

RINGKASAN

ROSDIANA. Komposisi dan Kepadatan Mikroplastik di Sedimen Perairan Kampung Bugis, Kota Tanjungpinang. Dibimbing oleh WINNY RETNA MELANI dan TRI APRIADI.

Kampung Bugis terletak di Kecamatan Tanjungpinang Kota, Kota Tanjungpinang Provinsi Kepulauan Riau. Wilayah perairan Kampung Bugis yang dekat dengan pusat kota dan sebagai tempat pemukiman rentan tercemar sampah plastik berukuran mikro. Partikel mikroplastik di perairan mudah terdistribusi secara luas dapat terakumulasi di berbagai jenis sedimen perairan. Sedimen berperan penting sebagai sumber bahan organik, apabila tercemar mikroplastik maka akan mengancam biota laut dan peradaban manusia. Masyarakat Kampung Bugis umumnya masih memanfaatkan sumberdaya perikanan di pesisirnya. Hal tersebut dikhawatirkan terjadi kontaminasi mikroplastik terhadap manusia apabila mengonsumsi tangkapan hasil laut dari perairan Kampung Bugis. Penelitian ini bertujuan mengetahui kepadatan mikroplastik di sedimen dan perbedaan rata-rata kepadatan mikroplastik berdasarkan tipe sedimen di perairan Kampung Bugis. Penelitian ini dilaksanakan pada bulan April-Juli 2022 berlokasi di perairan Kampung Bugis, Kota Tanjungpinang dan di Laboratorium *Marine Biology* Fakultas Ilmu Kelautan dan Perikanan Universitas Maritim Raja Ali Haji. Sampling yang digunakan dalam penelitian ini berjumlah 30 titik menggunakan metode *random sampling*. Analisis data dalam penelitian ini yaitu analisis kepadatan mikroplastik dan analisis perbedaan nilai kepadatan mikroplastik pada jenis sedimen pasir dan pasir berlumpur dengan Uji *one way ANOVA* menggunakan *software* SPSS versi 20. Komposisi mikroplastik di sedimen perairan Kampung Bugis, Kota Tanjungpinang yaitu fragmen, film, fiber, foam, dan pelet. Kepadatan mikroplastik pada sedimen pasir dan pasir berlumpur tertinggi yaitu fragmen. Sedangkan kepadatan mikroplastik terendah yaitu pelet di sedimen pasir berlumpur dan di sedimen pasir. Kepadatan mikroplastik di jenis sedimen berpasir dan pasir berlumpur di perairan Kampung Bugis tidak berbeda nyata.

Kata kunci: Kampung Bugis, Kepadatan Mikroplastik, Sedimen

SUMMARY

ROSDIANA. Composition and Density of Microplastics in the Sediments of the Kampung Bugis's Waters, Tanjungpinang City. Supervised by WINNY RETNA MELANI dan TRI APRIADI.

Kampung Bugis is situated in the district of the town of Tanjungpinang, the town of Tanjungpinang, province of the Kepulauan Riau. The Kampung Bugis water area which is near the city centre and as a residential area is vulnerable to contamination by micro-sized plastic waste. Microplastic particles in water are readily distributed and may accumulate in a variety of aquatic sediments. Sediment are an important source of organic matter, and if contaminated with microplastics, they threaten marine life and human civilization. The inhabitants of Kampung Bugis still generally use the fishery resources of the coastline. It is feared that contamination by microplastic will occur in humans while consuming marine catches in the waters of Kampung Bugis. This study aims to determine the density of microplastics in the sediments and the difference in the average density of microplastics based on the type of sediment in the waters of Kampung Bugis. This research was conducted in April - July 2022 located in the waters of Kampung Bugis, Tanjungpinang City and at the Marine Biology Laboratory, Faculty of Marine and Fishery Sciences, Raja Ali Haji Maritime University. Determine the sampling point using the random method set 30 points at random. Analysis of the data in this research that is analysis of microplastic density and analysis of differences in the value of microplastic density in each type of sediment in muddy sand and sandy with *one way* ANOVA using SPSS version 20 software. The composition of microplastics in sediment in the waters of Kampung Bugis, Tanjungpinang City are fragments, films, fibers, foam, and pellets. The highest density of microplastics was found in the mud sand sediments and in the sand sediments. Whereas the lowest microplastic density is pellets in muddy sand sediments and sandy sediments. Microplastic density in sand and muddy sediment types in the waters of Kampung Bugis was not significantly different.

Keywords: Density of Microplastic, Kampung Bugis, Sediment