

The occurrence of the fish *Sphoeroides pachygaster* in the south-eastern Aegean sea (Greece).

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Abstract

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This paper reports the capture of 5 specimens of the fish *Sphoeroides pachygaster* (Müller & Troschel, 1848), family Tetraodontidae, for the first time in Greek waters, one off Lindos and four off Plimmiri on the south-eastern coast of Rhodes & Dodecanese, South Eastern Aegean sea, Greece, Eastern Mediterranean.

Sphoeroides pachygaster is an Atlanto-mediterranean species not previously reported further to the east than the Gulf of Taranto, Italy.

Περίληψη

Ζαχαρίου - Μαμαλίγκα, Ε. & Κορσίνι, Μ. 1994. Εμφάνιση του *Sphoeroides pachygaster* στο ΝΑ Αιγαίο (Ελλάδα). *Ann. Musei Goulandris* 9: 479-483.

Η ανακοίνωση αυτή αναφέρει την αλίευση 5 ατόμων *Sphoeroides pachygaster* (Müller & Troschel, 1848), TETRAODONTIDAE, για πρώτη φορά στα ελληνικά νερά, ενός έξω από τη Λίνδο και τεσσάρων έξω από το Πλημμύρι, στη νοτιοανατολική ακτή της Ρόδου, Δωδεκανήσου, στο Νότιο-Ανατολικό Αιγαίο, Ελλάδα (Ανατολική Μεσόγειο).

Το *Sphoeroides pachygaster* είναι είδος του Ατλαντικού Ωκεανού και της Μεσογείου, το οποίο μέχρι σήμερα δεν έχει αναφερθεί ανατολικότερα του κόλπου του Τάραντα στην Μεσόγειο.

Key words: Tetraodontidae, *Sphoeroides pachygaster*, Aegean sea, Island of Rhodes, Eastern Mediterranean, new record.

INTRODUCTION

Five specimens of *Sphoeroides pachygaster* (Müller & Troschel, 1848), sec. Smith

(1991), were captured for the first time in Greek waters, Aegean Sea, off Lindos and Plimmiri, south-eastern coast of the island of Rhodes, Greece, Eastern Mediterranean.

One specimen was caught on 23 of November 1992, by the fisherman Georgios P. Idomeneas 300 m. off the coast of Lindos at a depth of 60-70 m., on a sandy-muddy bottom, with a fishing line. Four specimens were collected the day after from a trawl-net catch taken off Plimmiri, south of Lindos, from a sandy-muddy bottom. They are deposited in the Hydrobiological Station of Rhodes and the Goulandris Natural History Museum, Kifissia, Athens.

This record of *Spherooides pachygaster* in the island of Rhodes, Dodecanese, South-eastern Aegean Sea, adds a new species in Greek waters.

DESCRIPTION (based on the 5 Rhodian specimens): Dorsal rays 8-9; anal rays 8-9; pectoral rays 14-15; caudal rays 9. Head length 2.63-2.92; predorsal 1.28-1.45; preanal 1.20-1.41; snout 5.46-5.96; caudal peduncle length 4.42-4.97; caudal peduncle least depth 14.85-18.78; depth at posterior of dorsal fin 5.30-7.16, all in Standard Length. Eye diameter 4.59-4.92; interorbital 2.17-2.31; snout 2.00-2.11, all in Head Length (Table 1).

Colour of fresh specimens: grey-olive on dorsal and lateral parts of the body, whitish ventrally; dark spots on the dorsal and lateral part of the body; fins: whitish, the upper part of caudal fin darker than the other fins.

Stout body; broad expansible abdomen. Skin completely smooth, no spinules on head or body; skin of ventral surface of head and body wrinkled. Large head; mouth with fleshy lips, below the level of the upper end of the pectoral fin base; nasal organs covered by a small sac with two nostrils; oval eyes.

Similar dorsal and anal fins in the rear third of the body, the anal fin slightly backwards; wide pectoral fins with a wavy form; caudal fin truncate of slightly concave.

REMARKS: *Spherooides pachygaster* (Müller & Troschel, 1848) is an Atlanto-Mediterranean species. It belongs to the tropical and subtropical ichthyofauna of the Eastern Atlantic Ocean and its presence in the Mediterranean has been ascribed to the casual transport through the Strait of Gibraltar.

Spherooides pachygaster has been reported:

a) from the Western Mediterranean by several authors under the specific name *Spherooides cutaneus* (Günther, 1870), which Enrico Tortonese used for this species (1978, 1984-86):

Balearic Islands (Oliver, 1981)

Comarca del Garraf, Catalunya (Cerro & Portas, 1984)

Balearic Islands (Moreno & Roca, 1984)



Fig. 1. *Sphoeroides pachygaster*

Mar Ligure (Barletta & Torchio, 1986)

Gulf of Cagliari (Sardinia) Sicilian Channel (Vacchi & Cau, 1986)

Mar Ligure (Fiorentino & Zamboni, 1990)

b) from the Middle Eastern Mediterranean, by Tursi D' Onghia and Matarrese (1992), who found in 1991 a specimen of *Sphoeroides pachygaster* in the Gulf of Taranto (Amendolara-Trebisacce, Italy).

Daniel Golani found *Sphoeroides pachygaster* near the coast of Israel on May 1990. He reported his find at the Annual Meeting of the Zoological Society of Israel on December 1992 and it will appear in the proceedings of this meeting in the *Israel Journal of Zoology* (Personal communication from Professor Adam Ben-Tuvia and Dr. Daniel Golani of the Hebrew University of Jerusalem).

The finding of 5 specimens of *Sphoeroides pachygaster* of different sizes in the sea area of the South-eastern coast of the Island of Rhodes on November 1992 was followed in March 1993 by the catch of 10 more specimens of different sizes of this species with fishing-line in the same area, as the fishermen of the area informed us.

The occurrence of *Sphoeroides pachygaster* in Israel on May 1990 and the fact that off the Island of Rhodes, 15 specimens of this species have already been caught,

TABLE I

Measurements (mm) and counts of five specimens of *Sphoeroides pachygaster* from the Island of Rhodes, (November 1992).

	N.	1	2	3	4	5
Total length	mm.	224.0	278.0	281.0	293.0	345.0
Standard length	mm.	196.0	241.0	237.0	252.0	308.0
Head length	mm.	74.4	86.5	90.0	93.6	105.5
Snout	mm.	35.9	43.2	42.6	45.2	51.7
Snout to origin of dorsal fin	mm.	153.0	183.2	177.0	192.7	212.0
Snout to origin of anal fin	mm.	164.0	186.0	192.2	204.0	219.0
Snout to origin of pect. fin	mm.	84.1	92.3	100.6	102.0	117.0
Depth. at poster. of dors. fin	mm.	37.0	35.1	36.1	40.5	43.0
Caudal peduncle length	mm.	40.8	50.0	48.4	57.0	62.0
Caudal peduncle least depth	mm.	13.2	14.0	14.2	15.5	16.4
Eye horizontal diameter	mm.	16.2	18.4	18.3	19.6	21.6
Interorbital distance	mm.	33.3	39.0	40.0	43.2	45.6
Posterior of eye to dorsal corner of gill opening	mm.	24.8	33.4	32.6	35.3	36.0
First dorsal ray length	mm.	2.2	8.2	6.2	6.9	8.4
Longest dorsal ray length	mm.	22.2	25.3	21.6	24.0	35.0
Base of dorsal fin	mm.	6.7	11.2	9.0	12.0	15.0
First anal ray length	mm.	2.1	7.5	3.7	6.0	8.5
Longest anal ray length	mm.	22.0	23.2	22.0	24.0	29.5
Base of anal fin	mm.	9.7	11.2	9.4	11.8	13.0
Maximum pectoral fin length	mm.	24.8	33.0	29.4	32.0	33.6
Maximum caudal fin length	mm.	33.4	41.6	40.5	41.0	50.6
Dorsal ray count		8	9	9	9	9
Anal ray count		8	9	8	9	8
Pectoral ray count		14	14	15	14	15
Caudal ray count		9	9	9	9	9

shows that the area of *Sphoeroides pachygaster* has been extended from the Western to the Eastern basin of Mediterranean.

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