

Intisari

Penentuan Tingkat Pencemaran Perairan Sungai Opak di Kabupaten Bantul Berdasarkan Indeks Biotik Famili Makrozoobentos

Sungai Opak yang mengalir di wilayah Kabupaten Bantul merupakan salah satu sungai yang banyak dimanfaatkan oleh masyarakat Bantul guna kepentingan di bidang pertanian, peternakan, budidaya perikanan dan pariwisata. Pemanfaatan lahan di sekitar sungai menjadikan sungai rentan mengalami penurunan kualitas. Penelitian ini bertujuan untuk mengetahui tingkat pencemaran air Sungai Opak Kabupaten Bantul berdasarkan Indeks Biotik Famili makrozoobentos. Penelitian ini dilaksanakan selama dua bulan yaitu Bulan November-Desember 2023 di Sungai Opak, Kabupaten Bantul. Pengambilan data dilakukan di 5 stasiun pengamatan setiap seminggu sekali. Makrozoobentos diambil menggunakan *surber net* dengan ukuran 40 x 40 cm, di masing-masing stasiun dilakukan pengambilan sebanyak 3 titik. Parameter kualitas air yang diamati meliputi kecepatan arus, kedalaman, suhu, kandungan oksigen (O₂) terlarut, kandungan karbondioksida (CO₂) bebas, pH, dan bahan organik. Hasil penelitian menunjukkan bahwa terdapat 17 famili dengan 19 spesies dan nilai Indeks Biotik Famili sebesar 6,83 yang artinya perairan Sungai Opak dalam kondisi tercemar berat bahan organik.

Kata kunci: indeks biotik famili, makrozoobentos, pencemaran, sungai

Abstract

Determination of the Level of Water Pollution in the Opak Stream in Bantul Regency Based on the Macrozoobenthos Family Biotic Index

The Opak River which flows in the Bantul regency area is one of the streams that is widely used by the people of Bantul for purposes in the fields of agriculture, animal husbandry, fisheries cultivation and tourism. The land use around the stream makes it vulnerable to decline in quality. The study aims to determine the level of water pollution of the Opak Stream in Bantul regency based on the macrozoobentos family biotic index. The research was conducted for two months, November-December 2023 in Opak stream. Data was collected at five different stations once a week. Macrozoobenthos are taken using a surber net with a size of 40 x 40 cm, at each station 3 points are taken. The water quality parameters observed include current speed, depth, temperature, dissolved oxygen content (O₂), carbondioxide content (CO₂), pH, and organic compound. The results of the research showed that there are 17 families with 19 different species. The value of the biotic index family of the Opak stream in Bantul regency is 6.83 which means that the waters of Opak stream are polluted heavily organic compound.

Keywords: index biotic family, macrozoobenthos, pollution, streams