

WEDNESDAY, June 19

WELCOME, PLENARY AND OPENING CEREMONY Wednesday, June 19 08:45 - 10:00 Audit A

Chair: J.K. Jena

- 08:45 Welcome Words by APC President APA'19 Conference Chairs
- 08:55 Dr. J.K. Jena, Program Chair INTRODUCTION OF PLENARY SPEAKERS
- 09:00 Theng Dar Teng AQUACULTURE - MAKING THE WORLD FUTURE READY
- 09:25 Shri Tarun Shridhar INDIAN AQUACULTURE PRODUCTION AND ITS EXEMPLARY PERFORMANCE TOWARDS **BLUE REVOLUTION**
- 09:40 INAUGURAL FUNCTION
- 10:30 INAUGURATION OF EXPO
- 11:00 TECHNICAL SESSION

BIODIVERSITY

Wednesday, June 19 11:00 - 13:00 Hall 2 Chairs: A. Ramachandran, P. Krishnan, Grinson George, Muralidharan

- 11:00 Krishnan Pandian, Anand Arur, Senthil Kumar S., Rabikumar T., Soam S.K. FRAMEWORK FOR HARNESSING EMERGING TECHNOLOGIES FOR BIODIVERSITY CONSERVATION
- 11:20 Jawahar Paulraj, Anand C., Stephen Sampath Kumar K.
 GROWTH AND REPRODUCTIVE BIOLOGY OF Amphiprion sebae FROM GULF OF
 MANNAR, SOUTHEAST COAST OF INDIA
- 11:40 Rekha Nair, Dineshkumar S., Praveen Padmajan, Gopalakrishnan A.
 DIVERSITY OF CARDINAL FISHES (FAMILY APOGONIDAE) IN INDIAN WATERS
- **12:00 Kumar P.**, P. Sivaperumal, Kantha D. Arunachalam, Lita Sundar SPECIES DIVERSITY AND DISTRIBUTION OF FINFISH COMMUNITY IN PULICAT LAKE, SOUTH EAST COAST OF INDIA
- 12:20 Bipul Phukan, Jayanta Dutta, B.B. Nayak, Niti Sharma, G. Deshmukh, A.K. Jaiswar, A. Pavan Kumar, A. Ali, K.K. Tamuli SPATIO-TEMPORAL VARIATION IN ICHTHYOFAUNAL COMMUNITY STRUCTURE AND EVALUATION OF DIVERSITY INDICES OF HIMALAYAN STREAM NAMPHUK, ARUNACHAL PRADESH. NORTH-EAST INDIA

GENDER IN AQUACULTURE

Wednesday, June 19 11:00 - 13:00 Room B Chairs: J. Stephan Sampath Kumar, Amulyakumar Mohanty, Bibha Kumari, B. Mohanty

- 11:00 Balkam Sangma, Arpita Sharma
 GENDER ROLES IN MATRILINEAL SOCIETY OF MEGHALAYA: A STUDY IN FISHERIES
 SECTOR
- 11:20 Rajpal Yadav, Shekhar Nath Ojha, Ananthan P.S., Vinod Kumar Yadav, Nidhi Katre GENDER ROLES IN LAKE FISHERIES A CASE OF JAISAMAND LAKE, UDAIPUR, RAJASTHAN
- 11:40 Madhumita Mukherjee
 LOANS AND REPAYMENTS OF MICRO-CREDIT OF SMALL SCALE WOMAN FISHERS:
 A REVIEW FROM COASTAL WEST BENGAL, INDIA
- 12:00 Bibha Kumari, Meghna Meghna, D.K. Paul LOW/NO LITERACY OF WOMEN: NO BARRIER IN THE FISH MARKET OF PATNA (BIHAR), INDIA
- 12:20 Ipsita Biswas
 MOVING BEYOND FISH-FAG: AN APPROACH TOWARDS THE ISSUES ON GENDER
 SENSITIZATION IN AQUACULTURE SECTOR. INDIA
- 12:40 Sugumar Gopalrajan, Umamaheswari Thavasiyandi
 INFLUENCE OF CLIMATE CHANGE ON THE BIO-PHYSICAL AND SOCIOECONOMIC
 VIABILITY OF COASTAL COMMUNITIES OF THOOTHUKUDI DISTRICT, TAMIL NADU

FINFISH CULTURE

Wednesday, June 19 11:00 - 13:00 Hall 3 Chairs: K.K. Vijayan, Ravichandran, Kailasam

- 11:00 Gowsalya Thangasamy, Sundaramoorthy Balasubramaniam TREND ANALYSIS OF FISH PRODUCTION IN TAMIL NADU, INDIA
- 11:20 Ezhilarasi V., Felix S., Samuelmoses T.L.S., Cheryl Antony, Aruna S.
 EFFECT OF SALINITY LEVELS ON GROWTH, FEED UTILIZATION, CARCASS
 COMPOSITION AND DIGESTIVE ENZYMES ACTIVITIES OF JUVENILE PEARLSPOT
 Etroplus suratensis IN RACEWAY BASED CULTURE SYSTEM
- 11:40 Avinash Talukdar, Ashutosh D. Deo, Narrottam P. Sahu, Parimal Sardar, MD. Aklakur, Shamna N., Satya Prakash
 GROWTH AND PHYSIOLOGICAL ALTERATIONS IN LOW SALINE REARED
 Mugil cephalus (GREY MULLET) FED WITH GRADED LEVELS OF PROTEIN
- 12:00 Vijaya Durga G., Srinivasan M.
 CULTURE OF MILK FISH *Chanos chanos* FROM PARANGIPETTAI: A CASE STUDY
- 12:20 Sakthivel Kollimalai
 WATER QUALITY MANAGEMENT FOR SUCCESS IN AQUACULTURE
- 12:40 Marz Linnaeous Rabadon, Mark Nell Corpuz, Mark June Consigna,
 Adrian Deil Manliclic
 DYNAMICS IN LENGTH-WEIGHT RELATIONSHIP AND CONDITION FACTOR OF
 BRACKISHWATER POPULATIONS OF SILVER THERAPON Leiopotherapon plumbeus
 (KNER, 1864) IN BATAAN, LUZON ISLAND, PHILIPPINES

MARICULTURE SEAWEED CULTURE

Wednesday, June 19 11:00 - 13:00 Audit C Chairs: Mohan Joseph Modayil, Radhakrisna Chennur, Joe Kizhakudan

- 11:00 Reg Blaylock, Mark E. Capron, Jim R. Stewart, Mohammed Hasan, Kelly Lucas, Michael D. Chambers, Antoine de Ramon N'Yeurt, C.R.K. Reddy, Venu Madhav AQUACULTURE REVOLUTION MORE FOOD WITH NUTRIENT RECYCLING
- 11:40 Veeragurunathan Veeraprakasam MARICULTURE OF ECONOMICALLY IMPORTANT AGAROPHYTES (GRACILARIALES, RHODOPHYCEAE) IN INDIA
- **12:00 Vinithkumar Nambali Valsalan**, Karuna Kumari R., Nida Quraishi, Dharani G. CHALLENGES AND PROSPECTS OF SEAWEED FARMING IN ANDAMAN ISLANDS
- **12:20** Cherry Nian, Adzkim Mulsahi, Gerly-Ayn Tupas, Mengpi Haime EFFECTS OF DIFFERENT FERTILIZERS ON GROWTH PERFORMANCE OF Kappaphycus alvarezii IN FLOATING METHOD
- 12:40 Meenakshisundaram Ganesan, Nagarajan Nadukkattu Nayagi, Kanagaraj Priyanka, Nagarajan Maruthupandi, Mahalingam Selvakumar, Thavamani Saththish SUSTAINABLE COMMERCIAL CULTIVATION OF *Gracilaria edulis* THROUGH SPORE PRODUCTION IN THE LABORATORY
- 13:00 C.R.K. Reddy, Mark E. Capron, Jim R. Stewart, Venu Madhav
 DEEP WATER FLEXIBLE FLOATING REEFS: SPINOFF FROM U.S. MARINER

FARMERS MEET (NFDB)

Wednesday, June 19 11:00 - 13:00 Hall 1 Chairs: Kandan, Nyan Taw

- 11:00 Farshad Shishehchian
 INTELLIGENT AND SMART FARMING IS THE FUTURE OF AQUACULTURE
- 11:20 Sameeran
 STATE'S RESPONSIBILITIES IN PROMOTING AQUACULTURE IN TAMIL NADU
- 11:40 Yoram Avnimelech
 AQUACULTURE TO SUPPLY PROTEINS IN CLIMATE CHANGE INDUCED DROUGHTS
- 12:00 S. Santhana Krishnan
 PROFITABLE SHRIMP FARMING: NEED FOR COST EFFECTIVE MEASURES
- 12:20 Kok Leong Wee
 FEEDS AND FEEDING IN SHRIMP FARMING
- 12:40 P.E. VIJAY ANAND NATIONAL ASSESSMENT ON PATHWAYS FOR AQUACULTURE FOR INDIA

BROODSTOCK DEVELOPMENT AND SEED PRODUCTION ANALYSIS

Wednesday, June 19 11:00 - 14:40 Room A Chairs: Bindu R. Pillai, P. Routray, Sangram Sahoo

- 11:00 P. Routray
 A CROSS SECTIONAL REVIEW OF FISH SEED PRODUCTION AND RESEARCH IN INDIA
- 11:20 Jitendra Sundaray, Ananth P.
 FISH HATCHERY 2.0 AND IMPLICATIONS IN DOUBLING INCOME OF FISH FARMERS.
- 11:40 M.S. Akhtar, Manchi Rajesh, A. Ciji, B.S. Kamalam, P. Sharma, D. Sarma, A.K. Singh INDUCING CAPTIVE MATURITY AND SPAWNING OF ENDANGERED GOLDEN MAHSEER *Tor putitora* THROUGH ENVIRONMENTAL MANIPULATIONS
- 12:00 Aparajita Priyadarshani, Rajesh Kumar, Jitendra K. Sundaray, Saumyendra Nanda, Dharitri Choudhary, Bindu R. Pillai HORMONAL IMPLANTATION PLAY KEY ROLE IN CAPTIVE MATURATION OF STRIPED MURREL Channa striata
- 12:20 Debajit Sarma, Annu Sharma, Prakash Sharma
 EVALUATION OF SEASONAL REPRODUCTIVE MATURITY OF GOLDEN MAHSEER *Tor*putitora IN RELATION TO CHANGING TEMPERATURE AND THYROID STATUS
- 12:40 S. Nayak, P. Routray
 BROODSTOCK MANAGEMENT, SPONTANEOUS SPAWNING AND LARVAL REARING OF
 MOLA CARPLET *Amblypharyngodon mola* (HAMILTON, 1822)
- 13:00 LUNCH

- Neethu M., Kiran Dube Rawat, Virendra Kumar Tiwari, Nalini Poojary
 ROLE OF METHYL FARNESOATE IN REPRODUCTION OF Macrobrachium rosenbergii
 SUB ADULTS
- 14:00 Judith Betsy, Stephen Kumar
 INFLUENCE OF EXTENDERS ON THE DIFFERENT AGE GROUP OF COMMON CARP
 BROODERS IN TERMS OF SPERMATOLOGICAL AND FERTILIZATION PARAMETERS
- 14:20 Aman Khan, Vishal Dutta
 OVARY MATURATION STAGES AND HISTOLOGICAL INVESTIGATION OF RAINBOW
 TROUT Onchorhynchus mykiss

LARVAL FEED. MICROALGAE AND LIVE FEEDS

Wednesday, June 19 11:00 - 15:40 Audit B Chairs: N.P. Sahu, Reena Chakraborti, Shivanannda Murthy, Jennifer Cobcroft Sponsor:



- 11:00 Biji Xavier, Ritesh Ranjan, Sekar Megarajan, Vamsi Balla, Shubhadeep Ghosh EFFECT OF INDUCED PH ON FLOCCULATION OF MICRO ALGAE *Chaetoceros calcitrans* (PAULSEN)
- 11:20 Jean Rose Maquirang, Fiona Pedroso, Mary Jane Apines-Amar, Donna Rendaje, Fedelia Flor Mero, Josel Cadangin, Carlos Baylon, Lily Anne Pinosa INGESTION, DIGESTION, GROWTH AND SURVIVAL OF GREEN MUSSEL Perna viridis PEDIVELIGER LARVAE FED DIFFERENT MICROALGAE
- 11:40 Mahadevi Nagarahalli, Felix S., Cheryl Antony, Gopalakannan A., Samuel Moses T.L.S. CONTINUOUS MASS PRODUCTION AND ASSESSMENT GROWTH DYNAMICS OF CLADOCERANS *Moina micrura* IN RAS BASED ADVANCED CULTURE SYSTEMS
- 12:00 Ritesh Ranjan, Sekar Megarajan, Biji Xavier, Ravi Avadhanula, Santhosh B.,
 Shubhadeep Ghosh
 DEVELOPING INTENSIVE CULTURE TECHNIQUES FOR THE TROPICAL COPEPOD
 Parvocalanus crassirostris AS A LIVE FEED FOR MARINE FINFISH LARVAL REARING
- **12:20** Ahamed Rasheeq A., Arunkumar T., Antrose Preethi B., Durgadevi R., Meena P. GROWTH PERFORMANCE OF BIG HEAD CARP *Hypophthalmichthys nobilis* FED ON MICROALGAE AND PELLET FEED: A COMPARATIVE STUDY
- 13:00 LUNCH
- 13:40 Vishnu Nair M.S., Manu Madhavan, Vineetha G., Aanju Soma S., Boby Ignatius CULTURE OF *Pseudodiaptomus malayalus* IN LABORATORY CONDITIONS PROVIDING THREE DIFFERENT ALGAL DIETS

- **14:00** Sagar Mandal, Ansuman Panda, Janmejay Parhi, Arun Patel, Pradyut Biswas EFFECTS OF DIFFERENT DIETARY VITAMIN E LEVELS ON GROWTH PERFORMANCE AND SURVIVAL OF INDIAN BUTTER CATFISH *Ompok bimaculatus* FINGERLINGS
- 14:20 K.N. Mohanta, Sulagna Routroy, Rajesh Kumar, Nitish Chandan, Siddaiah G.M., B. Sahu, S. Nanda EFFECT OF DIETARY PROTEIN AND LIPID LEVELS ON GROWTH, NUTRIENT UTILIZATION AND WHOLE BODY COMPOSITION OF CLIMBING PERCH Anabas testudineus FINGERLING
- **14:40** Saravanan M., Maharajan Athi, Ganapiriya V., V. Shanmuga Arasu, S. Viswanathan, S. Kandan EFFECT OF LIVE FEED ON SURVIVAL, GROWTH AND DEVELOPMENT OF MUD CRAB Scylla serrata (FORSKAL, 1775) LARVAE
- 15:00 Robert Roulston, S. Glover, J. Long
 COMPACT PHOTOBIOREACTORS FOR LIVE MICROALGAE PRODUCTION IN
 AQUACULTURE HATCHERIES AND NURSERIES

DISEASE DIAGNOSIS AND MANAGEMENT

Wednesday, June 19 11:00 - 15:40 Audit A Chairs: Indrani Karunasagar, Sankar Alavandi, Rajeev Kumar Jha, Melba Reantaso, Peter Bossier

- 11:00 Melba B. Reantaso
 THE PROGRESSIVE MANAGEMENT FOR IMPROVING AQUACULTURE BIOSECURITY:
 A NEW INITIATIVE
- 11:40 Yoonhang Lee, Do-Hyung Kim STUDY ON PATHOGENICITY OF Streptococcus parauberis IN OLIVE FIOUNDER Paralichthys olivaceous
- 12:00 M. Arul Murugan, Sreedharan K., Sanath Kumar H., Megha Kadam Bedekar, Rajendran K.V.
 HISTOPATHOLOGICAL SURVEY OF HEPATOPANCREAS AND GUT OF FARMED SHRIMP, Penaeus (Litopenaeus) vannamei FROM BRACKISHWATER AND INLAND SALINE FARMS OF INDIA
- 12:20 Stephane Frouel, Ulisses Pereira, Maxime Hugonin, Thomas Pierrot EFFECTS OF A NEW PHYTOGENIC ON NILE TILAPIA GROWTH PERFORMANCE, GUT MICROBIOME AND DISEASE RESISTANCE AGAINST EMERGENT PATHOGEN Francisella noatunensis
- 12:40 Sudhansu Sekhar Mishra, Rakesh Das, S.N. Sahoo, Ramesh Rathod, B.S. Giri, Priyabrat Swain
 DISEASE OCCURRENCE AND DRUGS USE PATTERN IN FRESHWATER AQUACULTURE IN INDIA: A SURVEY REPORT
- 13:00 LUNCH

- 13:40 Stéphane Ralite, Eric Leclercq, Mathieu Castex
 THE POTENTIAL OF COMPLEMENTARY MICROBIAL SOLUTIONS AGAINST THE RISK
 OF INTERACTING DISEASES IN POND AQUACULTURE
- **14:00 Ubaid Qayoom**, Gireesh-Babu P., Muralidhar P. Ande, Aparna Chaudhari STUDIES ON WHITE SPOT SYNDROME VIRUS (WSSV) CHALLENGE IN *Penaeus vannamei* JUVENILES
- **Arun Dhar**, Roberto Cruz-Flores, Reginald Blaylock, Steven Curr, F.C. Thomas Allnutt CAN WHITE SPOT DISEASE CONTROL BE ACHIEVED USING CRISPR-CAS9 DRIVEN GENOME EDITING IN LIVE SHRIMP?
- 14:40 Md Abdullah Al Mamun, Nasren Shamima, Ramesh K.S.
 HEAVY INFECTION OF *Ichthyophthirius multifiliis* IN THE STRIPED CATFISH
 Pangasianodon hypophthalmus (SAUVAGE, 1878) AND ITS TREATMENT TRIAL BY
 DIFFERENT THERAPEUTIC AGENTS IN CONTROL ENVIRONMENT
- 15:00 Simon Sanguin, Jose Troncoso
 SMARTSHIELD CONCEPT IN SHRIMP FEED AGAINST BACTERIAL DISEASES IN WHITE
 LEGS SHRIMP Litopenaeus vannamei

ISTA 12 TILAPIA NUTRITION

Wednesday, June 19 11:00 - 12:20 Room 5 Chairs: Kevin Fitzsimmons, Menaga Meenakshisundaram, Victor Suresh, Arul Victor Suresh

- 11:00 Sebastian Chenyambuga, Renalda Munubi, Nazael Madalla, Kwamena Quagrainie, Emmanuel Frimpong, Hillary Egna EFFECTS OF FERTILIZATION AND SUPPLEMENTARY FEEDING ON WATER QAULITY AND GROWTH PERFORMANCE OF NILE TILAPIA Oreochromis niloticus GROWN IN CONCRETE TANKS
- 11:20 Renalda N. Munubi, Mariam Ahsadi, Sebastian Chenyambuga, Nazael Madalla, Kwamena Quagrainie, Emmanuel Frimpong, Hillary Egna
 THE INFLUENCE OF FERTILIZATION, FEEDING AND A COMBINATION OF FERTILIZATION AND FEEDING ON ALGAL QUALITY, PRIMARY PRODUCTIVITY AND GROWTH PERFORMANCE OF NILE TILAPIA Oreochromis niloticus
- 11:40 Karthik Masagounder
 PRECISION NUTRITION APPROACH TO DRIVE SUSTAINABLE TILAPIA FARMING
- 12:00 Adel Khamis Soliman, Adel M. Hasan, Asmaa I. Mohamed, Ahmed G. El-Komy PARTIAL REPLACEMENT OF FISH MEAL PROTEIN BY CABBAGE LEAVES CONCENTRATE MEAL PROTEIN IN DIETS OF NILE TILAPIA *Oreochromis niloticus*
- 12:20 Mohammad Ridha, Ismail Azad
 REGULATION OF HEAD-KIDNEY IMMUNE GENES IN NILE TILAPIA Oreochromis
 niloticus FED DIFFERENT COMMERCIAL DIETS

ISTA 12 TILAPIA HEALTH AND DISEASE

Wednesday, June 19 12:20 - 14:00 Room 5 Chairs: Kevin Fitzsimmons, Menaga Meenakshisundaram, Win Surachetpong

- 12:20 Win Surachetpong, Puttanat Tattiyapong
 UNDERSTANDING HOW TILAPIA LAKE VIRUS (TILV) CAUSE DISEASE IN TILAPIA
- **N. Daniel Naganathan**, Sathyaraj Krishnan, Suresh Eshwaran, Karal Marx Karuppiah ANAESTHETIC RESPONSE OF TOBACCO LEAF DUST ON GIFT TILAPIA
- **13:40 Rao N.V.**, Kumar A.R., Ramana T.V. STUDY ON THE GROWTH AND SURVIVAL OF GIFT TILAPIA AT DIFFERENT SALINITIES

ISTA 12 TILAPIA COUNTRY REPORTS

Wednesday, June 19 14:00 - 15:40 Room 5 Chairs: Kevin Fitzsimmons, Menaga Meenakshisundaram, Indar Ramnarine

- 14:00 Kevin Fitzsimmons
 ASIA LEADS GLOBAL TILAPIA PRODUCTION AND MARKETS IN 2019
- 14:20 Atul K. Singh
 BOOMING TILAPIA CULTURE INTO INDIA THROUGH LOOMING SUSTAINABILITY
- 14:40 Rajesh Joshi, Anders Skaarud, Mayet de Vera, Alejandro Tola Alvarez
 GENETIC PARAMETERS FOR COMMERCIAL TRAITS IN NILE TILAPIA USING
 MULTIVARIATE GENOMIC MODELS
- 15:00 Bibha Chetia Borah
 INCORPORATION OF TILAPIA *Oreochromis niloticus* AS AN ADDITIONAL COMPONENT
 IN SIX SPECIES CARP POLYCULTURE IN ASSAM, INDIA
- 15:20 Abdel-Fattah m. El-Sayed
 An overview of tilapia culture in Africa and Lessons Learned

SEED PRODUCTION OF BRACKISHWATER AND MARINE ANIMALS

Wednesday, June 19 11:00 - 15:40 Hall 4 Chairs: A.G. Ponniah, Ravikumar Yellanki, M.K. Anil Vizhingam

- 11:00 Marcell Boaventura de Carvalho
 MARINE FIN-FISH HATCHERY TECHNOLOGY THE BASE OF A NEW SUSTAINABLE
 ALTERNATIVE TO INCREASE INDIA'S SEAFOOD PRODUCTION
- 11:20 Samuel Moses T.L.S., Felix S., Ezhilarasi V.
 MASS PRODUCTION OF PEARL SPOT *Etroplus suratensis* IN BRACKISH WATER LINED PONDS USING HUMAN GONADOTROPHIC HORMONE
- 11:40 Naveen Raj Manickavel, Felix S., Aruna S.
 EFFECT OF DHA, EPA AND ARA ENRICHED LIVE FEED ON GROWTH AND SURVIVAL IN
 EARLY LIFE STAGES OF *Etroplus suratensis* (BLOCH, 1790)

- 12:00 Joe K. Kizhakudan
 BROODSTOCK DEVELOPMENT AND LARVICULURE OF THE HUNCHBACK LOCUST
 LOBSTER Petrarctus rugosus
- 12:20 Jyoti Saroj, P. Jawahar, R. Tamil Selvan, Suman Takar EFFECT OF FEEDING ON GROWTH AND SURVIVAL OF *Terapon jarbua* (FORSSKAL, 1775) LARVAE REARED IN THE LABORATORY
- 12:40 Suresh Babu P.P., Abdul Nasar A.K., Jayakumar R., Anikuttan K.K., Imelda Joseph, Boby Ignatius, Shilta M.T., Anuraj A., Jaysree Loka, Praveen Dube, Shinoj P. COMPENSATORY GROWTH PATTERN IN STUNTED FINGERLINGS OF SILVER POMPANO IN TWO DIFFERENT SALINITY REGIMES
- 13:00 LUNCH
- 13:40 Surya S., Anil M.K., Ajit Haridas, Sajitha Rani, Ambarish P. Gop, Gomathi P., Ponni J.M., Selvakumar P. DESIGN, CONSTRUCTION AND OPERATION OF AN ADVANCED PHYTOPLANKTON CULTIVATION METHOD FOR HATCHERY FEED WITH SPECIAL EMPHASIS ON ROTIFER PRODUCTION
- 14:00 Gomathi P., Anil M.K., Surya S., Ambarish P. Gop, Raju B., Krishnapriya P.M.
 GROWTH, SURVIVAL AND SETTLEMENT OF ASIAN GREEN MUSSEL *Perna viridis*EYESPOT LARVAE AT DIFFERENT STOCKING DENSITIES IN DOWN-WELLING SYSTEM
- 14:20 Anikuttan K.K., Abdul Nazar A.K., Jayakumar R., Tamilmani G., Sakthivel M., Ramesh Kumar P., Sankar M., Hanumantha Rao G., Tinto Thomas, Krishnaveni N., Sathiya C.

 COMPARATIVE ASSESSMENT OF COPEPODS AND ROTIFERS AS LIVE FEED FOR LARVICULTURE OF SILVER POMPANO *Trachinotus blochii* (LACEPEDE, 1801)
- **14:40 Thida Ei**, Kalayar Win Maung, Than Than Myint, Moe Thandar Oo, Maung Maung Gyi, Kay Lwin Tun
 DETERMINATION OF SEX RATIO AND SPAWNING CONDITION OF *Mugil cephalus* (LINNAEUS, 1758) IN THE BAGO RIVER, MYANMAR
- **15:00** Kalayar Win Maung, Thida Ei, Than Than Myint, Moe Thandar Oo, Tin Tin Aye, Kay Lwin Tun SEASONAL VARIATIONS IN GONADAL DEVELOPMENT OF FEMALE *Tenualosa ilisha* (HAMILTON,1822)
- 15:20 Moe Thandar Oo, Than Than Myint, Kalayar Win Maung, Thida Ei, Kay Lwin Tun COMPARATIVE STUDY ON REPRODUCTIVE BIOLOGY OF TWO CUTTLEFISH SPECIES Sepia aculeata (D'ORBIGNY, 1848) AND Sepiella inermis (VAN HASSELT, 1835) IN MYANMAR COASTAL AREA

FISH IN WOMEN AND CHILD NUTRITION

Wednesday, June 19 13:40 - 15:40 Room B Chairs: J. Stephan Sampath Kumar, Vijaya Khader

- 13:40 Aakriti Regmi, Ishori Sigh Mahato, Narayan Prasad Pandit
 AQUACULTURE FOR FOOD SECURITY, POVERTY ALLEVIATION AND NUTRITION OF
 ETHNIC MUSAHAR COMMUNITY IN NAWALPARASI, NEPAL
- 14:00 Sujathkumar Nambali Valsalan, Nithya Manickam, Jawahar Pualraj,
 Sai Susmitha Bhargavi Kapparapu, Vishaka Gurung
 APPLICATION OF MOBILE COMMUNICATION TECHNOLOGIES FOR ENHANCING THE
 LIVELIHOOD OPPORTUNITIES OF FISHERMEN
- **14:20 Pritam Tripathy**, Ramasubramanian V., M. Krishnan, Ananthan P.S. DETERMINANTS OF HOUSEHOLD INCOME AND CHOICE OF ALTERNATIVE LIVELIHOODS: CASE STUDY OF RUSHIKULYA FISHERS, ODISHA
- 14:40 L. Lianthuamluaia, Uttam K. Sarkar, Puthiyottil Mishal, Gunjan Karnatak,
 Preetha Panikkar, Archan K. Das, Basanta K. Das
 TECHNOLOGICAL ADVANCEMENT IN RESERVOIR FISHERIES DEVELOPMENT FOR
 SUSTAINABLE PRODUCTION, NUTRITIONAL AND LIVELIHOOD SECURITY IN INDIA
- 15:00 Ashim Nath
 STUDY ON THE SEASONAL ABUNDANCE OF THE JUVENILES OF *Tenualosa ilisha* WITH
 BODY COMPOSITION CHANGES FROM THE HOOGHLY RIVER ESTUARY OF WEST
 BENGAL, INDIA
- 15:20 Gladston Y., Ajina S.M., Kiruba Sankar R., Latha Shenoy, Sibnarayan Dam Roy ECONOMIC EFFICIENCY OF DEEP SEA FISHERY OPERATION IN THOOTHOOR, TAMIL NADU. INDIA

INLAND SALINE AND ARID LAND AQUACULTURE

Wednesday, June 19 13:40 - 15:40 Hall 3 Chairs: K.K.Vijayan, N.K. Chadha

- 13:40 Nickolai Shadrin, Elena Anufriieva
 FLUCTUATION OF SALINE / HYPERSALINE LAKE ECOSYSTEMS BETWEEN
 ALTERNATIVE STATES AND SUSTAINABLE AQUACULTURE IN THE ARID AND SEMIARID AREAS
- 14:00 Vidya Shree Bharti, Chitranjan Raul, Gayetri Tripathi, Gopal Krishna
 BIOCHAR FOR CARBON SEQUESTRATION IN INLAND SALINE AQUACULTURE
- 14:20 Madhuri Pathak, Wazir S. Lakra, Appidi K. Reddy, N.K. Chadha, V.K. Tiwari, P.P. Srivastava
 ACCLIMATISATION AND SURVIVAL OF SILVER POMPANO *Trachinotus blochii* (LACEPEDE, 1801) IN INLAND SALINE GROUND WATER
- **14:40 Iffat Jahan**, Tiwari V.K., Verma A.K., Chadha N.K., Kumar A.P., Babitha Rani A.M. INFLUENCE OF DIFFERENT SALINITIES ON BREEDING AND LARVAL DEVELOPMENT OF COMMON CARP *Cyprinus carpio* (LINNAEUS, 1758) IN INLAND SALINE WATER

CATFISH AND OTHER FINFISH

Wednesday, June 19 13:40 - 17:00 Audit C Chairs: J.K. Jena, S. Raizada, Arun Padaiyar

13:40 Baba Usman Ibrahim

LENGTH-WEIGHT RELATIONSHIP AND CONDITION FACTORS OF AFRICAN MUD FISH Clarias gariepinus IN LAPAI – AGAIE RESERVOIR, NIGER STATE, NIGERIA

- **14:00** Theophilus Babalola, John Bunmi Olasunkanmi, Jeremiah Jimoh
 THE EFFECT OF EXOGENOUS ENZYME ON THE GROWTH PERFORMANCE OF *Clarias*gariepinus FINGERLINGS
- 14:20 Taoping Zhang, Narasimha Rao Tatavarthy, Jielin Dai, Qiufen Dong SNAKEHEAD FISH (MURREL) FARMING PRACTICE AND FEED TECHNOLOGY IN INDIA
- 14:40 Satya Prakash, Rajesh Kumar, Saloni Shivam, Sangeeta Kumari, Virendra Tiwari, N.K. Chadha, Babitha Rani, Bindu R. Pillai EVALUATION OF DIFFERENT FEEDS AND FEEDING PROTOCOLS FOR FIRST FEEDING LARVAE OF STRIPED SNAKEHEAD *Channa striata* (BLOCH, 1793)
- **15:00** Amiya Sahoo, Himansu Swain, Dharmendar Meena, Mitesh Ramteke, Basanta Das AQUACULTURE POTENTIAL OF HILSA *Tenualosa ilisha* IN INDIA: A MULTIFACET APPROACH IS NEED OF THE HOUR
- 15:20 Azhaguchamy Muthukumaran, Krishnan Sundar PRODUCTION OF GYNOGENETIC CATFISH *Clarias batrachus* USING HETEROLOGOUS SPERM OF *Mystus armatus*
- 15:40 BREAK
- 16:00 Sudhir Raizada
 PRESENT STATUS AND PROSPECTS OF CATEISH FARMING IN INDIA
- **16:20 B.Ch. Mohan Avanigadda**, Gopala Rao K., Ravi Babu Godumala RECENT TRENDS IN PANGASIUS *Pangasianodon hypophthalmus* FARMING, PRODUCTION AND MARKETING IN INDIA

WATER QUALITY MANAGEMENT

Wednesday, June 19 13:40 - 18:40 Hall 2 Chairs: A. Ramachandran, V. Kripa, Aurore Trottet

- **Amita Saxena**, Sagar Kuveskar PHYSICO-CHEMICAL ANALYSIS OF NAUKUCHIATAL LAKE, UTTRAKHAND
- 14:00 Anand Theivasigamani, Uma Arumugam, Vetrivel Velayudham,
 Parthasarathy Mahadevan, Anitha Selvam
 STATUS OF WATER QUALITY IN SELECTED SHRIMP FARMING CREEKS IN
 NAGAPATTINAM DISTRICT, TAMILNADU, INDIA
- **14:20** Mahendersingh Yadav, K. Manmadhan, A. Shanmugam STUDIES ON THE SOIL FERTILITY IN SHRIMP PONDS

14:40	Micky Wu, Bing Li, Wei Fang
	FARM-CARE PRODUCTS IN SHRIMP FARMING

- **15:00 Madhavi K.**, Venkatesh D., Prabhanjan Kumar Reddy C., Dhanapal K., Anupama R.R. COMPARATIVE STUDY ON THE WATER QUALITY OF KANIGIRI AND NELLORE RESERVOIRS OF ANDHRA PRADESH
- 15:20 Venkatesan V., Sunil Mohammed K., Vidya . R., Jenni B., Alloycious P.S., Sajikumar K.K., Jestin Joy K.M., Sheela P.P.
 ASSESSMENT OF PHYSICO-CHEMICAL PARAMETERS OF WATER AND SEDIMENTS OF ASHTAMUDI ESTUARY, SOUTHWEST COAST OF INDIA
- 15:40 BREAK
- 16:00 Asha P.S., Diwakar K., Sivanesh H., Kripa V.
 STATUS OF WATER AND SEDIMENT QUALITY CHARACTERISTICS OF SEAGRASS AND
 MANGROVE ECOSYSTEM OF TUTICORIN COAST, GULF OF MANNAR
- 16:20 Kabiru Abdullahi
 SUITABLE APPROACH FOR BIO-FOULING CONTROL IN WATER SUPPLY SYSTEMS
- 16:40 Nilesh Pawar, Umesh Rane, Digambar Kumbhar, Veerendra Veer Singh,
 Anulekshmi Chellappan, Vasant Kripa
 APPLICATION OF WATER QUALITY INDEX TO ASSESS THE SITE SUITABILITY FOR
 MARICULTURE
- 17:00 Bindu Sulochanan, Lavanya Ratheesh, Veena S., Sujith Kumar, Shelton Padua, Prathibha Rohit, Kripa V.
 COMPARISON OF WATER AND SEDIMENT QUALITY PARAMETERS INFLUENCING MANGROVE ECOSYSTEM
- 17:20 Aruna Satyapriyan, Vennila A., Manikandavelu D., Velmurugan P.,
 Prabhanjan Kumar Reddy
 DISTRIBUTION OF PHOSPHORUS POOL IN UTTAN MANGROVES, MAHARASHTRA, INDIA
- 17:40 Shivakrishna A., Karan Ramteke, Ram Singh, Abidi Z.J.
 DETERMINATION OF WATER QUALITY CRITERIA IN KOLLERU LAKE, INDIA USING
 GEOGRAPHIC INFORMATION SYSTEM
- 18:00 Ajoy Saha, Sajina A.M., Jesna P.K., Mitesh R., Caciyal J., Mishal P., U.K. Sarkar, B.K. Das, A.K. Das
 ENVIRONMENTAL ASSESSMENT OF THE IMPACT OF CAGE FISH FARMING ON WATER AND SEDIMENT QUALITY OF PALERU RESERVOIR, TELANGANA, INDIA
- **18:20 Veena S.**, Karamathulla Sahib P., Geetha Sasikumar, Bindu Sulochanan, Prathibha Rohit, Prema D., Kripa V., Sujith Kumar, Nagaraj S. Gond, Shrinath B. MONITORING BIVALVE HABITATS IN NETRAVATHI ESTUARY

ADVANCED RESEARCH DEVELOPMENTS ON SHRIMP CULTURE

Wednesday, June 19 13:40 - 18:40 Hall 1 Chair: Shiau Shi-Yen

Sponsor:



13:40 Huu Loc Tran

LESSONS LEARNED FROM THE EMERGENCE OF AHPND, EHP, AND WHITE FECES DISEASE

14:20 Yew-Hu Chien

BESIDES PIGMENTATION, THE NUTRACEUTICAL ROLES OF CAROTENOIDS IN PENAEIDS

15:00 Marc Le Groumellec

THE UPDATE FARMING AND LATEST SPF BROODSTOCK DEVELOPMENT OF P. monodon

- 15:40 BREAK
- 16:00 Giridhar Rahul Gaddipati

USE OF MONOGLYCERIDES AS AN ANTIBACTERIAL TOOL IN FISH AND SHRIMP

16:40 Ming Hsien Chen

MANAGEMENT AND PRODUCTION OF GOOD QUALITY Litopeanus vannamei SEEDS

17:20 Iyappan Thangavelu

HOW SLBI AHP HELPS FARMERS MAINTAIN GOOD WATER MANAGEMENT FOR BETTER CULTURE

LARVAL REARING AND HATCHERY MANAGEMENT

Wednesday, June 19 14:40 - 17:20 Room A Chairs: Bindu R. Pillai, Jeyaraj

- **14:40 Thumronk Amornsakun**, Lim Seng Loong, Sajeenuth Srithongthum, Sarawuth Chesoh, Sitthisak Jantarat, Nobuo Suzuki, Anuar Hassan SOME ASPECTS IN EARLY STAGE OF SULTAN FISH *Leptobarbus hoevenii* (BLEEKER, 1851) LARVAE
- **15:00 Nkiruka Oparaku**, Okeakpu Henry

PRODUCTION AND UTILIZATION OF COPEPOD AS LIVE FEED FOR REARING OF Clarias gariepinus LARVAE

Siju R., Babitha Rani, Sunil Kumar Nayak, Tiwari V.K.
EFFECT OF PHOTOPERIOD ON GROWTH AND SURVIVAL OF *Clarias batrachus*(LINNAEUS, 1758) LARVAE

15:40	BREAK
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- **Siju R.**, Babitha Rani, Sunil Kumar Nayak, V.K Tiwari OPTIMIZATION OF PHOTOPERIODISM ON GROWTH AND SURVIVAL OF *Clarias batrachus* (LINNAEUS, 1758) LARVAE
- 16:20 Arpit Acharya, Rajesh Kumar, Swarnaprava Mohapatra, Suchismita Maharana, Debashis Jena EVALUATION OF SPAWNING PERFORMANCE IN *Anabas testudineus* (BLOCH, 1792) BY SERIAL DILUTION OF sGnRHa WITH NORMAL SALINE
- **16:40** Kassaye Balkew Workagegn, Natarajan Pavanasam, Tigist Ashagre Amare GENETIC ANALYSIS OF NILE TILAPIA *Oreochromis niloticus* REARED IN TWO INPUT PRODUCTION SYSTEMS
- 17:00 Than Than Myint, Kalayar Win Maung, Thida Ei, Moe Thandar Oo, Kay Lwin Tun INDUCED BREEDING OF CLIMBING PERCH *Anabas testudineus* (BLOCH, 1792) UNDER VARYING BROODSTOCK RATIONS
- 17:20 Kalidas Chellappa, Santhosh B., Chadha N.K.
 GROWTH AND SURVIVAL OF ORANGE SPOTTED GROUPER Epinephelus coioides
 EARLY STAGE LARVAE FED WITH CALANOID COPEPOD Acartia southwelli NAUPLII

DIAGNOSTICS

Wednesday, June 19 16:00 - 18:40 Audit A Chairs: Indrani Karunasagar, P.K. Sahoo, Zengfu Song, Peter Bossier

- 16:00 Sandra Zainathan, Nurshuhada Ariff, Azila Abdullah, Mohamed N.A. Azmai, Najiah Musa CASE STUDY OF VIRAL NERVOUS NECROSIS (VNN) IN MALAYSIAN GROUPERS: SEQUENCE ANALYSIS STRATEGIES AND QUASISPECIES DETERMINANTS
- 16:20 Gopalakannan Ayyaru, Felix Sugantham, Uma Arumugam, Ahilan Baboonsundaram RAPID DIAGNOSIS AND INFECTION STATUS OF WSSV, AHPND AND EHP DISEASES IN POST LARVAE AND FARM REARED *Penaeus vannamei* BY INSULATED ISOTHERMAL PCR METHOD
- **Sujeet Kumar**, J.J.S. Rajan, K.N. Viswas, S.V. Alavandi, K.K. Vijayan IN SILICO ANALYSIS OF VIRULENCE OF *Vibrio harveyi* CLADE
- 17:00 Anburaj Amaladoss, Kadamb Patel
 A RAPID AND SENSITIVE DIAGNOSTIC METHOD FOR SIMULTANEOUS DETECTION
 OF FOUR DIFFERENT SHRIMP PATHOGENS
- T.J. Abraham, M.S. Namdeo, R.B. Julinta, H. Adikesavalu, S. Banerjee
 PATHOGENICITY AND PATHOLOGY OF Streptococcus agalactiae IN CHALLENGED MOZAMBIQUE TILAPIA Oreochromis mossambicus (PETERS, 1852)
- 17:40 Muthulakshmi Thandapani, Murugadas Vaiyapuri, Ranjithkumar Nadhella, Ezhilnilavan S., Greeshma S.S., Prasad Muktheswar Mothadaka OCCURRENCE OF *Vibrio vulnificus*, AN EMERGING PATHOGEN IN AQUACULTURE PONDS

18:00 Nway Ei Khaine, Cho Cho Thin, Nant Thin Thin Kywe, Hendrik Stolz, Kevin Fitzsimmons, Kay Lwin Tun
DETECTION OF WHITE SPOT SYNDROME VIRUS (WSSV) INFECTION IN *Penaeus monodon* CULTURED IN TRAP AND HOLD FARMING

GENOMICS AND TRANSCRIPTOMICS

Wednesday, June 19 16:00 - 18:40 Hall 3 Chairs: A. Gopalakrishnan, Vindhya Mohindra, Karl Marx, Paramanada Das, Shashisekar, B.K. Behera

- **16:00** Yudong Shen, Xianwu Guo, Weimin Wang IDENTIFICATION AND CHARACTERIZATION OF CIRCULAR RNAS IN BLUNT SNOUT BREAM Megalobrama amblycephala
- 16:20 Phillip Dettleff, Marcia Fuentes, Rodrigo Zuloaga, Jorge Aedo, Alfredo Molina, Juan Antonio Valdés
 EFFECT OF THERMAL STRESS IN GILLS AND MUSCLE OF BLACK CUSK-EEL Genvoterus maculatus JUVENILE
- 16:40 Ahran Kim, Do-Hyung Kim
 CO-EXPRESSION ANALYSIS OF HEAD KIDNEY FROM BLACK ROCKFISH Sebastes
 schlegeli (HILGENDORF) INFECTED WITH Aeromonas salmonicida subsp. masoucida
 RFAS1
- 17:00 Janmejay Parhi, Asem Lembika Devi, Joy Monsang, Lopamudra Sahoo,
 Bijay Kumar Behera, Sagar Chandra Mandal
 MOLECULAR CHARACTERISATION OF AQUAPORIN 7 IN Clarias batrachus
- 17:20 Subrata Dasgupta, Sinthoi Chingakam, S. Chandrashekar, Narrotam P. Sahu, Gayatri Tripathi, Asim K. Pal HYPOXIA INVERSELY INFLUENCES ION TRANSPORTER PROTEINS AND AQUAPORIN 1 GENE IN PEARL SPOT *Etroplus suratensis* UNDER SALINITY CHALLENGES

ENTREPRENEURSHIP DEVELOPMENT

Wednesday, June 19 16:00 - 18:40 Room B Chairs: J. Stephan Sampath Kumar, B.C. Mohapatra

- **Santhakumar Rajagopal**, Chathurna R.D., Aswinkumar Singh AN OVERVIEW OF FISH-PRENEURSHIP
- 16:20 Swathi Lekshmi P.S., Narayanakumar Ramani, Phalguni Pattnaik DIVERSIFIED LIVELIHOODS AMONG SMALL SCALE FISHERS: A PRINCIPAL COMPONENT ANALYSIS
- **16:40 Balkam Sangma**, Arpita Sharma RECREATIONAL FISHING AS AN ENTREPRENEURIAL ACTIVITY IN MEGHALAYA, INDIA
- 17:00 B.C. Mohapatra, Barsha B. Das, B.R. Pillai
 ENTREPRENEURSHIP DEVELOPMENT THROUGH FRP CARP HATCHERY
 TECHNOLOGY: A NEW RAY OF HOPE

- 17:20 Bipin Vishwakarma, Dinesh Mohan, Preetam Kala, N.N. Pandey PRODUCTION POTENTIAL OF GRASS CARP Ctenopharyngodon idella UNDER DIFFERENT SYSTEMS IN MID HILLS OF UTTARAKHAND
- 17:40 Nityanand Pandey, Raghvendra Singh, Biju S. Kamlam, Bipin K. Vishwakarma, Preetam Kala
 POTENTIAL OF STERILE TRIPLOID RAINBOW TROUT *Oncorhynchus mykiss* FOR AQUA TOURISM AND AQUACULTURE IN HILLS
- 18:00 Kiruba Sankar Rajendran, Raymond Jani Angel Do Open Sea Fish Cages Have Recreational Value? A cage tourism Outlook for Andaman Islands, India

FOOD SAFETY STANDARDS

Wednesday, June 19 16:00 - 18:40 Room 5 Chairs: Iddya Karunasagar, T.V. Sankar, Rubiyanto Haliman

- 16:00 Muhammed Rafeeque K.T., Mini Sekharan N.
 ALTERNATIVES FOR MULTIPLE FOOD SAFETY MANAGEMENT SYSTEMS IN THE SEAFOOD INDUSTRY IN INDIA
- 16:20 Anil Kewat, Lidiya Wilwet, Geevaretnam Jeyasekaran, Robinson Jeya Shakila SEAFOOD FORENSICS: AUTHENTICATION OF HIGHLY PRICED COMMERCIAL FISH USING DNA BASED MOLECULAR MARKERS
- 16:40 Emma Freycon, Juliette Alemany, Emmanuelle Bourgois BEYOND AND BESIDES CERTIFICATION: HOW TO CERTIFY SUSTAINABILITY?
- 17:00 Michele Muccio, Ursula Hofstetter, Alexandro Marchioro, Dian Schatzmayr FUMONISINS IN ASIA: OCCURRENCE AND IMPLICATIONS FOR AQUACULTURE
- 17:20 Abhay Kumar, M.M. Prasad, V. Murugadas, Niranjana Sashi, G.K. Sivaraman, Ezhil Nilavan, Mousami Bayas, L. Narasimha Murthy Cronobacter sakazakii IN SEA FOODS: ISOLATION, CHARACTERIZATION AND ANTIBIOTIC SUSCEPTIBILITY
- 17:40 Lidiya Wilwet, Geevaretnam Jeyasekaran, Robinson Jeya Shakila,
 Binaya Bhusan Nayak, Balasubramanian Sivaraman
 SEAFOOD FRAUD DETECTION: DEVELOPMENT OF MULTIPLEX PCR ASSAY FOR THE
 AUTHENTICATION OF COMMERCIALLY IMPORTANT SHRIMP SPECIES
- 18:00 Saranya A. Sankar, Mini Sekharan N.
 BARRIERS IN IMPLEMENTING FOOD SAFETY MANAGEMENT SYSTEM, ISO
 22000:2005 IN SEAFOOD EXPORT FIRMS: AN EXPLORATORY FACTOR ANALYSIS

SHRIMP HATCHERY AND NURSERY PRACTICES

Wednesday, June 19 16:00 - 18:40 Audit B Chairs: A.G. Ponniah, Kandan, Craig Browdy

Sponsor:

- nutrition through innovation
- 16:00 Balasubramanian C.P., Vijayan K.K. OPEN THELYCUM AND CLOSED THELYCUM PENAEID SPECIES WITH SPECIAL REFERENCE TO THEIR REPRODUCTIVE ADVANTAGES AND SELECTIVE BREEDING SUCCESS
- 16:20 Remany M.C., Kannan D., Cyriac Daly, Sruthi Prem, Krishnakanth Varada Raju, Suresh Babu, Lakshmi Narayana, Sateesh Kumar, Panda A.K., Kandan S. AN OVERVIEW ON THE OPERATION OF ASIA'S ONE AND ONLY QUARANTINE FACILITY FOR THE PACIFIC WHITE SHRIMP Penaeus vannamei (BOONE, 1931).
- 16:40 **Craig Browdy**, Ramir Lee, Cao Khanh Ly, Satya Murthy, Peter Van Wyk THE BOLE OF HATCHERY FEEDS IN SHRIMP HEALTH MANAGEMENT.
- 17:00 Aedrian Ortiz Johnson, Eamonn Obrien TESTING WHITE SHRIMP POST LARVAE L. vannamei ROBUSTNESS WITH AN "ENEREGY RESERVE MEASUREMENT TEST", A NEW QUALITY CONTROL PARAMETER
- 17:20 Nirav Borakhatariya, J. Stephen Sampath Kumar, C. Judith Betsy, V. Senthil Kumar ROLE OF SIMPLE FEEDING REGIME IN THE HATCHING AND REARING OF Penaeus semisulcatus LARVAE
- Marcell Boaventura, Fernando A. Garcia 17:40 EFFICIENCY IN SHRIMP HATCHERY. INCREMENTAL SURVIVAL. AND ROBUSTNESS WITH EFFECTIVE USE OF PROBIOTICS
- 18:00 **Roshmon Thomas.** Ahmed Alsagufi, Yousef Alkhamis, Sheikh Mustafizur Rahman. Muhammed Aslam, Rashid Alngada EFFECTS OF GREEN WATER COMPOSED OF MONO AND MIXED MICROALGAL STRAINS ON SURVIVAL. GROWTH AND DEVELOPMENT OF LARVAL FRESHWATER PRAWNS Macrobrachium rosenbergii
- 18:20 A.H. Nabisa Begum, A.C. Rathiesh Sathya, M. Sriniyasan Muthu MENTHA PIPERITA (IMMUNOMODULATOR) TO IMPROVE THE MATURATION AND BREEDING OF IMPORTED SHRIMP Litopenaeus vannamei IN COMMERCIAL HATCHERY, COROMENDAL COAST OF INDIA

CONTRIBUTED AQUATIC ANIMAL HEALTH

Wednesday, June 19 16:40 - 18:40 Audit C Chair: Indrani Karunasagar, Peter Bossier

- **16:40 Nurliyana Mohamad**, Mohammad Noor Amal Azmai, Mohd. Zamri Saad, Ina Salwany Md. Yassin, Muskhazli Mustafa PREVALENCE OF *VIBRIO* spp. IN TROPICAL MARINE CAGE-CULTURED FISHES
- 17:00 Erhowose E. Omovwohwovie, A.O. Adeyemo, A.A. Garba, C.B. Okogbue, L. Fineroad Parasitic incidence observed in *Oreochromis niloticus* at the fisheries unit of Niger Delta University teaching and research farm
- 17:20 Ranjeeta Kumari, Gireesh Babu P., K.V. Rajendran, M.K. Bedekar A NOVEL shRNA TOOL TO STUDY TARGETED SILENCING EFFICIENCY OF IRAK4 GENE IN *Penaeus monodon*
- 17:40 Jeevitha C., Neethiselvan N., Ravikumar T., Ilayaraja M., Manikandavelu D., Senthilkumar V., Anand T. ETHNO FISHERIES SCIENCE, THE NEED OF THE HOUR FOR FISHERIES DEVELOPMENT AND MANAGEMENT
- 18:00 Alexandre Veille
 EFFICACY OF MARINE SULFATED POLYSACCHARIDE EXTRACT OF GREEN ALGAE, TO
 ENHANCE SHRIMP Penaeus vannamei IMMUNITY AND RESISTANCE AGAINST WHITE
 SPOT SYNDROME VIRUS (WSSV)
- **18:20 Pawan Kumar Sharma**, J. Stephan Sampath Kumar, B. Ahilan, A. Uma DETERMINATION OF THE EFFECTIVENESS OF DIFFERENT ANESTHETIC DOSES OF 2-PHENOXYETHANOL FOR JUVENILES OF *Eutropus suratensis* PEARL SPOT

INDUCED BREEDING FOR HATCHERY MANAGEMENT OF FINFISH

Wednesday, June 19 16:00 - 18:00 Hall 4 Chairs: A.G. Ponniah, A. Nazar, S.T. Arasu

- 16:00 Luís André Sampaio, Joel Linares, Diego Miranda, Marcelo Hideo Okamoto, Ricardo Vieira Rodrigues, Patricia Ramos, José Maria Monserrat THE EFFECT OF STOCKING DENSITY ON PRODUCTION OF JUVENILE BRAZILIAN FLOUNDER Paralichthys orbignyanus II: EFFECTS ON OXIDATIVE STRESS RESPONSES
- 16:20 Marz Linnaeous Rabadon, Mark Nell Corpuz, Adrian Deil Manliclic, Mark June Consigna HORMONAL INDUCED SPAWNING OF CAPTIVE SILVER THERAPON Leiopotherapon plumbeus (KNER, 1864)
- 16:40 Shilta M.T., Suresh Babu P.P., Asokan P.K., Vinod K., Imelda Joseph, Ramya Abhijith INDUCED SPAWNING TRIALS ON PICNIC SEABREAM *Acanthopagrus berda* FROM INDIA
- 17:00 Ambarish P. Gop, Surya S., Anil M.K., Gomathi P., Santhosh B., Jasmine S., Krishnapriya P.M. NATURAL SPAWNING AND SCALING UP OF LIVE SUCKER SHARK *Echeneis naucrates* IN CAPTIVITY
- 17:20 Dani Thomas, Rekha M.U., Raymond J.A., Krishna Sukumaran, Kailasam M., Vijayan K.K. FIRST PRODUCTION OF SILVER MOONY *Monodactylus argenteus* IN CAPTIVITY AS A NOVEL CANDIDATE SPECIES FOR BRACKISHWATER AQUARICULTURE

THURSDAY, June 20

PREBIOTICS AND PROBIOTICS

Thursday, June 20 09:00 - 10:40 Audit A Chairs: Indrani Karunasagar, Riji John, Farshad Shishehchian, Peter Bossier

- 09:00 Eric Leclercq, Caroline Achard, Stéphane Ralite, Loc Tran, Mathieu Castex GUT MICROBIATA AND HISTOPATHOLOGICAL CHANGES ASSOCIATED WITH WFD IN JUVENILES *Litopenaeus vannamei* AND THE MODULATING EFFECT OF A MULTI-STRAINS YEAST FRACTION PRODUCT
- 09:20 Pushpa Choudhary, Rakesh Das, S.S. Mishra, P. Swain
 EFFECTS OF DIETARY SUPPLEMENTATION OF PROBIOTICS IN COMBINATION ON
 NON-SPECIFIC IMMUNE RESPONSE AND SERUM ENZYMES OF Labeo robita
- 09:40 Usha Antony, Shalini R., Ayyappan P.
 ADVANCES IN PREBIOTICS AS FUNCTIONAL INGREDIENTS
- 10:00 Harapriya Behera, Riji John K., Rosalind George M.
 ISOLATION OF PROBIOTIC BACTERIA FROM TILAPIA (GIFT) CULTURE PONDS AND
 ITS APPLICATION IN PROTECTION OF FISH FROM INFECTIOUS PATHOGENS
- 10:20 Rayaprolu Srinivas
 EFFECT OF PROBIOTICS ON VIBRIO BACTERIAL POPULATION OF *Litopenaeus*vannamei IN CULTURE PONDS AT VAKAPADU, ANDHRA PRADESH, INDIA

INDIGENEOUS TECHNICAL KNOWLEDGE

Thursday, June 20 09:00 - 10:40 Room B Chairs: J. Stephan Sampath Kumar, Haribabu, Emmanuelle Bourgois

- 09:00 Deepen Modi, Manish Shrivastava
 USING MACHINE LEARNING AND INTERNET OF THINGS IN A RECIRCULATING
 AQUACULTURE SYSTEM FOR INCLUSIVE VALUE CHAIN DEVELOPMENT IN A TRIBAL
 HAMLET FOR SUSTAINABLE AQUACULTURE OF MUD CRABS Scylla serrata
- **09:20** Ajina S.M., Gladston Y., Kiruba Sankar R., Latha Shenoy, Sibnarayan Dam Roy DESIGN AND PERFORMANCE OF TRADITIONAL FAD "AKKADI" USED ALONG THE VIZHINJAM COAST OF KERALA
- **09:40** Shoji Joseph, Ajithkumar P.B., Priya N.P., Imelda Joseph, Boby Ignatius COMPARATIVE EVALUATION OF GROWTH AND PROFIT OF SEA BASS *Lates calcarifer* (BLOCH) CULTURE IN COASTAL CAGE FARMING BASED ON HARVEST DURATION
- 10:00 Nagesh Kumar Barik
 CONVERTING RESEARCH INTO BUSINESS: EXPERIENCE OF USING BUSINESS
 INCUBATION IN AQUACULTURE
- 10:20 Meghna Meghna, Albiya Arshabi, Bibha Kumari, D.K. Paul SOCIAL IMPACT OF FORMALIN LACED FISH BAN IN PATNA
- 10:40 Anamika Sagolsem, S.N. Ojha
 INDIGENOUS TECHNICAL KNOWLEDGE OF PHOOM FISH CULTURE A FISH
 AGGREGATING DEVICE IN LOKTAK LAKE MANIPUR

SHRIMP CULTURE

Thursday, June 20 09:00 - 10:40 Hall 4 Chairs: K.K. Vijayan, Farshad Shishehchian, May Myat Noe Lawin

Sponsor:



- **09:00** Gunalan Balakrishnan
 EFFECT ON TURBIDITY IN *Penaeus vannamei* SHRIMP PONDS ALONG THE
 COROMANDEL COAST
- 09:20 Vivek Santhiya Anix, Athithan S., Ahilan B., Rajagopalasamy C.B.T.
 COMPARISON OF PERIPHYTON BIOMASS ON COCONUT COIR AND BAMBOO POLES
 NATURAL SUBSTRATES IN EARTHEN LINED POND
- 09:40 Maharajan A., Rajalakshmi S., Ganapiriya V.
 HISTOPATHOLOGICAL CHANGES OF INDIAN WHITE SHRIMP *Litopenaeus vannamei*EXPOSED TO CHLORPYRIFOS
- 10:00 Muralidhar M., Saraswathy R., Kumararaja P., Suvana S., Nagavel A., Vijayan K.K.
 SOIL AND WATER HEALTH CARDS IN BRACKISHWATER AQUACULTURE –
 IMPLICATIONS FOR LOCATION SPECIFIC BMPS FOR PRODUCTIVE AND SUSTAINABLE
 POND ENVIRONMENT
- 10:20 Uwe Scholz, Soe Tun, Htin Aung Kyaw, Sascha Romatzki, Kevin Fitzsimmons SAVING THE BURMESE TIGER CURRENT EFFORTS IN RECUPERATING THE TRADITIONAL COASTAL *Penaeus monodon* TRAP AND HOLD AQUACULTURE SECTOR IN MYANMAR

GENETIC IMPROVEMENT

Thursday, June 20 09:00 - 10:40 Audit C Chairs: Kuldeep K. Lal, Kantha Das Mohapatra, Nick Robinson, Dean Jerry

- 09:00 Gen Hua Yue, Huan-Sein Lim Status of Molecular Breeding of Asian Seabass in Singapore Since 1998
- 09:40 Bindu Pillai, Kanta Mahapatra, Raul Ponzoni, Debabrata Panda, Hooiling Khaw, Bibhudatta Mishra, Namita Naik AFTER NINE GENERATIONS OF SELECTION FOR INCREASED BODY WEIGHT AT HARVEST IN GIANT FRESHWATER PRAWN Macrobrachium rosenbergii, WHAT IS THE WAY AHFAD?

FISHMEAL REPLACEMENT IN AQUACULTURE

Thursday, June 20 09:00 - 13:00 Audit B Chairs: N.P. Sahu, Arul Victor Suresh, Alberto Nunes

Sponsor:

AKER BIOMARINE

09:00 Vidar Gundersen
SUCCESS STORY OF FISHMEAL REPLACEMENT FOR ALTERNATIVE PROTEINS IN
SALMON FEEDS

09:20 Pena Li

USES OF RENDERED ANIMAL PROTEINS AS SUSTAINABLE SOLUTIONS OF FISHMEAL REPLACEMENT IN AQUACULTURE

- **09:40** Yang-Su Kim, Kyoung-Jin Jung, Bruno Lima REPLACEMENT OF FISHMEAL BY SOY PROTEIN CONCENTRATE IN SHRIMP FEEDS
- 10:00 Duy Hoa Nguyen
 REPLACEMENT OF FISHMEAL BY CORN PROTEIN CONCENTRATES IN AQUA FEEDS
- 10:20 Sergio Nates, Arul Victor Suresh
 USE OF UNCONVENTIONAL PROTEIN SOURCES TO REPLACE FISHMEAL IN SHRIMP
 FEEDS
- 11:00 Kevin Fitzsimmons
 PROMOTION OF NOVEL INGREDIENTS AS FISHMEAL REPLACEMENTS: F3 CONTEST
 AND A FEED INNOVATION NETWORK
- 11:20 Matts Johansen
 IMPROVING HUMAN AND PLANETARY HEALTH BY DELIVERING KRILL TO SHRIMP
 FFFD INDUSTRY
- 11:40 Alberto Nunes, Lena Burri LOW INCLUSIONS OF KRILL MEAL COUNTERACT THE EFFECTS OF FISHMEAL REPLACEMENT IN WHITELEG SHRIMP FEEDS
- 12:00 Arul Victor Suresh FORMULATING LOW FISHMEAL FEEDS
- 12:20 Romi Novriadi, Allen Davis
 THE EFFECTS OF FISH MEAL REPLACEMENT ON THE GROWTH AND PHYSIOLOGICAL
 CONDITIONS OF FLORIDA POMPANO *Trachinotus carolinus*

AQUACULTURE ECONOMICS AND FINANCES
Thursday, June 20 09:00 - 13:00 Room 5
Chairs: Debajit Sharma, Ganesh Kumar, M. Krishnan, N.K. Barik

09:00	Ganesh Kumar FACTORS DRIVING AQUACULTURE TECHNOLOGY ADOPTION
09:20	Mohammad Nadim Ansari AQUACULTURE PAST SCENARIO AND FUTURE PROSPECTS
09:40	A.C. Rathiesh , M. Srinivasan PRESENT STATUS OF <i>Litopenaeus vannamei</i> IN TAMIL NADU – A PROFITABLE VENTURE
10:00	Frencia Chisim Sangma, Rama Sharma ECONOMICS OF SPORT FISHERIES IN RI-BHOI DISTRICT, MEGHALAYA
10:20	Jayaraman Ramanujam , Umamaheswari T., Rajarajan R. TECHNICAL EFFICIENCY ANALYSIS IN SHRIMP FARMING IN INDIA
10:40	BREAK
11:00	Emmanuelle Bourgois , Marie Biron DATA IN AQUACULTURE; ETHICAL AND PRIVACY GUIDELINES AND PRINCIPLES TO DATE
11:20	Khemraj Bunkar , Swadesh Prakash, Mohan Krishnan, Nalini Ranjan Kumar, Ramasubramanian V. VALUE CHAIN ANALYSIS OF FISH IN BHARATPUR, RAJASTHAN
11:40	Stanzin Gawa , Nalini Ranjan Kumar, Swadesh Prakash, Rama Sharma, Pradeep Kumar INCOME INEQUALITY AMONG FISH SEED GROWERS IN THE INDIAN STATE OF JHARKHAND
12:00	Ramanan Mahadevan INNOVATIVE FINANCING STRATEGIES FOR AQUACULTURE PROJECTS
12:20	Ganesh Kumar PREPARING A SOUND AQUACULTURE BUSINESS PLAN
12:40 OUT	Aswathy Natarajan , Imelda Joseph RESOURCE USE EFFICIENCY OF CAGE FISH FARMING IN THE COASTAL WATERS OF KERALA, INDIA

CAGE AND PEN CULTURE

Thursday, June 20 09:00 - 13:00 Room A Chairs: J.K. Jena, U.K. Sarkar, Hukam Singh Dhaker, Masud Balki

- 09:00 Thankam Theresa Paul, Kuberan Ganeshan, Preetha Panickker, Deepa Sudheesan, Manoharan S., Usha U., Uttam Kumar Sarkar, B.K. Das AN ADAPTIVE STRATEGY FOR ENHANCEMENT OF CLAM FISHERIES USING CLIMATE RESILIENT MULTI-TROPHIC SYSTEM IN VEMBANAD LAKE
- 09:20 Mitesh Ramteke, Puthiyottil Mishal, P.K. Jesna, Canciyal Johnson, A.M. Sajina, Ajoy Saha, Archan Kanti Das, Uttam Kumar Sarkar, Basanta Kumar Das SCOPE OF SPECIES DIVERSIFICATION FOR INLAND FRESHWATER CAGE CULTURE IN RESERVOIR OF TELANGANA
- 09:40 M.A. Hassan, P. Mishal, Md Aftabuddin, D.K. Meena, S. Dasgupta, Y. Ali, B.K. Naskar, B.K. Das PERFORMANCE OF FEED IN CAGES IN RESPONSE TO ENVIRONMENT AND DOMESTICATION PROCESS IN Labeo rohita
- 10:00 Suman Kumari, G. Karnatak, Mishal P., T. Tayung, Y. Ali, B. Naskar, A.K. Das, U.K. Sarkar, B.K. Das INFLUENCE OF CAGE CULTURE ON PHYTOPLANKTON COMMUNITY STRUCTURE AND ABUNDANCE IN A TROPICAL RESERVOIR, INDIA
- 10:20 Himanshu Sekhar Swain, M.H. Ramteke, S. Kumari, A.K. Sahoo, D.K. Meena, U.K. Sarkar, B.K. Das
 PERUSAL OF *Barbonymus gonionotus* FOR SCAVENGING THE BIOFOULING AND ENHANCING PRODUCTION EFFICIENCY IN POLYCULTURE WITH *Pangasianodon hypophthalmus* IN TROPICAL INDIAN RESERVOIR: A BIO-MANIPULATION STRATEGIES TOWARDS GREENING OF INLAND CAGE ENVIRONMENT
- 10:40 Jesna P.K., Das B.K.
 CAGE CULTURE OF *Etroplus suratensis* IN KRISHNAGIRI RESERVOIR, TAMIL NADU, INDIA
- 11:00 Gunjan Karnatak, Tasso Tayung, Puthiyottil Mishal, Suman Kumari, Yusuf Ali, Subrata Das, Archan Kanti Das, Uttam Kumar Sarkar, Basanta Kumar Das OPTIMISATION OF STOCKING DENSITY OF Labeo bata FOR GROW OUT IN CAGES
- 11:20 Dipesh Debnath, Sona Yengkokpam, Birendra Kumar Bhattacharjya,
 Uttam Kumar Sarkar, Kabin Medhi, Kalpajit Gogoi, Basanta Kumar Das
 POLYCULTURE OF SMALL INDIGENOUS FISHES WITH MAJOR CARPS IN PENS AS A
 CLIMATE RESILIENT ADAPTATION STRATEGY: AN ECONOMIC ANALYSIS
- 11:40 Tasso Tayung, Archana Sinha, Pranab Gogoi, Mitesh H Ramteke, Aparna Roy, Arunava Mitra, Uttam K Sarkar EFFECT OF STOCKING DENSITY ON GROWTH PERFORMANCE AND SURVIVAL OF Labeo rohita AND Catla catla IN NET SCREEN BARRIER SYSTEM IN CANAL OF SUNDARBAN, INDIA
- 12:00 Himanshu Sekhar Swain, M.H. Ramteke, S.P. Kamble, Jeshna P.K., Mishal P., C. Johnson, U.K. Sarkar, B.K. Das FEASIBILITY STUDY OF GROW OUT FARMING OF *Labeo rohita* FOR INLAND OPEN WATER CAGE CULTURE IN DIFFERENT TROPICAL AGRO CLIMATIC RESERVOIRS OF INDIA

- **12:20** Archan Kanti Das, Basanta Kumar Das CONCERNS FOR CLIMATE-SMART ENCLOSURE CULTURE IN INLAND OPEN WATERS
- 12:40 Archan Kanti Das, Basanta Kumar Das, Puthiyottil Mishal, Himanshu Sekhar Swain, Tasso Tayung, Uttam Kumar Sarkar, Mitesh Ramteke CAGE CULTURE FOR PRODUCTION OF TABLE FISH IN PONG RESERVOIR, HIMACHAL PRADESH, INDIA
- **Mitesh Ramteke**, himanshu Sekhar Swain, Dharmendra Kumar Meena, Amiya Kumar Sahoo, Bablu Naskar, Yusuf Ali, Uttam Kumar Sarkar, Basanta Kumar Das EFFECT OF STOCKING DENSITIES ON THE GROWTH PERFORMANCE OF Pangasianodon hypophthalmus IN CAGES IN SALIA RESERVOIR OF ODISHA

HEALTH AND NUTRITION FOR SUSTAINABLE AQUACULTURE

Thursday, June 20 09:00 - 13:00 Hall 1 Chairs: A.G. Ponniah, Sachi Kaushik, Alexandros Samartzis Sponsor:



- 09:00 Thomas Wilson
 FISH NUTRITION DURING STRESS AND DISEASE: VITAMINS AND AMINO ACIDS
- **O9:40**Alberto Nunes, Felipe Nobre Façanha, Hassan Sabry-Neto, Karthik Massagounder A REVIEW ON THE EFFECTS OF PRODUCTION AND DIETARY VARIABLES FOR AN OPTIMAL METHIONINE CONTENT IN PRACTICAL DIETS FOR *Litopenaeus vannamei*
- **10:20 Juyun He**, Karthik Masagounder, Mingchun Ren
 LOWERING DIETARY PROTEIN LEVELS IN THE DIETS OF JIAN CARP *Cyprinus carpio*var. *Jian* USING SUPPLEMENTAL AMINO ACIDS
- 10:40 BREAK
- 11:00 Prakan Chiarahkhongman
 THE TREND OF HEALTH MANAGEMENT PRACTICES FOR SUSTAINABLE SHRIMP
 FARMING IN 2019
- 11:20 Manoj Sharma
 WHEN CARRYING CAPACITY EXCEEDS IN SHRIMP FARMING
- 11:40 Karthik Masagounder, João Dantas Lima
 IN VITRO EVALUATION OF Bacillus amyloliquefaciens CECT 5940 PROBIOTICS FOR
 AQUACULTURE APPLICATIONS

BIODIVERSITY - CONTINUED

Thursday, June 20 09:00 - 13:00 Hall 2 Chairs: A. Ramachandran, P. Krishnan, Grinson George, Muralidharan

- 09:00 Durairaja Ramulu, Jawahar Paulraj, David Kingston Samuel, Sri Hari Murugesan, Nirmal Tamilarasan, Velayutham Padamanadan LENGTH-WEIGHT RELATIONSHIP, CONDITION FACTOR AND MORPHOMETRY OF FLAT HEAD GREY MULLET Mugil cephalus (LINNAEUS, 1758) FROM PULICAT LAKE, TIRUVALLUR DISTRICT, TAMIL NADU
- 09:20 Suman Takar, U.R. Gurjar, Jyoti Saroj, A. Dwivedi, Geetanjali Deshmukhe, A.K. Jaiswar DISTRIBUTION OF PLANKTON AND BENTHIC ORGANISMS IN POLLUTED AND UNPOLLUTED MANGROVE ECOSYSTEM AROUND MUMBAI COAST
- 09:40 Deepika S., Srinivasan A., Padmavathy P., Jawahar P.
 PLANKTON DIVERSITY OF SEAGRASS ECOSYSTEM IN MANDAPAM COAST, GULF OF
 MANNAR
- 10:00 Kanaga V., Rajakumar M., Sujjathkumar N.V., Jawahar P., Brita Nicya ROLE OF MARINE FISHERIES REGULATIVE MEASURES IN SUSTAINABLE DEVELOPMENT
- 10:20 Vidhya V., Jawahar P., Davidkingston S., Karuppasamy K.
 POPULATION STRUCTURE OF THE THREE-SPOT SWIMMING CRAB *Portunus*sanguinolentus (HERBST, 1783) (CRUSTACEA: BRACHYURA: PORTUNIDAE) OF THE
 GULF OF MANNAR. SOUTH EAST COAST. INDIA
- 10:40 BREAK
- 11:00 Mahesh Chand Sonwal, Somashekara S.R., Jitendra Kumar, Shobha Rawat, Gayatri Pandey, Sahana K.
 DIVERSITY AND SEASONAL VARIATION OF CRUSTACEANS IN TRAWLING GROUND OFF MANGALURU COAST OF KARNATAKA
- 11:20 Karuppasamy K., P. Jawahar, S. David Kingston, V. Vidhya
 OCCURRENCE, DIVERSITY AND CATCH RATE OF CLUPEIFORMES FISHES FROM
 SOUTHERN COAST OF INDIA
- **V.S. Basheer**, Rahul G. Kumar, Krishnaprasoon N.P., Joshi K.D., Adithya Kumar, Kuldeep K. Lal
 IS EXOTIC CATFISH *Clarias gariepinus* A THREAT TO FRESHWATER BIODIVERSITY?
 A CASE STUDY FROM KERALA
- 12:00 Syed Shabih Hassan, Datta S.N.
 FISH CATCH COMPOSITION AND DIVERSITY IN THE RIVER BEAS IN PUNJAB (INDIA)
- 12:20 Thu Thu Min
- ASSESSMENT OF ANCHOVY FISH CATCHES BY PURSE SEIN NET IN KYEINTALI COASTAL AREA. RAKHINE STATE
- 12:40 Cherry Aung
 INVESTIGATION OF FISHERY STATUS OF THE THANLWIN RIVER ESTUARY IN MON
 STATE

GENOMICS AND TRANSCRIPTOMICS – CONTINUED

Thursday, June 20 09:00 - 13:00 Hall 3 Chairs: A. Gopalakrishnan, Vindhya Mohindra, Karl Marx, Paramanada Das, Shashisekar, B.K. Behera

09:00 Raju Ram, Gulshan Kumar, Annam Pavan Kumar, Gireesh Babu P., Aparna Chaudhari, S. Jahageerdar

MINING AND MAPPING OF SNP IN GROWTH HORMONE RECEPTOR OF Clarias magur

- **O9:20** Aparna Chaudhari, Chandan Haldar, Rameez Roshan, S. Jahageerdar, Gireesh Babu P., Annam Pavan Kumar, Prakash Koringa, Chaitanya G. Joshi SNP MARKERS ASSOCIATED WITH GROWTH TRAITS IN Clarias magur (HAMILTON, 1822) IDENTIFIED BY RNASeq
- 09:40 M.S. Shekhar, K. Vinaya Kumar, J. Ashok Kumar, C.P. Balasubramanian, K. Karthic, K.K. Vijayan WHOLE GENOME SEQUENCING AND DE NOVO DRAFT ASSEMBLY OF INDIAN WHITE SHRIMP Penaeus indicus
- 10:00 Kiran Rasal, Samiran Nandi, Mir Asif Iquebal, Sarika Jaiswal, Sangita Dixit,
 Manohar Vasam, Mustafa Raza, Lakshman Sahoo, Avinash Rasal, Khuntia Murmu,
 Kanta Das Mahapatra, U.B. Angadi, Anil Rai, Dinesh Kumar, Jitendra Kumar Sundaray
 LIVER TRANSCRIPTOME PROFILING FOR DELINEATION OF MODULATION IN
 CARBOHYDRATE METABOLIC GENES AND PATHWAYS IN GENETICALLY IMPROVED
 CARP, JAYANTI ROHU Labeo rohita
- 10:20 Lakshman Sahoo, Amrita Bit, Sofia P. Das, Paramananda Das Insights into the evolution of high capacity peripheral hearing in Teleosts
- 10:40 BREAK
- 11:00 Anupama Rathnam Ravikumar, Arabinda Mohanty, Tandrima Mitra, Sangram Rout, Bimal Prasanna Mohanty
 ANALYZING THE MUSCLE PROTEIN PROFILE OF *Catla catla* RAISED FROM SEWAGE FED AQUACULTURE SYSTEMS OF EAST KOLKATA, WEST BENGAL, INDIA
- 11:20 Akshaya Panigrahi, Esakkiraj Palanichamy, Rashmi Ranjan Das, Saranya Chakrapani, Yuvaraj Sekar, Otta S.K., Vijayan K.K.
 PROTEOMIC CHANGES OF PACIFIC WHITE SHRIMP *Penaeus vannamei* REARED IN BIOFLOC SYSTEM CUSTOMIZED WITH PROBIOTIC STRAIN
- 11:40 Jumria Sutra, Mohammad Noor Amal Azmai, Amalia Hashim, Hamidu Saadu, Mohd Zamri Saad, Azila Abdullah, Sufian Mustafa, Nik Haiha Nik Yusof, Ina Salwany Md. Yusof
 METAGENOMICS ANALYSIS OF BACTERIAL COMMUNITY IN A TROPICAL MARINE FISH HATCHERY
- **12:00** Menaga Meenakshisundaram, Felix Sugantham, Charulatha M., Gopalakannan A. METAGENOMIC ANALYSIS OF MICROBIAL POPULATION IN *IN SITU* BIOFLOC BASED CULTURE PONDS OF GIFT AND CHITRALADA STRAIN OF NILE TILAPIA

- 12:20 Sandhya Sukumaran Sebastian, A. Gopalakrishnan, Wilson Sebastion POPULATION MITOGENOMIC INVESTIGATIONS REVEAL REDUCTION IN GENETIC DIVERSITY IN PEARL SPOT *Etroplus suratensis* AN IMPORTANT CANDIDATE SPECIES FOR AQUACULTURE
- 12:40 Vinaya Kumar Katneni, Shashi Shekhar Mudagandur, Karthic Krishnan, Ashok Kumar Jangam, Vijayan K.K.
 NEW INSIGHTS ON DELETED CODING SEQUENCES BASED ON COMPARATIVE GENOMICS OF WSSV ISOLATES

FARMERS INCOME AND WELFARE

Thursday, June 20 11:00 - 13:00 Room B Chairs: J. Stephan Sampath Kumar, R. Jayaraman

- 11:00 Lloyd Chrispin Christy Inbaraj, Ananthan P.S., Ramasubramanian V.,
 Agnes Daney Angela S.
 FISHERIES AND MANAGEMENT STATUS OF VIDUR RESERVOIR IN TAMIL NADU,
 INDIA
- 11:20 Charan Ravi, Mihir J. Nakhwa, Ganeshmurthy R., Ajith Kumar T.T., Kuldeep K. Lal CLOWNFISH AQUACULTURE: A WAY FORWARD TO PROMOTE LIVELIHOOD OF MANGROVE DWELLING COMMUNITIES AND MARINE BIODIVERSITY CONSERVATION
- 11:40 Venkata Lakshmi Vardhanapu, Rizwana Malik
 POST FLOOD IMPACT ON THE WELL BEING OF FISHING COMMUNITIES IN DISTRICT
 SRINAGAR
- 12:00 Hendrik Stolz, Kay Lwin Tun Productivity and Profitability of Solar-Driven Aquaponic Systems Utilizing Gift Tilapia *Oreochromis* sp. In Myanmar
- 12:20 B.C. Mohapatra, S.K. Jena, A.D. Sahu, M. Mahapatra
 AQUACULTURE AS A LIVELIHOOD OPTION FOR TRIBAL FARMERS OF PHAILIN
 AFFECTED GANJAM DISTRICT, ODISHA STATE
- 12:40 Sweety Singh, Deepika Kurre, Mangesh M. Bhosale, Prashant Uraon, Dushyant Kumar Damle
 - EFFECT OF PHYSICO-CHEMICAL PARAMETERS ON PLANKTON COMPOSITION IN FISH CULTURE PONDS OF KABIRDHAM DISTRICT. CHHATTISGARH, INDIA
- 13:00 Arun Pandit, Piyashi Debroy, Ganesh Chandra, Aparna Roy, Lokenath Chakraborty, B.K. Das, D.K. Biswas
 ASSESSMENT OF LIVELIHOOD SECURITY OF THE RESERVOIRS FISHERS OF INDIA INDEXING APPROACH

RAS AND FLOW THROUGH SYSTEMS

Thursday, June 20 11:00 - 13:00 Hall 4 Chairs: S. Felix, Bright Singh, S.K. Salin, Vasco Mota

Sponsor:

Norway

11:00 Trond-Inge Kvernevik

SAFE DEVELOPMENT OF INDUSTRIAL-SCALE RAS USING INDEPENDENT PRODUCTION UNITS (IPU) WITH LEVERAGE FOR EFFECTIVE MACHINE LEARNING

11:20 Astrid Buran Holan, Akhila Gorle, Jagan Gorle

WATER QUALITY AND HYDRODYNAMIC CONDITIONS IN LARGE REARING TANKS FOR RAS

11:40 Ramakrishnan Kulasekaran

ENGINEERING APPLICATION FOR SUSTAINABLE AND INNOVATIVE AQUACULTURE SYSTEMS

12:00 Bright Singh I.S., Ambadi Kannan M.S., Boobal R., Jayesh P., Rosamma Philip, Valsamma Joseph

HIGH DENSITY GIFT CULTURE UNDER RAS MODE INTEGRATED WITH VEGETABLE CULTIVATION

- 12:20 Prasanth S. Nair, Alen Jo James, Hemanth Gonugunta, Suneel Bollineni
 RAS BASED SEABASS *Lates calcarifer* COMMERCIAL FACILITY:AN ADVANCED
 AQUACULTURE TECHNOLOGY FOR INDIAN AQUACULTURE
- 12:40 Tanveer Mohammad, Subha M. Roy
 ENVIRONMENTAL IMPACT ASSESSMENT OF RECIRCULATING AQUACULTURE
 SYSTEMS: A CONCEPTUAL APPROACH
- **13:00** Mangesh M. Bhosale, S. Felix, Cheryl Antony, A. Gopalakannan, S. Aruna RAS BASED CULTURE SYSTEM FOR CONTINUOUS PRODUCTION OF ROTIFERS *Branchionus calvciflorus* IN MASS

DISEASE MANAGEMENT IN SHRIMP CULTURE

Thursday, June 20 11:00 - 13:00 Audit A Chairs: Indrani Karunasagar, C. Sugumar

Sponsor:



- **Shankar Alavandi**, J. Ashok Kumar, S. Avunje, T. Sathish Kumar, K.K. Vijayan METAGENOMIC STUDIES SUGGEST THAT MICROBIAL DIVERSITY INFLUENCES SHRIMP HEALTH IN BRACKISHWATER AQUACULTURE
- 11:20 Kok Leong Wee
 CURRENT STATUS ON THE DEVELOPMENT OF A SUSTAINABLE SHRIMP FEED.

- 11:40 Uma A., Felix S.
 THE PREVALENCE OF HEPATOPANCREATIC MICROSPORIDIOSIS CAUSED BY
 Enterocytozoon hepatopenaei IN Penaeus vannamei FARMS OF TAMIL NADU, INDIA
- 12:00 Rajalekshmi M., Harikumar S.
 CONTROL OF VIBRIOSIS AND ASSOCIATED SYNDROMES IN WHITE LEG SHRIMP
 Litopenaeus vannamei
- 12:20 Vidya Arumugam, Sivakumar Reddy, Christophe Bodenreider, Geoff Horst ALGAL 1,3-BETA GLUCAN – AN EFFECTIVE IMMUNE MODULATOR FOR IMPROVING SURVIVAL IN SHRIMP FARMS
- 12:40 Orapint Jintasataporn, Srinoy Chumkam
 DISEASE CHALLENGE AND SUSTAINABILITY IN SHRIMP CULTURE
- 13:00 Cong Liu
 CRAYFISH, A REPLACEMENT CHOICE OF *Litopenaeus vannamei* IN CHINA
 AQUACULTURE CONSUMPTION AND DISEASE CHALLENGE

CONSERVATION GENETICS

Thursday, June 20 11:00 - 14:40 Audit C Chairs: Kuldeep K. Lal, Jose Domingos, Dean Jerry

- 11:00 Graham Mair, Devin Bartley, Daniela Lucente, Matthias Halwart
 KEY FINDINGS FROM A REPORT ON THE STATE OF THE WORLD'S AQUATIC GENETIC
 RESOURCES FOR FOOD AND AGRICULTURE AND THE NEED FOR A GLOBAL
 INFORMATION SYSTEM
- 11:40 J. Jaculine Pereira, Ahilan B., Jeya Shakila R., Karal Marx K., Rajagopalsamy C.B.T.
 DNA BARCODE DATABASE GENERATION AND PHYLOGENY ANALYSIS OF THE
 LOACHES OF WESTERN GHATS
- 12:00 Praveenraj J., Uma A.
 DNA BARCODING OF THE ORNAMENTAL SNAKEHEAD FISHES OF INDIA
- 12:20 Pavan-Kumar Annam, Archana Mishra, Gireesh-Babu Pathakota, Chaudhari Aparna MOLECULAR PHYLOGENY OF SELECTED MAHSEER SPECIES USING COMPLETE MITOCHONDRIAL GENOME
- 12:40 Pavan-Kumar Annam, Rutuparna Priyadarshini, Vishwasrao Vivek, Dhalong Siang, Gireesh-Babu Pathakota, Chaudhari Aparna
 DEVELOPMENT OF MOLECULAR MARKERS FOR IDENTIFICATION OF HYBRIDS OF Tor putitora AND Tor khudree
- 13:00 LUNCH
- 13:40 Divya P.R., Kathirvelpandian A., Basheer V.S., Charan Ravi, Linu Joy, Sunitha Poulose, Elizabeth Jency P.M., Rajeev Kumar Singh, Vindhya Mohindra, Kuldeep Kumar Lal GENETIC STOCK IDENTIFICATION IN *Perna viridis* FROM THE INDIAN PENINSULA USING MICROSATELLITE MARKER PANELS

- 14:00 Archana Sinha, Kavita Kumari, Manas H.M., Bijay Kumar Behra, Basant Kumar Das GENETIC DIFFERENTIATION AND PHYLOGENETIC RELATIONSHIP OF ELEVEN ASIAN SISORINAE GENERA (SILURIFORMES: SISORIDAE) WITH NEW RECORD OF Pseudolaguvia foveolata
- 14:20 Ramya V.L., Preetha Panikkar, Jesna P.K., Ajoy Saha, Sibina Mol S., Vijaykumar M.E., Sarkar U.K.
 SIGNIFICANCE OF NATIVE FISHES FOR CULTURE BASED FISHERIES IN HARANGI RESERVOIR. KARNATAKA

EMERGING CHALLENGES IN INDIAN SHRIMP AQUACULTURE

Thursday, June 20 13:40 - 15:40 Hall 1 Chairs: A.G. Ponniah, D. Vasu, Huang Huai

Sponsor:



- 13:40 Nguyen Nguyen Vu Thanh
 THE IMPORTANCE OF NURSERY PHASE WITH VIET NAM SHRIMP FARMING
- 14:10 Ramraj Dhamodaraswamy
 CURRENT DISEASE SCENARIO AND ITS IMPACT ON SHRIMP FARMING IN INDIA
- 14:40 Huai Huang
 THE CURRENT APPLICATION OF COMMERCIAL PROBIOTICS IN AQUACULTURE
- 15:10 Manimaran Baskaran EMERGING CHALLENGES IN INDIAN SHRIMP AQUACULTURE

ALTERNATIVE FEED INGREDIENTS AND FEED TECHNOLOGY

Thursday, June 20 13:40 - 18:40 Audit B Chairs: N.P. Sahu, N.Felix, Ambasankar, Lourens Heres

Sponsor: DARLING INGREDIENTS

- 13:40 N.P. Sahu, Gopal Krishna
 MULTI-DIMENSIONAL APPROACH IN FISH NUTRITION RESEARCH FOR INTENSIVE
 AND SUSTAINABLE FISH PRODUCTION MULTI-DIMENSIONAL APPROACH IN FISH
 NUTRITION RESEARCH FOR INTENSIVE AND SUSTAINABLE FISH PRODUCTION
- 14:00 Sangavi Sivamani, Paramita Banerjee Sawant, Muralidhar P. Ande, Karthireddy Syamala, N.K. Chadha
 CAN OIL PALM KERNEL MEAL BE A COST-EFFECTIVE FEED INGREDIENT FOR IMPROVED GROWTH PERFORMANCE OF FISH FINGERLINGS?
- 14:20 Parthiban Fathiraja, Felix Sugantham, Sugumar Gopalrajan, Velayutham Padmanaban, Sukumar Durairaj
 NUTRITIONAL COMPOSITION AND ACCEPTABILITY OF CO-DRIED FISH SILAGE
 OBTAINED FROM LITTLE TUNA Euthynnus affinis PROCESSING WASTES AND BRANS
- 14:40 Lourens Heres, Eric DeMuylder, Carine Van Vuure
 FUNCTIONAL LAND ANIMAL PROTEINS SUPPORT PERFORMANCE AND HEALTH OF
 YOUNG SHRIMP
- 15:00 Chandrasekar Selvam, Mark D. Powell, Nina S. Liland, Grethe Rosenlund, Nini H. Sissener IMPACT OF DIETARY LEVEL AND RATIO OF n6/n3 FATTY ACIDS ON DISEASE PROGRESSION, PHYSIOLOGICAL RESPONSE AND INFLAMMATION IN ATLANTIC SALMON CHALLENGED WITH AMOEBIC GILL DISEASE (AGD)
- **Sujata Sahoo**, Nitesh Gurung, Shamna N., P.P. Srivastava, G.H. Pailan EFFECT OF *Ipomea aquatica* LEAF MEAL BASED DIET ON THE GROWTH PERFORMANCE AND EXPRESSION OF INSULIN LIKE GROWTH FACTOR BINDING PROTEIN 1 (IGFBP1) GENE IN *Labeo rohita* FINGERLINGS
- 15:40 BREAK
- 16:00 Arun Bhai Patel, Nikhlesh Ghritlahre, Pradyut Biswas, Himanshu Priyadarshi,
 Dibyendu Kamilya, Sagar Chandra Mandal, Pramod Kumar Pandey
 EVALUATION OF REPLACEMENT OF ARTIFICIAL FEED WITH ON-FARM GROWN Wolffia
 globosa L. AS AN ALLOCHTHONOUS NUTRIENT SOURCE IN A SEMI-INTENSIVE CARP
 POLYCULTURE SYSTEM
- **16:20 Pramod Kiran R.B.**, Melby Emmanuel, Sreekanth G.B. DIETARY INCLUSION OF ULVA MEAL AND ITS IMPACT ON GROWTH, AND BIOCHEMICAL COMPOSITION OF *Etroplus suratensis* REARED IN CAGES
- 16:40 Manikandan Kalidoss, Aurobinda Upadhyay, Nathan Felix EVALUATION OF RAPESEED MEAL AS AN ALTERNATIVE PROTEIN SOURCE IN THE DIETS OF GIFT TILAPIA CULTURED IN CAGES AT POONDI RESERVOIR, TAMIL NADU

- 17:00 Cherry Nian, Augusto Jr. Serrano
 INFLUENCE OF Rhizoclonium MEAL WITH METHIONINE SUPPLEMENTATION ON
 GROWTH AND SURVIVAL PERFORMANCE OF NILE TILAPIA Oreochromis niloticus FRY
- 17:20 Sajina K.A., Narottam Prasad Sahu, Tincy Varghese
 GROWTH AND DIGESTIVE ENZYME RESPONSES IN Labeo rohita FINGERLINGS FED
 WITH Chromolaena ordata LEAF MEAL
- 17:40 Kumudu Radampola Gamage, Krishni M. Nishshanka, Vajira Bulugahapitiya PARTIAL OR TOTAL REPLACEMENT OF FISH MEAL WITH SESAME SEED CAKE MEAL AND SWEET POTATO LEAF MEAL MIXTURE IN GUPPY *Poecilia reticulata* DIETS
- **18:00** Ravi Fotedar, Vo Binh, Siddik Abu Bakar Muhammad, Huy Phan FISHMEAL ALTERNATIVES IN BARRAMUNDI *Lates calcarifer* DIET: A RESEARCH UPDATE
- 18:20 Ezhil Subbian, Ravindra Babu, Ravikumar Ganesan, Laavanya S., Rajesh M., Biju Sam Kamalam SUSTAINABLE. NOVEL AND COST EFFECTIVE PROTEIN FOR AQUACULTURE

IMMUNOLOGY - VACCINES

Thursday, June 20 13:40 - 18:40 Audit A Chairs: Indrani Karunasagar, Rajendran, Win Surachetpong, Zengfu Song, Peter Bossier

- 13:40 Ziping Zhang, Xinyang Zeng, Yilei Wang
 PRELIMINARY STUDY ON PHENOMENON AND MECHANISM OF IMMUNE PRIMING IN
 Scylla paramamosain
- 14:00 Peter Bossier, Parisa Norouzitallab, Kartik Baruah, Priyanka Biswas, Michiel Vandegehuchte, Daisy Vanrompay TRANSGENERATIONAL IMMUNITY TRANSFER IN ARTEMIA
- 14:20 Rebecca G., Uma A.
 EXPRESSION OF TOLL LIKE RECEPTOR3 (TLR3) IN Pangasius pangasius
 EXPERIMENTALLY INDUCED WITH Edwardsiella tarda
- **Saravanan K.**, Rajendran K.V., Gireesh-Babu P., Purushothaman C.S., Makesh M. MOLECULAR CHARACTERIZATION AND EXPRESSION ANALYSIS OF SECRETORY IMMUNOGLOBULIN M (IGM) HEAVY CHAIN GENE IN ROHU *Labeo rohita*
- **15:00** Sivagnanavelmurugan Madasamy, Arul Venkatesan IMMUNOSTIMULATORY EFFECT OF ULVAN OF *Ulva fasciata* ON *Litopenaeus vannameii* CHALLENGED WITH A SHRIMP PATHOGEN *Vibrio parahaemolyticus*
- Tasok Leya, Megha Kadam Bedekar, Rupam Sharma, Gayatri Tripathi, Pani Prasad Kurcheti, K.V. Rajendran MUCOSAL IMMUNE RESPONSE STUDIES: Labeo rohita IMMUNIZED WITH BICISTRONIC DNA VACCINE CONJUGATED PLGA/CHITOSAN NANOPARTICLE AGAINST Edwardsiella tarda
- 15:40 BREAK

- Sivasankar P., Riji John K., Rosalind George M., Amit Pande, Mohamed Mansoor M., Magesh Kumar P., Selvamagheswaran M.
 DEVELOPMENT OF RECOMBINANT MAJOR CAPSID PROTEIN VACCINE AND ASSESSMENT OF ITS EFFICACY AGAINST SRDV IN SIMILAR DAMSELFISH Pomacentrus similis
- 16:20 Sushila Ngairangbam, Gayatri Tripathi
 IDENTIFICATION AND EXPRESSION OF RAG-1 DURING THE DEVELOPMENT OF
 ADAPTIVE IMMUNE SYSTEM IN Pterophyllum scalare
- 16:40 Karim M. Khalil
 PRODUCTION OF YEAST-BASED VACCINE FOR GROWTH ENHANCEMENT IN
 AQUACULTURE
- 17:00 Shankar Chandra Mandal, Manfred Weidmann, Simon MacKenzie
 MODULATION OF BARRIER FUNCTION AND INNATE IMMUNITY BY BACTERIAL
 INFECTION AND PAMP STIMULATION
- 17:20 Serge Corneillie, Eric De Muylder, Victor Nsereko, Don McIntyre FERMENTED YEAST PRODUCT (DVAQUA) SHOWS STRONG PROTECTION AGAINST EMS/AHPND IN WHITELEG SHRIMP *Litopenaeus vannamei*
- 17:40 P.K. Patil, Satheesha Avunje, R. Geetha, C. Gopal, S.V. Alavandi, K.K. Vijayan REGULATED USE OF VETERINARY MEDICAL PRODUCTS IN INDIAN AQUACULTURE WITH SPECIAL REFERENCE TO FOOD SAFETY
- **Zahoor Mushtaq**, Kurcheti Pani Prasad, Megha Kadam Bedekar, Annam Pavan Kumar STRUCTURAL AND FUNCTIONAL ASPECTS OF GALECTIN-9 GENE IN *Labeo rohita*

BIOTECHNOLOGY AND NANOTECHNOLOGY

Thursday, June 20 13:40 - 18:40 Hall 3 Chairs: A. Gopalakrishnan, Aparna Chaudhari, P. Swain, S.K. Otta

- 13:40 J. Jaculine Pereira, Ahilan B., Jeya Shakila R., Karal Marx K., Rajagopalsamy C.B.T. GENERATION OF DNA BARCODE DATABASE AND PHYLOGENIC RELATIONSHIP ANALYSIS OF THE LOACHES OF WESTERN GHATS
- **Jebarani T.**, Srinivasan M.
 SCREENING AND OPTIMIZATION OF POLYPEPTIC ENZYME CELLULOSE FROM THE GUT OF *Siganus javus* (LINNAEUS, 1766)
- 14:20 Vindhya Mohindra, Priyanka Sah, Rajeev K. Singh, Sangeeta Mandal, Nimisha Dutta, Abhinav Pathak, Raj Kumar, Kuldeep K. Lal GENETIC DIVERSITY IN NATURAL POPULATIONS OF MAHSEER *Tor tor* ANALYSED BY MICROSATELLITE LOCI
- **14:40** Aditya Acharya, Pavan Kumar Anam, Gireesh Babu Pathkota, Gopal Krishna SSR DISTRIBUTION PATTERN IN GIANT RIVER CATFISH *Sperata seenghala* (SYKES, 1839)
- **Azhaguchamy Muthukumaran**, Subburaman Chandramohan, Krishnan Sundar SELENIUM NANOPARTICLES (SeNPs) ENHANCES THE SURVIVAL RATE IN ZEBRAFISH EMBRYOS

15:20	Priyabrat Swain, Rakesh Das, Sudhansu Sekhar Mishra
	PROSPECTS OF APPLICATIONS OF NANOFORMS OF CALCIUM, PHOSPHOROUS AND
	ZINC SALTS IN FUTURE AQUACULTURE

- 15:40 BREAK
- 16:00 Minju Joy, Kajal Chakraborty
 ANTI-INFLAMMATORY PROPERTIES OF SPIROCYCLES FROM Villorita cyprinoides:
 A CHEMOINFORMATIC APPROACH
- **16:20 Prima Francis**, Kajal Chakraborty
 BIOACTIVITY-GUIDED ISOLATION OF PREVIOUSLY UNDESCRIBED MACROCYCLIC
 PYRONE DERIVATIVES FROM ECHINOIDEA SEA URCHIN *Stomopneustes variolaris*
- 16:40 Tima Antony, Kajal Chakraborty, Minju Joy
 NATURAL ANTI-INFLAMMATORY DRIMANES TO ATTENUATE PRO-INFLAMMATORY
 5-LIPOXYGENASE FROM MARINE MACROALGA *Gracilaria salicornia*
- 17:00 J. Jaculine Pereira, Ahilan B., Karal Marx K., Jeya Shakila R., Rajagopalsamy C.B.T. A SINGLE RESTRICTION ENZYME BASED RFLP (PCR-RFLP) TECHNIQUE FOR THE SPECIES DETERMINATION OF FIVE IMPORTANT LOACHES OF WESTERN GHATS USING COI GENE
- 17:20 Minju Joy, Kajal Chakraborty
 MOLECULAR MODELING AS A TOOL TO VALIDATE CYCLOOXYGENASE PROPERTIES
 OF STEROL ANALOGUES FROM Villoritta cyprinoides

ENVIRONMENTAL ISSUES AND MANAGEMENT

Thursday, June 20 13:40 - 18:40 Hall 2 Chairs: A. Ramachandran, Ventaramana, Aurore Trottet

- 13:40 Amiya Sahoo, Bhabagrahi Sahoo, Dharmendar Meena, Himansu Swain, Rohan Raman, Basanta Das
 A MULTIFACET APPROACH FOR SUSTAINING RIVERINE FISHERIES THROUGH ENVIRONMENTAL FLOWS IN INDIA: A CASE STUDY
- 14:00 Phibi Philip Naduvathu, Senguttuvan G., Mohammed Meharoof, Vijay Sundar Deva G., Hafeef Roshan, Gopika Radhakrishnan, Bharathi Subramaniam, Sona B. R., Husain N., Aswini Amaravel FISH DEATHS: KEY REASONS, OCCURRENCE PATTERN AND FUTURE PERSPECTIVES
- 14:20 Muralidhar M., Sankara Rao P., Pavan Kumar B., Jayanthi M., Syama Dayal J., Ashok Kumar J., Alavandi S.V., Rama Sankar Naik, Vijayan K.K.
 CARRYING CAPACITY BASED AQUA ZONATION FOR BIOSECURED AND ENVIRONMENTALLY SUSTAINABLE AQUACULTURE CASE STUDIES IN ANDHRA PRADESH
- 14:40 Aurore Trottet, George Foulsham, Mads Birkeland
 IMPORTANCE OF PROPER SITE SELECTION AND IMPACT ASSESSMENT FOR
 SUSTAINABILITY IN AQUACULTURE
- **15:00 Jayakumar N.**, Jawahar P., Subburaj A., Selvaraj S., Ahilan B. EFFECTS OF ACUTE TOXICITY OF CARBOFURAN ON THE VITELLOGENIN LEVEL IN THE FRESHWATER STINGING CATFISH *Heteropneustes fossilis*

- **15:20 Manimekalai Durairaj**, Srinivasan Arasan, Padmavathy Pandurengan, Jawahar Paulraj, Riji John Kolanoor PERSISTENT ORGANOCHLORINE RESIDUES IN FISH SAMPLES COLLECTED FROM THAMIRABHARANI RIVER
- 15:40 BREAK
- 16:00 D. Gayathri, L. Shakila
 TRIPHENYL PHOSPHATE-INDUCED TOXICITY RESPONSE IN Catla catla
- 16:20 Jayakumar N., Jawahar P., Subburaj A., Pavinkumar P., Ahilan B.
 ACUTE CARBOFURAN TOXICITY INDUCED CHANGES IN THE TESTOSTERONE AND
 17ß-ESTRADIOL LEVEL IN THE FRESHWATER STINGING CATFISH Heteropneustes fossilis
- **Juliet A Selvarani**, Padmavathy P., Srinivasan A., Sugumar G., Jawahar P. ACUTE TOXICITY OF LAMDA-CYHALOTHRIN AND THE HISTOLOGICAL CHANGES OF GILL AND LIVER TISSUES OF TIL APIA *Oreochromis niloticus*
- 17:00 C. Jayapavithran, A. Srinivasan, P. Padmavathy, S. Athithan
 DISTRIBUTION OF TRACE ELEMENTS IN FISHES OF Amblygaster sirm AND Sardinella
 albella ALONG THE THOOTHUKUDI COASTAL WATERS, SOUTHEAST COAST OF INDIA
- 17:20 Sundhar S., Robinson Jeyashakila, Geevarthanam Jeyasekaran, R. Shalini, S. Aanand PHYTO-ACCUMULATION OF ORGANOCHLORINE PESTICIDE RESIDUES IN EDIBLE SEAWEEDS OF GULF OF MANNAR, SOUTHERN PENINSULAR INDIA
- 17:40 Rekha Nair, Gopalakrishnan A., Seetha P.K.
 IMPORTANCE OF RESPONSIBLE FISHERY OF THE SPINYCHEEK GROUPER IN INDIA
- 18:00 Keerthika Kalaiselvan, Padmavathy P., Rani V., Jeyashakila R.
 OCCURRENCE AND CHARACTERIZATION OF MICROPLASTICS IN THE COASTAL
 WATERS OF THOOTHUKUDI
- 18:40 Geeji, M.T., Chichu, E.R., Jithin, K. and Dinesh, K.
 MANGROVE ECOSYSTEM DEGRADATION AND ECONOMIC OUT TURN OF FISHER
 WOMEN: A CASE STUDY FROM PUDUVEYPU, KERALA, INDIA

MARKETING, TRADE AND POLICY

Thursday, June 20 13:40 - 18:40 Room 5 Chairs: Debajit Sharma, Rathinaraj, Anilkumar, P. Krishnan, Ganesh Kumar, M. Krishnan

- 13:40 Neha W. Qureshi, M. Krishnan Leads and Lags in Indian Seafood Exports
- 14:00 Pawan Kumar Sharma, Stephen Sampath Kumar John, Senthil Kumar Varadaraju
 MARKETING OF AQUACULTURE PRODUCES IN THE INDIAN CONTEXT AN ANALYSIS
- **14:20 Gomathy V.**, Ananthan P.S., Achal Lama, Mrinmoy Ray, Ramasubramanian V. SHRIMP PRICE TRENDS AND FORECAST IN DELHI'S GAZIPUR WHOLESALE FISH MARKET

- **Tenji Pem Bhutia**, Vinod Kumar Yadav, Neha Wajahat Qureshi, Kesavan S. CHOICE OF FISH FOR CONSUMPTION AN ANALYTICAL HIERARCHY PROCESS APPROACH
- 15:00 Arundhathi V., Mini Sekharan N.
 CONSUMER PREFERENCE TOWARDS SEAFOOD AMONG WOMEN CONSUMERS FROM
 DIFFERENT WORK STATUS: A SEMANTIC DIFFERENTIAL ANALYSIS
- **15:20** Gopika R., Rajakumar M., Umamaheshwari T., Ganesan P., Kanaga V. CONSTRAINTS OF WOMEN IN RETAIL FISH MARKETING AT THOOTHUKUDI, TAMIL NADU
- 15:40 BREAK
- 16:00 S. Kalugasalamurthy

OUT GLOBAL BIG SHIFT – A NEED FOR THE TRANSFORMATION IN SHRIMP FARMING AS A STRATEGIC BUSINESS

- **Taizhuo Zhang**, Yong Yang CHINA AQUATIC PRODUCTS CONSUMPTION STATUS AND EXPORT OPPORTUNITIES FOR INDIA
- 16:40 Luan Tran Dinh
 VIET NAM AQUACULTURE INTRODUCTION

CARPS. BARBS AND OTHER CYPRINIDS

Thursday, June 20 13:40 - 18:40 Room A Chairs: J.K. Jena, P.K. Pandey, P.C. Das

- 13:40 Deepika Kurre, Sweety Singh, Mangesh M. Bhosale
 EFFECT OF MANURING ON GROWTH AND SURVIVAL OF INDIAN MAJOR CARP
 JUVENILES
- 14:00 Ritesh Chandravanshi, A.B. Patel, P. Biswas, R. Kumar
 EFFECTS OF ADDITION OF PENGBA Osteobrama belangeri At Different densities
 ON GROWTH PERFORMANCE, YIELD AND FEED UTILIZATION OF SEMI-INTENSIVE
 CULTURE OF PABDA Ompok bimaculatus IN CEMENT TANKS
- 14:20 Rohitash Yadav, V.P. Saini, N.K. Chadha, Paramita Banerjee Sawant, Manish Jayant EFFECT OF SUPPLEMENTARY FEED ON GROWTH PERFORMANCE OF INDIAN MAJOR CARPS IN MICRO-WATER SHEDS
- 14:40 Suguna Tummala ECONOMICALLY IMPORTANT PROBLEMS SOLUTIONS IN FRESHWATER FISH CULTURE
- 15:00 Pratap Chandra Das, Pravati Kumari Sahoo, Snatashree Mohanty, Monali Mishra, Subrat Kumar Swain
 GROWTH PERFORMANCE OF PENGBA Osteobrama belangeri UNDER VARIED
 STOCKING DENSITY DURING FINGERLING REARING IN LARGE CONCRETE TANKS
- 15:20 Atul K. Singh
 STRATEGIC PLANNING, POLICY AND TECHNOLOGICAL INNOVATIONS TO PROMOTE
 RAINBOW TROUT *Oncorhynchus mykiss* FARMING IN INDIA

15:40 BREAK

16:00 Debajit Sarma

COLDWATER FISHERIES RESEARCH – TODAY AND TOMORROW: INNOVATIONS AND SHIFT TOWARDS SUSTAINABLE FISHERIES AND INCREASED AQUACULTURE PRODUCTION

16:20 Muruganandam Muthiah

ON THE POTENTIAL OF WATERSHED DEVELOPMENT TO ENHANCE AQUACULTURE PRODUCTION: A REVIEW AND PROJECTIONS FROM UTTARAKHAND, INDIA

ORNAMENTAL FISH CULTURE

Thursday, June 20 13:40 - 18:40 Room B Chairs: B.K. Das, Saroj Swain, K. Madhu, B. Ahilan

- 13:40 Paramita Banerjee Sawant, Raju M. Tibile, Narinder K. Chadha, Wazir S. Lakra, Chandra Prakash, Bhawesh T. Sawant, Sambid Swain, Jyotismita Thakuria STANDARDISATION OF REPRODUCTIVE PERFORMANCE OF THE HIGH VALUE ORNAMENTAL FISH, DISCUS Symphysodon aequifasciatus IN RELATION TO TEMPERATURE
- **14:00** Mahadevi Nagarahalli, Felix S., Ahilan B.
 CAPTIVE BREEDING OF AN INDIGENOUS ORNAMENTAL FISH *Pethia chonchonius*(HAMILTON, 1822) BY ORAL DELIVERY OF SYNTHETIC HORMONE
- **14:20** Sukham Munilkumar, B.K. Mahapatra, G.H. Pailan, M. Kamei, W.R. Mangang REORIENTING APPROACH TO HARNESS THE ORNAMENTAL FISHERIES RESOURCES OF NORTHEAST INDIA
- 14:40 Bijay Kali Mahapatra

FRESHWATER ORNAMENTAL FISH GENETIC RESOURCES OF NEH STATES OF INDIA WITH A NOTE ON THEIR CAPTIVE BREEDING AND CULTURE

- 15:00 Mini Sekharan N.
 ORNAMENTAL FISH BREEDING IN ASIAN COUNTRIES
- **15:20 Madhu Kuttan**, Rema Madhu, Mohandas M.P., Vijayan M.T., Suji Chandru MARINE ORNAMENTAL FISH BREEDING AS BOON FOR THE DEVELOPMENT OF AQUARICULTURE
- 15:40 BREAK
- **Saroj Kumar Swain**, Mukesh Kumar Bairwa, Sunil Kumar S. Ail GOAL SETTING, DOMESTICATION AND CAPTIVE BREEDING OF ENDEMIC ORNAMENTAL FISHES
- 16:20 Rajeswari K, Mini Sekharan N.
 QUALITY MANAGEMENT OF INTRINSIC PRODUCTION PROCESSES IN ORNAMENTAL
 FISH SYSTEM USING FISH BONE (ISHIKAWA) DIAGRAM
- 16:40 Mercy Amrita C.

 Moved DEVELOPMENT OF E-INTERFACE GADGET FOR DOMESTIC LEVEL FRESHWATER
 to Poster AQUARIUM
 Board #463

17:00 Ajith Kumar T.T., Sheena Jose, Manu Madhavan, Akash S., Bharathi S., Dhinakaran A., Charan Ravi, Kuldeep K. Lal
BREEDING OF MARINE ORNAMENTAL SHRIMPS: A MEASURE TOWARDS
GERMPLASM CONSERVATION AND PROVISION OF ALTERNATE LIVELIHOOD
OPPORTUNITY TO LAKSHADWEEP ISLANDERS

17:20 Sandeep Shankar Pattanaik, Paramita Banerjee Sawant, K.A. Martin Xavier,
Kiran Dube, Prem Prakash Srivastava, N.K. Chadha
DIETARY CAROTENOPROTEIN FROM Parapeneopsis stylifera SHELL WASTE
MODULATES COLORATION AND ANTIOXIDANT ENZYME ACTIVITIES OF THE HIGH
VALUE ORNAMENTAL FISH. OSCAR Astronotus ocellatus

BIOFLOC BASED CULTURE SYSTEMS

Thursday, June 20 13:40 - 18:40 Hall 4 Chairs: S. Felix, Akshaya Panigrahi

- 13:40 Yoram Avnimelech
 HOW TO DEVELOP SUCCESSFUL BIOFLOC PRODUCTION IN INDIA
- 14:00 Nyan Taw
 BIOFLOC TECHNOLOGY AND BIOSECURITY FOR SUSTAINABLE SHRIMP FARMING
- 14:20 Felix Sugantham
 ADOPTION OF BIOFLOC TECHNOLOGY IN INDIA: SUCCESS, CHALLENGES AND LESSONS LEARNED
- 14:40 Peter De Schryver, Wilson Wasielesky, Geert Rombaut, Dionéia Cesar, Olivier Decamp, Peter Bossier, Barbara Hostins
 MANAGING BIOFLOCS OPERATIONAL PARAMETERS AND USE OF PROBIOTICS
 CAN MINIMIZE THE RISK FOR HEPATOPANCREATIC NECROSIS DISEASE (AHPND)
 OUTBREAKS
- Akshaya Panigrahi, R.R. Das, A. Saravanan, P.S. Shyne Anand, Christina Lalramchhani, Jose Antony, S. Kannappan, P. Mahalaxmi, K. Vinay Kumar, G. Gopikrishnan, C.P. Balasubramanian, K.K. Vijayan
 EVALUATION OF GROWTH, SURVIVAL AND IMMUNE POTENTIAL OF INDIAN WHITE SHRIMP Penaeus indicus CULTURED UNDER HETEROTROPHIC SYSTEM USING ISOLATED BENEFICIAL BACTERIA
- 15:20 Menaga Meenakshisundaram, Felix Sugantham, Charulatha M., Gopalakannan A., Panigrahi Akshaya
 EFFECT OF *IN SITU* AND *EX SITU* BIOFLOC ON ANTIOXIDANT, IMMUNOLOGICAL, GROWTH AND GENE EXPRESSION RESPONSES OF GENETICALLY IMPROVED FARM TILAPIA (GIFT) AND ITS RESISTANCE TO *Aeromonas hydrophila*
- 15:40 Yuvarajan P., Felix S.
 STUDY ON CHARACTERISTICS OF AEROBIC MICROBIAL FLOC IN OUTDOOR LINED POND
- 16:00 Ezhilmathi Selvaram, Felix S., Gopalakannan A., Rajagopalasamy C.B.T., Menaga M. EFFECT OF AEROBIC MICROBIAL FLOC ON WATER QUALITY, GROWTH, SURVIVAL AND DIGESTIVE ENZYME ACTIVITY OF *Penaeus vannamei* IN INTENSIVE NURSERY REARING IN BACEWAY SYSTEM

- **Sudhansu Shekhar Mahanand**, Moulick S., Rao P.S., Pandey P.K. EFFECT OF *IN SITU* AND EXTERNALLY ADDED BIOFLOC SYSTEM ON WATER QUALITY AND GROWTH OF ROHU *Labeo rohita*
- 16:40 Nethaji M., Felix S., Ahilan B., Menaga M., Charulatha M.
 POTENTIAL OF DISTILLERY SPENTWASH ENRICHED WITH DIFFERENT BACILLUS
 SPECIES AS A CARBON SOURCE IN INDOOR BIOFI OF PRODUCTION
- 17:00 Harsha Haridas, Shoji Joseph, Ravindra Sontakke, Arun V.V., Somu Sunder Lingam, Chitra Soman, Jess Mariya Wilson, Anju Soma COMPARATIVE PRODUCTION PERFORMANCE OF ROTIFER *Brachionus plicatilis* IN MICROALGAE AND BIOFLOC-BASED SYSTEMS
- 17:20 Ajay Kumar, A.K. Reddy, A.M. Babita Rani, Gaurav Rathore, W.S. Lakra, Manish Jayant EFFECT OF BIOFLOC WITH DIFFERENT C/N RATIOS ON WATER QUALITY AND NUTRIENT DYNAMICS IN INLAND SALINE WATER
- 17:40 Akshaya Panigrahi, Saranya Chakrapani, Akshaya Panigrahi, Ambiganandham Krishna, Sundaram Mani, Sivakumar Mullaivanam Ramasamy, Kumaraguru Vasagam EVALUATION OF BIOFLOC GENERATION PROTOCOLS TO ADOPT HIGH DENSITY NURSERY REARING OF *Penaeus vannamei* FOR BETTER GROWTH PERFORMANCES, PROTECTIVE RESPONSES AND IMMUNOMODULATION IN BIOFLOC BASED SYSTEM
- 18:00 Subhas Sarkar, P.K. Tiwari, P.C. Das
 EFFECT OF MAINTAINING HIGH C/N RATIO BY ADDITION OF MOLASSES ON HIGH
 DENSITY REARING OF Labeo fimbriatus FROM SPAWN TO FRY
- 18:20 Yuvarajan P., Felix S., Gopalakannan A., Menaga M.
 EFFECT OF AEROBIC MICROBIAL FLOC ON HETEROTROPHIC BACTERIAL ABUNDANCE
 IN INTENSIVE NURSERY REARING OF GIFT TILAPIA

SHRIMP GENETICS

Thursday, June 20 16:00 - 18:00 Audit C Chairs: Kuldeep K. Lal, Gopikrishna, Adriana Artiles Valor, Dean Jerry

Sponsor:



- 16:00 Adriana Artiles, Carolina Braghini Stephenson, John Buchanan, Lorenzo Juarez BREEDING PROGRAM STRATEGIES USING MOLECULAR MARKERS AND PHENOTYPIC DATA
- 16:20 Eduardo Figueras
 GENETIC IMPROVEMENT OF SHRIMP Penaeus vannamei AT SEA PRODUCTS
 DEVELOPMENT (SPD): AN OVERVIEW OF NINE GENERATIONS OF SELECTION
- John T. Buchanan, America Fujimoto, Melissa Allen, Jason Stannard
 DEVELOPMENT OF A LOW-DENSITY SNP MARKER PANEL IN PACIFIC WHITE SHRIMP
 Penaeus vannamei FOR PARENTAGE ASSIGNMENT, DETECTION OF INBREEDING, AND
 BREEDING POPULATION STRUCTURE AND DIVERSITY

SAP SHRIMP SESSION

Thursday, June 20 16:00 - 18:40 Hall 1 Chairs: A.G. Ponniah, P.K. Senthil Kumar

Sponsor:



Keynote Address:

16:00 Arun Dhar

DISEASES IN SHRIMP AQUACULTURE - POSSIBLE REMEDIAL PATHWAYS

16:40 S. Chandrasekar

INDIAN SHRIMP CULTURE IN 2019 AND BEYOND

17:00 Robin Pearl

TOLERANT STOCKS: THE BEACON OF HOPE FOR SHRIMP FARMING

17:20 D. Ramraj

WEATHERING HEADWINDS - A CHALLENGE FOR THE INDIAN SHRIMP HATCHERIES

17:40 V. Surendran

FARM BASED, POND TYPE NURSERY OPERATIONS OF *Penaeus vannamei* - A CASE STUDY

18:00 Saii Chacko

SHRIMP FARM MANAGEMENT IN THE CURRENT SCENARIO

REPRODUCTIVE PHYSIOLOGY

Thursday, June 20 14:40 - 16:00 Audit C Chairs: Kuldeep K. Lal, Jitendra Sundaray, Dean Jerry

- 14:40 Phillip Dettleff, Marcia Fuentes, Rodrigo Zuloaga, Alfredo Molina, Juan Antonio Valdés EVALUATION OF mRNA AND THERMAL STRESS IN UNFERTILIZED EGGS OF RED CUSK-EEL *Genypterus chilensis*
- 15:00 Woei Chang Liew, Laia Ribas, Laszlo Orban, Francesc Piferrer
 MOLECULAR ANALYSIS OF HEAT-INDUCED MASCULINIZATION IN TELEOSTS
- **15:20 Ganapiriya V.**, Maharajan A. HISTOLOGICAL ANALYSIS OF THE MALE GONADS OF THE BRACHYURAN CRAB *Perisesarma bidens* (DE HAAN. 1835)
- **15:40 Hoang D. Chieu**, Luke Turner, Meaghan K. Smith, Tianfang Wang, Josephine Nocillado, Peter Palma, Saowaros Suwansa-ard, Abigail Elizur, Scott F. Cummins DEVELOPMENT OF A BREAK-THROUGH NEW ARTIFICIAL BREEDING APPROACH FOR SEA CUCUMBERS USING NEUROPEPTIDES

FRIDAY, June 21

MIXOTROPHIC CULTURE SYSTEMS

Friday, June 21 09:00 - 10:40 Hall 4 Chairs: S. Felix, Farshad Shishehchian

Sponsor:



09:00 Farshad Shishehchian
AQUACULTURE OPERATIONS AND SCIENTISTS HAVE BEGUN TO ADOPT NEW SMART
FARMING TECHNOLOGIES, INCLUDING COMPUTER CONTROL SYSTEMS

09:50 Farshad Shishehchian
SMART FARMING TECHNOLOGY – APPLICATION OF SCIENCE AND ARTIFICIAL
INTELLIGENCE (AI) IN AQUACULTURE

CONTRIBUTED CULTURE SYSTEMS

Friday, June 21 09:00 - 10:40 Audit B Chair: Akshaya Panigrahi, Bright Singh

- **09:00** Yuvarajan P., Felix S.
 EFFECT OF AEROBIC MICROBIAL FLOC ON PROXIMATE COMPOSITION AND GROWTH
 PERFORMANCE OF GIFT TILAPIA IN NURSERY CULTURE SYSTEM
- **09:20** Radhakrishnan K., B. Panda, S. Nayak, D.K. Verma, S. Adhikari, P. Routray EVALUATION OF GROWTH PERFORMANCE, FEED UTILIZATION PATTERNS AND HAEMATOLOGICAL CHANGES OF NILE TILAPIA *Oreochromis niloticus* REARED AT DIFFERENT WATER TEMPERATURES
- 09:40 Hasan Bazlul Mohi, Abirlal Dutta
 CHALLENGES OF SHRIMP FARMING WITH SPECIAL REFERENCE TO BUSINESS
 STABILITY AND PROFITABILITY
- 10:00 Atul Kumar Jain
 INDIA WILL BE HOME TO LARGEST NUMBER OF AQUARIUM HOBBYISTS ON THE
 GLOBE AT THE END OF NEXT DECADE

OUT

ENVIRONMENTAL ISSUES AND MANAGEMENT – CONTINUED

Friday, June 21 09:00 - 10:40 Hall 2 Chairs: A. Ramachandran, Ventaramana, Aurore Trottet

09:00 Manickavasaqam Samiyappan, Shukla S.P., Saurav Kumar, Kundan Kumar,

Rathi Bhuvaneswari G.

QUANTIFICATION AND ASSESSMENT OF MICROPLASTICS IN FLOWING WATERS ALONG SOUTH JUHU BEACH, MUMBAI COAST

09:20 Anju P., Mini Sekharan N., Harikrishnan M.

OCCURRENCE OF MICROPLASTICS IN GUT CONTENTS OF Sahyadria chalakkudiensis INHABITING A TROPICAL RIVER SYSTEM IN S. INDIA

09:40 Udai Gurjar, K.A. Martin Xavier, Geetanjali Deshmukhe, S.P. Shukla, B.B. Nayak,

A.K. Jaiswar

INCIDENCE OF MICROPLASTICS IN FISHES FROM MUMBAI WATERS, INDIA

10:00 Sariga P.K., Mini Sekharan N.
STATUS OF ORNAMENTAL FISHERIES MANAGEMENT IN KERALA

10:20 Indah Susilowati. Made Ika Prastvadewi. Aini Nur Furoida. Ika Suc

Indah Susilowati, Made Ika Prastyadewi, Aini Nur Furoida, Ika Suciati EMPOWERING SMALE-SCALE FISHERS WITH THE USE OF OPEN ACCESS INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) APPLICATION OF INDONESIAN SMART-FISHERS PROGRAM (NELAYAN PINTAR): PILOT PROJECT IN PATI REGENCY – CENTRAL JAVA, INDONESIA

SPD SEMINAR

Friday, June 21 09:00 - 10:40 Audit C Chair:

Sponsor:



9:00 Topics to be Discussed

- 1. Main diseases in shrimp hatcheries. Practical diagnostic and management
- 2. Health & biosecurity management in hatcheries, emphasis on EHP
- 3. Assessment of PL quality
- 4. The use of nurseries and the benefits.
- 5. SPD customer results from China
- 6. SPD and the future of broodstock genetics in India
- 7. Q&A session

DIAGNOSTICS AND EPIDEMIOLOGY

Friday, June 21 09:00 - 13:00 Audit A Chairs: Indrani Karunasagar, Paniprasad, Peter Bossier

- 09:00 Juliette Alemany, Gautam Dadhich, Emmanuelle Bourgois
 RISK ASSESSMENT OF DISEASES OUTBREAKS IN SHRIMP AQUACULTURE: CURRENT
 STATE AND FUTURE NEEDS
- 09:20 Uma A., Rebecca G., Karthik P., Gangatharan S., Ganesh Babu S., Anitha R. PREVALENCE OF TILAPIA LAKE VIRUS (TILV) IN FARMED AND WILD FISHES OF NORTH TAMIL NADU, INDIA
- 09:40 Sathish Subramani, Chidambaram Pushparaj, Sankar Ram Subramaniyam PREVALENCE OF PARASITES IN FARMS ADOPTING POLYCULTURE AND MONOCULTURE OF TILAPIA AND THEIR MANAGEMENT PRACTICES
- 10:00 Ganesh Babu S., Uma A., Gangatharan S., Rebecca G.
 PREVALENCE OF PATHOGENIC Vibrio parahaemolyticus IN Penaeus vannamei SHRIMP
 FARMS OF TIRUVALLUR DISTRICT, TAMILNADU, INDIA
- 10:20 Saravanan K., Praveenraj J., Kiruba-Sankar R., Dam Roy S.
 AQUATIC ANIMAL DISEASES AND INVASIVE SPECIES THREATS TO TROPICAL ISLAND
 ECOSYSTEM: ANDAMAN AND NICOBAR ISLANDS PERSPECTIVE
- 10:40 BREAK
- 11:00 Nameun Kim, Do-Hyung Kim
 COMPARATIVE GENOME ANALYSIS AND RE-IDENTIFICATION OF Edwardsiella
 SPECIES
- 11:20 Gabriel Arriagada
- THE ROLE OF EPIDEMIOLOGY IN THE SURVEILLANCE AND CONTROL OF PREVALENT FISH DISEASES THE CASE OF THE SEA LICE IN FARMED SALMONIDS IN CHILE
- 11:40 Maharajan Athi, Rajesh R., Ganapiriya V.
 CYTOPATHOLOGICAL CHANGES OF THE SPINY LOBSTER *Panulirus ornatus*(FABRICIUS, 1798) EXPOSED TO COPPER
- 12:00 Maarten Jay van Schoonhoven, Alexandre Veille IMPROVING SHRIMP HEALTH WITH SULPHATED POLYSACCHARIDES EXTRACTED FROM SEAWEED TO REDUCE DISEASE MORTALITIES

OPEN-SEA CAGE CULTURE

Friday, June 21 09:00 - 13:00 Room A Chairs: Mohan Joseph Modayil, Sunil Mohammed

09:00 Mohan Joseph Modayil
Mariculture and coastal food security in India

09:40 Sergio Bolasina. Anie Phillip

SPECIES AND SYSTÉM SELECTION FOR SUSTAINABLE AQUACULTURE IN THE REPUBLIC OF THE MARSHALL ISLANDS. CULTURE POTENTIAL OF PACIFIC CLAM OR JUKKWE *Asaphis violascens* (FORSSKÅL, 1775)

10:00 Dharani G., Santhanakumar J., Rajaprabhu G., Sendhil Kumar R., Vinithkumar N.V., Kirubagaran R., Atmanand M.A.
OPEN SEA CAGE CULTURE PROSPECTS AND CHALLENGES – INDIAN SCENARIO

10:20 Santosh Kumar T., Harini C., Sri Dattatreya P., Ravindra Kumar Reddy D. EFFECT OF STOCKING DENSITY ON GROWTH AND SURVIVAL OF GREY MULLET Mugil cephalus IN FLOATING NET CAGES

10:40 BREAK

Sivasankar P., Stephen Sampathkumar J., Anand C., Gokulakrishnan S.,
 Subash Chandraboss M., Athithan S.
 GROWTH PERFORMANCE OF SILVER POMPANO *Trachinotus blochii* UNDER SEA CAGE CULTURE, RAMANATHAPURAM COAST OF TAMIL NADU

Sankar M., Sakthivel M., Jayakumar R., Tamilmani G., Rameshkumar P., Anikuttan K.K.,
 Hanumantha Rao G., Nazar A.K.A.
 GROWTH AND SURVIVAL OF ASIAN SEA BASS Lates calcarifer (BLOCH, 1790)
 CULTURED IN SEA CAGES AT GULF OF MANNAR AND PALK BAY

11:40 Ricardo Alves, Sebastian Overmans, Asaad Mahamed, Jorge Alarcon,
Abdulaziz Al Suwailem, Susana Agustí
EFFECTS OF SOLAR ULTRAVIOLET RADIATION ON GROWTH, STRESS, PHYSIOLOGY
AND INNATE IMMUNE FUNCTION OF GILTHEAD SEABREAM Sparus aurata REARED IN
CAGES ON THE RED SEA COAST OF SAUDI ARABIA

12:00 Apolinar Santamaría, Juan Pablo Apun-Molina, Leonardo Ibarra-Castro, Claudia I. Cervantes-Mejia, Espinosa-Ortiz Mauro, Sergio Medina-Godoy ANALYSIS OF THE GROWTH AND PIGMENTATION OF *L. guttatus* CULTIVATED IN FLOATING CAGES

12:20 Sekar Megarajan, Ritesh Ranjan, Biji Xavier, Viji Pankyamma, Narasimhalu Sadhu, Shubhadeep Ghosh GROWTH, BODY COMPOSITION AND GROWTH RELATED GENE EXPRESSION IN JUVENILE OF INDIAN POMPANO *Trachinotus mookalee* FED WITH DIFFERENT FEED

12:40 David Mirera

RETHINKING BLUE ECONOMY: "FARMING NILE TILAPIA Oreochromis niloticus IN THE INDIAN OCEAN"

13:00 Bragadeeswaran Subramanian, Samrat Das ECONOMIC FEASIBILITY OF CAPTURE-BASED MARICULTURE (CBM) OF SPINY LOBSTER Panulirus homarus (LINNAEUS, 1758) IN THARUVAIKULAM, THOOTHUKUDI DISTRICT

POST HARVEST PROCESSING – PRESERVATION

Friday, June 21 09:00 - 13:00 Room B Chairs: C.N. Ravishankar, T.K. Shrinivas Gopal, Jeyashakila

- 09:00 Ravishankar C.N.
 ADVANCES IN PROCESSING AND PACKAGING OF FISH AND FISHERY PRODUCTS
- 09:20 Karthickumar P., Manimehalai N., Rathnakumar K.
 EXPERIMENTAL INVESTIGATION ON DRYING CHARACTERISTICS OF ANCHOVY
 FISHES USING SOLAR GREEN HOUSE DRYER
- 09:40 Nagarajan Manimehalai, P. Karthickumar
 RETORT POUCH PROCESSING OF PRE-PROCESSED PRAWN IN BRINE SOLUTION
- 10:00 Vimaladevi Sekar, Muralidharan Nagarajan, Satheesh Muniyasamy,
 Sandhya Venkatesh, Ramya Vadamalayan, Lalitha Ranganathan, Balasundari Subbaih
 DESIGN, FABRICATION AND EVALUATION OF PORTABLE SOLAR DRYER FOR DRYING
 FISH AND FISHERY PRODUCTS
- 10:20 Vijayarahavan Vetri, S.A. Shanmugam, B. Chrisolite, P. Velayutham, B. Sundaramoorthy NUTRITIONAL COMPOSITION OF SALT CURED SARDINE Sardinella gibbosa DURING STORAGE
- 10:40 BREAK
- Manivel Karthikeyan, Dharani Shrree, N. Manimehalai, K. RathnaKumar,
 P. Karthickumar
 DESIGN OF FO CALCULATOR FOR THERMAL PROCESSING OF SHRIMP PRODUCT
- **11:20 J.K. Jakhar**, K.K. Choudhary, Hauzou Kim, Priya Dubey, Chandrashekhar, Hemlata Thakur

INDIGENOUS FISH PROCESSING AND PRESERVATION PRACTICES IN DHAMTARI DISTRICT OF CHHATTISGARH

- 11:40 Jeyakumari A., Narasimha Murthy L., Visnuvinayagam S., Parvathy U.,
 Ravishankar C.N., Sarma K.S.S., Rawat K.P., Shaikh Abdul Khader
 QUALITY AND SHELF LIFE EVALUATION OF ELECTRON BEAM IRRADIATED TILAPIA
 FISH CHUNK UNDER CHILLED STORAGE
- 12:00 Ming-Jian Wang
 APPLICATION OF ICE SLURRY IN THE SHRIMP INDUSTRY
- 12:20 Gayatri Pandey, C.V. Raju, Chandan Kumar, Jag Pal, Shobha Rawat,
 Mahesh Chand Sonwal
 IMPACT OF SUPERCHILLING ON QUALITY CHARACTERISTICS OF RANI FISH STORED
 IN INDIGENOUSLY DEVELOPED FISH VENDING AND DISPLAY UNIT POWERED BY
 SOLAR ENERGY
- **12:40 Dhanapal Kandan**, Srikanya A., Sravani K., Madhavi K., Chamundeawari G. DEVELOPMENT OF FISH SAUSAGE FROM MULLET *Mugil cephalus* AND IT'S QUALITY EVALUATION DURING REFRIGERATED STORAGE

FOOD QUALITY AND CONSUMPTION

Friday, June 21 09:00 - 13:00 Hall 3 Chairs: Iddya Karunasagar, Ashok Kumar, Prathapchandra Shetty

- 09:00 Neeraj Pathak, Robinson Jeya Shakila, Geevaretnam Jeyasekaran, R. Shalini, Neethiselvan N., Padmavathy P. COMPOSITIONAL DIFFERENCE BETWEEN HARD AND SOFT SHELL OF BLUE SWIMMING CRAB Portunus pelagicus
- **09:20** Surya T., G. Jeyasekaran, R. Jeya Shakila, B. Sivaraman, N. Asha Hema Malini, V. Alamelu ISOLATION AND IDENTIFICATION OF HALOPHILIC AMINE FORMERS FROM SALT CURED SARDINES AND SEERFISH
- **09:40 A.K. Balange**, S.B. Gore, B.B. Nayak, Sanath Kumar H., Martin Xavier RESTRUCTURED MINCE SAUSAGES FROM ROHU *Labio rohita*
- 10:00 Shalini Rajendran, Jeya Shakila Robinson, Udhayakumar Ramar, Jeyasekaran Geevarathnam, Lidiya Wilwet STABLE ISOTOPE ANALYSIS (SIA) BY ICP-MS FOR TRACEABILITY OF COMMERCIAL SHRIMPS
- 10:20 Oishi Das, Sanath Kumar, B.B. Nayak
 CONTRIBUTION OF ARCHAEA AND BACTERIA IN SALT FERMENTED FISH PRODUCTS
- 10:40 BREAK
- 11:00 Pradeep R., Aravind R., Rathnakumar K., Manimehalai N., Karthickumar P.
 DEVELOPMENT OF MOBILE APPLICATION FOR QUALITY EVALUATION OF EXTRUDED
 FISH SNACK PRODUCTS
- **Alamelu V.**, Sony D.M.M., Santhosh K., Krishnakumar B., Venugopal M.N. EFFECT OF TEMPERATURE ON THE GROWTH OF ARTIFICIALLY SPIKED THREE DIFFERENT STRAINS OF *Vibrio parahaemolyticus* IN CLAMS
- **11:40** Alamelu V., Sony D.M.M., Santhosh K., Krishnakumar B., Venugopal M.N. EFFECT OF SALINITY ON THE EXPRESSION OF VIRULENT T3SS GENE OF *Vibrio parahaemolyticus*
- 12:00 George Chamberlain, Ken Corpron INNOVATIONS IN THE BEST AQUACULTURE PRACTICES (BAP) PROGRAM
- **Taizhuo Zhang**CHINA AQUATIC PRODUCTS CONSUMPTION TREND & EXPORT OPPORTUNITIES FOR INDIA *Pangasius* AS EXAMPLE

FUNCTIONAL FEED INGREDIENTS

Friday, June 21 09:00 - 18:00 Hall 1 Chairs: N.P. Sahu, B.P. Mohanty, Alberto Nunes

- O9:00 Griselda Karina Gonzalez Felix, Hervey Rodriguez-Gonzalez,
 Victor M. Peinado-Guevara, Manuel García-Ulloa Gómez, Sergio Medina-Godoy,
 Carlos Sosa-Aguirre, Hervey Rodríguez-Gonzalez, Víctor M. Peinado-Guevara,
 Manuel García-Ulloa, Sergio Medina-Godoy, Carlos R. Sosa-Aguirre
 BIOECONOMIC EVALUATION OF THE USE OF B-GLUCAN IN WHITE SHRIMP
 Litopenaeus vannamei IN SEMI-INTENSIVE FARMS IN SINALOA, MEXICO
- **09:20** Parimal Sardar, Shamna N., Narottam Prasad Sahu
 EFFECT OF MULTIPLE STRESSORS AND DIETARY NUTRACEUTICAL ON GROWTH AND
 IGF-1 EXPRESSION IN *Labeo rohita* (HAMILTON, 1822) FINGERLING
- 09:40 Sjoerd Bakker, Morgane Piriou, Delphine Weissman, Pauline Pourteau REDUCING EARLY IMPACT ON SHRIMP OF WHITE SPOT SYNDROME VIRUS IN FIELD CONDITIONS
- **10:00 Ekachai Jenwitheesuk**, Orapint Jintasataporn, Melina A. Bonato, Liliana L. Borges EFFECTS OF YEAST CELL WALL IN WHITE SHRIMP *Litopenaeus vannamei*
- 10:20 Shamna N., Narottam Prasad Sahu, Parimal Sardar
 EFFECT OF MULTIPLE STRESSORS AND DIETARY NUTRACEUTICAL ON HEPATIC
 ANTIOXIDANT STATUS IN *Labeo rohita* (HAMILTON, 1822) FINGERLING
- 10:40 BREAK
- 11:00 Chi Man, Lily Li, Kumar Baburao Kore
 MONOGLYCERIDE TECHNOLOGY AND APPLICATION IN SHRIMP PRODUCTION TO
 IMPROVE SURVIVAL RATE AND GROWTH PERFORMANCE
- 11:20 Kumar Kore, Wayoon Poonperm, Luu Thi Thanh Truc, Chi Man, Lily Li ORGANIC ACID (Amasil® NA) IMPROVES THE PERFORMANCE OF RED TILAPIA Oreochromis sp. AT FARM LEVEL
- 11:40 Naresh Raj Keer, N.K. Chadha, V.P. Saini, M.L. Ojha
 DIETARY SATAWARI *Asparagous racemosus* ROOT EXTRACT PROMOTES GROWTH,
 NUTRIENTS UTILISATION AND CARCASS COMPOSITION OF *Labeo rajasthanicus*(DATTA AND MAJUMDAR. 1970)
- **12:00** Sonia V., Ahilan B. EFFECT OF ORGANIC ACID SUPPLEMENTED DIET ON GROWTH DYNAMICS OF POPULAR ORNAMENTAL FISH *Cyprinus carpio* var. *koi*
- 12:20 Sagarika Swain, Anil S. Pawase, Aditya Pratap Acharya, R.K. Pai, R.M. Tibile, S.T. Indulkar, R.A. Pawar EFFECT OF DIFFERENT IMMUNOSTIMULANT INCORPORATED DIETS ON HAEMATOLOGICAL PARAMETERS OF JUVENILE STRIPED CATFISH Pangasianodon hypophthalmus (SAUVAGE, 1878)
- 12:40 Bejo Slamet, Ibnu Rusdi, Adiasmara Giri, Haryanti Haryanti GROW OUT OF SCALLOPED SPINY LOBSTER *Panulirus homarus* IN CONCRETE TANK WITH DIFFERENT DRY PELLET AS FEED

- 13:00 LUNCH
- 13:40 Clara Trullas, Zhu Chunhua, Warren Andrew Turner
 THE USE OF DIETARY HYDROLYSABLE TANNINS AS A PROPHYLACTIC STRATEGY IN
 AQUACULTURE
- 14:00 Waldo G. Nuez-Ortín, María Merce Isern-Subich
 VALIDATING THE EFFICACY OF A PHYTOBIOTIC-BASED FEED ADDITIVE AGAINST
 WHITE FECES SYNDROME
- 14:20 Agung Sudaryono, Purnama Sukardi, Ervia Yudiarti, Esti H. Hardi, Titik Susilowati EVALUATION OF DIETARY PAPAIN ENZYMES SUPPLEMENTATION ON GROWTH PERFORMANCE AND FEED UTILIZATION OF JUVENILE WHITE SHRIMP *Litopenaeus vannamei*
- 14:40 Hemanth Giri Rao Vantharam Venkata, Sri Sailaja Nori, Shrikumar Suryanarayan RED SEAWEED EXTRACT INCREASES PRODUCTIVITY, STRESS AND DISEASE TOLERANCE IN COMMERCIALLY IMPORTANT SHRIMP AND FISH
- 15:00 Nilima Priyadarshini, Dinesh K., Chiranjiv Pradhan
 EFFECT OF GUAR SPROUT MEAL ON THE GROWTH AND NUTRIENT UTILIZATION OF
 TILAPIA FINGERLINGS *Oreochromis niloticus*
- 15:20 Frank Ruyseveldt, Sjo Zwart
 EVALUATING 4 DIFFERENT TYPES OF INORGANIC PHOSPHORUS SOURCES IN
 WHITELEG SHRIMP Litopenaeus vannamei

HUMAN RESOURCE DEVELOPMENT

Friday, June 21 09:00 - 18:00 Room 5 Chairs: Gopal Krishna, B. Venkateswaralu, Suresh, Arpita Sharma Sponsor:



- 09:00 Gopal Krishna
 HIGHER FISHERIES EDUCATION AND WAY FORWARD
- 09:20 Dilip Kumar
 PROFESSIONAL FISHERIES EDUCATION: A FOCUS ON PARA FISHERIES
 PROFESSIONALS
- 09:40 Venkateshwarlu Gudipati
 INITIATIVES FROM ICAR IN DEVELOPING HUMAN RESOURCES IN AGRICULTURE
- 10:00 N.P. Sahu
 SEEDING INNOVATION IN AQUACULTURE EDUCATION THROUGH ACADEMIAINDUSTRY PARTNERSHIP

10:20	Aparna Chaudhari
	FLEXIBILITY IN FISHERIES EDUCATION FOR UNLOCKING GLOBAL OPPORTUNITIES

- 10:40 BREAK
- 11:00 Kay Lwin Tun, Kevin Fitzsimmons, Hillary Egna, Hendrik Stolz, Uwe Scholz HIGHER EDUCATION FOR FISHERIES AND AQUACULTURE IN MYANMAR
- 11:20 Gaind Singh Verma, Arpita Sharma
 IMPACT ASSESSMENT OF FISHERIES DEVELOPMENT PROGRAMMES IN
 CHATTISGARH ON FISH FARMERS' LIVELIHOOD
- 11:40 G.H. Pailan, Sukham Munilkumar, Sujata Sahoo, Dilip Kumar Singh SKILL DEVELOPMENT TRAINING ON INTEGRATED FARMING SYSTEM TO IMPROVE THE LIVELIHOOD OF FISH FARMERS
- 12:00 Suman Dey, Shekhar N. Ojha, Neha W. Qureshi
 CAPACITATING FOR MARKET LED FISHERIES EXTENSION SYSTEMS: A WAY
 FORWARD
- 12:20 Chinmaya Nanda, Sivaraman I., Ananthan P.S., S.N. Ojha FACETS OF WORKPLACE MILIEU AMONG FISHERIES EXTENSION OFFICERS IN ODISHA. INDIA
- 12:40 Shweta Kumari, Arpita Sharma, Rama Sharma, Ananthan P.S., Arup Choudhary EMERGENCE OF NEW EMPLOYMENT OPPORTUNITIES THROUGH CAGE CULTURE IN JHARKHAND STATE, INDIA
- 13:00 LUNCH
- 13:40 Sandesh Patil, Arpita Sharma, Shekhar Ojha, Mangesh Shirdhankar, Hukumsingh Dhaker IMPROVING PROFESSIONAL COMPETENCIES AND EMPLOYMENT OPPORTUNITIES THROUGH CAPACITY BUILDING OF SHRIMP AQUACULTURE EXTENSION PERSONNEL
- **14:00 Kiranmayi Dhenuvakonda**, Arpita Sharma USING PROGRESSIVE WEB APPS (PWAS) FOR IMPROVING EMPLOYABILITY SKILLS
- 14:20 Suhas Wasave, Arpita Sharma, Sangita Wasave, Bharat Yadav, Sandesh Patil, Rajeev Rathod
 POTENTIAL OF EMPLOYMENT GENERATION BY MARINE FISHERIES COOPERATIVE ORGANIZATIONS IN MAHARASHTRA
- 14:40 Suchismita Prusty, Arpita Sharma
 WORKING PROFILE AND OCCUPATIONAL INJURIES AMONG THE SHRIMP FARM
 WORKERS
- **15:00** Rajeshwaran M., Ananthan P.S., Ramasubramanian V., Veerabhadran K. WHAT DO THE YOUTH IN FISHING COMMUNITIES WANT? CASE STUDY OF URBAN AND RURAL FISHING VILLAGES IN TAMIL NADU
- 15:20 Arpita Sharma, Ananthan P.S., Rishabh Sharma
 INNOVATIVE GEN NEXT PEDAGOGY: EDUCATION MODEL FOR THE MODERN WORLD
 OF ARTIFICIAL INTELLIGENCE AND BEYOND

15:40 Arul Oli Govindasamy, Santhakumar Rajagopalan
EXTENT OF UTILIZATION OF INFORMATION COMMUNICATION TECHNOLOGICAL
TOOLS BY THE FISHERMEN OF COASTAL DISTRICTS OF TAMIL NADU – A
COMPARATIVE STUDY

AQUAPONICS AND OTHER CULTURE SYSTEMS

Friday, June 21 11:00 - 13:00 Hall 4 Chairs: S. Felix, A.K. Verma, Jean-Yves Mevel

- 11:00 Gokulakrishnan M., Arun Pandian G., Bhosale M.M., Felix S. MOLLUSCAN SHELL GRIT AS A pH STABILIZER IN AQUAPONICS
- 11:20 Jean-Yves Mével FROM RESEARCH TO PRODUCTION A PERSONAL AQUAPONIC JOURNEY
- 11:40 B.C. Mohapatra, N.K. Chandan, S.K. Panda, S. Routroy, B.R. Pillai GROWTH AND PRODUCTION OF PANGAS *Pangasius hypophthalmus* AND MARIGOLD *Tagetes erecta* IN FRP MADE NFT AQUAPONICS SYSTEM
- 12:00 Ritty Maria Thomas, Ajit Kumar Verma, Chandra Prakash, Hari Krishna, Satya Prakash, Ashok Kumar
 BIO-INTEGRATION OF NILE TILAPIA *Oreochromis niloticus* AND SPINACH *Spinacia oleracea* IN LOW SALINE UNDERGROUND WATER

GROW OUT AND BROODSTOCK NUTRITION

Friday, June 21 11:00 - 15:00 Audit B Chairs: N.P. Sahu, Kedarnath Mohanta, S.S. Giri, Vikas Kumar

- 11:00 Ambasankar Kondusamy, Syama Dayal J., Kumaraguru Vasagam K.P., Debasis De, Sandeep K.P., Sivaramakrishnan T., Vijayan K.K.
 COST EFFECTIVE INDIGENOUS SHRIMP FEED 'VANAMI PLUS' FOR SUSTAINABLE SHRIMP FARMING
- 11:20 Alberto Nunes, Hassan Sabry-Neto, Severino Oliveira-Neto, Lena Burri DIETARY KRILL MEAL INCLUSION RESULTS IN HIGHEST GROWTH PERFORMANCE OF JUVENILE WHITELEG SHRIMP *Litopenaeus vannamei* WHEN COMPARED TO OTHER FEED ATTRACTANTS
- 11:40 Karthik Masagounder, Sofia Engrola, Rita Teodósio, Rita Colen, Cláudia Aragão REDUCING DIETARY PROTEIN LEVELS TO A MORE ENVIRONMENTAL-FRIENDLY TILAPIA *Oreochromis niloticus* PRODUCTION
- **12:00 Biji Xavier**, Vamsi Balla, Ritesh Ranjan, Sekar Megarajan, Suresh Babu P.P., Shubhadeep Ghosh

EFFECT OF RATION RESTRICTION ON COMPENSATORY GROWTH OF INDIAN POMPANO *Trachinotus mookalee* FINGERLINGS

- 12:20 Judine John Chacko, Mini Sekharan N.
 FEEDS AND FEEDING PRACTICES IN ORNAMENTAL FISH FARMS IN KERALA
- 12:40 Joseph Leopoldo Q. Laranja, Jorge Alarcon, Asaad Mohamed,
 Muhammad Dania Arif bin Nor Azli, Nurhisham bin Razali, Gerry Carbonell,
 Jupit Donoso, Abdulaziz Mohamed Al-Suwailem
 GROWTH PERFORMANCE, FEED CONVERSION RATIO (FCR) AND TEMPERATURE
 TOLERANCE OF SELECTED MARINE FISH SPECIES WITH AQUACULTURE POTENTIAL
 FOR THE RED SEA
- 13:40 Amita Saxena, Ekta Tamta
 EFFECT OF Ficus racemosa (GULAR) ON GROWTH OF INDIAN MAJOR CARPS
- 13:00 LUNCH
- 14:00 Shajahan Ferosekhan, Hanlin Xu, Serhat Turkmen, Hipólito Fernández-Palacios, Juan Manuel Afonso, Ramon Fontanillas, Ana Gomez, Sadasivam Kaushik, Marisol Izquierdo
 BROODSTOCK NUTRITIONAL PROGRAMMING: INFLUENCE OF BROODSTOCK SELECTION (HIGH OR LOW fads2) AND DIETARY FATTY ACID PROFILES ON REPRODUCTIVE PERFORMANCE AND EGG QUALITY IN GILTHEAD SEA BREAM Sparus aurata
- **P. M. Nuzaiba**, Subodh Gupta, P.P. Srivastava, N.P. Sahu, Gopal Krishna ANTAGONISTIC EFFECT OF DIETARY GENISTEIN ON VITELLOGENESIS AND STEROIDOGENESIS IN FEMALE COMMON CARP *Cyprinus carpio*
- **14:40 R. Punniyamoorthy**, Guddu Kumar, G. Mahadevan, P. Murugesan EFFICACY OF FRESH FEEDS ON GROWTH AND SURVIVAL OF LAB REARED *Litopenaeus vannamei* (BOONE, 1931)

DISASTER MANAGEMENT

Friday, June 21 11:00 - 18:00 Hall 2 Chairs: A. Ramachandran, S. Dam Roy

- 11:00 Sibnarayan Dam Roy
 DISASTER MANAGEMENT IN THE ANDAMAN AND NICOBAR ARCHIPELAGO AND
 CORAL ISLANDS OF LAKSHADWEEP
- 11:20 Sambit Priyadarshi, S.N. Ojha, Arpita Sharma
 SUSTAINABLE LIVELIHOOD ASSESSMENT OF MARINE FISHERS OF ODISHA IN
 CONTEXT OF DISASTER PREPAREDNESS
- 11:40 Maniruzzaman Sk, Balaji Sankaran
 DETECTION OF RAINFALL INDUCED LANDSLIDE THROUGH SLOPE STABILITY
 INVESTIGATION BY USING 2D ERT AND SELF POTENTIAL TECHNIQUE,
 CHAKKARGAON, PORT BLAIR
- 12:00 Balaji Sankaran, Hamid Hussain
 EVALUATION OF STRESS ACCUMULATION THROUGH B VALUE: A SEISMIC HAZARD
 ANALYSIS OF ANDAMAN AND NICOBAR ISLANDS

- 12:20 Balaji Sankaran, Vazeem Iqbal REPERCUSSIONS OF HYDROLOGICAL DISASTER (SEA WATER INTRUSION) IN ANDAMAN ISLAND IN THE AFTERMATH OF 2004 GREAT SUMATRA-ANDAMAN TSUNAMI
- 12:40 Hamid Hussain, Balaji Sankaran Numerical Modelling of Cyclone Lehar and its associated surge by Using Mike 21 HD and SW Model
- 13:40 Nupur Mistry, Balaji Sankaran EARTHQUAKE RESISTANT ARCHITECTURAL DESIGN FOR DISASTER RISK REDUCTION (DRR) OF PORT BLAIR, SOUTH ANDAMAN
- 14:00 Sai Susmitha Bhargavi Kapparapu, Sujathkumar Nambali Valsalan, Santhakumar Rajagopal, Jawahar Paulraj FISHERS' PERCEPTION OF CLIMATE CHANGE ON FISHERIES IN THE SOUTHERN COASTAL DISTRICTS OF TAMIL NADU
- 14:20 Kiruba-Sankar R., Saravanan K., Sanjeev Kumar Singh, Lohith Kumar K., Dam Roy S. CLIMATE CHANGE PERCEPTIONS OF NICOBAR TRIBAL FISHERS IN CAR NICOBAR ISLAND, INDIA
- 14:40 Grinson George, Nandini Menon N, Sara Xavier, Sajhuneesa T., Pranav P., Anju Lal, Anas Abdul Aziz
 ENVIRONMENTAL SETTING IN VEMBANAD LAKE HOW AQUACULTURE IN THE LACUSTRINE SYSTEM IS IMPACTED IN THE RECENT PAST?
- 15:00 Sabuj K. Mazumder, Simon K. Das, Mazlan A. Ghaffar EFFECTS OF FOUR ACCLIMATION TEMPERATURES ON THE OXYGEN CONSUMPTION RATES, RESPIRED ENERGY, AND THERMAL COEFFICIENT OF MALABAR BLOOD SNAPPER *Lutjanus malabaricus* (BLOCH & SCHNEIDER, 1801) UNDER LABORATORY CONDITIONS
- 15:20 Umamaheswari Thavasiyandi, Sugumar Gopalrajan, Krishnan Pandian, Ananthan Pachampalayam Shanmugam
 AN EMPIRICAL ANALYSIS OF SOCIO-ECONOMIC VULNERABILITY OF COASTAL HOUSEHOLDS AND DECISION MAKING FOR CLIMATE CHANGE ADAPTATION IN THOOTHUKUDI DISTRICT, TAMIL NADU, INDIA
- 15:40 Vazeem Iqbal, Balaji S., Gulam Rasool Bhat, Mohammad Saleem
 CHARACTERIZATION OF SEAWATER INGRESS IN THE COASTAL AQUIFERS OF SOUTH
 ANDAMAN ISLAND, USING HYDROCHEMISTRY AND GEOPHYSICAL TRANSECTS

CONTRIBUTED ENVIRONMENT

Friday, June 21 11:00 - 15:00 Audit C Chair: Muralidhar, P. Krishnan

- 11:00 Amardeep Kaur, Adnan Abubakar, Venkata Lakshmi Vardhanapu TROPHIC STATUS ASSESSMENT OF NIGEEN LAKE, KASHMIR (INDIA)
- 11:20 Rajeswari Chandrasekar, Aanand Samraj Composting – An Ecofriendly Tool for Disposal of Fish Waste
- 11:40 P. Padmavathy Pandurengan, Juliet Selvarani A., Manimekalai D., Rani V. PERFORMANCE OF MACROPHYTES IN VARIOUS WASTEWATER TREATMENT.
- 12:00 Mohanasundari C., Felix Sugantham, Menaga Meenakshisundaram, Charulatha M. ISOLATION, CHARACTERIZATION AND PERFORMANCE OF EXTRACELLULAR POLYSACCHARIDES PRODUCING BACTERIA IN OUTDOOR BIOFLOC CULTURE PONDS OF CHITRALADA STRAIN OF NILE TILAPIA
- 12:20 Charulatha M., Felix Sugantham, Menaga Meenakshisundaram, Mohanasundari C. ISOLATION AND CHARACTERIZATION OF SULPHUR OXIDISING BACTERIA IN THE GROWOUT CULTURE OF GENETICALLY IMPROVED FARM TILAPIA (GIFT) USING BIOFLOC TECHNOLOGY
- 12:40 Jettiboina Mahija, Pratibha Baral, Anupam Pandey, Rajesh M., M.S. Akhtar, Ciji A., Biju Sam Kamalam
 TEMPERATURE AND OXYGEN RELATED ECOPHYSIOLOGICAL TRAITS OF SNOW
 TROUT Schizothorax richardsonii ARE SENSITIVE TO SEASONAL CHANGES IN A
 HIMALAYAN STREAM ENVIRONMENT
- 13:00 Syed Shabih Hassan, Datta S.N.
 ECOLOGICAL AND FISHERY STATUS OF AQUATIC COMMUNITY RESERVES IN
 GURDASPUR (PUNJAB) INDIA
- 13:20 LUNCH
- **13:40 Chinmaya Nanda**, Sivaraman I., Ananthan P.S., S.N. Ojha SCOPING FOR A WIDER RESILIENCE FRAMEWORK TO CLIMATE CHANGE: A CASE WITH FISHERS OF CHILIKA, ODISHA
- 14:00 Sahina Akter, Ajay Nakhawa, Santosh Bhendekar, B.B. Nayak, Anulekshmi Challapan, Karan K. Ramteke, Dhanya M. Lal, Zeba Jaffer Abidi GENERAL ADDITIVE MODELLING APPROACH TO PREDICT INDIAN MACKEREL HABITAT ALONG MUMBAI COAST USING SATELLITE DERIVED DATA
- 14:20 Raj Kumar Gautam, Pankaj K Singh, Krishnan Sakthivel, sibnarayan Dam Roy, S.K. Zamir Ahmed
 UTILIZING INDIGENOUS AGRO-BIODIVERSITY FOR DEVELOPING IMPROVED VARIETIES OF CROPS AND MICROBIAL BIOCONSORTIA FOR LIVELIHOOD SUSTAINABILITY IN ANDAMAN AND NICOBAR ISLANDS AN OVERVIEW
- 14:40 David Kingston S., Vidhya V.
 SPATIAL STRUCTURING OF FISH COMMUNITY ALONG THE VAMANAPURAM RIVER,
 SOUTH KERALA. INDIA

PRODUCT DEVELOPMENT AND VALUE ADDITION

Friday, June 21 13:40 - 15:40 Room B Chair: C.N. Ravishankar

- 13:40 Brita Nicy A., Velayutham P., Ganesan P., Jeya Shakila R., Neethiselvan N., Kanaga V. ORGANOLEPTIC EVALUATION AND NUTRITIONAL VALUE OF BREAD INCORPORATED WITH FREEZE DRIED AND OVEN DRIED ITOYORI SURIMI
- 14:00 P. Ganesan, Rathnakumar K., Brita Nicy A., Velayutham P., Jeya Shakila R., Anand S. EVALUATION OF NUTRITIONAL QUALITY, ORGANOLEPTIC CHARACTERISTICS AND SHELF LIFE STABILITY OF EXTRUDED FISH SNACKS FROM LOW VALUED FISHES
- 14:20 Hema Karuppasamy, Velayutham P., Mohan C.O., Sukumar D., Sundaramoorthy B., Athithan S., Sugumar G., Ravishankar C.N., Ashok Kumar K. PRODUCT DEVELOPMENT AND PROCESS EVALUATION OF READY TO EAT ANALOGUE SHRIMP CURRY (ASC) FROM LIZARD FISH Saurida tumbil IN RETORTABLE POUCHES USING STEAM AIR OVER PRESSURE RETORT
- 14:40 Bharathipriya R., Balasundari S., Satheesh M., Ahilan B.
 STUDY ON THE UTILITY OF FARMED GREEN MUSSEL *Perna viridis* IN THE
 PRODUCTION OF SNACK PRODUCT
- 15:00 Drishya Antony, Velayutham P., Ganesan P., Brita Nicy A., Kanaga V.
 ORGANOLEPTIC EVALUATION OF CUTLETS INCORPORATED WITH SURIMI IN
 DIFFERENT PROPORTIONS
- 15:20 Hema Karuppasamy, Velayutham P., Mohan C.O., Sukumar D., Sundaramoorthy B., Athithan S., Sugumar G., Ravishankar C.N., Ashok Kumar K.
 PROCESSING AND STORAGE OF READY TO SERVE IMITATED SHRIMP CURRY FROM LIZARD FISH *Saurida tumbil* IN RETORTABLE POUCHES (ASM) USING WATER IMMERSION RETORT
- **15:40 Bharathipriya R.**, Balasundari S., Satheesh M., Ahilan B. STUDY ON THE UTILITY OF FARMED GREEN MUSSEL *Perna viridis* IN THE PRODUCTION OF SNACK PRODUCT

PHARMACOLOGY – ALTERNATIVE MEDICINE

Friday, June 21 13:40 - 18:00 Audit A Chairs: Indrani Karunasagar, Jawahar Abraham, Sagiv Kolkovski, Peter Bossier

- 13:40 Diem Tho Ho, Yoonhang Lee, Do-Hyung Kim STUDY ON EFFECTS OF GREEN LIGHT EMITTING DIODES ON GROWTH OF OLIVE FLOUNDER *Paralichthys olivaceaus*
- 14:00 Ritesh Tandel, Babita K., Pragyan Dash, Kavya K.K., Aadi Raja B.H., Debajit Sarma EFFICACY OF ANTI-OOMYCETES AGENTS AGAINST SAPROLEGNIA SP ISOLATED FROM FARMED RAINBOW TROUT *Onchorhynchus mykiss: IN VITRO* AND *IN VIVO*
- 14:20 Ramesh Dharmaraj
 DETECTION OF SECRETED ANTIMICROBIAL PROTEIN ISOLATED FROM CELL FREESUPERNATANT OF PROBIOTIC *Bacillus* spp. AND ITS EFFICACY AGAINST THE FISH
 PATHOGENS

- 14:40 Pushpa Kumari, Saurav Kumar, Ramesh M., Shameena S.S., Ashutosh D. Deo, Rajendran K.V., Raman R.P.
 ANTIPARASITIC EVALUATION OF ETHANOLIC AND METHANOLIC EXTRACTS OF NEEM Azadirachta indica LEAF AGAINST DIFFERENT LIFE STAGES OF Argulus japonicus: IN VITRO STUDY
- 15:00 Menaga Meenakshisundaram, Felix Sugantham, Charulatha M., Gopalakannan A., Nethaji M.
 SCREENING OF POLYHYDROXY BUTYRATE (PHB) ACCUMULATING BACTERIA FROM BIOFLOC SYSTEMS AND ITS EFFECT ON GROWTH, IMMUNOLOGICAL, ANTIOXIDANT INDICATORS AND DISEASE RESISTANCE OF GENETICALLY IMPROVED FARMED TILAPIA (GIFT)
- 15:20 Jayakumar Rengarajan, Krishnaveni N., Abdul Nazar A.K., Rameshkumar P., Anikuttan K.K., Tamilmani G., Sakthivel M., Sankar M. ANTIBACTERIAL ACTIVITY OF ALOE VERA GEL EXTRACT AGAINST VIBRIOSIS IN SEA CAGE FARMING
- 15:40 BREAK
- 16:00 Heyong Jin Roh, Bo-Seong Kim, Do-Hyung Kim
 WHOLE GENEME ANALYSIS OF MULTI-DRUG RESISTANT Aeromonas veronii
 ISOLATED FROM DISEASED DISCUS Symphysodon discus
- **16:20** Saranya D., Divya bharathi G., Gopalakrishnan A. EFFECT OF AQUEOUS GARLIC EXTRACT ON SHRIMP *Vibriosis*
- **D.K. Meena**, A.K. Sahoo, H.S. Swain, D. Mohanty, U.K. Sarkar, B.K. Das ETHNO-MEDICINAL IMPORTANCE OF *Terminalia arjuna* (ARJUNA) AGAINST POTENTIAL FISH PATHOGENS

AQUACULTURE ENGINEERING

Friday, June 21 13:40 - 18:00 Hall 4

Chairs: B.C. Mal, Manoj, Sudhansu Sekhar Mahananda, Jean-Yves Mevel, Sagiv Kolkovski

- 13:40 Peace C. Mnelemba, Joshua S. Valeta
 ASSESSMENT OF TECHNICAL AND ECONOMIC FEASIBILITY OF PORTABLE
 AQUAPONIC SYSTEM
- **14:00** Kesavan Devarayan, Monikandon S. ECO-FRIENDLY INHIBITOR FOR CORROSION OF TMT ROD IN MARINE ENVIRONMENT
- 14:20 Tanveer Mohammad, Subhamanas Roy
 A CONCEPTUAL APPROACH ON LIFE CYCLE ASSESSMENT (LCA) OF MECHANICAL
 AERATION SYSTEMS
- 14:40 Arunachalasivamani Ponnusamy, Manikandan Subramanian FISH SCALE AS BIO-PEIZOELECTRIC NANOGENERATOR
- 15:00 Ritu Prem, V.K. Tewari

 OUT DESIGN OF A NOVEL FISH FEEDING SYSTEM FOR SMALL AND MARGINAL FARMERS

Kishor Biswas , C.K. Mukherjee, S.D. Ghosh
STUDY ON POND BOTTOM SEDIMENT FOR USING AS ORGANIC FERILIZER IN FISH
CULTURE

- 15:40 BREAK
- 16:00 Sudip Dutta, Virendra Kumar Tewari
 SCOPE OF LIFE-SUPPORT SYSTEMS FOR LIVE FISH AS A ROAD TRANSPORTATION
 FACILITY FOR SMALL SCALE FARMERS
- 16:20 Manohara Pai, Radhika Pai, Ujjwal Verma, Shreesha S., Vismai Naik BEHAVIOUR ANALYSIS OF FISHES USING COMPUTER VISION
- **16:40 Radhika Pai**, Manohara Pai, Ujjwal Verma, Vismai Naik
 DEVELOPMENT AND DEPLOYMENT OF IOT BASED WATER QUALITY MONITORING
 SYSTEM IN THE HABITAT OF *Sillago sihama*
- 17:00 Pandiyaraja B., Abinaya Vijay V.R., Mohammad Tanveer DESIGN OF PERFORATED PLATE AERATION SYSTEM
- 17:20 Muruganandam Muthiah, Prabhat Ranjan Ojasvi
 AQUACULTURE CONSIDERATIONS FOR DESIGN AND CONSTRUCTION OF FARM
 PONDS AND WATER HARVESTING STRUCTURES (WHSs)

INTEGRATED MULTITROPHIC AQUACULTURE SYSTEMS

Friday, June 21 13:40 - 18:00 Room A Chairs: Mohan Joseph Modayil, Imelda Joseph

- 13:40 Imelda Joseph Scope of Integrated Multi-Trophic Aquaculture (IMTA) in Indian Mariculture
- 14:20 Mary Rinju R., M.K. Anil, E. Sherly Williams
 STUDIES ON THE GROWTH AND SURVIVAL OF SPAT, JUVENILES AND ADULT AKOYA
 PEARL OYSTER *Pinctada fucata* IN DIFFERENT REARING CONTAINERS AND STOCKING
 DENSITIES
- 14:40 Cherry Nian, Sulayman Arabain, Rafsanjani Nambi, Rosalyn Tarabasa,
 Abdulwahid Esmola
 EFFECTS OF STOCKING DENSITY ON GROWTH AND SURVIVAL PERFORMANCE OF
 BLOODWORM *Marphysa* sp. JUVENILE IN TREATED SEAWATER
- **15:00** Arjun A. Arulvel, Ujjal Singha Mahapatra MUD CRAB *Scylla serrata* FATTENING
- **15:20 Tamilmani G.**, Abdul Nazar A.K., Rameshkumar P., Anikuttan K.K., Sakthivel M., Sankar M., Jayakumar R., Hanumantha Rao G., Sathiya C., Krishnaveni N. STUDIES ON THE MATURATION AND GONADAL DEVELOPMENT STAGES OF SIGANID FISHES FROM GULF OF MANNAR REGION, INDIA
- 15:40 Sagiv Kolkovski
 OCTOPUS AND LOBSTER 'RANCHING' BRIDGING THE GAP BETWEEN FISHERIES
 AND AQUACULTURE

CONTRIBUTED AQUATIC ANIMAL HEALTH - CONTINUED

Friday, June 21 13:40 - 18:00 Hall 3 Chair: Indrani Karunasagar, Peter Bossier

- **13:40 A.H. Nabisa Begum**, K. Gautam, A.R. Nazar
 VARIATION IN THE FATTY ACID PROFILE OF LION FISHES *Pterois volitans* (LINNAEUS, 1755) AND *Pterois antennata* (BLOCH, 1787) OF PARANGIPETTAI COAST, TAMIL NADU, INDIA
- **14:00 Gokul Raj A.**, Uma A.
 NON-TUBERCULOSIS MYCOBACTERIUM INFECTION IN CLIMBING PERCH *Anabas testudineus* FROM THE WILD A POSSIBLE THREAT TO FISH FARMING
- 14:20 Chidambaram Pushparaj, Sankar Ram Subramaniyam, Sathish Subramani ADOPTION OF FOLDSCOPE AS A PORTABLE TOOL FOR FISH PARASITE DIAGNOSIS IN AQUACULTURE SYSTEMS
- 14:40 Saloni Shivam, Raghu Ramudu, Satya Prakash, N.K. Sanil, A. Anuraj, Suresh Babu P.P., T. Senthil Murugan, Jayasree Loka MORTALITY IN CAGE FARMED JUVENILE SILVER POMPANO Trachinotus blochii: A CASE STUDY
- 15:00 Priyangha S.J., Saranya D., Muhil Vannan S., Gopalakrishnan A.
 BLACK GILL DISEASE OF WILD INDIAN WHITE SHRIMP Penaeus indicus
- **Younus Mohd Tilwani**, Sivagnanavelmurugan Madasamy, Natwar Jha, Arul Venkatesan EFFECT OF PROBIOTIC STRAIN *Streptococcus faecium* ON ANTIBACTERIAL AND IMMUNE ACTIVITY IN MRIGAL FISH *Cirrhinus mrigala* AGAINST FISH PATHOGEN *Aeromonas hydrophila*
- 15:40 BREAK
- **16:00 Charulatha M.**, Felix Sugantham, Menaga Meenakshisundaram, Mohanasundari C. *IN VITRO* PROBIOTIC PROPERTIES OF *Bacillus* sp. ISOLATED FROM BIOFLOC REARED GENETICALLY IMPROVED FARMED TILAPIA *Oreochromis niloticus*
- 16:20 Vinu Siva, Jojy John, Amit Kumar, Vinu Siva, Balasubramanian V., Sasikumar G. ISOLATION AND CHARACTERIZATION OF SALT PAN BACTERIA FOR DEVELOPING BACTERIAL CONSORTIUM FOR THE COMPLETE REMOVAL OF NITROGEN FROM AQUACULTURE POND
- 16:40 Natarajan Pavanasam, Kassaye Balkew Workagegn
 WEED INFESTATION AND DISEASE PREVALENCE: A THREAT TO SUSTAINABILITY FOR
 FISHERIES AND AQUACULTURE IN ETHIOPIA
- 17:00 Aksya Kumar Sarkar, M. Nazrul Islam, F.H. Ansary
 EFFECT OF HARMFUL AGENT ON PRODUCTION INCOME AND BIODIVERSITY OF
 SHRIMP FARMING IN BANGLADESH

NUTRITIONAL PHYSIOLOGY

Friday, June 21 15:00 - 18:00 Audit B Chairs: N.P. Sahu, Vijayagopal, Arul Victor Suresh

- **15:00 Ezhilarasi V.**, Felix S., Samuelmoses T.L.S., Cheryl Antony, Aruna S. CHANGES IN DIGESTIVE ENZYME DURING THE INITIAL ONTOGENY OF PEARLSPOT *Etroplus suratensis*
- **15:20 Prakash Sharma**, Debajit Sarma, M.S. Akhtar POSTPRANDIAL DIGESTIVE PHYSIOLOGICAL CHANGES IN GOLDEN MAHSEER *Tor putitora* JUVENILES
- 15:40 BREAK
- 16:00 Dilip Kumar Chowdhury, Narottam Prasad Sahu, Parimal Sardar, Ashutosh D. Deo, Megha Kadam Bedekar, Krishna Pada Singha, Manas K. Maiti EFFECT OF DIFFERENT DIETARY HERBAL MEALS ON IMMUNE-PHYSIOLOGICAL RESPONSES IN Labeo rohita (HAMILTON, 1822) FINGERLINGS
- 16:20 Soumya Krishnan, Kajal Chakraborty, Vijayagopal Pananghat NUTRITIONAL PROFILING OF SELECTED SPECIES OF EDIBLE MARINE MOLLUSCS FROM THE SOUTH-WEST COAST OF INDIA
- 16:40 Mahmoud Hafezieh

OUT DIETARY EFFECTS OF SEAWEED *Sargassum ilicifolium* ON REDUCING CHOLESTROL LEVEL OF WHITE LEG SHRIMP *Litopenaeus vannamei*

- 17:00 Molatelo Junior Madibana, Brett R Lewis, Victor Mlambo, Rashieda Toefy EFFECT OF GRADED LEVELS OF A HERBAL STIMULANT, AQUAPRO®, ON GROWTH AND INTESTINAL MORPHOLOGY IN JUVENILE DUSKY KOB *Argyrosomus japonicus*
- 17:20 Javad Amiri, Felix S., Ahilan B., Naveen Raj M.
 EFFECT OF DIGESTIVE ENZYME ACTIVITY IN *Etroplus suratensis* FINGERLINGS FED
 WITH DIFFERENT PERCENTAGE OF PROTEIN AND LIPID
- 17:40 Soumva Krishnan

NUTRITIONAL PROFILING OF SELECTED SPECIES OF EDIBLE MARINE MOLLUSCS FROM THE SOUTH-WEST COAST OF INDIA

WASTE UTILIZATION

Friday, June 21 15:00 - 18:00 Audit C Chairs: C.N. Ravishankar, Suseela Mathew, Binay Nayak

- **Masilan Karunanithi**, Neethiselvan N., Velayutham P., Jeya Shakila R. SYNTHETIC FISH BAIT DEVELOPMENT USING FISH PROCESSING WASTES TO AVOID FORAGE FISH REQUIREMENT IN FISHING
- 15:40 Vinoth Kumar Lakshmanan, Jeya Shakila Robinson, Jeyasekaran Geevaretnam, Velayutham Padmanaban, Shanmugam S.A.

 IN VITRO BIOACCESSIBILITY AND ANTIOXIDANT PROPERTIES OF UNICORN LEATHERJACKET Aluterus monoceros SKIN COLLAGEN HYDROLYSATES PREPARED USING CRUDE COLLAGENASE ENZYME ISOLATED FROM FISH FINS
- 16:00 Muralidharan Nagarajan, Thummanoon Prodpran, VImaladevi Sekar, Balasundari Subbiah, Soottawat Benjakul, Ponusa Songtipya CHARACTERISTICS OF MULTI-LAYERED BLEND FILMS FROM TILAPIA SKIN GELATIN AND POLY(LACTIC ACID)-POLYBUTYLENE ADIPATE TEREPHTHALATE
- 16:20 Md Aman Hassan, Amjad Balange, Akram Javith, Martin Xavier, Subodh Gupta, Binaya Nayak CHARACTERIZATION AND ANTIOXIDANT PROPERTIES OF FREEZE-DRIED VISCERAL PROTEIN HYDROLYSATE FROM Pangasius hypopthalmus
- 16:40 Vijayakumar Renuka, Ravishankar C.N., Bindu Jaganath, Toms C. Joseph CHARACTERIZATION OF CHITOSAN GELATIN COMPOSITE FILM FROM FISH WASTE
- 17:00 Nimish Mol Stephen, Masashi Hosokawa, Kazuo Miyashita Anti-Obese Efficacy of Marine Algal Carotenoid, Fucoxanthin in Combination with Curcumin in Diabetic/Obese KK-Ay Mice
- 17:20 Renuka Vijayakumar, Bindu Jaganath, Toms C. Joseph,
 Ravishankar Chandragiri Nagaraja Rao
 PREPARATION AND CHARACTERIZATION OF CHITOSAN GELATIN COMPOSITE FILM
 FROM FISH WASTE

NOTES