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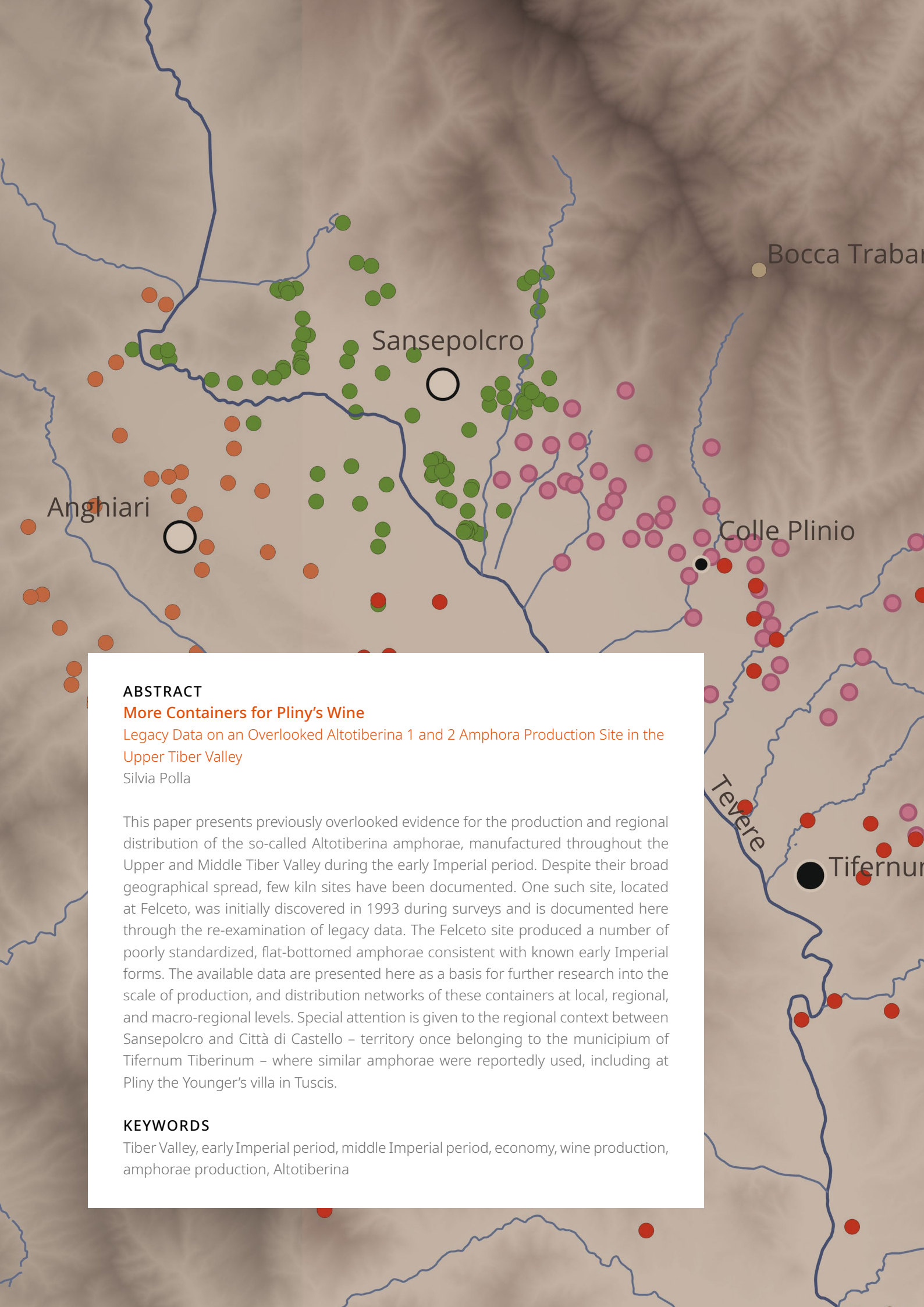
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ABSTRACT

More Containers for Pliny's Wine

Legacy Data on an Overlooked Altotiberina 1 and 2 Amphora Production Site in the Upper Tiber Valley

Silvia Polla

This paper presents previously overlooked evidence for the production and regional distribution of the so-called Altotiberina amphorae, manufactured throughout the Upper and Middle Tiber Valley during the early Imperial period. Despite their broad geographical spread, few kiln sites have been documented. One such site, located at Felceto, was initially discovered in 1993 during surveys and is documented here through the re-examination of legacy data. The Felceto site produced a number of poorly standardized, flat-bottomed amphorae consistent with known early Imperial forms. The available data are presented here as a basis for further research into the scale of production, and distribution networks of these containers at local, regional, and macro-regional levels. Special attention is given to the regional context between Sansepolcro and Città di Castello – territory once belonging to the municipium of Tifernum Tiberinum – where similar amphorae were reportedly used, including at Pliny the Younger's villa in Tuscis.

KEYWORDS

Tiber Valley, early Imperial period, middle Imperial period, economy, wine production, amphorae production, Altotiberina

More Containers for Pliny's Wine

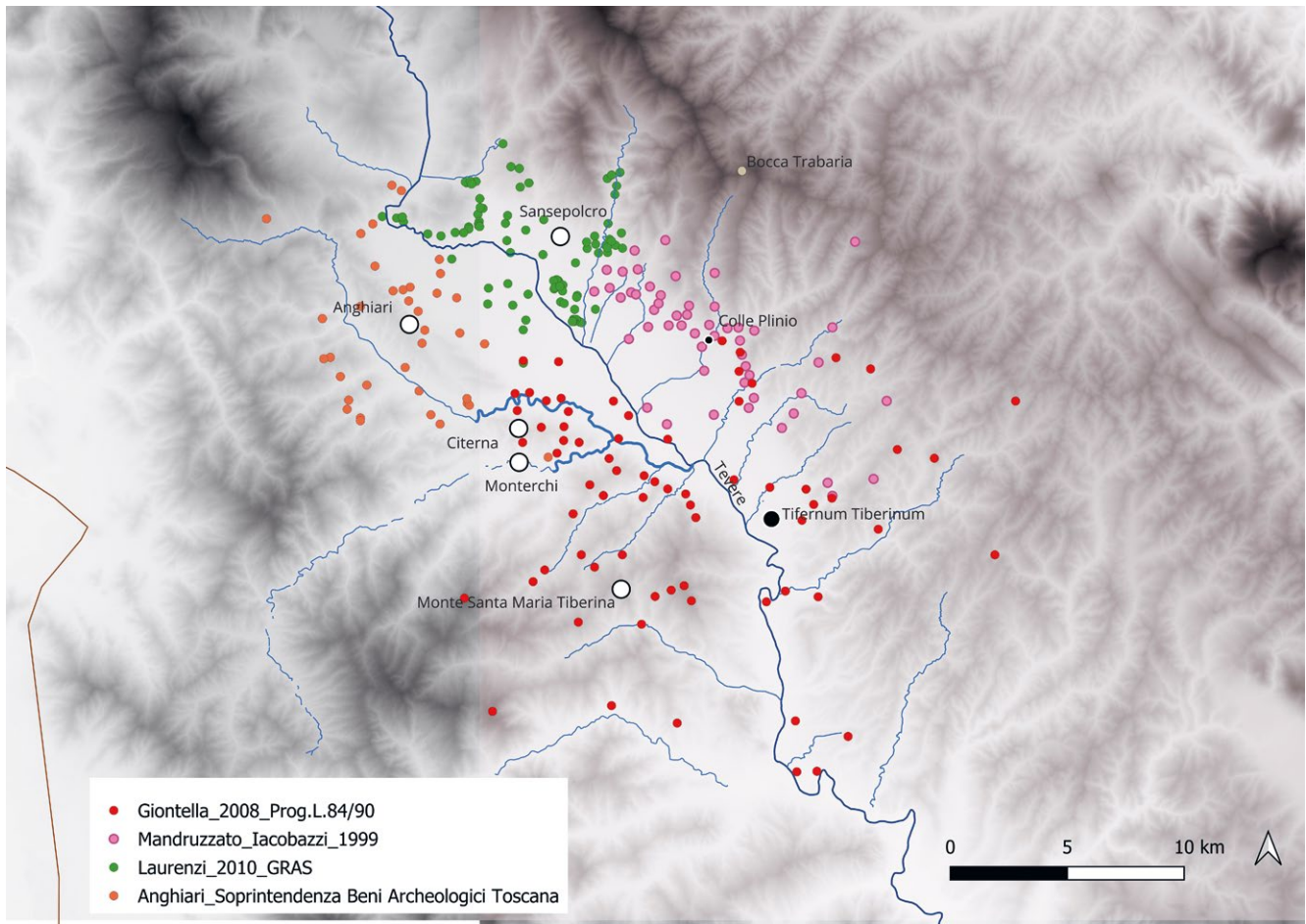
Legacy Data on an Overlooked Altotiberina 1 and 2 Amphora Production Site in the Upper Tiber Valley

Introduction

¹ As part of the Upper Tiber Valley Survey (Freie Universität Berlin)¹, legacy data² from rural sites across both the Tuscan and Umbrian sectors of the territory connected to the municipium of Tifernum Tiberinum have been systematically collected, digitized, and mapped (Fig. 1). For the first time, archaeological evidence of the northern part of the Upper Tiber Valley has been considered conjointly, transcending modern administrative boundaries. This paper brings to light previously overlooked evidence for the production and regional distribution of the so-called Altotiberina amphorae – ceramic containers manufactured across the Upper and Middle Tiber Valley during the early Imperial period. The production site at Felceto, first identified in 1993, is examined through the reuse of legacy data. The assemblage from Felceto includes a number of poorly standardized, flat-bottomed amphorae, which can be aligned with known early Imperial forms and contextualized within the economic framework of early to mid-Imperial Central Italy.

1 <<https://www.geschkult.fu-berlin.de/e/klassarch/forschung/projekte/upper-tiber-valley-survey/index.html>> (01/08/2026).

2 The legacy data referred to the Umbrian part of the Upper Tiber valley consist in a gazetteer of 70 sites identified and documented in 1993 (Prog. L. 84/90) during topographical investigations carried out by Archeostudio in the three Umbrian municipalities of Città di Castello, Citerna and Monte S. Maria Tiberina, under the scientific direction of the University of Perugia and Soprintendenza Archeologica dell'Umbria. Preliminary summaries are published in Bonomi Ponzì 1999 and Giontella 2008. I would like to thank the then Superintendent Elena Calandra and the then responsible functionary Marisa Scarpignato for allowing the access and full digitalization of the archival data collected within the framework of the Prog. L. 84/90 (Progetto Legge 84/1990 per la salvaguardia dei Beni culturali a rischio. Soprintendenza Archeologica per l'Umbria – Archeostudio) during my research stay at the Soprintendenza archeologica dell'Umbria in September 2015. The data referring to the Tuscan part of the region derive from the surveys conducted by the GRAS (Gruppo Ricerche Archeologiche di Sansepolcro) and were mapped and published by Gian Piero Laurenzi (Laurenzi 2010). A map of the sites identified in the area around Sansepolcro was made kindly available by Gian Piero Laurenzi. I would like to thank here also the Gruppo Ricerche Archeologiche di Sansepolcro (GRAS) and the CeSQ (Centro Studi sul Quaternario). Additionally, a digital georeferenced archaeological map of the rural sites in the comune of Anghiari (by G. Pocobelli) and the related database has been kindly provided by the Soprintendenza Archeologica della Toscana. I would like to thank the then responsible functionary Michele Bueno, and the then Superintendent Andrea Pessina for sharing the available legacy data. I would also like to thank the Superintendent of the Soprintendenza ABAP per l'Umbria Francesca Valentini, and the responsible functionary Giorgio Postriotti for the permit of publishing the material in Fig. 4.



1

Fig. 1: Map of rural sites in the considered area

Early and Middle Imperial Inland Economy

2 From the Late Republic onwards, the emergence of villas played a key role in transforming the rural landscape of Central Italy³. In the Upper Tiber Valley, whereas village settlements were predominantly linked to cereal cultivation, mixed farming, and extensive viticulture (*arbustum*), villas and farms situated along the foothills appear to have specialized in more intensive wine production (*vinea*)⁴. The best-documented example of an early Imperial villa complex is undoubtedly the villa in Tuscis owned by Pliny the Younger in the territory of Tifernum Tiberinum⁵, the municipium of which he was patronus and benefactor. Pliny provides a detailed account of this estate in his letters (Plin. Ep. 5, 6, dated to A.D. 105/106)⁶. The villa, built on the site of an earlier Augustan-period villa attributed to Marcus Granius Marcellus⁷, served as the administrative and productive center of a larger estate comprising vineyards, arable land, and meadows. Although viticulture formed the core of production, the estate also cultivated cereals – both to sustain the *coloni* likely residing in nearby villages (*vici*), small farms, or rural huts, and to generate surplus for export, transported to Rome via the seasonally navigable Tiber River⁸. The region was strategically located to serve the Roman market

3 Marzano 2007; Terrenato 2012; Terrenato 2019.

4 Braconi 2008, 93.

5 The villa is located 8 km north to Tifernum Tiberinum, on a south-facing terrace at the foot of the eastern hills 4 km west to the Tiber. *Ville e insediamenti* 1983, 12–44; Braconi – Uroz Sáez 1999.

6 Sherwin-White 1966.

7 Braconi – Uroz Sáez 1999; Braconi 2003; Marzano 2007, 110 f.

8 Patterson 1987, 121.

and likely benefited from its river connectivity to the capital⁹. At the same time, the area probably remained vulnerable to fluctuations in supply and demand, price dynamics, and market competition within the city of Rome¹⁰. The rural population of Pliny's estate primarily consisted of tenant farmers, with agricultural operations organized through sharecropping agreements in which rents were paid in kind¹¹. The extent to which the Italian agrarian economy began to stagnate from the late 1st cent. A.D. remains a matter of scholarly debate¹². Contributing factors may include reduced investment in Italian landholdings due to increasing competition from the provinces and a general decline in elite engagement with the peninsula's agricultural sector during the late 1st and early 2nd cent. A.D. – developments that may have had significant consequences for the dependent peasantry¹³. Both N. Purcell and A. Tchernia emphasize the significance of Italian wine production during the Imperial period¹⁴. Pliny's villa features a new *calcatorium* that is twice the size of its predecessor¹⁵, a fact interpreted by A. Marzano as evidence of increased wine production on the estate¹⁶. Furthermore, Pliny's villa was supplied with provincial olive oil, olives, and *garum* from Spain and North Africa¹⁷. Excavations by the Soprintendenza Archeologica dell'Umbria at the nearby rural site of Panicale have uncovered a large wine cellar measuring 43 × 5.50 m, capable of housing over thirty dolia. This complex is considered part of the *pars fructuaria* of a *villa rustica* dedicated to wine production and storage¹⁸. To reconcile the sometimes contradictory written and archaeological evidence, C. Panella interprets the 2nd cent. A.D. as a period of transformation, viewing Italian wine production as increasingly characterized by regionalization and local self-consumption, driven by growing demand in local markets¹⁹. This development was influenced by rising consumption in Rome and the provinces, resulting in reduced availability of provincial wines for export, compounded perhaps by the decline of Campanian wine production following the eruption of Vesuvius²⁰. Consequently, high-yield vineyards for the Italic market expanded into inland areas, including the Upper Tiber Valley. Closely linked to the emergence of early Imperial intensive surplus-oriented farming – especially the intensification of wine production for export utilizing free and semi-free labor²¹ – was the local industrial-scale production of wine containers.

9 Whitehead 1994, 188.

10 Patterson 1987, 123.

11 Dyson 1992, 219–221; Marzano 2007, 112 f.

12 Pliny reports economic difficulties affecting his estates, attributing them to poor harvests and mismanagement, and refers to a »penuria colonorum« (shortage of tenant farmers, Plin. Ep. 3, 19; Launaro 2011, 181) as well as, more broadly, to the »iniquitas temporum« – the hardships of the times (Patterson 1987, 119, 122). Despite these challenges, Pliny describes the reconstruction of the temple of Ceres on his estate, adding a portico to the original sacellum which had become too small. The local festival dedicated to Ceres attracted a large number of visitors, drawn by both religious and commercial activities (Plin. Ep. 9, 39; Dyson 1992, 127). Marzano 2007, 183 further notes that this religious festival, held at the end of September and attended by people from the entire region (»regioe tota«), likely functioned as a market site. It likely also served as a marketplace for the trade of Pliny's wine.

13 Launaro 2011, 180 f.

14 Purcell 1985; Tchernia 1986. See also Tchernia 2016.

15 Braconi – Uroz Sáez 1999, 35.

16 Marzano 2007, 114.

17 Uroz Sáez 1999 and Uroz Sáez 2008.

18 Scarpignato 2004.

19 Panella 1989, 163 f.

20 Tchernia 1986, 255.

21 Molina Vidal 1999, 231.

Flat-bottom Wine Amphorae in the Upper Tiber Valley

3 Pliny's account of riverine wine trade at the beginning of the 2nd cent. A.D. finds archaeological corroboration in the widespread distribution of a new type of wine container²². This amphora²³, characterized by a flat bottom and smaller dimensions, was produced from the mid-1st cent. A.D. (Tiberian-Claudian period) through to the end of the 2nd cent. A.D. in Central Italy²⁴. The phenomenon of inland amphora production for the trade of local wine in Central Italy during the Imperial period remained largely unknown until the discovery of kilns at Spello and Empoli²⁵. Within the context of Ostia, these containers have been classified as Ostia II, 521/Ostia III, 369–370²⁶. They were exported in large quantities primarily to Rome, considered their preferential market²⁷, as well as to central inland Italy, with peak distribution occurring from the Flavian to Trajanic-Hadrianic periods – that is, from the last third of the 1st cent. B.C. to the first half of the 2nd cent. A.D.²⁸. The South Etruria Survey highlights the predominance of Italian amphorae during the early and mid-Imperial periods (A.D. 0–250), with amphorae of Italian origin accounting for 66.2% of the assemblage. Among these, the so-called Spello Type amphorae – named after the site where their production was first identified²⁹ – are by far the best represented³⁰. The morphological variability of these amphorae has been systematically documented by E. Lapadula in 1997, particularly with respect to rim types which include everted, tapered, and rounded forms³¹. A diverse range of fabric types has also been identified³², suggesting multiple production centers within the Middle and Upper Tiber Valley (Fig. 2)³³. It is now well established that the production of flat-bottom containers during the 1st and 2nd cent. A.D. was closely linked to the development of intensive agriculture and the expansion of wine production, as well as

22 Plin. Ep. 8, 2.

23 Panella 1989, 143–146. 156.

24 The production period likely extended into the late second or early 3rd cent. (Carandini 1989, 518; Panella 1989, 143–146; Martin 1999, 333–339). At the villa of Lugnano in Teverina, small-sized ›Spello‹ amphora derivatives are the most common type found in contexts dating to the 5th cent. A.D.; however, the contexts exhibit a high degree of residuality. These amphorae were eventually replaced by wooden barrels (Tchernia 1986, 285–292; Panella 1989, 162 f.). Nonetheless, at Forum Novum, there is evidence for the continued use of pottery transport containers during the Late Antique period, including some locally produced vessels typologically derived from early imperial ›Spello‹ amphorae, which remained in circulation until the late 6th or even 7th cent. (Patterson et al. 2005).

25 Aldini 1978; Tchernia 1986, 253–255. 258; Manconi 1989, 590–593; Panella 1989, 148. To this respect, see also Patterson et al. 2005.

26 Panella 1989, 143–146; Rizzo 2014, 130. Hereafter, Ostia amphora types are cited according to their corresponding catalog numbers in the Ostia-volumes.

27 In the excavation contexts of the Via Sacra Nova (A.D. 90–110), these amphorae account for 24.8% of the assemblage (Panella 1992, 198 fig. 6 c); at the Meta Sudans (A.D. 130–150), they represent 26.1% (Panella 1992, 199 fig. 7). For a comprehensive overview, see Lapadula 1997. According to Rizzo 2003, 160, the most numerous amphorae in circulation during the Flavian period are Italic types, comprising 28.79% of the total. The most widespread type overall – constituting over 18% of all recorded finds – is the amphora from the middle and lower Tiber Valley (Ostia III, 369–370).

28 Panella 1989.

29 The kiln was related to a suburban villa of the municipium of Hispellum, located on the Via Flaminia on the left bank of the Tiber: Manconi 1989, 590 tab. III, no. 19. See Lapadula 1997, 149.

30 Patterson et al. 2005.

31 Lapadula 1997, 132 fig. 3. Additional studies on morphological variability include Rizzo 2003 and Martin 1999, 333 f.

32 Manconi 1989, 590 f.; Lapadula 1997; Arthur 1997, 314; Martin 1999, 334–339, on nine fabrics of ›Spello‹ amphorae from Lugnano in Teverina and Poggio Gramignano; Speranza 2007, 301 on Scoppieto; mineralogical and petrographic analyses by Schiavon – Capelli 2014 in Rizzo 2014; Schiavon – Capelli 2014, 372. 376 on the petrography of flat-bottom amphorae Ostia III, 369–370/Ostia VI, 41. 48. 56.

33 On the existence of different production centers in the Tiber valley, see Panella 1989, 144: «Preferisco mantenere per queste anfore la denominazione data nella pubblicazione dello scavo delle Terme del Nuotatore di Ostia (Ostia II, 521/Ostia III, 369–370), piuttosto che utilizzare quella derivata dalla località in cui sono comparsi i forni (›anfora di Spello‹), dal momento che alcuni dati (quali le paste ceramiche di cui si parlerà in seguito) portano a ritenere che siano esistiti diversi centri di fabbricazione forse anche in altre zone dell'Italia centrale interna, lungo la valle tiberina.»

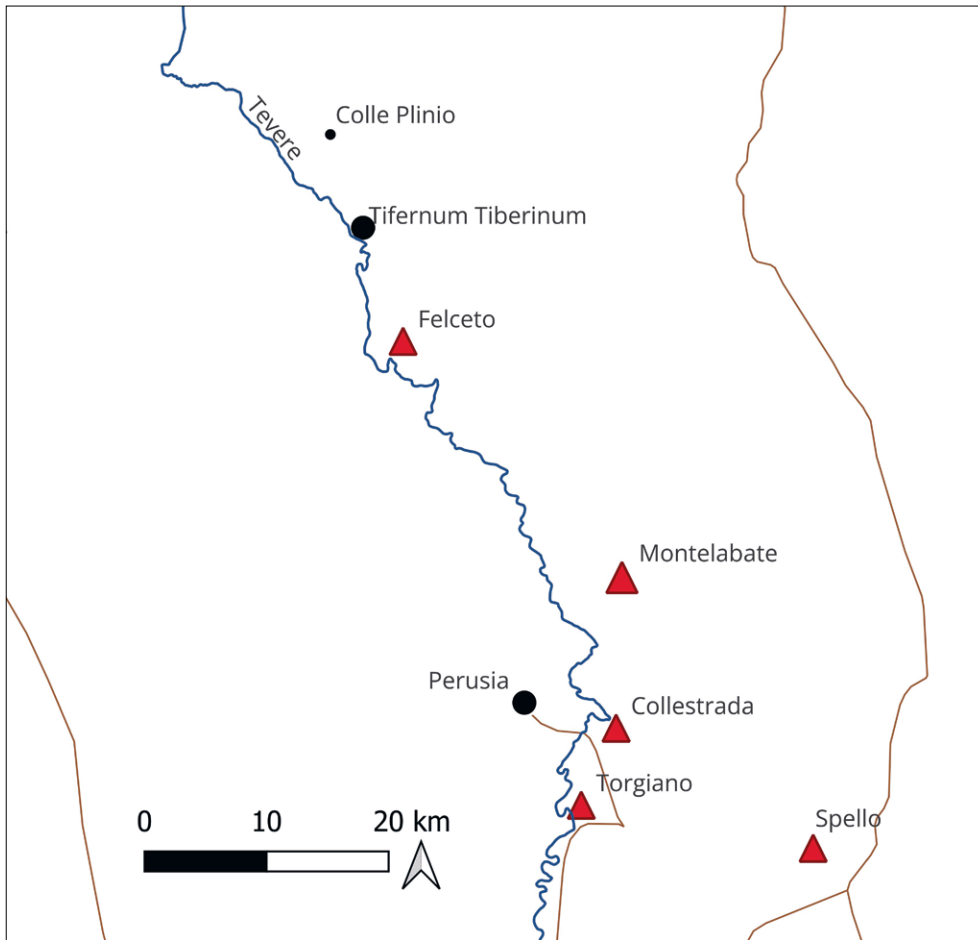


Fig. 2: Distribution of currently identified Altotiberina/Spello amphora kilns in the Upper Tiber Valley

2

to the inland distribution of these goods via mixed land-water transport, likely protected by vegetable fibers or straw³⁴. These containers primarily supplied both Rome and the broader regional Italian market. Navigable rivers such as the Tiber – and the Arno, in the case of ›Empoli‹ amphorae³⁵ – served as the principal channels for regional distribution³⁶. The emergence of these new production patterns has been associated with a shift toward the mass consumption of lower-quality regional wines³⁷.

4 Flat-bottomed amphorae of the Imperial period (›Spello‹ Type: Ostia II, 521; Ostia III, 369–370; ›Forlimpopoli‹ Type: Ostia I, 451/Ostia IV, 440–441 and ›Empoli‹ Type: Ostia IV, 279) are the result of a shared productive tradition (koine) which affected the whole of Central Italy. ›Spello‹ Type amphorae were produced throughout Umbria as well as in other areas of Central Italy and especially in coastal northern Etruria³⁸.

5 J. Molina Vidal³⁹, who originally defined the local early Imperial small-sized flat-bottom amphorae found near Pliny’s villa at San Giustino as Altotiberina 1 and 2,

34 Panella 1989, 158.

35 Regoli 2002, 224 on the ›Empoli‹ amphora and the river transport along the Arno – note a profound transformation in the distribution system of italic wines, where demand appears more fragmented and production centers change.

36 Marzano 2007, 111. Molina Vidal 1999, 104. The river diffusion seems to be corroborated by the much greater diffusion in Rome (25%) than in Ostia (3–14%) (Panella 1973; Panella 1989, 145). Between the late 1st and the 2nd cent. A.D., Tiberine and related wine amphorae represent 6.76% of the wine amphorae from the Flavian period at Ostia, 9.76% in the Trajanic-Hadrianic period, 9.96% in the Hadrianic-Antonine period, and 11.50% in the Late Antonine period (Rizzo 2014, 417 tab. 14).

37 Molina Vidal 2008, 224–226.

38 Del Rio – Cherubini 2023, 372.

39 Molina Vidal 1999, 104–111 figs. 7–9; Molina Vidal 2008, 227 f.

hypothesized that this type of container was produced throughout the entire Upper Tiber Valley⁴⁰. However, a lack of direct evidence for production sites in the immediate vicinity of the villa was noted. At Pliny's villa⁴¹, these containers, with a modest capacity of 15–20 liters⁴², are characterized by small-diameter rims. The handles, featuring rectangular or oval cross-sections of varying thickness, display two or three grooves on their external surfaces and are positioned beneath the rim, extending to or beyond its height. The vessel walls are thin, and the bottoms are flat, resting on a ring-shaped base measuring 1–2 cm in height and 10–14 cm in diameter. The Altotiberina 2 amphora represents a small-sized flat-bottom container, morphologically akin to the Ostia II, 523 type, distinguished by a diameter of 7–9 cm and circular-section handles with deep grooves⁴³. Based on these morphological traits, Molina Vidal hypothesized that this container functioned as a jug for wine storage and consumption at the household level⁴⁴, as well as for retail sale of Upper Tiber Valley wines. Such small containers are particularly suited to the predominantly young, low-alcohol, and rapidly oxidizing wines of northern Umbria, for which long-term conservation and aging would have been economically unviable⁴⁵. This aligns with a production model focused on quantity over quality⁴⁶. The environmental factors, including soil and climatic conditions, alongside the archaeological evidence of small-sized containers, do not seem to support recent suggestions⁴⁷ that the enlargement of the *cella vinaria* at San Giustino was related to a shift toward fermentation facilities designed (in part) for the production of profitable, long-term stored, high-quality wines⁴⁸.

6 Altotiberina amphorae are believed to have been used for the storage, trade, and possibly consumption of low-quality regional Umbrian wines, such as the *hirtiola* mentioned by Pliny the Elder and Columella who describes changes in color prior to pouring as a sign of wine oxidation⁴⁹. Juvenal also refers to low-quality, low-priced wines from the Tiber Valley, noting that five bottles or jars of wine transported down the Tiber constituted part of the payment for a lawyer's poor services, alongside rancid ham and old onions⁵⁰. Juvenal specifically mentions *lagonae* as the vessels used for transporting such wines⁵¹. Comprehensive documentation and analysis of recently excavated kilns at Montelabate, approximately 27 km northwest of Spello, have been published by L. Ceccarelli in 2017 and 2021⁵². This large workshop complex, consisting of seven kilns – some with a hypothesized production capacity exceeding 1000 amphorae per month⁵³ – produced flat-bottomed amphorae of the ›Spello‹ Type during the early and

40 Modest local production is evidenced by the fabrics already during the Late Republican period with Dressel 1 amphorae (classified as Altotiberina 6), followed by a more intensive production of small-sized Dressel 2–4 amphorae (Altotiberina 8) corresponding to the *Granius* phase of the villa: Molina Vidal 1999, 103–105; Molina Vidal 2008, 219 f. 242–245 pls. II. III. IV. V. These were subsequently replaced, beginning in the Flavian period, by flat-bottom amphorae associated with the Plinian phase.

41 Molina Vidal 1999.

42 In general, the estimated capacity of the ›Spello‹ amphorae corresponds to 13–19/20 liters (Lapadula 1997, 135) with an average capacity of about 17 liters: Rizzo 2003, 149 n. 22.

43 Molina Vidal 1999, fig. 8.

44 Molina Vidal 1999, 104 f. 108 suggests an intermediate function of these amphorae between jugs for the domestic usage and transport containers.

45 Molina Vidal 1999, 108.

46 Purcell 1985; Patterson 1987.

47 Van Oyen 2020, 51–53 on »qualitative differentiation [...] through the segmented process of production and storage« related to longer term storage, with »the least accessible groups of *dolia*« in the elongate storeroom space »creating aged wines of high value and commensurate prices«; see also Dodd 2022, 470.

48 Molina Vidal 2008 indicates ethnographic analogies with large vats for quick distribution.

49 Plin. HN 14, 37; Col. Rust. 3, 2, 28.

50 Juv. 7, 121.

51 Molina Vidal 2008, 226 n. 24.

52 Ceccarelli 2017; Ceccarelli 2021.

53 Ceccarelli 2017, 118.

middle Imperial periods. The amphorae from Montelabate have been classified into eight distinct types, exhibiting limited standardization⁵⁴, and their fabric was characterized using portable X-ray fluorescence (pXRF) analysis⁵⁵. Additionally, two more kilns producing imperial flat-bottom amphorae have been identified at Collestrada (approx. 12 km south of Montelabate) and Torgiano (about 7 km southwest of Collestrada and 20 km west of Spello)⁵⁶.

Evidence of Altotiberina Amphorae Production at Felceto

7 Legacy data from Project L. 84/90, archived at the Soprintendenza Archeologica dell'Umbria, indicate the existence of a kiln for the production of Altotiberina amphorae at Felceto, approximately 10 km from Tifernum Tiberinum. The site is located near a left-bank tributary of the Tiber, less than 2 km from the river's main course. Some preliminary results of fieldwork have been published by L. Bonomi Ponzi and C. Giontella⁵⁷. Both authors report evidence for an amphora kiln at Felceto, which produced flat-bottomed containers found at various sites within the surveyed area, encompassing the three Umbrian comuni of Città di Castello, Citerna, and Monte Santa Maria Tiberina. The archival documentation of the materials collected on site during the 1993 survey (Prog. L. 84/90) is presented here with the aim of integrating data on the production of flat-bottomed wine amphorae in Regio VI (Umbria), thereby contributing to an updated state of the art and providing a basis for further investigation into the scale and modalities of distribution of these containers in the Upper Tiber Valley. Fig. 2 offers an overview map of the kilns currently known in the region⁵⁸ including the evidence at Felceto. According to Giontella (A.V.T. 30), the presence of a kiln at the site of Felceto, initially suggested through oral reports, was substantiated by the significant discovery of fragments belonging to an amphora that is widespread throughout the surveyed territory but not attributable to any known typology⁵⁹. This production, evidently aimed at a local clientele, can be dated to between the 1st and 2nd cent. A.D., based on associated finds from the site. The fieldwork record (Prog. L. 84/90)⁶⁰ describes amphora dumps that appear to be linked to one (or more?) kiln(s). Earth-moving operations carried out in the area in 1993 destroyed the structural remains of one kiln. No direct evidence has emerged for a farm or villa associated with the kiln, neither in the report (Prog. L. 84/90) nor in the published literature. It is worth noting that the kilns of Montelabate and Collestrada also lacked direct connections to a villa or *fundus*, and rather represent industrial installations likely operated on behalf of large landowners or merchants who did not possess their own firing facilities⁶¹. The site, situated in a hilly and forested area at approximately 320 m asl, is characterized by clay-rich soils and access to both water

54 According to Ceccarelli 2017, 129, the low morphological standardization probably indicates that several potters shared the kilns. On low standardization of flat-bottomed ›Spello‹ amphorae see Lapadula 1997, 136 and Lapadula 1997, 132 fig. 3 on ›Spello‹ amphorae rims types.

55 Ceccarelli et al. 2016.

56 Ceccarelli 2021.

57 Bonomi Ponzi 1999, 12 no. 25: ›Felceto: area di fittili e fornace, I–II sec. d.C.‹. Giontella 2008, 369: ›In loc. Felceto (A.V.T. 30) la presenza di una fornace, oltre a essere stata ipotizzata sulla base di notizie orali, è stata supportata dal rinvenimento, cospicuo, di frammenti pertinenti quasi esclusivamente ad un tipo anforico capillarmente diffuso nell'ambito territoriale oggetto della ricerca ma non ascrivibile alle produzioni comunemente note. La produzione, che doveva essere evidentemente rivolta ad una clientela locale, può essere inquadrata tra il I e il II sec. d.C., sulla base delle altre occorrenze recuperate sul sito stesso‹.

58 According to Ceccarelli 2017 and Ceccarelli 2021.

59 Giontella 2008, 369.

60 M. L. Cipiciani and F. Chiocci compiled the documentation sheets and realized the drawings, under the supervision of L. Bonomi Ponzi.

61 Ceccarelli 2021, 15.

and fuel resources. Surface finds at the location include one fragment of Italic sigillata, 18 fragments of unidentified common ware, 116 amphora fragments, and several tile fragments. The rim of the Italic sigillata corresponds to Atlante 1985, 384 pl. CXXI, 4, which is dated to the first half of the 1st cent. A.D.⁶². In general, the amphora diagnostic fragments are related to small-sized containers datable to the 1st and 2nd cent. A.D. with parallels from Luni⁶³ and mainly from the Marche region⁶⁴.

Amphorae Typology

8 The kiln at Felceto appears to have produced several types of small flat-bottomed containers, grouped into two main categories based on size⁶⁵:

1. A larger type with funnel-shaped rims (rim Types 1–4; rim diameters ranging from 12–17.6 cm), with two subtypes:
 - (a) rims elongated and tapered toward the lip, with internal thickening connecting to the neck (rim Type 1);
 - (b) rims with vertical cut and shaping (rim Types 2–4).
2. A smaller type with narrow mouths and various everted or vertical thickened rims⁶⁶ (rim Types 5–8; rim diameters ranging from 7.4–8.4 cm).

9 For an overview of the described types, see Fig. 4. Rim Type 1 shows similarities with containers from the Marche region⁶⁷. The vertical funnel-shaped rim with an interior groove under the lip (Felceto rim Type 3b) also appears in Altotiberina 1 amphorae from Pliny's villa⁶⁸. Felceto rim Type 6 can be related to a further Altotiberina 1 from the same context⁶⁹. In general, the second group (rim Types 5–8) may be associated with small cylindrical amphorae, attested also in the area of Gubbio and dated to the 1st cent. A.D.⁷⁰. In the rural territory of Gubbio (San Marco Romano site), similar amphorae – termed »anforette« – are documented⁷¹. Comparable examples include references in Foligno⁷², as well as consistent types found in Ostia: Ostia III, 369⁷³ and Ostia II, 521⁷⁴, both widely attested and often dated to the second half of the 2nd cent. A.D. At Scoppieto⁷⁵ four groups of »Spello« amphorae were identified. Group 1 corresponds to Ostia II, 521, and Group 4 to Ostia III, 370, featuring thickened, rounded rims⁷⁶. Further examples

62 Atlante 1985, 384.

63 Prova – Bertino 1977, 226 pl. 139, 6.

64 Mercado 1982, 175 fig. 54 T. 44.10; 245 fig. 113 T. 4.2; 265 fig. 134 T. 23.5; 171 fig. 51 T. 42.8.

65 Prog. L. 84/90, description after M. L. Cipiciani.

66 For examples of everted rims, see Molina Vidal 1999, fig. 9 and Molina Vidal 2008, 244 pl. IV, which illustrate slightly everted rims associated with a variety of ridged handles, both ribbon-shaped and ovoid. Comparable forms are documented in Ceccarelli 2021, 127 fig. 11, 1, and in Ville e insediamenti 1983, 176 pl. 24.

67 Mercado et al. 1974, 184 fig. 53 T.17.

68 Molina Vidal 2008, 244 pl. IV, CP 299.041.

69 Molina Vidal 2008, pl. IV, CP 169.349. CP 309.283.

70 Cipollone 1984–1985, 156 figs. CLXXXVII.2 and CXCI; Cipollone 2000–2001, 75 fig. 72 no. 183; 105 fig. 97 no. 282; 122 fig. 114 T.91 no. 316. Comparable forms include also those classified as »anfure di Spello«, noted for their almond-shaped rims and cylindrical necks, similar to Ostia II, 521 and Ostia III, 369–370 in Matteini Chiari 1995, 294 nos. 411–413. The fabrics of certain examples (notably nos. 411 and 413) appear closely related to amphorae from the Upper Tiber Valley and Felceto.

71 Whitehead 1994, 199 fig. 6, 11 nos. 4, 5. Particularly, one specimen is identified as a »Spello« amphora with a vertical almond-shaped everted rim and cylindrical neck.

72 Bergamini 1988, 41 fig. 1; 48 fig. 4; 60 fig. 9, 1; 64 fig. 11, 6; 70 fig. 15; 81 fig. 20, 5; 84 fig. 21, 5; 109 fig. 33, 4; 110 fig. 34, 3 T.114; 115 fig. 35, 7; 132 fig. 44; 148 fig. 53, 3; 153 fig. 57, 4. Examples from Foligno dated to A.D. 90–155/160 are described as narrow mouths, slightly convex rims, cylindrical necks, and elbow-shaped handles with a central groove: Bergamini 1988, 48 fig. 4 T.14 no. 2.

73 Ostia III, 369 = Bergamini 1988, 153 fig. 57, 4 = Prova – Bertino 1973, pl. 76, 7 CM 2243.

74 Ostia II, 521 = Bergamini 1988, 60 fig. 9, 1 T.33E3; 80 fig. 19, 11; 81 fig. 20, 5; 84 fig. 21, 5.

75 Speranza 2007, 301–303. 335 f. figs. 7, 8.

76 Corresponding to Molina Vidal 2008, 244 pl. IV (Altotiberina 1).

appear in *Mola di Monte Gelato*, where local ovoid amphorae with ribbed handles, slightly everted rims, and omphalos bases are found⁷⁷. At *Civitella d'Arna*, amphorae of the ›Spello‹ tradition with rounded, almond-shaped everted rims are documented⁷⁸. In Lugnano in Teverina, comparable forms are illustrated⁷⁹, while the necropoleis of the Marche – *San Severino Marche*, *Porto Recanati*, and *Urbino* – provide many small ovoid amphorae with flat ring bases from tombs dated to the 1st–2nd cent. A.D.⁸⁰. Additional parallels come from *Fiesole*⁸¹, *Luni*⁸², and Rome (*Gianicolo*), where ›Spello‹ Type amphorae with everted rims are illustrated⁸³. Strong affinities can also be observed with amphora productions from the *Romagna region* (e.g., Felceto rim Type 8)⁸⁴.

10 The walls of Felceto containers are generally thin (0.8–1.3 cm). Bottoms include flat ring bases (bottom Types 1–3, diam. 15.4–19.9 cm) and flat apodal bases (bottom Type 4, diam. 14.2 cm). Handles are typically attached at mid-neck and anchored on the shoulder. Handle varieties include ridged ribbon and ovoid types with rectangular sections. Handle Type 4 – a long vertical ribbon with a pronounced central rib – is comparable to an example from Pliny's villa⁸⁵. Neck and handle fragment Type 7, characterized by circular grooved handles and cylindrical necks, seems to belong to the small-size Altotiberina 2 amphora (diam. 7–9 cm)⁸⁶, comparable to types from Ostia II, 523 and *Settefinestre*⁸⁷.

11 Felceto's described local fabric (reddish-orange clay with chamotte and white/gray lithic inclusions) appears consistent with Type 2 clay as defined by Molina Vidal and corresponds to alluvial clay described by Lapadula⁸⁸. Ceccarelli et al. demonstrate that similar amphorae from Montelabate were fired at temperatures above 900 °C⁸⁹. Gray fractures in the ceramic fabric indicate overfiring, while soft porous surfaces are the result of underfiring⁹⁰. Amphorae from Felceto display gray interior fractures and porous surfaces, suggesting similar firing conditions.

Regional Context

12 Felceto seems to represent a producer of Altotiberina 1 amphorae characterized by considerable morphological variability, and notably the first localized kiln producing Altotiberina 2 amphorae – a smaller variant featuring a cylindrical neck and circular, slightly grooved handles found at Pliny's villa. The workshop probably supplied the Upper Tiber Valley wine-producing villas and farms with this small-sized container. It is known that Pliny sold both his own grapes and those of his *coloni* to the *negotiatores*⁹¹. Specialized amphora workshops formed part of this supply chain. The evidence of a further, previously unknown kiln may serve as a proxy for intensified production levels and trade in the region. Even though the limited evidence does not permit

77 Arthur 1997, 301–305 figs. 207–209.

78 Donnini – Bonci 2008, pl. I, no. 11; pl. II, nos. 81–86; pl. XVIII, no. 875; pl. VII, nos. 299, 353.

79 Martin 1999, figs. 259–261.

80 Mercado et al. 1974 and Mercado 1982.

81 Fiesole 1990, 254 f. pl. 55, nos. 14–18; pl. 56, nos. 19, 20.

82 Frova – Bertino 1973, pl. 76, 3 CM 1806/10.

83 Ferrandes 2008, 261, 276 fig. 6, nos. 40, 41.

84 Ostia IV, 440/441 and Ostia IV, 442: ›Forlimpopoli‹ and ›Santarcangelo‹ types (Rizzo 2014, 127–129) were produced in numerous areas of Emilia Romagna and the Marche, as well as in the Arno valley and coastal northern Etruria.

85 Molina Vidal 2008, 244 pl. IV.

86 Molina Vidal 2008, 228 fig. 5; Molina Vidal 1999, 110 fig. 8.

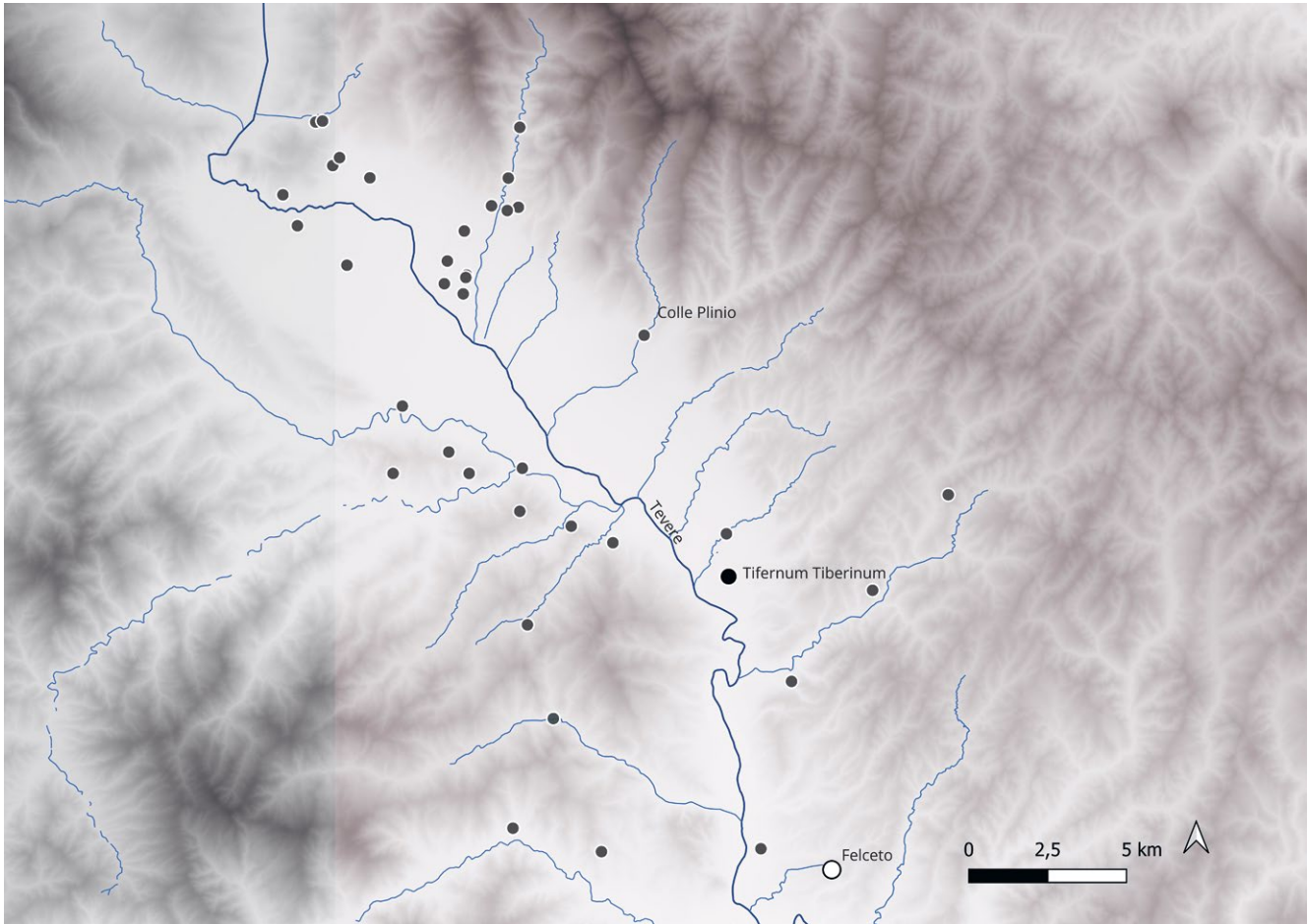
87 Carandini 1985, 77 pl. 20, 14 (G. Volpe).

88 Molina Vidal 2008, 221; Lapadula 1997.

89 Ceccarelli et al. 2025.

90 Ceccarelli 2017, 121.

91 Braconi 2008, 99.



3

Fig. 3: Distribution of Altotiberina and other regional amphorae according to Prog L. 84/90 and Laurenzi 2010

a reliable assessment of production scale, chronology, and distribution patterns, the kiln appears to have supplied small-size flat-bottomed containers to producer and consumer villas⁹² – such as Pliny’s villa at San Giustino – and to wine-producing farms along the Tiber and its tributaries, in upstream direction (Fig. 3). Written sources confirm that the Tiber was seasonally navigable even upstream⁹³. A seasonality of manufacture can also be assumed, with higher production occurring during the drier seasons and possibly involving the seasonal employment of farmers⁹⁴.

13 Not only was Pliny’s villa in Tuscis supplied with containers of the Altotiberina 1 and 2 types, but similar amphorae are also attested throughout the Tuscan and Umbrian Valtiberina, as shown in Fig. 3, which maps the distribution of local and regional containers based on legacy data. According to G. P. Laurenzi⁹⁵, the 1st and 2nd cent. A.D. are marked by the widespread presence of small-sized flat-bottom amphorae corresponding to the Altotiberina 1 type (characterized by ribbon-shaped grooved or ridged handles) and Altotiberina 2 type (with twisted handles). These forms have been identified at 19 archaeological sites classified as villae (8), large farms (9), or rural settlements (2), all located along the Tiber River and its tributaries⁹⁶. Additionally, two rims

92 See Carandini 1989, 510 on the villas as consumer sites: «Si parla sempre di città a proposito del consumo di vino e si dimenticano le ville, importanti consumatrici.»

93 Dion. Hal. Ant Rom. 3, 44, 1; Plin. Ep. 5, 6, 11 states that the Tiber was navigable only during the winter; see also Ceccarelli 2017, 135.

94 Ceccarelli 2017, 131. 134.

95 Laurenzi 2010, 72 f.

96 Laurenzi 2010, 85–92.

of Altotiberina 3 amphorae have been documented at two *villae rusticae*⁹⁷. According to C. Giontella, the containers produced at Felceto were distributed capillarly across the surrounding territory⁹⁸. Documentation from Prog. L. 84/91 confirms the presence of Altotiberina and other regional amphorae in the surface assemblages of 16 sites classified as either villae (4) or farms/rural settlements located on opposing hills of the Tiber around ancient Tifernum Tiberinum⁹⁹. The assemblages include locally produced variants of Dressel 2/4 and 2/5, Altotiberina types 1–3, and a range of later forms such as ›Empoli-like‹ amphorae (4th–5th cent. A.D.), along with documented types including Ostia I, 493, Ostia II, 428, Ostia II, 521, Ostia III, 148, 369 and 533, Ostia IV, 279–280, as well as parallels to forms illustrated by L. Mercado and M. Cipollone¹⁰⁰.

14 Such containers formed part of a wider economic chain linking rural estates, like wine-producing farms and villas, to merchant networks active in regional and urban markets¹⁰¹.

Concluding Remarks

15 Small-sized cylindrical amphorae – often identified with the so-called *anfore di Spello* tradition – are widely distributed across central Italy, with documented parallels in Gubbio, Foligno, Civitella d’Arna, and Scoppieto, as well as in Fiesole, Mola di Monte Gelato, the necropoleis of the Marche region, and the coastal site of Luni, illustrating their broad circulation in regional markets during the 1st and 2nd cent. A.D. The typological affinities between amphorae from this part of the Upper Tiber Valley and those from the Marche and Romagna¹⁰² regions demonstrate trans-Apennine connections with the Adriatic area.

16 The evidence of the workshop at Felceto enriches this complex picture. The morphological comparison of the Altotiberina amphorae with those from Umbria, Pi-cene and coastal Etruria (Fig. 4) may serve as evidence of this shared productive tradition (koine).

17 Containers from the Upper Tiber Valley probably transported low-alcohol regional wines and were distributed via river¹⁰³ and/or the Via Flaminia¹⁰⁴. Their capillary rural distribution forms part of the inland economic network linked to intensive wine production, and rural consumption. The archival data on Felceto’s kiln provides further evidence for the production topography of the early and middle imperial Tiber valley¹⁰⁵. According to the documentation of the types (Prog. L. 84/90), Felceto is currently the only

97 Laurenzi 2010, 75. 85–87.

98 Giontella 2008, 369.

99 Speranza 2007, 301 discusses the distribution of ›Spello‹ amphorae on the left bank of the Tiber. While this observation may accurately reflect the location of production centers, it does not account for the broader distribution pattern of these containers in rural settlements. Evidence from the right bank of the Tiber and along its tributaries demonstrates a more extensive spread (see Fig. 3).

100 Mercado 1982; Cipollone 1984–1985.

101 Plin. Ep. 8, 2 mentions merchants buying the grape harvest at his villa in Tuscis, highlighting the competitive market of the early Imperial age (see Carandini 1989, 516).

102 Maioli – Stoppioni 1989. See also Rizzo 2014, 127 and 129 on the distribution of productions from the Romagna.

103 Bergamini 2008, 311 on the river transport and distribution of the wine from the Upper Tiber Valley along the Tiber to Rome.

104 Fontana 2008, 661 fig. 5 on the Via Flaminia as carrier of distribution of locally produced flat-bottom amphorae together with the Tiber. On the distribution of ›Spello‹ amphorae in the South Etruria Survey, see Fontana 2008, 659.

105 Arthur 1997, 315: »The next step clearly is to identify the various centres of production, both by fabric and by nuances of form, so as to be able to recognize respective chronologies and market areas, as well as to attempt the reduction of the frustrating unidentified categories.«

known kiln producing Altotiberina 2 amphorae identical to those found at Pliny's villa, characterized by circular grooved handles¹⁰⁶.

18 The production site does not appear to be directly related to a villa or farm; however, targeted fieldwork – particularly an intensive re-survey aimed at identifying related settlement structures – is needed to clarify its economic and spatial integration¹⁰⁷. Determining the workshop's size, scale of production, precise chronology, and a comprehensive typology of containers produced would only be possible through stratigraphical excavation¹⁰⁸. The distribution networks of the Upper Tiber amphorae at local, regional, and supra-regional levels can only be demonstrated archaeometrically with reference groups derived from the analysis of kiln waste from the different Umbrian workshops¹⁰⁹.

19 Amphorae from contexts such as Pliny's villa in Tuscis demonstrate the economic importance of independent rural workshops like Felceto, which were integrated into broader agricultural and commercial networks supplying both rural and urban consumers through the middle Imperial period. The transition from wine amphorae to cooking and common wares production in the 4th cent. A.D. at Montelabate¹¹⁰ reflects broader economic and social shifts from the intensified wine production and amphora distribution of the imperial era towards more regionalized patterns in late antiquity¹¹¹.

106 Molina Vidal 2008, 228.

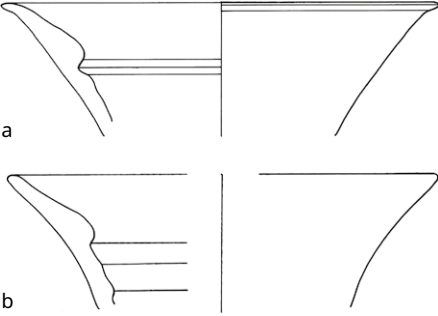
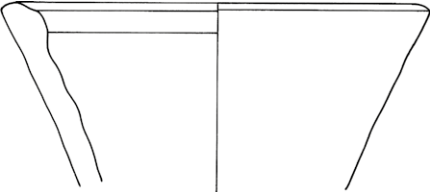
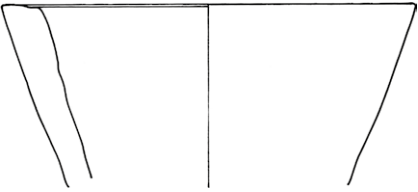

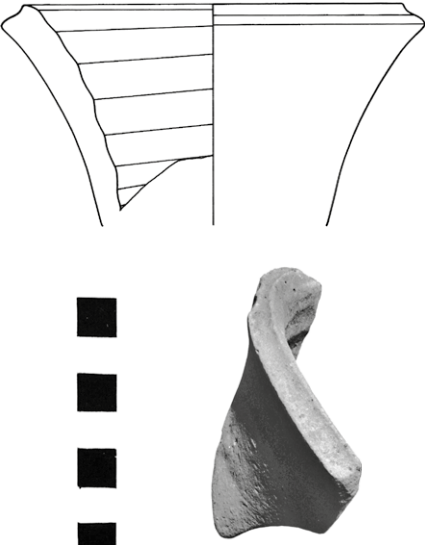
107 In the area of Montelabate, where the kilns were not related to an agricultural settlement, villas do not seem to be at the top of the settlement hierarchy and the landscape is dominated by small/medium independent farms (Ceccarelli 2017, 133).

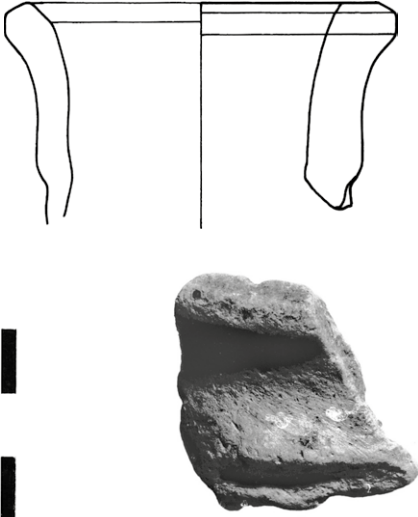
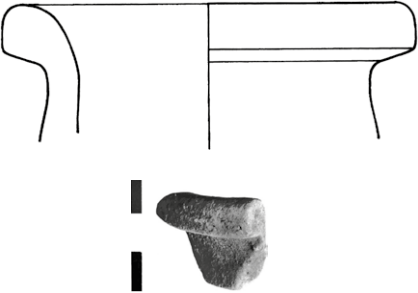

108 According to the 1993 documentation of surface remains, kiln-related structures had been already accidentally destroyed by earth-moving operations.

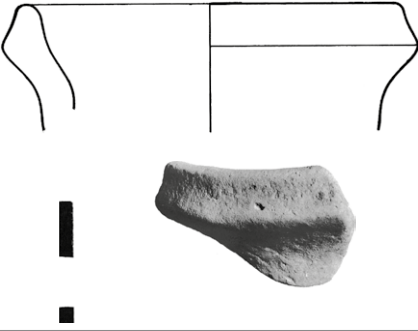
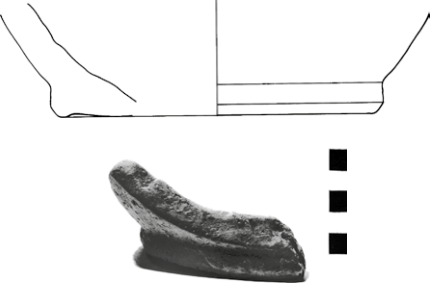
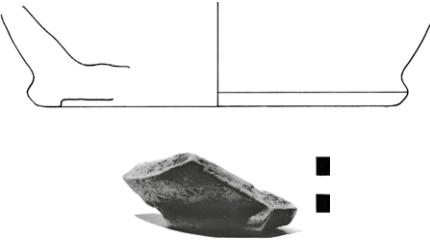
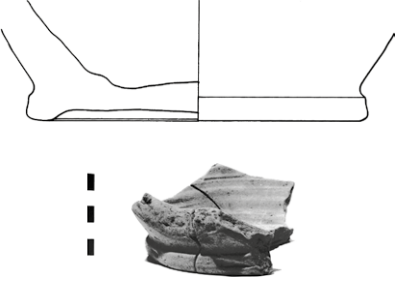
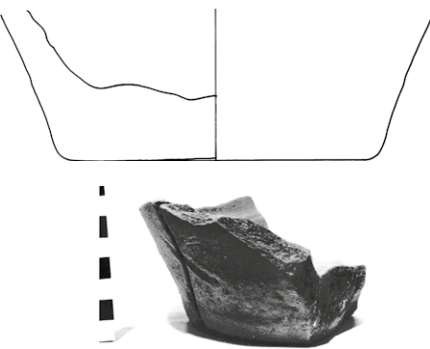
109 To this respect see Ceccarelli et al. 2016 on fingerprinting the production of the site of Montelabate.

110 Ceccarelli 2023.

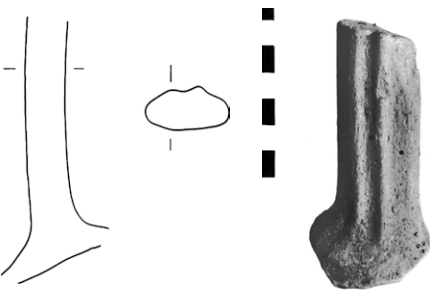
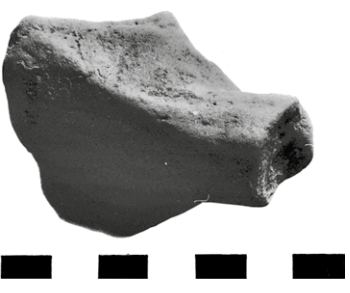
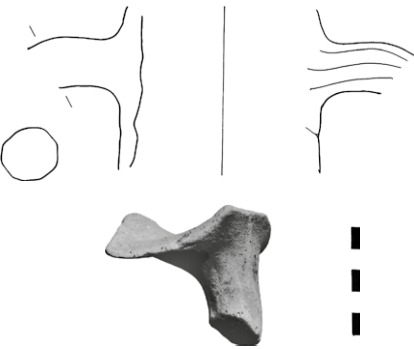
111 In general, see Cirelli et al. 2015. A complex of three late antique kilns producing domestic and utilitarian ceramic forms has been excavated at Catiglianello, on the left bank of the Tiber: Lelli et al. 2011.

Object	Form	Description	Size	Fabric	Graphic/photographic documentation	Suggested chronology	References
Rim	Type 1	Funnel-shaped rim tapering towards a horizontal, sharp lip; flared rim at the junction with the neck with internal thickening followed by a pronounced groove (a); without groove (b)	Diam.: 17.6 cm Height: 7.7 cm Width: 6.8 cm Thickness: 1.3 cm	Light orange clay (Munsell 5YR 7/4), red-orange inner surface (Munsell 5YR 6/6); sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	Mercando 1974, 184 fig. 53 T. 17
Rim	Type 2	Funnel-shaped flattened rim with a groove in the inner part under the lip	Diam.: 13.2 cm Height: 7.3 cm Width: 6.3 cm Thickness: 1.1 cm	Orange clay (Munsell 5YR 6/6), light gray in fracture (Munsell 5YR 7/2); sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Rim	Type 3a	Vertical funnel-shaped flattened rim, with step inside	Diam.: 13.2 cm Height: 9.2 cm Width: 6.1 cm Thickness: 1.2 cm	Orange clay (Munsell 5YR 6/6), sparse inclusions: coarse chamotte, white and gray lithics, white mica; vacuoles		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Rim	Type 3b	Vertical funnel-shaped everted flattened rim, with a groove inside under the lip	Diam.: ca. 12.8–13.2 cm Thickness: 1.2–1.3 cm	Orange clay (Munsell 5YR 6/6), light gray in fracture (Munsell 5YR 7/2), sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	Molina Vidal 2008, 244 pl. IV, CP 299.041
Rim	Type 4	Funnel-shaped everted rim with a groove; narrow cylindrical neck	Diam.: 12 cm Height: 9.4 cm Width: 6.8 cm Thickness: 1.1 cm	Orange clay (Munsell 5YR 6/8), red-orange inner surface (Munsell 2.5YR 6/8); sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	

Object	Form	Description	Size	Fabric	Graphic/photographic documentation	Suggested chronology	References
Rim	Type 5	Vertical everted carinated rim, distinct from the neck	Diam.: 7.4 cm Height: 3.9 cm Width: 4.2 cm Thickness: 1 cm	Orange clay (Munsell 5YR 7/6-6/6), sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D.	Mercando 1979, 155 fig. 65 e
Rim	Type 6	Everted thickened rounded rim	Diam.: 7.8 cm Height: 4.1 cm Width: 2.8 cm Thickness: 1.1 cm	Red-orange clay (Munsell 5YR 7/6 6/6); rare white and gray lithic inclusions and coarse chamotte		First half 1 st cent. A.D. – first half 2 nd cent. A.D.	Frova – Bertino 1977, 226 T. 139,6. CM 7578/1 Mercado 1974, 127 fig. 49; 129 fig. 51 b Mercado 1974, 188 fig. 59 g Mercado 1982, 245 fig. 113 T. 4,2; 265 fig. 134 T. 23,5 Ostia VI, 27-30. 48 -51 ›Altotiberina‹ 1, Molina Vidal 2008, pl. IV, CP. 169.349. CP. 309.283
Rim	Type 7	Square section flattened rim with thickened wall below the rim	Diam.: 7.6 cm Height: 4.1 cm Width: 2.8 cm Thickness: 1 cm	Orange clay (Munsell 5YR 6/6); rare white and gray lithic inclusions and coarse chamotte		First half 1 st cent. A.D. – first half 2 nd cent. A.D.	Mercando 1974, 205 fig. 79 T. 25, d; 224 fig. 104 T. 40, b; 225 fig. 105 Mercado 1982, 171 fig. 51 T. 42, 8

Object	Form	Description	Size	Fabric	Graphic/photographic documentation	Suggested chronology	References
Rim	Type 8	Vertical carinated rim	Diam.: 8.4 cm Height: 4.2 cm Width: 2.7 cm Thickness: 1.1 cm	Orange clay (Munsell 5YR 6/6); rare white and gray lithic inclusions and coarse chamotte		Last quarter 1 st – first quarter 2 nd cent. A.D.	Mercando 1982, 175 fig. 54 T. 44, 10 Mercando 1982, 175 fig. 54 T. 51, 5 Ostia I, 452; see also Ostia IV, 440/441. 442; Ostia IV, p. 127
Bottom	Type 1	Flat bottom; slightly ringed foot	Diam.: 19.9 cm Height: 5.4 cm Width: 7 cm Thickness: 1.1 cm	Orange clay (Munsell 5YR 7/6–6/6), light gray in fracture and internally (Munsell 5YR 7/1), sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Bottom	Type 2	Flat bottom; wide ringed foot	Diam.: 18.9 cm Height: 4.5 cm Width: 5.3 cm Thickness: 2.5 cm	Light orange clay (Munsell 5YR 6/6), sparse inclusions: coarse chamotte, white and gray lithics; dusty surface		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Bottom	Type 3	Flat bottom; ringed foot	Diam.: 15.4 cm Height: 4.7 cm Width: 4.5 cm Thickness: 2.9 cm	Orange clay (Munsell 5YR 6/6), light gray in fracture and internally (Munsell 5YR 7/1), sparse inclusions: coarse chamotte, white and gray lithics; dusty surface		First half 1 st cent. A.D. – first half 2 nd cent. A.D.	Mercando 1974, 171 fig. 31, e Lapadula 1997, 136 fig. 7 Type 4
Bottom	Type 4	Flat apodal bottom, flared wall	Diam.: 14.2 cm Height: 6.6 cm Width: 9.8 cm Thickness: 3.3 cm	Orange clay (Munsell 5YR 6/6), light gray in fracture (Munsell 5YR 7/2), sparse inclusions: coarse chamotte, white and gray lithics, dusty surface		Second half 2 nd cent. A.D.	Mercando 1974, 184 fig. 53 T. 17

Object	Form	Description	Size	Fabric	Graphic/photographic documentation	Suggested chronology	References
Handle	Type 1	Ridged ribbon handle two median grooves	Thickness: 2 cm Length: 6 cm Width: 4 cm	Orange clay, sparse including: coarse chamotte, white and gray lithics, white mica		2 nd cent. A.D.	Mercando 1982, 338 fig. 209 T. 91, 4
Handle	Type 2a	Ovoid-shaped, ridged handle	Width: 3.8 cm Length: 11.2 cm Thickness: 2.3 cm	Orange clay, sparse including: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Handle	Type 2b	Ridged ribbon handle with rectangular section	Width: 4.2 cm Length: 10.3 cm Thickness: 2.3 cm	Orange clay (Munsell 5YR 6/6), light gray on the internal surface and in fracture (Munsell 5YR 6/1), sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Handle	Type 3	Long vertical ridged handle with two median grooves on the back and one median groove inside	Width: 4.35 cm Length: 13.65 cm Thickness: 2.2 cm	Orange clay (Munsell 5YR 6/6), light gray on the internal surface and in fracture (Munsell 5YR 7/1), sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D. ?	
Handle	Type 4	Long vertical ribbon handle with pronounced central rib	Width: 3.4 cm Length: 11 cm Thickness: 1.95 cm	Red-orange clay (Munsell 5YR 6/8), sparse inclusions: coarse chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D.	Mercando 1974, 173 fig. 33 T. 10, c Molina Vidal 2008, 244 pl. IV

Object	Form	Description	Size	Fabric	Graphic/photographic documentation	Suggested chronology	References
Handle	Type 5	Long vertical ridged handle	Width: 5.6 cm Length: 10.9 cm Thickness: 1.8 cm	Light orange clay (Munsell 5YR 7/4, 6/4), light gray on the internal surface and in fracture (Munsell 5YR 7/2), sparse inclusions: coarse chamotte, white and gray lithics		2 nd cent. A.D.	Mercando 1982, 338 fig. 209 T. 91, 4 Mercando, 1974, 127 fig. 49; 129 fig. 51 b
Handle	Type 6	Wall fragment with twisted rectangular handle	Height (wall): 5.5 cm Width: 4.8 cm Length (handle): 1.8 cm Thickness (handle): 2.4 cm	Orange clay, gray in fracture, sparse inclusions: coarse chamotte, white and gray lithics, white mica		Second half 1 st cent. A.D.	Cipollone 1984-1985, 142 fig. CLII (anse a tortiglione)
Neck and handle	Type 7	Cylindrical neck, circular handle with grooves	Diam. (neck): 9.4 cm Height (wall): 7.2 cm Width (wall): 7.35 cm Thickness (wall): 0.8 cm	Light orange clay (Munsell 5YR 6/6), light orange outer surface (Munsell 5YR 7/4), sparse inclusions: chamotte, white and gray lithics		First half 1 st cent. A.D. – second half 2 nd cent. A.D.	Molina Vidal 2008, 245 pl. V Molina Vidal 1999, 110 fig. 8 (Altotiberina 2) Ostia II, 523-524

4

Fig. 4: Amphorae types attested at Felceto according to the documentation of Prog. L. 84/90 (M. L. Cipiciani and F. Chiocci; scientific direction: L. Bonomi Ponzi). It is not specified how many examples each type is attested by. Drawings not to scale

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