

## ***ABSTRACT***

Sekanak River is a tributary of the Musi River, this river is located in the center of Palembang city. Physically, the Sekanak River water has undergone physical changes in water so it is necessary to analyze the quality of the river water to obtain accurate data regarding the water quality of the Sekanak River. Research on the identification of the types of zooplankton has been carried out to be able to describe and create a key to determining the types of zooplankton to be used as bioindicators of water quality in the Sekanak River, supported by the results of measurements of the physical and chemical parameters of the water. This research is a qualitative descriptive study that uses exploratory methods with research starting in April-Mei 2023. Based on the results of the research that has been conducted, 11 the types of zooplankton were found, namely *Paramecium caudatum*, *Paramecium tetraulia*, *Centropyxis aculeata*, *Vorticela microstoma*, *Keratella cochlearis*, *Tricocherca pusilla*, *Philodina roseola*, *Nauplius cyclops*, *Cyclops fimbriatus*, *Oithona rigida* and *Cercaria batillaria*. The types of zooplankton obtained were identified based on their morphology which was then arranged into a key of determination. From the results of the types of zooplankton found and associated with the physicochemical parameters of the water, it was found that the Sekanak River was categorized as polluted. The results of this study were used as a contribution to learning biology in the form of an encyclopedia developed using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) which was limited to the design stage, obtaining an average validity value of 90,5% with a very valid category.

**Keywords:** *Encyclopedi, Identification, Water Quality, Sekanak River and Zooplankton.*

## ABSTRAK

Sungai Sekanak merupakan anak sungai dari Sungai Musi, terletak di pusat kota Palembang. Secara fisik, air sungai Sekanak telah mengalami perubahan fisik air disebabkan oleh aktivitas warga yang membuang limbah ke sungai sehingga dapat berdampak pada organisme perairan, perlu dilakukan analisis terhadap kualitas air sungai agar memperoleh data yang akurat mengenai kualitas air Sungai Sekanak. Penelitian ini bertujuan agar dapat mendeskripsikan dan membuat kunci determinasi jenis-jenis zooplankton yang digunakan sebagai bioindikator kualitas air Sungai Sekanak dengan didukung hasil pengukuran parameter fisika dan kimia air. Jenis penelitian ini deskriptif kualitatif, menggunakan metode eksplorasi dan metode pengembangan media menggunakan model ADDIE dibatasi pada tahap *development*. Waktu penelitian dimulai pada bulan April-Mei 2023. Hasil penelitian ditemukan 11 jenis zooplankton yakni *Paramecium caudatum*, *Paramecium tetraulia*, *Centropyxis aculeata*, *Vorticella microstoma*, *Keratella cochlearis*, *Tricocerca pusilla*, *Philodina roseola*, *Nauplius cyclops*, *Cyclops fimbriatus*, *Oithona rigida* dan *Cercaria batillaria*. Selanjutnya diidentifikasi berdasarkan morfologinya, kemudian disusun ke dalam kunci determinasi. Dari hasil spesies zooplankton yang dijumpai, dihubungkan dengan parameter fisika-kimia air, didapatkan bahwa Sungai Sekanak termasuk kategori tercemar. Hasil penelitian ini dijadikan media dalam pembelajaran biologi berupa ensiklopedia yang dikembangkan, memperoleh nilai rata-rata akhir yaitu 90,5% dengan kategori sangat praktis.

**Kata Kunci: Ensiklopedia, Identifikasi, Kualitas Air, Sungai Sekanak dan Zooplankton**