

ISSN 0215-0883

INDONESIAN AQUACULTURE JOURNAL

Volume 9 Number 1, June 2014



Ind. Aqua. Journal	Vol. 9	No. 1	Page 01 - 88	Jakarta 2014	ISSN 0215-0883
-----------------------	--------	-------	-----------------	-----------------	-------------------

Accreditation Number: 389/AU/P2MI-LIPI/04/2012

INDONESIAN AQUACULTURE JOURNAL

Volume 9 Number 1, June 2014

The *Indonesian Aquaculture Journal* publishes research results on aquaculture, coastal and freshwater fisheries, and the environment. This journal publishes twice a year and funded by Center for Aquaculture Research and Development, Agency for Marine and Fisheries Research and Development.

Managing Director:

Tri Heru Prihadi

Editor in Chief:

Ketut Sugama (Aquaculture, *Center for Aquaculture Research and Development, INA*)

Associate Editors:

Anang Hari Kristanto (Aquaculture, *Research and Development Institute for Freshwater Aquaculture, INA*)

Akhmad Mustafa (Aquatic environment, *Research and Development Institute for Coastal Aquaculture, INA*)

I Nyoman Adiasmara Giri (Fish Nutrition, *Research and Development Institute for Mariculture, INA*)

Mike Rimmer (Marine Finfish Aquaculture, *James Cook University, Queensland, AU*)

Clive Jones (Crustasea Aquaculture Development, *Department of Agriculture, Fisheries and forestry, Northern Fisheries Centre, Queensland, AU*)

Alimuddin (Biotechnology, *Faculty of Fisheries and Marine Science, Bogor Agricultural University, INA*)

Guest Editors:

Michael A. Rice (Shellfish Aquaculture and Water Quality, *University of Rhode Island, USA*)

Haryanti (Genetic and Biotechnology, *Research and Development Institute for Mariculture, INA*)

I Nyoman Radiarta (Aquatic Environment, *Center for Aquaculture Research and Development, INA*)

Imron (Genetic, *Research Institute for Fish Breeding, INA*)

Munti Yuhana (Fish Pathology, *Faculty of Fisheries and Marine Science, Bogor Agricultural University, INA*)

Production Editors:

Purnomo Indra Basuki

Suprpti

Diana Yulianti

Manuscript Readers:

Raden Roro Sri Pudji Sinarni Dewi

Lila Gardenia

Manuscript may be send to the publisher:

Indonesian Aquaculture Journal

Jl. Ragunan 20, Pasar Minggu, Jakarta Selatan 12540, INDONESIA

Phone: (021) 7805052, Fax.: (021) 7815101

E-mail: publikasi.p4b@gmail.com

Accreditation Number: 389/AU/P2MI-LIPI/04/2012

PREFACE

It is our pleasure to introduce a new issue (June 2014, Volume 9, Number 1) of the *Indonesian Aquaculture Journal* to the interested audience. This issue embraces a wide range of contemporary research topics related to aquaculture.

The edition contains primary articles, i.e. reproductive aspects of cultured humpback grouper, gonad rematuration on *Pangasionodon hypophthalmus* female through injection of pregnant mare serum gonadotropin and human chorionic gonadotropin, grow-out of abalone in floating cages fed different proportions of seaweed and with reduction of stocking density, analysis of immune responses on transgenic tiger shrimp against pathogenic bacterium *Vibrio harveyi*, detection of *Macrobrachium rosenbergii* Nodavirus (MrNV) and extra small virus (XSV) diseases on giant freshwater prawn, development of primary cell culture from tail epidermal tissue of koi carp, the correlation between wet and dry weight of intestine and body without intestine of sea cucumber, isolation and growth of dinoflagellate and diatom in controlled conditions, management of sustainable seaweed aquaculture in the context of climate change mitigation, and spatial distribution of some chemical characteristics of an acid sulfate soil-affected brackishwater ponds in the coastal area of Luwu Regency South Sulawesi Province.

The editorial staffs would like to acknowledge all of those who participated in the publication of *Indonesian Aquaculture Journal*. We hope that readers may find journal beneficial to enhance discourse and knowledge. Finally, comments and suggestions are welcome for further improvement.

Editor

INDONESIAN AQUACULTURE JOURNAL

Volume 9 Number 1, June 2014

CONTENTS

PREFACE	iii
CONTENTS	v
Reproductive aspects of cultured humpback grouper (<i>Cromileptes altivelis</i>) for supporting seed production By: Sari Budi Moria Sembiring, John Harianto Hutapea, Ahmad Muzaki, Ida Komang Wardana, Ni Wayan Widya Astuti, and Retno Andamari	1–8
Gonad rematuration on <i>Pangasionodon hypophthalmus</i> female through injection of pregnant mare serum gonadotropin and human chorionic gonadotropin By: Evi Tahapari, Jadmiko Darmawan, Raden Roro Sri Pudji Sinarni Dewi, Wahyu Pamungkas, and Huria Marnis	9–14
Grow-out of abalone <i>Haliotis squamata</i> in floating cages fed different proportions of seaweed and with reduction of stocking density By: I Nyoman Adiasmara Giri, Tatam Sutarmat, Himawan Tirta Yudha, Ibnu Rusdi, and Bambang Susanto	15–21
Analysis of immune responses on transgenic tiger shrimp (<i>Penaeus monodon</i>) against pathogenic bacterium <i>Vibrio harveyi</i> By: Andi Parenrengi, Bunga Rante Tampangallo, and Andi Tenriulo	23–32
Detection of <i>Macrobrachium rosenbergii</i> Nodavirus (MrNV) and extra small virus (XSV) diseases on giant freshwater prawn, <i>Macrobrachium rosenbergii</i> at Samas, Yogyakarta By: Isti Koesharyani and Lila Gardenia	33–40
Development of primary cell culture from tail epidermal tissue of koi carp (<i>Cyprinus carpio koi</i>) By: Lila Gardenia and Isti Koesharyani	41–50
The correlation between wet and dry weight of intestine and body without intestine of sea cucumber (<i>Holothuria scabra</i>) By: Lisa Fajar Indriana and Andreas Kunzmann	51–54
Isolation and growth of dinoflagellate, <i>Scrippsiella</i> sp. and diatom, <i>Melosira</i> cf. <i>moniliformis</i> in controlled conditions By: Wa Iba	55–63
Management of sustainable seaweed (<i>Kappaphycus alvarezii</i>) aquaculture in the context of climate change mitigation By: Erlania and I Nyoman Radiarta	65–72

Spatial distribution of some chemical characteristics of an acid sulfate soil-affected brackishwater ponds in the coastal area of Luwu Regency South Sulawesi Province By: Erna Ratnawati and Akhmad Mustafa	73—88
---	-------