

Contents

Preface	1
Ánforas romanas y contenidos. Notas historiográficas	7
Miguel Beltrán Lloris	
Historical and archaeological indicators	
Amphorae: typology and contents	31
Stefanie Martin-Kilcher and André Tchernia	
Shipwrecks, amphorae and contents	41
Franca Cibecchini	
Amphora contents as commodities: the structure and function of <i>tituli picti</i> in the western Mediterranean in the 1st century AD	51
Enrique García Vargas	
How late antique <i>dipinti</i> contribute to a better knowledge of amphora contents	63
Jean-Luc Fournet	
The reuse of transport amphorae as packaging containers in the Roman world: an overview	77
J. Theodore Peña	
Archaeometric indicators: generalities and case studies	
Amphorae and residue analysis: content of amphorae and organic coatings	113
Nicolas Garnier and Alessandra Pecci	
GC-MS analysis of pitch from Roman amphorae from Cosa in Etruria (Italy)	127
Hitomi Fujii, Carole Mathe, Fabienne Olmer and Cathy Vieillescazes	
Residue analysis by GC-MS and FT-IR Spectroscopy on Roman amphorae from the archaeological site 'Nuovo Mercato Testaccio' (Rome)	133
Florinda Notarstefano and Mariateresa Lettieri	
The contents of ancient Graeco-Italic amphorae. First analyses on the amphorae of the Filicudi F and Secca di Capistello wrecks (Aeolian Islands, Sicily)	141
Nicolas Garnier and Gloria Olcese	
Inland trade and consumption in context. A case study on the organic residue analysis of transport amphorae from the Balkan Peninsula (Yambol District, South-eastern Bulgaria)	149
Silvia Polla, Andreas Springer, Birte Gruber, Petra Tušlová and Barbora Weissová	
The Beirut amphora: residue analysis and contents	161
Marshall Woodworth and Paul Reynolds	
Making Garum. Experimental archaeology methods	171
Álvaro Rodríguez-Alcántara, Ana Roldán-Gómez, Enrique García Vargas, Darío Bernal-Casasola and Víctor Manuel Palacios-Macías	

Regional and provincial syntheses

West

Lusitanian Amphora Contents	183
Inês Vaz Pinto, Rui Morais, Carlos Fabião, César Oliveira and Sónia Gabriel	
The Iberian and Roman amphorae of <i>Hispania Citerior</i>	205
Ramón Járrega Domínguez and Albert Ribera i Lacomba	
Amphora contents in <i>Baetica</i>: from the Punic tradition to Late Roman times	215
Darío Bernal-Casasola, Enrique García Vargas, Antonio M. Sáez Romero and Horacio González Cesteros	
<i>Tituli picti</i> on Spanish amphorae	241
Piero Berni and Emmanuel Botte	
The contents of amphorae produced in Gaul in the Imperial period	249
Fanette Laubenheimer	
Italian and Sicilian amphorae and their contents: a general overview	259
Simonetta Menchelli	
The content of amphorae from Adriatic Italy	273
Marie Brigitte Carre and Stefania Pesavento Mattioli	
African amphora contents: an update	281
Michel Bonifay	
Amphorae from the Byzacene coast: what did they contain?	299
Jihen Naceff	

East

The oil supply in the Roman East: identifying modes of production, containers and contents in the eastern Empire .	307
Paul Reynolds	
Feeding the Lower Danube and Pontic areas with local wine and fish products (1st century BC-3rd century AD)	355
Andrei Opaïț	
Ephesus wines	377
Tamás Bezaczy†	
Egyptian amphorae from the Hellenistic to the Late Roman periods	389
Delphine Dixneuf	

Case studies: From the West to the East

The contents of amphora type T-7.4.3.3 (former type Mañá C2b): ancient problematic and new research perspectives	401
Max Luaces	
The fish-salting production centre of Águilas: late-Roman amphora content analysis	409
Alejandro Quevedo, Myriam Sternberg and Juan de Dios Hernández García	
New data, new questions on the paleo-contents studies of Roman jars and amphorae in underwater contexts: salsamenta, garum, lymphatum and other fish products	419
Gaël Piquès, Núria Rovira, Margaux Tillier, Franca Cibecchini, David Djaoui and Carlos De Juan	
Dressel 21-22 Italic amphorae for fish: the archaeozoological confirmation from the garum shop at Pompeii	437
Darío Bernal-Casasola, Daniela Cottica, Ricard Marlasca Carmen Gloria Rodríguez Santana and Enrique García Vargas	

Amphorae with residues from Southern Sardinia (Cagliari and Nora)	453
Ignazio Sanna, Laura Soro and Cristina Nervi	
'De profundis': three amphorae of unorthodox contents retrieved from the Aegean Sea	473
George Koutsouflakis	
Salting and consuming fish in the Classical Mediterranean. A review of the archaeological evidence from the Punic Amphora Building (Corinth, Greece)	485
Antonio M. Sáez Romero and Tatiana Theodoropoulou	
Conclusion	499