

ON SOME ECHINODERMS RARELY NOTED IN THE ADRIATIC SEA

Dušan ZAVODNIK¹ and Ante ŠIMUNOVIĆ²¹Center for Marine Research Rovinj, "Rudjer Bošković"²Institute, 52210 Rovinj, Yugoslavia²Institute for Oceanography and Fisheries, 58001 Split, Yugoslavia

Abstract. New data on distribution and ecology of *Mesothuria intestinalis*, *Odontaster mediterraneus*, *Luidia sarsi*, *Sclerasterias neglecta*, and *Brisingella coronata* are presented.

Résumé. Données nouvelles sur la distribution et l'écologie de *Mesothuria intestinalis*, *Odontaster mediterraneus*, *Luidia sarsi*, *Sclerasterias neglecta* et *Brisingella coronata* sont notées.

In 1982 benthic fisheries surveys were initiated by the MV "Pipeta" at 54 stations distributed uniformly along 9 offshore transversal profiles within an area between the line Chioggia-Portorož in the north, and Mt. Gargano (Vieste) - Mljet Island in the south. At five southern stations some echinoderms, hitherto rarely noted in the Adriatic Sea, were collected. As their ecology is also relatively unknown we decided to report on these new findings. The specimens were collected by a commercial otter trawl which fished from a surface area of about 0.0778 km² per tow. At each station, two tows per survey were made at opposite directions.

Station	Survey	Date (1982)	Geogr. position		Depth (m)	Bottom
			N	E		
H4	a	20.05.	42°29.0'	15°35.0'	140	silt and sandy silt
	b	07.12.			145	
I2	a	18.05.	42°00.0'	16°25.0'	109	see H4
	b	05.12.			110	
I3	a	18.05.	42°08.5'	16°37.0'	168	sandy silt
	b	06.12.			180-210	
I4	a	19.05.	42°18.0'	16°50.0'	280	see H4
	b	06.12.	42°18.0'	16°48.5'	200-260	
I5	a	19.05.	42°26.0'	16°57.0'	396	sandy silt, rocky debris, stones
	b	06.12.	42°24.0'	16°58.0'	400-430	

Mesothuria intestinalis Asc. (Synallactidae) to our knowledge was previously collected in the South Adriatic pit by the "Pola" expedition at 840-895 m (4). Present findings (9 specimens at station I5) extend its depth distribution. Noteworthy is also the occurrence of this species on sandy silt mixed with rocky debris where a population density of about 23 specimens per square kilometer was estimated.

Odontaster mediterraneus Mar. (Odontasteridae) was previously noted in the South and Central Adriatic (1,4,5,6). According to our observations (5 specimens at stations H4, I2 and I3) it is a species living on silty bottoms but tolerant to other fractions.

Luidia sarsi Düb. Kor. (Luidiidae). To our knowledge, no precise location of this species was hitherto noted in the Adriatic Sea (2,6) but Vidović-Matvejev (7) suggested that it is distributed in the whole area. In total, 15 specimens were collected at stations I3, I4 and I5. Obviously, this species belongs to the group of silt living species tolerant to other fractions.

Sclerasterias neglecta (Perr.) (Asteriidae) prefers sandy and mixed bottoms. Previously, it was noted at about ten locations in the entire Adriatic (4,5,6). Our specimens (4) were collected at station I4.

Brisingella coronata (O. Sars) (Brisingiidae) in the Adriatic Sea was hitherto collected only by the expeditions "Pola" (4) and "Najade" (2,3). Apparently it inhabits areas below a 200 m depth but according to our records (11 specimens at station I5) it is not strictly confined to bathyal muds as suggested previously (1,7).

References

- (1) GAMULIN-BRIDA, H., 1972. Contribution aux études des biocoenoses benthiques de l'Adriatique méridionale. Rad Jugosl. akad. zn. umjet. 364 : 23-31.
- (2) KOLOSVARY, G.V., 1937. Die Echinodermen des Adriatischen Meeres. Festschr. E. Strand, 2 : 433-474.
- (3) LEIDENFROST, J., 1917. Halak és tuskésbörűck az Adriából. Allat. Közl. 16 : 9-55.
- (4) MARENZELLER, E., 1895. Zoologische Ergebnisse "Pola". V. Echinodermen. Denkschr. Akad. Wiss. Wien, Math.-naturw. Cl., 62 : 123-146.
- (5) MATVEJEV-VIDOVIĆ, A., 1964. O dvema vrstama Asteroidea retkima u Jadranu. Acta Adriat. 11 (26) : 189-194.
- (6) TORTONESE, E., 1965. Echinodermafa. Fauna d'Italia 6. Ed. Calderini, Bologna, 419 pp.
- (7) VIDOVIĆ-MATVEJEV, A., 1978. Catalogue of the Adriatic echinoderms. Acta Adriat. 17 (15) 24 pp.