



FIRST RECORD OF HARRY HOTLIPS *Plectorhinchus gibbosus* (Lacepède, 1802) (Perciformes: Haemulidae) FROM THE IRANIAN COAST OF THE GULF OF OMAN

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ARTICLE INFO

Received: 19 July 2019
Accepted: 4 October 2019

Keywords:

Chabahar Bay
Plectorhinchus gibbosus
Grunt
Haemulidae

How to Cite

ABSTRACT

Harry hotlips (*Plectorhinchus gibbosus*), belonging to the fish family Haemulidae, is recorded for the first time off the Iranian coast of the Oman Sea, Chabahar Bay (25°18'N, 60°37'E). Identification confirmed by comparing morphological data of the collected specimen with data of reported congener species off this area.

Alavi-Yeganeh, M. S., Khajavi, M. (2019): First record of Harry hotlips *Plectorhinchus gibbosus* (Lacepède, 1802) (Perciformes: Haemulidae) from the Iranian coast of the Gulf of Oman. Croatian Journal of Fisheries, 77, 271-274. DOI: 10.2478/cjf-2019-0021.

INTRODUCTION

The Haemulidae with 19 genera and 134 species are marine fish (some in brackish and rarely inhabiting fresh waters), distributed in the tropical and subtropical area of the Atlantic, Indian and Pacific Oceans (Eschmeyer, 2019; Nelson et al., 2016; Froese and Pauly, 2019). Genus *Plectorhinchus* (Lacepède, 1081) with 29 species (Froese and Pauly, 2019) is distinguished from other genus by the following characters: dorsal fin base in spinous part is longer than the dorsal fin base under soft rays, second anal fin spine is robust and longer than others, lips in adult specimens are often expanded, pre-orbital naked or somewhat covered by scale, the chin distinguished by 4–6 pores in the absence of a middle pit, 10–18 scales from the dorsal-fin origin obliquely down to the lateral line

(Smith and McKay, 1986). *Plectorhinchus gibbosus* inhabit coastal reefs, sandbanks and near estuaries (Sommer et al., 1996). Coloration in small juveniles observed along sheltered sandy shorelines is related to their camouflage ability by resembling a dead leaf and drifting on their sides (Myers, 1999). Adult specimens inhabit protected inshore reefs to deep offshore areas (Kuitert and Tonozuka, 2001). This species has a wide distribution from the Red Sea to Natal, South Africa (including Madagascar and the Comoro and Reunion Islands), Gulf of Aden, eastward to Samoa, north to the Ryukyu Islands, south to Australia, Caroline and Mariana Islands in Micronesia (Froese and Pauly, 2019). For the first time in the study, presence of *Plectorhinchus gibbosus* is reported in Iranian waters of the Oman Gulf.

MATERIAL AND METHODS

During sampling with a beach seine (mesh size: 12 mm) on 24 February 2019 in Chabahar Bay, the Gulf of Oman (25°18'N, 60°37'E) (Fig. 1), one specimen of *Plectorhinchus gibbosus* (62.14 mm TL) was captured (Fig. 2). The specimen was photographed and then fixed in 5% Formalin Buffer and cataloged in the Aquatic Animal Collection of Tarbiat Modares University (TAC1299F). Measurements for 26 morphometric characters were taken by a caliper to accuracy of 0.02 mm and counting of meristic characters was carried out under stereomicroscope (Alavi-Yeganeh and Bahmani, 2018).

RESULTS

Meristic characters of the collected specimen of *Plectorhinchus gibbosus* were counted as D. XIV, 15; A III, 8, V. I, 5; P. 16, the number of lateral line scale was 55, and the number of gill rakers on the first arch was 21. Results of morphometric measurements (as the percent of standard length) were: Total length (123.14%); Body depth at body midline (49.74%); Head length (37.25%); Predorsal length (33.57%); Prepectoral length (35.94%); Pectoral-fin length (26.31%); Pelvic-fin length (27.42%); Prepelvic length (37.85%); Preanal length (40.11%); Dorsal fin base length (61.13%); Anal fin base length (15.18%);



Fig 1. Open square corresponds to the record locality of Harry hotlips *Plectorhinchus gibbosus*, Iranian coast of the Gulf of Oman, Chabahar Bay (25°18'N, 60°37'E), Feb 2019



Fig 2. Specimen of *Plectorhinchus gibbosus* collected from the Iranian coast of the Gulf of Oman, Chabahar, Feb 2019 (TAC1240F, 50.46 mm SL)

Pectoral to Pelvic fin origin distance (18.54%); Pelvic to Anal fin origin distance (34.08%); 1st Dorsal fin spine length (7.29%); 2nd Dorsal fin spine length (11.05%); 3rd Dorsal fin spine length (18.86%); 1st Anal fin spine length (8.12%); 2nd Anal fin spine length (17.32%); 3rd Anal fin spine length (12.32%); and as the percent of head length: Post orbit length (38.56%); Head width (45.21%); Snout length (27.02%); Orbit diameter (31.80%); Interorbital width (32.02%).

Description of the collected specimen: lips were fleshy, 6 pores on the chin and no median pit. Head scaled and scales on the body were larger than the scales on the head. Chest fully scaled. The second anal fin was robust and long. Third and fourth spines of dorsal fin had the same length. Dorsal fin contains 14 spines and 15 soft rays. The membrane between anal, pelvic and dorsal fins rays are black with a narrow white bar in the margin of the spiny first part of dorsal fin, and a thick white bar in a higher one third of the second part of dorsal and anal fins. Whole caudal fin is white and pectoral fin was apparent and colorless. All body was black, inclining to brown on middle parts.

DISCUSSION

The genus *Plectorhinchus* has 4 species in the Iranian coast of the Persian Gulf and Gulf of Oman including *P. gaterinus*, *P. pictus*, *P. flavomaculatus* and *P. schotaf* (Assadi and Dehghani, 1997). The collected specimen of the Haemulidae in this study was easily distinguishable from these four reported congener species by comparing the number of dorsal fin spine and rays and coloration. *P. flavomaculatus* has 12-13 dorsal fin spines, 19-22 dorsal soft rays and yellow and blue lines on the head (McKay, 2001; Allen and Erdmann, 2012; Jawad et al., 2014); *P. gaterinus* has 13 dorsal fin spines, 19-20 dorsal soft rays and bright spots on the whole body (Smith and McKay, 1986; Jawad et al., 2014); *P. pictus* has 12 dorsal fin spines, 15-16 dorsal soft rays and is brightly spotted (Bianchi, 1985); and *P. schotaf* has 12 dorsal fin spines, 18-20 dorsal soft rays and margin of operculum and the base of the pectoral fin is reddish (Masuda et al., 1984; Bianchi, 1985). So, *P. gibbosus* with 14 dorsal fin spines, 15-16 dorsal soft rays and specific coloration of the body was distinguishable.

Only one specimen of Harry hotlips was collected during three-year occasional sampling from 2016 to 2019 in several stations along coastal waters of the Oman Gulf. As this species inhabits sheltered area and as the coast of the Gulf of Oman is mostly exposed to waves, lack of reported specimen of this species is logically expected. Chabahar Bay is one of few sheltered areas along Iranian coast of the Gulf of Oman. Hence the present study adds a new fish species to the fish fauna of the Gulf of Oman.

ACKNOWLEDGEMENTS

The authors are thankful to Dr. Javad Ghasemzdeh and Dr. Sasa Maric for their assistance during sampling.

SAŽETAK

PRVI ZAPIS VRSTE *Plectorhinchus gibbosus* (Lacepède, 1802) (Perciformes: Haemulidae) S IRANSKE OBALE OMANSKOG ZALJEVA

Plectorhinchus gibbosus iz porodice roktaljki (Haemulidae) roda *Plectorhinchus* zabilježen je prvi put s iranske obale Omanskog mora, zaljeva Chabahar (25 ° 18'N, 60 ° 37'E). Identifikacija je potvrđena usporedbom morfoloških podataka prikupljenog uzorka s podacima sličnih vrsta s ovog područja.

Ključne riječi: Chabahar Bay, *Plectorhinchus gibbosus*, roktaljka, Haemulidae

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