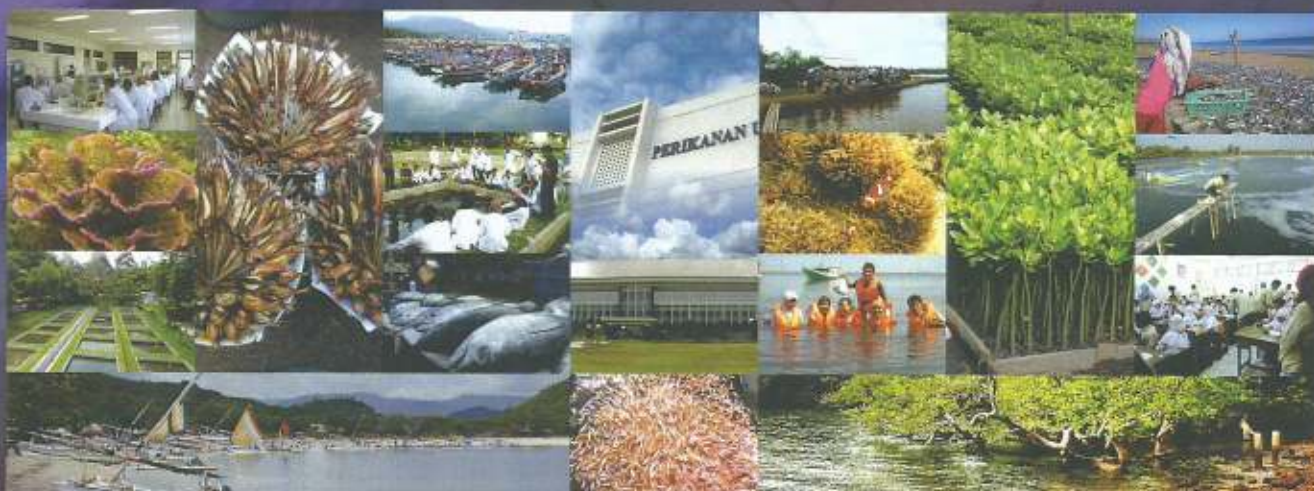




ISMFR



Guidebook

THE 2nd INTERNATIONAL SYMPOSIUM
ON MARINE AND FISHERIES RESEARCH
(ISMFR 2017)

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PROGRAM BOOK

The 2nd International Symposium on Marine and Fisheries Research

July 24-25th, 2017

PREFACE

On behalf of the Organizing Committee, it is our pleasure to welcome all participants to The 2nd International Symposium on Marine and Fisheries Research (ISMFR 2017). Although this is the second time, we have planned a remarkable scientific program that covers different aspects of marine and fisheries science. This international symposium was held as the response of the rapid increase of scientific interest in our annual national seminar of fisheries and marine research (SEMNASKAN), which this year was held for the 14th. This international symposium is our effort to broaden the scope of the forum in order to provide the knowledge exchange between national and international expert in the field of fisheries and marine science. The theme of ISMFR 2017 is "Tropical Marine and Fisheries Resources in A Changing Environment". This issue was chosen as the consequences of a rapid growing of fisheries product demand to fulfill fish for food and for other uses that required the strong production capacity as well as ensuring sustainability of marine environment in the era of global climate change.

ISMFR 2017 aims to bring together academic scientists, researchers, government institutions, private parties and stakeholders to share and exchange progress information, experiences and research results in all aspects of marine and fisheries science. It also provides a gathering forum for interdisciplinary discussion about innovation, trends, and challenges to increase awareness of sustainable marine and fisheries production and consumption. Scientific networks are expected as an output of this symposium.

We would like to express our gratitude to the people that have made this symposium possible. Our thanks go out to the local organizing committee who has volunteered so much of their time to develop the program. We would also like to acknowledge our invited speakers for their support and tremendous effort to share their expertise in this symposium. Special thanks are also due to the Faculty of Agriculture UGM and BPP UGM for giving us facilities and support. Lastly, we wish to cordially thank all participants for your contributions to the symposium.

Yogyakarta is long known as the beautiful city offering unique experiences to all travelers of its traditional culture, attractive nature scenery, authentic culinary, and warm-heartedness of its people. We hope you will have a great ISMFR 2017 and enjoying Yogyakarta.

Indun Dewi Puspita, Ph.D.
Chairperson, Organizing Committee

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ORAL PRESENTATION SESSION (24-25 July 2017)

Marine Science (O1), Orchid Room

Time	Presenter	Title
24 July 2017		
14.15 – 15.30 (O1.1)	Lady A.S. Wijayanti [132]	Coral Transplantation of <i>Pocillopora verrucosa</i> and <i>Stylophora pistillata</i> on The Coastal Area of Serangan, Denpasar Bali
	Hasan Eldin Adimu [199]	Condition of Coral Reefs in Kaledupa Island Conservation Area Wakatobi National Park
	Diah P. Wijayanti [169]	DNA Barcode of <i>Acropora Hyacinthus</i> of Karimunjawa Archipelago
	Widiastuti Karim [179]	Pigmented Response in Massive Porites: A Signal of Poor Water Quality
Moderator	Djumanto	
15.45 – 17.00 (O1.2)	Charlothia I. Tupan [107]	Population Dynamics of Seagrass <i>Thalassia hemprichii</i> in Suli Waters, Ambon Island
	Dedy Kurnianto [227]	Fish Diversity in Seagrass Beds at Dullah Laut Island, Tual
	Amron [170]	Sound Productivity and Characteristics of <i>Mystus Guleo</i> : Comparison Between Individual and Agregation
	Andi Alamsyah Rivai [115]	Analysis of Habitat Characteristics of Small Pelagic Fish Based on Generalized Additive Models in Kepulauan Seribu Waters
Moderator	Diah Permata Wijayanti	
25 July 2017		
13.00 – 14.15 (O1.3)	Femy M. Sahami [171]	Analisis of Mangrove Vegetation in The Coastal Area of Tomini Gulf District of Paguyaman Pantai ✓
	Prulley A. Uneputty [144]	Pattern of Relative Growth in Cockle <i>Anadara antiquata</i> in Ihamahu Coastal Waters, Central Maluku
	Ferinta Rahmayanti [159]	Biodiversity of Gastropod at Sombu Beach, Wangi-Wangi Island, Wakatobi, Indonesia
	Siti Nurleily Marlina [187]	Zooplankton Communities at Cenderawasih Bay National Park, West Papua: Can Their Composition be Used to Predict Whale Shark <i>Rhincodon typus</i> Smith, 1828 Appearance Frequencies?
	Retno Hartati [126]	Similarity Microalgal Epiphyte Composition on Seagrass of <i>Enhalus Acoroides</i> and <i>Thalassia hemprichii</i> from Different Waters
Moderator	Richard Gavina Castor	
14.15 – 15.30 (O1.4)	Richard Gavina Castor [207]	Floristic Composition, Structure and Diversity of Mangrove Forests in Siruma, Camarines Sur, Philippines
	Widianingsih [157]	Characteristic Sediment and Water Column Chlorophyll-a in the Seacucumber <i>Paracaudina</i> sp. Habitat on the Kenjeran Water, Surabaya
	Muh Yusuf [139]	Coastal Dynamic, Nitrate (NO ₃ -) Phosphate (PO ₄ -) and Phytoplankton Abundance at Morodemak North Java Sea Indonesia
	Dafit Ariyanto [225]	Decomposition Rate of Mangrove Leaves in Banggi Coastal Rembang District Central Java Indonesia
Moderator	Djumanto	

Social Economic (O2), Magnolia Room

Time	Presenter	Title
24 July 2017		
14.15 – 15.30 (O2.1)	Agnes Zafe Faustino [209]	Local Government Units Initiatives on Coastal Resource Management in Adjacent Municipalities in Camarines Sur, Philippines
	Arie Budiarto [164]	Analyzing Community-Based Mangrove Governance in Indonesia: Study Case in Kulon Progo Regency
	Zulfa N.A. Nissa' [176]	Livelihood Analysis of Floating Net Cages Fish Farmers at Sendang Village District of Wonogiri Regency of Wonogiri
	Boby Muslimin [185]	Lebak Lebung as Community-Based Inland Fishery Resource Management Model - Case Study in Pangkalan Lampam Sub-District of Ogan Komering Ilir Regency
	Dimas H. Nugraha [220]	Livelihoods and Vulnerability Analysis of Tambaklorok Setlemen in Dealing with Bahari Kampung Program
Moderator	Suadi	
15.45 – 17.00 (O2.2)	Atikah Nurhayati [123]	Techno-Socio-Economic Analysis of Losses in Capture Fisheries (Case Study in Pelabuhan Ratu Sukabumi District, West Java Province)
	Aziz Salam [141]	Technological Adaptation in Traditional Fisheries: Way to Survive
	Didik Purwadi [168]	Analysis of Eco-Innovation With Triple Helix Approach: Case-Study of Biofloc Catfish Farming in Yogyakarta
	Widitya P. Fitriyanny [137]	Selection of Sustainable Seaweed and Grouper Aquaculture Development Strategy : A Case Of Pulau Panjang, Serang Regency Banten Province
	Maria R.A. Campos [109]	Bioeconomic Modelling of Fishery Conservation Policies in The Philippines
Moderator	Agnes Zafe Faustino	
25 July 2017		
13.00 – 14.15 (O2.3)	Dian Wijayanto [117]	Bioeconomic of Profit Maximization of Red Tilapia (<i>Oreochromis</i> sp.) Culture Use Polynomial Growth Model
	Tito A. Perdana [148]	Economic Valuation of Mangrove Ecosystem
	Faizal Rachman [215]	Economic Impact Studies on Development Project of New Yogyakarta International Airport to Aquaculture in Kulonprogo Coastal Area
	Maria R.A. Campos [100]	Economics of Protected Sea Cucumber Ranching in The Philippines
Moderator	Hasrizal Bin Shaari	
14.15 – 15.30 (O2.4)	Maya Shafira [212]	Prevention Policies of the Fishery Crime (Study Against the Prevention Effort of Illegal Fishing in the Lampung Province)
	W. Rathnayake [113]	Compensating the Hunger of Local Fishermen: A Strategy for Conserving Marine Turtles
	Hasan Eldin Adimu [194]	Review Management Policy of Marine Conservation Area Wakatobi National Park
	Ika Kusumawati [108]	Public Perspective Towards Marine Litter in West Aceh City
	Edi Susilo [184]	Traditional Fishermen in the Shadows of "Development Jargon" and State Dynamics on World Fishery System Relations
Moderator	Suadi	

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Gorontalo State University, Indonesia

The aim of the study is to determine the structure and diversity of mangrove vegetation at coastal areas of Tomini Gulf in the District of Paguyaman; Boalemo Regency covering Apitalao, Lito, and Limbatihu villages where two stations were placed in each village. Data was collected in July-August 2015 by using line transect method with quadrat transect of terraced plot (Nested Quadrat). Data analysis included the composition, density, IVI (Important Value Index), equality, diversity, distribution patterns, and zonation. Number of mangrove species found in the study site is 11 species with the highest for seedling being *Rhizophora apiculata*, while for sapling and trunk categories it is *Ceriops decandra*. Based on the species density analysis it can be said that the mangroves fall in the category of very dense and in good conditions. *Rhizophora apiculata* has the highest IVI value for category: seedling and *Ceriops decandra* for category: is sapling and trunk. High degrees of similarity are exhibited between Stations Limbatihu I and Limbatihu II. Diversity levels of seedling and sapling categories are average, while for trunk category, it is high (Stations Lito I and Limbatihu II) and it is average for other stations. Zonings that were formed varied between stations, but areas generally overlooking the sea are *Rhizophora* zones and the ones near the land are *Ceriops* zones.

Keywords: mangrove, structure of vegetation, IVI, diversity, zonation

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Maluku province is known as Thousand Island archipelago which having high biodiversity of marine and fisheries resources. *Anadara antiquata* is economically important species for fisheries and belong to phylum mollusc. Local community in Ihamahu village often collect this species during low tide for their daily needs due to its delicious meat. As a consequence, it could be predicted that in the next future, the number of this species will decrease. Recently, it is difficult to collect this species in large size. Therefore, the objective of the present study was to analysed relative growth pattern of *Anadara antiquata* including size distribution and growth pattern based on shell dimensions. The study was carried out from December 2016 to February 2017 in Ihamahu coastal waters. Data were collected by using purposive random sampling. All the individuals of *Anadara antiquata* found were measured the length, width and height by using vernier calliper to the nearest 0.01mm. Data were analysed by using SPSS 20 and Microsoft Excel softwares. The results indicated that the *Anadara antiquata* mostly found in seagrass bed with muddy substrate. The size distribution of shell dimensions was different during time of sampling. Overall, the length ranged from 15.87 mm to 57.5 mm, the width from 15.50 mm to 48.60 mm and the height was from 9.36 mm to 35.9 mm. The *Anadara antiquata* showed allometric relative growth pattern.

Keywords: mollusc, shell, growth, distribution, allometric



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