

Albert Ribera & Carlo De Mitri

HISPANIC AMPHORAE ALONG ILLYRIA AND EPIRUS. PRELIMINARY REPORT

The presence of western goods and containers, often attested by only a few units, indicates that this area was part of the trade networks that linked the western and eastern Mediterranean. Notably, the Ionian-Adriatic basin was a major market for Hispanic products throughout the Roman period.

Roman amphorae – mostly Greco-Italic and Lamb. 2 types from Adriatic Italy – began arriving to the region in the Hellenistic period. During this early period, Iberian productions were rare, chiefly Punic-Ibizan vessels found from Montenegro (Risan) to Albania (Skhodër, Oriko) and in the Greek Epirus.

From the 1st century AD, Roman Hispanic amphorae, especially Baetican Dr. 7-11, 12, 20 and Haltern 70 types, become common in land and maritime Dalmatian sites. This is less the case in southern Dalmatia, but we think that these differences in distribution are more the result of the poor excavation methodologies in certain sites than a reflection of historical reality. This paper aims at reviewing finds of Hispanic vessels in the region.

Trade – Hellenistic – Roman – shipwrecks, economy

Introduction¹

The finds reported in the literature and in museum collections and storerooms are, in general, very dispersed and fragmented. The current territorial division of ancient Illyria and Epirus into three states, Montenegro, Albania, and Greece, does not facilitate a homogeneous research approach. In some instances, the catalogue entries of some pieces that have not been examined directly can be regarded as doubtful.

Our aim is to try to fill existing gaps, while trying to clarify whether these gaps are due to a lack of research or if Hispanic amphorae were really that rare in the region, being simply channeled through it on their way to the northern and the eastern Mediterranean.

Hispanic amphorae in the Western Mediterranean

Hispanic amphorae are common in archaeological assemblages in the southern Tyrrhenian coast, as illustrated by numerous finds in Rome and its immediate hinterland. From the earliest research on amphorae, Monte Testaccio and Castro Pretorio have borne witness to the intensity of this trade. More recent, and no less striking, finds in Longarina 1 and 2, Ostia and, within Rome, the Mercato Testaccio, have confirmed this, while demonstrating that Iberian amphorae accounted for a significant proportion of imports in the capital of the Empire from Augustus to the mid-3rd century AD (Blázquez and Remesal 2016; Contino et al. 2022; Rizzo et al. 2020; Sebastiani and Serlenti 2011).

Further south, in Pompeii, from the change of era to AD 79, Hispanic amphorae have also been found in great numbers all the way to the eruption (Ribera et al. 2016; Manacorda 1977). From the Hellenistic period onwards, amphorae manufactured in the Iberian Punic regions (e.g. Ibiza and Cádiz) also made their way to the city, although only in small numbers (Pascual, Ribera and Finkielstein 2008; Bernal-Casasola and Sáez 2019).

In Pompeii, most of these amphorae are containers of fish products, while in Rome olive oil containers predominate. In Italy, Baetican wine containers are as a rule less common, gradually decreasing in number after a moderate peak in the first half of the 1st century AD.

Imperial Hispanic amphorae are found in some quantity in interior southern Italian cities, for instance Grumentum, where they account for 20% of the total assemblage in some contexts, especially the Baetican Dr. 7-11 and 20 and Beltrán IIA and IIB types. The Almagro 50 type has also been attested (De Mitri 2023a). Imported amphorae in Grumentum appear to be connected to Tyrrhenian trade networks, as suggested by the Matrella shipwreck, found near the workshop of Santo Janni (Bottini 2017), whose cargo included the Almagro 50 type. In Maratea, in the Tyrrhenian coast of Lucania, more Iberian containers have been found, including two specimens of the Dressel 20 type, which do not seem to be included in the wreck's cargo, alongside some Almagro 50 amphorae (Bottini and Freschi 1993: 35-39) and a whole specimen of the Dressel 7/11 type found in the mooring area of Santo Janni.

Shipwrecks in southern Corsica, Sardinia, Sicily, and Tyrrhenian Italy have thoroughly documented this traffic for the 1st century AD but, interestingly, less so for the 2nd century AD. Underwater finds, like those on land, suggest the predominance of oil and fish-product containers (Bom-bico 2016). Iberian wine only appears to have been a major

¹ The authors are very grateful to Horacio Gonzalez and Guillermo Pascual for their co-operation and retrieval of data and information.

product in the early days of the Empire, especially in Gaul and the Rhenish border.

The end of the Monte Testaccio sequence in the third quarter of the 3rd century AD is parallel to the end of the preeminence of Baetican oil amphorae in Rome and Ostia. Although Dressel 23 amphorae from the Guadalquivir Valley and the Malaga region appear in different contexts in Lazio (Rizzo 2014; Contino and Quevedo 2021), Baetican and Lusitanian fish containers become the predominant Iberian types, with only a few wine amphorae. Recent studies by Alejandro Quevedo, in cooperation with Italian colleagues, have also identified amphorae from the region between Águilas and Mazarrón, in southeast Spain, in archaeological contexts from the Roma area (Contino and Quevedo 2021). We are certain that future studies will increase the presence of this important amphoric production of the 4th and 5th centuries.

In the 3rd and 4th centuries AD, shipwrecks with Hispanic amphorae – forms Keay XIII (Dr. 23), XVI (Almagro 50 / Beltran 72), XIX (Almagro 51 AB / Beltran 52), XXII (Almagro 50), and XXIII (Almagro 51C / Beltran 51) – increase in number in the South Tyrrhenian (Bombico 2016). Although the arrival of Hispanic amphorae, especially fish by-products, has been observed in places farther east, from Greece to Israel (Bernal 2000), some of these sunken vessels were in all probability sailing towards the Adriatic coast.

Hispanic amphorae in the Adriatic

Many Hispanic amphorae from the imperial period have been found on the Italian, Croatian, and Slovenian north Adriatic coast. Baetican fish products appear to have been more popular than Lusitanian ones, both of which are found, although imports were somewhat limited by the local production of similar products. Archaeological activity has been intense in the region, so the evidence is plentiful. The literature covers a large number of sites, including Milan, Brescia, Ravenna, Classe, Trieste, Rijeka, Aquileia, Grado, Concordia, Opitergium, Padova, Imola, Zuglio, Altino, Modena, Adria, Brioni, and Pola, concerning both Baetican and Lusitanian containers (Auriemma, Pesavento and Mongardi 2016).

In the Late Empire there was a relative increase in the number of these amphorae, notably of the Almagro 50 and 51 types, both Baetican and Lusitanian (Auriemma, Pesavento and Mongardi 2016: 419).

In Dalmatia and Pannonia, amphorae from Hispania have been found in at least 40 sites, both at sea and on land. Several cargoes of Hispanic amphorae have been recorded in the waters of the northern and central Adriatic, including the shipwrecks of Parzanj (Hvar) – Dr. 8-10 – and Pupak (Palagruza) – Haltern 70, Dr. 2-4 and Beltran IIA – both dated to the 1st century AD (Vrsalović 2011). The Dr. 28 and 2-4 types were found in Mlim, near Split, but their origin is dubious (Dugonjić 2015: 246; Jurisić 2000: 22). Only one major find of Dr. 20 amphorae has been found in the Adriatic, at the coastal embankment in Spinut, where such amphorae were used as construction material together with African cylindrical amphorae (Afr. II). According to the stamps (SAXO. FERR, FSF. A.QVA, SCOROBRES, SPERATVS, OC.PA,

A(I) FF, L.P.M.S., FORTVNA), these amphorae are dated to the first half of the 2nd century AD. Large fragments of individual specimens were found in Fazana, Sveti Ivan, Stipanska, and at the island of Zut (Cambi 1983). As the Dr. 20 type is often found in archaeological collections, more find-spots can be expected.

Somewhat later, in the late 2nd or early 3rd century, a shipwreck of the small island of Gusteranski, north of Zirje Island, in central Dalmatia, yielded Keay XVI amphorae in association with the Beltran IIB type (Jurisić 2000: 22, 64). The Almagro 51 type was found in the Sobra shipwreck, off Mljet island (Kisić 1987).

Overall, the proportion of Hispanic amphorae in these waters is low, a fact that stands out particularly in view of the large number of shipwrecks found in the Eastern Mediterranean (Auriemma, Degraasi and Quiri 2015; Dugonjić 2015; Royal 2018).

On land, the data agrees with the evidence yielded by shipwrecks. In northern Adriatic Italy, Hispanic amphorae are abundant in major cities such as Aquileia and Verona (Gonzalez et al. 2000).

In general, in Dalmatia, in the first century AD, *garum* Hispanic amphorae (Dr. 7-11, 12 and Beltran IIA) are common, while wine (Dr. 2-4 from *Tarraconensis*, Pascual 1, and Haltern 70) and oil (Dr. 20) amphorae are scarce, although not altogether missing. In the 2nd and 3rd centuries, in contrast, the arrival of fish products (of the Beltran IIA and IIB and the Keay XVI types) and oil Dr. 20 amphorae (Borzić and Ožanić 2018) wanes. This pattern is also observed in the bordering provinces of Pannonia, Noricum, and northern Italy. This is illustrated, for instance by Sisak (Siscia), an important and communications hub far from the coast, where many Baetican amphorae have been found, including the Dr. 20, Dr. 7-11, Beltran IIA, and Haltern 70 types and some specimens cataloged as Dr. 8, followed, later, by some Dr. 23 (Novaković, Paro and Radman-Livaj 2018). Even in less connected areas, such as Herzegovina, Hispanic amphorae dated to the early imperial period – Dr. 20 and Beltran IIA – and later – Dr. 23 – have been found (Busuladžić 2019).

In the 4th century, there were still some Dr. 23 olive oil amphorae, but Lusitanian types were more common (Keay XVI, XIX, XXIII) (Borzić and Ožanić 2018). In the village of Školarice (Koper), at a mid-5th century destruction level yielded Dr. 23, Almagro 50, and 51C specimens, in contexts regularly dominated by African productions (Žerjal 2010: 704).

In general, Hispanic amphorae were widely distributed throughout the Upper Adriatic, on the coast of Istria and Dalmatia and also some areas of the interior (Cambi 1983; Borzić and Ožanić 2018).

Some alleged Hispanic finds in the military camp of Burnum and other nearby sites, which have been related to the Dr. 8 type, are not in fact Hispanic, but local imitations of Hispanic types. This matter is not free from controversy. Recent analyses by Capelli have excluded the possibility that these strange Dressel 7-11 amphorae (fairly similar to the Dressel 8 type) were made in the central or southern Adriatic, and are unlikely to come from the northern Adriatic either (although the latter possibility must not be rejected out

of hand). We think that the formal features, the presence of inscriptions in ink mentioning “Hispanum”, comparable to those found in Dressel 7-11 specimens from Lyon, and the absence of these amphorae outside northern Italy (with the exception of one example in Bezeczy, Poetovio) suggests a production center not too distant from their main distribution centers in northern Italy (Gonzalez and Berni 2019; Mongardi 2016).

A. R.

Hispanic amphorae in Illiria and Epirus

Hellenistic period

The expansion of Hispanic amphorae took off from the mid-1st century BC, which explains their extreme rarity in Risan, Shkodra, Orikos, and Butrint (fig. 1). The Hellenistic corpus of Iberian amphorae is small and certainly not homogeneous, representing different productions and chronologies. At Risan, most amphorae are from the Italian Adriatic coast. The bulk of the assemblage is made up of the Lamboglia 2 type, a predominant type during the 1st century, which was manufactured in many different production centers (Cipriano and Carré 1989; Pascual and Ribera 2013: 252-254). Another type found in the assemblage is the Italo-Adriatic Palazzo-Apani 1/Giancola 2. Graeco-Italic containers whose fabrics point to Adriatic Italy are among the earliest vessels; they are dated from the late 3rd to the mid-2nd century BC (Dyczek et al. 2020).

The most numerous amphora type was the Punic-Ibiza type, made in the island of *Ebusus* (Ibiza) (Ramon 1995). The type has been found in Shkodra (Ribera and Heras 2020) and Orikos (De Mitri 2023a). These containers were common in the Western Mediterranean from the 5th to the 1st century BC. They are found in coastal sites in Iberia, south Gaul, Morocco, and Algeria, but in Italy they are very scarce (Ribera, Salavert y Stannard 2013). None had been recorded to the east of southern Italy (Pompeii). It is likely that these amphorae are more common than this suggests, but they are difficult to recognize. At any rate, they are the first Iberian wares recorded in this area.

To date, the type has not been identified in Epirus.

Painted Iberian wares dated to the 2nd and 1st centuries BC are common, although in small numbers, in Tyrrhenian Italy. The presence of some fragments in Salona reflects the restricted distribution of Hispanic productions in this area (Puppo 2016; De Mitri 2023b: 181-184).

Finds of Hispanic coins of the pre-imperial period in the eastern Adriatic coast and its hinterland are an interesting development. These coins are either isolated finds or part of so-called Mazin-type hoards. A total of 28 specimens are known, most of which have not been published to date. Most were minted in Castulo, but there are three specimens from Obulco, and one each from Emporiae, Kelse and Sekobirikes. Isolated examples of these western Mediterranean coins have been found in fifteen different sites, notably in Iapodia and Liburnia. A single example has been found in central Dalmatia, during archaeological excavations in the territory of

Resnik, near Split (Čelhar and Ilkić 2019). This concentration of 2nd-century BC Hispanic coins in Liburnia and Iapodia, should be related in part to commercial traffic but above all with Roman army activity during the conquest of Dalmatia.

Roman Empire

The Imperial period was very different. In general, both underwater and terrestrial assemblages off and on the Adriatic coast reflect a substantial increase in the arrival of wine amphorae, most of them oriental, especially of the late Camolodunum 184 type (Auriemma and Silvestrelli 2013: 442; Auriemma, Degraffi and Quiri 2015).

It seems that contacts with Hispania were not direct, but through intermediate harbors. Some shipwrecks detected in Dalmatia, for instance in Pupak (Palagruza), contain mixed cargoes, in which Hispanic amphorae are found in association with alum containers from Lipari, but that of Parzanj only carried Hispanic products (Vrsalovic 2011).

In an early phase, during Augustus's rule, findspots include Risan, Orikos (ovoid) and Butrint (Pascual 1), and, perhaps, Shkodra (Risan: Dyczek et al. 2020; Shkodra: Shpuza 2009; Butrinto: Aleotti and Bolzoni 2018).

Risan yielded a single specimen of Baetican, Dr. 8, a widely distributed type. It is contemporary to the Dr. 6A and 6B types, which also appear in small numbers in Risan. In nearby waters, most amphorae are Hellenistic types from Adriatic Italy, and no Hispanic types have been attested (Bajtler 2016).

No Hispanic amphorae have been recognized in a broad corpus of materials from the Budva area, south of Montenegro, which includes a fair proportion of underwater finds; amphorae from Adriatic Italy, Africa and the eastern Mediterranean are widely represented in this assemblage (Zagarćanin 2021: 409).

In Dyrrachium (Dürres), the presence of the Dr. 17 and 20 and the Beltran II A types have been attested. A little farther inland, the Dr. 20 type has been identified in Shkodra (Shehi 2003: 210 and 216).

In the ancient Illyrian capital, Shkodra, several fragments of Hispanic amphorae of the Dr. 19-20, 7-11 and 28 types have been reported (Shpuza 2009: 223-225). Further south, in Apollonia, the presence of the Dr. 7-11 and 28 and the Beltran IIA types has also been attested.² In the waters of Triport, in the area of the Vlorë bay, an allegedly Hispanic Dr. 28 amphora was found (Disantarosa 2017: 271-273). In the interior of northern Epirus, some Baetican containers have also been found, for instance in the city of Hadrianopolis, founded by Emperor Hadrian in Caonia, south of Gjirokaster, including the Dr. 7-11 and 20 and the Beltran IIA and IIB types (Perna 2016: 234).

Most imports spanning the 1st and 4th centuries AD in Butrint are wine transport vessels and include no Hispanic productions. The Hispanic amphorae from the site are containers for oil and fish by-products. They are especially

² Information provided by Bashkim Lahi.

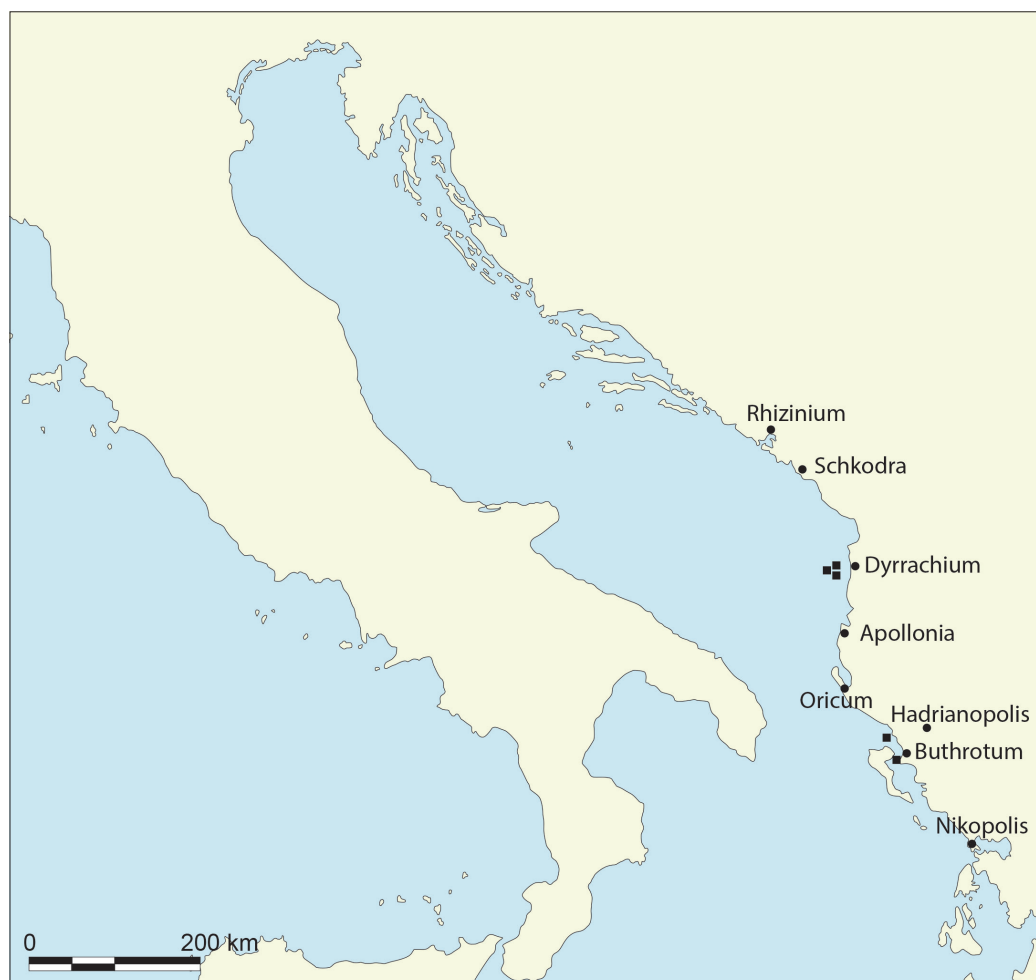


Fig. 1. Main sites mentioned in the text.

SITE	PHASE 1 Hellenistic	PHASE 2 50 BC-50 AD	PHASE 3 50 250 AD-	PHASE 3 250-500	Notes
Risan Rhizinium			Dr. 8		
Shkodra	Punic Ebusitan	Pascual 1	Dr. 20; Dr. 19; D. 28; Dr. 7/11		Shpuza 2009: 223-225; Ribera and Heras 2020
Dürres Dyrrachium			Dr. 20; Dr. 7/11	Almagro 51C	Auriemma, Degrassi and Quiri 2012; Shpuza 2009: 223-225
Dyrrachium 3 shipwreck				Almagro 51C	Anastasi and Capelli 2016
Apollonia			Dr. 28, Dr. 7-11 Beltran IIA		Ex info Bashkim Lahi
Triport (sea)			Dr. 28		Disantarosa 2017: 271-273;
Orikos	Punic Ebusitan	Ovoide?			De Mitri 2023a
Butrinto	Punic Ebusitan	Pascual 1	Dr. 20 Dr. 28, Pascual 1	Almagro 51C Beltran 72	Aleotti and Bolzoni 2018; Auriemma, Degrassi and Quiri 2012; Reynolds 2020; Disantarosa 2017: 273
Butrinto (sea)		Pascual 1	Dr. 28	Beltran 72	Disantarosa 2017, 273.
Hadrianopolis			Dr. 7/11 Dr. 20 Beltran IIA e B Gauloise 4		Perna 2016: 234
Sud Albania (sea)		Pascual 1	Dr. 9/10, 20, 28	Beltran 72 Dr. 23	Royal 2018
Nicopolis				Baetican	Reynolds and Pavlidis 2015

Tab. 1. Distribution of Hispanic amphorae along Illyria and Epirus.

abundant in the 1st century and the early 2nd century AD, after which they lose ground to African, Pontic and Aegean containers (Aleotti and Bolzoni 2018). Although they never were very abundant, they are always present in contexts dating to between the 1st and 4th centuries AD. The most common types are the Dr. 20 and some Lusitanian productions.

Intensive surveys in southern Albania waters have attested several Hispanic amphorae, which account for 10% of all republican and early imperial and 3.4% of late imperial material. The most common type is Dr. 20, which account for 5% of all early imperial amphorae and 1.7% overall. The rest belong to the Pascual 1 and Dr. 9/10 and 28 types. Late imperial types include Dr. 23 and Beltran 72 (Royal 2018: 28-30).

In the imperial period, the oldest specimens are the Pascual 1 and Dr. 8 types found in Risan, Shkodra, Butrint, and the sea. Throughout the imperial period, Hispanic containers are documented in the main Roman centers in modern Albania, including amphorae produced in various workshops and intended for the transport of different products. The most common type is the Dressel 20, followed by Dr. 7/11 and, less often, other types such as the Beltran IIA and IIB.

Late Roman period

The Almagro 51 amphorae found in the Sobra (Mljet) shipwreck came together with African amphorae, tableware, and kitchen wares (Kisić 1987). Similarly, the Almagro 51c types found in the Dyrrachium 3 shipwreck were part of a mixed cargo that also included African (I, II, III) and Mauritanian (Keay I) amphorae (Anastasi and Capelli 2016). In the waters of southern Albania, late Hispanic amphorae are represented by the Dr. 23 and Beltrán 72 types (Royal 2018: 28-30).

On land, the Almagro 51 type also appears in Dyrrachium (Auriemma, Degrassi and Quiri 2012) and Butrint (Aleotti and Bolzoni 2018).

In Nicopolis, a doubtful Baetican pivot was attested in a deposit dated to the early 5th century, alongside other amphorae of miscellaneous origin (Reynolds and Pavlidis 2017).

C.D.M.

Preliminary conclusions

These are the preliminary results of a work in progress (**table 1**). For instance, the meaning of the absence or low proportion of certain materials in specific areas remains unclear. For the issue at hand, Epirus is like a black hole, where the presence of Hispanic amphorae is negligible. However, until approximately ten years ago, the Ionic Sea, especially its eastern shores, had witnessed very little archaeological activity, unlike the Aegean, on which most of the work of the Greek Department of Underwater Antiquities focused (Kourkoumelis 2013: 469). The situation has improved somewhat since, both on land and at sea, but the volume of information available is still fairly low, especially when compared with the north-central Adriatic region.

In general, Hispanic amphorae are present in this area, but only in small numbers. In the late Hellenistic period, their presence is dwarfed by that of Italic Adriatic productions. The circulation of goods and pottery from the Iberian Peninsula in the late Hellenistic period is, however, attested by a few specimens. Incidentally, the so-called “sombbrero de copa” type, a type of *kalathos* with painted decoration, which was probably used in the honey trade, is found on both sides of the Adriatic, in Ancona and Salona (Puppo 2016). At the same time, a few larger containers, especially Hispanic Punic amphorae, are also found. However, only a few of these containers, whose chronology spans the 2nd and 1st centuries BC, have been found or identified in the late Hellenistic contexts of Shkodra, Orikos, and Butrint (De Mitri 2023b: 181-184).

Hispanic amphorae began to become more common from the mid-1st century BC, when several foodstuffs, such as olive oil, wine, and fish by-products, as well as other goods, especially metals, began flooding the Mediterranean markets (Berti 2017).

In fact, from the reign of Augustus and throughout the imperial period, Hispanic products are attested by amphorae intended to contain different foodstuffs and made in various workshops, especially in Baetica, whence they were shipped to the main centers in modern Albania. The Dressel 20 is the most widespread type, but the Dr. 7/11 and, less often, other shapes such as the Beltran IIA and IIB, are also found. The Dr. 28 type has also been reported, although the fragmentary state of the remains makes this classification uncertain. In this period, the Baetican products were more common than Lusitanian ones.

To date, the central and northern Adriatic area present a much greater number of finds than the southern Adriatic and the eastern Ionian regions. The wide dissemination of eastern Mediterranean products is striking. They are widely represented in several shipwrecks and terrestrial sites (Auriemma, Degrassi and Quiri 2015). On the Albanian Illyrian coast, some shipwrecks from the mid-imperial period have been recorded to include late Rhodian amphorae, but no Hispanic cargoes (Royal 2018). In contrast, on the Dalmatian coast and islands, some sites have yielded only Hispanic amphorae, for instance Pupak and Parzanj (Vrsalovic 2011). The somewhat later Gusteranski shipwreck (c. AD 200), carried a mixed cargo of Hispanic (Beltran IIB and Keay XVI) African and Italians containers (Jurisić 2000: 64).

From the late imperial period and during late antiquity there is a sharp decline in the number of Hispanic finds, which are reduced to the Lusitanian amphorae found in Durres, Butrint and nearby waters. In this period, the few attested Hispanic containers, basically the Almagro 51C type, are unevenly distributed and generally appear mixed with African shapes, for instance in the Dyrrachium 3 shipwreck (Anastasi and Capelli 2016). Other shipwrecks off Albania, such as Joni, dated to the late 4th century, carried African amphorae alongside eastern types (Royal 2018). Mixed cargoes are known in other shipwrecks dated to the late imperial period (Volpe 1998). As a rule, African products constitute the bulk of these cargoes. For instance, in the above noted 4th century Sobra shipwreck, off the island of Mljet, in southern

Dalmatia but very close to Illyria, five specimens of Hispanic Almagro 50 amphorae were found alongside 1,000 African Keay XXV and several African IID, as well as containers from other origins. It is assumed that these ships came from some important entrepot, probably Carthage (Auriemma, Pesavento and Mongardi 2016). The renewed trade patterns in the late empire have been linked to the *annona militaris* and the supply of the Danubian frontier (Kingsley 2008).

Therefore, the Iberian amphorae attested in Illyria and Epirus suggest an uneven distribution over time. Their presence in Albania is more common, but this is where excavation has been most intensive, while the Illyrian coast (Montenegro) coast and the coast of Epirus, on the eastern shore of the Ionian Sea, appear almost empty of Hispanic products. Future finds, both positive and/or negative, should confirm or modify these conclusions.

Albert Ribera

Independent researcher
ariberalacomba@gmail.com

Carlo De Mitri

Research Fellow. Department of Humanities,
Social Sciences and Education, University of Molise (Italy)
carlo_demitri@yahoo.com

Bibliography

- Aleotti, N. and Bolzoni, G. 2018. Contatti commerciali nel basso Ionio tra l'età ellenistica e l'età imperiale: i dati delle anfore da Butrinto. In J.-L. Lamboley, L. Përzhita and A. Skenderaj (eds.), *L'Illyrie méridionale et l'Épire dans l'Antiquité. Actes du VIe colloque international de Tirana*, 791-796. Paris, De Boccard.
- Anastasi, A. and Capelli, C. 2016. The "Dyrrachium 3" Wreck in the Bay of Durres. A Cargo with African-Spanish Amphorae of the III/IV Century AD. *International conference Transformations of Adriatic Europe 2nd - 9th century. Programme and Book of Abstracts*. Zadar.
- Auriemma, R., Degrassi, V. and Quiri, E. 2012. Produzione e circolazione di anfore in Adriatico tra III e IV secolo: dati da contesti emblematici. In C.S. Fioriello (ed.), *La Ceramica romana nella Puglia adriatica*, 255-298. Bari, Sedìt.
- Auriemma, R., Degrassi, V. and Quiri, E. 2015. Eastern amphora imports in the Adriatic Sea: evidence from terrestrial and underwater contexts of the Roman Imperial age. In S. Demesticha (ed.) *Per Terram, per Mare. Seaborne trade and the Distribution of Roman Amphorae in the Mediterranean*, 139-160. Uppsala, Aströms förlag.
- Auriemma, R., Pesavento, S. and Mongardi, M. 2016. Lusitanian amphorae in Adriatic Italy: Commercial routes and distribution. In I. Vaz Pinto, R. R. de Almeida and A. Martin (eds.), *Lusitanian Amphorae: Production and Distribution* (RLAMP - Roman and Late Antique Mediterranean Pottery 10): 419-428. Oxford, Archaeopress.
- Auriemma, R. and Silvestrelli, F. 2013. Rotte e commerci marittimi tra Ellenismo e prima età imperiale: i giacimenti dell'Adriatico e dello Ionio. In G. Olcese (ed.), *Inmensa Aequeora 3. Ricerche archeologiche, archeometriche e informatiche per la ricostruzione dell'economia e dei commerci nel bacino occidentale del Mediterraneo (metà IV sec. a.C. – I sec. d.C.)*, 439-454. Roma, Quasar.
- Bajtlar, M. 2016. Underwater finds from Risan (Montenegro). Season 2011. *Novensia* 27, 99-106.
- Bernal-Casasola, D. 2000. Las ánforas béticas en los confines del imperio. Primera aproximación a las exportaciones a la pars orientalis. In *Ex Baetica Amphorae. Conservas, aceite y vino de la Bética en el Imperio Romano. Sevilla-Écija, 17-20 diciembre 1998*, 935-988. Écija, Gráficas Sol.
- Bernal-Casasola, D. and Sáez, A. 2019. *Garum* y salazones de la *Hispania Ulterior*. Primeras identificaciones de ánforas de producción púnico-gaditana en Pompeya. In D. Bernal-Casasola and D. Cottica (eds.), *Scambi e commerci in area vesuviana. I dati delle anfore dai saggi stratigrafici I.E. (Impianto Elettrico) 1980-81 nel Foro di Pompei* (RLAMP - Roman and Late Antique Mediterranean Pottery 14): 96-116. Oxford, Archaeopress.
- Berti, F. 2017. Piombo in lingotti dalla nave di Valli Ponti. In R. Auriemma (a cura di), *Nel mare dell'Intimità. L'archeologia subacquea racconta l'Adriatico. Trieste, ex Pescheria – Salone degli Incanti, 17 dicembre 2017 – 1 maggio 2018*, 171. Roma, Gangemi editore SpA international.
- Blázquez, J. M. and Remesal, J. (eds.) 2016. *Estudios sobre el Monte Testaccio (Roma) V* (Col.lección Instrumenta 35). Barcelona, Universitat de Barcelona.
- Bombico, S. 2016. Lusitanian amphorae on Western Mediterranean shipwrecks: fragments of economic history. In I. Vaz Pinto, R. R. de Almeida and A. Martin (eds.), *Lusitanian Amphorae: Production and Distribution* (RLAMP - Roman and Late Antique Mediterranean Pottery 10): 445-460. Oxford, Archaeopress.
- Borzić, I. and Ožanić Roguljić, I. 2018. Hispanic products in Dalmatia and the Croatian part of Roman Pannonia. *Rei Cretariae Romanae Fautores Acta 45. Congressus tricesimus Rei Cretariae Romanae Fautorum Olisipone habitus MMXVI*, 511-523. Bonn, RCRF.
- Bottini, P. (ed) 1997. *Il Museo archeologico nazionale dell'Alta Val d'Agri*. Lavello, Alfagrafica Volonnino.
- Bottini, P. and Freschi, A. (a cura di) 1993. *Sulla rotta della "Venus". Storie di navi, commerci e ancore perdute. Catalogo della mostra – Maratea 1991*. Taranto, Scorpione Ed.

- Busuladžić, A. 2019. A contribution to knowledge of Greek and Roman amphorae found or located in Bosnia and Herzegovina. *Radovi* 6, 223-246, Sarajevo.
- Cambi, N. 1983. Le anfore Dressel 20 nella Jugoslavia. In J. M. Blázquez and J. Remesal Rodríguez (eds.), *Producción y comercio del aceite en la Antigüedad : segundo congreso internacional (Sevilla, 24-28 febrero 1982)*, 363-389. Madrid, Editorial de la Universidad Complutense de Madrid.
- Čelhar, M. and Ilkić, M. 2019. Finds of Hispanian coins on the eastern Adriatic coast and its hinterland. *Vjesnik za Arheologiju i Povijest Dalmatinsku (VAHD)* 112, 33-55.
- Cipriano, M. T. and Carré, M. B. 1989. Production et typologie des amphores sur la côte adriatique de l'Italie. In *Amphores romaines et histoire économique, dix ans de recherche. Actes du colloque de Sienne (22-24 mai 1986)* (Collection de l'École française de Rome 114): 6-104. Rome, École française de Rome.
- Contino, A., D'Alessandro, L., D'Alessio, A., González, H. and Pannuzi, S. 2022. La Longarina 2 (Ostia) Revisione dei dati provenienti dai contenitori da trasporto. Rapporto Preliminare. *FOLD&R Fasti On Line Documents & Research* 540, 1-29.
- Contino, A. and Quevedo, A. 2021. Contesti tardoantichi di Portus (Fiumicino, IT): Novità dai c.d. Magazzini Traiane. *Papers of the British School of Rome* 89, 1-31.
- De Mitri, C. 2023a. Rotte e snodi commerciali: contenitori da trasporto iberici e gallici nel bacino ionio-adriatico in età romana. Il caso di Grumento (Potenza – Basilicata). In *Testaceum I. Studia Amphoraria Emilio Rodriguez Almeida Dedicata. Le anfore betiche Dressel 20: produzione e diffusione. Museo delle Navi Antiche di Pisa. 25-26 maggio 2021* (Gradus 17.1): 87-99. Pisa, Museo delle Navi Antiche di Pisa.
- De Mitri, C. 2023b. *From coast to coast: networks sociali ed economici nel Canale d'Otranto tra Mar Adriatico e Mar Ionio in età tardoellenistica* (Cronache Monografie). Roma, Edizioni Quasar.
- Disantarosa, G. 2017. Le anfore: indicatori archeologici dei traffici commerciali lungo le coste albanesi. In D. Leone y M. Turchiano (eds.), *Liburna I. Archeologia subacquea in Albania* (Insulae diomedee, 29): 243-324. Bari, Edipuglia.
- Dugonjić, P. 2015. Rhodian amphorae in the Adriatic: a preliminary report on the evidence from Croatia. In S. Demesticha (ed.), *Per Terram, per Mare. Seaborne trade and the Distribution of Roman Amphorae in the Mediterranean*, 245-256. Uppsala, Aströms förlag.
- Dyczek P., Principal, J., Ribera, A. and Heras, J. 2020. Main Trade Dynamics in Hellenistic Risan (Kotor, Montenegro): Preliminary Evidence from Tableware and Amphorae. In *Exploring the neighborhood : the role of ceramics in understanding place in the Hellenistic world : proceedings of the 3rd Conference of IARPotHP, Kaštela, June 2017, 1st-4th*, 387-400. Wien, Phoibos Verlag.
- Gonzalez, H. and Berni, P. 2019. Hispanian amphorae. In T. Bezeczky (ed.), *Amphora Research in Castrum Villa on Brijuni Island* (Denkschriften Bd. 29): 47-54. Wien, Austrian Academy of Sciences Press.
- Gonzalez, C., Gonzalez, M., Lagostena, L., Modrzewska, I., Oddone, M. and Pianetti, F. 2000. L'importazione del garum iberico a Verona. In *Ex Baetica Amphorae. Conservas, aceite y vino de la Bética en el Imperio Romano. Sevilla-Écija, 17-20 diciembre 1998*, 837-852. Écija, Gráficas Sol.
- Jurišić, M. 2000. *Ancient shipwrecks of the Adriatic. Maritime transport during the first and second centuries AD* (BAR International Series 828). Oxford, Archaeopress.
- Kingsley, S. 2008. Decline & fall in Late Antiquity Croatia: Analytical models for marine archaeology. In I. Radić, A. Gaspari and A. Pydyn (eds.), *Underwater Archaeology: Past, Present, Future. Proceedings of the EAA conference Session, Zadar, 22-23 September 2007*, 235-248. Zagreb, Croatian Archaeological Society.
- Kisić, A. 1987. Nalaz potinulog trgovačkog broda s početka IV. Stoljeca u uvali Sobri na Mljetu. Archaeological finds from the sunken ship of the 4th century in the bay of Sobra. *Anali Historiskog Instituta Dubrovnika* 24-25, 7-31.
- Kourkoumelis, D. 2013. Transports maritimes et amphores en Mer Ionienne. Une première approche. In G. Olcese (ed.), *Immensa Aequora 3. Ricerche archeologiche, archeometriche e informatiche per la ricostruzione dell'economia e dei commerci nel bacino occidentale del Mediterraneo (metà IV sec. a.C. – I sec. d.C.)*, 469-476. Roma, Quasar.
- Manacorda, D. 1977. Anfore spagnole a Pompei. In *L'Instrumentum Domesticum di Ercolano e Pompei* (Quaderni di Cultura Materiale 1): 121-133. Roma, L'Erma di Bretschneider.
- Mongardi, M. 2016. Anfore di morfologia betica con iscrizioni dipinte dalla *regio VIII Aemilia*. In R. Jarrega and P. Berni (eds.), *Amphorae ex Hispania: paisajes de producción y consumo* (Monografías ex Officina Hispana III): 557-568. Tarragona, Institut Català d'Arqueologia Clàssica.
- Novaković, O., Paro, A. and Radman-Livaj, I., 2018. Amphorae from the position of Sisak - Railway station with special reference to a Dressel 8 type amphora with an inscription. In I. Drnić (ed.), *Segestica and Siscia - From the Periphery of the Empire to a Provincial Center*, 223-247. Zagreb, Arheološki muzej u Zagrebu.
- Pascual, G. and Ribera, A. 2013. El material más apreciado por los antiguos. Las ánforas. In A. Ribera (ed.), *Manual de cerámica romana. Del mundo Helenístico al Imperio Romano. Curso de formación permanente para arqueólogos* 3, 215-290. Alcalá de Henares, Museo Arqueológico Regional.
- Pascual, G., Ribera, A. and Finkielstejn, G. 2008. Las ánforas griegas y púnicas de recientes excavaciones en la *regio VII* de Pompeya. In *V Jornadas Internacionales de Arqueología Subacuática. Comercio, redistribución y fondeadores. La navegación a vela en el Mediterráneo (Gandia 2006)*, 501-520. València, Universitat de València.
- Perna, R. 2016. Ricerche ad Hadrianopolis e nella valle del Drino (Albania): alcune considerazioni sulle trasformazioni dell'insediamento e del territorio dall'età ellenistica a quella bizantina, sulla base delle indagini condotte dal 2011 al 2015. *Annuario Saia* Volume XCII Serie III, 14, 195-260.

- Puppo, P. 2016. Trade Exchanges in the Western Mediterranean: The Distribution of *sombreros de copa*. In S. Japp and P. Köegler (eds.), *Tradition and Innovations: Tracking the Development of Pottery from the Late Classical to the Early Imperial Periods. 1st Conference of IARPotHP, Berlin, November 2013*, 87-98. Wien, Phoibos Verlag.
- Ramón, J. R. 1995. *Las ánforas fenicio-púnicas del Mediterráneo Central y Occidental* (Col.lecció Instrumenta 2). Barcelona, Universitat de Barcelona.
- Reynolds, P. 2020. *Butrint 6 : excavations on the Vrina Plain. Volume 3, The Roman and late antique pottery from the Vrina Plain excavations* (Butrint archaeological monographs) Oxford, Oxbow Books.
- Reynolds, P. and Pavlidis, E. 2017. An early 5th century AD pottery deposit from a cloaca cleaning shaft of the cardo next to Basilica A, Nicopolis (Epirus, Greece). In σπείρα. Επιστημονική συνάντηση προς τιμήν της Αγγελίκας Ντούζουγλη και του Κωνσταντίνου Ζάχου. Πρακτικά [Conference in honour of Angelika Douzougli and Konstantinos Zachos] (Ioannina, 1st-3rd November 2012), 651-666. Athens.
- Ribera, A., Bustamante, M., Garcia, E., Huguet, E. and Vioque, J. M. 2016. Ánforas hispánicas en Pompeya. Materiales de la casa de Ariadna y el *macellum*. In R. Jarrega and P. Berni (eds.), *Amphorae ex Hispania: paisajes de producción y consumo* (Monografías ex Officina Hispana III): 569-587. Tarragona, Institut Català d'Arqueologia Clàssica.
- Ribera, A. and Heras, F. J. 2020. Fine pottery and amphorae of Hellenistic and later periods from Scodra. In P. Dyczek, S. Shpuza (eds.), *Scodra : from antiquity to modernity. Vol. 1, A companion to the study of Scodra*, 189-206. Warsaw, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw.
- Ribera, A., Salavert, J.V. and Stannard, C. 2013. La moneda en la casa de Ariadna (VII, 4, 51-31) de Pompeya. El contexto arqueológico de las monedas de Ebusus y de las series imitativas de la pseudo-ceca de Pompeya. In A. Arevalo, D. Bernal-Casasola and D. Cottica (eds.), *Ebusus y Pompeya, ciudades marítimas. Testimonios monetales de una relación* (Monografías del Proyecto Pesca y Garum en Pompeya y Herculano 1): 181-206. Cádiz, Servicio de Publicaciones de la Universidad de Cádiz.
- Rizzo, G. 2014. Le anfore. In C. Panella and G. Rizzo (eds.), *Ostia VI. Le terme del nuotatore, I saggi nell'area ne / Le Anfore, Ostia e i commerci mediterranei* (Studi Miscellanei 38): 64-440. Roma, L'Erma di Bretschneider.
- Rizzo, G., Razza, A., Surace, D. M. and Moreno, V. 2020. Importazioni ispaniche di generi alimentari trasportati in anfora ad Ostia nella prima età imperiale: nuovi dati. In J. P. Brun, N. Garnier and G. Olcese (eds.), *A. Making Wine in Western-Mediterranean. B. Production and the Trade of Amphorae: some new data from Italy, Proceedings of the 19th International Congress of Classical Archaeology - Panel 3.5 (Cologne-Bonn 22-26 May 2018)*, 143-158. Heidelberg, Propylaeum.
- Royal, J. 2018. *The Illyrian Coastal Exploration Program (2010-14): The Roman and Late-Roman Finds*. Independently published.
- Sebastiani, R. and Serlorenzi, M. 2011. Nuove scoperte dall'area di Testaccio (Roma): tecniche costruttive, riuso e smaltimento dei contenitori anforici pertinenti ad horrea e strutture utilitarie di età imperiale. In J. Arce and B. Goffaux (eds.), *Horrea d'Hispanie et de la Méditerranée romaine. Colloque Internationale (Junio 2009)* (Collection de la Casa de Velázquez 125): 67-96. Madrid, Casa de Velázquez.
- Shehi, E. 2003. I rapporti commerciali di Dyrrachium e di altre città dell'Illyricum del sud con i centri del Mediterraneo (III secolo a.C. - III secolo d.C.). In M. Buora y S. Santoro (eds.), *Progetto Durres* (Antichità Altoadriatiche LIII): 209-220. Trieste, Editreg.
- Shpuza, S. 2009. Importimi dhe prodhimi i verës dhe vajit në Ilirinë e jugut (shekujt III-I p.e.s.). *Iliria XXXIII* (2007-2008), 219-232.
- Volpe, G. 1998. Archeologia subacquea e commerci in età tardoantica. In *Archeologia subacquea. Come opera l'archeologo sott'acqua. Storie dalle acque. VIII Ciclo di Lezioni sulla Ricerca applicata in Archeologia. Certosa di Pontignano 1996*, 561-626. Firenze, Edizioni Del Giglio.
- Vrsalović, D. 2011. *Arheološka istraživanja u podmorju istočnog Jadrana: prilog poznavanju trgovačkih plovnih putova i privrednih prilika na Jadranu u antici* (Pomorska biblioteka 13). Split.
- Zagarčanin, M. 2021. Gradovi, pristaništa i vile: Urbanistička, privredna i kulturna kretanja od antike do ranog srednjeg vijeka. In D. Medin (ed.), *Antička Budva: Zbornik radova s Međunarodnog multidisciplinarnog naučnog simpozijuma po pozivu održanog u Budvi 28-30. novembra 2018. godine*, 320-470. Budva.
- Žerjal, T. 2010. Školarice near Koper. Some Late Roman contexts in the Northern Adriatic. In S. Menchelli, S. Santoro, M. Pasquinucci and G. Guiducci (eds.), *LRCW 3. Late Roman coarse wares, cooking wares and amphorae in the Mediterranean : archaeology and archaeometry : comparison between western and eastern Mediterranean* (BAR International Series 2185): 703-710. Oxford, Archaeopress.