

RINGKASAN

NICO MARCELINO. Makrozoobentos Sebagai Bioindikator Kualitas Perairan di Perairan Kelam Pagi Kelurahan Dompak, Kepulauan Riau. Dibimbing oleh TRI APRIADI dan WINNY RETNA MELANI.

Makrozoobentos adalah organisme yang peka terhadap perubahan lingkungan perairan yang ditempatinya, sehingga sering dijadikan sebagai salah satu indikator biologis kualitas perairan. Tujuan dari penelitian ini yaitu untuk mengetahui kondisi parameter fisika dan kimia perairan di perairan Kelam Pagi, struktur komunitas makrozoobentos di perairan Kelam Pagi, serta mengetahui kualitas perairan di perairan Kelam Pagi berdasarkan indikator biologis makrozoobentos. Penelitian ini dilakukan pada bulan Maret 2022 yang berlokasi di perairan Kelam pagi Kelurahan Dompak. Penentuan lokasi penelitian menggunakan metode *survey*, dan Pengambilan sampel dilakukan dengan Teknik *Random sampling*, yang terdiri dari 40 titik. Pengambilan sampel makrozoobentos menggunakan transek kuadran berukuran 1x1 m. Hasil pengukuran parameter perairan di semua stasiun masih berada pada ambang batas baku mutu PP Republik Indonesia No 22 Tahun 2021 Lampiran VIII. Kelimpahan makrozoobentos tertinggi terdapat pada kelas gastropoda, sedangkan kelimpahan terendah ialah kelas Sipunculidea. Kategori indeks keanekaragaman (H') di perairan Kelam Pagi dikategorikan “sedang”. Kategori keseragaman (E) dikategorikan “tinggi” kategori indeks dominansi (C) dikategorikan “rendah”. Kualitas perairan berdasarkan indikator biologis makrozoobentos berdasarkan indeks AMBI bahwa perairan di Kelam Pagi termasuk dalam kategori “sedikit tercemar”.

Kata kunci: AMBI (*A Marine Biotic Index*), Bioindikator, Dompak, Kelam Pagi, Makrozoobentos.

SUMMARY

NICO MARCELINO. *Makrozoobentos as a Bioindicator of Water Quality in the Kelam Pagi Waters of Dompak Village, Riau Islands.* Supervised by TRI APRIADI and WINNY RETNA MELANI.

Macrozoobentos are organisms that are sensitive to changes in the aquatic environment they live, so they are often used as one of the biological indicators of aquatic quality. The purpose of this study is to determine the condition of the physical and chemical parameters of the waters in the Kelam Pagi waters, the structure of the macrozoobentos community in the waters of Kelam Pagi, and find out the quality of the waters in the waters of Kelam Pagi based on biological indicators of macrozoobentos. This research was conducted in March 2022 which was located in the waters of Kelam pagi Kelurahan Dompak. The determination of the location of the study was using the survey method, and sampling was carried out with the Random sampling Technique, which consisted of 40 points. Macrozoobenthos sampling using a quadrant transect measuring 1x1 m. The results of measuring water parameters at all stations are still at the meet of quality standards of PP Republic of Indonesia No. 22 of 2021 Appendix VIII. The highest abundance of macrozoobenthos is found in the gastropod class, while the lowest abundance is the sipunculidea class. The diversity index (H') category in the Kelam Pagi waters is categorized as "moderate". The evenness category (E) is categorized as "high". And the dominance index category (C) is categorized as "low". The quality of the waters is based on the biological indicators of macrozoobentos based on the AMBI index that the waters in the Kelam Pagi belong to the category of "slightly polluted".

Keywords: AMBI (A *Marine Biotic Index*), Bioindicator, Dompak, Kelam Pagi
Macrozoobenthos