

## Preliminary data on the Ichthyofauna Structure from the Northern Part of the Romanian Black Sea Coast

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### Abstract

In the context of climate change observed in recent decades and taking into account the Danube input from the northern part of Romanian Black Sea waters, a research survey was conducted in order to obtain data regarding the ichthyofauna structure. During the survey conducted with the research vessel “Steaua de Mare 1” in 2019, 20 pelagic hauls and 4 fishing stations with gillnets of different mesh sizes were carried out. In pelagic trawling, 20 fish species have been identified, the dominant species being sprat (*Sprattus sprattus*) and whiting (*Merlangius merlangus euxinus*). In gillnet experimental fishing, 16 species were identified, Caspian shad (*Alosa tanaica*) and Danube shad (*Alosa immaculata*) being dominant. Also, in order to estimate the ichthyofauna biological diversity, the Margalef Index was calculated, values between 3.07-6.15 being recorded, indicating a high species diversity in the studied area.

**Keywords:** ichthyofauna, pelagic trawl, gillnets, diversity

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### Introduction

Studies conducted in order to analyze the ichthyofauna composition in recent years have shown a slight increase in the number of species observed on the Romanian Black Sea coast [5].

Biodiversity is important for the future sustainable development of marine natural resources, which include fish species [2, 3].

In the northern part of the Romanian coast, the ichthyofauna has some peculiarities due to the freshwater input from the Danube; in the area being identified euryhaline fish species.

### Experimental

The methodology and techniques that have been used both for data collection and analysis, as well as for fish stocks assessment are those accepted for the Black Sea basin and in accordance with the international demands [1].