

Muhammad Alvian Nur Faizi NPM. 18.03.4.1.1.00134. Kelimpahan Gastropoda Dan Kerapatan Mangrove Di Pesisir Kabupaten Tuban, Jawa Timur. Dibawah Bimbingan, **Dr. Maulinna Kusumo Wardhani, S.Kel., M.Si.**

ABSTRAK

Wilayah pesisir Kabupaten Tuban terletak di jalur pantai utara Pulau Jawa yang memiliki potensi sumber daya alam berupa ekosistem mangrove. Ekosistem mangrove menjadi tempat sumber makanan, habitat biota laut, salah satunya yaitu Gastropoda. Gastropoda memiliki pergerakan yang relatif lambat dan relatif menetap. Tujuan penelitian mengenai kualitas perairan, kerapatan jenis mangrove, identifikasi jenis gastropoda, kelimpahan jenis dan relatif gastropoda, indeks terdiri dari keanekaragaman, keseragaman, dominansi gastropoda. Penelitian dilakukan pada bulan Juli – Agustus 2023. Metode penelitian adalah survei dengan teknik pengambilan sampel purposive sampling pada 2 stasiun berbeda, pengambilan data kerapatan mangrove menggunakan metode transek garis dengan ukuran 10x10m, dan pengambilan data gastropoda menggunakan plot transek 1x1 meter didalam transek mangrove. Stasiun I berada di kawasan mangrove Tambakboyo Kabupaten Tuban berdekatan dengan industri dan stasiun II berada di kawasan mangrove Jenuh Kabupaten Tuban berdekatan dengan pemukiman. Hasil penelitian kualitas perairan yaitu suhu berkisar 28,3-29,8°C, pH berkisar 7-7,5, salinitas berkisar 5-20‰, dan DO berkisar 5-5,6. Kerapatan jenis mangrove *Avicennia marina* pada stasiun I sebesar 2667 ind/ha termasuk dalam kategori baik, sedangkan jenis mangrove *Rhizophora apiculata* pada stasiun II sebesar 1033 ind/ha termasuk dalam kategori sedang. Spesies gastropoda yang ditemukan pada penelitian ini yaitu *Pirenella cingulata* dan *Cerithium lutosum*, *Turritella duplicata*, *Natica vitellus*, *Ellobium aurisjudae*, *Phasianella solida*, *Cerithidea quadrata* dan *Cerithium lutosum*. Kelimpahan jenis tertinggi terdapat pada transek 2 stasiun II yaitu spesies *Natica vitellus* sebesar 4,2 Ind/m². Kelimpahan relatif tertinggi pada Stasiun I yaitu spesies *Pirenella cingulata* sebesar 62,93% dan stasiun II yaitu *Natica vitellus* sebesar 40,67%.

Kata kunci: *Pesisir Kabupaten Tuban, Kualitas Perairan, Kerapatan Mangrove, Kelimpahan Gastropoda*

Muhammad Alvian Nur Faizi NPM. 18.03.4.1.1.00134. *Abundance of Gastropods and Mangrove Density on the Coast of Tuban Regency, East Java.* Under the guidance of, **Dr. Maulinna Kusumo Wardhani, S.Kel., M.Si.**

ABSTRACT

The coastal area of Tuban Regency is located on the north coast of Java Island which has natural resource potential in the form of a mangrove ecosystem. The mangrove ecosystem is a source of food and a habitat for marine biota, one of which is gastropods. Gastropods have relatively slow movements and are relatively sedentary. The research objectives are regarding water quality, density of mangrove Spesies, identification of gastropod Spesies, Spesies and relative abundance of gastropods, indices consisting of diversity, uniformity and dominance of gastropods. The research was conducted in July - August 2023. The research method was a survey using a purposive sampling technique at 2 different stations, collecting mangrove density data using the line transect method with a size of 10x10m, and collecting gastropod data using a 1x1 meter transect plot within the mangrove transect. Station I is in the Tambakboyo mangrove area, Tuban Regency, close to industry and station II is in the Jenuh mangrove area, Tuban Regency, close to residential areas. The results of research on water quality are temperature ranging from 28.3-29.8°C, pH ranging from 7-7.5, salinity ranging from 5-20‰, and DO ranging from 5-5.6. Density of mangrove Spesies *Avicennia marina* at station I amounting to 2667 ind/ha is included in the good category, while the mangrove type *Rhizophora apiculata* at station II of 1033 ind/ha, it is included in the medium category. The gastropod Spesies found in this study are *Pirenella cingulata* and *Cerithium lutosum*, *Turritella duplicata*, *Natica vitellus*, *Ellobium aurisjudae*, *Phasianella solida*, *Cerithidea quadrata* and *Cerithium lutosum*. The highest Spesies abundance was found on transect 2 station II, namely Spesies *Natica vitellus* of 4.2 Ind/m². The highest relative abundance at Station I is Spesies *Pirenella cingulata* amounted to 62.93% and station II, namely *Natica vitellus* amounting to 40.67%.

Keywords: Coastal Tuban Regency, Water Quality, Mangrove Density, Gastropod Abundance