

About the presence of the Haifa Grouper *Hyporthodus haifensis* (Ben-Tuvia, 1953) (Perciformes Serranidae) in the Strait of Messina, Italy, Mediterranean Sea

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ABSTRACT

In this paper is reported for the first time the presence of the Haifa Grouper, *Hyporthodus haifensis* (Ben-Tuvia, 1953) (Perciformes Serranidae) in the waters of the Strait of Messina, Italy which confirms the expansion process of the species toward the northern part of the Mediterranean Sea.

KEY WORDS

Epinephelinae; *Hyporthodus haifensis*; Lampedusa; Pellaro; Serranidae.

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INTRODUCTION

The subfamily Epinephelinae belonging to the family of marine bony fish Serranidae includes many genera, among which *Hyporthodus* Gill, 1861. The species belonging to this genus are commonly called "groupers" as some of their close relatives of the genus *Epinephelus* Bloch, 1793.

Haifa Grouper, *Hyporthodus haifensis* (Ben-Tuvia, 1953) is a marine fish, demersal and generally present in water depths between 90 and 220 meters (Froese & Pauly, 2014; Heemstra & Randall, 1993). The body has large pelvic and pectoral fins, often bordered with white, tail shape rather rounded, body color dark brown. Its distribution area appears to be the Eastern Atlantic from the coast of Angola in the south, to those in the southern part of Portugal.

Hyporthodus haifensis is also present in the southern part of the Mediterranean Sea (where the species arrived entering through Gibraltar) from the coast to the south of Spain, along almost all the

Mediterranean coast of North Africa to Lebanon, Israel, Turkey and southern Greece (Heemstra & Randall, 1993). The only indication of its presence in Italian waters was published in 2000 for the Lampedusa Island, Pelagie Archipelago, Sicily Channel (Azzurro et al., 2000). Considering the characteristics of Lampedusa and its geographical location, we can say that the island represents a bridge between the Italian and North African territory. This led to assume, even at the time of the report of *H. haifensis* in Lampedusa, a future movement of the species in the direction of the waters of Sicily and the Italian mainland (Heemstra & Randall, 1993).

MATERIAL AND METHODS

The sighting occurred during a dives with scuba equipment. The camera equipment consisted of Canon G-15, Fantasea housing and Sea & Sea flashes.



Figures 1–3. Young specimen of *Epinephelus haifensis* (Pellaro, Reggio Calabria, Italy), 35 m deep, XI.2014, photographed by day (Figs. 1, 2) and during the night (Fig. 3).

RESULTS AND CONCLUSIONS

The discovery of this species has occurred in Pellaro (Reggio Calabria, Italy) in the month of November 2014 on a backdrop of mixed sand and mud, 35 meters deep and with a water temperature of about 23 °C. The animal was a young specimen (Fig. 1) of about 25 cm in overall length, stationing around a small wreck of about 3 meters in length.

The identification was made possible by counting the number of soft rays in the anal fin, which is not less than nine; another distinctive character of

the species (but only valid for young specimens) is that the pelvic fins are not long enough to reach the anus. No wonder for the low depth at which the specimen was found intact, despite belonging to a species which prefers stationing at depths beyond 90 meters, it is well known the habit of young groupers to colonize shallow waters, within 30 meters. Also in the Strait of Messina, thanks to its weather and sea conditions or currents, peculiar at all, many species, such as the Longspine snipefish *Macroramphosus scolopax* (Linnaeus, 1758) (Syngnathiformes Centriscidae), generally station at depths

much lower than those where they are usually found in other areas of the Mediterranean Sea.

The specimen was found in the same spot in three separate dives performed during the same month of November and then photographed by day (Fig. 2) and during the night (Fig. 3). The latter photo was taken in a subsequent night dive, during which it was found the same specimen in the same place. The image depicts the specimen during sleep and is interesting because, as is well known, fish change their colors at night using special cells called chromatophores. This picture shows exactly the colors taken at night by Haifa's grouper, which is rarely documented.

This new record of *H. haifensis* is in continuity with the previous one recorded in Lampedusa, confirming the expansion process of the species toward the northern part of the Mediterranean Sea. This expansion was predicted by some authors (Heemstra & Randall, 1993) and will therefore be interesting to continue to monitor future developments.

It is also very likely that often the presence of specimens of this species may not be noticed, as they may be easily confused with specimens of other Mediterranean species.

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