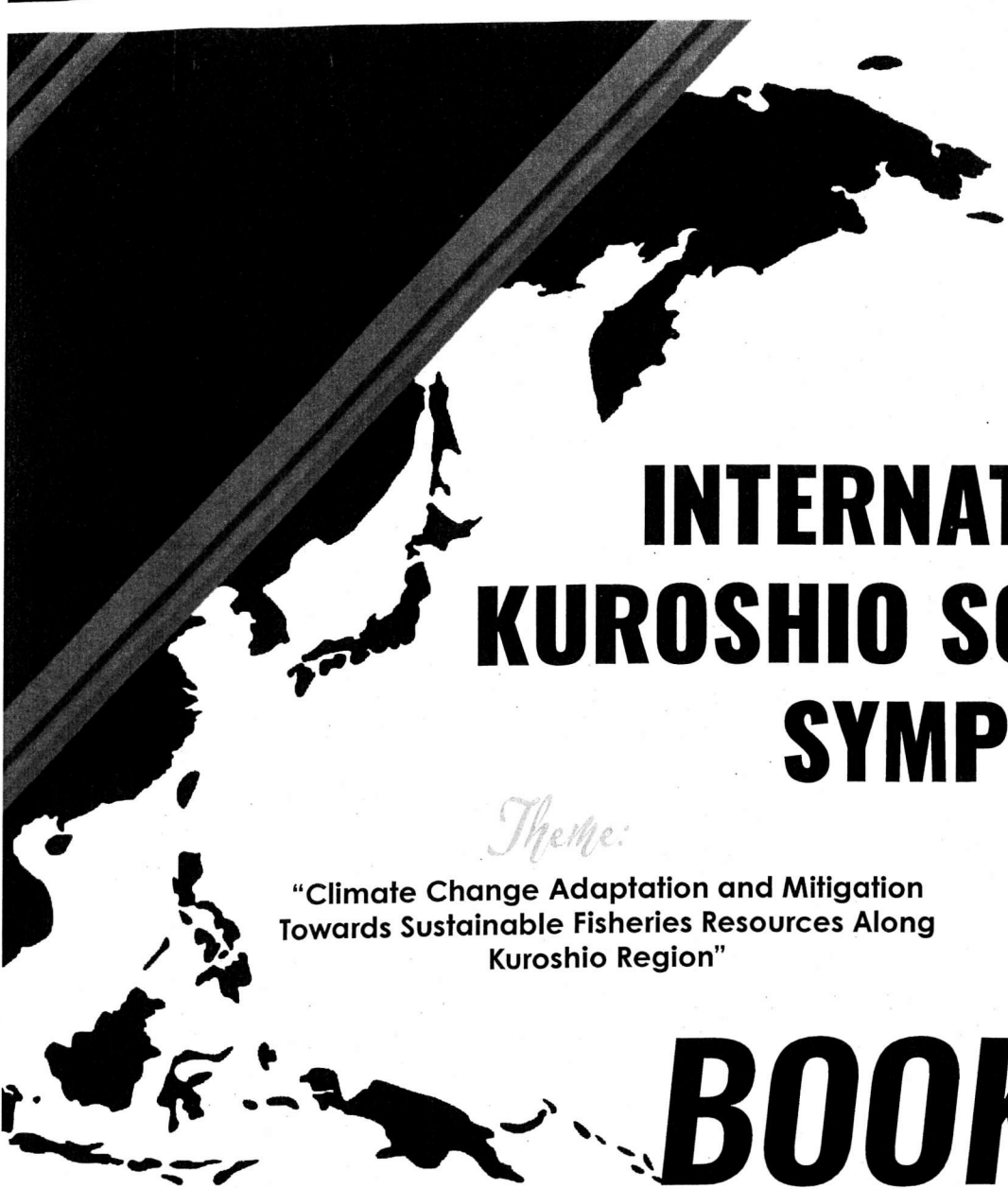


A black silhouette map of the Kuroshio region, including Japan, the Philippines, and parts of Southeast Asia, is positioned on the left side of the cover. A diagonal grey band runs from the top left towards the center.

# **13<sup>th</sup>** **INTERNATIONAL KUROSHIO SCIENCE SYMPOSIUM**

*Theme:*

**"Climate Change Adaptation and Mitigation  
Towards Sustainable Fisheries Resources Along  
Kuroshio Region"**

# ***BOOK OF ABSTRACTS***

A diagonal grey band runs from the bottom right towards the center, mirroring the one in the top left.

# Program

**DAY 1 - NOVEMBER 19, 2019**

9:00 – 12:00 NN

## **OPENING CEREMONY**

(Claude Andrews Convention Center)

**I. Doxology** ----- CSU-Athena Legato Chorale

**II. Philippine National Anthem** ----- CSU-Athena Legato Chorale

## **III. Presentation of Participants**

**Welcome Remarks** ----- **Dr. Urdujah A. Tejada**

President  
Cagayan State University, Tuguegarao  
City, Cagayan, Philippines

**Opening Address** ----- **Dr. Milagros C. Morales**

Regional Director  
Bureau of Fisheries and Aquatic Resources Regional Office No. 02  
Tuguegarao City, Cagayan, Philippines

**Messages** ----- **Dr. Teruyuki Shinbo**

Head/Professor  
Kurushio Science Unit, Multidisciplinary Science Cluster,  
Research and Education Faculty  
Kochi University  
Kochi, Japan

**Hon. Manuel N. Mamba, MD**

Governor  
Province of Cagayan  
Cagayan, Philippines

## **IV. Photo Opportunity/ Health Break**

**V. Intermission Number** ----- CSU – Athena Rondalla Ensemble

**VI. Introduction of Keynote Speaker** ----- **Dr. Evelyn C. Ame**

Chief, Training Division  
BFAR RO2

## VIII. Keynote Speech ----- Dr. Yoshinori Morooka

Professor Emeritus  
Kochi University  
Kochi, Japan

12:00 -1:00 P.M.

### LUNCH BREAK

### PLENARY SESSION 1

(Claude Andrews Convention Center)

1:01-1:20 P.M.

### PLENARY TALK 1

**Dr. Sakiko Orui Sakaguchi**

Engineer

Japan Agency for Marine-Earth Science and Technology Analyses of Changes in East Japan Marine Ecosystems  
Research and Development Group Kanagawa Japan

**“Brackish-water copepod faunas in Kuroshio Current region, and a diet analysis of juvenile fishes associated with zooplankton including copepods”**

1:21-1:4 P.M

### PLENARY TALK 2

**Dr. Raul Bradecina**

University President

Partido State University

Goa, Camarines Sur

**“Estimating the Total Economic Value of Malabungot Protected Landscape and Seascape:  
Valuing Environmental Services and Goods for Sustainable Resource Governance and  
Inclusive Growth in the Typhoon-prone Island and Coastal Communities of Garchitorena,  
Camarines Sur”**

1:41-2:00 P.M.

### OPEN FORUM

#### Moderator

**Dr. Angel B. Encarnacion**

BFAR RO2, Tuguegarao City, Cagayan, Philippines

#### Rapporteur

**Dr. Renan Bobiles**

Bicol University Tabaco Campus  
Tabaco City, Albay

2:01-2:31 P.M.

### COFFEE BREAK



2:30-5:30 P.M.

## PARALLEL SESSIONS

### Parallel Session 1

#### Fisheries Biology and Oceanography 1

Claude Andrews Convention Center

**Moderator:** **Dr. Wilfredo Campos**  
University of the Philippines –Visayas

**Rapporteur:** **Dr. Alex Camaya**  
Bicol University, Tabaco Campus  
Tabaco City, Albay

#### A Network of High Frequency Doppler Radio Scatterometers for Luzon Strait

Charina Lyn Amedo-Repollo, Cesar L. Villanoy, Jian-Wu Lai, Hwa Chien, Jeffrey Peter Maloles, Dhon Xean Bobis, Aiko del Rosario and Pierre Flament  
UP Diliman, Quezon City

#### Gonad and Egg Quality of the Sea Urchin *Tripneustes gratilla* From Seagrass- and Seaweed-dominated Habitats in a Typhoon-prone Region

Helen Grace P. Bangi and Marie Antonette Juinio-Meñez  
CSU Aparri Campus, Maura, Aparri

#### Variability of Kuroshio Geostrophic Flow in Eastern Luzon Using Satellite Altimetry Data

Dhon Xean Bobis, Charina Lyn Repollo, and Cesar Villanoy  
UP Diliman, Quezon City

#### Seasonal and Interannual Variability of Mesoscale Eddy Tracks with NEC Bifurcation Latitude

Aiko Love B. del Rosario, Charina Lyn Amedo-Repollo and Cesar L. Villanoy  
UP Diliman, Quezon City

### Parallel Session 2

#### Fisheries Resource Management 1

CSU Hostel Lobby

**Moderator:** **Dr. Mudjekeewis Santos**  
DA-NFRDI

**Rapporteur:** **Dr. Jayvee Saco**  
Batangas State University

#### Integrated Coastal and Ocean Management for Coral Reef Conservation: Thinking from the Philippine MPAs and Japanese Policy Instruments

Teruyuki Shinbo  
Kochi University, Kochi, Japan

#### The Coral Reef Status of Tablas Island, Romblon, Philippines: A Baseline for Conservation and Management

Jeric B. Gonzalez, Boromeo B. Motin, Vincent Jay H. Gado, Bernie G. Mantes, Mae Stella A. Fornal, Delbert F. Fornal and Mary Joy F. Fetalver  
School of Fishery and Technology, San Agustin Campus, Romblon State University

#### Status of Coral Reefs in Lagonoy Gulf with Emphasis on Marine Protected Areas

Antonino B. Mendoza Jr., Romeo B. Asejo Jr. and Michael C. Borejon  
Bicol University Tabaco Campus Tabaco City, Albay

#### Tourism Attractions Inventory in Malabungot Protected Landscape and Seascape (MPLS): Developing Potential Towards Sustainable Fishery Resource

Josenia M. Penino and Raul G. Bradecina  
Partido State University  
Goa, Camarines Sur





## **Regional Intra-Specific Variability of Sagittal Otolith Shape in Seagrass Siganids *Siganus canaliculatus***

Renan U. Bobiles, John Dave C. Ceneta, Jon Nekko Borlagdan and  
Victor S. Soliman  
Bicol University Tabaco Campus

## **Population Structure of *Selaroides leptolepis* (Cuvier, 1833) in Central Philippines Based on Cytochrome Oxidase I (COI) Gene Sequences**

Lorenzo C. Halasan and Paul John L. Geraldino  
University of San Carlos Talamban Campus, Cebu City

## **Molecular Identification of "Abo" from San Miguel Bay, Philippines**

Teresa N. Avila, Raul G. Bradecina and Satoshi Kubota  
Kochi University, Kochi, Japan

## **Sinusoidal Growth, Mortality and Yield-per-recruit of Buried Fan Scallop (*Mimachlamys funebris*, Reeve 1953) Using Different Estimates of Natural Mortality**

Ian Cris R. Buban, Christian C. Cabiles, Alex P. Camaya, Renan U.  
Bobiles and Victor S. Soliman  
Bicol University Tabaco Campus  
Tabaco City, Albay

## **Food and Feeding Habit of Freshwater Eel (*Anguilla* spp.) in Rivers and Tributaries Along Lagonoy Gulf, Philippines**

Plutomeo M. Nieves and John Christopher C. Nolia  
Bicol University Tabaco Campus  
Tabaco City, Albay

## **Meso- and Microplastic Occurrences in the Gastrointestinal Tract of Yellowfin Tuna (*Thunnus albacares*, Bonnaterre, 1788) from the Fish-landing Site in Tabaco City, Albay, Bicol, Philippines**

Marvy Claire N. Mortega and Ma. Kristina O. Palar  
University of San Carlos Talamban Campus, Cebu City

## **The Interspecific Relationship of a Facultative Shrimp-goby Association in the West Pacific**

Sota Kirihaara, Yumi Henmi and Gyo Itani  
Kochi University, Kochi, Japan

## **Fishing Practices of Small-Scale Fisherfolks and Catch of *Otolithes ruber* (Bloch & Schneider in San Miguel Bay, Philippines**

Emerson L. Bergonio  
Central Bicol State University of Agriculture

## **Status of Mangrove Communities in Malabugot Protected Landscape and Seascape**

Jasper R. Nieves and Raul G. Bradecina  
Partido State University  
Goa, Camarines Sur

## **Status of Seagrass and Seaweed Beds in Malabugot Protected Landscape and Seascape**

Xavier Jules A. Dioneda and Ronnel R. Dioneda Sr.  
Partido State University  
Goa, Camarines Sur

## **Fish Community Assemblages in Artificial Reefs in the 5th District of Leyte, Philippines**

Art Russel R. Flandez  
Visayas State University  
Baybay, Leyte

## **Fish Assemblages in the Coastal Waters of Malabugot Protected Landscape and Seascape**

Joel B. Balasta and Noel P. Umbao  
Partido State University  
Goa, Camarines Sur

## **Fishery Dependent Survey of Fishes and Fishing Gears in Two Coastal Towns of Isabela**

Princess Queen A. Emperador, Frances Vany R. Santiago and  
Glycinea M. De Peralta  
CSU Aparri Campus  
Maura, Aparri

## **Glass Eel Abundance and By-catch Monitoring for Sustainable Aquaculture Utilization: Cagayan State University-Aparri and Local Government Unit of Gonzaga, Cagayan Initiative**

Ernesto S. Del Rosario Jr., John Phillip B. Tabasin, Jomar R. Realica  
and Aljohn B. Banares  
CSU Aparri Campus  
Maura, Aparri



# 13<sup>th</sup> INTERNATIONAL KUROSHIO SCIENCE SYMPOSIUM

NOVEMBER 19-21, 2019 | CSU ANDREWS CAMPUS, CARITAN SUR, TUGUEGARAO CITY, CAGAYAN, PHILIPPINES



## Symbiotic Ecology and Morphometry of an Alpheid Shrimp *Stenolpheops anacanthus* Collected from Crustacean Burrows in Tokyo Bay, Japan

Kristian Q. Aldea, Yumi Henmi, Jonel M. Corral and Gyo Itani  
Kochi University, Kochi, Japan

## High Exploitation of the Fishery for Scallop *Chlamys macassarensis* in Asid Gulf, Philippines

Christian D. Cabiles,  
Bicol University Tabaco Campus  
Tabaco City, Albay

6:00 P.M.

### FELLOWSHIP NIGHT/WELCOME DINNER

(hosted by the Local Government of Tuguegarao City)

Cultural Presentation ----- CSU Socio Cultural Affairs

Message ----- **Hon. Jefferson P. Soriano**  
City Mayor  
Tuguegarao City

## DAY 2 - NOVEMBER 20, 2019

8:00 – 9:00 A.M.

### POSTER DISPLAY PRESENTATION AND COMPETITION

| Title of Abstract                                                                                                                                                | Authors                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Bacteriological Assessment of Water and Soil of Nabao Lake in Cabiao, Nueva Ecija                                                                                | Jhon Christian P. Suyom, Karl Marx A. Quiazon, Alvin T. Reyes and Janet O. Saturno         |
| Some Aspects of the Reproductive Biology of the Spotted Stinger, <i>Inimicus sinensis</i> (Valenciennes, 1833), in Carles, Iloilo, Philippines                   | Emmanuel S. Delloro Jr. and Ricardo P. Babaran                                             |
| Abundance and Diversity of Macroinvertebrates Along the Coral Reefs of Lagonoy Gulf with Notes on Algal Herbivory                                                | Michael C. Borejon, Antonino B. Medoza, Joshua Karl B. Bista and Plutomeo M. Nieves        |
| Juvenile Coral Density as an Input to Coral Resilience in Selected Marine Protected Areas of Lagonoy Gulf, Philippines                                           | Joshua Karl B. Bista, Antonino B. Mendoza Jr., Plutomeo M. Nieves and Michael C. Borejon   |
| Species Composition, Stand Characteristics, Aboveground Biomass and Carbon Stock of Mangroves in Panabo Mangrove Park, Panabo City, Davao del Norte, Philippines | Jemer A. Alimbon and Mark Ronald S. Manseguiao                                             |
| Fishery Dependent Survey of Molluscs in Maconacon and Divilacan, Isabela                                                                                         | Sheena P. Batacan, Kathleene Ela R. Bugarin, Jezza Mae R. Castillo and Vivial Mae M. Gallo |
| Why are Seagrass Siganids Maturing Early?                                                                                                                        | Victor S. Soliman and Renan U. Bobles                                                      |
| Embryonic Development of Blackchin Tilapia ( <i>Sarotherodon melanotheron</i> ) in Freshwater                                                                    | Quennie M. Bilugan                                                                         |
| Fish Composition and Diversity in Inland Waters of Nueva Ecija: The Cases of Nabao Lake in Cabiao and Sumacbao River in General Tinio                            | Cherry Ann G. Kindipan, Jose S. Abucay and Ravelina R. Velasco                             |





|                                                                                                                                                                                                  |                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rhizofiltration Potential of Floating Aquatic Macrophytes (FAMs) in Nile Tilapia (<i>Oreochromis niloticus</i> L.) Tanks</b>                                                                  | Niko A. Macaraeg and Janet O. Saturno                                                                                                                  |
| <b>Molecular Identification and Occurrence of Anisakis Nematodes Harboursing Mackerel Scad, <i>Decapterus macarellus</i> (Cuvier, 1833) in the Waters of Bolinao, Pangasinan</b>                 | Aries Paul D. Padron, Claire Samantha T. Juanico, Casiano H. Choresca and Karl Marx A. Quiazon                                                         |
| <b>Economic Impact of Invasive Species, Blackchin Tilapia (<i>Sarotherodon melanotheron</i>) on Selected Milkfish (<i>Chanos chanos</i>) Farms in Dagupan City by Partial Budgeting Analysis</b> | Danica May A. Lawagan, Aries Paul D. Padron and Judith A. Teaño                                                                                        |
| <b>Anesthetic Effect of Sodium Bicarbonate at Different Concentrations on <i>Molobicus</i> (<i>Oreochromis niloticus</i> X <i>Oreochromis mossambicus</i>) Fingerlings</b>                       | Aubrey D. Belington and Remedios B. Bolivar                                                                                                            |
| <b>Physico-chemical Characteristics of Water and Sediment Quality of Selected Aquaculture Sites in the Northwestern Part of Taal Lake, Batangas, Philippines</b>                                 | Jesus Paolo B. Cullado, Joselito S. Miranda, Reginor Lyzza A. Roque, Donnie Ray G. Sanchez and Lorenz J. Fajardo                                       |
| <b>Isolation, Molecular Identification and Probiotic Characterization of Microbiota from the Gut of Orange Spotted Grouper (<i>Epinephelus coioides</i>)</b>                                     | Victoria N. Malaya, Christian C. Molina, Glor B. Alcantara, Florentino R. Elizaga, Manily J. Jucutan, Princess T. Raguindin and Mark Joseph S. Tabilin |
| <b>Impact of the Aquashade Technology on Seed Production of Nile Tilapia during Warm Months</b>                                                                                                  | Emmanuel M. Vera Cruz, Eddie Boy T. Jimenez, Eduardo A. Lopez and Sherwin B. Celestino                                                                 |

## PLENARY SESSION 2

(Claude Andrews Convention Center)

9:01-9:20 A.M.

### PLENARY TALK 3

**Dr. Mudjekeewis D. Santos**

Scientist II

National Fisheries Research and Development Institute

Quezon City, Philippines

**“Kuroshio Current: What it means to Philippine Fisheries Management and Climate Change Adaptation”**

9:21-9:40 A.M.

### PLENARY TALK 4

**Dr. Satoshi Kubota**

Professor

Graduate School of Integrated Arts and Sciences

Kochi University

Kochi, Japan

**“Launching Collaborative Projects with Biotechnological Techniques under Kuroshio Science Ph.D. Network”**



9:41-10:00 A.M.

## OPEN FORUM

**Moderator**

**Dr. Plutomeo Nieves**

Bicol State University Tabaco Campus  
Tabaco City, Albay

**Rapporteur**

**Dr. Nico Jose Leander**

BFAR RO3

10:30-12:00 NN

## PARALLEL SESSIONS

### Parallel Session 3

#### **Fisheries Socio-Economic, Seafood Safety and Processing Technology 1**

Claude Andrews Convention Center

**Moderator: Dr. Teruyuki Shinbo**

Kochi University

**Rapporteur: Mr. Antonino Mendoza**

Bicol University

#### **Developing Resiliency Among Resource-dependent Coastal Communities Along Maqueda Channel of Caramoan, Philippines**

Charlie V. Balagtas

Partido State University, Goa, Camarines Sur

#### **Vulnerability and Response to Climate Change Impacts: The Case of Atulayanons, Sagnay, Camarines Sur, Philippines**

Cristina P. Lim

Partido State University

Goa, Camarines Sur

#### **Perceptions of Coastal Villagers on the Non-Use Values of Mangroves in Cagayan Province, Philippines**

Emma L. Ballard and

Cecille B. Mangabat

BFAR RO2, Carig, Tuguegarao City

### Parallel Session 4

#### **Fisheries Biology and Oceanography 2**

CSU Hostel Lobby

**Moderator: Dr. Evelyn C. Ame**

BFAR RO2

**Rapporteur: Dr. Helen Grace Bangi**

CSU Aparri

#### **Differences in Reproductive Capacity of Sardine Stocks from Different Fishing Grounds: Environment or Fishery-induced?**

Wilfredo L. Campos, Alexandra A. Bagarinao-Regalado, C.J. L.

Almaquer, Jiye Kwon, Liezel C. Paraboles and

Lucas R. Felix

UP Visayas, Miag-ao, Iloilo

#### **Ichthyofaunal Community Structure of Magat Reservoir in Ramon, Isabela, Philippines**

Felecitas M. Paraggua, Ma. Vivian C. Camacho, Pablo P. Ocampo

and Antonio J. Alcantara

BFAR RO2, Carig, Tuguegarao City

#### **Seasonal Distribution of Scomber (Scomber, Pisces) Eggs and Larvae in Tosa Bay, Japan**

Donna Guarte

Kochi University

Kochi, Japan





## **Value Chain Analysis of Abalone Trading in Lahuy Group of Island in Caramoan, Camarines Sur, Philippines**

Karlo Pedro L. Medroso II, Joel B. Balasta and Percival O. Ebron  
Partido State University  
Goa, Camarines Sur

## **Mussel Farmers' Knowledge, Perceptions and Willingness to Adopt Longline Culture Technology in Pilot-Test Sites of Sorsogon, Capiz and Pangasinan Green Mussel (*Perma viridis*) Areas**

Raul Bradecina  
Partido State University  
Goa, Camarines Sur

## **Mitigating the Impact of Hazards to the Fishing Community of Nato in the Municipality of Sagnay, Camarines Sur using Participatory Approach to BDRRM Planning**

Maria Christina Gumba  
Partido State University Sagnay Campus

## **Distribution and Utilization of Black Mussels in the Philippines**

Rochelle A. De Los Reyes, Harold M. Monteclaro, Vince Neil B. Fuertes and BFAR RO2 Personnel  
UP Visayas, Miag-ao, Iloilo

## **Community Structure of Cyclopoid Copepods and Distribution of Genus *Oncaea* Along a Transect Traversing the Upwelling Zone of Northern Zamboanga Peninsula, Philippines**

Beverly T. Jaspe and Wilfredo Campos  
UP Visayas, Miag-ao, Iloilo

## **Species Composition of Freshwater Eels Collected from the Tributaries Along Lagonoy Gulf, Philippines using PCR-RFLP Analysis**

Katrina L. Canon, John Christopher Nolia, Ronie O. Mediaro, Nino C. Celestial, Antonino B. Mendoza Jr., Raul G. Bradecina, Plutomeo M. Nieves and Satoshi Kubota  
Kochi University, Kochi, Japan

12:00-1:00 P.M.

### **LUNCH BREAK**

(Claude Andrews Convention Center)

1:01- 4:30 P.M.

### **PARALLEL SESSIONS**

#### **Parallel Session 5**

##### **Ecological Habitats and Ecological Sciences**

Claude Andrews Convention Center

**Moderator:** Dr. Victor Soliman

Bicol University

**Rapporteur:** Ms. Glycinea De Peralta

CSU Aparri

##### **Physiological Responses of Bleaching and Recovering Scleractinian Corals, *Acropora hyacinthus* and *Pocillopora damicornis* Under Aquarium Condition**

Satoshi Kubota, Dan Anthony U. Bataan, Takuma Mezaki and Shashank Keshavmurthy  
Kochi University, Kochi, Japan

#### **Parallel Session 6**

##### **Fisheries Socio-Economic, Seafood Safety and Processing Technology 2**

CSU Hostel Lobby

**Moderator:** Dr. Esterlita Calanoga

CSU Aparri

**Rapporteur:** Mr. Aeron Mayor

BFAR RO2

##### **Standardization and Sensory Evaluation of Thermal Processed Smoked Sardines**

Myrna C. Bigueja, Glenda S. Sales and Irene P. Daet  
Partido State University, Goa, Camarines Sur



## **Padina sp. as a Possible Bioindicator of Eutrophication in Verde Island, Batangas City, Batangas, Philippines**

Jayvee A. Saco, Najeen Arabelle M. Rula, John Matthew H. Arcega  
and Alvin N. Atuga  
Batangas State University, Batangas City

## **Overlooked Habitat: The Importance of Tropical Intertidal Seagrass Beds as Foraging Grounds for Fish as Revealed by Underwater Video**

Anabelle Dece A. Espadero, Yohei Nakamura, Wilfredo H. Uy,  
Prasert Tongnunu and Masahiro Horinouchi  
Kochi University, Kochi, Japan

## **Distribution, Community Structure and Diversity of Zooplankton Situated in Aquaculture Ground of Lake Buhi, Buhi, Camarines Sur**

Sandy Rey Bradecina, Mikka Ella M. Cabrera, Plutomeo M.  
Nieves, Antonino B. Mendoza Jr. and Arian Bustamante  
Central Bicol State University of Agriculture - Calabanga  
Campus, Bicol

## **Marine Crypto-biota within the Coral Reef Areas of Malabugot Protected Landscape and Seascape**

Ronnel A. Dioneda Jr. and Ronnel R. Dioneda Sr.  
Partido State University, Goa, Camarines Sur

## **Salt Reduced Thermal Stress in Nile Tilapia (*Oreochromis niloticus* L.)**

Marwin B. Dela Cruz and Emmanuel M. Vera Cruz  
Cavite State University Naic Campus, Cavite

## **Impact of the Aquashade Technology on Seed Production of Nile Tilapia during Warm Months**

Emmanuel M. Vera Cruz, Eddie Boy T. Jimenez, Eduardo A. Lopez  
and Sherwin B. Celestino  
CLSU, Muñoz, Nueva Ecija

## **Climate Risk Vulnerability Assessment for Tilapia (*Oreochromis niloticus*): Basis for Decision-support Platform**

Bondee L. Peñaflor and Marino R. Romero  
ISU Cabagan, Isabela

## **Utilization of Seaweeds Puree (*Kappaphycus alvarezii*) Into Bath Soap**

Nessella Marie N. Mortega, Jay Ambrosio O. Jasmin III, Joseph N.  
Papica and Catherine J. Sarrato  
BFAR V, Fabrica Bula, Camarines Sur

## **Post-harvest Handling Practices for Glass Eel Along Rivers and Tributaries in Lagonoy Gulf, Philippines**

Plutomeo M. Nieves and John Christopher C. Nollal  
Bicol University Tabaco Campus, Tabaco City

## **Development of Bottled Tunanut**

Myrna C. Bigueja and Christine B. Bigueja  
Partido State University  
Goa, Camarines Sur

## **Parallel Session 7**

### **Fisheries Resource Management 2**

CSU Hostel Lobby

**Moderator:** Dr. Emma Ballad

BFAR R02

**Rapporteur:** Mr. Aeron Mayor

BFAR R02

## **In Troubled Waters: Facing Challenges in Fish Taxonomy and Its Implications to Fishery Resource Management**

Cleto L. Nafola Jr., Maybelle A. Fortaleza Jr., Glycinea M. De  
Peralta and Te-yu Liao  
UP Mindanao, Mintal, Davao City

## **History of Scientific Oceanographical and Botanical Inquiries During Spanish Colonization in Luzon: Precursor of Resource Utilization Supporting Urbanization and Antecedent of Resource Conservation**

Raul Bradecina  
Partido State University, San Juan Bautista St., Goa, Camarines  
Sur



## Parallel Session - 5

### **Evaluation of Fish Kill Occurrence in Buhi Lake, Philippines**

Plutomeo M. Nieves, Antonino B. Mendoza Jr., Sandy Rey B. Bradecina and Recie B. Bonaos  
Bicol University Tabaco Campus, Tabaco City

### **Rainfall-Temperature-Dissolved Oxygen Nexus to Fish Kill Occurrence at Buhi Lake**

Recie B. Bonaos and Plutomeo M. Nieves  
Bicol University Tabaco Campus, Tabaco City

### **Revisiting the Water Quality of Padre Burgos Mariculture Zone After a Decade of Aquaculture**

Joy A. Azarias, Eusebia Chrissevi M. Dianquinay, Ryan Daryl M. Peñalosa, Joemari S. Piñero, Joselyn Joy D. Egagamao, Juvy M. Barillo and Ligaya P. Cabrera  
BFAR IV-A, Los Baños, Laguna

### **Science and Technology Community-Based Farm on Sea Cucumber Production in La Union**

Victoria N. Malaya, Jinnie R. Mamhot, Alfredo L. Quesada Jr. and Dianne A. Peralta  
Don Mariano Marcos Memorial State University, Sto. Tomas, La Union

## Parallel Session - 7

### **Resource Allocation Trade-offs in the Sea Urchin *Tripneustes gratilla* Under Relative Storminess and Wave Exposure**

Helen Grace P. Bangi and Marie Antonette Juinio-Meñez  
CSU Aparri Campus, Maura, Aparri

### **'From Hard to Soft': The Scallop Fishers and Their Shifting Preference for Managing Scallop Fishery in Asid Gulf, Masbate, Philippines**

Alex P. Cariaya, Ian Cris R. Buban, Christian D. Cables, Renan U. Bobiles and Victor S. Soliman  
Bicol University Tabaco Campus Tabaco City, Albay

### **Freshwater and Estuarine Fish Fauna Composition in the Central Part of Palawan**

Herminie P. Palla, Taiga Kunishima, Hirozumi Kobayashi and Ken Maeda  
Western Philippines University, Puerto Princesa City, Palawan

### **Status of the Pinacanauan de San Pablo River, Isabela, Philippines for Water Resources Management**

Geraldine J. Paguigan, Jailaine R. Siriban, Leonore B. Morillo, Melanie S. Subilla and Myrna T. Ramos  
ISU Ilagan Campus, Isabela

### **Diversity of Fishes in Laguna de Cagayan Lake: Status and Conservation Needs**

Wilma S. Urmeneta and Ernesto S. del Rosario Jr.  
CSU Aparri Campus, Maura, Aparri

### **Assessment of the Fisheries Resources of Bangui Bay, Ilocos Norte, Philippines 2000-2009**

Rosario Segundina P. Gaerlan, Francis Greg A. Buccat and Felymar C. Ragutero  
BFAR RO1, City of San Fernando, La Union

# 13<sup>th</sup> INTERNATIONAL KUROSHIO SCIENCE SYMPOSIUM

NOVEMBER 19-21, 2019 | CSU ANDREWS CAMPUS, CARITAN SUR, TUGUEGARAO CITY, CAGAYAN, PHILIPPINES



4:30-5:15 P.M.

## CLOSING PROGRAM

(Claude Andrews Convention Center)

IX. Synthesis: -----

**Dr. Ronaldo R. Libunao**

Chief, Fisheries Administrative Division  
Bureau of Fisheries and Aquatic Resources Regional Office No.02  
Tuguegarao City, Cagayan, Philippines

X. Message: -----

**Dr. Lilian Garcia**

Interim Director  
National Fisheries Research and Development Institute  
Manila, Philippines

## XI. Awarding of Certificates

XII. Closing Remarks: -----

**Dr. Milagros C. Morales**

Regional Director  
Bureau of Fisheries and Aquatic Resources Regional Office No. 02  
Tuguegarao City, Cagayan, Philippines

## DAY 3 - NOVEMBER 21, 2019

7:00-5:00 P.M.

## FIELD TOUR

### MASTERS OF CEREMONIES

**Mr. Quirino G. Pascua**, Cagayan State University  
**Ms. Gene Baquiran**, Philippine Information Agency

