

The Productive Landscapes and *villae* of Roman Histria Establishment, diachronic development, estate organisation, crops and outputs

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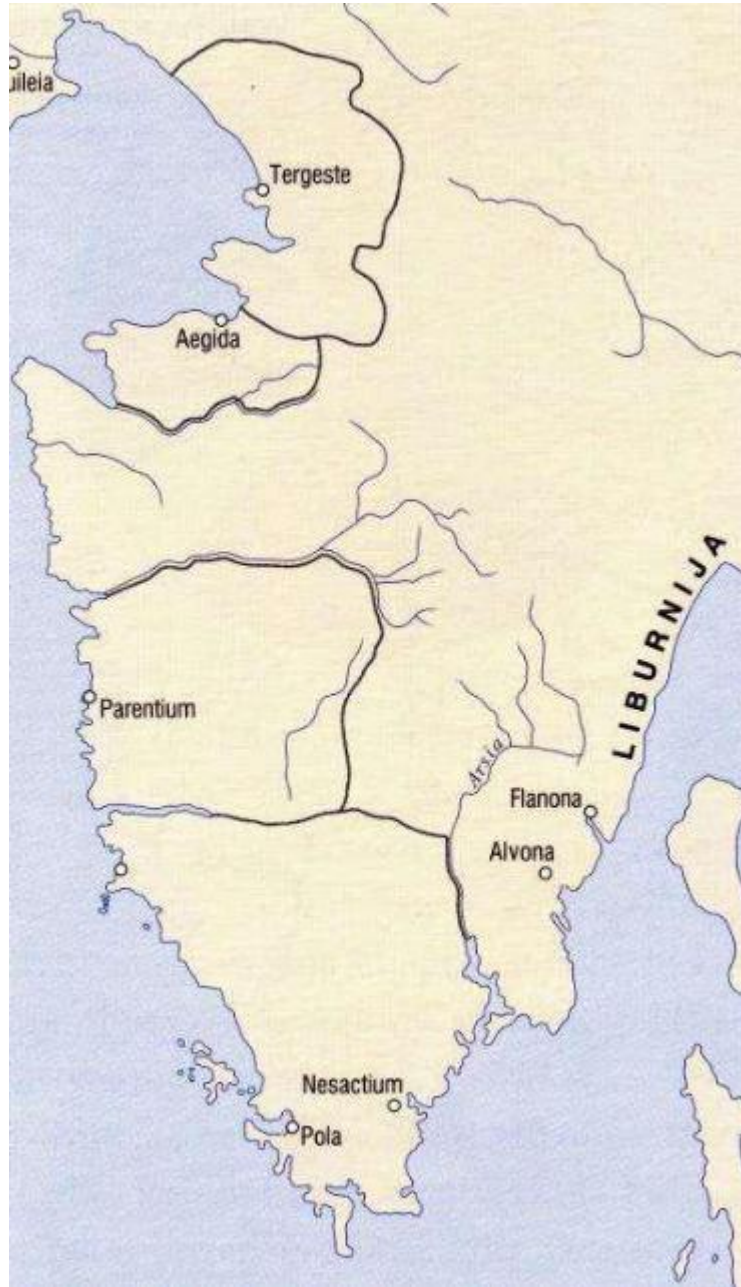
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ECONOMIC INTERACTIONS IN THE ROMAN NORTHERN ADRIATIC
Regional Trajectories of Production,
Trade and Consumption from the Sea to the Mountains
International Online Conference, 7 May 2026



54 BC: *Colonia Iulia Tergeste*



45 BC: *Colonia Iulia Parentium*

45 BC.: *Colonia Iulia Pola*



Roman rural sites in Istria

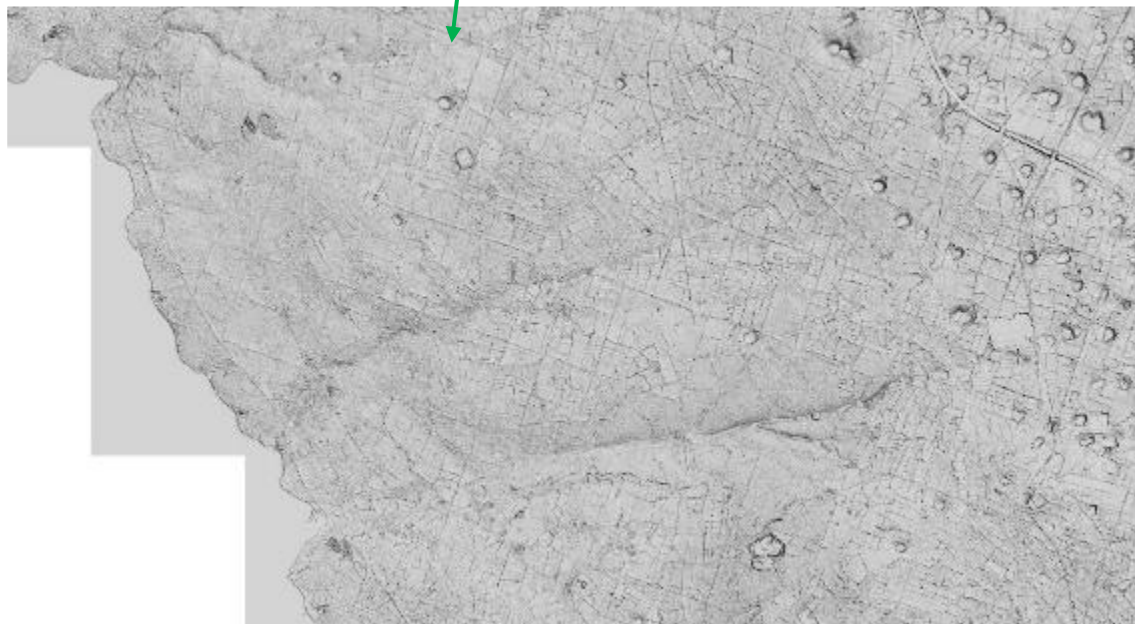
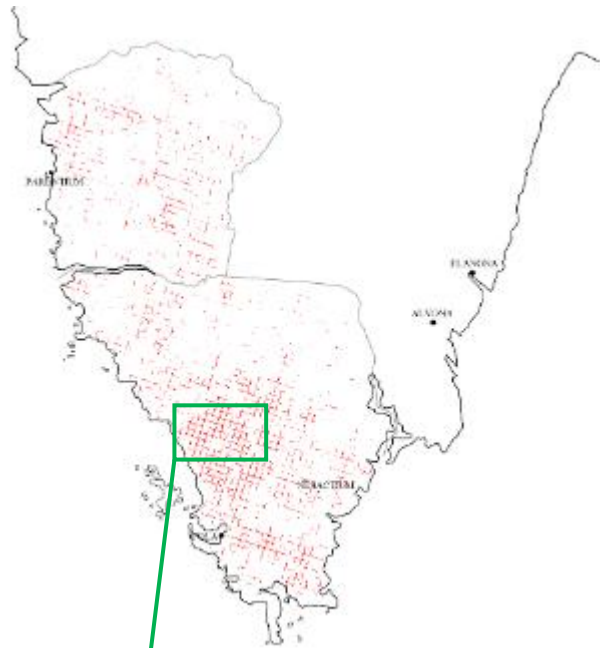
- a site with Roman architecture
- a site with surface scatter of Roman pottery



Hierarchy of ports and landings:

- Urban
- Secondary
- Villa landings

(from: *L'Istrie et la mer*, 2011, 58)



The distribution of Istrian centuriation before 2026 according to Bulić, D., 2012.



The distribution of Istrian centuriation according to Čučković, Fovet E. 2026 (10.5281/zenodo.18928451).

Sites with finds of parts of installations for the production of oil and wine, according to Kopáčková, 2023, p. 379.



Production centres and distribution of Istrian Dressel 6B amphorae



Distribution of Istrian amphorae according to Marion, Tassaux 2020, p. 33.

Typology of Fažana amphorae

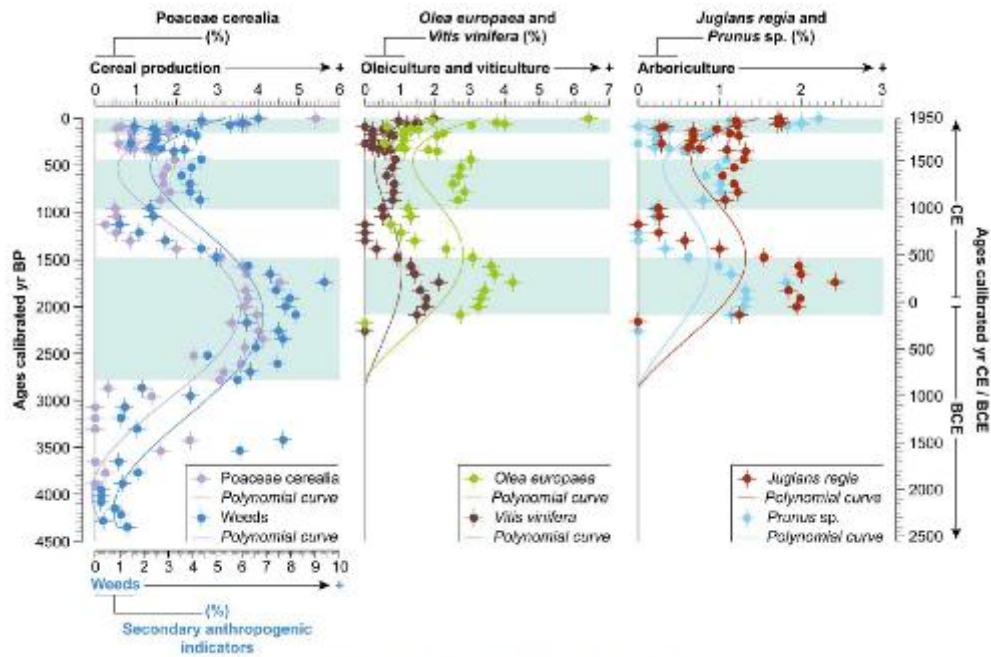
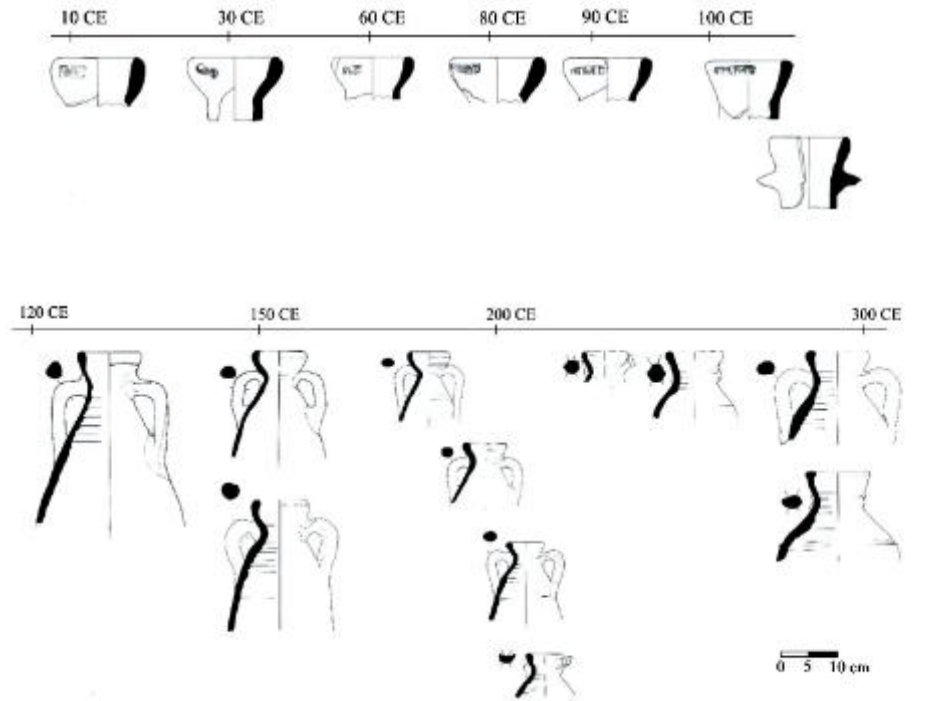
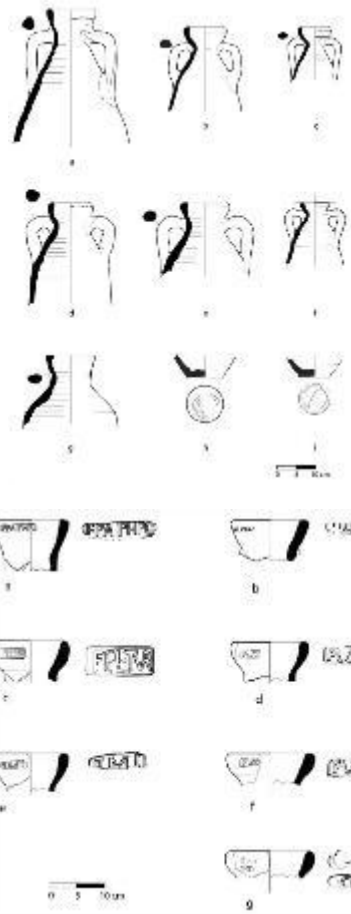
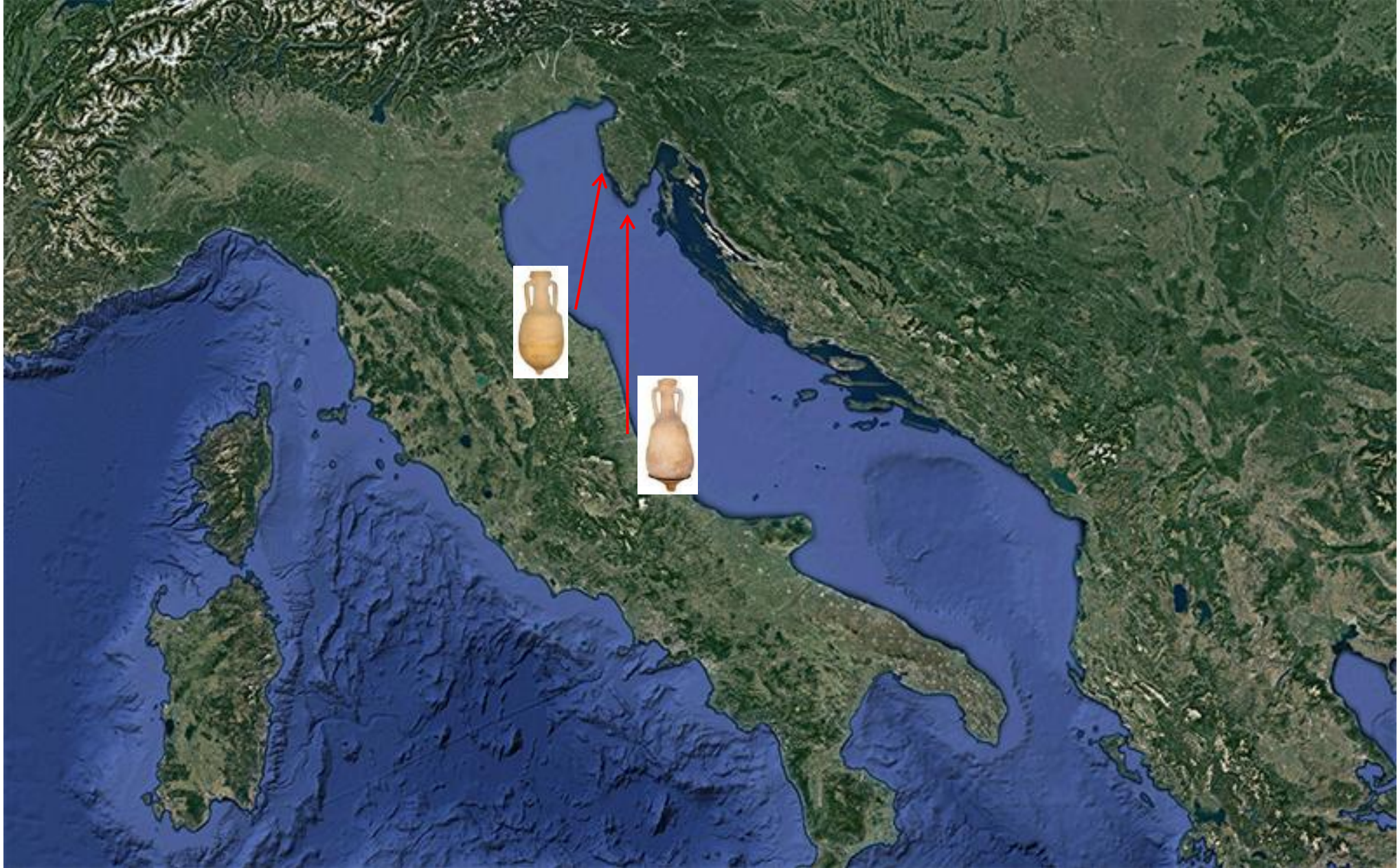


Figure 2. Crops cultivated in the Parentin coast from the pollen analysis of the river Mirna

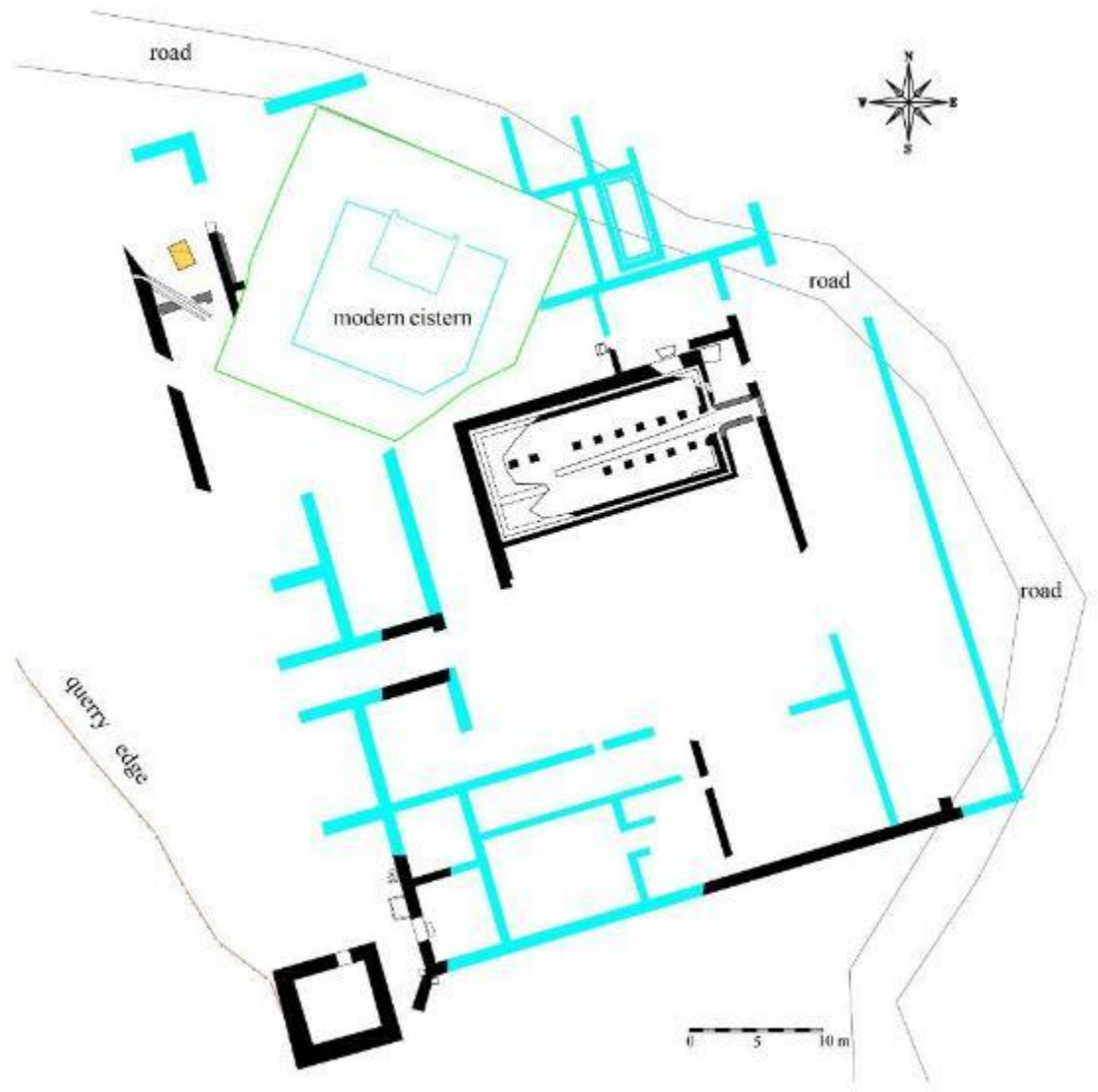
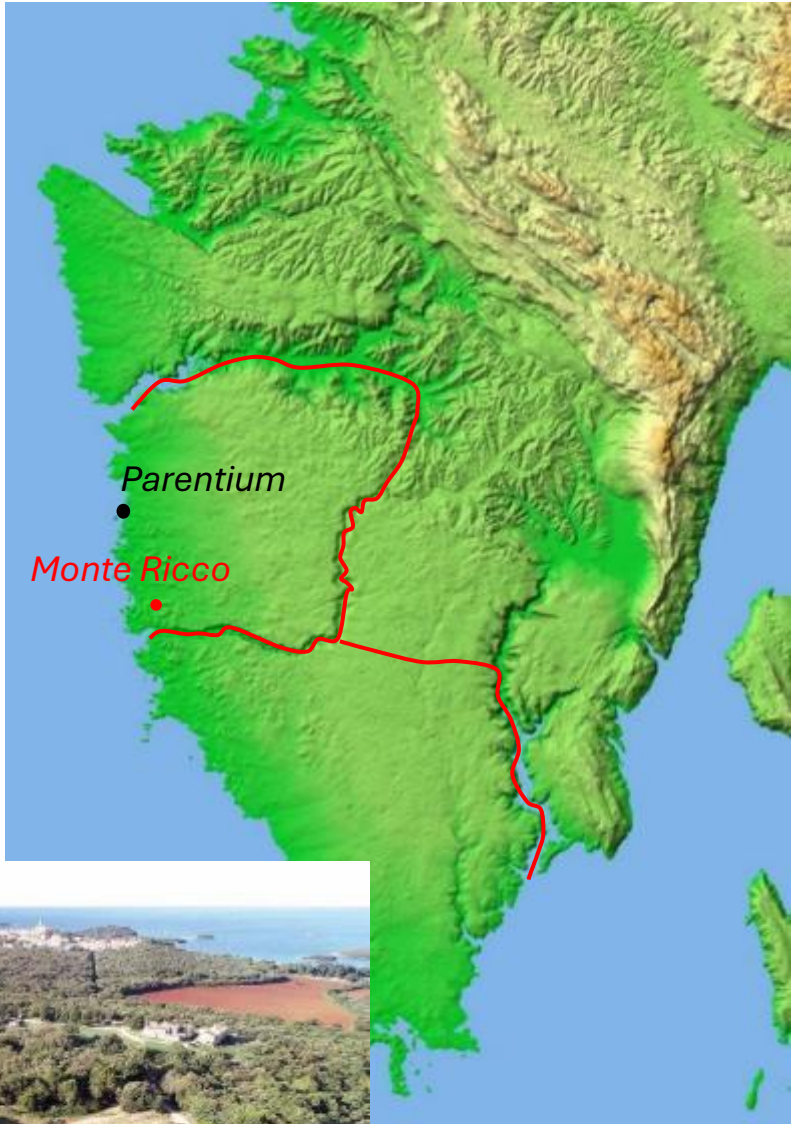
Palinology from Mirna river sediments, Vaschalde et al. 2023, p. 185.

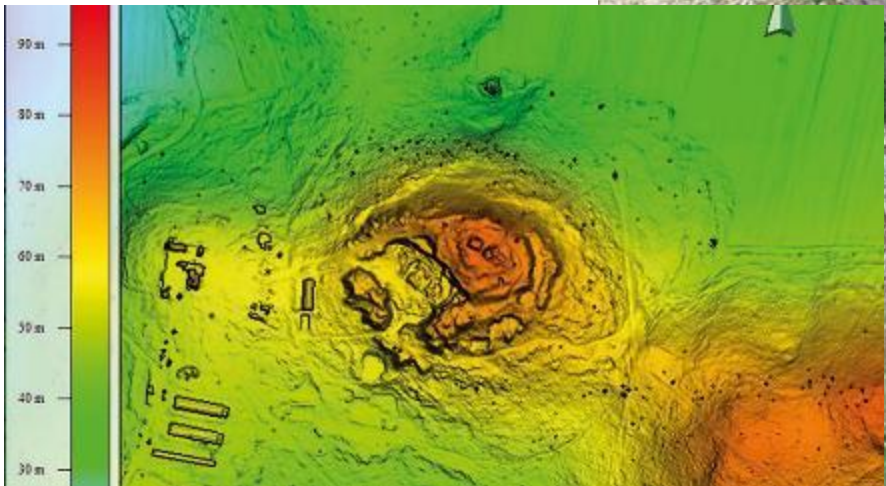




1st century BC > import of wine from the western Adriatic coast

Monte Ricco









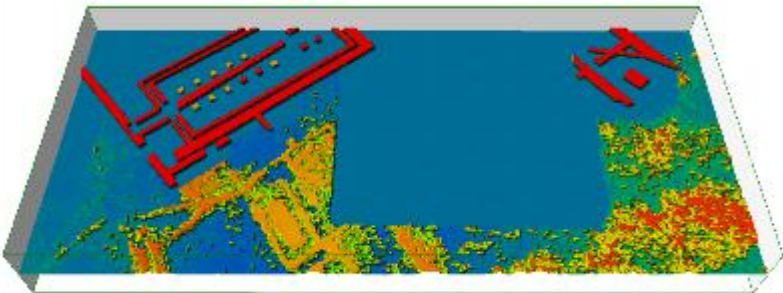
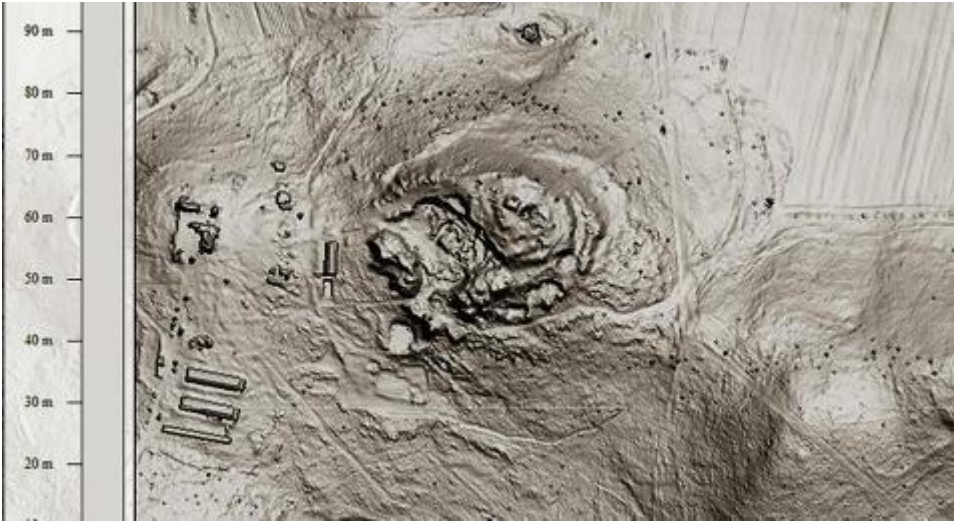


Iron arrowheads from trench 6

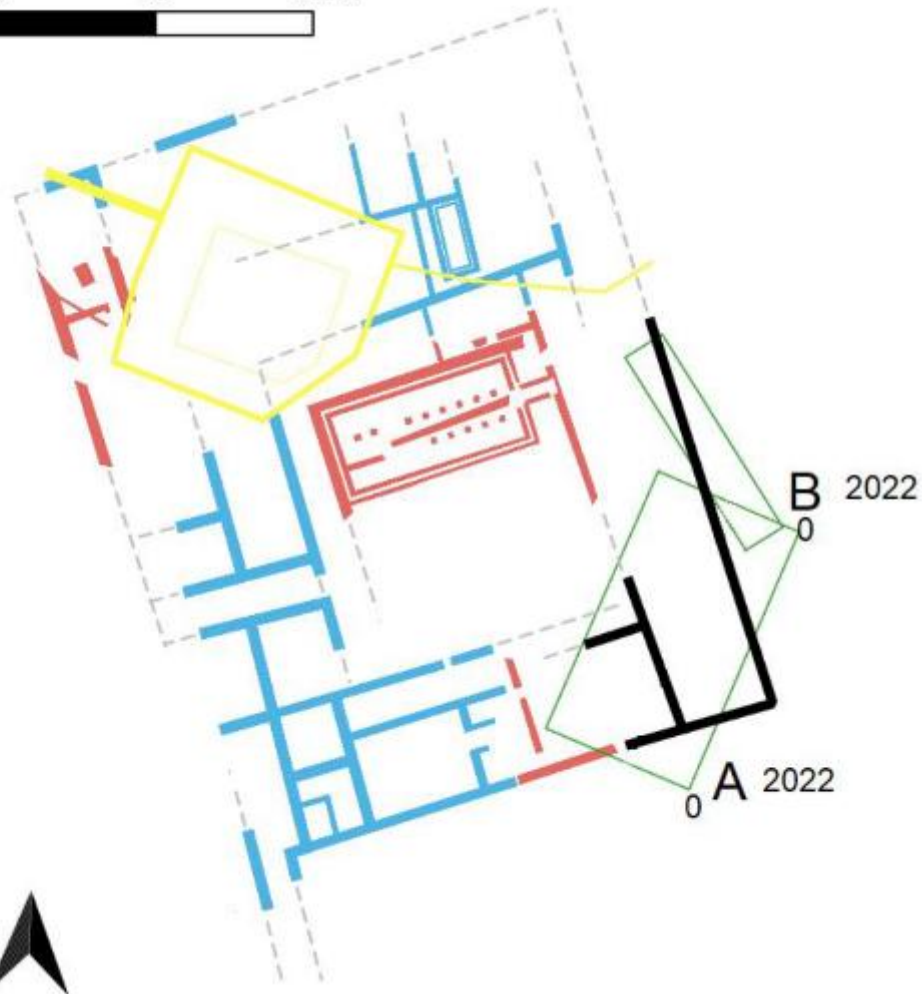
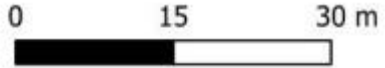
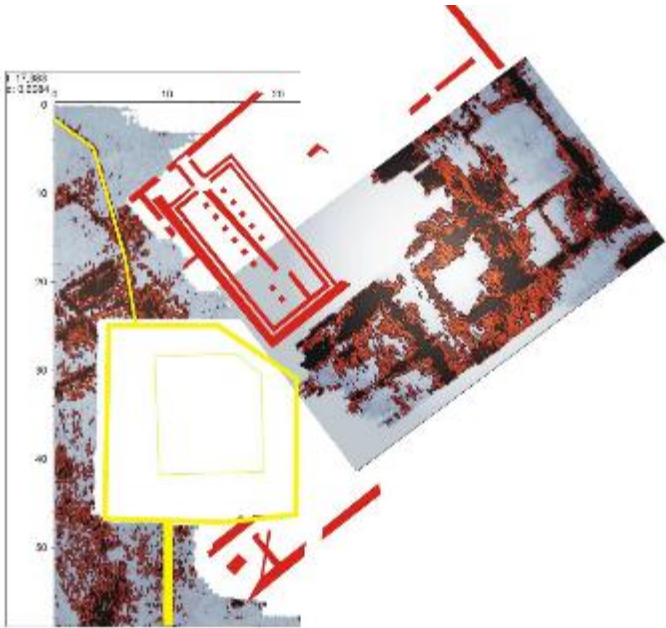
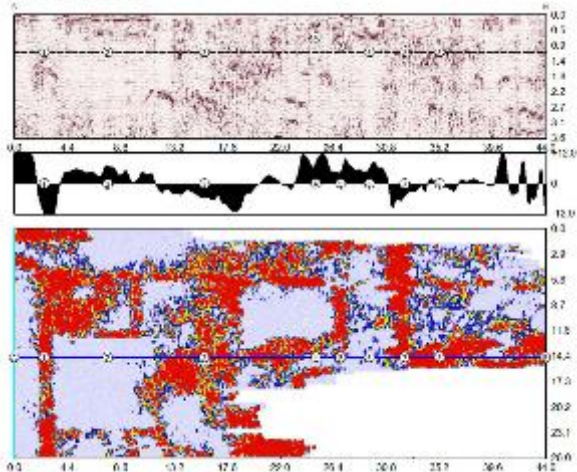


Iron wedge

**Monte Ricco
Remote sensing**



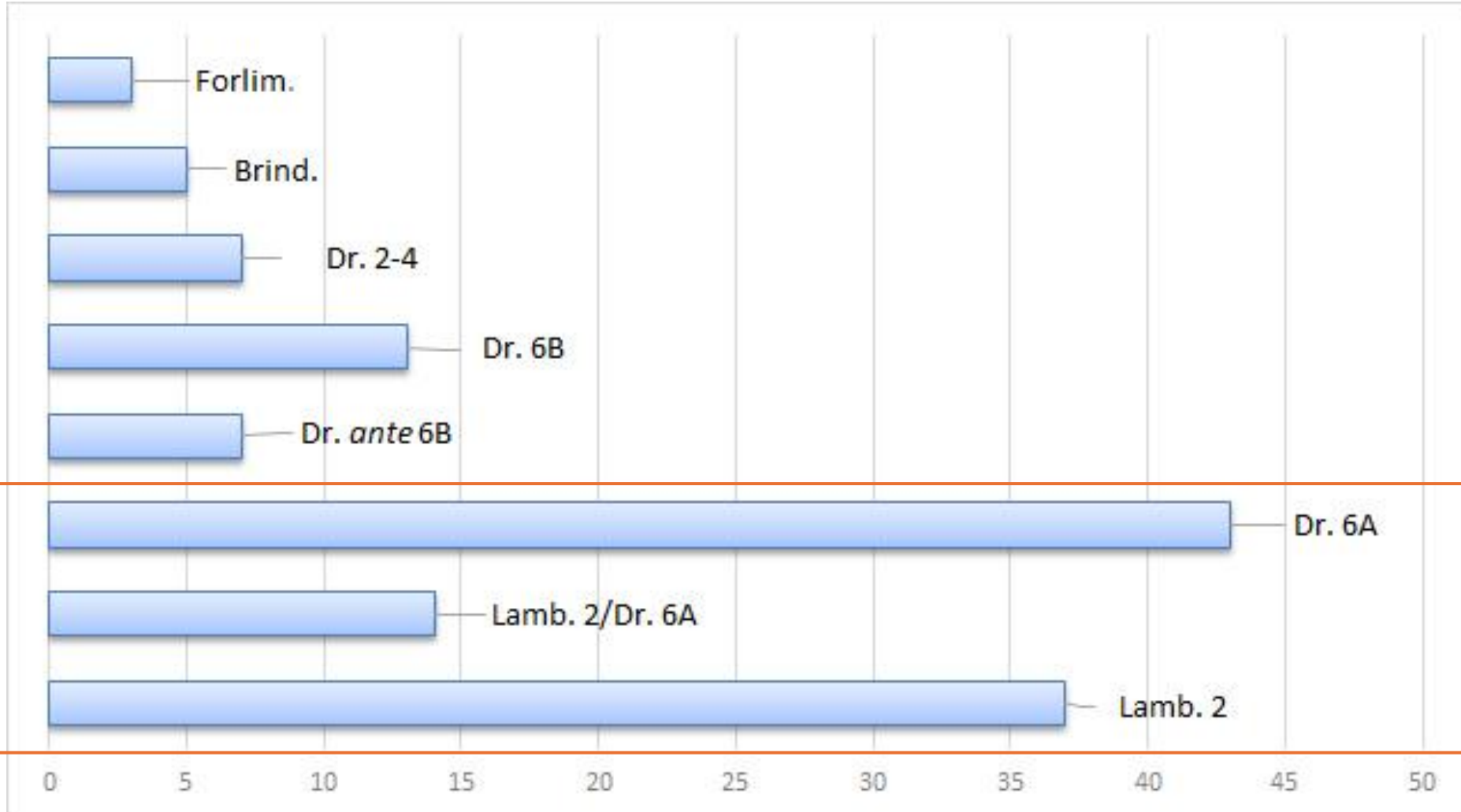
Depth: 1,08 m, profile C





- Cistern capacity – 240 m³
- Outer dimension 19,3 x 10 m

Quantification of amphorae types from Monte Ricco



Barrel lid from the villa of Isola della Punta with stamp and graffiti, Buonopane, Mainardis 2023, fig. 4.

Monte Ricco

Archaeobotany

Judgement sampling

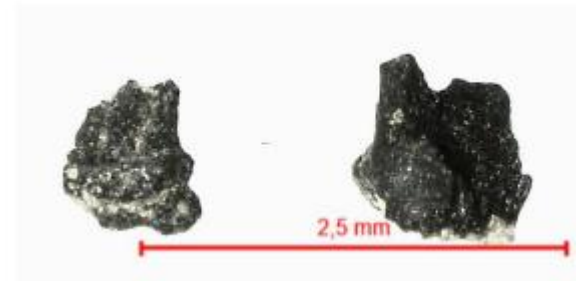
- Six samples contained a large quantity of stones, recent roots, charcoal, pottery, shells, bones, coprolites of small mammals, and a small quantity of seeds/fruits.
- Seeds/fruits – in carbonized and fragmented condition.
- Recent seeds/fruits in an uncarbonized condition – *Rubus sp.* (blackberry/raspberry).
- Cultivated plant – *Olea europaea* (olive)
– *Cerealia frg.*



Small mammals coprolites



Olea europaea (olive)



Cerealia chaff



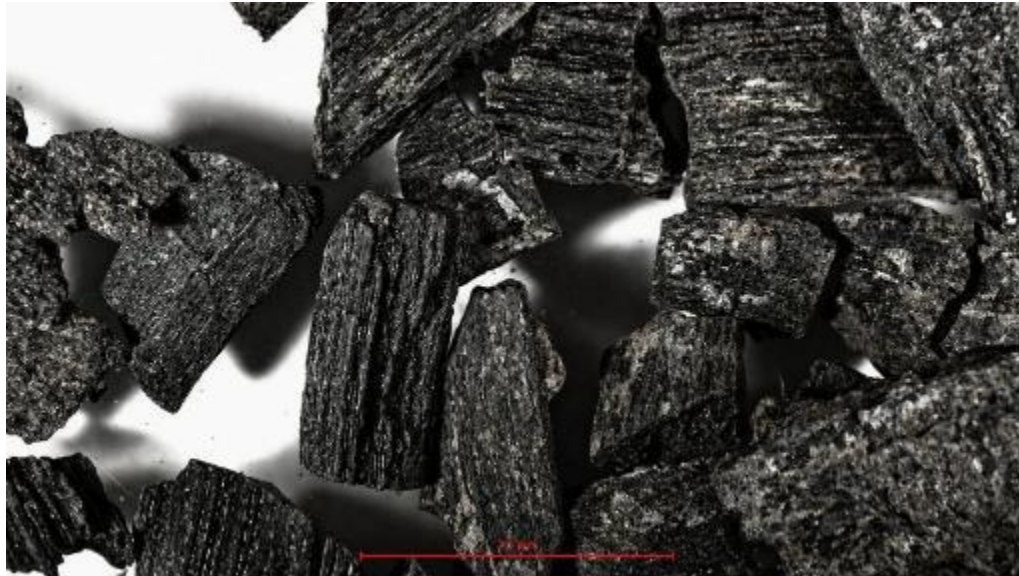
Fungus sp. (fungal spores)

Monte Ricco

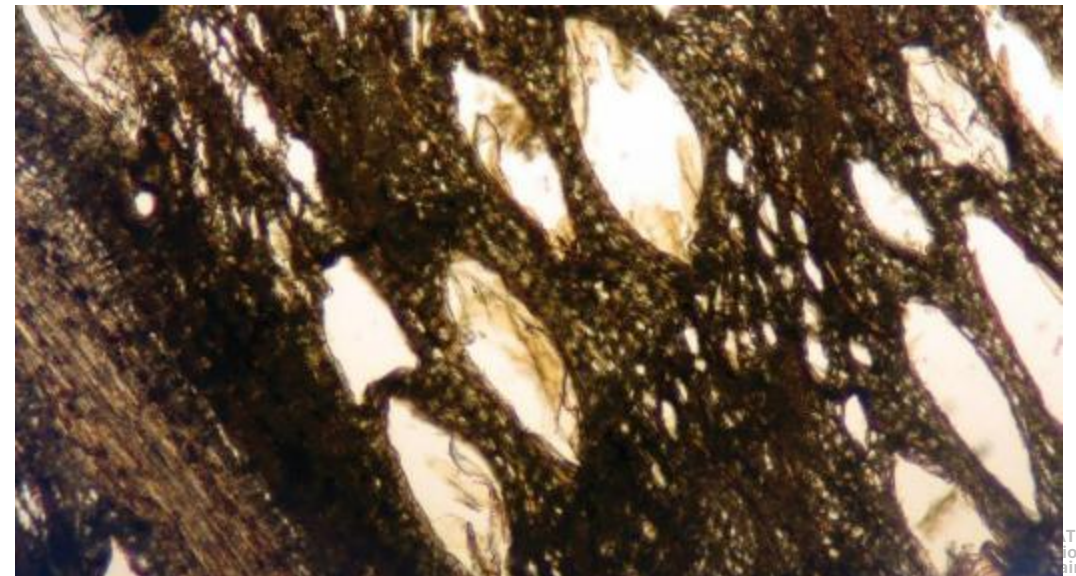
Archaeobotany

Charcoal

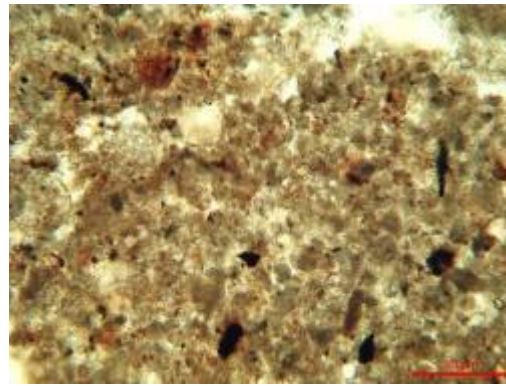
- Based on the cross-section of the charcoal, deciduous wood or broadleaf wood was identified.
- Two types of deciduous wood were identified: ring-porous and diffuse-porous. No conifers or softwood were found in the samples.



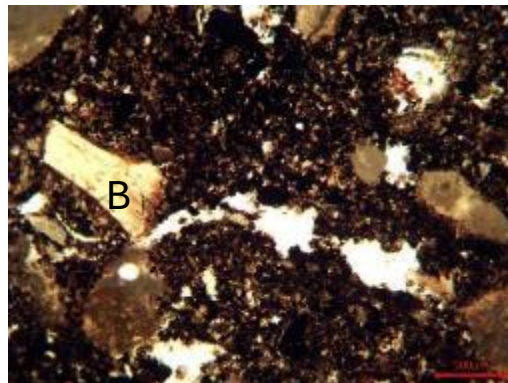
- In five of the six analyzed samples, oak (*Quercus* sp.) was identified.
- The characteristics of oak are pores arranged in flame-like patterns, broad rays, and simple perforation.



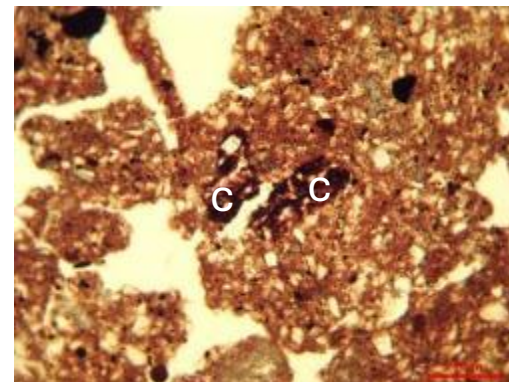
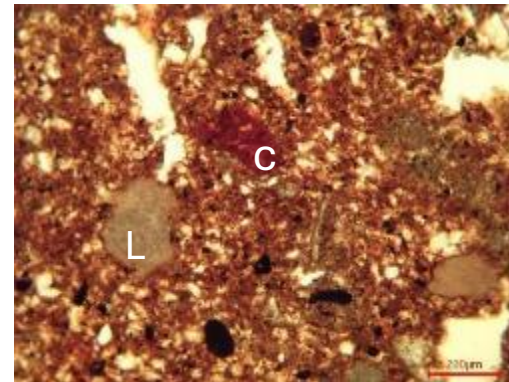
Monte Ricco Geoarchaeology



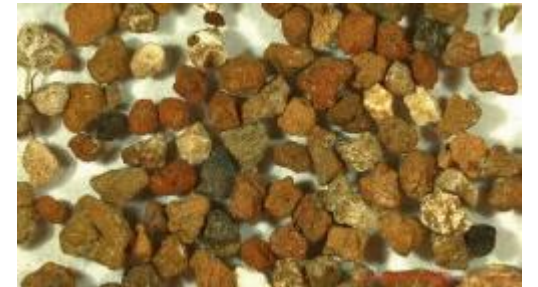
Wood/bark ash



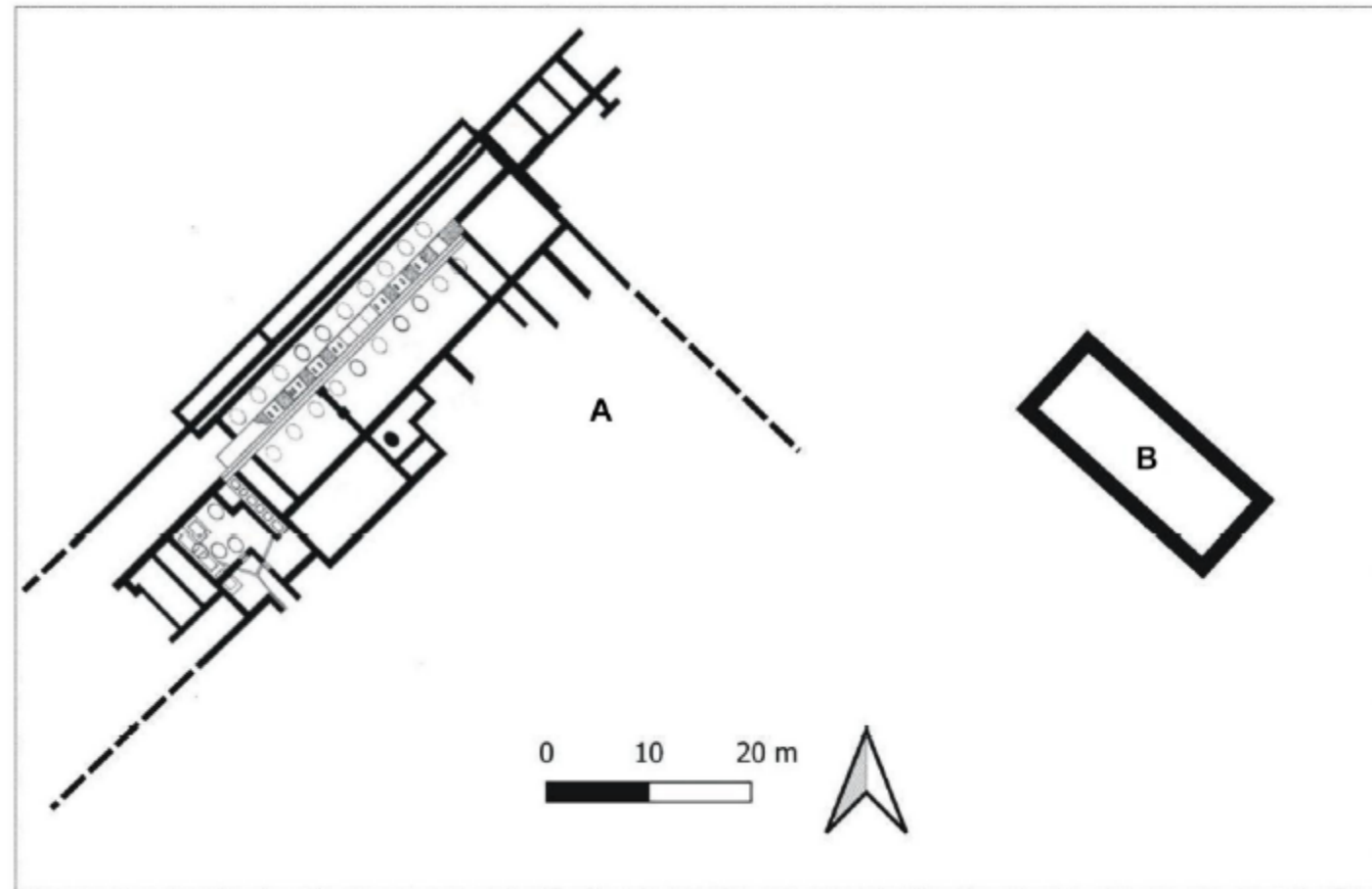
B – bone fragment
dark stains – amorphous organic matter



C – ceramic fragment
L – lime lump



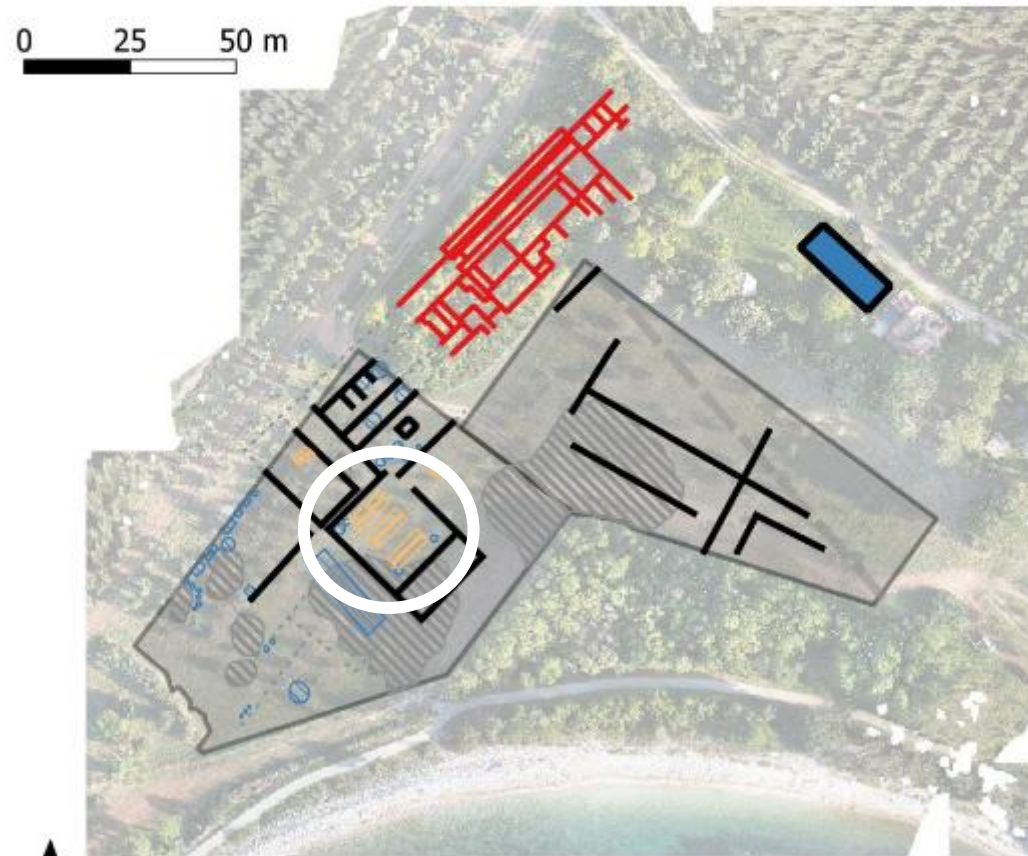
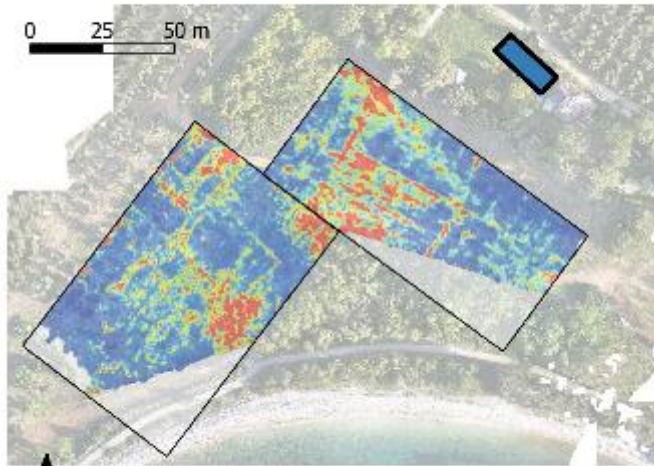
Barbariga



Barbariga

Remote sensing

-  CISTERN
-  OLD EXCAVATIONS
-  INTERPRETATION - FEATURES DETECTED BY MAGNETOMETRY
-  INTERPRETATION - AREAS OF DESTRUCTION
-  INTERPRETATION - DETECTED WALLS
-  INTERPRETATION - OLD ROAD
-  INTERPRETATION - DETECTED POSSIBLE WALLS
-  INTERPRETATION - DETECTED ARCHED STRUCTURES



Barbariga

Water management



Legend

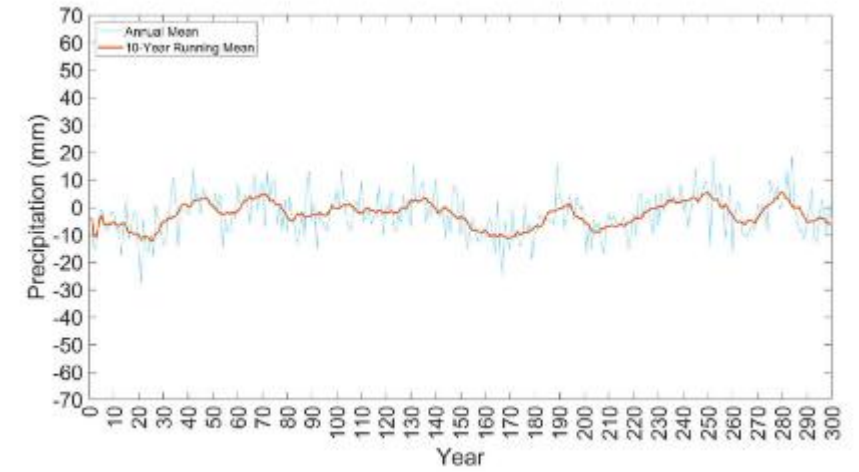
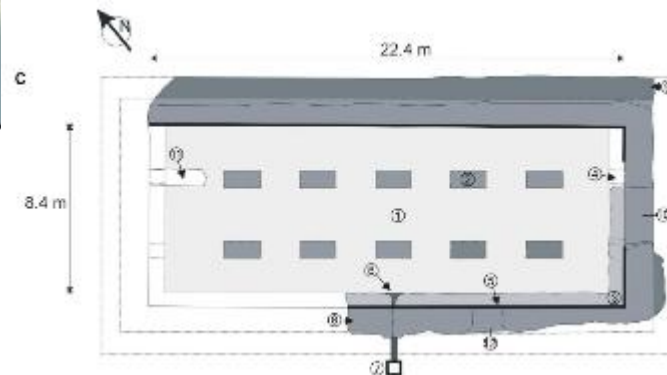
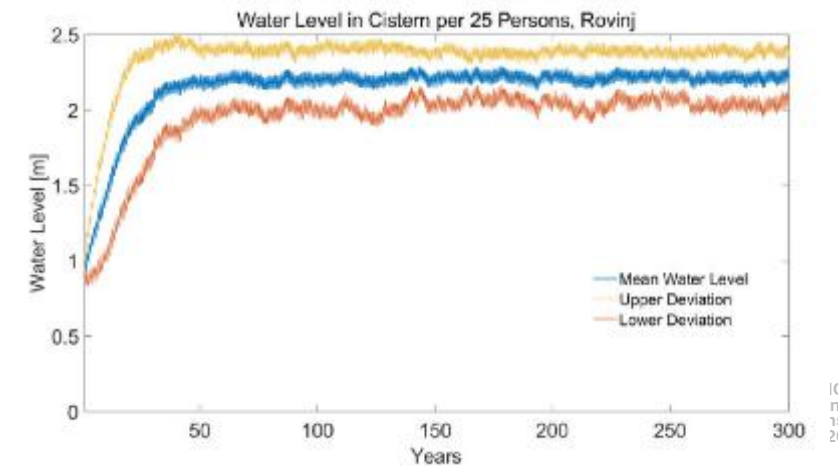


Table 6. Rovinj—average water level in the cistern at a consumption of 15 L per capita per day.

Number of people	All year [m]	I–IV [m]	V–VIII [m]	IX–XII [m]
20	2.23	1.16	1.41	2.25
25	1.76	0.33	0.47	2.18
30	0.22	0.15	0.18	1.20
40	0.53	0.07	0.09	0.51
50	0.03	0.05	0.05	0.13



Barbariga

Archaeobotany

- Seven samples contained a large quantity of stones, charcoal, bones, shells, fish scales, and a small quantity of seeds/fruits.
- Seeds/fruits were found in a carbonized and fragmented state. The uncarbonized seeds/fruits are recent and entered the samples through contamination.

- Judgement sampling
- **Cultivated plants:**
 - Hordeum vulgare* (barley)
 - Olea europaea* (olives)
 - Vitis vinifera* (grapevine)
- **Gathered plants:**
 - Rubus* sp. (blackberry/raspberry)
 - Pinus pinea* (stone pine)



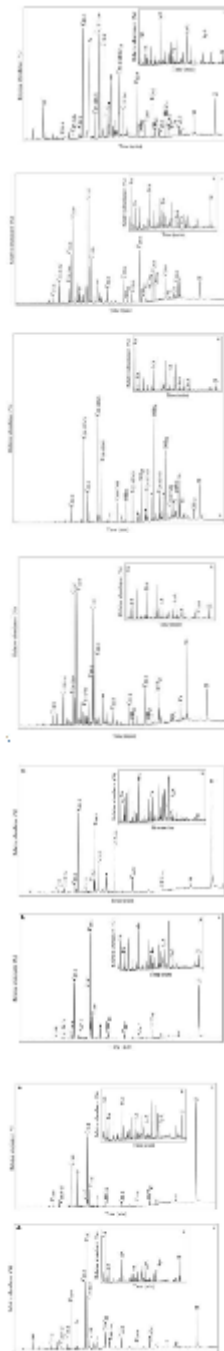
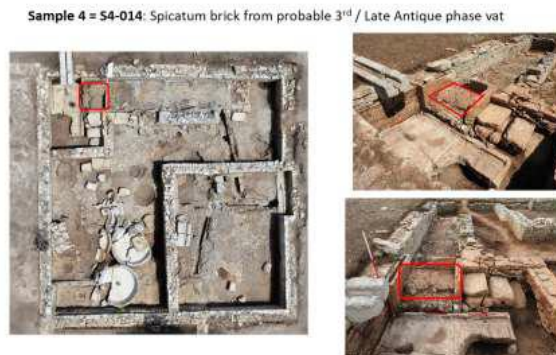
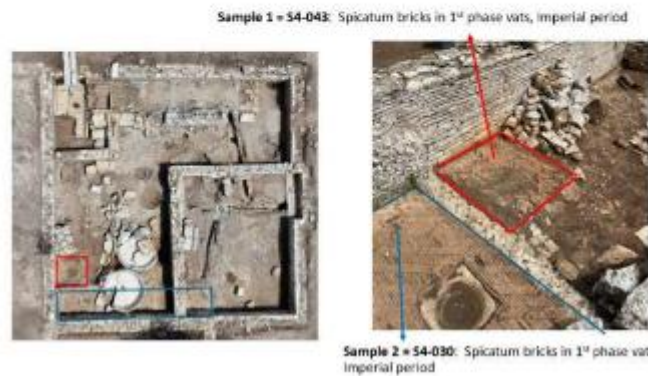
Barbariga Residue analyses

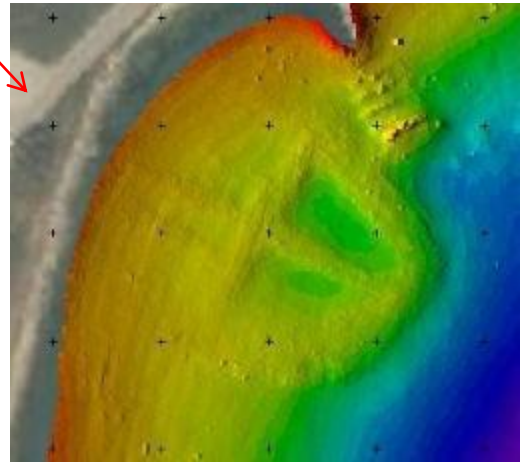
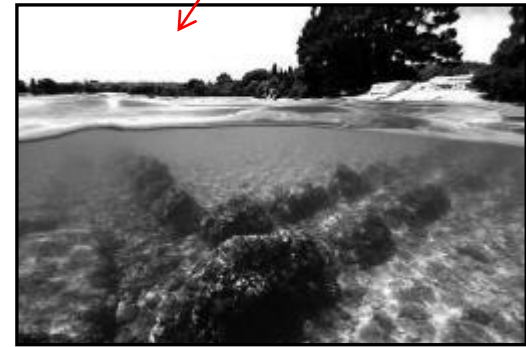
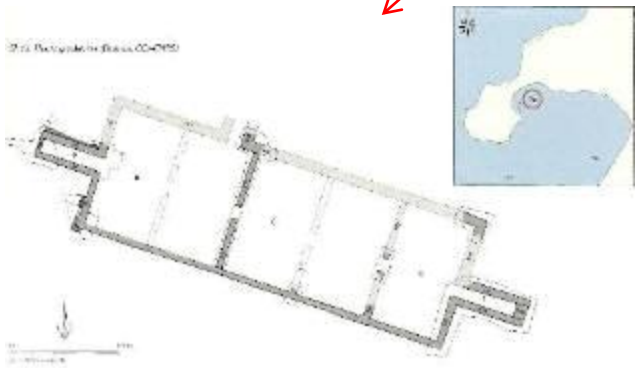
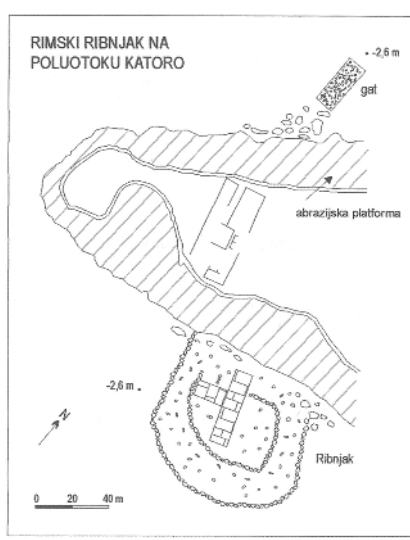
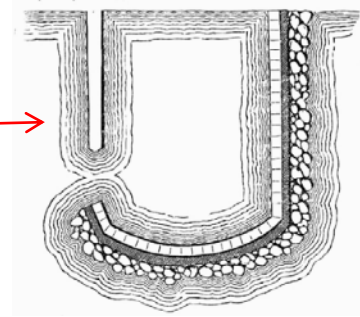
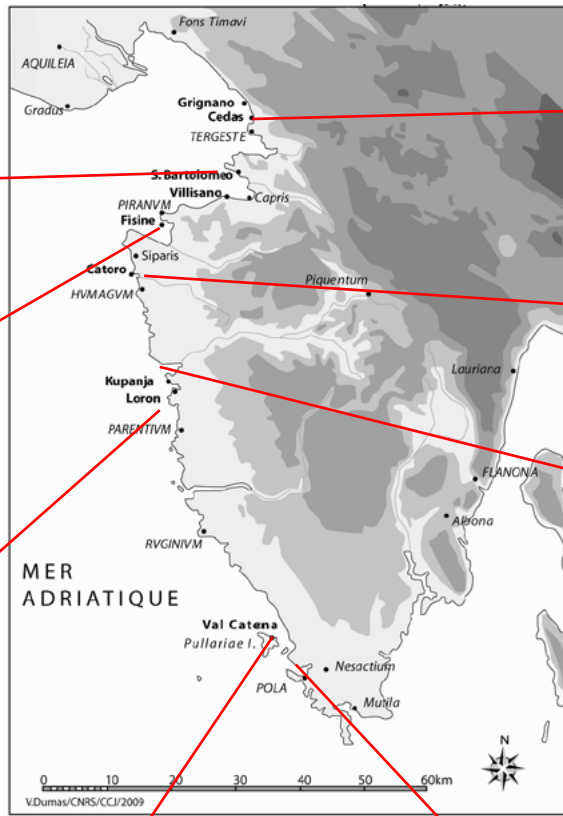
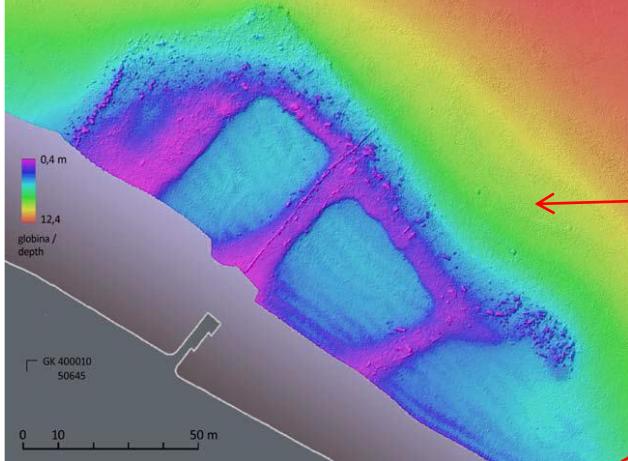
Table 1. List of the analysed samples and grams analysed.

Sample ID	Sample type	Phase	AE (g)	ETO (g)
BARB 1	Brick from opus spicatum	1 st phase-Imperial Period	2	1.2
BARB 2	Brick from opus spicatum	1 st phase-Imperial Period	2	1.1
BARB 3	Brick tile	1 st /2 nd phase	2,1	1
BARB 4	Brick from opus spicatum from Late Antique vat	probable 3 rd / Late Antique phase vat	2,1	1

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Conclusions



?

Thank you for your attention!

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