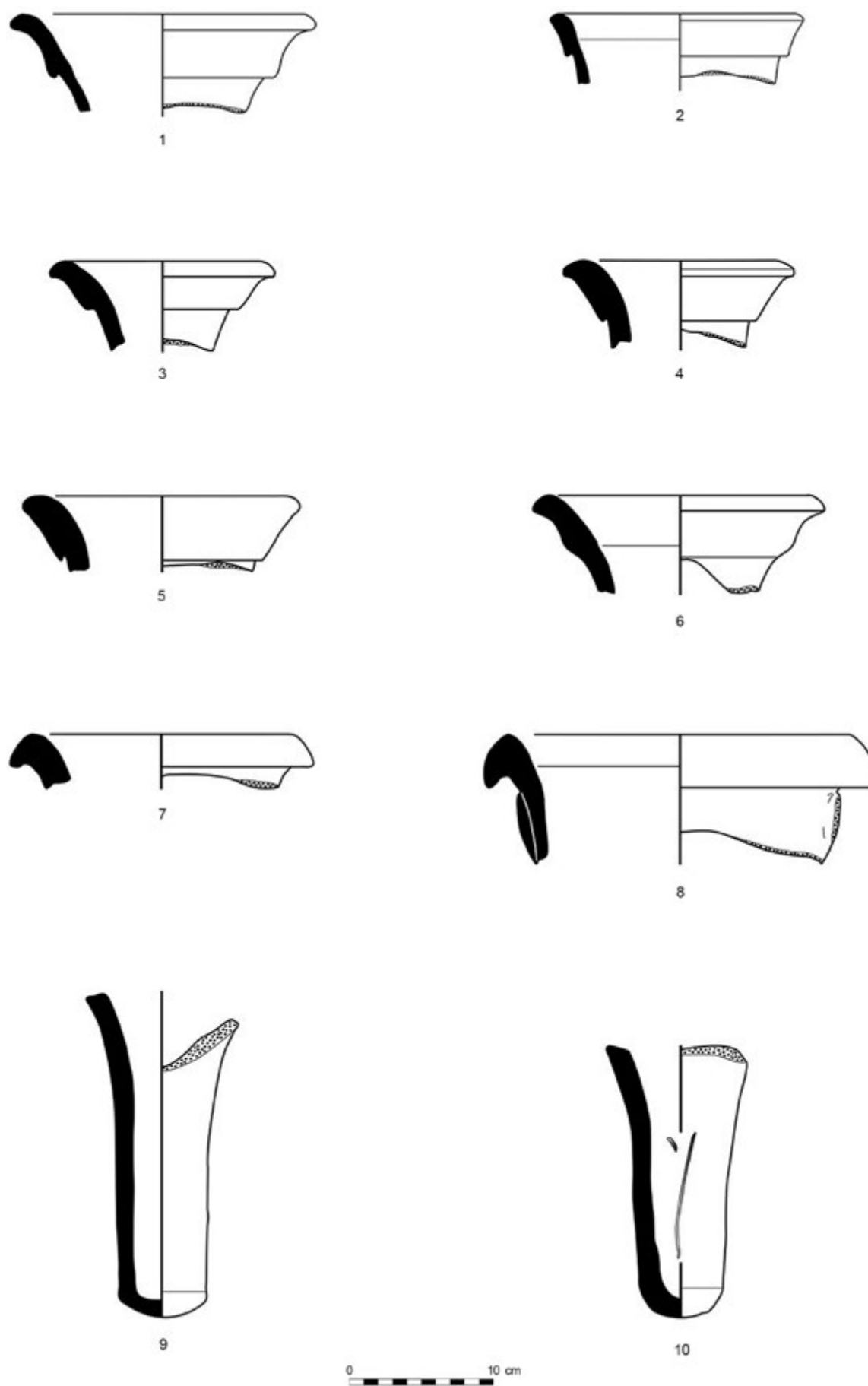


FIGURE 6.2.3: NEW DRAWINGS OF NEUSS AMPHORAE. BAETICAN COASTAL FISH CONTAINERS (DRESSSEL 7-11: 1-2; DRESSSEL 8: 3-6; BELTRÁN IIA: 7-10).

### 6.3. Products from *Hispania Citerior Tarraconensis*

The north-eastern part of the Iberian Peninsula was a rich and productive region that developed, in ancient times, an extensive trade in wine. Several ancient sources, mainly from the late first century BC to the early second AD, mention the wines of *Tarraconensis*, even if they are not always very positive as to its qualities (see for example Martial).<sup>44</sup>

Archaeological remains, discovered over the last century, emphasize the huge number of wine-presses in this region and a similar number of kiln sites. These are focused on the coastal area and around the Ebro and Fluvia valleys. Most of them date from the middle of the first century BC to the beginning of the second century AD.<sup>45</sup>

Within the material we studied in Meckenheim, Tarraconensian amphorae account for just over 8% of the total amphorae, representing 17.5% within the Hispanic material. These quantities are more elevated than is normally experienced for Tarraconensian imports in the Rhine area.<sup>46</sup> The percentage was probably even greater during Augustan and Tiberian times. The more prevalent forms documented at Neuss, that is the Pascual 1 and Oberaden 74, were produced from the last decades before the change of the BC/AD watershed and continued during the first quarter of the first century AD. Pascual 1 is the main Tarraconensian container recognized at Neuss. There are 27 examples (equivalent to some 5% of the total amphorae, and 10% of the Hispanic products). Most of the recorded fragments have fabrics and stamps ascribable to the metropolitan areas of *Barcino* (Barcelona) and *Baetulo* (Badalona). Generally, these pieces are more or less homogeneous, presenting some small differences in rims, necks, and handles, probably the result of the sheer quantity of kiln sites producing this type of amphora in central Catalonia from the late first century BC.<sup>47</sup> There are just two main groups that can be differentiated, but this is not easy in the absence of complete or semi-complete pieces; neither can a chronological differentiation between both sub-types be positively suggested.<sup>48</sup> For this reason, we think it is not really possible to separate out the earliest Pascual 1 imports on the base of any morphological variations.

The other two known Tarraconensian types found at Neuss, the Oberaden 74 and the Dressel 3-2,<sup>49</sup> are present in small quantities, especially the Dressel 3-2. This is something normal in the Rhine area, where the Oberaden 74 always

appears during the Augustan-Tiberian period,<sup>50</sup> and the Dressel 3-2 were never very widespread.<sup>51</sup> The Dressel 3-2 found at Neuss present fabrics and some stamps that suggest a production region around *Barcino* (Barcelona), much as with the Pascual 1; whilst the Oberaden 74 comes mostly from the kiln sites placed around the territory of *Tarraco*, primarily the central and southern part of the actual province of Tarragona.

A singular characteristic of the Tarraconensian amphorae from Neuss is the high number of epigraphic finds. Most of these stamps have been published over and over again, since Vegas presented the Augustan material of Neuss.<sup>52</sup> However, it is important to present them here once more because during the last decades, knowledge about Tarraconensian production centres has vastly developed and now it actually is possible to link some pieces with a particular production region within *Tarraconensis*. While in Meckenheim, we took several samples for thin sectioning, we unfortunately could only work on two of them.<sup>53</sup> Broadly speaking, the practice of inscribing the vessels was particularly prevalent in Tarraconensian workshops, more so than in other amphora production regions – East or West – during the Augustan period.<sup>54</sup> This important happenstance provides us with considerable relevant information about the owners and development of the kiln sites and, in several cases, with the fortunate discovery of some of these very stamps in a workshop, allows us to fix the exact source of some pieces.

In Table 4 we can observe the good number of Pascual 1 that customarily appear in more or less well-preserved fragments and not just as small sherds. As already mentioned, the fabric of most of the pieces indicates a production region in the central Catalan region, at the kiln sites of the Maresme and Badalona areas. It is from these two small regions that the three stamped Pascual 1 vessels come from. The first stamp lies in the series, well-known in epigraphy of *Tarraconensis*, of *M. Porcius* and is represented by two examples, once as MPORC and the other as MPORCI.<sup>55</sup> During our stay in Meckenheim, we could study only the shortest variant which was already published and drawn by Vegas<sup>56</sup> and Gechter.<sup>57</sup> Happily, we could make a better reading, because we found the fragment with the beginning of the stamp<sup>58</sup> and made a

<sup>44</sup> Miró 1985.

<sup>45</sup> For the kiln sites: Tremoleda 2007; for the presses: Peña 2010; Revilla Calvo 2013.

<sup>46</sup> González Cesteros 2015.

<sup>47</sup> López Mullor – Martín Menéndez 2007; Martínez Ferreras 2014; Tremoleda 2007.

<sup>48</sup> López Mullor – Martín Menéndez 2007: 55-64.

<sup>49</sup> We prefer to call this Tarraconensian production Dressel 3-2 and not Dressel 2-4 as it has usually been done because form Dressel 4 was never produced in the kiln sites of our area and the production of form Dressel 3 precede form Dressel 2: Berni 2015; forthcoming.

<sup>50</sup> Carreras – González Cesteros 2012; González Cesteros 2014.

<sup>51</sup> González Cesteros 2014: 455-459; 2015: 212-214.

<sup>52</sup> Gechter 1979; Remesal – Revilla 1991; Vegas 1975; etc.

<sup>53</sup> We are really grateful to the archaeometric team of the ICAC and above all to Prof I. Rodà and Dr A. Gutiérrez, who gave us access to these analyses. They have been made on Oberaden 74 whose production can be located in the south of the current province of Tarragona.

<sup>54</sup> Even if we compare these with the Baetican or even Gaulish productions, we do not find such a number of stamped examples in other regions as we do for *Hispania Tarraconensis*. Of course, they never reached the scale of stamping as that of Hellenistic Rhodian amphorae, Italian Dressel 1 in the second and early first centuries BC or the Dressel 20 from the second part of the first century AD. For a better understanding of the tradition of stamping in Tarraconensis, see: Berni – Miró 2013; Berni – Revilla 2007.

<sup>55</sup> Epigraphic appendix no. 17.

<sup>56</sup> Vegas 1975: Taf. 29, 3 and 3a.

<sup>57</sup> Gechter 1979: 69 fig. 1.

<sup>58</sup> Referred as: Fundnummer 17131n + 19719n.

silicon mould.<sup>59</sup> Following the general tendency of the marks observed on Pascual 1 and Oberaden 74 from the Augustan period, this rectangular stamp is deep and the letters are easy to discern. It looks like the *duo nomina* of, probably, a freed-man whose *nomen* is *Porcius*.<sup>60</sup> *M. Porcius* stamps are clearly associated with those of the Badalona workshops.<sup>61</sup> The local clays of Badalona match the fabric of this piece, which is beige, smooth, with occasional inclusions of angular quartz. Further, the form of the stamp, rectangular with wide letters, is also typical of those from the Badalona kiln sites.

The second piece of epigraphic evidence on a Pascual 1 is also well known and was equally thoroughly published by Vegas<sup>62</sup> and Gechter.<sup>63</sup> It is the stamp of IVLI·THEOPHIL with the T and H in nexus, as well as the second P and the second H.<sup>64</sup> Once again, the stamp is rectangular and deeply marked, with long letters that can be easily read. We recognize this as a piece of the large corpus of stamps related to the *Iulii*, found in several kiln sites along the Layetan territory, especially in the Llobregat and the Maresme areas.<sup>65</sup> In the specific case of the example from Neuss, we are inclined to think that its origin should be placed in the Maresme, being well documented in the kiln sites of Calella<sup>66</sup> and Canet de Mar.<sup>67</sup> The fabric seems to point to an origin in this Catalan region too; their characteristics – brick red in colour, a rough surface with large quantities of medium- and large-sized angular white and grey quartz, without a mica presence – exclude its production in the kiln sites around the lower Llobregat area. So far, the most precise archaeological date was provided by the Cap del Vol Shipwreck (Port de la Selva, Girona), dated to between 10 BC and 5 AD;<sup>68</sup> the wreck is contemporary with the earliest period of the Roman presence in Neuss.

There exists, too, a circular stamp with an A<sup>69</sup> on an amphora spike whose fabric is a pinkish-ochre in colour with some quartz inclusions. This fabric seems to be characteristic of the *Baetulo* and *Barcino* settlements. It is not clear if this base belongs to a Pascual 1 or a Dressel 2 of the Julio-Claudian period, but the first option seems more likely.

Concerning the stamped examples of Oberaden 74, the ratio of stamps-to-sherds existing in the documented corpus reached the highest level of any of the Hispanic amphora types found at Neuss, surpassing even the Baetican olive oil amphorae of Julio-Claudian and later periods. It is true that at Neuss the percentage of Oberaden 74 bearing stamps is extraordinarily high, but in general

terms too, this amphora form seems to have been stamped more often than other Augustan amphora types, making the Rhine area a privileged region for the study of these containers and the epigraphy associated with them.<sup>70</sup>

Just as we have seen for Pascual 1, so too is the case with Oberaden 74: most stamps are placed on the upper part of the vessel, always on the neck. All our evidence points their dating to the Augustan period or in the very first years of the reign of Tiberius. This is in accordance with the evolution of this form, which reached its commercial peak in the military markets of the Rhine during the last quarter of the first century BC and the first half of the first century AD.

The earliest epigraphic material we could examine in Meckenheim were the well-known SEX·DOMITI stamps.<sup>71</sup> This stamp has been extensively documented in Roman settlements all along the Rhône and Rhine axes,<sup>72</sup> and is also known in at least two amphora workshops in southern Catalonia, namely at L'Aumetina in the estuary of the Ebro and in La Canaleta in the area of Tarraco.<sup>73</sup> From the material at Neuss two examples bearing this stamp emerged, but they did not employ the same die, neither did they have the same kind of fabric (Figure 6.3.2, 1, 6). Both vessels are robust in form with a large moulded rim; the stamp appears in a rectangular cartouche, being carefully and deeply impressed, which makes it easy to read all the letters. Both pieces have a point separating the *praenomen* from the *nomen*. Concerning the fabrics, both are semi-hard and a slightly coarse texture, presenting some voids and medium-sized angular and semi-rounded quartz inclusions on the surface. One of our examples is a little rougher and is beige in colour, whilst the other has a smoother surface and a pinkish colour.

One other documented stamp on an Oberaden 74 from Neuss is the well-known PHILODAMVS, with the M and V together in nexus.<sup>74</sup> This name belongs to a non-free person, probably the slave in charge of the workshop. Also impressed in a rectangular cartouche on the neck, the letters are not in such good condition as they are in the SEX·DOMITI stamps, as some of them are slightly erased. This stamp is widely distributed across the Iberian Peninsula and southern France,<sup>75</sup> but on the German border it is only known by this example in Neuss. The petrological characteristics are in concordance with the typical fabrics from the La Canaleta workshop in the western part of the *ager* of Tarraco,<sup>76</sup> being similar to the fabric of the SEX·DOMITI examples, but bearing some small red iron inclusions that are difficult to see without a lens.

<sup>59</sup> Epigraphic appendix no. 17b.

<sup>60</sup> Berni – Miró 2013: 69.

<sup>61</sup> Comas i Solà 1997: 28-45.

<sup>62</sup> Vegas 1975: Taf. 29, 2 and 2a.

<sup>63</sup> Gechter 1979: 67. Figure 8.

<sup>64</sup> Epigraphic appendix no. 16.

<sup>65</sup> Berni – Carreras 2013: 197-199; Berni – Miró 2013: 69-70.

<sup>66</sup> Martín Menéndez 2015: 45 fig. 3.

<sup>67</sup> Pera i Isern 1983.

<sup>68</sup> Nieto – Foster 1980: 174.

<sup>69</sup> Epigraphic appendix no. 10.

<sup>70</sup> Carreras – González Cesteros 2012; González Cesteros 2015.

<sup>71</sup> Epigraphic appendix no. 11.

<sup>72</sup> González Cesteros 2014; 2015.

<sup>73</sup> Carreras – González Cesteros 2012.

<sup>74</sup> Epigraphic appendix no. 13.

<sup>75</sup> Carreras – González Cesteros 2012: 219.

<sup>76</sup> We would like to thank Dr Anna Gutiérrez for the chance to compare our sherds with those of the pottery collection of the Catalan Archaeological Institute which derive from various Tarraconensian kiln sites.

The last stamp on an Oberaden 74 reads C·FOVRI, the stamp from Neuss being the only known example. Once again it has a rectangular cartouche and the letters are fairly well impressed, which allows for an easy reading.<sup>77</sup> In this case we have the *duo nomina* of a free person, C. Fuorius, with a triangular point in the upper part of the cartouche that makes clear the distinction between the *praenomen* and *nomen*. This vessel bears a pale slip covering a pinkish-brown hard fabric, with a few quartz inclusions, some voids and some other large and semi-rounded dark and grey inclusions. We do not recognize at present any workshop or production place for this stamp, but the fabric characteristics point, once more, to the *ager of Tarraco*.

The last Tarraconensian type documented at Neuss is the Dressel 3-2.<sup>78</sup> Some fragments of this form exist in Tarraconensian fabrics, albeit some could also be from a Pascual 1 amphora. Within this material, which undoubtedly arrived at the military base of Neuss during the first half of the first century AD, two bases that carry small stamps containing limited textual marks deserve attention. In *Tarraconensis*, the stamping of amphora bases seems to have taken place later than the stamping of necks and rims. Even if every workshop is a law unto itself, and indeed some stamps on the bases of Pascual 1 have been documented, most of the stamped bases belong to Dressel 3-2. Another characteristic of most of these stamps is the shortening of the names that are compressed to a few letters, a practice that began around the BC/AD turn of the era.<sup>79</sup>

The first of these stamps is placed on a Dressel 2 spike. It can be deciphered as GE within a rectangular cartouche, and is composed of wide and flat letters.<sup>80</sup> This stamp can be read easily and is accompanied by a graffito *ante cocturam*, representing an inverse V half way up the spike. This base is associated with a bifid handle set at a right angle to the shoulder. The fabric is bright red with much large and angular quartz grains and some lime inclusions, but has a soft texture, probably due to a clay wash or a thick, but fugitive slip. Theoretically, this piece belongs to the sixth military camp of Neuss and should be dated between 16 and 28 AD. In our opinion, the morphological features indicate a later date, which would be in agreement with the only known parallel discovered in the Petit-Congloué shipwreck dated to the mid-first century AD, whose cargo consisted of Dressel 2 produced in eastern Layetania.<sup>81</sup> Within the Tarraconensian repertoire, the Dressel 2 form must date to the second quarter of the first century AD.<sup>82</sup>

In Neuss, the presence of one epigraphic sample on Dressel 3-2 from Layetania deserves discussion. It is the stamp

EVT<sup>83</sup> published by Gechter in 1979,<sup>84</sup> that was not found during our stay in Meckenheim. Following the drawing of Gechter, the piece looks like a Dressel 3 and should date to within the first third of the first century AD.<sup>85</sup> The stamp EVT is broadly documented around the Mataró area: A. Aguilera and V. Revilla have already pointed out a likely production site at the Can Portell workshop.<sup>86</sup>

The final Tarraconensian stamped base is only partially preserved (Figure 6.3.1, 8), which makes a precise ascription to any amphora typology challenging. We have already mentioned this stamp while describing those of the Pascual 1; it bears just an A enclosed in a circular cartouche. The problem is that the spike form is not clear and could belong to both Pascual 1 and Dressel 3-2 types, and this stamp type is documented on both Laetanian forms.<sup>87</sup> As it has already been said, the fabric is beige/pale brown and presents some white and grey medium-sized quartz inclusions, which would indicate a source probably around *Baetulo* or *Barcino*.

<sup>77</sup> Epigraphic appendix no. 14.

<sup>78</sup> Berni 2015; Berni forthcoming.

<sup>79</sup> Berni – Miro 2013: 71, fig. 6; Berni – Revilla 2007.

<sup>80</sup> Epigraphic appendix no. 15.

<sup>81</sup> Corsi-Sciallano – Liou 1985: 31. Figure 19-20.

<sup>82</sup> Berni 2015.

<sup>83</sup> Epigraphic appendix no. 12.

<sup>84</sup> Gechter 1979: 68-69. Figure 30,4.

<sup>85</sup> Berni 2015: 198.

<sup>86</sup> Aguilera – Revilla 1994: 222.

<sup>87</sup> See epigraphic appendix no. 10.

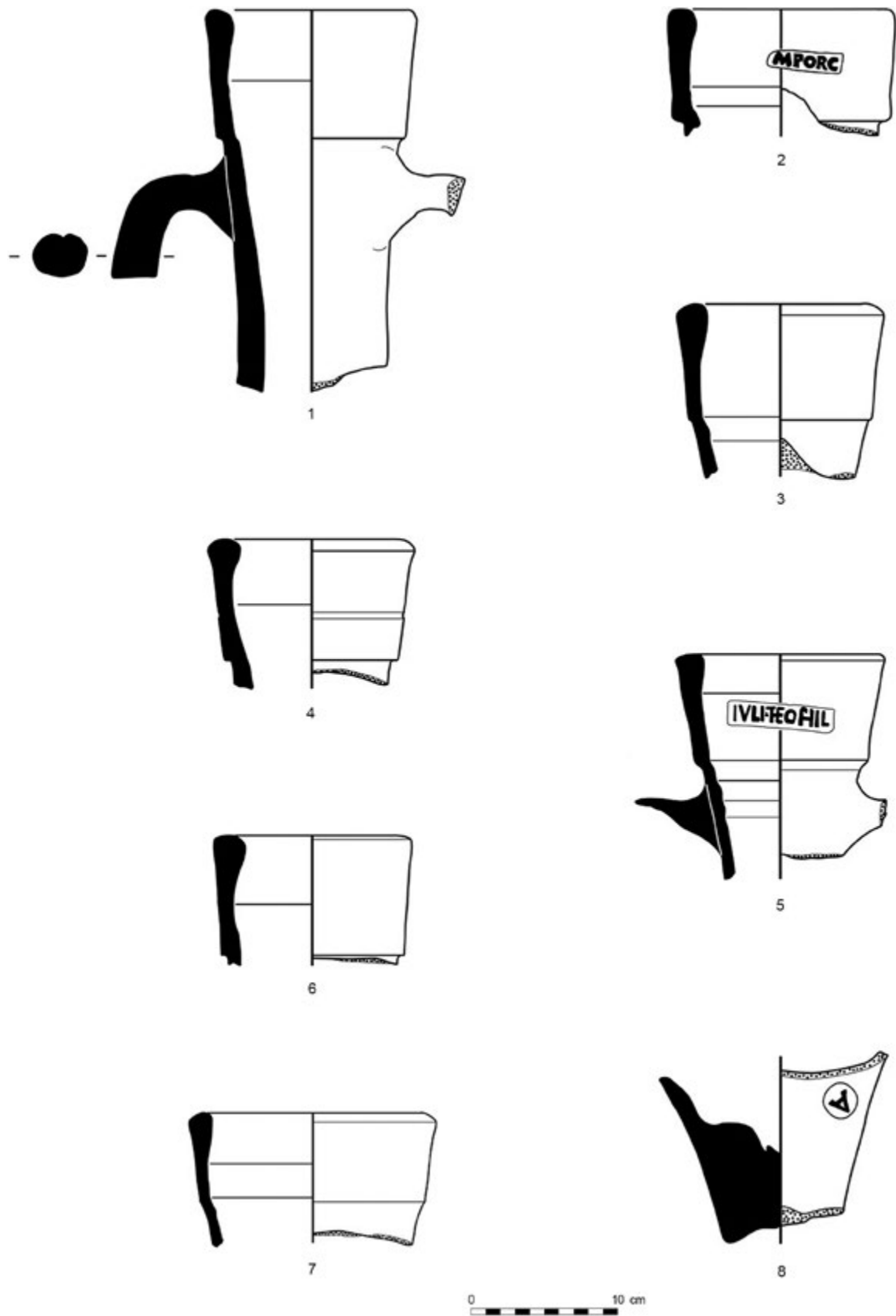


FIGURE 6.3.1: NEW DRAWINGS OF NEUSS AMPHORAE. TARRACONENSIAN WINE CONTAINERS (PASCUAL 1: 1-7).

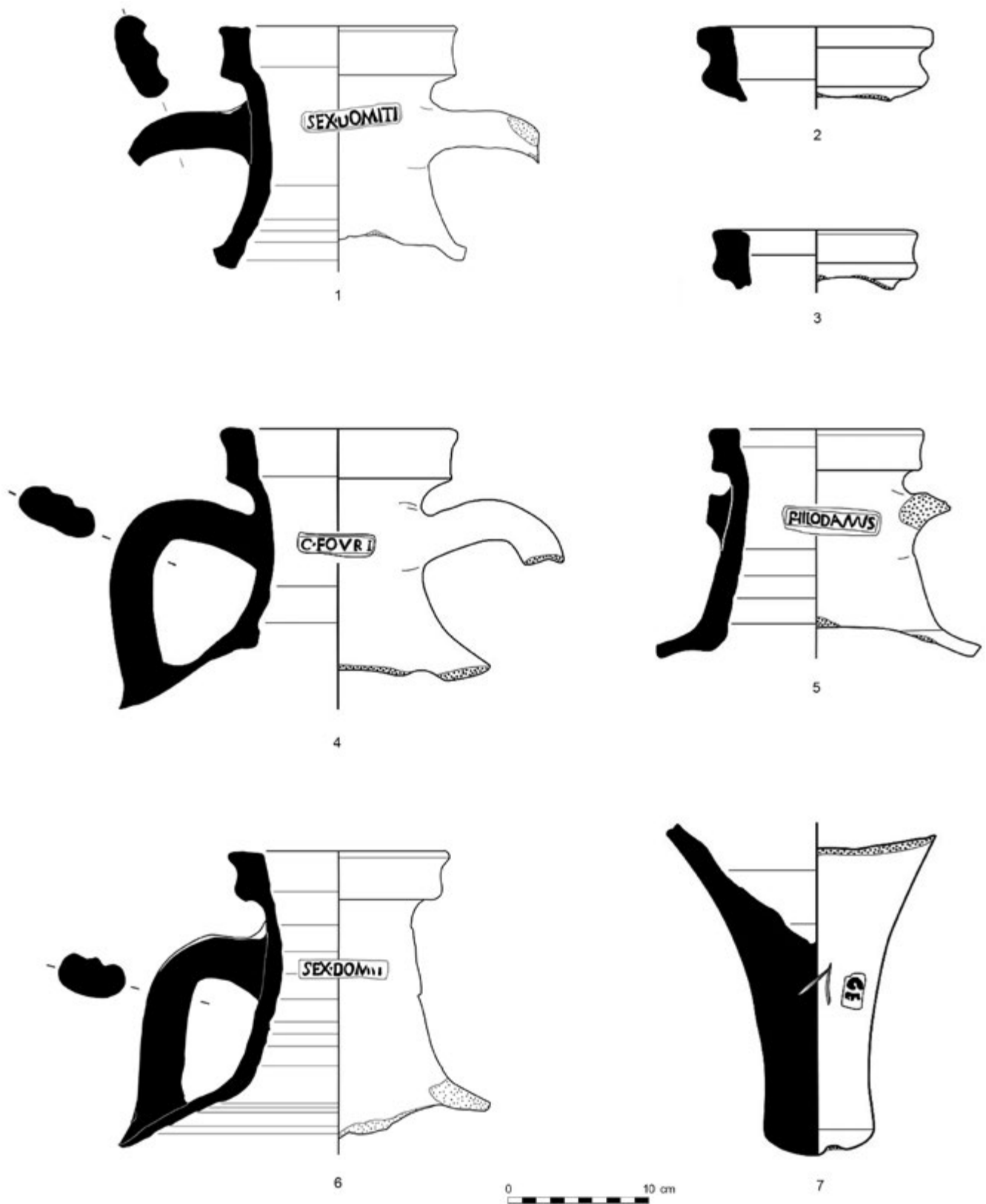


FIGURE 6.3.2: NEW DRAWINGS OF NEUSS AMPHORAE. TARRACONENSIAN WINE CONTAINERS (OBERADEN 74: 1-6; DRESSSEL 3-2: 7).



## 7. Imports from the Gallic provinces

The Roman border on the Rhine was, since the very beginning, an exceptional market for products from the south and centre of Gaul. In our opinion, the creation of the repertoire of the Gallic flat-bottomed amphorae in the workshops of *Narbonensis* during Augustan times was intended mostly to transport local products to the northern provinces of the Roman Empire. Already winning formidable percentages within the amphora markets in the non-Mediterranean Gallic regions from the central decades of first century AD, their main purpose was the export of Gallic products, taking advantage of the excellent riverine communication system the Gauls had developed. By combining this with short overland trips to the Rhine and its tributaries,<sup>1</sup> these particular amphorae proved equally suited for travel on the ships and small, shallow boats adapted for European rivers.

However, if we leave aside the typical Marseille amphorae produced before the creation of the province of *Narbonensis* in 123 BC,<sup>2</sup> the first Gallo-Roman amphorae were not actually flat-bottomed vessels, but copies of the most popular western forms at the time, but mainly the Dressel 1B, which were made during the first century BC in Marseille,<sup>3</sup> in different places in *Narbonensis*<sup>4</sup> and in the colony of *Lugdunum*.<sup>5</sup> The latter was founded in 43 BC as capital of the *Three Gauls*, due to its excellent communication links, both by land and water. During the Augustan and Julio-Claudian periods new types of amphorae, such as the Dressel 2-4, the Dressel 7-11, and the Pascual 1, were imitated in the southern and central Gallic regions,<sup>6</sup> in Marseille<sup>7</sup> and in Lyon, the latter also producing copies of the Baetican Haltern 70.<sup>8</sup> In some cases, the copies ended up evolving into new forms, as happened with much of the Lyonese repertoire, mainly after the Tiberian period.<sup>9</sup>

These copies of amphorae, which were possibly originally meant for different products, provide us with information about the range of different goods produced for export in Gaul – mainly wine, as well as fish sauces and other kinds of salted products. Of these, the first was the most important product exported from Gaul even from the last third of the first century BC, reaching its peak during the second half of first century and beginning of the second century AD.<sup>10</sup>

The wine boom was without doubt determined by the introduction of Roman customs and lifestyles into Gaul. Although the annexation of *Gallia Narbonensis* occurred three quarters of a century before the conquest of the rest of Gaul, it seems that the peak of production took place at around the same time in all regions. We believe that this initial 'delay' and later activity seen in *Gallia Narbonensis* are due to different simultaneous factors, to some extent linked between them. One important factor would have been the highly probable existence of economic interests on the part of established elites of Italian origin and wine merchants in dominating the Gallic markets for themselves, prior to Caesar's conquest.<sup>11</sup> The end of the Gallic Wars however, would have spelt a progressive decline in Italic imports to Gaul, as the series of colonies came into being during the second half of the first century BC all throughout *Narbonensis* (Béziers, Fréjus, Orange, Arles) and along the valley of the Rhône (Valence, Vienne, Lyon). The settlement of veterans and big contingents of the Italic population in the south of the *Lugdunensis* and in all *Narbonensis* would have occasioned the exploitation of the territory under parameters that were typically Roman. The beginning of viticulture on a grand scale commenced at that moment and would reach its peak at the mid first century AD.

As we can see from the archaeological remains and epigraphic evidence, it is nigh certain that the boom in the Gallic wine industry soon outgrew what the local and regional market could absorb, and started overflowing towards other regions. This process is reflected in a massive production of a great number of types of amphorae from the last years of the first century BC, both in *Narbonensis* and in Lyon. We suspect though that the true economic dimensions of the industry cannot be really appreciated solely through the study of amphorae, as the use of the barrel would certainly have served as an alternative mode for shipping, especially, it seems, in the Lyon and Rhône regions.

At Lyon, wine amphora production copying Italian forms ceased by the early first century AD. This phenomenon has recently been linked to the development of the barrel as the means of transportation for the wine produced in the region.<sup>12</sup> Undoubtedly, in continental Europe the use of wood in any type of industry was far greater than we can now know, something of a disadvantage for the archaeologist. Most of the iconographic representations of barrels found in *Gallia* and *Germania* that can be dated come from between the end of first century AD to the third century.<sup>13</sup> But the existence of a great number of barrels reused in the military camps along the Rhine from the very

<sup>1</sup> Desbat – Martin-Kilcher 1989; González Cesteros 2014: 478-486; Martin-Kilcher 1994: 525-553; Schmitz 2011.

<sup>2</sup> Bertucchi 1992.

<sup>3</sup> Bertucchi 1992: 130.

<sup>4</sup> Laubenheimer 1985; Laubenheimer – Schmitt 2009: 11.

<sup>5</sup> Dangréaux *et al.* 1992 : 38; Desbat – Dangréaux 1997: 75-76.

<sup>6</sup> Laubenheimer 1985; 1990; Martin 2007.

<sup>7</sup> Bertucchi 1992.

<sup>8</sup> Dangréaux *et al.* 1992; Desbat – Dangréaux 1997; Monsieur 2001.

<sup>9</sup> Monsieur 2001.

<sup>10</sup> Brun – Laubenheimer 2001.

<sup>11</sup> Laubenheimer 1985: 405; Poux 2004.

<sup>12</sup> Poux 2011: 90.

<sup>13</sup> Marlière 2002: 155. Figure 194.

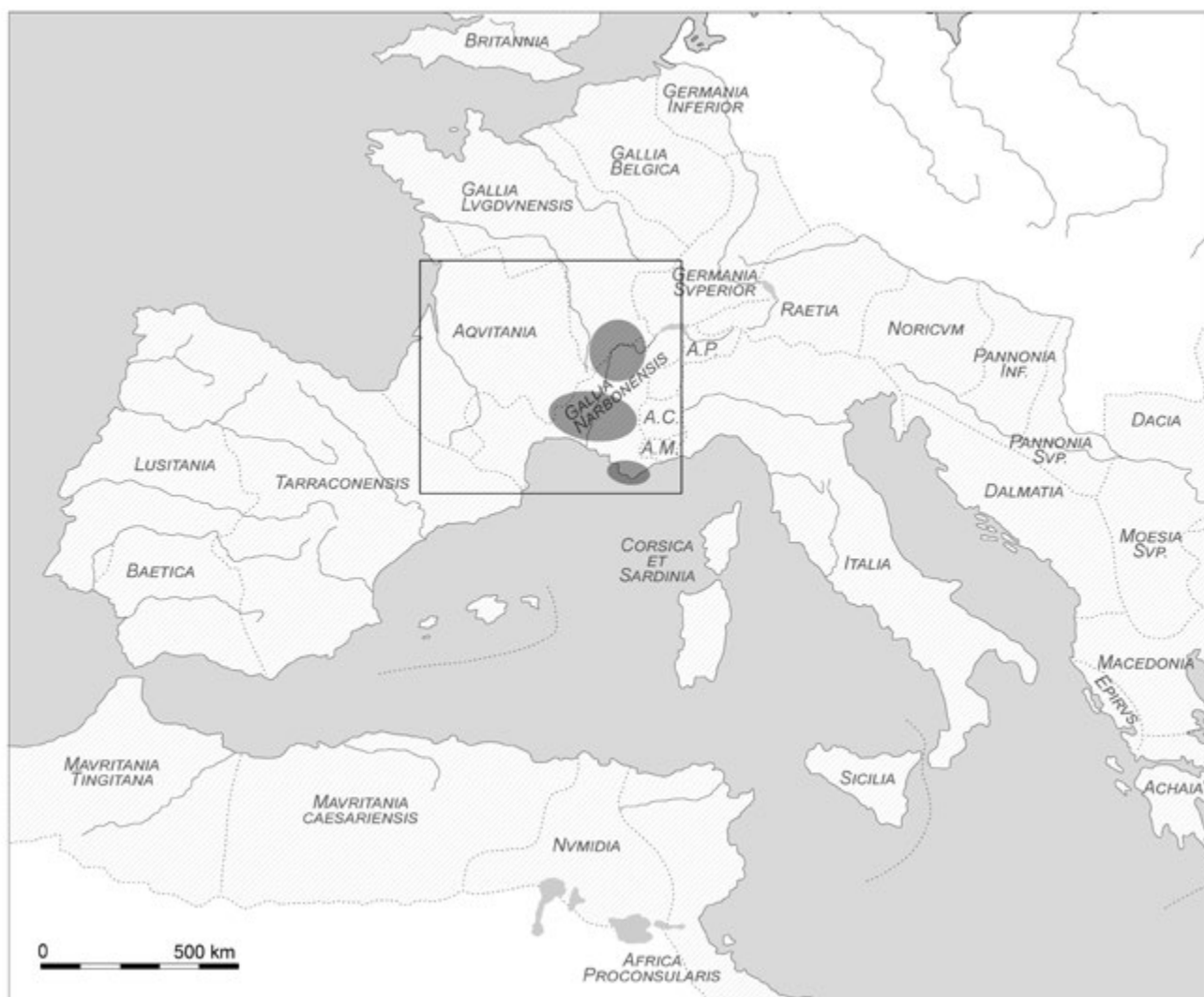


FIGURE 7.0.1: MAP OF THE WESTERN ROMAN EMPIRE, WITH GALLIA AND ITS MAIN EXPORTING REGIONS.

PROVENANCE	NMI (103)	%	AMPHORA FORMS							
LYON	48	46.6	Lyon 3A: 20	Lyon 7A: 8	Lyon 3B: 4	Lyon 1: 1	Lyon 2: 1	Indet.: 14		
NARBONENSIS	27	26.2	G.4: 5	G.1: 2	G.3: 5	Dr. 1B: 1	G.3/7: 1	G. 5: 1	Dr. 2-4: 5	Indet.: 9
MARSEILLE	7	6.8	G. 2: 4	Dr. 2-4: 1	Indet.: 2					
INDET.	21	20.4	G.2/3: 4	Indet.: 17						

TABLE 4: GALLIC AMPHORAE PERCENTAGES, ACCORDING TO FORM AND ORIGIN.

beginning of the Roman presence in *Germania*,<sup>14</sup> tells us that this type of container had been in use for the export of Gallic wines from the decades immediately following the foundation of the main Caesarean and Augustan colonies.

Analysis of the wood of some of these barrels and of the marks incised in the wooden planks and on the iron rods all indicate a probable production in the Lyon area,<sup>15</sup> which also happens to be where the use of such containers has

been documented at this early date.<sup>16</sup> Possibly these barrels were used for re-shipping goods manufactured in other regions, maybe southern Gaul, but it would be logical to accept that at least some of them were used for storing local or regional wine. Finds in the last decade in the Goiffieux villa, just a few kilometres south of Lyon on the left bank of the Rhône,<sup>17</sup> show the early existence of a winery on a grand scale near the capital of the *Tres Galliae*. This could have been oriented towards provisioning the most northern

<sup>14</sup> Kühnborn 1992; Marlière 2002.

<sup>15</sup> Marlière 2002: 177-179.

<sup>16</sup> Marlière 2001: 187-189.

<sup>17</sup> Poux *et al.* 2011.

regions, especially near the Rhine area. Here grape crops, linked to the exploitation of a territory by the *villa* system, are not documented until at least the mid-first century AD.<sup>18</sup>

Greatly important though Gallic wine was for the western Roman markets, especially the territories at the Rhine from the time of conquest, this was not the only produce that the Gallic regions exported during Early Imperial times. Along with goods whose remains are nowadays impossible to identify, some of the amphorae produced in Lyon and some places in *Narbonensis* reveal that salted fish and fish sauces were traded, as well as some kind of sweet wine or *defrutum*, which could have been exported for itself or used in preserving fruits and olives. However, an agreement by the scholarly community of the existence of local production of these goods is still lacking. Though it is accepted that salted fish and fish sauces, shipped within their local amphora types or imitations of Baetican amphorae, were of local production from the south of *Narbonensis*, including Marseille and Fréjus,<sup>19</sup> in the case of Lyon, common opinion still holds that the products arrived in other vessels and were only transferred into local amphorae for redistribution.

It is important to state that, although some common types – like the Dressel 1, Dressel 2-4 and copies of the Dressel 7-11 – were produced everywhere, each region presents its own stylistic repertoire, with its own morphological traits. It also needs to be appreciated that the peak of each type of amphora production happened at different historical moments during the Roman period. Thus it occurs earlier in Marseille,<sup>20</sup> while the Lyon products found their preferred market in Germany and north and central Gaul during the first century AD.<sup>21</sup> The products of *Narbonensis* started to be exported during the Augustan period, reaching their peak only in the middle decades of the first century AD.<sup>22</sup> The chronological span in which the Neuss occupation took place encompasses the most successful periods of exportation from all of these three Gallic areas. It is possible, nonetheless, to establish some occasional divisions of time: one should not expect a Gauloise 2 amphora from Marseille during the Claudian period, nor for the Narbonensian Gauloise 4 to arrive before the reign of Tiberius.

### 7.1 Amphorae from the central Rhône valley and the problem of their contents

The privileged commercial position of Lyon and the economic preminence so generated as the main fulcrum of the non-Mediterranean territories in *Gallia* greatly helped make this city pivotal in the logistics of redistributing

goods to the different north-western Roman-controlled regions.<sup>23</sup>

Linked to this function as a redistribution centre for commerce between the Gallic interior and the Mediterranean regions, the amphora production in the workshops of Lyon has generally been associated with the re-packaging of Mediterranean products, particularly wine or other grape derived-products, as well as salted fish and fish sauces. We believe this hypothesis poses numerous problems, mainly in the case of Hispanic products. We have no satisfactory answer, but we do believe the matter deserves reflection.

We argue for a simpler view. Products packaged in Lyon, both in amphorae or in barrels, are at least partly of local/regional provenance. At the very least, they were produced within the Gallic borders and just quite sporadic import and re-packaging of external commodities would have been done. In the case of wine, there is conclusive proof of the great scale of production in the region that took place not long after colonial foundation of Lyon, Vienne, and other cities along the Rhône river.<sup>24</sup> That wine was then transported in Lyon-produced amphorae and in the great barrels found in military settlements on the Rhine, known from Augustan and Julio-Claudian times.<sup>25</sup>

Among these containers, we would include the Lyon 7 amphorae. Initially this reproduced the Baetican Haltern 70, but later evolved into its own form as the Lyon 7B/Augst 21, which shows morphological differences from the original south Spanish model. We believe Haltern 70 was mainly used for the transport of *defrutum* and/or similar grape by-products,<sup>26</sup> and that these products could have reached northern Europe not as a foodstuff in their own right, but as condiments that would help make local wines tastier, as we believe also took place in the Hispanic north-eastern regions, where the Haltern 70 were the main amphora import.<sup>27</sup>

In the case of the Lyon 7B, the Lyonese subtype on which the most inscriptions have been found to-date, almost all the *tituli picti* refer to olives, and none to *defrutum*,

<sup>18</sup> Heinz Lenz 1998; Rothenhöfer 2005.

<sup>19</sup> Bertucchi 1992; Laubenheimer 1985: 318-319; 1992: 19-20; Martin-Kilcher 1994: 410-412.

<sup>20</sup> Bertucchi 1992; Laubenheimer 1990; Laubenheimer – Schmitt 2009.

<sup>21</sup> Desbat – Dangréaux 1997.

<sup>22</sup> Laubenheimer 1985.

<sup>23</sup> There are several publications about the essential commercial place of *Lugdunum* for the supply of the Roman north-western territories. Some must be mentioned: Desbat – Martin-Kilcher 1989; Desbat 2009; Schmitz 2011. Part of the PhD thesis of one of us was dedicated to the routes taken by the Hispanic products from the Iberian Peninsula to the Rhine, taking into account the importance of the Gaulish capital for the transshipment of Mediterranean goods to the military centres on the Rhine: González Cesteros 2014: 461-495.

<sup>24</sup> Poux *et al.* 2011.

<sup>25</sup> A. Desbat proposed the existence of an important barrel industry in Lyon: Desbat 1991. This hypothesis was followed by A. Tchernia: Tchernia 1998: 125, who linked it with the dolia ships of the Augustan period and first century AD: Tchernia 1998: 127, and by E. Marlière: Marlière 2002: 177-179.

<sup>26</sup> Aguilera 2004b; Berni 2011; Bernal *et al.* forthcoming; González Cesteros 2014: 403-404.

<sup>27</sup> Berni 2011; Carreras – Martín Menéndez 2013; Carreras – Morais (eds) 2011; Fabião 1998: 180; Naveiro 1991; Morais 2004; Morais – Carreras 2004: 100-106.

although two referred to sweet wine conservation.<sup>28</sup> It is possible that the 7B, even in advanced Julio-Claudian and Flavian times, was an amphora dedicated more to carrying sweet preserves, in this case olives, as could also be the case for the later Haltern 70 and the little vessels of the Verulamium 1908 type too.<sup>29</sup>

A possible scenario is that the preserved olives came from *Narbonensis*, being sent probably in barrels, or maybe in flat-based *dolia*, all the way to Lyon, where they would have been redistributed. Many of these preserves could have continued on their way in these big vessels until their final destination in central *Gallia*, Belgian *Gallia* or *Germania*, but a large proportion were re-packaged in some key entrepôt, of which the most important would have been Lyon, to be sold in smaller quantities. One can note here the existence of various jars or jugs, dated from the second half of second or third centuries AD, that have ink inscriptions which read *Oliva/Olivae*.<sup>30</sup> Two of these little vessels are found in private collections in Mainz; a third one can be seen in the Wiesbaden museum; a fourth one, with two handles and specifically dated to the third century AD, comes from Bliesbruck and has an *Oliva picena* inscription. A final example, though found outside of the Rhine area, comes from Magdalensberg and has the inscription *Oliva n(igra)*.<sup>31</sup> The legends on the containers seem to argue that such goods were transferred to the smaller vessels, either before transport to their final market or at the place where they would have been consumed.

Although we are sure that wine was produced in the mid-Rhône area and that olive trees could not be grown there because of the climatic conditions, it is hard to know about the existence or not of the local manufacture of salted fish and fish sauces on the Rhône and Saône rivers. Producing these goods from fresh water fish caught in these rivers sounds plausible. Accounts reveal this sort of manufacture both on the great Mediterranean rivers and those in north-eastern Europe.<sup>32</sup> Doubts arise though when we observe the quite numerous ink inscriptions on salted fish amphorae produced in Lyon. These mention products that would have required marine fish species for their preparation, especially *muria* and *garum*, which are sometimes also accompanied by – the undoubtedly sea-fish – mackerel/*scomber*.<sup>33</sup> Most scholars, promoting theories of the re-packaging of Mediterranean fish products, do so from *tituli picti* on amphorae and other vessels from Lyon that make apparent geographical references mostly to *Hispania*, Antipolis, southern Gaul and last of all, even Pompeii.<sup>34</sup> We agree that Lyon was the re-packaging centre for certain products, which could have involved a kind of wine, olives, and some salted fish and fish sauces. However, we believe

that these products, maybe with exception of some wines, were not originally manufactured in the Iberian Peninsula, nor in Italy, but were locally produced both along the Rhône and in *Gallia Narbonensis*.

Several authors suggest that the inscriptions on the Lyon 3 were a way of showing the type of product through an adjective (as in today, *à la Grecque*), which could be read as ‘Hispanic’ or ‘Antipolitan’ or ‘Pompeian’. This would explicitly refer to the manufacture of *garum* or *muria*. O. Bohn was the first to propose this hypothesis, as he studied two inscriptions from Augst on a Lyon 3B that mention *g(arum) Hisp(anum)* and *mur(ia) Hisp(ana)*, suggesting that this referred to a recipe that Columella’s uncle gave his nephew.<sup>35</sup> F. Zevi supported that theory and applied it to the same sort of amphorae where the adjective *Hisp(anum)* was often found.<sup>36</sup> More recently, both A. Desbat and F. Laubenheimer have validated this hypothesis.<sup>37</sup> However, the argument has generally been rejected in favour of one proposing the re-packaging of goods from Mediterranean regions, including *Hispania* and later Italy, that reached the Gallic capital in great quantities, shipped inside huge containers (*dolia* or barrels).

We feel that the second proposal is hazardous in the case of Hispanic salted fish and fish sauces, reflecting that there are many weak points in the argument. One such being that the hypothesis would require the transporting of fish sauces and salted fish in big barrels or *dolia* over great distances first by sea and then by river. For the *dolia*, even if the logistical problems of manoeuvring these great containers full of goods could be solved in some important ports, so far we know of no shipwreck of this date that has been found with *dolia* containing organic remains of fish. Yet another difficulty we encounter, not only for the fish products, concerns the weight and positioning of the cargo. Although the ratio of ‘weight of the content to the total weight of the ship’ is way higher for ships with *dolia* than for ships that carried amphorae, even the largest carriers would have encountered many problems in distributing the cargo weight safely inside their holds. The breaking of even just one *dolium* could unbalance the whole ship to such a degree that it could threaten to sink it.<sup>38</sup>

The existence of cistern ships, as those specially built to carry *dolia* are termed, seems to be limited to a very specific moment in time. Despite the discovery of such ships in the south of France of the Cap Benat B shipwreck with three small *dolia*, dating from the second century or the beginning of the first century BC, the La Meloria B of the late first or early second century AD, the Golfo de Baratti wreck and one of the Punta Ala wrecks in Tuscany, dating to the third century AD, all the other cistern boats date to between the Augustan period and the mid first century AD.<sup>39</sup> As J-P. Morel pointed out, they must have

<sup>28</sup> Laubenheimer 2004: 158-159.

<sup>29</sup> Carreras – Marimon 2004: 34-35. Bernal *et al.* forthcoming.

<sup>30</sup> Ehmig 2006.

<sup>31</sup> Ehmig 2006: 74-75.

<sup>32</sup> Van Neer *et al.* 2010: 181-185.

<sup>33</sup> Ehmig 2007a: 142; Laubenheimer 2004: Tabl. XV; Van Neer *et al.* 2010.

<sup>34</sup> Ehmig 2007b: 236-237.

<sup>35</sup> Bohn 1926: 202-204.

<sup>36</sup> Zevi 1966: 232.

<sup>37</sup> Desbat 1991: 324; Laubenheimer 2004: 154-159.

<sup>38</sup> Marlier 2008: 164.

<sup>39</sup> Marlier 2008: 162; Panella 1998: 554.

been linked to the need for massive supplies, as was the case in the Augustan and Julio-Claudian periods, in a process similar to the shipping of Italian *terra sigillata*,<sup>40</sup> but that in the end they proved too big a risk to be braved on a more continuous basis.

The phenomenon of the cistern ships is limited to the West Mediterranean areas, having been mostly found in the Gulf of Leon and the Strait of Bonifacio.<sup>41</sup> They are generally linked to a mode of naval transportation connected to the Tarraconensian and Tyrrhenian wines that were exported in vast quantities to southern Gaul and Rome in a two-way system connecting these three northern Mediterranean regions.<sup>42</sup> The ventilation holes on some *dolia* lids confirm they were used for wine, as do the capacity inscriptions, *post cocturam*, which expressed the amphora's unit, a practice typical on wine amphorae. However, among the shipwrecks with cargos of Baetican amphorae studied by B. Liou,<sup>43</sup> not one included *dolia* in their holds. Even if some of the best preserved ships with *dolia* seem to have been capable of entering the Rhône, and in case of the Diano Marina shipwreck a mast seemingly used for the towline has been documented, we are unable to figure out the way in which the existence of these cistern ships affected the supply of the central and northern European regions. However, we believe it was fairly limited, and amphora evidence indicates that little Tarraconensian and Italian wines reached the Rhine border.<sup>44</sup>

On the other hand, the concept of using barrels for shipping wine and salted fish in the Mediterranean region has its own problems for a number of reasons. Primarily because, until the invention of the hydraulic press, barrels needed to be constantly checked and well-conserved, and would eventually need to be repaired en route, and the preservation of the contents would not have been as good as it is with clay containers.<sup>45</sup> In the Roman period, the barrel does not seem to have been the best way to transport liquid or semi-liquid products at sea on any great scale, although there is proof of its occasional use in the Roman and Byzantine periods.<sup>46</sup> It must be emphasized that, while the use of the barrel seems to have a long history in Gaul and that it is documented since pre-Roman times, it was nonetheless amphorae and other smaller ceramic vessels that formed the chief mode of packing and transportation.<sup>47</sup> This preference is justified by their resistance to climatic variations (as amphorae have the capacity to preserve the food even in extreme temperature changes), and maybe also by the scarcity of wood in most

of the Mediterranean regions, or more specifically the kind of wood that would be ideal to provide the big wooden planks used to form a barrel.

Another problem attached to the theory of the re-packaging of Baetican products in Lyon is mostly related to the distribution of the Lyon and Baetican fish containers. In the early Augustan period Baetican fish was supplied to Lyon<sup>48</sup> and to *Germania*<sup>49</sup> on a massive scale. From the change of era Lyonese amphorae arrived in large numbers, but still far less significant in comparison to the quantities of Baetican fish amphorae of the early Augustan period to the military sites in *Germania*, and this trend continued even though numbers of Spanish amphorae dropped in the mid-first century AD Lyonese amphorae were still way below.<sup>50</sup> Yet, as we were able to see at Neuss, the Baetican salted fish amphorae were never completely replaced by the amphorae from the Rhône area, and Baetican products continued to arrive in northern Europe throughout the first and second centuries AD; even when the workshops in Lyon had stopped making amphorae.<sup>51</sup> In our opinion, if Baetican products were repackaged in Lyon amphorae, then a lower quantity of them should be expected in contexts of the first half of the first century AD in northern Gaul and *Germania*, but this is not the case. On the other hand, Baetican products continued to arrive in the northern provinces even after the end of amphora production in Lyon. Here a second question arises: Why did they stop the supposed repackaging of Baetican products in Lyon, but the Baetican products continued to arrive? In our opinion the answer is simple, they were never repackaged.

At a morphological level, it should be observed that the first generation of Lyon amphorae are very similar to the foreign models they used as their prototypes. Thus, the Lyon 1 is very close to the Italic Dressel 1, whilst the Lyon 2A and B is similar to the Italic Dressel 2-4 in their earlier stages; the Lyon 2A is linked to the Koan prototypes or the early Campanian Dressel 4, and the Lyon 2B derives from the Italian Dressel 3;<sup>52</sup> and again, the Lyon 3A reflects the Baetican Dressel 9 and the Lyon 7A, the Augustan-Tiberian Haltern 70. However, with what we could call the 'second generation of amphorae from Lyon', the vessels from the Rhône seem to have inspired their own changes in shape that take them progressively less typologically close to their ancestral prototypes.<sup>53</sup> In this regard it should be pointed out that the Lyon 3B, and especially the Lyon 4B and 7B, have very little to do with the Baetican originals on which their predecessors were based. To us, this evolution in shape indicates that these amphorae contained their own products, different from the goods packed in other

<sup>40</sup> Morel 1998: 499.

<sup>41</sup> Marlier 2008: Figure 1.

<sup>42</sup> Arnaud 2012: 136-138; Corsi-Sciallano – Liou 1985; Marlier 2008; Nieto – Raurich 1998; Panella 1998: 154-155.

<sup>43</sup> Liou 2000.

<sup>44</sup> González Cesteros 2015; Martin-Kilcher 1994.

<sup>45</sup> Bevan 2014: 402; Marlière 2002: 189.

<sup>46</sup> Marlière 2002: 189; McCormick 2012: 15.

<sup>47</sup> The use of barrels for maritime transport in Antiquity is documented for the use of the crews or as something not linked to the transport of liquid or semi-liquids commodities: Marlière 2002: 189. It does not seem logical to us to export fish products in barrels from a region where wood was short, but a strong pottery tradition existed – as in the case of *Baetica*.

<sup>48</sup> Desbat – Lemaître 2000.

<sup>49</sup> González Cesteros – Tremmel 2011-2012; González Cesteros 2014.

<sup>50</sup> González Cesteros 2014: 439-440.

<sup>51</sup> Desbat – Dangréaux 1997.

<sup>52</sup> We do not think that the Lyon 2A took directly the Koan amphora as its model. It is much more feasible to think that Italian potters were working in Lyon from the very first moments of the Roman colony and copied the first Italian versions of Dressel 2-4, which are indeed most similar to the Koan form.

<sup>53</sup> Dangréaux – Desbat 1997: 79.

amphorae.<sup>54</sup> If they too had intended to carry a similar or even the same product, they probably would have copied the original ceramic model in detail too, just as they did in the very first production period. It is clear that, from the mid-first century AD or even earlier, the Lyon vessels stopped imitating the main Baetican salted-fish amphorae; thereafter they continued their own developmental line that has no connection with the principal shapes of southern *Hispania*. There are very few similarities between the Lyon 3B, and even less the 4A and B, and the Beltrán IIA, IIB and Dressel 14 shapes. These last types would become the most common Baetican salted-fish amphorae during the second half of the first century AD and the second century AD and were indeed copied in the Narbonensian workshops.<sup>55</sup>

To conclude the account of this complex and unresolved matter, we offer our own hypothesis. We believe that we should reject the idea of the repackaging at Lyon of Baetican products arriving from the south of *Hispania* in *dolia* or in barrels, because there is no archaeological proof that the salted-fish and fish sauces were transported in large *dolia* from *Hispania* – and we do know of several shipwrecks with *dolia*. Further, the great distance between *Hispania* and Lyon would create a formidable logistical challenge, not only in Lyon, but also at any stops en route, especially Arles. The presence of inscriptions that include the adjective ‘*hispanum*’ must be understood as a reference to the way the sauces were made (to the formula or recipe applied to obtain the manufactured product), not as a reference to the origin of the ingredients. The words in *tituli picti* on the Lyon 3A and 3B amphorae should also be taken in this sense – referring to Antipolitan fish sauces that were actually made outside of the *Antipolis* territory,<sup>56</sup> or of the *garum pompeianum* (found in a Lyon 3B, during the Kurtz Schumacher Platz excavations in the centre of Cologne)<sup>57</sup> that never saw Campania.

Continuing this line of thought, the following three alternative options could assist in explaining the origin of the products carried in amphorae from Lyon. The first explanation is that the products originated in the same region as the amphorae themselves, and we would therefore be talking about fresh-water salted fish. The second option would be that the packed goods underwent some kind of processing in Lyon that altered them from the original products they carried. The third option would be that goods came from other regions in containers that were not amphorae, carrying a product that would then be almost exclusively packed in amphora made in Lyon, and not in amphorae from their place of origin, wherever that might be.

The *tituli picti* exclude, in most cases, the first of these options and also seem to contradict the second option, as they mention sauces and salted fish previously known and produced in other regions, sometimes with high quality sea fishes, as in the case of the *garum scomber*.<sup>58</sup> We believe the third option to be the most rational, and there might have been economic reasons behind it. However, as we have previously explained, we think it should be rejected in the case of Baetican products and accepted only for the salted-fish and fish sauces produced in the southern regions of *Gallia*, most probably along the mouth of the Rhône and its nearby coast, sometimes following a kind of *Hispanic*, *Antipolitan*, or *Pompeian* recipe. Nevertheless, we must admit that this question remains open. We have no convincing answer at the moment, and must therefore await new findings to shed light on the matter.

Concerning amphorae from Lyon recovered at Neuss, the fact that they constitute by far the largest component of the Gallic imports, at almost half of the quantified diagnostic elements, deserves attention. However, in a great number of cases, it has been impossible to determine the specific type of amphora: either only bases/spikes or handles were found (which may correspond to a number of types), or just simple, and anonymous, body fragments isolated in some archaeological layer. For the recognizable remainder, it has proven excessively complicated even here to produce a clear appreciation of the Lyonesse repertoire.

There are at Neuss two fragments of wine amphorae from Lyon, one belonging to a Lyon 1 and the other to a Lyon 2. Both forms correspond to imitations of the main Italic wine amphorae used in late Republican and Augustan times, namely the Dressel 1B and the Dressel 2-4, which achieved great popularity in the interior of Gaul. In both cases their production in Lyon must have been sporadic: though they have been found in contexts in central Gaul and on the German border, the numbers, as at Neuss, have always been small.

The presence of eight specimens classified as Lyon 7A among the Meckenheim collection should correspond to the import of some kind of grape-derived product or preserve. The presence of the Lyon 7B at Neuss was assured by the publication of the illustration in the eleventh volume of the *Limesforschungen*, which is dedicated to the ceramics supposed to be in circulation in the second quarter of the first century AD.<sup>59</sup> As we have mentioned before, the ink inscriptions on the Lyon 7 indicate the presence of olives preserved in *defrutum* or something similar.<sup>60</sup> However, it must be said that most of the inscriptions on Lyon 7 have been found on the later sub-type, the Lyon 7B,<sup>61</sup> and

<sup>54</sup> A similar process has been suggested for the second stage of the Dressel 3-2 of *Tarraconensis*, when the high quality Lauro wine would have been the main product they contained: Berni forthcoming.

<sup>55</sup> Laubenheimer 1985: 318-319; 1992.

<sup>56</sup> Laubenheimer 2004: 156.

<sup>57</sup> Ehlig 2007b: 236-237. Taf. 16.

<sup>58</sup> Curtis 1991; González Cesteros 2012: 116.

<sup>59</sup> Filtzinger 1972: Taff. 24, 8.

<sup>60</sup> Ehlig 2007b: 218-219; Laubenheimer 2004: Tabl. XVI; Monsieur 2001.

<sup>61</sup> The existence of a *postcocturam graffito* on a neck fragment that could belong to a ‘Halter 70 similis’ has been observed: it comes from the vicus of Bern-Engelhalbinsel: Martin-Kilcher 1994: 391. On it can be read: MVLS M, interpreted as ‘*mulsum*’. We are of the view that normally neck fragments are not enough by which to recognize an amphora type, at

consequently they should be dated from mid first century AD, a period in which also corresponds to when most of the inscriptions that mention olives as the contents are found on the Baetican Haltern 70. We believe it possible that, as time went on, the typical contents of the Haltern 70 changed until it became a rarely used amphora dedicated to the export of olive-preserves.<sup>62</sup> This alteration was surely an adaptation to one in the market, mainly involving north-west Spain and the northern European borders, where demand for the original product, the *defrutum* or something similar, had ceased, but where there was still a request for a product that could not be manufactured locally, like olives.<sup>63</sup> Continuing this line of reasoning, we could also argue that the first Lyon copies of the Haltern 70, that is the Lyon 7A, which are quite similar to the Baetican shape from Augustan and Tiberian times, would mostly have carried *defrutum* or some similar product with a high sugar content. This sweetener would have been used in the same way as the contents of the Baetican Haltern 70, as an ingredient or condiment to improve the low-quality wines that were normally drunk by the Roman soldiers.

Regardless of these imports of wines and similar products originally manufactured in Lyon, the salted-fish and fish sauce amphorae are the most representative among the Lyonesse material registered at Neuss. Most correspond to the Lyon 3A (Figure 7.1.1.1-2), which fits with the early date of most of the materials studied at Neuss, dated largely before the construction of the so-called 'Koenen' camp, during the Claudian period. There are, however, a few pieces belonging to the second type of salted fish amphorae from Lyon, those classified as Lyon 3B (Figure 7.1.1.3). This seems to be an evolution from the previous type, reaching its maximum distribution range in the Flavian period.<sup>64</sup> Its appearance in Neuss must be related to the later occupation phases of the pre-Claudian camps or even later. All this demonstrates once more the fragility of the chronology supposedly established for the strata associated with each camp.

It is on the rim of a Lyon 3B amphora where was found at Neuss the only stamp that can be associated with production at Lyon, which is somewhat odd considering that the presence of epigraphical elements on the Lyon amphorae is rather frequent, either as stamps,<sup>65</sup> or as ink inscriptions.<sup>66</sup> On our piece, the stamp appears inverted on the upper neck, under the rim (Figure 7.1.1.3). This find was already known through the material published by Filtzinger,<sup>67</sup> with the unsure reading of CVB, which has generally been accepted by scholars.<sup>68</sup> However, the text of the Neuss stamp seems retrograde to us, considering the shape and orientation of the last letter, P – thereby giving

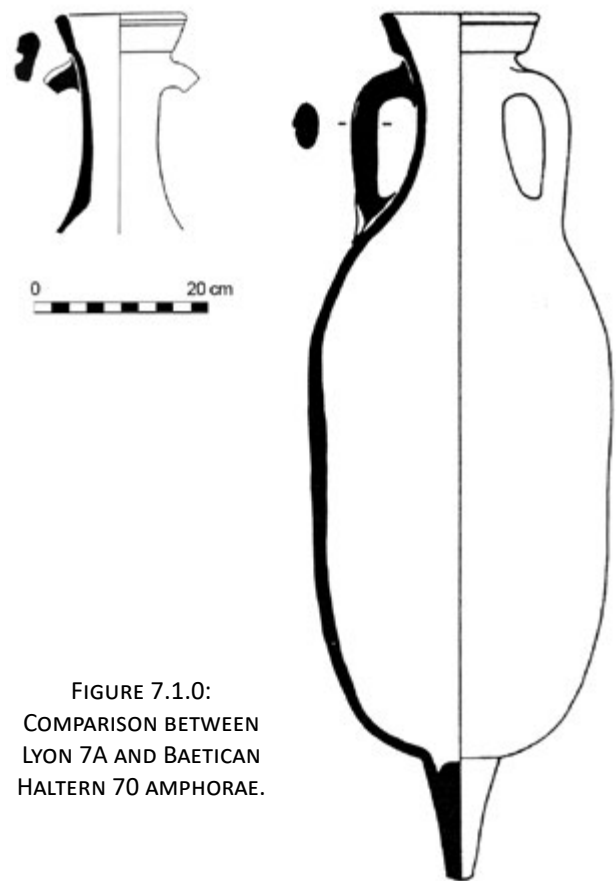


FIGURE 7.1.0:  
COMPARISON BETWEEN  
LYON 7A AND BAETICAN  
HALTERN 70 AMPHORAE.

the impression that it can be read as CAP, with the letter A oddly lacking its horizontal stroke.<sup>69</sup> The shape is analogous to the CVP one on the handle of the Lyon 4B amphora, as may be seen in August,<sup>70</sup> Soleure and Mayence.<sup>71</sup> As there are no punctuation signs, the inscription should be read as only a single name *Cap()* or *Cup()*, rather than separate the letters forming a *tria nomina*.

A short *titulus pictus* in black ink (*atramentum*) exists on a Lyon 3 neck.<sup>72</sup> We can scarcely read three letters with a dot between the first two. It seems to be a *duo* or *trianomina*, that could be read as *M · Ca[---]*.

The clays of the Lyonesse amphorae of Neuss are more or less homogenous, being all calcareous with a great quantity of quartz inclusions, which can be quite angular and slightly jagged, or smaller in size and a darker, reddish shade. Some differences between sherds certainly exist: including thinner ones with granite inclusions, and others display different tints in the clays, usually brown or yellowish. These variations do not correspond to the different species of the Lyonesse vessels, as they seem to appear both in the Lyon 7A and the Lyon 3A, where more than one specimen is known. Most probably we are encountering products from different workshops within

least for the large amphora forms.

<sup>62</sup> Bernal *et al.* forthcoming.

<sup>63</sup> Aguilera 2004c: 129-130.

<sup>64</sup> Dangréaux *et al.* 1992: 44.

<sup>65</sup> Monsieur 2010.

<sup>66</sup> Laubenheimer 2004.

<sup>67</sup> Filtzinger 1972.

<sup>68</sup> Desbat – Dangréaux 1997: 83; Monsieur 2010: 408.

<sup>69</sup> Epigraphic appendix no. 8.

<sup>70</sup> Martin-Kilcher 1994: 188.

<sup>71</sup> Desbat – Dangréaux 1997: 83.

<sup>72</sup> Epigraphic appendix no. 127. J. Kütter thought it was a Haltern 70 (Kütter 2008: no. 817, Taf. 55), but there is no doubt it is a Lyon 3 amphora.

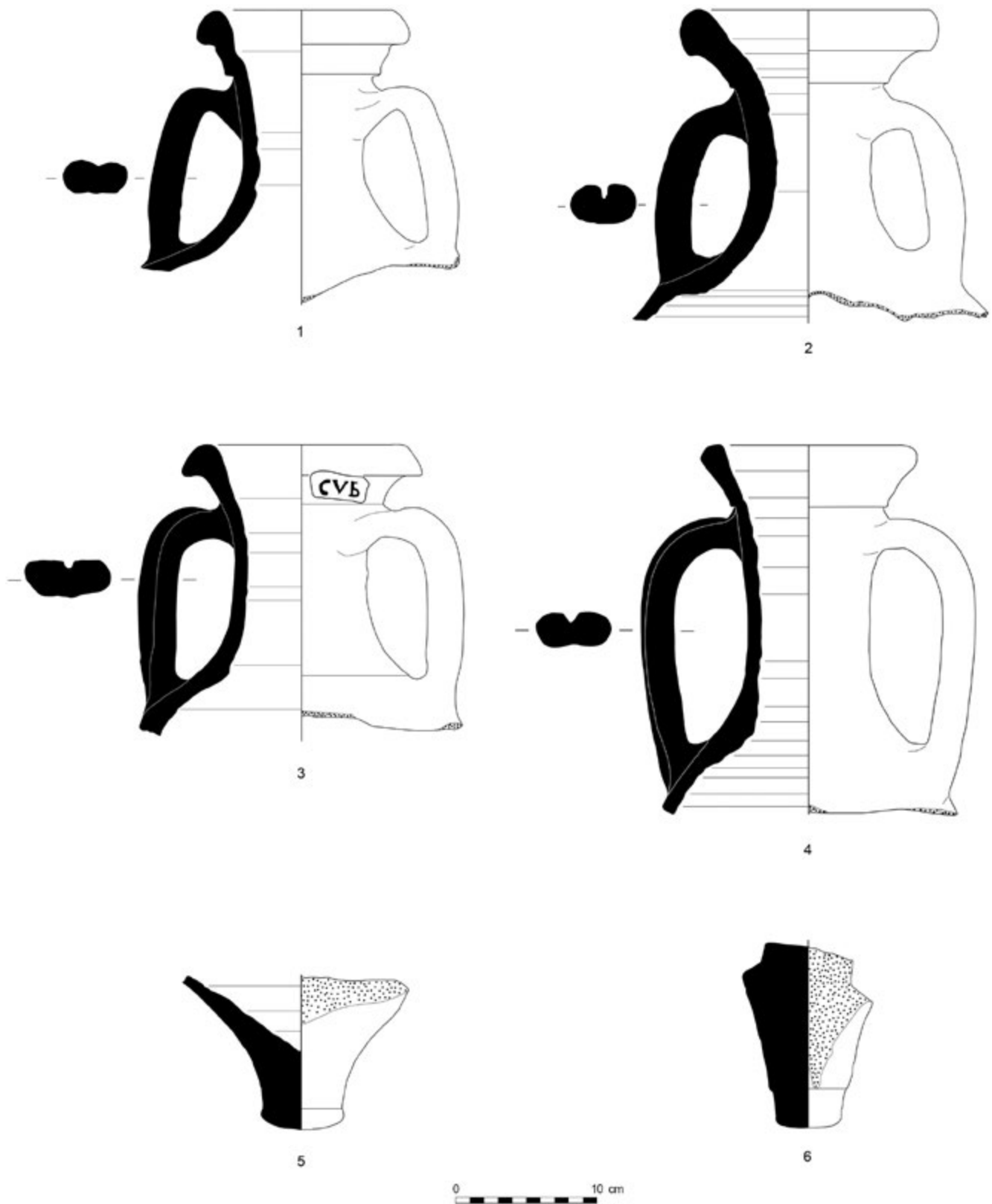


FIGURE 7.1.1: NEW DRAWINGS OF NEUSS AMPHORAE. LYON CONTAINERS (LYON 3A: 1-2; LYON 3B: 3; LYON 7A: 4).



the Lyon area, maybe some of them are on the Saône,<sup>73</sup> and others from the area where this river meets the Rhône. The absence of archaeometrical analyses prevents us from confirming this hypothesis.

To conclude the Lyonese products, one may mention that the arrival of these amphorae in quantities of around 10% of the whole amphorae assemblage seems to be in concordance with the general dynamic observed at archaeological sites on the Rhine and in *Gallia Belgica* during the first half of the first century AD.<sup>74</sup> A complete study that would provide more specific data about the distribution of these amphorae still remains to be done. The low presence, or absolute absence, of the so-called 'second generation amphorae' from Lyon at Neuss,<sup>75</sup> mainly those of the 3B and 4 types, places these imports in the first moments of the military occupation (almost certainly in case of the Dressel 1 imitation), and on into the first part of the first century AD, as seems to be the pattern with the other imports found at Neuss.

## 7.2. Amphorae from *Gallia Narbonensis*

After Lyon, the Gallic region that is next best represented among the Meckenheim material is *Gallia Narbonensis*. The variety of types of Narbonese amphorae is the highest among all the regions documented at Neuss, with seven different shapes. The Marseille productions are considered separately because the city had its own tradition in ceramics, even though it lies within the geographical boundaries of *Narbonensis*. We believe that the great variety, observed mainly in the diversity of flat-bottomed amphorae, is an indicator of the chronological position of the Neuss imports and illustrates the rapid evolution that the products of *Narbonensis* underwent from Augustan times to the second half of the first century AD. At this point, a standardization in shape occurred in many *Narbonese* workshops, represented mostly by the Gauloise 4.

In light of the archaeological finds now known, we can claim *Narbonensis* as the most important wine-growing region in Gaul. More wine installation-units have been excavated here than in any other part of the Roman world, some of which are among the best known examples of Roman functional buildings.<sup>76</sup> In the Mediterranean part of Gaul there are also many amphora workshops that were very active from Augustan times until the third century AD,<sup>77</sup> with the flat-bottom shapes, particularly the Gauloise 4, being their main product. Both the known wine production centres and the ceramic workshops belong to the Flavian and Antonine periods, the moment when the Narbonese wine exports were at their peak. The written

data and the wide distribution reached by the Gauloise 4 at the time together make this clear.<sup>78</sup>

It is, however, evident that this process had begun earlier. A first peak was reached during the time of Augustus, similar to trends along the mid-Rhône valley. In both cases there were certain similar control and exploitation structures operating in the territory. These had started basically at the same time with the foundation of new colonies during the second half of the first century BC, but soon became engaged in satisfying the demands of the locals and the interior regions of Gaul, as well as the two military departments on the Rhine.

Although it is quite clear that the agricultural wealth of *Narbonensis* was based on the production and export of wine, during Roman times salted fish and sauces were also manufactured within the borders of this province. Traces of production of salted fish and fish sauces have been found in different sites in *Narbonensis*, and the production of these goods has also been mentioned by ancient authors when writing about the province.<sup>79</sup> Without doubt, it is *Antipolis*/Antibes, the city of southern Gaul, where the most famous Gallic *salsamenta*, especially the *muria*, came from. There are multiple *tituli picti* that specifically mention this product, both on amphorae produced in Fréjus and in Lyon.<sup>80</sup> In speaking about the contents of the Lyonese amphorae we have already mentioned the fish products, suggesting that these might have been produced in different parts of southern Gaul, as well as outside the Gaulish borders. This recipe was originally made in Antibes, but would soon be popular in other places in the Roman world, above all along the whole coastline of Provence<sup>81</sup> and was produced in places like Fréjus, where the manufacture of vessels for fish sauces and salted fish also took place.<sup>82</sup>

Unlike the case of the Lyonese amphorae, the geographical situation of *Narbonensis* and the great wealth of the province help to discern the contents of the vessels produced there. In the case of the Dressel 1, Dressel 2-4 and Pascual 1 imitations, and the whole family of flat-bottomed vessels, it is clear that they were used in the wine trade.<sup>83</sup> This hypothesis is confirmed by the *tituli picti*, which, although never using the word wine, do refer to known grape varieties on several occasions.<sup>84</sup> In the case of the imitations of Dressel 7-11 and later Baetican and Lusitanian forms,<sup>85</sup> both their shape and

<sup>73</sup> Monsieur *et al.* 2007: 109-110.

<sup>74</sup> González Cesteros 2014: 323; González Cesteros – Tremmel 2015; Monsieur *et al.* 2007; Monsieur 2010.

<sup>75</sup> Desbat – Dangréaux 1997: 79.

<sup>76</sup> Brun – Laubenheimer 2001; Brun 2005.

<sup>77</sup> Brun – Laubenheimer 2001; Laubenheimer 1985; Laubenheimer – Schmitt 2009.

<sup>78</sup> Brun – Laubenheimer 2001: 207-213; Laubenheimer 2004. On the occasion of the 'Table Ronde' celebrated in Paris in 2013, we heard F. Laubenheimer talk about the distribution of Gauloise 4 based on new data. She pointed out their massive diffusion in the western part of the Mediterranean basin, with only a sporadic presence in the eastern part (even being present in small quantities in some points of the Arabian Peninsula and India). We would like to thank F. Laubenheimer for this information.

<sup>79</sup> Laubenheimer 1985: 407.

<sup>80</sup> Laubenheimer 2004. Even if the inscription on vessels of Lyon probably mention a kind of recipe, at least this product was well-known and produced in other places.

<sup>81</sup> Laubenheimer 2004: 156.

<sup>82</sup> Laubenheimer 1992.

<sup>83</sup> Brun – Laubenheimer 2001: 208-209; Laubenheimer 1985: 399-406.

<sup>84</sup> Laubenheimer 2004: 159 and Tabl. XVII.

<sup>85</sup> Among the amphorae from Porte d'Orée in Fréjus was found a

the presence of pools and the ruins of salted-fish factories on the coastline, as well as by some coastal lakes along the Roussillon and in Provence and Languedoc, remove any doubt about the existence of fish factories.

Among the Narbonese imports at Neuss, we could not confirm any fish sauce amphorae, so all the pieces were classified as wine vessels. Some of them had Narbonese clays, but could not be properly identified and so were classified as undetermined materials. Among the identified examples, we highlight the presence of amphorae that imitate Italian types, especially the rim of a Dressel 1 and five samples that we classified as *Narbonensis* Dressel 2-4. The fact that there were several Dressel 2-4 and one Dressel 1 is consistent with the time of the first camps at Neuss. The arrival of this kind of vessel to other places along the Rhine is already documented, although always in smaller quantities. It seems to have been a small production, restricted to the second half of the first century BC and the beginning of the first century AD.<sup>86</sup>

Regarding the flat-bottomed amphorae, the real protagonists of the Narbonese exports, we found at Neuss are some Gauloise 3 (Figure 7.4.1. 5,8)<sup>87</sup> and Gauloise 2 with Narbonese fabrics (Figure 7.4.1. 1). These pieces could be included among the early Neuss imports, as the production of Gauloise 2 is one of the earliest documented up to date,<sup>88</sup> even if it seems to continue in some workshops until the early second century AD; and the Gauloise 3, with production initiating in the Augustan period and continuing all through the first century AD.<sup>89</sup> Other documented Narbonese forms are the Gauloise 4 (Figure 7.4.1. 9) and 5 (Figure 7.4.1. 6) and a possible Gauloise 1 (Figure 7.4.1. 11). The export of Gauloise 1 is extremely rare and we are not completely sure if our example of Narbonese fabric can be securely included within this classification. It could be dated to Julio-Claudian times, as it is a shape that is normally found in contexts of the first and second centuries AD. Finally, Gauloise 4 and Gauloise 5 seem to have already appeared in the first half of the first century AD, but they seem to have been massively exported to the North from the mid first century AD, maybe a little bit earlier for the Gauloise 5, and the examples from Neuss could belong to the 'Koenen' and 'post-Koenen' phases, i.e. within the late first and second century AD.

The clays of the different specimens of Narbonese amphorae from Neuss are varied, but three main fabrics can be identified in accordance with the clays characterized by Laubenheimer and Schmitt.<sup>90</sup> The Dressel 1 and Dressel 2-4 are from calcareous clays, whereas the flat-bottomed amphorae seem to vary from calcareous clays, as in the

rim and base of the Gauloise 1, to the non-calcareous clays documented for some Gauloise 3 and Gauloise 4. Nevertheless, there is a major presence of yellowish and slightly pink calcareous clays. On some specimens, some white slip has been found, but that is not typical of Narbonese amphorae from Neuss.

Finally, these amphorae could not be attributed to any particular workshop because no. stamps were found on them, nor have any archaeometrical analyses of the pieces been carried out.

### 7.3. Products from the Marseille region

Although Marseille is clearly within the limits of *Gallia Narbonensis*, the cultural and commercial history of this city, reflected in the production of its own amphora types, provide sufficient reasons to study it separately. Indeed, it is in the area around Marseille that the earliest amphora production in Gaul took place. The extensive trading tradition of the Phocaeen colony lay behind the early manufacture of Greek amphorae types here and prompted the fast development of its own line of vessels, which were popular throughout the western Mediterranean.<sup>91</sup> During the Republican period Marseille began to imitate some of the most common Italian types, like the Graeco-Italic and the Dressel 1, thus playing an important role in the distribution of these Marseille amphorae into the Gallic hinterland. During the period of use of the early military camps at Neuss, the Marseille workshops continued imitating the amphorae that were most important in the Gulf of Lion such as the Dressel 7-11, the Dressel 2-4 and the Pascual 1.<sup>92</sup> However, the Marseillese were not content to merely imitate, but saw a great business opportunity, first in the inland Gallic areas where there were colonies and Roman settlements along the main rivers, and then soon after in the military centres along the Rhine. We believe that the beginning of the production of Gallic flat-bottomed amphorae – that spread to the interior regions of the north-west of the Roman world during the first century AD – must be sought in Marseille, where the Gauloise 2 seems to have been first produced. This form should be considered as the first flat-bottomed amphora within the Gaulish repertoire. Furthermore, and along with the Urceus and the Oberanden 74, they seem to comprise the very first Roman provincial flat-bottomed forms in the western Mediterranean, being part of a phenomenon that started during the Augustan period.<sup>93</sup>

Not many Marseille amphorae are found at Neuss, nor at any of the other Rhine settlements; their presence is constant, but in very small quantities. Along with some fragments that could not be classified as a specific type, four specimens must be classified as Gauloise 2 (Figure 7.4.1. 2-4), and a piece of

complete piece, similar to an earlier Dressel 14, with a stamp on its neck: Laubenheimer 1991: 239, Figure 17; 1992. Similarly, other examples found in the workshops of de Salleles d'Aude and Sigean and classified as local Dressel 7-11 (Laubenheimer 1985: 318-319), could be late versions of Dressel 14 or maybe Beltrán II.

<sup>86</sup> Laubenheimer – Schmitt 2009: 11.

<sup>87</sup> A piece we are uncertain about but could be catalogued as either a Gauloise 3 or a Gauloise 4 (Figure 7.4.1. 7).

<sup>88</sup> Laubenheimer 1985: 131-135; Laubenheimer – Schmitt 2009: 62-63.

<sup>89</sup> Laubenheimer 1985: 385-386.

<sup>90</sup> Laubenheimer – Schmitt 2009.

<sup>91</sup> Bertucchi 1992.

<sup>92</sup> Bertucchi 1992: 125-144.

<sup>93</sup> It is not yet possible to determine the first and original form within the western flat-bottomed amphora tradition: they seem to have started at more or less the same time in Gaul and the Iberian Peninsula. Elsewhere, we have already discussed this topic without providing any certain answer: Carreras – González Cesteros 2012: 223-224; García Vargas *et al.* 2011: 250; González Cesteros 2014.

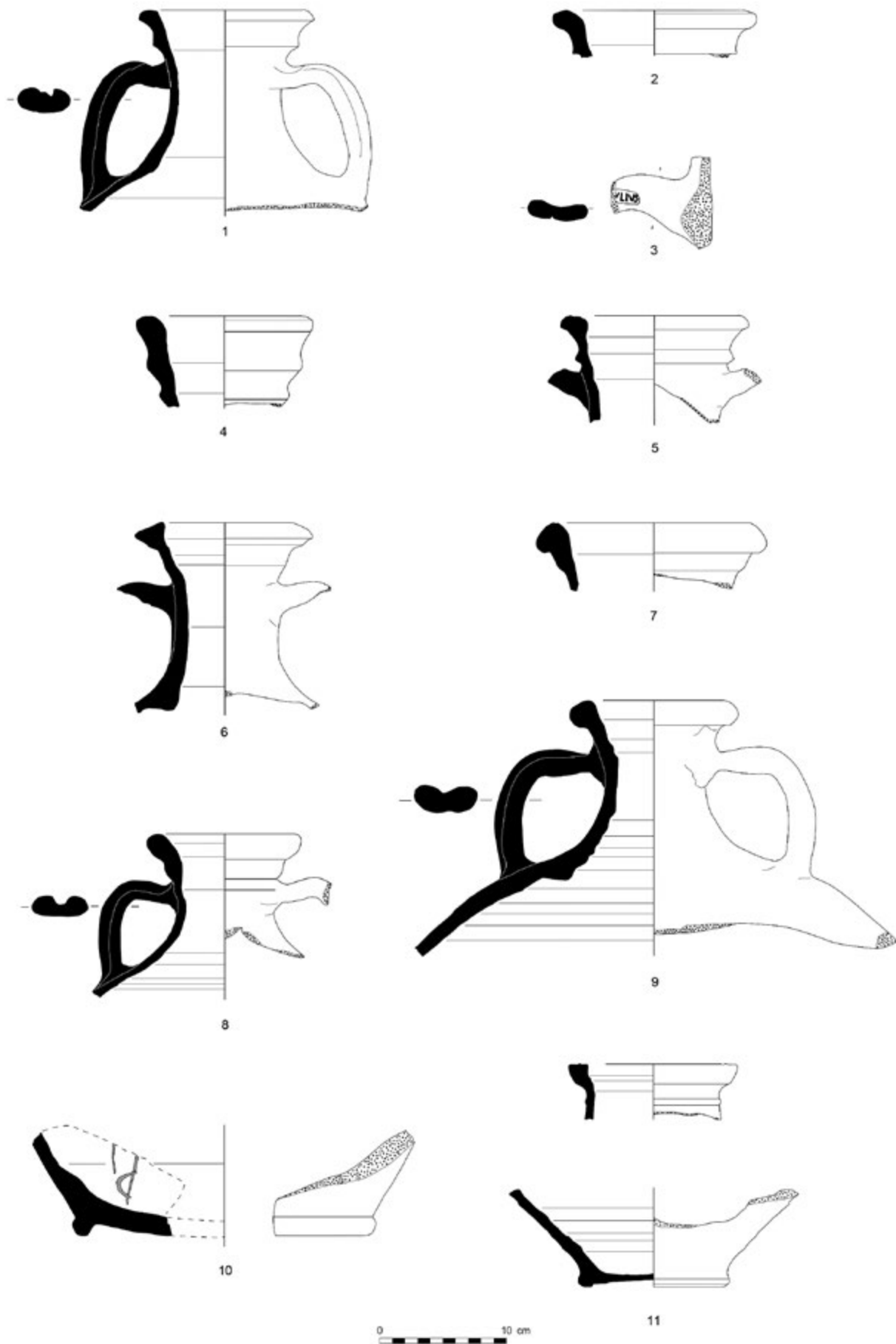


FIGURE 7.4.1. NEW DRAWINGS OF NEUSS AMPHORAE. NARBONESE AND MARSEILLE WINE CONTAINERS (GAULOISE 2 : 1-4; GAULOISE 3 : 5 AND 8 ; GAULOISE 1 ? : 11 ; GAULOISE 4 : 7, 9-10 ; GAULOISE 5 : 6).

a bifid handle is from a Dressel 2-4. They present the pale clays with abundant silver mica typical of the Marseille area. A partially preserved handle from a Gauloise 2, made of buff clay with many inclusions, including the silver mica, presents part of a small rectangular stamp with the text [---]VLIVS (Figure 7.4.1.3).<sup>94</sup> The find is linked to Neuss camp number 7, although without any stratigraphic context. Because of the absence of epigraphical parallels, we dare not give a complete reading, despite the fact that the letters are in Latin, forming a name in the nominative is itself remarkable: indeed, even during Augustan times the epigraphic corpus of Marseille was dominated by stamps in the Greek alphabet and names that could be either Greek or Latin.<sup>95</sup>

#### 7.4. Gallic amphorae from uncertain provenances

Lastly, and briefly, there are four rim fragments that have been classified as Gauloise 2 and Gauloise 3, but their origin could not be securely determined – perhaps somewhere in inland *Gallia Lugdunensis*. Other examples exist that were also difficult to associate with a definite region: mostly fragments of handles or flat bases that we believe must belong to Gallic amphorae, or at least to ones in the Gallic style. However, from a simple macroscopic examination, they could not be linked to a specific source.

<sup>94</sup> Epigraphic *appendix* no. 9.

<sup>95</sup> Bertucchi 1992: 176-180.

## 8. Imports from *Gallia Belgica* and the Rhineland

Within the Neuss material there are some amphorae whose exact source determination was difficult to assess due to their rarity and thus, unfamiliarity. These are likely to be regional productions of *Gallia Belgica* and may also be from the Rhine area and the inland part of *Lugdunensis*, where workshops producing mainly flat-bottomed amphorae, from the middle of the first century AD until well into the third century AD, have been documented.<sup>1</sup> Within *Gallia Lugdunensis*, and especially in the regions of central and western France, the beginning of amphora production goes back to the Augustan period, copying the wine amphora shapes most widespread in the region, such as Dressel 2-4 and Pascual 1.<sup>2</sup> From the middle of the first century AD, it seems that the typical Narbonese flat-based models prevailed, though a local amphora production is also still represented.<sup>3</sup> This production is clearly independent from the formal repertoire of Lyon, probably due to the fact that they handled different products. The use of the barrel as a means of packaging and transportation in these two regions seems widespread, as is shown by both archaeological evidence and the numerous iconographical representations.<sup>4</sup> It is usually argued that the amphorae in this part of the Roman world were reserved for higher quality products,<sup>5</sup> though this suggestion is not easy to prove because of the shortage of inscriptions on amphorae about the product packaged inside.

It should be made clear that, according to current data, the amphorae produced in each of these regions, despite sometimes sharing common types, tend to vary in form and in their time of their production. Thus, imitations of the Dressel 20 from *Baetica* and of flat-bottomed amphorae like the ones from southern Gaul are mainly produced in eastern Gaul and the Lower Rhine from the end of the first century AD or during the second century,<sup>6</sup> with the territories of the *Germania Superior* being their main target market.

In Neuss, a specimen similar to the Gauloise 4 form and two rim fragments of what seem to be Gauloise 3 were recovered, whose clays are different from those known from *Narbonensis* and the Rhône basin. The production of forms that copy the Gauloise 4 is a phenomenon common to Gaul and the nearby territories; as can be seen in inland France,<sup>7</sup> the Rhine,<sup>8</sup> and the Iberian Peninsula.<sup>9</sup> A fragment of a handle with the beginning of a rim, found at Neuss, has a hard orange fabric, with numerous inclusions of different colours, which probably came from a workshop in *Gallia Belgica* or the Rhine area.

Less known though are the whereabouts of production-sites of the Gauloise 3 outside *Narbonensis*, although they were made both in *Lugdunensis*<sup>10</sup> and in the southern part of *Gallia Belgica*, where similar shapes have been documented in the pottery centres of Noyon and Bavay.<sup>11</sup>

In *Gallia Belgica*, the list of known amphora workshops has gained both in number and importance in the last years. We distinguish two production areas. The southernmost distributed its amphorae between the Seine basin and the current French-Belgian border.<sup>12</sup> The other production area, further north along the course of the Scheldt, made amphorae that differ rather more from the flat-bottomed amphorae of southern Gaul. Its market area, yet to be established clearly, seems to have focused on the northern part of *Gallia Belgica* and *Germania Inferior*.<sup>13</sup>

The mouth of the Scheldt looks to be an important area for the production of amphorae for the packaging of foods and so, the contents too. The clays used in the vessels of this repertoire are fairly easy to identify: red in colour, with abundant inclusions, and presenting, almost always, a characteristic white slip. However, it seems that this type of clay is not unique to the river-mouth. It is probably also characteristic of other nearby areas, including the current Nord-Pas de Calais and Picardie territories.<sup>14</sup> Despite the work of J. H. van der Werff, H. Thoen and R. van Dierendonck, and the current revision of the Xanten material by S.D. Schmitz, we believe that there still remain many unresolved questions regarding this interesting regional production, especially apropos the absence of a satisfactory typological classification and a clear grasp of the dating for its start. In this respect, a piece from Neuss, (Figure 8.2) that could be included in Group 2 of van der Werff, Thoen and Dierendonck and Group 3 of Schmitz,<sup>15</sup> is regrettably unable to contribute to a finer chronological determination; because, as we have repeatedly mentioned, among the Neuss material there is a high rate of contamination from later times, as the presence of stamps and Dressel 20, of the 2nd and early 3rd centuries AD (*vide supra*), makes abundantly plain.

Another important issue regarding this production, and its poorly understood repertoire, is the content or kind of contents they transported. In view of the diversity of forms and of the geographical area over which they were produced, various kinds of products, including wine and salted fish or fish sauces in the case of some forms, could be have been involved.

<sup>1</sup> Even if in the last decades there has been a good advance in the recognition of these vessels, there are still many points to be defined in relation to the products of the interior areas of Europe. One such is knowing the initial date of manufacture of many of them.

<sup>2</sup> Barthélémy-Sylvand *et al.* 2005; Dumasy *et al.* 2011.

<sup>3</sup> Laubenheimer 1998; Laubenheimer – Marlière 2010: 43-44, 75.

<sup>4</sup> Marlière 2001; 2002.

<sup>5</sup> Brun 2011: 11.

<sup>6</sup> Baudoux 1992; 1996; Laubenheimer 2000; Ehmiq 2000.

<sup>7</sup> Laubenheimer 2003.

<sup>8</sup> Baudoux 1992: 65-66.

<sup>9</sup> Aranegui – Gisbert 1992; Revilla 1995: 52-55; Bernal Casasola 2008: 43-46.

<sup>10</sup> Dumasy *et al.* 2011: 132-133.

<sup>11</sup> Laubenheimer – Marlière 2010: 44-45.

<sup>12</sup> Laubenheimer – Marlière 2010: 44-45 and 76,

<sup>13</sup> Schmitz 2014; van der Werff *et al.* 1997.

<sup>14</sup> We would like to thank S. Willems for the interesting talk about this and other questions during the 2015 SFECAG congress in Nyon.

<sup>15</sup> Schmitz 2014.



FIGURE 8.1: MAP OF WESTERN ROMAN EMPIRE, WITH GALLIA BELGICA AND ITS MAIN EXPORTING REGION.

PROVENANCE	NMI	AMPHORA FORMS			
		G. 3:	G. 4:	Scheldt (Group 3 Schmitz): 1	Undet.: 10
RHINE/ G. BELGICA	14	2	1		

TABLE 5: GALLIA BELGICA AND RHINELAND AMPHORA PERCENTAGES, ACCORDING TO FORM.

The import of the so-called Scheldt amphorae is documented at several military sites in *Germania Inferior*, mainly in the more northern sites such as Valkenburg,<sup>16</sup> Nijmegen,<sup>17</sup> and Xanten.<sup>18</sup> The pieces from Neuss, whether intrusions from later occupation, or not, add a new findspot to their distribution as imports.

A careful study of local/regional productions throughout the Rhine, starting from the Flavian period, could clarify many puzzling issues concerning commercial dynamics after the Julio-Claudian period. Sites like Xanten<sup>19</sup> Valkenburg,<sup>20</sup> Vechten, or *Flavio Castrum* and *Noviomagus Batavorum* in Nijmegen, could provide new data which

could then be compared and contrasted with that known in certain parts of *Germania Superior*.<sup>21</sup> Thereby, one may calibrate the quantitative reach and geographical range of these regional products.

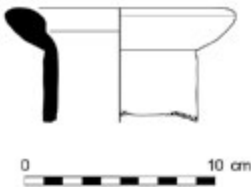


FIGURE 8.2: NEW DRAWINGS OF NEUSS AMPHORAE. GALLIA BELGICA AND RHINELAND (SCHELDT VALLEY AMPHORA).

<sup>16</sup> Van der Werff *et al.* 1997.

<sup>17</sup> Carreras – Van den Berg 2017: 368-369; González Cesteros 2014: 262; Stuart 1962.

<sup>18</sup> Schmitz 2014.

<sup>19</sup> Schmitz 2014.

<sup>20</sup> Van Dierendonck *et al.* (eds) 1993.

<sup>21</sup> Ehmgig 2003; 2007a; Martin-Kilcher 1994.

## 9. Eastern Mediterranean imports

After the Hispanic amphorae and those produced in central and southern Gaul, the third largest group in the Neuss ceramic corpus comprises the eastern Mediterranean vessels. While it is common in the literature on the western Roman world to assign all eastern products to one group, we believe they should be separated into the different macro-localities that produced the amphorae, as this region comprises areas that are strongly differentiated on cultural, linguistic, and even political levels. At Neuss, along with a good representation of the most common Aegean forms, there are also fragments clearly attributable to other areas,

such as the island of Crete and the eastern coast of the Levant. Similarly, there are a number of specimens whose clays point to a production site in the Aegean or Anatolian area, but whose classification into a form and a more particular source has been impossible.

Most of the vessels imported into Neuss from the eastern provinces appear to have been used as containers for wine, though there are others, such as the Levantine containers, whose main function seems to have been for transporting dried fruit.<sup>1</sup> Among the eastern wines are different varieties



FIGURE 9.0: MAP OF THE ROMAN EAST WITH AND ITS MAIN EXPORTING REGIONS.

<sup>1</sup> Almeida – Jerez Linde 2015; Carreras – Williams 2002; Reynolds *et al.* 2010: workshops producing the ‘carrot amphora’, as well as several other amphora types, have been excavated in Beirut. We would like to thank P.

PROVENANCE	NMI (82)	%	AMPHORA FORMS			
AEGEAN	68	80.7	Rhodian: 51	Coan: 15	Cnidian: 1	Chian: 1
CRETE	2	3.6	AC-2: 1	Undet: 1		
LEVANTINE	6	7.2	King. 117: 3	Carrot/Kings.: 3		
UNDET.	6	8.4				

TABLE 6: EASTERN MEDITERRANEAN AMPHORA PERCENTAGES, ACCORDING TO FORM AND ORIGIN.

and qualities, which in our opinion determine the greater or lesser presence of amphorae from these regions in the western provinces of the Roman world.

In *Germania*, apart from the excellent work of Martin-Kilcher in Augst,<sup>2</sup> there is a lack of more focused studies on the distribution of eastern amphorae. In a recent article, based on the material listed in the stores of the archaeological service of Nijmegen, J. van den Berg presented, considering the material of the Kops Plateau site, a vision of the 'rare and exotic amphorae of North West Europe', in which he included eastern Mediterranean amphorae.<sup>3</sup> While the article was based purely on the lists drawn up by the Nijmegen archaeological service (with which for many years van der Werff had collaborated), it is still one of the few studies on this type of amphorae in the Rhine region. Recently, the same author analysed the Aegean material found at the Kops Plateau in Nijmegen.<sup>4</sup> Due to the large volume of imports from this area found at this archaeological site, he revised his opinion and placed the Aegean products among the most imported wine amphorae in the Rhine region.<sup>5</sup>

In all the archaeological sites we have been able to study throughout the Rhine territory dated to the Augustan and Julio-Claudian periods, eastern amphorae are usually present in proportions greater than 10%, generally being the second or third largest group of the total. This can be seen perfectly in Neuss also, where products from the Aegean, Crete, and the Levant stand at 15.9% of the total, slightly lower the Gallic imports. A similar proportion can be seen in the vicinity of Lyon,<sup>6</sup> although their incidence appears lower in other parts of southern and central Gaul.

### 9.1. Aegean Products

Within the imports from the eastern Mediterranean, Aegean products are those that have the greatest presence on the Rhine. We believe this pattern can indeed be extended to the whole of the western regions in the first century BC and the first AD.<sup>7</sup> At Neuss, as at most of the sites of north-west Europe of Augustan and Julio-Claudian date, it is the late Rhodian amphorae which comprise the bulk of material from the Aegean, followed by the Koan amphorae in second position, and then, in fewer quantities, Knidian and Chian. The Cretan productions, which are so abundant in Italy from the mid-first century AD but less so in the western Mediterranean, are barely present at Neuss at all.

A point that needs to be appreciated, is that very often the amphorae in question are products that have their origins firmly planted in the Hellenistic period, and had been the main types of amphorae circulating with a huge Mediterranean distribution from the third century BC until, at least, the late second century or even the first half of the first century BC.<sup>8</sup> These forms continued to appear in their later versions during the Augustan and Julio-Claudian periods, with slight changes in the shape of the container, in the stamps, and even in their fabrics, as they made a fast adaptation to the Roman trading models. It is their integration in the new markets under Roman control that accounts for the arrival of these amphorae in places as far away as the Rhine Basin.

A substantial difference between the Hellenistic products and those of Augustan and Julio-Claudian contexts can be found in the stamps, which markedly affect the Rhodian amphorae and to a lesser extent other types of Aegean amphorae, like the Knidian and Koan types. Thus, it seems that in Hellenistic times many amphorae were stamped, as in the case of the Rhodian amphorae – with the vast majority dating to the late third and second centuries BC.<sup>9</sup> Yet in the Roman period, stamps appear to become quite scarce, and they change in shape and content, especially

Reynolds for this information.

<sup>2</sup> Martin-Kilcher 1987; 1994.

<sup>3</sup> Van den Berg 2012.

<sup>4</sup> Van den Berg 2017b: 133-142.

<sup>5</sup> As in most of the military camps in *Germania Inferior* of the Augustan and Julio-Claudian periods, the eastern products in the Kops Plateau are elevated in number, even if some of the pieces presented are not correctly identified: e.g. the supposed Knidian spike (van den Berg 2017b: 138. Figure 6) that clearly corresponds with a south Baetican Dressel 7-11. As part of the Kops Plateau team we did not classify this piece as Knidian, but as a Dressel 7-11 produced in Baetica (González Cesteros 2014: 276, Lam. 64, 8; Lam. 499, 4, 3).

<sup>6</sup> Desbat – Picon 1986; Lemaître 2002.

<sup>7</sup> González Cesteros 2011; Martin-Kilcher 1994; Peacock 1977; Rizzo 2003; Williams 2003.

<sup>8</sup> Empereur – Hesnard 1987; Finkielsztejn 2001; Lund 1999; 2011.

<sup>9</sup> Finkielsztejn 2001; Lund 1999.



for the amphorae of Rhodes and Knidos. Interestingly, the profusion of stamps of the Hellenistic period has led to the paradox that a good portion of the quantitative studies of the Hellenistic finds are very skewed because they are only based on ‘collections’ of stamped handles. This is especially relevant in places like Delos,<sup>10</sup> Alexandria,<sup>11</sup> or even Pergamon,<sup>12</sup> where there are collections formed only from stamped amphorae.<sup>13</sup>

Among the Neuss material is precisely one epigraphic stamp, placed in the bend of a handle of a Rhodian amphora (Figure 9.1.1, 1).<sup>14</sup> This stamp presents what seems to be a female bust in an oval cartouche, but we dare not identify it with any specific goddess or mythological figure, even if we can suggest a particular one. It has been securely classified among the ‘marks’ of the last phase of the stamping of Rhodian amphorae in the second part of the first century BC. This phase is characterized by changes introduced into the old Rhodian system with elongated cartouches that barely fit the dorsal part of the handles.<sup>15</sup> The fragment in question was found among the material which is supposed to correspond with the Neuss camp 2, with a preliminary date between 12-8 BC. Considering the shape of the handle, rim and neck, this piece must be placed within the Rhodian amphorae of the second part of the first century BC to the late Augustan period.<sup>16</sup> It should correspond to the forms presented by G. Finkielsztein in his book published in 2001, as C 19. Here, the handles are slightly more arched than before, with a higher bend that still does not rise above the rim line, as is the case with our stamped exemple. For a better fit to the chronology, the stamp too needs studying. Our exemple corresponds perfectly with the stamps of Helios and Rhodos,<sup>17</sup> that in Finkielsztein’s view were stamped from 43 BC down to at least till 26 BC, but in fact probably longer.<sup>18</sup> The chronology of the Roman occupation at Neuss, that began around 16 BC, seems to confirm that this kind of stamp was produced later than 26 BC, but it should also be remembered, that the Romans really appreciated old wines and the Rhodian types were normally made with salt water (*tethalassomenoi*) or were sweet varieties made with sun-dried grapes (*passum*) that could be stored for long periods.

Viewed macroscopically, the fabric of this piece indicates a production site in Rhodes itself, although we cannot rule out somewhere on the coast of Asia Minor. It is salmon-pink, hard, thin, somewhat mealy, and with occasional inclusions – especially of limestone, different-sized quartz fragments, and some smaller red specks that must be ferric inclusions. Because of these features, it should be associated with fabric 1 of Peacock (based on material found in Britain and the amphorae in the agora of Athens).<sup>19</sup> The presence of the small pieces of quartz makes us doubt that it corresponds to fabric 3, nor were any small flakes of mica visible.

The presence of stamps on Rhodian amphorae from the Roman period in the Rhine area is also documented in the Kops Plateau material in Nijmegen<sup>20</sup> and in Haltern.<sup>21</sup> In Augst there also is a piece from late Hellenistic or Augustan times, but, as pointed out by S. Martin-Kilcher,<sup>22</sup> it is a handle that was not found in Augst, but came to the museum as part of a private collection previously deposited at the Basel Museum, and tagged as ‘Reisesouvenirs’, suggesting that comes from somewhere in the Mediterranean. So far, no other Rhodian stamp has been retrieved on the Rhine or in the middle stretch of the Rhône, although they continue to appear on this type of amphorae until at least the Julio-Claudian period, as is implied by the complete amphora with two identical stamps, very similar to the one of Nijmegen, from the wreck of Dramont D, dated to the mid-first century AD.<sup>23</sup>

As it can be clearly seen in Table 6, Rhodian-style amphorae are the main vessels from the eastern Mediterranean amphorae found at Neuss.<sup>24</sup> The question of the origin of many of the Rhodian-style amphorae actually made outside the island of Rhodes was raised long ago by some researchers.<sup>25</sup> It has been determined that their production took place during Hellenistic times and, to a lesser extent, during the early Roman period on the islands under Rhodian control, such as Carpathus,<sup>26</sup> and in the territories of its Peraia,<sup>27</sup> in Crete,<sup>28</sup> in Kos,<sup>29</sup> in Ephesus,<sup>30</sup> in Cyprus, in Egypt, and maybe even on the Danube.<sup>31</sup> Most of these ‘outside-Rhodes’ productions occurred during the second century BC, the time of the maximum distribution of

<sup>10</sup> Grace – Savvatiou-Pétropoulakou 1970.

<sup>11</sup> Empereur 1998.

<sup>12</sup> Borker – Burow 1998.

<sup>13</sup> These obstacles to the progress of the Hellenistic research have already been pointed out by several scholars since the 1980s: Empereur – Hesnard 1987; Empereur 1998; Lund 1999; 2011 etc. It is obvious that the partial study achieved of these amphorae that is based merely on their epigraphic remains does not allow a truly comparative study, one that could elucidate the evolution of each amphorae type and their links with the most important economic and political features of the time. This problem is really acute for the first century BC

<sup>14</sup> Epigraphic appendix no. 1.

<sup>15</sup> Finkielsztein 2000.

<sup>16</sup> Our exemple perhaps belongs to the early Augustan period, being similar to other pieces found in Rödgen (Schönberger – Simon 1976), Oberaden (Loeschke 1942) and Dangstetten (Ehmig 2010). Nevertheless, due to the lack of a coherent formal division between the Rhodian amphorae of the Augustan period and the already mentioned stratigraphic deficits at Neuss, we decided to place it in a broader chronological horizon, namely that of the second half of the first century BC.

<sup>17</sup> Finkielsztein 2000: 407-413.

<sup>18</sup> Finkielsztein 2000: 412.

<sup>19</sup> Peacock 1977: 266-267.

<sup>20</sup> Van den Berg 2012: 218; Berni 2017: 189.

<sup>21</sup> González Cesteros – Monsieur forthcoming.

<sup>22</sup> Martin-Kilcher 1994: 350.

<sup>23</sup> The date of the piece from this shipwreck is still controversial. Based on morphological criteria, J. Y. Empereur and A. Hesnard (1987: 60-61), and Finkielsztein (2001: 51), have all suggested an earlier date for this amphora. We think this piece can be dated to the Claudian period and, because of the underwater context it was found in, it would be logical to date it to the same period as the other materials from the wreck.

<sup>24</sup> At Neuss were found other Rhodian amphorae from the Julio-Claudian and Flavian period (Filtzinger 1972: Taf. 24, 9) that we did not work on during our period of research in Meckenheim.

<sup>25</sup> Empereur – Picon 1989; Hesnard 1986; Peacock 1977.

<sup>26</sup> Empereur – Picon 1989: 225.

<sup>27</sup> Cankardas Senol *et al.* 2004; Empereur – Picon 1986: 115-116.

<sup>28</sup> Eiring *et al.* 2002.

<sup>29</sup> Bezeczky 2013: 40-43; Empereur – Hesnard 1987: 13; Grace – Savatiou-Pétropoulakou 1970: 280.

<sup>30</sup> Bezeczky 2013: 40-44.

<sup>31</sup> Empereur – Hesnard 1987: 13.

Rhodian amphorae, according to the myriad of studies focusing on their stamps. Moreover, during Roman times, they were also produced in even more places. This is quite evident from a typological point of view, since the characteristic Rhodian form influenced amphorae such as the Agora G 198 and M 54 in Asia Minor,<sup>32</sup> or the Cretan AC 4.

Among the Rhodian material found at Neuss there are substantial typological variations, which in some cases should be related to the different production workshops. However, the presence of more-or-less straight handles, or those with a low curve, (that are both typical of the second half of the first century BC and the Augustan period), along with others that are more pointed and/or curved that are representative of Julio-Claudian times, mark the arrival of these products when the early military establishments of Neuss were in use, but also after the creation of the so-called Koenen camp. With these pieces goes the handle illustrated in Figure 9.1.1, no. 7, high curved and with horns: this should have arrived at Neuss at a later time, because of the similarities it has with later Rhodian specimens found in British contexts after the Roman conquest.<sup>33</sup> There is also a good range of fabrics among the Rhodian amphorae from Neuss, most of which can be classified into the fabrics 1 and 2 of Peacock,<sup>34</sup> which are usually associated with Rhodes itself or nearby islands like Carpathus and Syme, but also with part of the Peraia.

The second largest group among the Aegean material found at Neuss consists of Koan amphorae. This name refers to a specific form, whose origins are in the island of Kos in the first half of the third century BC, but were also made elsewhere from the Hellenistic period onwards.<sup>35</sup> The production of these amphorae during the Hellenistic and Imperial periods is documented in places such as the coast of Caria<sup>36</sup> and Crete,<sup>37</sup> and probably elsewhere in Asia Minor. Sometimes the amphorae were produced with local variations, as for example, the Cretan AC 2 which is a different size, with bifid handles, that evolved directly from the models of Kos. Throughout the first century AD it is quite possible that the production of amphorae following the Koan originals took place in even more centres in the Aegean and indeed in all the eastern Mediterranean regions. Similarly, imitations of these amphorae were being made in Campania and Lazio from the early Augustan period or even earlier, eventually resulting in the major production of a new form, the Dressel 2-4, that achieved a great diffusion during the first and second centuries AD in the West. In the Roman East from the mid-first AD the production of what has been called Pseudo-Koan is documented. It is found in Egypt,<sup>38</sup> Rhodes, Pamphilia, and Cilicia,<sup>39</sup> and in some

places in Asia Minor.<sup>40</sup> This multiplicity of production places leads to the existence of a wide variety of clays that are not always easy to classify, and where there is only a simple handle to work with, it is not easy to determine either the period or the place of origin.

An almost complete Koan amphora from Neuss bears a short *titulus pictus*<sup>41</sup> in black ink (*atramentum*) on the neck. Though some letters can be discerned, it is not certain if they are written in Latin or Greek. The first is unclear; if in Latin, then they would be two letters, possibly ES – less probably this is a Greek β. The second part is formed by κ-κ followed by an unreadable sign. Since *kappa* is found in Latin, no sensible decipherment is forthcoming. This inscription was published by Kütter as a Latin inscription.<sup>42</sup>

Apart from the example with the *titulus* on the neck, most of the Neuss pieces are fragments of rims, handles or bases. As a result, a clear-cut differentiation by shape is not feasible, although one can generally associate rounded rims with coarser fabrics, and more quadrangular and thinner rims with finer fabrics. The variety detectable in the fabrics of the Neuss specimens is considerable, which provides proof of the diversity of production centres that existed. Thus, along with fine and hard fabrics that are green and orange in colour, with small inclusions of semi-rounded colourful quartz and occasional vacuoles, exist other fabrics of thin and slightly micaceous clays, and yet others that are coarse and greyish, with abundant calcareous and medium-sized quartz inclusions. The Neuss material shows that, from the second half of the first century BC, the Koan amphorae originals, whose main characteristic since the mid-Hellenistic period was their double-barrelled handles, are not only replicated to a high level in their western version of Dressel 2-4, but also became a regular type in the Aegean area; probably associated with a very specific type of wine that would have been quite cheap and thus consumed in large quantities throughout the Roman Empire.<sup>43</sup> Thus, the island of Kos and the nearby centres in Caria, would soon become unable to fulfil the very high demand. A similar process happened apropos the Rhodian amphorae in the Hellenistic period: these were not only produced on the island itself, but in many other places inside and outside the Aegean.

We believe J.-Y. Empereur and M. Picon were right when they said that the imitations of what they call Dressel 4, which are the Imperial reproductions of Koan amphorae, were spread throughout the Aegean and other eastern regions, such as Crete, Pamphilia, Cilicia and even Egypt, due to economic reasons.<sup>44</sup> We also believe that this has nothing to do with the specific ratio between the weight of the container and the weight of the contents, but rather

<sup>32</sup> These two amphorae seem to have received a double influence from the Rhodian and Koan forms.

<sup>33</sup> Sealey 1985; Peacock 1977: Figure 3.

<sup>34</sup> Peacock 1977: 266-268.

<sup>35</sup> Hesnard 1986.

<sup>36</sup> Berg Briesen 2005; Empereur – Picon 1986: 109-112; 1989: 225-229.

<sup>37</sup> Eiring *et al.* 2002.

<sup>38</sup> Empereur – Picon 1986: 107-109; 1989: 227-228.

<sup>39</sup> Empereur – Picon 1989: 229; Rauh – Slane 2000; Reynolds 2005: 564.

<sup>40</sup> Recently, while working in Ephesus, we were able to document the local or regional production of Pseudo-Koan amphorae into Roman times: González Cesteros – Yilmaz forthcoming.

<sup>41</sup> Epigraphic appendix no. 126.

<sup>42</sup> Kütter 2008: no. 816, Taf. 55.

<sup>43</sup> Its recipe has been handed down to us by Cato, *De Agri* 112; *vide infra*.

<sup>44</sup> Empereur – Picon 1989: 229.

because it held a type of wine that was made in the manner of the Koan ones. This question touches on the intensive debate about the amphorae imitations and their contents, something we still are far from comprehending.

After Rhodes and Kos, the third most prolific amphorae production area in the Aegean from the Hellenistic period and the early Roman Empire, was the Datça Peninsula, where the city of Knidos was located. The product that these amphorae carried would also have been wine, but its quality and characteristics are difficult to establish. In the section about the Italic productions, we noted that Knidian amphorae were imitated in southern Italy,<sup>45</sup> although this must have happened at a very low level and probably only during the Augustan period. Apart from the examples found at Neuss, and another in Haltern, to our knowledge, no record of similar cases exists. The production of Knidian amphorae in other areas of the Aegean must have also been sporadic, and probably took place in the region close to Knidos, such as Rhodes and the Rhodian Peraia where its production is documented during the Hellenistic period.<sup>46</sup> The practice probably also occurred during Roman times, judging from the different clays from which they are fashioned. At Neuss there is only a spike fragment, in rather poor condition, and some wall fragments that probably belonged to another vessel. Their clays indicate manufacture in the Datça Peninsula, as they are hard and coarse, with reddish tones and a darker inner core, and contain many both angular and rounded medium-sized quartz inclusions, as well as having a large number of medium or large vacuoles (due to burnt out lime?), accompanied by some calcareous inclusions. More Knidian amphorae are found in other military places of the Augustan period, among others, at Haltern, and at Anreppen some late Knidian stamps have been found.<sup>47</sup>

Another island that had exported its wine in amphorae since archaic times was Chios. A handle and a rim belonging to the same piece have been unequivocally identified at Neuss, corresponding in shape with the typical Augustan amphorae from Chios (Figure 9.1.3, nos. 2-3). The presence of these amphorae in north-west Europe is more infrequent than of the other types of Aegean amphorae, although not unknown. Some examples can be found in the Rhône and Rhine valleys, especially in Oberaden<sup>48</sup> and in Haltern,<sup>49</sup> but there are none published by Martin-Kilcher from the important archaeological site of Augst. The low presence of amphorae from Chios both in Neuss and in most of the Rhenish contexts is due to the fact that it was one of the most prestigious and expensive wines in Antiquity,<sup>50</sup> similar in quality to the best Italic vintages. The example from Neuss is overfired, which gives it a dark grey tint on the outside, and a pinkish-red ring in the middle section of

the handle. It has a thin, smooth fabric, with some small and medium vacuoles and some limestone inclusions of equal size, with scattered inclusions of dark roundish quartz. Despite the high-temperature firing, this type of clay is similar to some clays used for Chian amphorae during the early Roman period.<sup>51</sup>

The island of Crete was geographically and culturally part of the Aegean world, but boasted its own amphora production throughout all Antiquity,<sup>52</sup> with its main markets in the Aegean itself, in Tyrrhenian Italy, and in Alexandria. Because of its particular traits we preferred to separate the Cretan material from other Aegean productions in Table 6. These amphorae compose a minority among the imports at Neuss, as we can only be sure of the presence of a fragment of a base and a bifid handle belonging to an AC 2. Similarly, a rim in a beige fabric, smooth texture in the external surface, with a rather hard break with quite abundant calcareous inclusions, similar to those of the AC 2 sample, also seems to have a Cretan origin. Its exact type is impossible to discern and only the AC 4 can be ruled out because its rim diameter exceeds 10 cm.<sup>53</sup>

The high number of Cretan amphorae found in Rome and Ostia,<sup>54</sup> and especially in Pompeii<sup>55</sup> from the last moments of the city, as well as the evidence of an increased production after the Julio-Claudian period, that reached its zenith during the second half of the first century AD and Antonine times,<sup>56</sup> all suggest that the period to which are assigned the greatest amount of imports at Neuss is too early for the Cretan amphorae. A large quantity of these amphorae are unlikely to appear in the West before the mid-first century AD.<sup>57</sup> The stratigraphic problems mentioned at the beginning of this work, however, do not allow us to provide a secure date for these Cretan specimens at Neuss.

One last item in Aegean clay is the complete handle presented in Figure 9.1.3, no. 1. It is reddish-pink, thin and more or less hard: macroscopically only some small calcareous inclusions and small vacuoles along the break point, with some rounded quartz grains, can be recognized. no. fully satisfactory parallel for this piece presents itself, but this handle is nevertheless quite similar to the Aegean types produced in the area of Ephesus, known as Local Aegean 1 and 2 by T. Bezeczký,<sup>58</sup> being closer to the type 2. It also has some similarities with some specimens of

<sup>45</sup> *Vide infra*.

<sup>46</sup> Empereur – Hesnard 1987.

<sup>47</sup> Aßkamp – Wiechers 1996: 45; González Cesteros – Monsieur forthcoming; González Cesteros – Tremmel 2015: 346-347.

<sup>48</sup> Loeschke 1942: Form 76.

<sup>49</sup> González Cesteros – Monsieur forthcoming.

<sup>50</sup> Tchernia 1986: 100-107,

<sup>51</sup> Bezeczký 2013: 52.

<sup>52</sup> Marangou-Lerat 1995; Portale – Romeo 2000; Yangaki 2004/2005.

<sup>53</sup> Perhaps it is a AC3, but it is not sure.

<sup>54</sup> Casaramona *et al.* 2010; Ciotola *et al.* 1989; Marangou 1994; Rizzo 2003; 2014: 324-327.

<sup>55</sup> Marangou 1994.

<sup>56</sup> Marangou-Lerat 1995: 159-160.

<sup>57</sup> In western Italy (Marangou-Lerat 1995: 159-160), and in the eastern Mediterranean (Bezeczký 2013; González Cesteros 2012; forthcoming), Cretan amphorae arrived in good quantities after Tiberius' reign. Their presence, specially form AC 4, in *Britannia* (Williams 2003) and southern Gaul (Marangou-Lerat 1995: 146-150; Lemaître 2002; 2011: 106; Marty – Zaaraoui 2009; Djaoui *et al.* (eds) 2011: 73), during the second part of the first century AD, makes us think that their arrival to the Rhine frontier is from the same period.

<sup>58</sup> Bezeczký 2013: 87-90. Pl. 13-15.

the Augustan Dressel 24, although the handle section is too flat to be that of a Dressel 24 or any earlier prototype. While the morphological characteristics are more like those of the late Hellenistic and early Augustan products of the Ephesus region, its clay, which does not appear to have mica, argues that the place of production is closer to the one usually indicated for the Dressel 24 (i.e. the area of Chios and the nearby coast of Asia Minor, particularly the Erythraia workshops).<sup>59</sup> no. similar amphora in the Rhine region is known to us. We stress that we believe this piece must be related to the earliest stages of occupation at Neuss or at least to the Augustan period.

An important point here is the contents of the eastern amphorae of early Roman date. Without a doubt, the vast majority of Aegean amphorae contained wine or products that may be associated with wine.<sup>60</sup> Written sources, especially Pliny in his *Historia Naturalis*, speak in more or less detail about several of the most famous wines in the Aegean, such as the ones from Rhodes, Kos, Knidos, Chios, or Crete, all of which are imported to Neuss as their amphorae bear witness. These same authors mention the worth and nature, as well as the different qualities of the wines of each place. Unfortunately, the amphorae only tell us about types of wine if we are lucky enough to have *tituli picti* that explicitly mention them, but the importance of the various products can be inferred through the number of examples found at the point of import, especially in the case of regions that are remote, or in those where the products can be replaced by those produced locally or in nearby areas. Concerning the Aegean wines, their importance to the military of north-western provinces during the Augustan and Julio-Claudian period can be estimated through a comparison of the archaeological evidence with the information given by written sources. The import of large quantities of Rhodian amphorae to Neuss, and in general throughout the Rhine area, raises the question of what they were doing in such great numbers in this border region. The archaeological evidence and written sources seem to show that different types of wines were produced in Rhodes. One such source of information is a *titulus pictus* mentioning a *passum* wine from Rhodes,<sup>61</sup> which is a sweet wine, boiled during manufacture. There are also fig seeds from a Rhodian amphora in the Dramont D shipwreck that might represent some kind of conserve, or better a wine made with figs. Based on these findings some Rhodian amphorae present at Neuss must have contained these types of wine; however, they were certainly in the minority. Rather, in Rhodes and its associated territories it was a very different kind of wine that was primarily produced – and in much greater quantities. The written sources always mention other wines when referring to Rhodes: these weresalty wines (*τεθλασσωμενοι*, *vina salsa*) with a high content of seawater, similar to the

equally famous wines of Kos, whose medical virtues, for man or beast, seem to be one of their main selling points.<sup>62</sup>

The composition of Knidian wines is not fully known, although thanks to an inscription at Delos, its price is known to have been double or four times that of Koan wine.<sup>63</sup> Considering this information and the low number of Knidian amphorae in general, it is clear that it was a high quality wine; although far below the great wines from Roman times, such as the Falernian from Campania, or the wines from Chios and Lesbos in the Aegean.

In the case of Chian wine, it is beyond doubt that it was a renowned product which reached only the wealthiest tables. Written sources speak constantly of its excellence,<sup>64</sup> and position it among the best wines of Antiquity, being at the same level as those of Thasos and Lesbos in the Aegean, of which there are no. documented amphorae from the late Hellenistic period. The quality and cost of this wine has been used as support for the interpretation, in the Hellenistic period, of *lagynoi* with a limited capacity but bearing the same stamps as the amphorae.<sup>65</sup> Be that as it may, is it out of question to assume that the presence of Chian amphorae at Neuss, and other military points of the Rhine like Oberaden or Haltern, must be to soothe the palates of high commanders and senior officers?

Thanks to the excellent work of A. Marangou and the large number of written sources that exist about Cretan wines during the early Roman period,<sup>66</sup> today, one can be quite confident that the Cretan amphorae carried some special quality wines produced on the island. Nevertheless, different qualities of wines seem to have been produced in the island, often related to different types of wines; some of them were probably copies of well-known types, such as the *τεθλασσωμενοι* mentioned from Rhodes and Kos. But, without any doubt, the most famous, and the most exported wine from Crete was the Cretan *passum*.

To conclude, it is important to stress once again, that the presence of Aegean amphorae in the Rhenish sites from Augustan and Julio-Claudian times is comparatively high. In other north-western regions, such as northern Gaul and especially in Britain, their number also appears to be significant, particularly in the case of Rhodian amphorae, followed by those of Kos. This is a pattern that does not seem to occur in southern France and the Iberian Peninsula, although it is true that the necessary studies in these regions have yet to be undertaken. The high presence of Rhodian amphorae led Peacock to propose, in 1977, a special link between the supply of British military forts during the conquest period and Rhodian wine.<sup>67</sup> Later,

<sup>62</sup> Tchernia 1986: 105-106.

<sup>63</sup> Tchernia 1986: 105.

<sup>64</sup> Tchernia 1986: 100-105.

<sup>65</sup> Empereur – Hesnard 1987: 21-22; Grace 1952: 519; Grace – Savvatiou-Petropoulakou 1970: 361; Hayes 1991: 18-21; Rotroff 2006, 83.

<sup>66</sup> Marangou-Lerat 1995.

<sup>67</sup> Peacock 1977: 269-270.

<sup>59</sup> Carlson – Lawall 2005/2006; Opait – Tsaravopoulos 2011.

<sup>60</sup> For the Aegean wines see: Salviat – Tchernia 2013.

<sup>61</sup> Maiuri 1932: 485.

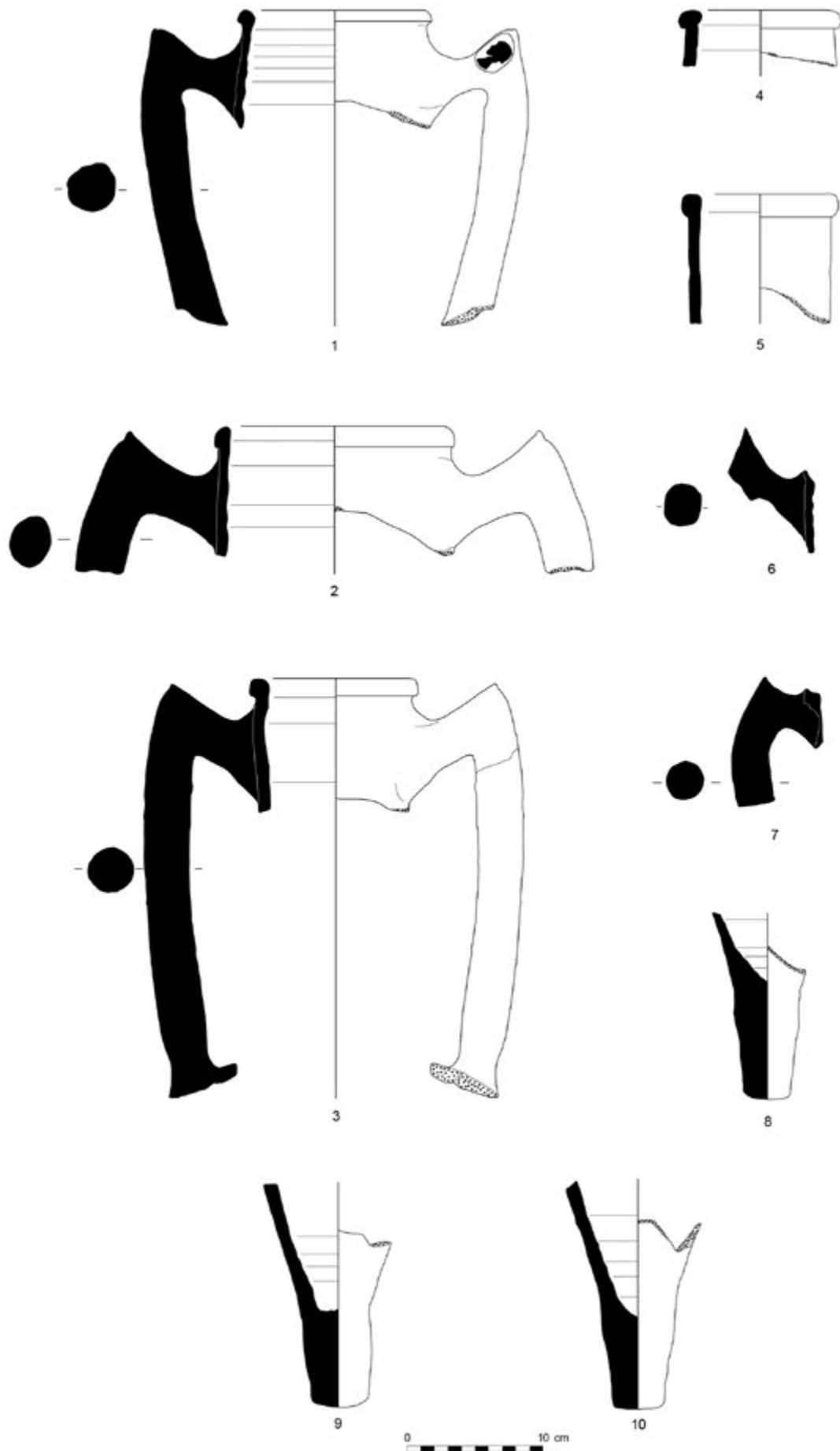


FIGURE 9.1.1: NEW DRAWINGS OF NEUSS AMPHORAE. EARLY IMPERIAL RHODIAN AMPHORAE.

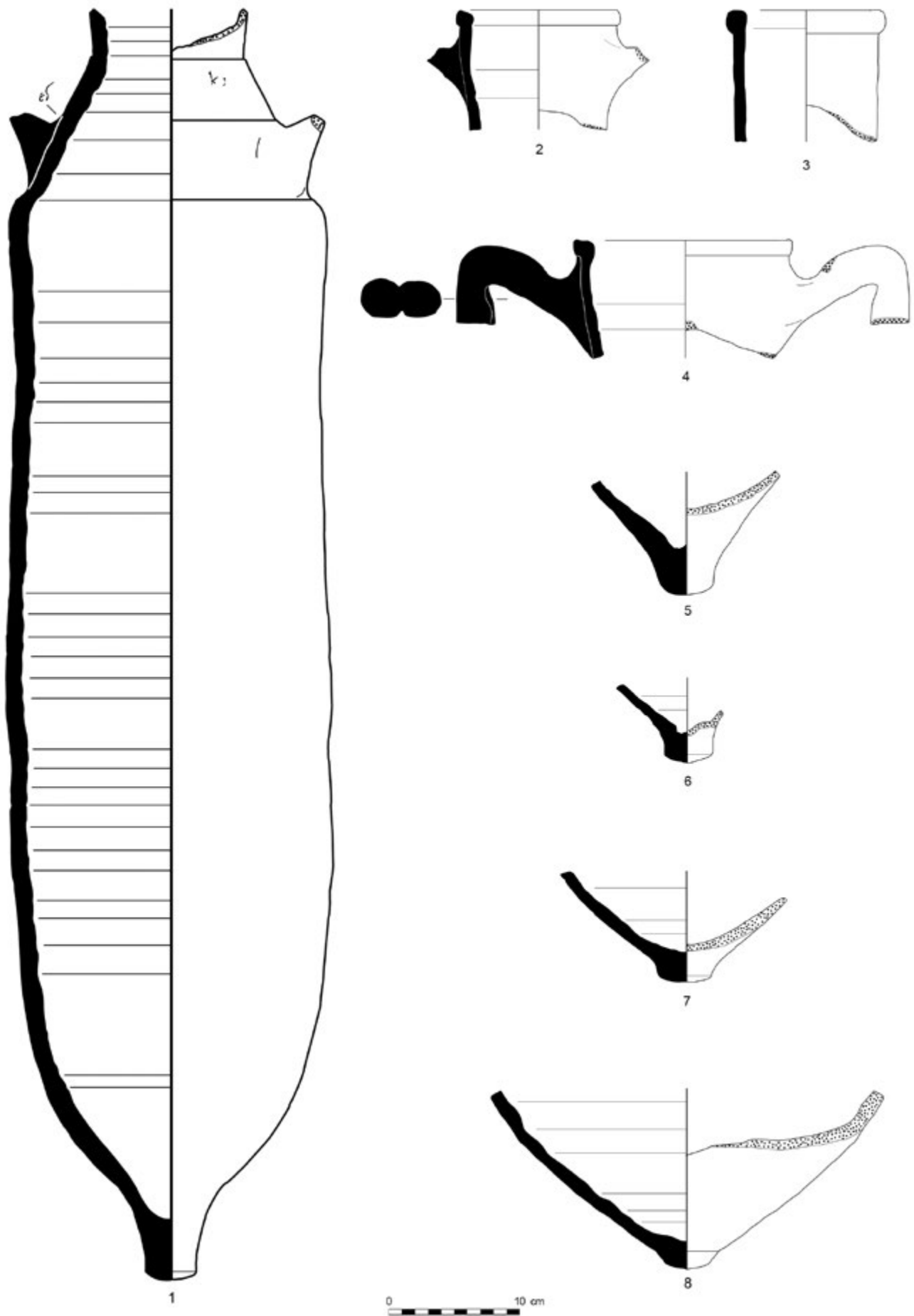


FIGURE 9.1.2: NEW DRAWINGS OF NEUSS AMPHORAE. EARLY IMPERIAL KOAN (1-7). CRETAN AC 2 (8).

Martin-Kilcher<sup>68</sup> noted that the increased identification of this type of amphorae, after the publication of Peacock, undermined his own hypothesis. To us, the arrival of these amphorae with wine made with a high amount of saltwater, whose medical and veterinary properties are commented on by several authors from Antiquity, makes it particularly likely that they were consumed by the army that was in constant action in the north-western provinces during the Augustan period and much of the first century AD. Perhaps their presence in other non-military sites like Lyon or August weakens the link between them and the army, but as in the case of other goods, it is clear that the main commercial driving force in the Rhine region during Augustan and Julio-Claudian periods (as too during the first Roman presence in Britain) are the troops settled on its borders. So, in our opinion, the link, even if indirect, does indeed exist.

## 9.2. Products from the Levant (Syria-Palestine)

The production of amphorae in the Levantine area had been under way, at least, since the middle of the second millennium BC in the form of the 'Canaanite jars',<sup>69</sup> continuing, unbroken, down to Umayyad times, with the last productions from Gaza and Beirut, and the so-called 'Baggy-Jar' amphorae.<sup>70</sup> Omitting the time periods outside those covered in this study, it should be mentioned that various types of products appear to have been exported from these lands during early Roman times, especially wine and dates, and other types of nuts or fruits. Such would have been the contents of the small number of Levantine amphorae that are usually found in western deposits from Augustan period until the end of the first century AD.<sup>71</sup> The Rhine area does not seem to be an exception. The main Roman Levantine types (i.e. the so-called 'Carrot amphora' and its contemporary the Kingsholm 117), both are always found in small numbers.<sup>72</sup> It was, then, a minor but constant import, comparable in its presence to those holding certain precious wines, like the Chian amphorae, or even those of Knidos, but curiously they were imitated in the region in small number in the Flavian period.<sup>73</sup>

The small, narrow carrot amphora (Camulodunum 189) and the large, ovoid Kingsholm 117 belong to the same Phoenician-Levantine tradition as do Tyrian or Gazan amphorae, with vertical ring handles and a 'hole-mouth' with no neck. We now know that Beirut was one of the main production sites for the carrot amphora, with other variants deriving from unidentified sources perhaps to the south in *Palaestina*.<sup>74</sup> The Neuss fabrics show no detectable difference between those that can be assigned

to Kingsholm 117 and the carrot amphora examples, which confirms that both were manufactured in the same geographical area. The fabrics are not too hard, a light beige or brown, with a rough sandy texture, with numerous rounded quartz inclusions and occasional flecks of reddish and chalky material that often make large and medium vacuoles when they disintegrate after firing. These clays seem compatible with an origin area in modern northern Israel and Lebanon.

A broad synthesis regarding the Carrot or Camulodunum 189 amphorae exists, written recently by R. Almeida and J.M. Jerez Linde. In this, not only is the matter of their origin tackled, but also the type of content they carried, as witnessed in several contexts from *Augusta Emerita* (Merida, Spain), the capital of Roman Lusitania, is presented. In Merida, large numbers of these amphorae were re-used as vehicles for libations in the necropolis of El Disco.<sup>75</sup> As with other authors, and accepting that they may also have contained other products, Almeida and Jerez Linde highlight the evidence that points to dates, likely preserved in some kind of liquid,<sup>76</sup> as the main product packaged in carrot amphorae

Among the Neuss material, it is often difficult to distinguish which particular type is represented, based only on simple fragments. Accordingly, some are classified as Carrot / Kingsholm 117. However, it seems that in general, and contrary to what it is typical in most of the western archaeological deposits,<sup>77</sup> the Kingsholm 117 amphora (Figure 9.1.3, 4, 7) is more common than the carrot amphora.<sup>78</sup> The few finds at Neuss should be considered expensive imports, perhaps related to the senior troops settled there, who demanded dates or another products prepared on the Levantine coast.

<sup>68</sup> Martin-Kilcher 1994; 349 note 371.

<sup>69</sup> Leonard 1995.

<sup>70</sup> Pieri 2005; Reynolds 2005.

<sup>71</sup> Almeida – Jerez Linde 2015; Carreras – Williams 2002; Vipard 1995.

<sup>72</sup> Van den Berg 2012.

<sup>73</sup> We have not found any local imitation within the material studied by us at Neuss, but we have seen them in Nijmegen. For these curious copies produced mainly in the area around Nijmegen, Xanten and Cologne: Van den Berg 2017b, 143-144; Liesen 2018.

<sup>74</sup> Lemaître *et al.* 2005; Reynolds 2005: 567-569; Reynolds *et al.* 2010.

<sup>75</sup> Almeida – Jerez Linde 2015.

<sup>76</sup> P. Reynolds suggests they were probably just dried figs and dates. P. Reynolds personal communication.

<sup>77</sup> van den Berg 2012: 220-222.

<sup>78</sup> Of the material published by Vegas, there are a few carrots amphorae that were not available for study in Meckenheim. Vegas 1975: Taf. 27. no. 20 and 21.

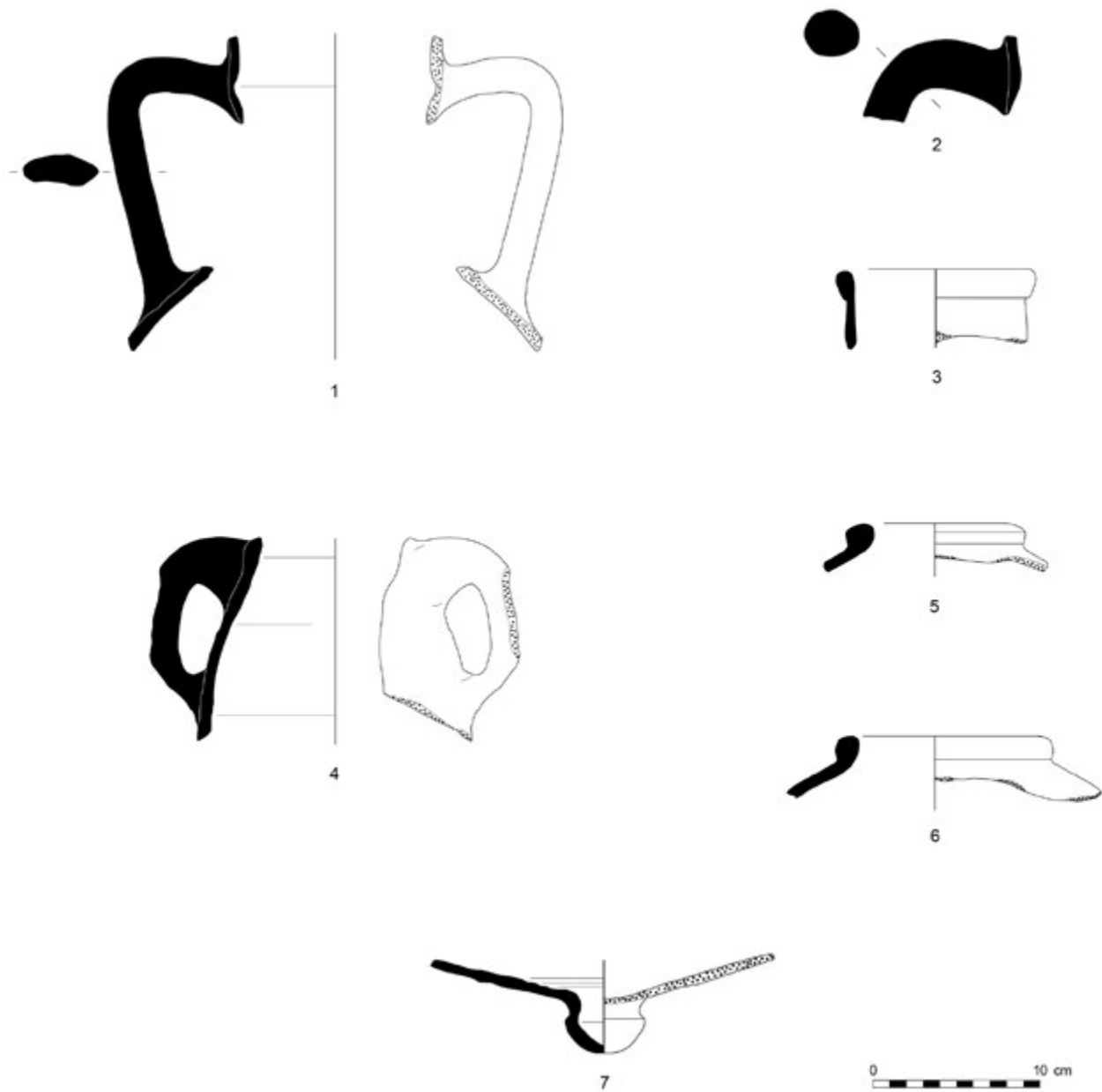


FIGURE 9.1.3: NEW DRAWINGS OF NEUSS AMPHORAE. EASTERN MEDITERRANEAN, VARIA.



## 10. Italian imports

Having dominated the markets in Gaul from the late second century to the middle decades of the first century BC, Italian imports suffered a drop in the last quarter of the first century BC; and this downturn is also observed at the military camps settled along the Rhine from 20 BC. This situation arose due to the growth and success of provincial productions, as Tchernia has properly explained in the third chapter of his book about Italian wine,<sup>1</sup> but

also to the decline of the economy based in big domains or *latifundia* in Italy, which relied heavily on slave labour.<sup>2</sup> These phenomena are reflected in the level of amphora production: the growth and decline of the Dressel 1 can, for example, be linked to them.<sup>3</sup> In the supply of northern and central Europe, the rise of Hispanic salted fish and oil exports, and of wine from southern Gaul (the latter mainly packed in barrels)<sup>4</sup> is sufficient to account for the

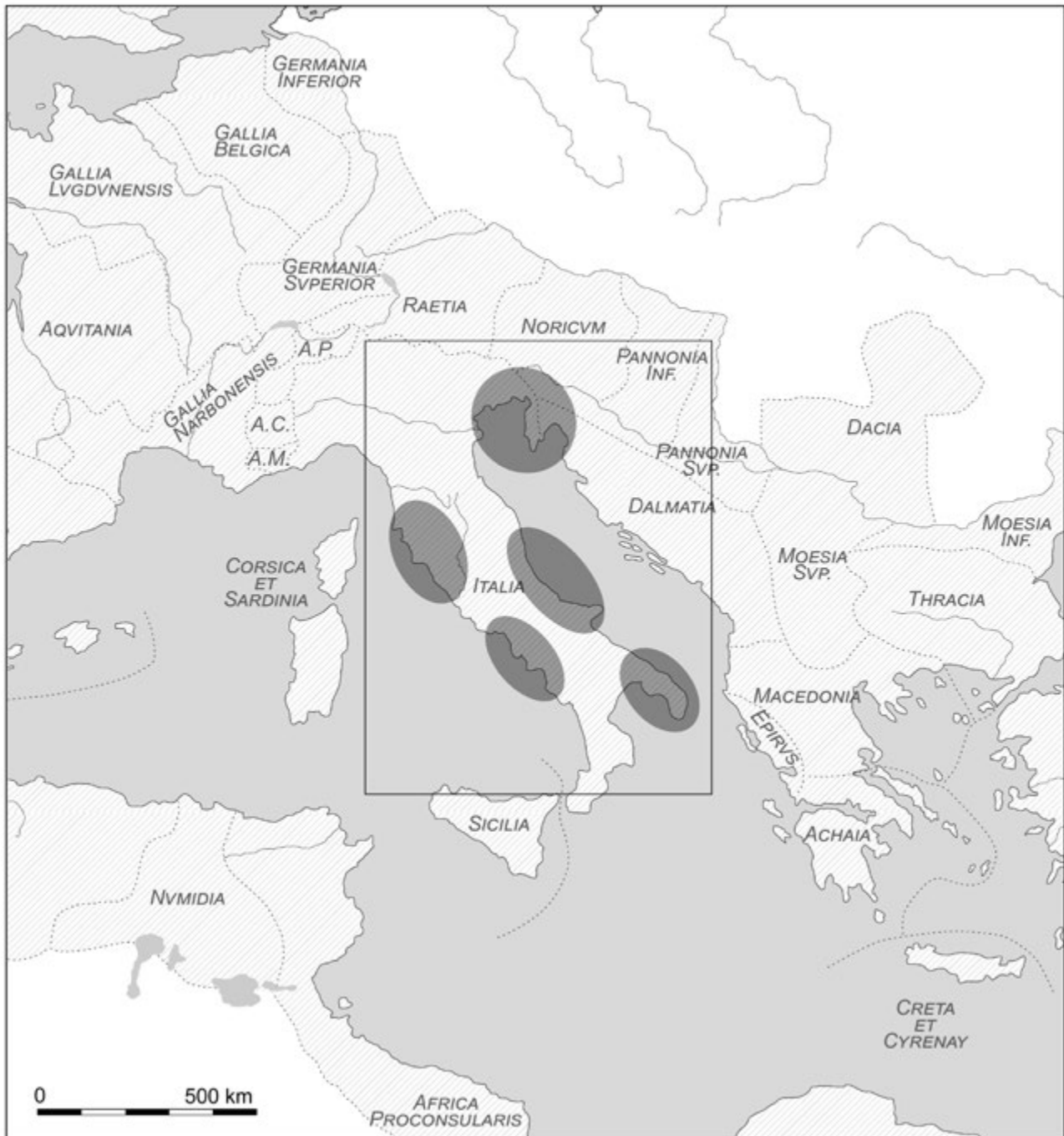


FIGURE 10.0.1: MAP OF THE CENTRAL PART OF THE ROMAN EMPIRE, WITH ITALY AND ITS MAIN EXPORTING REGIONS.

<sup>1</sup> Tchernia 1986: 125-195.

<sup>2</sup> Carandini 1981: 251-252; Manacorda 1994; 1995; 2001; Panella 2001: 191-193.

<sup>3</sup> Panella 1981: 58.

<sup>4</sup> *vid. Supra.*

PROVENANCE	NMI (62)	%	AMPHORAE FORMS			
CAMPANIA	13	21	Dr. 2-4: 4	Dr. 1: 5	Knidian imitation.: 1	Undet.: 3
ETRURIA	9	14.5	Dr. 1: 8	Dr. 2-4: 1		
ADRIA	21	32.2	Dr. 6A: 19	ante Dr. 6B: 1	Undet.: 1	
BRINDISI	4	8	Giancola 6: 2	Undet: 2		
UNDET.	15	24.2	Dr. 2-4: 11	Undet.: 4		

TABLE 7: ITALIAN AMPHORA PERCENTAGES, ACCORDING TO FORM AND ORIGIN.

secondary position now forced on Italian imports all along the Rhine.

Even so, it cannot be said that Italian products had a negligible presence at Neuss, for they do constitute more than 10% of the total of amphorae recovered. Virtually every region of Italy contributed goods, which in this historical period were packed in amphorae for export: among them are a relatively high number from the Adriatic.

It should be remembered that the presence of Italian products is likely to be higher in the initial stages of the military occupation in Neuss, so one would expect that the first camps would have yielded more Italian amphorae than would the sites occupied later. Italy seems indeed to have occupied a relatively high position in the supply of certain products exported in amphorae, mainly wine, to the early northern military posts; a position that was not maintained later on. This hypothesis could be properly confirmed from the material at Neuss and other military camps with an early date of occupation, especially Hünnerberg in Nijmegen,<sup>5</sup> and Dangstetten.<sup>6</sup> However, caution must be exercised here: this line of reasoning cannot be fully verified, since in those camps founded soon after, in the second phase of occupation, as is the case of Oberaden<sup>7</sup> and Rödgen,<sup>8</sup> the overall number of Italian finds had already fallen to below 10%. Unfortunately, as ever, the lack of a fully reliable stratigraphy at Neuss prevents one from having a secure chronological framework with which to approach the question. Morphologically, though, most Italian amphorae indicate that their importation took place early on, within the Augustan period.<sup>9</sup>

Another important concern is the quality of the products transported in the Italian amphorae, which perhaps may explain their relatively low presence at Neuss compared with others, mainly the Baetican olive oil and salted fish products, and probably the wine from southern Gaul. At

least a part of the Campanian wines must be regarded as high-end products,<sup>10</sup> but not all of them.<sup>11</sup> Nevertheless this is unlikely to be the case for the products packed in Dressel 1 from Etruria, which had been arriving *en masse* in the Gaulish markets since the late second century BC;<sup>12</sup> nor for the Adriatic products exported in large numbers into both the western and eastern Mediterranean during the late second and first century BC, as well as in the first century AD.

Before discussing in detail each of the Italian regions involved in supplying the troops settled in Neuss, it has to be stated that many pieces could not be fully classified, often because they could not be associated with an exact source, nor with a specific amphora form when they were small fragments of rims, handles, and/or bases. Within this group, there is a series of Dressel 2-4 amphorae that we believe have an Italian shape, and whose fabrics possibly indicate manufacture on the Tyrrhenian coast, but an exact production area escapes us at present, but this may be modern Calabria.

Finally, among the Italian amphorae from Neuss there are some forms whose production or distribution is not yet known, not only in the military settlements along the Rhine, but in general. These comprise some ovoid forms from Brindisi not yet attested in the northern Roman territories, and in particular a Knidian imitation in a Campanian fabric; they will be discussed in detail in the following pages.

### 10.1. Products from the Adriatic

The Adriatic imports account for one third of the Italian amphorae documented at Neuss, being mainly represented by the Dressel 6A, a type that gradually replaces the Lamboglia 2 in the second half of the first century BC. Both shapes, or intermediate ones, coexist for some time close to the BC/AD divide.<sup>13</sup> Each is for the export of wine, which was produced on a massive scale in the central area of the Italian Adriatic, particularly in the Piceno and

<sup>5</sup> González Cesteros 2014; Van den Berg *et al.* 2017.

<sup>6</sup> Ehlig 2010.

<sup>7</sup> González Cesteros – Tremmel 2011-2012.

<sup>8</sup> Ehlig 2007a.

<sup>9</sup> The finds at the military camp of Anreppen show that the imports of Italian Dressel 1 to the Rhine still continued into late Augustan times: González Cesteros – Tremmel 2015.

<sup>10</sup> Tchernia 1986: 34-37 and 60-65.

<sup>11</sup> See *infra*.

<sup>12</sup> Loughton 2014; Olmer 2003; Poux 2004;

<sup>13</sup> Carre 1985; Tchernia 1986: 134.

Padania regions,<sup>14</sup> although wine production is known in other parts of the Adriatic, even on the coast of Istria<sup>15</sup> and in different parts of Dalmatia.<sup>16</sup>

In the classification of amphorae by U. Ehmgig for the military camp of Dangstetten,<sup>17</sup> with an occupation sequence that falls between 15 and 9 BC, the Tyrrhenian imports do not achieve a percentage that can be really taken into account. However, the Adriatic imports, represented by the Dressel 6A, are certainly important, surpassing 10% of the total amphorae. At Neuss, the absence of stratigraphic contexts, as well-defined as they were in Dangstetten, makes it impossible to know whether the increased presence of Dressel 6A has primarily a chronological perspective (i.e. they belong to a time when the products of the Adriatic were reaching the Rhine in some quantities), or whether it is to be explained by mere geographical proximity, (i.e. the greater closeness of Dangstetten to the Adriatic region and especially to the redistribution points of *Noricum* and *Raetia*, where Adriatic imports were more common).<sup>18</sup>

Though they will have been supplied by goods travelling the same routes as those to Dangstetten, and were occupied before BC/AD, the virtual absence of Dressel 6A in Augst<sup>19</sup> and *Vindonissa*<sup>20</sup> does not permit any clear patterns to be concluded. However, the Adriatic material at Neuss, even without reaching the quantities at Dangstetten, nonetheless shows that even in the Lower Rhine region Adriatic imports could be the most substantial of the Italian products. This point does not seem to be replicated at other settlements in the Lower Rhine with Augustan chronologies, such as Nijmegen Hünerberg and the Kops Plateau,<sup>21</sup> Oberaden, Haltern, or Anreppen,<sup>22</sup> where, although they are present, Adriatic vessels never form an important group among the amphora imports.

The difficulty in distinguishing between the Lamboglia 2 and Dressel 6A when in a fragmentary state means some pieces cannot be safely ascribed to one type or the other, let alone to transitional forms. Given the chronology of the first military occupation of Neuss, we decided to classify them all as Dressel 6A. Nevertheless, the Lamboglia 2 could also be present in some parts of the Rhine,<sup>23</sup> so its arrival at Neuss would not be surprising in times before the change of era, when this production seemed to coexist with the Dressel 6A.<sup>24</sup>

Among the material studied at Neuss are a couple of epigraphic examples attributable to Dressel 6A amphorae. The first is impressed on the outer edge of the rim, and only the last letter remains, it is: [---]O, at the end of the cartouche (Figure 10.1.1, 2).<sup>25</sup> The text is insufficient to extract a meaning. The second stamp is well known: T·H·B and is found on a small fragment of wall that could have belonged to the neck or upper belly of an amphora.<sup>26</sup> This stamp belongs to a 'classic' Dressel 6A of the Julio-Claudian period. This *tria nomina* formula is traditionally associated with the historical figure of *T. Helvius Basila*, father of a legate of Tiberius and Claudius and owner of an amphora workshop in the Piceno, probably in the town of Cupra Marittima in the modern Marche region.<sup>27</sup> The current and most accurate dating for the T·H·B stamp places it in the reign of Caligula. This revision is due to the find, in Magdalensberg (Carinthia, Austria), of a specimen from this series with a *titulus pictus* bearing the consular date AD 38, alluding to the year of the transfer of a (*vinum*) *Kalab(rum)*, produced four years earlier.<sup>28</sup> This is not the first evidence for this series along the lower course of the Rhine; another unpublished find was collected in Nijmegen, in the military camp of the Kops Plateau, whose activity is dated between 10 BC and AD 69.<sup>29</sup>

Along with the Dressel 6A at Neuss comes a fragment of a stamped rim (Figure 10.1.1, no. 4) that must be an 'ante' Dressel 6B or primitive Dressel 6B from its first production phase.<sup>30</sup> The fabric is quite hard, of a deep red colour, with numerous inclusions of small and medium size, mainly limestones and perhaps microfossils and quartzes of different colours; it is covered on the outer side by a creamy-white slip. It does not quite match the most common fabric known to come from the Istrian peninsula because it has too many inclusions, but it could perfectly well come from northern Istria or from the northern Adriatic area of modern Italy. The stamp can be read as: SEX·A[---] in a rectangular cartouche, with sharp characters, but unfortunately it is incomplete.<sup>31</sup> The preserved text seems to allude to a *Sex(tus) A[---]*, a person with a *nomen* that starts with an A. no. epigraphic parallels provide a restored name or a link to other persons in that family line. This stamp must be considered a new addition to the epigraphy associated with the 'ante' – Dressel 6B amphorae. Its position on the rim, as well as its form, are arguably typical of those on forerunners of the Dressel 6B of late Republican and Augustan times,<sup>32</sup> whose production area could encompass the entire middle and north Adriatic areas. These early productions, like their successors from the early Roman times, usually

<sup>14</sup> Carre 1985; Carre *et al.* 2014; Cipriano 1994; Cipriano – Carre 1989; Pesavento Mattioli 1996; Pasquinucci – Menchelli 2002.

<sup>15</sup> Županič *et al.* 1998.

<sup>16</sup> Bezczy 2013: 116; Kirigin *et al.* 2006.

<sup>17</sup> Ehmgig 2010.

<sup>18</sup> Bezczy 1998b; Schimmer 2009.

<sup>19</sup> Martin-Kilcher 1994: 428-429.

<sup>20</sup> Martin-Kilcher 2003.

<sup>21</sup> van den Berg 2012: 224-226.

<sup>22</sup> González Cesteros – Tremmel 2015.

<sup>23</sup> van den Berg 2012: 224-226.

<sup>24</sup> Carre 1985.

<sup>25</sup> Epigraphic appendix no. 7.

<sup>26</sup> Epigraphic appendix no. 5.

<sup>27</sup> Carre – Pesavento Mattioli 2003b: 271-272; Fortini 1993: 91-92; Zaccaria 1989: 481 and 483.

<sup>28</sup> Bezczy 1998a: 230; Piccotti 1997.

<sup>29</sup> Berni 2017: no. 7.

<sup>30</sup> Carre – Pesavento 2003a.

<sup>31</sup> Epigraphic appendix no. 2.

<sup>32</sup> Carre – Pesavento 2003a: 460-461.

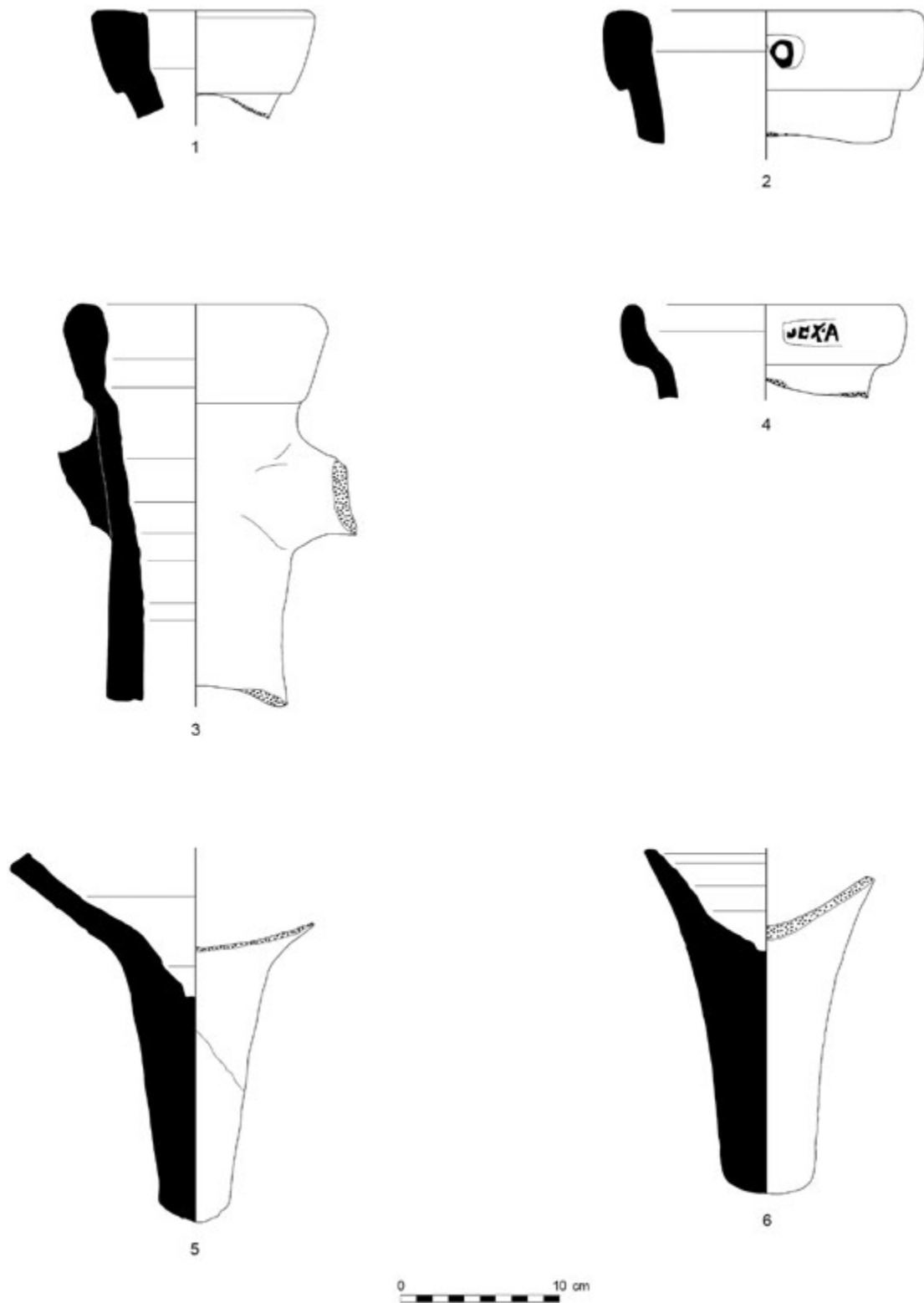


FIGURE 10.1.1: NEW DRAWINGS OF NEUSS AMPHORAE. ADRIATIC CONTAINERS  
(DRESSSEL 6A : 1-3; 5-6; ANTE DRESSSEL 6B : 4).

present stamps on the rim that can refer to *tria nomina*, as in this example from Neuss.<sup>33</sup>

The presence of the Dressel 6B oil amphora is documented at very few sites in the north, such as Augst,<sup>34</sup> and perhaps at *Vindonissa* and Massongex<sup>35</sup> within the Alpine area. Similarly, in *Germania Inferior* it was present at Nijmegen and Altkalkar.<sup>36</sup> In the Xanten Museum, a complete specimen with two stamps on the edge is displayed. This was acquired by the museum from a private collector and its origin is unknown.<sup>37</sup>

At Dangstetten there is a base that seems to correspond to an 'ante' -Dressel 6B,<sup>38</sup> although in this case it seems that the fabric is typical of the middle area of the Adriatic, comparable to that of the Dressel 6A specimen. The piece at Neuss, stratigraphically associated with the supposed Camp 7, should belong with the imports of the Augustan period, probably from the first years of occupation at Neuss prior to BC/AD divide. Both this piece and the base from Dangstetten are of the greatest importance, as they can prove that there was the occasional arrival of oil (in Dressel 6B) from sources other than the Iberian Peninsula in the initial stages of the Roman conquest, and the probable existence of routes other than those along the Rhône and the Rhine valley, ones which would likely have used the western alpine passes at a very early stage. Possibly, the accessibility of these passes, due to the conquest and pacification of the Alpine region after 15 BC, encouraged the rise of commercial relations between the Adriatic and the Rhine, using first the route of the Po valley, and then the Alpine passes. This situation, though, would have operated for only a very short period because of the rapid influx of products from other regions, and the use of more profitable trading routes along the main river arteries of western Europe. However, the existence of some typical Dressel 6B produced in Istria, in both *Germania Superior* and *Germania Inferior*, advises caution.

## 10.2. Products from Latium and Campania

From the late 1960s, thanks to the various works of Zevi and Tchernia, the extensive amphora production of Republican and early Imperial times in the area between the Bay of Naples and the mouth of the Tiber is well known. The production in this area is primarily of three large groups of amphorae: the Graeco-Italic type, the Dressel 1, and the Dressel 2-4, and more recently, mainly due to the work of E. Botte,<sup>39</sup> the group of Dressel 21-22<sup>40</sup> can be added. In the amphora collection from Neuss,

Graeco-Italic pieces are unknown (because these were produced much earlier), and the arrival of the salted fish Dressel 21-22 amphorae cannot be pinpointed anywhere along the whole Rhine, as this market was monopolized almost exclusively by Hispanic imports during the Augustan age.<sup>41</sup> However, within the Neuss material, fragments of Dressel 1 and of Dressel 2-4 amphorae both have fabrics that denote the workshops of southern Lazio and Campania, and so fall within the sphere of the Italian imports on the Rhine.<sup>42</sup>

The Dressel 1, produced in huge quantities during the second and first centuries BC in the workshops of southern Lazio and Campania, ceased to be heavily marketed in the last third of the first century BC, being replaced gradually by the Dressel 2-4. Although most of the workshops that produced the Dressel 1 in southern Lazio and Campania also went on to produce the Dressel 2-4,<sup>43</sup> we are of the opinion that the change in the form of the container denotes a change in the type of wine exported. As was noted in a recent article on the production of the Dressel 2-4 in the Tyrrhenian area,<sup>44</sup> it is precisely at that moment that a type of wine from the Naples Bay, called *Surrentinum*, made its first sudden appearance. According to written sources from the Augustan and Julio-Claudian period, it was not a fine wine, or at least not as fine as other reputed Italian wines such as the *Falernus*, the *Caecubio*, and others; although by the time of Pliny, it may have become more accepted.<sup>45</sup> The adoption of the typical Koan amphora form in Italy still remains a controversial point. Many publications exist that try to explain the typological evolution of the vessels in establishing chronological patterns within the complex evolution of the Dressel 2-4.<sup>46</sup> Generally, these accounts explain the adoption of these prototypes because of the advantageous ratio between the weight of the container and the weight of the contents. However, as we believe that there was always a link between the type of vessel and the type of content they conveyed (especially in the initial moments when a particular type of amphora was imitated), it is their shared contents of wine that connects the original Koan prototypes to the Italic Dressel 2-4.<sup>47</sup> Here, one might mention again the famous recipe by Cato,<sup>48</sup> who as early as in the second century BC, informs us of the production of Koan-type wine in Campania. We argue that this *Surrentinum* and other Campanian or Latium wines from the second half of the first century BC probably imitated, to a greater or lesser degree, the way in which the Koan

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more or less well-known geographical production area.

<sup>41</sup> González Cesteros 2014.

<sup>42</sup> H. Dessau pointed out the presence of a *Postumus Curtius* stamp on handle in Koblenz: Dessau 1912, 320. The description by Dessau of the form of this handle, even if these stamps are to be found on both Dressel 21-22 and Dressel 2-4, seems to be that of a Dressel 21-22 type: we think that if it were the typical double-handles of the Dressel 2-4, this fact would have been indicated by the author, who merely states that it is a 'breiter Henkel eines großen Krugs früher Form'.

<sup>43</sup> Hesnard *et al.* 1989; Panella 2001; Tchernia 1986: 127.

<sup>44</sup> Iavarone – Olcese 2013: 221.

<sup>45</sup> Tchernia 1986: 345-347.

<sup>46</sup> Berni 2015; Freed 2000.

<sup>47</sup> Iavarone – Olcese 2013; Freed 2000.

<sup>48</sup> Cato *De Agri.* 121.

<sup>33</sup> Carre – Pesavento 2003a: 461.

<sup>34</sup> Martin-Kilcher 1994: 428.

<sup>35</sup> Martin-Kilcher 1994: 428.

<sup>36</sup> van den Berg 2012: 224.

<sup>37</sup> We would like to thank Mr. B. Liesen from the Archaeological Park in Xanten, for his comments about this amphora during the *Rei Cretariae Fautores* congress in 2014.

<sup>38</sup> Ehlig 2010: 49 and taf. 13.

<sup>39</sup> Botte 2009.

<sup>40</sup> It must be stated that each of these big amphorae groups is divided in small subtypes by shape: sometimes one can be related to a period or to a

wines were manufactured, mimicking their particular taste by a special treatment of the grapes or by adding a high percentage of saltwater.<sup>49</sup> For packaging the great wines of the area, such as the *Falernus*, the *Caecubio*, or the *Albanum*, perhaps they retained the recognized vessel from the Republican era (i.e. the Dressel 1) for longer than elsewhere, and only later changed over to the Dressel 2-4 form when it became the mainstream form.

Related to the production of wine in the Aegean style in Campania is an exceptional find at Neuss. This is a vessel that would be classified with the so-called 'Knidian amphorae', but whose fabric, albeit without proper petrographic studies being conducted, directly indicates a manufacturing site in the volcanic area of southern Lazio and northern Campania (Figure 10.2-3.2). This amphora has been already published by Vegas in the sixth volume of the *Limesforschungen*, noting that it was of Claudian date, and that it was a wine amphora in a dark red-brown and very coarse fabric.<sup>50</sup> However, the Spanish scholar did not notice the similarity between this fabric and that of some Dressel 2-4 and Dressel 1 productions she had studied at Neuss – namely a typically reddish/brown fabric with a great amount of volcanic inclusions from the Campania-Latium region.<sup>51</sup> So far the Neuss fragment, and a handle and a rim fragment that we have documented at Haltern,<sup>52</sup> comprise the only known examples of Campanian imitations of Knidian amphorae. Although, this section focuses on the large groups of amphorae produced in Lazio and Campania, this finding prompts the inclusion of amphorae of the Knidian type too. It is impossible to calibrate the extent of its production, but in all likelihood it was restricted and probably limited to the Augustan period.

The curious imitation at Neuss has a number of features that differentiate it from the original productions of Knidos: the neck is slightly wider than usual, the handles are less arched and carry on their upper parts two deep incisions made by the potter with his fingers, and finally the spike presents a ring slightly different to that of the Knidian product. The existence of the Neuss piece and the one found at Haltern reflects the changes occurring during the second half of the first century BC and the early years AD in the wine production of southern Lazio and Campania, and of course, in the production of contemporary imitations of Koan amphorae.<sup>53</sup> The stimulus for these actions was not only due to the suitability of the vessel for transportation, but also to changes in the way of making wine, as new influences came in from the eastern Mediterranean. Perhaps the high demand for Aegean wines in Italy from the late Republican period meant that several regions, but especially the central and southern Tyrrhenian coast, started to make wine according to Greek recipes, as indicated by the procedure that Cato records

from as early as the second century BC. While there is no textual evidence for the Knidian wine production in Italy, the existence of this specimen and of the one from Haltern may offer a hint.

### 10.3. Products from Etruria

The Etruscan Dressel 1B made significant inroads into the wine market of Gaul from the late second century until the Caesarian conquest, with huge quantities arriving at the large Gallic *oppida*.<sup>54</sup> From then on, to at least the late Augustan era, its presence in the markets of northern Europe is observed, as evidenced by the finds of these amphorae: at sites in the basin of the Lippe river, especially at both Haltern<sup>55</sup> and Anreppen;<sup>56</sup> or in the area of the Rhône Valley, especially at the sites of Lyon and Saint-Romain-en-Gal;<sup>57</sup> and to a lesser extent in Valence,<sup>58</sup> where these amphorae arrived during the last third of the first century BC. While in northern France, the site of La Chaussée-Tirancourt<sup>59</sup> yields a good number of Dressel 1B mainly of Etruscan origin. The area of *Gallia Belgica* is where a greater number of Etruscan Dressel 1B were found in pre-Augustan or early Augustan contexts, especially in the tombs around Luxembourg,<sup>60</sup> and at the *oppidum* of Titelberg.<sup>61</sup> Titelberg seems to have served as an important trading post that also hosted a military garrison, as did the Petrisberg hill site, in the city of Trier, where a military camp functioned between 29 and 27 BC.<sup>62</sup> To these sites, has recently been added the Hermeskeil camp, also in the German state of Rheinland-Pfalz and dated prior to 30 BC.<sup>63</sup> While, the ceramics from the last two sites still need a careful contextual study, in both places the Dressel 1 seems to predominate, especially at Hermeskeil. These important finds support the general impression of the arrival of Italian products *en masse* in Gaul, and indicate that, in the period just before the beginning of the Augustan conquest of the Rhine, the Tyrrhenian products (a large part of them from Etruria) were still well-positioned for supplying the Gaulish interior. This situation seems to change around 30-20 BC in both Lyon and the early military camps on the Rhine, where the presence of amphorae from Etrurian workshops becomes less and less significant. But, as just stated, even after the BC/AD change of era, the Dressel 1 from Etruria does continue to arrive at some military sites, such as Haltern and Anreppen.<sup>64</sup>

A fact worth noting is that, while in Campania and Latium the production of Dressel 1 appears to be gradually abandoned during the second half of the first century BC,

<sup>49</sup> Cato *De Agri.* 121; González Cesteros 2011: 112; Tchernia 1986: 105.

<sup>50</sup> Vegas 1975: 76. Taf. 36, 31.

<sup>51</sup> Tchernia – Zevi 1972.

<sup>52</sup> González Cesteros – Monsieur forthcoming.

<sup>53</sup> Freed 2000; Hesnard 1977; Lemaître *et al.* 1998: 51; Panella – Fano 1977; Tchernia 1986.

<sup>54</sup> Loughton 2009; 2014; Olmer 2003; Olmer *et al.* 2013; Poux 2004; Poux – Demierre 2015.

<sup>55</sup> Tremmel *et al.* 2012.

<sup>56</sup> González Cesteros – Tremmel 2015.

<sup>57</sup> Desbat 2005; Genin 1997; Lemaître *et al.* 1998.

<sup>58</sup> Maza – Silvino 2011: 486-488.

<sup>59</sup> Laubenheimer – Marlière 2010.

<sup>60</sup> Metzger *et al.* 1991; Martin-Kilcher *et al.* 2009.

<sup>61</sup> Laubenheimer – Hénon 1998.

<sup>62</sup> Löhr – Trunk 2008.

<sup>63</sup> Hornung 2012.

<sup>64</sup> González Cesteros – Tremmel 2015; Tremmel *et al.* 2012.

north of Rome this type of amphorae continued – coexisting with the Dressel 2-4 for a longer period.<sup>65</sup> It is actually not yet possible to determine the true end of the manufacture of Dressel 1; though, considering the Anreppen data, it cannot have happened before the end of the principate of Augustus.<sup>66</sup> These two types of amphorae from Etrurian workshops definitely reached Neuss, although the Dressel 2-4 is in a minority, which fits with the decline that had been on-going in general in Italy, and particularly, we believe, in the Tyrrhenian area since the Augustan period.<sup>67</sup>

As the fabric of our exemplars presents a great uniformity, they should come from one of the main production areas of the Dressel 1B (i.e. the *Ager Cosanus*),<sup>68</sup> where the important Albinia and Cosa workshops are located. Their fabrics are fairly hard and somewhat sandy, presenting quite light pink or red hues, and often bearing remains of a whitish slip. The inclusions are frequent, mostly of angular quartz, usually small or medium-sized, accompanied by small reddish or medium brown flecks. They also show some calcareous inclusions, and medium- and small-sized vacuoles caused by their disappearance in firing.

Apropos the epigraphic evidence, the Etruscan Dressel 1B are often among the most stamped western amphorae of the last two centuries BC. Its mass production meant a high standardization not only in form but also in the existence of epigraphic marks on them. Both processes possibly worked in tandem.<sup>69</sup> However, some differences in the characteristic features of the most exported wines from this region are detectable, enabling a good chronological distinction between the early productions of the end of the second century BC and beginning of the first century BC, and the mid to late productions of the late first century BC. Among the material studied in Meckenheim, we recovered the bilinear stamp already published by Gechter,<sup>70</sup> reading APELLALVCRE (APELALVCRE) (Figure 10.2-3.1, no. 5), although the amphora in question had lost a large part of the neck and the beginning of its handles.<sup>71</sup> Despite the size, the text of this stamp is hard to read because of the irregular relief of the individual letters. A new copy of the stamp with the silicone technique confirms the drawing of Gechter, although the last E of the first line is not entirely clear – it may perhaps be an A. If the stamp is read as APELLALVCRE, we suggest considering a patronymic: *Apella Lucre(ti) (servus fecit)*, in which *Apella*, slave of *Lucretius*, would be represented as the manufacturer of the amphorae.

To the APELLALVCRE stamp, another on a 'late' Dressel 1B stamp must be added. It reads HILAR,<sup>72</sup> as already published by Gechter,<sup>73</sup> and finds a possible parallel in

Xanten according to Fitzpatrick.<sup>74</sup> Both these stamps are part of the late Dressel 1B production of Etruria. We have already pointed out the arrival of these amphorae in the north late in the Augustan era.<sup>75</sup>

The epigraphic section of the Dressel 1B at Neuss is completed by two *graffiti ante cocturam*.<sup>76</sup> These are simple control traces (an I and an X) (Figure 10.2-3.1, nos. 1-2) made by the *figulus* before the amphorae were placed in the kiln.

To conclude this discussion of the Dressel 1B, one must simply state that imports of amphorae from Etruria into the Rhenish military sphere are rather scarce and always seem to be linked to the Augustan period. It can be said that the Tyrrhenian wines packed in the Dressel 1 are the best example of Roman commerce in western Europe during the last century of the Republic; in Gaul, they were extremely common before the Roman conquest in the mid-first century BC. Probably, the Caesarian troops involved in the conquest and pacification of Gaul used the knowledge of the Gaulish trade routes that the Italian traders were already familiar with. The Tyrrhenian wines seem, in the end, to account for no more than a marginal part of the wine imports into the Rhenish camps from the Augustan period onwards, which we think were dominated by products of medium or low quality from *Narbonensis* and the Rhône Valley and transported in amphorae or, mainly in barrels. The proper quantitative data is lacking to allow for a better understanding of the timing of this economic process related to wine imports. Nevertheless, the earliest colonies of the Rhône Valley and the military posts and tombs of *Gallia Belgica* would indicate that this transformation took place around the third decade BC, at which time the rise of imports from other regions, mainly from the south of the Iberian Peninsula, can be observed.<sup>77</sup>

At Neuss, the similarity of the fabrics, at a macroscopic level, has led to the classification of the top section of a Dressel 2-4 as an Etruscan product. The fragment presents a complete stamp on a typical double-handle of a Dressel 2-4 (Figure 10.2-3.1, no. 7). This specimen, and its stamp, was published by Filtzinger,<sup>78</sup> although the picture and the label are not entirely accurately represented. The text of the stamp presents the reading: P·ARRV[---?]; with a single triangular dot separating the letter P and composed of two sets of nexus (corpus no. 4). The latter nexus seems to be formed by the union of the letters A^R and R^V. Given the absence of a second dot separating a possible *nomen* from the *cognomen*, we suggest considering a freedman named *P. Arru(ntius)*, expressed with the *duo nomina*.

The presence of Dressel 2-4 alongside Etruscan region Dressel 1 at Neuss reflects the production and export of both types of amphorae from the present-day region of

<sup>65</sup> Panella 2001, 193-194.

<sup>66</sup> González Cesteros – Tremmel 2015.

<sup>67</sup> Panella 2001: 193-194; Tchernia 1986: 157-158.

<sup>68</sup> Hesnard *et al.* 1989; Manacorda 1980; 1981.

<sup>69</sup> Olmer 2003.

<sup>70</sup> Gechter 1979: 67, fig. 29.6.

<sup>71</sup> Epigraphic *appendix* no. 3.

<sup>72</sup> Epigraphic *appendix* no. 6.

<sup>73</sup> Gechter 1979: 66 no. 9. Abb. 29.5

<sup>74</sup> Fitzpatrick 1985: 330, no. III.

<sup>75</sup> González Cesteros – Tremmel 2015: 348.

<sup>76</sup> Epigraphic *addenda* no. 53 and 54.

<sup>77</sup> González Cesteros 2014: 409-415.

<sup>78</sup> Filtzinger 1972: Taf. 25, 3.

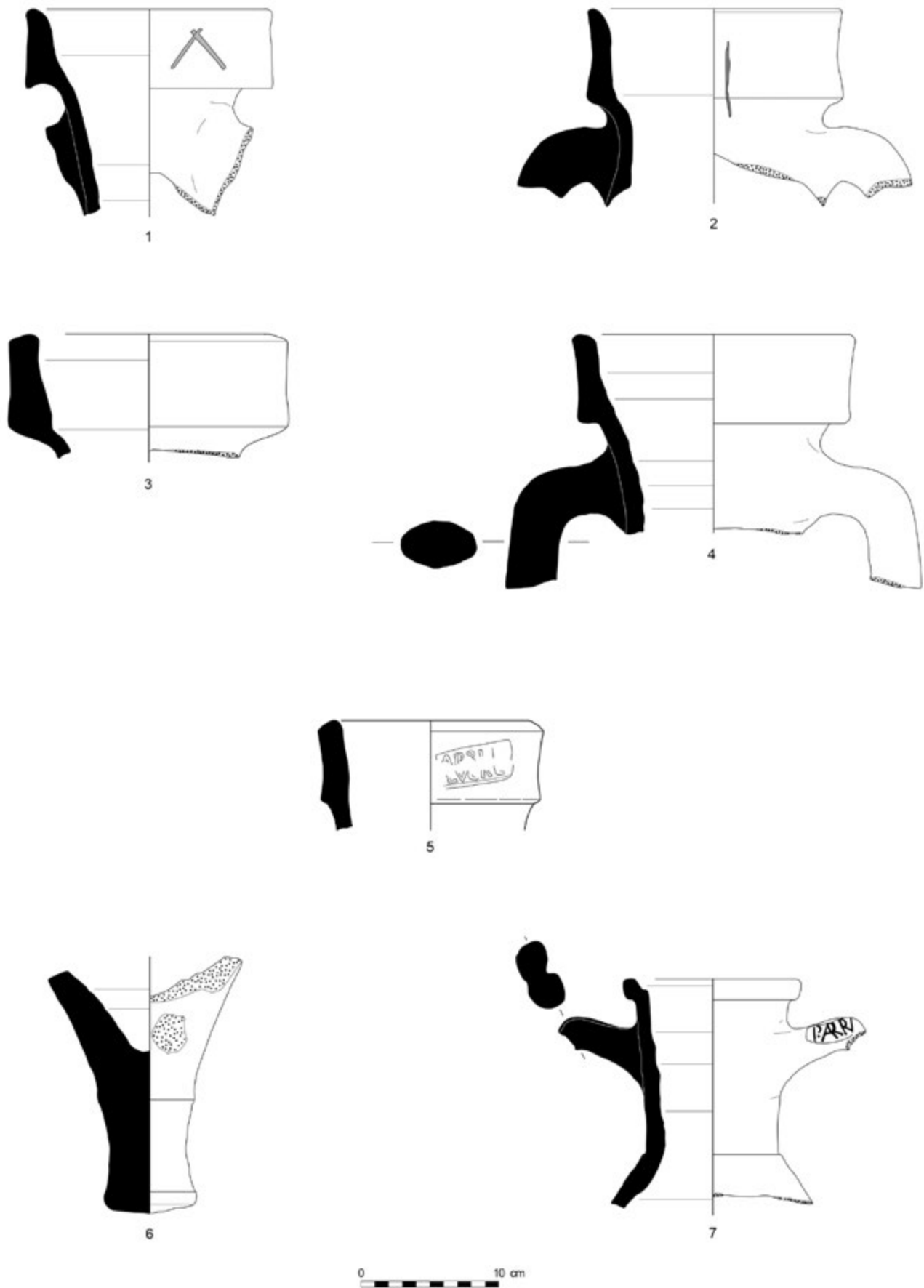


FIGURE 10.2.3.1: NEW DRAWINGS OF NEUSS AMPHORAE. ETRURIA AND LATIUM/CAMPANIA (DRESSSEL 1: 1-5; DRESSSEL 2-4: 6-7).





FIGURE 10.2.3.2: NEW MAGES OF NEUSS AMPHORAE. LATIUM/CAMPANIA KNIDIAN TYPE.

Tuscany during the first century BC and the first half of the first century AD; something that was already known from the contexts in the production region itself.<sup>79</sup> Considering the stratigraphic deficiencies at Neuss, it is impossible to determine whether both arrive at the same time, or whether the Dressel 1B predates the Dressel 2-4. In any case, the ratio between the two Etruscan forms is 1:8 in favour of the Dressel 1, indicating that this was the main production source for material in the area, and was being exported in large quantities to central and western Europe. This pattern had already been established by the late second century BC (with a massive number of imports of the Etruscan Dressel 1 into Gaul), and continued throughout the first century BC. Studies conducted in Etruscan ceramic production sites confirm this pattern admirably.

#### 10.4. Products from Brindisi

The territory of ancient *Brundisium* is the last Italian region that sent its amphorae to supply the Roman troops stationed at Neuss. The existence of an important production centre at Brindisi from the second half of the second century BC through the first century BC is well known. Epigraphic studies on the amphorae found in Apulia<sup>80</sup> and the surface material collection and partial excavations of some workshops on the outskirts of the current Brindisi,

especially that of the Apani<sup>81</sup> and Giancola workshops,<sup>82</sup> have together revealed the origin of a large family of ovoid vessels in this area. These amphorae, mainly associated with olive oil and to a lesser extent with wine, were exported to different parts of the Mediterranean and the surrounding regions.

In recent years, new contributions have helped clarify some misunderstandings about the late Republican production of Brindisi, such as its terminal phases and the production sequence. This has come about from the association of specific types of amphorae with clear historical moments. The studies on major Brindisi workshops, such as Apani<sup>83</sup> and Giancola, are key components of this evaluation.<sup>84</sup> In the Rhine area, the last production phase is solely documented in a few places, placing it in the Augustan period. This is when the activity of the Brindisi workshops declined irredeemably because of the rise of commercial rivals in the provinces.<sup>85</sup> However, during the second half of the first century BC some activity continued on a smaller scale, especially in early and mid-Augustan times.<sup>86</sup>

<sup>81</sup> Palazzo 1988; 2013.

<sup>82</sup> Manacorda 1988; 1994; Manacorda – Pallecchi (eds) 2012.

<sup>83</sup> Palazzo 2013.

<sup>84</sup> Manacorda – Pallecchi (eds) 2012.

<sup>85</sup> Manacorda 1994; Manacorda – Pallecchi (eds) 2012.

<sup>86</sup> Manacorda – Pallecchi (eds) 2012: 531.

<sup>79</sup> Manacorda 1980; Menchelli 1990-1991; Panella 2001: 185.

<sup>80</sup> Désy 1983; 1989.

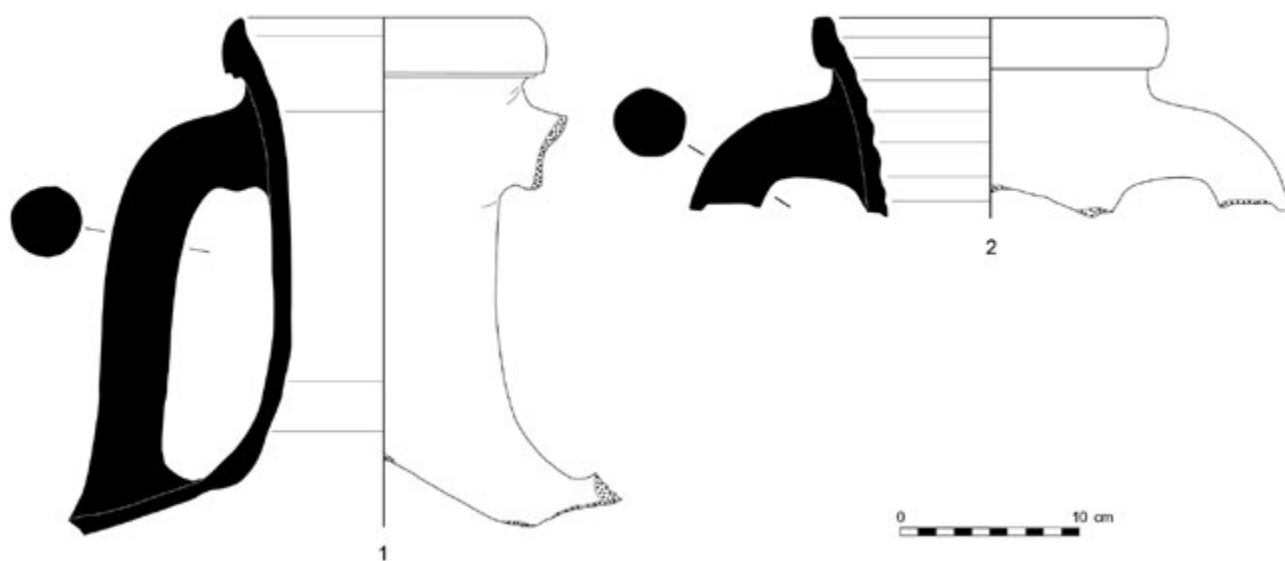


FIGURE 10.4.1: BRINDISI AMPHORAE FROM NEUSS: TYPES GIANCOLA 6.1 (1) AND GIANCOLA 6.2 (2).

Among the material studied at Neuss, there are only a few pieces that must undoubtedly be Brindisian, belonging to the final moments of the production sequence. There are four pieces, whose fabrics and shapes mark them out as Brindisian, although for two fragments, a base and a fragment of handle, it is impossible to determine the exact type of amphora they derive from within the Brindisi repertoire. An assignation could be determined for the examples in Figure 10.4.1: it is the form called Giancola 6,<sup>87</sup> or Apani 3.<sup>88</sup> The start of production and export of this type can be placed early in the second production phase of Giancola or late in that of Apani, at the end of Caesarian period.<sup>89</sup> Both versions ran on until the end of the first century BC.<sup>90</sup> This late chronology fits well with the early stages of occupation at Neuss, with such amphorae probably supplying the soldiers settled in any of the military camps prior to the BC/AD turn of the era. The fabrics of these examples are quite similar, being orange-red with remains of a darker red slip, soft in touch, compact, and more or less hard with scattered large inclusions of a dark colour, as well as some smaller red inclusions (probably grog).

The presence of Brindisi amphorae at Neuss, even if small, is still a pleasant surprise. Together with finds of more examples at Mainz<sup>91</sup> and in the early contexts at Lyon,<sup>92</sup> this indicates that the Brindisi products arrived at the military markets of *Germania* during the earlier phase of occupation,<sup>93</sup> following the route of the Rhône

and stopping at Lyon, the main-point of redistribution of goods to northern markets from the time of its foundation in 43 BC.<sup>94</sup> North of the Alps they are also documented at Magdalensberg in Augustan-Tiberian contexts,<sup>95</sup> in the previously mentioned military camps of Mainz,<sup>96</sup> and at places such as the *oppidum* of Titelberg in *Gallia Belgica*.<sup>97</sup> To-date, they have not been found elsewhere. The presence of some specimens at Neuss and Mainz could indicate an early start-date for both military settlements, contemporary with, or immediately subsequent to, the first occupations at Lyon and Vienne.<sup>98</sup> Perhaps, after the conquest of the Alps in 15 BC and the final Roman control of the Alpine passes, the products of the Adriatic reached the Upper Rhine and Danube along these routes rather than through the Rhône-Rhine axis. Notably, it is also at this time that the Brindisi products become marginal in the Roman markets, coinciding with the final stages of production of amphorae at Apani, Giancola, and other workshops of the *ager Brundisium*. Lastly, the absence of Brindisi amphorae at other sites with chronologies before the BC/AD change of era, like Nijmegen Hunerberg, Augst, Dangstetten, Rödgen, Oberaden, Nijmegen Kops Plateau or Haltern, must be noted.

Despite the existence of some Brindisi imports, the period of the occupation at Neuss, even at its earliest stages, corresponds to the final decline of Brindisi trade. The

reveal the interesting material associated with the first military camp of the Petrisberg in Trier, occupied from 29 to 27 B.C. This kind of amphora has not yet been recognized there, but we have examples of other ovoid forms, in this case, some south Hispanic amphorae (González Cesteros 2014: 410-415).

<sup>94</sup> González Cesteros 2014: 478-480.

<sup>95</sup> Bezczy 1994: 13-15.

<sup>96</sup> Ehlig 2003.

<sup>97</sup> Tretola Martínez forthcoming. For a general overview of the supply of ovoid amphorae in the northern Roman provinces, see González Cesteros forthcoming.

<sup>98</sup> Desbat – Martin-Kilcher 1989; Genin 1997.

<sup>87</sup> Manacorda – Pallecchi (eds) 2012.

<sup>88</sup> Palazzo 2013.

<sup>89</sup> Manacorda – Pallecchi (eds) 2012: 160.

<sup>90</sup> Manacorda – Pallecchi (eds) 2012: 162.

<sup>91</sup> Ehlig 2003.

<sup>92</sup> Genin 1997; Lemaître *et al.* 1998.

<sup>93</sup> Brindisi amphorae have sporadically been found in the northern provinces. Some examples come from the *oppidum* on the Titelberg (Tretola Martínez forthcoming) and from the likely military occupation in Artiparc (Arras, France) dated to the Caesarian conquest of Gaul (Laubenheimer – Marlière 2010: 28). We hope that future studies will

competition, or the support of the State, that led to the massive import of a wide range of Hispanic products, such as Baetican olive oil, to markets in the western Roman provinces, seems to have extinguished the market for Brindisi products very soon after the establishment of the first Roman camps on the Rhine. In this regard, the absence of Brindisi amphorae in places like Dangstetten,<sup>99</sup> whose initial date coincides with the end of the Alpine campaigns led by Drusus and Tiberius around 15 BC and which was occupied until 9 BC, seems highly significant. The same is true for Oberaden and Rödgen, both well-dated military

settlements associated with Drusus' campaigns west of the Rhine between 12 and 9/8 BC. Combining all these data, the arrival of Brindisi material on the Rhine is thus clearly confined to the phase of Roman occupation there, still within the last two decades before the BC/AD change of eras.

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<sup>99</sup> Ehmig 2010.

## 11. African Imports

Among the material reviewed from Neuss, along with several wall fragments, were two complete handles in the typical fabric of the Tunisian production area: hard, with rounded medium or small quartz pieces, reddish in colour (here with a dark grey core because of firing conditions), and presenting the characteristic white surface skin. In form, it is beyond doubt that these are still within the Punic amphorae tradition because of their recognizable ear-shape handles. However, the precise amphora form remains obscure, although it is probably one of the later forms of Maña C, falling within the T-7 group, produced in the Tunis area until the Julio-Claudian period, according to J. Ramón Torres.<sup>1</sup>

The exact contents of these amphorae are still not clear. While in the case of their south Spanish ‘relatives’, it is generally accepted that they were for salted fish, for the Tunisian series there are arguments for and against this assumption;<sup>2</sup> the possible alternative being for wine. The presence of factories for salted fish along the Tunisian coast<sup>3</sup> might suggest this content, although the differing late variants within the group of the T-7 should argue a corresponding diversity of products.

The presence of African amphorae of Punic tradition from the late Republican and early Imperial periods in the western Roman world is well-documented in Tyrrhenian

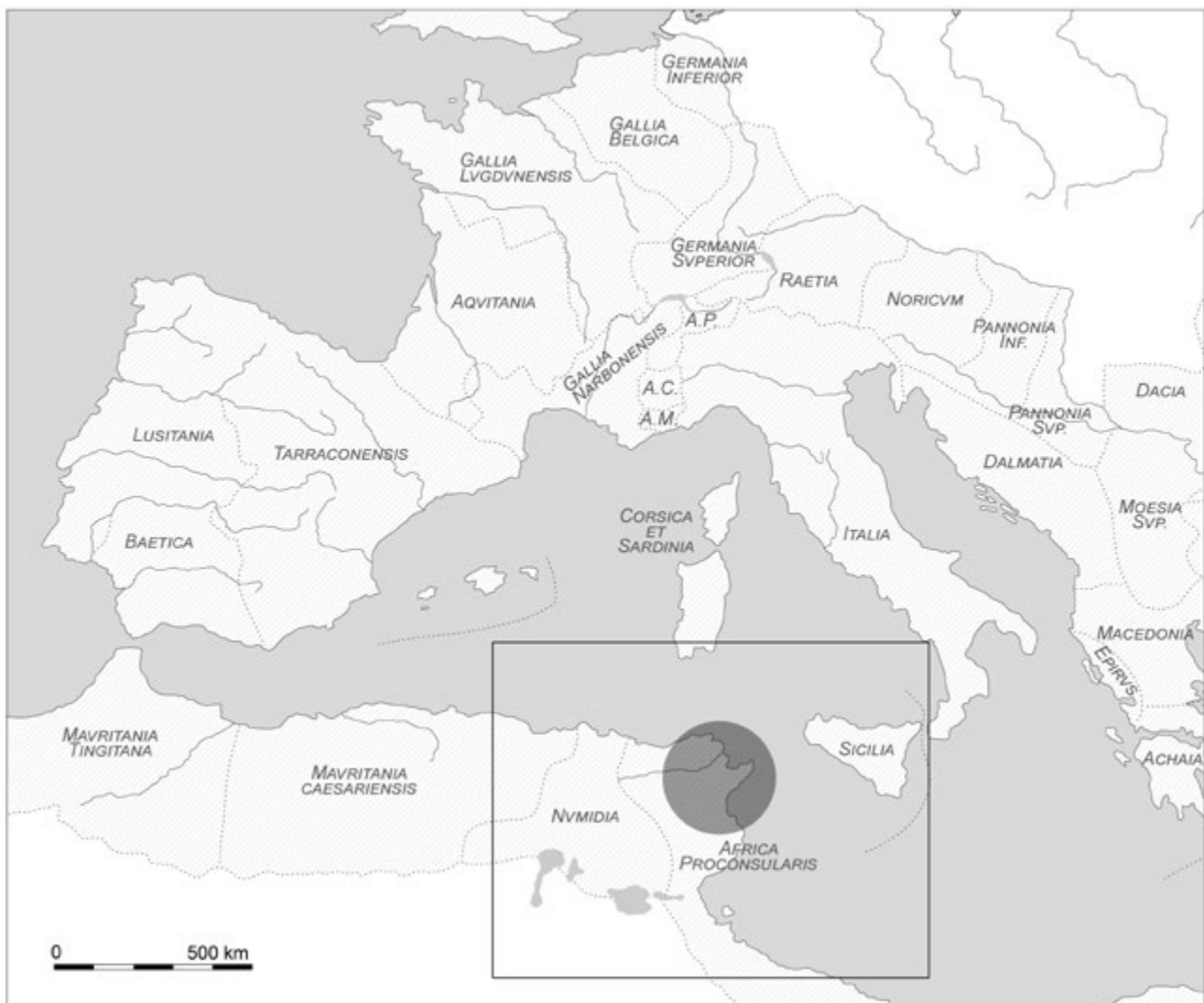


FIGURE 11.0: MAP OF THE WESTERN HALF OF THE ROMAN EMPIRE, WITH THE NORTH AFRICAN PROVINCES AND ITS MAIN EXPORTING REGION.

<sup>1</sup> Ramón Torres 1995.

<sup>2</sup> Bonifay 2004: 463-475; 2007; Ramón Torres 1995: 264-266; van der Werff 1986: 109-112.

<sup>3</sup> Slim *et al.* 2007.

Italy in Augustan and Julio-Claudian contexts: at La Longarina 1,<sup>4</sup> the ‘amphorae wall’ of the porch house in Ostia,<sup>5</sup> from different contexts in Rome,<sup>6</sup> or in Pompeii.<sup>7</sup> The presence of these types in archaeological sites on the Rhine is sporadic, although there always seems to be at least one at most sites, even in the early years AD, as in the case of Anreppen.<sup>8</sup>



FIGURE 11.1: NEW DRAWINGS OF  
NEUSS AMPHORAE. NORTH AFRICAN  
CONTAINER.

<sup>4</sup> Hesnard 1980.

<sup>5</sup> Van der Werff 1986.

<sup>6</sup> Rizzo 2003; Contino 2013.

<sup>7</sup> Pascual Berlanga *et al.* 2008; Pascual Berlanga – Ribera i Lacomba 2008.

<sup>8</sup> González Cesteros – Tremmel 2015.

## 12. Appendix: Epigraphy

In this section epigraphic marks within their geographic origins, beginning with the Eastern Mediterranean and ending with the southern Iberian Peninsula are grouped.

Stamps are classified after the epigraphic concept of ‘family of stamps’.<sup>1</sup> Each group or ‘family’ follows a sequential numbering in the catalogue. The different variants are set apart by small letters and, in several examples, each of them has an extra number.

Graffiti are organized according to their content: in letters or acronyms, numerals, nominal and symbolic.

Each record contains some general basic fields: provenance date, find spot, present location, reading (reading of the stamp), publication (literature about the inscription in case some parallels exist), description. The Latin word ‘vidimus’ appears in the Publication field to indicate that the piece was seen by us.

Previously published inscriptions were omitted if they are unreadable, are on amphorae of unknown type, or have no value for our study.

### 12.1. Stamps

#### A. Eastern Mediterranean

##### 1. ((Rhodian sphinx))

*Provenance:* Rhodes.

*Dating:* Second part of the first century BC, early first century AD.

##### a) ((Rhodian sphinx))

*Find spot:* Fundnummer 16535n, Lager 2.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Rodhe?

*Publication:* Vidimus.

*Description:* Stamp placed in the upper part of the handle (Figure 9.1.1, no. 1).



Thanks to the silicon mould of the upper part of the handle that we took, it was possible to recognise a female bust in profile. The stamp is complete but eroded. It is in an oval cartouche or maybe a rectangular one with rounded corners. It has a clear relation with the bronze coins minted in Rhodes in Imperial times.<sup>2</sup> Following Finkielsztein, the beginning of these stamps must be placed soon after 43 BC.<sup>3</sup> There are two options for the iconographic representations in these late Rhodian stamps: the first is Helios with his clearly visible radiant crown, and the second, his wife Rhode who gives her name to the island and is present in our example.

Our piece from Neuss is in no way related to the massive stamp production of the third and second centuries BC in Rhodes, nor with later stamps that have appeared in several places.<sup>4</sup> In our opinion this piece must be linked with the first military settlements at Neuss and according to its shape, the handle and rim fit perfectly with the typology of the Rhodian amphorae of the second half of the first century BC.<sup>5</sup>

#### B. Italy

##### 2. SEXA[---]

*Provenance:* North Adriatic

*Dating:* Augustan.

##### a) SEX·A[---]

*Find spot:* Fundnummer 19055n, lager 7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Sex(ti) A[---].

*Publication:* Vidimus.

*Description:* Rim fragment with beginning of the neck (Figure 10.1.1, no. 4). We have classified this piece as an ‘ante’-Dressel 6B. It has a reddish fabric with a beige slip in its outer side.



The text is placed in a rectangular cartouche. A small triangular dot separates the praenomen Sextus of the first letter of the gentilicum an A. We have not found any parallels.

<sup>1</sup> Berni 2008: 139-140.

<sup>2</sup> Finkielsztein 2001: 199.

<sup>3</sup> Finkielsztein 2000: 412.

<sup>4</sup> Finkielsztein 2000: 413-414.

<sup>5</sup> Finkielsztein 2000: 50-51. Pl. C fig. 19.

The production of 'ante' Dressel 6B is dated to the Augustan principate before the BC/AD change of eras.<sup>6</sup>

### 3. APELLALVCRE (APELALVCRE)

*Provenance:* Etruria.

*Dating:* End of first century BC.

#### a) APELLA/LVCRE (APELA/LVCRE)

*Find spot:* Fundnummer 1686n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Apella Lucre(t)i (servus fecit).*

*Publication:* *Vidimus.* GECHTER 1979: 66 no. 10, Abb. 29.6 (APELE/LVCRE).

*Description:* Rim and upper part of the neck of Dressel 1B (Figure 10.2-3.1, no. 5).



Stamp with letters in two parallel lines but poorly legible. Thanks to the silicon mould, we could recognize most of the letters. We propose a slave patronym Apella and in the second row the gentilicum of his patronus Lucretius. We have not found any parallels.

This stamp must be placed within the latest productions of Dressel 1B that still arrive to Gaul and the German frontier during the Augustan period.<sup>7</sup>

### 4. PARRV[---?]

*Provenance:* Etruria.

*Dating:* –

#### a) P·ARRV[---?]

*Find spot:* Fundnummer 14827n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* *P. Arru(nti).*

*Publication:* *Vidimus.* FILTZINGER 1972: 16, Taf. 25.3 (P·ARR). GECHTER 1979: 68 no. 17, Abb. 30.5 (P·ARRV).

*Description:* Upper part of a Dressel 2-4 with the stamp on the upper part of one of the sticks of the bifid handles (Figure 10.2-3.1, no. 7).



The stamp was not well impressed over the latter part of the text and we cannot say if the text continues further. The first part is easy to recognize, with a triangular inverse dot after a P and the nexus AR and RV. As only one dot is to be seen, we propose that the name is a duo nomina, a possible P. Arru(nti).

A possible parallel is the fragmentary stamp P·ARR[---], included in the CIL XV 3404 by H. Dressel, who proposed a similar reading.

The fabric seems to be from the Etrurian region.

### 5. THB

*Provenance:* Picenum.

*Dating:* Tiberian-Claudian.

#### a) T·H·B

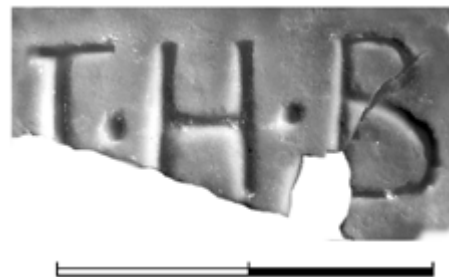
*Find spot:* Fundnummer 1937n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* *T. H() B().*

*Publication:* *Vidimus.* KÜTTER 2008: no. 401, Taf. 25.

*Description:* Small fragment of the upper part of the body and beginning of the neck of a Dressel 6A. Kütter published this stamp as a graffito.



T·H·B is a well-known stamp and this example is similar to several others, with large, deep letters and two circular dots separating them. The person appearing in these inscriptions has been identified as T. Helvius Basila, the father of a legatus under Tiberius and Claudius, who was the owner of an amphora workshop in Picenum, probably around Cupra Marittima in the actual Italian region of Marche.<sup>8</sup>

There are several examples in Castro Pretorio in Rome (CIL XV 2905), a context that must be dated in the 30s or early 40s of the first century AD. The most accurate dating

<sup>6</sup> Carre – Pesavento 2003a: 460-461.

<sup>7</sup> Berni 2017: no. 13; González Cesteros – Tremmel 2015: 348; Séguier 2013: 306-307.

<sup>8</sup> Carre – Pesavento 2003b: 271-272; Fortini 1993: 91-92; Zaccaria 1989: 481 and 483.

comes from Magdalensberg, where this stamp has been found together with a titulus pictum of (vinum) Kalab(rum) of the 34 AD vintage, transferred to an amphora four years later, i.e. in 38 AD.<sup>9</sup>

Recently we have found another example on the German border, securely in the Kops Plateau of Nijmegen.<sup>10</sup>

## 6. HILAR

*Provenance:* North Latium or Etruria.

*Dating:* Augustan.

### a) HILAR

*Find spot:* Fundnummer 1686n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Hilar(i).

*Publication:* GECHTER 1979: 66 no. 9, Abb. 29.5 (HILARI).

*Description:* Rectangular cartouche placed on a rim of a Dressel 1B.



This stamp is well-known on Dressel 1B, presenting some variants. One of them, HILARI appears on Dressel 1B in the Canneto workshop (Terracina, Latium).<sup>11</sup> A fragmented stamp HILAR[---] is mentioned in the epigraphic charter of F. Olmer<sup>12</sup> as coming from La Feniglia workshop in Tuscani too (Orbetello, Grossetto).

Concerning its diffusion, a fragmentary rim with HILA[---] on a Dressel 1B similar to the example from Neuss was found in Clos Saint-Antoine (Fréjus), but it was classified as Pascual 1.<sup>13</sup> In the northern military border in Xanten was found a HILAR[---].<sup>14</sup>

## 7. [---]O

*Provenance:* Central Adriatic.

*Dating:* –

### a) [---]O

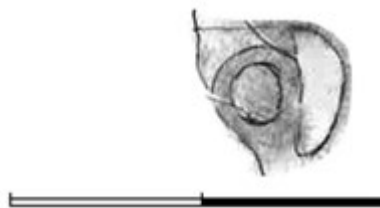
*Find spot:* Fundnummer 10444n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* [---]o.

*Publication:* Vidimus.

*Description:* Small rim fragment with neck of a Dressel 6A (Figure 10.1.1, no. 2).



Only the last letter, an O, is preserved together with the end of what seems to be a rectangular cartouche with rounded edges.

## C. Galliae

### 8. CAP aut CVP

*Provenance:* Lyon Region.

*Dating:* Second half of the first century AD.

#### a) CAP aut CVP

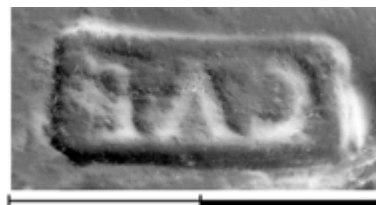
*Find spot:* Fundnummer 143n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Cap() aut Cup().

*Publication:* Vidimus. FILTZINGER 1972: 15, Taf. 24.4 (CVB).

*Description:* Upper part of a Lyon 3B (Figure 7.1.1, no. 3). The text is in placed upside down under the rim.



Retro stamp. Last letter looks like a P, but we are not sure due to the high degree of erosion. The central letter must be read as an A with no. hasta. We cannot see any dots between the letters. Filtzinger published this stamp as CVB and no. retro reading and proposed that the B was partially erased. This letter is partially worn and to us it looks like a P retrograde. At the same time, the shape of the second letter, apparently a V, has a reverse orientation relative to the P, which makes the reading difficult and ambiguous: CAP or CVP. We have opted to read in the first place the stamp as CAP with retro text, but CVP with the inverted P is possible too, because this stamp resembles to a CVP of directly reading found in Augst on a handle of a Lyon 4B.<sup>15</sup> Concerning the chronology, the Lyon 3B was produced from the middle decades of the first century AD.<sup>16</sup>

<sup>9</sup> Bezeczky 1998a: 230; Piccottini 1997.

<sup>10</sup> Berni 2017: no. 7.

<sup>11</sup> Hesnard – Lemoine 1981: 253.

<sup>12</sup> Olmer 2003: 296.

<sup>13</sup> Brentchloff – Rivet 2003: 597 no. 2.

<sup>14</sup> Fitzpatrick 1985: 330, no. III.

<sup>15</sup> Martin-Kilcher 1994: 3673/ST 188.

<sup>16</sup> Desbat – Dangréaux 1997: 77. We would like to thank P. Monsieur for his interesting suggestions about this stamp.



## 9. [---]VLIVS

*Provenance:* Marseille Region.

*Dating:* Augustan-Tiberian.

## a) [---]VLIVS

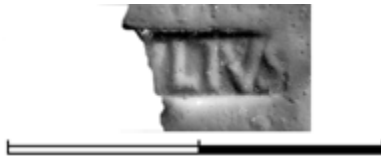
*Find spot:* Fundnummer 4330n, Lager 7.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* [---]Iulius.

*Publication:* *Vidimus*.

*Description:* Upper part of a flat handle with a central groove belonging to a Gauloise 2 (Figure 7.4.1, no. 3). The fabric is burnt sienna in colour, with large golden micaceous inclusions on the surface.



The stamp is in a fragmentary state and the first part is missing. A personal name in nominative is to be read, maybe a [I]Iulius.

We have not found any parallel in the Marseille region, where still in the Augustan period the Greek alphabet, for both Latin and Greek names, was in use.

**D. Hispania Tarraconensis**

## 10. A

*Provenance:* Western Layetania.

*Dating:* End of the first century BC – middle of the first century AD.

## a) A

*Find spot:* Fundnummer 13289n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* A( ).

*Publication:* *Vidimus*.

*Description:* Upper part of a solid spike with a pinkish-russet fabric with some big quartz inclusions (Figure 6.3.1, no. 8).



The height and dimensions of the fragment makes it hard to determine whether it is a Pascual 1 or a later Dressel

3-2. Nevertheless, due to the general shape, it is probably a Pascual 1.

Stamps with a circular cartouche and an A are common on spikes of Layetanian Pascual 1 and Dressel 3, as for example in the Pascual 1 production from *Baetulo* (Badalona).<sup>17</sup> On the other hand, they also occur on Dressel 3, as for example in the La Chrétienne H shipwreck, dated ca. 15-25 AD,<sup>18</sup> and Planier 1, ca. 15 AD.<sup>19</sup>

The fabric seems to be from the area of *Barcino* (Barcelona) and *Baetulo* (Badalona).

## 11. SEXDOMITI

*Provenance:* L'Aumedina (Tivissa, Tarragona), La Canaleta (Vila-seca, Tarragona).

*Dating:* Augustan period.

## a1) SEX·DOMIT[I]

*Find spot:* Fundnummer 14041n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Sex(ti) Domit[i]*.

*Publication:* *Vidimus*. GECHTER 1979: 66 no. 3, Abb. 28.3.

*Description:* Upper part of an Oberaden 74 with complete rim, neck and one handle (Figure 6.3.2, no. 6). The stamp is placed in the middle of the upper part of the neck at the beginning of the handles.



## a2) SEX·DOMITI.

*Find spot:* Fundnummer 14041n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Sex(ti) Domit[i]*.

*Publication:* *Vidimus*. Gechter 1979: 64 no. 2, Abb. 28.2.

*Description:* Upper part of an Oberaden 74 with complete rim, neck and beginning of two handles (Figure 6.3.2, no. 1). The stamp is placed in the middle of the upper part of the neck at the beginning of the handles.



Stamps of Sextus Domitius in Oberaden 74 are found in particular in the Catalan district of Baix Ebre, the

<sup>17</sup> Comas i Solà 1997: no. 12.

<sup>18</sup> Sciallano – Liou 1985: 78, no. 1. Figure 66.

<sup>19</sup> Sciallano – Liou 1985: 19. Figure. 4-5.

l'Aumedina workshop (Tivissa, Tarragona) being the main production centre.<sup>20</sup> A second kiln-site has been found in La Canaleta (Vila-seca, Tarragona) near Tarraco.<sup>21</sup> Probably we are faced with one dominus, belonging to at least two figlinae placed in different territories of the southern coastal Catalan area.<sup>22</sup>

The distribution of this stamp is broadly documented all along the German frontier, in Neuss and sites such as Nijmegen, Oberaden, Haltern, Dangstetten, Basel and Nyon.<sup>23</sup> The precise chronology of Dangstetten (15 – 9 BC), Oberaden (11 – 8/7 BC) and Haltern (9 BC -9 AD) provide the best dating for the distribution of this production in the last quarter of the first century BC and first years of the first century AD.

## 12. EVT

*Provenance:* Can Portell (Mataró, Barcelona).

*Dating:* First quarter of the first century AD.

### a) EVT

*Find spot:* Fundnummer 26035n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Eut()*.

*Publication:* GECHTER 1979: 68 no. 16, Abb. 30.4 (Dressel 1).

*Description:* Short spike of a Layetanian amphora, probably a Dressel 3.



M. Gechter suggested it was an Italian Dressel 1, but there is no doubt it is a Tarraconensian amphora. EVT was a stamp produced in the Can Portell workshop, near Iluro (Mataró, Barcelona) where different Dressel 3-2 variants are documented.<sup>24</sup>

We were unable to examine this piece, but the spike drawn by Gechter is short and fits perfectly with a Dressel 3, suggesting a date in the first quarter of the first century AD.<sup>25</sup>

## 13. PHILODAMVS

*Provenance:* La Canaleta (Vila-seca, Tarragona).

*Dating:* Augustan period.

### a) PHILODAMVS

*Find spot:* Fundnummer 13607n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Philodamus*.

*Publication:* *Vidimus*.

*Description:* Rim and complete neck with the upper beginning of the two handles of an Oberaden 74 (Figure 6.3.2, no. 5). The stamp is placed in the middle of the neck at the beginning of the two handles.



The stamp was not sharply marked. It presents a rectangular cartouche with a cornice. It presents two ligature, the first one is the P with the H and the second is the M with the V.

The production area of PHILODAMVS stamps is around La Canaleta (Vila-seca, Tarragona), in the territory of Tarraco,<sup>26</sup> where SEX·DOMITI is also documented (vide supra no. 11).

At present time the piece from Neuss is the only one of this set documented in the Rhine region. There are some examples in Gaul *Narbonensis* (Rodez, Millau, Ruscino, Ensérune) and *Aquitania* (Bordeaux).<sup>27</sup>

## 14. C·FOVRI

*Provenance:* Southern Catalan coast.

*Dating:* Augustan period.

### a) C·FOVRI

*Find spot:* Fundnummer 17180n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *C. Fouri*.

*Publication:* *Vidimus*. GECHTER 1979: 64 no. 1, Abb. 28.1.

*Description:* Upper part of Oberaden 74 with rim, neck and handles (the left handle is just partially preserved) (Figure 6.3.2, no. 4). Once again, the stamp is placed in the middle of the neck at the beginning of the handles. The fabric is light beige.

<sup>20</sup> Revilla 1993.

<sup>21</sup> Berni 2010: 178, no. 140; Gebellí – Járrega 2011.

<sup>22</sup> Járrega 2016.

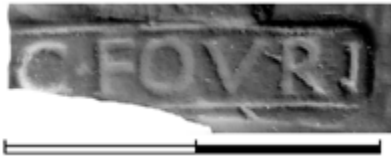
<sup>23</sup> Berni 2017: no. 31; Carreras – González Cesteros 2013; González Cesteros 2014.

<sup>24</sup> Aguilera – Revilla 1994.

<sup>25</sup> Berni 2015.

<sup>26</sup> Berni 2010: 180, no. 143; Gebellí – Járrega 2011.

<sup>27</sup> Bigot 2014; Carreras – González Cesteros 2013: 219; Claustres 1961; Lamour – Mayet 1981; Laubenheimer – Watier 1991.



It is sharply marked and we can clearly recognise a *duo nomina* separated by a triangular dot. The text is inside a rectangular cartouche with cornice.

This piece is the only epigraphic sample known by us for *C. Fourius*. He was probably a person of Italian origin with extensive properties in the coastal area of present day Catalonia.<sup>28</sup> His presence at Neuss together with *SEX·DOMITI* and *PHILODAMVS* suggests a similar chronology.

### 15. GE

*Provenance:* Eastern Layetania.

*Dating:* Second quarter of the first century AD.

a) GE

*Find spot:* Fundnummer 22655n, Lager 6.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Ge()*.

*Publication:* *Vidimus*.

*Description:* Tall, massive spike of a Dressel 2, found together with a bifid handle of the same piece (Figure 6.3.2, no. 7). Together with the stamp a *graffito ante cocturam* with a V is placed on the spike (*cf.* no. 66). The fabric is orange-red in colour.



There is an identical piece in Elna (Pyrénées-Orientales) presenting the same orientation and also with a graffito, in this case an X.<sup>29</sup> It was published as a Pascual 1. Equally, a stamp on a spike from Port-La-Nautique (Narbonne) was published as CE on an unclassified amphora form, with the same fabric as our piece.<sup>30</sup> A similar GE stamp was also found on a Dressel 2 spike in the Petit Congloué shipwreck near Marseille.<sup>31</sup>

The fabric of our piece suggests a source in western Layetania, probably in a workshop of the River Llobregat, south of *Barcino* (Barcelona). The typological features and a presence in the Petit Congloué shipwreck suggest a date in the second quarter of the first century AD.

### 16. IVLITHEOPHIL

*Provenance:* Canet de Mar and Calella (Calella, Barcelona).

*Dating:* Augustan period.

a) IVLI·THEOPHIL

*Find spot:* Fundnummer 3939n, Lager 3.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* *Iuli Theophil(i)*.

*Publication:* *Vidimus*. VEGAS 1975: Taf. 29.2. GECHTER 1979: 68 no. 12, Abb. 29.8.

*Description:* Complete rim of Pascual 1 with neck and beginning of the upper part of the handles (Figure 6.3.1, no. 5). The stamp is placed in the middle of the tall rim. The fabric is dark reddish with abundant large quartz inclusions.



Amphorae with stamps of Iulius Theophilus are dated to the last years of the first century BC and first years of the first century AD, as its presence in Pascual 1 from the Cap del Vol shipwreck, dated between 10 and 5 BC, suggests.<sup>32</sup> It is also found with very early Dressel 3 in the Catalan area.<sup>33</sup>

Several stamps of *Iulius Theophilus* have been found

around Port-la-Nautique in the territory of *Narbo*.<sup>34</sup>

The source would seem to be in northern Layetania, in the area around Canet de Mar and Calella.<sup>35</sup>

The *gens Iulia* is well represented by a group of freedmen on Layetanian Pascual 1 and Dressel 3. The economic activity of this family seems to have covered the coastal territory of the modern province of Barcelona.<sup>36</sup>

<sup>28</sup> Járrega 2016: 84.

<sup>29</sup> Savarese 2011: Figure 16.51.

<sup>30</sup> Bergé 1990: 177, no. 88.

<sup>31</sup> Corsi-Sciallano – Liou 1985: 31. Figures 19-20.

<sup>32</sup> Nieto – Foerster 1980: 174.

<sup>33</sup> Márquez – Molina 2005: no. 169; Pera i Isern 1983.

<sup>34</sup> Bergé 1990.

<sup>35</sup> Martín Menéndez 2015: 45, Figure 3.20; Pera i Isern 1983.

<sup>36</sup> Berni – Carreras 2013: 193 no. 71; De Nicolás *et al.* 2015: 206 no. 6.

17. MPORCI, MPORC

*Provenance:* Baetulo (Badalona).

*Dating:* Augustan.

a) MPORCI

*Find spot:* Fundnummer 10472n.

*Present location:* -

*Reading:* M. Porci.

*Publication:* VEGAS 1975: 72, Taf. 29.4. GECHTER 1979: 68 no. 14, Abb. 30.2.

*Description:* Rim of Pascual 1.



b) MPORC

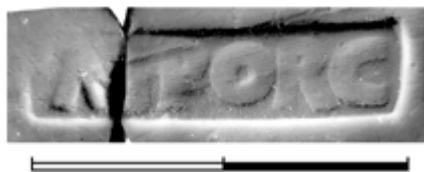
F.P. Fundnummer 17131n + 19719n.

S.P. Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* M. Porci(i).

*Publication:* Vidimus. Vegas 1975: 71, Taf. 29.3 (MPORC). GECHTER 1979: 68 no. 13, Abb. 30.1 (MPORC).

*Description:* Rim of Pascual 1 with light beige fabric (Figure 6.3.1, no. 2).



Two stamps of M. Porci have been found in Neuss. The second, MPORC, was published by M. Vegas, but only the biggest fragment of the stamp with the Fundnummer 19719n. We found in Meckenheim the other part with the Fundnummer 17131n.

M. Porci stamps are well-known on Pascual 1. They were produced in the suburbs of Baetulo (Badalona) and have been well studied by M. Comas.<sup>37</sup>

**E. Hispania Baetica (coast)**

18. Illegible.

P.P. Cadiz Bay.

*Dating:* -

a) [---]

*Find spot:* Fundnummer 21270n, Lager 3.

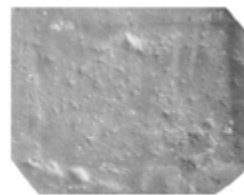
*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Illegible.

*Publication:* Vidimus.

*Description:* Fragment of the upper part of the belly and beginning of the neck of a Dressel 7-11. The stamp is placed on the upper part of the belly.

<sup>37</sup> Comas i Solà 1997.



We could only distinguish the frame of a quadrangular cartouche.

**F. Hispania Baetica (Guadalquivir valley) (Dressel 20)**

19. POLAR

L.P. La Catria.

*Dating:* Flavian period.

a) POLAR

*Find spot:* Fundnummer 28730n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Po(rtus) L. A( ) R( ).

*Publication:* Vidimus.

*Description:* Upper part of a handle and partially preserved neck. The handle profile corresponds to that of Dressel 20 form C, dated to Flavian or Trajanic times.



In this example POLAR is to be read, and not PORLAR. It must be a variant without the L, or this letter is placed in a nexus with the R. There are several examples and variants of this stamp as, for example, POR·L·A·R from La Catria.<sup>38</sup>

We have recently published an identical piece from the Flavian material of the *Canabae legionis* in Nijmegen.<sup>39</sup> The PORLAR were produced in La Catria during the Flavian period, with a varied range of forms and texts. One stamp POLAR is known for two examples of Dressel 20 form B found in Saint-Romain-en-Gal.<sup>40</sup> These two amphorae of form B and the word *portus* indicate an early Flavian date for the first production.<sup>41</sup>

20. ACIRGI

*Provenance:* -

*Dating:* End of 2nd – beginning of 3rd century AD

a) ACIRGI

*Find spot:* Neuss, 'Südwestlich der Ortslage Hoeeningen'.

<sup>38</sup> Remesal 1977-78: no. 5a.

<sup>39</sup> Berni 2017: no. 40b.

<sup>40</sup> Rouquette 1992.

<sup>41</sup> Berni 2008: 164 ff.

*Location:* Private collection.

*Reading:* (*ex figlinis*) *Acirgi(anis?, – tanis?)*.

*Publication:* EUWENS *et al.* 1981, 546, Figure 20.

REMESAL 1997, no. 51k.

*Description:* The stamp is found on a handle curve.



This is a very well-known production of the Severan period with a broad distribution. We have recently documented one similar stamp in the Roman settlement of *Ulpia Noviomagus* (Nijmegen).<sup>42</sup>

The exact placement of this workshop in the Guadalquivir valley has not yet been located,<sup>43</sup> but some finds in La Catria<sup>44</sup> and Adelfa,<sup>45</sup> suggest that area.

## 21. ATITTAE

*Provenance:* La Ramblilla.

*Dating:* Nero-Vespasian.

a) ATITTAE

*Find spot:* Fundnummer 28362n.

*Present location:* Depot of the LVR-LandesMuseum. Bonn in Meckenheim.

*Reading:* *Atittae*

*Publication:* *Vidimus*.

*Description:* Single handle of Dressel 20 Form B.



The indigenous cognomen Atitta has been seen at several workshops on both sides of the Guadalquivir between Roman municipia of *Axati* (Lora del Río, Seville) and *Celti* (Peñaflor, Seville). We have found such stamps solely at the La Ramblilla, La Mallena and El Berro II workshops. Associated with Brocchus in Las Sesenta and El Berro II; and with Rufinus in La Mallena.<sup>46</sup>

Our variant ATITTAE on a Dressel 20 form B is dated to the third quarter of the first century AD.

## 22. BROCODV

*Provenance:* La Catria, Los Mochales, Los Guerras, Álamo Alto, Las Sesenta, El Berro II.

*Dating:* Nero – Vespasian.

a) BROCODV

*Find spot:* ‘Gef. im Praetorium’ (Lehner 1904);

‘Grimmlinghausen’ (CIL XIII). Koenenlager.<sup>47</sup>

*Present location:* Bonn Provinzial Museum. Nummer 6447.

*Reading:* <Q. Servi(li, –)> *Brocchi (et) Od(uciae?)*

*Publication:* KLEIN 1889: 113, n° 6 (ROCODV). CIL

XIII 10002.12h. LEHNER 1904: 357, n° 4d, Taf. XXXVI

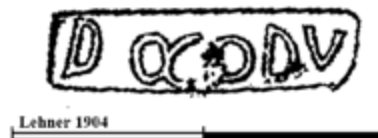
Figure 2. RIESE 1914: n° 4531a. CALLENDER 1965: no.

205h. BAKKER – GALSTERER-KRÖLL 1975: 236, no. 521

(D(I)O.DV? oder A.OSODV?). REMESAL 1997: no. 241b

(POROCODV). KÜTTER 2008: no. 267.

*Description:* In the publication of H. Lehner this stamp is placed in the handle near a *post cocturam* graffiti of two numbers, VI and V (*cf.* no. 92).



The amphorae stamped Q. Servilius Brocchus is found in several places near Mesa de Lora (Lora del Río, Seville). Stamps have been found in La Catria workshop,<sup>48</sup> in Los Mochales, Los Guerras, Álamo Alto, Las Sesenta, and El Berro II.<sup>49</sup>

We have already written about the stamp reading and the role of the person mentioned within the clan of the Servilii from the Guadalquivir valley.<sup>50</sup>

The example from Neuss has the ligature BR at the beginning highly eroded. The same variant, but with the complete text, has been found in Nijmegen.<sup>51</sup>

It has been found in a good context dating to the third quarter of the first century AD.<sup>52</sup>

## 23. LCFPCO

*Provenance:* Adelfa, Juan Barba and Guadajoz

*Dating:* End of the first century AD, beginning of the second AD.

a) L·C·F·P·C·O

*Find spot:* ‘Grimmlinghausen’.

*Present location:* ‘Neuss ap. Schramm’

*Reading:* L. C( ) F( ) P(ortus) C(armonensis?) O( ).

*Publication:* CIL XIII 10002.143. REMESAL 1997, no. 66d.

*Description:* We have not seen this stamp and we did not find any mention of its position or form.

<sup>47</sup> Küttler 2008.

<sup>48</sup> Remesal 1977-78: no. 48d-n.

<sup>49</sup> Ponsich 1979: nos 67, 75, 71, 128, 91.

<sup>50</sup> Berni 2008: 190-194.

<sup>51</sup> Remesal 1986: no. 191 = Berni 2017, no. 62.b2.

<sup>52</sup> Berni 2017: no. 62; Dangréaux – Desbat 1988; Fernández Izquierdo *et al.* 2007; Martin-Kilcher 1987: 92.

<sup>42</sup> Berni 2017: no.42.

<sup>43</sup> Berni 2008: 168.

<sup>44</sup> Remesal 1977-78: no.16a.

<sup>45</sup> Moros – Berni 2011: 37. Figure 6.1.

<sup>46</sup> Berni 2008: 346; Ponsich 1979: 50, no. 89.

**L · C · F · P · G O**

This stamp covers three main elements of the Baetican epigraphical system. The first is the person *L. C( ) F( )*, followed by the mention to the *portus Carmonensis* or *Cananiensis*. The last letter, O, is the start of the name of a dependent person, probably an *offinator*.<sup>53</sup> We have documented the same variant in the *Canabae Legionis* of Nijmegen on a handle of form C-D.<sup>54</sup>

The source is located on the River Corbones, at its confluence with the Guadalquivir.<sup>55</sup>

#### 24. LCM

*Provenance:* La Catria.

*Dating:* Marcus Aurelius.

a) LCM

*Find spot:* 'Grimmlinghausen'.

*Present location:* 'Düsseldorf ap. Ph. Braun'

*Reading:* L. C( ) M(y...).

*Publication:* CIL XIII 10002.150c. REMESAL 1997: no. 73(2).

*Description:* We have not seen this stamp and we did not find any mention of its position or form.

**L C M**

The source of this stamp could be around La Catria, where two pieces with deep letters were collected by Remesal.<sup>56</sup>

It has been found at the Monte Testaccio,<sup>57</sup> in a chronological horizon dating to the period of Marcus Aurelius.

There is a variant, LCMY, found in Haza del Olivo<sup>58</sup> that suggests a later date (CIL XV 2755).

#### 25. QCR

*Provenance:* –

*Dating:* Neronian.

a) Q · C · R ·

*Find spot:* Fundnummer 29521n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Q. C( ) R( ).

*Publication:* Vidimus.

*Description:* Single handle of Dressel 20 form B.



The example from Neuss presents three triangular dots, one after each letter.

The stamp QCR is one of the best known and most diffused of the Neronian period,<sup>59</sup> associated with the name Q. *Connius Verna* in Saint-Colombe-les-Vienne.<sup>60</sup>

Its source is not yet known, although one example has been found in the workshop of the 'Parlamento de Andalucía' in the old town of Seville.<sup>61</sup>

#### 26. CALPVRNIANI? (CALPVRIANI)

P.P. Madre Vieja II.

*Dating:* Flavian.

a) CALPVRNIA[NI]? (CALPVRIA[NI])

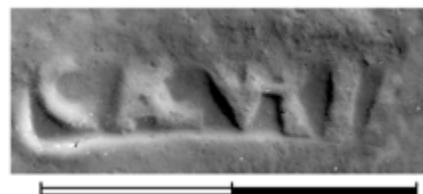
*Find spot:* Fundnummer 28343n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Calpurnia[ni] ?

*Publication:* Vidimus.

*Description:* Upper part of a handle of Dressel 20 form B or C.



The best text preserved of this stamp type was found in Saint-Romain-en-Gal,<sup>62</sup> presenting three ligatures: ALP, VR, NI. The same variant was recorded by Ponsich in the workshop of Madre Vieja II.<sup>63</sup>

It is a Flavian production of the *figlina Calpurniana*. Stamps of this workshop are found at the La Ramblilla y Madre Vieja I-II sites, all of them in the left bank of Guadalquivir, in the territory of *Hispalis*.<sup>64</sup>

Stamps of *Calpurniana* are known with different developments, some are quite simple and others present more than one word or name. The most common form presents different names of persons as a suffix, subordinate to the *figlina*.<sup>65</sup>

Our variant from Neuss is not easy to read. It could be CALPVRIA[NI] or CALPVRNIA[NI].

<sup>53</sup> Berni 2008: 256.

<sup>54</sup> Berni 2017: no. 68.

<sup>55</sup> Moros – Berni 2011.

<sup>56</sup> Remesal 1977-78: no. 20a.

<sup>57</sup> CIL XV 2754a-b.

<sup>58</sup> Berni 2008: 337-339; Ponsich 1979: 46, no. 83.

<sup>59</sup> Rodríguez Almeida 1977: Figure 20.1.

<sup>60</sup> Liou 2003.

<sup>61</sup> Berni 2008: 227; García Vargas 2000.

<sup>62</sup> Étienne – Mayet 2004: no. 298a.

<sup>63</sup> Ponsich 1979: 51, no. 92.

<sup>64</sup> Berni 2008: 171 and 346.

<sup>65</sup> Berni 2008: 347, tab. 72.

All parallels of this stamp type are on Dressel 20 form B and C. We suggest a chronology in the Flavian period.

## 27. CAPXIV

*Provenance:* Between Cortijo Nuevo and El Sotillo workshops.

*Dating:* Second quarter 3rd century AD.

a) CAPXIV

*Find spot:* 'Grimmlinghausen'.

*Present location:* –

*Reading:* Cap( ) XIV.

*Publication:* CIL XIII 10002.73. CALLENDER 1965: no. 245. REMESAL 1997: no. 15.

*Description:* –

**CAP XIV**

We can localize the production of this stamp in Cordoba, in our sector 3,<sup>66</sup> due to the presence of the stamp FQXIII in Cortijo Nuevo and CAP + OLEASR in El Sotillo.

This kind of mixed stamp with a number (X, XIII, XIV) sometimes together with a *cognomen*, and others with *tria nomina*, seems typical of the territory of Corduba. We know similar *tituli picti* from the middle of the 2nd century AD, but these stamps date to the principate of Caracalla.<sup>67</sup>

## 28. IIIENNIIORIVLSAE

*Provenance:* Huertas del Río.

*Dating:* Hadrian-Antoninus Pius.

a) [IIIENNIIOR]IVLSAE

*Find spot:* Neuss.

*Present location:* Bonn Mus. prov. n. 7128.

*Reading:* [trium Ennior(um)] Iul(iorum) Sae(nianensia).

*Publication:* LEHNER 1904: 358, no. 4p, Taf. XXXVI, Figure 15. CALLENDER 1965: no. 1179 (MSN). REMESAL 1997: no. 98c (IIIENNIIORIVLSAE).

*Description:* –



The singular text form presenting small and tight-packed letters belongs to the IIIENNIIORIVLSAE type, whose production place is in Huertas del Río.<sup>68</sup>

This stamp presents the association formed by *trium Ennior(um)* Iul(iorum) always preceding the name of the *figlina Saenianensis*, documented in Huertas del Río and quite active under Trajan and other Antonine emperors.<sup>69</sup>

<sup>66</sup> Berni 2008: 519.

<sup>67</sup> Berni 2008: 187.

<sup>68</sup> Berni 2008: 357-362; Ponsich 1979: 43 no. 79; Remesal 1977-78: 113.

<sup>69</sup> Berni 2008: tab. 79.

The variant IIIENNIIORIVLSAE is found at the Monte Testaccio at the beginning of the reign of Antoninus Pius or perhaps at the end of Hadrian's rule.<sup>70</sup>

## 29. LFO

*Provenance:* –

*Dating:* Mid first century AD – mid second century AD.

a) L·F·O

*Find spot:* Neuss.

*Present location:* 'Neuss mus.'

*Reading:* L. F( ) O( ).

*Publication:* CIL XIII 10002, 223d ('Rein Stationsorte p. 18'). Callender 1965: n° 856d.

*Description:* –

**L·F·O**

Under LFO are hidden at least two homonymous sets of stamps produced at different moments. The oldest is present already on Dressel 20s from the mid first century AD.<sup>71</sup> The latest is from the first half of the second century AD.<sup>72</sup> We have not seen this stamp and rely on the drawing in CIL XIII. For this reason we cannot propose any dating for our piece.

## 30. PHILO

*Provenance:* –

*Dating:* Claudian.

a1) PHILO

*Find spot:* Fundnummer 29766n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Philo(cali, –).

*Publication:* Vidimus.

*Description:* Handle of a Dressel 20 A



a2) PHILO

*Find spot:* Fundnummer 7196n, Lager 7.

*Present location:* Depot des LVR-LandesMuseum Bonn.

*Reading:* Philoc(ali).

*Publication:* Vidimus.

*Description:* Handle of Dressel 20 form A, broken at the middle of the stamp.



<sup>70</sup> CIL XV 2816d ; Blázquez – Remesal eds. 2003: 875l-m.

<sup>71</sup> Étienne – Mayet 2004: no. 508i.

<sup>72</sup> Berni 2008: 231.

Stamps PHILO are present in the Port-Vendrés II shipwreck, dated to 41-42 AD.<sup>73</sup> Their source in southern Spain is still unknown.

The interpretation as *Philoca(us)* comes from the most developed variant PHILOCAL found in the Vienne Museum in Dressel 20 A,<sup>74</sup> placed on the lower part of the handle at its start.

Variant a2 of Neuss was found in the same archaeological context as the stamp C·SEMPOL (cf no. 42.b), the same as in Port-Vendrés II.

### 31. MFLAVIT

*Provenance:* –

*Dating:* Julio-Claudian or early Flavian.

a) MFLAVIT

*Find spot:* Neuss.

*Present location:* Bonn Mus. prov. no. 5440.

*Reading:* *M. Fl(avi) Avit(i) vel M. Fla(vi) Vit(alis, –) vel M. Flavi T(ituri).*

*Publication:* Klein 1889: 113, n° 9 (MFLAVIT). CIL XIII 10002, 231 (MFLAVITI). LEHNER 1904: 357, no. 4e, Taf. XXXVI Figure 3. CALLENDER 1965: n° 1089, Figure 11.9. REMESAL 1997: no. 142a.

*Description:* –



This piece is an *unicum*. Perhaps a similar example was found in Nida (Frankfurt am Main, Hessen) with comparable writing but only with MFLAVI. This was on a Dressel 20 A or B.<sup>75</sup> However, we cannot confirm it is the same person mentioned because there is the variant MFLAVIE from Rottweil on a Dressel 20 of Claudian period,<sup>76</sup> for a person with a different *cognomen*. A third possible reading associates our example with the stamp set M·FLAVI·TITVRI from the Mingaobez workshop,<sup>77</sup> but it is dated to the late Flavian-Trajan period.

It is the absence of punctuation marks on the Neuss example that makes more than one interpretation possible.

### 32. MIAPMA

*Provenance:* – La Catria?

*Dating:* Trajanic-Hadrianic.

a) MIAPMA

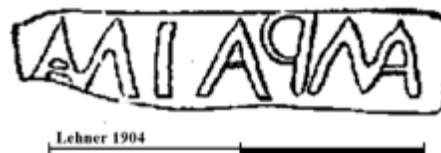
*Find spot:* Neuss.

*Present location:* Bonn Mus. prov. no. 10351.

*Reading:* *M. I( ) A( ) P(ortus) Ma( ).*

*Publication:* CIL XIII 10002, 327. LEHNER 1904, 357, no. 4h, Taf. XXXVI Figure 6. CALLENDER 1965, n° 1107c, fig. 11.14. REMESAL 1997, no. 158a.

*Description:* –



The stamp MIAPMA seems comprise the three most important parts of the Dressel 20 epigraphic system, that is, *tria nomina* + production place (*portus*) + *cognomen* of a dependent.<sup>78</sup> It must be part of the stamps of *M. I( ) A( )* that present various endings.

The variant MIAPMA was documented together with MIAPC in El Marchante,<sup>79</sup> a site located far from the ancient bank of the Guadalquivir, at a crossroads with good communications with Mesa de Lora and the mouth of the River Genil.<sup>80</sup>

El Marchante is not considered a Dressel 20 kiln-site. The stamps found there by Ponsich seem to have come from other places and the amphora material was reused for other purposes. Nevertheless, the chronological homogeneity of the epigraphic ensemble, dated to between Trajan and Hadrian, is evidence that they were collected at the same time.

This stamp set is considered to be of Flavian-Trajanic date, because of the handle profile.<sup>81</sup>

### 33. MIM

*Provenance:* La Catria, Los Guerras.

*Dating:* Claudius-Nero.

a) M·I·M

*Find spot:* 'Gef. im Praetorium' (Lehner).

'Grimmlinghausen' (CIL XIII)

S.P. Bonn Mus. prov. no. 7275.

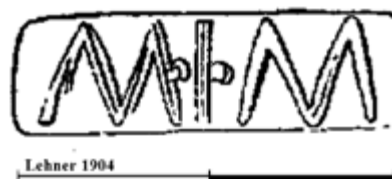
*Reading:* *M. I( ) M(opsi?).*

*Publication:* KLEIN 1891, 48, c2. CIL XIII 10002.263g.

LEHNER 1904, 357, no. 4f, Taf. XXXVI Figure 4.

CALLENDER 1965, no. 1114. REMESAL 1997, no. 165i.

*Description:* –



<sup>73</sup> Colls *et al.* 1977 : 32, no. 7.

<sup>74</sup> Étienne – Mayet 2004 : no. 941.

<sup>75</sup> Remesal 1986: no. 119 = Ehmig 2007b, T. 29.223

<sup>76</sup> Remesal 1997: no. 141.

<sup>77</sup> Ponsich 1979: 155, no. 13.

<sup>78</sup> Berni 2008: 198-199, Figure 105.

<sup>79</sup> Ponsich 1979: 51, no. 93.

<sup>80</sup> Berni 2008: 344.

<sup>81</sup> Étienne – Mayet 2004: no. 607-609.



Stamps MIM on Dressel 20 are not easy to date if the formal development of the amphora is unknown. These three initials letters of a *tria nomina* are common to various persons from different periods.<sup>82</sup>

Nonetheless, the form of the Neuss stamp, presenting thin letters and characteristic dots, is exactly the same as one found in Mainz on a Julio-Claudian Dressel 20.<sup>83</sup>

The Julio-Claudian MIM could be a short variant of MIMOPSI, produced in the Los Guerras workshop,<sup>84</sup> near La Catria.<sup>85</sup> In Augst one such is dated *ca.* 50-70 AD.<sup>86</sup>

#### 34. QIMF

*Provenance:* Tierras del Judío.

*Dating:* Antoninus Pius.

a) Q·I·M[F]

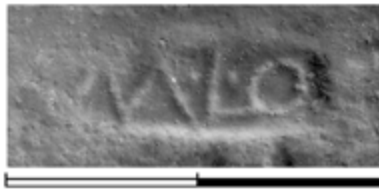
F.P. Fundnummer 2168n, Lager 6-7.

S.P. Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Q. I( ) M( ) [(ex figlinis?) F( )].

*Publication:* *Vidimus*.

*Description:* Fragment of handle of Dressel 20 form D.



Retro stamp with thin letters separated by two small dots. The left part of the cartouche is not finished. We think there must have existed at least one letter more and place this stamp within the QIMF series.

This set of stamps was produced in the Tierras del Judío workshop at the beginning of Antoninus Pius' rule.<sup>87</sup> In Monte Testaccio all data are *ca.* 138-145 AD.<sup>88</sup>

#### 35. LISILVESTRI

*Provenance:* Las Delicias.

*Dating:* End second century AD – beginning of third AD.

a) LISILV/ESTRI

*Find spot:* Fundnummer 6745n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* L. I( ) Silvestri.

*Publication:* KÜTTER 2008: no. 530.

*Description:* Kütter did not publish any drawing of the handle. In the edge of the piece there is a *graffito post cocturam* with a name (*cf.* no. 122).

The variant LISILV/ESTRI in two lines was found by Bonsor in the Las Delicias workshop.<sup>89</sup> After the evidence of Monte Testaccio, we have suggested a late second or early third century AD as possible dating.<sup>90</sup> In the last years excavations at Monte Testaccio have shown the presence of three pieces in dumps dated to AD 207.<sup>91</sup>

The person named on the stamp seems to have been a relative of *L. Iunius Melissus*, whose stamps have been found in Las Delicias also. He stamp is dated to the Severan period.

#### 36. LIT

*Provenance:* Álamo Alto.

*Dating:* Severan.

a) LIT

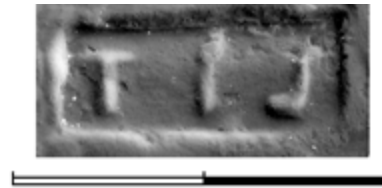
*Find spot:* Fundnummer 28489n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* L. I( ) T( ).

*Publication:* *Vidimus*.

*Description:* Complete handle with neck of Dressel 20 form E-F.



The origin of this production is placed in Álamo Alto,<sup>92</sup> a site southwest of Los Mochales, in front of Lora del Río to the north and east of 'Lora la Vieja'.

Early finds of Heinrich Dressel in Monte Testaccio with *litterae* G, K and L should be dated in the last quarter of the second century AD (CIL XV 2947). However, recent excavations in Monte Testaccio have shown a major quantity of LIT variants in deposits dated in 207, 208, 210 and 214 AD.<sup>93</sup>

The variant found in Neuss is retro and the dots have disappeared. The same matrix has been used as one example found in Monte Testaccio and dated to 207 AD.<sup>94</sup>

#### 37. LIVNIMELISSI

*Provenance:* Las Delicias.

*Dating:* *Ca.* 220-224 AD.

a) L·IVNIM/ELIS[·SI]

*Find spot:* 'Gef. wie f.' (LEHNER 1904).

'Grimmlinghausen' (CIL XIII).

S.P. Bonn Mus. prov. no. 7276.

*Reading:* L. Iuni Melissi aut Melis(si) Si( ).

<sup>82</sup> Berni 2008: 131.

<sup>83</sup> Ehmig 2003: no. 102.1.

<sup>84</sup> Ponsich 1979: 40, no. 75.

<sup>85</sup> Remesal: 1977-78.

<sup>86</sup> Martin-Kilcher 1987: 64.

<sup>87</sup> Berni 2008: 402; Ponsich 1979: 127, no. 141.

<sup>88</sup> Blázquez – Remesal eds. 2003: no. 885.

<sup>89</sup> Bonsor 1931: 32, no. 76.

<sup>90</sup> Berni 2008: 403.

<sup>91</sup> Blázquez – Remesal eds. 2010: no. 372.

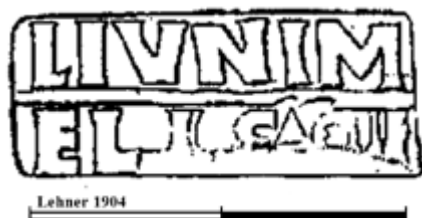
<sup>92</sup> Berni 2008: 342; De la Peña 1967, 129-132; Ponsich 1979: 36, no. 71.

<sup>93</sup> Blázquez – Remesal eds. 2010: no. 373.

<sup>94</sup> Blázquez – Remesal eds. 2010: no. 3731.

*Publication:* KLEIN 1891: 48, c1 (LIVNIM/FLIFABI).  
CIL XIII 10002.296h. LEHNER 1904, 357, no. 4g, Taf.  
XXXVI Figure 5. CALLENDER 1965, no. 879a. REMESAL  
1997, no. 189a(4).

*Description:* –



Observing the text layout in two lines and the letters within it, the stamp belongs to the L·IVNIM/ELIS·SI from the Las Delicias workshop.<sup>95</sup>

This variant, with a decorative dot dividing the two S, has been also found in Ladenburg and Zugmantel in the upper Rhine, linked to FSCIM/NIANO – a stamp that gives his name to the *figlina*.<sup>96</sup>

In Monte Testaccio our stamp appears in deposits dated to between 220 and 224 AD.<sup>97</sup>

### 38. LM[---]

*Provenance:* –

*Dating:* Antoninus Pius.

a) LM[---]

*Find spot:* Fundnummer 6717n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* L. M[---].

*Publication:* Vidimus.

*Description:* Fragment of the upper part of a Dressel 20 form D. On the other handle there are four parallel incisions forming a *post cocturam graffito* (cf. no. 83).



Other variants of the same period with a similar design are also attested, as for example the stamp LMA from Faro<sup>98</sup> or the LMVE set from Monte Testaccio dated to ca. 145 AD.<sup>99</sup>

### 39. MAR

*Provenance:* –

*Dating:* Antoninus Pius.

a) MAR

*Find spot:* Fundnummer 28468n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Mar( ) vel M. A( ) R( ).

*Publication:* Vidimus.

*Description:* Upper part of a handle and beginning of the neck. The handle profile is typical of the Antonine production (Dressel 20 form D). A *post cocturam graffito* with an X cuts across the beginning of the cartouche (cf. no. 109).



It is difficult to determine which stamp family our example belongs to, because there are several sets of stamps in the long production period of the Dressel 20.

The style of the letters, the size and the chronology of the handle form, together with some parallels, have helped us to propose an appropriate identity to our handle. The best parallel is an amphora found in Bavay with an example of Dressel 20 form D.<sup>100</sup>

We cannot establish the definite production area of the stamp MAR in southern Spain because we have more than one set of stamps.

### 40. LSPYR

*Provenance:* –

*Dating:* Second quarter of the first century AD.

a) L·S·P[YR]

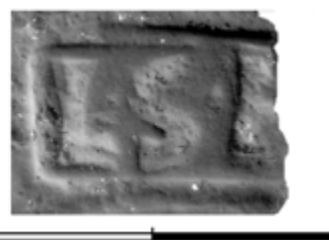
*Find spot:* Fundnummer 29761n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* L. S( ) P[yr( )].

*Publication:* Vidimus.

*Description:* Upper part of a handle with neck. The handle typology is related to Dressel 20 form A.



<sup>95</sup> Berni 2008 : 426-432; Mauné *et al.* 2014.

<sup>96</sup> Wiegels 2000: 103-105; Remesal 1986: no. 156a(2).

<sup>97</sup> Blázquez – Remesal eds. 2001: no. 477b.

<sup>98</sup> Viegas *et al.* 2013: 734. Figure 4.17b.

<sup>99</sup> CIL XV 3017a-b; Blázquez – Remesal eds. 2003: no. 895.

<sup>100</sup> Laubenheimer – Marlière 2010: no. 72a.

The formal development of the handle is essential to exclude other stamps such as the Antonine ones LSPBOEQ documented in Guadajoz, Adelfa and the Juan Barba workshops.<sup>101</sup>

The text can be completed thanks to a recent find in the lower Rhône valley of a stamp L·S·PYR with a similar form, letters and dots.<sup>102</sup> Other parallels are the fragmentary stamp [L·S]·PYR from Sheepen (Colchester, Essex) dated before 60 AD<sup>103</sup> and a find with no. context from Monte Testaccio.<sup>104</sup>

We do not have any documentation about this stamp in southern Spain.

#### 41. ROSAENIANE

*Provenance:* Huertas del Río.

*Dating:* Flavian.

a) [RO·S]AENIANE

*Find spot:* 'Grimmlinghausen' (CIL XIII).

*Present location:* Bonn Mus. prov. no. 5662.

*Reading:* [Ro( ) Saeni]ane(nsia).

*Publication:* Klein 1889: 113, no. 13 ([---]ENANE). CIL XIII 10002.619. LEHNER 1904, 358, no. 4n, Taf. XXXVI Figure 13. CALLENDER 1965, no. 1559a ([...]ENIANE).

REMESAL 1997, no. 310c ([SAE]NIANE).

*Description:* –



The conserved part is more than enough to recognize a production of the *figlina Saenianensis* in Huertas del Río,<sup>105</sup> but from a different phase than the stamp IIIENNORIVLSAE (*vide* no. 28).

The reading of the missing part can be solved thanks to a find from the *canabae legionis* in Nijmegen with RO·SAENIANE dating from the Flavian period.<sup>106</sup>

#### 42. LSELSSEN

*Provenance:* Acebuchal and La Rambla.

*Dating:* Trajanic-Hadrianic.

a) LSELSSEN

*Find spot:* 'Gef. im Praetorium' (LEHNER).

*Present location:* Bonn Mus. prov. no. 7744.

*Reading:* L. Sel(i, – ici) Sen(icionis, – iciani) aut L.

Se(rvili) L(upi) Sen(tiana) ?

*Publication:* CIL XIII 10002, 563 (ILSLSSEN). LEHNER 1904, 357, no. 4k, Taf. XXXVI Figure 8. CALLENDER 1965, no. 1592c, fig. 16.49 (SENL.SL or SENIL.

<sup>101</sup> Berni 2008: 260; Moros – Berni 2011.

<sup>102</sup> Bigot *et al.* 2014: 762-763, no. 35.

<sup>103</sup> Funari 1996: no. 190.

<sup>104</sup> CIL XV 3154.

<sup>105</sup> Ponsich 1979: 43 no. 79; Remesal 1977-78: 113; Berni 2008: 357-362.

<sup>106</sup> Berni 2017: no. 157h.

SL). BAKKER – GALSTERER-KRÖLL 1975, 236, no. 523 (LSLSSEN(?) oder ILSISEN(?)). REMESAL 1997, no. 300 (LSELSSEN).

*Description:* Lehn's drawing shows the stamp to be placed in the handle curvature.



The text form suggests that it belongs to the LSELSSEN from the Acebuchal and La Rambla workshops area.<sup>107</sup> Our variant from Neuss with a retro N is not known in any other place, so far as we know. Lehner's drawing is not accurate for the beginning of the text.

Stamps of this person are dated *ca.* 120-125 AD in Mâcon.<sup>108</sup> Other scholars have suggested a Flavian-Trajanic horizon, based on the handles profiles.<sup>109</sup> We propose the first quarter of the second century AD as probably its production moment.

#### 43. CSEMPPOLYCLITI, CSEMPOL, POLYCLITI

*Provenance:* –

*Dating:* Claudian.

a) [C]SEMPPOLYCLITI

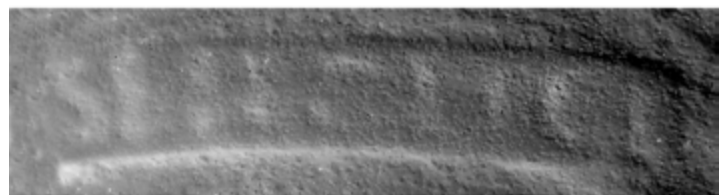
*Find spot:* Fundnummer 1771n, Lager 7.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* [C.] Semp(roni) Polycliti.

*Publication:* Vidimus.

*Description:* Almost complete handle. The stamp is not well imprinted, but we can read the inscription text.



b) C·SEMPOL

F.P. Fundnummer 7196n, lager 7.

S.P. Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* C. Sem(proni) Pol(ycliti).

*Publication:* Vidimus.

*Description:* Large amphora fragment with the belly and beginning of the neck, as well as handles. It belongs to Dressel 20 form A. The stamp is placed on the upper part of the handle and is interrupted by a *post cocturam* graffiti X (*cf.* no. 110). In the lower part of the handle

<sup>107</sup> Berni 2008: 339; Chic 1985: 62.

<sup>108</sup> Cognot 1983: 39; Silvino 2003: 19.

<sup>109</sup> Étienne – Mayet 2004: no. 1152.

other *post cocturam graffito* formed by six thin parallel lines is also found.



c) PO[LYCLITI]

*Find spot:* Fundnummer 3660n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Po[lycliti].

*Publication:* Vidimus. FILTZINGER 1972: Taf. 25.4.

*Description:* Amphora fragment of Dressel 20 form A comprising by a rim, neck and upper part of a handle (Figure 6.1.4, no. 8).



The classification of this amphora as a very early Dressel 20 and the design of the pointed P with a small 'head' supports the reading as POLYCLITI.

The variants CSEMPPOLYCLITI y POLICLYTI are also found in the Port-Vendres II shipwreck, dated to ca. AD 41/42. The other variant presented in Neuss, C·SEMPOL, has been found in Augst also on a Dressel 20 form A.<sup>110</sup>

*C. Sempronius Polyclitus* is a well-known amphora stamp, one of the most representative of the Claudian period,<sup>111</sup> but the location of his workshop in southern Spain still remains unknown.

Some stamps varianst were collected together with the stamp PHILO in the same archaeological context.

44. LVIVCV, LVIVC

*Provenance:* Las Delicias.

*Dating:* Second quarter of the first century AD.

a) L·V[·]IVC·

*Find spot:* 'Grimmlinghausen' (CIL XIII).

*Present location:* Bonn Mus. prov. n. 6700.

*Reading:* L. V( ) Iucu(nde).

*Publication:* CIL XIII 10002.513. LEHNER 1904: 357, no. 4i, Taf. XXXVI Figure 7. CALLENDER 1965, no. 985, fig. 10.25. REMESAL 1997, no. 335.

*Description:* –

<sup>110</sup> Martin-Kilcher 1987: ST 112e.

<sup>111</sup> Berni 2017: no. 165; Étienne – Mayet 2004 : no. 1154.



b) L·V·IVC

*Find spot:* Fundnummer 29720.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* L. V( ) Iuc(undi).

*Publication:* KÜTTER 2008, no, 798.

*Description:* Stamp on a handle that also presents a *post-cocturam graffito* (cf. no. 79). Kütter did not publish any drawing.

The design of our variant, with thin letters and dots separating the *tria nomina* fits with the stamp found in the latest excavation in the Las Delicias workshop,<sup>112</sup> that was found in the same layer as the stamps LVIVC and IVCVNDI.

Las Delicias is located on the right bank of the River Genil, close to the Roman colony of *Astigi*.<sup>113</sup>

The production of L. V( ) *Iucundus* dates from the earliest stages of the *figlina*, during the second quarter of the first century AD. This early chronology is also supported by the finds in the Castro Pretorio.<sup>114</sup>

45. VRITTIFES (VRITIFES)

*Provenance:* La María ?

*Dating:* Neronian-Vespasianic.

a) VRITTI·FES (VRITI·FES)

*Find spot:* Fundnummer 28520n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* Uritti(ana) Fes( ).

*Publication:* Vidimus. KÜTTER 2008: no. 775 (TROPHIS?).

*Description:* Handle of Dressel 20 form B (fig. XXX). It presents a *post cocturam graffito* of capacity (cf. no. 103).



This stamp indicates the *figlina* Urittiana and dates to the Neronian-Vespasianic period.<sup>115</sup> Their stamps present mixed forms with the name of the *figlina*'s owner and a

<sup>112</sup> Bourgeon *et al.* 2016 : Figure 6 no. 21.

<sup>113</sup> Berni 2008: 426 ff; Mauné *et al.* 2014.

<sup>114</sup> CIL XV 2960.

<sup>115</sup> Berni 2008: 185.

large list of persons, probably most of them *officinatores*. In our example it is a *Fes()* who seems to have been the *offinator*.

The location of this *figlina* in the Guadalquivir Valley is still unknown. Recently, it has been suggested to be the La María workshop, where stamps L·VR·F *vel* L·VR·E, with VR in ligature have been found. It could be the *tria nomina* of the famous *Uritius*.<sup>116</sup>

#### 46. LVALS

*Provenance:* –

*Dating:* Tiberius-Caligula.

a) L·VAL·[S].

*Find spot:* Fundnummer 29932n.

S.P. Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* L. Val() [S(a...)]

*Publication:* *Vidimus*. KÜTTER 2008, no. 814 (L·VAL).

*Description:* Upper part of handle and beginning of the neck of Dressel 20 form A.

Above the stamp on the upper part of the handle are three parallel short incisions, forming a *post cocturam graffiti* (cf. no. 78).



The particular ligature VAL, makes possible to restore the text as L·VAL·S. This set of stamps is known by the versions LVALS and LVALSA on very early Dressel 20 A.<sup>117</sup> The kind of letters and the dot system are similar to the L·VAL·CHAE from Cortijo del Algarrobo (Écija, Seville).<sup>118</sup> However, this late set is known in Avenches at a later moment, around the end of the first century AD.<sup>119</sup>

Some words must be said about the stamp L·VAL·S from the ‘*vide sanitaire*’ of Sainte Colombe, that still preserves a *titulus* α with a value of 68 *librae* (22,26 kg).<sup>120</sup> The profile of the upper fragment of the body is almost rounded, something that permitted the placement of our stamp in the 30s of the first century AD, being the earliest stamp on a Dressel 20 found in Neuss.

There is no evidence of the source in southern Spain.

#### 47. LVALTROPHIMI

*Provenance:* Close to Mesa de Lora.

*Dating:* Neronian – Vespasianic.

<sup>116</sup> Moros 2014: 793.

<sup>117</sup> Étienne – Mayet 2004: no. 1272.

<sup>118</sup> Ponsich 1979: 75, no. 190.

<sup>119</sup> Schüpbach 1983.

<sup>120</sup> Helly *et al.* 1986: 139, no. 14.

a) [L·VAL]TROPHIM[I]

*Find spot:* Neuss.

*Present location:* Bonn Mus. prov. n. 10408.

*Reading:* [L. Val(eri) ]Trophim[i]

*Publication:* CIL XIII 10002.592. LEHNER 1904, 358, no. 4m, Taf. XXXVI Figure 11. CALLENDER 1965, no. 547 (DIOPHS?), no. 1739 (TROPHIMIA). BAKKER – GALSTERER-KRÖLL 1975, 236, no. 526 (TROPHIMI(A)). REMESAL 1997, no. 342b (LVALTROPHIMI). KÜTTER 2008, no. 317 (LVTROPHIM).

*Description:* The drawing presented by Lehner indicates that it is a broken handle. On the opposite site of the stamp there is *apost cocturam graffiti* of capacity with the numbers VI and X[---] (cf. no. 93).



The variant L·VALTROPHIMI in a complete stamp has been found in Nijmegen.<sup>121</sup>

The period of activity of *L. Valerius Trophimus* must be placed during the reigns of Nero and Vespasian. His broad distribution contrasts with the scarcity of evidence in southern Spain. Remesal collected an example in La Catria, Ponsich another in Arva and Bonsor one more in Mesa de Lora.<sup>122</sup>

#### 48. M[-]NT

*Provenance:* –

*Dating:* –

a) M[-]NT

*Find spot:* Neuss.

*Present location:* Bonn Mus. prov. no. 5663.

*Reading:* M. [-]nt() ?

*Publication:* KLEIN 1889, 113, no. 8 (MTN). LEHNER 1904, 358, no. 4l, Taf. XXXVI, Figure 10. CALLENDER 1965, no. 1014 (MANT).

*Description:*

On reading Lehner's description ('*doliumhenkel, rund*'), it is likely that he is referring to a Dressel 20.



The *gentilicium* letter seems to be erased, something that prevents this stamp from being considered in our corpus as with a *nomen*. Callender catalogued it in the same set as

<sup>121</sup> Berni 2017: no. 183b.

<sup>122</sup> Bonsor 1931: 51, Tab. XXXIV, no. 14; Ponsich 1974: 155, no. 64 Figure 66; Remesal 1977-78: no. 75a.

M·ANT from *Bibracte* (Mt. Beuvray, Sône-et-Loire),<sup>123</sup> thinking it to be Italian. Now we know that a stamp from *Bibracte* has M·ANTO, from a rim of Pascual 1 produced in *Hispania Citerior*.<sup>124</sup>

49. [---]VB ?

*Provenance:* –

*Dating:* Julio-Claudian.

a) [---]VB ((hedera)) ?

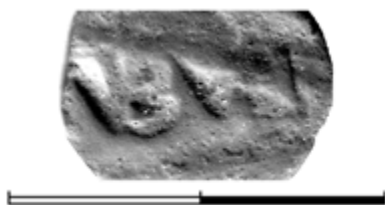
*Find spot:* Fundnummer 1951n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* [---]ub(?) ?

*Publication:* *Vidimus*.

*Description:* Lower part of a handle of Dressel 20 form A or B.



No other stamp with this design and development is known to us. We are not completely sure about the ligature VB. The handle form suggests a Claudian or Neronian production.

50. Unreadable.

*Provenance:* –

*Dating:* –

a) Unreadable

*Find spot:* Neuss.

*Present location:* Bonn Mus. prov. no. 6569.

*Reading:* Illegible.

*Publication:* LEHNER 1904: 358, no. 4o, Taf. XXXVI, Figure 14.

*Description:*

On reading Lehner's description ('Doliumhenkel, rund'), it is likely that he is referring to a Dressel 20. We cannot read the stamp from the drawing presented by Lehner. It could be the stamp *C. Antonius Quietus* in a retro reading.<sup>125</sup>



51. CA[---]M?

*Provenance:* –

*Dating:* –

a) CA[---]M?

*Find spot:* Fundnummer 6212n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* –

*Publication:* KÜTTER 2008, no. 504.

*Description:* Handle of Dressel 20, presenting a stamp and a capacity VIII in a *post cocturam graffito* (cf. no. 105). We did not find any drawing or photographs.

52. [---]SAR?

*Provenance:* –

*Dating:* –

a) [---]SAR?

*Find spot:* Koenenlager.

*Present location:* RLMB Inv.-No. 7939.

*Reading:* –

*Publication:* KÜTTER 2008, no. 292.

*Description:* Handle of Dressel 20, presenting a stamp and a capacity VIII *post cocturam graffito* (cf. no. 89 and no. 51). We did not find any drawing or photographs.

## 12.2. Graffiti

### A. Italian amphorae

53. I

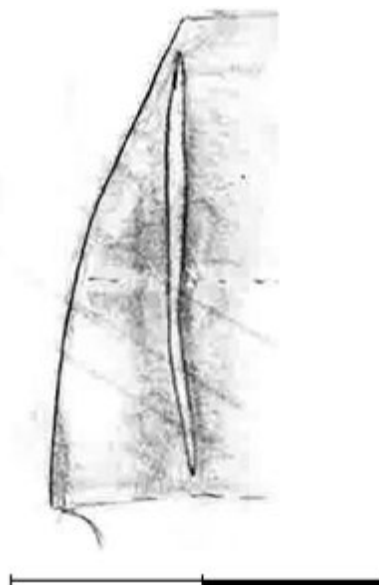
*Find spot:* Fundnummer 17049n, Lager 2.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* I.

*Publication:* *Vidimus*.

*Description:* Rim fragment and beginning of the handle of a Dressel 1B (Fig. 10.2-3.1, no. 2). There is an *ante cocturam graffito* formed just by a vertical line.

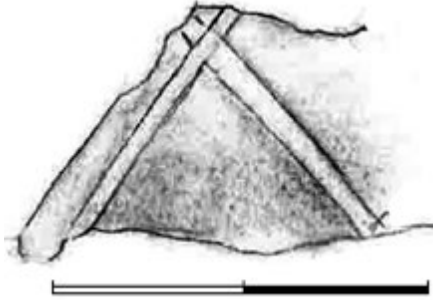
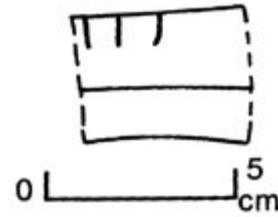


<sup>123</sup> CIL XIII 10002.100.

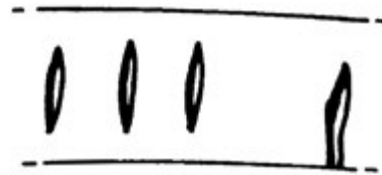
<sup>124</sup> Laubenheimer 1991: 51, no. 6.

<sup>125</sup> Berni 2017: no. 53.

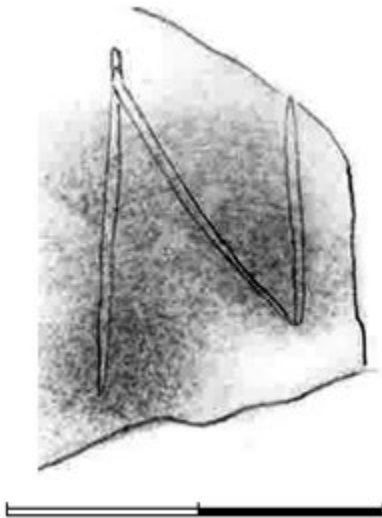
54. X

*Find spot:* Fundnummer 1972n.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* X.*Publication:* *Vidimus*.*Description:* Rim fragment and beginning of the handle of a Dressel 1B (Fig. 10.2-3-1, no. 1). Here is an *ante cocturam graffito* formed by an X.*Publication:* KÜTTER 2008, no., 849, Taf. 57.*Description:* Handle fragment of a Gauloise 4 with a *post cocturam graffito* of a number.

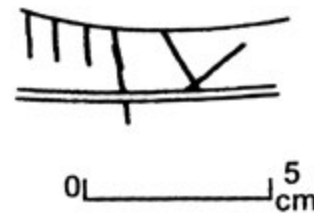
57. III I

*Find spot:* Dunantstraße.*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-22-02.*Reading:* III I.*Publication:* KÜTTER 2008, no. 897, Taf. 62.*Description:* Handle of a Gauloise 4 with a *post cocturam graffito*.

55. N[---]

*Find spot:* Fundnummer 5215n.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* N[---].*Publication:* *Vidimus*.*Description:* Lower part of the neck and upper part of the belly, together with a fragment of handle of a Dressel 2-4. The *post cocturam graffito* belongs to a name and is probably a reference to the owner.

58. IIII V

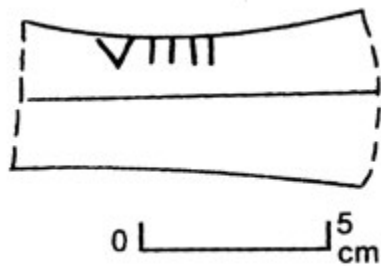
*Find spot:* Dunantstraße.*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-07-01.*Reading:* IIII V.*Publication:* KÜTTER 2008, no. 847, Taf. 57.*Description:* Handle fragment of a Gauloise 3 with a *post cocturam graffito* of a number.**B. Amphorae from Gallia Narbonensis**

56. [---]II

*Find spot:* Dunantstraße.*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-07-02 B.*Reading:* [---]III.

59. VIII

*Find spot:* Dunantstraße.*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-07-02 A.*Reading:* VIII*Publication:* KÜTTER 2008, no. 848, Taf. 57.*Description:* Handle fragment of a Gauloise 3 with a *post cocturam graffito* of a number.



60. XII

*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 28-25-00.

*Reading:* XII

*Publication:* KÜTTER 2008, no. 931, Taf. 65.

*Description:* Handle fragment probably of a Gauloise 3 with a *post cocturam* graffito of a number.

XII

61. Palm motifs.

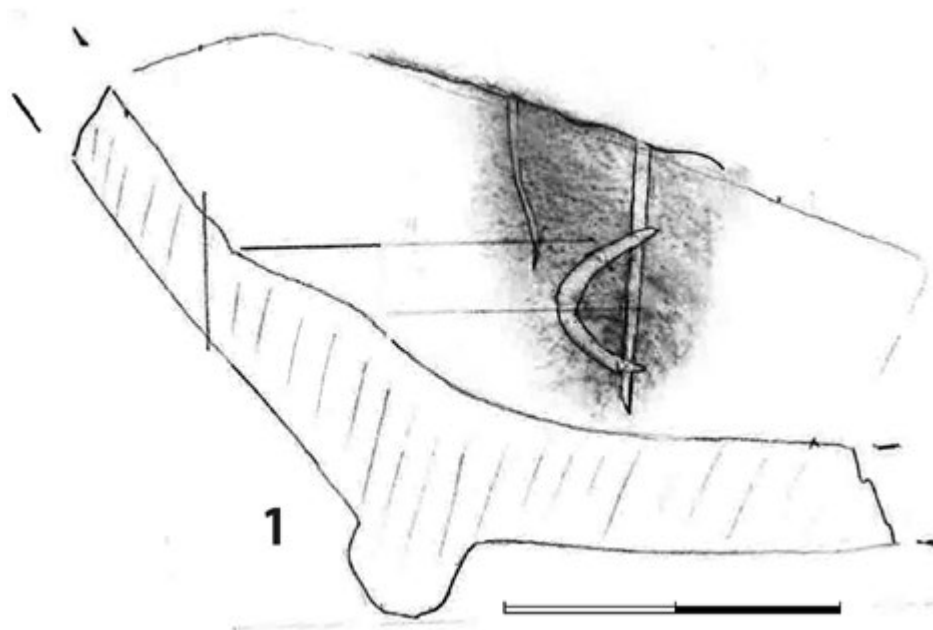
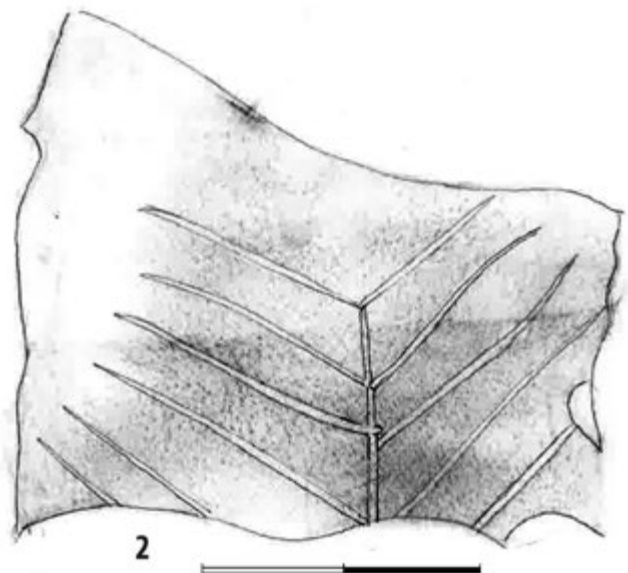
*Find spot:* Fundnummer 18274n, Lager 6-7.

*Present location:* Depot des LVR-Landes Museums Bonn.

*Reading:* Palm motifs.

*Publication:* *Vidimus.* KÜTTER 2008, no. 695, Taf. 45.

*Description:* Three *ante cocturam* graffiti decorating a flat-bottom Gaulish amphora. There is a palm branch facing upwards (2) that seems to be connected to a kind of inverted P (1). Another palm branch (3) is placed in a different place of the amphora and faces downwards.





## 62. Palm motif.

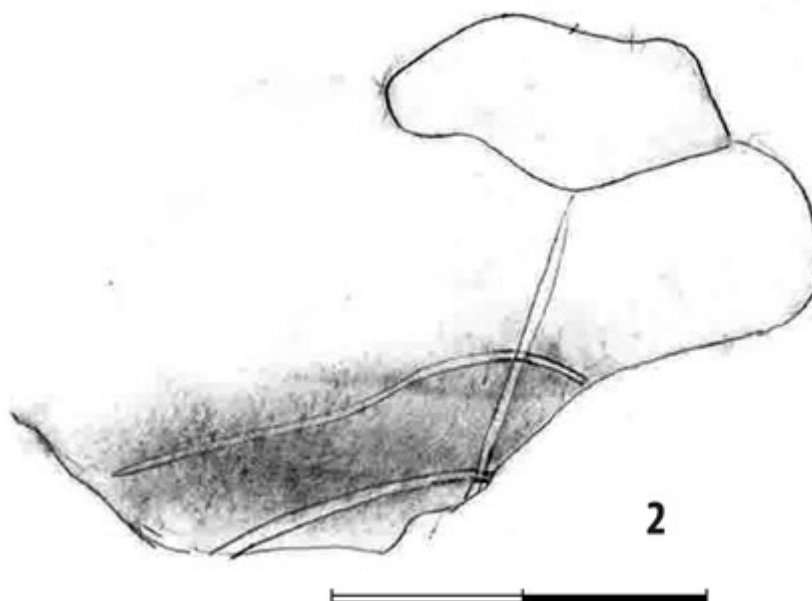
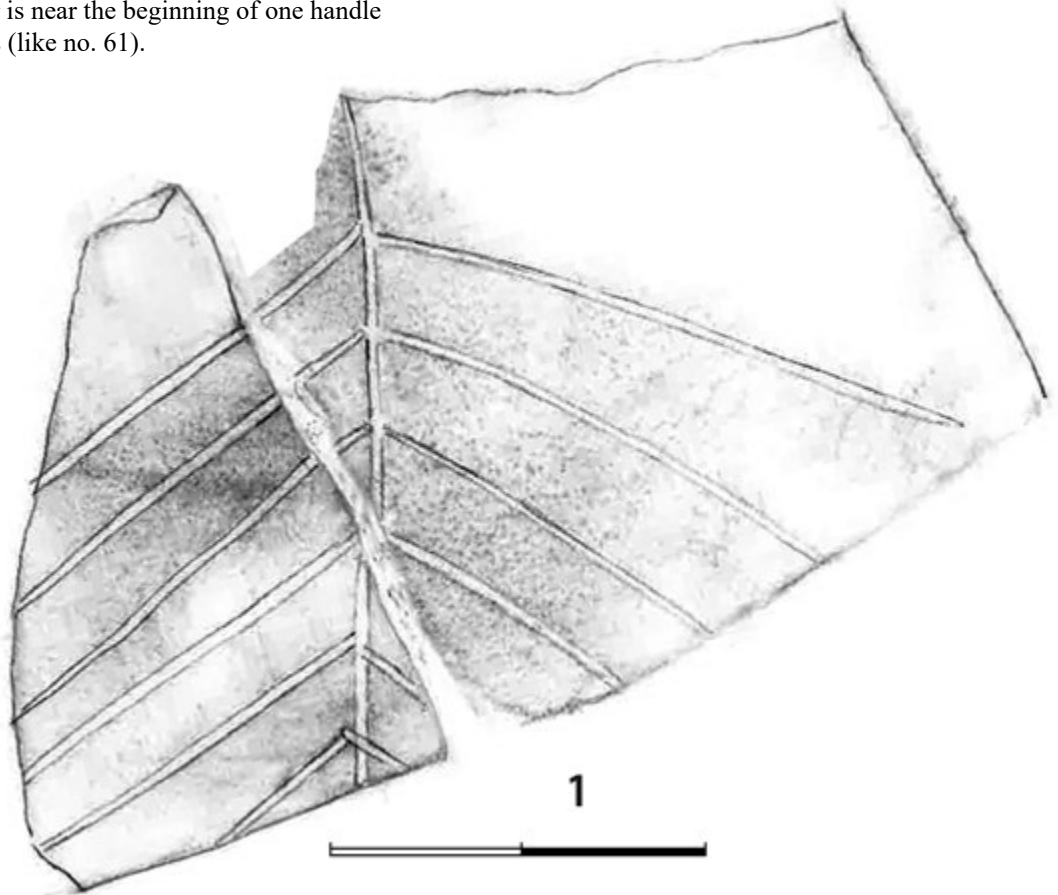
*Find spot:* Fundnummer 18590n, Lager 6-7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Palm motif.

*Publication:* *Vidimus*. KÜTTER 2008, no. 698, Taf. 46.

*Description:* Two fragments of a flat-bottom Gaulish amphora with decorated *ante cocturam graffiti*. The best preserved of them (1) is placed in the beginning of the neck and is formed by a palm branch and appears to face downwards. The other is near the beginning of one handle and points downwards (like no. 61).



### C. Amphorae from *Gallia Lugdunensis*

63. Cav[---]

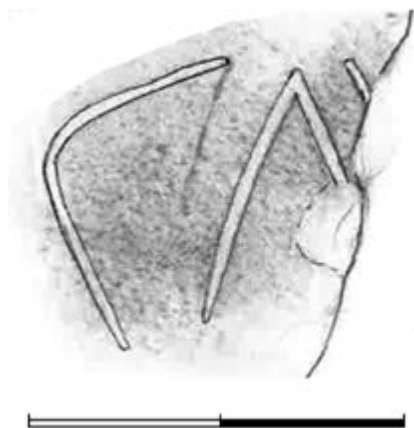
*Find spot:* Fundnummer 20090n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Cav[---].

*Publication:* Vidimus. KÜTTER 2008, no. 715, Taf. 47.

*Description:* Fragment of the upper part of the body and neck of a Lyon amphora of unknown form, with a *post cocturam graffiti* on the upper part of the belly. Kütter just read the first two letters, CA[---].



64. VIIAII ?

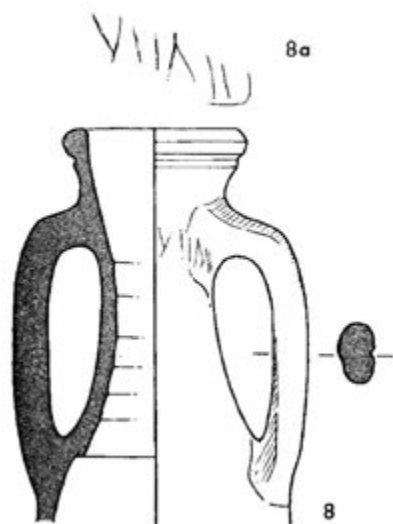
*Find spot:* Fundnummer 2554n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* VIIAII ?

*Publication:* FILTZINGER 1972, Taf. 24.8. KÜTTER 2008, no. 423, Taf. 27.

*Description:* *Post cocturam graffiti* placed between the neck and the beginning of the handle of a Lyon 7B (= Augst 21). Kütter drew and read it as DIIAII. We think this is not correct and propose a new reading. If the third letter is a T, then it could be read as *Vitalis*, = the person who owns the amphora.



### D. Amphorae from *Hispania Tarraconensis*

65. N

*Find spot:* Fundnummer 29741n C.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* N( ).

*Publication:* KÜTTER 2008, no. 802, Taf. 54.

*Description:* We were unable to examine this piece during our stay in Meckenheim. Following Kütter, it is an *ante cocturam graffiti* of a N on the shoulder of a Pascual 1. Probably we have the amphora owner once again.



66. V

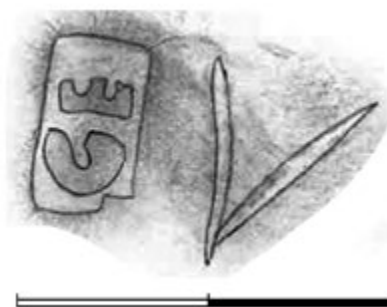
*Find spot:* Fundnummer 22655n, Lager 6.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* V( ) or V.

*Publication:* Vidimus.

*Description:* *Ante cocturam graffiti* placed on a Layetanian Dressel 2 near the stamp GE (Fig. 6.3.2, no. 7). We date this piece to the second quarter of the first century AD (*vide* no. 15). It is a sign made in the amphora workshop, perhaps the first letter of a name or just a mark for the people involved in the production of the vessel.



### E. Amphorae from the Baetican coastal area

67. A

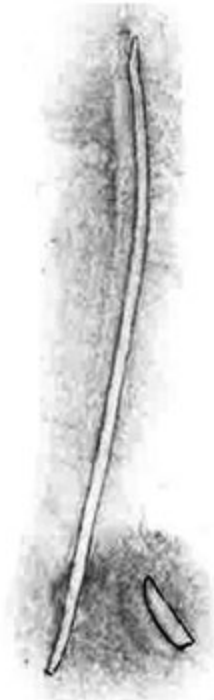
*Find spot:* Fundnummer 17306, Lager 7.

*Present location:* Depot of the LVR-Landes Museums Bonn in Meckenheim.

*Reading:* A( ).

*Publication:* Vidimus.

*Description:* *Ante cocturam graffiti* of an A incised on a long hollow spike of a Dressel 7-11 from Bay of Cádiz (Fig. 6.2.3, no. 10). The A was made in two steps.



68. L

*Find spot:* Fundnummer 30101n.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* L( ).*Publication:* Vidimus.*Description:* Ante cocturam graffito of an L incised on a long hollow spike of a Dressel 9 (Fig. 6.2.3, no. 10) from the Bay of Cádiz. The L was made in three stages and is upside down.**F. Amphorae from the Guadalquivir Valley**

69. I

*Find spot:* Fundnummer 10500n, Lager 2.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* I( ) aut I.*Publication:* Vidimus.*Description:* Ante cocturam graffito of an I incised on the spike of a Haltern 70 (Fig. 6.1.5, no. 10). The I was made in three steps.

70. I

*Find spot:* Fundnummer 13596n, Lager 1.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* I.*Publication:* Vidimus.*Description:* Ante cocturam graffito of a hasta incised on a Haltern 70 spike (Fig. 6.1.5, no. 9).

71. A I ?

*Find spot:* Fundnummer 4236n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* A(mphora) I ?

*Publication:* KÜTTER 2008, no. 452, Taf. 28.

*Description:* Post cocturam graffito on a Dressel 20 handle. We were unable to examine this piece during our stay at Meckenheim. Kütter read it as the number IV. We interpret it as the letters AI.



72. AI VIII

*Find spot:* Koenenlagen.

*Present location:* Bonn

Mus. prov. no. 12088.

*Reading:* (amphora) I (sextarii) VIII.

*Publication:* LEHNER

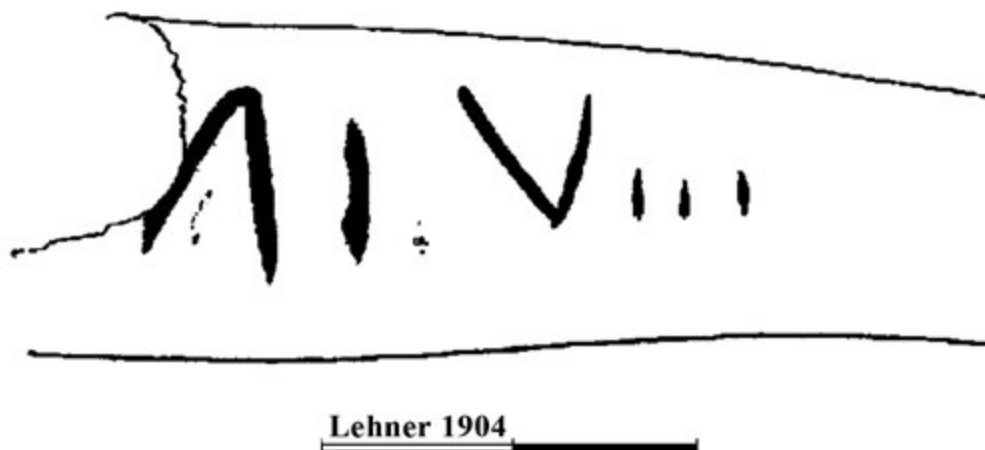
1904, 358, no. 4n,

Taf. XXXVI, Fig. 20.

KÜTTER 2008, no. 341,

Taf. 20.

*Description:* Dressel 20 handle with post cocturam graffito denoting a capacity Kütter drew and read it as XII VIII.



73. II

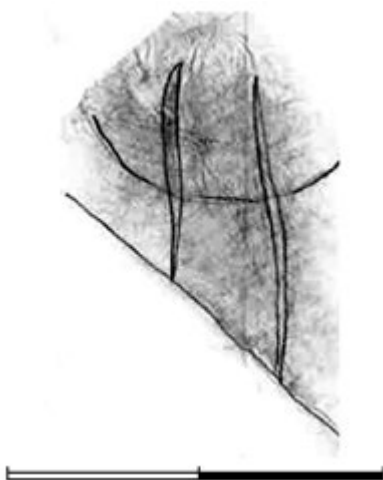
*Find spot:* Fundnummer 11200n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* II.

*Publication:* Vidimus.

*Description:* Lower part of the belly and spike of a Haltern 71, with an ante cocturam graffito comprising two parallel lines.



74. II

*Find spot:* Fundnummer 29758.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* II.

*Publication:* KÜTTER 2008, no. 803, Taf. 54.

*Description:* Post cocturam graffito on a possible Dressel 20 rim. We were unable to examine this piece during our stay at Meckenheim. Kütter read it as the number II.



75. A II

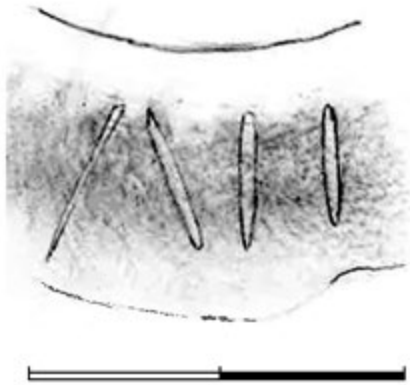
*Find spot:* Fundnummer 2168n, Lager 6-7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* A(mphorae) II.

*Publication:* Vidimus.

*Description:* Rim fragment of Dressel 20 form F, with a post cocturam graffito denoting a capacity.



## 76. XX AII

*Find spot:* Fundnummer 2559n, Lager 5-7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* XX A(mphorae) II.

*Publication:* Vidimus. KÜTTER 2008, no. 424, Taf. 27.

*Description:* Upper part of an early Haltern 71 comprising a rim, neck and handles (Fig. 6.1.3, no. 5). The *graffito* is placed *post cocturam* under the neck and is formed of two parts. To the left we see a horizontal line and two vertical parallel lines cutting it. It could be interpreted as XX. To the right we see an A and two horizontal parallel lines. All together it can be a kind of control mark, the right side being an indication of the oil removed from the vessel. Kütter read and published it as HAIL.



## 77. AII VIII

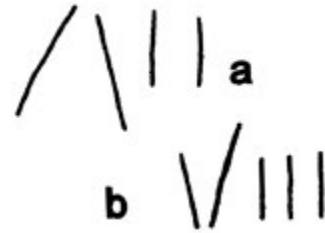
*Find spot:* -

*Present location:* CSM Inv.-no.. R 1902.

*Reading:* A(mphorae) II (sextarii) VIII.

*Publication:* KÜTTER 2008, no. 65, Taf. 4.

*Description:* Handle fragment of a Dressel 20 with a *post cocturam graffito* denoting a capacity. It is formed comprises two lines.



## 78. III

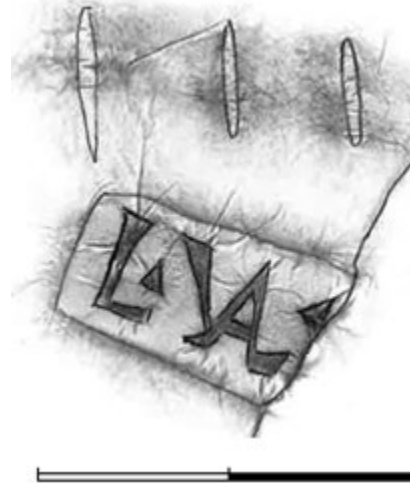
*Find spot:* Fundnummer 29932n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* III.

*Publication:* Vidimus. Kütter 2008: no. 814, Taf. 55.

*Description:* *Post cocturam graffito* on a handle fragment of Dressel 20 form A, that also presents the beginning of the neck. It is formed by three parallel lines that are made near the stamp LVALS (*vide* no. 46).



## 79. III

*Find spot:* Fundnummer 29720.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* III.

*Publication:* KÜTTER 2008, no. 798, Taf. 54.

*Description:* Handle of a Dressel 20 with *post cocturam graffito* denoting a number placed near the Julio-Claudian stamp L·V·IVC (*vide* no. 44b). We were unable to examine this piece during our stay in Meckenheim.



80. III

*Find spot:* Grünweg Siedlung.

*Present location:* CSM Inv.-No. R 0940.

*Reading:* III.

*Publication:* KÜTTER 2008, no. 32, Taf. 2.

*Description:* A possible Dressel 20 handle with a *post cocturam graffito*.



81. III

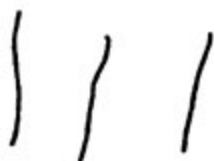
*Find spot:* Fundnummer 28316n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* III

*Publication:* KÜTTER 2008, no. 770, Taf. 51.

*Description:* Dressel 20 handle with a *post cocturam graffito* denoting a number. We were unable to examine this piece during our stay in Meckenheim.



82. III aut IIII

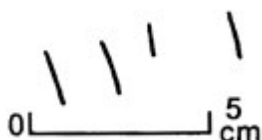
*Find spot:* Fundnummer 29765n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* III or IIII.

*Publication:* KÜTTER 2008, no. 804, Taf. 54.

*Description:* Dressel 20 handle with a *post cocturam graffito* denoting a number.. We were unable to examine this piece during our stay in Meckenheim.



83. IIII

*Find spot:* Fundnummer 6717n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* IIII.

*Publication:* *Vidimus.* KÜTTER 2008, no. 529, Taf. 34.

*Description:* Upper part of a Dressel 20 form D. One of the handles is broken and there is the beginning of the stamp LM[---] (*vide* no. 38). A *post cocturam graffito* denoting a number is incised on the lower part of the complete handle.



84. IIII

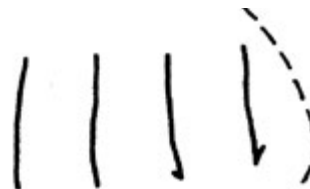
*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-03-00.

*Reading:* IIII.

*Publication:* *Vidimus.* KÜTTER 2008, no. 845, Taf. 57.

*Description:* Handle of a Dressel 20 with a *post cocturam graffito*.



85. IIII

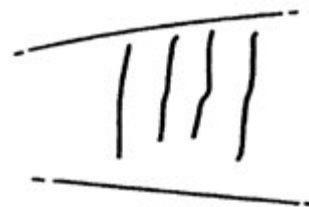
*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-22-00 D.

*Reading:* IIII.

*Publication:* KÜTTER 2008, no. 896, Taf. 62.

*Description:* Handle with a *post cocturam graffito*.



## 86. IIII XIII

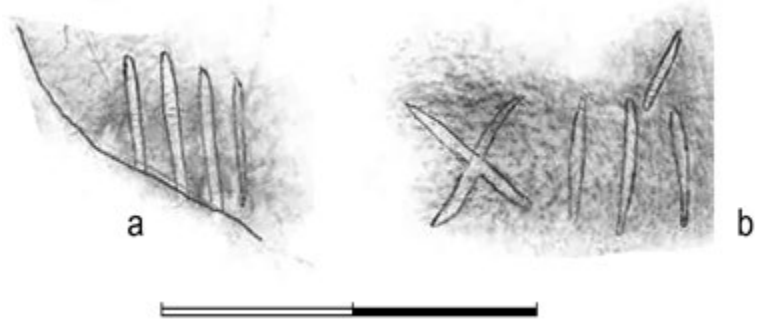
*Find spot:* Fundnummer 2168n, Lager 6-7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* IIII + XIII.

*Publication:* *Vidimus*.

*Description:* Lower part of a handle of Dressel 20 form D. Two different *post cocturam graffiti* denoting numbers are incised all along the handle. In the upper part of the handle there are four parallel lines (a). In the lower part the number XIII (b) is to be found. Perhaps it is a fractionary value expressed in *sextarii*.



## 87. IV IIII

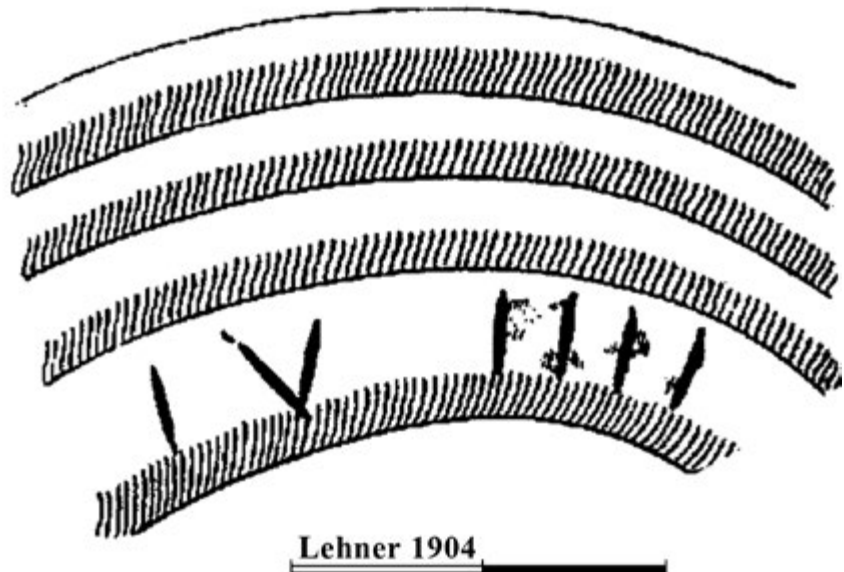
*Find spot:* Koenenlager (Kütter).

*Present location:* Bonn Mus. prov. no. 10805.

*Reading:* (modii) IV s(extarii) IIII.

*Publication:* LEHNER 1904, 357, no. 4c, Taf. XXXVI, Fig. 1. KÜTTER 2008, no. 327, Taf. 19.

*Description:* Following Kütter, there is a *post cocturam graffiti* denoting a number on a Dressel 28 handle.



## 88. I I I I I I

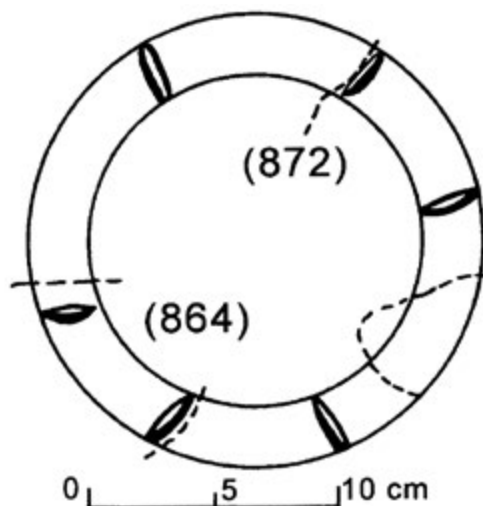
*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-24-05.

*Reading:* I I I I I I.

*Publication:* KÜTTER 2008, no. 905, Taf. 62.

*Description:* Rim of a possible Dressel 20 with six '*post cocturam*' incisions all along the rim.



## 89. VI

*Find spot:* Koenenlager.

*Present location:* RLMB Inv.-no. 7939.

*Reading:* (modii) VI.

*Publication:* BAKKER – GALSTERER-KRÖLL 1975, 236, no. 524. KÜTTER 2008, no. 292, Taf. 17.

*Description:* A *post cocturam graffiti* on a Dressel 20 handle placed near the stamp [---]SAR? (*vide* no. 52). Kütter read it as a retro N, but we prefer to propose a number *graffito*, namely VI.



90. VI

*Find spot:* Fundnummer 29872n A.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (modii) VI

*Publication:* KÜTTER 2008, no. 807, Taf. 54.

*Description:* A Dressel 20 handle with a *post cocturam* graffiti denoting a number. We were unable to examine this piece during our stay in Meckenheim.



91. VI

*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 43-03-00.

*Reading:* (modii) VI.

*Publication:* KÜTTER 2008, no. 935, Taf. 65.

*Description:* A Dressel 20 handle with a *post cocturam* graffiti denoting a number. We were unable to examine this piece during our stay in Meckenheim.



92. VI V

*Find spot:* 'Gef. im Praetorium' (Lehner).

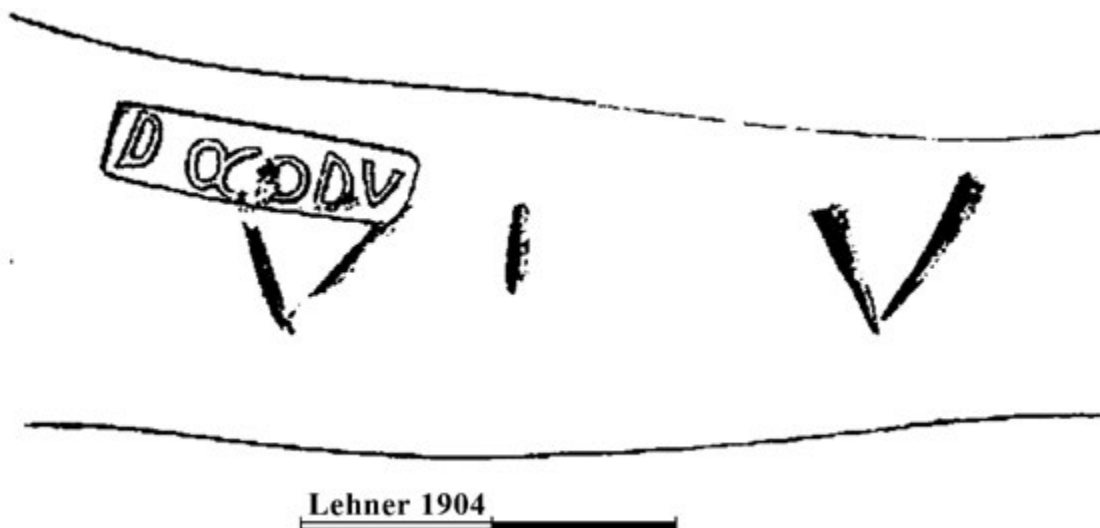
'Grimmlinghausen' (CIL XIII). Koenenlager.

*Present location:* Bonn Mus. prov. no. 6447.

*Reading:* (modii) VI (sextarii) V.

*Publication:* LEHNER 1904, 357, no. 4d, Taf. XXXVI, Fig. 2. KÜTTER 2008, no. 267, Taf. 15.

*Description:* A Dressel 20 handle with a *post cocturam* graffiti denoting a number near the stamp BROCODV (vide no. 22).





## 93. VI X[---]

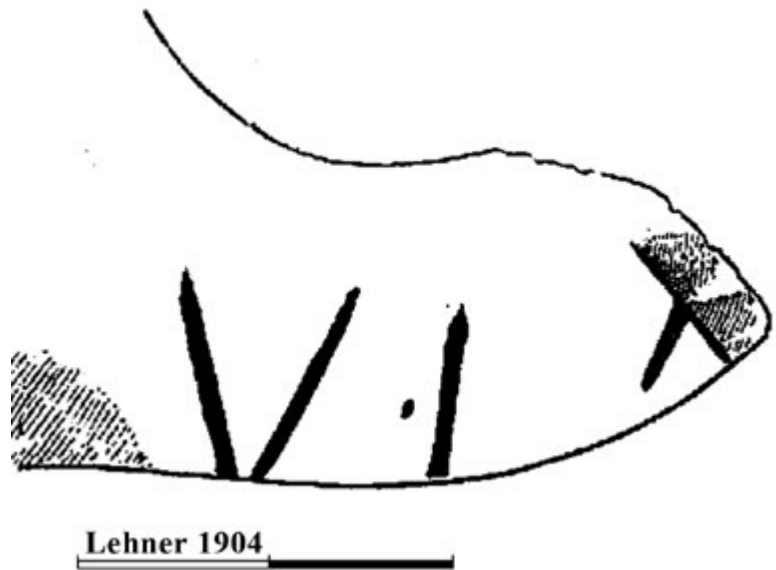
*Find spot:* Koenenlager.

*Present location:* Bonn Mus. prov. no. 10408.

*Reading:* (modii) VI (sextarii) X[---].

*Publication:* LEHNER 1904, 358, no. 4m, Taf. XXXVI, Fig. 12. KÜTTER 2008, no. 317, Taf. 19.

*Description:* A Dressel 20 handle with a *post cocturam* graffito denoting a number near the stamp LVALTROPHIMI (vide no. 47). We propose a date for this piece around the Neronian-Vespasianic period.



## 94. M VI XIII

*Find spot:* Grimlinghauser Brücke.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* M(odii) VI (sextarii) XIII. *Publication:* KÜTTER 2008, no. 67, Taf. 5.

*Description:* Possible *post cocturam* graffito denoting a number on a Dressel 20. Following the drawing of Kütter, it may be that the capacity is directly expressed in modii. We were unable to examine this piece during our stay in Meckenheim.



## 96. I I I I I I I

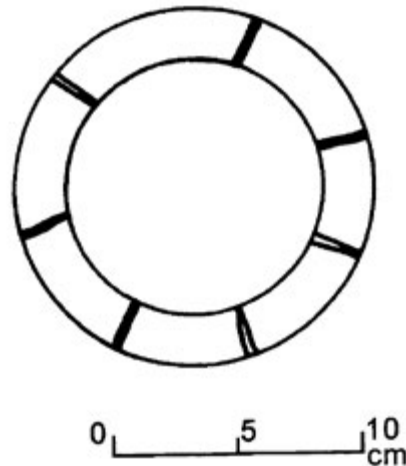
*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-18-02 A.

*Reading:* I I I I I I I.

*Publication:* KÜTTER 2008, no. 862, Taf. 58.

*Description:* Rim of a Dressel 20 a *post cocturam* graffito comprising seven parallel lines (see above, no. 95).



## 95. IIIIII

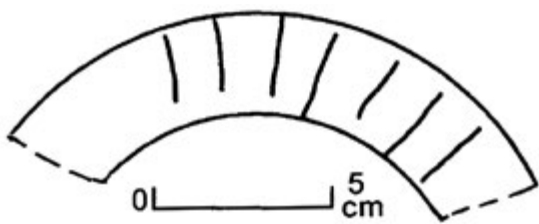
*Find spot:* Fundnummer 29892n A.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* IIIIII.

*Publication:* KÜTTER 2008, no. 811, Taf. 54.

*Description:* A Dressel 20 rim with a *post cocturam* graffito comprising seven parallel lines. We were unable to examine this piece during our stay in Meckenheim.



97. VII

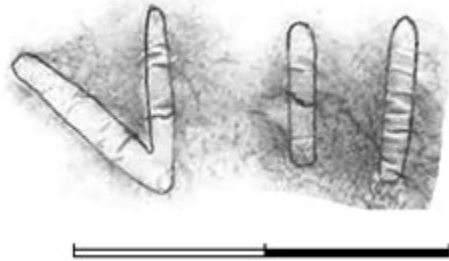
*Find spot:* Fundnummer 2168n, Lager 6-7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (modii) VII.

*Publication:* Vidimus.

*Description:* Rim fragment of a Dressel 20 form B, with a *post cocturam* graffito denoting a number.



99. [---]VII [---]

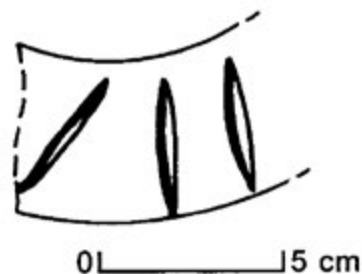
*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-20-06 A.

*Reading:* (modii) VIII [---].

*Publication:* KÜTTER 2008, no. 877, Taf. 60.

*Description:* A rim fragment of a Dressel 20 with a *post cocturam* graffito denoting a number.



98. VII

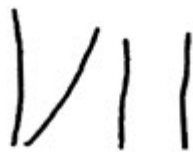
*Find spot:* Fundnummer 28294n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (modii) VII.

*Publication:* KÜTTER 2008, no. 769, Taf. 51.

*Description:* A Dressel 20 handle with a *post cocturam* graffito denoting a number. We were unable to examine this piece during our stay in Meckenheim.



100. VII III

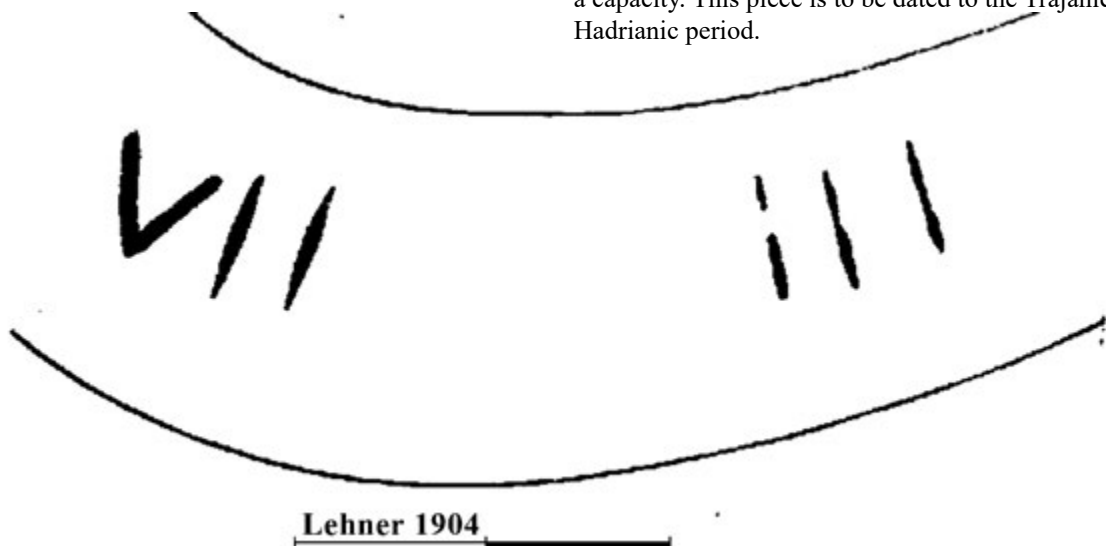
*Find spot:* 'Gef. im Praetorium' (Lehner). Koenenlager, Praetorium (Kütter).

*Present location:* Bonn Mus. prov. no. 7744.

*Reading:* (modii) VII (sextarii) III.

*Publication:* LEHNER 1904, 357, no. 4k, Taf. XXXVI, Fig. 9. BAKKER – GALSTERER-KRÖLL 1975, 136, VI.V. KÜTTER 2008, no. 291, Taf. 17.

*Description:* A Dressel 20 handle with stamp LSELSSEN (vide no. 42) and a *post cocturam* graffito denoting a capacity. This piece is to be dated to the Trajanic-Hadrianic period.



## 101. VII III

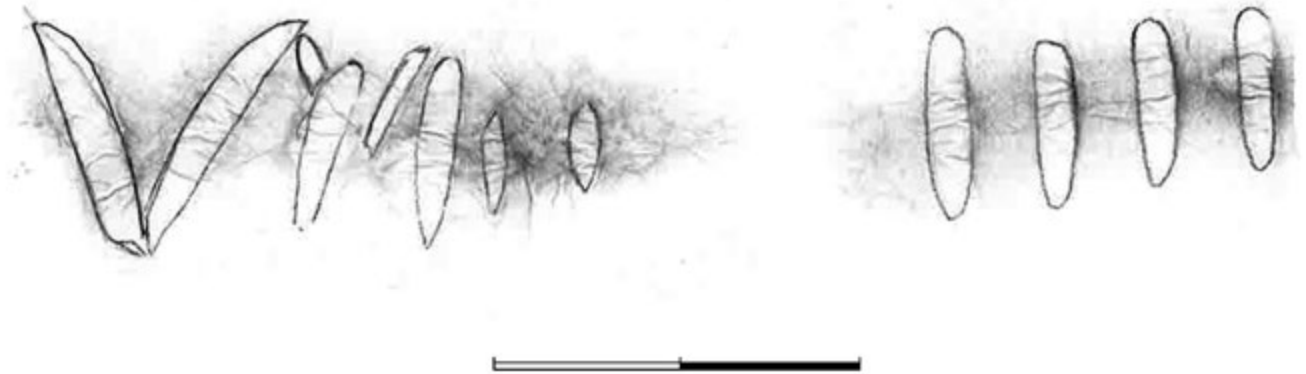
*Find spot:* Fundnummer 28520n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (modii) VII (sextarii) III.

*Publication:* Vidimus. KÜTTER 2008, no. 775, Taf. 52.

*Description:* A *post cocturam graffito* denoting a capacity on a Dressel 20 form D. The letters are executed with big incisions and are very deep. The first number, VII, is followed by two small parallel lines, perhaps of a *graffito* made before it, or a first attempt at the same *graffito*.



## 102. VII + III[---]

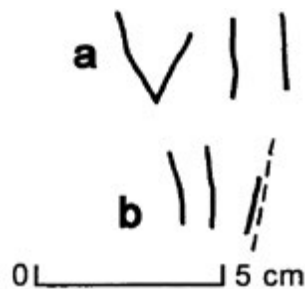
*Find spot:* Dunantstraße.

*Present location:* Bodendenkmalpflege Neuss, NE 94/10 26-10-00.

*Reading:* (modii) VII + III[---].

*Publication:* KÜTTER 2008, no. 930, Taf. 65.

*Description:* Two *post cocturam graffiti* denoting numbers on a Dressel 20. The first number, VII, is on the rim, the other, III[---], is on the handle.



## 103. VII XII

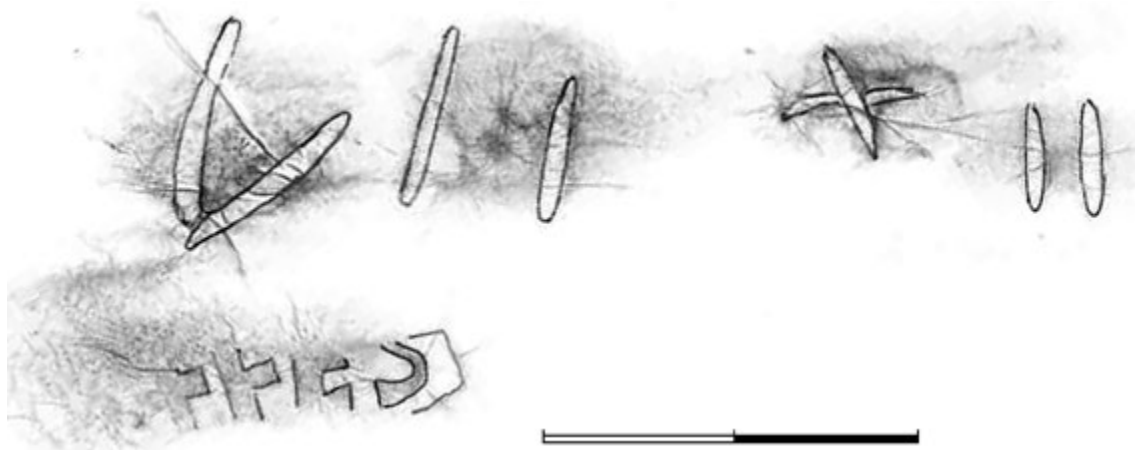
*Find spot:* Fundnummer 28520n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (modii) VII (sextarii) XII.

*Publication:* Vidimus. KÜTTER 2008, no. 776, Taf. 52.

*Description:* Handle of a Dressel 20 form B with a *post cocturam graffito* denoting a capacity, placed close to the stamp VRITTI·FES (VRITI·FES) (*vide* no. 45). Kütter read it as VII L II ?



104. VII XX

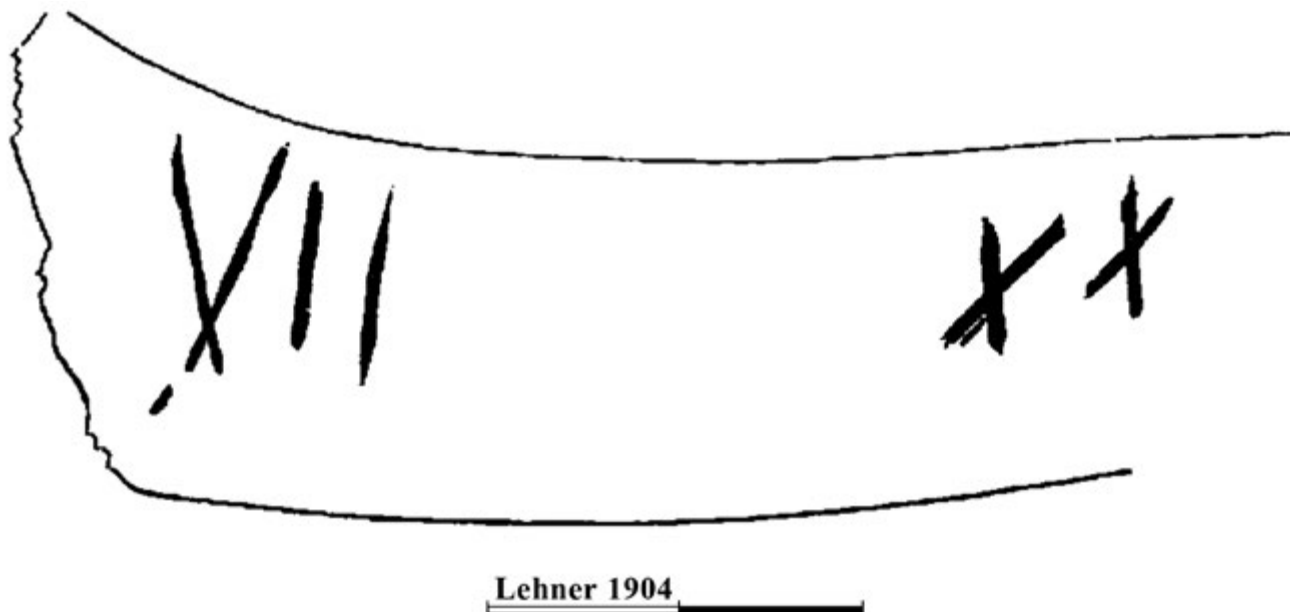
*Find spot:* Koenenlager (Kütter).

*Present location:* Bonn Mus. prov. no. 8357.

*Reading:* VII XX.

*Publication:* LEHNER 1904, 358, no. 4t, Taf. XXXVI, Fig. 19. KÜTTER 2008, no. 300, Taf. 17.

*Description:* A Dressel 20 handle with *post cocturam graffiti* denoting numbers. The first could be read as VI and it could be the *modii*. The second, XX, seems to be a counting sign above sixteen *sextarii*.



105. VIII

*Find spot:* Fundnummer 6112n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (*modii*) VIII.

*Publication:* KÜTTER 2008: no. 504, Taf. 32.

*Description:* A *post cocturam graffiti* VIII, on a possible Dressel 20 handle. It is placed together with the stamp CA[---]M? of doubtful reading (*vide* no. 51). We were unable to examine this piece during our stay in Meckenheim.



106. VIII III

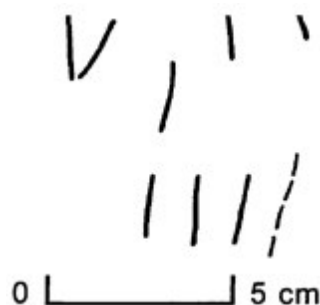
*Find spot:* Fundnummer 29076n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* (*modii*) VIII (*sextarii*) III.

*Publication:* KÜTTER 2008, no. 784, Taf. 52.

*Description:* Handle of a Dressel 20 *post cocturam graffiti* denoting a number on two lines. We were unable to examine this piece during our stay in Meckenheim.



107. X

*Find spot:* Fundnummer 17484n.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* X.*Publication:* KÜTTER 2008, no. 685, Taf. 45.*Description:* Handle of Dressel 20 with a *post cocturam* *graffito* denoting a number. We were unable to examine this piece during our stay in Meckenheim.

108. X

*Find spot:* Dunantstraße.*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-03-00 B.*Reading:* X.*Publication:* KÜTTER 2008, no. 846, Taf. 57.*Description:* Handle of Dressel 20 with a *post cocturam* *graffito* denoting a number.

109. X

*Find spot:* Fundnummer 28468n.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* X.*Publication:* *Vidimus.*

KÜTTER 2008, no. 773, Taf. 52.

*Description:* Upper part of a Dressel 20 handle and beginning of the neck. A *post cocturam* *graffito* formed by an X placed directly over the left side of the stamp MAR (vide no. 39a). We date this piece to the reign of Antoninus Pius.

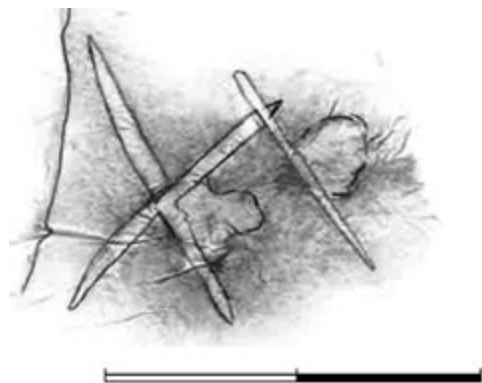
110. X IIIII

*Find spot:* Fundnummer 7196n, Lager 7.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* X IIIII.*Publication:* *Vidimus.*

KÜTTER 2008, no. 541, Taf. 35 y 69.

*Description:* A large fragment of a Julio-Claudian Dressel 20 with a complete handle. There are two *post cocturam* *graffiti*. The first is an X cutting the stamp CSEMPOL placed on the handle (vide no. 43b). Below the same handle is the other *graffito*, in this case comprising six thin parallel lines.

111. [---] XI

*Find spot:* Fundnummer 642n.*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*Reading:* [---] (*sextarii*) XI.*Publication:* *Vidimus.**Description:* A handle fragment of Dressel 20 form A or B with a *post cocturam* *graffito* denoting a number, possibly an XI. It could be the continuity of a bigger unit, but the handle is broken.

112. XII

*Find spot:* Dunantstraße.*Present location:* Bodendenkmalpflege Neuss, NE 94/10 24-17-01 A.*Reading:* (*sextarii*) XII.*Publication:* KÜTTER 2008, no. 859, Taf. 58.*Description:* A Dressel 20 handle with a *post cocturam* *graffito* denoting a number.

113. [---]XIII

*Find spot:* Fundnummer 29446.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* [---] (sextarii) XIII.

*Publication:* KÜTTER 2008, no. 787, Taf. 53.

*Description:* A Dressel 20 handle with a *post cocturam* graffiti denoting a number.

114. [---X]XXI+[---]

*Find spot:* Fundnummer 6779n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* [---X]XXI+[---].

*Publication:* KÜTTER 2008, no. 531, Taf. 34.

*Description:* A Dressel 20 wall fragment with a *post cocturam* graffiti denoting a number. Kütter read it as XXXII? We were unable to examine this piece during our stay in Meckenheim.

0 5 cm

115. AE

*Find spot:* Fundnummer 25889n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Ae().

*Publication:* KÜTTER 2008, no. 753, Taf. 50.

*Description:* A Dressel 20 handle with a *post cocturam* graffiti in this case a ligatured AE. We were unable to examine this piece during our stay in Meckenheim.

116. [---]BRIG[---]

*Find spot:* Fundnummer 27314n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* [---]brig[---].

*Publication:* KÜTTER 2008, no. 758, Taf. 50.

*Description:* A Dressel 20 wall fragment with a *post cocturam* graffiti denoting a name, probably referring to the owner of the vessel. We were unable to examine this piece during our stay in Meckenheim.

0 5 cm

117. Ma III ?

*Find spot:* Grünweg-Siedlung.

*Present location:* CSM Inv.-No. R 0939.

*Reading:* Ma() III ?

*Publication:* KÜTTER 2008, no. 31, Taf. 2.

*Description:* A *post cocturam* graffiti on a Dressel 20 handle. Kütter read it as the name MASII or MACII. In our opinion, the space between MA and the rest of the text could indicate the division between an abbreviated name, *Ma()*, and the number III.

0 5 cm

118. [Si]lvani / [---]+si.

*Find spot:* Fundnummer 2445n.

*Present location:* Depot of the LVR-LandesMuseum Bonn in Meckenheim.

*Reading:* [Si]lvani / [---]+si.

*Publication:* Vidimus. KÜTTER 2008, no. 413, Taf. 26.

*Description:* An *ante cocturam graffito* on a base fragment of a Dressel 20. There are two *cognomina* on two lines written in the genitive singular. Kütter read it as VANI / SI.



119. T CIV ?

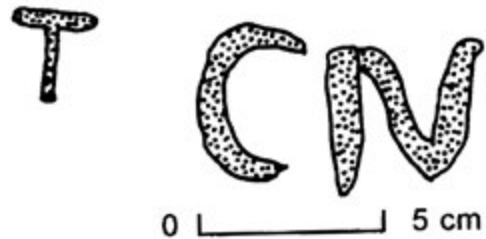
*Find spot:* Fundnummer no. 6265 A.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* T. Ciu( ) ?

*Publication:* KÜTTER 2008, no. 510, Taf. 32.

*Description:* A *post cocturam graffito* denoting a name on a Dressel 20 wall fragment. Kütter read it as T CIV or T CN. We were unable to examine this piece during our stay in Meckenheim.



120. SC[---] ?

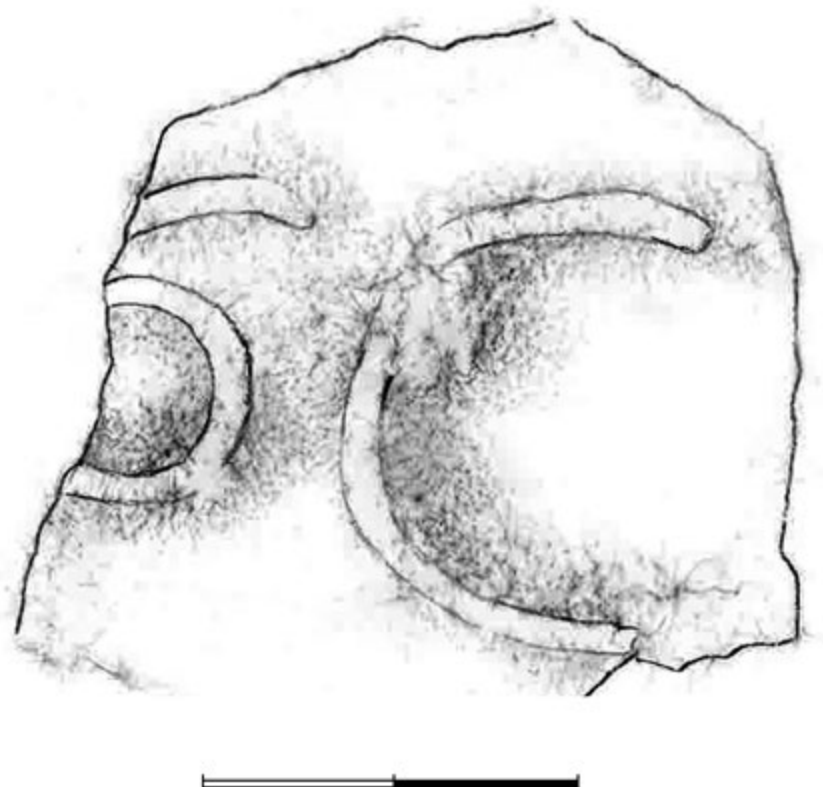
*Find spot:* Fundnummer 16535n, Lager 2.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Sc[---] ?

*Publication:* Vidimus.

*Description:* A thick wall fragment of a Dressel 20 presenting a *post cocturam* graffito comprising at least two large letters incised with a sharp tool.



121. V+[---].

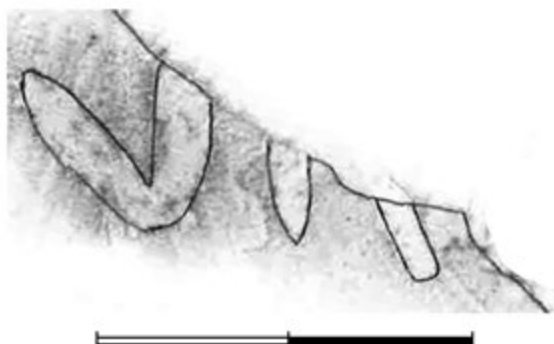
*Find spot:* Fundnummer 2168n, Lager 6-7.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* V+[---].

*Publication:* *Vidimus*.

*Description:* A *post cocturam* graffito denoting a number on a small fragment of the upper body of a Dressel 20.



*Description:* An *ante cocturam* graffito on a Julio-Claudian Dressel 20 spike (Fig. 6.1.3, no. 9). The lines are really thin, possibly executed with a nail. We do not have any accurate interpretation for this *graffito*. Perhaps it refers to the *figulus* name or is just part of the vessel recount in the workshop.



122. VER M[---].

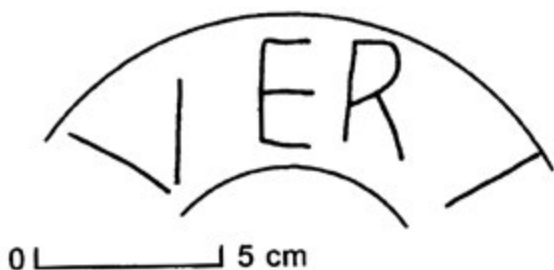
*Find spot:* Fundnummer 6745.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Ver( ) m(odii) [---].

*Publication:* KÜTTER 2008, no. 530, Taf. 34.

*Description:* A *post cocturam* graffito on a Dressel 20 rim. Kütter read it as VERI, but we think the last line belongs to a different subject, probably the *hasta* of the letter M referring to *modius*. A similar example would be the rim fragment found in the *castra* of Nijmegen, with the *graffito* COR M VIII.<sup>126</sup> The handle of our Neuss piece has the stamp LISILV/ESTRI (*vide* no. 35), dated to the end of the second or beginning of the third century AD. We were unable to examine this piece during our stay in Meckenheim.



124. VIA?

*Find spot:* Fundnummer 25772n.

*S.P. Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.*

*Reading:* Via( ) ?

*Publication:* KÜTTER 2008, no. 751, Taf. 50.

*Description:* A *post cocturam* graffito on a Dressel 20 handle. We were unable to examine this piece during our stay in Meckenheim.



123. VI? N?

*Find spot:* Fundnummer 978n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Reading:* Vi( ) aut VI.

*Publication:* *Vidimus*.

125. VICTOR

*Find spot:* 'Grimmlinghausen' (CIL XIII). Koenenlager (Kütter)

*Present location:* Bonn Mus. prov. no. 6448.

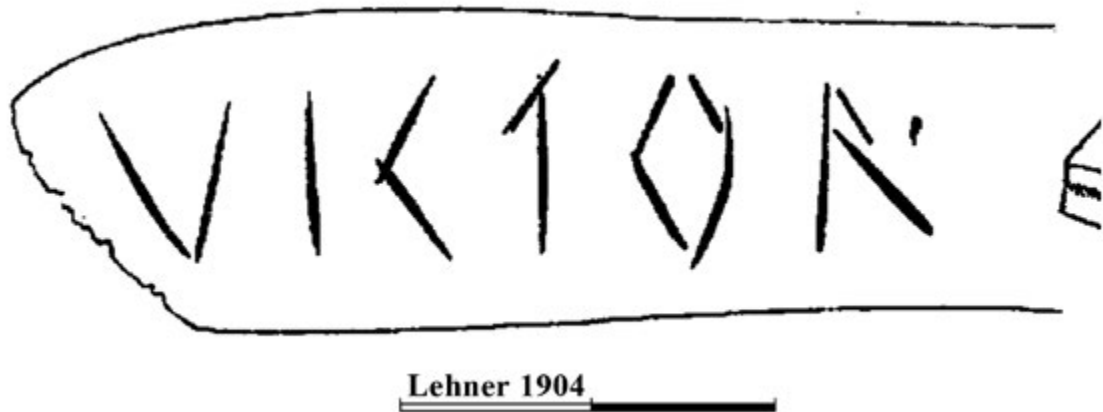
*Reading:* Victor

*Publication:* KLEIN 1889, 113, no. 12. CIL XIII 10003.13b. LEHNER 1904, 358, no. 4q, Taf. XXXVI, Fig. 16. KÜTTER 2008, no. 268, Taf. 15.

*Description:* A *graffito* denoting a name on a Dressel 20 handle. It was already published in CIL XIII within the '*nomina ante argillam coctam sitilo scripta*'. It is strange because these *graffiti* are rather part of the *post cocturam* inscriptions found in military contexts. The *ductus* is quite straight and lineal, something that seems to confirm our suspicions.

<sup>126</sup> Berni 2017: 331.





### 12.3. Tituli picti (painted inscriptions)

126. Es [-----] K+[---]

*Find spot:* Fundnummer 30101n A.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Publication:* KÜTTER 2008, no. 816, Taf. 55.

*Description:* Almost complete Koan amphora. The inscription is placed on the upper part of the body, almost at the beginning of the neck (Fig. 9.1.2, no. 1).



It still preserves two groups of letters, written in fine lines in *atramentum* around the upper part of the body, just below the neck. The inscription placed close to the handle could be read as *Es*, but it could also be Greek and read as  $\theta'$ . The second inscription is formed of two small letters, the first easy to read as a *K* but the second being completely unreadable.

We have no accurate interpretation to offer for this *titulus* and are even not able to distinguish if it these letters are part of a Latin or Greek inscription.

127. M · Ca[---] ?

*Find spot:* Fundnummer 30101n B.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Publication:* *Vidimus*. KÜTTER 2008, no. 817, Taf. 55.

*Description:* Neck fragment of Lyon 3. Kütter classified it as a possible Haltern 70.



Written in *atramentum* and placed in the central part of the neck. From the original text only three letters are preserved, with a dot after the M, separating the *praenomen* from the *nomen*. We propose, with some doubts, the reading *M · Ca[---]*.

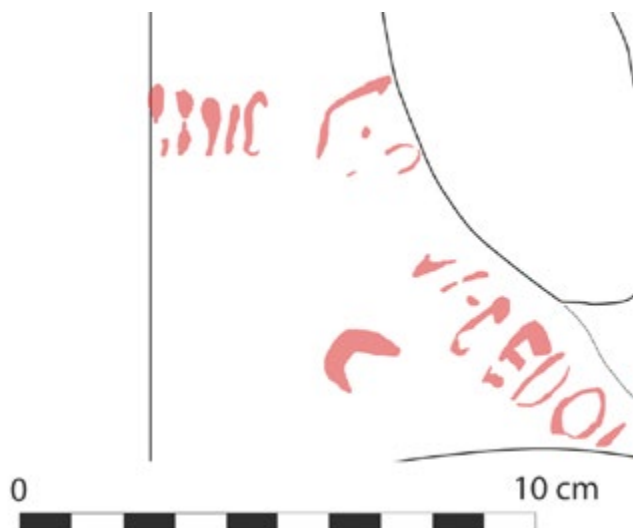
128. [---]IIII / C · [---] · Cedo+[---] / C

*Find spot:* Fundnummer 19429n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Publication:* *Vidimus*.

*Description:* Upper part of early Oberaden 83 (Fig. 6.1.0). The profile still recalls the Ovoide 6, something that would date it to the very early moments of the Roman military presence at Neuss.



This find is an ink inscription on a Baetican olive-oil amphora and it is written in red (*rubrum*). Unlike the *tituli picti* in *atramentum* from Monte Testaccio, on our example the ink is red. The conservation is not that good, but we could read and interpret the text. It consists of two parts, one placed parallel to the handle and the other on the neck. The first refers to a name, with dots between the different parts of a *tria nomina*. The other seems to be a number inscription with small units. This piece has already been published by Vegas, but she did not mention the presence of the *titulus pictus*.<sup>127</sup>

129. A X ?

*Find spot:* Fundnummer 11200C.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Publication:* KÜTTER 2008, no. 604, Taf. 39.

*Description:* Based on a list made by Ehmig, Kütter mentions that it must be a Dressel 7-10, but as it has a groove it could also be a Haltern 70. In our opinion, the 17 cm for the rim diameter and 7 cm for the neck diameter would never correspond to a Haltern 70, but rather a Dressel 7-11. The *titulus* is placed between the two handles and the piece must be dated to between the Augustan and the early Flavian periods.



130. + · Co++ [·] F++[---]

*Find spot:* Fundnummer 19138n B, Lager 2.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Publication:* *Vidimus*. KÜTTER 2008, no. 704, Taf. 46.

*Description:* Inscription on four fragments of a Gaditan Dressel 7-11, one of them a rim fragment that permits us to identify the amphora form. The inscription in *atramentum* is placed on the upper part of the body.

The text was written with a thick flat brush. There are still some traces of the *praenomen* letter, that is followed by a rounded dot and later by the *gentilicium* Co++, and the *cognomen* F++[---].

<sup>127</sup> Vegas 1975: 73 no. 17. Taf. 30.17.



CO " FR

0 | 5 cm

Kütter 2008

131. Lucconis / Prisci / CS=XXX

*Find spot:* Fundnummer 25900n.

*Present location:* Depot of the LVR-PalmLandesMuseum Bonn in Meckenheim.

*Publication:* KÜTTER 2008, no. 754, Taf. 50, 70.

*Description:* Dressel 7-11 produced in the Bay of Cádiz. We were unable to examine this piece during our stay in Meckenheim.

There are two groups of inscriptions in *atramentum* placed on the lower part of the amphora neck. We find at least two names, the first is *Lucconis* in the dative and in horizontal position, while the other is the *cognomen* *Prisci* in the genitive and vertical position, (Kütter read this as *Nisti*[---]). The inscription in the vertical and in the largest lettering must relate to a later moment, linked to the marketing or transport of the product. It is a metric indication CS=XXX, as can be inferred from the fraction S= (*bes*: 8/12; 'twice a third'). Perhaps it refers to a monetary value.

0 | 5 cm

CS=XXX

PRISCI

lucconis

754

## 12.4.1.- Geographic Index of Stamps

**Eastern Mediterranean**

((Rhodian sphinx))

Rhodian

1

**Italia**

SEX·A[---]

Dr. 6B  
“ante”

2

APELLA/LVCRE (APELA/  
LVCRE)

Dr.1B

3

P·ARRV[---?]

Dr. 2-4

4

T·H·B

Dr. 6<sup>a</sup>

5

HILAR

Dr.1B

6

[---]O

Dr. 6<sup>a</sup>

7

**Gallia Lugdunensis**

CAP aut CVP

Ly. 3B

8

[---]VLIVS

G. 2

9

**Hispania Tarraconensis**

A

Pasc.1

10

SEX·DOMIT[I]

Ob.74

11

EVT

Dr. 3

12

PHILODAMVS

Ob.74

13

C·FOVRI

Ob.74

14

GE

Dr. 2

15

IVLI·THEOPHIL

Pasc. 1

16

MPORCI

Pasc. 1

17a

MPORC

Pasc. 1

17b

**Hispania Baetica (coast)**

Illegible

Dr. 7-11

18

**Hispania Baetica (Guadalquivir valley)**

POLAR

Dr. 20c

19

ACIRGI

Dr. 20e-f

20

ATITTAE

Dr. 20b

21

BROCODV

Dr. 20b

22

L·C·F·P·C·O

Dr. 20c-d

23

LCM

Dr. 20e

24

Q·C·R·

Dr. 20b

25

C A L P V R N I A [ N I ] ?  
(CALPVRIA[NI])

Dr. 20b-c

26

CAPXIV

Dr. 20f

27

[IIIENNIOR]IVLSAE

Dr. 20d

28

L·F·O

Dr. 20

29

PHILO

Dr. 20<sup>a</sup>

30a1

PHILO

Dr. 20<sup>a</sup>

30a2

MFLAVIT

Dr. 20a-b

31

MIAPMA

Dr. 20c-d

32

M·I·M

Dr. 20a

33

Q·I·M[F]

Dr. 20d

34

LISILV/ESTRI

Dr. 20e-f

35

LIT

Dr. 20f

36

L·IVNIM/ELIS[·SI]

Dr. 20f

37

LM[---]

Dr. 20d

38

MAR

Dr. 20d

39

L·S·P[YR]

Dr. 20a

40

[RO·S]AENIANE

Dr. 20c

41

LSELEN

Dr. 20d

42

[C]SEMPPOLYCLITI

Dr. 20a

43a

C·SEMPOL

Dr. 20a

43b

PO[LYCLITI]

Dr. 20a

43c

L·V[·]IVC·

Dr. 20a

44a

L·V·IVC

Dr. 20a

44b

VRITTI·FES (VRITI·FES)

Dr. 20b

45

L·VAL·[S]

Dr. 20a

46

[L·VAL]TROP HIM[I]

Dr. 20b

47

M[-]NT

Dr. 20?

48

[---]VB ((hedera)) ?

Dr. 20a-b

49

Unreadable

Dr. 20

50

CA[---]M?

Dr. 20

51

[---]SAR?

Dr. 20

52

## 12.4.2.- Alphabetical Index of Stamps

((Rhodian sphinx))

1

A

10

ACIRGI

20

APELLA/LVCRE (APELA/LVCRE)

3

ATITTAE

21

BROCODV

22

CA[---]M?

51

CALPVRIA[NI]? (CALPVRIA[NI])

26

CAP aut CVP

8

CAPXIV

27

C·FOVRI

14

C·SEMPOL

43b

[C]SEMPPOLYCLITI

43a

EVT

12

GE

15

HILAR

6

[IIIENNIOR]IVLSAE

28

IVLI·THEOPHIL

16

L·C·F·P·C·O

23

LCM

24

L·F·O

29

LISILV/ESTRI	35	Palma motif	G.	62
LIT	36			
L·IVNIM/ELIS[·SI]	37			
LM[---]	38	<i>Gallia Lugdunensis</i>		
LSELSN	42	Cav[---]	Lyon	63
L·S·P[YR]	40	VIIAII ?	Lyon 7B	64
L·VAL·[S]	46			
[L·VAL]TROPHIM[I]	47	<i>Hispania Tarraconensis</i>		
L·V[·]IVC·	44a	N	P. 1	65
L·V·IVC	44b	V	Dr. 2	66
M[-]NT	48			
MAR	39			
MFLAVIT	31	<i>Hispania Baetica (coast)</i>		
MIAPMA	32	A	Dr. 7-11	67
M·I·M	33	L	Dr. 9	68
MPORC	17b			
MPORCI	17a			
[---]O	7	<i>Hispania Baetica (Guadalquivir valley)</i>		
P·ARRV[---?]	4	I	H70	69
PHILO	30a1	I	H70	70
PHILO	30a2	A I ?	Dr. 20	71
PHILODAMVS	13	AI VIII	Dr. 20	72
POLAR	19	II	H71	73
PO[LYCLITI]	43c	II	Dr. 20	74
Q·C·R·	25	A II	Dr. 20f	75
Q·I·M[F]	34	XX AII	H71	76
[RO·S]AENIANE	41	AII VIII	Dr. 20	77
[---]SAR?	52	III	Dr. 20a	78
SEX·A[---]	2	III	Dr. 20a	79
SEX·DOMIT[I]	11	III	Dr. 20	80
T·H·B	5	III	Dr. 20	81
[---]VB ((hedera)) ?	49	III aut IIII	Dr. 20	82
[---]VLIVS	9	IIII	Dr. 20d	83
VRITTI·FES (VRITI·FES)	45	IIII	Dr. 20	84
		IIII	Dr. 20	85
		IIII XIII	Dr. 20d	86
		IV IIII	Dr. 28	87
		I I I I I I	Dr. 20	88
		VI	Dr. 20	89
		VI	Dr. 20	90
		VI	Dr. 20	91
		VI V	Dr. 20b	92
		VI X[---]	Dr. 20b	93
		M VI XIII	Dr. 20	94
		IIIIII	Dr. 20	95
		I I I I I I I	Dr. 20	96
		VII	Dr. 20b	97
		VII	Dr. 20	98
		[---]VII [---]	Dr. 20	99
		VII III	Dr. 20d	100
12.4.3.- Index of <i>graffiti</i> according to amphora region and type				
<i>Italia</i>				
I	Dr. 1B	53		
X	Dr. 1B	54		
N[---]	Dr. 2-4	55		
<i>Gallia Narbonensis</i>				
[---]II	G. 4	56		
III I	G. 4	57		
IIII V	G. 3	58		
VIII	G. 3	59		
XII	G. 3	60		
Palma motifs	G.	61		

VII III	Dr. 20d	101	Palma motif	G.	62
VII + III[---]	Dr. 20	102	N	P. 1	65
VII XII	Dr. 20b	103	V	Dr. 2	66
VII XX	Dr. 20	104	A	Dr. 7-11	67
VIII	Dr. 20	105	L	Dr. 9	68
VIII IIII	Dr. 20	106	I	H70	69
X	Dr. 20	107	I	H70	70
X	Dr. 20	108	II	H71	73
X	Dr. 20	109	[Si]lvani / [---]+si	Dr. 20	118
X IIIII	Dr. 20a	110	VI? N?	Dr. 20a	123
[---] XI	Dr. 20a-b	111	VICTOR	Dr. 20	125
XII	Dr. 20	112			
[---]XIII	Dr. 20	113			
[---X]XXI+[---]	Dr. 20	114			
AE	Dr. 20	115	N[---]	Dr. 2-4	55
[---]BRIG[---]	Dr. 20	116	[---]II	G. 4	56
Ma III ?	Dr. 20	117	III I	G. 4	57
[Si]lvani / [---]+si	Dr. 20	118	III V	G. 3	58
T CIV ?	Dr. 20	119	VIII	G. 3	59
SC[---] ?	Dr. 20	120	XII	G. 3	60
V+[---]	Dr. 20	121	Cav[---]	Lyon	63
VER M[---]	Dr. 20e-f	122	VIIAII ?	Lyon 7B	64
VI? N?	Dr. 20a	123	A I ?	Dr. 20	71
VIA?	Dr. 20	124	AI VIII	Dr. 20	72
VICTOR	Dr. 20	125	II	Dr. 20	74
			A II	Dr. 20f	75
12.4.5.- Nominal <i>graffiti</i>			XX AII	H71	76
			AII VIII	Dr. 20	77
A	Dr. 7-11	67	III	Dr. 20a	78
AE	Dr. 20	115	III	Dr. 20a	79
[---]BRIG[---]	Dr. 20	116	III	Dr. 20	80
Cav[---]	Lyon	63	III	Dr. 20	81
T CIV ?	Dr. 20	119	III aut IIII	Dr. 20	82
L	Dr. 9	68	IIII	Dr. 20d	83
MA	Dr. 20	117	IIII	Dr. 20	84
N	P. 1	65	IIII	Dr. 20	85
N[---]	Dr. 2-4	55	IIII XIII	Dr. 20d	86
SC[---] ?	Dr. 20	120	IV IIII	Dr. 28	87
[Si]lvani / [---]+si	Dr. 20	118	I I I I I I	Dr. 20	88
V	Dr. 2	66	VI	Dr. 20	89
VER M[---]	Dr. 20e-f	122	VI	Dr. 20	90
VI? N?	Dr. 20a	123	VI	Dr. 20	91
VIA?	Dr. 20	124	VI V	Dr. 20b	92
VICTOR	Dr. 20	125	VI X[---]	Dr. 20b	93
VIIAII ?	Lyon 7B	64	M VI XIII	Dr. 20	94
			IIIIII	Dr. 20	95
12.4.6A nte <i>cocturam graffiti</i>			I I I I I I I	Dr. 20	96
I	Dr. 1B	53	VII	Dr. 20b	97
X	Dr. 1B	54	VII	Dr. 20	98
Palma motifs	G.	61	[---]VII [---]	Dr. 20	99

VII III	Dr. 20d	100
VII IIII	Dr. 20d	101
VII + III[---]	Dr. 20	102
VII XII	Dr. 20b	103
VII XX	Dr. 20	104
VIII	Dr. 20	105
VIII IIII	Dr. 20	106
X	Dr. 20	107
X	Dr. 20	108
X	Dr. 20	109
X IIIII	Dr. 20a	110
[---] XI	Dr. 20a-b	111
XII	Dr. 20	112
[---]XIII	Dr. 20	113
[---X]XXI+[---]	Dr. 20	114
AE	Dr. 20	115
[---]BRIG[---]	Dr. 20	116
Ma III ?	Dr. 20	117
T CIV ?	Dr. 20	119
SC[---] ?	Dr. 20	120
V+[---]	Dr. 20	121
VER M[---]	Dr. 20e-f	122
VIA?	Dr. 20	124

#### 12.4.8.- *Tituli picti* (Ink inscriptions)

Koan amphora	Es [-----] K+[---]	126
Lyon 3	M · Ca[---] ?	127
Oberaden 83	[---]IIIII / C · [---] · Cedo+[- --] / C	128
Dressel 7-11	A X ?	129
Dressel 7-11	+ · Co++ [·] F++[---]	130
Dressel 7-11	Lucconis / Prisci / CS=XXX	131

## 13. Neuss amphorae and their significance for the understanding of Roman imports on the Rhine

In this book, we have presented our overview of the imports that arrived at Neuss, both from those specimens collected in fieldwork and stored in the Meckenheim stores, and from reviewing the already classified and published material.

Studies of the ceramic finds of Neuss, which include the amphorae, have progressed considerably since the studies of the *Limesforschungen* in the 1970s, based on excavations directed by H. Von Petrikovits<sup>1</sup> from the early 1950s and later. This work has been taken up again in recent years, by both A. Wegert and our own project. Some publications have materialized from this work, though with hindsight they required more reflection and time.

The geostrategic position of Neuss, at an intermediate point between Cologne and Xanten, at the confluence of a smaller river and the Rhine, seems to have been correctly evaluated by the Roman army, as is revealed by the continuous military occupation of this area.<sup>2</sup> It is possible that during Augustan times most of the military camps in Neuss were active intermittently, serving as a rear-base for the armies that were in constant military action on the far bank of the Rhine.<sup>3</sup> This occupation, linked to troops that were always on the move, can perhaps explain the relatively low number of fragments of amphorae compared to other sites with a similar occupation length, like the Kops Plateau in Nijmegen, or a shorter one, such as the military camps in the Lippe valley.

### 13.1. Comparison with other sites in the Rhine region

Throughout, repeated reference is made to the presence, absence, and the quantities of specific types of amphorae located in other parts of central and north-western Europe, a satisfactory comparison of Neuss, it has emerged, with other places on the Rhine can be difficult to achieve because, despite it being evident that most of the material has to date to the Augustan and Julio-Claudian periods, the lack of chronological precision at Neuss and the high impossibility of finding other sites with similar chronologies pose major impediments. While the camps in the Lippe valley, or at sites like Rödgen, Höchst, and Dangstetten in the middle and upper basin of the Rhine, do assist to a degree with comparisons for the Augustan period, for later times the situation becomes more complex. At sites like Xanten, Mainz, Cologne, and Augst, there are broad-based chronologies covering the Augustan and Julio-Claudian periods, but they remain settled for several

centuries, something that generally impedes an accurate characterization of their initial phases. The site that can be best compared to Neuss is the Kops Plateau in Nijmegen, as it presents an occupation that runs from the end of the penultimate decade BC until the outbreak of the Batavian revolt in AD 69.<sup>4</sup> We have recently shown that despite the number of amphorae studied at the Kops Plateau being four times greater than that of Neuss, both sites show a very similar percentage breakdown of the major producing regions present.<sup>5</sup> The study conducted with other colleagues on the material from the Kops Plateau provides important comparative data, thus enabling a more rigorous investigation into the evolution of imports in the Augustan and Julio-Claudian periods into the the Lower Rhine. The Kops Plateau is not the only site at Nijmegen that is interesting to compare with Neuss, as the Hunerberg is a vital co-witness with Neuss to the first moments of the arrival of the Roman army in the Rhine region.<sup>6</sup>

Similarly, the importance of the sites in the basin of the Lippe for detailing the Roman occupation during Augustan period must not be overlooked. Despite the problems due to the lack of a reliable stratigraphy at Neuss for determining the chronological sequence of the different phases of occupation, the morphological comparison of the material from Neuss, along with that from Oberaden, Haltern, or Anreppen, is very important, especially in the case of Hispanic imports, as the amphorae were subject to constant typological transformation in this early phase.<sup>7</sup>

Due to the nature of the historical development of the Rhine region during the first century of Roman occupation, a unique opportunity exists to observe the development of production and exports from various areas of the Mediterranean and Central Europe. Thus, through an extensive comparison of materials from the different sites that imported amphorae (or rather, their contents) along the Rhine, one can establish and identify rhythms, fluctuations, and changes in exports and product-demand, as related to the main production regions of amphorae-borne goods. The dominance of some types, related to the decline of others and the intervention of the Roman state and the political and economic elites all had an impact in this process. Recently, an in-depth study of Hispanic

<sup>4</sup> Van Enckevort 1997; Willems – van Enckevort 2009: 35-41.

<sup>5</sup> González Cesteros 2014: 256-280.

<sup>6</sup> Despite the problems in achieving a proper differentiation of the pottery from the Hunerberg, due to the later occupation of the area by a legionary fortress of the Flavian period, some early materials have been recovered. R. Nijmeijer has published an article that refers to some of these materials (Nijmeijer 2013). Some Spanish finds of this early phase are reported in González Cesteros 2014: 243-250. A comprehensive article about the earliest occupation phase of the Hunerberg, written by J. Van den Berg, H. González Cesteros and R. Nijmeijer, has recently been published (van den Berg *et al.* 2017).

<sup>7</sup> González Cesteros 2014: 313-329.

<sup>1</sup> Von Petrikovits 1957; 1961.

<sup>2</sup> Chantraine *et al.* (eds) 1984.

<sup>3</sup> Gechter 2010.





FIGURE 13.1: MAP OF THE GERMANIA ROMAN FRONTIER WITH THE MAIN MILITARY SETTLEMENTS.

imports in what would later be the province of *Germania Inferior* has been conducted,<sup>8</sup> and provides a good starting-point for a better understanding of these processes, given that Hispanic imports comprise the main portion of any Roman deposit along the Rhine. It is advisable now to look

<sup>8</sup> González Cesteros 2014. This work was submitted for a Phd, under the direction of J. Ruiz de Arbulo and P. Berni, is expected to be published soon.

more deeply into other regions, to define more precisely the pattern of evolution of their exports.

At Neuss, by carrying out a comprehensive study of the entire amphora collection available, we have provided and organised the relevant information on each of the amphorae-producing regions and explored the export economy operating in the Roman world during the Augustan and Julio-Claudian periods.

### 13.2. Regions, products, forms, chronology, and singularities of the Neuss amphorae

As mentioned above, at Neuss and in the Rhine as a whole, it was the Iberian Peninsula that dispatched the greatest number of amphorae to the settlements. According to the data studied, it is the norm in north-western Europe for one of every two amphorae identified to come from ancient *Hispania*. The numbers were probably even higher during the early Augustan period, if the initial forms of Dressel 7-11 and of amphorae from the Guadalquivir and from *Tarraconensis* are taken into account. This large number of Hispanic imports predominantly carried two products: olive oil and salted fish or fish products. *Tarraconensis* wine is well-represented at Neuss thanks to a number of Pascual 1 and Oberaden 74, to which could also be added some probable Dressel 3-2. The percentage of Haltern 70 is also significant. In this case, it should be clarified that although the dominance of Hispanic products within the amphorae-borne trade is undisputable, they did not enjoy a comparable ascendancy with respect to the overall provisioning of Neuss. Thus, and leaving aside the shipping of grain from the Iberian Peninsula, something quite improvable, the impact of Hispanic products in the particular case of the liquids that were imported into Neuss also needs revision. Indeed, a large part of these goods, mainly wine, came in barrels from southern France, as E. Marlière and J. Torres have demonstrated for the English fort of *Vindolanda*,<sup>9</sup> and this trend seems to be more than adequately proven for sites on the Rhine also.<sup>10</sup> The presence of Haltern 70 amphorae at Neuss must be linked to the massive arrival of low-quality wines for the daily needs of the Roman troops, even though it is an amphora whose contents could vary; but as a carrier of *defrutum* or syrup, a product that was regularly needed to improve the taste of the wines of poor quality, it was naturally found in the highest quantities.<sup>11</sup>

In any case, the dependence at Neuss on certain Hispanic products, particularly olive oil and salted fish, is evident in the results and is documented at other Rhenish military establishments at an early stage. This highlights the close link, established from the very outset, between the Iberian Peninsula and the Rhine frontier.<sup>12</sup> This economic tie was maintained throughout the period of Roman rule and military presence on the Rhine,<sup>13</sup> involving principally the Guadalquivir valley and the coastline of *Baetica*.

After the Iberian Peninsula, the Gallic provinces provided the second-most important sources of amphora products to Neuss, with Lyon pre-eminent with its exports of both wine, or wine sub-products, and salted fish and fish sauces. Among these amphorae the earlier types produced in the region of Lyon are noticeable, from the end of the

Augustan and the Tiberian periods,<sup>14</sup> when imports from the Gallic metropolis were much in-demand in markets of the north-western provinces. Here, it is the Lyon 3A which was the most common type (as opposed to the few examples of Lyon 3B, dominant in the Lyon workshops in the second half of the first century AD). Nevertheless, the presence of Lyon 3B demonstrates once again the inability to fit the Neuss material into a refined chronology, in this case purportedly between the principates of Augustus and Claudius.

After Lyon, *Gallia Narbonensis* was the second most important Gaulish region supplying the troops at Neuss. A large number of flat-bottomed amphorae arrived from the south of France, as did other vessels related to the packaging and export of local wines. The types and shapes of Narbonensian containers found in Neuss provide very early examples of these, such as the Dressel 1B Narbonensis, and account for the presence of the Gauloise 3 and probably Gauloise 7. Amphorae of the Julio-Claudian period or even later times from *Narbonensis* are also present at Neuss.

Similarly, the region of Marseille, included geographically within *Gallia Narbonensis*, but considered separately here because of its own cultural and ceramic traditions, exported different types of amphorae to Neuss. The forms documented in this study are all from the Augustan period, coinciding with the last boom in the amphorae products of Marseille.<sup>15</sup> In this case, at Neuss, only types linked to the export of wine appear, especially the flat-bottom Gauloise 2 amphora; while in *Germania* the presence of Dressel 7-11 in a Marseille fabric has been documented on several sites.

There are numerous studies of Gallic wine production and exports in amphorae, with the work of Laubenheimer crowning them all.<sup>16</sup> As mentioned, products other than wine were also exported to Neuss from central and southern Gaul, the most common being fish sauces and salted fish from the coast of *Gallia Narbonensis* and from the Lyon region. On the Rhine, the main market for Lyon products,<sup>17</sup> a significant percentage of the amphorae contained fish products whose production sites remain unclear. We disagree with the popular hypothesis that many came from the Iberian Peninsula and were repackaged in Lyon, as we argued in Chapter 7.

Overall, it is our belief that the role played by the Gallic provinces, mainly *Gallia Lugdunensis*, in provisioning Neuss and the Rhine region in general from the Augustan period onwards, was far more important and at a greater scale than the archaeological evidence indicates, based on the commonest ceramic types. Thus, as mentioned many times, much of the wine consumed by the troops would

<sup>9</sup> Marlière – Torres 2005.

<sup>10</sup> Kühlborn 1992; Marlière 2002.

<sup>11</sup> Aguilera 2004a: 126-128; Bernal *et al.* forthcoming; Fernández Sáez 1987; González Cesteros 2014: 404.

<sup>12</sup> González Cesteros 2014.

<sup>13</sup> González Cesteros 2010; Remesal 1997.

<sup>14</sup> Dangréaux – Desbat 1988.

<sup>15</sup> Bertucchi 1992.

<sup>16</sup> Laubenheimer 1985; *inter alia*.

<sup>17</sup> Dangréaux – Desbat 1988; Monsieur 2010.

have come in large barrels with capacities that could reach well over 1000 litres. It is true that the excavations at the military camps at Neuss have not revealed any barrel remains, but at other Augustan and Julio-Claudian Rhine camps there are large numbers of barrels which were reused to build wells, as in Oberaden.<sup>18</sup> Perhaps the apparent absence of wells made with barrels at Neuss is due to the known intermittent occupation of the site by Roman troops.

It is quite clear that the geographical proximity of the Gallic provinces to the Rhine provided a great advantage for the economy of Gaul, as the Roman State would have always tried to supply their troops with Gallic products, saving high transport costs. The military market in the Rhine region must be understood as a major incentive for the development of the export economy of Gaul. Geographical proximity is the only reasonable explanation for the presence of some products from *Gallia Belgica* among the material studied in Meckenheim. Despite being a very small number, the presence of these flat-bottomed containers in Neuss is, in itself, significant. The assignment of most of the material into a somewhat broad and indivisible period of early occupation is probably the reason why flat-bottomed amphorae from *Gallia Belgica* seem to be scarce, as their greatest phase of dissemination seems to begin at the end of the first century AD. The role of such significant productions, as also those from the Scheldt Valley, continues to suffer from this lack of chronological precision: only at Nijmegen<sup>19</sup> and Xanten,<sup>20</sup> and especially at Valkenburg,<sup>21</sup> have they been studied, even if minimally.

At Neuss, numerous amphorae produced in the Aegean are recorded, Rhodian amphorae being the most prominent. The presence of large numbers of Rhodian and Koan amphorae in military contexts of the north-western provinces is due to the consumption of wines produced in this part of the Aegean and exported to the troops settled in the North; this phenomenon was signalled by Peacock long ago with regards to the first phases of the Roman military presence in *Britannia*.<sup>22</sup> However, 'minor' Aegean imports, such as Knidian and especially Chian wines, may in fact have been high-quality products, less extensively traded, and probably only to the military elite.

The second eastern Mediterranean region with a presence at Neuss is the Levantine coast, represented by a few fragments of Carrot and Kingsholm 117 amphorae. Though well distributed to sites in Gaul, the Rhine provinces and Britain, as well as Rome, these types are generally found in very low quantities, which is understandable, given that they are for packaging exceptional foodstuffs, probably figs, dates and prunes from *Phoenicia* and perhaps also

*Iudea Palaestina*. Undoubtedly, again, their consumption at Neuss must have been limited to senior army officers.

It has been repeatedly stated that Italian amphorae dominated all western markets during the last two centuries BC, penetrating in particular the central and south Gaulish regions. However, the evidence suggests that during the second half of the first century BC a decrease in exports from all Italian sources occurred, though regions such as the central and northern Adriatic seem to have withstood this decline better. At Neuss, Italian amphorae are present in moderate to high numbers and were probably more numerous in the early phase of occupation. Also, and perhaps surprisingly, many Italian regions are present, there being a good number of amphorae from the Tyrrhenian regions and the central Adriatic. The Brindisi specimens, as well as those from the northern Adriatic, deserve attention, as amphorae from these regions are virtually non-existent at most of the settlements in the Lower Rhine. Although there is a predominance of what might be called the 'classic forms' of amphorae from the Italian peninsula during the Augustan and Julio-Claudian periods, at Neuss some do not conform to the norm. This concerns primarily the presence of an amphora that imitates the shape of those of Knidos, but with a fabric that is typical of Campania, and a rim of the 'ante'-Dressel 6B form, with a stamp and clay that recall the products of the northern Adriatic. Though we cannot assign this piece to a source or workshop in the Istrian peninsula, we may note that it was there that later, the entire production of the Dressel 6B evolved during the first and early second centuries AD.

Finally, among the marginal products, is the single fragment of a late Maña C 2 or an amphora of the T-7 group, whose place of production is indisputably North Africa. Amphorae of this type are documented at other Rhenish sites, but always in very small quantities. We can not say which kind of product these amphorae contained; its rarity is maybe suggesting a special import.

Considering the entire Neuss assemblage, certain traits are identifiable that we suspect are due to the long occupation and the poor comprehension of the early stratigraphy. These include: the great number of early Italian amphorae and sources, and the major presence of Lyon amphorae. Within the Hispanic finds, the high number of Tarraconensian amphorae, at a percentage similar to those at *Vindonissa* and Dangstetten, should be noted.<sup>23</sup> We believe that imports of these amphorae were probably higher at Neuss than at other military sites during the reign of Augustus. The low presence of Dressel 3-2 suggests that the vast majority arrived in the initial years of occupation at Neuss. Eastern amphorae are also very common, represented especially by Rhodian amphorae, which from the variety of shapes, can be said to have been imported during the Augustan and Julio-Claudian periods. From a chronological and geographical point of view, the presence of a few Brindisi

<sup>18</sup> Kühlborn 1992.

<sup>19</sup> Stuart 1962; van den Berg 2017a.

<sup>20</sup> Schmitz 2014.

<sup>21</sup> van der Werff *et al.* 1997.

<sup>22</sup> Peacock 1977: 269-270.

<sup>23</sup> González Cesteros 2014: 453 graf 4; 2015: Fig 3.

amphorae is anomalous, as these finds do not appear to be consistent with what we know about their distribution elsewhere. These are in fact late products of the Augustan period.

The amphora assemblage of Neuss is also of special interest for the typological evidence it offers. Leaving aside the presence of the better-studied forms of Augustan and early Roman times, at Neuss there exist truly unique pieces. Among them, are the early forms of Oberaden 83, which represent an intermediate stage between the Ovoide 6, documented in contexts of the third quarter of the first century BC, and the 'classic' form of Oberaden 83, found at Rödgen or Oberaden.<sup>24</sup> To this early form from southern *Hispania*, must be added the previously mentioned Knidian amphorae in Campanian fabric, the 'ante'- Dressel 6B, and an unclassified Aegean vessel (Figure 9.1.3, no. 1).

Another important topic is the changing patterns in the quantities of certain goods imported, mainly salted fish products and fish sauces, as has already been mentioned in this book and elsewhere.<sup>25</sup> While imports of wine, both in amphorae and barrels, and especially of olive oil, appear to occur in volumes that do not vary excessively over the analysed period, in the case of fish products, a progressive decline is observed following the late Augustan period, both at Neuss and across the entire Rhine region. For us, this decline is not so much due to rival production and/or packaging of similar products in nearby areas, but mainly to a decline in the need for imports rich in salt at the military establishments of the Rhine.<sup>26</sup>

Similarly, the Neuss material has an important contribution to make on the epigraphic front, these finds being presented in detail in the epigraphy addendum. Once again, the extensive collection of stamps on Hispanic examples supposes the largest group. Here, this can perhaps be mainly explained by the relatively high frequency of Tarraconensian imports which, during the Augustan and Julio-Claudian periods, seem to have been stamped with some regularity.<sup>27</sup> As for the Baetican productions, despite recovering a stamp on the upper body of Dressel 7-11, most are on Dressel 20 from the Julio-Claudian period, or even from later intrusions. Along with these stamps, some traces of ink lettering on Hispanic forms are known. Particularly important is that of a *titulus pictus* on an early Oberaden 83 that is unfortunately not possible to completely and satisfactorily transcribe.

Regarding the epigraphy from other regions present at Neuss, it is noteworthy that among the Gallic amphorae there are some stamps, some of them already published. In these pages we have proposed a new interpretation for the stamp found on the neck of a Lyon 3A being proposed. The Italian amphorae, second to the Hispanic corpus,

provide many epigraphical examples, with stamps on Campanian, Etruscan, Adriatic, and perhaps Calabrian amphorae. Undoubtedly, the discovery of the upper part of a Rhodian amphora from the Augustan period with a complete handle whose upper section was stamped was a great surprise. It must belong to the very latest stamps of Rhodian amphorae, which have nothing in common with the previous epigraphic practice documented on Rhodian amphorae from the third to early first century BC.<sup>28</sup> Along with this specimen, our studies in north-west Germany and in the Netherlands has yielded another Rhodian stamp in Haltern, yet unpublished, and another in the Kops Plateau finds in Nijmegen.<sup>29</sup>

<sup>24</sup> García Vargas *et al.* 2011.

<sup>25</sup> Carreras – González Cesteros 2013; González Cesteros 2014.

<sup>26</sup> González Cesteros 2014: 425-439.

<sup>27</sup> Berni – Revilla 2007; Berni – Miró 2015.

<sup>28</sup> Finkielsztejn 2000; 2001.

<sup>29</sup> van den Berg 2012; Berni 2017: 189.

## 14. The logistics of Roman territories on the Rhine and the contribution of Neuss material to the economic and social development of the north-western provinces of the Roman Empire

The supply of amphora-borne produce to the legions is one of the topics that has generated the largest number of papers in studies dedicated to the Roman army.<sup>30</sup> In the case of the Rhine region, the work of J. Remesal on the provision of Spanish olive oil and the existence of an *annona militaris* at an early date immediately raised a controversy that, even today, is far from being resolved. Without wishing to plunge into this thorny issue, we would like to state clearly that we are of the opinion that the Roman state paid special attention to the provisioning of its troops during the phases of conquest and settlement in *Germania*. The way in which this supply was organised cannot be explained from the amphorae evidence alone; there exist several options as to its mechanics. It could have happened, either directly or with the encouragement of incentives and assistance of the Roman state, through the agency of merchants and private carriers, or even by a combination of state and private enterprise, depending on the situation at a given time. In any case, the presence of amphorae at Neuss and in many other places along the Rhine suggests that the supply of basic products to soldiers stationed there was run directly by the Roman administration, which would have put an emphasis on certain products for the soldiers.

The logistics apparatus of the Roman state would have had to have been highly efficient to facilitate the proper conduct of military operations in *Germania* from the Augustan period onwards. It would have been essential for the troops to have regular and plentiful access to a number of basic commodities, including certain foods such as wine, olive oil, grain, and salt; but also to other goods that would guarantee the health and morale of the soldiers, including surely certain wines such as Koan and Rhodian, or some typical products of the Mediterranean diet like piquant or salted sauces. However, it should be remembered that not all amphorae were filled with basic commodities. Those carried in the Carrot amphora or the Chian wine amphora found at Neuss were of superior quality, from which one may perhaps deduce the presence of private traders keen to develop their economic activities in these northern regions. How this happened is certainly difficult to determine in the absence of dependable epigraphic and literary sources, although we believe there may be several options. One of them would be straightforward private mercantile trade, taking advantage of the routes opened by the Roman army. Another option is that some of these traders were already working directly for the state as large-scale and bulk contractors and alongside these activities, they took the opportunity to include certain luxury products, at their own risk, that they knew such goods, especially quality wines, would have been well received by the wealthier soldiers.

Such practices are attested in later times, but cannot be confirmed for the early years of the Roman presence on the Rhine.

The transport of these products from Mediterranean regions to Neuss also involved a real organisational challenge, that the central and southern Gallic provinces played an indispensable role in solving. It seems quite likely that it was the difficulty in ensuring regular supplies that caused Caesar to abandon plans to conquer the Rhine territories. However, in the half century after the Caesarian conquest of Gaul, Rome established an infrastructure of such amplitude that it was possible to transfer over really long distances not only the large military units involved in the Roman conquest of the Rhine, but also the products necessary for their subsistence. The creation of a number of colonies and Roman settlements around the major Gaulish waterways, with special attention at the converging of the Saône and the Rhône at *Lugdunum* made it possible to send Mediterranean and Gaulish products to the legions settled on the Rhine. Lyon became, in the decades after its founding around 43 BC, the main communication nexus in Gaul, to which goods would arrive from virtually all parts of the Roman world. From this central geographical point many of these products were distributed to the troops active on the Rhine, taking advantage of the excellent river systems that connect the Mediterranean with the Rhône and Rhine through two routes, one by the Saône, and the other down the Rhône to the Swiss lakes.<sup>31</sup> Along with the creation of the necessary riverine infrastructure, there would also have been a serious campaign for the construction of roads for terrestrial communication during the last third of the first century BC. It is quite clear that Neuss was incorporated into this development as the amphora evidence suggests.

Finally, we would like to re-emphasize that, despite not having studied all the material from the excavations of the military camps at Neuss, and despite the problems with correction association, and thus the dating of the materials with the stratigraphical levels, it is abundantly clear that Neuss was a dynamic focus-point for the region due to the important presence of the army. Here, not only amphorae, that are to be found in lower quantities than in other Augustan military sites on the Rhine,<sup>32</sup> but also many other Mediterranean imports would constantly have arrived to assuage the demands and needs of the soldiers quartered there.

<sup>30</sup> Erdkamp ed. 2002; Stallibrass – Thomas eds. 2008. *etc.*

<sup>31</sup> González Cesteros 2014: 478-486.

<sup>32</sup> See chapter 12.

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The occupation of the territories on both sides of the Rhine was an enormous challenge for the Roman military administration and logistics. In the last two decades of the first century BC several regions were conquered or partially occupied by Roman legions, establishing a large number of military camps around the Rhine and their most important eastern tributaries. Most of these camps were occupied for short periods, depending on the march of the legions and the course of the military events.

Located at a place with good natural defences and communications with the Belgian hinterland, Neuss was one of the earliest points on the Rhine where Roman army was stationed. The area was occupied by different legions and smaller units stationed in camps with some intervals from 16 BC.

*Roman Amphorae in Neuss: Augustan to Julio-Claudian contexts* presents a thorough study of one of the most important archaeological artefacts for the understanding of military supply to the German frontier, the amphorae. Deliveries from the Iberian Peninsula, Gaul and various eastern Mediterranean regions arrived at military camps established at the intersection between the rivers Erf and Rhine from 16 BC until the Claudian principate. The study of this material has been essential not only for Neuss, but also for further understanding of the whole Rhine region and of the logistics of the Roman army supply from distant areas.

*Horacio González Cesteros* obtained his PhD from the University of Tarragona and the Catalan Archaeological Institute. He is a member of the research staff of the Austrian Archaeological Institute. His research areas are commercial and agrarian economy and social studies of the late Hellenistic, Roman and Byzantine periods. He has published several articles and edited books mainly focused on amphora studies. Horacio has been part of or has directed several projects in Spain, Germany, the Netherlands, Italy, Croatia, Greece and Turkey, collaborating with various research institutions.

*Piero Berni Milet* holds a PhD from the University of Barcelona. He is linked to the research unit of the Labex Archimede of the University of Montpellier. His research areas are social and economic studies in Classical Antiquity using the so-called *Instrumentum Domesticum Inscriptum* as the preferred tool. He has published many articles and books mainly focussed on ownership systems and land exploitation patterns, production and consumption of food, economic interdependence between producer territories and consumer markets, and social promotion within the structure of individuals and families involved in trade within the Roman Empire. He has worked on many different projects in southern and northern Spain, France, Germany, the Netherlands and Croatia, being a member of different teams and collaborating with various research institutions.



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