

ADRIAMPHORAE WORKSHOP

Amphorae as a resource for the reconstruction of economic development in the Adriatic region in Antiquity: local production

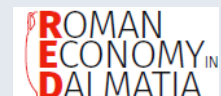


CRIKVENIČKE AMFORE TIP 8 - INDIKATORI PROIZVODNJE/TRGOVINE RIBLJIM PRERAĐEVINAMA?

CRIKVENICA AMPHORAE TYPE 8 - INDICATORS OF
PRODUCTION/COMMERCE OF FISH PRODUCTS ?

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Project RED (IP-11-2011 – 3973)



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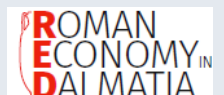
The lack of evidence from literary sources is a crucial problem in reconstruction of micro economic development, especially of agriculture and trade in the areas of north Liburnia (like recent Kvarner area) in the period of Roman Antiquity.

When we add to this conclusion the absence of systematic archaeological excavations in the same geographical area, the problem is much more complicated.

In this context, the question is whether our local pottery production can give us some answers or solve them.

According to the example of local produced amphorae from Crikvenica's pottery complex we will try to point out a few of the challenges we face when we use them as indicators of the local agricultural production of the mentioned region.

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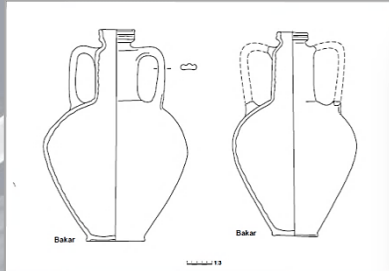


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Crikvenica's pottery workshop produced several types of amphorae. Referring to the general topology of amphorae (that are based on the main content that was transported in them and on the shape), we identify three types of amphorae:

I. **Wine amphorae**

CRIKVENICA 1



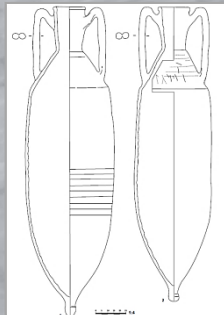
II. **Amphorae for fish products:**

CRIKVENICA 8



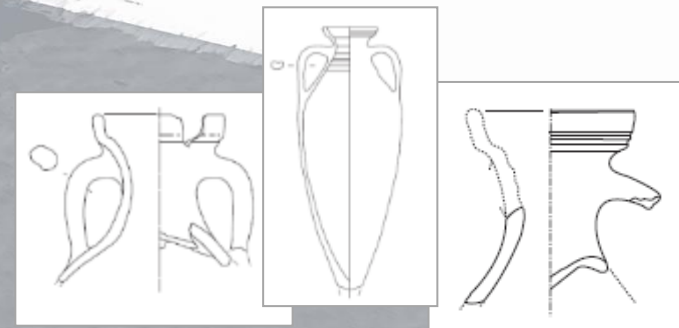
CRIKVENICA 9 - 11 ???

CRIKVENICA 2



III. **Olive oil amphorae**

CRIKVENICA 6





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Did the main amphorae typology help solving the problem of identifying the type of agricultural produce of norther Liburnia (mainly Kvarner) within the time-frame of Crikvenica's figlina

New research pointed to carefulness in determining the transported content of amphorae, if we base it only on connections with amphorae typology or inadequate analyses.

„Has my Amphora been reused or are these its primary contents?

The Million Dollar question. „

(Darío Bernal Casasola, „What contents do we characterise in Roman Amphorae? Methodological and archaeological thoughts on a “trending topic” in *ArchaeoAnalytics*)

The market requirements have influences on the use of different types of amphorae transporting the same content depending on the current agricultural yield offer (rich or poor), trade competition and certain legislation.

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Example:

Amphorae and their contents from the shipwreck in GRADO

(Rita Auriemma, *Le anfore del relitti di Grado*, 2000, str. 30)

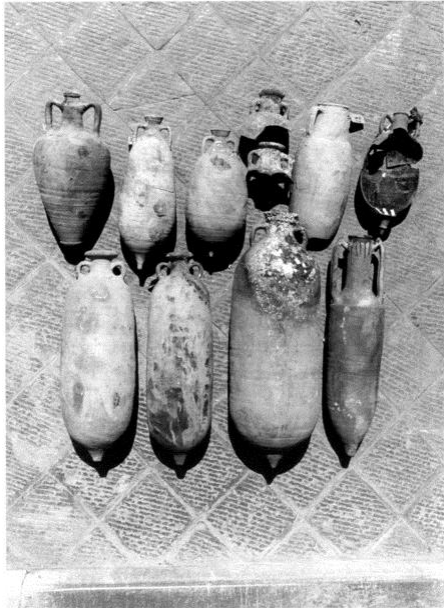


Fig. 3 – Relitto di Grado. I vari tipi di anfore presenti a bordo.

The reuse of various types of amphorae in transporting fish products (sauces) and preserved (salted – conserved) fish.

Africana I Grado – oil amphorae/ transporting salted fish (sardine)

Tripolitana I – olive oil amphorae/ transporting salted fish

(*Scomber Japonicus* - mackerel)

Dressel 2-4/Dressel 5 – wine amphorae /transporting salted fish (sardine)

Forlimpopoli - wine amphorae/ transporting salted fish (sardine) -

problem with: sub –types: A and D for garum, B and C for wine

Grado I - small amphorae, **LOCAL PRODUCTION**

content:

- **liq(uaminis) flos tj. garum** (tituli picti) ?
- **salsamentum** (salted fish with oil) ?

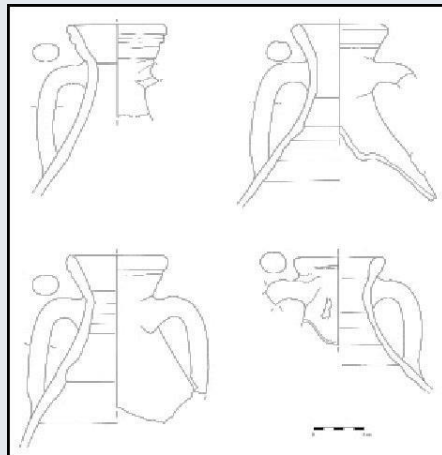
The question of amphoras storage and their reuse !!!



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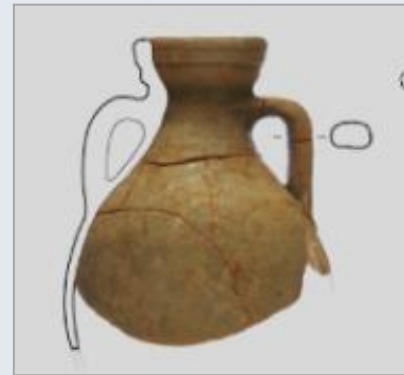
Adriatic fish amphorae

With a group of south Hispanic fish amphorae (Dressel 7-11 or Beltrán 2A) in the wider Adriatic region appears a considerable group of Adriatic fish amphorae in particular specific smaller sizes during the 1st c. A.D. Their local production and distribution indicated significant competition in fish produce trade.



GRADO I

(M-B. Carre, S. Pesavento Mattioli, Belotti, 2009.)



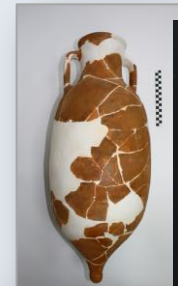
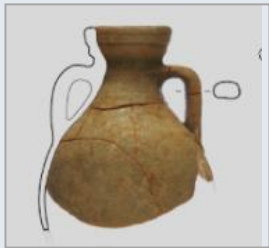
CRIKVENICA 8

According to the morphological characteristics in this group we include Crikvenica „anforette” (produced in several types and variants). The most common type is the **CRIKVENICA 8**

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Fish – processing industry in the northern Liburnia ?

Significant amount of small amphorae (*anforette*) found in Crikvenica's *figlina* raises the question of the existence of fish processing industry in the Kvarner area.



❖ Plin. Nat. Hist. XXXI, 94

...sicut muria Antipolis et Thurii,....iam vero et Dalmatia.

- Pliny praises the quality of Dalmatian muria -



DOUBTS / QUESTION:

Fish processing industry (*vivarii*) and production of liquid fish sauce in northern Liburnia ??? Fishing???

Have we other archaeological evidence to reconstruct this local production apart Crikvenica amphorae, suitable landscape and rich fish resources???

Altino
(S. Cipriano,
F. Ferrarini ,2009.)