Ports and trades in central-Tyrrhenian Bruttium between II BC and II AD: the case of Vibo Valentia (Calabria/Italy)¹

P. Vivacqua – M. T. Iannelli

After the Punic Wars, Rome began a process of reorganization of the acquired Bruttium territory: it preserves some Greek towns such as Reggio and Locri and transforms others like Crotone and *Tempsa* in Roman colonies; Vibo Valentia and *Copia* in Latin colonies. Later in 123 BC, following the Graccan reforms, Cosentia, Pandosia, Minervia Nervia Scolacium are founded. During this period Bruttium assumes a significant importance because it becomes a point of connection between Africa and the east. The consular road ab Capua ad Regium, which ensures the connection between Rome and Sicily, was built. The discovery of a *cippus* miliaris near Vibo Valentia², provides topographical indications of the consular road, as well as the distance in Roman numerals and the name of Annius T (iti) filius / Pr (etor), identified with T. Annius Rufus, which had completed the construction of the road, initiated by the consul P. Popilius Laenas³ (fig. 1). According to the Tabula Peutingeriana and to the *Anonymous Ravennate*, the Calabrian road system is completed by at least two other roads: one on the Tyrrhenian coast and one on the Ionian coast.⁴ At the same time the ports are also rearranged. Strategic ports are Crotone on the Ionian coast, Reggio and Vibo Valentia on the Tyrrhenian coast; there are also some intermediate calls at *Copia* and at *Minervia* Nervia Scolacium; also very important is the portus Herculis, cited from the sources and located in the territory of Vibo Valentia in the current location of Torre S. Maria, south of Tropea.⁵ Thanks to the new infrastructures *Bruttium* starts a productive recovery, exploiting the economic and agricultural richness through the birth and development of the first production villas⁶, mainly concentrated in the territory of *Copia* and Vibo Valentia, with the consequent industrial organization of agricultural and clay production.⁷

Regarding Vibo Valentia (fig. 2) and its territory (fig. 3), recent studies have reconsidered the process of romanization in the Latin colony of Vibo Valentia and the *ager vibonensis*, proposing a continuity between the settlement of the colony, in 192 BC, and the previous Brettian occupation of the end of the 4th century BC.⁸ After the Social War, around 89 BC, the town becomes an autonomous *municipium*. It has a great impetus with the construction of the via Annia-Popilia and its strategic position allows it to control the north of the Lametin Gulf and the south of the entire plain of Metauros. In addition, its territory consists of a broad coastal strip, with vast cultivated areas that converge towards the Mountains of Sila, a large reserve of wood and pitch. The historical information give a flourishing picture of the city in the Republican age, while the Imperial one marks the monumentalization of the urban structure during the 2nd-3rd century AD, with the construction of the theater, perhaps of an amphitheater, of a public thermal building and some patrician *domus* with polychrome mosaics.⁹ The discovery of some statues of fine workmanship¹⁰ and two portraits including the one in *marmor numidicum* of Agrippa, the general of Augustus, dated to the end of the

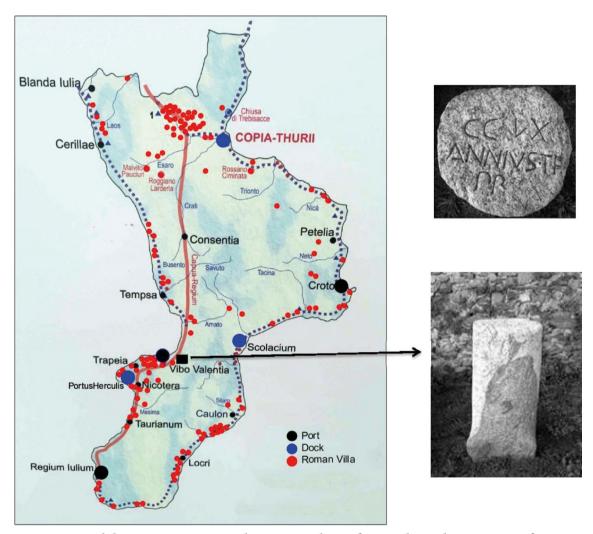


Fig. 1: Calabria in roman period: cippus miliaris from Vibo Valentia-S. Onofrio.

first century BC, testify not only solid artistic links between the Urbs and Vibo Valentia, but above all economic and political relations that are configured both in the personal attention of Agrippa towards the *municipium*, where he owns vast properties, and in the presence of an urban aristocracy firmly linked to the Roman ruling classes.¹¹ Vibo Valentia is therefore an active center, politically linked to Rome and the reference pole of a vast territory, intensely exploited with settlements in the villa; the port has a fundamental role. It is the only Tyrrhenian port south of Naples and a must for communications with Sicily. Archaeological investigations¹² and underwater excavations¹³ have highlighted the structures of the Roman port that was active up to the late ancient and medieval age in the area between Bivona and Trainiti, where the anthractures, currently underwater, have been highlighted.¹⁴ In Bivona a 100 m long port dock dated to the 5th century AD has been excavated.¹⁵ The port of Vibo Valentia was restored by Agatocle in Greek times. It

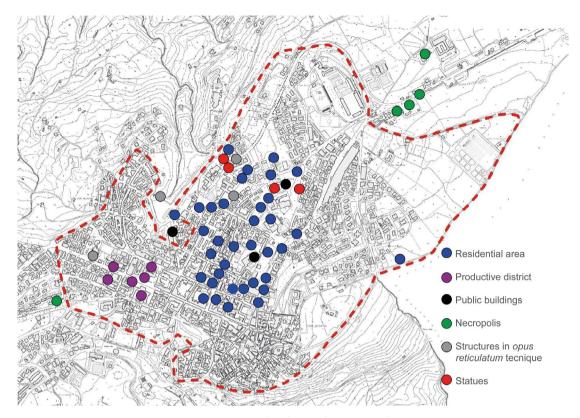


Fig. 2: The roman town of Vibo Valentia in the II BC-II DC.

plays an important role during the civil wars in 48 and 38 BC, when the city with its territory gains the favors of Caesar and Octavian because it offers the indispensable support of its port, as a basis for operations conducted on the Strait, against Pompey. The town's dynamic economy is suggested by the presence of the craft district located in the western part, where several active kilns have been found;¹⁶ two other kilns were found near the municipal building recently.¹⁷ They were active between the 2nd century BC and 2nd century AD, and were used for the production of ceramics of common use and thin-walled ceramics (fig. 4). The latter represents a novelty in the study of the *Bruttium* ceramics, since this workshop is the only one excavated so far that produces this particular type of ceramic, which has always been considered a product of central-Tyrrhenian Italy. The kilns of Vibo Valentia also produce amphorae, for which the typological and archaeometric analyses have confirmed a local production. These data suggest an economic vitality of the city, which not only was able to produce various types of ceramic containers, but through the port, was able to export the agricultural surplus, in the amphorae.

The local production of amphorae, confirmed by the archaeometric analysis are: Dressel 1, 2–4 and Dressel 21–22. As for the Dressel 21–22, they have particular characteristics in the rim molding similar to specimens from Cuma, for which a production of the *Bruttium* has been hypothesized.¹⁸ As for imports, among Italian productions, Lamboglia 2 amphorae is

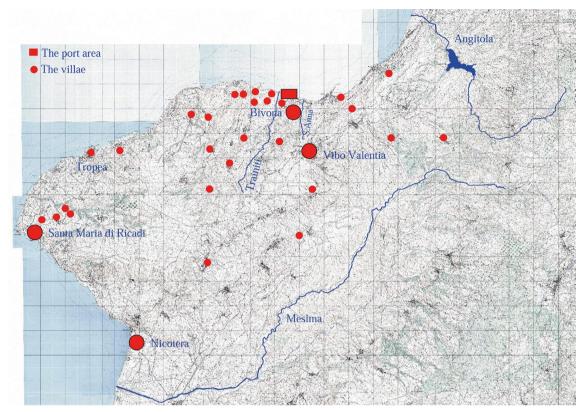


Fig. 3: The Vibo Valentia territory in the II BC-II DC.

to be noted. The production from Spain is represented by garum amphorae, such as the Dressel 7-11 and the Beltran II A and B, and the Dressel 14, olive oil Dressel 20 and Haltern 70 amphorae used to transport *defrutum* wine. A small percentage of the imported wine comes from Gallia transported in the Gauloise 4 amphora. The African imports at this stage are not very consistent, compared to those of the following centuries.¹⁹ There are few specimens of neo-Punic amphorae of 1st-2nd century AD like the Van der Weff 2, the Dressel 18 and the amphorae Uzita pl. 52 that present a continuity in the morphology with the previous amphorae of Punic tradition.²⁰ This is interesting because it shows a continuity of traffic with North Africa that in the first centuries after the destruction of Carthage, continues to propose Punic morphological models. In fact, the relationships between Vibo Valentia and the Carthaginians are well attested by the historical and archaeological sources for the beginning of the 4th century BC, when the city was refounded by the latter following the conquest by Dionysius the Elder who had captured and transferred the Hipponiates to Syracuse.²¹ The presence of a Carthaginian military garrison in Vibo Valentia was also hypothesized, which guaranteed protection for the city and an economic advantage for the Carthaginians who could stock up on wine, minerals, wood and pitch.²² The Aegean amphorae from Crete are particularly numerous. In particular one example, Knossos 19, is almost intact. From Rhodes the late wine amphorae continue to arrive, reflecting a commercial continuity established in



Fig. 4: Vibo Valentia: the kilns near the municipal building: the thin-walled ceramics.

the previous centuries between 3rd – beginnings 2nd century BC. The territory is a very rich and fully inserted in the Mediterranean commercial circuits, thanks to the presence of the port. The discovery of some production plants, excavated in different locations²³, suggests a well-organized manufacturing industry also in the territory, probably functional to the production of containers for the storage and transportation of foodstuffs. The major port was excavated at Trainiti-Bivona. In this area the "Villa of Bivona" has been found and studied.²⁴ Several papers on its late antique phase have been published²⁵, but it also presents activities during the 2nd BC-2nd AD that are still unpublished. In the port area local productions are represented by Dressel 1 and Dressel 2-4. Among the imports the Iberian amphorae and the Rhodes ones are found at a lower percentages comparing to the city, while the imports from Crete are higher. Tripolitans I and II from Africa and the flat-bottomed amphorae Ostia II 522 = Ostia III 464 of probable Sicilian or North African origin are also found. In Bivona there are also the Dressel 2-5 Aegean amphorae and the amphorae Mau XXVII-XXVIII from Asia Minor; the latter are absent in the town, but found in other centers of the territory, probably distributed by the port thanks to the presence of small calls located along the coast including the portus Herculis. Several clues suggest that it can be located in the Capo Vaticano area due to the presence of a natural bay sheltered from the winds; this area is an obligatory point of reference for the coastal navigation that from the Strait of Messina goes up to the Tyrrhenian Sea (fig. 5). The port of Capo Vaticano was settled since the Archaic period, when the phrourion of Torre S. Maria was built on a rise, and then abandoned at the end of the 4th century BC.26 During the 3rd century BC the settlement is moved further down, in the bay of S. Maria di Ricadi, where there is the best landing place and where a deposit of amphorae Dressel 1 A and B, Dressel 1 B-Lamboglia 2 and Kadoi was excavated. The



Fig. 5: Tropea (VV): the area of Portus Herculis.

considerable quantity of amphora found immediately suggested that the place was used as storage of foodstuffs, intended to be transported. The hypothesis of a local production of containers was also advanced.²⁷ The presence of numerous overcooked fragments, and the results of the archaeometric analyses have confirmed the on-site manufacturing activity. The type of Dressel 1 B-Lamboglia 2, represents a type of transition within the Calabrian amphoric panorama of the Republican age, which links the Adriatic tradition of the Lamboglia 2 with that of the Tyrrhenian Dressel 1.28 Two examples present two fragmentary scrolls that complement each other, and yet the reading of the stamp is very problematic; the letters in sequence are: $ME \cdot PPI \cdot LA$ (fig. 6). Perhaps it is the name of a local character; or a complete onomastic form with praenomen, nomen and cognomen and the final part stands for Latinus, considering this character as coming from Lazio. In other locations we have noticed that the characteristics of the Dressel 1 fabric found in the S. Maria di Ricadi depot are similar to those of Dressel 1 found in the rest of the territory and in the underwater specimens. This fact suggests that the amphorae of S. Maria di Ricadi, through the coastal navigation, reached the port of Vibo Valentia, from where they were distributed both to the neighboring territory and a wider range area.

Another type of containers recently identified in Santa Maria di Ricadi are the *kadoi*. They are characterized by a particular shape of the wide swollen and rounded mouth, a piriform body and a small base with a flat base; they do not have loops and therefore cannot be properly considered amphorae (fig. 7, no. 1–3). Several names have been proposed including *doliola*²⁹ or *kadoi*³⁰, the last one used by ancient sources to describe



Fig. 6: Ricadi loc. S. Maria (VV): the stamp on amphora Dressel 1B-Lamboglia 2.

a container for wine and dried fruit or for solid pitch as evidenced by the inscription on the bronze Locri tablets of the *Olympeion* 3rd century BC.³¹

Many of these containers have been found in Puglia and Campania and in Calabria.³² They are found in some excavations both on the Tyrrhenian and Ionian coast (Chiusa di Trebisacce, Crotone, Capo Colonna, Sellia Marina, Kaulonia on the Ionian coast; Pian delle Vigne, Vibo Valentia, on the Tyrrhenian coast).³³ Seven specimens found in Calabria have the stamp pix brut, that is pitch bruttia³⁴ (fig. 8). The pitch was a specific product of the Bruttium and special containers had been created, most often Dressel 1. They have been found in the coastal territories of the colonies of Calabria, mostly in inhabited complexes or in warehouses connected to port facilities. Wood and pitch were very popular products and a source of wealth for the Roman state.³⁵ Ancient sources describe the process for pitch extraction; in particular Pliny the Elder defines pitch bruttia, "spissa", that is of dense and viscous consistency obtained by adding vinegar during boiling. It was used for various uses: in medicine, in cosmetics, as a slow-burning material. In particular, pitch was used in the preparation of wine, to seal the lids, to waterproof the internal surfaces of amphorae and to caulk ships. A pitch processing plant was recently found in Sila Silva³⁶; after the process of extraction and processing, it was transported on the Ionian and Tyrrhenian coasts, where it was further processed and refined, and then exported. More detailed data on the content and size of Calabrian kadoi are provided by the discovery of Monasterace-Punta Stilo, ancient Kaulonia, on the Ionian coast, where 4 kadoi were recovered, coming from the same underwater deposit and probably related to the same wreck. Archaeometric analyses, in fact, have demonstrated a local origin of the raw fabric. It was also possible to reconstruct the entire kados profile, calculated with the capacity of about 27 liters and revealed through chemical and organic analyses that the content was pitch³⁷ (fig. 7, no. 4). However, for the specimens of S. Maria di Ricadi, it is reasonable to suppose that they also carried other goods, such as the garum, because the deposit of S. Maria di Ricadi, which is

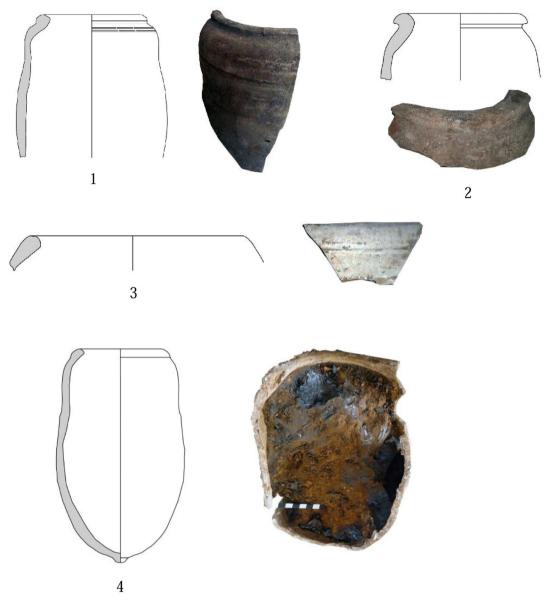


Fig. 7: Typology of Calabrian kadoi.

located near the sea, appears closely connected with the factories for processing fish found on the coast of Vibo. 38

In conclusion, regarding the amphorae, we can present the first possible comparisons between the city of Vibo Valentia and its territory. Already starting from 2^{nd} century BC the city and the territory had commercial traffic with the Mediterranean, thanks to the presence of the port and minor calls, which convey the import goods but also those intended to be exported. Between 2^{nd} and 1^{st} century BC, alongside the local productions, commercial relations are consolidated with those areas that had already supplied the

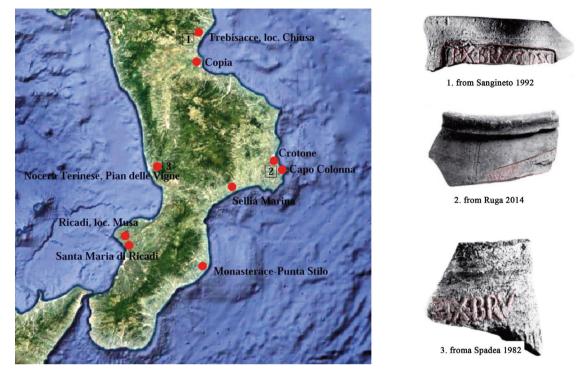


Fig. 8: The distribution of *kadoi* in Calabria.

city and the territory in the previous centuries, such as North Africa. Italian goods also arrive, especially from the Adriatic with the Lamboglia 2. During the 1st century BC and for the whole 1st-2nd century AD local workshops specialize in the creation of new and different types of amphoras, such as Dressel 1 B-Lamboglia 2, Dressel 2-4 and Dressel 21-22, well-attested both in the city and in the territory. As for imports, Spanish goods arrive predominantly in the city, especially with Dressel 20 and Dressel 7–11, which in the territory are not found; while the Haltern 70s are more numerous. The Gallic amphorae are found in the city and at the moment they do not seem to be present in the territory. The consumption of wines from the east and especially from Crete is more present in the territory, while the city continues to consume the Rhodian wine as it was in previous centuries. The wine produced in the area of Asia Minor and transported with the Mau XXVII-XXVIII is present, particularly in Bivona, but absent in the city. At this stage the contribution of African amphorae that make up 3% of the total fragments is marginal, even if so-called neo-Punic amphorae are still coming. The African goods will become significant in the city and in the territory starting only from the 3rd century AD until late antiquity.

With regard to the containers of local production, it is still to understand whether they were used for wider range transport or for local trade only. The archaeometric comparison with the fragments found in the consumption centers, and a careful typological and morphological analysis will provide further indications.

Notes

- ¹The excavation and the study of Vibo Valentia ceramics were conducted by Archaelogical Superintendence of Calabria under scientific direction of M. T. Iannelli.
- ² Pitimada 1953, 343–344.
- ³ La Torre 1990; Taliano Grasso 1995.
- ⁴ Givigliano 1994, 318–328.
- ⁵ Sabbione 1979.
- ⁶ Accardo 2000.
- ⁷ Sangineto 1994, 579–580.
- ⁸ Cannatà 2013, 176-182.
- ⁹ Iannelli Givigliano 1989, 635–646; Rotella 2014.
- ¹⁰ Faedo 1994, 599-616.
- ¹¹ Paoletti 2014, 174–176.
- ¹² Rotella Sogliani 1998.
- ¹³ Mariottini 2001.
- ¹⁴ Lena 1989, 583-607.
- ¹⁵ Sogliani Rotella 1998.
- ¹⁶ Iannelli Givigliano 1989, 650–656.
- ¹⁷ Bonomi Sabbione 2011, 665–667.
- ¹⁸ Botte 2009, 156–158, tipo 2.
- ¹⁹ Cuteri et al. 2014.
- ²⁰ Rizzo 2002, 153–154; Rizzo 2014, 260–270; Capelli et al. 2017, 19–32.
- ²¹ Iannelli et al. 2017.
- ²² De Sensi Sestito 2011.
- ²³ Iannelli 1989.
- ²⁴ Cucarzi et al. 1995; Sogliani Rotella 1998.
- ²⁵ Sogliani Rotella 1998; Cuteri et al. 2007; Cuteri et al. 2014, Cuteri et al. forthcoming.
- ²⁶ Lattanzi 1989, 557-558.
- ²⁷ Lattanzi 1988, 655.
- ²⁸ Sangineto 2006.
- ²⁹ Auriemma 1997.
- ³⁰ Cavassa 2008.
- ³¹ Costabile 1992.
- ³² Cavassa 2008, 102 fig. 2.
- ³³ Chiusa di Trebisacce: Sangineto 1992. Crotone e Capo Colonna: Spadea 2006, 51–65. Sellia Marina:
 Corrado 2009. Pian delle Vigne: Spadea 1982, 85.
- 34 One from Chiusa di Trebisacce, three from Capo Colonna, one from Crotone and two from Pian delle Vigne.
- ³⁵ Giardina 1981, 99–100.
- ³⁶ Marino Taliano Grasso 2010.

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Fig. 1-8: by authors.

References

Accardo 2000

S. Accardo, Villae Romanae nell'ager Bruttius. Il paesaggio rurale calabrese durante il dominio romano (Rome 2000).

Auriemma 1997

R. Auriemma, Per la carta archeologica subacquea del Salento, in: Atti del Convegno Nazionale di archeologia subacquea, Anzio 30-31 maggio e 1 giugno 1996 (Bari 1997) 225–239.

Bonomi - Sabbione 2011

S. Bonomi – C. Sabbione, Attività della Soprintendenza per i Beni archeologici della Calabria, in: La vigna di Dioniso e culti in Magna Grecia: Vite, vino e culti in Magna Grecia, Atti del quarantanovesimo Convegno di Studi sulla Magna Grecia, Taranto 24-28 settembre 2009 (Taranto 2011) 657–688.

Botte 2009

E. Botte, Le Dressel 21-22. Anfore da pesce tirreniche dell'alto impero, in: S. Pesavento Mattioli – M. B. Carre (eds.), Olio e pesce in epoca romana. Produzione e commercio nelle regioni dell'Alto Adriatico Atti del Convegno Padova, 16 febbraio 2007 (Rome 2009) 149–171.

Cannatà 2013

M. Cannatà, La colonia latina di Vibo Valentia (Rome 2013).

Capelli et al. 2017

C Capelli – A. Contini – D. Dajaoi – G. Rizzo, Anfore neopuniche del I secolo d. C. di Arles, Ostia e Roma: classificazione tipo-petrografica, origine e diffusione, the journal of Fasti online, 2017, 1–43.

Cavassa 2008

L. Cavassa, Les Kadoi à poix du Bruttium, MEFRA 220,1, 2008, 99-107.

Costabile 1992

F. Costabile, Redditi, terre e fondi finanziarie dell'Olympeion: tributi, imposte e rapporti contrattuali, in: F. Costabile (ed.), Polis ed Olimpeion a Locri Epizefiri: costituzione economia e finanze di una città della Magna Grecia: editio altera e traduzione delle tabelle locresi (Soveria Mannelli 1992) 160–174.

Corrado 2009

M. Corrado, Nuovi dati di scavo ed epigrafici sulle manifatture tardo-repubblicane di anfore commerciali del versante ionico calabrese gravitanti sul golfo di Squillace (Cz), the journal of Fasti online 138, 2009, 1–10.

³⁷ Vivacqua et al. forthcoming.

³⁸ Iannelli – Cuteri 2007.

Cucarzi et al. 1995

M. Cucarzi – M. T. Iannelli – A. Rivolta, The costal site of Bivona, its detection and its environmental changes through geoarcheological exploration, in: Geosciences and Archeology in the Mediterranean Countries, Atti del Congresso Internazionale, Cairo Novembre 28-30 1993 (Cairo 1995) 149–168.

Cuteri et al. 2007

F. A. Cuteri – M. Corrado – M. T. Iannelli – M. Paoletti – P. Salamida – B. A. Sangineto, La Calabria fra Tarda Antichità ed Alto Medioevo attraverso le indagini nei territori di Vibona Valentia, della Massa Nicoterana, di Stilida-Stilo. Ceramiche, commerci, strutture, in: M. Bonifay – J. C. Tréglia (eds.), Late Roman coarse ware, cooking ware and amphorae in the Mediterranean. Archeology and archeometry Aix-en-Provence – Marseille – Arles, 13-16 avril 2005 (Oxford 2007) 461–476.

Cuteri et al. 2014

F. A. Cuteri – M. T. Iannelli – P. Vivacqua – T. Cafaro, Da Vibo Valentia a Niotera. La ceramica tardo romana nella Calabria tirrenica, in: N. Poulou-Papadimitriou – E. Nodarou – V. Kilikoglou (eds.), Late Roman Coarse wares, cooking wares and amphorae in the Mediterranean Archeology and Archaeometry. The Mediterranean: a market without frontiers (Oxford 2014) 63–79.

Cuteri et al. forthcoming

F. A. Cuteri – M. T. Iannelli – P. Vivacqua – G. M. Crisci – D. Barca – N. Rovella, La provincia di Vibo Valentia nella tarda antichità. Considerazione sulla produzione e circolazione delle anfore e della ceramica comune, in: Late Roman Coarse wares, cooking wares and amphorae in the Mediterranean Archeology and Archaeometry. Land and sea: pottery routes, Agrigento 24-27 maggio 2017, forthcoming.

De Sensi Sestito 2011

G. De Sensi Sestito, Cartagine e la Magna Grecia in età dionisiaca. Il ruolo di Ipponio, in: M. Intrieri – S. Rubichini (eds.), Fenici e Italici, Cartagine e la Magna Grecia. Popoli a contatto culture a confronto. Atti del Convegno Internazionale, Cosenza 27-28 maggio 2008 (Pisa 2011) 29-50.

Faedo 1994

L. Faedo, Aspetti della cultura figurative in età romana, in: S. Settis (ed.), Storia della Calabria 2 (Rome 1994) 597–652.

Giardina 1981

A. Giardina, Allevamento ed economia della selva in Italia meridionale: trasformazioni e continuità, in: A. Giardina – A. Schiavone (eds.), Società romana e produzione schiavistica I. L'Italia: insediamenti e forme economiche (Bari 1981) 87–113.

Givigliano 1994

G. Givigliano, Percorsi e strade, in: S. Settis (ed.), Storia della Calabria 2 (Rome 1994) 243–362.

Iannelli 1989

M. T. Iannelli, Hipponion – Vibo Valentia: documentazione archeologica e organizzazione del territorio, Annale della scuola normale superiore di Pisa 3, 19, 1989, 683–736.

Iannelli - Givigliano 1989

M. T. Iannelli – G. Givigliano, Hipponion –Vibo Valentia: la topografia (carta archeologica), Annale della scuola normale superiore di Pisa 3, 19, 1989, 627–681.

Iannelli et.al. 2017

M. T. Iannelli – P. G. Guzzo – G. Gaglianese – B. Minniti – A.M. Rotella – P. Vivacqua, Hipponion tra la seconda metà del IV e la fine del III sec. a. C.: ricostruzione topografica alla luce di nuove scoperte, in: G. De Sensi Sestito – S. Mancuso (eds.), Enotri e Brettii in Magna Grecia. Modi e forme di interazione culturale (Soveria Mannelli 2017) 397–510.

Iannelli - Cuteri 2007

M. T. Iannelli – F. A. Cuteri, Il commercio e la lavorazione del pesce nella Calabria antica e medievale con particolare riferimento alla costa tirrenica, in: L. Lagòstena – D. Bernal – A. Arévaloo (eds.), Cetariae 2005. Salsas y Salazones de pescado en Occidente durante la Antigüedad. Actas del Congreso Internacional Cadiz, 7-9 de novembre de 2005 (Oxford 2007) 285–300.

La Torre 1990

G. F. La Torre, Per lo studio della viabilità romana in Calabria: considerazioni sul tracciato della via cosiddetta Annia o Popilia dalla Conca di Castelluccio a Vibo, in: Klearchos 125-128 (Reggio Calabria 1990) 149–185.

Lattanzi 1988

E. Lattanzi, L'attività archeologica in Calabria nel 1987, in: Atti del ventisettesimo Convegno di Studi sulla Magna Grecia, Taranto-Pestum 9-15 ottobre 1987 (Taranto 1988) 647–657.

Lattanzi 1989

E. Lattanzi, L'attività archeologica in Calabria-1988, in: Atti del ventottesimo Convegno di Studi sulla Magna Grecia, Taranto7-12 ottobre 1988 (Taranto 1989) 545–563.

Lena 1989

G. Lena, Vibo Valentia. Geografia e morfologia della fascia costiera e l'impianto del porto antico, in: Annale della scuola normale superiore di Pisa, serie 3, 19 (Pisa 1989) 583–607.

Marino - Taliano Grasso 2010

- D. Marino A. Taliano Grasso, Ricerche topografiche e scavi archeologici nella Sila Grande, in:
- L. Quilici S. Quilici Gigli (eds.), Atlante Tematico di Topografia Antica, 20 (Rome 2010) 51-78.

Mariottini 2001

S. Mariottini, Volontariato ed archeologia subacquea: esperienza di ricerca in Calabria, in: M. Gacobelli (ed.), Lezioni Fabio Faccenna. Conferenze di archeologica subacquea (Bari 2001) 37–50.

Paoletti 2014

M. Paoletti, Il ritratto di Agrippa da Vibo Valentia, in: M. T. Iannelli (ed.), Hipponion Vibo Balentia Monsleonis. I volti della città (Reggio Calabria 2014) 171–179.

Pitimada 1953

L. Pitimada, S. Onofrio (Catanzaro). Rinvenimento di cippo miliario, NSc 7, 1953, 343-344.

Rizzo 2002

G. Rizzo, Instrumenta urbis I. Ceramiche fini da mensa, lucerne ed anfore a Roma nei primi due secoli dell'impero (Rome 2003).

Sabbione 1979

C. Sabbione, Ricerche archeologiche nei territori di Locri e delle sue sub colonie, in: Atti del diciottesimo Convegno di Taranto, Taranto 8-12 ottobre 1978 (Taranto 1979) 382–398.

Rizzo 2014

G. Rizzo, Ostia VI. Le terme del nuotatore. Le anfore, Ostia e i commerci mediterranei (Rome 2014).

Sangineto 1992

A. B. Sangineto, Il deposito di anfore di tre bisacce ed un recipiente per la pix bruttia, in: F. Costabile (ed.), Polis ed Olimpeion a Locri Epizefiri: costituzione economia e finanze di una città della Magna Grecia: editio altera e traduzione delle tabelle locresi (Soveria Mannelli 1992) 183–190.

Sangineto 1994

A. B. Sangineto, Per la ricostruzione dei paesaggi agrari delle Calabrie romane, in Storia della Calabria, in: S. Settis (ed.), Storia della Calabria 2 (Roma-Reggio Calabria 1994) 559–593.

Sangineto 2006

A. B. Sangineto, Anfore, in: G. F. La Torre – F. Mollo (eds.), Blanda Julia sul Palecastro di Tortora. Scavi e ricerche (1990-2005) (Soveria Mannelli 2006) 310–335.

Sogliani - Rotella 1998

A. M. Rotella – F. Sogliani, Il materiale ceramico tardoantico ed altomedievale da contesti di scavo e dal territorio nella Calabria centro – meridionale, in: L. Saguì (ed.), Ceramica in Italia: VI – VII secolo, Atti del Convegno in onore di John W. Hayes (Roma 11–13 maggio 1995) (Firenze 1998) 769–776.

Spadea 1982

R. Spadea, L'area di Piano della Tirena e di S. Eufemia Vetere, in: G. Maddoli (ed.), Temesa ed il suo territorio. Atti del Colloquio di Perugia e Trevi 30-31 maggio 1981 (Taranto 1982) 79–89.

Spadea 2006

R. Spadea, L'abitato del promontorio lacinio e la colonia romana di Crotone, in: R. Spadea (ed.), Ricerche nel santuario di Hera Lacinia a Capo Colonna di Crotone (Rome 2006) 51–65.

Taliano Grasso 1995

A. Taliano Grasso, Considerazioni topografiche sulla via Annia tra Muranum e Valentia (Rome 1995).

Vivacqua et al. forthcoming

P. Vivacqua – G. Biscontin – F. C. Izzo – A. Bernardi, I kadoi del Bruttium: nuove evidenze archeologiche ed archeometriche, in: Atti e Memorie della Società Magna Grecia s. V., vol. III, 2018 [2019], forthcoming.