

# POPULATION DYNAMICS OF FISH FROM THE DANUBE RIVER IN THE SECTOR KM 1047 - 1071: ESTIMATION OF GROWTH AND MORTALITY PARAMETERS

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## **Abstract**

*As the human population continues to grow, the demand for food resources rises, consequently exerting greater pressure on aquatic ecosystems. Given the scarcity of suitable information for stock assessments, the growth and mortality of certain commercial fish species from the Danube River were estimated based on length-frequency data. In this context, growth and mortality parameters were determined for the following species: common carp (*Cyprinus carpio*), pike perch (*Sander lucioperca*), crucian carp (*Carassius gibelio*), common bream (*Abramis brama*), and European catfish (*Silurus glanis*). Fish were captured in the Danube sector between kilometers 1047 and 1071, situated between two hydrological stations: Baziaș and Moldova Veche, during the period from January 2021 to August 2023. The results of our research indicate overexploitation of pike perch ( $E=0.64$ ), crucian carp ( $E=0.71$ ), common bream ( $E=0.64$ ), and European catfish ( $E=0.55$ ). Our study highlights the importance of maintaining balance within the fish community of the Danube and the need to develop effective strategies for the conservation and management of fishery resources.*

**Key words:** population dynamic; fish stock, age and growth, mortality