

ABSTRACTS AND CONFERENCE PROGRAM

Theme:

Ecosystem Management and Conservation
Towards Sustainability in the Kuroshio Region



02-04 DECEMBER 2012

Bicol University Tabaco Campus
Tabaco City, Albay
Philippines



CONFERENCE RATIONALE

A key to understanding critical issues and trends along the Kuroshio Region is through sharing of knowledge learned, generally through research and development, shared and discussed among peers and stakeholders. As a large marine ecological zone, the Kuroshio region covers several countries, with importance beyond the marine environment. With the Philippines, Japan and Taiwan as significant stakeholders, the three (3) countries, through their respective academic institutions, namely, Bicol University Tabaco Campus, Kochi University and National Sun Yat-sen University have agreed to collaborate in the knowledge management in the region. This international conference will provide opportunity for researchers and scientists to share information, experiences and learnings to increase the understanding of the related concepts and issues affecting the Kuroshio Region.

The 6th International Conference on Kuroshio Science will include a larger sphere of knowledge, along the theme *"Ecosystem management and conservation towards sustainability in the Kuroshio Region."*

Knowledge sharing will cover scientific papers, posters, panel discussions grouped in the following sessions:

1. Fisheries-based regional economies and factors affecting fish production in the Kuroshio Region;
2. Seaweed/seagrass resources and related regional economies;
3. Ecosystems harbouring agriculture, forestry and fisheries activities, and related socio-economic impacts;
4. Management practices on land and marine-based resources and the regional economy;
5. Sustainable use of bio-resources for human health; and
6. Progress in marine conservation in San Miguel Island and other related topics

CONFERENCE PROGRAM

08:00-08:30	REGISTRATION	
08:30-12:00	OPENING PROGRAM	
	Invocation	DR. LEONILA B. BARBACENA Associate Professor Bicol University Tabaco Campus
	Philippine National Anthem	MS. ROSETTE MARIAN AMOR A. GRENGIA Conducting
	Welcome Address	HON. KRISSEL LAGMAN-LUISTRO City Mayor, Tabaco City, Albay
	Opening Remarks	DR. YOSHIAKI IIGUNI Professor Kochi University, Japan
	KEYNOTE ADDRESS	DR. FAY LEA PATRIA M. LAURAYA SUC President IV, Bicol University Legazpi City, Albay, Philippines
	Awarding of Certificates of Appreciation	HON. JOEY S. SALCEDA Governor, Province of Albay
	Group Photos	DR. FAY LEA PATRIA M. LAURAYA
	Health Break	
	Presentation of Participants and Conference Overview	DR. PLUTOMELO M. NIEVES Dean and Conference Organizer Bicol University Tabaco Campus Tabaco City, Albay, Philippines
	Media Conference	
12:00-13:00	Lunch Break	
13:00-14:30	PLENARY SESSION	DR. AKIRA TOMINAGA Head, Kuroshio Science Unit Kochi University, Japan <i>Anti-allergic, anti-diabetic, anti-tumor effects of algae with a sustainable society in view</i>
		DR. VICTOR S. SOLIMAN Professor, Bicol University Tabaco Campus <i>Managing at the 'root' of Kuroshio</i>
14:30-17:00	CONCURRENT SESSIONS	
18:00-20:00	CULTURAL SHOW	

Master of Ceremonies: **MS. VIOLETA B. CLEOFFE**
Bicol University Tabaco Campus

DAY 1**DECEMBER 2, 2012 (SUNDAY)****SESSION 1:****Fisheries-Based Regional Economies and Factors Affecting Fish Production in the Kuroshio Region**

Session Chair: Dr. Raul Bradecina, Dr. Evelyn C. Ame and Dr. Victor S. Soliman

Rapporteur: Ms. Yolanda Brugada

Venue: BUTC Social Hall

Time	Title of Paper	Author(s)	Institution/Agency
14:30-14:50	Sustainability of Elvers Fisheries in Cagayan	Evelyn C. Ame ^{1*} Jovita P. Ayson ¹ Reynaldo B. Ame ²	¹ Bureau of Fisheries and Aquatic Resources Regional Office 02 Tuguegarao City, Philippines ² AMA International University, Bahrain
14:50-15:10	Capture Fisheries Assessment of Commercially Important Marine Crabs in Sorsogon Bay and San Miguel Bay	Plutomeo M. Nieves ^{1*} Skorzeny C. de Jesus ¹ Maria Aurea B. Guiriba ² Shiela Belen ¹ Gemma Corral ¹	¹ Bicol University Tabaco Campus, Tabaco City, Philippines ² Bicol University Research and Development Center, Legazpi City, Philippines
15:10-15:30	Health Break		
15:30-15:50	Overview of Fisheries Policy Reform in Kingdom of Cambodia and Prospects for Better Management	Mina Hori ^{1*} Satoshi Ishikawa ²	¹ Kochi University, Japan ² Research Institute for Humanity and Nature, Kyoto Japan
15:50-16:10	Strengthening Governance and Sustainability of Small-Scale Fisheries Management in San Miguel Bay, Philippines: An Ecosystem-based Fisheries Management Approach	Plutomeo M. Nieves ^{1*} Tomas B. Briñas ² Aida S. Andayog ³ Georgina Bordado ⁴	¹ Bicol University Tabaco Campus ² Department of Science and Technology Regional Office 5, Legazpi City, Philippines ³ Bureau of Fisheries and Aquatic Resources Regional Office 5, Camarines Sur, Philippines ⁴ Central Bicol State University of Agriculture, Camarines Sur, Philippines
16:10-16:30	Modified Danish Seine (Hulbot-Hulbot/Boli-Boli/Liba-Liba) Operation in Camarines Norte	Nelson SA. Olfindo	Camarines Norte State College-Mercedes Campus Camarines Norte, Philippines
16:30-17:00	General Discussion		

*Presenter

DAY 1**DECEMBER 2, 2012 (SUNDAY)****SESSION 2:****Seaweed/Seagrass Resources and Related Regional Economies**

Session Chair: Dr. Kazuo Okuda, Dr. Ichiro Mine and Prof. Antonino B. Mendoza, Jr.
Rapporteur: Ms. Gemma Corral
Venue: RFTC Conference Hall

Time	Title of Paper	Author(s)	Institution/Agency
14:30-14:50	Maintenance of Cell Wall Integrity in the Giant-celled, Green Seaweed <i>Valonia utricularis</i>	Sho Suzuki Kun-Feng Li Ichiro Mine* Kazuo Okuda	Kochi University, Japan
14:50-15:10	Reproductive Biometrics of the Scallop <i>Decatopecten striatus</i>	Renan U. Bobiles* Victor S. Soliman	Bicol University Tabaco Campus
15:10-15:30	Health Break		
15:30-15:50	Symbiodinium Diversity in Five Common Scleractinian Species from San Miguel Island, Albay, Philippines: A Preliminary Study	Antonino B. Mendoza, Jr. ^{1*} Arjay Vista ¹ Stephane de Palmas ² Vianney Denis ² Chaolun Allen Chen ²	¹ Bicol University Tabaco Campus ² Biodiversity Research Centre, Academia Sinica, Taipei, Taiwan
15:50-16:10	Sea Urchin (<i>Tripneustes gratilla</i>) Resource Enhancement Project Along Lagonoy Gulf	Plutomeo M. Nieves Skorzeny C. de Jesus* Antonino M. Mendoza Aldrin Mel B. Macale	Bicol University Tabaco Campus
16:10-16:30	Assessment of the Fishery for Macro-invertebrates Gleaning in Lagonoy Gulf: Catanduanes Side	Plutomeo M. Nieves Skorzeny C. de Jesus Aldrin Mel B. Macale* Jasper R. Nieves	Bicol University Tabaco Campus
16:30-17:00	General Discussion		

*Presenter

DAY 2**DECEMBER 3, 2012 (MONDAY)****SESSION 3:****Ecosystems Harbours Agriculture, Forestry and Fisheries Activities, and Related Socio-Economic Impacts**

Session Chair: Dr. Kosaku Yamaoka, Dr. Raul G. Bradecina and Dr. Teruyuki Shinbo

Rapporteur: Ms. Ivy Arizapa

Venue: RFTC Conference Hall

Time	Title of Paper	Author(s)	Institution/Agency
08:30-08:50	Importance of Mangrove Habitat for Sustaining Fisheries Resources in SE Asia	Kou Ikejima	Kochi University, Japan
08:50-09:10	Linking Together Disaster Preparation and Community Revitalization against NANKAI Trough Earthquake A Case Study of Kochi Prefecture in Japan	Satoshi Otsuki	Kochi University, Japan
09:10-09:30	Exploring Local Coastal Recreational Tourism as Potential Strategy to Support Changing Agriculture in a Typhoon-Prone Small Island of San Miguel, Tabaco, Albay, Bicol Region	Raul G. Bradecina ^{1*} Teruyuki Shinbo ² Plutomeo M. Nieves ³	¹ Partido State University Camarines Sur, Philippines ² Kochi University, Japan ³ Bicol University Tabaco Campus
09:30-09:50	Fisherman's Life at the Headwaters of Kuroshio in the Philippines	Ryo Unten ¹ Kosaku Yamaoka ^{1*} Satoru Yahata ² Yoh Ohnuki ³ Masaru Kanda ⁴ Victor S. Soliman ⁵ Plutomeo M. Nieves ⁵	¹ Kochi University, Japan ² Outfitter Churanesia ³ TV director ⁴ Kuroshio Zikkan Center ⁵ Bicol University Tabaco Campus
09:50-10:10	Health Break		
10:10-10:30	Socio-Political and Climate-Related Factors to Successful Investments in Science and Technology in Farms: Case Analysis of Magsasaka Siyentista Science and Technology-Based Farms in Bicol Region, Philippines	Ninfa R. Pelea ¹ Grace B. Brizuela ¹ Marissa N. Estrella ² Maria Luisa U. Tango ¹ Alwin Joseph M. Maceres ² Maureen M. Maceres ² Jayson V. Dayawon ³	¹ Bicol University Tabaco Campus ² Bicol University College of Agriculture and Forestry, Albay, Philippines ³ Bicol University, Legazpi City, Philippines
10:30-11:00	General Discussion		

*Presenter

DAY 2**DECEMBER 3, 2012 (MONDAY)****SESSION 4:****Management Practices on Land and Marine-Based Resources and the Regional Economy**

Session Chair: Dr Kazuo Okuda, Dr. Raul G. Bradecina and Prof. Antonino B. Mendoza, Jr.
Rapporteur: Ms. Ivy Arizapa
Venue: RFTC Conference Hall

Time	Title of Paper	Author/s	Institution/Agency
11:00-11:20	The Influences of Alien Fish Species on Native Fish Community Structure in Malaysian Waters	Khairul Adha A. Rahim* Yuzine Esa	Universiti Malaysia Sarawak, Malaysia
11:20-11:40	Land Management Issues in Depopulated Areas of Japan	Yoshiaki Iiguni* Yukio Yamamoto	Kochi University, Japan
12:00-13:00	Lunch Break		
13:00-13:20	Community Responses to LGU Strategies and Actions Targeting Climate Change Adaptation in Albay Province, Bicol, the Philippines	Victoriya Venediktova* Jeng-Di Lee	National Sun Yat-sen University, Kaohsiung, Taiwan
13:20-13:40	Profitability and Resource Rent of Multi-Gear Fisheries in Lagonoy Gulf, Philippines	Raul Bradecina ^{1*} Victor Soliman ² Ronnel Dioneda ³ Ninfa Pelea ²	¹ Partido State University ² Bicol University Tabaco Campus ³ BU Research and Development Center
13:40-14:10	General Discussion		

*Presenter

DAY 2**DECEMBER 3, 2012 (MONDAY)****SESSION 5:****Sustainable Usage of Bio-Resources for Human Health**

Session Chair: Dr. Akira Tominaga, Prof. Antonino B. Mendoza and Prof. Ronnel Dioneda
Rapporteur: Ms. Shiela Belen
Venue: BUTC Social Hall

Time	Title of Paper	Author(s)	Institution/Agency
08:30-08:50	Antioxidative Property and Phytochemical Screening of Edible Seaweeds Endemic in the Coast of Cagayan, Philippines	Angel B. Encarnacion* Joyce G. Cabading Marivic G. Llanto Jovita P. Ayson	Department of Agriculture- Bureau of Fisheries and Aquatic Resources Region 02 Tuguegarao City Philippines
08:50-09:10	The Current Circadian Typology and Sleep Habits of People who Experienced the Great Hanshin-Awaji Earthquake in their Childhood	Kai Wada* Hiroko Kuroda Hitomi Takeuchi Tetsuo Harada	Kochi University, Japan
09:10-09:30	Antihypertensive Effect of Medicinal Plants on Batan Island, the Philippines: an Ethno-pharmacological and Experimental Evaluation	Reika Abe* Kazuhiro Ohtani	Kochi University, Japan
09:30-09:50	Inventory and Biodiversity of Medicinal Plants from Tropical Rainforest Based on Traditional Knowledge by Ethnic Dayaknese Communities in West Kalimantan Indonesia	Farah Diba ¹ * Fathul Yusro ² Yeni Mariani ² Kazuhiro Ohtani ²	¹ Tanjungpura University, Indonesia ² Kochi University, Japan
09:50-10:20	General Discussion		
10:20-10:35	Health Break		

*Presenter

DAY 2**DECEMBER 3, 2012 (MONDAY)****SESSION 6:****Progress in Marine Conservation on San Miguel Island and Other Related Topics**

Session Chair: Dr. Yoshinori Morooka and Dr. Plutomeo M. Nieves
Rapporteur: Ms. Shiela Belen
Venue: BUTC Social Hall

Time	Title of Paper	Author(s)	Institution/Agency
10:35-10:55	Outlook for SMI and Implementation of MPAs	Plutomeo M. Nieves	Bicol University Tabaco Campus
10:55-11:15	Twenty-years of the San Miguel Island MPA: Has it stood the test of time?	Victor S. Soliman	Bicol University Tabaco Campus
11:15-11:35	Estimating the Willingness to Pay of City Residents for Protecting San Miguel Island MPA in Tabaco, Philippines: Evidence from a Double Bounded Dichotomous Choice Contingent Valuation Method	Raul G. Bradecina ^{1*} Teruyuki Shinbo ² Yoshinori Morooka ²	¹ Partido State University ² Kochi University, Japan
11:35-11:55	Importance of Seaweeds and their Current Status in San Miguel Island, Lagonoy Gulf, Philippines, and Aspects of Valonia sp. in Cell Biology	Alex P. Camaya ^{1*} Victor S. Soliman ¹ Antonino B. Mendoza, Jr. ¹ Kazuo Okuda ²	¹ Bicol University Tabaco Campus ² Kochi University, Japan
12:00-13:00	Lunch Break		
13:00-13:20	Perceptions of Local Residents of the Value of Marine Resources and Protected Areas: The Case of San Miguel Island (SMI), Bicol	Cheryll C. Launio ¹ Teruyuki Shinbo ² Plutomeo M. Nieves ³ Yoshinori Morooka ²	¹ Philippine Rice Research Institute (PhilRice), Science City of Muñoz, Philippines ² Kochi University, Japan ³ Bicol University Tabaco Campus
13:20-13:40	Study on the Identification of MPAs Management Phases - Two Cases in the Philippines	Jeng-Di Lee Victoriya Venediktova Otto Lee*	National Sun Yat-sen University, Kaohsiung, Taiwan

*Presenter

DAY 2**DECEMBER 3, 2012 (MONDAY)****SESSION 6:****Progress in Marine Conservation on San Miguel Island and Other Related Topics**

Time	Title of Paper	Author(s)	Institution/Agency
13:40-14:00	Comparative Analysis among SMI, Atulayan and Agojo MPAs in the Lagonoy Gulf: From the Viewpoints of their Functions and "The Cost of Commons"	Teruyuki Shinbo ^{1*} Raul G. Bradecina ² Yoshinori Morooka ¹	¹ Kochi University, Japan ² Partido State University
14:00-14:45	General Discussion: Progress in Marine Conservation in the Lagonoy Gulf, Bicol	Plutomeo M. Nieves ^{1*} Yoshinori Morooka ²	¹ Bicol University Tabaco Campus, Tabaco City, Albay ² Kochi University, Japan
14:00-14:45	General Discussion		

**Presenter*

14:45-17:00

CLOSING PROGRAM

Synthesis

PROF. SKORZENY C. DE JESUS

Assistant Professor

Bicol University Tabaco Campus

Impression from the Participants

Message

HON. EDCCEL C. LAGMAN

Congressman, First District of Albay

Awarding of Certificates

Closing Remarks

DR. ARNULFO M. MASCARIÑAS

Research Director

BU Research and Development Center

DAY 3**DECEMBER 4, 2012 (TUESDAY)**

08:00-17:00

ALBAY TOUR**DR. NINFA R. PELEA**

Consortium Director

BCARRD, Bicol University

Legazpi City, Philippines