

Struktur Komunitas Gastropoda Pada Ekosistem Mangrove Dengan Kerapatan Berbeda Di Pulau Gili Genteng Kabupaten Sumenep. Imam Mahdi. E-mail: imammahdi1115@gmail.com. Dibawah bimbingan Insafitri., ST., M.Sc., PhD dan Dr. H. Agus Romadhon., SP., M.Si.

ABSTRAK

Pulau Gili Genteng merupakan pulau yang memiliki sumberdaya yang sangat potensial, salah satunya yaitu kelompok molusca dari kelas gastropoda mempunyai habitat yang berbeda pada ekosistem mangrove dengan kerapatan berbeda dan sesuai dengan komunitasnya. Komunitas gastropoda di pengaruhi oleh perubahan faktor lingkungan dan juga menyebabkan adanya cara perbedaan hidup gastropoda, gastropoda dapat hidup di epifauna, tree fauna dan infauna. Penelitian ini bertujuan untuk mengetahui kerapatan mangrove, mengetahui struktur komunitas gastropoda pada ekosistem mangrove yang mempunyai kerapatan berbeda, dan mengetahui faktor lingkungan di ekosistem mangrove yang mendukung untuk habitat gastropoda. Pengambilan sampel dilakukan menggunakan transek kuadrat 10x10 m sebanyak 2 stasiun dengan 3 titik pengambilan data tiap stasiunnya. Pada masing-masing transek dilakukan pengamatan sebanyak 5 kalidengan ukuran 1x1 mpada setiap titik pengambilan data. Waktu penelitian dilakukan pada bulan Mei 2016 di Pulau Gili Genteng Kabupaten Sumenep. Hasil penelitian menunjukkan bahwa kerapatan mangrove rapat yaitu 3667 m². Jenis gastropoda epifauna yang ditemukan yaitu *Rhinoclavis sinensis*, *Nasarius pullus*, *Nirita undata*, *Terebalia sulcata*, *Crithidea quadrata*. Jenis gastropoda tree fauna yang ditemukan yaitu *Litorina scabra*. Jenis gastropoda infauna *Morula granulata*, *Rhinoclavis vertagus*. Nilai kerapatan mangrove berkisar antara 0,190-1,100 m². Kepadatan gastropoda jenis epifauna berkisar antara 1,067-7,933 individu/m², jenis tree fauna berkisar antara 2,333-8,533 individu/1,5 m³, dan jenis infauna berkisar antara 1,333-8,333 individu/m³. Indeks keanekaragaman jenis epifauna berkisar antara 0,377-1,375 termasuk kriteria rendah-sedang, sedangkan jenis treefauna 0,000 termasuk kriteria rendah, jenis infauna berkisar antara 0,000-0,683 termasuk kriteria rendah. Indeks keseragaman jenis epifauna berkisar antara 0,544-0,873 maka termasuk populasi sedang-tinggi. Jenis tree fauna 0,000 termasuk populasi rendah, jenis infauna berkisar antara 0,000-0,985 termasuk populasi sedang-tinggi. Indeks dominansi jenis epifauna berkisar antara 0,284-0,781 termasuk dominansi rendah-tinggi. Jenis tree fauna 1,000 termasuk dominansi tinggi, jenis infauna berkisar antara 0,510-1,000 termasuk dominansi sedang-tinggi. Faktor lingkungan pada kedua stasiun tergolong cocok untuk kehidupan gastropoda walau mempunyai nilai yang berbeda.

Kata Kunci : Struktur Komunitas, Gastropoda, Mangrove, Kerapatan Berbeda, Gili Genteng

Community Structure of Gastropoda on Mangrove Ecosystem with Different Density in Gili Genteng Island Sumenep District. Imam Mahdi. E-mail: imammahdi115@gmail.com. Dibawah bimbingan Insafitri., ST., M.Sc., PhD and Dr. H. Agus Romadhon., SP., M.Si.

ABSTRACT

Gili Genteng Island is an island which has a very potential resource, one of them is a group of molusca from gastropoda class which has different habitat on mangrove ecosystem with different density and suitable with its community. The community of gastropoda is influenced by the changing of environment factor also brings the different way of life of gastropoda, gastropoda may live in epifauna, tree fauna, and infauna. This study was aimed to know the density of mangrove, the community structure of gastropoda on mangrove ecosystem which has different density and the environment factor in mangrove ecosystem which support the habitat of gastropoda. In taking the sample was done by using kuadrat transect 10x10 with 2 stations with three spot of data taking in each station. On each transect was done five observations with size 1x1 on every spot of data taking. The time of observation was done on May, 2016 in Gili Genteng Island, Sumenep District. The result of observation shows that the density of thick mangrove is 3667m². The epifauna gastropoda which were found are Rhinoclavis sinensis, Nasarius pullus, Niritia undata, Terebalia sulcata, Crithidea quadrata. The tree fauna gastropoda which was found is Litorina Scabra. The infauna gastropoda which were found are Morula granulata, Rhinoclavis vertagus. The density value of mangrove is between 0,190-1100 m². The density of epifauna gastropoda is between 1067-7933 individu/m², while, the tree fauna is between 2333-8533 individu/1,5m³, and infauna itself is between 1333-8333 individu/m³. Index of plurality of epifauna is between 0,377-1,375 is included in low-moderate criteria, while, the tree fauna 0,000 is included in low criteria, the infauna is between 0,000-0,683 included in low criteria. The index of similarity on epifauna is between 0,544-0,873. It is included in moderate-high population. The tree fauna 0,000 was included in low population, the infauna is between 0,000-0,985 is included in moderate-high. The index of dominance of epifauna is between 0,284-0,781 was included in low-high dominance. The tree fauna was included in high dominance, the infauna is between 0,510-1,000 is included in moderate-high dominance. The environment factor in both of stations is suitable to gastropoda's life although has different value.

Key words: Community Structure, Gastropoda, Mangrove, Different Density, Gili Genteng