ABSTRAK

Muara Sungai Ijo dikenal sangat produktif dan rentan terhadap tekanan lingkungan yang diakibatkan oleh kegiatan manusia maupun oleh proses alamiah. Muara Sungai Ijo berada dekat dengan pemukiman warga, pelabuhan, TPI(Tempat Pelelangan Ikan), pertanian, kawasan mangrove dan tempat wisata yang menjadi faktor utama masuknya limbah organik di perairan. Penambahan bahan organik dalam suatu perairan dapat diketahui menggunakan indeks saprobik untuk menentukan status pencemarannya. Penelitian ini bertujuan untuk mengetahui tingkat pencemaran organik perairan Muara Sungai Ijo berdasarkan indeks saprobik fitoplankton. Dilakukan pada Agustus dan Oktober 2022 dengan metode *purposive sampling* di enam stasiun berdasarkan faktor yang memengaruhi kelimpahan fitoplankton. Hasil identifikasi menunjukan keberadaan 5 kelas fitoplankton yang berbeda, dengan kelas Bacillariophyceae mendominasi sebanyak 23 spesies, diikuti Chlorophyceae dan Dinophyceae masing-masing 2 spesies, serta Cyanophyceae dan Zygnematophyceae masing-masing 1 spesies. Kelimpahan tertinggi pada bulan Agustus dan Oktober dari kelas Bacillariophyceae yaitu spesies *Asterionellopsis glacialis* berturut-turut sebesar 18,71% dan 19,65%. Nilai indeks saprobik bulan Agustus sebesar 0,85 s/d 1,25, sedangkan pada bulan Oktober sebesar -0,33 s/d 1,4. Hal ini menunjukkan perairan Muara Sungai Ijo memiliki tingkat pencemaran ringan hingga sedang. Pencemaran sedang di Muara Sungai Ijo dapat disebabkan oleh masukan limbah atropogenik serta proses alami seperti dekomposisi serasah dan biota air.

Kata Kunci: Muara Sungai Ijo, Fitoplankton, Pencemaran Organik, Indeks Saprobik

ABSTRACT

The Ijo River estuary is known to be very productive and vulnerable to environmental pressures caused by human activities and natural processes. The Ijo River estuary is close to residential areas, harbors, TPI (Fish Auction Place), agriculture, mangrove areas and tourist attractions which are the main factors for the entry of organic waste in the waters. The addition of organic matter in a water body can be known using the saprobic index to determine its pollution status. This study aims to determine the level of organic pollution of the waters of the Ijo River Estuary based on the saprobic index of phytoplankton. Conducted in August and October 2022 with purposive sampling method at six stations based on factors that affect phytoplankton abundance. The identification results showed the presence of 5 different phytoplankton classes, with the Bacillariophyceae class dominating with 23 species, followed by Chlorophyceae and Dinophyceae with 2 species each, and Cyanophyceae and Zygnematophyceae with 1 species each. The highest abundance in August and October from the Bacillariophyceae class was Asterionellopsis glacialis species at 18.71% and 19.65% respectively. The saprobic index value in August was 0.85 to 1.25, while in October it was -0.33 to 1.4. This shows that the waters of the Ijo River Estuary have mild to moderate levels of pollution. Moderate pollution in the Ijo River Estuary can be caused by atropogenic waste input as well as natural processes such as litter decomposition and aquatic biota.

Keywords: *Ijo River Estuary, Phytoplankton, Organic Pollution, Saprobic Index*

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