

INTISARI

DIVERSITAS PROTOZOA SEBAGAI INDIKATOR LINGKUNGAN PADA OBJEK WISATA AIR WADUK ROWO JOMBOR KABUPATEN KLATEN

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Air memiliki peran penting dalam kehidupan. Kualitas lingkungan yang baik sangat berpengaruh pada kondisi air yang memenuhi standar kesehatan dan bebas dari pencemaran. Waduk menjadi salah satu sumber air bersih dan habitat berbagai anggota Protozoa. Protozoa adalah mikroorganisme uniseluler yang banyak ditemukan di perairan laut, air tawar, dan tanah lembab. Kehidupan mereka dipengaruhi oleh berbagai faktor seperti kelembaban, suhu, cahaya, nutrisi, dan kondisi fisiko-kimia air. Waduk Rowo Jombor di Kabupaten Klaten merupakan waduk yang dipenuhi oleh sumber daya alam dengan kelimpahan organisme yang ada, termasuk protozoa. Belum banyak diketahui mengenai peran protozoa air, terutama zooplankton dan fitoplankton, sebagai bioindikator di Waduk Rowo Jombor. Penelitian ini bertujuan untuk mengidentifikasi dan menjelaskan keragaman anggota protozoa serta kondisi kualitas lingkungan perairan di Waduk Rowo Jombor. Enambelas titiksampling di area waduk digunakan sebagai titik pencuplikan sampel air, yang terdiri atas 8 titik sampel di area tepi dan 8 titik sampel di area tengah waduk. Sampel air dibawa dan diidentifikasi di Bagian Parasitologi Laboratorium Sistematika Hewan Universitas Gadjah Mada. Anggota Protozoa yang ditemukan adalah dari genus *Trichodina*, *Chilodonella*, *Trinema*, *Euglypha*, *Arcella*, *Astasia*, *Chaos*, *Amoeba*, *Holophyra*, *Mayorella*, *Paramecium*, *Saccamoeba*, *Tintinnopsis*, *Centropyxis*, *Vorticella*. Kondisi fisiko-kimia perairan di Waduk Jombor mendukung keberadaan protozoa.

Kata kunci: air, diversitas, indikator lingkungan, protozoa, Waduk Rowo Jombor

ABSTRACT

**PROTOZOA DIVERSITY AS AN
ENVIRONMENTAL INDICATOR IN THE WATER TOURISM
OBJECT OF ROWO JOMBOR RESERVOIR
KLATEN DISTRICT**

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Water is a crucial role in life. Good environmental quality significantly affects the condition of water, ensuring it meets health standards and remains free from pollution. Reservoirs serve as vital sources of clean water and habitats for various protozoa species. Protozoa are single-celled microorganisms commonly found in marine and freshwater environments, as well as damp soil. Their livelihoods are influenced by factors such as humidity, temperature, light, nutrients, and the physicochemical conditions of water. Rowo Jombor Reservoir in Klaten Regency is rich in natural resources and harbors abundant organisms, including protozoa. However, the role of water protozoa, particularly zooplankton and phytoplankton, as bioindicators in Rowo Jombor Reservoir, remains largely unknown. This research aims to identify and explain the diversity of protozoa species and the environmental water quality conditions in Rowo Jombor Reservoir. Sixteen sampling points within the reservoir area were used for water sample collection, comprising eight points along the reservoir's edge and eight points in the central area. Water samples were collected and identified at the Parasitology Section of the Animal Systematics Laboratory, Universitas Gadjah Mada. Protozoa species identified include genera such as Trichodina, Chilodonella, Trinema, Euglypha, Arcella, Astasia, Chaos, Amoeba, Holophyra, Mayorella, Paramecium, Saccamoeba, Tintinnopsis, Centropyxis, and Vorticella. The physicochemical conditions of the water in Rowo Jombor Reservoir support the presence of protozoa.

Keywords: water, diversity, environmental indicators, protozoa, Rowo Jombor Reservoir