

Taranto

Early days of cartography

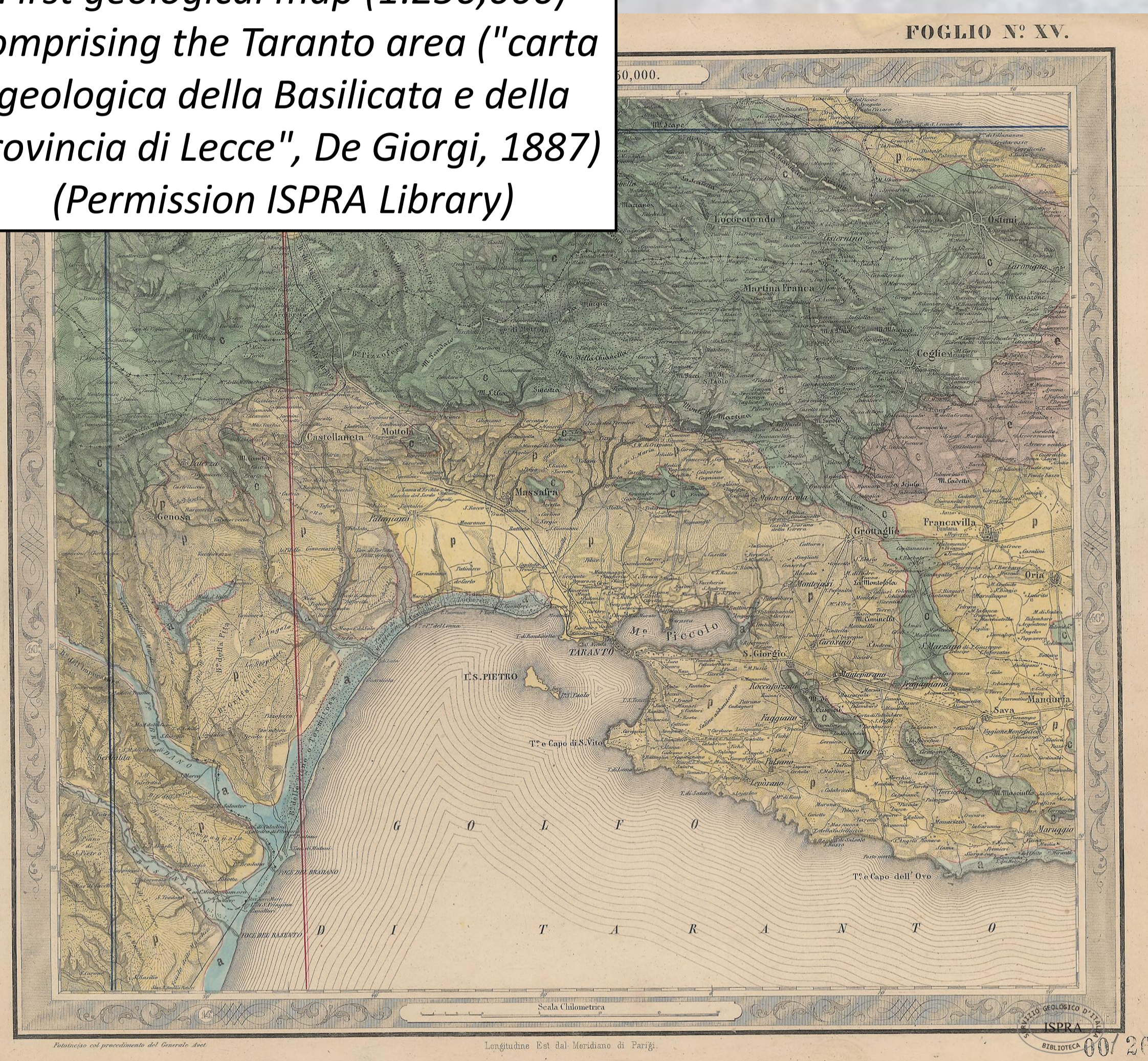
The history of Taranto, in Apulia, dates back to the 8th century BC when it was founded as a Greek colony. Since that time, the town protects an almost enclosed gulf, the Mar Piccolo, that represents a natural harbour.

Apulia is the easternmost region of Italy and is characterized by a thick Mesozoic carbonate succession not involved in the Apennines chain deformations. Thus, Apulia (Gargano, Murge and Salento) is considered the foreland in the southern Italy orogenic system.



Aerial view of Taranto and the Mar Piccolo
C. Delgado, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=11198578>

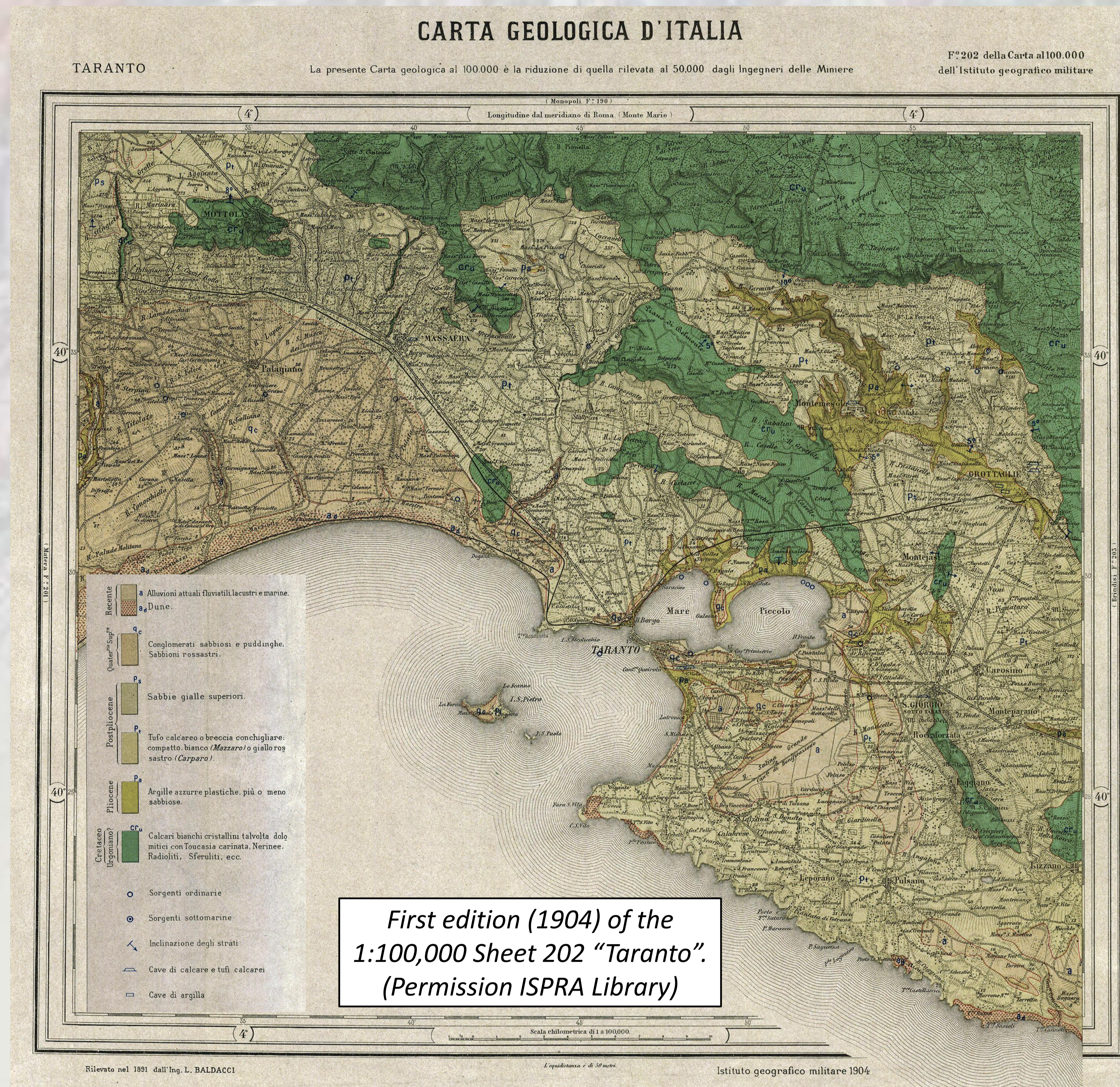
First geological map (1:250,000) comprising the Taranto area ("carta geologica della Basilicata e della provincia di Lecce", De Giorgi, 1887) (Permission ISPRA Library)



First geological maps of the Taranto area highlight the presence of thin Plio-Pleistocene covers (light colours) onto a thick Cretaceous basement (green).

Main points:

- 1) no data about tectonics;
- 2) absence of geological sections;
- 3) no stratigraphic data about either Mesozoic or younger sedimentary units.



First edition (1904) of the 1:100,000 Sheet 202 "Taranto". (Permission ISPRA Library)

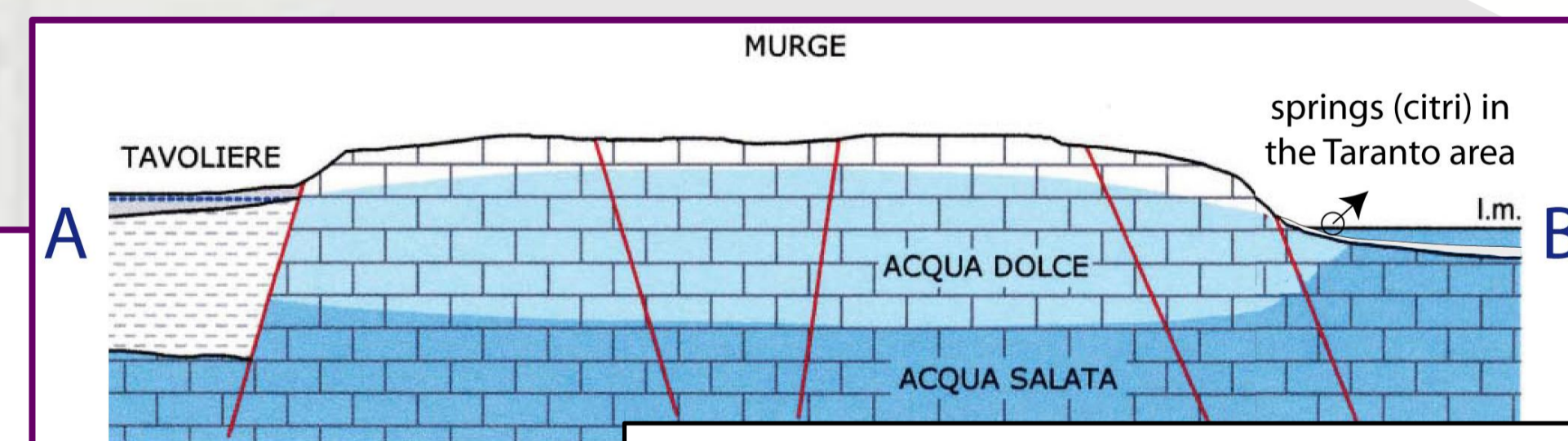
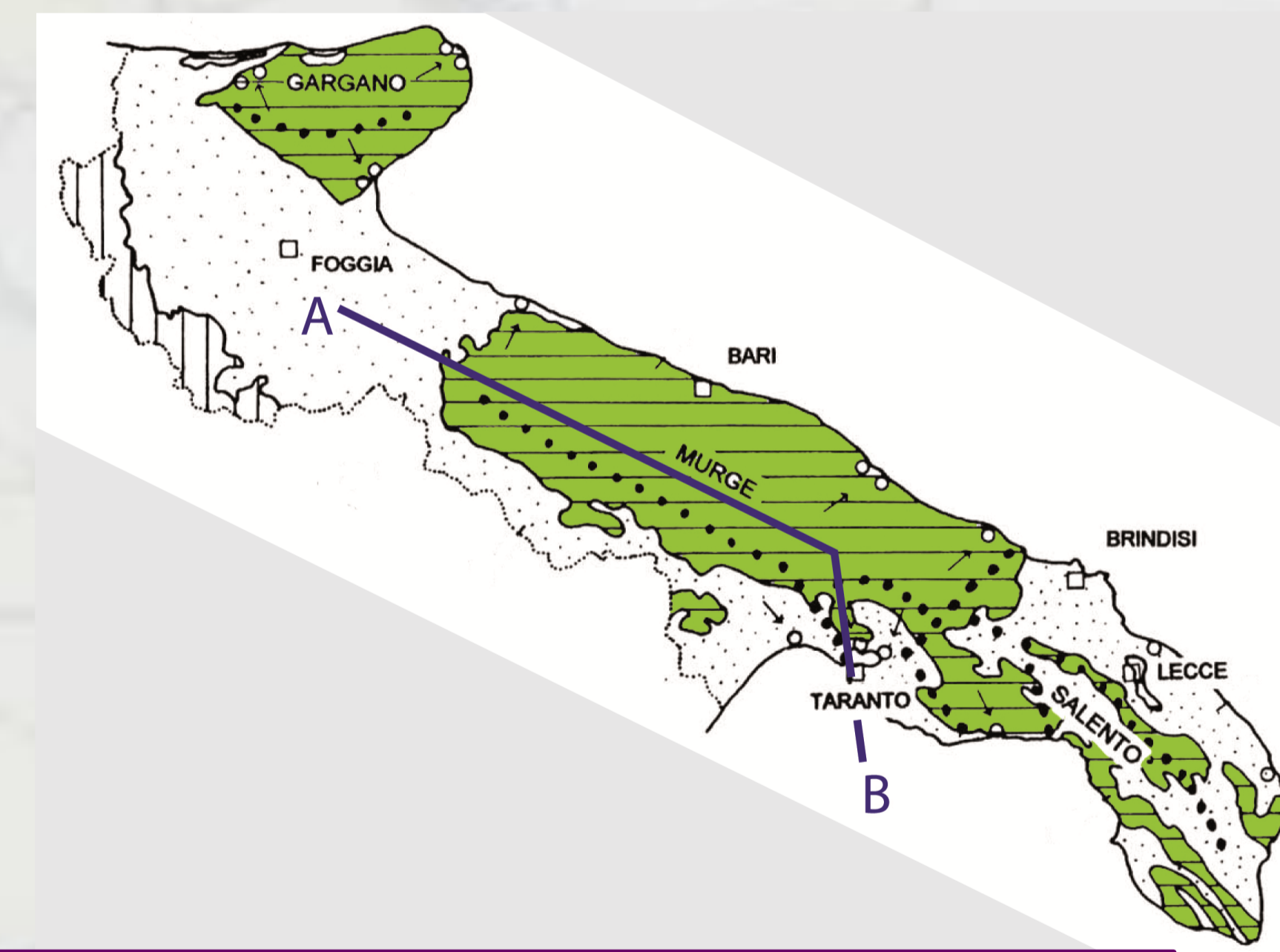
Taranto springs: freshwater from the karstic area of Murge



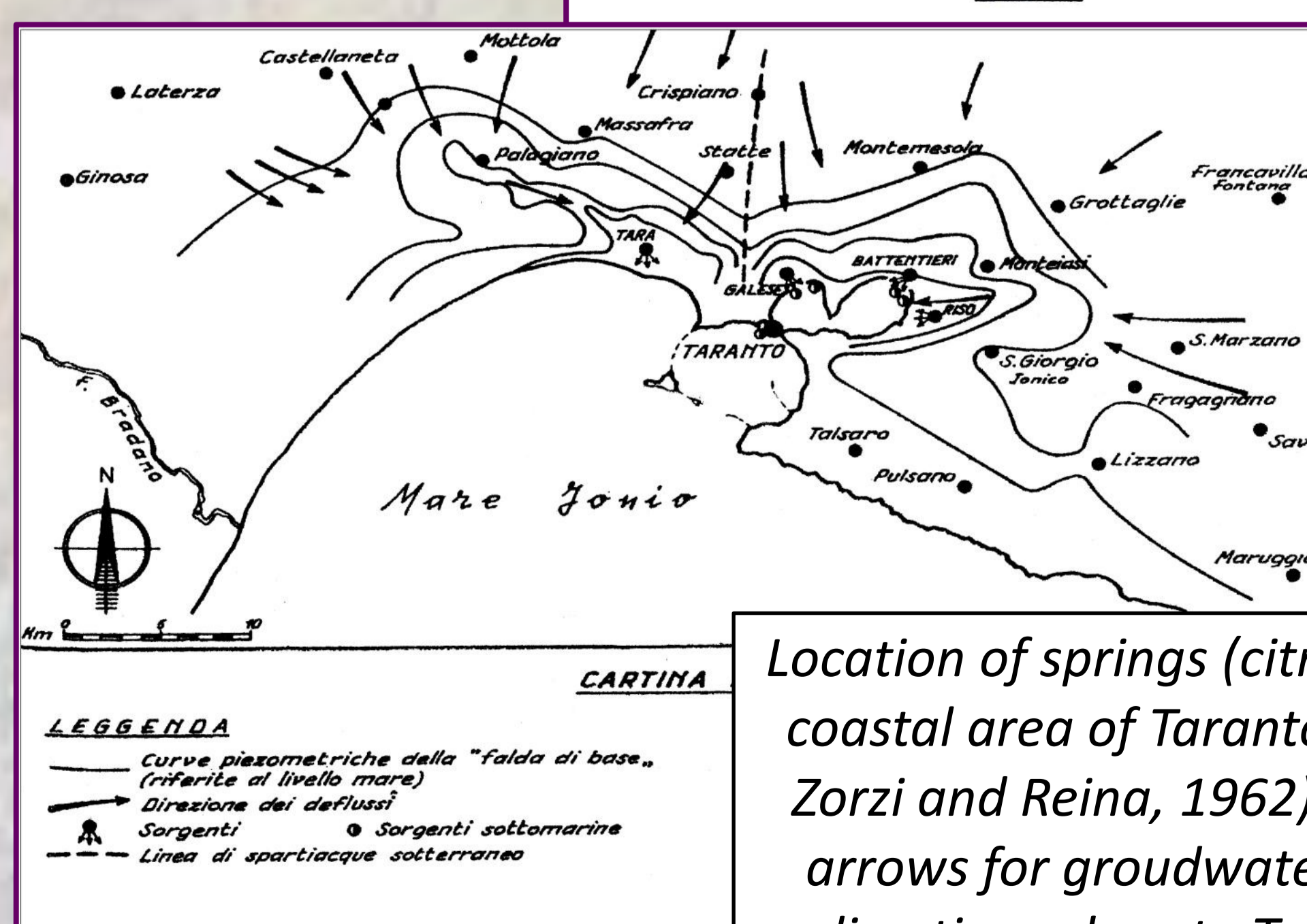
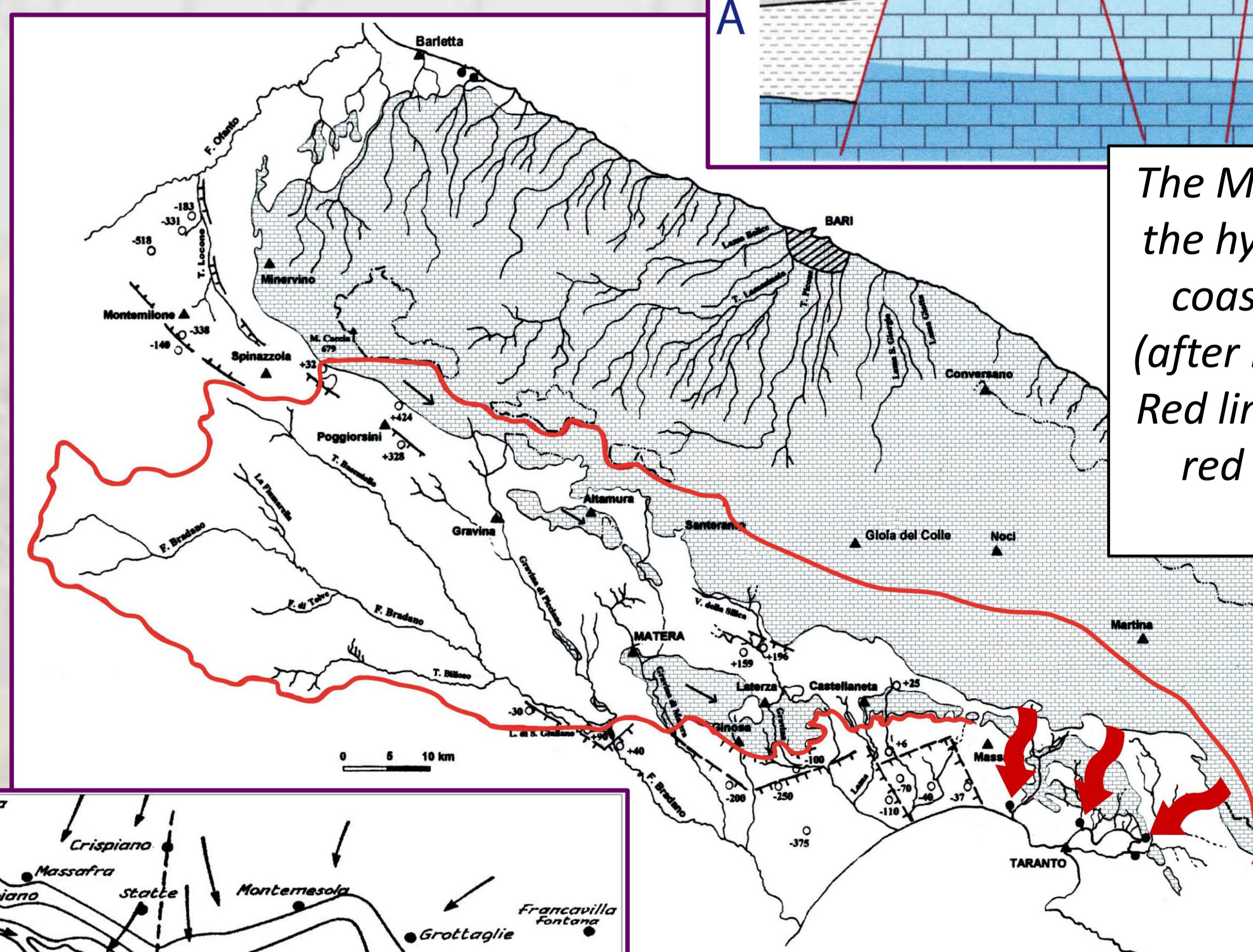
The "San Cataldo ring"
<http://www.panoramio.com/photo/54776163>
(photo by Angelo Rusciano)

Some submarine, karstic freshwater springs (locally called "cetri"), located in the "Mar Piccolo" led to the development of intensive aquaculture in the past. Legend has it that San Cataldo, the patron saint of Taranto, let fall his ring in the sea, and a spring of freshwater went out from the sea bottom. That spring is known as the "San Cataldo Ring".

A big groundwater reservoir is hosted in the Mesozoic carbonates of Murge. The main groundwater outflows are the coastal/shallow-marine springs in the Taranto area, fed by a very large hydrogeological basin extending from the western side of the Murge to the front of the Apennines (Bradano River drainage network).



The Murge groundwater reservoir and the hydrogeological basin feeding the coastal springs in the Taranto area (after Maggiore and Pagliarulo, 2004). Red line for the hydrogeological basin; red arrows for main groundwater outflow directions.



Location of springs (cetri) in the coastal area of Taranto (after Zorzi and Reina, 1962). Black arrows for groundwater flow directions close to Taranto.

Now, the Mar Piccolo is a highly polluted area due to the presence of both military and industrial navy docks and various heavy industries located in proximal areas.