



SNIGIROV S., MEDINETS V., ABAKUMOV A., PITSYK V., SNIGIROV P.M., SOLTYS I., KONAREVA O.

Odessa National I.I. Mechnikov University
2, Dvorianskaya Str., Odessa, 65082, Ukraine

ICHTHYOFAUNA OF ZMIINYI ISLAND COASTAL WATERS IN 2016-2017

The material was collected during complex surveys in the Zmiinyi Island coastal waters in 2016-2017 in the framework of the National Research Project implemented by the ONU with financial support of the Ministry of Education and Science of Ukraine and the international project EMBLAS (phase II).

Fish was caught in accordance with the standard ichthyological methods (Pravdin, 1966; Pryahin, 2008). Underwater observations, description of bottom relief and substrate in the areas of ichthyological material collecting were performed using diving outfit in accordance with the methodologies (Halford, 1994; Mochek, 1978).

In the period from April to December 2016, around 50 fish species were registered in the island coastal waters; during 2 months (May and June 2017) – 37 species. Analysis of the results received in April-December 2016 and May-June 2017 had shown that ichthyofauna biodiversity level (Shannon index calculated coming out of number) in 2016 varied within 0.86-3.06 making in average 2.06 and in 2017 – 2.40-2.54 making in average 2.47. Minimal indicators of biodiversity were registered in the end of autumn and in winter when most of fishes migrated for wintering to deep areas. Maximums of biodiversity index were registered in May-June.

In 2016 (from April to December) the following species prevailed in the catches: anchovy (36.70%), scorpion fish (16.20%), horse mackerel (12.70%), round goby (11.50%) and whiting (9.60%). The share of other species was insignificant and made 0.02 – 2.8%. In 2017 (May-June) round goby (38.76%) and horse mackerel (37.15%) prevailed. Catches of common blenny were relatively high (7.63%). Share of other species was insignificant and made from 0.10 to 2.31%.

Ichthyofauna of Zmiinyi Island coastal waters as before (Snigirov, 2011) is distinguished by its biodiversity and abundance of rare protected species of the Black Sea fish. Different habitat conditions (a variety of bottom substrates and hydrological features of this area) contribute to concentration of a large number of species of fish on a small area in the north-western part of the Black Sea.