Naturalista sicil., S. IV, XLV (1-2), 2021, pp. 103-108

DOI: https://doi.org/10.5281/zenodo.5713444

Mark-Anthony Falzon

FIRST RECORD OF POR'S GOATFISH UPENEUS PORI (Actinopteri Mulliformes Mullidae) FROM MALTA (CENTRAL MEDITERRANEAN)

SUMMARY

In October 2021, Por's goatfish *Upeneus pori* Ben-Tuvia & Golani, 1989 was recorded for the first time from Malta, in the central Mediterranean. The Lessepsian species was previously recorded from a number of locations around the Mediterranean, including nearby Lampedusa. The Malta records suggest a thriving population.

Keywords. Mediterranean, Lessepsian species

RIASSUNTO

Upeneus pori (*Actinopteri Mulliformes Mullidae*), specie nuova per Malta (Mediterraneo centra-le). Viene segnalata per Malta *Upeneus pori* Ben-Tuvia & Golani, 1989, specie Lessepsiana di Mullidae in precedenza non nota per l'isola. La presenza della specie è confermata da due fotografie. Vengono fornite informazioni sulla specie, sull'habitat e sulla comunità ittica.

Keywords. Mediterraneo, specie Lessepsiana

INTRODUCTION

Of the six species of Mullidae recorded to date in the Mediterranean, only the two native species - *Mullus surmuletus* and *Mullus barbatus* - were known to occur in Malta. *M. surmuletus* is common in nearshore waters (FALZON & SCHEMBRI, 2021) and *M. barbatus* occurs offshore and is artisanally fished in considerable numbers. This paper reports on the discovery of a third

species, *Upeneus pori* Ben-Tuvia & Golani, 1989. *U. pori* is a Lessepsian species which is native to the Western Indian Ocean, where its distribution ranges from the Red Sea to Oman, Madagascar and South Africa (BEN-TUVIA & GOLANI, 1989). It was first recorded in the Mediterranean as *Upenoides* (=*Upeneus*) *tragula* in the Gulf of Iskenderun, Turkey, in 1950 (KOSSWIG, 1950) and subsequently spread westwards, where it has been recorded in a number of locations. The Strait of Sicily is the westernmost area where the species is known to be established: in the period 2012-2016, GERACI *et al.* (2018) examined a total number of 106 specimens taken by commercial trawlers off the southern coast of Lampedusa.

MATERIALS AND METHODS

On 2nd October 2021, the present author came across a group of four goatfish feeding in shallow sublittoral water (ca.1.5m) at ir-Ramla tal-Mixquqa (popularly known as 'Golden Bay') on the northwestern coast of Malta. Largely from the pattern on the caudal fin, it was immediately obvious that they were not *M. surmuletus*, a somewhat similar species which occurs commonly in the bay (and indeed in nearshore Maltese waters generally). A thorough search on 3rd October produced prolonged and close views of two individuals, again in shallow water. Another two were seen separately on 4th October. They were photographed extensively and filmed, and the results compared with photographs of living animals in LOUISY (2015) and on Fishbase, as well as with detailed descriptions and photographs of specimens in AZZOUZ *et al.* (2010), DEIDUN *et al.* (2018) and GERACI *et al.* (2018). From the photographic and film materials, it can be ascertained that the species in question is *U. pori.*

RESULTS

For the two individuals photographed, length was ca. 80mm and ca. 60mm. The general impression in the field was of a 'cleaner'-looking and greyer fish than *M. surmuletus*. The most diagnostic feature was the pattern on the caudal fin: 4-5 transverse alternate red-brown and white streaks on the upper lobe, and the pattern repeated, together with a wide red-brown band, on the lower lobe. The band was continuous with a thin red-brown longitudinal stripe which ran the length of the body, through the eye and to the mouth. The overall colour was a light grey with rows of darker blotches, lighter on the ventral side. The dorsal fins had horizontal stripes of whitish

dots. The second dorsal fin was opposite the anal fin. There were two slim white barbels (Figs. 1, 2).



Fig. 1 — Upeneus pori, Malta, October 2021.



Fig. 2 — Upeneus pori, Malta, October 2021.

The location where the fish were seen is a 200m-long sandy bay bordered on either side by submerged and algae-covered boulder habitat. There are extensive boulder cliffs to the north and south, as well as two other sandy bays to the south. It is a popular recreational spot and subject to much human activity, mainly bathing. Depending on the currents, there are significant areas of submerged detritus accumulations (SDAs) of the seagrass *Posidonia oceanica*, meadows of which cover the seabed in the bay in deeper water (GALLMETZER *et al.*, 2005). On both occasions, the individuals recorded in the present study were observed feeding actively among this detritus. The benthic fish assemblage at these SDAs includes *M. surmuletus*, *Dasyatis pastinaca*, *Dactylopterus volitans*, *Lithognathus mormyrus*, *Bothus podas*, *Trachinus draco* and *Callionymus pusillus*, the different species often associating when feeding.

DISCUSSION

The bay where the fish were recorded, while subject to human activity, is nowhere in the vicinity of a port; any boating is limited to pleasure craft. This, and the fact that a small group of fish was seen on the first day and multiple individuals on subsequent days, means that a casual occurrence is highly unlikely (SCIBERRAS & SCHEMBRI, 2010). Furthermore, *U. pori* has now been recorded from many parts of the Mediterranean, including Lampedusa which lies about 140km west of the Maltese islands, in the central Mediterranean (GERACI *et al.*, 2018). It is known that Mullids have planktonic larvae (SABATÉS *et al.*, 2015), and transport from Lampedusa or some other as yet undiscovered closer population is possible. All the evidence suggests a thriving population of the species in Maltese waters, the size and distribution of which cannot be determined at the present time.

Acknowledgements — The author wishes to thank Professor Patrick J. Schembri (Department of Biology, University of Malta) for reading and commenting on an earlier version of this article. The responsibility for the present content is with the author alone.

REFERENCES

AZZOUZ K., MANSOUR S., BOUMA ZA M. & CAPAPÉ, C., 2010. Occurrence of the Por's Goatfish *Upeneus pori* (Ostheichthyes: Mullidae) in the lagoon of Bizerte (Northern Tunisia, Central Mediterranean). *Annales Ser. hist. nat.*, 20 (1): 29-32.

Ben-Tuvia A. & Golani D., 1989. A new species of goatfish (Mullidae) of the genus *Upeneus* from the Red Sea and the eastern Mediterranean. *Israel J. Zool.*, 36 (2): 103-112.

- DEIDUN A., ZAVA B., INSACCO G. & CORSINI-FOKA M., 2018. First record of the Por's Goatfish *Upeneus pori* (Actinopterygii: Perciformes: Mullidae) from Italian waters (Western Ionian Sea). *Acta Ichthyol. et Piscatoria*, 48 (1): 93-97.
- FALZON M.A. & SCHEMBRI P.J., 2021. Fishes and other marine animals of the Maltese islands. *BDL*, Malta, 240 pp.
- GALLMETZER I., PFLUGFELDER P., ZEKELY J. & OTT J.A., 2005. Macrofauna diversity in *Posidonia oceanica* detritus: distribution and diversity of mobile macrofauna in shallow sublittoral accumulations of *Posidonia oceanica* detritus. *Marine Biol.*, 147: 517-523.
- GERACI M.L., SCANNELLA D., FALSONE F., COLLOCA F., VITALE S., RIZZO P., DI MAIO F., MILISENDA G. & FIORENTINO F., 2018. Preliminary study on the biological traits of the Por's goat-fish *Upeneus pori* (Chordata: Actinopterygii) off the southern coast of Lampedusa Island (Central Mediterranean). *Eur. Zool. J.*, 85 (1): 231-241.
- Kosswig C., 1950. Erythräische Fische im Mittelmeer und an der Grenze der Ägais. Pp. 203-212 in: Von Jordans A. & Peus F. (eds), Syllegomena Biologica. Festschrift Kleinschmidt. *Akademie Verlag*, Leipzig.
- LOUISY, P., 2015. Europe and Mediterranean Marine Fish Identification Guide. *Ulmer*, Paris, 512 pp. Sabatés A., Zaragoza N. & Raya V., 2015. Distribution and feeding dynamics of larval red mullet (*Mullus barbatus*) in the NW Mediterranean: the important role of cladocera. *J. Plankton Res.*, 37 (4): 820-833.
- SCIBERRAS M. & SCHEMBRI P.J., 2010. A critical review of records of alien marine species from the Maltese Islands and surrounding waters (Central Mediterranean). *Medit. marine Science*, 8 (1): 41-66.

 $\label{eq:main_markanthony} \emph{Indirizzo dell'autore} -- \text{M.-A. Falzon, University of Malta, MSD2080 Malta; markanthony-falzon@gmail.com}$