

Occurrence of Cephalopods *Sepiolo ligulata*  
(Naef 1912) and *Rondeletiola minor* (Naef 1912)  
in the Adriatic

*Prisutnost Cephalopoda Sepiolo ligulata* (Naef 1912)  
*i Rondeletiola minor* (Naef 1912) u Jadranu

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A series of samplings carried out along the northern and central Adriatic coast has revealed the presence of *Sepiolo ligulata* (Naef 1912) and *Rondeletiola minor* (Naef 1912).

Previously these two species had not been noted in the Adriatic sea (Gamulin-Brida et Ilijanić, 1973; Torchio, 1968).

*Sepiolo ligulata* has been collected relatively frequently, in some cases also in numerous communities, so it seems strange that in the past there has been no record of its having been found.

The catches were made in five stations (Fig. 1) at depths varying between 65 and 125 metres, on a muddy bottom. In the samplings it was generally associated with *Sepietta oweniana*.

Observations were made on 49 specimens, the morphological characteristics of which correspond to the diagnoses made by Naef (1912), Naef (1916) and Naef (1923).

The determination of the specimens was made particularly easy by the hectocotylisation of the left dorsal arm, which differs markedly from that of the other species of the genus *Sepiolo*.

In this case, in fact, a sort of fairly obvious lobature is present, which develops towards the distal part of the arm; beside this, along the middle, there extends another very characteristic dilation, which, in all probability, originates from the peduncles of the second and third suckers of the middle row.

Moreover, this arm appears dilated even more markedly than in *Sepietta oweniana*.

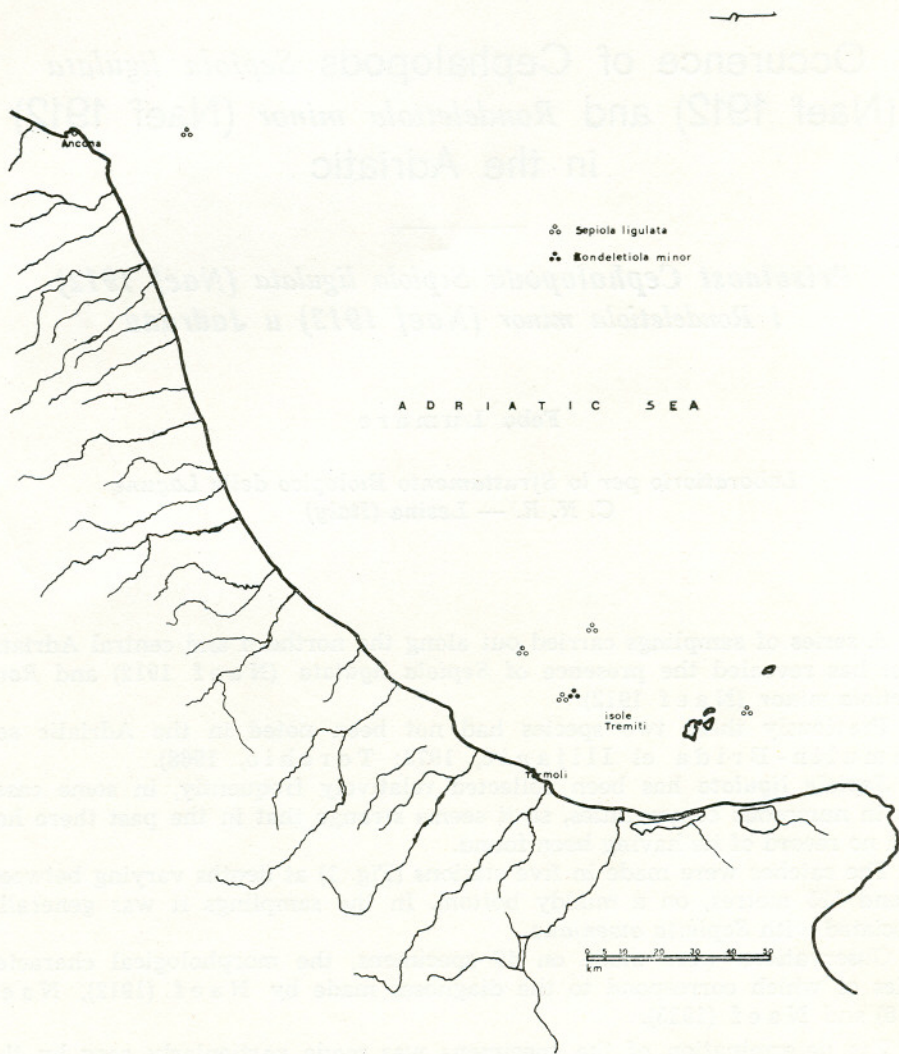


Fig. 1. — Areas of the Adriatic Sea in which the presence of *Sepiolo ligulata* and *Rondeletiola minor* was revealed.



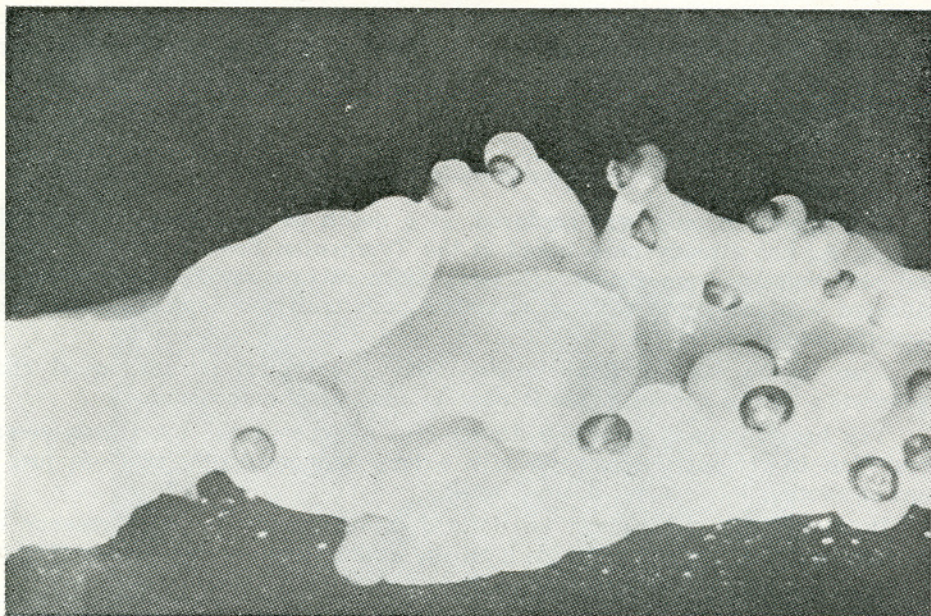


Fig. 2. — Characteristic hectocotylus of *Sepiola ligulata* with its evident spatula-like lobe folded towards the distal part of the arm and with next to it an appendage which extends towards the right arm.

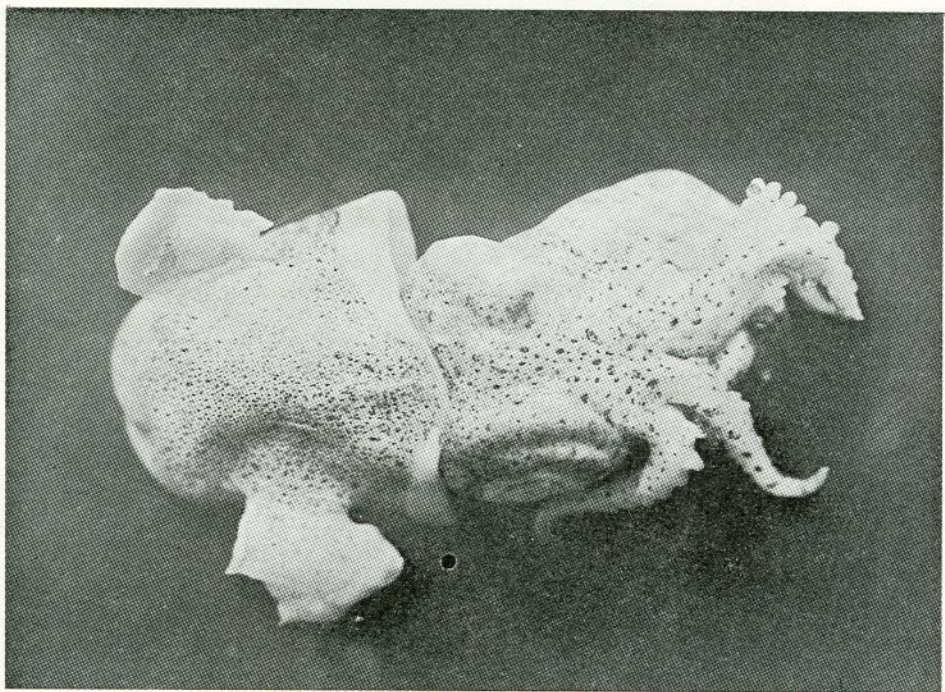


Fig. 3. — Dorsal view of *Sepiola ligulata*. Note in the hectocotylized arm the specific character of the distal part which is more widened like a spoon, than in the species *Sepietta oweniana*.



Figure 2 shows this characteristic; it is also visible in Figure 3, which illustrates the general appearance of the species, in spite of the impairment suffered as a result of the system of collection with a trawl net and the system of preservation.

#### *Rondeletiola minor*

One specimen only was captured, at a depth of 90 metres on a muddy bottom. As has already been noted in the Tyrrhenian Sea (Lumare, 1970) and observed by some authors (Naef, 1972; Wirz, 1958), the cephalopod collected was associated with an abundant community of *Sepiola ligulata* and *Sepietta oweniana*.

Also in the case of *Rondeletiola minor* the typical morphological characteristics of the species made it easy to identify the specimen.

The hectocotylation of the dorsal arm is represented by a transversal crest that is prolonged sideways with a very obvious tooth; there is just a hint of another tooth lower down (Fig. 4).

However, the species can be defined unmistakably by the presence of the two luminous glands embedded, on the middle line, in the ink sac (Fig. 5).

The specimen collected was sexually mature.

Table I shows the data relative to the areas of capture of the two species of Sepiolidea.



Fig. 4. — Dorsal arm of the male of *Rondeletiola minor*. The copulatory apparatus shows a very strong, hornlike lateral tooth which is curved anteriorly; there is just a hint of another tooth lower down.





Fig. 5. — Viscera, after removal of mantle, showing the typical luminous glands embedded in the ink sac and united into a rounded body.

TABLE I

Species	Date	Depth (m)	Type of bottom	A r e a	No. of specimens
Sepiola ligulata	17. 5. 73	90	mud	11 miles off Termoli	45
	17. 5. 73	105	mud	2 miles NE of Tremiti islands	1
	2. 4. 73	125	mud	20 miles off Termoli	1
	3. 4. 73	85	mud	13 miles off Petacciato	1
	25. 1. 73	65	mud	12 miles off Ancona	1
Rondeletiola minor	17. 5. 73	90	mud	11 miles off Termoli	1

## Summary

The author presents the first record of the presence of *Sepiola ligulata* and *Rondeletiola minor* in the waters of the Adriatic Sea.

## Riassunto

L'autore segnala per la prima volta la presenza nelle acque del mar Adriatico di *Sepiola ligulata* e *Rondeletiola minor*.



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### PRISUTNOST CEPHALOPODA, *Sepiola ligulata* (Naef 1912) i *Rondeletiola minor* (Naef 1912) u Jadranu

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### KRATAK SADRŽAJ

U radu se donose podaci o dvjema vrstama glavonožaca koje do sada nisu bile registrirane za Jadran. Vrst *Sepiola ligulata* zabilježena je sa 49 primjeraka, dok je od vrsti *Rondeletiola minor* zabilježen samo jedan.

Rad je ilustriran fotografijama nađenih primjeraka kao i kartom nalaza.