

Short communication

Occurrence of the oilfish, *Ruvettus pretiosus* Cocco, 1833 (Gempylidae) in Iskenderun Bay, northeastern Mediterranean, Turkey

By M. Gurlek, D. Erguden and C. Turan

Fisheries Genetics and Ecology Laboratory, Marine Science and Technology Faculty, Mustafa Kemal University, Iskenderun, Hatay, Turkey

Introduction

The oilfish, *Ruvettus pretiosus* Cocco, 1833, is a member of the family Gempylidae (snake mackerels), which are widely distributed in tropical, subtropical and warm temperate waters of the world and represented by 23 species belonging to 16 genera (Parin, 1986). *Ruvettus pretiosus* are usually found in the Atlantic, Pacific, and Indian oceans as well as the Mediterranean Sea (Froese and Pauly, 2012). A first report in the Mediterranean was in 1987 (Fischer et al., 1987), in northern Turkish waters for the first time by Kaya and Bilecenoglu (1999), and by Bettoso and Dulcic (1999) in the Adriatic Sea. *Ruvettus pretiosus* was further reported from Benghazi in March 2004 off the Libyan coast (southern Mediterranean) (Elbaraasi et al., 2007).

Rarely found on the Mediterranean coast of Turkey, *R. pretiosus* was first recorded in 1999 from Antalya Bay (Alanya coast) (Kaya and Bilecenoglu, 1999), with no further reports in other areas. Thus, the September 2012 finding of *R. pretiosus* in Iskenderun Bay, the most eastern part of the Turkish Mediterranean coast, is the second reported occurrence in Turkish waters.

Materials and methods

One female *R. pretiosus* specimen was captured off Samandag coast at about 160 m depth by bottom trawl on 26 September 2012 in Iskenderun Bay (35°59'231"N; 35°48'081"E). Measurements were carried out with a caliper to the nearest 0.1 mm. The specimen was identified and photographed as *Ruvettus pretiosus* using the diagnostic characteristics as described by Parin (1986) and Fischer et al. (1987). The specimen was preserved in 4% formalin solution and deposited in the Museum of the Faculty of Fisheries, Mustafa Kemal University, Iskenderun-Hatay (collection number: MSM-PIS/2012-1).

Results

The specimen measured 55 cm total length and weighed 1272 g total weight. Meristic counts and morphometric measurements are compared in Table 1 with those in other publications (Bettoso and Dulcic, 1999; Kaya and Bilecenoglu, 1999; Elbaraasi et al., 2007). The morphological features are well known, and those of the captured specimen are in full agreement with the textbooks: slightly compressed elongated

body; large mouth, not protractile, with strong teeth in both jaws; large and round eyes; single lateral line, often obscure; very rough skin on body and covered with cycloid scales, interspersed with rows of sharp bony tubercles; belly keeled between ventral fins and anus. The body is uniformly violet or purplish brown; tips of the pectoral and pelvic fins are dark; margins of the second dorsal and anal fins in young specimens are white.

Discussion

Ruvettus pretiosus is a oceanic and benthopelagic species (Riede, 2004) and distributed in the Mediterranean Sea at depths ranging from 100 to 800 m (Nakamura, 1995). Nakamura and Parin (1993) reported a usual depth distribution of the oil fish as 80–200 m. Commonly found in coastal waters on the continental slope and in oceanic areas (Cervigón et al., 1992; Nakamura and Parin, 1993; Golani et al., 2006), *R. pretiosus* usually lives in pairs, which rise to the surface at night (Nakamura and Parin, 2001; Elbaraasi et al., 2007). *Ruvettus pretiosus* feed on various deepwater benthic fishes, crustacean and cephalopods. The oil fish eggs and larvae are probably pelagic (Nakamura and Parin, 1993; Golani et al., 2006).

Ruvettus pretiosus has no high commercial value in Turkish fisheries; however, in Brazil and Japan its meat has been widely requested by restaurants and is much appreciated in their domestic markets (Weidner and Arocha, 1999).

The occurrence of this young specimen of *R. pretiosus* in the northeastern Mediterranean is most likely due to the northward migration of the sea current systems. The northward migration of *R. pretiosus* to the Iskenderun Bay may also reflect changes in oceanographic conditions such as temperature and salinity, which are the most important large-scale variables, as also supported by Bettoso and Dulcic (1999) and Elbaraasi et al. (2007). Moreover, we can draw some conclusions on the spawning status and establishment of *R. pretiosus* in this area through the capture of this immature young female specimen. Similar studies by Bettoso and Dulcic (1999) and Elbaraasi et al. (2007) are in agreement with this observation.

In conclusion, our finding is the first report of this species in the Iskenderun Bay from the northeastern Mediterranean coast of Turkey and the second record from Turkish marine waters. This new record indicates that *R. pretiosus* has

expanded its range along the northeastern coast of the Mediterranean Sea.

References

- Bettoso, N.; Dulcic, J., 1999: First record of the oilfish *Ruvettus pretiosus* (Pisces: Gempylidae) in the northern Adriatic Sea. *J. Mar. Biol. Ass. UK*. **79**, 1145–1146.
- Cervigón, F.; Cipriani, R.; Fischer, W.; Garibaldi, L.; Hendrickx, M.; Lemus, A. J.; Márquez, R.; Poutiers, J. M.; Robaina, G.; Rodríguez, B., 1992: Fichas FAO de identificación de especies para los fines de la pesca. Guía de campo de las especies comerciales marinas y de aguas salobres de la costa septentrional de Sur América. [FAO species identification for fishery purposes. Field guide to the commercial species of marine and brackish aqua of the northern coast of South America], FAO, Rome, pp. 513.
- Elbaraasi, H.; Elmariami, M.; Elmeghrabi, M.; Omar, S., 2007: First record of oilfish, *Ruvettus pretiosus* (Actinopterygii, Gempylidae), off the coast of Benghazi, Libya (Southern Mediterranean). *Acta Ichthyol. Piscat.* **37**, 67–69.
- Fischer, W.; Bauchot, M. L.; Scheneider, M., 1987: Fishes FAO d'identification des espèces pour les besoins de la pêche (rev.1) Méditerranée et Mer Noire, FAO, Rome. pp. 1530. [in French].
- Froese, R.; Pauly, D. (Eds.), 2012: Fishbase (www Database). World Wide Web Electronic Publications. Available at: <http://www.fishbase.org>. version/(accessed on 30 September 2012).
- Golani, D.; Ozturk, B.; Basusta, N., 2006: Fishes of the eastern Mediterranean. Turkish Marine Research Foundation (Publication no. 24), TUDAV, Istanbul, Turkey, pp. 259.
- Kaya, M.; Bilecenoglu, M., 1999: *Ruvettus pretiosus* Cocco, 1829 (Teleostei: Gempylidae) – a new fish record for the Mediterranean coast of Turkey. *J. Fish. Aquat. Sci.* **16**, 433–435.
- Nakamura, I., 1995: Gempylidae. In: Eastern Central Pacific. W. Fischer, F. Krupp, W. Schneider, C. Sommer, K. E. Carpenter and V. Niem (Eds). FAO species identification guide for fishery purposes. Vol. **3**. FAO, Rome, pp. 1106–1113.
- Nakamura, I.; Parin, N. V., 1993: FAO Species Catalogue. Snake mackerels and cutlassfishes of the world (families Gempylidae and Trichiuridae). An annotated and illustrated catalogue of the snake mackerels, snoeks, escolars, gemfishes, sackfishes, domine, oilfish, cutlassfishes, scabbardfishes, hairtails, and frostfishes known to date. Vol. **15**. FAO Fish. Synop. 125(15), pp. 136.
- Nakamura, I.; Parin, N. V., 2001: Gempylidae, snake mackerels. In: The living marine resources of the western central Pacific. K. E. Carpenter and V. Niem. (Eds). FAO species identification guide for fishery purposes. Vol. **6**. FAO, Rome, pp. 3698–3708.
- Parin, N. V., 1986: Gempylidae. In: Fishes of the north-eastern Atlantic and the Mediterranean. P. J. P. Whitehead, M. L. Bauchot, J. C. Nureau, J. Nielsen and E. Tortonese (Eds). UNESCO, Paris, pp. 967–973.
- Riede, K., 2004: Global register of migratory species - from global to regional scales. Final Report of the R&D-Project 808 05 081. Federal Agency for Nature Conservation, Bonn, Germany, pp. 329.
- Weidner, D. M.; Arocha, F., 1999: World swordfish fisheries: an analysis of swordfish fisheries, market trends and trade patterns. IV, Part A2b: Brazil. NOAA Tech. Memo, NMFS-F/SPO, Vol. **35**, pp. 237–628.

Author's address: Deniz Erguden and Mevlut Gurlek, Fisheries Genetics and Ecology Laboratory, Marine Science and Technology Faculty, Mustafa Kemal University, TR-31220 Iskenderun, Hatay, Turkey.
E-mails: derguden@yahoo.com; mevlutgurlek@gmail.com