

ABSTRAK

Sungai Logawa dimanfaatkan penduduk sekitar untuk memenuhi berbagai macam kebutuhan sehari-hari, seperti untuk MCK (mandi, cuci, kakus), lahan pertanian dan penambangan batu serta pasir. Pemanfaatan tersebut dapat mengganggu ekosistem sungai, salah satunya yaitu vegetasi riparian. Tujuan penelitian ini untuk menganalisis keanekaragaman vegetasi riparian, mengetahui kondisi parameter lingkungan, dan mendeskripsikan keterkaitan vegetasi dengan faktor lingkungan di Sungai Logawa. Pengambilan data dilakukan pada Juli 2024. Metode yang digunakan adalah *purposive sampling* dan Uji non-parametrik Kruskal-Wallis serta analisis *Principal Component Analysis* (PCA). Keanekaragaman vegetasi riparian di Sungai Logawa ditemukan 39 spesies tumbuhan secara keseluruhan dari hulu, tengah, dan hilir, namun memiliki jumlah individu yang berbeda-beda setiap stasiunnya. Hal tersebut dapat disebabkan karena kondisi lingkungan sekitar dan karakteristik habitat. Kondisi air pada Sungai Logawa masih memenuhi baku mutu air sungai, sedangkan nilai P-total tanah dan pH tanah masuk dalam kategori rendah. Keanekaragaman vegetasi memiliki hubungan dengan parameter lingkungan khususnya P-total tanah dan pH tanah.

Kata kunci: Vegetasi Riparian, Sungai Logawa, dan PCA

ABSTRACT

The Logawa River is utilized by local residents to fulfill a variety of daily needs, such as for bathing, washing, and toilet (BWT), agricultural land and stone and sand mining. This utilization can disturb the river ecosystem, one of which is riparian vegetation. The purpose of this study was to analyze the diversity of riparian vegetation, determine environmental parameters, and describe the relationship between vegetation and environmental factors in the Logawa River. This research was conducted in July 2024 - Mei 2025. The method used was purposive sampling and Kruskal-Wallis non-parametric test and Principal Component Analysis (PCA). The diversity of riparian vegetation in the Logawa River found 39 plant species in total from upstream, middle and downstream, but has a different number of individuals at each station. This can be caused by the surrounding environmental conditions and habitat characteristics. Water conditions in the Logawa River still meet river water quality standards, while the soil P-total value is still relatively low while the soil pH is in the neutral category. The value of vegetation diversity has a relationship with environmental parameters, especially soil P-total and soil pH.

Keywords: Riparian Vegetation, Logawa River, and PCA