

Intisari

Penelitian ini bertujuan untuk mengetahui keanekaragaman jenis dan kelimpahan bulu babi dari kelas Echinoidea yang hidup di zona intertidal pada pesisir Pantai Sepanjang Kabupaten Gunungkidul. Penelitian dilakukan selama empat bulan dari bulan Januari hingga April 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 yang terletak paling dekat dengan bibir pantai, stasiun 2 terletak diantara stasiun 1 dengan stasiun 3 dan stasiun 3 yang terletak paling jauh dari bibir pantai. Setiap kuadrat plot dilakukan pengamatan mengenai jenis dan jumlah Echinoidea serta pengukuran kualitas air yang terdiri dari salinitas, suhu dan pH. Data yang diperoleh dianalisis secara deskriptif berupa tabel dan gambar. Parameter 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*, dan *Stomopneustes variolaris*. Kelimpahan total Echinoidea di zona intertidal Pantai Sepanjang sebesar 29,74 individu/m² dengan nilai indeks keanekaragaman jenis 0,95 dan indeks dominansi 0,51. Keanekaragaman Jenis Echinoidea di zona intertidal Pantai Sepanjang tergolong rendah dan indeks dominansi tergolong sedang. Pola distribusi *Echinometra* sp. yaitu mengelompok sedangkan *Echinometra mathei*, *Heterocentrotus trigonarius* dan *Stomopneustes variolaris* teratur. Kelimpahan Echinoidea tertinggi terdapat di stasiun 3. *Echinometra* sp. merupakan spesies yang dominan di zona intertidal Pantai Sepanjang.

Kata kunci : echinoidea, intertidal, keanekaragaman, kelimpahan, pantai sepanjang

Abstract

The objective of this research was to determine the diversity and abundance of sea urchin from the Class of Echinoidea that live at the intertidal zone of Sepanjang coastal, Gunungkidul. This study was conducted from January to April 2018. Field observations were performed during the lowest tide. Sampling method in this research was the transect quadrat. The study sites were divided into three stations. Station 1 was located closest to the shoreline, station 2 was located between station 1 with station 3 and station 3 was located farthest from the shoreline. Each quadrat plot was performed to observe species and the numbers of Echinoidea along with the measurements of water quality such as salinity, temperature, and pH. The data were analyzed descriptively in the form of graphs and tables. The parameter used in this research includes the abundances, diversity index, dominance index, importance value index and the distribution patterns for each Echinoidea species. The types of Echinoidea that were found during the study were *Echinometra* sp., *Echinometra mathei*, *Heterocentrotus trigonarius*, and *Stomopneustes variolaris*. The total abundance of Echinoidea at the intertidal zone of Sepanjang beach was 29,74 individuals/m² with the diversity index of species was 0,95 and the dominance index was 0,51. Diversity of Echinoidea in the intertidal zone of Sepanjang coastal is classified as low category and the dominance index is classified as medium category. Distribution patterns of *Echinometra* sp. was clumped while *Echinometra mathei*, *Heterocentrotus trigonarius* and *Stomopneustes variolaris* were regular. The highest abundance of Echinoidea was found in station 3. *Echinometra* sp. was the dominant species in the intertidal zone of Sepanjang beach.

Keywords : abundance, diversity, echinoid, intertidal, sepanjang beach