



**ENTRE
MARES**
ITSASO ARTEAN
3/4/5 - XI - 2021 - IRUN

Myos Hormos and the Ports of the Red Sea

Katia Schörrle, CCJ-CNRS, UMR 7299, Aix-Marseille-Université

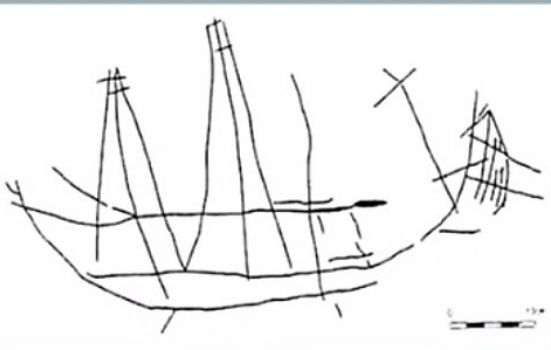




MYOS HORMOS AND THE PORTS OF THE RED SEA

Katia SCHÖRLE

*Chargée de recherches au Centre National de la Recherche Scientifique
CNRS Researcher in Archaeology, Aix-Marseille University*



Ship graffito, Myos Hormos



Satellite view, Myos Hormos



Ship graffito, Berenike



Entre Mares



Mar Rojo : vientos principales y navegación

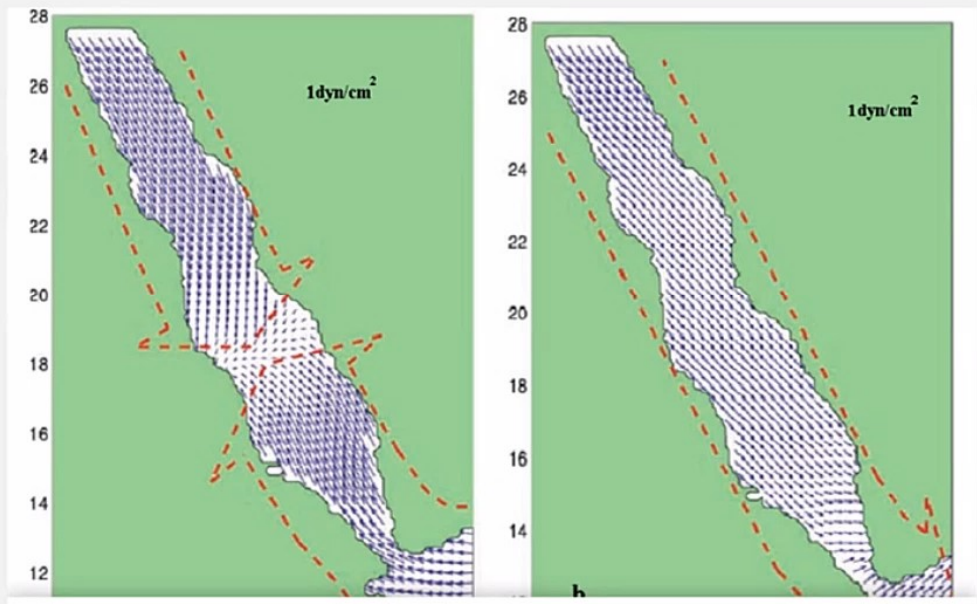
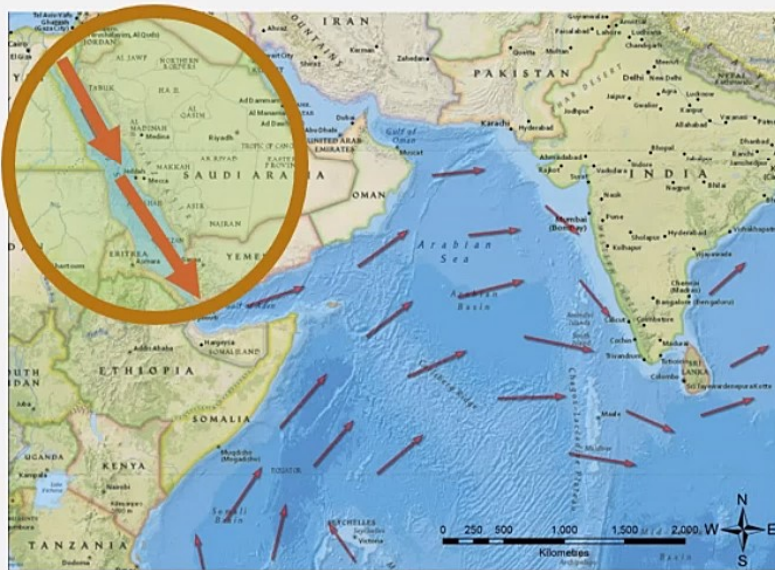


Figure 1.2: Wind-stress fields for (a) January and (b) July [11].

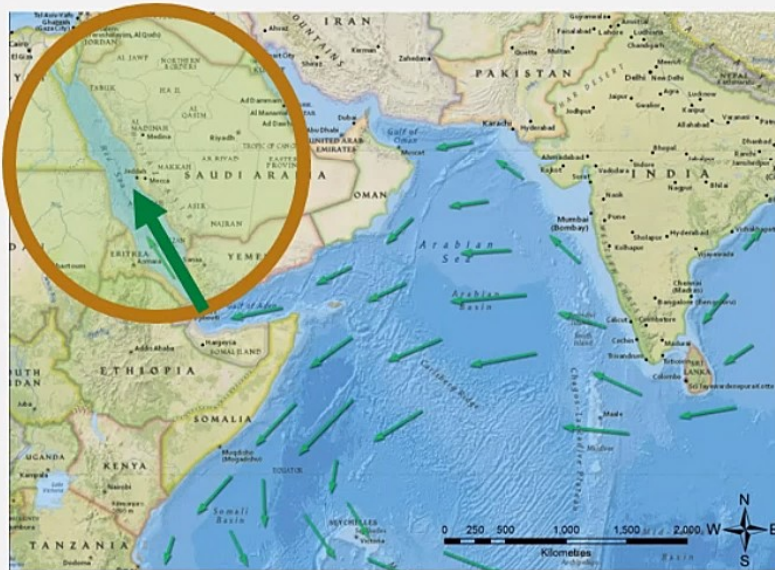
Published in 2010
Wave and wind conditions in the Red Sea. A numerical study using a third generation wave model
 A. Saad



MAIN WINDS AND NAVIGATION VIENTOS PRINCIPALES Y NAVEGACION



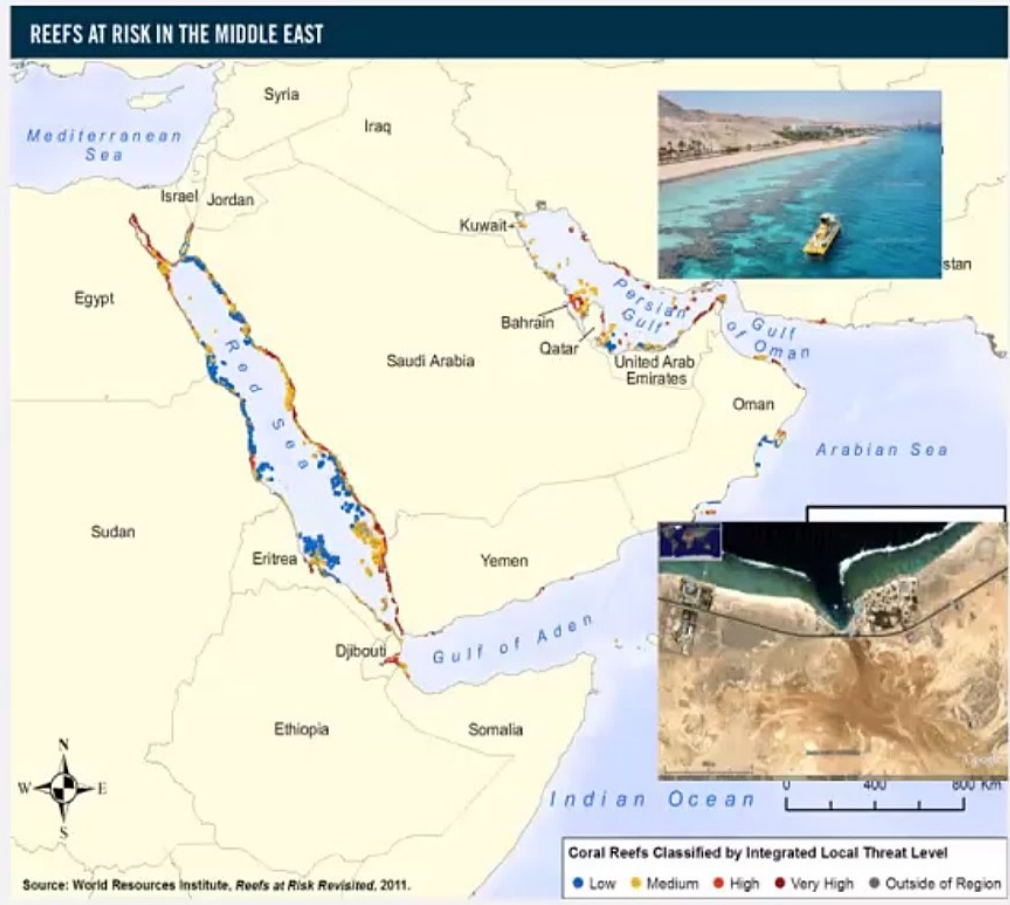
A) Summer / Verano



B) Invierno (Winter)

© ESRI & National Geographic





REEFS - ARRECIFES

Diodorus Siculus, Book 3.40

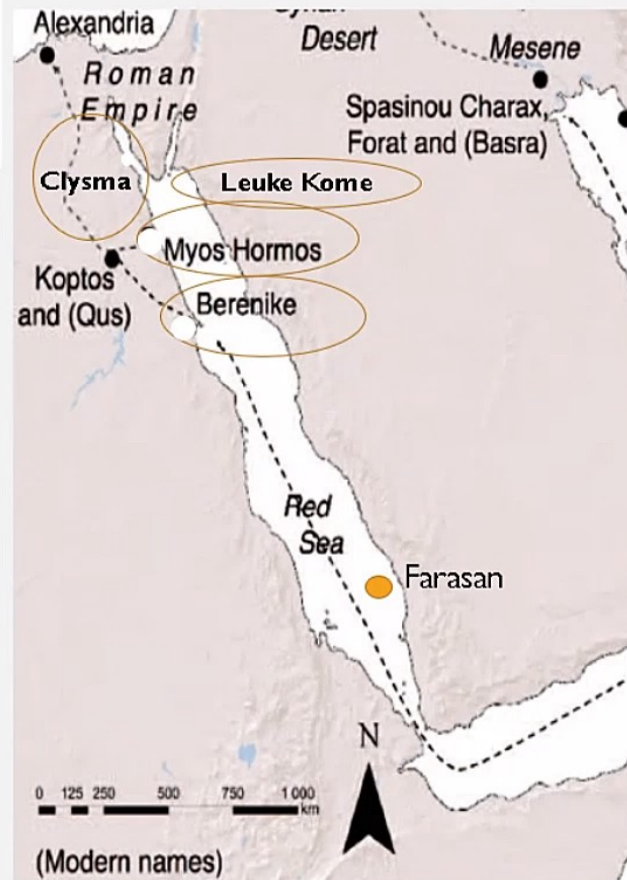
« until one comes to the Harbour of Soteria...

the sea, which runs to shoals, is found to have a depth of no more than three fathoms...**For ships, then, which are equipped with oars the place is suitable enough,...**but the ships which carry the elephants, being of deep draft because of their weight and heavy by reason of their equipment, bring upon their crews great and terrible dangers. »



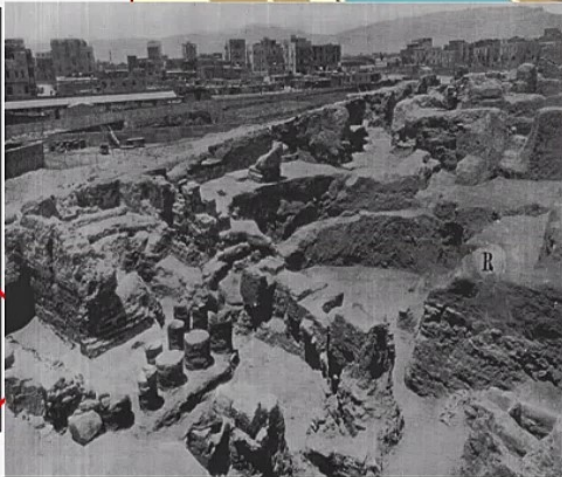
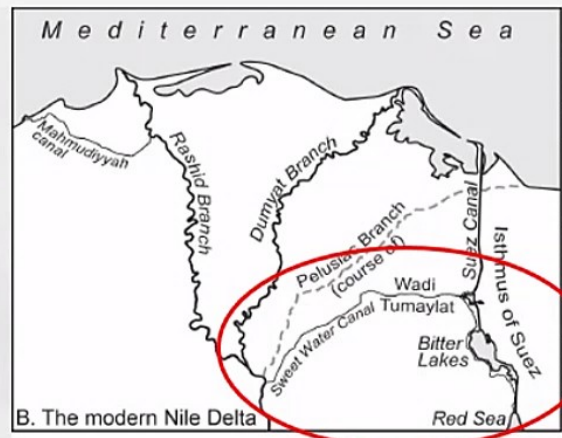
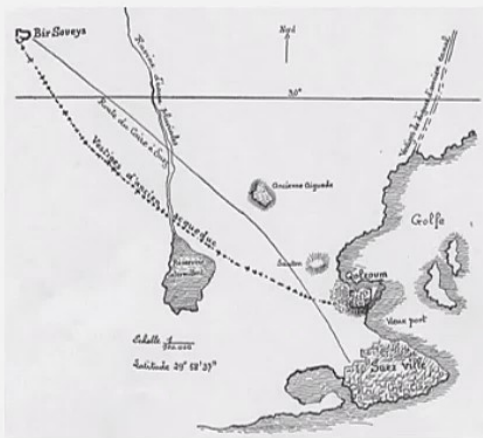
ROMAN PERIOD: MAIN HARBOURS PUERTOS ROMANOS PRINCIPALES

- 2 principal harbours:
 - Myos Hormos
 - Berenike



TRAJAN'S CANAL (CLYSMA)- CANAL DE TRAJANO

- Ostrakon dated to AD 112: *terminus ante quem*.
- Papyrology: canal is maintained between the 2nd and 6th century AD
- Diocletian (284-305) reinforces access to the canal
- Egeria: visit to Clysma AD 383
- Point of origin of annual embassies to India by a *logotherte* (official)



MYOS HORMOS



Entre Mares

MYOS HORMOS

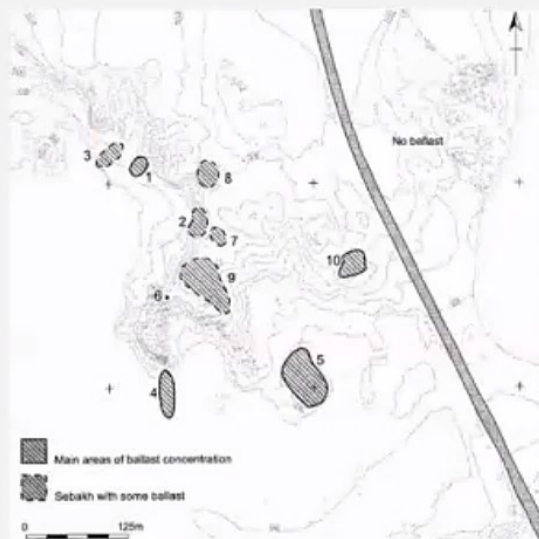


Islamic era

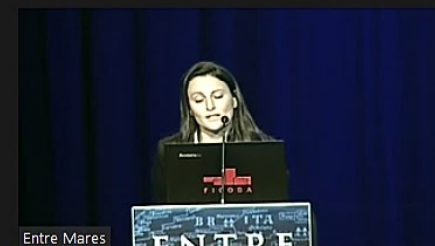
Roman era

University of Southampton excavations
L. Blue & D. Peacock





Peacock, David, Williams, David and James, Sarah (2007) Basalt as ships' ballast and the Roman incense trade. In, Peacock, David and Williams, David (eds.) *Food for the Gods: New Light on the Ancient Incense Trade*. Oxford, UK. Oxbow, pp. 28-70.



Entre Mares

GRAFFITI

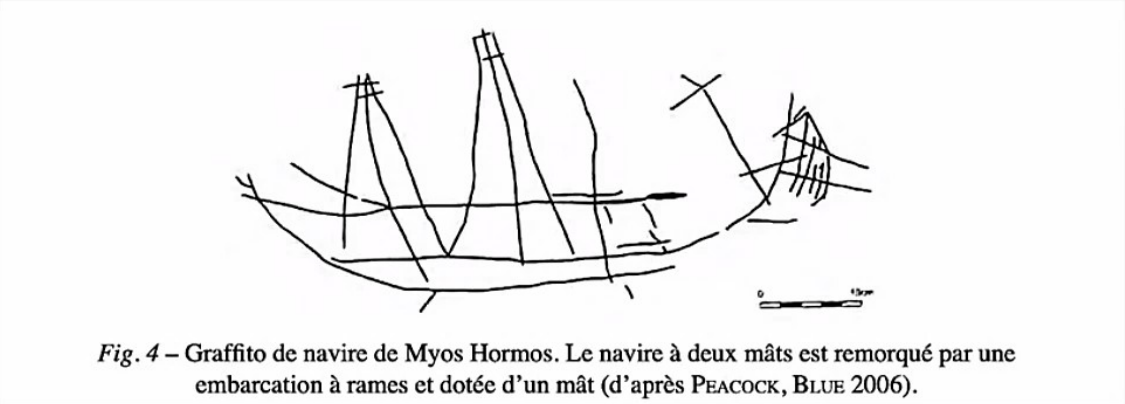


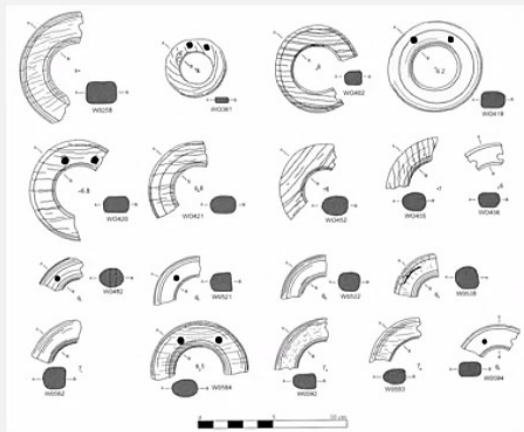
Fig. 4 – Graffito de navire de Myos Hormos. Le navire à deux mâts est remorqué par une embarcation à rames et dotée d'un mât (d'après PEACOCK, BLUE 2006).



Entre Mares



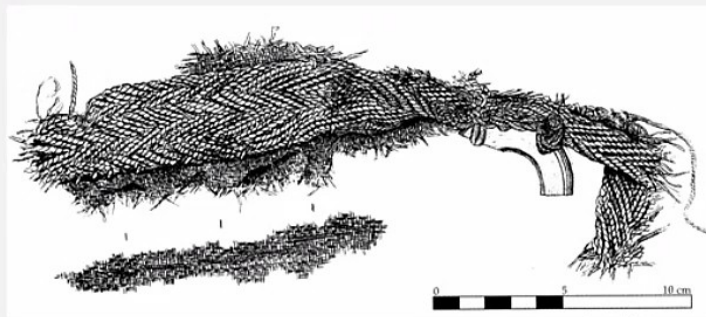
Roman (?) vessels



Cattle horn or wooden brail-rings

J. Whitewright

Cotton sails



Entre Mares

COPTOS TARIFF – 90 AD

From the precept of...how much is payable for the duties owing to the arabarch in Coptos, according to the judgment he has written on this stele by Lucius Antistius Asiaticus, prefect of Mount Berenike:
for a helmsman of the Red Sea, eight drachmas;

a ship's lookout, ten drachmas;

a guard, five drachmas;

a sailor, five drachmas;

a shipbuilder's servant, five drachmas;

an artisan, eight drachmas;

women for the purposes of prostitution, one hundred and eight drachmas;

women arriving by ship, twenty drachmas;

women of the soldiers, twenty drachmas;

a ticket for camels, one obol;

a seal for a ticket, two obols;

per outward journey for each ticket of a man going up, one drachma;

all women going up, four drachmas;

an ass, two obols;

a covered wagon, four drachmas;

a mast, twenty drachmas;

an animal horn, four drachmas;

a funeral procession going up and down, one drachma four obols.

Year 9 of the Emperor Caesar (Domitianus) Augustus (Germanicus), the 15th day of the month Pachys.¹⁴⁵

ἐξ ἐπιταγῆς . . .

. . . ὅσα δεῖ τοὺς μισθ(ω)-

τάς τοῦ ἐν Κόπτῳ ὑποπέπτον-

τος τῆ ἀραβαρχ(ι) ἀποστολίου πράσ-

σειν κατὰ τὸν γνάμον[α] τῆδε τῆ

στήλη ἐνεκχάραται διὰ Λουκίου

Ἀντιστίου Ἀσιατικοῦ ἐπάρχου

ὄρους Βερενείκης

κυβερνήτου Ἐρυθραίου δρα-

χμᾶς ὀκτώ . . .

πρωτέρως δραχμᾶς δέκα,

[φυλ]άκου δραχμᾶς πέντε,

[να]ύτου δραχμᾶς πέντε,

[θε]ραπευτοῦ ναυπηγοῦ δραχμᾶς

πέντε, χειροτέχνου δραχμᾶς

ὀκτῶ γυναικῶν πρὸς ἔταιρισ-

μὸν δραχμᾶς ἑκατὸν ὀκτώ,

γυναικῶν εἰσπλευουσῶν δρα-

χμᾶς εἴκοσι, γυναικῶν στρατι-

ωτῶν δραχμᾶς εἴκοσι,

πιττακίου καμηλῶν ὀβολῶν ἓνα,

σφραγισμοῦ πιττακίου ὀβολοῦς δύο,

πορείας ἐξερχομένης ἐκάστου

πιττακίου τοῦ ἀνδρὸς ἀναβαίνον-

τος δραχμὴν μίαν, γυναικῶν

πασῶν ἀνά δραχμᾶς τέσσαρες,

ὄνου ὀβολοῦς δύο, ἀμάξης ἐχού-

σης τετράγωνον δραχμᾶς τέσσαρες,

ἱστοῦ δραχμᾶς εἴκοσι, κέρατος δρα-

χμᾶς τέσσαρες, ταφῆς ἀναφερομέ-

νης καὶ καταφερομένης δραχμὴν μ[ι]-

αν τετράβολον. Ἔτους θ' Ἀυτοκράτορος

Καίσαρος [Δομιτιανοῦ] Σεβαστοῦ [Γερμανικοῦ], Παχῶν ιε'.



Entre Mares

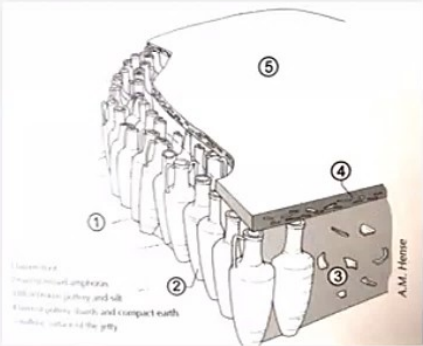
MYOS HORMOS



Entre Mares

ENTRE

MYOS HORMOS



Entre Mares

AMPHORAE TYPES USED

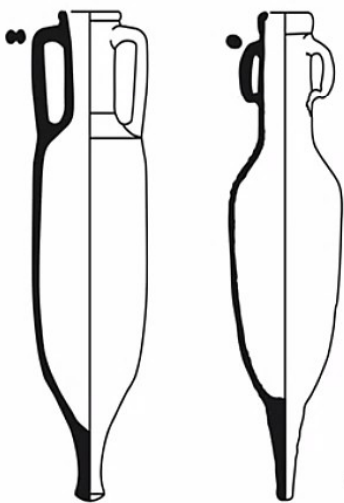
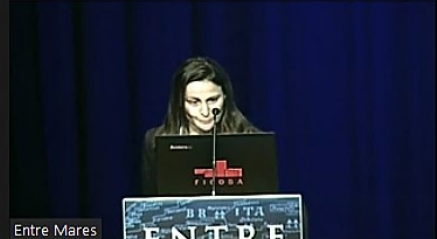


Fig. 2: Dressel 2-4 (left) and Amphore égyptienne 3 (right) (not to scale) (Antony Simpson).



Fig. 3: Italian Dressel 2-4 from the amphora jetty at Quscir al-Qadim (Photo: D. Peacock).



R. Tomber (2012) From the Roman Red Sea to beyond the Empire : Egyptian ports and their trading partners, *British Museum Studies in Ancient Egypt and Sudan* 18: 201-215.

MILITARY PRESENCE AT MYOS HORMOS *PRESENCIA MILITAR*

O. Petr. 279, Myos Hormos, AD 52

- Σατορνίλος τεσσαράριος λυβέρνου Ἐπωνύχῳ Ἀχιλλέως χαίρειν. ἀπέχω παρὰ σοῦ ἐπὶ Μυὸς Ὅρμου πυροῦ ἀρτάβας τρεῖς (γίνονται) γ. (ἔτους) ιγ Τιβερίου Κλαυδίου Καίσαρος Σεβαστοῦ Γερμανικοῦ Αὐτοκράτορος Θῶθ ιθ.
- *Satornilos tesserarius liburnae / to Eponichos, son of Achilleus, salutations / I receive from you here in Myos Hormos / three artabas of cereals. Year 13 of Caesar / Tiberius Claudius Augustus Germanicus / Emperor, Thoth 19.*

• *O. Petrie 296 (AD 6–50) (Myos Hormos/Berenike)*

Λούκιος Κλώδιος
τρηραρκως (τριήραρχος) Νικάνορι
Πανῆς. Ἀπέχω τοὺς γάμου(ς)
οὺς ἐπιθωιμε σοι

Lucius Clodius / trierarchos to Nicanor, / Son of Panes. I received the packages / entrusted to you.



Entre Mares

MARTYRIUM SANCTI ARETHAE (524-525 AD)

- 70 ships assembled in Adulis for a military expedition of 120,000 men under the orders of the negus (king) Kaleb against the kingdom of Himyar
- *70 barcos reunidos en Adulis para una expedición militar de 120.000 hombres bajo las órdenes del negus (rey) Kaleb contra el reino de Himyar*

- 20 Clysmā
- 15 Aila
- 10 Adulis
- 7 Iotabe
- 2 Bérénike
- 9 India
- 7 Farasan islands

