

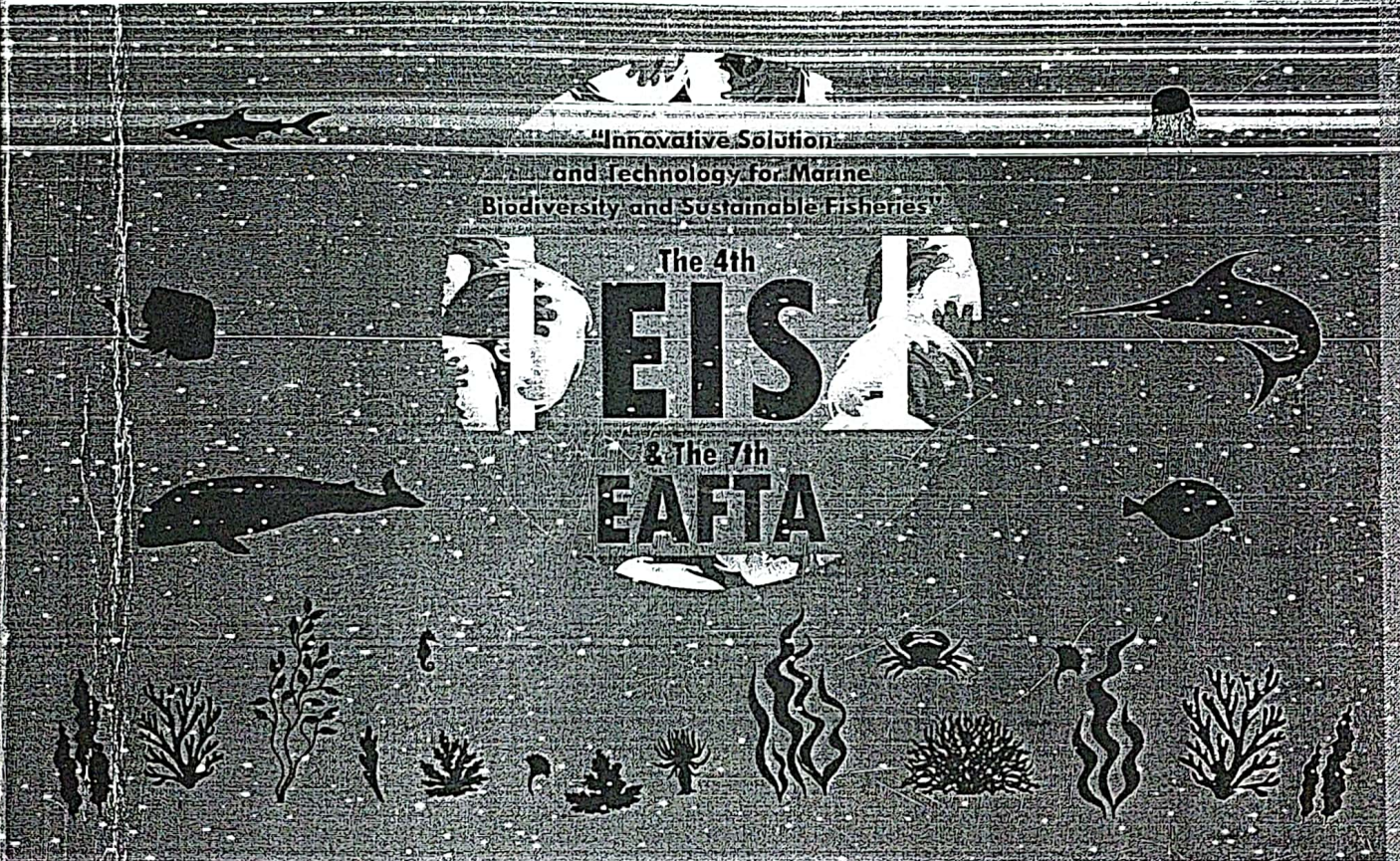


Enhancing Marine
Biodiversity Research
in Indonesia

**PROGRAM BOOK:
Joint symposium**

The 4th EMBRIO International Symposium (EIS) &
The 7th International Symposium of East Asia Fisheries
and Technologist Association (EAFTA)

IPB International Convention Center & Favehotel, Bogor
Indonesia, 5-6 August 2019



Sponsored by:



Session 4: (16:04 – 17:06) Moderator: Dr. Asadatun Abdullah

| No | Code | Presenter | Title |
|----|---------------|-----------------------|---|
| 1 | O-UT-MB-S4-01 | Dewita | Utilization of papain enzymes in the making of hydrolysed protein of malong fish (<i>Congresox talabon</i>) |
| 2 | O-UT-MB-S4-02 | Rizsa Mustika Pertiwi | Characteristic of cathepsin enzyme from yellow pike (<i>Congresox talabon</i>) fish |
| 3 | O-UT-MB-S4-03 | Yisha Xie | Development of soft-textured fish meat-based paste-like product |
| 4 | O-UT-MB-S4-04 | Untung Trimio Laksono | Characteristic of tongkol (<i>Euthynnus</i> sp.) surimi with optimization pH washing |
| 5 | O-UT-MB-S4-05 | Indra Suharman | Fermented water hyacinth (<i>Eichhornia crassipes</i>) leaf protein as soybean protein substitution in river carp (<i>Leptobarbus hoevenii</i>) fingerling diet |

Oral Presentation: Meeting Room C, IPB International Convention Center, 5 August 2019
PIC: Dr. Ichsan A. Fauzi

Session 1: (13:15 – 14:00) Moderator: Dr. Neviaty P. Zamany

| No | Code | Presenter | Title |
|----|---------------|--------------------------------|---|
| 1 | O-UN-MC-S1-01 | Tanza Syahidati Maulida Rahmah | Microplastics polymer in Karapyak Beach and Barat Beach, Pangandaran, Indonesia |
| 2 | O-UN-MC-S1-02 | Vincentia Priscilla | Comparison of microplastic abundance in aquaculture ponds of milkfish <i>Chanos chanos</i> (Forsskal, 1775) at Muara Kamal and Marunda, Jakarta Bay |
| 3 | O-UN-MC-S1-03 | Fitria Rahmayanti | Analysis of sources and composition of marine debris in Western and Southern Aceh, Indonesia |
| 4 | O-UN-MC-S1-04 | Suci Rahayu Ningtiyas | Effect of bait on done folding traps on catches in sea waters of Tuban Regency |

Session 2: (14:00 – 15:02) Moderator: Dr. Hsiu-Chin Lin

| No | Code | Presenter | Title |
|----|---------------|-------------------------|--|
| 1 | O-UN-MC-S2-01 | Nahla Alfiatunnisa | Application of cube and tube folding trap in sea waters of Tuban Regency |
| 2 | O-UN-MC-S2-02 | Roza Yusfiandayani | Trial of catching portable FADs at Hindia Ocean Waters |
| 3 | O-UN-MC-S2-03 | Shidiq Lanang Prasetiyo | Development strategy of superior small pelagic fishing unit at Tawang Coastal Fishing Port, Kendal Regency |
| 4 | O-UN-MC-S2-04 | Fitri Agustriani | Accumulation of heavy metal (Pb) in caught fish by using millenium nett (PLY) at Banyuasin Coastal Water, South Sumatera |
| 5 | O-UN-MC-S2-05 | Wike Ayu Eka Putri | Polycyclic Aromatic Hydrocarbons (PAH) in the Banyuasin River Estuary South Sumatera |
| 6 | O-UN-MC-S2-06 | Beginer Subhan | Coral recruitment on concrete blocks at Gosong Pramuka, Kepulauan Seribu, Jakarta |

Session 3: (15:02 – 16:04)

| No | Code | Presenter | Title |
|----|---------------|---------------------------|--|
| 1 | O-UN-MC-S3-01 | Rory Anthony Hutagalung | Survival rate improvement of land hermit crabs in artificial habitat through multispecies and niche heterogeneity approach |
| 2 | O-UN-MC-S3-02 | Ludi Parwadani Aji | The condition of seagrass and its biota association mollusca on Biak Island, Papua |
| 3 | O-UN-MC-S3-03 | Udhi E. Hernawan | Predicting future distributions of a colonizer seagrass in the Indo-Malay Archipelago under projected climate change |
| 4 | O-UN-MC-S3-04 | Duranta Diandria Kembaren | Biological aspects of <i>Leptobrama pectoralis</i> Ramsay and Ogilby 1887 (<i>Leptobramidae</i>) in Merauke waters, Papua, Indonesia |
| 5 | O-UN-MC-S3-05 | Sulistiyono Lie | Measurement of macroalgae chlorophyll content in Sundak Beach, Gunung Kidul, Yogyakarta by Spectrophotometry Method |

O-UT-MB-S4-04

Characteristic of tongkol (*Euthynnus* sp.) surimi with optimization pH washing

U T Laksono^{1,2*}, Suprihatin³, T Nurhayati⁴, M Romli³

¹ Department of Agricultural Industry Technology, IPB University (Bogor Agricultural University)

² Study Program of Teknologi Pengolahan Hasil Perikanan, Jurusan Ilmu Kelautan dan Perikanan, Politeknik Negeri Pontianak

³ Department of Agricultural Industry Technology, IPB University (Bogor Agricultural University)

⁴ Department of Aquatic Products Technology, IPB University (Bogor Agricultural University)

*E-mail: uun.laksono@yahoo.co.id

pH modification is one of the effective methods to increase protein yield in surimi processing. Alkaline pH (alkaline) is very suitable to minimize the loss of water soluble proteins lost during surimi washing with conventional methods. Aim of this study was to obtain optimal surimi protein rendering and determine the characteristics of the gel produced. The results showed the optimum pH for washing on tongkol surimi was pH 8 with 2 times washing ($p > 0.1$). The proportion of sarcoplasmic and myofibrillar proteins in tongkol meat was 25.77% and 45.40%. PH modification affects the amount of tenderness, hardness, and chewiness and has no effect on the parameters of adhesiveness, fracturability and cohesiveness. The modified characteristics surimi of pH 8 and washing twice were the yield of 64.75% (± 1.06), hardness of 300 g (± 19.2), Gumminess 202.90 g (± 21.24) and chewiness of 98.97 mJ (± 10.22).

Keywords: chewiness, pH, protein, surimi, yield

O-UT-MB-S4-05

Fermented water hyacinth (*Eichhornia crassipes*) leaf protein as soybean protein substitution in river carp (*Leptobarbus hoevenii*) fingerling diet

I Suharman^{1*}, A Adelina¹, F A Rahmad¹, N E Fajri²

¹ Department of Aquaculture, Faculty of Fisheries and Marine Science, Universitas Riau, Pekanbaru, Indonesia

² Department of Aquatic Resources Management, Faculty of Fisheries and Marine Science, Universitas Riau, Pekanbaru, Indonesia

*E-mail: indra70s@yahoo.com

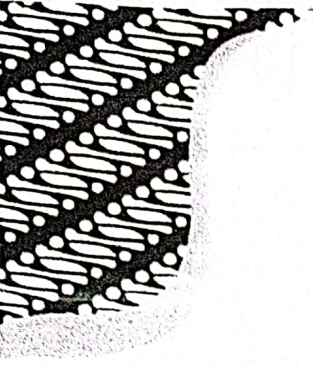
With increasing price of soybean meal (SBM), great efforts are made in seeking alternative protein for fish feed. Therefore, a 56 days feeding trial was conducted to investigate the effects of fermented water hyacinth leaf (FWHL) protein in diets on the growth performance and feed utilization of river carp, *Leptobarbus hoevenii*, (initial mean weight 7.91 ± 0.56 g). 300 fingerlings of *L. hoevenii* randomly divided into 15 net cages installed in earthen pond were fed five different experimental 30% isonitrogenous diets (D), a control (0% FWHL) meal and four diets containing different substitution levels of FWHL meal (30%, 40%, 50% and 60%, respectively) in place of SBM as protein source. The results showed that with increasing substitution levels of FWHL meal; weight gain (WG), specific growth rate (SGR), and feed efficiency (FE) decreased gradually. The results also clearly showed that fish fed with diet 30% FWHL meal substitution level perform the best results among four different experimental diets. Based on the results of present study, 30% substitution level of FWHL meal as SBM substitution is recommended in a practical diet of *L. hoevenii* fingerling for good growth performance.

Keywords: diets, fermented water hyacinth, growth, *Leptobarbus hoevenii*, soybean meal



Enhancing Marine
Biodiversity Research
in Indonesia

4th EMBRIO
INTERNATIONAL
SYMPOSIUM



CERTIFICATE

is awarded to

Indra Suharman

as an Oral Presenter

in the 4th EMBRIO International Symposium (EIS)

& the 7th International Symposium of East Asia Fisheries and Technologists Association (EAFTA)
“Innovative Solution and Technology for Marine Biodiversity and Sustainable Fisheries”
at IPB International Convention Center & Favehotel, Bogor - Indonesia
August, 5-6th 2019

Dean of Faculty of Fisheries
and Marine Sciences, IPB

Director of EMBRIO
& EAFTA Representative

Head of Committee
EMBRIO International Symposium

Dr. Luky Adrianto

Dr. Mala Nurilmala

Dr. Asadatun Abdullah



Dipindai dengan CamScanner