

**Molluscs found in the stomach of the White seabream *Diplodus sargus*
caught along the Mediterranean coast of Israel**

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**Mollusken uit de magen van de Witte zeebrasem *Diplodus sargus* gevangen langs de
Middellandse Zee kust van Israel**

Een onderzoek van de inhoud van tien magen van de Witte zeebrasem *Diplodus sargus* heeft uitgewezen dat deze vissoort zich voedt met een groot aantal weekdieren. Onder de 13 verschillende prooi-soorten waren een keverslak, twee zeeslakken en tien verschillende tweekleppigen. In een maag werden bijna 90 exemplaren van de Lessepsiaanse migrant *Brachidontes pharaonis* gevonden.

In the past I have received from one of my colleagues at the Hebrew University of Jerusalem Dr. Daniel Golani the molluscs found in the stomachs of fishes caught along the Mediterranean coast of Israel. From time to time I have dealt with such material in several short notes (Mienis, 1977a-b, 1979, 1981, 1984, 1992, 1995a-b, 1999, 2001 & 2002; Rothman & Mienis, 2011) however some investigations have been remained unreported or were dealt with only in part.

In this short note I will deal once again with the molluscs found in the stomach of the White seabream *Diplodus sargus* (Linnaeus, 1758), Fam. Sparidae. It is an important commercially fish species living in rocky habitats down to a depth of 50 m (Golani *et al.*, 2006). It may reach a size of 40 cm but most specimens caught along the coast of Israel range usually between 10 and 22 cm. It is a well-known predator of molluscs and to a lesser extent of crustaceans and echinoderms.

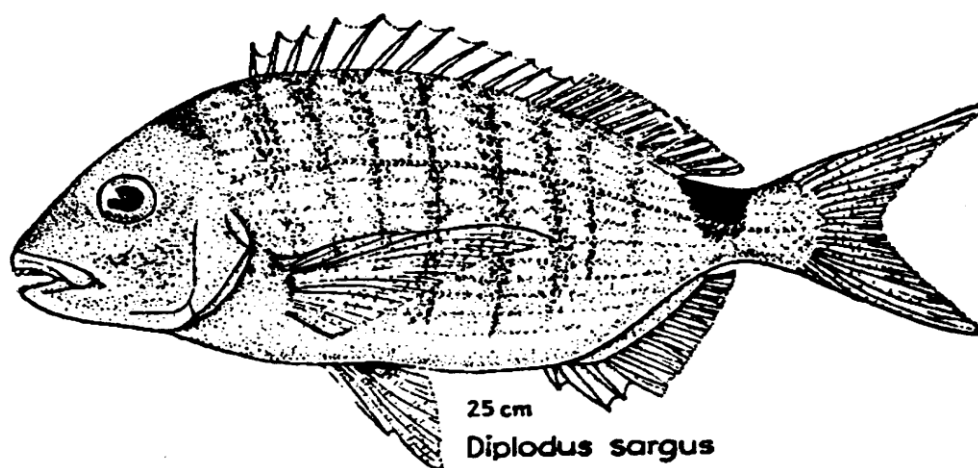


Fig. 1: The White seabream (copy of a drawing in Riedl, 1963)

I could study the stomach contents of 10 specimens. All of the stomachs contained remains of shells, but the number of specimens ranged from one to almost 90.

The molluscs found in the stomachs are mentioned in Table 1 and the various species are arranged systematically in Table 2.

Table 1: Molluscs found in the stomachs of 10 specimens of the White seabream *Diplodus sargus* caught along the Mediterranean coast of Israel.

Date	Locality	Species	Minimum number
20 Sept. 1982	Akko	<i>Donax trunculus</i>	10
		<i>Donax venustus</i>	4
20 Sept. 1982	Akko	<i>Donax semistriatus</i>	14
		<i>Donax trunculus</i>	1
		<i>Donax venustus</i>	6
20 Sept. 1982	Akko	<i>Mactra stultorum</i>	1 juvenile
20 Sept. 1982	Akko	<i>Modiolus barbatus</i>	3
		<i>Musculus costatus</i>	1
		<i>Mactra stultorum</i>	2 juveniles
		<i>Donax semistriatus</i>	10
		<i>Donax trunculus</i>	9
		<i>Donax venustus</i>	14
1 Dec. 1982	Nahal Tanninim-Hadera	<i>Lepidochitona corrugata</i>	2
		<i>Rissoina bertholleti</i>	1
18 May 1992	Fish market	<i>Gregariella petagnae</i>	6
		<i>Modiolarca subpicta</i>	2
		<i>Solen marginatus</i>	1 juvenile
22 June 1992	Fish market	<i>Gregariella petagnae</i>	1
		<i>Mactra stultorum</i>	1 juvenile
		<i>Donax trunculus</i>	3
30 Dec. 1992	Fish market	<i>Mactra stultorum</i>	2
16 March 1993	Fish market	<i>Tricolia pullus</i>	4
28 Jan. 2002	Herzliyya-Marina	<i>Brachidontes pharaonis</i>	+ 89

Table 2: Systematic list of molluscs found in the stomachs of the White seabream *Diplodus sargus* caught along the Mediterranean coast of Israel.

POLYPLACOPHORA

Lepidochitona corrugata (Reeve, 1848)

GASTROPODA

Tricolia pullus, (Linnaeus, 1758)

Rissoina bertholleti Issel, 1869

BIVALVIA

Brachidontes pharaonis (P. Fischer, 1870)

Gregariella petagnae (Scacchi, 1832)

Modiolarca subpicta (Cantraine, 1835)

Modiolus barbatus (Linnaeus, 1758)

Musculus costatus (Risso, 1826)

Mactra stultorum (Linnaeus, 1758)

Solen marginatus Pulteney, 1799

Donax semistriatus Poli, 1795

Donax trunculus Linnaeus, 1758

Donax venustus Poli, 1795

Although the White seabream is usually associated with rocky outcrops, it is searching for food in at least three different habitats. In rocky areas it feeds at least on the chiton *Lepidochitona corrugata* and four species of mussels which are usually firmly attached with their byssus-threads to rocks: *Brachidontes pharaonis*, *Gregariella petagnae*, *Modiolarca subpicta* and *Modiolus barbatus*. Among algae they look for *Tricolia pullus*, *Rissoina bertholleti* and *Musculus costatus*, while in sandy habitats they take bivalves like *Maetra stultorum*, *Solen marginatus*, *Donax semistriatus*, *Donax trunculus* and *Donax venustus*.

Among these prey items are two Lessepsian migrants: *Rissoina bertholleti* and *Brachidontes pharaonis*. Of the latter almost 90 specimens were found in a single stomach!

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