

Tiara Islami Ananda Dipa NIM 190341100026. Perbedaan Kadar *Total Organic Matter* (TOM) Dan Kualitas Air Pada Tambak Udang Vaname (*Litopenaeus Vannamei*) Berdasarkan Metode Pemberian Pakan. Pembimbing Dr. Maulinna Kusumo Wardhani. S.Kel., M.Si

ABSTRAK

Budidaya udang vaname berperan penting dalam upaya memenuhi kebutuhan pasar lokal dan global. Budidaya udang vaname sering mengalami gagal panen akibat manajemen pakan yang kurang optimal dan memicu tingginya Bahan organik atau Total Organic Matter (TOM) di perairan budidaya. Penelitian sederhana ini dilakukan untuk mengetahui perbedaan kadar Total Organic Matter (TOM) dan kualitas air di tambak udang berdasarkan metode pemberian pakan. Pengambilan data dilakukan di tambak udang pada kolam yang menggunakan metode pemberian pakan secara manual dan otomatis menggunakan (automatic feeder). Kadar TOM diperoleh dengan analisis laboratorium menggunakan metode titrasi larutan $KMnO_4$ dan kualitas air dilakukan pengukuran secara in situ. Kadar TOM pada kolam B dengan metode pemberian pakan secara manual memiliki rentan nilai 86,50 – 115,20 mg/L, sedangkan pada kolam C dengan pemberian pakan menggunakan automatic feeder memiliki rentan nilai 74,00 – 119,00 mg/L. Kadar TOM masih aman sesuai baku mutu menurut SNI 8037.1 (2014), dan Laboratorium Instansi : < 90 mg/L. Hasil uji statistik menunjukkan bahwa dengan metode pemberian pakan berdampak terhadap adanya perbedaan kadar TOM dan kualitas air pada tambak udang vaname, kualitas air menggunakan automatic feeder memiliki nilai lebih rendah pada nilai DO, pH dan salinitas sedangkan suhu memiliki nilai yang lebih tinggi.

Kata Kunci : Metode Pemberian Pakan, Total Organic Matter (TOM), Kualitas Air

Tiara Islami Ananda Dipa NIM 190341100026. Differences in Total Organic Matter (TOM) levels and water quality in vaname shrimp ponds (*Litopenaeus vannamei*) based on feed feeding methods. Supervisor Dr. Maulinna Kusumo Wardhani. S.Kel., M.Si

ABSTRACT

Vaname shrimp farming plays an important role in efforts to meet the needs of local and global markets. Vaname shrimp farming often experiences crop failure due to suboptimal feed management and triggers high organic matter or Total Organic Matter (TOM) in aquaculture waters. This simple study was conducted to determine the difference in Total Organic Matter (TOM) levels and water quality in shrimp ponds based on feeding methods. Data collection was carried out in shrimp ponds in ponds using the method of manually and automatically using (automatic feeder). TOM levels were obtained by laboratory analysis using the KMNO₄ solution titration method and water quality was measured in situ. TOM levels in pool B with manual feeding methods have a vulnerable value of 86.50 – 115.20 mg / L, while in pool C with feeding using automatic feeders have a vulnerable value of 74.00 – 119.00 mg / L. TOM levels are still safe according to quality standards according to SNI 8037.1 (2014), and Agency Laboratories: < 90 mg / L. Statistical test results show that the feed brian method has an impact on differences in TOM levels and water quality in vaname shrimp ponds, Water quality using automatic feeders has lower DO, pH and salinity values while temperature has higher values.

Keywords: Feeding Method, Total Organic Matter (TOM), Water Quality