RINGKASAN

Ekosistem mangrove merupakan salah satu wilayah pesisir yang memiliki karakteristik yang unik dan khas, dan umumnya terdapat di daerah pasang surut di wilayah pesisir, pantai serta pulau-pulau kecil. Salah satu ekosistem mangrove yang berada di Provinsi Jambi yaitu hutan mangrove yang berada di Cagar Alam Hutan Bakau Pantai Timur, kabupaten Tanjung Jabung Timur, wilayah Mendahara. Secara ekologis kawasan mangrove berfungsi sebagai daerah pemijahan serta daerah pembesaran (*nursey grounds*) berbagai jenis ikan, udang, kerang, kepiting, serta gastropoda. Gastropoda termasuk salah satu penyusun komunitas bentik pada suatu perairan yang berasosiasi dengan ekosistem mangrove. Gastropoda ditemukan hidup pada daun, batang, ranting, akar (Tree-fauna), permukaan substrat (Epi-fauna), serta hidup membenamkan diri didalam sedimen tanah (In-fauna).

Penentuan lokasi penelitian dilakukan dengan menggunakan metode *Purposive Sampling* yang terbagi menjadi 3 stasiun penelitian dengan 3 kali pengulangan di masing-masing stasiun. Stasiun I berada di kawasan mangrove parit adong, stasiun II berada di kawasan mangrove sungai siput, stasiun III berada di kawasan mangrove syahbandar. Masing masing stasiun penelitian ditetapkan titik pengambilan sampel dengan membuat garis transek (*line transect*) sepanjang 30 meter, Jarak antara garis transek yaitu sepanjang 10 meter, serta lebar garis transek yaitu 2,5 meter. Pada satu garis transek terdapat 7 kotak plot dengan ukuran 2 x 2 meter dengan jarak masing-masing plot 2 meter. Selain itu, pengumpulan data gastropoda in-fauna dilakukan dengan menggunakan metode *pipa grab* kedalaman 10 cm dan 30 cm secara *Purposive Random Sampling* dengan 3 kali pengulangan.

Berdasarkan hasil penelitian jumlah gastropoda yang ditemukan diketiga stasiun sebanyak 12 jenis dengan total individu sebanyak 7368. Nilai indeks keanekaragaman jenis gastropoda di Cagar Alam Hutan Bakau Pantai Timur pada stasiun I yaitu 2,345, stasiun II 2,169, serta stasiun III 2,468 sehingga nilai indeks keanekaragaman gastropoda dari masing – masing stasiun tergolong kategori sedang. Hasil *Principal Component Analysis* (PCA) menunjukkan faktor lingkungan yang berhubungan serta berkolerasi positif terhadap keanekaragaman dan keseragaman gastropoda yaitu faktor salinitas.

Kata kunci: Keanekaragaman, Gastropoda, Hutan Bakau

SUMMARY

Mangrove ecosystems are one of the coastal areas that have unique and distinctive characteristics, and are generally found in tidal areas in coastal areas, beaches and small islands. One of the mangrove ecosystems in Jambi Province is a mangrove forest located in the East Coast Mangrove Forest Nature Reserve, East Tanjung Jabung district, Mendahara region. Ecologically, mangrove areas function as spawning areas and nursey grounds for various types of fish, shrimp, shellfish, crabs, and gastropods. Gastropods are one of the constituents of benthic communities in waters associated with mangrove ecosystems. Gastropods are found living on leaves, stems, twigs, roots (Tree-fauna), substrate surfaces (Epi-fauna), and living immersed in soil sediments (In-fauna).

The determination of the location of the study was carried out using the Purposive Sampling method which was divided into 3 research stations with 3 repetitions at each station. Station I in the mangrove area of the adong trench, station II in the mangrove area of the snail river, station III in the mangrove area of syahbandar. Each research station was assigned a sampling point by making a transect line (line transect) along 30 meters, the distance between the transect lines is 10 meters, and the width of the transect line is 2.5 meters. On one transect line there are 7 plot boxes with a size of 2 x 2 meters with a distance of 2 meters each. In addition, data collection of in-fauna gastropods was carried out using the 10 cm and 30 cm deep grab pipe methods by Purposive Random Sampling with 3 repeats.

Based on study, the number of gastropods found at the three stations was 12 types with a total of 7368 individuals. The value of the gastropod species diversity index in the East Coast Mangrove Reserve at station I 2,345, station II 2,169, and station III 2,468 so that the value of the gastropods diversity index from each station classified as medium category. The results of *Principal Component Analysis* (PCA) shows environmental factors that are related and positively correlate with gastropods diversity and uniformity salinity factors.

Keywords: Biodiversity, Gastropods, Mangrove