

## **Struktur Komunitas Makroalga di Perairan Bagian Selatan Pulau Kabung Kabupaten Bengkayang Kalimantan Barat**

### **Abstrak**

Pulau Kabung merupakan lokasi perairan yang tergolong banyak aktivitas manusia. Makroalga di perairan berfungsi sebagai produsen pada ekosistem perairan, hal ini dikarenakan alga mempunyai kemampuan untuk makanan sendiri (autotrop), sehingga menjadi sumber makanan bagi organisme laut. Tujuan dari penelitian ini yaitu mengetahui komposisi makroalga, kelimpahan, indeks keanekaragaman, indeks keseragaman dan indeks dominansi di perairan Pulau Kabung. Metode yang digunakan pada penelitian ini yaitu metode *purposive sampling* untuk penentuan lokasi penelitian. Penelitian ini terdapat 3 stasiun. Perhitungan individu dilakukan dengan membentang line transek sepanjang 50 m dan meletakkan transek kuadrat yang berukuran 1x1 m dari titik 0 m line transek. Penelitian ini dilakukan pada bulan febuari 2022. Berdasarkan hasil penelitian diperoleh 3 divisi, 6 ordo, 6 family dan 9 spesies makroalga yaitu *Halimeda macroloba*, *Caulerpa racemosa*, *Padina australis*, *Sargassum plicystum*, *Turbinaria Conoides*, *Sargassum binderri*, *Acanthophora spicifera*, *Caulerpa sertularioides* dan *Laurencia intricata*. Hasil total analisa mengenai kelimpahan makroalga diperoleh berkisar 58-86 ind/m<sup>2</sup>. Nilai indeks keanekaragaman rata-rata sebesar 1,31-1,60 yang masuk dalam kategori keanekaragaman sedang, nilai indeks keseragaman rata-rata sebesar 0,60-0,73 yang masuk dalam keseragaman sedang dan nilai indeks dominansi rata-rata sebesar 0,24-0,41 yang masuk dalam kategori dominansi rendah. Factor lingkungan perairan dapat mempengaruhi kelimpahan makroalga di perairan Pulau Kabung.

**Kata Kunci:** Makroalga, kelimpahan, *Sargassum binderri*, *purposive sampling*, Pulau Kabung

***Macroalgae Community Structure in the Waters of Kabung Island, Bengkayang Regency, West Kalimantan***

***Abstract***

Macroalgae in the water act as producers in aquatic ecosystems; this is due to algae's ability to self-feed (autotroph), which allows them to serve as a food source for marine organisms. The aim of this study was to determine macroalgal composition, abundance, diversity index, uniformity index, and dominance index in Kabung Island waters. The method used in this research is the purposive sampling method for determining research locations. This research has three stations. Individual counting was performed by stretching a 50-m-long transect line and placing a 1x1-m-squared transect from the transect line's starting point. This research was conducted in February 2022. Based on the research results, 3 divisions, 6 orders, 6 families, and 9 species of macroalgae were obtained, namely: *Halimeda macroloba*, *Caulerpa racemosa*, *Padina australis*, *Sargassum plicatum*, *Turbinaria conoides*, *Sargassum binderri*, *Acanthophora spicifera*, *Caulerpa sertularioides*, and *Laurencia intricata*. The total results of the analysis regarding the abundance of macroalgae were obtained in the range of 58–86 ind/m<sup>2</sup>. The average diversity index value is 1.31–1.60, which is included in the moderate diversity category; the average uniformity index value is 0.60-0.73, which is included in the medium uniformity category; and the average dominance index value is 0.24–0.41, which is included in the low dominance category. Aquatic environmental factors can affect the abundance of macroalgae in the waters around Kabung Island.

***Keywords:*** *Macroalgae, abundance, Sargassum binderri, purposive sampling, Kabung Island*