



MERSİN ÜNİVERSİTESİ KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ
MERSIN UNIVERSITY PUBLICATIONS OF THE RESEARCH CENTER OF CILICIAN ARCHAEOLOGY

KAAM
YAYINLARI

OLBA
VIII
(Özel Sayı)



MERSİN
2003

KAAM YAYINLARI
OLBA
VIII
(Özel Sayı)

© 2003 Mersin/Türkiye
ISSN 1301-7667

OLBA dergisi hakemlidir ve Mayıs-Haziran aylarında olmak üzere,
yılda iki kez basılmaktadır.
Published each year in May and June.

KAAM'ın izni olmadan OLBA'nın hiçbir bölümü kopya edilemez.
Alıntı yapılması durumunda dipnot ile referans gösterilmelidir.
It is not allowed to copy any section of OLBA without the permit of KAAM.

OLBA'ya gönderilen makaleler aşağıdaki web adresinde yada KAAM tarafından dağıtılan
broşürlerde bildirilmiş olan formatlara uygun olduğu takdirde basılacaktır.
Articles should be written according the formats mentioned in the following web address
or brochures distributed by KAAM

Yayınlanması istenilen makalelerin, her yılın sonuna kadar aşağıda belirtilen
iletişim adreslerine teslim edilmiş olması gerekmektedir.
Articles should be sent to the following correspondence addresses till the end of the year.

OLBA'nın yeni sayılarında yayınlanması istenen makaleler için yazışma adresi:
Correspondance addresses for sending articles to following volumes of OLBA:

Prof. Dr. Serra Durugönül
Mersin Üniversitesi Fen-Edebiyat Fakültesi
Arkeoloji Bölümü
Çiftlikköy Kampüsü
33342-MERSİN
TURKEY

Diğer İletişim Adresleri
Other Correspondance Addresses
Tel:00.90.324.361 00 01 (10 Lines)/162-163
Fax: 00.90.324.361 00 46
web mail: www.kaam.mersin.edu.tr
e-mail: kaam@mersin.edu.tr



MERSİN ÜNİVERSİTESİ
KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ
(KAAM)
YAYINLARI-VIII

MERSIN UNIVERSITY
PUBLICATIONS OF THE RESEARCH CENTER OF
CILICIAN ARCHAEOLOGY
(KAAM)-VIII
(Özel Sayı)

Editör

Serra DURUGÖNÜL
Murat DURUKAN

Bilim Kurulu

Prof. Dr. Serra DURUGÖNÜL
Prof. Dr. Coşkun ÖZGÜNEL
Prof. Dr. Tomris BAKIR
Prof. Dr. Hayat ERKANAL
Prof. Dr. Sencer ŞAHİN
Prof. Dr. Yıldız ÖTÜKEN



MERSİN
2003

Prof. Dr. Jale İnan
ve
Ord. Prof. Dr. Ekrem Akurgal' ı kaybettik,
saygıyla anıyoruz...

OLBA' nun Basılması İin Vermiş OlduĐu Desteklerden Dolayı
Mersin Üniversitesi Rektörü Prof. Dr. UĐur Oral' a
Teşekkür Ederiz.

İçindekiler/Contents

Marcello Spanu <i>Roman Influence in Cilicia through Architecture</i>	1
Suna Güven <i>Evolution of Colonnaded Avenues in the Roman Cityscape: Role of Cilicia</i>	39
Fikret K. Yegül <i>Cilicia at the Crossroads: Transformations of Baths and Bathing Culture in the Roman East</i>	55
Burcu Ceylan <i>Temple-Church in OLBA and the Reuse of Antique Monument in Late Antiquity</i>	73
Ayşe Aydın <i>Der Ambon der Kirche "A" in Tapureli</i>	83
Mark Wilson <i>Was Paul a Cilician, a Native of Tarsus? A Historical Reassessment</i>	93
Turhan Kaçar <i>Cilician Bishops and Fourth-Century Church Politics</i>	109
Paolo Desideri <i>The presence of Cilicia and its towns in the Greek writers of the Roman Empire (I-II Cent. A.D.)</i>	129
Murat Özyıldırım <i>İlkçağ ve Erken Hıristiyanlık Kaynaklarında OLBA Sözcüğünün Değişik Kullanımları</i>	145
Erendiz Özbayoğlu <i>Notes on Natural Resources of Cilicia: A Contribution to Local History</i>	159
Hugh Elton <i>The Economy of Cilicia in Late Antiquity</i>	173
Mustafa Adak <i>Welche Trachäer Bekämpfte Veranius?</i>	183
Murat Arslan <i>Piracy on the Southern Coast of Asia Minor and Mithridates Eupator</i>	195

Nevzat Çevik	
<i>Anadolu'daki Kaya Mimarlığı Örneklerinin Karşılaştırılması ve Kültürlerarası Etkileşim Olgusunun Yeniden İrdelenmesi</i>	213
Ümit Aydınöğlü	
<i>The Settlement Patterns of the Olbian Territory in Rough Cilicia in the Hellenistic Period</i>	251
Giovanni Salmeri	
<i>Processes of Hellenization in Cilicia</i>	265

THE ECONOMY OF CILICIA IN LATE ANTIQUITY

(LEV. 35-36)

Hugh ELTON*

ÖZET

Bu bildiride Geç Roma Döneminde (MS 4. yüzyıldan 7. yüzyıla kadar) Kilikya bölgesinde yer alan Domuztepe yerleşimi örnek alınarak, bölgenin ekonomik yapısı sorgulanmaktadır. Özellikle üzerinde durulan nokta, Kilikya'nın bir bütün olarak ele alınan Akdeniz ekonomisindeki yeridir. Ekonominin incelenebilmesi amacıyla dikkatler keramiklerde gözlenen birkaç sorun üzerine çekilmektedir. En önemlisi, buluntu tabakalarına göre elde edilmiş keramiklerin kesin miktarının saptanmasıdır. Her bir formun, özellikle amphora formlarının, daha sonra ayrıntılı olarak incelenmesi gerekmektedir. Bu çalışma sırasında günümüze kadar korunmuş arkeolojik malzemenin kullanılması, araştırma yöntemiyle ilgili birkaç problemin ortaya çıkmasına sebep olmaktadır. Şöyle ki, bölgedeki ekonomik faaliyetler (örneğin kereste ve tekstil üretimi) geride ne kadar arkeolojik kanıt bırakmıştır. Kilikya'ya ithal edilen ve Kilikya'dan ihraç edilen keramiklerle ilgili bulguların bugünkü durumu, özellikle LR 1 amphoraları tartışılmıştır. Bu bildiride, son olarak, bölgenin Roma ekonomisiyle nasıl bütünleştiği, Kuzey Afrika'daki Vandal istilasıyla doğulu tüccarların karşısına çıkan yeni olanaklar değerlendirilerek, ele alınmıştır.

At Domuztepe in eastern Cilicia, about 12 km north of Castabala and 55 km inland, there is a late Roman country house. With no inscriptions recovered from the site, we know little about the owners. Although the house lay on the river Pyramus, it lay above the point where the river was navigable. Nonetheless, the house owners were able to buy pottery imported from other parts of the Mediterranean world. From western Anatolia they received Phocaeen red slip tableware and LR 3 amphorae, while from North Africa they received more red slipped tableware.¹ The imported

* Dr. Hugh Elton, British Institute of Archaeology at Ankara, Tahrn Cad. 24, TR-06700 Kavaklıdere, Ankara.

¹ Rossiter and Freed 1991.

ceramics thus show links between Cilicia (here broadly defined as the area between the river Melas in the west and the Amanus mountains in the east) and the Mediterranean economy as a whole during the fourth to seventh centuries AD. Domuztepe was not simply a residential site, but was also involved in the production of olive oil. It had a large oil press with a tank that seems too big for domestic needs (1.85 m in diameter, capacity 5000 litres). Domuztepe can be used not just to show links, but to outline a much more complex understanding of the way in which Cilicia was integrated into the Mediterranean economy.

Ceramics provide enormous potential for understanding economic relationships between Cilicia and the rest of the Mediterranean economy. At the simplest level, the presence of imported or exported goods does show links between regions. But unless we expect there to be no changes in patterns of regional exchange, then showing links is only a first stage of analysis. A second stage is to show changes in relationships between different sites over time. This can only be done with a quantified approach. Ideally, publications would include a full quantification of all pottery (including coarse wares) by deposit on a site, though full quantification is rarely the case in Roman archaeology. One reason is that quantities of recovered ceramics are large, e.g. the 15,000 kg of pottery from the British Excavations on the Avenue Bourguiba site at Carthage.² However, these apparently large quantities these need to be viewed in conjunction with known manufacturing practices. Three third-century leases of potteries from Oxyrhynchus in Egypt show a minimum annual production of 15,000, 16,000 and 24,000 20 *sextarii* jars, each of which would have weighed more than 1 kg. In other words, one village potter in one year was expected to produce as much pottery as was recovered from one large trench (700 m²) from an urban excavation.³ We will never be able to analyse more than a minute percentage of the material in circulation although this is not a statistical problem as long as the samples themselves are sufficiently large.⁴ Full quantification also allows analysis by type of deposits, e.g. make-up layers, domestic dumps, commercial dumps, and

² Fulford and Peacock 1984, 1.

³ Cockle 1981; Mayerson 2000.

⁴ Orton 2000, 23-24.

destruction layers. Thus commercial dumps contain larger quantities of amphorae and fewer tableware and faunal deposits, whereas domestic deposits have fewer amphorae, but more tableware and faunal deposits. With full publication of all material in deposits (both ceramic and non-ceramic), rather than a selected series of tablewares, the different types of deposit should be detectable from the publication and can be incorporated into any analysis.⁵ As a tool, quantification of deposits allows us to ask more questions about the nature of the site and about changing relationships between sites over time.

All of the red-slipped tablewares at Domuztepe were transported by sea from the production centres to ports on the Cilician coast. Although this was common in the ancient Mediterranean, it is worth some consideration. Since pottery was not only cheap, but also heavy and breakable, it was rarely traded in its own right. Parker's 1992 analysis showed that although pottery (excluding amphorae) was part of the cargo of 26 of 98 ancient shipwrecks, it made up the complete cargo of only two ships.⁶ Moreover, pottery was made throughout the Roman world and thus finding a market outside big cities may not always have been easy. But if the profit on pottery was small, and it was an awkward cargo, easy to damage, then why was it so often traded over long distances?

But even when we have a full publication of evidence, we must also be aware of what ceramic evidence does not tell us. Amphorae were moved long distances in large quantities; in Parker's list of 98 ship cargoes, amphorae made up the sole cargo for 45.⁷ However, amphorae were not traded for their own sake but as containers worth far less than their contents. Diocletian's Price Edict gives 12 denarii as the cost of a container holding 20 sextarii (11-12 litres). To fill such a vessel with 'rustic wine' would have cost 160 denarii. If it was filled with 'first quality wine' it would have cost 480 denarii, so the contents would be worth forty times the cost of the container.⁸ Second, as throughout the Mediterranean, most

⁵ Reynolds 1997-1998, 56-59.

⁶ Parker, 1992, 20.

⁷ Parker, 1992, 20.

⁸ Lauffer 1971, 2.10, 2.1.

of Cilicia's production was cereals, and vine and olive products.⁹ Much of this production need not have been transported in amphorae, e.g. olive oil and wine could have been carried in barrels or skins, though neither is well-suited for oil. Other regional goods could not be transported in amphorae, for example textiles and timber, or were probably not transported in amphorae, such as saffron from Corycus and storax from Isauria and the Amanus.¹⁰ This caution is particularly relevant for one form of amphora, often referred to as LR 1, which were produced in Cilicia between the late fourth and seventh centuries and used to export Cilician products. Unlike some late antique amphorae which were used for either wine or oil, LR 1 were used to carry both oil and wine. Their production was not confined to Cilicia, but they were also produced in the rest of the southern coast of Anatolia, in North Syria, Cyprus, and Rhodes. These amphorae help to explain the economy, but there was much more to the region's economy than these vessels.¹¹

With these cautions in mind, we can now consider the ceramic evidence showing links between Cilicia and the rest of the Mediterranean. For late Roman Cilicia, as for many areas of the Roman Empire there has until very recently been a tendency to concentrate on cataloguing tablewares, with little attention paid to quantification or to analysing coarse wares and amphorae. In the case of LR 1 amphorae although there are numerous variants of form and fabric, there is still no reliable guide to these. Without a clearer typology and systematic petrographic analysis, the often-quoted statement of Empereur and Picon regarding the origins of many LR 1 amphorae in Egypt as either Cypriot or Cilician must be regarded as unproven.¹² Other amphorae are often treated as a single manufacturing block, sometimes referred to as a 'standard package' of types LR 1 - LR 7, though this is highly misleading. The numbering system and their ease of identification helps conceal numerous other types of late antique amphorae, some of which have only recently been identified such as those

⁹ Hild and Hellenkemper 1990, 1.104-127; Broughton 1938.

¹⁰ Mango 2001.

¹¹ Some recent literature on LR 1 amphorae: Peacock and Williams 1986, 185-187; Hayes 1992, vol. 2, 63-64; Arthur and Oren 1998; Kingsley and Decker 2001, 4-5.

¹² Empereur and Picon 1989, 242-243.

from Beirut or Sinope.¹³ Perhaps because of these difficulties there is only one report from a Cilician city which provides quantification and a study of all types of ceramics (though not the lamps) found at the site, that of Williams on Anemurium.¹⁴ However, there are ongoing or recently completed urban excavations, in particular at Celenderis, Sebaste, Tarsus (the Cumhuriyet Alanı) and Pompeiopolis, which should produce good results. More work could also be usefully done on museum collections, along the lines of Şenol and Kerem's recent article on amphorae in the Mersin Museum.¹⁵ Nonetheless, in the current state of our knowledge, it is only possible to show presence or absence of imports on a few sites (fig. 3).

Analysing late antique Cilician exports presents different challenges. Most obviously, Cilician products are hard to define in ceramic terms. No widely distributed tablewares were produced in the region and, besides LR 1 amphorae, the only possible ceramic product was a wheel-made lamp, Bailey Q3339, perhaps produced at Anemurium (fig. 1).¹⁶ Thus the only ceramic form certainly exported from Cilicia was the LR 1 amphora, though this was also produced elsewhere in southern Anatolia, Cyprus and north Syria. In the current state of our knowledge, we cannot subdivide LR 1 types by areas of production.

Although there were almost certainly regional trade details that we cannot detect at present, the exports of LR 1 can be divided into three major geographical zones (fig. 2). These are very broad generalisations and there are exceptions at every site and within every zone. The first zone, Egypt, southern Gaul (especially Marseille), Constantinople, the Balkans, and probably Greece and western Asia Minor, saw a consistent flow of imports from the late fourth century into the seventh century.¹⁷ The second zone, Italy, North Africa and Spain, had very small numbers of LR 1 imports during the late fourth and early fifth centuries, but much larger numbers from the mid to late fifth centuries.¹⁸ The third zone was the

¹³ Reynolds 1997-1998; Kassab-Tezgör and Touma 2001.

¹⁴ Williams 1989; the only publication on lamps to date is Williams and Taylor 1975.

¹⁵ Şenol and Kerem 2000.

¹⁶ Bailey 1988, 418 and pl. 125; Reynolds 1993, 144-145; Williams and Taylor 1975.

¹⁷ Bonifay 1986.

¹⁸ Arthur 1998.

Levant where there were few imports.¹⁹ Although close to the production areas, this may have been because Cilician wine was similar to Ascalon wine.²⁰ Although finds are known from Britain and south Russia, these were in minute quantities and not significant for reconstructing trade patterns.²¹

This trade was probably both direct and indirect. As far as potentially Cilician products are concerned, direct trade might be suggested by the collocation of lamp Q3339 and LR 1 amphorae, but as yet there is not a great deal of data.²² Thus in fifth and sixth century Carthage, although LR 1 and other eastern amphorae were present in large numbers, eastern produced tablewares like Phocaean and Cypriot Red Slip were not, which might suggest limited direct contact between Cyprus or western Anatolia and Africa, a hypothesis reinforced by the almost total absence of other eastern produced materials like the lamp Q3339, Palestinian cookwares and coins minted in Antioch. However, we should try to avoid being too dogmatic, since many ships would have had mixed cargoes, some of which were directly traded, others redistributed.

The environment in which this trade took place involved a substantial private sector.²³ But it was not a totally free market, being distorted by the enormous state contracts for supplying the army and the cities of Rome and Constantinople.²⁴ The transportation of food for Rome and Constantinople (the *annona*) was by private shippers on government contracts, though they were allowed to carry small quantities of other goods for private trade. On their return voyage, the ships presumably carried some goods back with them, though in the case of the subsidised cargoes this may not have been economically necessary. The majority of the wheat imported to Rome came from Africa, to Constantinople from Egypt. In Italy, this situation produced an enormous volume of African imports before c. 450, shown by the lack of market penetration by LR 1 and large numbers of

¹⁹ Reynolds 1997-1998, 53-54; Riley 1975.

²⁰ Mayerson 1993.

²¹ Thomas 1959.

²² Reynolds 1995, 133 and fig. 173.

²³ Wickham 1988; Temin 2001; Whittaker 1983.

²⁴ Sirks 1991.

African amphorae and cooking wares. But from the 440s, the Vandal conquest of Africa destroyed the *annona* system. Once African imports were no longer subsidized by the state, eastern merchants could compete more effectively in Italy and Africa. For the owners of Domuztepe and those like them, an opportunity appeared. The exploitation of this economic opportunity is shown archaeologically by the sudden increase in finds of LR 1 (as well as other eastern) amphorae on sites in Italy and Africa from the late fifth century.²⁵ Events elsewhere in the Mediterranean that would at first glance appear remote, like the Vandal conquest of Africa, could thus have a profound effect on the economy of Cilicia, as well as of other regions.

Conclusion

In studying the economy of late antique Cilicia there are a number of problems. Much of the evidence for production has not been recorded textually or has not survived archaeologically while the use of the archaeological material that has survived presents a number of methodological problems. At the moment, we can say little more than the region was linked to the rest of the Mediterranean, but with a few quantified studies, it will be possible to say much about the economic relationships of Cilicia with neighbouring regions and the Roman Empire, including discussion of how these changed over time. In this way, a more detailed understanding can be created of how goods moved within the late antique Mediterranean.

²⁵ Fulford 1980; Reynolds 1995, 70-83.

Abbreviations and Bibliography

- Arthur 1998 Arthur, P., "Eastern Mediterranean amphorae between 500 and 700: a view from Italy", *Ceramica in Italia VI-VII secolo*, ed. Saguì, L., Rome, 157-184.
- Arthur and Oren 1998 Arthur, P. and Oren, E., "The N. Sinai survey and the evidence of transport amphorae for Roman and Byzantine trading patterns", *Journal of Roman Archaeology* 11, 193-212.
- Bailey 1988 Bailey, D.M., *A Catalogue of the Lamps in the British Museum*, Vol. 3, London.
- Bonifay 1986 Bonifay, M., "Observations sur les amphores tardives à Marseille d'après les fouilles de la Bourse (1980-1984)", *Revue Archéologique de Narbonnaise* 19, 269-305.
- Broughton 1938 Broughton, T.R.S., "Roman Asia Minor", Frank, T., ed., *An Economic Survey of Ancient Rome*, vol. 4, New York, 499-918.
- Cockle 1981 Cockle, H., "Pottery Manufacture in Roman Egypt: a new papyrus", *Journal of Roman Studies* 71, 87-97.
- Empereur – Picon 1989 Empereur, J.-Y., – Picon, M., "Les régions de production d'amphores impériales en Méditerranée orientale", *Amphores Romaines et Histoire Economique: Dix Ans de Recherche*, Rome, 223-248.
- Fulford 1980 Fulford, M.G., "Carthage: Overseas trade and the political economy, c AD 400-700", *Reading Medieval Studies* 6, 68-80.
- Fulford – Peacock 1984 Fulford, M. – Peacock, D., *Excavations at Carthage: The British Mission 1.2*, Sheffield
- Hayes 1992 Hayes, J., *Excavations at Saraçhane in Istanbul*, Princeton.
- Hild – Hellenkemper 1990 Hild, F. – Hellenkemper, H., *Kilikien und Isaurien*, TIB 5, Vienna.
- Kassab-Tezgör – Touma 2001 Kassab-Tezgör, D. – Touma, M., "Amphores exportées de mer noire en Syrie du nord", *Anatolia Antiqua* 9, 105-115.
- Kingsley – Decker 2001 Kingsley, S. – Decker, M., "New Rome, New Theories on Inter-Regional Exchange", in Kingsley, S. and Decker, M., eds., *Economy and Exchange in the East Mediterranean during Late Antiquity*, Oxford, 1-27.
- Lauffer 1971 Lauffer, S., *Diokletians Preisedikt*, Berlin.
- Mango 2001 Mango, M.M., "Beyond the amphora; non-ceramic evidence for late antique industry and trade", in Kingsley, S. and Decker, M., eds., *Economy and Exchange in the East Mediterranean during Late Antiquity*, Oxford, 87-106.

- Mayerson 1993 Mayerson, P., "The Use of Ascalon Wine in the Medical Writers of the Fourth to Sixth Centuries", *Israel Exploration Journal* 43, 169-173.
- Mayerson 2000 Mayerson, P., "The Value of the Maximian Cotyla in P.Oxy L 3595 and PSI XII 1252", *Zeitschrift für Papyrologie und Epigraphie* 131, 167-169.
- Orton 2000 Orton, C., *Sampling in Archaeology*, Cambridge.
- Parker 1992 Parker, A.J., *Ancient Shipwrecks of the Mediterranean and the Roman Provinces*, BAR S580, Oxford.
- Peacock – Williams 1986 Peacock, D.P.S. – Williams, D.F., *Amphorae and the Roman Economy: An Introductory Guide*, London.
- Reynolds 1993 Reynolds, P., *Settlement and Territory in the Vinalopó Valley (Alicante, Spain), AD 400-700*, Oxford.
- Reynolds 1995 Reynolds, P., *Trade in the Western Mediterranean, AD 400-700: The Ceramic Evidence*, BAR S604, Oxford.
- Reynolds 1997-8 Reynolds, P., "Pottery Production and Exchange in Second Century Berytus", *Berytus* 43, 35-110.
- Riley 1975 Riley, J.A., "The Pottery from the First Season of Excavation in the Caesarea Hippodrome", *Bulletin of the American Schools of Oriental Research* 218, 25-63.
- Rossiter – Freed 1991 Rossiter, J.J. – Freed, J., "Canadian-Turkish Excavations at Domuztepe, Cilicia (1989)", *Echoes du Monde Classique* 10, 145-174.
- Şenol – Kerem 2000 Şenol, A. – Kerem, F., "İçel Müzesinde Bulunan Bir Grup Amphora", *Olba* 3, 81-114 and pl. 14-20.
- Sirks 1991 Sirks, B., *Food for Rome*, Amsterdam.
- Temin 2001 Temin, P., "A Market Economy in the Early Roman Empire", *Journal of Roman Studies* 91, 169-181.
- Thomas 1959 Thomas, A.C., "Imported Pottery in Dark-Age Western Britain", *Medieval Archaeology* 3, 89-111.
- Whittaker 1983 Whittaker, C.R., "Late Roman Trade and Traders", in Garnsey, P. et al., eds., *Trade in the Ancient Economy*, Berkeley, 163-180, 208-211.
- Wickham 1988 Wickham, C., "Marx, Sherlock Holmes and Late Roman Commerce", *Journal of Roman Studies* 78, 183-193.
- Williams 1989 Williams, C., *Anemurium: The Roman and Early Byzantine Pottery*, Toronto.
- Williams – Taylor 1975 Williams, H. – Taylor, P., "A Byzantine Lamp Hoard from Anamur (Cilicia)", *Anatolian Studies* 25, 77-84.

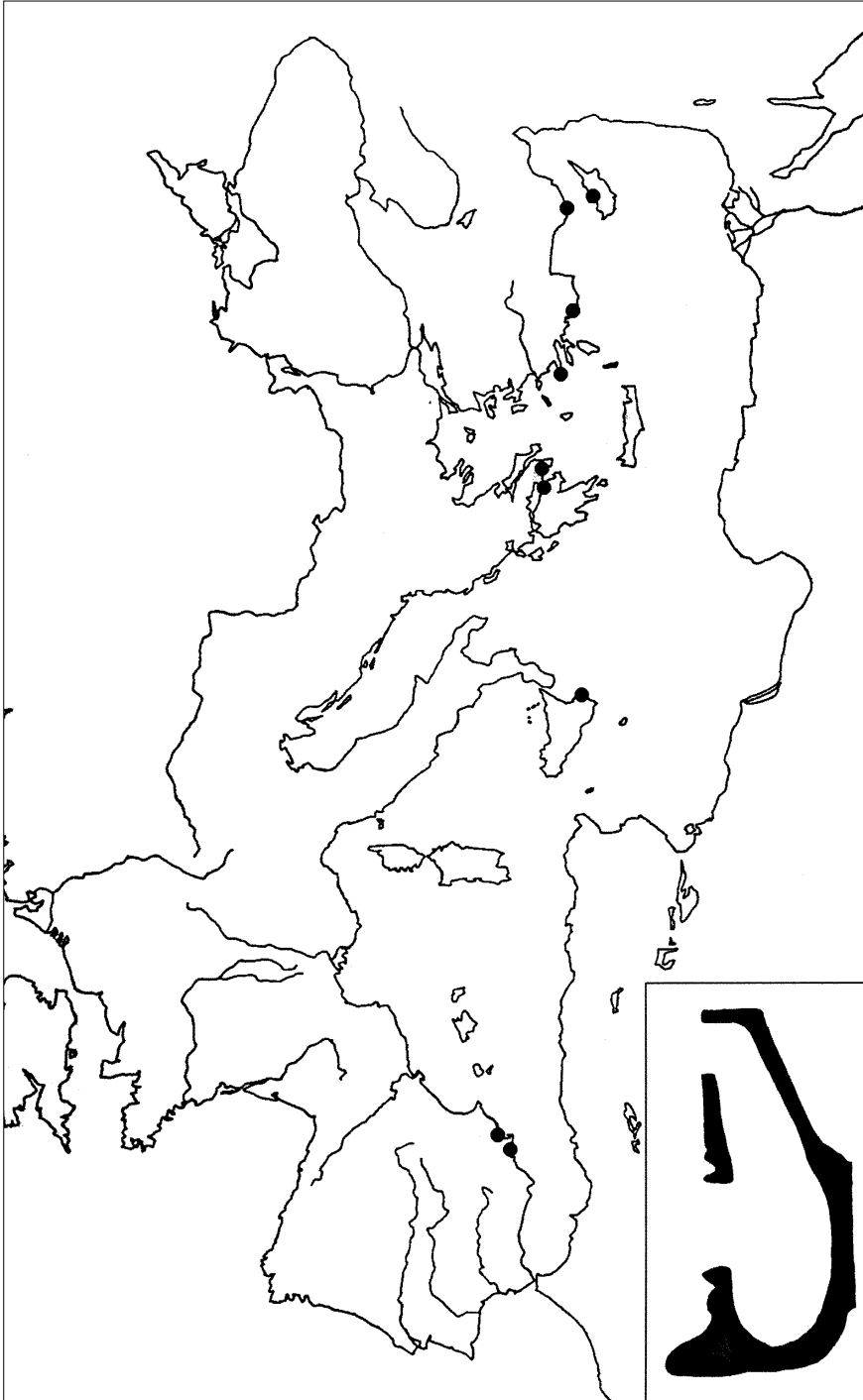


Fig. 1 Distribution of Bailey Q3339

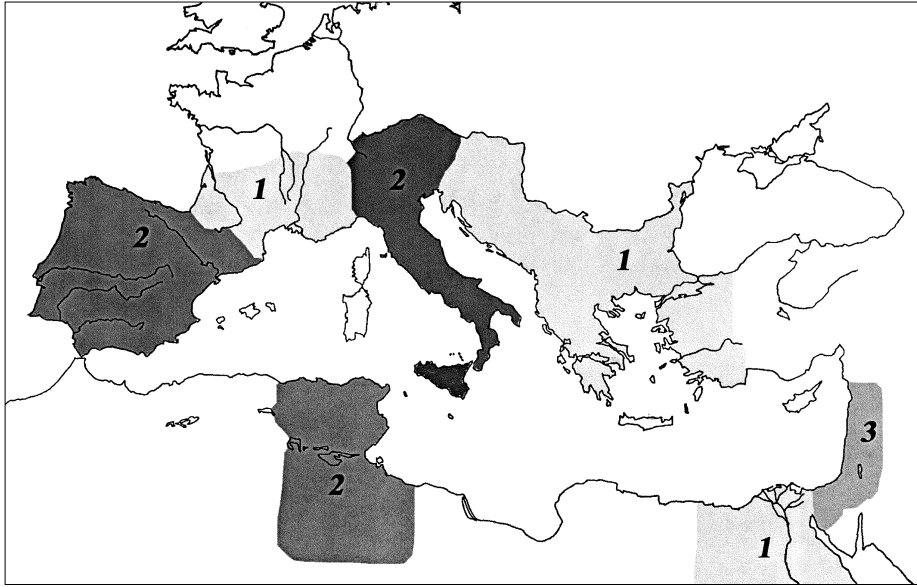


Fig. 2 Export Zones of LR 1 Amphorae

Site	LR 1 Amphora	LR 3 Amphora	LR 4 Amphora	LR 5 Amphora	ARS	PRS	CRS	ERS A	ERS C	Lamp Q3339	Palestinian Cookware
Adana Museum	X										
Alahan	X				X	X	X		X	X	
Anemurium	X	X	X	X	X	X	X	X	X	X	X
Domuztepe Excavation	X	X			X	X					
Domuztepe Survey					X	X					
Kilise Tepe	X					X	X				
Rough Cilicia Survey	X		X		X	X	X				
Silifke Museum	X		X								

Fig. 3 Tableware and Amphora Imports in Cilicia