

Penilaian Kualitas Perairan Berdasarkan Keberadaan Makrozoobentos Pada Eceng Gondok (*Eichhornia crassipes*) di Situ Salam, Universitas Indonesia, Depok, Jawa Barat = Water Quality Assessment Based on the Presence of Macrozoobenthos in Water hyacinth (*Eichhornia crassipes*) in Situ Salam, University of Indonesia, Depok, West Java.

Dewi Astuti Kristianti, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20523377&lokasi=lokal>

Abstrak

Telah dilakukan penelitian penilaian terhadap kualitas perairan menggunakan makrozoobentos pada eceng gondok (*Eichhornia crassipes*) dengan Family Biotic Index (FBI) dan mengetahui struktur komunitas makrozoobentos di Situ Salam Universitas Indonesia. Situ Salam berada di bagian utara kampus UI. Berdasarkan parameter fisika-kimia yang dilakukan yaitu hasil suhu yaitu 28,66—30C, hasil turbiditas yaitu 6,9—8 NTU, hasil kecepatan arus yaitu 0,012—0,071 m/s, hasil dissolved oxygen (DO) yaitu 6,58—9,87 mg/L, hasil derajat keasaman (pH) yaitu 6,79—7,11, hasil kecerahan air yaitu 82—93,66 cm, hasil kedalaman yaitu 179—318,33 cm, hasil nitrat yaitu 0,58—2 mg/L, dan hasil fosfat yaitu 0,47—1,48 mg/L. Berdasarkan hasil FBI, kualitas perairan Situ Salam tergolong kategori buruk dengan nilai FBI berkisar 6,42—6,64. Berdasarkan hasil struktur komunitas makrozoobentos, indeks keanekaragaman tergolong tinggi dengan nilai < 2,50, indeks dominansi tergolong rendah dengan nilai < 0,26 yang menandakan jenis makrozoobentos tidak ada yang mendominasi, indeks Evenness tergolong merata dengan nilai < 0,90 dan indeks kelimpahan berkisar antara 0,2—34,4 ind/tanaman. Berdasarkan hasil dilakukan di Situ Salam parameter fisika-kimia tergolong dalam perairan yang masih dapat ditoleransi oleh makrozoobentos.

.....An assessment of water quality has been carried out using macrozoobenthos on water hyacinth (*Eichhornia crassipes*) with the Family Biotic Index (FBI) and to determine the structure of the macrozoobenthos community in Situ Salam, Depok, West Java. Situ Salam is a lake that has a parallel flow from south to north which has a series with Situ Puspa and Situ Ulin. Situ Salam is located in the northern part of the UI campus near the Makara Dormitory, University of Indonesia and comes from the water input of Situ Agathis. Measurements of physico-chemical environmental parameters were carried out namely, temperature with a yield of 28.66—30C, turbidity with a yield of 6.9—8 NTU, current velocity with a yield of 0.012—0.071 m/s, dissolved oxygen (DO) with a yield of 6.58—9.87 mg/L, degree of acidity (pH) with a yield of 6.79—7.11, water brightness with a yield of 82—93.66 cm, depth with a yield of 179—318.33 cm, the nitrate with a yield of 0.58—2 mg/L, and phosphate with a yield of 0.47—1.48 mg/L. Based on the results of the FBI, the water quality of Situ Salam is classified as poor with an FBI value ranging from 6.42—6.64. The diversity index is low with a value of < 2.50, the dominance index is low with a value of < 0.26 which indicates that no macrozoobenthos species dominates, the Evenness index is evenly distributed with a value of < 0.90 and abundance index ranged from 0.2-34.4 ind/plant. Based on the results of measurements of physico-chemical parameters that have been carried out, Situ Salam is classified in waters that can still be tolerated by macrozoobenthos.