KEANEKARAGAMAN SPESIES SIPUT ANGGOTA FAMILI PACHYCHILIDAE DI SUNGAI KUNING, SLEMAN, DAERAH ISTIMEWA YOGYAKARTA

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INTISARI

Sungai Kuning di Jalan Besi Jangkang, Karanglo, Sukoharjo, Kecamatan Ngaglik, Sleman, Daerah Istimewa Yogyakarta. Kondisi dari Sungai Kuning dipengaruhi oleh aktivitas manusia seperti pariwisata dan aktivitas pembuangan sampah sembarangan di sungai. Ekosistem sungai berperan krusial dalam menyediakan habitat berbagai organisme, seperti anggota Famili Pachychilidae dari Kelas Gastropoda, serta berperan dalam menentukan kondisi kualitas lingkungan. Penelitian ini bertujuan untuk menganalisis sebaran dan kelimpahan anggota Famili Pachychilidae dari Kelas Gastropoda di Sungai Kuning serta untuk menginvestigasi pengaruh faktor-faktor lingkungan terhadap sebaran dan kelimpahan gastropoda tersebut. Faktor lingkungan yang diamati yaitu suhu air, oksigen terlarut, pH, kadar nutrisi, serta alkalinitas. Penelitian ini dilakukan menggunakan metode *purposive*. Pengambilan sampel gastropoda dilakukan sebanyak tiga kali di lokasi yang ditentukan dengan menggunakan metode jarak yang ditandai oleh pasak panjang sebagai titik acuan. Identifikasi sampel gastropoda dilakukan dengan merujuk pada literatur jurnal. Parameter lingkungan, seperti, kadar oksigen terlarut, dan jeluk diukur secara langsung pada lokasi penelitian dan selanjutnya dianalisis lebih lanjut di laboratorium. Hasil dari penelian ini ialah keanekaragaman siput air anggota famili Pachychilidae di Sungai Kuning tergolong rendah, dengan kadar oksigen terlarut sebagai faktor pembatas utama bagi keanekaragaman dan kelimpahan spesies. Kondisi ekosistem sungai ini dapat dikatakan tidak stabil, ditunjukkan oleh indeks keanekaragaman Shannon-Wiener yang rendah di tiga lokasi penelitian, yaitu 1,2206 ; 0,3488 ; dan 0,7963. Selain itu, terdapat perbedaan drastis dalam kadar oksigen terlarut antar lokasi sampling, yang semakin memperjelas bahwa variasi faktor fisikokimia berperan signifikan dalam menentukan keberagaman spesies di Sungai Kuning.

Kata kunci: Sungai Kuning, ekosistem sungai, Famili Pachychilidae

SPECIES DIVERSITY OF SNAIL MEMBERS OF THE PACHYCHILIDAE FAMILY IN THE KALI KUNING RIVER, SLEMAN, SPECIAL REGION YOGYAKARTA

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ABSTRACT

The Kuning River, located in Besi Jangkang street, Karanglo, Sukoharjo, Ngaglik District, Sleman, Special Region of Yogyakarta. The condition of the Kuning River is influenced by human activities, such as tourism and improper waste disposal. River ecosystems play a crucial role in providing habitats for various organisms, including members of the Family *Pachychilidae* from the class *Gastropoda*, and contribute significantly to environmental quality. This study aims to analyze the distribution and abundance of Family *Pachychilidae* gastropods in the Kuning River and investigate the influence of environmental factors on their distribution and abundance. The observed environmental factors include water temperature, dissolved oxygen, pH, nutrient levels, and alkalinity. The study employs a purposive sampling method. Gastropod samples were collected three times at predetermined locations using a distance-based approach marked by long stakes as reference points. Sample identification was conducted based on relevant journal literature. Environmental parameters, such as dissolved oxygen levels and depth, were measured directly at the study site and subsequently analyzed in the laboratory. The result of this research is that the abundance of aquatic snails from the Pachychilidae family in Sungai Kuning is relatively low, with dissolved oxygen levels serving as the primary limiting factor for species diversity and abundance. The river ecosystem is considered unstable, as indicated by the low Shannon-Wiener diversity index values recorded at three sampling locations, namely 1.2206, 0.3488, and 0.7963. Furthermore, a significant variation in dissolved oxygen (DO) levels across sampling sites highlights the substantial influence of physicochemical factors in determining species diversity in Sungai Kuning.

Keywords: Kuning river, river ecosystem, Famili Pachychilidae