

ABSTRAK

Ismawati Ridwan Npm. 05171711011. **Pengaruh C/N Rasio Terhadap Kualitas Air dan Volume Flok Pada Budidaya Udang vaname (*Litopenaeus vannamei*): Yang Di Pelihara Dalam Wadah Terkontrol.** Program Studi Budidaya Perairan Fakultas Perikanan dan Kelautan Universitas Khairun Ternate. Dibawah bimbingan Dr. Gamal M Samadan S.Pi.,M.Si dan Fatma Muchdar S.Pi.,M.Si.

Udang vaname (*Litopenaeus vannamei*) merupakan sala satu komoditas budidaya yang memiliki nilai ekonomis tinggi relatif mudah dibudidayakan karena tahan terhadap serangan penyakit. Teknologi bioflok merupakan salah satu teknologi yang tepat pemeliharaan udang vaname di wadah terkontrol, Tujuan penelitian adalah untuk mengetahui karbon dan nitrogen terhadap pertumbuhan udang vaname (*L vannamei*). Penelitian menggunakan Rancangan Acak Lengkap (RAL) terdiri dari empat perlakuan dan tiga kali ulangan. Adapun perlakuan yang digunakan penambahan karbon yang berbeda-beda yaitu Tanpa pemberian bioflok (kontrol), C/N rasio 10, C/N rasio 12, C/N rasio 15. Penambahan molase dalam media pemeliharaan yang menghasilkan pertumbuhan mutlak sebesar 1,27 gram/ per minggu, laju pertumbuhan spesifik 3,49 gram/ per hari, kelangsungan hidup 1,98%. Amoniak 1,67 mg/l, Nitrat 15,17 mg/l, Nitrit 0,56 mg/l, parameter kualitas air seperti, suhu pada semua benda berkisar antara 25,3-25,4 C, pH berkisar antara 7-8, oksigen terlarut berkisar antara 27,7-26,6 mg/l, salinitas 12,0-11,9 ppt. Disimpulkan bahwa penambahan C-organik molase menurunkan konsentrasi (NH₃), (NO₂), (NO₃), tetapi akan berpengaruh terhadap kelangsungan hidup (SR%), pertumbuhan mutlak dan volume flok.

Kata kunci. C/N rasio, udang vaname, flok.

ABSTRACT

Ismawati Ridwan Npm. 05171711011. Effect of C/N Ratio on Water Quality and Floc Volume in Vannamei Shrimp (*Litopenaeus vannamei*) Cultivation: Raised in Controlled Containers. Aquaculture Study Program, Faculty of Fisheries and Marine Affairs, University of Khairun Ternate. Under the guidance of Dr. Gamal M Samadan S.Pi.,M.Si and Fatma Muchdar S.Pi.,M.Si .

Vannamei shrimp (*Litopenaeus vannamei*) is one of the cultivated commodities that has high economic value and is relatively easy to cultivate because it is resistant to disease. Biofloc technology is one of the appropriate technologies for rearing vaname shrimp in controlled containers. The aim of the study was to determine carbon and nitrogen on the growth of white vannamei shrimp (*L vannamei*). The study used a completely randomized design (CRD) consisting of four treatments and three replications. The treatments used different carbon additions, namely without the provision of biofloc (control), C/N ratio 10, C/N ratio 12, C/N ratio 15. The addition of molasses in the maintenance medium resulted in absolute growth of 1.27 grams. / per week, specific growth rate 3.49 grams/ per day, survival 1.98%. Ammonia 1.67 mg/l, Nitrate 15.17 mg/l, Nitrite 0.56 mg/l, water quality parameters such as, the temperature of all objects ranges from 25.3-25.4 C, pH ranges from 7-8 , dissolved oxygen ranged from 27.7-26.6 mg/l, salinity 12.0-11.9 ppt. It was concluded that the addition of C-organic molasses decreased the concentration of (NH₃), (NO₂), (NO₃), but it would affect the survival (SR%), absolute growth and floc volume.

Keywords. C/N ratio, vaname shrimp, flock .