

INTISARI

PENILAIAN KUALITAS AIR SUNGAI SEMPOR DI KALURAHAN DONOKERTO KABUPATEN SLEMAN BERDASARKAN INDEKS BIOTIK FAMILI MAKROZOOBENTOS

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Penelitian ini bertujuan untuk mengetahui kualitas air di Sungai Sempor Kalurahan Donokerto Kabupaten Sleman menggunakan indeks biotik famili makrozoobentos. Stasiun pengamatan ditetapkan sebanyak 4 lokasi, pelaksanaan sampling dilakukan seminggu sekali dari pertengahan April sampai awal Juni 2023. Pengambilan data dilakukan dengan mengumpulkan makrobentos di dasar sungai menggunakan jaring surber. Sampel disimpan dalam kantong berisikan formalin 4% kemudian diidentifikasi di laboratorium. Data makrobentos yang diperoleh dianalisis dengan indeks biotik famili (IBF). Parameter fisika mencakup suhu, kedalaman, dan substrat. Parameter kimia meliputi oksigen terlarut dan pH. Hasil penelitian ditemukan makrobentos dari 5 famili, yaitu: Astacidae, Gecarcinucidae, Lymnaeidae, Perlidae, dan Tipulidae. Substrat perairan berupa batu dan pasir dengan kedalaman berkisar antara 27,5-55 cm. Suhu air terukur masih tergolong normal berkisar 24,98-27,87°C. Kandungan oksigen terlarut tergolong cukup rendah berkisar 0,25-0,89 mg/L dan pH berkisar 6,84-7,22 masih pada kisaran netral. Indeks biotik famili berkisar antara 5,87-6,0 menunjukkan kualitas air agak buruk atau tercemar sedang yang dipengaruhi oleh aktifitas di sekitar sungai.

Kata kunci: Indeks biotik famili, kualitas air, makrobentos, Sungai Sempor.

ABSTRACT

**WATER QUALITY ASSESSMENT OF SEMPOR RIVER IN DONOKERTO
SUB-DISTRICT SLEMAN REGENCY BASED ON FAMILY BIOTIC
INDEX OF MACROZOOBENTHOS**

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This research aims to determine the water quality in the Sempor River, Donokerto Sub-district, Sleman Regency using the family biotic index of macrozoobenthos. Observation stations were determined at 4 locations, the sampling process was carried out once a week from mid-April to early June 2023. Sampling was carried out by collecting macrobenthos at the bottom of the river using a surber net. Samples were stored in bags containing 4% formalin and then identified in the laboratory. The macrobenthos data obtained were analyzed using the family biotic index (IBF). Physical parameters include temperature, depth, and substrate. Chemical parameters include dissolved oxygen and pH levels. Macrobenthos found were from 4 orders/families, namely Astacidae, Gecarcinucidae, Lymnaeidae, Perlidae, and Tipulidae. The aquatic substrate consists of rock and sand with a depth ranging from 27.5-55 cm. The water temperature measured is classified as normal, ranging from 24.98-27.87°C. The dissolved oxygen measured is quite low, ranging from 0.25-0.89 mg/L and the pH was in the neutral range from 6.84-7.22. The family biotic index ranges between 5.87-6.00, indicating that the water quality is quite poor or polluted and it is influenced by activities around the river.

Key words: Family biotic index, macrozoobenthos, Sempor river, water quality.