

Intisari

Variabilitas Klorofil-A Dan Struktur Komunitas Plankton Di Muara Sungai Serang Kabupaten Kulon Progo

Alfredo Na Jogi Naiborhu

Departemen Perikanan, Fakultas Pertanian

Universitas Gadjah Mada, Yogyakarta

Sungai Serang yang terletak di Kabupaten Kulon Progo Yogyakarta berperan penting bagi lingkungan dan komunitas lokal. Tujuan penelitian ini adalah untuk menyelidiki variabilitas klorofil- α dan struktur komunitas plankton di muara Sungai Serang dari September 2023 hingga Februari 2024. Parameter fisika dan kimia air diukur selama survei lapangan dan identifikasi plankton dilakukan di laboratorium. Hasil penelitian menunjukkan konsentrasi klorofil- α bervariasi signifikan dengan kisaran 1,2-25,6 mg/L. Fitoplankton dari genus *Bacillariophyta* dan zooplankton dari genus *Cyclops* mendominasi struktur komunitas plankton di lokasi penelitian. Secara umum, hasil penelitian ini menunjukkan klorofil- α berkorelasi positif dengan kelimpahan plankton, dan struktur komunitas plankton dipengaruhi parameter lingkungan seperti suhu air, kecerahan air, dan salinitas.

Kata kunci: klorofil- α , fitoplankton, zooplankton, Sungai Serang, Kulon Progo

Yogyakarta, 10 Juli 2024

Penulis

Dosen Pembimbing Skripsi



Dr.rer.nat. Riza Yuliratno Setiawan, S.Kel., M.Sc.
NIKA. 111198007201607101



Alfredo Na Jogi Naiborhu
20/459481/PN/16675

ABSTRACT

CHLOROPHYLL-A VARIABILITY AND PLANTON COMMUNITY STRUCTURE IN THE MOUTH OF SERANG RIVER IN THE KULON PROGO DISTRICT

Alfredo Na Jogi Naiborhu
Department of Fisheries, Faculty of Agriculture
Universitas Gadjah Mada, Yogyakarta

The Serang River located in the Kulon Progo regency of Yogyakarta, plays a significant role in the local community and the environment. The objective of this study is to investigate the variability of chlorophyll-a and the community structure of plankton in the estuary of Serang River from September 2023 to February 2024. The physical and chemical parameters of water were measured during field surveys and plankton identification was performed at the laboratory. The results indicated that the concentration of chlorophyll-a varied significantly within the range of 1.2-25.6 mg/L. Phytoplankton of the *Bacillariophyta* and zooplankton of *Cyclops* dominate the plankton community structure in the region. In general, the findings indicate that chlorophyll-a is positively correlated with the abundance of plankton, and the structure of the plankton community is influenced by environmental parameters such as water temperature, water clarity, and salinity.

Keywords: chlorophyll- α , phytoplankton, zooplankton, Serang River, Kulon Progo

Advisor



Dr. rer. nat. Riza Yuliratno Setiawan, S.Kel., M.Sc.
NIKA. 111198007201607101

Yogyakarta, 10 Juli 2024
Author



Alfredo Na Jogi Naiborhu
20/459481/PN/16675