



www.otium.unipg.it

OTIVM.
Archeologia e Cultura del Mondo Antico
ISSN 2532-0335 – DOI 10.5281/zenodo.5718352



No. 11, Anno 2021 – Article 1

The taste of Romanitas. Evidence of innovation in the culinary practice at Nora between the first century BC and the second century AD

Bianca Maria Giannattasio^{1✉} Silvia Pallecchi^{2✉}
University of Genova *University of Genova*

Abstract: Nora is a town with a long story and a complex cultural tradition that, in its first centuries, appears to be strictly linked to the customs and practices of the Punic world. This tradition, also facilitated by the geographic position on the Mediterranean Sea, can be easily found in the culinary practices, as proved by kitchenware and food preparation pottery shapes used between the 4th century BC and the 2nd century BC.

As it happened in the construction of imposing buildings of the town, and also in the practices of everyday life, innovations coming from the Roman culture are progressive and particularly slow and the spread of the new tendencies lives together with the persistence of the Punic underlayers.

Markers of these changes are visible in the private and public life, where the adoption of codified forms used for the self-representation is evident (for instance in buildings and in the tableware pottery). Other markers, certainly less obvious but as much as important and even more substantial, demonstrate the deep rootedness of some Roman habits, that merge with the local traditions, regardless of the exterior appearance of the self-representation.

Amongst these last markers, there is the use of some pottery shapes, that clearly shows a change in the taste of preparing and cooking food.

Keywords: Romanisation, pottery, culinary practice.

^{1✉} Address: Dipartimento di Antichità, Filosofia e Storia, Università degli Studi di Genova. Email: silvia.pallecchi@unige.it

^{2✉} Address: Dipartimento di Antichità, Filosofia e Storia, Università degli Studi di Genova. Email: silvia.pallecchi@unige.it

The papers published in this volume were presented at the session n° 162 “Culture contacts in Western Mediterranean Sea during the Roman Age. Pottery as cultural marker between traffics and local productions” of the 25th Annual Meeting of the European Association of Archaeologists (EAA) - Beyond Paradigms (Bern 4-7 September 2019), organized under the scientific direction of Prof. Marco Giuman, Dr. Ciro Parodo and Dr. Gianna De Luca (University of Cagliari. Department of Humanities, Languages and Cultural Heritage. Cittadella dei Musei, Piazza Arsenale 1, 09124 Cagliari, Italy).

1. ROMANISATION AND CULINARY PRACTICE IN NORA

In the suburban areas of Roman Italy, the presence of the *res publica* is little perceived, and in population substrata like the Ligurians and Sardinians with very precise types and markers, Roman customs and habits seep through very slowly.

The evidence of a tangible assimilation of the culture and civilization brought by Rome in the different areas of the Italian peninsula is not to be searched so much in the big and important displays of Roman power, even though entirely different behaviours can be obviously witnessed depending on the proximity to the centre of power. The area of Campania, for example, is romanised quite quickly even if sometimes, as in the case of Poseidonia/Paistom, Rome’s arrival turns out to be traumatic¹.

The most evident signs of Romanisation, which can be perceived in the transformation of the systems of urban organisation, are often dictated by the central government and, for this reason, they cannot directly prove the will to adopt the new idea of civilization. On the contrary, the introduction of a specific type of pottery represents direct evidence of the ongoing

¹ As clearly shown by the erasure of the *agorà* and the relocation of the public space, breaching into the southern sacred area further south.

Romanisation process and of its deep penetration in the private lives of people, since other potential markers, like clothing or wooden objects (furniture, *capsae*, etc), are not preserved due to their perishability.

In fact, the clues extrapolated from daily life are those that namely point to the change in mentality and the infiltration of the *mos Romanorum* in the territory. Among those, at archaeological level, it is evident that a notable indicator is offered by the presence of pottery products, which are to be found on the table of the new citizens. From this point of view, the pottery becomes one of the possible 'litmus papers' of Romanisation, in contrast to other potential markers.

Clear indicators of this kind are, for example, the MG amphoras which carry the wine in the Phlegraean area, including the famous *Falernum* mentioned by the literary sources², as well as the pottery *à petites estampilles* and the latest Campanian black-glazed ware³ which, as already underlined by J.-P. Morel⁴, is an obvious marker of the maritime trade managed by Rome in the Mediterranean Sea.

Nora is a town with a long history and a complex cultural tradition which, as clearly attested by the excavations during the last thirty years that have brought to light a remarkable amount of findings datable to the period between the late Republic and the first Empire, show a long persistence of the Punic customs⁵ up until the 1st mid-century BC (fig. 1). The long duration of this tradition, also naturally facilitated by the

² Hor. *Sat.* 2, 8, 27.

³ Hor. *Sat.* 1, 6, 116-118; 2, 8, 39.

⁴ MOREL 1981.

⁵ TESSERIN 2018, p. 44; BOLZONI 2018, p. 83; BOLZONI, FRONTORI, PANERO 2018, p.78; BOLZONI 2020: settlement contexts of the central area, and the one overlooking the southern bay, show that during the 1st century BC 50% of the pottery findings can still be attributed to the Punic tradition.

geographical position of the town in the Mediterranean Sea, becomes evident in the culinary activities, as witnessed through the forms of cooking and preparation ware documented in the town area.

At the end of the *res publica*, the Roman culinary tradition, having come into contact with many different populations, has partially abandoned the usage of the *olla*, which still maintains the usual function of boiling pot. The *puls*, dish made of spelt polenta typical of the *mos maiorum*⁶, is replaced by food based on meat, game or fish, prepared inside the *caccabus*, which has a versatile form certainly due to its spaciousness, that allowed to boil and stew food (fig. 2). Inside these containers, the meat, sometimes mixed with vegetables and usually dressed with oil, was slowly cooked on a low heat⁷.

In the Punic settings and at Nora the *puls punica*⁸, a sort of *semolina* of boiled spelt, is known but the use of pots is already attested from the 5th century BC⁹. These containers are characterised by a convex external base, a rim characterised by a recess, where a lid could rest, and by an internal red-glazed coating¹⁰ which, from the archaeometric analysis, is constituted by a resin of *Pinaceae* with likely the addition of beeswax¹¹. The characteristics of these containers seem to indicate that they might have had a similar function to the *caccabus* and that they were specifically used for the slow boiling of solid food.

⁶ Pl. XVIII, 83; Aus. *Idyll*. 9 5.

⁷ TUBALDI 2009-2010.

⁸ Cato *agr.* 85.

⁹ CAMPANELLA 2008, p. 98.

¹⁰ CAMPANELLA 2009, pp. 348-351.

¹¹ PECCI 2008, pp. 260-261.

The imposition of the new kind of eating of the first Empire period, with predominance of animal proteins, compels to choose more complex cooking ways that allow to roast or stew meat. The utensil characterising the new nutrition habits is the *patina*, or the pot, often mentioned in Apicio's recipe book, that can be covered by hot ashes or put in ovens, even camp ones.

The *patina* is surely a less versatile form than the *olla*¹² and was often used to complete the cooking process of previously boiled or roasted food¹³: in fact, for this very specialised character, it can document well the introduction of a foreign cooking technique and the acceptance of the new Roman customs on the population's part.

As it happens in Athens¹⁴, the *cumanae patellae*¹⁵ particularly represent interesting and reliable Romanisation markers at Nora too. Apicio, in his recipe book, recalls the functionality of these utensils that allowed to cook the food at a slow heat and that could also be used in the oven. Their name is used, in the *de re coquinaria*, to indicate a sort of 'frittata' based on beaten eggs and vegetables.

The excavations undertaken from 2003 to present in Nora's western district have led to the discovery of 127 fragments of internally red-glazed *patinae* produced in Latium and Campania, which could correspond to circa 20 objects (MNI). It can be considered a remarkable number of finds, as the research is carried out within a sector that is both commercial and residential, wherein the majority of the current finds is datable from the 3rd

¹² For the different uses cf. TUBALDI 2009-2010, pp. 25-28.

¹³ It was often used to complete the cooking process of already boiled or grilled food.

¹⁴ ROTROFF 2006; ROTROFF 2015.

¹⁵ Apic. IV 2 11; V 4 2.

century AD onwards, and only in some particular cases it has been possible to excavate deeper to reach the first Empire period levels¹⁶.

The most interesting specimens (6 MNI) are coming from the excavation of a well (Area C, room A30: fig. 3) which ceases to function at the end of the 1st century BC, likely when Nora becomes *municipium*, the artisan district transforms itself into residential, and the well is used as a midden of the *domus* nearby during all the first century AD.

These are three pots (almost whole)¹⁷, plus a rim and two bases, whose diameters measure between 0.26 to 0.35m and they are part of the most ancient type with almond-rim, slightly introflexed, with concave body. The deeply opaque red glaze, more or less shiny, internally covers the body as well as the external part of the rim; the base has concentric circles inside, and it is completely smooth externally. Moreover, the two different bases has concentric circles inside, but smooth externally.

All the artefacts show obvious traces of exposition to the fire; in particular, the single one that has been possible to entirely restore (diam. 0.34 m) is distinguished from the others by its mixture and for the presence of a very little compact glaze, opaque and slightly covering; furthermore, it does not show the usual circles on the internal bottom (fig. 4).

Five of these objects are made of a clean mixture, with solid ceramic body, slightly coarse to the touch. The clays show, even if with difference

¹⁶ It needs to be considered that at 0.70 m above sea level there is an incoming sea water tide which prevents from excavating further, thus reaching the Julio-Claudian levels with difficulty.

¹⁷ Two have been partially restored in 2015-2016 (Ditta Docilia s.n.c.-Conservazione e restauro, Savona), the third one is complete instead, and it has been possible to realize a reconstructed restoration.

of dimensions and frequency, the same inclusions: small limestones, medium and big quartz crystals, black lava nuclei (augite), numerous and minute scales of mica and, sometimes, a little chamotte¹⁸. These are distinguishable traits of clay with provenance from the geological area of Tivoli and the Alban Hills, where mica and limestones can be usually found¹⁹. It has been speculated the existence of a factory precisely at Tivoli, active between the end of the 2nd century BC and the Tiberian period²⁰, which produced almond-rim pots similar overall to the ones found inside the well at Nora. Products with poorer quality, and a more diluted, opaque glaze with presence of bubbles, wherein the sixth object found in the well at Nora could be placed, have been attributed to the same factory.

The whole of the materials found within this context seems, therefore, to confirm the theory of an early arrival of products from the Tyrrhenian area to Nora that, as already suggested for the bifid-rim pots, would have encouraged the start of a local production, reproducing both the internal opaque red glaze pots and bifid-rim pots²¹.

Fragments of internally red-glazed ware also come from other areas of the town²², and thus document the diffusion of a new way of preparing and cooking food, which corresponds with an adaptation to the new customs and the intervention of the central power, to which is due, for example, the construction of the *forum*. In any case, the adoption of the *patina* must have not caused any particular issues, since Nora's population, of clear Punic origin, was accustomed to use that type of form

¹⁸ The analysis has been carried out with a biocular microscope.

¹⁹ Geological map: <http://www.isprambiente.gov.it/Media/carg/lazio.html>

²⁰ LEOTTA 2005, p. 119.

²¹ CANEPA 2003a, pp. 145-146.

²² CANEPA 2003b, pp. 203-204; MAZZOCHIN 2009, pp. 712-713.

as they already did with the pot, although for a kind of different cooking, more similar to that of the *olla*²³.

B.M.G.

2. A ROMAN STAMPED MORTARIUM AND THE CULTURAL ROMANISATION OF THE TOWN ÉLITES IN NORA

A further clear sign of the Romanisation of the customs at Nora is corroborated by the attestation of the *mortaria* in *opus doliare* of central-Italic production.

One of these utensils, assignable to the range of Dramont D2 type, comes from the area of the Little Baths and, in particular, from a levelling layer datable to a phase preceding their construction (PTF US 28039: 1st century AD).

Two adjoining fragments related to the rim, with the pouring lip, are preserved (fig. 5). On the two sides of the pouring lip two rectangular cartouche stamps are preserved, impressed before the overfiring. The stamp located on the left of the pouring lip, even if abraded, is still partially readable and an interpretation can be put forward (fig. 6); instead, of the one located on the right of the pouring lip only a part of the cartouche is preserved, and that does not allow further speculation.

The morphology and the angle of the brim of the *mortarium* suggest a dating range within the 1st century AD. The macroscopic observation of the clay, which presents considerable similarities with the clays used in the production of the area of the Tiber Valley, and specifically with those

²³ CAMPANELLA 2008, pp. 67, 98.

used in the furnaces of the *Domitii* during the 70s of the 1st century AD, seem to guide towards the same direction. The shape of the letters and, more generally, the type of composition of the stamp, with the text arranged on three lines of writing is also in agreement with this classification. Particularly, this latter characteristic seems to recall the productions realised in the period when the furnaces were managed together by the two brothers *Cn. Domitius Lucanus* and *Cn. Domitius Tullus*, namely the years between 59 and 93 AD.²⁴

On the stamp on the left of the pouring lip it can be read: [---]ISmari D[---] / [---]IV do[---] / [---]c[---]. Even though the text is noticeably damaged, at the first line of writing one seems to be able to read rather clearly the name of *Ismarus*, who is one of the most well-known slaves inside the factories of the *Domitii*. Active since the beginning of the 40s of the first century AD, *Ismarus* oversaw the production of the building materials, *dolia* and *mortaria*²⁵.

The stamp found at Nora seems to represent an *unicum* and that makes, for the moment, the comprehension of the second and third lines of the text quite delicate where, in an hypothetical manner and analogous to what happens in the other few stamps of *mortaria* on three lines attributable to this same period, one could perhaps imagine to read the name of a second slave, maybe *Daphnus*, followed by that of the two *domini*²⁶.

²⁴ For the *mortaria* related to this production cf. PALLECCHI 2002, pp. 133-134, nn. 18.21 and 18.23.

²⁵ As regards the story of *Ismarus*, cfr. PALLECCHI 2019.

²⁶ I think, in particular, about a dissolution of *ISmari (et) D[aphni] / [D]IV(orum) Do[mitiorum] / [Lu]c[ani et Tulli]*, which presumes the use of a formulary and a series of connections rather common within the setting of the production of the two *Domitii*.

If the reading is correct, considering the stories of *Ismarus* and *Daphnus*, the production of this *mortarium* must probably be placed towards the end of the 60s of the 1st century AD.

The Roman *mortarium* emerges from a rather complex Mediterranean tradition, tied with the development and the diffusion of food customs that include crushing and mixing vegetal and animal substances, for the preparation of liquid and semi-liquid mixtures to be consumed raw or cooked²⁷. It is quite an ancient tradition, which seems to be diffused with a good frequency in the Greek sources of the 7th century BC²⁸. Likely it arrived to Greece from Asia Minor in the colonisation period, as a result of the adoption of oriental culinary traditions: then, it spread from Greece to the *Magna Graecia* between the fourth and the 3rd centuries BC and from there it was gradually introduced into the Roman world²⁹.

Between the 1st and 3rd centuries AD, the *mortarium* characterises the Roman culinary tradition in a rather strong way by then, as it can be deduced by how frequent it is cited within the *corpus* attributed to Apicio and, more generally, to its almost constant presence in the texts offering recipes and instructions for the preparations of dishes³⁰.

During this same period, the stamps impressed on the rim of the *mortaria* attest with clarity that the production of these utensils is organised through setting purposely built operative chains up, in the range of activities of big factories involved in the productions of heavy

²⁷ MATTEUCCI 1987; BATS 1988, pp. 33, 39-40; PEINADO ESPINOSA 2011.

²⁸ PALLECCHI 2002, p. 33.

²⁹ BAATZ 1977, p. 155. Concerning the *mortaria* used in Greece, cf. the last VILLING 2009; VILLING, PEMBERTON 2010, with previous bibliography.

³⁰ For a discussion of the ancient sources about the *mortarium*, cf. PALLECCHI 2002, pp. 34-39; for a recent summary of the current state of the studies about these materials, cf. FRAZZONI 2017, pp. 25-27.

pottery objects and building materials. These are factories characterised by a high degree of organisation and productivity, able to achieve a good level of standardisation of the morphological aspects of the products, and to guarantee a widespread distribution along the main routes of the Mediterranean trade³¹. Their management, which seems characterised as quite a real commercial enterprise, it is often attributable, in a direct or indirect way, to some of the most important urban and central-Italic families and, in certain periods, it witnesses the direct interest of some members of the imperial family³².

While the interest of these families and their commercial endeavours in the production of amphorae and *dolia* is easily justified when thinking at the fundamental role of these containers in the exported range of food products (which constituted an important segment of the production and commercial economy), and while the interest in the production of bricks and roof tiles is likely related to the great building transformations which radically transformed the character of the major Roman cities in the same years, the reason that brought the big commercial enterprises to show interest in the production and commercialisation, even at wide range, of the *mortaria*, is less evident.

In fact, the *mortarium* is a very simple product, whose creation – at least in the case of samples of small and medium size, which absolutely are the most diffused – should not have required special operational skills. From this perspective, the presence of *mortaria* of central-Italic production in the most remote areas of the Roman Empire appears curious at the very

³¹ For the diffusion of the urban *opus doliare*, cf. STEINBY 1981; for that of the *mortaria* of central-Italic production, cf. PALLECCHI 2002, pp. 49-53.

³² HELEN 1975; SETÄLÄ 1977; STEINBY 1982.

least, also considering that, from the economic point of view, to set specific production lines up in areas close to where the objects were sold would have been more convenient, in theory, than organising the export and the long-distance transport. Moreover, the *mortaria* are rather bulky objects, characterised by a remarkable weight in comparison to that of other pottery products: by and large, their export seems difficult to justify as an outcome of a casual selection on the basis of a setting-up of additional loads or return loads on the big transport ships. On the contrary, the wide diffusion of these products seems rather to prove a very precise economic choice³³.

A further interesting element of consideration is constituted by the fact that some stamps are often present on the rim of the *mortaria* of central-Italic production. The marking of the amphorae is likely in relation to their capacity and sturdiness, and constitutes a guarantee for the buyer compared to the quantity of the product contained inside and to the quality of the container; in the same way, the marking of building materials can be related both to the dimensions of the products and to their quality³⁴. The reasons behind the marking of the *mortaria* appear of

³³ This could also offer an explanation about the particular composition of the load of the shipwreck D di Cap Dramont, almost exclusively composed by *mortaria* from central-Italic production. About this context, cf. JONCHERAY 1972; JONCHERAY 1973; JONCHERAY 1974.

³⁴ In this meaning, cf. MANACORDA 1989, p. 449; AUBERT 1993, pp. 178-180; MANACORDA 1993 pp. 38-40; AUBERT 1994, pp. 234-235. As regards the amphorae, cf. anche TCHERNIA 1986; instead, concerning the *firmitas* of the building materials see the unambiguous evidence by Vitruvius (Vitr. 2.8.19). More generally, as regards of the different meanings of the marking, cf. MANACORDA 2000. As regards the interpretation of the function of the stamps chiefly in relation to the regulation of the management procedures of the production process, cf. HELEN 1975, pp. 108-109; STEINBY 1982, p. 230; STEINBY 1993, p. 13-14; STEINBY 1993b, p. 141; GOMEZEL 1996, p. 88; DE MARCHI 1997, pp. 540-547. On this topic, cf. also the summary in GASPERONI 2003, pp. 56-68.

less immediate identification instead. In the case of a kitchen utensil, sold as a tool and not as a container of goods, indeed it can be imagined that the dimensional aspects fulfilled, all things considered, a limited role, which could hardly justify their marking by itself. In the same way, it seems difficult to accept that the marking of the *mortaria* can be simply explained away with the need to guarantee the robustness, which should also constitute a feature of primary importance for these utensils.

The existence of commercial strategies that had organised the export of *mortaria* towards the major markets of the Mediterranean Sea³⁵ probably constitutes a good clue that the final price that these products could have on their destination markets must have been quite high, and also able to compensate, beyond the cost of the raw material and the artisan labour, that of transport and commercial brokerage while balancing out the risk of the venture.

Then, the marking could have responded to a need of rendering these products easily recognisable on the market, distinguishing them from similar utensils of local production or, in any case, that originated from other areas. From this perspective, it could also be deduced the interest for the production of these objects on the part of the big Roman commercial enterprises, and that of the *negotiatores* who guaranteed the transport and the commercialisation towards the furthest markets of the Mediterranean Sea.

Instead, the reason of the success of these products still remains inexplicable and, even though currently we do not have available facts that can allow us to resolve the question in a definitive way, one wonders

³⁵ For the diffusion of the centre-italic *mortaria* cf., among others, PALLECCHI 2002, pp. 46-53.

if the success of the central-Italic *mortaria* between the 1st and 3rd centuries AD is not somehow connected with the events that characterises the cultural, political and military history of those times. Ultimately, those are centuries during which Rome is constantly in contact with different populations, cultures and traditions, which she partially assimilates and partially rejects, forced each time to design strategies of cultural management – beyond military and political ones – that are able to establish and maintain control over the territories. Particularly, one wonders whether it is not possible to imagine that, in this period, the central-Italic *mortarium* has come to take on a renewed symbolic role compared to the one it had fulfilled in Greece towards Asia Minor, then coming to identify with Roman culinary tradition and, through it, Roman culture and traditions in general.

If that were the case, its presence, its usage and eventually its display inside the romanised areas could have acquired strong connotations from the cultural, political and social perspective. Its diffusion on the markets of the furthest areas of the Empire could, in other words, constitute a real and typical cultural operation, which would justify the marking of these products and make the cost bearable, also shedding a new light on why important members of the imperial family were interested in their production and marking³⁶.

³⁶ For a different interpretation, cf. AGUAROD OTAL 1991, p. 152. Built on an analysis carried out by J.-P. Joncheray in the context of the investigations on the site of the shipwreck D di Cap Dramont, the scholar formulates an explanation of the marking of the *mortaria* depending on the ways of their commercialization. In fact, according to J.-P. Joncheray, the stamped *mortaria*, when they preserved their original position, were located at the top of the piles of non-stamped *mortaria* in the load of the shipwreck. This examination allows C. Aguarod Otal to envisage that the marking of the *mortaria* was used, during the transport and the delivery of the products, to identify batches of

The findings at Nora seem to fit well in this panorama, where it appears rather plausible that the presence of the *mortaria* can be related to the process of gradual cultural Romanisation of the town élites. Its discovery under the foundation layers of the Little Baths, in particular, probably represents the clue of the presence in the area of a domestic context which might be interpreted as a rather wealthy one, which the process of gradual, cultural Romanisation of the town élites might have already seeped through.

S.P.

materials produced by different workshops. Nevertheless, even in this case I am under the impression that the peculiarity of these products is indirectly confirmed, strong enough to impose a separation of the different batches during the transportation phase.

BIBLIOGRAPHY

AGUAROD OTAL 1991: C. Aguarod Otal, *Cerámica Romana importada de cocina en la Tarraconense*, Zaragoza 1991.

AUBERT 1993: J.-J. Aubert, *Workshop managers*, in W.V. Harris (ed.), *The Inscribed Economy*, Ann Arbor 1993, pp. 171-181.

AUBERT 1994: J.-J. Aubert, *Business managers in ancient Rome. A social and economic study on institores, 200 b.C. - a.D. 250*, Leiden 1994.

BAATZ 1977: D. Baatz, *Reibschale und Romanisierung*, in *ReiCretActa* 17-18, 1977, pp. 147-158.

BATS 1988: M. Bats, *Vaisselle et alimentation à Olbia de Provence (v. 350-v. 50 av. J.-C.): modèles culturels et catégories céramiques*, in *RANarb Suppl.* 18, 1988.

BOLZONI 2018: G. Bolzoni, *Due contesti tardorepubblicani dal quartiere delle Terme Centrali*, in *Quaderni Norensi* 7, 2018, pp. 83-90.

BOLZONI 2020: G. Bolzoni, *Ceramica non troppo comune: il microcosmo delle ceramiche da cucina dell'area E di Nora*, in *Lanx* 12, 2019 (2020), pp. 226-252.

BOLZONI, FRONTORI, PANERO 2018: G. Bolzoni, I. Frontori, E. Panero, *Problemi di definizione e cronologia nello studio delle ceramiche comuni*, in B.M. Giannattasio (ed.), *La ceramica della Sardegna meridionale. Questioni aperte e nuove prospettive*, *Quaderni di Archeologia – Genova (QUAGE)* 3, 2018, pp. 73-98.

CAMPANELLA 2008: L. Campanella, *Il cibo nel mondo fenicio e punico d'occidente. Un'indagine sulle abitudini alimentari attraverso l'analisi di un deposito urbano di Sulky in Sardegna*, Pisa-Roma 2008.

CAMPANELLA 2009: L. Campanella, *La ceramica da cucina fenicia e punica*, in J. Bonetto, A.R. Ghiotto, G. Falezza (eds.), *Il foro romano. Storia di un'area urbana dall'età fenicia alla tarda antichità. 1997-2006*, II.1, Padova 2009, pp. 295-358.

CANEPA 2003a: C. Canepa, *Ceramica comune romana (CC)*, in B.M. Giannattasio (ed.), *Nora. Area C. Scavi 1996-1999*, Genova 2003, pp. 137-202.

CANEPA 2003b: C. Canepa, *Ceramica a vernice rossa interna (VRI)*, in B.M. Giannattasio (ed.), *Nora. Area C. Scavi 1996-1999*, Genova 2003, pp. 203-208.

DE MARCHI 1997: C. De Marchi, *Bolli laterizi: domini, conductores, officinatores*, in F. Filippi (ed.), *Alba Pompeia. Archeologia della città dalla fondazione alla tarda antichità*, Alba 1997, pp. 540-547.

FRAZZONI 2017: L. Frazzoni, *Mortaria*, in M. Milella, S. Pastor, L. Ungaro (eds.), *Made in Roma. Marchi di produzione e di possesso nella società antica*, Roma 2017, pp. 15-17.

GASPERONI 2003: T. Gasperoni, *Le fornaci dei Domitii. Ricerche topografiche a Mugnano in Teverina*, Viterbo 2003.

GOMEZEL 1996: C. Gomezel, *I laterizi bollati romani del Friuli-Venezia Giulia (Analisi, problemi e prospettive)*, Portogruaro 1996.

HELEN 1975: T. Helen, *Organization of Roman brick production in the first and second centuries A.D.*, Helsinki 1975.

JONCHERAY 1972: J.-P. Joncheray, *Contribution à l'étude de l'épave Dramont D, dite des pelvis*, in *CahASubaqu* 1, 1972, pp. 11-34.

JONCHERAY 1973: J.-P. Joncheray, *Contribution à l'étude de l'épave Dramont D (campagnes 1970-1971)*, in *CahASubaqu* 2, 1973, pp. 9-47.

JONCHERAY 1974: J.-P. Joncheray, *Étude de l'épave Dramont D (campagnes 1972)*, in *CahASubaqu* 3, 1974, pp. 21-48.

LEOTTA 2005: M-C. Leotta, *Ceramica a vernice rossa interna*, in D. Gandolfi (ed.), *La ceramica e i materiali di età romana. Classi, produzioni, commerci e consumi*, Bordighera 2005, pp. 114-120.

MANACORDA 1989: D. Manacorda, *Le anfore dell'Italia repubblicana: aspetti economici e sociali*, in *Amphores romaines et histoire économique: dix ans de recherche. Actes du colloque (Sienne 1986)*, Rome 1989, pp. 443-467.

MANACORDA 1993: D. Manacorda, *Appunti sulla bollatura in età romana*, in W.V. Harris (ed.), *The inscribed economy: production and distribution in the Roman Empire in the light of instrumentum domesticum*, in *JRA Suppl.* VI, 1993, pp. 37-54.

MANACORDA 2000: D. Manacorda, *I diversi significati dei bolli laterizi: appunti e riflessioni*, in P. Boucheron, H. Broise, Y. Thébert (eds.), *La brique antique et médiévale. Production et commercialisation d'un materia. Actes du colloque International (Fontenay-Saint Cloud 1995)*, Rome 2000, pp. 17-159.

MATTEUCCI 1987: P. Matteucci, *L'uso dei mortai di terracotta nell'alimentazione antica*, in *StClOr* 37, 1987, pp. 239-277.

MAZZOCHIN 2009: S. Mazzochin, *La ceramica comune romana*, in J. Bonetto, A.R. Ghiotto, G. Falezza (ed.), *Il foro romano. Storia di un'area urbana dall'età fenicia alla tarda antichità. 1997-2006*, II.2, Padova 2009, pp. 699-731.

MOREL 1981: J.-P. Morel, *Céramique campanienne: les formes*, Roma 1981.

PALLECCHI 2002: S. Pallecchi, *I mortaria di produzione centro-italica. Corpus dei bolli*, Roma 2002.

PALLECCHI 2019: S. Pallecchi, *Ismarus e gli altri. Nascita ed evoluzione di un sistema produttivo*, in M. Modolo, S. Pallecchi, G. Volpe (eds.), *Una lezione di archeologia globale. Studi in onore di Daniele Manacorda*, Bari 2019, pp. 189-192.

PECCI 2008: A. Pecci, *Analisi dei residui organici assorbiti nei materiali dell'US 500*, in L. Campanella, *Il cibo nel mondo fenicio e punico d'occidente. Un'indagine sulle abitudini alimentari attraverso l'analisi di un deposito urbano di Sulky in Sardegna*, Pisa-Roma 2008, pp. 260-263.

PEINADO ESPINOSA 2011: M.V. Peinado Espinosa, *Mortaria baeticae. La producción de morteros en la Bética durante el alto imperio*, in *CuadGranada* 21, 2011, pp. 283-302.

ROTROFF 2006: S.I. Rotroff, *Hellenistic Pottery: The Plain Wares, Athenian Agora XXXIII*, Princeton 2006.

ROTROFF 2015: S.I. Rotroff, *The Athenian kitchen from the early Iron Age to the Hellenistic Period*, in M. Spataro, A. Villing (eds.), *Ceramics and Culture: The archeology and science of kitchen pottery in the ancient mediterranean world*, Oxford-Philadelphia 2015, pp. 180-189.

SETÄLÄ 1977: P. Setälä, *Private domini in Roman brick stamps of the Empire, an historical and prosopographical study of landowners in the district of Rome*, ActaInstRomFin IX, 2, Helsinki 1977.

STEINBY 1981: M. Steinby, *La diffusione dell'opus doliare urbano*, in A. Giardina, A. Schiavone (eds.), *Società romana e produzione schiavistica. II. Merci, mercati e scambi nel Mediterraneo*, Roma-Bari 1981, pp. 237-245, 292.

STEINBY 1982: M. Steinby, *I senatori e l'industria laterizia urbana*, in *Epigrafia e ordine senatorio. Atti del Colloquio Internazionale AIEGL (Roma 1981)*, I (Tituli, 4), Roma 1982, pp. 227-237.

STEINBY 1993a: M. Steinby, *Ricerche sull'industria doliare nelle aree di Roma e di Pompei: un possibile modello interpretativo?*, in C. Zaccaria (ed.), *I laterizi di età romana nell'area nord-adriatica*, Roma 1993, pp. 9-14.

STEINBY 1993b: M. Steinby, *L'organizzazione produttiva dei laterizi: un modello interpretativo per l'instrumentum in genere?*, in W.V. Harris (ed.), *The Inscribed Economy*, Ann Arbor 1993, pp. 139-144.

TCHERNIA 1986: A. Tchernià, *Le vin de l'Italie romaine*, Rome 1986.

TESSERIN 2018: C. Tesserin, *Nora. Area C: i materiali di età repubblicana e primo-imperiale dal pozzo del vano A30*, in *Quaderni Norensi* 7, 2018, pp. 39-44.

TUBALDI 2009-2010: V. Tubaldi, *L'olla: pentola e non solo. Analisi dei suoi usi attraverso le fonti letterarie romane*, in *AnnMacerata* XLII-XLIII, 2009-2010, pp. 17-29.

VILLING 2009: A. Villing, *The daily grind of ancient Greece: mortars and mortaria between symbol and reality*, in A. Tsingarida (ed.), *Shapes and Uses of Greek Vases /7th – 4th centuries B.C.*, Bruxelles 2009, pp. 319-334.

VILLING, PEMBERTON 2010: A. Villing, E.G. Pemberton, *Mortaria from Corinth. Form and Function*, in *Hesperia* 79, 2010, pp. 555-638.



Fig. 1. Nora. In the foreground, the Western District (picture by E. Santoro).

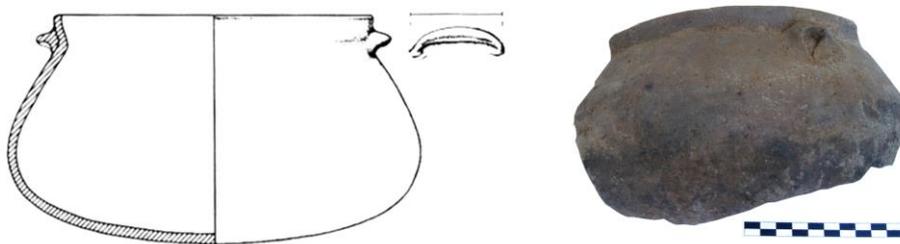


Fig. 2. Nora: *caccabus* (figure by B.M. Giannattasio).



Fig. 3. Nora: the well (Area C, room A30) (picture by B.M. Giannattasio).

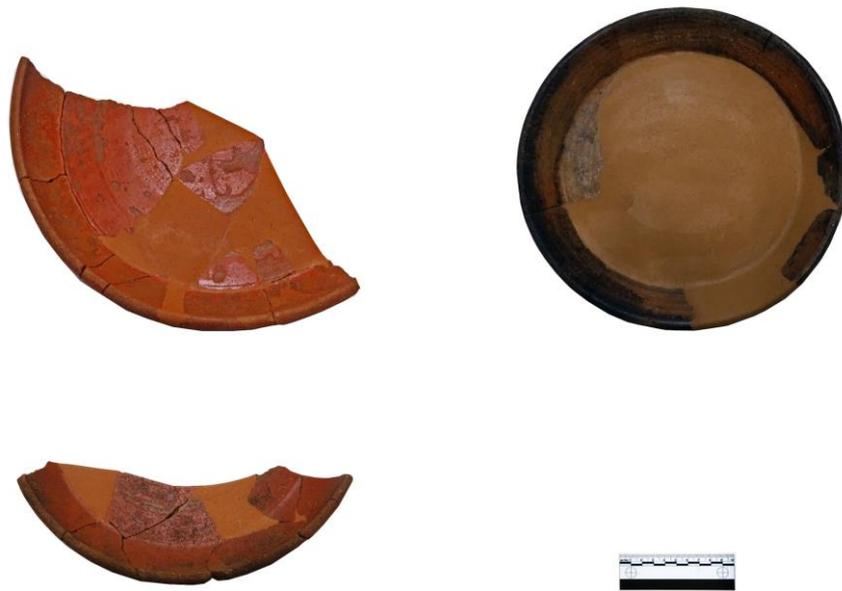


Fig. 4. Nora: *patinae* (picture by B.M. Giannattasio).

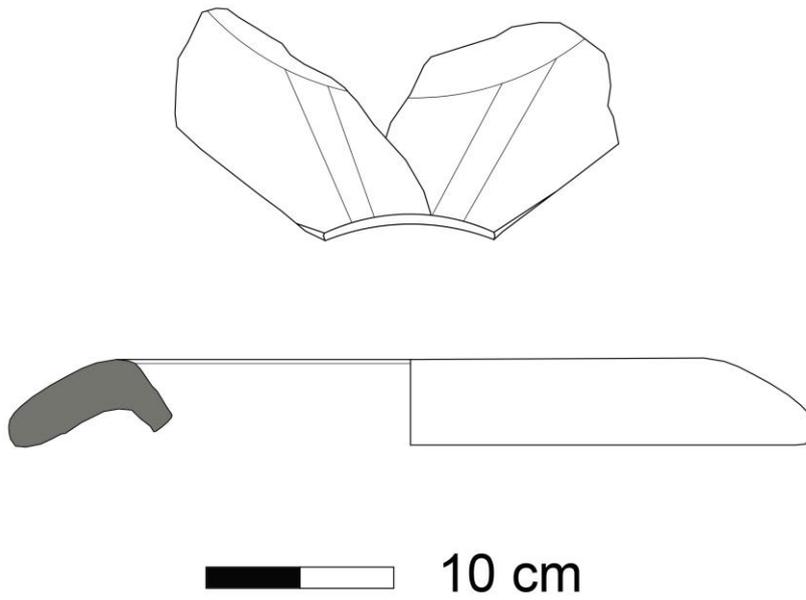


Fig. 5. Nora: *mortarium* from PTF 28039 (figure by S. Pallecchi).

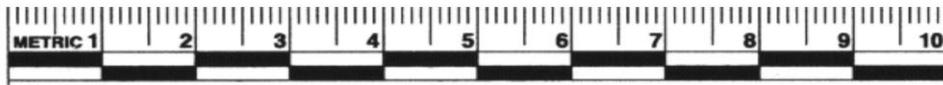


Fig. 6. Nora: stamp on the rim of the *mortarium* from PTF 28039 (picture by E. Santoro).