

10th International Kuroshio Science Symposium

Theme: "Addressing Coastal Resources Conservation and Food Security through Science-based Solutions and Innovations"

Patio de San Jose Resort and Convention Center, San Jose, Malilipot, Albay

November 24-26, 2016

SYMPOSIUM ACTIVITIES		
Day	Activity	Responsible Person/Entity
November 23, 2016	Arrival of Participants	Secretariat
November 24, 2016	Conference Proper	
8:30 AM	Registration	Secretariat
9:00 AM	OPENING CEREMONY	
	Doxology	BUTC students performing artists
	Philippine National Anthem	BUTC students performing artists
	Welcome Address	Hon. Krisel L. Luistro City Mayor, Tabaco City
	Presentation of Participants and Symposium Overview	Prof. Maria Asuncion V. Oronan Dean, BU Tabaco Campus
	Keynote Address	Dr. Arnulfo M. Mascariñas SUC President IV, Bicol University
		Dr. Milagros Morales Regional Director, BFAR RO 2
		Dr. Teruyuki Shinbo Professor, Kochi University, Japan
		Dr. Hsu-Sen Chen National Sun Yat-Sen University Kaohsiung, Taiwan
	Media Conference	
LECTURE SERIES		
Cross-Border Education Session: Integrated Management of Coastal Resources by Marine Protected Areas		
<i>Lecture Series Chair: Dr. Mina Hori and Prof. Antonino B. Mendoza, Jr.</i>		
1:00 – 1:20	Philippine MPAs: How Best Can They Be Managed?	Victor S. Soliman ¹ <u>Antonino B. Mendoza, Jr.</u> ² Ronnell R. Dioneda Sr. ³ ¹ Bicol University Graduate School, Legazpi City, Philippines ² Bicol University Tabaco Campus, Tabaco City, Philippines ³ Bicol University Research and Development Center, Legazpi City, Philippines
1:20 – 1:45	Western Danajon Bank: Networking of Ecology and Management	<u>Wilfredo L. Campos</u> ¹ Samuel Gulayan ² Liezal C. Paraboles ¹ Pacifico D. Beldia ³ ¹ OceanBio Lab, University of the Philippines Visayas, Miag-ao, Iloilo, Philippines ² Bohol Island State University, Candijay, Bohol, Philippines ³ Malampaya Foundation, Inc., Alabang, Metro-Manila, Philippines
1:45 – 2:10	Marine Protected Areas and Integrated Management of Coastal and Ocean Resources	<u>Hiroyuki Matsuda</u> ^{1,2} Darren D. Mizuta ² Eirini I. Vlachopoulou ³ Mitsutaku Makino ⁴ ¹ Kochi University, Japan ² Yokohama National University, Japan ³ University of the Aegean, Greece ⁴ National Research Institute of Fisheries Sciences, Japan

2:10 – 2:30	Evaluating the Conservation Effectiveness of Partially Protected Marine Areas for Commercially Important Fishes in Bicol Region, Philippines	<u>Renan U. Bobiles</u> ^{1,2} Yohei Nakamura ² ¹ Bicol University Tabaco Campus, Tabaco City, Philippines ² Graduate School of Kuroshio Science, Kochi University, Japan
2:30 – 2:50	Ecological Management of MPA from the Perspective of Seaweed and Seagrass Ecology	Antonino B. Mendoza, Jr. Bicol University Tabaco Campus, Tabaco City, Philippines
2:50 – 3:10	Opportunities and Challenges of Community-Based Marine Protected Area (CB-MPA) Programs in Cagayan Province, Philippines	<u>Emma Legaspi Ballad</u> ^{1,3} Teruyuki Shinbo ¹ Yoshinori Morooka ² ¹ Laboratory of Environmental Change and Sustainable Society, Graduate School of Kuroshio Science, Kochi University, Japan ² Professor Emeritus, Kochi University, Japan ³ Department of Agriculture-Bureau of Fisheries and Aquatic Resources Regional Office 02, Tuguegarao City, Cagayan, Philippines
3:10 – 3:30	Balancing Fishery and Tourism, Case Study from Thailand	Mina Hori Graduate School of Kuroshio Science, Kochi University, Japan
3:30 – 3:45	Health break	
3:45 – 4:05	MPA Management and Rural Fisheries along Lagonoy Gulf	Raul G. Bradecina Partido State University, Goa, Camarines Sur
4:05 – 4:25	Life and Natural Resource Use in the Communities lying behind the MPA: The San Miguel Island Case	Plutomeo M. Nieves Bicol University Tabaco Campus, Tabaco City, Philippines
4:25 – 4:40	Open Forum	
4:40 – 5:00	Synthesis of Lecture Series	Antonino B. Mendoza Jr.
5:00 PM	Welcome Dinner and Cultural Show	Sponsored by BUTC, BURDC and PSU
November 25, 2016	CONCURRENT SESSIONS	
FISHERIES AND COASTAL RESOURCES MANAGEMENT <i>Session Chairs: Dr. P. M. Nieves and Dr. Milagros C. Morales</i>		
8:20 – 8:40	Evaluation of Lying-in Hatchery Concept as Resource Management Strategy	Plutomeo M. Nieves Bicol University Tabaco Campus, Tabaco City, Philippines
8:40 – 9:00	Simultaneous Occurrence of Larvae and Juveniles of <i>Acanthopagrus latus</i> and <i>A. Schlegelii</i> (Sparidae) in the Estuary of Northern Vietnam	<u>Thanh Trung Tran</u> ¹ Izumi Kinoshita ¹ Hau Duc Tran ² ¹ Usa Institute of Marine Biology, Kochi University, Japan, ² Hanoi National University of Education, Hanoi, Vietnam
9:00 – 9:20	Molluscicidal Activity of Poison vine <i>Derris elliptica</i> in Non-Target Organism: The Philippine Freshwater Trumpet Snail <i>Jagora asperata</i>	<u>Kristian Q. Aldea</u> ¹ Jimmy T. Masagca ² ¹ Catanduanes State University (Panganiban Campus), Panganiban, Catanduanes Island, Philippines ² Catanduanes State University (Virac, Campus), Virac, Catanduanes Island, Philippines
9:20 – 9:40	The State of Atulayan Fish Sanctuary and Fishers Behavior on the Protection of Marine Protected Area (MPA) through Social Marketing in Municipality of Saga, Camarines Sur	Joel B. Balasta Partido State University, Nato, Sagnay, Camarines Sur

9:40 – 10:00	Rapid Mobulid Assessment Survey in Camarines Sur, Philippines	<u>Redentor L. Buetre</u> ¹ Maureen F. Postrado ² Primo G. Barja ² Almira C. Valencia ² Patricia M. Candelaria ¹ Irene C. Consulta ¹ ¹ Partido State University-Sagnay Campus, Sagnay, Camarines Sur, Philippines ² Partido State University- Caramoan Campus, Caramoan, Camarines Sur, Philippines
10:00 – 10:15	Health break	
10:15 – 10:35	Diversity and Species Composition of Marine Fish Fauna in Isabela Waters, Philippines	<u>Angel B. Encarnacion</u> Milagros C. Morales Evelyn C. Ame Melanie C. Villarao DA-Bureau of Fisheries and Aquatic Resources, Regional Office No. 02, Tuguegarao City, Philippines
10:35 – 10:55	Philippine Eel (Anguillidae) Conservation Initiatives Towards Sustainable Resource Management	<u>Evelyn C. Ame</u> Milagros A. Morales Bureau of Fisheries and Aquatic Resources, Tuguegarao City, Philippines
10:55 – 11:15	Reproductive Biology and Population Dynamics of Figate Tuna (<i>Auxis thazard</i>) and Bullet Tuna (<i>Auxis rochei</i>) from Babuyan Channel, Philippines	<u>Melanie C. Villarao</u> Milagros C. Morales Evelyn C. Ame Angel B. Encarnacion Erickson Gumiran DA-Bureau of Fisheries and Aquatic Resources, Regional Office No. 02 Tuguegarao City, Philippines
11:15 – 11:35	Stock Assessment of Spider Conch (<i>Lambis lambis</i>) in Guinanayan, Rapu-Rapu, Albay	<u>Skorzeny C de Jesus</u> Romeo B. Asejo Jr. Arian S. Bandola Bicol University Tabaco Campus, Tabaco City, Philippines
11:35 – 11:55	Community Structure and Reproductive Biology of Spider Conch Genus <i>Lambis</i>	Anne Retuerma-Dioneda Bicol University College of Science, Legazpi City, Philippines
ECOLOGICAL HABITATS & CORAL SCIENCES <i>Session Chairs: Dr. Takahiro Taguchi and Prof. Ronnel R. Dioneda</i>		
8:20 – 8:40	Recent Advance of Molecular Cytogenetic Studies on Scleractinian Corals (Stony Corals)	<u>Takahiro Taguchi</u> ^{1,2} Satoshi Kubota ^{1,2} Takuma Mezaki ³ Erika Tagami ² Satoko Sekida ⁴ Kazuo Okuda ⁴ Akira Tominaga ^{1,2} ¹ Laboratory of Human Health and Medical Science, Graduate School of Kuroshio Science, Kochi University, Japan ² Department of Molecular and Cellular Biology, Kochi Medical School, Kochi University, Japan ³ Kuroshio Biological Research Foundation, Hata County, Kochi, Japan ⁴ Laboratory of Cell Structure and Function, Division of Marine Bioresources, Graduate School of Kuroshio Science, Kochi University, Japan

8:40 – 9:00	Breeding and Culture Morphology of Tropical Green Algae	<u>Alvin Monotilla</u> Masanori Hiraoka Graduate School of Kuroshio Science, Kochi University, Japan
9:00 – 9:20	Morphology and Life History of Cosmopolitan Green Macroalgae, <i>Ulva prolifera</i> (Ulvophyceae, Chlorophyta)	<u>Jianjun Cui</u> ¹ , Alvin Monotilla ¹ , Masanori Hiraoka ¹ ¹ Graduate School of Kuroshio Science, Kochi University, Japan
9:20 – 9:40	Ecological Impact of Tsunami: A Ten-year Field Study of Intertidal Mud Snails Exposed to the 2011 Tohoku Earthquake Tsunami	<u>Osamu Miura</u> ¹ , Gen Kanaya ² , Shizuko Nakai ³ , Hajime Itoh ⁴ ¹ Graduate School of Kuroshio Science, Kochi University, Japan, ² National Institute for Environmental Studies, Onogawa, Tsukuba, Ibaraki, Japan, ³ Department of Marine Science and Resources, College of Bioresource Sciences Nihon University, Kanagawa, Japan, ⁴ Atmosphere and Ocean Research Institute, The University of Tokyo, Chiba, Japan
9:40 – 10:00	The climate effect on the shrimp assemblages in the waters off the Gaoping (Kaoping) River mouth, southwestern Taiwan– An eight-year observation	<u>Chen Hsu-Sen</u> ^{1, 2} , Wen, Ta-Chieh ³ , Chen, Chiee-Young ⁴ , Chen, Meng-Hsien ^{1, 2} ¹ Department of Oceanography, National Sun Yat-sen University, Kaohsiung, Taiwan ² Asia-Pacific Ocean Research Center, National Sun Yat-sen University, Kaohsiung, Taiwan ³ R/V Ocean Research I, National Taiwan University, 1, Sec. 4, Roosevelt Rd., Taipei, Taiwan ⁴ Department of Marine Environmental Engineering, National Kaohsiung Marine University, Kaohsiung, Taiwan
10:00 – 10:15	Health break	
10:15 – 10:35	Low cost and low tech community based coral reef restoration: A pilot demonstration study in Tabaco City, Albay, Philippines	Antonino B. Mendoza, Jr. Bicol University Tabaco Campus Tabaco City, Philippines
10:35 – 10:55	Coral Reef Assessment in Selected Marine Protected Areas in Albay, Philippines	<u>Christian D. Cabiles</u> ¹ , Antonino B. Mendoza Jr. ¹ Ronnell R. Dioneda Sr. ² Victor S. Soliman ³ ¹ Bicol University Tabaco Campus, Tabaco City ² Bicol University Research and Development Center, Legazpi City ³ Bicol University Graduate School, Legazpi City
10:55 – 11:15	Assessment of Seaweeds Species along Uyugan, Batanes, Philippines	Eleandro A. Obar ¹ <u>Quirino G. Pascua</u> ² Milagros C. Morales ² ¹ University of the Philippines in the Visayas, Miag-ao, Iloilo Philippines ² Bureau of Fisheries and Aquatic Resources Region 02, Tuguegarao City, Philippines

SOCIO-ECONOMICS AND FOOD SECURITY		
<i>Session Chairs: Dr. Raul Bradecina and Dr. Teruyuki Shinbo</i>		
1:00 – 1:20	Local Residents' Valuation on Marine Protected Areas (MPAs) in Northern Luzon, Philippines: Application of Willingness to Pay (WTP) and Willingness to Work (WTW) Approach	<u>Emma Legaspi Ballad</u> ^{1, a3} Teruyuki Shinbo ¹ Yoshinori Morooka ² ¹ Laboratory of Environmental Change and Sustainable Society Graduate School of Kuroshio Science, Kochi University, Japan ² Professor Emeritus, Kochi University, Japan ³ Department of Agriculture-Bureau of Fisheries and Aquatic Resources Regional Office 02, Tuguegarao City, Philippines
1:20 – 1:40	Physico-chemical properties of dried <i>Porphyra acanthophora</i> in the Philippines	<u>Ritchie A. Rivera</u> ¹ Ye-JooKim ² Yang-Bong Lee ² Angel B. Encarnacion ^{1*} ¹ Department of Agriculture-Bureau of Fisheries and Aquatic Resources Regional Office No. 02, Regional Government Center, Tuguegarao City, Philippines ² Department of Food Science and Technology, Pukyong National University, Busan, Korea
1:40 – 2:00	The Significance of Indigenous Knowledge System of Fishers in the Management of Peculiar Species: the Case of <i>Siganids</i> , in Lagonoy Gulf, Philippines	Ninfa R. Pelea Leonila B. Barbacena Maria Luisa U. Tango <u>Glenda A. Abejuela</u> Raffy B. Bilangel Christian D. Cabiles Bicol University Tabaco Campus, Tabaco City, Philippines
2:00 – 2:20	Related Issues and Problems to Safety of Dried and Smoked Fish in Bicol Region (Philippines)	<u>Ninfa R. Pelea</u> Milard P. Subagan Hermia Bondad Jamella Ivy R. Nieves Maria Josefa Pelea Bicol University Tabaco Campus, Tabaco City, Philippines
2:20 – 2:40	The Economic Value of the Capture Fisheries and Coastal Habitats in Representative Municipalities West and East Coast of Albay, Philippines	Erwin E. Torres <u>Ronnel R. Dioneda, Sr.</u> Joan R. Nace Mariz B. Bermillo Bicol University, Legazpi City
2:40 – 3:00	Socio-Economic Assessment of the Gleaners of Spider Conch in Prieto Diaz, Sorsogon	Ma. Teresa Abalon-Mirandilla Bicol University, College of Science, Legazpi City, Philippines
BIOSCIENCES & OCEANOGRAPHY		
<i>Session Chair: Dr. Wilfredo L. Campos and Dr. Osamu Miura</i>		
1:00 – 1:20	Otolith microstructure and early life of seagrass siganid <i>Siganus canaliculatus</i> (Park 1797) with implications to marine reserve management	Victor S. Soliman ¹ Hideaki Yamada ² <u>Renan U. Bobiles</u> ¹ Kosaku Yamaoka ³ ¹ Bicol University Tabaco Campus, Tabaco City, Philippines ² Ishigaki Tropical Station, Seikai National Fisheries Research Institute, Fisheries Research Agency, Ishigaki, Okinawa, Japan ³ Graduate School of Kuroshio Science, Kochi University, Kochi, Japan

1:20 – 1:40	The <i>nifH</i> gene abundances of unicellular heterotrophic diazotrophs (α -, γ -proteobacteria) in the Kuroshio	<u>Tien-Yi Chen</u> ¹ Yuh-ling Lee Chen ¹ ¹ Department of Oceanography, National Sun Yat-sen University, Kaohsiung, Taiwan
1:40 – 2:00	Density Distribution of Blue Crab (<i>Portunus pelagicus</i>) Larvae with Implications to the Lying-in Concept of Stock Enhancement	<u>Aldrin Mel B. Macale</u> ^{1,2} Simon G. Alcantara ³ Plutomeo M. Nieves ² ¹ Camarines Norte State College, Institute of Fisheries and Marine Sciences, Mercedes, Camarines Norte, Philippines ² Bicol University Tabaco Campus, Tayhi, Tabaco City, Philippines ³ Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines
2:00 – 2:20	Morphometric, Sexual Dimorphism and Fecundity of Endemic Freshwater Shrimp <i>Caridina buhi</i> (Crustacea: Decapoda: Caridea) from Lake Manapao	Sandy Rey B. Bradecina Bicol University Tabaco Campus, Tabaco City, Philippines
2:20 – 2:40	Surfactants in the Environment	Katrina L. Canon Bicol University Graduate School, Legazpi City
	POSTERS	
	Reproductive Biology and Population Dynamics of Flyingfish (<i>Cheilopogon Unicolor</i>) from Batanes Waters	Evelyn C. Ame Jessica Retamal Milagros C. Morales Bureau of Fisheries and Aquatic Resources, Regional Office 02 Tuguegarao City, Philippines
	Evaluation of Lying-in Hatchery Concept as Resource Management Strategy	Plutomeo M. Nieves Bicol University Tabaco Campus Tabaco City, Philippines
3:00	CLOSING PROGRAM	
	Impression	
	Synthesis of Symposium Proceedings	Ninfa R. Pelea Professor, BU Tabaco Campus
	Awarding of Certificates	
	Closing Remarks	Ronnell R. Dioneda Director, BU Research and Development Center
November 26, 2016 7:30 AM	Fieldwork in Sagurong MPA	
	Courtesy Call to Barangay Chairman	Dr. Plutomeo M. Nieves Prof. Antonino B. Mendoza, Jr. Mr. Renan Bobiles Mr. Christian Cabiles
	Interview of Stakeholders (i.e. Bantay Dagat, Fishers, Barangay Officials, etc.)	
	Return to BUTC for discussion: <i>Towards Co-existence with the Ecosystem Conservation/ Preservation and the Development of Rural Residents' Lives</i>	Dr. Plutomeo M. Nieves Dr. Raul G. Bradecina (PSU)