

TETRAODONTIDAE

pufferfishes

Sphoeroides pachygaster

(Müller and Troschel, 1848)



Photo : David Darom

Relevant synonyms: *Sphoeroides cutaneus*
 Misidentification: None
 Meristic formula: D, 8-9; A, 8-9; P, 14-15

SHORT DESCRIPTION

Body inflatable, with large head and rounded snout. Two large teeth in each jaw form a beak-like dental plate with an entire even-cutting edge. Gill openings just in front of the pectoral fins. Big eyes, with a flat interorbital space. Scales absent and skin completely smooth, without spines and bony plates. One lateral line. Fins with rays soft, segmented and branched. Dorsal fin single, placed behind midpoint and opposite the similar-shaped anal fin. Pelvic fin absent and caudal fin truncated or slightly concave.

color: greyish brown on dorsal and whitish pale grey on its inflatable belly. Axil of pectoral fins black, base of dorsal fin dark. Caudal fin dark, especially on fin membrane and on upper and lower edges.

common size: 10-35 cm (max 40.5 cm).

DISTINGUISHING CHARACTERISTICS

- *Sphoeroides marmoratus*: series of dark spots along the lower flank.
- *Ephippion guttiferum*: two lateral lines and bony plates on back in adults.
- *Lagocephalus* spp.: two lateral lines; presence of spinules on body.
- *Diodon hystrix*: long spines on skin.
- *Chilomycterus spilostylus*: three-rooted spines fixed in erect position.

BIOLOGY / ECOLOGY

Sexual differences in allometric growth, females reaching larger size than males. Oviparous species with wide spawning period. In the Mediterranean, ripe specimens have been observed between April and October, with a peak in July-September.

habitat: benthic species, on muddy, sandy and rocky bottoms, usually between 50 and 250 m, up to 400 m depth.

DISTRIBUTION

Mediterranean: first record, as *Sphoeroides cutaneus*, in Mallorca, western Mediterranean* (Oliver, 1981); successively recorded in the Mediterranean from north-east Iberian Peninsula (Cerro and Portas, 1984), Sicily channel and southern Sardinia (Vacchi and Cau, 1986), Ligurian Sea (Barletta and Torchio, 1986), southern Adriatic (Bello, 1990), Tunisia (Bradai *et al.*, 1993), Ionian Sea (Tursi *et al.*, 1992), Greece (Zachariou-Mamalinga and Corsini, 1994), and the eastern Levant (Golani, 1996).

*Note: Relini and Orsi-Relini (1995) noted that ancient literature (Salviani, 1558) contained the description and drawing of a puffer very similar to *S. pachygaster*, which was abundant in Egypt. They suggest that this fish was possibly present in the southern Mediterranean since ancient times.

MODE OF INTRODUCTION

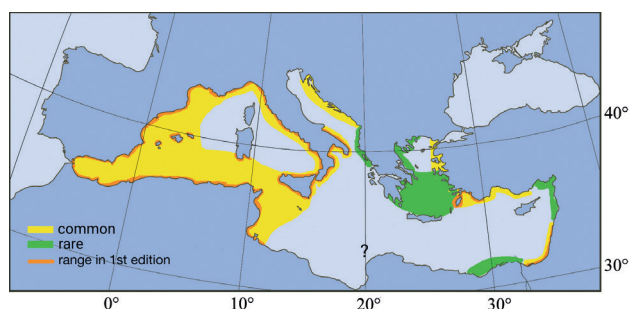
Via Gibraltar.

ESTABLISHMENT SUCCESS

Common.

IMPORTANCE TO HUMANS

This species is captured in the bottom trawl fishery, where it is discarded. Although some puffers are successfully exploited around the world and are highly valued as food (specially in Japan where it is marketed as "fugu"), they can be poisonous, due to their capacity to produce tetrodotoxin.



1st Med. record
Mallorca, western
Mediterranean,
1981*

KEY REFERENCES

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- Oliver P. 1981. Sobre la aparición de algunos peces raros en las Islas Baleares. *Boletín del Instituto Español de Oceanografía*, VI(304): 59-64.
- Ragonese S., Jereb P. and Morara U. 1997. Morphometric relationships of *Sphoeroides pachygaster* (Pisces - Tetraodontidae) of the Strait of Sicily (Mediterranean Sea). *Cahiers de Biologie Marine*, 38: 283-289.
- Relini M. and Orsi Relini L. 1995. Pesci palla in Mediterraneo, presenze antiche e recenti. *Biologia Marina Mediterranea*, 2(2): 509-511.