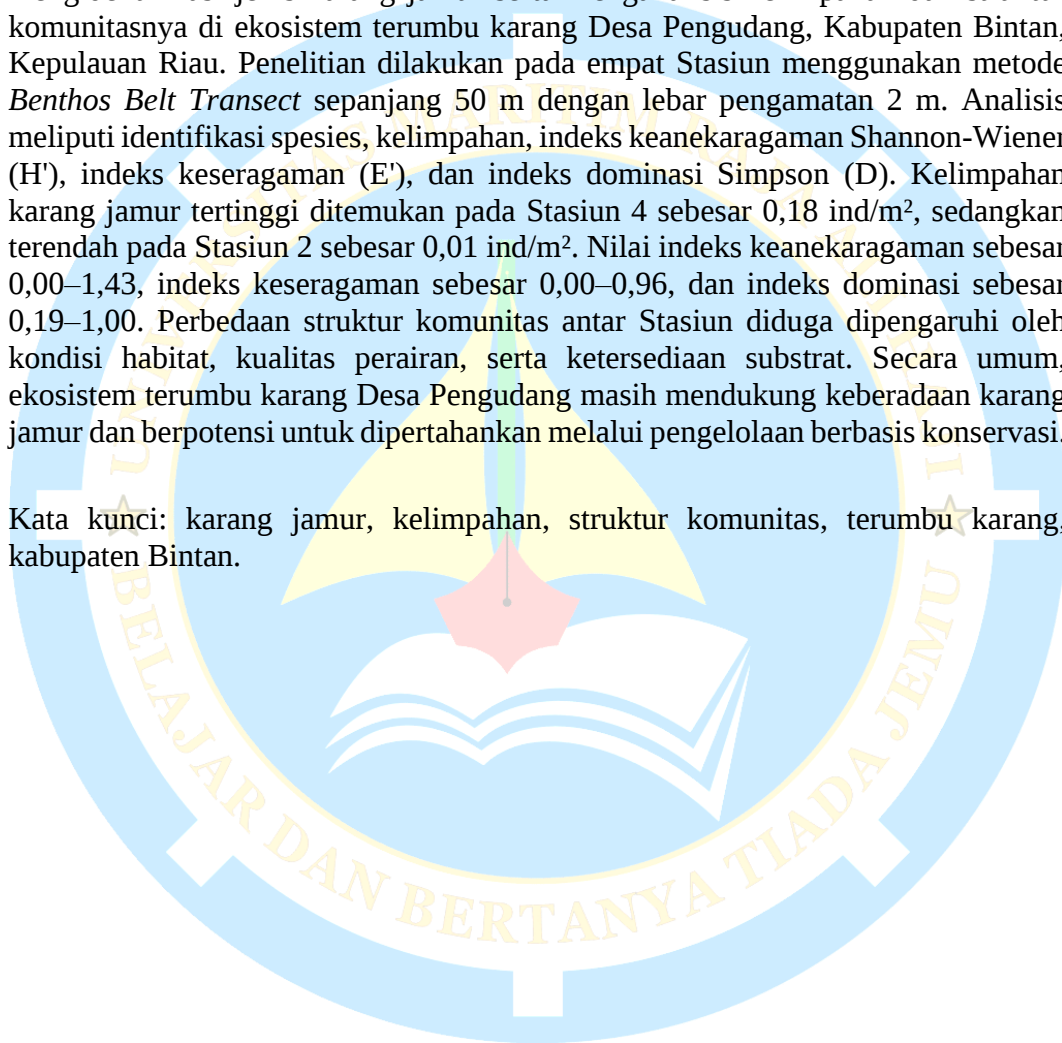


RINGKASAN

SAID RONALDI MUHRAM. Identifikasi Dan Kelimpahan Karang *Mushroom* (Jamur) Di Ekosistem Terumbu Karang Desa Pengudang Kabupaten Bintan. Dibimbing oleh Rika Kurniawan dan Arief Pratomo

Karang jamur (Famili Fungiidae) merupakan kelompok karang keras (Scleractinia) yang berperan penting dalam menjaga keseimbangan ekosistem terumbu karang dan dapat dijadikan sebagai indikator kondisi lingkungan. Penelitian ini bertujuan mengidentifikasi jenis karang jamur serta menganalisis kelimpahan dan struktur komunitasnya di ekosistem terumbu karang Desa Pengudang, Kabupaten Bintan, Kepulauan Riau. Penelitian dilakukan pada empat Stasiun menggunakan metode *Benthos Belt Transect* sepanjang 50 m dengan lebar pengamatan 2 m. Analisis meliputi identifikasi spesies, kelimpahan, indeks keanekaragaman Shannon-Wiener (H'), indeks keseragaman (E'), dan indeks dominasi Simpson (D). Kelimpahan karang jamur tertinggi ditemukan pada Stasiun 4 sebesar 0,18 ind/m², sedangkan terendah pada Stasiun 2 sebesar 0,01 ind/m². Nilai indeks keanekaragaman sebesar 0,00–1,43, indeks keseragaman sebesar 0,00–0,96, dan indeks dominasi sebesar 0,19–1,00. Perbedaan struktur komunitas antar Stasiun diduga dipengaruhi oleh kondisi habitat, kualitas perairan, serta ketersediaan substrat. Secara umum, ekosistem terumbu karang Desa Pengudang masih mendukung keberadaan karang jamur dan berpotensi untuk dipertahankan melalui pengelolaan berbasis konservasi.

Kata kunci: karang jamur, kelimpahan, struktur komunitas, terumbu karang, kabupaten Bintan.



SUMMARY

SAID RONALDI MUHRAM. Identification and Abundance of Mushroom Corals in the Coral Reef Ecosystem of Pengudang Village, Bintan Regency. Supervised by Rika Kurniawan and Arief Pratomo

Mushroom corals (Family Fungiidae) are a group of hard corals (Scleractinia) that play an important role in maintaining the balance of coral reef ecosystems and can serve as indicators of environmental conditions. This study aimed to identify mushroom coral species and analyze their abundance and community structure in the coral reef ecosystem of Pengudang Village, Bintan Regency, Riau Islands. The study was conducted at four stations using the Benthos Belt Transect method with a 50 m transect length and a 2 m observation width. Data analysis included species identification, abundance, the Shannon–Wiener diversity index (H'), evenness index (E'), and Simpson's dominance index (D). The highest mushroom coral abundance was recorded at Station 4 (0.18 ind/m²), while the lowest was found at Station 2 (0.01 ind/m²). The diversity index ranged from 0.00 to 1.43, the evenness index from 0.00 to 0.96, and the dominance index from 0.19 to 1.00. Differences in community structure among stations were likely influenced by habitat conditions, water quality, and substrate availability. Overall, the coral reef ecosystem of Pengudang Village remains suitable for supporting mushroom corals and has strong potential to be maintained through conservation-based management.

Keywords: mushroom corals, abundance, community structure, coral reefs, Bintan Regency.

