

Observations on the feeding of *Helicolenus dactylopterus* (Delaroche)
(Pisces, Scorpaenidae) in the Mediterranean Sea

by

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The Rockfish *Helicolenus dactylopterus* is a characteristic element of bathyal ichthyofauna.

During our investigations on South Adriatic trawling grounds it was found in all the hauls made at depths ranging from 250 to 650 m. Concentrations of rockfishes and catches of more than 25 Kg./hour were obtained in summertime in a small area 45 miles NE of Gargano peninsula at a depth of 300-400 meters.

Also average size of population is there greater than in other Italian areas.

To investigate reasons of such concentrations, food of rockfishes from the above area as well as from other areas of South Tyrrhenian Sea and Central Mediterranean Sea was investigated. 255 specimens from Adriatic, 60 from South Tyrrhenian and 133 from an area Se of Pantelleria were examined for stomach contents, percentage of empty stomachs being respectively 33 %, 56 %, and 61 %.

Results of food investigations can be summarized as follow : Adriatic Rockfish proved to feed mainly on pelagic Tunicates of the genus *Pyrosoma* and the Amphipod associated with them, the latter is without quantitative importance.

Crustacean Decapods were also frequently recognized and among them burrowing species (*Goneplax rhomboides*, *Alpheus glaber* and *Calocaris macandreae*) were by far the most abundant.

In Sicilian waters Tunicates were never found in stomachs of rockfishes whereas Decapods were presents in more than 55 % of stomachs, again burrowing species (mainly *Goneplax rhomboides*) were by far the most abundant.

Isopods were also frequently found, mainly in smaller specimens from Pantelleria area. Fishes and Cephalopods were both represented in more than 5 % of filled stomachs of the specimens from the different aeras, but were more abundant in stomachs of material from Sicilian seas.

Food spectra for investigated areas are, expressed as presence (in percentage) in " filled stomachs " are reported in tab. 1.

	South Adriatic	Sicilian seas
<i>Pyrosoma</i> sp.	65.7	—
<i>Goneplax rhomboides</i>	11.4	25.0
<i>Calocaris macandreae</i>		
<i>Alpheus glaber</i>	6.6	14.5
Other Decapods	10.8	17.1
Euphasids	3.0	—
Mysids	3.0	9.2
Stomatopods	1.2	—
Isopods	3.6	15.8
Polychetes	7.2	—
<i>Amphiuridae</i>	3.6	3.9
Cephalopods	9.0	13.2
Fishes	6.6	13.2

From our observations results *Helicolenus dactylopterus* usually feeds on strictly benthic species but, as reported for the related genus *Sebastes* in ICNAF area it can feed also on pelagic species.

For Adriatic rockfish feeding habit, two hypothesis can be suggested : the Pyrosomas by vertical water mixture are brought near bottom and there eaten by rockfishes or the rockfish undertake vertical displacements, probably in nigh-time.