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OCCURENCE OF ADULT MALE AND JUVENILES OF *Dipturus oxyrinchus* FROM NORTH-EASTERN MEDITERRANEAN SEA

ABSTRACT

In this study, the juveniles and adult male of longnosed skate, *Dipturus oxyrinchus* (Linnaeus, 1758), were caught as by-catch from a commercial trawl fishing at depths between 300-410 and 360-400m in the international waters of Northeastern Mediterranean Sea. The juveniles and mature male of longnosed skate were found for the first time in this region.

Keywords: *Dipturus oxyrinchus*, long-nosed Skate, Mature, Juvenile, North-Eastern Mediterranean

1. INTRODUCTION

The long-nosed skate, *Dipturus oxyrinchus*, is found in the east Atlantic and Mediterranean. It is a bottom dwelling species that is found on sandy or muddy substrates at depths of 90-900m [1]. This species is particularly vulnerable to fishing pressures due to its size and low rate of population increase. *D. oxyrinchus* is currently listed under "Near Threatened" on the IUCN Red List of Threatened Species. Because there is no evidence to indicate the population has declined significantly [2]. Generally, fishermen are fished in the international waters during the season (15 April-15 July) in which fishing is prohibited in the continental shelf [3]. *D. oxyrinchus* is one of the species caught by multispecies trawl fisheries in the eastern Mediterranean [4].

2. RESEARCH SIGNIFICANCE

The aim of this study is to report the existence of juveniles and adult male of *D. oxyrinchus* captured off the Antakya Bay, North-eastern Mediterranean.

3. MATERIAL AND METHOD

Dipturus oxyrinchus have been captured as by-catch from commercial trawl fishing at 300-410 m and 360-400 depths, in the Antakya Bay of North-eastern Mediterranean (between 36°06'200 N - 35°35'432 E and 36°03'795 N -35°29'098 E) and (between 36°06'004 N - 35°23'821 E and 36°06'152 N -35°36'966 E) on the 20th of May 2015. Fish samples were transported in the ecophysiology laboratory, Fisheries Faculty, Firat University, where they were identified, sexed and photographed [1]. Morphometric measurements of the specimens were taken to the nearest 1 mm and the weight of each specimen was measured with a digital scale to the nearest 0.01 g. *D. oxyrinchus* specimens were preserved at the Museum of Fisheries Faculty, Firat University.

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Figure 1. Fishing region in the North Eastern Mediterranean, the open circle (o) indicates the trawling route

3. RESULTS AND DISCUSSION

Total lengths and weights of *D. oxyrinchus* were 14.6-21.8cm and 9.53-26.03g, respectively. Thus, this study provides the first record of egg capsules and juveniles long-nosed skate from the North-eastern Mediterranean Sea. The presence of juvenile individuals and adult male of *D. oxyrinchus* in May and June, in the same area suggests that there is egg laying and nursery in the North-eastern Mediterranean.

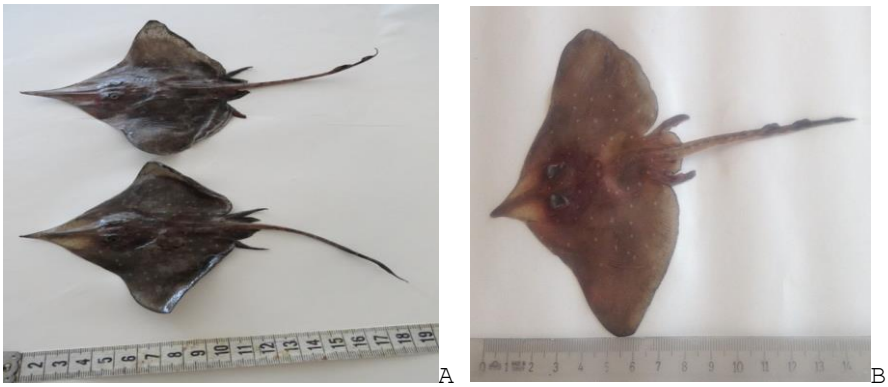

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Figure 2. Juveniles of *Dipturus oxyrinchus*

Figure 3. Mature male specimen of *Dipturus oxyrinchus*

According to Castro [5], the decision regarding the use of the study area as a nursery by a given species was made considering the

presence of neonates, small juveniles and gravid females. It has also been observed the young and mature individuals of same species in same region in the following years (personal observation). These findings show that some shark and skate species may use this region for mating, breeding and nursery area. It can be said that the generation of shark and skates that produce limited number of eggs or juveniles are under threat in this region because of using for fishing by Syrian and Egyptian fishermen. This finding should be taken into account and countries should consider creation of marine protected areas with international consensus under regional fisheries organizations such as GFCM.

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