



ICMACES



International Conference on Marine and Coastal Engineering and Sciences 2019

August 23 - 24, 2019
Emersia Hotel Lampung, Indonesia

Sponsor by :



Conference Agenda of ICMACES, August 23nd 2019

Time	Activity
08.00 08.30	Registration
08.30 09.15	Opening Session welcome remarks Warsono, Ph.D (LPPM University of Lampung) Prof. Dr. Ir. Hasriadi Mat Akin, M.P. (Rector University of Lampung) MC: Haifa FawwazAtmaya
09.15 09.45	Prof. Ryohei Kada, Ph.D. (Sijonawate Gakuen University, Japan) <i>Social Empowering for Natural Disaster Ris</i>
09.45 10.15	Prof. Warsito, S.Si., DEA, Ph.D. (Education Attache at Embassy of RI in Paris) <i>Early Warning System for Natural Disaster</i>
10.15 10.45	Prof. Dr. Normawaty Mohammad Noor, M.Sc (International Islamic University of Malaysia) <i>Harmful Algal Blooms: A Malaysian Scenario</i>
10.45 11.15	Prof. Dr. Rokhmin Dahuri, M.Sc. (Indonesian Aquaculture Society) <i>Sustainable Mariculture</i>
11.15 13.30	LUNCH BREAK (Jumat Prayer)
13.30 14.00	Prof. Dr. Takahiro Sayama (Kyoto University, Japan) <i>Less on to Learn to Hydrology Flood Mapping of Batang Hari of Riverbasin</i>
14.00 14.30	Prof. Dr. Mustofa Usman, M.A. (Dean of Graduate School University of Lampung) <i>Applied Statistical Analysis for Marine and oastal Studies</i>

Plenary Session

Time	Title	Presenter
14.30 15.10 Moderator Dr. Melya Riniarti	Artificial Light Colours Could Increase Growth and Valuable Fatty Acid of <i>Nitzschia</i> sp. (Bacillariophyceae)	Diah Noerdjito and Diah Noerdjito
	Utilization of By catch From Fishing and Fish Processing Waste as Formulated Feed Raw Materials in Silver Pompano (<i>Trachinotus blochii lacepede</i> 1801) Gow Out	Yuwana Puja, Tugiyono, Suci Antoro, dan Indra Gumay Febryano
	Protein Test on Powder <i>Nannochloropsis</i> sp. Lampung Mangrove Centre (LMC) Isolate Based on Differences of Dry Temperature	Tugiyono, Agus Setiawan, Emy Rusyani, Destria Nuansa
	Isolation and Characterization of Cellulase Producing <i>Bacillus</i> sp. From Hanura Mangrove Forests	Sumardi Sumardi, Christina Nugroho Ekowati, Salman Farisi and Cahya Intan Listiyorini
	Selection and Characterization of Mannanolytic <i>Bacillus</i> sp. From Hanura Mangrove Forests	Dwi Eka Rahmawati, Christina Nugroho Ekowati, Salman Farisi and Sumardi Sumardi
	Population Of Beton Shell (<i>Donax Faba</i>) At Coastal Area Of Citereup Banten, Indonesia	Tati Suryati Syamsudin and Indira Utami
	Tidal Current Pattern in The Surrounding	Ahmad Bayhaqi,

PROTEIN TEST ON POWDER *Nannochloropsis* sp. LAMPUNG MANGROVE CENTER (LMC) ISOLATE BASED ON DIFFERENCES OF DRY TEMPERATURE

Tugiyono, Agus Setiawan, Emi Rusyani, Destria Nuansa S

ABSTRACT

Nannochloropsis sp. One type of phytoplankton that is very abundant in the waters ecosystem of the Mangrove Lampung Center (LMC), so that *Nannochloropsis* sp. has the potential as a natural feed in aquaculture. Availability of natural feed stocks continuously is often a problem in aquaculture, so the availability of feed stock in powder form is the answer to these problems. This study aims to make *Nannochloropsis* sp. powder isolated from nutritious LMC aquatic ecosystems based on its fat content. The making of powder began with a semi-mass scale *Nannochloropsis* sp. culture using a combination of fertilizer namely 40 ppm Urea farming, 20 ppm ZA and 5 ppm TSP, then 175 ppm NaOH solution was given to the culture media at the optimum growth to make a paste and finally the paste is dried to become powder. The treatment in this study was the drying temperature which included a temperature of -50°C, 20°C, 30°C, 50°C and 70 °C each treatment was repeated 4 times. Analysis of powder quality based on protein content analyzed by proximate analysis. The data obtained were analyzed using the Analysis of Variance (ANOVA) method, if the results were obtained that were significantly different, it would be carried out with the Least-Significant Difference test (LSD) level $\alpha = 0.05$. The results showed that the highest protein content produced at a drying temperature of -50°C was $8.89 \pm 0.19\%$ and 70°C was $8.07 \pm .69\%$, and the protein content of the two treatments was significantly different from the protein produced at drying at 20 °C, 30°C, and 50°C ($p < 0.05$). While the drying content of -50°C and 70°C the protein content produced was not significantly different ($p = 0.250$).

Keywords: *Powder Nannochloropsis* sp., Protein content, combination of fertilizer and drying, temperature

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Drs. Tugiyono, M.Si., Ph.D.

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