Distribution and First Report of *Parupeneus forsskali* (Fourmanoir & Guézé, 1976) From North of Cyprus and Gulf of Antalya, Turkey

Yaşar ÖZVAROL*, Aysu TATLISES

Akdeniz University, Fisheries Faculty, Fisheries Department, Antalya, Turkey

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Sorumlu Yazar: ozvarol@akdeniz.edu.tr E-Dergi ISSN: 1308-7517

Abstract

On 26 July 2017, 7 specimens of *Parupeneus forsskali* were caught at a depth 18 m in North Cyprus and a single specimen was caught at a depth 11 m, by trammel net, around pipeline charge system of marine aquarium in the gulf of Antalya, Turkey. Reports from different locations are pointed that the population of *P*. *forsskali* may be established in the eastern Mediterranean Sea.

Keywords: Parupeneus forsskali, North Cyprus, Gulf of Antalya, Eastern Mediterranean Sea

Parupeneus forsskali (Fourmanoir & Guézé, 1976)'nin Kuzey Kıbrıs ve Antalya Körfezi'nden İlk Kaydı ve Dağılımı

Özet

26 Temmuz 2017 tarihinde, Kuzey Kıbrıs'ta, uzatma ağları ile, 18 m derinlikten 7 adet ve Antalya Körfezi'nde, deniz akvaryumu su dolum borularının oluşturduğu sistemde, 11 m derinlikten 1 adet *Parupeneus forsskali* bireyi yakalanmıştır. *P. forsskali* türüne ait farklı yerlerde verilen kayıtlar, türün doğu Akdeniz'de populasyonunu oluşturmuş olabileceğini göstermektedir.

Anahtar kelimeler: Parupeneus forsskali, Kuzey Kıbrıs, Antalya Körfezi, Doğu Akdeniz

INTRODUCTION

In recent years, as a result of the effect of global warming on the Mediterranean Sea, the temperature of the water increased. Introduction of new fish species is continuously change the composition of the fish fauna of the Mediterranean Sea (Turan and Ergüden, 2013). Up to recent years, there were known only 5 Mullidea family members (*Upeneus pori* (Por's goatfish) Ben-Tuvia and Golani, 1989, *Upeneus moluccensis* (Goldband goatfish) Bleeker, 1855, *Mullus barbatus barbatus* (Red mullet) Linnaeus, 1758, *Mullus surmuletus* (Surmullet) Linnaeus, 1758, *Pseudupeneus prayensis* (Cuvier, 1829) in the Mediterranean Sea (Bariche et al., 2013). By introducing *Parupeneus forsskali* (red Sea goatfish) Fourmanoir and Guézé, 1976 this number was increased to five.

Parupeneus forsskali is distinguished by a black spot on the upper side of the caudal peduncle; no teeth in the upper jaw and a black stripe, which start from the tip of its snout through the eye along the lateral line, and ending beneath the rear of the second dorsal fin (Randall, 2004).

In this study, *P. forsskali* was reported for the first time from North of Cyprus and Gulf of Antalya. Also the distribution of species from the eastern Mediterranean Sea was presented.

MATERIAL and METHODS

On 26 July 2017, seven specimens of *P. forsskali* were caught by a trammel nets (18 mm mesh size) at a depth 18 m in North Cyprus (35° 04' 624" N; 34° 00' 125" E) and a single specimen was caught by a spearfish at a depth 11 m, around pipeline charge system of marine aquarium (Figure 1) in the gulf of Antalya, Turkey ($36^{\circ}52'24.13"N$; $30^{\circ}39'30.80"E$). All specimens were caught on sandy substrate. All measurements belonging all specimens were made with a digital caliper and by scale (0.01g).

Diagnostic features and morphometric characters were described according to Bariche (2013) and Gürlek et al. (2016).



Figure 1. Parupeneus forsskali (Fourmanoir & Guézé, 1976) caught in North of Cyprus and an underwater photo from the Gulf of Antalya (northeastern Mediterranean)

RESULT and DISCUSSION

The first report of *P. forsskali* from the Turkish Mediterranean coast was in Taşucu, in 2004 (Çınar et al., 2006) and then it was reported from the Beirut, Lebanon, by Bariche et al. (2013). After this date, *P. forsskali* was reported from several locations by Sonin et al. (2013) from southern edge of Haifa Bay, Israel; by Iglésias and Frotté (2015) from Agia Triada, Cyprus; By Gurlek et al. (2016) from İskenderun Bay, by Yağlıoğlu and Ayas (2016) from Yeşilovacık, Turkey; by Mehanna et al. (2016) from Alexandria, Egypt; by Ali et al., 2016 from Jableh, Syria (Figure 2). In the current study, it is reported from North of Cyprus and gulf of Antalya (Table 1).

Reference	Country	Geographic location
Çınar et al., 2006	Mersin, Turkey	
Bariche et al., 2013	Beirut, Lebanon	33°55'N; 35°34'E
Sonin et al., 2013	Haifa Bay, Israel	32°51′N; 34°56′E
Iglésias and Frotté, 2015	Agia Triada, Cyprus	35° 3′ N; 34°01'E
Gurlek et al., 2016	İskenderun Bay, Turkey	36°21'N; 35°49'E
Mehanna et al,, 2016	Alexandria, Egypt	31°16'N; 30°10'E
Ali et al., 2016	Jableh, Syria	35°22′N; 35°50′E
Yağlıoğlu and Ayaş, 2016	Yeşilovacık Bay, Turkey	
Present Study	Gazimağusa, Cyprus	35°25'N; 33°49'E
	Gulf of Antalya, Turkey	36°52'N; 30°39'E





Figure 2. Map show where *Parupeneus forsskali* (Fourmanoir & Guézé, 1976) reported in the eastern Mediterranean Sea

According to all of these reports from different locations of Mediterranean Sea, the population of *P. forsskali* may be established in the eastern Mediterranean Sea. Also, according to latest reports on the south of Turkey, it is expanding westward along to Turkey Mediterranean coasts. New reports can be waiting from Aegean coast of Turkey and Greece.

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