

## Struktur Komunitas Mikroalga Epifit pada Genus *Padina* Adanson, 1763 di Teluk Hurun, Lampung = Community Structure of Epiphytic Microalgae in Genus *Padina* Adanson, 1763 in Hurun Bay, Lampung

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### Abstrak

Mikroalga epifit merupakan kelompok mikroalga yang berinteraksi dan tumbuh menempel pada permukaan substrat. Salah satu substrat bagi mikroalga epifit adalah makroalga *Padina*. Keberadaan mikroalga epifit dipengaruhi oleh faktor lingkungan seperti kandungan oksigen terlarut (DO) dan nutrisi. Penelitian bertujuan untuk mengetahui struktur komunitas mikroalga epifit pada genus *Padina* dan kondisi perairan di Teluk Hurun melalui proses identifikasi jenis, analisis kelimpahan, kekayaan, keanekaragaman, kemerataan, serta dominansi mikroalga epifit. Penelitian dilakukan pada lima substasiun dengan dua kali pengambilan sampel di setiap substasiun menggunakan metode purposive sampling berdasarkan keberadaan *Padina*. Selanjutnya, sampel mikroalga epifit diamati menggunakan metode subsampel di bawah mikroskop. Hasil identifikasi dan penghitungan jumlah sel mikroalga diperoleh 14 genus mikroalga epifit dari kelas Bacillariophyceae. Kelimpahan mikroalga berkisar 500—85.000 sel/mL dan kelimpahan genus tertinggi terdapat pada *Nitzschia*. Mikroalga epifit pada *Padina* di Teluk Hurun memiliki keanekaragaman yang sedang (2,51) dan kemerataan yang tergolong tinggi (0,9).

.....Epiphytic microalgae are a group of microalgae that interact and grow attached to the surface of substrate. One of the substrates for epiphytic microalgae is *Padina*. The existence of epiphytic microalgae is influenced by environmental factors such as dissolved oxygen (DO) and nutrient content. This study aimed to determine the community structure of epiphytic microalgae in the *Padina* and the condition of the waters in Hurun Bay through a process of species identification, analysis of abundance, richness, diversity, evenness, and dominance of epiphytic microalgae. The study was conducted at five substations with two samplings at each substation using a purposive sampling method based on the presence of *Padina*. Meanwhile, epiphytic microalgae samples were observed using the subsample method under a microscope. The results of identifying and counting the number of microalgae cells obtained 14 genera of epiphytic microalgae from the class Bacillariophyceae. The abundance of microalgae ranges from 500—85,000 cells/mL and the highest abundance of the genus is found in *Nitzschia*. Epiphytic microalgae in *Padina* has moderate diversity (2,51) and high evenness (0,9).