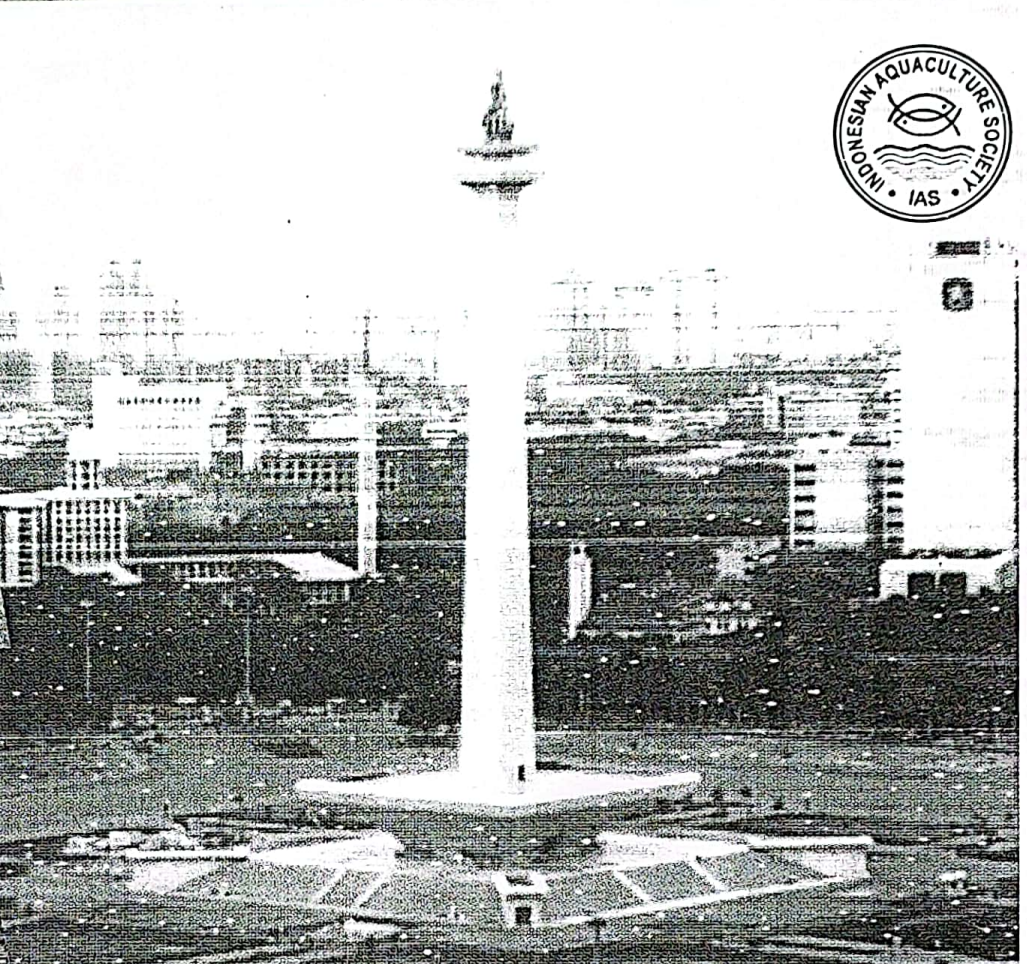
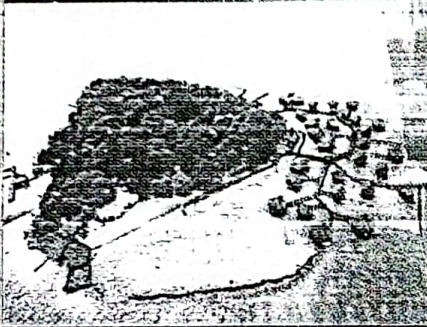
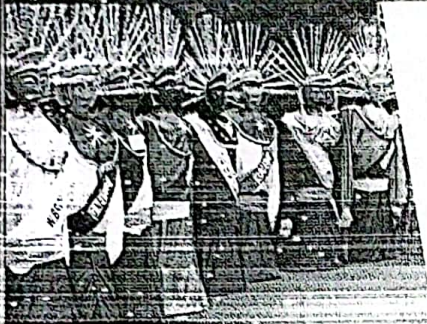




ICAI 2015

THE 5th INTERNATIONAL CONFERENCE
OF AQUACULTURE INDONESIA

JAKARTA, OCTOBER 29-31, 2015



Sustainable Aquaculture For The Future

Hosted By

INDONESIAN AQUACULTURE SOCIETY

www.aquaculture-mai.org

Sponsors



- 10:10 **Sapto P. Putro**, Rahmansyah, Suminto, Asmi Citra Malina, Lidemans, Agung Sudaryono
APPLICATION OF POLYCULTURE USING STRATIFIED DOUBLE NET CAGE: A STUDY CASE AT AWERANGE BAY, BARRU, SOUTH SULAWESI, INDONESIA (20 mins)

FEED MANAGEMENT & NUTRITION

Saturday, October 31 08:00-10:10 Jasmine 2 Room

- 08:00 **Session Chair 1**
Ricky Gimin
- 08:10 **Orapint Jintasataporn**, Terry Ward, Srinoy Chumkam, Oratai Jintasataporn
THE EFFICACY OF MINERAL- AMINO ACID COMPLEX BLEND (ZN,MN,CU) AND SE-AMINO ACID COMPLEX FOR WHITE SHRIMP, *Litopenaeus vannamei*, DIETS (20 mins)
- 08:30 **Nik Nurhusna Nik Sin**, Rossita Shapawi
SUPPLEMENTATION OF EGG CUSTARD REDUCED REARING PERIOD AND IMPROVED SURVIVAL OF FRESHWATER PRAWN, *Macrobrachium rosenbergii* LARVAE (20 mins)
- 08:50 **Ibrahim E.H. Belal**, F.A.H. AlShehhi
EVALUATION OF MORINGA *Moringa oleifera* SEED AS AN ALTERNATIVE PROTEIN SOURCE FOR NILE TILAPIA OREOCHROMIS NILOTICUS FINGERLINGS COMMERCIAL DIET (20 mins)
- 09:10 **Indra Suharman**, Adelina, Nur Elfajri, Nirwan Fadli Pulungan
USE OF WATER HYACINTH (*Eichhornia crassipes*) MEAL AS A SUBSTITUTE FOR SOYBEAN MEAL IN DIETS OF RIVER CARP *Leptobarbus hoevenii* (BLEEKER, 1851) FINGERLINGS (20 mins)
- 09:30 **Johanes Pucher**, N.N. Tuan, E. Nikolaevskaya, Ulfert Focken
UTILISATION OF EARTHWORM MEAL AS FISHMEAL REPLACEMENT IN AQUAFEEDS FOR OMNIVOROUS FISH (20 mins)
- 09:50 **Kumar Katya**, Giva Kuppusamy, George Hall Max Herriman
UNDERUTILIZED CROPS AND INSECTS MEAL IN AQUAFEED: PROSPECTS AND PERSPECTIVES (20 mins)
- 10:20 **Coffe Break (20 mins; 10:20-10:40)**

USE OF WATER HYACINTH (*Eichhornia crassipes*) MEAL AS A SUBSTITUTE FOR SOYBEAN MEAL IN DIETS OF RIVER CARP (*Leptobarbus hoevenii* BLEEKER, 1851) FINGERLINGS

Indra Suharman^{*}, Adelina, Nur Elfajri, Nirwan Fadli Pulungan

Faculty of Fisheries and Marine Science, University of Riau
Kampus Bina Widya Km. 12,5 Simpangbaru
Pekanbaru-Riau 28293, INDONESIA
indra70s@yahoo.com

The potential of water hyacinth meal (WHM) protein as soybean meal (SBM) alternative in diets (D) for river carp, *Leptobarbus hoevenii*, (initial average weight 6.7 ± 0.4 g) was evaluated. Fifteen fish were stocked into each of 15 net cages installed in earthen pond. Fish were organized in triplicate groups and received isonitrogenous (30% crude protein) experimental diets with 0% (D1), 10% (D2), 20% (D3), 30% (D4) and 40% (D5) of SBM replaced by with WHM. At the end of the 56-day feeding period, specific growth rate (SGR), feed efficiency (FE) and protein retention (PR) showed no significant difference between fish fed D5 and D1 (control diet), but significantly different with fish fed D2, D3 and D4 (Table 1). The highest SGR (1.03%/day), FE (22.53%) and PR (38.87%) were achieved in fish fed 40% WHM inclusion (D5). The results of this study suggest that water hyacinth meal protein can replace up to 40% of the soybean meal protein in practical diet for river carp, *Leptobarbus hoevenii*, fingerlings without any adverse performance.

Tabel 1. Growth response and feed utilization of river carp fed diets containing various replacement levels of protein of soybean meal by water hyacinth meal

Parameters ¹	% Replacement of dietary protein of soybean meal by water hyacinth meal				
	0 (D1)	10 (D2)	20 (D3)	30 (D4)	40 (D5)
SGR (%/day)	1.00 ^b	0.83 ^a	0.93 ^a	0.75 ^a	1.03 ^b
FE (%)	21.95 ^b	16.85 ^a	20.05 ^a	16.15 ^a	22.53 ^b
PR (%)	32.68 ^c	28.20 ^b	27.79 ^b	22.89 ^a	38.87 ^d
SR (%)	100	98.33	98.33	100	100

¹ SGR, specific growth rate; FE, feed efficiency; PR, rotein retention; SR, survival rate

Keywords: Diets; Growth; *Leptobarbus hoevenii*; Soybean meal; Water hyacinth



INDONESIAN AQUACULTURE 2015

International Conference of Aquaculture Indonesia
October 29-31, 2015 Jakarta, Indonesia



Certificate of Participation

Indra Suharman

University of Riau
INDONESIA

Prof. Rokhmin Dahuri
Steering Committee Chair



INDONESIAN AQUACULTURE 2015

International Conference of Aquaculture Indonesia
October 29-31, 2015 Jakarta, Indonesia



Certificate of Participation

Indra Suharman
Adelina, Nur Elfajri, Nirwan Fadli Pulungan

For Oral Presentation of

USE OF WATER HYACINTH (*Eichhornia crassipes*) MEAL AS A SUBSTITUTE FOR
SOYBEAN MEAL IN DIETS OF RIVER CARP (*Leptobarbus hoevenii* BLEEKER, 1851) FINGERLINGS

Prof. Rokhmin Dahuri
Steering Committee Chair