

**KOMUNITAS MAKROZOOBENTOS DI PERAIRAN KAWASAN
PERKEBUNAN KELAPA SAWIT PT. BINTARA TANI NUSANTARA,
PASAMAN BARAT SUMATERA BARAT**

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ABSTRAK

Makrozoobentos adalah hewan perairan yang sebagian atau seluruh hidupnya berada di substrat perairan sehingga dapat digunakan sebagai bioindikator perairan. Habit bentos yang hidup di substrat perairan mengakibatkan keberadaan bentos sangat berpengaruh terhadap kondisi lingkungan perairan. Penelitian dilakukan di perairan Sungai Laping dan Sungai Runding di kawasan perkebunan kelapa sawit PT. Bintara Tani Nusantara (BTN) Pasaman Barat, Sumatera Barat tentang struktur dan komposisi makrozoobentos dari Juni – September 2023. Tujuan penelitian ini untuk mengetahui komunitas makrozoobentos di perairan kawasan perkebunan kelapa sawit di BTN yang dilakukan pada 5 stasiun dengan metode *Purposive sampling*. Pada perairan sungai itu juga dilakukan pengukuran faktor fisika dan kimia lingkungan. Hasil yang didapatkan sebanyak 48 genera, 33 famili, 17 ordo, dan 5 kelas makrozoobentos dengan kepadatan total makrozoobentos berkisar 191,84-838,44 ind/m². Genus yang tertinggi kepadatannya adalah *Melanoides* yaitu 400,00 ind/m². Genera yang sering ditemukan pada setiap stasiun yaitu *Caenis*, *Choroterpes*, *Melanoides*, *Terebia*, *Thiara* dan *Tubifex*. Indeks keanekaragaman ditemukan berkisar antara 1,12-2,86 masuk kondisi sedang, indeks equitabilitas berkisar antara 0,54-0,82 masuk kategori cukup merata hingga hampir merata, indeks dominansi berkisar 0,08-0,39 berarti tidak ada genera yang dominan dan nilai indeks similaritas berkisar 17,14-69,76. Faktor fisika kimia perairan yang diukur masih dalam kondisi normal kecuali kandungan amoniak stasiun 4 dan 5 serta kadar TSS stasiun 3 dan 4. Komunitas makrozoobentos sangat bervariasi antara stasiun yang dipengaruhi oleh perbedaan faktor fisik kimia lingkungan terutama substrat perairan.

Kata kunci : komunitas, makrozoobentos, perkebunan sawit, struktur



ABSTRACT

Macrozoobenthos are aquatic animals that live part or all of their lives in aquatic substrates so they can be used as aquatic bioindicators. The benthic habit that lives in aquatic substrates means that the presence of benthos greatly influences the condition of the aquatic environment. The research was conducted in the waters of the Laping River and the Runding River in the oil palm plantation area of PT. Bintara Tani Nusantara (BTN) West Pasaman, West Sumatra regarding the structure and composition of macrozoobenthos from June – September 2023. The aim of this research was to determine the macrozoobenthic community in the waters of oil palm plantation areas in BTN which was carried out at 5 stations using the purposive sampling method. In the river waters, physical and chemical environmental factors were also measured. The results obtained were 48 genera, 33 families, 17 orders and 5 classes of macrozoobenthos with a total density of macrozoobenthos ranging from 191.84 to 838.44 ind/m². The genus with the highest density is Melanoides, namely 400.00 ind/m². The genera that are often found at each station are Caenis, Choroterpes, Melanoides, Terebia, Thiara and Tubifex. The diversity index was found to range between 1.12-2.86, which is in moderate condition, the equitability index ranged between 0.54-0.82, which was in the fairly even to almost even category, the dominance index ranged from 0.08-0.39, meaning there were no genera that dominant and the similarity index value ranges from 17.14-69.76. The physical and chemical factors of the waters measured were still in normal conditions except for the ammonia content of stations 4 and 5 and the TSS levels of stations 3 and 4. The macrozoobenthic community varied greatly between stations, which was influenced by differences in physical and chemical environmental factors, especially water substrates.

Key words: community, macrozoobenthos, oil palm plantations, structure

