

## Length-Weight and Disc Width-Weight Relationships of Long-Nosed Skate (*Dipturus oxyrinchus*) Obtained from Northeastern Mediterranean

Nuri BAŞUSTA<sup>1</sup>, Fatih Volkan ÖZEL<sup>1</sup>

<sup>1</sup>Fisheries Faculty, Firat University, TR-23119, Elazig, Turkey  
nbasusta@hotmail.com

**Aim of the study:** Long-nosed skate, *Dipturus oxyrinchus* (Linnaeus, 1758) is a demersal species found on sandy or muddy substrate at depths of 100–1000 m. There is no more biological data for *D. oxyrinchus* from the northeastern Mediterranean. In this study, total length-weight and disc width-weight relationships of long-nosed skate were examined for the first time in a population of the North-eastern Mediterranean Sea.

**Material and Methods:** *Dipturus oxyrinchus* specimens were captured as by-catch species from a commercial fishing vessel between May 2015- June 2016 at a depth of 200 to 380 m from the Antakya Bay (Hatay, Turkey). Fish samples were transported to the ecophysiology laboratory in Faculty of Fisheries, Firat University where they were identified, sexed and photographed. Each fish was measured for total length to the nearest 0.1 cm and weight (W) to the nearest 0.1 g. Data were subjected to statistics analysis by using the IBM SPSS Statistics ver. 22.0 for Windows (IBM Corporation and Others, 2013).

**Results:** A total of 244 (103 male and 141 female) *D. oxyrinchus* were collected. Minimum-maximum length and weight of caught fishes were determined as 8.0-93.5 cm and 8.5-3828 g for females and 14.6-80.1cm and 9.53-2091 g for males respectively. Total length-weight relationships of *D. oxyrinchus* were found as  $W=0.0017*TL^{3.19}$ ,  $r^2=0.974$ ,  $SEb=0.033$  for all individuals,  $W=0.0023*TL^{3.11}$ ,  $r^2=0.980$ ,  $SEb=0.037$  for females and  $W=0.0009*TL^{3.34}$ ,  $r^2=0.967$ ,  $SEb=0.061$  for males. According to *b* values, all individuals, females and males showed a positive allometric growth (t-test:  $p < 0.05$ ).

**Acknowledgement:** This work was supported by Scientific Research Projects Coordination Unit of Firat University. Project Number: SUF.15.04.

**Keywords:** *Dipturus oxyrinchus*, long-nosed skate, length-weight relationship, disc width-weight relationship, Antakya Bay, northeastern Mediterranean