

RINGKASAN

WELANTRI VILAN EMOLA (20380018). Struktur Komunitas Asteroidea Dan Echinoidea Di Pesisir Kecamatan Kupang Barat, Kabupaten Kupang. WILSON L. TISERA, S.Pi, M.Si, Ph.D dan ROCKIE R.L. SUPIT, S.Pi. M.Si sebagai Pembimbing I dan II. Program Studi Manajemen Sumberdaya Perairan, Fakultas Perikanan dan Ilmu Kelautan, Universitas Kristen Artha Wacana Kupang.

Asteroidea biasa dikenal dengan sebutan bintang laut dan Echinoidea biasa dikenal dengan sebutan bulu babi termasuk hewan invertebrata dari filum Echinodermata berbentuk simetris radial dan umumnya memiliki lima atau lebih lengan. Tujuan dari penelitian ini yaitu untuk menganalisis perbedaan struktur komunitas Asteroidea dan Echinoidea di pesisir Kecamatan Kupang Barat Kabupaten Kupang terutama Desa Tablolong, Lifuleo dan Bolok. Penelitian ini menggunakan metode deskripsi eksploratif dan teknik pengambilan sampel yang dilakukan menggunakan metode transek kuadran. Asteroidea dan Echinoidea di perairan Desa Tablolong, Bolok, dan Lifuleo terdapat 4 jenis Asteroidea yaitu *Protoreaster nodosus*, *Nordoa tuberculata*, *Echinaster luconicus*, dan *Archaster thypicus*. Selain itu ditemukan 4 jenis Echinoidea yaitu *Tripneustes gratila* (Oranye), *Tripneustes gratila* (Putih), *Diadema setosum* dan *Echinothrix calamaris*. Rata-rata nilai frekuensi relatif tertinggi di perairan Tablolong yaitu 59.44% pada spesies *Protoreaster nodosus*, rata-rata nilai frekuensi relatif di perairan Bolok yaitu 70.55% pada spesies *Protoreaster nodosus*, sedangkan nilai frekuensi relatif di perairan Bolok yaitu 100% pada spesies *Nordoa tuberculata*. Keanekaragaman tertinggi Asteroidea dan Echinoidea pada perairan Bolok. keseragaman Asteroidea tertinggi di perairan Tablolong sedangkan keseragaman Echinoidea tertinggi pada perairan Bolok. Dominansi Asteroidea tertinggi pada perairan Lifuleo dan Dominansi Echinoidea tertinggi pada perairan Bolok. Sedangkan kesamaan pada ketiga lokasi tersebut yaitu 0%.

Kata kunci: Struktur komunitas, Asteroidea, Echinoidea, Perairan, Kupang Barat.

SUMMARY

WELANTRI VILAN EMOLA (20380018). Community Structure of Asteroidea and Echinoidea on the Coast of West Kupang District, Kupang Regency. WILSON L. TISERA, S.Pi, M.Si, Ph.D and ROCKIE R.L. SUPIT, S. Pi. M.Si as Supervisor I and II. Aquatic Resources Management Study Program, Faculty of Fisheries and Marine Sciences, Artha Wacana Christian University Kupang.

Asteroidea, commonly known as sea stars and Echinoidea, commonly known as sea urchins, include invertebrate animals from the phylum Echinodermata, which are radially symmetrical and generally have five or more arms. The aim of this research is to analyze differences in the community structure of Asteroidea and Echinoidea on the coast of West Kupang District, Kupang Regency, especially Tablolong, Lifuleo and Bolok Villages. This research uses an exploratory description method and sampling techniques are carried out using the quadrant transect method. Asteroidea and Echinoidea in the waters of Tablolong, Bolok and Lifuleo villages there are 4 types of Asteroidea, namely *Protoreaster nodosus*, *Nordoa tuberculata*, *Echinaster luconicus* and *Archaster thypicus*. Apart from that, 4 types of Echinoidea were found, namely *Tripneustes gratila* (Orange), *Tripneustes gratila* (White), *Diadema setosum* and *Echinothrix calamaris*. The highest average relative frequency value in Tablolong waters is 59.44% for the *Protoreaster nodosus* species, the average relative frequency value in Bolok waters is 70.55% for the *Protoreaster nodosus* species, while the relative frequency value in Bolok waters is 100% for the *Nordoa tuberculata* species. The highest diversity of Asteroidea and Echinoidea in Bolok waters. Asteroidea uniformity was highest in Tablolong waters, while Echinoidea uniformity was highest in Bolok waters. Asteroidea dominance is highest in Lifuleo waters and Echinoidea dominance is highest in Bolok waters. Meanwhile, the similarity in the three locations is 0%.

Key words: Community structure, Asteroidea, Echinoidea, Water, West Kupang.

