



Intisari

Penelitian ini bertujuan untuk mengetahui keanekaragaman jenis dan kelimpahan bulu babi (Echinoidea) yang hidup di zona intertidal Pantai Drini Kabupaten Gunungkidul. Penelitian dilakukan selama tiga bulan dari bulan Januari hingga Maret 2018. Pengamatan di lapangan dilakukan pada saat surut terendah. Metode yang digunakan dalam penelitian yaitu metode transek kuadrat. Lokasi kajian dibagi menjadi tiga stasiun, yaitu stasiun 1 dengan substrat pasir, stasiun 2 dengan substrat karang berongga dan stasiun 3 dengan substrat karang mati. Setiap kuadrat plot dilakukan pengamatan mengenai keanekaragaman dan kelimpahan Echinoidea serta pengukuran kualitas air seperti salinitas, suhu dan pH. Data yang diperoleh dianalisis secara deskriptif berupa tabel dan gambar. Analisis hasil pengamatan meliputi kelimpahan, indeks keanekaragaman, indeks dominansi, indeks nilai penting dan pola distribusi masing-masing spesies anggota Kelas Echinoidea. Jenis Echinoidea yang ditemukan selama penelitian yaitu *Echinometra* sp., *Echinometra mathei*, *Heterocentrotus trigonarius*, *Stomopneustes variolaris* dan *Colobocentrotus atratus*. Kelimpahan total Echinoidea di zona intertidal Pantai Drini sebesar 39,61 individu/m² dengan nilai indeks keanekaragaman jenis 0,58, dan indeks dominansi 1,74. Pola distribusi *Echinometra* sp. yaitu mengelompok sedangkan *Echinometra mathei*, *Heterocentrotus trigonarius* dan *Stomopneustes variolaris* teratur. Keanekaragaman Jenis Echinoidea di zona intertidal Pantai Drini tergolong rendah. Kelimpahan Echinoidea tertinggi terdapat di stasiun 3. *Echinometra* sp. merupakan spesies yang dominan di zona intertidal Pantai Drini.

Kata kunci : Echinoidea, keanekaragaman, kelimpahan, Pantai Drini, zona intertidal



Abstract

This research aims to determine the diversity and abundance of sea urchin (Echinoid) from the intertidal zone of the Drini Beach of Gunungkidul regency. The study was conducted for three months from January to March 2018. Field observations were conducted during the lowest tide. The method used in this research was the transect quadrat method. The study sites were divided into three stations, station 1 with sand substrate, station 2 with mixture between sand and dead coral substrate, and station 3 with dead coral substrate. Each quadrat plot was performed to observe the diversity, abundance and environment factor of Echinoidea such as salinity, temperature, and pH. The data were analyzed descriptively in graph and tables. Analyze of data include the abundance, diversity index, dominance index, important value index and distribution pattern of each species of Echinoidea. The types of Echinoidea found during the study were *Echinometra* sp., *Echinometra mathei*, *Heterocentrotus trigonarius*, *Stomopneustes variolaris* and *Colobocentrotus atratus*. The total abundance of Echinoidea in the intertidal zone of Drini Beach was 39.61 individuals / m² with the diversity index of species was 0,58 and the dominance index was 1,74. Distribution patterns of *Echinometra* sp. is clumped while *Echinometra mathei*, *Heterocentrotus trigonarius* and *Stomopneustes variolaris* are regular. Diversity of Echinoidea in the intertidal zone of Drini Beach is low. The highest abundance of Echinoidea is found in station 3. *Echinometra* sp. is the dominant species in the intertidal zone of Drini Beach.

Keywords : abundance, diversity, Drini Beach, Echinoid, intertidal zone