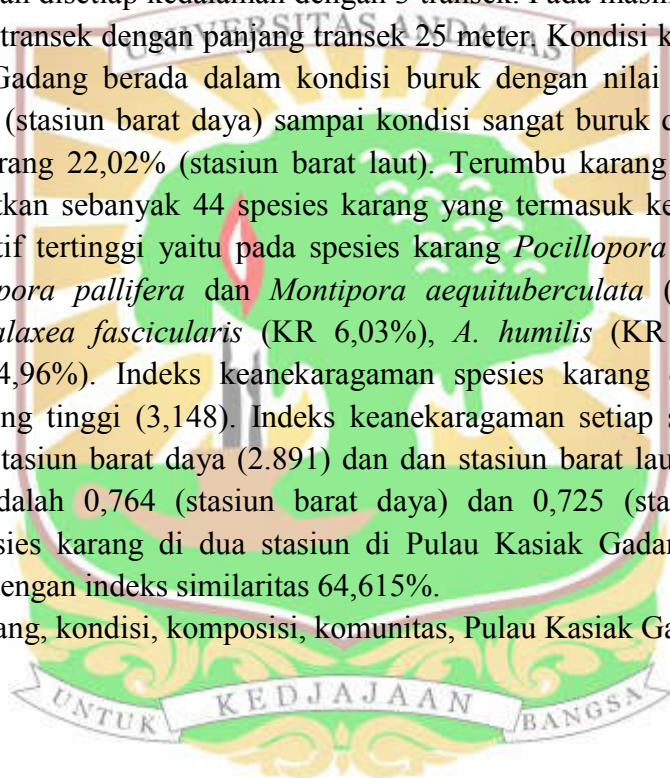


ABSTRAK

Penelitian tentang kondisi, komposisi dan struktur komunitas karang (scleractinia) di ekosistem terumbu karang Pulau Kasiak Gadang Lubuk Begalung Kota Padang telah dilakukan dari Maret-April 2014. Penelitian ini bertujuan untuk mengetahui kondisi, komposisi dan struktur komunitas karang (scleractinia) di ekosistem terumbu karang Pulau Kasiak Gadang Lubuk Begalung Kota Padang. Metode penelitian adalah metode survey dengan teknik "Line Intercept Transect" dan "Purposive Sampling" pada dua stasiun: stasiun barat daya dan stasiun barat laut pada kedalaman 3-5 meter dan 6-8 meter dan disetiap kedalaman dengan 3 transek. Pada masing-masing stasiun memiliki enam transek dengan panjang transek 25 meter. Kondisi karang di perairan Pulau Kasiak Gadang berada dalam kondisi buruk dengan nilai rata-rata tutupan karang 26,47% (stasiun barat daya) sampai kondisi sangat buruk dengan nilai rata-rata tutupan karang 22,02% (stasiun barat laut). Terumbu karang di Pulau Kasiak Gadang didapatkan sebanyak 44 spesies karang yang termasuk ke dalam 8 famili. Kepadatan relatif tertinggi yaitu pada spesies karang *Pocillopora damicornis* (KR 18,91%), *Acropora pallifera* dan *Montipora aequituberculata* (KR 6,86%), *M. venosa* dan *Galaxea fascicularis* (KR 6,03%), *A. humilis* (KR 5,91%) dan *M. informis* (KR 4,96%). Indeks keanekaragaman spesies karang di Pulau Kasiak Gadang tergolong tinggi (3,148). Indeks keanekaragaman setiap stasiun tergolong moderat yaitu stasiun barat daya (2,891) dan stasiun barat laut (2,743). Indeks equitabilities adalah 0,764 (stasiun barat daya) dan 0,725 (stasiun barat laut). Komposisi spesies karang di dua stasiun di Pulau Kasiak Gadang berada dalam kondisi stabil, dengan indeks similaritas 64,615%.

Kata kunci: karang, kondisi, komposisi, komunitas, Pulau Kasiak Gadang



ABSTRACT

A study on the condition, composition and community structure of coral (scleractinia) in coral reef ecosystem at Kasiak Gadang Island Lubuk Begalung of Padang City have been done from March - April 2014. The purpose of the study are to know the condition, composition and community structure of coral (scleractinia) in coral reef ecosystem at Kasiak Gadang Island Lubuk Begalung of Padang City. The research was conducted by "Line Intercept Transect" and "Purposive Sampling" in two stasions: south-west station and north-west station have 3-5 meters and 6-8 meters in depth and with 3 transects in each depth. Each stations have six transects and each transect have 25 meters in length. Condition of reefs in Pulau Kasiak Gadang included the category poor with percent coverage 26,47 % (south-west station) until very poor condition with percent coverage 22,02 % (north-west station). There are 44 coral species belong to 8 family at Kasiak Gadang Island. The highest relative density of coral species are *Pocillopora damicornis* (18,91%), *Acropora pallifera* and *Montipora aequituberculata* (6,86%), *M. venosa* and *Galaxea fascicularis* (6,03%), *A. Humilis* (5,91%) and *M. informis* (4,96%). Diversity index of coral species at Kasiak Gadang Island is high (3,148). Respectively diversity index of each station is moderate which are south-west station (2,891) and and north-west station (2,743). The equitabilities index are 0,764 (south-west station) and 0.725 (north-west station). The composition of coral species at two stasion at Kasiak Gadang Island were in stable condition, and a similarity index is 64,615%.

Keywords: coral, condition, composition, community, Kasiak Gadang Island

