Intisari

Distribusi dan Kelimpahan Makrobentos di Sungai Sempor Kalurahan Donokerto Kabupaten Sleman

Sungai Sempor merupakan salah satu sungai di Kabupaten Sleman yang terletak di daerah hulu. Penelitian ini dilakukan untuk mengetahui keanekaragaman dan kelimpahan makrobentos di Sungai Sempor serta mengetahui korelasinya dengan parameter kualitas air. Penelitian ini dilakukan pada bulan Oktober hingga Desember 2022. Makrobentos dikoleksi dengan menggunakan *Surber net*. Sampel yang terkumpul diawetkan dalam formalin 5%. Indeks ekologi yang diamati adalah kelimpahan, keanekaragaman, kemerataan, dan dominasi makrobentos. Data kualitas air terdiri dari parameter fisika (suhu air, kecepatan arus, total padatan tersuspensi, dan kedalaman) dan parameter kimia (pH dan oksigen terlarut). Hasil penelitian menunjukkan adanya 4 kelas, yaitu Gastropoda (8 spesies), Bivalvia (1 spesies), Clitellata (1 spesies), dan Malacostraca (4 spesies), dengan kelimpahan berkisar antara 9-14 ind/m^2. Spesies yang ditemukan adalah *Sulcospira testudinaria* (23%), *Sulcospira* sp. (22%), *Macrobrachium* sp. (22%), *Tarabia granifera* (13%), dan *Pleurocera ampla* (9%). Substrat di keempat stasiun terdiri dari lumpur, pasir, batu, dan kerikil. Suhu berkisar antara 21,57-24,27°C, kedalaman berkisar antara 0,28-5,6 m, kecepatan arus berkisar antara 0,22-0,46 m/dtk, padatan tersuspensi total berkisar antara 14,25-25,31 mg/L, pH berkisar antara 6,9-7,2, dan oksigen terlarut berkisar antara 6-8,26 mg/L. Indeks keanekaragaman makrobentos di Sungai Sempor adalah 1,79 yang menunjukkan kategori sedang. Indeks kemerataan sebesar 0,83 yang menunjukkan kategori tinggi, dan indeks dominansi sebesar 0,22 yang menunjukkan kategori rendah.

Kata kunci: keanekaragaman, kelimpahan, makrobentos, Sungai Sempor

Abstract

Distribution and Abundance of Macrobenthos in Sempor River Donokerto Village
Sleman Regency

Sempor river is one of the rivers in the Sleman Regency located in the upstream area. This research was conducted to determine the diversity and abundance of macrobenthos in Sempor river and to understand their correlation with water quality parameters. The research was conducted from October to December 2022. Macrobenthos were collected using a surber net. The collected samples were preserved in 5% formalin. The ecological indices were macrobenthos abundance, diversity, evenness, and dominance. Water quality data consisted of physical parameters (water temperature, flow velocity, total suspended solids, and depth) and chemical parameters (pH and dissolved oxygen). The results of the study revealed the presence of 4 classes, namely Gastropoda (8 species), Bivalvia (1 species), Clitellata (1 species), and Malacostraca (4 species), with the abundance ranging from 9 to 14 ind/m^2. The species found were *Sulcospira testudinaria* (23%), *Sulcospira* sp. (22%), *Macrobrachium* sp. (22%), *Tarabia granifera* (13%), and *Pleurocera ampla* (9%). The substrates in the four stations consisted of mud, sand, rocks, and gravel. The temperature ranged from 21,57 to 24,27 °C, depth ranged from 0,28 to 5,6 m, flow velocity ranged from 0,22 to 0,46 m/s, total suspended solids ranged from 14,25 to 25,31 mg/L, pH ranged from 6,9 to 7,2, and dissolved oxygen ranged from 6 to 8,26 mg/L. The macrobenthos diversity index in Sempor river was 1.79, indicating a moderate category. The evenness index was 0,83, indicating a high category, and the dominance index was 0,22, indicating a low category.

Keywords: abundance, diversity, macrobenthos, Sempor River