

DIET OF COMMON STINGRAY, *DASYATIS PASTINACA* (LINNAEUS, 1758) IN THE GULF OF GABÈS (SOUTH-CENTRAL MEDITERRANEAN)

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Abstract

The diet and feeding habits of the common stingray, *Dasyatis pastinaca*, in the Gulf of Gabès were studied from examination of 314 Stomach contents. Crustaceans were the most important prey component in the diet of *D. pastinaca* (%IRI =72, 91).Teleosts were second in importance (IRI%=25, 18). Changes in diet were observed and related to size of specimens.

Keywords: Diet, Gulf of Gabes, South-Central Mediterranean

Introduction

The bibliographic research highlighted a lack of aggregate knowledge on the biology of elasmobranchs in many parts of the Mediterranean [1]. The purpose of the present study was to provide a description quantitative of the diet and was to investigate feeding habits of common stingray, *Dasyatis pastinaca*, caught in Gulf of Gabès (Central Mediterranean).

Material and Methods

In order to study the diet and feeding habits of common stingray, a total of 314 specimens with a disc width (DW) between 12.7 and 70.0 cm were caught between June 2011 and January 2012 in the Gulf of Gabès. In the laboratory, stomach contents was analyzed using the percentage frequency of occurrence (F %), numerical percentage (N %), percentage by weight (W %), the index of relative importance (IRI), and percent of IRI (IRI %) for each prey type [2].

observed and related to size of specimens. With increasing size, crustaceans decreased in importance, whereas teleosts and molluscs increased.

Discussion

The results indicate that *D. pastinaca* fed on benthic and demersal preys, and reveals that crustaceans are the most frequent prey. The present study provides broad support for the description of this species as a broad spectrum predator [3]. The composition of the diet of the common stingray changed with increasing size; crustaceans decreased in importance, whereas teleosts and molluscs became more dominants. Dietary shifts with size observed in this study, have been described for this species in another geographical area in Mediterranean Sea [4].

References

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Tab. 1. List of the species identified in *D. pastinaca* stomach contents.

Prey Species	F%	N%	W%	IRI	IRI%
Crustaceans	88.2	73.8	78.88	2888.88	72.91
Teleosts	48.8	24.3	7.88	1088.88	25.18
Molluscs	18.2	7.8	2.75	187.5	4.72
Polychaetes	1.2	0.5	0.8	1.2	0.3
Echinoderms	0.8	0.3	0.5	0.8	0.2
Other	2.8	1.2	1.8	2.8	0.7
Empty stomachs	16.2	0	0	0	0
Total	100	100	100	3988	100

Results

Of the 314 stomach contents of *Dasyatis pastinaca* examined, 266 are full (83, 37%) and 48 are empty (16, 27%). Prey items was identified in stomachs belong five major groups: Crustaceans, Teleosts, Molluscs, Annelida and Echinoderms (Table1). Crustaceans were the dominant prey items (IRI%= 72, 91), followed by Teleosts (IRI%=25, 18). Molluscs, annelid and echinoderms were occasional preys. Changes in diet were