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Terra sigillata in southern Latium

Tol, G. W.; de Haas, T. C. A.; Attema, Peter

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Address

University of Groningen
Groningen Institute of Archaeology
Poststraat 6
9712 ER Groningen
The Netherlands
gia@rug.nl

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A decorated Late Postclassic Mixtec human skull from Teotitlán del Camino, Oaxaca, Mexico, possibly dating to c.1400–1520 CE. The type of adhesive used to affix the mosaic to the skull raised some doubts about the authenticity of the object. Photo P. Erdil. (Collection Nationaal Museum van Wereldculturen. Coll.No. RV-4007-1.)

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Terra sigillata in southern Latium

The evidence from the Pontine Region Project, 1987-2014

G.W. Tol^a, T.C.A. de Haas^b & P.A.J. Attema^c

^a Department of Classics and Archaeology, School of Historical and Philosophical Studies, University of Melbourne

^b Faculty of Archaeology, Leiden University

^c Groningen Institute of Archaeology, University of Groningen

Abstract: *This contribution is the first of a series of publications by the authors to systematically disclose the wealth of material evidence collected during some 30 years of fieldwork in the Pontine region by the Pontine Region Project. This project has, since its inception in the mid-1980s, investigated more than 36 km² of terrain across all major geomorphological units of the region, largely by means of systematic surface investigations. During these investigations, close to 200 000 artefacts were collected for further study, including c. 1 660 fragments of (Italian) terra sigillata, the emblematic, shiny red fine table ware of the Early Imperial period. In this article, we present a detailed spatial and contextual analysis of the terra sigillata fragments that have been gathered within the Pontine Region Project and discuss the results in light of economic issues (market integration, economic growth). We then supplement this evidence by published evidence of name stamps from surrounding areas to further expose to what extent, and in what ways, the different parts of southern Latium were embedded in the long-distance economic networks of the period.*

Keywords: *Pontine Region Project, Early Imperial period, terra sigillata, name stamps, Roman economy, ceramic studies.*

1. Introduction

Since its inception in the mid-1980s, the Pontine Region Project (PRP) has amassed a large quantity of archaeological data on the settlement, economic and land-use history of the Pontine region (Lazio, central Italy). The recent construction of an overarching database for the project, comprising most of the information on sites and finds, has made it possible to systematically query this important collection of archaeological data. Drawing on this database, we plan to fully publish all the material evidence collected over the course of the project, in a series of publications that together furnish insight into the material culture and economic history of the region from the perspective of the countryside.

The present article is the first contribution to this series. In it, we present a full discussion (and associated catalogue) of the (Italian) terra sigillata collected within the PRP, amounting to some 1 662 fragments. Using this dataset, we first look at regional patterns of distribution and consumption of terra sigillata as a proxy to assess

potential differences in market integration within the region. We then investigate the differential occurrence of the ware among areas and site types (villas, farms, etc.) as a possible reflection of economic growth and prosperity. In the second part of the article, we zoom in on the 'diagnostic' fragments to assess more closely the intra-regional diachronic patterns of circulation and consumption. Finally, we combine the results from the PRP material with the published evidence for name stamps for southern Latium as a whole, to further tease out differences in the supply and consumption of terra sigillata across the region.

2. Terra sigillata: a brief introduction

Terra sigillata is the emblematic fine ware of the Early Imperial period. It is characterized by a purified pink-red clay covered with a shiny, red gloss. Production of the ware probably started around 40-30 BC, and it soon replaced the previously preferred Italian black gloss pottery, with which it shows clear affinities in

formal repertoire and areas of production. The earliest production centred on the Roman colony of *Arretium* (modern-day Arezzo), but within a few decades many other areas in Tyrrhenian central Italy were involved in the manufacturing of this ware, including the wider Naples area (Pozzuoli/Cuma?), northern Tuscany (the city of Pisa and its surroundings) and the lower Tiber valley. These production centres between them managed to achieve such a remarkably homogeneous product in terms of vessel repertoire, fabric and slip that one can usually only distinguish products from different areas of manufacturing through chemical analysis (*Conspectus* 1990: 1-2).

The ware enjoyed immediate success and within a few decades found its way to markets all over the Roman world and beyond, with small numbers of vessels reaching areas as far away as Scandinavia, India and the Arabian Peninsula (OCK 2000). A large part of the initial success of the ware was in supplying the Roman troops on the frontiers, and it was not long before businesses were set up in the Roman provinces themselves, reducing transportation costs and replacing much of the need for Italian products. Italian sigillata did, however, continue to be immensely popular in Italy and the wider Mediterranean area until at least the late 1st century AD, after which it gradually seems to lose its share of the fine ware market to competing products from the Eastern Mediterranean and, especially, North Africa. The cessation of the manufacturing of the ware is usually placed around the mid-2nd century AD; terra sigillata fragments are still common in contexts dating to the first half of that century at Ostia (Martin 1992 & 2006), while a remarkable fragment from Cosa bearing the impression of a coin depicting Hadrian's wife, Sabina, provides a firm *terminus post quem* in the 140s AD (Marabini Moevs 2006: 167-8).

From early on, terra sigillata has received a lot of attention in the scholarly literature as its rapidly changing vessel repertoire made it a comparatively suitable class of material for the dating of contexts. Also, the presence of makers' marks on vessels rendered the ware particularly suitable for the reconstruction of ancient trade patterns. The meaning of the name stamps themselves has long preoccupied scholars, the four most popular interpretations being that these stamps were used to 1) quantify output; 2) identify the contribution of separate potters to a kiln batch;¹ 3) identify items that were made in fulfilment of a specific contract; or 4) promote the products (OCK 2000: 10-4; Fülle 1997).

The development of terra sigillata passed through several stages. Initially it saw the manufacturing of a limited number of mainly open shapes that lacked the degree of standardization apparent in later phases. The frequent variations in slip colour, ranging from black to bright red, indicate an overall phase of experimentation in achieving the transition from products bearing a black to those bearing a red surface slip (hence such frequently adopted terms as 'experimental' or 'transitional' sigillata) (*Conspectus* 1990: 3-4). Name stamps – usually four or five – in this early phase are predominantly squarish/rectangular and radially placed around the centre of the floor.

The Augustan and Tiberian periods can surely be considered the pinnacle of Italian sigillata production. During this period, a wide variety of vessels of high quality was produced in many different workshops. The bulk of the output consisted of highly standardized plain shapes, but some workshops (mainly in Arezzo) specialized in the manufacturing of elaborate, mould-made, relief-decorated vessels. In early Augustan times, radially placed stamps were replaced by single stamps – usually of rectangular shape – placed at the centre of the floor. Shortly after the reign of Augustus, several important technological changes occur in the production of terra sigillata with the introduction of the *planta pedis* stamp and, around the same time, the use of applied decoration on the rims of both open and closed shapes.²

Around the mid-1st century, there appears to be a reduction in both the number of workshops and the range of vessel types produced, which becomes limited to just a few open and closed shapes bearing applied decoration. Also, by this time the production of relief-decorated sigillata in Italy appears to come to a halt. Although production continues in Arezzo on a smaller scale, production in central Italy and Pisa seems to gradually gain a dominant position during this period. Around Pisa, a group of potters commenced the production of decorated sigillata (*terra sigillata tar-do-italica*), a class of mould-produced, relief-decorated sigillata bearing extensive and – compared with the earlier Arretine relief-decorated pottery – relatively standardized, crudely executed decorative schemes (Medri 1992; Rosetti Tella 1996). These decorated vessels almost exclusively belong to a single bowl shape, the Dragendorff 29.

Although this pottery is thus an Italian invention, our knowledge of terra sigillata was until recently predominantly based on several closely datable military sites

1 This is a suggestion that finds some support in two firings lists inscribed on fragments of terra sigillata found at La Graufesenque (Marichal 1988) and Pisa/Isola di Migliarino (Camodeca 2006), respectively.

2 Note that the overview of stamp shapes as provided in this paragraph sketches a general development; the use of rectangular stamps, for example, continued after the use of the *planta pedis* stamp became commonplace.

in the northern provinces, such as Haltern, Oberaden and Magdalensberg. In the (updated) introduction of the seminal work on name stamps on sigillata, Philip Kenrick stated only some 20 years ago that “...some parts of Italy (e.g. Samnium, Picenum, Lucania, Calabria and Bruttium) are poorly represented, surely through lack of research rather than lack of trade” (OCK 2000: 38). Fortunately, in recent decades the tables have begun to turn, with significant advances in the study of the actual production sites. In (northern) Tuscany, the archaeological investigation of a number of smaller production sites in rural settings now provides useful information on the organization of the terra sigillata manufacturing industry.³ Also in the last two decades, important publications of urban contexts have appeared, including the city of Rome (Rizzo 2003; Brando 2008) and the Roman colony of Cosa (Marabini Moevs 2006), and a number of comprehensive regional overviews have been published (for example, Mollo 2003 for Calabria; Malfitana 2004a for Sicily).

In this contribution we add to these recent works by providing a first overview of the available evidence for the supply of terra sigillata to southern Latium. This reconstruction will initially be framed within the

context of the Pontine Region Project, a long-running landscape archaeological project that focuses on the reconstruction of the history of settlement and land use in the Pontine region.

3. The Pontine region

The Pontine region consists of a large coastal plain situated in central Tyrrhenian Italy, just south of Rome. The plain itself is made up of two distinct geomorphological units: a system of higher marine terraces along the coast and – more inland – a lower-lying area known as the Pontine graben. The region is bounded to the south and west by the Tyrrhenian Sea, to the north by the Alban Hills and to the east by the Lepini and Ausoni mountains, two limestone ranges belonging to the anti-Apenines (Fig. 1).

A long tradition of archaeological research allows us to reconstruct the general development of the settlement and economy of the region in the Roman period. Having witnessed the rise of cities and an intensively settled countryside from early Roman times onwards, both urban and rural settlements flourished in later Republican and Imperial times, with some localized

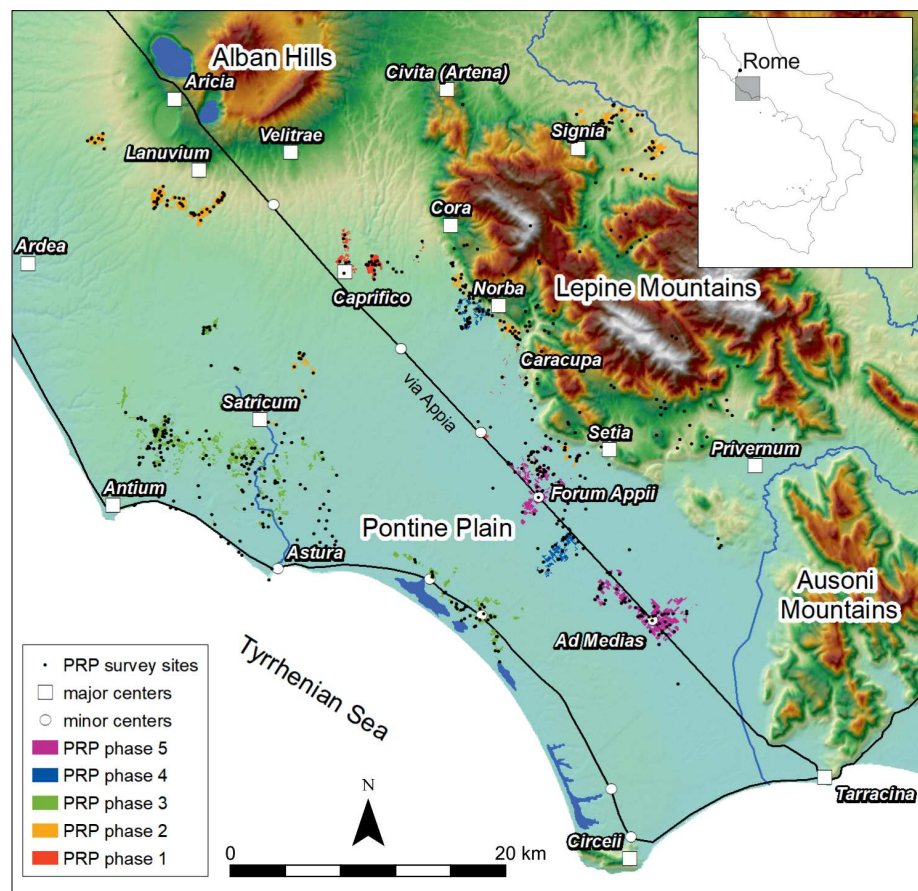


Figure 1. The Pontine region, with areas and sites investigated by the PRP.

3 Sites include Torrita di Siena (Pucci 1992); Vasanello (Olcese 2004); Scoppieto (Bergamini ed. 2007); and, more recently, Podere Marzuolo (Vaccaro et al. 2017; Vennarucci et al. 2018; Van Oyen et al. 2019). For a recent overview of the evidence for production sites of Italian terra sigillata, see Sternini 2019.

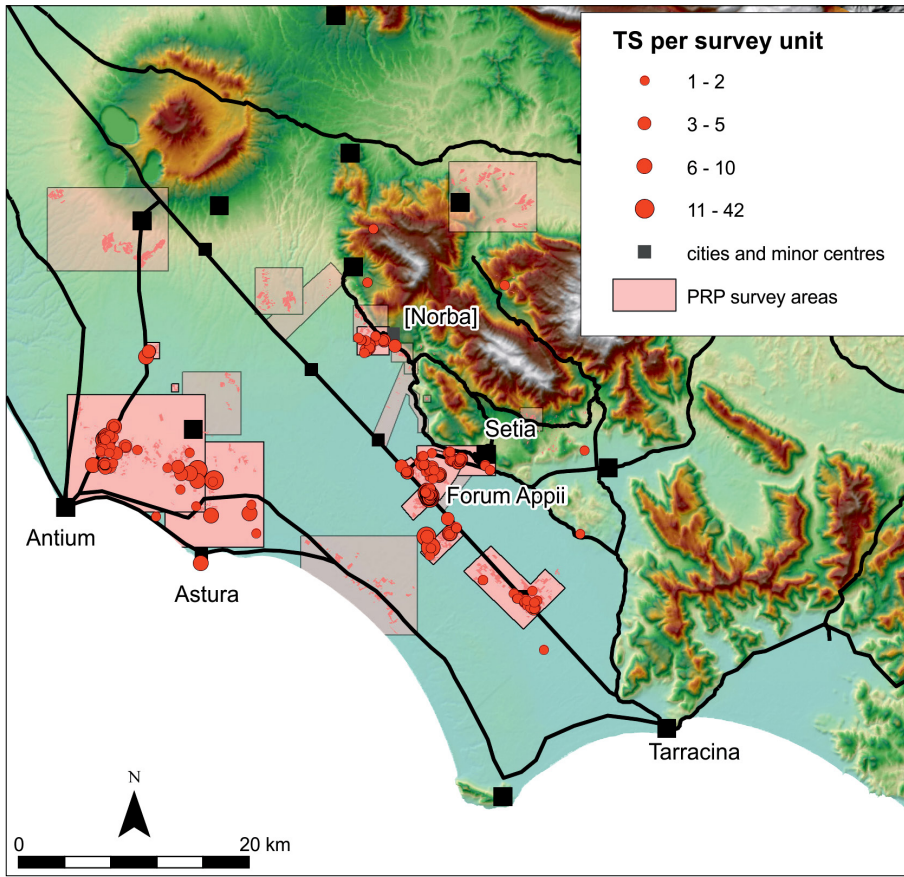


Figure 2. Distribution of terra sigillata (TS) collected during off-site gridded surveys of PRP phases 3-5 (excluding the Fogliano survey and parts of the Hidden Landscapes surveys in the Monti Lepini).

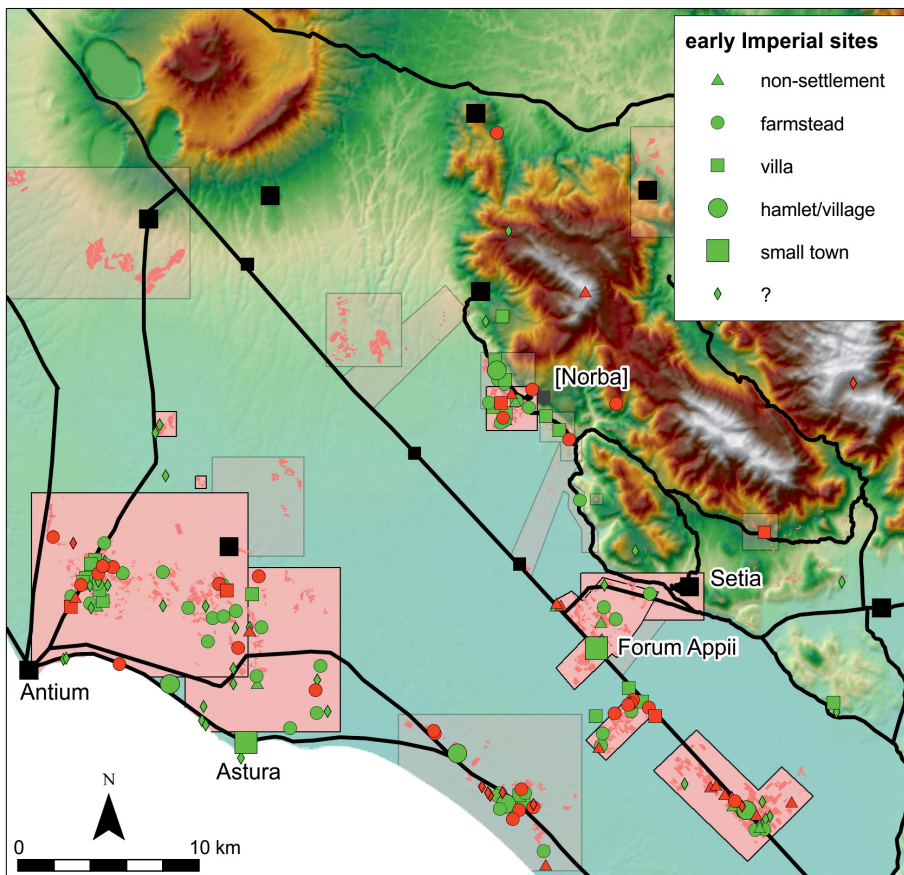


Figure 3. Distribution of early Imperial period sites with (green) and without (red) terra sigillata.

Table 1. Terra Sigillata collected during the different phases of the PRP.

Project phase	Area surveyed (ha)	Artefacts collected (n)	PRP survey project name and season	Notes on whether terra sigillata systematically collected and its abundance (n)	Terra sigillata diagnostics (n)
Phase 1	268.8	120 985		?	32
			Cora/Norba/ Sezze Transects (1987/1988)	Not systematically collected	3
			Caracupa on-site survey (1985-1988)	Systematically collected	10
			Contrada Casali on-site survey (1988)	Not present	
			Cisterna survey (1990)	Systematically collected	19
Phase 2	1 064.3	73 431		>72	9
			Satricum area (1991/1992/1996)	Unclear*	?
			Sezze (1994)	72	9
			Selva Forcella (1997)	Not present	?
			Lanuvium (1995)	Unclear*	?
			Norba (1995)	Unclear*	?
			Segni (1997)	Unclear*	?
			Ninfa (1998/1999)	Unclear*	?
Phase 3	1 111.0	56 145		>203	172
			Fogliano (1998/1999)	Systematically collected	85
			Platform site survey (2002)	Not systematically collected	18
			Astura valley (2003)	>1	7
			Nettuno (2004/2005)	202	62
Phase 4	315.0	84 475		383	554
			Hidden Landscapes Project upland surveys (2005-2009)	12	1
			Pontinia (2007/2008)	92	19
			Norba (2008)	37	5
			Nettuno on-site surveys and revisits (2006-2008)	242	164
			study collection Antiquario Comunale di Nettuno	-	365
Phase 5	833.8	99 661		638	219
			Minor Centres Project Forum Appii and Ad Medias on-site surveys and rural surveys (2012-2015)	638	219
Phase unknown				1	1
TOTAL	3 592.9	434 697		>1 297	987

* During these surveys, finds were systematically collected, but the raw ceramic counts could not be retrieved from the original database. A future restudy of the paper archives of these surveys may yield additional data.

exceptions, such as the interior plain, which seems to have already fallen into decline from the Late Republican period onwards. Late Republican and Imperial settlement is especially prominent in the coastal part of the region, where many large elite residences were constructed, often with associated production facilities (Marzano 2007; Lafon 2001; Attema 2018). At the same

time, large-scale improvements to the coastal infrastructure were made through the construction of new port facilities at *Antium* (under Nero) and *Tarracina* (under Trajan), and the establishment of a series of smaller secondary harbours, for example at *Torre Astura* and *Circeii*. It is not until the 3rd century AD that there appears to be a wholesale decline in settlement and

Chronological trend of TS consumption based on PRP materials (N=387)

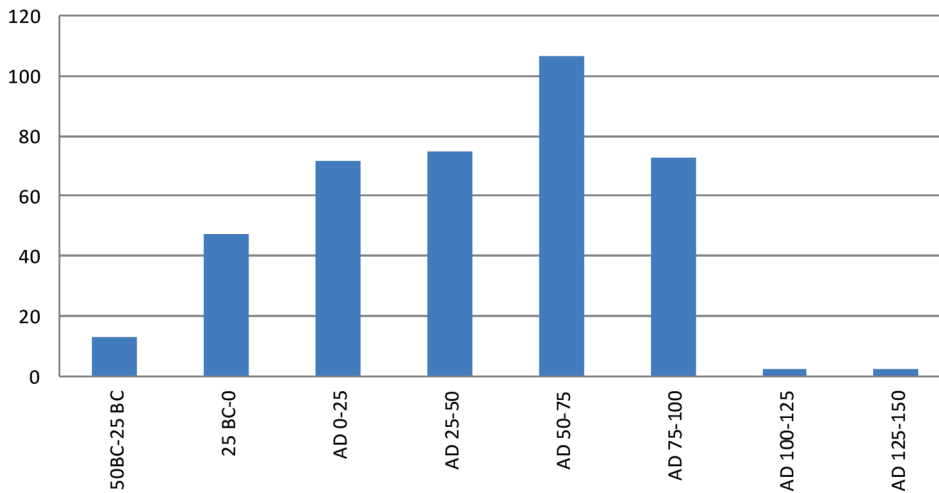


Figure 4. Chronological trend of terra sigillata (TS) consumption in the Pontine region, based on PRP fieldwork.

Chronological trend of TS consumption in the coastal and inland parts of the region based on PRP materials (N=387; rim fragments only)

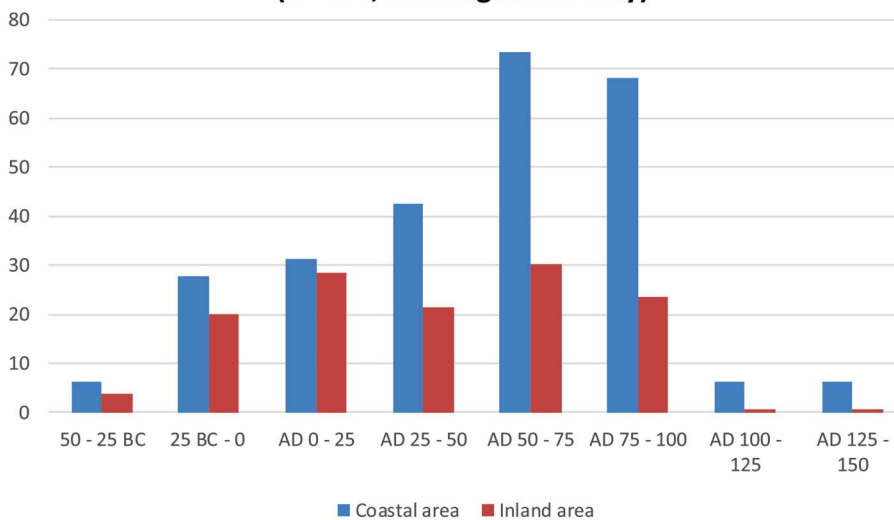


Figure 5. Chronological trend of terra sigillata (TS) consumption in the coastal and inland parts of the Pontine region, based on PRP fieldwork.

economy in the region, although there are several areas of continued activity, again especially on the coast (Coarelli 1990; De Haas 2011; De Haas *et al.* 2011).

Born out of the University of Groningen excavations at *Satricum*, the Pontine Region Project has, in several sub-phases (usually representing five-year funding cycles; *cf.* Fig. 1), investigated various geographical zones and different themes. In recent years, it has developed into an international and multi-institutional partnership including the Universities of Leiden (the Netherlands) and Melbourne (Australia) (see Table 1). In line with other major landscape archaeological projects in the Mediterranean, the PRP has constantly updated its field and collection methods to contemporary standards,

improving the quality and quantity of ceramic data available for each sub-phase of the project (De Haas & Tol *in press*). Generalizing, this means a gradual shift from work with a lower spatial resolution, less intensive ground coverage and variable collection strategies in the earliest phases to standardized collection units and the systematic (and intensive) collection of materials in the most recent phases of the project.

The phased build-up of the project - with information on sites and finds usually stored and archived per individual sub-phase - has long hampered synthetic analysis. In the past few years, significant effort has been put towards the merging of the available data into a single, overarching database to allow for the addressing of

questions on the regional scale (De Haas 2017; Tol 2017). One of the products of this merger will be the systematic publication of the material evidence that has been collected during the project, of which the present publication represents the first example.

4. Terra sigillata in the Pontine region

Before we move to the further analysis of this dataset, some remarks on the scope of the dataset must be made.

First, it must be stressed that the evidence discussed almost exclusively derives from surface investigations in a rural context. This means that the data provide only a partial picture, excluding urban contexts that presumably were both major consumers and the main marketplaces of the region. That being said, our dataset provides a valuable counterweight to the emphasis on urban contexts prevalent in many studies on terra sigillata (and imported pottery more generally). It provides an excellent basis from which to start exploring the characteristics of regional patterns of distribution and consumption of ceramic wares such as terra sigillata. As such, it allows for the exploration of patterns of economic interaction and integration beyond the city.

Second, we must acknowledge that within the Pontine Region Project, survey and material sampling procedures have changed significantly over time and that our surveys have also covered but a small part of the region (see Fig. 1). This implies, first, that for those areas left unstudied, the absence of evidence should certainly not be considered evidence of absence and, second, that not all areas that have been studied through field surveys can be compared or juxtaposed in a straightforward manner, because of differences in sampling and material analysis approaches. In practice, this means that for our analysis of the 'non-diagnostic' materials, we rely on the systematic, intensive and well-documented data from the later phases of the project (Table 1, phases 3-5; De Haas & Tol in press). For the analysis of the diagnostic materials, data from the first phases of the project are also incorporated (Table 1, phases 1-2), although for these phases the ceramics could not be visually inspected by the authors, and we therefore had to rely on descriptions and drawings that were produced at a time when ceramic knowledge within the project was undoubtedly less developed.

The dataset

The PRP database contains information on approximately 1 662 fragments of Italian terra sigillata, both diagnostics (rims, bases, stamps, decorated fragments) and non-diagnostics (body fragments).⁴ Of these, 1 297 fragments were collected during our intensive field surveys, while the remainder were catalogued through the study of the archaeological collection of the Antiquarium Comunale di Nettuno, part of phase 4 of the project (Tol 2012). Although a large amount of pottery (undoubtedly including many more fragments of terra sigillata) was collected during phases 1 and 2 of the project, we have unfortunately not been able to retrieve the original databases of these surveys. Only the published diagnostic fragments from these surveys, which form an extremely small proportion of the data from these first phases of the PRP (Table 1), are included in the overarching database, and therefore incorporated in the present analysis (De Haas & Tol in press).

Because of this gap in the database and the fact that during the two most recent phases we have engaged in extensive programmes of diagnostic sampling, a relatively large proportion of the terra sigillata in the database consists of 'diagnostic' pieces. It includes only 675 non-diagnostic fragments compared with 987 diagnostics. Of these diagnostic fragments, 622 derive from PRP fieldwork, while another 365 come from the Antiquarium Comunale di Nettuno museum collection.⁵ For 492 of the 987 diagnostics, a more precise date can be postulated through comparison with the available literature, based on vessel morphology, surface decoration or preserved name stamps. The repertoire of vessel shapes and surface decorations attested is depicted in the catalogue at the back of this article (appendix 4; see also Fig. 6); an overview of recorded name stamps is provided in appendix 1.

It is clear from Table 1 not only that terra sigillata forms only a minute share (perhaps 0.5%) of the artefacts collected during our surveys, but also that the record for the earlier phases of the PRP is incomplete. Nonetheless, the data from the most recent phases of the project have been collected systematically and are quantitatively substantial. These more recent surveys focus on the coastal landscape south of *Antium*, the Lepine footslopes below *Norba* and *Setia*, and the lower Pontine plain around *Forum Appii* and *Ad Medias*. Although they

4 There are a few inconsistencies in our database that render the numbers approximate. For example, according to the quantitative data table of the Astura 2003 survey, only 1 fragment of terra sigillata was collected, whereas 7 diagnostics of this ware are included in the 'diagnostics' table. Quantitatively, these are only minor issues, and for two most recent phases of the PRP the data are consistent.

5 The archaeological collection of the Antiquarium Comunale di Nettuno was largely assembled during decades of unsystematic field reconnaissance within the municipal area by former director Arnaldo Liboni. During these visits, no systematic sampling took place, and the collection of (diagnostic) fine ware fragments was favoured over the collection of (undiagnostic) coarse wares and amphorae (Attema et al. 2011: 19).

Terra sigillata types present in the PRP materials (N=387: rim fragments only)

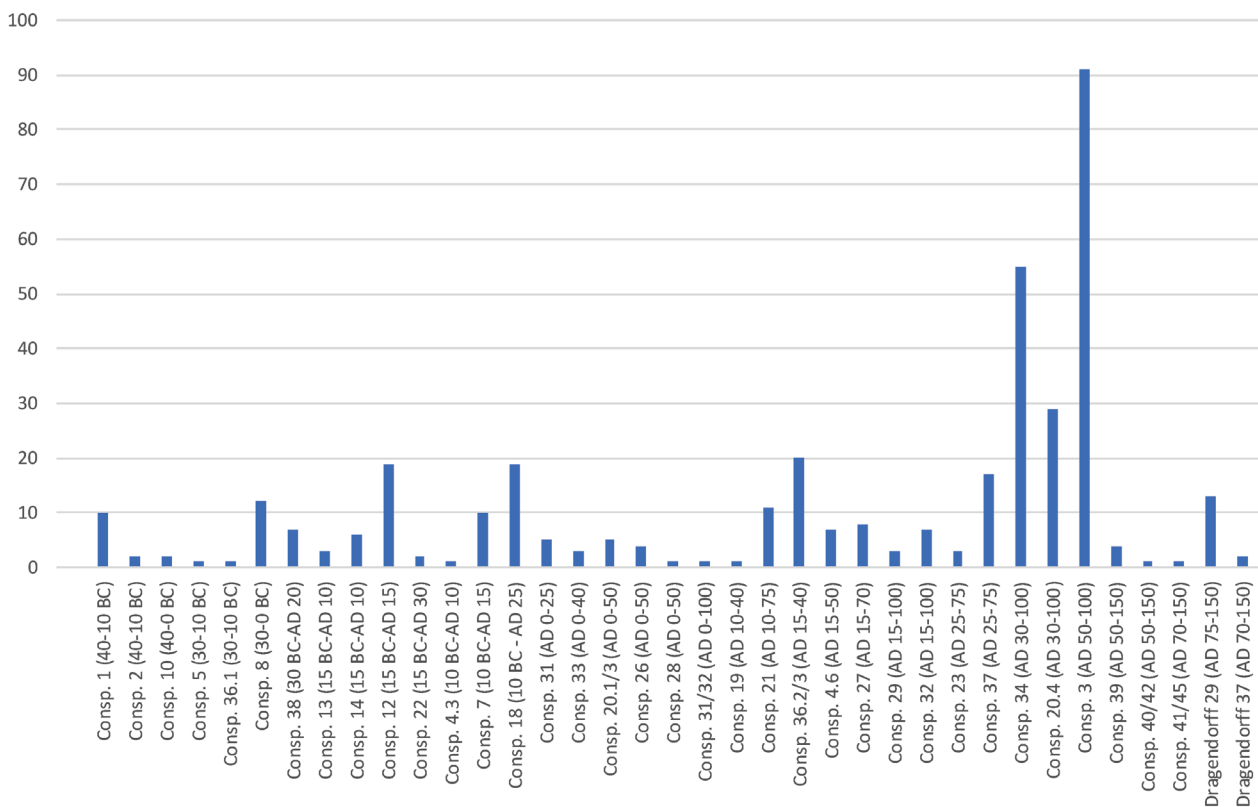


Figure 6. Terra sigillata types present in the PRP materials.

do not represent all geographic subregions, these more recent data provide a transversal cross-section across the region from coast to upland and are thus a good basis from which to explore several issues related to their distribution and consumption across the region. In particular, the data lend themselves well to distinguishing patterns in the coastal area between Roman *Antium* and Lake Fogliano, on the one hand, and the inner plain and Lepine footslopes, on the other.

Market integration

We first explore the degree of integration of regional markets, an issue that has been extensively debated. While some have suggested that the Roman world witnessed particularly high levels of market integration on a Mediterranean scale (Temin 2012; Brughmans & Poblome 2016), others maintain that because of high transportation and transaction costs, markets in the Roman world mainly operated on a regional level, with only limited integration among such regional systems (e.g. Bang 2008). Yet others have suggested that only in the main period of Roman territorial expansion was such global integration achieved, whereas subsequently most markets again operated on a regional level (Woolf 1992).

What may our data contribute to this debate? First, it is important to realize that the region we are dealing with is situated right in the core of the empire, at less than 100 km from the Imperial capital, in which many trade connections converged. We may thus expect that the region was extremely well integrated throughout, because it was well connected to Rome and interior regions, both overland (via several major roads) and by sea (with several smaller and larger ports) (cf. de Haas 2017).

In order to assess whether this was indeed the case, we evaluate the distribution of terra sigillata over the region. Because of the nature of the data, we here limit ourselves to an analysis of the distribution of terra sigillata from the systematic off-site surveys (Fig. 2) conducted during phases 3-5 of the PRP (see Table 1). As is clear from the map, terra sigillata commonly occurs in considerable quantities in areas both close to urban and minor centres (the hinterlands of *Antium* and *Setia*, the surroundings of *Forum Appii*) and farther away from towns (e.g. the surroundings of *Norba*, a town that had been destroyed and deserted in the early 1st century BC); in areas close to major infrastructural nodes and edges (the sea port of *Antium*, the river port at *Forum Appii*, the *Via Appia*) and farther away from these; and in different

Table 2. *Terra sigillata* on Early Imperial sites from PRP surveys.

	Non-settlement (%)	Farm (%)	Villa (%)	Hamlet/village (%)	Small town (%)	Site type indet (%)	Total
Sites without terra sigillata	14 (58%)	29 (41%)	5 (20%)	-	-	10 (21%)	58 (33%)
Sites with terra sigillata	10 (42%)	42 (59%)	20 (80%)	5 (100%)	2 (100%)	38 (79%)	117 (67%)
Total	24	71	25	5	2	48	175

landscapes zones, from the coastal zones to the interior plain and the foothills and uplands of the Monti Lepini.⁶ This would suggest that within our region, distance to (urban) markets and infrastructure did not inhibit access to imported fine wares such as terra sigillata, and that the region was indeed well integrated.

Prosperity

Looking more closely into the contexts where terra sigillata was found, we may also address issues related to economic performance, another topic that has received ample attention in recent scholarship (Jongman 2017; Bowman & Wilson 2009). Archaeological proxy data suggests that in the first centuries BC and AD, population growth went hand in hand with economic growth (e.g. Bowman & Wilson 2009; Jongman 2014). Whether the region saw both aggregate growth and per capita growth and, if so, who benefited from it (elites only or a larger segment of society), remains unclear (De Haas *et al.* 2011).

The focus on terra sigillata in this article, a ceramic class with a limited chronological range, does not allow us to address the issue of economic growth over time, but by analysing the contexts in which terra sigillata occurs, we can explore who may have benefited from growth. If we accept that fine table wares are goods with a high income elasticity of demand (e.g. these are among the first goods you buy beyond the bare necessities once you are slightly better off), the common occurrence of these goods would suggest many people were indeed better off. If we also accept that villa estates mainly represent elite consumption contexts and that farms, hamlets and villages mainly represent contexts where farmers of lower socioeconomic standing dwelt (Launaro 2011), the occurrence of terra sigillata on these different site types should tell us something about the extent to which the ware was consumed by both the elites and the lower classes.

As was the case in our above discussion of terra sigillata distribution, we once again limit our analysis to the data from the more recent PRP surveys: in contrast to the older surveys, where the dating of sites was based primarily on the occurrence of fine wares, in our more recent surveys, we also used coarse and cooking wares for site dating. We can therefore more confidently evaluate whether terra sigillata occurs on few or many early Imperial period sites.⁷ The selected data are summarized in Table 2.

The data suggest that although terra sigillata occurs on a majority of early Imperial sites, there is a considerable proportion (33%) on which such wares have not been recorded. In part, this may reflect sampling biases. For example, it seems difficult to believe that on 20% of the villa sites, terra sigillata was not used; here, the absence of the ware may be due to surface visibility or site preservation conditions rather than a genuine lack of such materials. Such issues may also affect other site types (particularly the farms), but here the number of sites without terra sigillata is higher, and this group also includes sites with excellent ground visibility conditions and large ceramic samples (of several hundreds of sherds). Therefore, it appears that there was a considerable difference in access to terra sigillata fine wares between sites with different socioeconomic status. At the same time, most farm sites did have access to fine table wares, and we may thus assume that their occupants lived with at least a modest degree of prosperity. As can be surmised from Figure 3, there are no clear differences across space: different types of sites without terra sigillata occur in all selected areas, both at shorter and at longer distances from towns and major roads and both in upland and in lowland areas (a possible exception is the area below Setia, where virtually all early Imperial sites have terra sigillata). This distribution

6 Admittedly, few materials are recorded for the Lepine uplands, but it should be noted that only few intensive systematic surveys have taken place here.

7 We here also include data from the Fogliano survey and the platform site survey, as for both these surveys we have reliable and robust data from diagnostic samples from sites that allow us to identify early Imperial sites with and without terra sigillata.

Table 3. *terra sigillata* on a selection of systematically sampled rural sites.

Site	Location	Interpretation	Total finds / pottery (N/n)	Terra sigillata (n) fragments	Terra sigillata proportion of all finds	Terra sigillata proportion of all pottery
15111	Coastal area	Villa	1 545/858	23	1.49%	2.68%
15014	Coastal area	Villa	1 584/813	11	0.69%	1.35%
15036	Coastal area	Large farm	1 904/1 421	57	2.99%	4.01%
11281	Coastal area	Large farm	2 044/278	4	0.20%	1.44%
15106	Coastal area	Large farm	29 229/6 439	48	0.16%	0.75%
15160	Coastal area	Villa	13 564/3 534	27	0.20%	0.76%
11262 (Forum Appii)	Inner plain	Road station/small town	22 876/10 684	196	0.86%	1.85%
14044	Inner plain	Medium-sized farm	1 137/149	5	0.44%	3.36%
14049	Inner plain	Farm?	1 054/87	2	0.19%	2.30%
14058	Inner plain	Farm?	2 571/579	2	0.08%	0.35%
14060	Inner plain	Large farm	1 380/199	7	0.51%	3.52%
14010	Inner plain	Large farm	876/286	1	0.35%	0.11%
12303	Inner plain	Large farm	837/440	28	3.35%	6.36%
12305	Inner plain	Large farm	1 078/550	6	0.57%	1.09%
12310	Inner plain	Medium-sized farm	754/489	13	1.72%	2.66%
14047	Inner plain	Large farm	2 806/938	12	0.43%	1.28%
12407	Lepine footslopes	Medium-sized farm	2 102/655	4	0.19%	0.61%
10504	Lepine footslopes	Medium-sized farm	529/212	2	0.38%	0.94%
14062	Lepine footslopes	Large farm	3 306/1 799	3	0.09%	0.17%
12413	Lepine footslopes	Small farm	250/105	2	0.80%	1.90%
12421	Lepine footslopes	Small farm	281/61	3	1.07%	4.92%

confirms the suggestion that intra-regional variations in the degree of market integration are very limited.⁸

To obtain more detailed insight into potential variations in the quantities of *terra sigillata* consumed at different site types and in different parts of the region, we also compare quantitatively the occurrence of *terra sigillata* fragments on a cross-section of settlements that were surveyed with comparable intensive and systematic methods (Table 3).

As can be expected, *terra sigillata* fragments generally comprise only a small part of the entire suite of materials collected on sites, ranging from 0.09 to 3.35% of all finds or from 0.17 to 6.36% of all pottery finds.⁹ No

consistent high or low values appear to be associated with specific areas or site types, and it is likely that the proportional differences between analysed sites may be explained by methodological issues, including differential surface visibility conditions, fragmentation rates and site longevity. Based on our current knowledge, the variations do not seem significant and do not allow us to identify strong differences in overall consumption levels between site types.

The supply of terra sigillata to the Pontine region

Having outlined some general characteristics of the distribution of *terra sigillata* across the region and across different site types, we now proceed to a more

8 Relatively many sites (4 out of 8) in the Lepine uplands have no *terra sigillata*, but this seems to be mainly due to low visibility circumstances and the resulting small size of ceramic samples from these sites.

9 The often-higher percentage of *terra sigillata* in assemblages from sites that were surveyed with a standardized partial coverage (usually 20%) compared with the two sites for which 100% of the surface was investigated is, at least partly, explained by biasing factors. With very intensive (full-coverage) surveys, it is likely that, compared with standard sampling, a much higher percentage of building materials and a much lower percentage of table wares is collected (Tol 2012, 242). This is probably because, due to their abundance, fragments of building materials are not always systematically collected during standard sampling. Table wares, on the other hand, usually stand out on the surface due to their shiny and often bright surface coating and therefore seem to be overrepresented in standard samples.

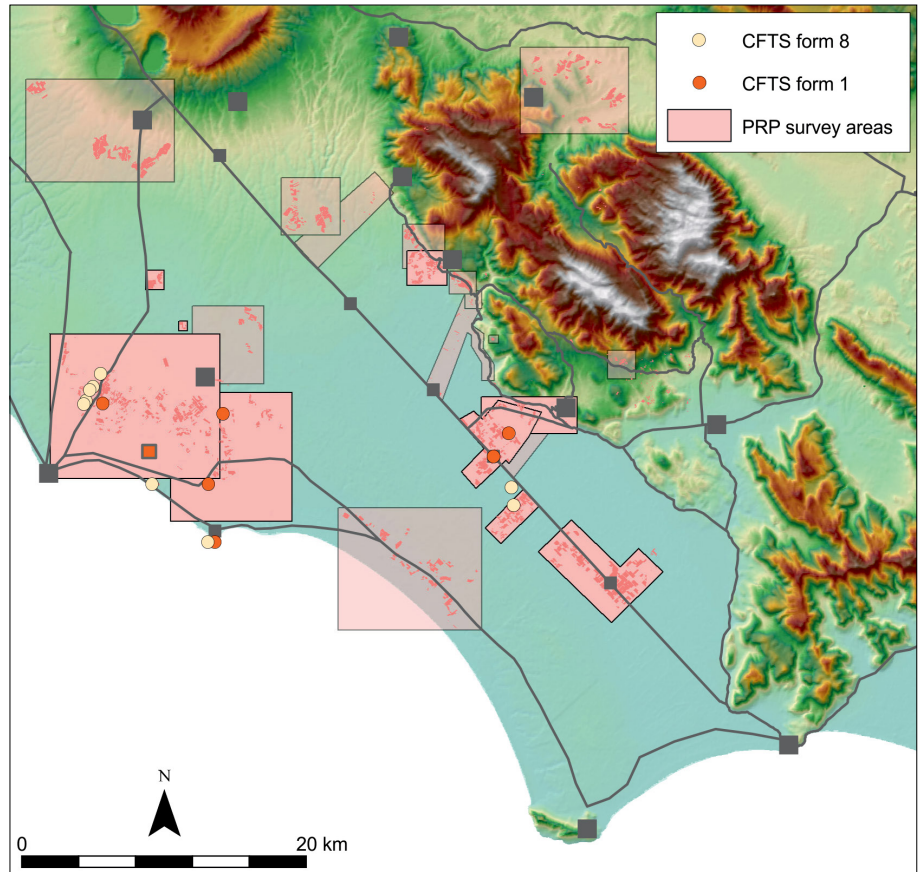


Figure 7. Distribution of the most common early terra sigillata forms within the PRP research areas.

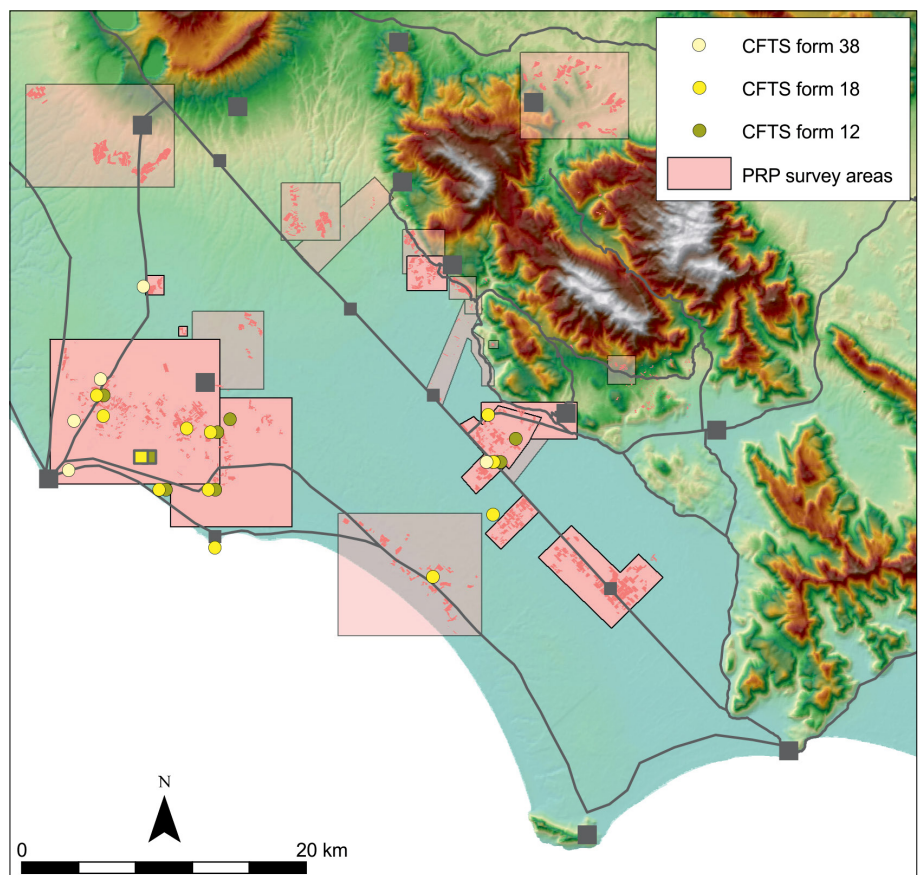


Figure 8. Distribution of the most common Augustan-period terra sigillata forms within the PRP research areas.

fine-grained analysis of supply patterns and changes in these patterns over time on the basis of shapes and stamps that can be attributed to specific production centres and phases. While quantitatively less robust, these data do allow us to compare trends in the consumption history between the coastal and inland parts of the region and potential differences in supply routes to these two areas.

It seems that the supply of terra sigillata to the region was rather limited in pre-Augustan times, although it remains difficult to pinpoint either the start date or the volume of the early supply of the ware, due to the relatively long period of production of the earliest shapes (Fig. 4).¹⁰ One indication for a slightly delayed uptake of sigillata consumption is that no fragments are recorded that characterize the transition from black to red slip technique as documented elsewhere.¹¹ Based on the current evidence, the earliest certain occurrence of terra sigillata in the region comes from *Forum Appii*, in the form of name stamps of the Arezzo-based potters *L. Titius Copo* (the only example of radially placed rectangular stamps in our dataset), dated to the 20s BC, and a centrally placed rectangular stamp of *L. Tettius Crito*, dated to the last two decades BC. Most of the vessel shapes that are associated with the early production of the ware are uncommon in the Pontine region; the only ones that occur in decent numbers are plate *Conspectus* 1 (10 fragments) and cup *Conspectus* 8 (12 fragments).¹² Looking at their distribution, we see that these early fragments are found on different types of sites (villas, isolated farms and larger nucleated centres, such as *Forum Appii*) in both the inland and coastal parts of the region (Fig. 7).

During Augustan times, we witness a gradual increase in the consumption of terra sigillata, and the ware is rather common on both coastal and inland sites and, again, on larger nucleated centres, farms and villas alike. The most common open form dating to this period is *Conspectus* 18 (19 specimens), but a wide variety of both open (*Conspectus* 4, 12 and 14) and closed (*Conspectus* 22, 36.1 and 38) shapes is attested in smaller quantities (Fig. 8). It is probable that most of the sigillata still came from Arezzo, as is suggested by central rectangular name stamps recording *Philogenes* and

Chrestio, slave of *L. Titius*, both dating between 10 BC and AD 10. However, a central circular stamp with surrounding laurel wreath of *Q. Pompeius Serenus*, collected at *Forum Appii*, and an anepigraphic stamp depicting a radiating pattern from a farm site in the coastal area, demonstrate that also products from Pozzuoli found their way to the Pontine market. Another stamp from the coastal area mentions *Sex()*, a small-scale producer of unknown origin.¹³

During Tiberian–Neronian times, we see diverging patterns of consumption within the region. As the quantitative trend in Figure 5 shows, consumption levels plateau and subsequently slightly decline in the inland part of the region; the most common shapes of this period have only been found at the site of *Forum Appii*. In contrast, the quantities of terra sigillata in the coastal part of the region continue to grow and show a remarkable rise in the third quarter of the 1st century AD. This development probably relates to the construction of new harbour facilities at *Antium* and, possibly, at *Torre Astura*. A wide array of forms is attested, some of which – particularly those bearing applied decoration – occur in large numbers, such as *Conspectus* 4.6 (7 specimens), 21 (11 specimens), 27 (8 fragments), 36.3-4 (10 fragments) and 37 (17 fragments) (Fig. 9). Moreover, it is likely that a portion of the very common shapes *Conspectus* 3, 20.4 and 34, whose date range extends at least to the end of the 1st century AD, date to this period as well. For this timespan, just a handful of stamps (five) are documented, all of the *planta pedis* type. Three of these, from sites in the coastal area, belong to *Camurius*, active in Arezzo (with possibly small-scale production in *Torrita di Siena* – see Pucci 1992) c. AD 30–70, while individual stamps of Arretine potter *Cornelius* (from the coastal area) and the possibly Pisan manufacturer *Cn. Ateius Amarantus* (from *Forum Appii*) were recorded. Possibly also belonging to this period is another *planta pedis* stamp, collected from a villa in the coastal area, recording *P. Clodius Proculus*, another Arretine manufacturer whose production is tentatively dated AD 40–100. Although both during Augustan and Tiberian–Neronian times the lion’s share of fragments concerns fragments from plain vessels or vessels decorated with small *appliques*, a small number of fragments of

10 For this graph, as well as for those displayed in Figures 5, 12 and 13, we have adopted the *media ponderata* approach to plot the date of individual fragments, an approach frequently adopted by researchers working with large sets of ceramic data (see e.g. Di Giuseppe 2012; Fentress & Perkins 1988). The approach assumes that there is an equal chance that a ceramic type was produced during each year of its documented date range. Trends are reconstructed based on the assumption that each identified fragment contributes proportionally to each phase covered by its entire date range.

11 Based on these inconsistencies (see OCK 2000: 36) such terms as ‘transitional sigillata’, ‘pre-sigillata’ or ‘experimental sigillata’ have often been used to characterize these early fragments; see Vaccaro *et al.* 2017: 237–44.

12 Possibly a portion of the recorded specimens of cup *Conspectus* 38 (6 fragments) may also date to this early period.

13 This may be the same producer active at *Podere Marzuolo* (Vaccaro *et al.* 2017).

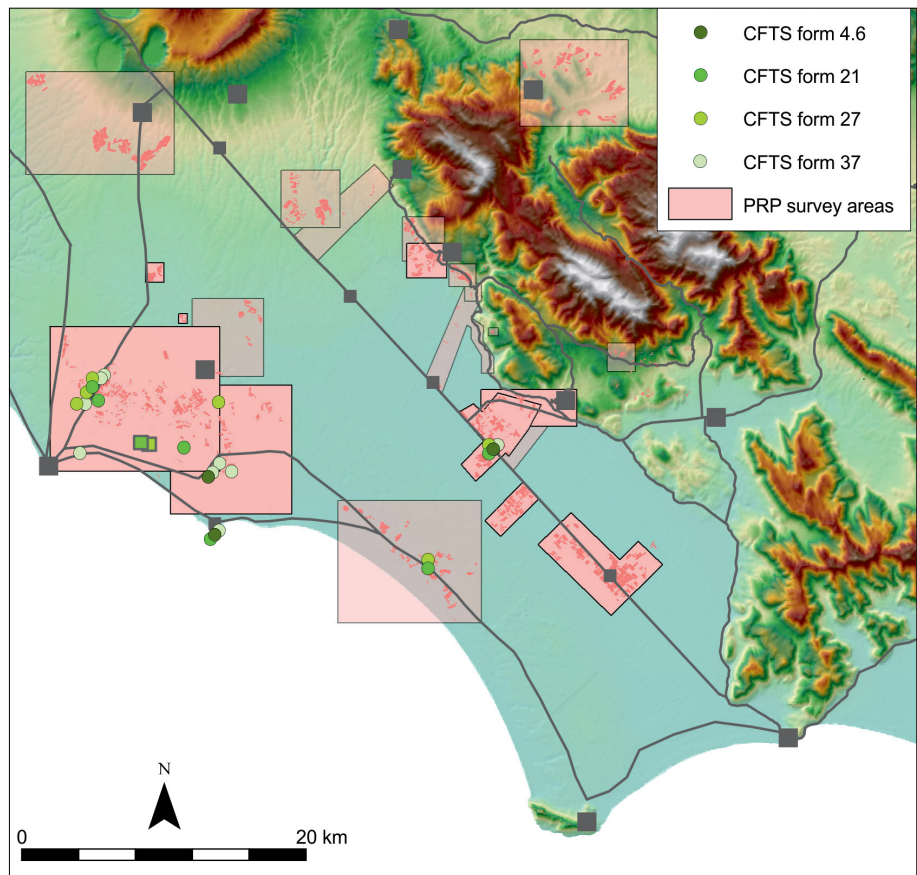


Figure 9. Distribution of the most common Tiberian-Neronian period terra sigillata forms within the PRP research areas.

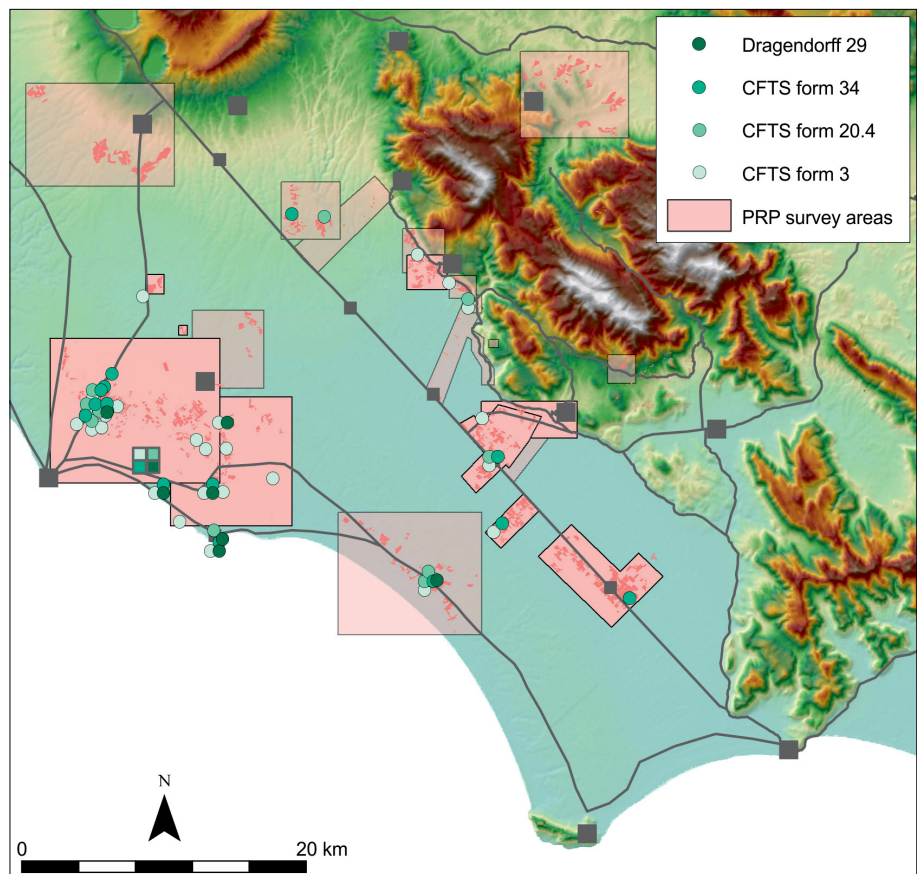


Figure 10. Distribution of the most common terra sigillata (TS) forms dating from the second half of the 1st century AD within PRP research areas.

relief-decorated vessels were recorded, to which can be added some foot fragments of chalices that would have borne such relief decoration on the body (see catalogue entries B.2 and B.3). Two of the decorated fragments can be assigned to workshops situated in Arezzo: one preserves an elbow and part of a name stamp on the rim of the vessel, which together allow identification as the depiction of a *Centauromachy* originating from the workshop of *M. Perennius*, the best-known (and probably first) producer of relief-decorated sigillata. The second preserves part of a harnessed pair of horses and can be identified as originating from the workshop of *Rasinius*. The distribution of these relief-decorated vessels appears limited to up-scale sites (larger farms, villas) and larger nucleated centres, such as *Forum Appii*.

High levels of terra sigillata consumption are maintained in the coastal area until at least the end of the 1st century, as is evidenced by a wide range of open and closed shapes, including Conspectus 3.2, 20.4 and 34, Conspectus 29, 36.2/3 and 39, and an individual example of Conspectus 41/45 (Fig. 10). To this we can add at least 14 rim fragments belonging to bowl type Dragendorff 29, the *Leitform* of Late Italian sigillata production, which was produced between c. AD 70 and the mid-2nd century. It is likely that most of the fragments of mould-decorated Late Italian sigillata included in the catalogue can also be ascribed to this vessel shape. A total of 21 name stamps from the coastal area is associated with this final phase of Italian sigillata production, belonging to four different potters active around Pisa in the manufacturing of Late Italian sigillata: *L. Rasinius Pisanus* (9 specimens); *Sex. M(urrius) Fes(tus)* (8 specimens); *Sex. M(urrius) P()* (2 specimens); and *C. P() Pi(sanus)* (2 specimens). Although the recorded stamps leave no doubt about the near-monopoly position that the Pisan producers occupied in supplying the Pontine coastal area, small quantities of sigillata from other areas seeped into the market. While there is no



Figure 11. Fragment of sigillata marmorata from the coastal part of the region.

reason to assume the large-scale presence of Gaulish Sigillata, which in some parts of Italy appears in rather large quantities in the transitional period between the heyday of Arretine relief-decorated production and the start of the decorated Late Italian sigillata manufacture (Marabini Moevs 2006: 170; Rizzo 2003: 98-103),¹⁴ some Gaulish products have been identified with certainty. These include a fragment of a Dragendorff 29 bowl in sigillata marmorata, produced at La Graufesenque in southern Gaul (Fig. 11), and two fragments of bowl type Dragendorff 37. The single fragment of a dish Conspectus 41/45 is likely to come from northern Italy (Tardo-Padana production). As no new vessel shapes were introduced by Late Italian sigillata producers after the late 1st century AD, it is not easy to estimate how long the supply of their products to the coastal part of the region persisted; however, the fact that one of the stamps by *Sex. M(urrius) P()* is of the late *in lunula* type suggests that the ware continued to be imported until well into the first half of the 2nd century AD, although by then the Pontine market was also being supplied with competing goods from northern Africa (ARS A) and, to a lesser extent, the Eastern Mediterranean (Eastern Sigillata B).

The picture for the inland part of the region is markedly different. The supply of Italian sigillata slightly declined during the last quarter of the 1st century AD, although the distribution of the ware significantly widens, incorporating many small rural sites both in the Pontine plain and the along the Lepine footslopes. The formal repertoire recorded on these sites also appears more restricted than in the coastal area, although this restricted variation may simply be a side effect of the lower overall consumption rates. Only four shapes – Conspectus 3.2, 20.4, 34 and 36.2/3 – are attested in meaningful numbers, supplemented by single fragments of Conspectus 39 and 40/42. The four recorded name stamps belonging to this phase – all in *planta pedis* – suggest that also in the interior parts of the region Pisan products are dominant, with two recorded stamps of *Sex. M(urrius) Fes(tus)* and a single stamp of *C. P() Pi(sanus)*. A single stamp of *C. Num(erius) Fel(ix)* indicates the presence of products belonging to the late phase of central Italian production (belonging to the so-called OctPro-OctSal group – see Olcese 2003 & 2004), whereas the Conspectus 40/42 fragment is likely to belong to Late Padana production. In contrast to the coastal area, no rim fragments of Dragendorff 29 have been recorded in the inland parts of the region; a dozen decorated body fragments are, however, of certain Late Italian production and may indicate small-scale

14 Despite the fact that Late Gaulish sigillata is not uncommon in central Italian contexts, our observation that Late Gaulish sigillata is rather rare on rural sites is backed up by evidence from elsewhere (Martin 1985, 2001: 241).

continuity of terra sigillata supply during the 2nd century AD.

5. Terra sigillata in southern Latium

As we have seen, the data from the Pontine Region Project provide valuable first insights into the consumption of terra sigillata in the region. But, because these data are restricted to surface finds from rural contexts, the dataset also has limitations when it comes to identifying chronological and spatial patterns. Therefore, in order to further contextualize our findings, in this section we integrate our collection of name stamps with published data from wider southern Latium.¹⁵ The foundation for this analysis is the most recent edition of the *Corpus Vasorum Arretinorum* (*CV Arr*; OCK 2000; see appendix 2), supplemented by data from three recent publications on the sites of Nemi and Velletri (see appendix 3).¹⁶

The *CV Arr* contains a total of c. 36 000 stamps, of which 6 368 come from the Lazio region. However, if we exclude data for the city of Rome and northern Lazio, we are left with a much less impressive 557 stamps, which, supplemented by 71 from recent publications and the 54 fragments from the PRP investigations, gives us a total of 682 stamps to work with. For a region in the heart of the Empire, the numbers are surprisingly poor, and the data are moreover far from equally distributed across the area. Almost 50% of the stamps recorded come from a single site (Ostia; 332 stamps), and there are only two other towns in the region for which more than 50 stamps have been recorded (Nemi and Interamna Lirenas; see Table 4). Additionally, some of the most important towns in the region – including the harbour towns of *Antium* and *Tarracina* – are poorly represented or not represented at all. In addition, for most towns included in the *CV Arr*, the recorded stamps come from only one or at most a few contexts, and the resulting consumption profile may not be representative for the town as

a whole. One clear example of this are the entries for ancient *Tibur*, which mention only stamps belonging to Late Italian potters. For a town that was situated in proximity to Rome and connected to the Eternal City through direct road and riverine routes, it is hard to imagine that it was not connected to the supply lines of early sigillata. A more likely explanation is that all recorded fragments were uncovered during excavations of structures that date no earlier than the 2nd century AD (perhaps Hadrian's villa?). A final observation on the data is that they comprise almost exclusively urban contexts and therefore represent locations that were relatively well connected.¹⁷ Apart from the Pontine Region Project data, there is only one other source – on Velletri – that provides insight into the penetration of terra sigillata into rural areas. Despite these limitations, the corpus does allow us to sketch a first tentative reconstruction of consumption patterns of terra sigillata in southern Latium. We hope that this publication forms an incentive to further supplement and update the dataset.

Of the 682 stamps included in this study, 86.8% (592 stamps) could be identified and dated based on the dates provided in the *CV Arr*. Figure 12 provides an overview of the chronological distribution of all dated fragments.¹⁸ It confirms – as suggested by our previous analysis of the PRP data – that the supply of terra sigillata to southern Latium was rather insignificant during the earliest phase of production of the ware. This slow uptake is followed by a marked rise in the consumption of terra sigillata during Augustan times, and consumption levels remain high until Neronian times. A marked and continuous decline in the number of recorded name stamps is evident from Flavian times onwards, although it is clear that terra sigillata continued to reach the region until the cessation of its production around the mid-2nd century AD.

While giving some first insights into diachronic changes in supply patterns, this cumulative trend is,

15 From this analysis, we exclude the city of Rome, which is a special case and for which terra sigillata consumption has already been extensively studied (Rizzo 2003).

16 A large collection of Terra Sigillata, mainly of Late Italian manufacture, was confiscated at Velletri in 1945 and transported to the Museo Nazionale Romano (Lilli 2008: 27; Rosetti Tella 1996). Since its original find location is unclear, this material has not been considered.

17 Considering that Sermoneta is not a town of Roman origin, the finds included here are likely to come from rural sites in the wider surroundings.

18 For this graph, we have used the date ranges for potters as provided in the *CV Arr*. While we acknowledge that some of these dates are rather tentative (see also OCK 2000: 8-9), we note that most of the uncertainty is thought to be smoothed out in the kind of bulk analysis presented here. For the few fragments belonging to potters for whom no end or start date of production is given, we have systematically extended production by 20 years. For example, if a date of AD 10+ is given, we assume production in the period AD10-30. This decision was made because the alternative – namely, the use of the provided spot dates – is considered undesirable for trend analysis (as this would potentially skew the graph considerably) and would be an unrealistic rendering of the longevity of production that one can assume for any potter.

Table 4. Provenance of name stamps recorded for different towns in southern Latium.

Production area/ site	Ostia		Nemi		Lanuvium		Sermoneta		Gabii		Interamna Lirenas	
Arezzo?	25	7.5%	8	14.5%	2	9.5%					4	7.4%
Arezzo	75	22.6%	21	38.2%	9	42.9%	4	26.7%	11	40.7%	20	37%
Pisa	91	27.4%	1	1.8%	2	9.5%			2	7.4%	3	5.6%
Pisa?											2	3.7%
Pisa/Lyon	8	2.4%	1	1.8%								
Arezzo/Pisa/Lyon	3	0.9%			1	4.8%					3	5.6%
Central Italy?	25	7.5%	3	5.5%			1	6.7%	4	14.8%	2	3.7%
Central Italy	33	9.9%	2	3.6%	4	19%	6	40%	2	7.4%	6	11.1%
Etruria?	6	1.8%	1	1.8%								
Po valley			2	3.6%								
Arezzo/Po valley	1	0.3%	1	1.8%					2	7.4%		
Scoppieto	6	1.8%	1	1.8%								
Lyon			1	1.8%								
Pozzuoli	5	1.5%					1	6.7%			2	3.7%
Pozzuoli?	1	0.3%			1	4.8%						
Vasanello	1	0.3%										
Torrita di Siena	2	0.6%										
Cales	1	0.3%										
Ostia	2	0.6%										
Unknown	47	14.2%	13	23.6%	2	9.5%	3	20%	6	22.2%	12	22.2%
Total	332		55		21		15		27		54	

Production area/ site	Aquinum		Aquinum/ Interamna Lirenas		Ferentino		Palestrina		Tivoli	
Arezzo?	3	9.7%			3	21.4%	1	8.3%		
Arezzo	7	22.6%	7	46.7%	3	21.4%	7	58.3%		
Pisa	8	25.8%	3	20%					18	90.0%
Pisa?										
Pisa/Lyon										
Arezzo/Pisa/Lyon	1	3.2%	1	6.7%						
Central Italy?	1	3.2%			1	7.1%	2	16.7%		
Central Italy	3	9.7%	1	6.7%	3	21.4%			2	10.0%
Etruria?										
Po valley										
Arezzo/Po valley	1	3.2%	1	6.7%						
Scoppieto							1	8.3%		
Lyon										
Pozzuoli										
Pozzuoli?										
Vasanello										
Torrita di Siena										
Cales										
Ostia										
Unknown	7	22.6%	2	13.3%	4	28.6%	1	8.3%		
Total	31		15		14		12		20	

Chronological trend of all dated TS stamps for South Latium (N=592)

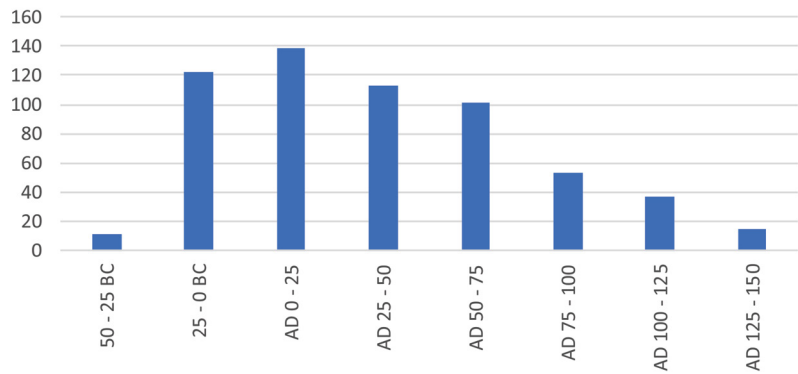


Figure 12. Chronological trend of all dated terra sigillata (TS) name stamps for southern Latium.

Chronological Distribution of all TS stamps for five different parts of South Latium (N=592)

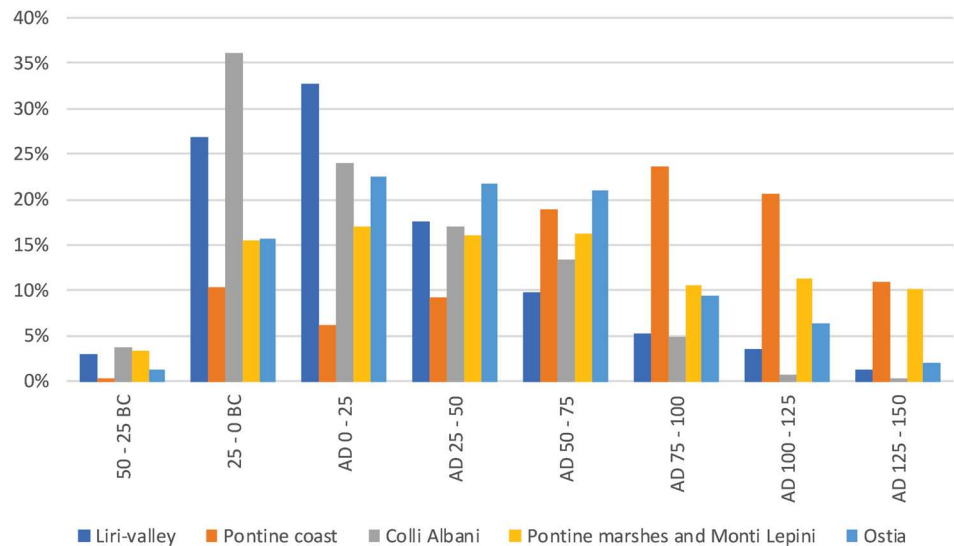


Figure 13. Chronological trend of all dated terra sigillata (TS) name stamps for five different parts of southern Latium.

however, likely to mask intra-regional differences that may reflect the existence of different supply lines. Therefore, in Figure 13 we have split the same data into five sub-areas: the Pontine coastal area; the inland plain and adjacent foothills of the Lepine mountains; the Liri valley; the Alban Hills; and, lastly, the site of Ostia, with its pre-eminent location on the mouth of the Tiber river and its robust dataset.

The few stamps that can be related to the earliest phase of terra sigillata production occur throughout the region and attest mainly to products from Arezzo, although there are several specimens stamped by early potters from central Italy as well. In the final quarter of the 1st century BC and the first quarter of the 1st century AD, the supply of terra sigillata increases significantly. Especially in the Colli Albani and the Liri valley,

the bulk of the consumed terra sigillata belongs to this period. Although during the period AD 25-75 the total volume of consumed terra sigillata drops gradually, all parts of the region seems to remain well connected to the sigillata supply chain. Between the last quarter of the 1st century BC and the end of the 3rd quarter of the 1st century AD – and especially during Augustan and Tiberian times – a wide variety of producers is attested. This may suggest that the region was indirectly supplied, with redistribution of primary cargos probably taking place in Rome and/or Ostia and perhaps at other port sites. The only workshops that seem to gain a more substantial hold on the market are among the best documented producers of this period: the Arretine/Pisan producer *Ateius* (and his many slaves); *M. Perennius* from Arezzo, active in, among others, the production of high-quality, relief-decorated sigillata; and *Camurius*,

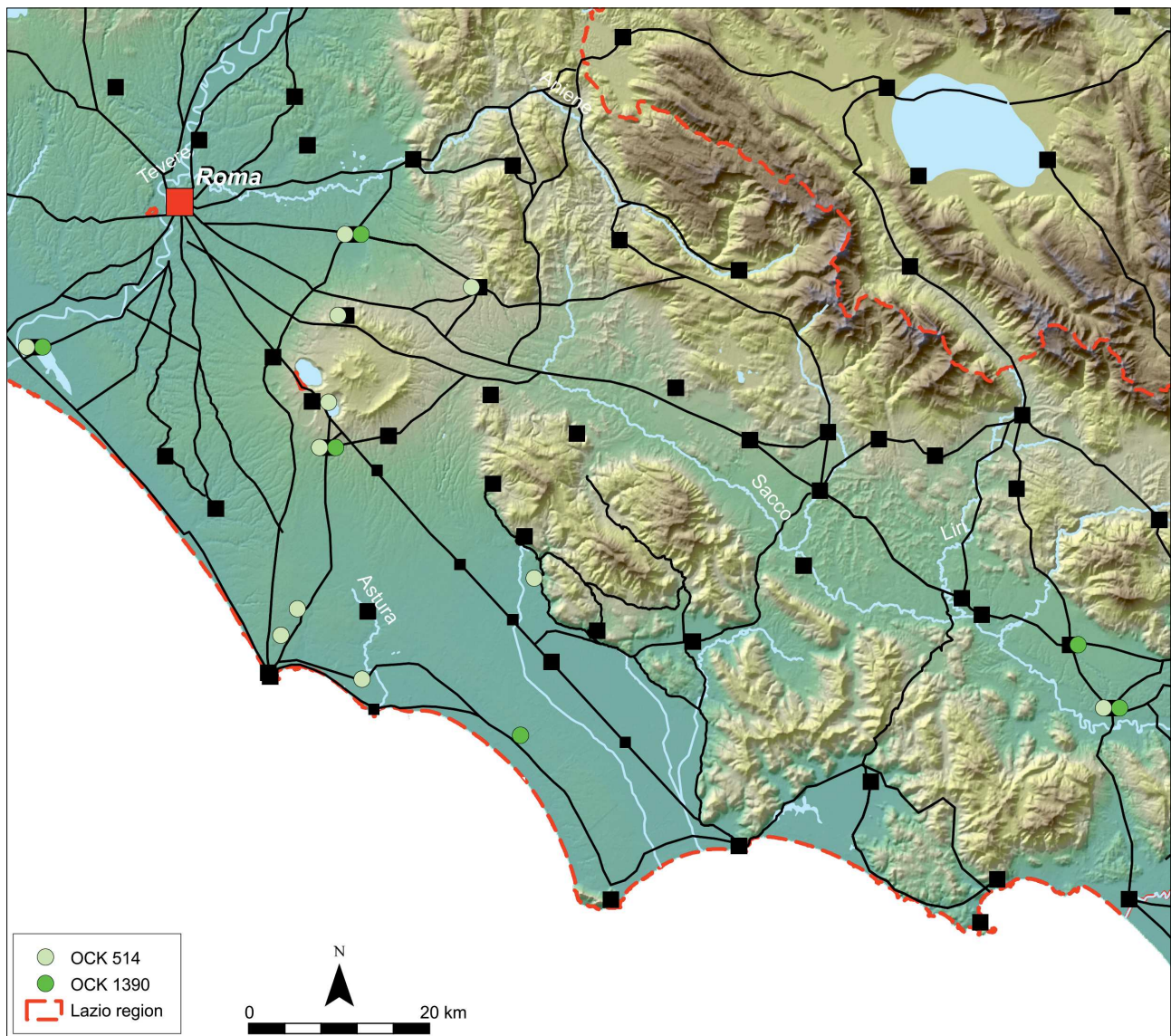


Figure 14. Distribution of the most common potters attested for the Augustan–Neronian period.

who worked in Arezzo and possibly Torrita di Siena (see Fig. 14). If we look at the origin of vessels, Arretine products are clearly dominant, but also considerable quantities of central Italian products are recorded, although their occurrence is somewhat more dispersed. During Augustan–Tiberian times, they are, for example, well attested at Gabii, Sermoneta, Interamna Lirenas and Lanuvium, as well as at Ostia. On the other hand, central Italian products of Augustan–Tiberian date are currently undocumented from the Pontine plain and the coast of Latium south of Ostia. Other areas of origin are much more poorly documented: workshops from both Pozzuoli and Pisa do not seem to be major suppliers in this period, and products from minor workshops, such as Torrita di Siena, Vasanello and Scoppieto, are only attested in very low numbers.

At the end of the 3rd quarter of the 1st century AD, significant changes in the supply patterns are apparent.

The overall supply to the region diminishes significantly, and it continues to decrease until the mid-2nd century, although the ware is still consumed throughout the region. This can only partly be explained by increased competition on the table ware market from African products, since, for example, at Ostia and Rome terra sigillata still has a more than 80% share of the fine ware market in the early 2nd century and early ARS does not occur in meaningful quantities before the mid-2nd century (Martin 1992 & 2006; Rizzo 2003). The overall lower consumption may be the product of decreased demand (either because of demographic reasons or because of lower prosperity, or a combination of both), but differential transport costs must also have played a part, with much of the supply of terra sigillata depending on sea-borne trade (as is clear from the widespread occurrence of Late Italian products in coastal parts of Tyrrhenian central Italy and on some of the Mediterranean islands;

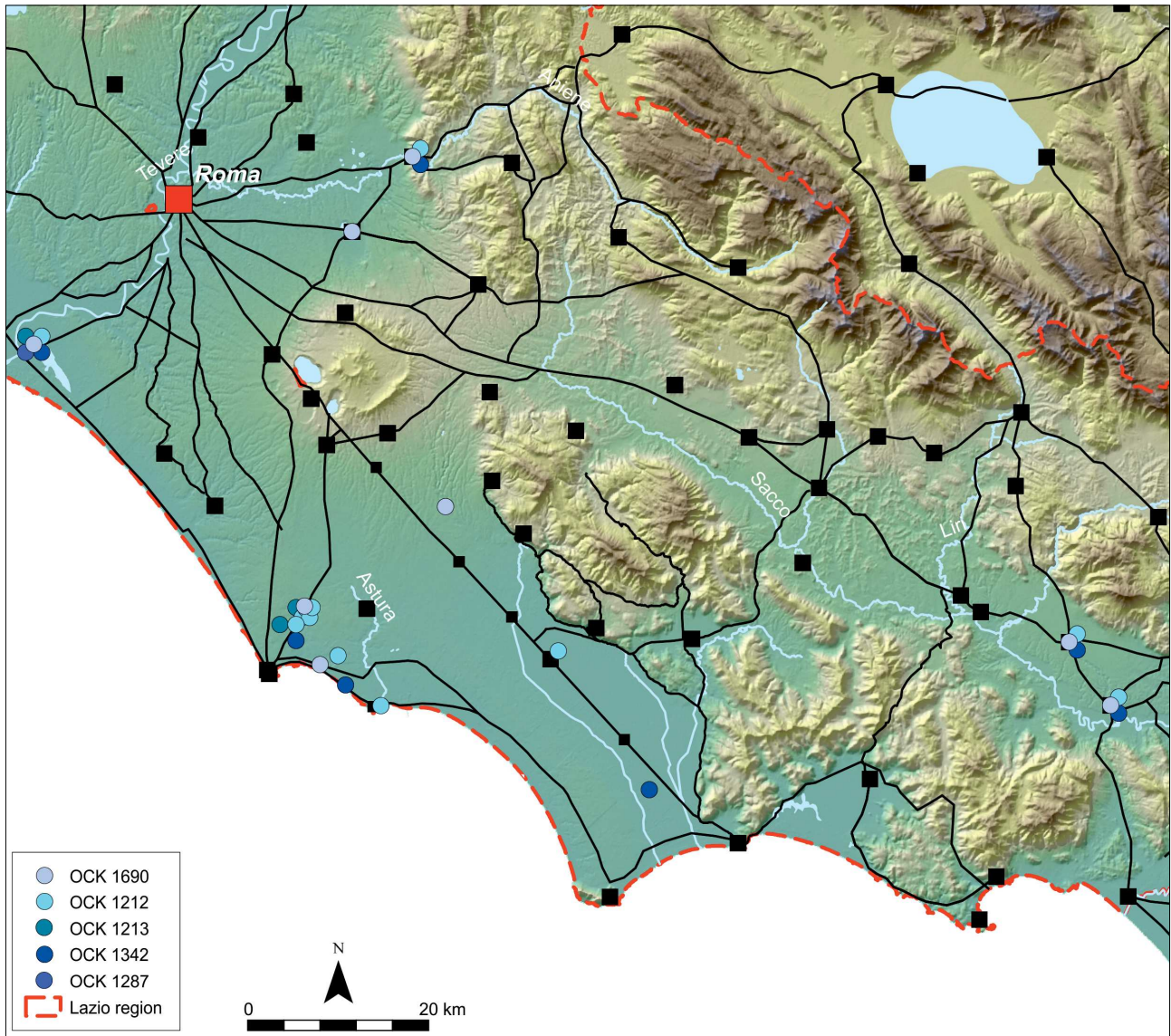


Figure 15. Distribution of name stamps of Late Italian sigillata manufacturers.

Fig. 15 – see e.g. Mollo 2003 for Calabria; Malfitana 2004a for Sicily; Malfitana 2004b for Cyprus; and Bowsky 2014 for Crete). This may explain why one part of the region – the coastal area – demonstrates an inverse trend compared with all other areas of southern Latium. When new harbour facilities were installed at *Antium* under Nero, this harbour likely became a major port-of-call on the Tyrrhenian coast and thus improved the marketing of terra sigillata vessels in its direct surroundings. The presence of secondary harbours at *Circeii* and *Torre Astura* may also have played a role in the coastal distribution. This reconstruction ties in well with the remarkable post-firing graffito of a sailing vessel on the bottom of one of the vessels stamped by Pisan potter *Sex. M(urrius) Fes(tus)*, found at the villa of Torre

Astura, in the hinterland of *Antium* (Fig. 17).¹⁹ Another principal area for the manufacturing of late sigillata is central Italy, in particular the Tiber valley upstream from Rome (potters belonging to the so-called OctPro-OctSal group). Their products are extremely common downstream in Rome, and in southern Latium they are also noted in modest quantities in the Pontine plain, the Lepini foothills and at Tivoli, Ferentino, Velletri and Ostia (Fig. 16). Tellingly, they are absent from the coast of Latium south of the Tiber, reinforcing the image of the existence of two different supply lines to southern Latium during the later phases of terra sigillata production. The first commenced in the Tiber valley and lead towards the inland parts of southern Latium, with redistribution probably taking place in Rome, and the

¹⁹ The depiction of the oars is similar to the depiction on the famous graffito of a warship on a fragment of southern Gaulish sigillata from ancient Fectio (modern Vechten) in The Netherlands (Polak 2000: 12-3).

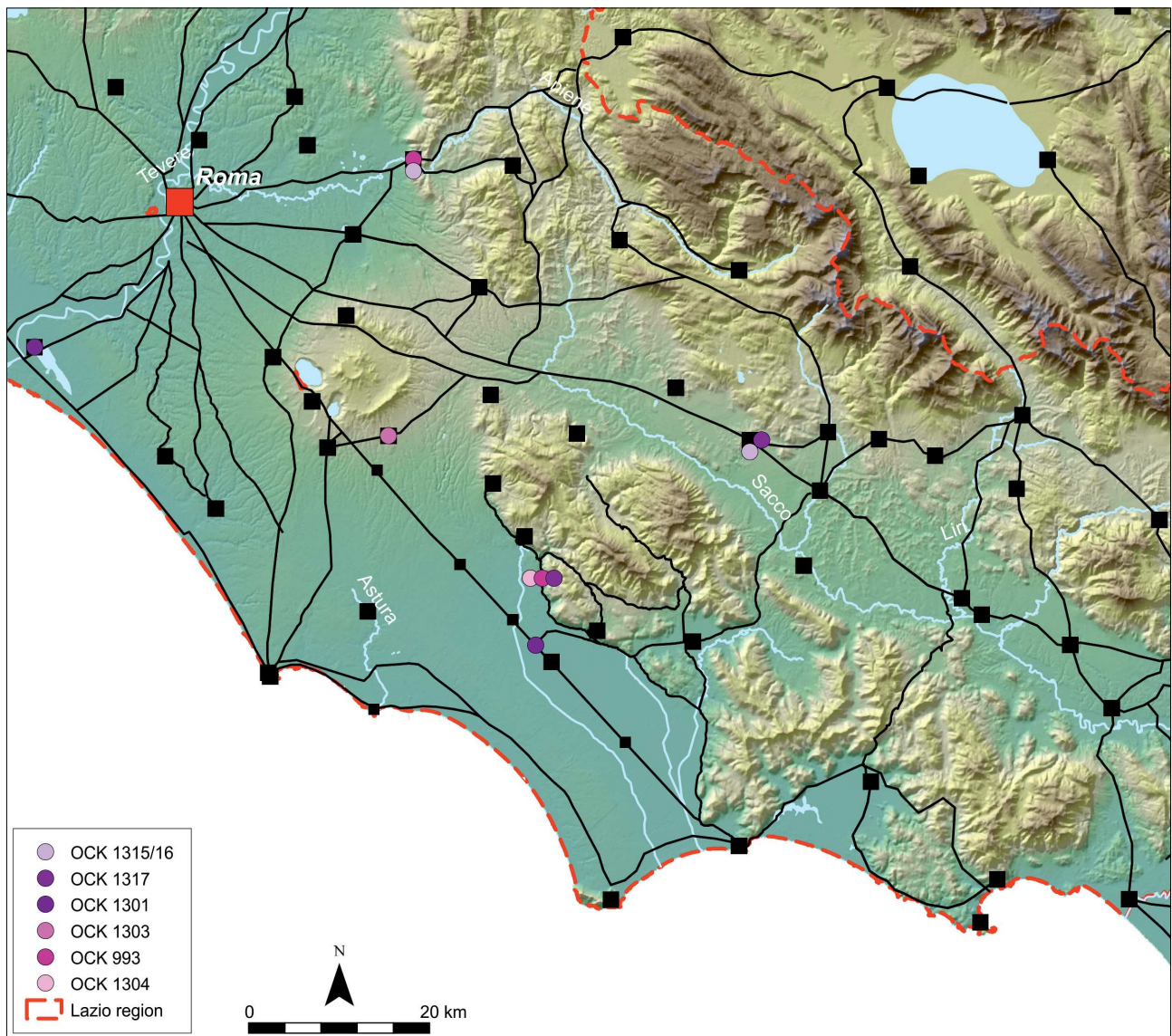
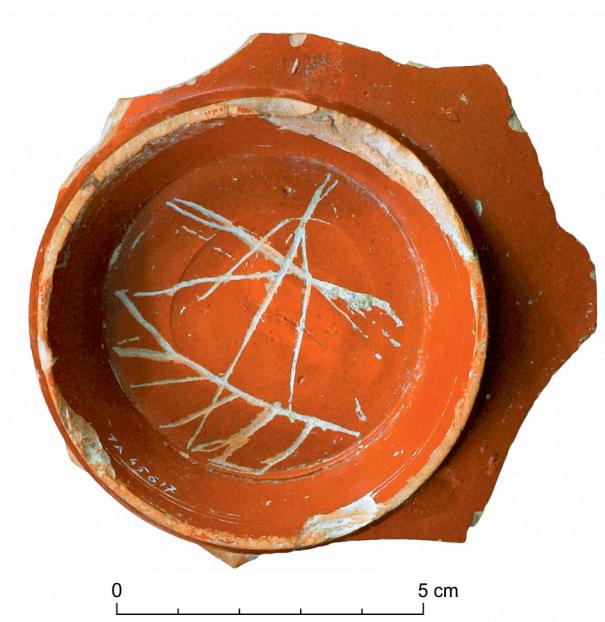


Figure 16. Distribution of stamps belonging to the Late central Italian potters.



second was based on coastal trade that directly supplied the main coastal harbours (Ostia/Rome, possibly

Figure 17. Graffito of a ship on the underside of a terra sigillata plate stamped *Sex. M(urrius) Fes(tus)* from the villa at Torre Astura. Scale 80%.

Antium and *Tarracina*), from where redistribution to inland areas occurred.²⁰

6. Conclusion

The analysis of 1 662 fragments of (Italian) terra sigillata collected by the Pontine Region Project, supplemented by published evidence, provides valuable insights into the circulation of this ware in southern Latium. Based on data collected within the Pontine Region Project, we first explored the geographic and contextual distribution of terra sigillata in the region. This distribution suggests that rural areas in general had good access to these products and thus were well integrated into regional urban markets and that levels of prosperity were such that large segments of rural society could indeed afford these fine table wares.

Next, we explored in more detail the chronological patterns, which show that the region was relatively slow in the uptake of terra sigillata, with consumption generally increasing during Augustan and Tiberian times, on both elite and lower-class rural sites. Whereas consumption levels remain stable in the inland parts of the region during the 2nd half of the 1st century AD, the coastal area saw a remarkable peak in consumption levels. These diverging fates may be explained, on the one hand, by the presence of several luxurious (coastal) villas that can be found here that consumed large quantities of terra sigillata and, on the other, by harbour works at *Antium* (and possibly Torre Astura) facilitating (direct) trade with coastal northern Tuscany, which by that time had taken over from Arezzo as the main production centre for the ware. During the first half of the 2nd century AD, the coastal area continued to be supplied with terra sigillata – although there certainly is a contraction in volume, while evidence for the continued consumption of terra sigillata is scarce for the inland parts of the region.

An integration of the PRP observations with evidence from urban contexts in other parts of Latium Vetus confirms many of these observations. It emphasizes that only modest quantities of terra sigillata reached the region during the initial phase of production, but diverges from the PRP trend in firmly placing the main peak of terra sigillata consumption during Augustan–Tiberian times, stressing how much of the PRP trend is conditioned by the anomalous consumption profile of the coastal area around *Antium*. In this period, vessels from a wide range of workshops are attested, indicating that most of the market in southern Latium was supplied indirectly with goods probably funnelled through

Rome and/or Ostia. From the second half of the 1st century AD, more differentiated patterns appear. With the shift of production to Pisa in the later phases of production, and with the construction of several ports on the coast, especially the Tyrrhenian littoral continues to be well supplied. Based on the large number of stamps belonging to only a few potters, it is likely that *Antium* in this period had become one of the ports-of-call for the marketing of products from Pisan workshops. On the other hand, more inland areas demonstrate a gradual – or in some cases much more dramatic – decline in terra sigillata consumption. Based on the substantial variety of potters attested and on the observation that both products from Pisa and from the Tiber river valley are common, we argue that these areas functioned further down the supply chain, mainly relying on the redistribution of the ware in one of the major regional centres, such as Rome and Ostia, or from the harbours on the Pontine coast.

In conclusion, our analysis of terra sigillata finds in southern Latium has demonstrated the potential of large sets of pottery data to contribute to economic historical reconstructions, including both patterns of circulation (reconstruction of ancient trade routes) and patterns of consumption (degrees to which different areas and social groups were integrated into markets). Although offering some first insights, the evidence discussed here undoubtedly constitutes only a fraction of the total amount of Italian terra sigillata that must have been gathered during centuries of fieldwork (both antiquarian and scientific) in southern Latium. We therefore especially hope that the present work provides an incentive to further unlock the quantities of pottery, especially terra sigillata, present in storerooms and museums across the region. This will hopefully allow researchers to evaluate whether the patterns presented here are indeed representative of developments in the supply and consumption of terra sigillata in southern Latium.

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²⁰ It must, however, be noted that stamps of the OctPro-OctSal group can be very well represented outside Italy (e.g. in Corinth; see Slane 1987), and that therefore these central Italian producers must have been true competitors of late Pisan potters on overseas markets.

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Appendix 1: Terra sigillata name stamps recorded during the Pontine Region Project investigations

No.	Find location	Stamp type	Potter	Mark	Reference	Provenance	Date
1	Site 12262 (Forum Appii)	Central circular with surrounding laurel wreath	Q. POMPEIVS SERENVVS	SER/[EN]I	OCK 1878.5	Pozzuoli	10 BC-AD 10
2	Site 12262 (Forum Appii)	Planta pedis	Sex. M(urrius) Fes(tus)	SEX·M·F	OCK 1212	Pisa	AD 60-150
3	Site 12262 (Forum Appii)	Radially placed rectangular	L. TITIVS COPO	L-TITI/COPO	OCK 2239.2	Arezzo	20-10 BC
4	Site 12262 (Forum Appii)	Central rectangular	-	[..]A	-	-	-
5	Site 12262 (Forum Appii)	Planta pedis	CN. ATEIVS AMARANTVS	A·AMAR	OCK 281.4	Pisa?	AD 30-75
6	Site 12262 (Forum Appii)	Central rectangular	L. TETTIVS CRITO	L-TE[...]/CRITO	OCK 2107	Arezzo	20-1 BC
7	Site 12262 (Forum Appii)	Planta Pedis	Sex. M(urrius) Fes(tus)	S·M·F	OCK 1212	Pisa	AD 60-150
8	Site 14094	Planta pedis	C. P() Pi(sanus)	C·P·P	OCK 1342	Pisa	AD 50-100
9	Site 12262 (Forum Appii)	Central rectangular	Unknown	A[...]	-	-	-
10	Site 14059	Planta pedis	C. NVM(ERIVS) FEL(IX)	C·NVF	OCK 1301	Central Italy	AD 75-150
11	Site 11232	Planta pedis	C. P() Pi(sanus)	[C]·P·P	OCK 1342	Pisa	AD 50-100
12	Site 15036	Planta pedis	Sex. M(urrius) Fes(tus)	SEX·M·F	OCK 1212	Pisa	AD 60-150
13	Site 15036	Central rectangular	-	A[...]	-	-	-
14	Site 15014	Planta pedis	-	[...]A	-	-	-
15	Site 15153	Planta pedis	Sex. M(urrius) Fes(tus)/SEX. M(VRRIVS) (P)	S·M·[.]	OCK 1212/13	Pisa	AD 60-150
16	Site 11323	Planta pedis	C. P() Pi(sanus)/L. Rasinius Pisanus	[..]PIS	OCK 1342/1690	Pisa	AD 50-120
17	Site 10509	Planta pedis	-	Illegible	-	-	-
18	Site 15160	Planta pedis	C. P() Pi(sanus)	[C]·P·P	OCK 1342	Pisa	AD 50-100
19	Site 15160	In lunula	SEX. M(VRRIVS) (P)	SEX·M·P	OCK 1213.36	Pisa	AD 60-150
20	Site 15106	Planta pedis	-	T[...]	-	-	-
21	Site 15106	Planta pedis	P. Clod(ius) Proc(ulus)	P·CLO[...]	OCK 592	Arezzo	AD 40-100
22	Site 11268	Planta pedis	Camurius	CAMVRI[...]	OCK 514	Arezzo	AD 30-70
23	Site 11268	Central rectangular	Philogenes	PHILOG/ENES	OCK1456	Arezzo	10 BC-AD 10
24	Site 11268	Planta pedis	-	illegible	-	-	-
25	Site 15150	Anepigraphic stamp	-	Circle with cross	OCK 2549.5	-	10BC?
26	Site 15029	Planta pedis	CAMVRIVS	CA[...]	OCK 514	Arezzo	AD 30-70
27	Site 15014	Planta pedis	SEX. M(VRRIVS) (P)	SEX·M·P	OCK 1213	Pisa	AD 60-150

Appendix 1: Terra sigillata name stamps recorded during the Pontine Region Project investigations (continued).

No.	Find location	Stamp type	Potter	Mark	Reference	Provenance	Date
28	Site 15014	Planta pedis	C. P() Pi(sanus)/L. Rasinius Pisanus	[...]PIS	OCK 1342/1690	Pisa	AD 50-120
29	Nettuno municipality (precise find location unknown)	Planta pedis	Sex. M(urrius) Fes(tus)	SEX·M·F	OCK 1212	Pisa	AD 60-150
30	Site 15082	Planta pedis	Sex. M(urrius) Fes(tus)	SEX·M·F	OCK 1212	Pisa	AD 60-150
31	Site 15019	Planta pedis	Sex. M(urrius) Fes(tus)	SEX·M·F	OCK 1212	Pisa	AD 60-150
32	Nettuno municipality (precise find location unknown)	Circle with clover leaf	L. Rasinius Pisanus	L R P	OCK 1690.62	Pisa	AD 50-120
33	Nettuno municipality (precise find location unknown)	Planta pedis	L. Rasinius Pisanus	L·R·PI	OCK 1690	Pisa	AD 50-120
34	Nettuno municipality (precise find location unknown)	Planta pedis	L. Rasinius Pisanus	L·R·PI	OCK 1690	Pisa	AD 50-120
35	Nettuno municipality (precise find location unknown)	Planta pedis	L. Rasinius Pisanus	L·R·P	OCK 1690	Pisa	AD 50-120
36	Nettuno municipality (precise find location unknown)	Planta pedis	L. Rasinius Pisanus	L·R·P	OCK 1690	Pisa	AD 50-120
37	Nettuno municipality (precise find location unknown)	Planta pedis	L. Rasinius Pisanus	L·R·P	OCK 1690	Pisa	AD 50-120
38	Nettuno municipality (precise find location unknown)	Planta pedis	L. Rasinius Pisanus	L·R·P	OCK 1690	Pisa	AD 50-120
39	Nettuno municipality (precise find location unknown)	Central rectangular	L. Titius, slave CHRESTIO	CHREST/L·TITIO	OCK 2209	Arezzo	10 BC-AD 10
40	Site 15085	Planta pedis	Sex. M(urrius) Fes(tus)	S·M·F	OCK 1212	Pisa	AD 60-150
41	Site 15085	Planta pedis	Camurius	CANV[.]	OCK 514	Arezzo	AD 30-70
42	Site 11202	Planta pedis	P. Cornelius	CORNEL	OCK 612/624	Arezzo	AD 10-50
43	Poligono militare di Nettuno (precise find location unknown)	Planta pedis	Sex()	SEX	OCK 1958.5	?	Augustan?
44	Poligono militare di Nettuno (precise find location unknown)	Planta pedis	Sex.	SEX[.]	-	Pisa	-
45	Site 11202	Planta pedis	Sex. M(urrius) Fes(tus)	S·M·F	OCK 1212	Pisa	AD 60-150
46	Site 15029	Planta pedis	L. Rasinius Pisanus	L·R·PI	OCK 1690	Pisa	AD 50-120
47	Site 15029	Planta pedis	L. Rasinius Pisanus	L·R·PI	OCK 1690	Pisa	AD 50-120
48	Site 15029	Planta pedis	-	Illegible	-	-	-

Appendix 1: Terra sigillata name stamps recorded during the Pontine Region Project investigations (continued).

No.	Find location	Stamp type	Potter	Mark	Reference	Provenance	Date
49	Nettuno municipality (precise find location unknown)	-	Unidentifiable	-	-	-	-
50	Nettuno municipality (precise find location unknown)	Planta pedis	-	Illegible	-	-	-
51	Site 10889	Planta pedis	L. Rasinius Pisanus	L.RAS[.]	OCK 1690	Pisa	AD 50-120
52	Site 12316	Planta pedis	Illegible	-	-	-	-
53	Site 10571	Planta pedis	Illegible	-	-	-	-
54	Site 15001	Central rectangular	Unknown	F[.]/FES[.]	-	-	-

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000)

Location	Ock no.	Stamp name	Production location	Date
<i>Alatri</i>	729	P. DELOREIVS	Central Italy	AD 50+
<i>Anagni</i>	102	Q. ANCHARIVS	Vasanello	20-0 BC
<i>Anzio</i>	1217	SEX. M(VRRIVS) T()	Pisa	AD 30-50
<i>Aquinum</i>	276	CN. ATEIVS	Pisa	5 BC-AD 40+
	278	CN. ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 50+
	403	L. AVILLIVS	Unknown	AD 30-70
	815	FAVSTVS	Central Italy	AD 0-20
	867	GAVIVS	Arezzo?	10 BC-AD 20
	867	GAVIVS	Arezzo?	10 BC-AD 20
	928	HERMEISCVS	Unknown	AD 15+
	933	P. HERTORIVS	Arezzo	30-10 BC
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1226	L. N() P()	Central Italy	15 BC-AD 5
	1329	OPTATVS	Central Italy?	AD 0-20
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1390	M. PERENNIVS	Arezzo	15 BC-AD 60
	1404	(M.) (PERENNIVS) BARGATHES	Arezzo	AD 0-30?
	1412	(M.) (PERENNIVS) TIGRANVS	Arezzo	10 BC-AD 10
	1491	M. POBL()	Central Italy	AD 15+
	1549	PROTVS	Arezzo	15-5 BC
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	2166	A. TITIVS	Arezzo/Po Valley	30-10 BC
	2169	A. TITIVS FIGVLVS	Arezzo	30-20 BC
	2203	L. TITIVS	Arezzo	15 BC-AD 30+
	2315	M. VALERIVS	Pisa	15 BC-AD 15
	2398	A. VIBIVS FIGVLVS	Unknown	20-5 BC
	2441	VMBRICIVS	Arezzo?	10 BC-AD 50+
	2495	L. VOL()	Unknown	AD 15+
	2558	Abstract; planta pedis	Unknown	AD 15-100+
	2585	Unattributable	Unknown	Unknown
	2585	Unattributable	Unknown	Unknown
<i>Aquinum/Interamna</i>	270	ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 30
	275	CN. ATEIVS	Arezzo	15-5 BC
	275	CN. ATEIVS	Arezzo	15-5 BC
	279	CN. AT(EIVS) A()	Pisa	AD 30-80
	556	CILNIVS	Arezzo	AD 15+
	612	CORNELIVS	Arezzo	AD 10-50+
	932	HERTORIVS	Arezzo	30 BC-AD 10
	953	HILARVS	Unknown	20 BC-AD 10
	1171	P. MESSENIUS MENOPILVS	Central Italy	40-0 BC
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1909	SERTORIVS	Arezzo	AD 0-30+

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	OCK no.	Stamp name	Production location	Date
	2094	L. TETTIVS	Arezzo	20-0 BC+
	2166	A. TITIVS	Arezzo/Po Valley	30-10 BC
	2278	L. V() FI()	Unknown	AD 30+
Cassinum	371	AVILLIVS	Unknown	20 BC-AD 40
	683	A. CORONGANIVS	Central Italy?	15 BC-AD 5
	2437	Q. VIVIVS FVSCVS	Unknown	Unknown
Castelporziano	1584	M. PVMIDIVS, partner P. SABIDIVS EROS+	Unknown	20-10 BC
Ferentino	183	SEX. ANNIVS	Arezzo	20 BC-AD 10
	383	AVILLIVS, slave PHILEM(O)	Unknown	15 BC+
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	815	FAVSTVS	Central Italy	AD 0-20
	879	L. GELLIVS	Arezzo?	15 BC-AD 50
	1105	A. MANNEIVS, slave COSMVS	Arezzo?	Unknown
	1256	NAT(ALIS?)	Unknown	AD 15+
	1316	L. O(CTAVIVS) PROC(LVS)	Central Italy	AD 80-150
	1317	(L.) OCTA(VIVS) SALV(TARIS)	Central Italy	AD 80-150
	1426	Q. PETILLIVS	Unknown	AD 0-20
	1824	L. S(AVFEIVS) G(AVSA)	Arezzo	15 BC-AD 10
	2173	(C.) TITIVS, slave DIODORVS STA	Central Italy?	AD 0+
	2331	C. VE() BARG()	Arezzo?	AD 30+
	2469	L. VM(BRICIVS) F()	Unknown	AD 15+
Fondi	932	HERTORIVS	Arezzo	30 BC-AD 10
Formia	1482	P. PLOT() ALBANVS	Unknown	Before AD 0
Gabii	116	ANNIVS	Arezzo	15 BC-AD 5
	164	L. ANNIVS	Arezzo	10 BC-AD 10
	276	CN. ATEIVS	Pisa	5 BC-AD 40+
	379	AV(I)LLIVS, slave HIL(ARVS)	Unknown	15-0 BC
	446	BLESAMVS	Central Italy?	AD 0+
	514	CAMVRIVS	Arezzo	AD 30-70
	579	CLARVS	Central Italy	15 BC-AD 5
	1127	L. MARIVS	Central Italy?	10 BC-AD 10
	1309	OCELLA	Arezzo/Po Valley	40-15 BC
	1328	OPTATVS	Central Italy?	AD 0-20
	1390	M. PERENNIVS	Arezzo	15 BC-AD 60
	1430	L. PETR(ONIVS) CORIA, partner C. PETR(ONIVS) CORIA	Arezzo	40-10 BC
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	2063	TER()	Central Italy?	AD 0-50
	2094	L. TETTIVS	Arezzo	20-0 BC
	2109	L. TETTIVS SAMA	Arezzo	20 BC-AD 5
	2168	A. TITIVS FIGVLVS	Arezzo/Po Valley	30-15 BC
	2197	C. TITIVS NEPOS, slave PRISCVS	Central Italy	AD 0+
	2239	L. TITIVS COPO	Arezzo	20-10 BC
	2400	A. VIBIVS SCROF(VLA)	Arezzo	40-15 BC
	2400	A. VIBIVS SCROF(VLA)	Arezzo	40-15 BC
	2428	VILLIVS	Arezzo	AD 0-40

Appendix 2: Name stamps recorded for southern Latium (C VARR 2000), continued.

Location	Ock no.	Stamp name	Production location	Date
	2549	Abstract: circle	Unknown	10 BC+
	2550	Abstract: ellipse	Unknown	AD 0+
	2550	Abstract: ellipse	Unknown	AD 0+
	2585	Unattributable	Unknown	Unknown
	2585	Unattributable	Unknown	Unknown
Grottaferrata	1553	PVB(), slave DIOG(ENES)	Central Italy	40-20 BC
Interamna Lirenas	92	AN()	Unknown	AD 15+
	144	C. ANNIVS, slave EPAPHRA	Arezzo	Augustan (25 BC-AD 15)
	158	C. ANNIVS, slave SALVIVS	Arezzo	Augustan (15 BC-AD 25)
	270	ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 30
	270	ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 30
	278	CN. ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 50+
	305	CN. ATEIVS PLOCAMVS	Pisa?	AD 30+
	371	AVILLIVS	Unknown	20 BC-AD 40
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	550	C. CHRESTIVS	Unknown	15 BC-AD 5
	550	C. CHRESTIVS	Unknown	15 BC-AD 5
	608	CORINTHVS	Pozzuoli	AD 0-30+
	702	CRISPINIVS	Unknown	10 BC-AD 10
	823	FELIX	Unknown	Unknown
	879	L. GELLIVS	Arezzo	15 BC-AD 50
	879	L. GELLIVS	Arezzo	15 BC-AD 50
	884	L. GELLIVS QVADRATVS	Arezzo?	15-0 BC
	933	P. HERTORIVS	Arezzo	30-10 BC
	1024	LEPIDVS	Unknown	10 BC-AD 15
	1065	C. M() F()	Unknown	AD 15+
	1132	C. ME()	Unknown	AD 0-30+
	1143	C. MEMMIVS, slave COMMVNIS	Unknown	AD 0+
	1193	MVN(ATIVS), slave TIODO(TVS)	Central Italy	AD 0+
	1193	MVN(ATIVS), slave TIODO(TVS)	Central Italy	AD 0+
	1212	SEX. M(VRRIVS) FES(TVS)	Central Italy?	AD 60-150
	1281	L. NONIVS, slave STRABO	Central Italy?	Unknown
	1324	ONESIMVS	Unknown	AD 0-50
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1388	(M.) PERENNIVS	Arezzo	30-15 BC
	1390	M. PERENNIVS	Arezzo	15 BC-AD 60
	1404	(M.) (PERENNIVS) BARGATHES	Arezzo	AD 0-30?
	1477	L. PLE() AMAR()	Pisa?	AD 0-50
	1500	Q. POMPEIVS SERENVVS	Pozzuoli	10 BC-AD 10
	1529	PRIMVS	Arezzo	5 BC-AD 40
	1593	P. Q()	Arezzo	40-20 BC
	1598	QVARTIO	Arezzo	15 BC+
	1623	RASINIVS	Arezzo	15 BC-AD 40
	1623	RASINIVS	Arezzo	15 BC-AD 40
	1669	RASINIVS, slave PLANCVS	Arezzo	Unknown

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	OCK no.	Stamp name	Production location	Date
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1730	T RVFRENVS	Arezzo	AD 0-40
	1942	A. SESTIVS, slave PRIAMVS	Arezzo?	30-10 BC
	1994	STEPHANVS	Central Italy	15 BC-AD 5
	2091	(C.) TETTIVS PRINCEPS	Unknown	10 BC+
	2094	L. TETTIVS	Arezzo	20-0 BC+
	2170	C. TITIVS	Central Italy	AD 0-20
	2170	C. TITIVS	Central Italy	AD 0-20
	2203	L. TITIVS	Arezzo	15 BC-AD 30+
	2220	L. TITIVS, slave GEMELLVS	Arezzo?	15 BC-AD 5
	2298	C. VALERIVS TYRANNVS, slave ANT()	Central Italy	10 BC-AD 10
	2431	(SEX.) VILLIVS NAT(ALIS)	Arezzo?	AD 15-40
	2500	C. VOLVSENVS	Arezzo	AD 0-20
Lanuvio	244	ARRETINVM	Unknown	15 BC-AD 15
	278	CN. ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 50+
	415	SEX. AVILLIVS MANIVS	Pisa	10 BC-AD 20
	448	C. BOV(IVS) GENT()	Arezzo?	AD 30-60
	514	CAMVRIVS	Arezzo	AD 30-70
	531	CELER	Pozzuoli?	20 BC-AD 40
	746	DOCIMVS	Central Italy	15-0 BC
	931	HERTORIA	Arezzo	AD 0+
	932	HERTORIVS	Arezzo	30 BC-AD 10
	932	HERTORIVS	Arezzo	30 BC-AD 10
	1173	P. MESSEN(I)VS ZOSIMVS	Central Italy	Augustan
	1390	M. PERENNIVS	Arezzo	15 BC-AD 60
	1404	(M.) (PERENNIVS) BARGATHES	Arezzo	AD 0-30+
	1532	PRIMVS	Central Italy	20 BC-AD 20
	1542	PRISCVS	Central Italy	AD 0-50
	1646	RASINIVS, slave DRACO	Unknown	Unknown
	1913	C. SERTORIVS PROCVLVVS	Arezzo	15 BC-AD 5
	2355	A. VETTIVS OPTATVS	Arezzo?	10 BC-AD 10
	2373	C. VIBIENVS	Arezzo	AD 0-40
	2428	VILLIVS	Arezzo	AD 0-40
	2544	ZOILVS	Pisa	5 BC-AD 50+
Nemi	1409	(M.) (PERENNIVS) SATVRN(INVS)	Arezzo	AD 15-35
Ostia	9	T. A() PIR()	Central Italy	AD 50+
	24	A. ACILIVS MACEDO	Pozzuoli	10-0 BC
	24	A. ACILIVS MACEDO	Pozzuoli	10-0 BC
	52	Q. AG()	Central Italy?	AD 40-60
	74	ALFIVS	Central Italy	AD 15+
	78	ALYPSVS	Arezzo	AD 40-60
	78	ALYPSVS	Arezzo	AD 40-60
	78	ALYPSVS	Arezzo	AD 40-60
	78	ALYPSVS	Arezzo	AD 40-60
	78	ALYPSVS	Arezzo	AD 40-60

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	Ock no.	Stamp name	Production location	Date
	79	AMA()	Unknown	AD 15-35
	83	AMAR(ANTVS)	Pisa?	AD 0+
	90	AN()	Unknown	40-0 BC
	94	ANCH(ARIVS)	Vasanello	10-0 BC
	120	ANNIVS, slave IVCVNDVS	Arezzo?	Augustan
	157	C. ANNIVS, slave RVFIO	Arezzo	15-0 BC
	183	SEX. ANNIVS	Arezzo	20 BC-AD 10
	184	SEX. ANNIVS	Ostia	15 BC+
	184	SEX. ANNIVS	Ostia	15 BC+
	199	ANTEROS	Unknown	15 BC-AD 5
	219	APOL(L)ONIVS	Central Italy	AD 0-20+
	223	APONIVS, slave DONV()	Central Italy	Augustan
	268	ATEIVS	Pisa	5 BC-AD 25
	270	ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 30
	270	ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 30
	270	ATEIVS	Arezzo/Pisa/Lyon	15 BC-AD 30
	279	CN. AT(EIVS) A()	Pisa	AD 30-80
	279	CN. AT(EIVS) A()	Pisa	AD 30-80
	281	CN. ATEIVS AMARANTVS	Pisa?	AD 30-75
	281	CN. ATEIVS AMARANTVS	Pisa?	AD 30-75
	282	CN. ATEIVS AR()	Pisa	AD 30-80
	285	CN. ATEIVS CRESTVS	Pisa	5 BC-AD 25
	285	CN. ATEIVS CRESTVS	Pisa	5 BC-AD 25
	298	CN. ATE(IVS) MA()	Pisa	AD 20-80
	298	CN. ATE(IVS) MA()	Pisa	AD 20-80
	305	CN. ATEIVS PLOCAMVS	Pisa?	AD 30+
	309	CN. A(TEIVS) R()	Pisa?	AD 30+
	316	CN. ATEIVS XANTHVS	Pisa	5 BC-AD 20
	347	P. ATTIVS	Unknown	20-0 BC
	352	P. ATTIVS, slave GRATVS	Arezzo?	20 BC+
	361	L. AV() G(), partner P. AV() G()	Central Italy	AD 30+
	364	AVCTVS	Central Italy	10 BC-AD 10
	371	AVILLIVS	Unknown	20 BC-AD 40
	388	AVILLIVS, slave STATIVS	Unknown	20-0 BC
	402	C. AVILLIVS NYM()	Central Italy	AD 30-70
	402	C. AVILLIVS NYM()	Central Italy	AD 30-70
	402	C. AVILLIVS NYM()	Central Italy	AD 30-70
	402	C. AVILLIVS NYM()	Central Italy	AD 30-70
	402	C. AVILLIVS NYM()	Central Italy	AD 30-70
	403	L. AVILLIVS	Unknown	AD 30-70
	403	L. AVILLIVS	Unknown	AD 30-70
	414	SEX. AVILLIVS FELIX	Central Italy?	10 BC-AD 20
	415	SEX. AVILLIVS MANIVS	Pisa	10 BC-AD 20
	448	C. BOV(IVS) GENT()	Arezzo?	AD 30-60+
	448	C. BOV(IVS) GENT()	Arezzo?	AD 30-60+
	504	CALIDIVS STRIGO, slave PROTVS	Arezzo	15-5 BC

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	Ock no.	Stamp name	Production location	Date
	509	CALIDIVS STRIGO, slave TELAMO	Arezzo	15 BC-AD 5
	511	CAL(PVRNIVS) PRIM(VS)	Central Italy?	AD 15+
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	524	Q. CASTR(ICIVS) VE()	Unknown	AD 50+
	524	Q. CASTR(ICIVS) VE()	Unknown	AD 50+
	524	Q. CASTR(ICIVS) VE()	Unknown	AD 50+
	524	Q. CASTR(ICIVS) VE()	Unknown	AD 50+
	531	CELER	Pozzuoli?	20 BC-AD 40
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	590	P. CL(ODIVS) EVPHEMVS	Arezzo?	AD 30-50
	592	P. CLOD(IVS) PROC(VLVS)	Arezzo	AD 40-100
	592	P. CLOD(IVS) PROC(VLVS)	Arezzo	AD 40-100
	592	P. CLOD(IVS) PROC(VLVS)	Arezzo	AD 40-100
	592	P. CLOD(IVS) PROC(VLVS)	Arezzo	AD 40-100
	592	P. CLOD(IVS) PROC(VLVS)	Arezzo	AD 40-100
	612	CORNELIVS	Arezzo	AD 10-50+
	665	P. CORNELIVS, slave PHILONI(CVS)	Arezzo	5 BC+
	679	P. CORNELIVS, slave VRBANVS	Arezzo	Unknown
	680	P. CORNELIVS, slave ZET(H)VS	Arezzo	AD 0+
	698	CRESTVS	Pisa/Lyon	10 BC-AD 30
	698	CRESTVS	Pisa/Lyon	10 BC-AD 30
	698	CRESTVS	Pisa/Lyon	10 BC-AD 30
	702	CRISPINVS	Unknown	10 BC-AD 10
	711	L. CRISPIVS	Arezzo	AD 0-20
	718	C. CVRTIVS	Central Italy	AD 0-20
	729	P. DELOREIVS	Central Italy	AD 50+
	787	EVHODVS	Pisa	5 BC-AD 40
	824	FELIX	Central Italy?	AD 0+
	840	FLORVS	Central Italy	AD 15+
	840	FLORVS	Central Italy	AD 15+
	847	FORTVNATVS	Central Italy	AD 0-20
	867	GAVIVS	Arezzo?	10 BC-AD 20
	878	GELLIVS	Arezzo?	AD 10-50
	878	GELLIVS	Arezzo?	AD 10-50
	879	L. GELLIVS	Arezzo?	15 BC-AD 50
	879	L. GELLIVS	Arezzo?	15 BC-AD 50

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	OCK no.	Stamp name	Production location	Date
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	AD 60-150
	1213	SEX. M(VRRIVS) P()	Pisa	AD 60-150
	1222	C. N()	Central Italy	AD 0-30+
	1225	L. N() AT()	Arezzo?	AD 15+
	1226	L. N() P()	Central Italy	15 BC-AD 5
	1287	L. NONIVS FLOR(ENTINVS)	Pisa	AD 100-150
	1287	L. NONIVS FLOR(ENTINVS)	Pisa	AD 100-150
	1301	C. NVM(ERIVS) FEL(IX)	Central Italy	AD 80-150
	1301	C. NVM(ERIVS) FEL(IX)	Central Italy	AD 80-150
	1313	L. OCTAVIVS	Central Italy	AD 80-150
	1322	OLYMPVS	Unknown	10 BC-AD 15+
	1328	OPTATVS	Central Italy?	AD 0-20
	1328	OPTATVS	Central Italy?	AD 0-20
	1338	C. P() E()	Unknown	40-10 BC
	1338	C. P() E()	Unknown	40-10 BC
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1342	C. P() PI(SANVS)	Pisa	AD 50-100+
	1372	PAMPFILVS	Cales	AD 0+
	1390	M. PERENNIVS	Arezzo	15 BC-AD 60
	1390	M. PERENNIVS	Arezzo	15 BC-AD 60
	1422	M. PESCVN(NIVS)	Arezzo?	AD 50-100

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	OCK no.	Stamp name	Production location	Date
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1690	L. RASINIVS PISANVS	Pisa	AD 50-120
	1691	RASTICANIVS	Central Italy?	Flavian? (AD 70-100)
	1691	RASTICANIVS	Central Italy?	Flavian?
	1693	L. RAST(ICANIVS) AVG()	Central Italy?	AD 40-60
	1693	L. RAST(ICANIVS) AVG()	Central Italy?	AD 40-60
	1719	C. ROSCIVS	Central Italy	AD 40-60
	1728	RVFRENVS	Arezzo	AD 0-30
	1730	T. RVFRENVS	Arezzo	AD 0-40
	1739	RVFVS	Unknown	AD 0-30
	1773	L. SAE() SAT()/STA()	Unknown	AD 15+
	1800	SAVFEIVS	Arezzo	15 BC-AD 30+
	1800	SAVFEIVS	Arezzo	15 BC-AD 30+
	1824	L. S(AVFEIVS) G(AVSA)	Arezzo	15 BC-AD 10
	1830	C. SCEVNIVS PRI(MVS)	Central Italy?	AD 15+
	1861	C. SENTIVS	Etruria?	20 BC-AD 20
	1861	C. SENTIVS	Etruria?	20 BC-AD 20
	1913	C. SERTORIVS PROCVLVS	Arezzo	15 BC-AD 5
	1913	C. SERTORIVS PROCVLVS	Arezzo	15 BC-AD 5
	1920	M. SERVIL(IVS) RVFVS	Central Italy	AD 0+
	1926	A. SESTIVS	Arezzo/Po Valley	40-10 BC
	1958	SEX()	Unknown	Augustan
	1999	L. SV() M()	Pisa	AD 50-100
	2007	SVLPI(CIVS)	Unknown	AD 15+
	2038	TARQVI(TIVS)	Unknown	20-0 BC
	2040	L. TARQVITIVS	Arezzo	15 BC-AD 15+
	2042	L. TARQVI(TIVS) PRIMVS	Arezzo?	Unknown
	2047	C. TELLIVS	Arezzo	10 BC+
	2094	L. TETTIVS	Arezzo	20-0 BC+
	2107	L. TETTIVS CRITO	Arezzo	20-0 BC
	2107	L. TETTIVS CRITO	Arezzo	20-0 BC
	2109	L. TETTIVS SAMIA	Arezzo	20 BC-AD 5
	2109	L. TETTIVS SAMIA	Arezzo	20 BC-AD 5
	2109	L. TETTIVS SAMIA	Arezzo	20 BC-AD 5
	2117	THALAMIO	Pozzuoli	10 BC-AD 10
	2117	THALAMIO	Pozzuoli	10 BC-AD 10
	2120	THYRSVS	Arezzo	20-0 BC
	2170	C. TITIVS	Central Italy	AD 0-20
	2171	C. TITIVS, slave ACASTVS	Central Italy	AD 0-20
	2203	L. TITIVS	Arezzo	15 BC-AD 30+
	2203	L. TITIVS	Arezzo	15 BC-AD 30+
	2205	L. TITIVS, slave APRILIS	Unknown	Unknown
	2209	L. TITIVS, slave CHRESTIO	Arezzo	10 BC-AD 10
	2213	L.(?) TITIVS, slave CINNAMVS	Unknown	10 BC+
	2239	L. TITIVS COPO	Arezzo	20-10 BC

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	Ock no.	Stamp name	Production location	Date
	2246	L. TITIVS THYRSVS	Arezzo	20 BC-AD 10
	2276	C. V()	Central Italy	AD 25-50
	2299	C. VALERIVS TYRANNVS, slave AVCTVS	Central Italy	Tiberian (AD 15-35)
	2306	C. VALERIVS TYRANNVS, slave IASO	Central Italy	10 BC-AD 10
	2331	C. VE() BARG()	Arezzo?	AD 30+
	2354	A. VETTIVS	Unknown	AD 15-30+
	2373	C. VIBIENVS	Arezzo	AD 0-40+
	2373	C. VIBIENVS	Arezzo	AD 0-40+
	2373	C. VIBIENVS	Arezzo	AD 0-40+
	2373	C. VIBIENVS	Arezzo	AD 0-40+
	2379	VIBI(VS?)	Central Italy?	15 BC-AD 15+
	2409	(A.) VIBIVS (SCROFVLA), slave DIO-MEDES	Arezzo?	30-10 BC
	2418	C. VIBIVS	Unknown	Unknown
	2428	VILLIVS	Arezzo	AD 0-40
	2441	VMBRICIVS	Arezzo?	10 BC-AD 50+
	2452	L. VMBRICIVS	Arezzo	20 BC-AD 50+
	2452	L. VMBRICIVS	Arezzo	20 BC-AD 50+
	2464	L. VMBRICIVS, slave RUFIO	Unknown	15 BC-AD 5
	2466	L. VMBRICIVS, slave THYRSVS	Arezzo?	20-0 BC
	2470	L. VMBRICIVS H()	Torrita di Siena	AD 50+
	2470	L. VMBRICIVS H()	Torrita di Siena	AD 50+
	2500	C. VOLVSENVS	Arezzo	AD 0-20
	2500	C. VOLVSENVS	Arezzo	AD 0-20
	2504	C. VOLVSENVS, slave CHAEREA	Arezzo?	Unknown
	2523	VOLVSVS	Pisa	10 BC-AD 20
	2536	XANTHVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2544	ZOILVS	Pisa	5 BC-AD 50+
	2550	Abstract: ellipse	Unknown	AD 0+
	2550	Abstract: ellipse	Unknown	AD 0+
	2550	Abstract: ellipse	Unknown	AD 0+
	2558	Abstract: planta pedis	Unknown	AD 15-100+
	2558	Abstract: planta pedis	Unknown	AD 15-100+
	2558	Abstract: planta pedis	Unknown	AD 15-100+
	2558	Abstract: planta pedis	Unknown	AD 15-100+
	2559	Abstract: rectangle	Unknown	Unknown
	2561	Abstract: square	Unknown	40-20 BC
	2585	Unattributable	Unknown	Unknown
	2585	Unattributable	Unknown	Unknown

Appendix 2: Name stamps recorded for southern Latium (C V ARR 2000), continued.

Location	OCK no.	Stamp name	Production location	Date
	2585	Unattributable	Unknown	Unknown
	2585	Unattributable	Unknown	Unknown
Palestrina	410	SEX. AVILLIVS	Central Italy?	10 BC+
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	514	CAMVRIVS	Arezzo	AD 30-70
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	589	C. CLO(DIVS) SABI(NVS)	Arezzo	AD 50-100
	879	L. GELLIVS	Arezzo?	15 BC-AD 50
	996	L. IVLIVS EROS	Central Italy?	Unknown
	1322	OLYMPVS	Unknown	10 BC-AD 15+
	1489	L. PLO(TIVS) ZOS(IMVS), partner FRATER	Scoppieto	AD 25-75
	2373	C. VIBIENVS	Arezzo	AD 0-40+
	2412	A. VIBI(VS) (SCROFVLA), slave DIO- MEDES	Arezzo	30-10 BC
Ponza	1210	SEX. M(VRRIVS) CAL()	Pisa	AD 80-100+
Sermoneta	207	ANTIOCHVS	Pozzuoli	10 BC-AD 10
	371	AVILLIVS	Unknown	20 BC-AD 40
	514	CAMVRIVS	Arezzo	AD 30-70
	815	FAVSTVS	Central Italy	AD 0-20
	993	C. IVLIVS FIR(MVS)	Central Italy	AD 80-150
	1067	C. M() R()	Unknown	AD 50+
	1101	A. MANNEIVS	Arezzo	AD 30-70
	1275	A. NONIVS	Arezzo	AD 30+
	1279	L. NONIVS, slave FAVSTVS	Central Italy?	Unknown
	1304	C. NVM(ERIVS) RES(TITVTVS?)	Central Italy	AD 80-150
	1304	C. NVM(ERIVS) RES(TITVTVS?)	Central Italy	AD 80-150
	1317	(L.) OCTA(VIVS) SALV(TARIS)	Central Italy	AD 80-150
	1383	S(EX.) PE()	Arezzo	40-20 BC
	1544	PRO()	Unknown	AD 15+
	2170	C. TITIVS	Central Italy	AD 0-20
Sezze	1488	L. PLOT(IVS) ZOS(IMVS)	Scoppieto	AD 25-75
Tivoli	993	C. IVLIVS FIR(MVS)	Central Italy	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1212	SEX. M(VRRIVS) FES(TVS)	Pisa	
	1315	(L.) OCTA(VIVS) PROCLVS	Central Italy	
	1342	C. P() PI(SANVS)	Pisa	
	1342	C. P() PI(SANVS)	Pisa	
	1342	C. P() PI(SANVS)	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	

Appendix 2: Name stamps recorded for southern Latium (C VARR 2000), continued.

Location	OCK no.	Stamp name	Production location	Date
	1690	L. RASINIVS PISANVS	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	
	1690	L. RASINIVS PISANVS	Pisa	
Tusculum	514	CAMVRIVS	Arezzo	AD 30-70
	708	C. CRISPINIVS, slave PHILEROS	Unknown	15-5 BC
	1694	L. RAST(ICANIVS) PRE()	Central Italy?	Flavian?
Zolforata	2009	Q. SVLP(ICIVS)	Unknown	AD 15+

Appendix 3: Name stamps for southern Latium, additions to C V ARR (2000)

Velletri and surroundings (Lilli 2008: 283)

No.	OCK	Potter	Workshop	Stamp type	Date
1	OCK 2428	Villi(us)	Arezzo	Planta pedis	AD 0-40
2	OCK 2168/69	A. Titi(us) Figu(lus)	Arezzo/Po Valley	-	30-15 BC
3	OCK 624	P. Cornelius	Arezzo	-	5 BC-AD 40
4	OCK 371	Avilius	Unknown	Rectangular	20 BC-AD 40
5	OCK 1303	C. Numerius Restitutis	Central Italy	Planta pedis	AD 75-150?
6	OCK 729	P. Deloreius	Central Italy	Planta pedis	AD 50+
7	OCK 729	P. Deloreius	Central Italy	Planta pedis	AD 50+
8	OCK 1216	S. Murrius Priscus	Pisa	Planta pedis	AD 70-100
9	OCK 1391	M. Perennius	Arezzo	Planta pedis	20 BC-AD 20
10	OCK 587-589	C. Clodius Proculus/Sabinus	Arezzo	-	AD 40-100
11	OCK 1823/24	L. Saufeius Gausa	Arezzo	-	15 BC-AD 10

Nemi-Roman villa (Berg 2010: 151-85)

12	OCK 1174	METELI	Arezzo?	Planta pedis	AD 30+
13	OCK 402	C. Avillius Nym()	Central Italy	Planta pedis	AD 30-70
14	Undocumented	MEAIMA	Unknown	Oval	-
15	OCK 2441	Umbricius	Arezzo?	Planta pedis	AD 15-50+
16	OCK 592	P. Cl(odius) Pro(culus)	Arezzo	Planta pedis	AD 40-100
17	Unknown	C. M(E?)	Unknown	Planta pedis	-
18	OCK 514	Cam(urius)	Arezzo	Planta pedis	AD 30-70
19	OCK 514	Camur(ius)	Arezzo	Planta pedis	AD 30-70
20	Unknown	C M()	Unknown	Planta pedis	-
21	Unknown	Illegible	-	Planta pedis	-
22	OCK 1732	Ru(frenus)/T R(ufio)	Arezzo?	Rectangular	15-5 BC
23	Unknown	H?/AT?C?	Unknown	Rectangular	-
24	OCK 933	P. Hertorius	Arezzo	Rectangular	30-10 BC
25	OCK 698	Crestus	Pisa/Lyon	Rectangular	10 BC-AD 30
26	OCK 276	Cn. At(eius)	Pisa	Planta pedis	5 BC-AD 40+
27	Unknown	MARSS		Planta pedis	
28	OCK 592	P. Cl(odius) (Proculus)	Arezzo	Planta pedis	AD 40-100
29	OCK 269	Ate(ius)	Lyon	Rectangular	10 BC-AD 10
30	Unknown	Empty stamp	-	Planta pedis	-
31	Unknown	Unknown	-	Planta pedis	-
32	Unknown	Unknown	-	Planta pedis	-

Nemi-Sanctuary of Diana (Maffioli 2013: 299-300)

33	OCK 1171	P. Messenius Menopilus	Central Italy	-	40-0 BC
34	OCK 2166	A. Titius	Arezzo/Po Valley	-	30-10 BC
35	OCK 2548.2	Anepigraphic, circular	Unknown	-	40 BC+
36	OCK 155	C. Annius, slave Primus	Arezzo	-	10 BC+
37	OCK 267	Ateius	Arezzo	-	15-5 BC
38	OCK 267	Ateius	Arezzo	-	15-5 BC
39	OCK 322	C. Ati()	Arezzo	-	Augustan?
40	OCK 322	C. Ati()	Arezzo	-	Augustan?
41	OCK 416	Sex.(Avilius) Manius	Unknown	-	10 BC+

Appendix 3: Name stamps for southern Latium, additions to CVARR (2000), continued.

No.	OCK	Potter	Workshop	Stamp type	Date
42	OCK 617	L. Cornelius	Central Italy?	-	AD 1+
43	OCK 972	L. Iegidius, slave Hilarus	Arezzo?	-	20 BC+
44	OCK 933	P. Hertorius	Arezzo	-	30-10 BC
45	OCK 1268.1	Nicolaus	Central Italy?	-	AD 1+
46	OCK 1415 ¹	M. Perennius Tigranus	Arezzo	-	20-0 BC
47	OCK 1415	M. Perennius Tigranus	Arezzo	-	20-0 BC
48	OCK 1581	Publius + Titius	Arezzo	-	20-10 BC
49	OCK 1831	Scro(fula)?	Arezzo?	-	15 BC+
50	OCK 1854	Sentius	Etruria?	-	20-0 BC
51	OCK 2063	Ter()	Central Italy?	-	AD 0-50
52	OCK 2112	(L) Tettius Samia	Arezzo	-	15 BC-AD 5
53	OCK 2248	L.(Titius)Thyrus	Arezzo	-	15-5 BC
54	OCK 2398	A. Vibius Figulus	?	-	20-5 BC
55	OCK 2448	C. Umbricius Philologus	Arezzo	-	15 BC+
56	OCK 2549.6	Anepigraphic circular	?	-	10 BC+
57	OCK 2561	Square	?	-	40-20 BC
58	OCK 2580.20	Palm leaf	?	-	15 BC+
59	OCK 448	C. Bov(ius) Gent()	Arezzo?	-	AD 30-60+
60	OCK 587	Clod(ius) Proc(ulus)	Arezzo	-	AD 40-100
61	OCK 612	Cornelius	Arezzo	-	AD 10-50+
62	OCK 879	L. Gellius	Arezzo?	-	15 BC-AD 50
63	OCK 1078	C. Ma()	?	-	AD 15+
64	OCK 1408	M. Perennius Crescens	Arezzo	-	AD 30-60
65	OCK 1485	L. Plot(ius) Por()	Scoppieto	-	AD 25-75
66	OCK 1728	Rufrenus	Arezzo	-	AD 0-30
67	OCK 2558	-	Unknown	Planta pedis	AD 15-100+
68	OCK 2029	C.T()T()	Po Valley	-	20-10 BC
69	OCK 1067	C. M() R()	?	-	AD 50+
70	OCK 2027	C. T() P()	Po Valley	-	AD 30-80

Tor Caldara Villa-Unpublished (part of the collection of the Antiquarium di Nettuno)

71	OCK 1535	PRIW	Po Valley	Planta pedis	15 BC-AD 30+
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1 Both records 46 and 47 have been amended, as the original publication contained a reference to the wrong OCK entry (1515 instead of 1415).

Appendix 4

Catalogue of terra sigillata studied by the Pontine Region Project

In this catalogue, we present a complete overview of the diagnostic terra sigillata fragments that have been collected during fieldwork by the Pontine Region Project (PRP).¹ The first part (Plates 1-8) presents the different vessel types that could be distinguished based on morphological characteristics. Most of the identified types correspond to types listed in the *Conspectus formarum terrae sigillatae Italico modo confectae* (1990), although some recorded types do not fit within this typology. The description of each identified type contains the following elements:

- A number, following by a description of the vessel shape and, in parentheses, the total number of fragments assigned to the type;
- A detailed morphological description, including information on minor or more substantial morphological variation noted;
- A listing of the size range. Diameter is measured at the exterior of the rim unless otherwise noted.
- Information on its distribution based on Pontine Region Project data, separated into two broad find locations: the coastal part of the region and the region's interior (covering the Pontine plain and the Lepine footslopes). Part of the terra sigillata of the museum at Nettuno could not be assigned to a specific location (site), but only to a generic area (e.g. having been collected "on the Poligono Militare di Nettuno" or "within the Nettuno municipality"). For the exact location of individual sites, we refer to De Haas, T.C.A., P.M. Van Leusen, P.A.J. Attema & G.W. Tol. The Pontine Region Project. In: *Fasti Online Survey*, KNIR, Royal Netherlands Institute in Rome & AIAC, International Association for Classical Archaeology (distributor). Permalink: http://www.fastionline.org/survey/site/AIAC_454. These locations can also be found in the source publications of individual sub-phases of the PRP. For work around Antium, see Tol (2012; covering both the collection of the Antiquarium di Nettuno and field surveys), as well as Attema *et al.* 2008 and 2010; see van Loon *et al.* 2014 for work in the Padiglione/Campoverde area; for work in the Lepine footslopes, see De Haas 2011, Attema 1993, De Haas *et al.* 2012 and van Leusen *et al.* 2010; for work in the

Pontine plain, see Tol *et al.* forthcoming; for the area around Sezze, see Attema *et al.* 2014; for work around Fogliano, see Attema *et al.* 2008; for surveys around Cisterna, see Attema 1993.

- A list of potential parallels identified in existing literature;
- A proposed date range for its production and circulation.

The second part of the catalogue presents the different kinds of decorated fragments identified. After listing the recorded types of *appliques* (Plate 9), it informs on the mould-decorated vessels, split into 1) the high-quality Arretine mould-made sigillata (Plate 10); 2) sigillata marmorata (Plate 10), and 3) South Gaulish and Late Italian mould-decorated sigillata (Plates 10-14). For the identification of the former, the works of Francesca Paola Porten Palange (2004a and b; 2009a and b) have been indispensable, while for the identification of the latter, the works of, respectively, Allard Mees (1995) and Maura Medri (1992) were essential.

Catalogue

1. *Conspectus form 1.1* – Plate (10 fragments)

Shallow plate with spreading or slightly incurving rim and angular or more rounded transition from rim to base. The lip shows minor variations and is either convex (1A1 and A2) or bevelled on the interior (1B).

Dimensions: Ø: between 16 and 28 cm.

Distribution: This shape is documented in equal quantities in the inland part of the region, where it occurs at sites 12262 (Forum Appii [2×]) and 14047 (3×), and in the coastal area, where it is documented on sites 11202, 11312, 11268 and 15082, with a fifth fragment deriving from the Poligono Militare di Nettuno (without a more specific location).

Parallel: Both variants correspond to *Conspectus form 1.1*; variant 1B is close to *Conspectus example 1.1.4*.

Date: Ca. 40-10 BC.

¹ Excluded here are those fragments that were originally classified as diagnostic but turned out to be too fragmentary to provide any clues about the original vessel morphology and/or reveal any information about the decorative scheme employed.

2. **Conspetus form 2.1 – Plate (2 fragments)**

Small, shallow plate with spreading wall, slightly overhanging rim and convex lip. On exterior, the transition to wall is slightly hollowed out.

Dimensions: Ø: between 14 and 19 cm.

Distribution: Both recorded fragments come from the coastal part of the region. It is documented on site 11312, while a second fragment derives from the Poligono Militare di Nettuno (without a more specific location).

Parallel: Corresponds to *Conspetus form 2.1*.

Date: Ca. 40-10 BC.

3. **Conspetus form 3 – Plate (91 fragments)**

Plate with spreading or incurving wall, slightly outcurving rim and convex lip. Several variants of this shape, which is very common in the Pontine region, are recorded. The first is characterized by a slightly incurving wall and an outcurving rim, which often bears a groove on its interior. Two lip profiles occur, the first simple convex (3.1.1) and the second more profiled (3.1.2). A second variant has a spreading, steep body and a heavier rim and lip (3.2). The third variant also has a steeply spreading body, but a much less accentuated rim (3.3).

Dimensions: 3.1: Ø: between 12 and 24 cm; 3.2: Ø: between 16 and 25 cm; 3.3: Ø: between 13 and 25 cm.

Distribution: This form is extremely common in the Pontine region and occurs on numerous sites in both the coastal and the inland parts of the region. **Variant 3.1:** Interior: sites 12262 (Forum Appii [2×]), 15156 and 12303; Coastal area: sites 11232, 11268 (3×), 15160, 15111 (2×), 15036, 11319, 15019, 15082 (4×), 15003, 11202 (2×), 10572, off-site (1×); 1 fragment from the Poligono Militare di Nettuno (without a more specific location). **Variant 3.2:** Coastal area: 11268, 15160, 15004, 15138 and 1 fragment from the Poligono Militare di Nettuno (without a more specific location); interior: site 10957. **Variant 3.3:** Coastal area: 11268 (2×), 11318, 1× off-site, 10571, 15036, 15106, 11202 (3×), 15019; 1 fragment from the Poligono Militare di Nettuno (without a more specific location). Interior: site 10879. Generically assigned to this shape are 47 fragments: interior: sites 12262 (Forum Appii [15×]), 10509 and 10918. Coastal area: sites 11232 (3×), 15082 (5×), 11312, 10558, 10571, 15160 (2×), 15108, 15138 (2×), 15019 (2×), 15036, 11323, 15116, 15004, 15083, 11384, 11209, 11202 (2×); 3 fragments from the Poligono Militare di Nettuno (without a more specific location).

Parallel: All variants belong to *Conspetus form 3* (3.1 = *Conspetus 3.1*; 3.2 = *Conspetus 3.2*; 3.3 = *Conspetus 3.3*).

Date: AD 50-100.

4. **Conspetus form 4 – Plate (8 fragments)**

Shallow plate. Two variants are noted: the first (4.1 – not depicted) has a sloping, incurving rim with convex lip with grooves on the interior and exterior transition from rim to base. The second (4.2) is characterized by a straight to slightly incurving rim and convex lip that sometimes bears a groove on its interior and/or exterior. Two examples of variant 4.2 preserve applied spiral decoration. One specimen (4.2A) has a large diameter.

Dimensions: 4.1: Ø: 25 cm; 4.2: Ø: between 15 and 20 cm; 4.2A: Ø: 40 cm.

Distribution: 4.1: Only one recorded specimen, from site 11202, in the coastal area. 4.2: Interior: site 12262 (Forum Appii [2×]); Coastal area: sites 11202 (2×) and 11268. Generically ascribed to this shape are two fragments, one from site 12262 (Forum Appii), in the interior part of the region, and one from site 11202, in the coastal area.

Parallel: 4.1: Corresponds to *Conspetus form 4.3*; variant 4.2 conforms to *Conspetus form 4.6*.

Date: 4.1: 10 BC-AD 10; 4.2: AD 15-50.

5. **Conspetus form 5 – Plate (1 fragment)**

Shallow plate with incurving wall, slightly outcurving rim and convex lip.

Dimensions: Thin-walled (0.3 cm). Ø: 20 cm.

Distribution: The only recorded specimen comes from site 11202, in the coastal area.

Parallel: Corresponds to *Conspetus form 5.4*.

Date: 30-10 BC.

6. **Conspetus form 7 – cup (10 fragments)**

Cup with steeply spreading wall, straight rim and convex lip. Almost all recorded specimens have a strong groove on the exterior just below the lip (6.1); on a single example, this groove is absent (6.2).

Dimensions: Ø: between 16 and 25 cm.

Distribution: 6.1: interior: sites 12262 (Forum Appii [2×]) and 12303; Coastal zone: site 11202 (2×), 15160, 15029, 15138 and 1 fragment from the Poligono Militare di Nettuno (without a more specific location); 6.2: interior: site 12262 (Forum Appii).

Parallel: *Conspetus form 7.1*.

Date: 10 BC-AD 15.

7. **Conspetus form 8 – cup (12 fragments)**

Cup with spreading wall. Two main variants are recorded: the first has a short, almost flat, horizontal rim with sometimes a groove on top and a convex lip (7.1). The second has a somewhat outcurving rim; some specimens have grooves on the exterior of the rim and a convex lip (7.2.1). One fragment possibly belonging to this variant has three strong grooves on the interior of the lip (7.2.2).

Dimensions: 7.1: Ø: between 10 and 22 cm; 7.2: Ø: between 12 and 18 cm.
Distribution: 7.1: Coastal area: sites 11232, 15019 (2×), 11202 and 15004; 7.2: interior: sites 12310 and 12319; Coastal area: sites 15036, 11202, 15029 (2×) and 15014.
Parallel: Both variants belong to Conspectus form 8 (variant 1 = 8.1; variant 2 = 8.3).
Date: 30-0 BC.

8. Conspectus form 10 – Plate (2 fragments)

Large, shallow plate with broad, convex-shaped horizontal rim; the lip is either convex (8.1.1) or bevelled (8.1.2) on the interior and generally bears a groove on the interior transition to the rim.

Dimensions: Ø: 28 cm.

Distribution: The two recorded specimens of this shape come from site 12262 (Forum Appii), in the interior of the region, and from site 15108, in the coastal area.

Parallel: Both fragments correspond to Conspectus form 10.1.

Date: 40-0 BC.

9. Conspectus form 12 – Plate (19 fragments)

Shallow plate with more or less triangular rim. Several variants of this shape are recorded: the first is characterized by a strongly incurving wall, and the interior of the rim is generally marked by a succession of groove-moulding-groove (9.1), whereas on variant 9.2, the rim is somewhat overhanging and has a less profiled interior. The lip is convex. Variant 9.3 has an incurving wall and a rounded exterior transition from wall to base. Halfway the inner rim, this variant is characterized by a convex moulding with shallow groove above and below. A single example shows the same succession of groove-moulding-groove on the interior of the rim but has a comparatively straight wall (9.4).

Dimensions: Ø: between 16 and 28 cm.

Distribution: 9.1: interior: 12262 (Forum Appii [4×]); coastal area: site 11312 and 1 fragment from the Poligono Militare di Nettuno (without a more specific location); 9.2: interior: site 14047; coastal area: site 15036; 9.3: coastal area: site 11232, 15036 and 11316; 9.4: coastal area: site 11268. Fragments generically assigned to this type were collected from sites 12262 (Forum Appii [5×]) and 10957, in the inland parts of the region, and site 10571, in the coastal area.

Parallel: All noted variants can be classified under Conspectus form 12 (9.1 = Conspectus 12.1; 9.2 = Conspectus 12.2; 9.3 = Conspectus 12.3; 9.4 = Conspectus 12.5)

Date: 15 BC-AD 15.

10. Conspectus form 13 – Cup (3 fragments)

Cup with convex-shaped horizontal rim, outcurving into wall. Two variants are recorded: the first has a somewhat broader rim, with a single groove on top, and a convex lip that is thickened on the interior and the exterior (10.1). The second variant appears to have a shorter rim that curves into a steeper wall. On the top of the rim, near the flattened lip, the vessel is decorated with a small moulding with a shallow groove above and below (10.2).

Dimensions: Ø: between 11 and 16 cm.

Distribution: 10.1: interior: site 12262 (Forum Appii); 10.2: interior: site 12262 (Forum Appii). A single example that cannot be ascribed with certainty to one of the two variants comes from site 10571, in the coastal area.

Parallel: Both variants belong to Conspectus form 13 (10.1 = Conspectus 13.2; 10.2 = Conspectus 13.3).

Date: 15 BC-AD 10.

11. Conspectus form 14 – Cup (6 fragments)

Cup with spreading or incurving wall, straight rim and more or less triangular rim. Two variants are recorded: the first has a strong triangular (11.1.1a and b), profiled (11.1.2) or somewhat hanging (11.1.3) lip, and the upper part of the interior wall is plain. The second variant (11.2) has an almost upright triangular rim and a groove, with below this a convex moulding on the interior transition to the wall.

Dimensions: 11.1: Ø: between 16 and 18 cm; 11.2: the single example has a relatively large diameter of 28 cm.

Distribution: 11.1: interior: site 12262 (Forum Appii [4×]); 11.2: coastal area: site 11319. A single example that cannot be assigned to one of the recorded variants comes from site 15036, in the coastal area.

Parallel: Both variants belong to Conspectus form 14 (11.1 = Conspectus 14.1; 11.2 = Conspectus 14.2). Fragment 11.1.2 has an exact parallel from Cosa (Marabini Moevs 2006, fr. BNWII.21)

Date: 15 BC-AD 10.

12. Conspectus form 18 – Plate (19 fragments)

Shallow plate with vertical rim, which is concave on the exterior (12.1.1). It generally has two convex mouldings with intersecting grooves on the exterior of the rim: one just below the lip and the other on the generally rounded transition from rim to base. On some examples, these mouldings are decorated with bands of rouletting (12.1.2). The interior of the rim generally bears a bipartite internal moulding and commonly has one or more grooves. The interior transition to the base is rounded to somewhat angular.

Dimensions: Ø: between 14 and 22 cm, except for one larger example, which has a diameter of 36 cm.

Distribution: interior: sites 12262 (Forum Appii [5×]), 12316 and 10917; coastal area: sites 11232, 11268,

15001, 10571, 15036, 11316, 11287, 11202 (2×) and 1 fragment from the Poligono Militare di Nettuno (without a more specific location).

Parallel: Conspectus form 18.2.

Date: 10 BC-AD 25.

13. Conspectus form 19 – Plate (1 fragment)

Shallow plate with more or less vertical rim, which is concave on the exterior; no lip preserved. The fragment has a quarter-round moulding on the exterior transition from rim to base, which is marked by a groove as well. Another groove midway the exterior of the rim. The interior of the rim bears a bipartite internal moulding and two grooves.

Dimensions: Ø: (at exterior moulding) 15 cm.

Distribution: The single documented fragment comes from site 11268, in the coastal area.

Parallel: Conspectus form 19.2.

Date: AD 10-40.

14. Conspectus form 20 – Plate (33 fragments)

Shallow plate with vertical rim and convex lip. Several variants can be distinguished. The first of these has a plain, vertical rim and a rather angular transition from rim to base (14.1). The second is characterized by double convex mouldings (with groove in between) near the lip and the bottom of the exterior of the rim. The area between these mouldings bears rouletted decoration (14.2). Most fragments belong to a variant with two plain convex mouldings on the exterior of the rim (again at the lip and at the transition from rim to base); sometimes a groove is placed on the interior of the rim near the lip. A single complete vessel of this form has a tall ring foot and a flat base with a single and a double band of grooves (14.3). This fragment bears applied decoration in the form of rosettes and double spirals and is stamped on the interior base with a trefoil reading L R P, identifying it as a product of the workshop of L. RASINIVS PISANVS. Four other fragments assigned to this variant bear applied decoration: two preserve a rosette, one the larger part of a double spiral and another a small part of a horizontally placed leaf-spray (see Plate IX.2).

Dimensions: 14.1: Ø: between 14 and 18 cm; 14.2: 18 cm; 14.3: Ø: between 14 and 20 cm.

Distribution: 14.1: interior: sites 12316 and 12939; coastal area: site 11202; 14.2: interior: site 12262 (Forum Appii); coastal area: site 15082; 14.3: interior: site 12262 (Forum Appii [5×]); coastal area: sites 11201, 15001, 10558, 10571, 15036 (2×), 15106 (2×), 15019, 4 fragments from the Poligono Militare di Nettuno (without a more specific location) and 1 fragment from the Nettuno municipality (without a more specific location); interior: sites 10889 and 10879. Six specimens could only be assigned generically to this shape: they come from sites 12262 (Forum Appii) and 14047, in the interior part of the region, and sites 11232 (2×) and 15036,

in the coastal area, while another fragment comes from the Poligono Militare di Nettuno (without a more specific location).

Parallel: All fragments belong to Conspectus form 20 (14.1 = Conspectus 20.1; 14.2 = Conspectus 20.3; 14.3 = Conspectus 20.4).

Date: 14.1: AD 0-50; 14.2: AD 0-50; 14.3: AD 30-100.

15. Conspectus form 21 – Plate (11 fragments)

Shallow plate with vertical rim and convex lip. This form has a characteristic quarter-round moulding on the exterior transition from rim to base. Some examples have a groove halfway the interior of the rim or on the interior, angular transition between rim and wall. Several variants are documented. The first is characterized by a double moulding with groove in between on the bottom of the rim exterior and bears two thin bands of rouletting both on the upper part of the rim and below the exterior transition from rim to wall (15.1). The most commonly encountered variant has two simple convex mouldings on the upper and the lower part of the rim and, in the case of one example, extensive horizontal rilling on the rim exterior (15.2). A third variant bears an additional triple moulding that is centrally placed on the exterior of the rim (15.3).

Dimensions: 15.1: Ø: 16 cm; 15.2: Ø: between 13 and 18 cm; 15.3: Ø: 15 cm.

Distribution: 15.1: coastal area: site 15036; 15.2: interior: site 12262 (Forum Appii); coastal area: sites 15082, 10571, 11277, while 1 fragment comes from the Poligono Militare di Nettuno (without a more specific location); 15.3: coastal area: site 11202. Furthermore, 4 fragments can only be assigned generically to this shape: they come from site 12262 (Forum Appii [3×]), in the interior part of the region, and site 15082, in the coastal area.

Parallel: All variants belong to Conspectus form 21 (15.1 = Conspectus 21.2; 15.2 = Conspectus 21.3; 15.3 = Conspectus 21.4).

Date: AD 10-75.

16. Conspectus form 22 – Cup (2 fragments)

Conical cup with spreading or slightly outcurving wall, vertical concave rim and convex lip. Single simple moulding on the exterior transition from rim to wall, and on the interior, convex moulding with groove above and below. Two different variants are recorded: the first has a relatively longer rim and bears a single thin band of rouletting on the upper part of the rim (16.1 – depicted). The second has a much shorter, less concave rim and has a band of rouletting that covers the entire exterior of the rim (16.2 – not depicted).

Dimensions: 16.1: Ø: 16 cm; 16.2: Ø: 20 cm.

Distribution: 16.1: interior: site 14060; 16.2: coastal area: site 11386.

Parallel: Both fragments belong to Conspectus form 22.1.

Date: 15 BC-AD 30.

17. Conspectus form 23 – Cup (3 fragments)

Small, conical cup with vertical, straight to slightly concave rim and convex lip. All recorded specimens have a short, convex moulding on the lower side of the rim exterior. One fragment bears two grooves on the upper part of the lip. All three fragments have applied decoration: two fragments preserve parts of spirals, whereas one fragment preserves a single rosette.

Dimensions: Ø: between 9 and 12 cm.

Distribution: All three fragments derive from sites in the coastal area: single specimens come from sites 15001 and 15106, while another fragment comes from the Poligono Militare di Nettuno (without a more specific location).

Parallel: Conspectus form 23.2.

Date: AD 25-75.

18. Conspectus form 26 – Cup (4 fragments)

Small cup with straight, vertical to slightly spreading wall and convex lip. One specimen has a single groove on the upper rim exterior. Two examples bear applied spiral decoration.

Dimensions: Ø: between 10 and 13 cm.

Distribution: interior: site 10934; coastal area: site 10571, while 2 fragments come from the Poligono Militare di Nettuno (without a more specific location).

Parallel: All fragments belong to Conspectus form 26.1.

Date: AD 0-50.

19. Conspectus form 27 – Cup (8 fragments)

Cup with long, vertical, straight or slightly outward-spreading rim and triangular lip. Single simple moulding on exterior transition from rim to wall. Two variants are documented: the first has a plain rim (19.1A and B), while the second bears three strong grooves on the upper rim interior, as well as two clear grooves midway the rim exterior, with bands of rouletting below and an additional groove on the upper rim exterior (19.2).

Dimensions: 19.1: Ø: between 12 and 14 cm; 19.2: Ø: 22 cm.

Distribution: 19.1: interior: site 12262 (Forum Appii); coastal area: 1 fragment comes from the Poligono Militare di Nettuno (without a more specific location); 19.2: site 15160, in the coastal area. Furthermore, five examples can only generically be assigned to this form: they come from site 12262 (Forum Appii), in the inland part of the region, and sites 15019, 15036, 11312 and 10571, in the coastal area.

Parallel: Both variants belong to Conspectus form 27 (19.1 = Conspectus form 27.1; 19.2 = Conspectus form 27.2).

Date: AD 15-70.

20. Conspectus form 28 – Cup (1 fragment)

Small cup with vertical rim and rounded transition to flat base, which is marked by a small ring foot. The exterior of the rim bears a single groove, with below that three consecutive bands or rouletting.

Dimensions: Ø: (base): 3 cm.

Distribution: The only recorded example comes from site 12262 (Forum Appii), in the inland part of the region.

Parallel: Conspectus form 28 (28.1 or 28.2).

Date: AD 0-50.

21. Conspectus form 29 – Cup (3 fragments)

Small cup with vertical, straight rim and convex lip. The exterior transition from rim to base is marked by a small ring foot. Shallow grooves sometimes decorate the interior and exterior of the base. Two specimens have a plain rim with grooves on the upper and lower part of the rim exterior (21.1.1), while another only has a groove on the lower part of the rim (21.1.2). All three recorded examples of this shape have a *planta pedis* stamp reading L R P, indicating them as products from the workshop of L. RASINIVS PISANVS.

Dimensions: Ø: between 5.2 and 7.2 cm.

Distribution: All three known fragments were found within the Nettuno municipality (without a more specific find location).

Parallel: Conspectus form 29.1.

Date: AD 15-100.

22. Conspectus form 31 – Cup (5 fragments)

Cup with long, incurving rim and convex lip. The rim exterior has a groove just below the lip and bears extensive rouletting; single groove on the interior of the rim.

Dimensions: Ø: Unknown.

Distribution: This form is mainly known from site 12262 (Forum Appii [4×]), in the interior part of the region; a single fragment comes from site 15029, in the coastal area.

Parallel: Conspectus form 31.

Date: AD 0-25.

23. Conspectus form 31/32 – Cup (1 fragment)

Cup with strongly incurving wall and rim; the latter preserves traces of rouletting on its exterior. The transition between wall and rim is marked by a bipartite moulding on the exterior and a moulding with rouletting on the exterior with a groove above and below.

Dimensions: Ø: (at transition rim to wall): 10 cm.

Distribution: The only recorded example of this form comes from site 15036, in the coastal area.

Parallel: Conspectus form 31/32.

Date: AD 0-100.

24. Conspectus form 32 – Cup (7 fragments)

Cup with strongly incurving rim, which generally bears rouletting on its exterior. Two variants are noted: the first

is characterized by a short, convex-shaped overhanging lip. A single example preserves rouletting on the top of the rim (24.1). A second variant has a much less pronounced rim, which is only slightly thickened on the exterior and has a single corresponding interior groove (24.2).

Dimensions: 24.1: Ø: between 14 and 22 cm; 24.2: Ø: 20 cm.

Distribution: 24.1: interior: site 12262 (Forum Appii); coastal area: site 15019, 15116; 24.2: site 11312, in the coastal part of the region. Also, three fragments are generically ascribed to this form: they come from sites 12269 (Ad Medias) and 12303, in the interior part of the region, and site 11323, in the coastal area.

Parallel: Both variants belong to *Conspectus* form 32 (24.1 = *Conspectus* 32.1; 24.2 = *Conspectus* 32.5).

Date: AD 15-100.

25. *Conspectus* form 33 – Cup (3 fragments)

Cup with incurving wall. Characteristic ridge on the exterior of the vessel between rim and wall that either protrudes strongly (25.1.1) or forms a gentler extension of the exterior wall (25.1.2); exterior of the rim is decorated with rouletting. None of the documented fragments preserved the lip.

Dimensions: Ø: (at wall protrusion) between 14 and 15 cm.

Distribution: interior: site 12262 (Forum Appii [2×]); coastal area: site 11312.

Parallel: Both variants can generically be identified with *Conspectus* form 33.

Date: AD 0-40.

26. *Conspectus* form 34 – Cup (55 fragments)

Cup with incurving rim, more or less vertical rim with a strong flange on the exterior and a convex lip. Many examples have a single groove on the upper rim interior, whereas additional grooves incidentally occur on the upper rim exterior, on the underside of the exterior flange and halfway the rim interior corresponding to the location of the exterior flange. Two complete vessels of this type show a small ring foot with convex edge and one or two grooves on the interior of the base. Two variants are documented (forms 26.1 and 26.2), which are distinguished from each other by the deepness of the vessel and the steepness of the wall. Both variants frequently bear applied decoration. Noted motifs are running dogs (on 7 specimens), different types of rosettes (10 specimen), and a double spiral (on 1 specimen). A single fragment preserved a rosette, part of a spiral, as well as a theatre mask. Two specimens preserved a stamp (*planta pedis*) reading L R P and L R PI, respectively, indicating they originate from the workshop of L RASINIVS PISANVS.

Dimensions: 26.1: Ø: between 8.3 and 16 cm; 26.2: Ø: between 12 and 13 cm.

Distribution: 26.1: coastal area: 11268 (2×), 15082, 15029 (2×), 15014 (2×), 15036, 15160 (3×), 11202 (4×), 15019, 1 fragment comes from the Poligono Militare di Nettuno (without a more specific

location), 2 fragments come from within the Nettuno municipality (without a more specific location); off-site fragments (3×); interior: site 10882. 26.2: coastal area: sites 15014 and 11202 (3×). Another 28 fragments are generically ascribed to this form: they come from sites 12262 (Forum Appii [10×]), 14044 and 12303, in the inland part of the region, and 11232 (3×), 10558, 15029 (3×), 15001, 15036 (2×) and 15160, in the coastal area. Four fragments come from the Poligono Militare di Nettuno (without a more specific location), while another fragment is an off-site find from the coastal area.

Parallel: Both variants belong to *Conspectus* form 34 (26.1 = *Conspectus* 34.1; 26.2 = *Conspectus* 34.2).

Date: AD 30-100.

27. *Conspectus* form 36 – Cup (21 fragments)

Cup with incurving wall and rim and convex lip. Three variants are recorded: the first has a plain rim and lip, which is slightly thickened on the interior (27.1). Some examples bear two grooves on the rim exterior with extensive rouletting between (27.2). A third variant is generally small and characterized by a more vertical rim and a single groove on the upper rim exterior (27.3).

Dimensions: 27.1: Ø: 19 cm; 27.2: Ø: between 10 and 18 cm; 27.3: Ø: between 7 and 11 cm.

Distribution: 36.1: interior: site 12305; 36.2: interior: site 12262 (Forum Appii); coastal area: 15160, 15036, 15106, 11202, 1 fragment comes from the Poligono Militare di Nettuno (without a more specific location); 36.3: coastal area: sites 11201, 15111 and 11202. Furthermore, 10 fragments are generically assigned to this type. They come from sites 12262 (Forum Appii-3×) and 12316, in the inland part of the region, and sites 11201, 15082, 15036, 11208, 11202, in the coastal area. One fragment comes from the Poligono Militare di Nettuno (without a more specific location).

Parallel: All variants fall under *Conspectus* form 36 (27.1 = *Conspectus* 36.1; 27.2 = *Conspectus* 36.3; 27.3 = *Conspectus* 36.4).

Date: 27.1: 30-10 BC; 27.2 and 3: AD 15-40.

28. *Conspectus* form 37 – Cup (17 fragments)

Cup with incurving wall and vertical or slightly incurving rim. Two main variants are distinguished based on variation in the working of the rim. The first is characterized by a short, convex-shaped horizontal rim (28.1.1 and 28.1.2); a single example of this variant has a somewhat downturned rim which is concave on top (28.1.3). The second, more common, variant has a distinctive triangular rim that is occasionally undercut (28.2).

Dimensions: 28.1: Ø: between 7.5 and 16 cm; 28.2: Ø: between 16 and 24 cm.

Distribution: 28.1: interior: site 12262 (Forum Appii [2×]); coastal area: site 11268; 28.2: coastal area: sites 15160 (2×), 15014, 15116, 11202 and 15072. Another eight fragments are generically assigned to this form: they come from sites 12269 (Ad Medias) and 12262 (Forum Appii [5×]), in the inland part of the region, and sites 15036 and 15014, in the coastal area.

Parallel: Both variants belong to *Conspectus* form 37 (28.1 = *Conspectus* 37.4; 28.2 = *Conspectus* 37.5).

Date: AD 25-75.

29. *Conspectus* form 38 – Cup (7 fragments)

Flaring wall, slightly outcurving rim, convex lip; two specimens have a groove on the rim interior. The rim exterior bears several bands of rouletting.

Dimensions: Ø: between 20 and 30 cm.

Distribution: interior: site 12262 (Forum Appii [2×]); coastal area: site 15029, off-site fragment, 15160, 15072, 1 fragment comes from the Poligono Militare di Nettuno (without a more specific location).

Parallel: *Conspectus* form 38.1.

Date: 30 BC-AD 20.

30. *Conspectus* form 39 – Dish (4 fragments)

Shape characterized by a distinctive, wide, convex-shaped horizontal rim that is decorated with fragmentary applied (barbotine-style) grape-and-lily motif (30.1.1) or plain (30.1.2).

Dimensions: Ø: between 14 and 24 cm.

Distribution: 30.1.1: sites 15019 and 15111, in the coastal area; 30.1.2: site 15111, in the coastal area and 10887, in the interior part of the region.

Parallel: *Conspectus* form 39.1.

Date: AD 50-150.

31. *Conspectus* form 40/42 – Dish (1 fragment)

Fragment with a wide, flat rim that preserved part of barbotine decoration (leaf of a lily).

Dimensions: Ø: 20 cm.

Distribution: The only recorded example of this form comes from site 12303, in the interior part of the region.

Parallel: *Conspectus* form 40 or 42.

Date: AD 50-150.

32. *Conspectus* form 41/45 – Dish (1 fragment)

Fragment characterized by a wide, horizontal, convex-shaped rim with two grooves on the exterior and a slight corresponding moulding with groove above and below on the interior. The rim exterior bears fragmentary traces of

barbotine decoration, probably depicting a grape-and-lily motif. The edge of the rim is thickened and bears a central groove.

Dimensions: Ø: 22 cm.

Distribution: The only documented specimen of this form comes from site 15019, in the coastal part of the region.

Parallel: This fragment can be identified with *Conspectus* form 41 or 45.

Date: AD 70-150.

33. Dragendorff form 29 – Bowl (14 fragments)

Bowl with spreading or slightly outcurving wall. The rim is slightly outcurving and bears a large, convex moulding on its exterior with a second smaller moulding below; on the interior are generally two corresponding grooves. Convex lip. One fragment preserves the transition from wall to base, which is rounded and marked by an exterior moulding. Below the rim, this fragment preserved a decorative panel consisting of multiple lines of pearls, framed above and below by a beaded line. Another band of rouletting marks the transition from rim to wall. Several fragments belonging to this type preserve extensive figurative decoration (see D 10-14, 17, 47, 55 and 75). One recorded example of this shape is in terra sigillata marmorata (see D9).

Dimensions: Ø: between 18 and 20 cm.

Distribution: The distribution of this form is limited to the coastal part of the region. It occurs on sites 11201, 11202 (6×), 10571, 11268, 15082, 11312 and 11232. Also, 1 fragment comes from the Poligono Militare di Nettuno (without a more specific location); the terra sigillata marmorata fragment comes from an unspecified location in the Nettuno municipality.

Parallel: Dragendorff form 29.

Date: AD 75-150; the fragment in terra sigillata marmorata dates earlier, AD 40-70.

34. Dragendorff form 37 – Bowl (2 fragments)

Bowl with incurving wall, slightly incurving vertical rim and convex lip. Four shallow grooves on the interior transition from rim to wall. Under the plain rim (which is somewhat withdrawn) there is a band of egg-and-tongue decoration with extensive figurative decoration below. Preserved are a single St. Andrew's cross, consisting of several wavy lines. The left panel has a scroll, while the uppermost frame contains one straight and two oblique wavy lines ending in unrecognizable decorative elements. Adjacent to the upper left border of the cross (marked by a rosette) is a human figure facing right. Right of the cross is a small panel, depicting a standing figure, framed on three sides by beaded rows. To its right is a scroll ending in a twist and part of an arch or medallion.

Dimensions: Ø: 20 cm.

Distribution: coastal area: sites 11202 and 15004.
Parallel: Dragendorff form 37.
Date: AD 70-150.

Non-identified forms

35. Plate – 1 fragment

Extremely thin-walled shape with spreading wall that gently curves into the base; broad, convex-shaped, almost horizontal rim and convex lip. On the interior of the rim is a slight ridge.

Dimensions: Ø: 15 cm.

Distribution: The single documented fragment of this type comes from site 11202, in the coastal area.

Parallel: Uncertain identification. The general shape recalls *Conspectus* form 3.

Date: -

36. Beaker? – 1 fragment

Fragment with vertical, straight wall; short, outturning, horizontal rim; and convex lip. The exterior of the lip bears rouletted decoration; relief decoration on the wall exterior. Visible are two vertically placed arrows.

Dimensions: Ø: 12 cm.

Distribution: The single documented example of this form comes from site 12262 (Forum Appii), in the inland part of the region.

Parallel: -

Date: Relief-decorated vessel; date after AD 50.

37. Cup – 1 fragment

Slightly flaring wall, outcurving rim, convex lip. The interior of the rim bears two shallow grooves. On the rim exterior is a large, convex moulding with groove below; above is a much smaller, bipartite moulding with central groove.

Dimensions: Ø: 14 cm.

Distribution: The only documented example comes from site 15036, in the coastal area.

Parallel: -

Date: -

38. Cup – 1 fragment

Fragment with an outcurving rim, which bears a long and undercut thickening on its exterior. Convex lip.

Dimensions: Ø: 13 cm.

Distribution: The single documented example comes from site 12262 (Forum Appii), in the inland part of the region.

Parallel: -

Date: -

39. Plate/lid – 1 fragment

Fragment with straight rim and triangular lip. On top of the lip are two grooves.

Dimensions: Ø: 30 cm.

Distribution: The single documented example comes from site 12262 (Forum Appii), in the inland part of the region.

Parallel: -

Date: -

40. Bowl? – 1 fragment

Straight rim, with large moulding on its exterior; two corresponding grooves on the rim interior. Convex lip.

Dimensions: Ø: 24 cm.

Distribution: The single documented example is an off-site find from the coastal area.

Parallel: -

Date: -

41. Plate – 1 fragment

Outcurving rim, grooved lip, which is thickened and undercut on the exterior, with corresponding strong groove on the interior.

Dimensions: Ø: 24 cm.

Distribution: The single documented example of this shape comes from site 11268, in the coastal area.

Parallel: -

Date: -

42. Cup – 1 fragment

Almost vertical rim with convex lip. The rim exterior is decorated with four grooves with large, convex moulding in between. Large, convex moulding on the rim interior as well, with grooves above and below.

Dimensions: Ø: 17 cm.

Distribution: The only documented example of this shape comes from site 15111, in the coastal area.

Parallel: -

Date: -

43. Lid/base? – 1 fragment

Small shape of uncertain identification characterized by a horizontal, flat rim with attached ring foot. The lip is profiled.

Dimensions: Ø: 10 cm.

Distribution: The only documented example of this shape comes from site 12262 (Forum Appii), in the interior part of the region.

Parallel: -

Date: -

44. Plate – 2 fragments

Somewhat outcurving rim, convex lip that is thickened on the exterior. Both fragments of this type preserve rouletted decoration on the rim exterior. On the first specimen, two bands of rouletting are visible, one within a slightly recessed area, the second immediately below (44.1). The second has a somewhat simpler rim shape and preserves only a single rouletting band (44.2).

Dimensions: Ø: between 25 and 26 cm.

Distribution: Both documented specimens derive from site 12316, in the interior part of the region.

Parallel: -

Date: -

Base fragments

B.1 – Base fragment of a stemmed cup? – 1 fragment

Raised, flaring base ring with pointed edge. On the exterior of the ring is a single groove. Transition from base ring to stem is rounded on the interior and somewhat angular on the exterior.

Dimensions: Ø: (base): 4.5 cm.

Distribution: The only recorded specimen of this form is an off-site find from the coastal area.

Parallel: -

Date: -

B.2 – Base fragment of a chalice – 2 fragments

Pedestal foot that shows some variation between the two documented specimens. The first preserved almost the entire profile of the base, which is stepped. The exterior bears a single groove on the transition to the foot; on the interior of the foot are two strong grooves. Furthermore, a single groove is visible on the underside of the base. The foot has a profile lip (B.2.1). The second specimen is characterized by a long, flat foot that turns sharply upwards. The foot bears a ridge on its exterior and a strong corresponding groove on its interior (B.2.2).

Dimensions: Ø: (foot) between 8 and 10 cm.

Distribution: B.2.1: site 12262 (Forum Appii), in the inland part of the region; B.2.2: comes from an unspecified location on the Poligono Militare di Nettuno, in the coastal area.

Parallel: These bases belong to relief-decorated chalices, although they cannot be assigned to a specific form; see e.g. Conspectus form 52; Conspectus R 1, 2, 5, 6, 9.

Date: AD 50-150.

B.3 – Base fragment of a chalice? – 1 fragment

Pedestal foot with pointed edge. The edge of the foot is thickened on the exterior and undercut; single groove on the foot interior.

Dimensions: Ø: (foot) 10 cm.

Distribution: The single documented example comes from site 15036, in the coastal area.

Parallel: Probably the base fragment of a chalice; no exact parallel found.

Date: -

Applied decoration

Type 1 – Rosette

Rosettes are the most common type of applied decoration recorded in the Pontine region. They demonstrate little standardization, and all identified subtypes occur only once or twice at most.

Type 1.1 Occurs on a plate Conspectus form 20.4 from an unspecified location within the Nettuno municipality in the coastal part of the region.

Type 1.2 The only known example of this applique comes from site 10571, in the coastal area.

Type 1.3 Occurs on a cup Conspectus 34.2 from site 11202, in the coastal area.

Type 1.4 Occurs on a cup Conspectus 34 from site 12262 (Forum Appii), in the inland part of the region.

Type 1.5 Occurs on a cup Conspectus 34.1 from site 15029, in the coastal area.

Type 1.6 Occurs on a cup Conspectus 34.1 from site 11202, in the coastal area.

Type 1.7 Occurs twice, in both cases on cups Conspectus 34. The recorded examples come from sites 15001 and 15029, in the coastal area.

Type 1.8 Occurs on a cup Conspectus 34.1 from site 11202, in the coastal area.

Type 1.9 Occurs on a cup Conspectus 34.1 from an unspecified location on the Poligono Militare di Nettuno, in the coastal part of the region.

Type 1.10 Occurs on a plate Conspectus 20.4 from an unspecified location on the Poligono Militare di Nettuno, in the coastal part of the region.

Type 1.11 Occurs on a plate Conspectus 20.4 from site 15106, in the coastal area.

Type 1.12 Occurs twice, in both cases on cup Conspectus 34, from sites 15014 and 15029, in the coastal area.

Type 2 – Leaf-spray:

A single example of a (partially preserved) vertically placed leaf-spray occurs on the rim of a plate Conspectus 20.4, which derives from an unspecified location on the Poligono Militare di Nettuno.

Type 3 – Double spiral:

This is a common type of applied decoration, consisting of a double spiral. It occurs on eight different fragments: two plates Conspectus 20.4, two cups Conspectus 34, two cups Conspectus 26 and two plates Conspectus 4.6. One of these fragments derives from site 12262 (Forum Appii), in the interior part of the region; all other 7 fragments derive from sites in the coastal area (11268, 11202, 2 fragments from an unspecified location within the Nettuno municipality and 3 fragments from an unspecified location on the Poligono Militare di Nettuno).

Parallel: Santrot *et al.* 1995: 118, Figure 34.255.

Type 4 – Theatre mask

A single example of a theatre mask is documented on the rim of a cup *Conspectus* 34.2 from site 11202, in the coastal area.

Parallel: Resembles Santrot *et al.* 1995: 118, Figure 34.267

Type 5 – Running animals

Several applied running animal motifs are documented. Types 5.1 to 5.3 possibly can be identified as dogs, although this remains speculative due to their extremely schematic rendering. Type 5.4 can be identified as a horned animal, possibly a goat or a bull.

Type 5.1: Documented on three different fragments of cups *Conspectus* 34. These derive from sites 11202, 15029 and 15106, in the coastal area.

Type 5.2: Occurs on the rim of a cup *Conspectus* 34 from site 12303, in the interior part of the region.

Type 5.3: Occurs on the rim of a cup *Conspectus* 34 from site 15160, in the coastal area.

Type 5.4: Occurs on the rim of a cup *Conspectus* 34 from site 11202, in the coastal area.

Type 6 – Dancing maenad

A rim fragment of a plate *Conspectus* 21.3 preserved the lower part of a dancing maenad draped in a chiton. It comes from site 10571, in the coastal part of the region.

Parallel: Porten Palange & Troso 2011:TAV.XLIII.208.

Type 7 – Nine-lobed palm leaf

The rim of an unknown shape preserved an applied nine-lobed palm leaf. It comes from site 15111, in the coastal part of the region.

Parallel: Medri 1992, Type 5.6.3.

Type 8 – Head of a satyr/Silenus

Three fragments preserved the applied head of a satyr/Silenus. They derive from sites 15160 (2×) and 11202, in the coastal area.

Type 9 – Head of a goat

One fragment, from site 11202, in the coastal area, preserves an applied goat head.

Relief-decorated vessels

Relief-decorated Arretine ware

D1 – Small fragment of a relief-decorated vessel. The preserved decoration consists of the underside of a nude male/female, reclining on a cloth(?) with below a horizontal band of double circles. It must have formed part of a symposium scene, a common decorative scheme on Arretine

relief-decorated sigillata (see, e.g., Porten Palange 2004b: Plates 119-125).

Provenance: Site 10571

D2 – Small fragment of a relief-decorated vessel, preserving part of a horizontal beaded border with part of a name stamp below (an M followed by a punctuation element can be distinguished). To the lower right of the stamp are traces of an elbow belonging to a human figure. The combination of the name stamp and the preserved figurative decoration are enough to identify it as a product of the well-documented workshop of M. Perennius, the best-known (and probably first) producer of relief-decorated sigillata, situated in Arezzo. It originally depicted a Centauromachy, the mythic battle between the Lapiths and Centaurs at the wedding of King Peirithous (see Porten Palange 2009b: Plate 27, Komb. Per 22 for a more complete view of the decorative programme preserved on a vessel from Nemi). This cycle was probably restricted to the 2nd and 3rd phases of production of the workshop (Porten Palange 2009a: 50), which date between 15 BC and AD 30.

Provenance: Site 10571

D3 – Small fragment of relief-decorated Arretine sigillata. Preserved decoration consists of a pair of legs.

Provenance: Site 15004

D4 – Small fragment of relief-decorated Arretine sigillata. Preserved decoration consists of part of a coiffure (possibly of a male/female mask – see Porten Palange 2004b: Plate 164-8) or hide (e.g. of a lion – Porten Palange 2004b: Plate 149; a boar – Porten Palange 2004b: Plate 158; or a bear – Porten Palange 2004b: Plate 159).

Provenance: 12262 (Forum Appii)

D5 – Body fragment, decorated with a partially preserved horizontal row of leaves with figurative decoration below. Visible are part of a winged figure and the upper part of a sceptre with sphere. Various kinds of winged figures occur on relief-decorated Arretine sigillata (e.g. Porten Palange 2004b: Plates 30, 31, 75, 76); no precise identification is possible for this small fragment.

Provenance: Site 15036

D6 – Preserved decoration consists of the upper part of a human figure. In front of the figure's abdomen is a tentacle-like motif. No precise parallel for this piece was found.

Provenance: Site 11232

D7 – Small fragment; preserved decoration consists of a pair of harnessed horses, one of which has a raised right front leg. Based on the decoration, it can be identified as a product from the workshop of Rasinius (see Porten Palange 2004a, type T/Equidae li 8a and 2004b: Plate 148).

Provenance: Site 11202

D8 - Fragment of relief-decorated Arretine sigillata. Preserved decoration consists of two vine leaves (one complete, of the other only part of the midrib survives), surrounded by grapes.

Provenance: Site 12262 (Forum Appii)

Terra sigillata marmorata

D9 - Fragment of a Dragendorff 29 bowl in sigillata marmorata. Preserved decoration consists of a horizontal beaded row with below that an area with two partially preserved festoons with central rosette. Whereas most lines that make up the festoon are plain, the upper one is made up of small leaves. The two preserved festoons are separated by a short, vertical beaded line topped by a small, bottle-shaped element. On the underside of the fragment is a horizontal band of rouletting.

Provenance: This fragment comes from an unspecified location in the Nettuno municipality.

Late Italian and South Gaulish mould-decorated sigillata

D10 - Rim fragment of a Dragendorff 29 bowl. Preserved decoration consists of extensive rouletting on the exterior of the rim with below a broad wreath of horizontally placed leaves, framed above and below by a beaded row.

Provenance: Site 11202

D11 - Rim fragment of a Dragendorff 29 bowl. Preserved decoration consists of extensive rouletting on the exterior. Below the rim remains part of a decorative panel depicting a running lion (see Medri 1992, type 2.2.1), framed on three sides by beaded lines. On the right edge of the fragment are two unrecognizable (probably vegetal) decorative elements (TA 47807).

Provenance: Site 11202

D12 - Rim fragment of a Dragendorff 29 bowl. Preserved decoration consists of extensive rouletting on the exterior of the rim. Below is a beaded line framing an area of unidentifiable decoration (TA 47806).

Provenance: Site 11202

D13 - Large body and base fragment of a Dragendorff 29 bowl. The fragment preserved a large part of a decorative motif consisting of a continuous leafed scroll that contains two medallions with two encircling lines, framing single birds that are facing in opposing directions. Above the scroll are two branches ending in palm leaves. Depictions of similar birds (both contained in medallions as in festoons) are uncommon in mould-decorated Late Italian sigillata, but frequently occur on specimens from southern Gaul (e.g. Mees 1995: Plates 38, 39, 56.1 & 2, 147).

Provenance: Site 11202

D14 - Large body fragment of a Dragendorff 29 bowl. Preserved decoration consists of two horizontal segmented

lines with below that a row of *nautili* with bifid ornaments in between.

Provenance: Site 11202

D15 - Preserved decoration consists of a horizontal beaded line with below that a single medallion with leafed cornice, framing an eagle (for similar examples, see Mees 1995: Plate 96.12). Below the medallion are two small, isolated songbirds, and the medallion is flanked on both sides by St. Andrew's crosses made up of wavy lines originating from a central rosette. The left and right frames are filled with scrolls ending in twists; the upper frame contains a segmented line ending in a three-lobed decorative element (see Medri 1992, type 9.7.2.09) with to its right an oblique wavy line ending in a sword-like decorative element. Scrolls originating from the top right and left corners of the cross depart end in rose buds.

Provenance: Site 11202

D16 - Preserved decoration consists of a beaded row with below that a sequence of palm leaves, interconnecting by festoons made up of small wedges that change direction midway. The ends of each festoon as well as its centre are marked by a small rosette (Medri 1992, type 5.5.1.05). Pairs of palmettes frame a repetitive central motif consisting of a small, lanceolate object above which are two curving lines ending in twists and a central, vertical beaded line ending in a bottle bud (Webster 1996: 119).

Provenance: Site 11202

D17 - Small fragment of a Dragendorff 29 bowl. The exterior of the rim is decorated with rouletting. Otherwise, preserved decoration consists of a running animal (a hare?) framed above and below by a horizontal beaded line. Another horizontal beaded line marks the beginning of a second decorative panel of which remains a partial arch or medallion framing a head with a strongly receding hairline (Silenus?).

Provenance: Site 11232

D18 - Preserved decoration consists of two (Gorgon?) heads (Medri 1992, type 3.2.2.03; Lavizzari Pedrazzini 1972, no. 159), framed above and below by a horizontal wavy border.

Provenance: Site 15160

D19 - Preserved decoration consists of a single medallion with wreath-like border, surrounding a mask with wig (for other examples, see Medri 1992, type 3.5).

Provenance: Site 11202

D20 - Preserved decoration consists of an arch with three lines (Medri 1992, type 8.3.1), surrounding a head with a strongly receding hairline (possibly Silenus).

Provenance: Site 15160

D21 - Two fragments that can be refitted. Preserved decoration consists of a strong groove with below that a horizontal

band of decorative elements (doves? – see Medri 1992, type 9.6.9.01). Below is a horizontal sequence of alternating columns with a stem of leaves (Medri 1992, type 7.2.7) and an unidentified motif (an elongated bottle bud?).

Provenance: Site 15160

D22 – Preserved decoration consists of two concentric grooves with below that a dancing figure (a satyr?) leaning on/grasping what may be a tree trunk.

Provenance: Site 12262 (Forum Appii)

D23 – Preserved decoration consists of three concentric grooves with below that a sequence of winged figures (cupids/Victoria) facing left, separated by a vertical, partially plain and partially segmented line.

Provenance: off-site find from the coastal area

D24 – Preserved decoration consists of two partially preserved, semi-circular, leafed festoons. The one on the left surrounds a (partially preserved) leaf; the one on the right surrounds a stemmed leaf with bud.

Provenance: Site 15160

D25 – Preserved decoration consists of two arches (one complete, one partial), made up of two lines (Medri 1992, type 8.2.2), framing a spiral with central pearl (Medri 1992, type 6.1.2).

Provenance: Site 15160

D26 – Preserved decoration consists of a single medallion with three surrounding lines framing a kneeling archer. Below is unidentified vegetative decoration. Similar depictions of archers are uncommon in mould-decorated Late Italian sigillata, but frequently occur on specimens from southern Gaul (e.g. Mees 1995: Plates 2, 3, 96.1 & 12)

Provenance: Site 15160

D27 – Preserved decoration consists of two (partial) arches, consisting of three lines (Medri 1992, type 8.3.1), framing an unidentifiable figure.

Provenance: Site 15014

D28 – Small fragment; preserved decoration consists of two fragmentary arches with three lines (Medri 1992, type 8.3.1) with a vertical cord ending in a star/rosette in between.

Provenance: Site 12262 (Forum Appii)

D29 – Small fragment; preserved decoration consists of an arch with three lines (Medri 1992, type 8.3.1 – similar to D17).

Provenance: Site 12262 (Forum Appii)

D30 – Lower part of a thick-walled vessel, decorated with a sequence of human figures facing right.

Provenance: Site 15160

D31 – Lower part of a thick-walled vessel, decorated with a single (worn) human figure striding towards the left, with horizontal grooves above and below.

Provenance: Site 15014

D32 – Fragment of preserved decoration which is very worn. Below an unidentifiable figurative motif is a groove, followed by a human figure, possibly leading an animal.

Provenance: Site 15014

D33 – Small fragment; preserved decoration consists of the upper part of a dedicant (Medri 1992, type 1.4.3.04).

Provenance: Site 11202

D34 – Preserved decoration consists of a horizontal line of vegetative motifs or chevrons. Below is a rectangular panel depicting a running animal, possibly a deer (see Medri 1992, type 2.2.3) or a hare, which is framed above and below by a horizontal wavy border and to the right by a beaded border.

Provenance: Site 12262 (Forum Appii)

D35 – Preserved decoration consists of part of an arcade surrounding a running dog (Medri 1992, type 2.2.8), with below that a partial panel of leaf tips flanked on both sides by oblique lines.

Provenance: Site 15029

D36 – Decoration consists of a partially preserved pair of running dogs with above and below that unidentifiable spiral motifs.

Provenance: Site 11202

D37 – Preserved decoration consists of a central motif of a running animal, probably a dog or a deer, framed below by a horizontal wavy line and above by a horizontal band of small wedges.

Provenance: Site 11202

D38 – Preserved decoration consists of a small human figure and a running animal (deer/dog). To the left is a vertical pendant with rosette and the fragmentary remains of several oblique wavy lines.

Provenance: Site 15150

D39 – Preserved decoration consists of three incomplete sea creatures (dolphins? – see Medri 1992, type 2.3.1.04) with below that possibly part of a larger, unidentified animal.

Provenance: Site 15160

D40 – Preserved decoration consists of a partially preserved, unrecognizable running animal surrounded by four rosettes (Medri 1992, type 5.5.8.02).

Provenance: Site 15029

D41 - Preserved decoration consists of a sequence of large (acanthus?) leaves (somewhat similar to Marabini Moevs 2008: Plate 66, Figure 19a), separated by several blades.

Provenance: This fragment comes from an unspecified location on the Poligono Militare di Nettuno.

D42 - Preserved decoration consists of a single multi-petalled rosette (Medri 1992, type 5.5.4.05) surrounded by five (partial) segmented festoons (Medri 1992, type 8.6.1.04).

Provenance: Site 15014

D43 - Preserved decoration consists of a single large palm leaf with probably five lobes.

Provenance: Site 11323

D44 - Preserved decoration consists of an eight-petalled rosette with cornice, flanked on each side by unidentifiable vegetative decoration. Below are two horizontal grooves.

Provenance: Site 11323

D45 - Preserved decoration consists of a laurel wreath (Medri 1992, type 4.6.1.02; Rossetti Tella 1996, type 310; Lavizzari Pedrazzini 1972, no.185) with a partially preserved rosette below.

Provenance: Site 15160

D46 - Preserved decoration consists of a horizontal beaded row. Below are two partially preserved arches with one line (Medri 1992, type 8.1.1) and a single bottle bud (Webster 1996, p.119) in between. Each arch encloses a spiral motif with central rosette. The lowest part of the fragment bears a horizontal band of rouletting.

Provenance: Site 15106

D47 - Fragment of a Dragendorff 29 bowl. The rim of the vessel bears rouletting. Below the rim remains part of a decorative panel depicting festoons with a central rosette made up of both plain lines and lines consisting of small leaves. Above and below are two isolated rosettes. The panel is bordered above and below by a beaded line. Another beaded line on the underside of the fragment probably marks the beginning of a second decorative panel.

Provenance: Site 15082

D48 - Preserved decoration consists of a fragmentary spiral/festoon with central rosette with below that a beaded line. The main decorative panel is bordered above by a second beaded line and depicts different vegetal motifs. To the left remains a single olive leaf (see Medri 1992, type 5.2.3), hanging from a curving branch, which is framed to the right by a vertical wavy line. On the right side of the fragment are the fragmentary remains of what is probably a palm leaf.

Provenance: Site 15082

D49 - Preserved decoration consists of a single palm leaf (similar to Medri 1992, type 5.2.1.07) with a single chevron

below. To the right are two fragmentary, unidentified objects. Below is a single concentric ridge.

Provenance: Site 11202

D50 - Preserved decoration consists of two leafed festoons framing several oblique wavy lines. To the lower right is an unidentified vegetal motif. The two festoons are separated by a vertical beaded line.

Provenance: Site 11202

D51 - Preserved decoration consists of a series of rope motifs.

Provenance: Unspecified location on the Poligono Militare di Nettuno.

D52 - Preserved decoration consists of three pendants with rosette (Medri 1992, type 9.4.2).

Provenance: Site 11202

D53 - Preserved decoration consists of a column with leafed stem from which originate several oblique wavy lines.

Provenance: Site 15014

D54 - Small fragment; preserved decoration consists of a single stirrup leaf with to the left a partially preserved spiral motif. Below are two small ridges. This type of decoration is relatively common on southern Gaulish terra sigillata (various specimen in Mees 1995; Webster 1996: 123).

Provenance: Site 12262 (Forum Appii)

D55 - Fragment of a Dragendorff 29 bowl. The exterior of the rim bears rouletting. Below the rim is a horizontal segmented line, followed by a horizontal band of chevrons (Medri 1992, type 9.5.2). At the lower left extremity of the fragment is the beginning of another decorative motif, possibly a spiral or an arcade.

Provenance: Site 11268

D56 - Small fragment; preserved decoration consists of part of a vertical line of chevrons (Medri 1992, type 9.5.2.05) and to its right the beginning of an arcade, probably consisting of two lines (Medri 1992, type 8.2.2).

Provenance: Site 11268

D57 - Preserved decoration consists of a single vine leaf (close to Medri 1992, type 5.2.2.06).

Provenance: Site 12262 (Forum Appii)

D58 - Preserved decoration consists of a single large rosette with pearl-like pistils (Medri 1992, type 5.5.3.04/5) from which departs a wavy line. Below is a fragmentary wavy line ending in a chevron.

Provenance: Site 12301

D59 - Fragment preserved a vertical line of motifs, from top to bottom an unrecognizable object with a pointed edge, a

six-petalled rosette and a *pelta*. Below is a horizontal groove. The *pelta* occurs sporadically on southern Gaulish sigillata (e.g. Harle Easson 1988: Figure 28) but is not included in Medri's comprehensive publication on mould-decorated Late Italian sigillata.

Provenance: Site 15106

D60 – Small fragment; preserved decoration consists of a single long, thin palm leaf (close to Medri 1992, type 5.2.1.20).

Provenance: Site 15111

D61 – Fragment bears a partially preserved seven-lobed palmette (Medri 1992, type 5.6.2).

Provenance: Site 10558

D62 – Preserved decoration consists of a horizontal sequence of four rosettes (Medri 1992, type 5.5.1).

Provenance: Site 15036

D63 – Preserved decoration consists of a horizontal band of plain rosettes (Medri 1992, type 5.5.8) with below that a panel of triangles surrounded by oblique wavy lines (Medri 1992, type 1.3).

Provenance: Site 11268

D64 – Preserved decoration is made up of a single palm leaf and partially preserved figurative decoration, consisting possibly of a human figure and part of a fish.

Provenance: Site 11202

D65 – Small fragment; preserved decoration consists of several rows of leaf tips, bordered to the right by a vertical wavy line. Below is a single groove.

Provenance: Site 15116

D66 – Small fragment; preserved decoration consists of one (or possibly two) line(s) ending in an arrow with a single rosette (Medri 1992, type 5.5.1.05).

Provenance: Site 12262 (Forum Appii)

D67 – Small fragment; preserved decoration consists of a small loop with a knot(?).

Provenance: Site 12262 (Forum Appii)

D68 – Small fragment; preserved are two circular, intersecting festoons. To the left is a vertical beaded row and part of a panel of leaf tips.

Provenance: Site 12262 (Forum Appii)

D69 – Preserved decoration consists of two chevrons with below that a festoon with central rosette, ending in an arrowhead.

Provenance: Site 11202

D70 – Preserved decoration consists of two festoons, separated by a horizontal line. The best-preserved festoon shows that whereas most of its lines are plain, one part is corded.

Provenance: Site 15019

D71 – Preserved decoration consists of a partially preserved spiral with central pearl surrounded to its left by two partially preserved encircling lines.

Provenance: Site 15160

D72 – Small fragment; preserved decoration consists of a small ridge with below a single vertically placed chevron and a partial spiral.

Provenance: Site 12262 (Forum Appii)

D73 – Preserved decoration consists of a partially preserved festoon with central rosette.

Provenance: Site 10504

D74 – Preserved decoration consists of a partially preserved spiral with central pearl.

Provenance: Site 12262 (Forum Appii)

D75 – Fragment of a Dragendorff 29 bowl. The exterior of the rim is decorated with a band of rouletting. Below the rim is a horizontal band of square eggs with below that two festoons.

Provenance: Site 11312

D76 – Fragment bears a horizontal row of egg-and-tongue decoration with unrecognizable figurative motif below.

Provenance: Site 14060

D77 – Small fragment; preserved decoration consists of a horizontal row of rectangular eggs (close to Medri 1992, type 9.3.1.04) with below that two isolated rosettes.

Provenance: Site 12262 (Forum Appii)

D78 – Preserved decoration consists of a repeated fluted design (so-called gadroons; see Medri 1992, type 9.3.3.01).

Provenance: Site 12262 (Forum Appii)

D79 – Very small fragment; preserved decoration consists of three grapes.

Provenance: Site 11316

D80 – Preserved decoration consists of partially preserved barbotine decoration and oblique series of pearls.

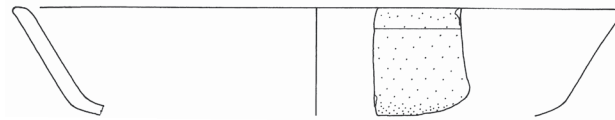
Provenance: Site 11202

D81 – Preserved decoration consists of partially preserved barbotine decoration with above two oblique beaded lines.

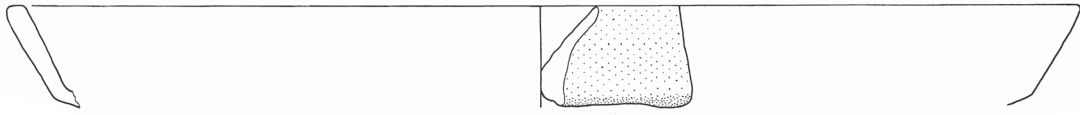
Provenance: Site 15160

Vessels
Type 1

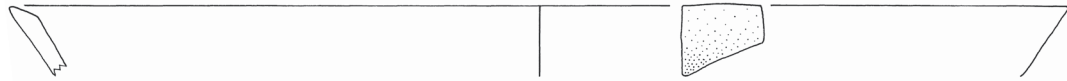
Plate I



1.1a



1.1b

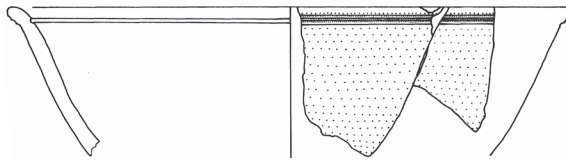


1.2

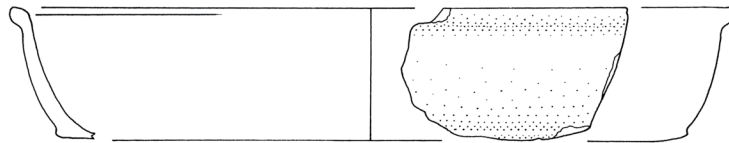
Type 2



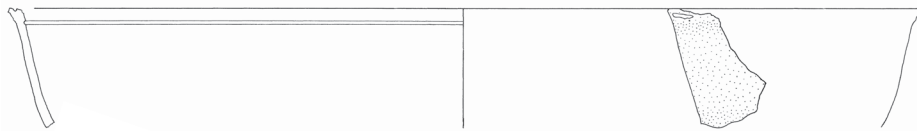
Type 3



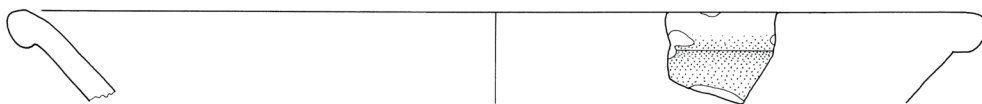
3.1.1



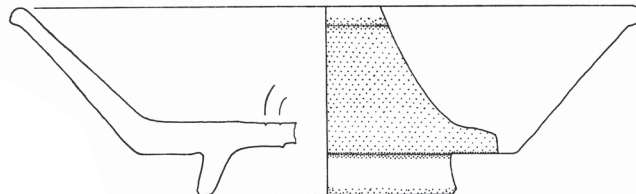
3.1.1



3.1.2 (1:3)

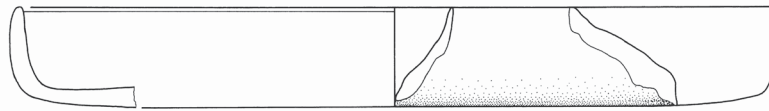


3.2



3.3

Vessels cont.
Type 4



4.2

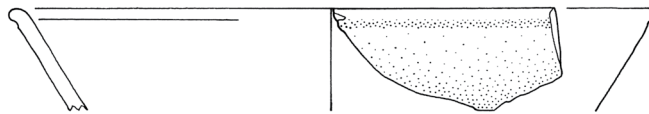


4.2A (1:3)

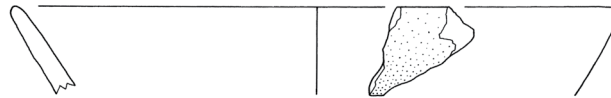
Type 5



Type 6

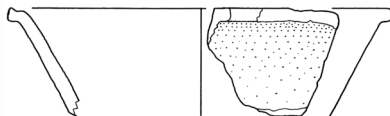


6.1

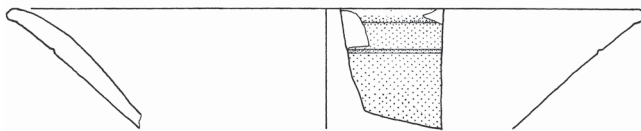


6.2

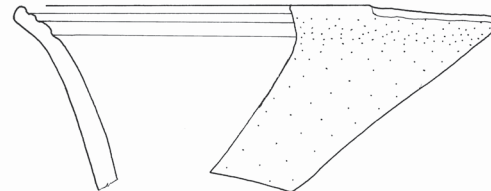
Type 7



7.1

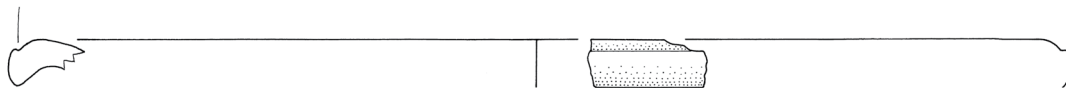


7.2.1



7.2.2

Type 8



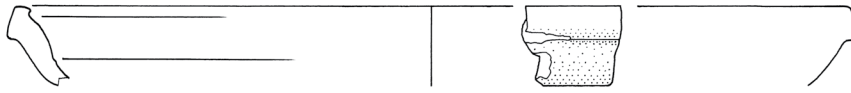
8.1.1



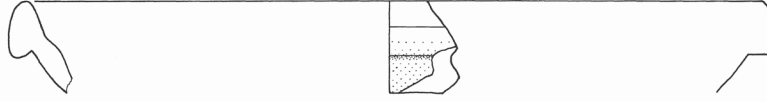
8.1.2

Vessels cont.
Type 9

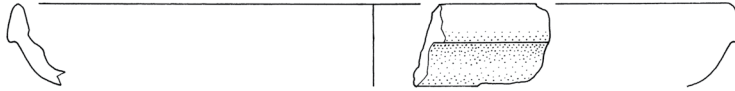
Plate III



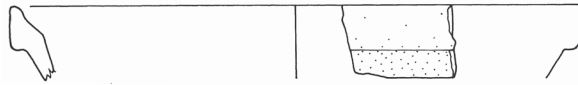
9.1



9.2



9.3

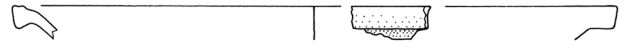


9.4

Type 10

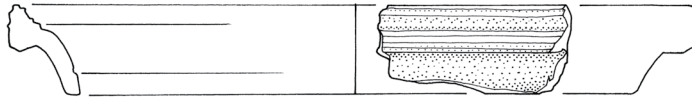


10.1

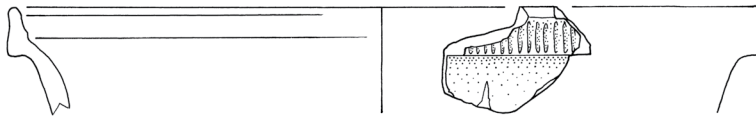


10.2

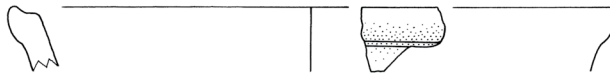
Type 11



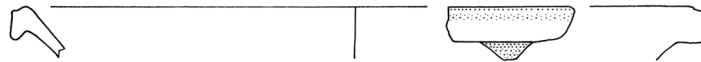
11.1.1a



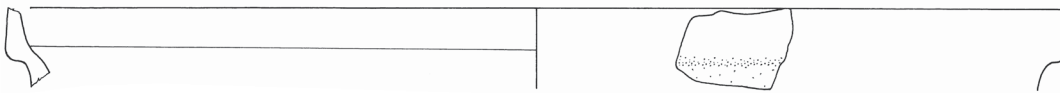
11.1.1b



11.1.2

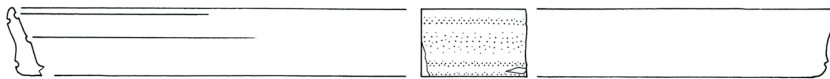


11.1.3

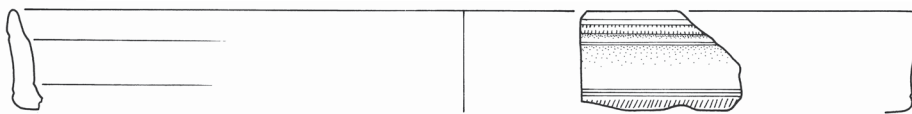


11.2

Type 12

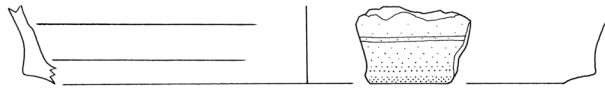


12.1.1

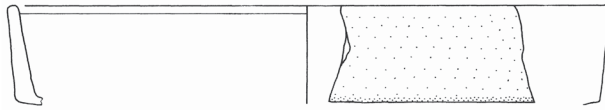


12.1.2

Vessels cont.
Type 13



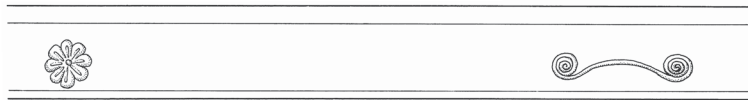
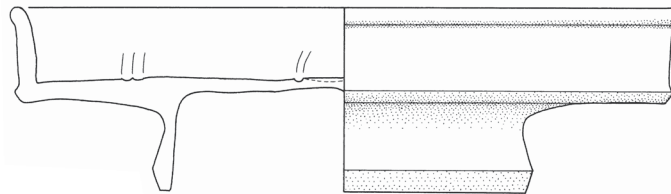
Type 14



14.1

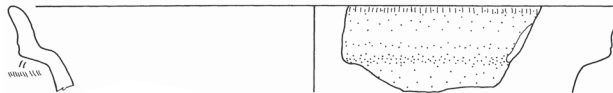


14.2

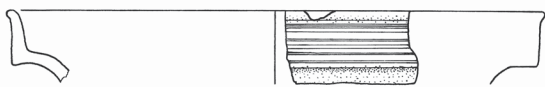


14.3

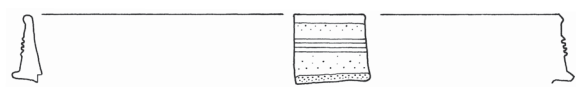
Type 15



15.1

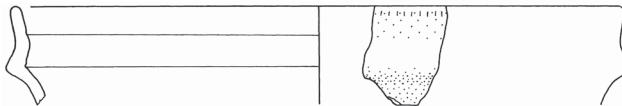


15.2



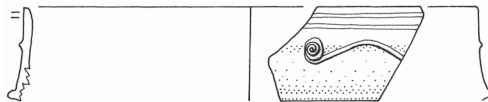
15.3

Type 16



16.1

Type 17

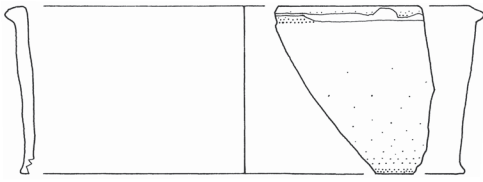


Type 18

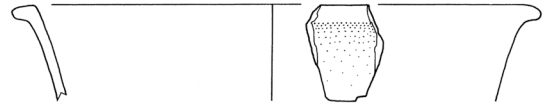


Vessels cont.
Type 19

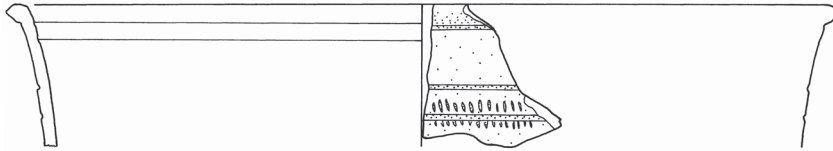
Plate V



19.1A



19.1B

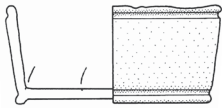


19.2

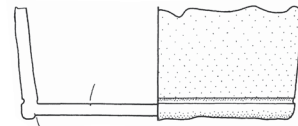
Type 20



Type 21



21.1.1

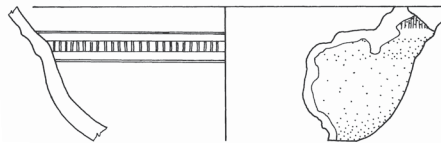


21.1.2

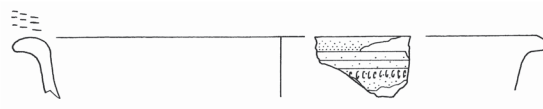
Type 22



Type 23



Type 24

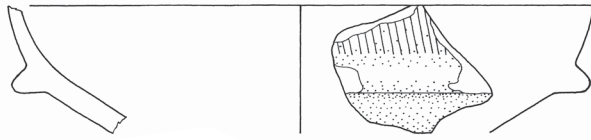


24.1

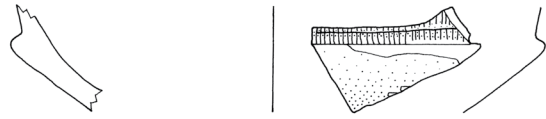


24.2

Vessels cont.
Type 25

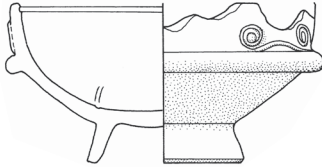


25.1.1

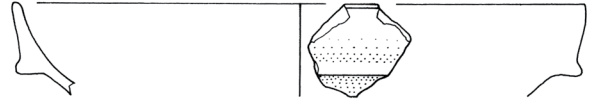


25.1.2

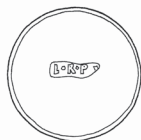
Type 26



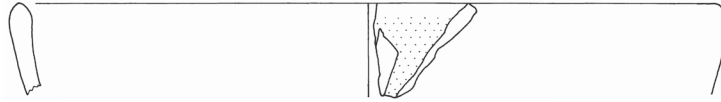
26.1



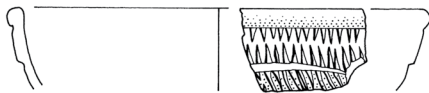
26.2



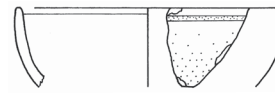
Type 27



27.1

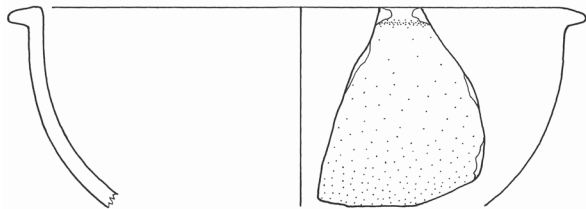


27.2

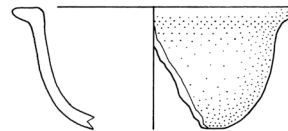


27.3

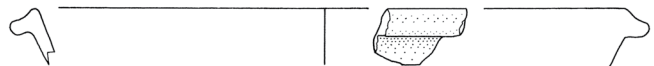
Type 28



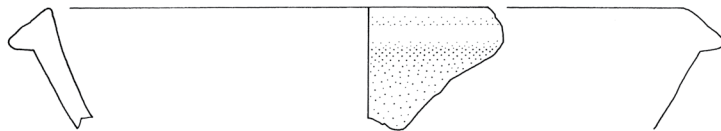
28.1.1



28.1.2

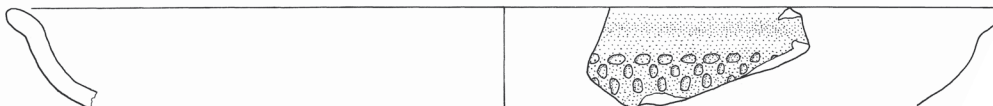


28.1.3



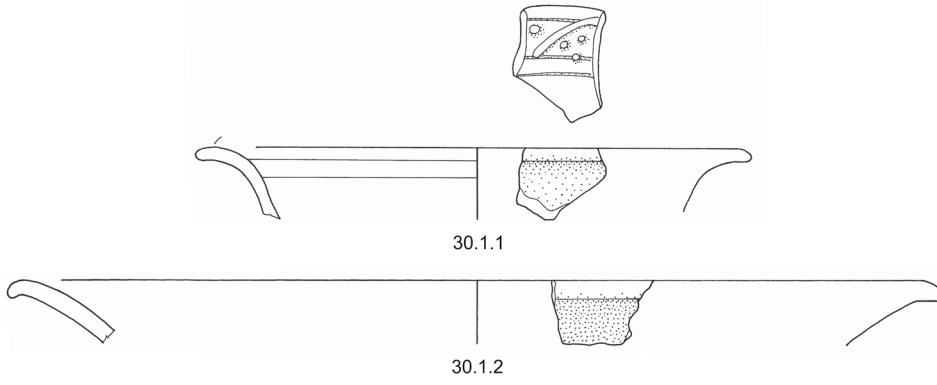
28.2

Type 29



Vessels cont.
Type 30

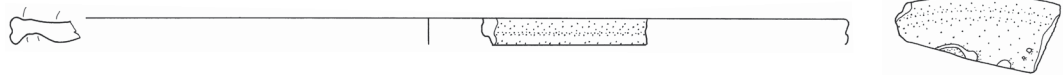
Plate VII



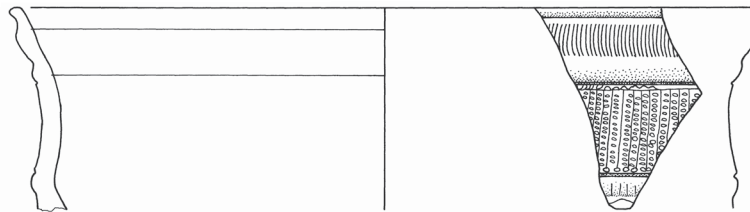
Type 31



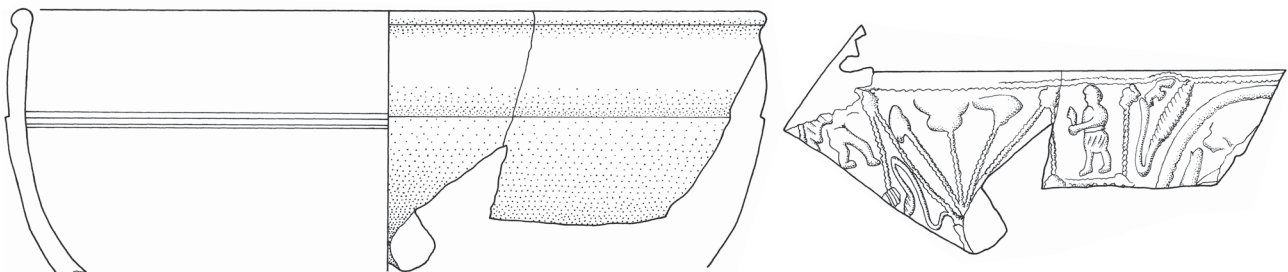
Type 32



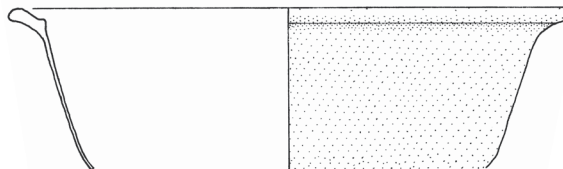
Type 33



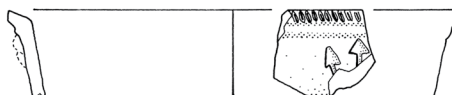
Type 34



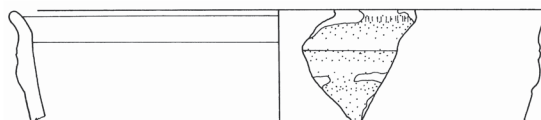
Type 35



Type 36



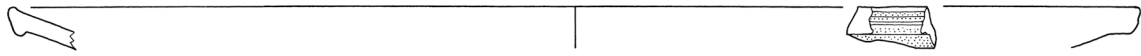
Type 37



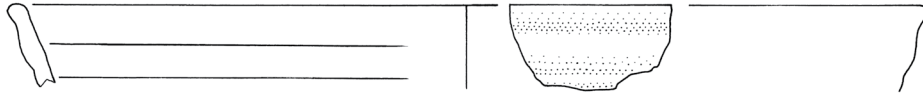
Vessels cont.
Type 38



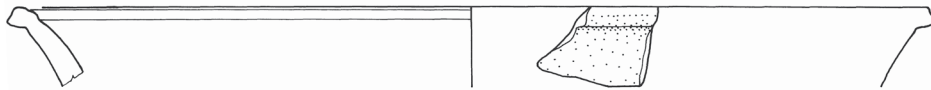
Type 39



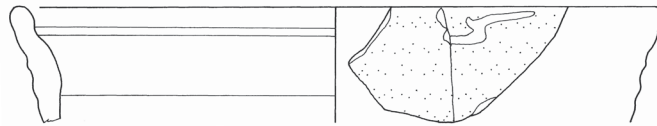
Type 40



Type 41



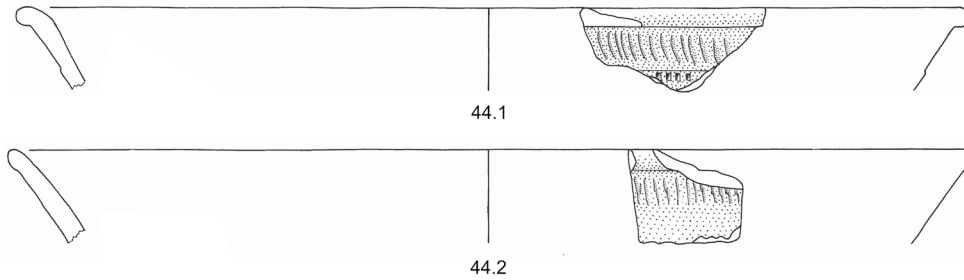
Type 42



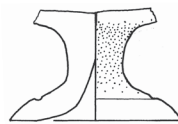
Type 43



Type 44



Bases
Type 1



B.1

Type 2



B.2.1

B.2.2

Type 3



B.3

Applied decoration types
scale 1:1

Plate IX



1.1



1.2



1.3



1.4



1.5



1.6



1.7



1.8



1.9



1.10



1.11



1.12



2



3



4



5.1



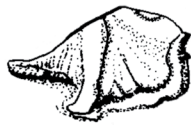
5.2



5.3



5.4



6



7

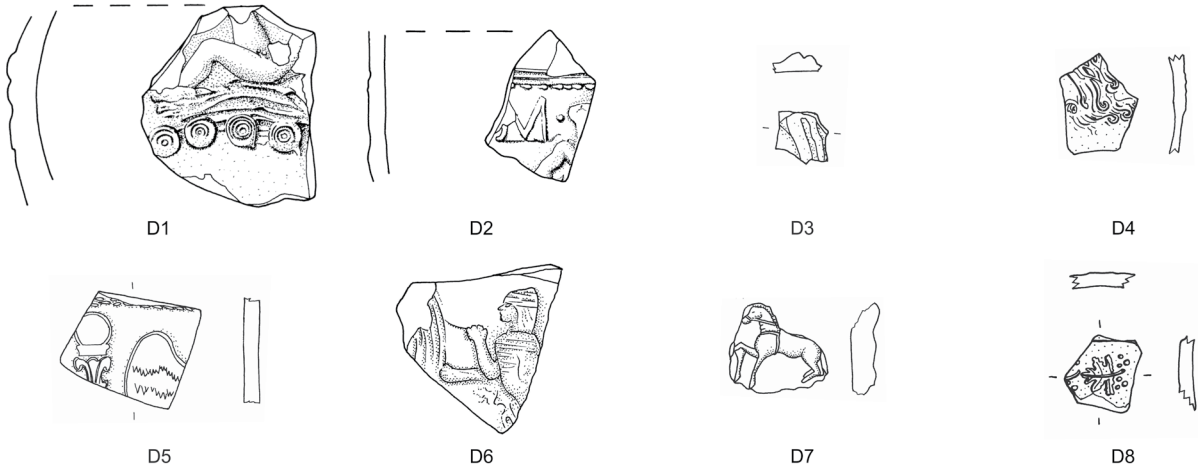


8

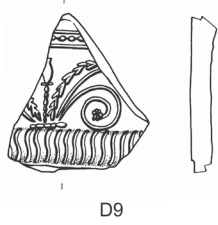


9

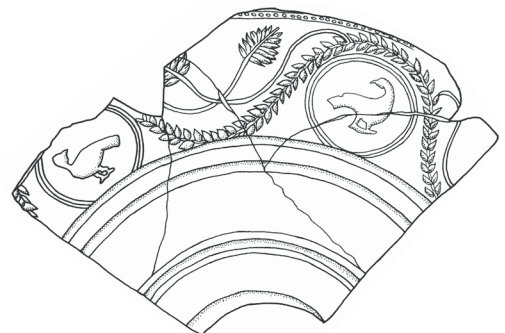
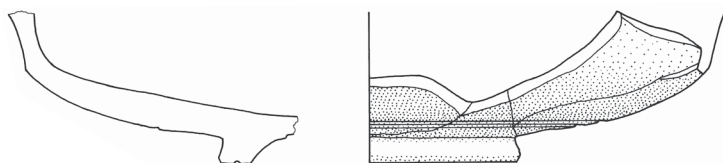
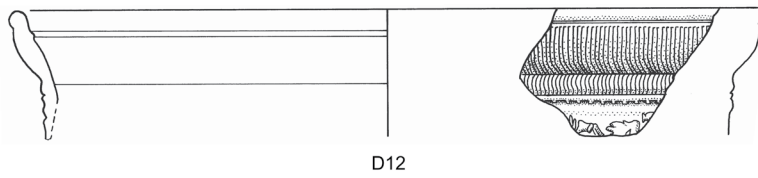
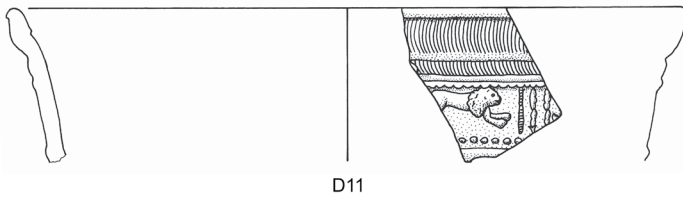
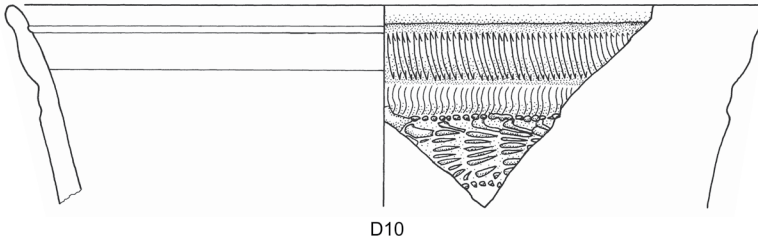
Mould-made relief decoration
Relief-decorated Arretine Sigillata



Terra Sigillata Marmorata



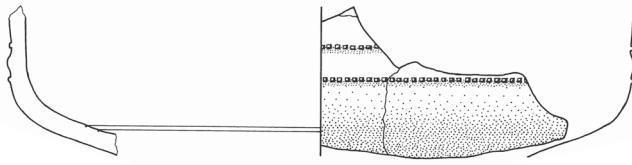
Late Italian and Gaulish decorated Sigillata



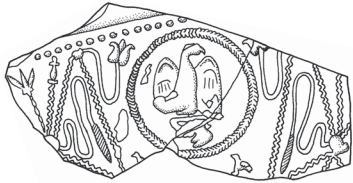
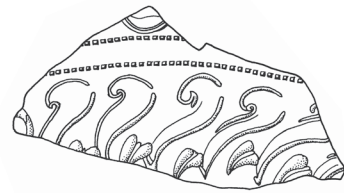
D13

Mould-made relief decoration cont.
Late Italian and Gaulish decorated Sigillata

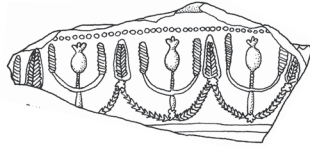
Plate XI



D14



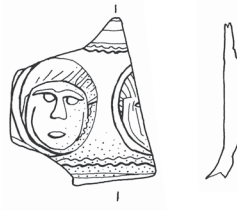
D15



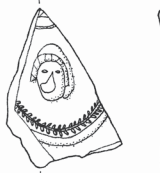
D16



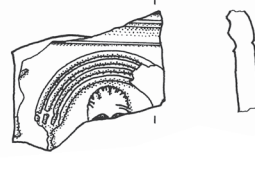
D17



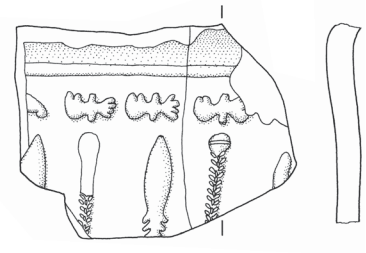
D18



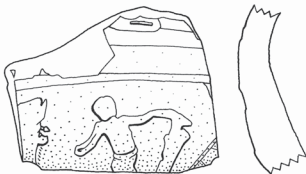
D19



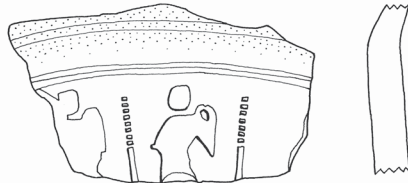
D20



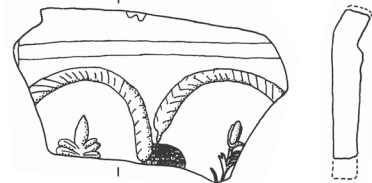
D21



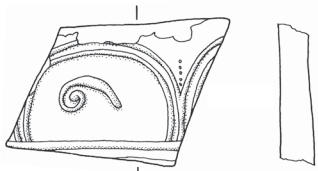
D22



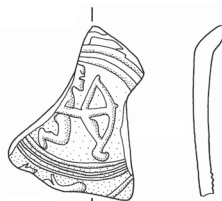
D23



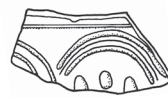
D24



D25



D26



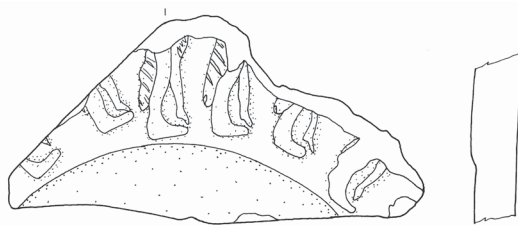
D27



D28

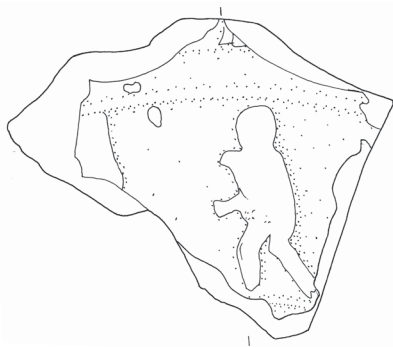


D29

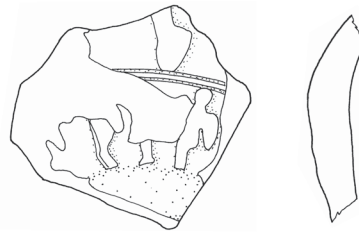


D30

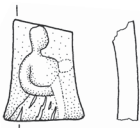
Mould-made relief decoration cont.
Late Italian and Gaulish decorated Sigillata



D31



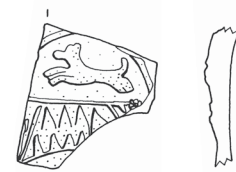
D32



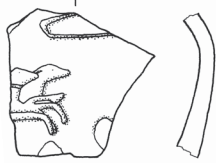
D33



D34



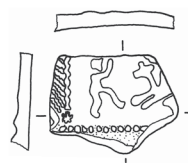
D35



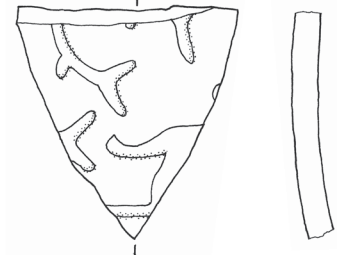
D36



D37



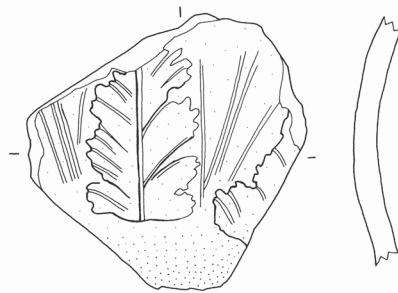
D38



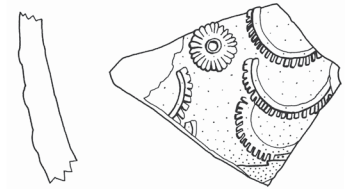
D39



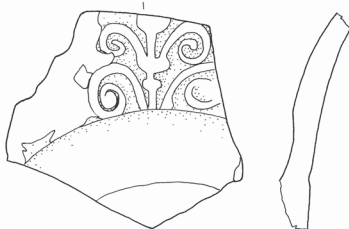
D40



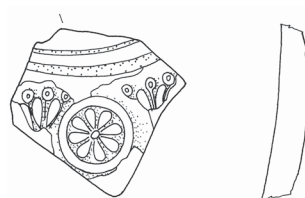
D41



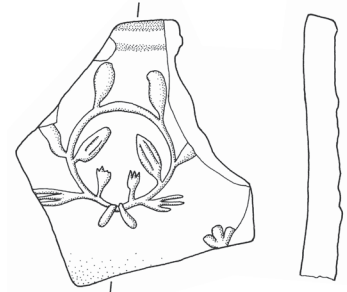
D42



D43



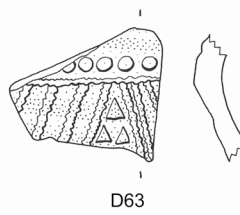
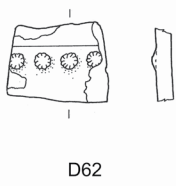
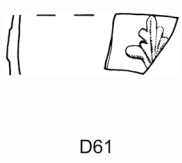
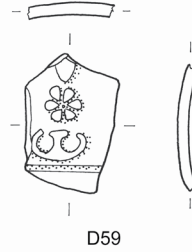
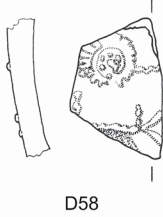
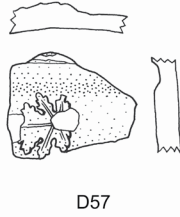
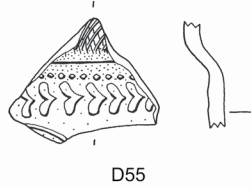
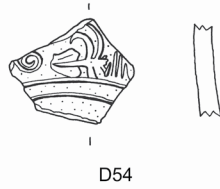
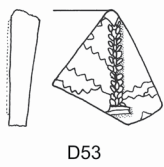
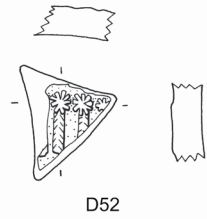
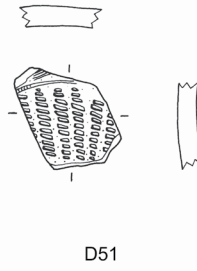
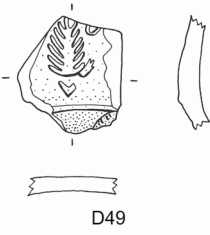
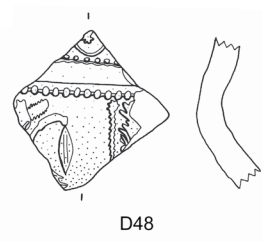
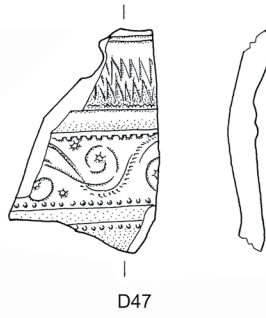
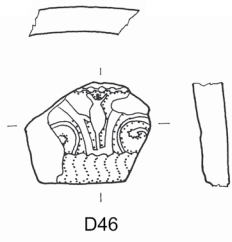
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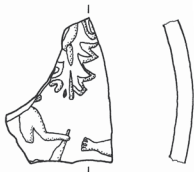
D45

Mould-made relief decoration cont.
Late Italian and Gaulish decorated Sigillata

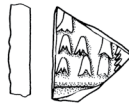
Plate XIII



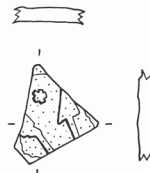
Mould-made relief decoration cont.
Late Italian and Gaulish decorated Sigillata



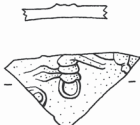
D64



D65



D66



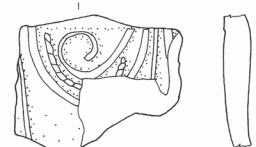
D67



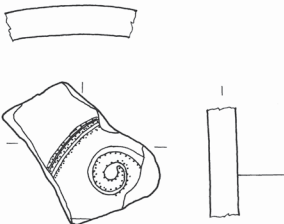
D68



D69



D70



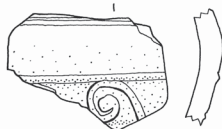
D71



D72



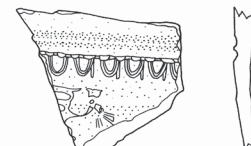
D73



D74



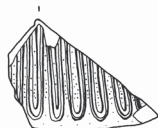
D75



D76



D77



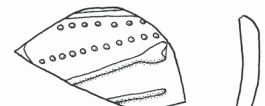
D78



D79



D80



D81