

Occurrence of Pilotfish *Naucrates ductor* (Carangidae) in Izmir Bay (Aegean Sea)

İzmir Körfezi'nde (Ege Denizi) Malta Palamudu *Naucrates ductor* (Carangidae)'un Bulunuşu

Türk Denizcilik ve Deniz Bilimleri Dergisi

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ABSTRACT

This paper reports the occurrence of *Naucrates ductor* in Izmir Bay, northeastern Aegean Sea. A specimen, measuring 275 mm in TL, was captured from Urla coast, Izmir Bay on 13 November 2018. This short note presents additional record of *N. ductor* on the ichthyofaunal richness of the Turkish Aegean Sea.

Keywords: Rare species, record, Izmir Bay, Aegean Sea

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ÖZET

Bu makale İzmir Körfezi'nde (Kuzeydoğu Ege Denizi) *Naucrates ductor*'un ortaya çıkışını rapor etmektedir. 13 Kasım 2018 tarihinde, İzmir Körfezi Urla kıyılarından 275 mm TL boyunda ölçülmüş bir birey yakalanmıştır. Bu kısa not Türk Ege Denizi'nin ihtiyofaunal zenginliği üzerine *N. ductor*'un ilave bir kaydını sunmaktadır.

Anahtar sözcükler: Nadir tür, kayıt, İzmir Körfezi, Ege Denizi

1. INTRODUCTION

Pilotfish, *Naucrates ductor* (Linnaeus, 1758) is a pelagic oceanic species, and found usually in close proximity in large cartilaginous or bony fishes, turtles or marine mammals. It feeds on waste of its large hosts and possibly as a cleaner that consumes ectoparasites; also small fishes and invertebrates. Young pilotfish are usually associated with jellyfish and drifting seaweed. Maximum length is 70 cm TL, common length is 40 cm TL (Golani et al., 2006; Froese and Pauly, 2018).

N. ductor distributes circumtropical in tropical seas. Eastern Atlantic: British Isles, the Azores and Madeira, Norway and Bay of Biscay to Namibia, including the Mediterranean and the Canaries. It is common throughout the Indian Ocean and nearly cosmopolitan in tropical seas (Smith-Vaniz, 1986; Froese and Pauly, 2018).

In the eastern Mediterranean, *N. ductor* has been known from Israel (Ben-Tuvia, 1971) and from Egypt (Akel and Karachle, 2017). In Turkish seas, Geldiay (1969) firstly mentioned only by name for the coasts of Izmir, Aegean Sea. In addition, it has been listed among the fish species, caught from Mersin and Iskenderun Bays, Turkey since early 1980s (Gücü and Bingel, 1994).

Özgül (2015) recently observed the juveniles of *N. ductor* (n=21, length range: 40-80 mm) beneath the experimental FADs in Kuşadası Bay, southern Aegean Sea. This short note presents the additional record of *N. ductor* on the ichthyofaunal richness of the Turkish Aegean Sea.

2. MATERIAL AND METHOD

On 13 November 2018, a specimen of *Naucrates ductor*, measuring 275 mm TL (Figure 1) was captured by a gillnetter from Urla, Izmir Bay, northern Aegean Sea (coordinates: 38°22'15'' N - 26°47'51'' E) at a depth of 10 m (Figure 2). The specimen was fixed with 5% formaldehyde solution and deposited in the ichthyological collection of Ege University, Fisheries Faculty (catalogue no: ESFM-PIS/2018-09).



Figure 1. Pilotfish, *Naucrates ductor* (ESFM-PIS/2018-09), captured from Izmir Bay, NE Aegean Sea

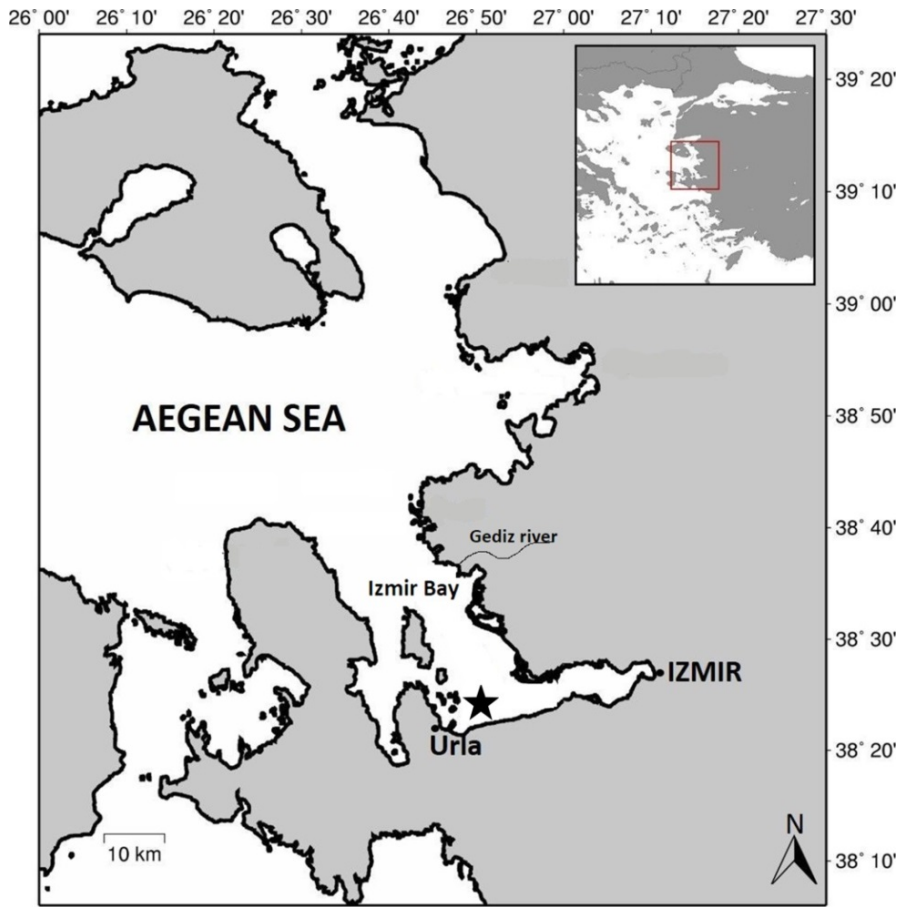


Fig 2. Map of sampling area: black star indicates capture site of *Naucrates ductor* in Izmir Bay, Aegean Sea

3. RESULTS AND DISCUSSION

N. ductor entangled the gill net (72 mm mesh size) with a sea turtle. Sea turtle was released as alive by the fisherman and only one specimen among the 5-6 fish was brought to the laboratory for further examination. Description, measurements and percent in total length (Table 1), recorded of the specimen are in total accordance with Smith-Vaniz (1986), Golani et al. (2006) and Froese and Pauly (2018).

According to the manager of local fishery cooperative, three specimens of *N. ductor*

were previously caught in Izmir Bay at the beginning of November 2018 and they were sold in the fish auction of local fishery cooperative (İ. Temiztepe, pers. comm.).

Even though, specimens of *N. ductor* were caught twice within a month from Izmir Bay, it does not indicate that there is an established population, yet. Nevertheless, I think that the new specimens with sea turtles and cartilaginous fish likely to enter to the Bay of Izmir can be observed much more due to the alteration of sea water temperatures.

Table 1. Morphometric measurements in mm and as percentage of total length (%TL) and counts recorded in *Naucrates ductor*, captured from Izmir Bay, Aegean Sea

Reference	ESFM-PIS/2018-08	
Measurements	mm	%TL
Total length	275	100.0
Fork length	247	89.8
Standard length	224	81.5
Predorsal fin length	84	30.5
Prepectoral fin length	62	22.5
Pre-anal fin length	134	48.7
Head length	58	21.1
Eye diameter	11	4.0
Preorbital length	18	6.5
Counts		
Dorsal fin rays	IV+I+28	
Anal fin rays	III+15	
Pectoral fin rays	18	
Ventral fin rays	I+5	

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