ABSTRACT

THE ECTOPARASITE DIVERSITY FROM ASIAN SEABASS *Lates calcarifer* (Bloch, 1790) CULTURED AT BANDAR LAMPUNG COASTAL WATER

BY

NAUFAL SEPTA RIZKY

Asian seabass (*Lates calcarifer*) is mariculture commodity that need to increase its production. Challenge that faced this culture was parasite infection that related with natural waters condition. The research was conducted to evaluate diversity of ectoparasite on Asian seabass cultured Bandar Lampung coastal water. Research method was random sampling within two floating net cages, three times sampling of 30 individuals was taken. Ectoparasite examination and water quality were measured in Laboratory of Healthy Environment of Sea Farming Development Centre of Lampung. Results founded four ectoparasite *i.e., Neobenedenia melleni, Neobenedenia girellae, Pseudorhabdosynocus hirundineus,* and *Trichodina* sp. Intensity and prevalence of ectoparasite with highest within two locations was *Pseudorhabdosynocus hirundineus* with 9.5 individual, 80% at first location and 8.3 individual and 86% at second location. Diversity index (SDI) at first location were 0.22 and 0.02 on second location. Uniformity index (E) were 0.32 and 0.07, respectively at first and second location. Dominance index (c) at first location was 0.78 and second location was 0.98. Water qualities results showed nitrite, phosphate, ammonia, and total organic matters were high varied and out from water quality requirements for mariculture.

Key words: Asian seabass, diversity, ectoparasite, floating net cage, water quality

ABSTRAK

DIVERSITAS EKTOPARASIT PADA KAKAP PUTIH *Lates calcarifer* (Bloch,1790) BUDI DAYA DI PERAIRAN PESISIR KOTA BANDAR LAMPUNG

OLEH

NAUFAL SEPTA RIZKY

Kakap putih (*Lates calcarifer*) merupakan komoditas marikultur yang produksinya perlu ditingkatkan. Tantangan budi dayanya adalah infeksi parasit yang erat hubungannya dengan kondisi perairan. Penelitian dilakukan untuk mengevaluasi diversitas ektoparasit pada kakap putih budi daya di perairan Kota Bandar Lampung. Metode penelitian pengambilan sampel secara acak di dua lokasi karamba jaring apung. Pengambilan sampel dilakukan sebanyak tiga kali dengan jumlah ikan sebanyak 30 ekor. Pengamatan ektoparasit dan pengukuran kualitas air dilakukan di Laboratorium Kesehatan Lingkungan Balai Besar Perikanan Budidaya Laut Lampung. Hasil penelitian menemukan empat spesies ektoparasit yaitu *Neobenedenia melleni, Neobenedenia girellae, Pseudorhabdosynocus hirundineus,* dan *Trichodina* sp. Ektoparasit dengan nilai intensitas dan prevalensi tertinggi dikedua lokasi yaitu *Pseudorhabdosynocus hirundineus* dengan nilai 9,5 ind/ekor dan 80% pada lokasi satu serta 8,3 ind/ekor dan 86% pada lokasi dua. Indeks keanekaragaman (SDI) pada lokasi satu 0,22 dan lokasi dua 0,02. Indeks keseragaman (e) pada lokasi satu 0,32 dan lokasi dua 0,07. Indeks dominansi (c) pada lokasi satu 0,78 dan lokasi dua 0,98. Parameter kualitas air terutama nitrit, fosfat, amonia dan bahan organik total sangat bervariasi dan melebihi baku mutu yang menjadi persyaratan budi daya laut.

Kata kunci: Diversitas, ektoparasit, kakap putih, keramba jaring apung, kualitas air