



SATURDAY, March 26

WELCOME, OPENING CEREMONY AND PLENARY 1

Saturday, March 26 09:00 - 10:40 Principle Hall

Chair: Sherif Sadek

09:00 Abdel-Fatah El-Sayed
STATUS OF AQUACULTURE IN EGYPT

10:00 OPENING CEREMONY

COUNTRY REPORTS

Saturday, March 26 16:00 - 17:40 Room C

Chair: John Walakira

16:00 Noam Mozes, Amit Savaya, Guy Rubinstein, Nir Froyman
DESERT LAND-BASED AQUACULTURE AND OFFSHORE MARICULTURE RECENT
INNOVATION AND DEVELOPMENT DIRECTIONS IN ISRAEL

16:20 John Walakira, Etienne Hinrichsen, Blessing Mapfumo, Lanre Badmus, Nabil Ibrahim,
Victoria Boit, Heike Baumüller
ENHANCING FOOD SECURITY, JOB AND WEALTH CREATION IN AFRICA THROUGH
AQUACULTURE: CASE STUDIES OF SUCCESSFUL COUNTRIES AND INNOVATIONS

16:40 Bernadette Fregene, Harrison Charo-Karisa, Ajibola Olaniyi
IMPACT OF AQUACULTURE COMPACT, TECHNOLOGIES FOR AFRICAN
AGRICULTURE TRANSFORMATION PROGRAM ON AFRICA'S TILAPIA SEED
PRODUCTION

17:00 Etienne Hinrichsen
ADDRESSING EXPORT BARRIERS FOR SOUTH AFRICAN AND NAMIBIAN SHELLFISH
- THE TRADE FORWARD SOUTHERN AFRICA PROGRAMME

NUTRITION

Saturday, March 26 11:00 - 12:20 Lecture Hall
Chairs: Marc Verdegem, Ashraf El Dakar, Guillaume Le Reste

- 11:00 Sofolabi Sofela**, Karen Veverica, Akinleye Akinwale
FEED CONSUMPTION AND FEED CONVERSION OF *Clarias gariepinus* RAISED IN SMALL PLASTIC TANKS AFFECTED BY METHOD OF WATER EXCHANGE
- 11:20 Shakiru Okanlawon Sule**
GROWTH PERFORMANCE OF *Clarias gariepinus* FED ALKALINE CATTLE HOOF MEAL BASED DIET
- 11:40 Lawrence Nwanna**, Benson Ikuesan
ALOE VERA LEAF EXTRACTS IRON-OXIDE NANOPARTICLES IMPROVED GROWTH AND IMMUNITY OF AFRICAN CATFISH *Clarias gariepinus*
- 12:00 Shakiru Okanlawon Sule**
GROWTH EVALUATION OF *Clarias gariepinus* FED GOAT HOOF MEAL BASED DIET
- 12:20 Olufemi Akanbi**, Niall Vine, Henry Njom, Graeme Bradley
ISOLATION AND IDENTIFICATION OF POTENTIAL PROBIOTICS FROM THE DIGESTIVE TRACT OF THE SHORT-SPINED SEA URCHIN *Tripneustes gratilla*
- 12:40 Mexford Mulumpwa**
THE POTENTIAL OF INSECT MEAL IN IMPROVING FOOD SECURITY IN MALAWI: AN ALTERNATIVE OF SOYBEAN AND FISHMEAL IN LIVESTOCK FEED

AQUACULTURE DEVELOPMENT

Saturday, March 26 11:00 - 12:20 Small Theatre
Chair: Salah Mesalhy Aly

- 11:00 Eman El-Wazzan**, Ahmed Kotit, Ahmed S.A. Abbas
POTENTIAL AND CHALLENGES OF HATCHERY-BASED BIVALVES AQUACULTURE IN EGYPT: AN EMERGING INDUSTRY
- 11:20 Sherif Sadek**, Mohamed Fathy Osman, Noor Ahmed
GROWTH PERFORMANCE IN SEMI-INTENSIVE SHRIMP *Litopenaeus vannamei* PONDS FROM DIBA TRIANGLE ZONE, EGYPT, USING TWO COMMERCIAL FEEDING TYPES: SHRIMP FEED (38%CP) AND TILAPIA FEED (36%CP)
- 11:40 Flower E. Msuya**, Elizabeth Cottier-Cook, Claire Gachon, Juliet Brodie, Louise Shaxson, Ivy Matoju, Amelia Buriyo, Sadock Rusekwa, Msafiri Andrew, Janina Brakel, Iona Campbell, Anicia Hurtado, Phaik Eem Lim, Stuart Ross, Grant Stentiford
CHALLENGES OF THE SEAWEED INDUSTRY IN TANZANIA AND THE ROLE OF THE GLOBALSEAWEEDSTAR PROJECT
- 12:00 Abisola Akinyemi**, Bernadette Fregene, Bolarin Omonona
GENDER AND CREDIT CONTROL AMONG AQUACULTURE PRODUCERS IN SOUTHWESTERN, NIGERIA

SEED PRODUCTION

Saturday, March 26 14:00 - 15:40 Multiple Purpose Room

Chair: Steve Amisah

- 14:00 Reham Negm**, Hadir Abdel Maguid Aly, Heba Saad El-Sayed
DETERIORATION OF NEWLY HATCHED LARVAE AND POTENTIALITY OF REARING LARVAL AND POST-LARVAL STAGES OF EUROPEAN SEA BASS *Dicentrarchus labrax* IN STRESSED GROUND MARINE WATER THROUGH MANAGING WATER SYSTEMS
- 14:20 Temitope Adebayo**, Adebisi Musefiu Tihamiyu, Titilope Mary Olujo, Abigael Temitope Akinsowon
AN EVALUATION OF INDUCED FISH BREEDING TECHNIQUES IN AFRICA CATFISH *Clarias gariepinus* (BURCHELL, 1822)
- 14:40 Buumba Hampuwo**, Daud Kassam, Jeremiah Kango'mbe, Rose Basiita, Alexander Kefi
THE REPRODUCTIVE PERFORMANCE OF THREE POPULATIONS OF *Oreochromis andersonii* (CAUSTELNAU, 1861) BROODFISH
- 15:20 Prince Ofori-Darkwah**, Daniel Adjei-Boateng, Regina Esi Edziyie, Nelson Winston Agbo, Ivar Lund
WEANING FRY OF THE AFRICAN BONYTONGUE (*Heterotis niloticus*) TO PARTICULATE DRY FEED DIETS
- 15:40 Ahmed Md. Salem**, Sara Castanho, João Henriques, Ana Candeias-Mendes, Margarida Gamboa, Wilson Pinto, Pedro Pousão-Ferreira, Laura Ribeiro
DECREASING ARTEMIA PERIOD AS A STRATEGY FOR *Argyrosomys regius* LARVAE EARLY WEANING: IMPACTS ON GROWTH AND DIGESTIVE PHYSIOLOGY

TILAPIA HEALTH MANAGEMENT

Saturday, March 26 11:00 - 12:20 Multiple Purpose Room

Chair: Mohamed Marzouk

Sponsor: 

- 11:00 Abdel-Fattah El-Sayed**
NUTRITIONAL FISH DISEASES – HOW TO AVOID
- 11:20 Mohamed Marzouk**
BIOSECURITY IN FISH CULTURE
- 11:40 Win Surachetpong**, Jidapa Yamkasem, Puntanat Tattiyapong
EMERGING VIRAL DISEASES THAT THREATEN GLOBAL TILAPIA AQUACULTURE

GREY MULLET

Saturday, March 26 11:00 - 17:40 Delegate's Hall
Chairs: Kevan Main, Ashraf Goda

- 11:00 H. Lee Blankenship**, Kenneth M. Leber
RESPONSIBLE APPROACH TO MARINE STOCK ENHANCEMENT
- 11:40 Noam Mozes**, Amos Tandler, Kevan Main, Ken Leber, Mohamed A. Essa
STOCK ENHANCEMENT AND PRODUCTION OF THE GREY MULLET FRY –
A SUSTAINABLE CHOICE. A MERC PROJECT
- 12:00 Amr Moneer Helal**, Mohamed A. Essa, Amr M. Helal, Nevine M. Abou Shabana,
Basem S. Abdelaty, Mohamed A. Elokaby, Mohamed Baroma, Mohamed El Hammamy,
Ahmad M. Aboseif, Ashraf M.A.-S. Goda
EFFICACY OF CODED WIRE-TAGGING AS A TOOL TO ENHANCE THE STOCK OF
GREY MULLET IN WADI EL-RAYAN LAKE AS ENCLOSED WATER BODIES
- 12:20 LUNCH**
- 14:00 Guy Rubinstein**, Iris Meiri, Hanna Rosenfeld, Noam Mozes
STOCKING MULLET FINGERLINGS IN THE SEA OF GALILEE AS PART OF AN
ECOLOGICAL BALANCE MANAGEMENT
- 14:20 Neila Hamza**, Ines Ben Khemis, Mohamed Salah Azaza
SEEDING OF YOUNG TAGGED MULLET IN TUNISIAN RESERVOIRS:
PRELIMINARY RESULTS
- 14:40 William Koven**, Oriya Nixon, Dor Israeli, Iris Meiri-Ashkenazi, Eric Gisbert, Amos Tandler
CHANGING NUTRIENT REQUIREMENTS DURING THE TROPHIC SHIFT FROM
LARVAL CARNIVORY TO JUVENILE OMNIVORY IN GREY MULLET *Mugil cephalus*
- 15:00 Mohamed Naceur Dhraief**, Leila Guerdelly, Dora Zouiten, Mohamed Salah Azaza
MANAGEMENT OF CAPTIVE BROODSTOCK GREY MULLET *Mugil cephalus* AT INSTM
HATCHERY
- 15:20 William Koven**, Iris Meiri Ashkenazi, Aldo Corriero, Rosa Zupa, Oriya Nixon,
Vered Zlatnikov, Chen Bracha, Hanna Rosenfeld
ASSESSMENT OF THE EFFECTS OF CAPTIVITY ON FIRST SEXUAL MATURITY OF
WILD-CAUGHT AND HATCHERY-PRODUCED MULLET *Mugil cephalus*
- 15:40 BREAK**
- 16:00 Lior David**, Dor Agiv, Itay Oz, Evgenia Marcos-Haddad, Ayana Benet-Perelberg,
Boaz Ginzbourg
DEVELOPING SEX-REVERSED MALES BROOD FISH FOR PRODUCTION OF
ALL-FEMALE PROGENY POPULATIONS OF THE GREY MULLET
- 16:20 Sherif Sadek**
PRODUCTION OF MULLET IN CAGES: EGYPTIAN CASE

16:40 Boaz Ginzbourg, Noam Mozes
COMMERCIAL SCALE HATCHERY PRODUCTION OF MULLET FRY IN ISRAEL-
CHALLENGES AND SUCCESS

17:00 Kevan Main
PANEL DISCUSSION

SUSTAINABLE AQUACULTURE

Saturday, March 26 14:00 - 15:40 Small Theatre

Chair: Abd El Rahman Khattaby



14:00 Abd El Rahman Khattaby, Technical Support Advisor, Aller Aqua Egypt
FUNCTIONAL FEEDS

14:20 Hanno Slawski, Group R&D Director, Aller Aqua Group
SUSTAINABLE FEED: RAW MATERIALS AND COMPOSITION

14:40 BREAK

15:00 Mohammed Teleb Mekawy, Technical Support Advisor, Aller Aqua Egypt
WATER QUALITY AND DETERMINANTS OF SUSTAINABLE AQUACULTURE
DEVELOPMENT

15:20 Poul Rosendorf, Project Manager, OxyGuard International
CONTROL IS KEY! WATER QUALITY MEASURING AND CONTROL, FARM MANAGEMENT

15:40 QUESTIONS

16:00 THANK YOU FOR TODAY

BIVALVES, SEAWEED, SEA URCHINS

Saturday, March 26 11:00 - 12:20 Room C

Chair: Msuya Flower

11:00 Flower Msuya, Msafiri Ndawala, Amelia Buriyo, Elizabeth Cottier-Cook
WHAT TYPES OF MACRO-ORGANISMS FOUL SEAWEED FARMS? CASE STUDY OF
ZANZIBAR, TANZANIA

11:20 João Araújo, Ana Candeias-Mendes, Paulo Loureiro, Jorge Dias, Florbela Soares,
Narcisa Bandarra, Pedro Pousão-Ferreira
TESTING A NEW FORMULATED FEED FOR PURPLE SEA URCHINS *Paracentrotus*
lividus ON ONGROWING CULTURE

11:40 Jerry Mang'ena, Claire Gachon, Clement Mlay, Janina Brakel, Rose Masalu
ASSESSMENT OF CAUSATIVE AGENTS IN ICE ICE DISEASE IN *Kappaphycus alvarezii*
AND RELEVANT MOLECULES FOR PROLIFERATION OF ALGAL PATHOGENS IN
ZANZIBAR ISLANDS

NUTRITION

Saturday, March 26 14:00 - 17:40 Lecture Hall

Chair: DSM



- 14:00** **Benedict Standen**, Bo-Groth Bendsen
DISEASE MITIGATION STRATEGIES IN TILAPIA: A POSITIVE AND NEGATIVE APPROACH
- 14:20** **Alaa M. Badr-Eldin**, Darja Dobermann, Diaan Al-Kenawy, Hussein Alkady, Hassan Ali
GROWTH OF NILE TILAPIA *Oreochromis niloticus* ABBASSA STRAIN FED ON INSECT MEAL, FISH MEAL OR PLANT BASED DIETS IN EGYPT
- 14:40** **Marc Verdegem**, Hala Saber Khalil, Diaan Al-Kenawy, Sahya Maulu, Rodrigue Yossa, Alaa Badr-Eldin, Arjen Roem, Johan Schrama
GROWTH EFFICIENCY, APPARENT NUTRIENT DIGESTIBILITY, AND NATURAL FOOD INTAKE IN NILE TILAPIA *Oreochromis niloticus* FED DIETS WITH DIFFERENT LEVELS OF BIO-AVAILABLE PHOSPHORUS
- 15:00** **Rutchanee Chotikachinda**, Daranee Seguin, Sirirat Chatvijitkul, Chiow-Yen Liew
THE UTILIZATION OF PHYTASE ENZYME TO REPLACE INORGANIC PHOSPHATE IN PLANT-BASED DIETS IN TILAPIA UNDER A CAGE CULTURE SYSTEM IN INDONESIA
- 15:20** **Roy Rosen**, Paula Kovalsky, Benedict Standen
THE EFFECTS OF MYCOFIX® ON GROWTH PERFORMANCE, IMMUNE PARAMETERS AND DISEASE RESISTANCE IN TILAPIA (*Oreochromis niloticus*)
- 15:40** **BREAK**
- 16:00** **Diaan Al-Kenawy**, Hala Saber Khalil, Marc Verdegem, Taofik Momoh, Rodrigue Yossa, Alaa Badreldin, Arjen Roem, Johan Schrama
EFFECT OF DIETARY LYSINE DEFICIENCY ON NILE TILAPIA *Oreochromis niloticus* PRODUCTION IN FERTILIZED PONDS
- 16:20** **Mutia Grace Mumbi**
EFFECTS OF SEAWEEEDS *Chaetomorpha crassa* AND *Ulva rigida* AS FEED ADDITIVES ON THE GROWTH PERFORMANCE AND BODY COMPOSITION OF NILE TILAPIA *Oreochromis niloticus* FINGERLINGS
- 16:40** **Radi Mohamed**, Ahmed Abozeid, Mohamed Abdel-Rahim, Fatma Abouelenien, Asmaa Elkaradawy
Quillaja saponaria AND/OR *Yucca schidigera* AMELIORATE WATER QUALITY, GROWTH PERFORMANCE, IMMUNE-OXIDATIVE STATUS, DIGESTIVE ENZYMES, INTESTINE AND GILLS HISTOMORPHOLOGY OF NILE TILAPIA *Oreochromis niloticus*
- 17:00** **Robert Serwata**, Daniel Arana, Jorge Dias
EXOGENOUS PHYTASE APPLICATION IN NILE TILAPIA *Oreochromis niloticus* FEED REDUCES THE REQUIREMENT FOR INORGANIC PHOSPHORUS AND ENHANCES GROWTH PERFORMANCE
- 17:20 Paula Solé-Jiménez^{1*}, Fernando Naya-Català², M. Carla Piazzon³, Itziar Estensoro³, Josep À. Calduch-Giner², Ariadna Sitjà-Bobadilla³, Danny Van Mullem¹ and Jaume Pérez-Sánchez²
RESHAPING OF GUT MICROBIOTA IN ~~QU~~HEALTHY SEA BREAM FED MICROBIAL AND PROCESSED ANIMAL PROTEINS AS THE MAIN DIETARY PROTEIN SOURCE

EGYPT-FRENCH AQUACULTURE SEMINAR

Saturday, March 26 14:00 - 15:40 Room C

Chair:

GENETICS OMICS

Saturday, March 26 16:00 - 17:40 Multiple Purpose Room

Chairs: Morris Agaba, Nazari Sajad

- 16:00** **Mohammad Y. Abubakar**, Ipinjolu J. Kayode, Yuzine B. Esa, Magawata Ibrahim, Hassan W. Akin, Turaki A. Abdullahi
GENETIC DIVERSITY OF WILD POPULATION OF *Heterobranchus bidorsalis* AND *Heterobranchus longifilis* BASED ON MITOCHONDRIAL DNA CYTOCHROME OXIDASE 1 GENE ANALYSIS
- 16:20** **Mohammed Nambyl A. Fagbemi**, Lise-Marie Pigneur, Adrien André, Nathalie Smitz, Vincent Gennotte, Johan R. Michaux, Charles Mélard, Philippe A. Laleye, Carole Rougeot
STRUCTURE GENETIQUE DES POPULATIONS SAUVAGES ET D'ELEVAGE DE TILAPIA DU NIL, *Oreochromis niloticus* AU BENIN BASEE SUR LA TECHNOLOGIE SNP A L'ECHELLE DU GENOME
- 16:40** **Sajad Nazari**, Saltanat Najjar Lashgari, Mahdi Golshan
DETECTION OF FUNCTIONAL SNP MARKERS IN RAINBOW TROUT *Onchorhynchus mykiss* FROM NEXT GENERATION SEQUENCING (NGS) DATA
- 17:00** **Mona Saleh**, Gokhlesh Kumar, Abdel-Azeem Abdel-Baki, Mohamed Dkhil, Saleh Al-Quraishy, Mansour El-Matbouli
- 17:20** **Edwin Kikamba**, Daniel Sikawa, Wilson Jere, Petros Chigwechokha
ESTIMATES OF COMBINING ABILITY ON GROWTH TRAITS IN A FULL DIALLEL CROSSES OF THE THREE STRAINS OF *Oreochromis macrochir* (BOULENGER, 1912)
- 17:40** **Asma Karim**, Haji Muhammad
DNA BARCODING APPLICATION IN STUDY OF ICTHYO- BIODIVERSITY IN RIVER INDUS AT TAUNSA BARRAGE, PAKISTAN

AQUACULTURE DEVELOPMENT - CONTINUED

Saturday, March 26 16:00 - 17:40 Small Theatre

Chair: Etienne Hinrichsen

- 16:00** **Mohammad Al-Zibdah**
LAND BASED AQUACULTURE PRACTICES IN AQABA; A VISION FOR PROGRESS IN JORDANIAN IMPLEMENTATION
- 16:20** **John Domozoro**, Karen Veverica, Jeff Terhune, Sofela Sofolabi, Chris Slempe, Josh Neiderman, Theresa Fang
SUPPORTING AQUACULTURE DEVELOPMENT ACTIVITIES
- 16:40** **Diogo Gomes**, Rui Ferreira, João Ferreira, Jorge Mafuca, Claque Maunde
ZONING FOR FISHERIES AND AQUACULTURE IN CAHORA BASSA, MOZAMBIQUE
- 17:00** **Etienne Hinrichsen**, Papius Dias Tibihika, John Benzie, Jose Parajua, Koffi Honouga, Elysee Nzohabonayo
ADVANCING AQUACULTURE IN EAST AFRICA: THE TRUE-FISH PROJECT
- 17:20** **James Njiru**, Jonathan Munguti, Christopher Aura, Kelvin Obiero, Gladys Mwaka, Paul Orina, David Mirera
COULD AQUACULTURE BE THE SILVER BULLET FOR KENYA FISHERIES GROWTH?

SUNDAY, March 27

PLENARY 2

Sunday, March 27 09:00 - 09:40 Principle Hall
Chair: Sherif Sadek

- 09:00 Abdulhakim Elwaer**
UNLOCKING AQUACULTURE PROSPECTS IN AFRICA AND THE NEAR EAST

NUTRITION - CONTINUED

Sunday, March 27 09:40 - 10:20 Lecture Hall
Chair: Ashraf El Dakar

- 09:40 Alaa M. Badr-Eldin**, Hussien Al-Kady, Mohamed Al Amir, Daa Al-Kenawy, Rodrigue Yossa
EFFECT OF DIFFERENT LEVELS OF CORN DRIED DISTILLER'S GRAINS WITH SOLUBLES (DDGS) AND SUNFLOWER MEAL ON THE GROWTH PERFORMANCE AND BODY COMPOSITION OF NILE TILAPIA *Oreochromis niloticus*
- 10:00 Daniel Montero**, Silvia Torrecillas, Tibiabin Benitez-Santana, Marisol Izquierdo
REPLACEMENT OF FISHMEAL BY ANTARCTIC KRILL MEAL IN DIETS OF EUROPEAN SEA BASS *Dicentrarchus labrax*: EFFECTS ON GROWTH PERFORMANCE, FEED UTILIZATION AND LIVER METABOLISM
- 10:20 Hanoch Glassner**, Margarita Smirnov, Tamir Ofek, Yiftach Cohen, Benny Ron
USING DESALINATION BRINE FOR SEABASS *Dicentrarchus labrax* AQUACULTURE

AQUATIC ANIMAL HEALTH - VET TRAINING

Sunday, March 27 09:40 - 10:20 Multiple Purpose Room
Chairs: Nelly Isyagi , Mohamed Marzouk

Sponsor:



- 09:40 Ajangale Nelly Isyagi**, Vivian Lee, Eva Marie Quijano Cardé, Claudia Venegas, Darbi Jones, Bartolomeo Gorgoglione
FOSTERING OPPORTUNITIES TO ENHANCE THE AQUATIC VETERINARY EDUCATION
- 10:00 Jeff Terhune**, Karen Veverica, John Domoroza, Sofela Solalabi, Theresa Wang, Joshua Neiderman, Chris Slemp
IMPROVING FISH HEALTH CAPABILITIES IN EMERGING AQUACULTURE INDUSTRIES IN WESTERN SUB-SAHARAN AFRICA

EDUCATION AND TRAINING

Sunday, March 27 10:40 - 12:00 Delegate's Hall

Chair: Sofela Sofolabi

Sponsor:



- 10:40 Siphon Mafuyeka**, Deborah Robertson-Anderson, Khalid Salie
AQUACULTURE SKILLS AUDIT IN KWAZULU NATAL (RSA)
- 11:00 Mary Opiyo**, Jane Fonda, Betty Nyonje, Gilbert Van Stappen
A STRATEGIC POLICY FRAMEWORK FOR AQUACULTURE EDUCATION IN KENYA
- 11:20 Henk Stander**
AQUAPONICS RESEARCH AND EDUCATION DEVELOPMENTS AT STELLENBOSCH UNIVERSITY IN SOUTH AFRICA.
- 11:40 Ian Goulding**, Margarida Correia
FOOD SAFETY CONTROLS IN THE AFRICAN AQUACULTURE

CONTRIBUTED SESSION

Sunday, March 27 10:40 - 12:00 Room C

Chair: TBA

- 10:40 Yew-Hu Chien**, I Chiu Liao, Eduardo Leano
A NEW BOOK: MULLET AND ITS AQUACULTURE
- 11:00 Abinawanto Abinawanto**, Nia Vardini, Jojo Subagja, Anang Hari Kristanto, Retno Lestari, Astari Dwiranti, Anom Bowolaksono
VIABILITY AND FERTILIZATION RATE OF *Tor soro* SPERMATOZOA AFTER FREEZING: THE EFFECT OF EGG YOLK FREE-RANGE CHICKEN AS A NATURAL CRYOPROTECTANT

TILAPIA NUTRITION

Sunday, March 27 10:40 - 12:00 Lecture Hall

Chair: Abd El Rahman Khattaby



- 10:40 Abd El-Rahman Ahmed Khattaby**
USING FUNCTIONAL FEED TO HELP OVERCOME STRESS AND PAT BACTERIA AT THE EGYPTIAN TILAPIA *Oreochromis niloticus* FARMS
- 11:00 Ashraf El-Dakar**, Shymaa M. Shalaby, Esraa E. Mostafa, Mohamed F. Abdel-Aziz
DETERMINING THE OPTIMUM LEVEL OF DIETARY PROTEIN AND FEEDING FOR IMPROVING THE GROWTH PERFORMANCE AND FEED EFFICIENCY OF JUVENILES HYBRID TILAPIA *Oreochromis niloticus* × *Oreochromis aurea* REARED IN BRACKISH WATER
- 11:20 Alaa M. Badr-Eldin**, Hussien Al-Kady, Mohamed Al Amir, Diaa Al-Kenawy, Rodrigue Yossa
EFFECT OF DIFFERENT LEVELS OF CORN DRIED DISTILLER'S GRAINS WITH SOLUBLES (DDGS) AND SUNFLOWER MEAL ON THE GROWTH PERFORMANCE AND BODY COMPOSITION OF NILE TILAPIA *Oreochromis niloticus*
- 11:20 Radi Mohamed**, Asmaa Elkaradawy, Ahmed Abozeid, Asmaa El-Nokrashy, Mohamed Abdel-Rahim
SYNERGISTIC EFFECTS OF THE SOAPBARK TREE *Quillaja saponaria* AND VITAMIN E ON WATER QUALITY, GROWTH PERFORMANCE, BLOOD HEALTH, GILLS AND INTESTINE HISTOMORPHOLOGY OF NILE TILAPIA *Oreochromis niloticus* FINGERLINGS
- 11:40 Guillaume Le Reste**, Mamy Andriantsoa, Henri Andriniana, Damien Desprez, Léo Godard, Fanomezantosa Randriarilala, Samuel Rakotoambinina, Lovasoa Rakotoasimbola, David Rakotomavo, Frédéric Mauny, Sylvain Delord
EFFECT OF GRADED INCLUSION RATE OF A LOCALLY PRODUCED PEANUT *Arachis hypogaea* MEAL IN EXTRUDED FEED ON THE GROWTH OF CARP *Cyprinus carpio* AND TILAPIA *Oreochromis niloticus* FARMED IN THE ANALAMANGA REGION IN MADAGASCAR

REPRODUCTION PHYSIOLOGY

Sunday, March 27 10:40 - 12:00 Small Theatre

Chair: Besa Darlington

- 10:40 Kalima Sauti**, Wilson Lazarus Jere, Alexander Shula Kefi
SEX RATIO, GROWTH AND SURVIVAL OF *Oreochromis tanganicae* (GÜNTHER, 1894)
FED ON A DIET WITH VARYING LEVELS OF 17 α -METHYLTESTOSTERONE
- 11:00 Darlington Besa**, Rebecca Mainza, Chad Kancheya, Oliver Hasimuna, Mavis Sialumano, Masiliso Phiri, Bornwell Seemani, Lumbwe Kalumba, Martin Mwale, Evans Mutanuka, Mbamwai Mbewe, Harris Phiri, Alexander Kefi, Cyprian Katongo
PRELIMINARY DEVELOPMENT IN THE ARTIFICIAL PROPAGATION OF THE GIRAFFE CATFISH *Auchenoglanis occidentalis* (VALENCIENNES, 1840) IN CONCRETE TANKS AND EARTHEN PONDS
- 11:20 Sahya Maulu**, Hualiang Liang, Xianping Ge, Heng Yu, Dongyu Huang, Ji Ke, Mingchun Ren, Haifeng Mi
EFFECT OF DIETARY *Clostridium autoethanogenum* PROTEIN ON GROWTH, BODY COMPOSITION, PLASMA PARAMETERS, AND HEPATIC GENES EXPRESSION RELATED TO GROWTH AND AMPK/TOR/PI3K SIGNALING PATHWAY OF THE GENETICALLY IMPROVED FARMED TILAPIA (GIFT) JUVENILES

AQUATIC ANIMAL HEALTH

Sunday, March 27 10:40 - 17:40 Multiple Purpose Room

Chairs: Nelly Isyagi, Mohamed Marzouk, Zahran Eman

Sponsor:



- 10:40 Amelia Paredes**, Victor Manuel Vidal-Martínez, Vanessa Papiol, Ivan Abunader, Rodolfo Del Río Rodríguez, Amelia Paredes-Trujillo
NEGATIVE EFFECT OF ECTOPARASITE BURDENS ON THE CONDITION FACTOR FROM FARMED TILAPIA *Oreochromis niloticus* IN THE YUCATAN, MEXICO
- 11:00 Mamdouh Elgendy**, Shimaa Ali
MOLECULAR CHARACTERIZATION OF *Vibrio* spp. AFFECTING FARMED *Oreochromis niloticus* WITH SPECIAL REFERENCE TO VIRULENCE, ANTIBIOTIC SUSCEPTIBILITY, PATHOGENICITY AND HISTOPATHOLOGICAL ALTERATIONS
- 11:20 Mansour El-Matbouli**, Johanna Wolfbauer, Mohamed Shaalan, Elsayed Eldessouki, Hatem Soliman, Sven Bergmann, Mona Saleh
TILAPIA LAKE VIRUS (TILV): CURRENT STATUS AND FUTURE PERSPECTIVE
- 12:00 LUNCH**
- 13:40 Irom B. Okey**
EFFICACY OF *Ocimum gratissimum* (SCENT LEAF) POWDER AS ANAESTHETIC AND ITS EFFECT ON THE HAEMATOLOGY OF *Clarias gariepinus* JUVENILES

- 14:00 Ashraf El-Dakar**, Shymaa M. Shalaby, Heba T. Abdelshafy, Mohamed F. Abdel-Aziz
USING CLOVE AND MINT OILS AS NATURAL SEDATIVES TO INCREASE THE TRANSPORT QUALITY OF BROODSTOCK NILE TILAPIA *Oreochromis niloticus*
- 14:20 Adel Shaheen**, Hadeer Youssuf, Eman Abdel Gawad, Amel El Asely, Amany Abbass
SANACORE®GM SUPPLEMENTED FEED BOOST THE HAEMATO-IMMUNOLOGICAL PATTERNS, ANTI-OXIDATIVE RESPONSES, AND *Aeromonas veronii* RESISTENCE IN NILE TILAPIA *Oreochromis niloticus*
- 14:40 Eman Zahran**, Samia Elbahnaswy, Iman Ibrahim, Asmaa Khaled
Nannochloropsis oculata ENHANCES IMMUNE RESPONSE, TRANSCRIPTION OF STRESS, AND CYTOKINE GENES IN NILE TILAPIA SUBJECTED TO AIR EXPOSURE STRESS
- 15:00 Mai Mahmoud**, Mohamed Shaalan, Mona Saleh, Dušan Palic, Mansour El-Matbouli
EVALUATION OF THE EFFICACY OF SALINOMYCIN/AMPROLIUM (SAL/AMP) LOADED CHITOSAN NANOPARTICLES ON THE MYXOSPORES OF *Myxobolus cerebralis*, THE CAUSATIVE AGENT OF SALMONID WHIRLING DISEASE
- 15:40 BREAK**
- 16:00 Guillaume Le Reste**, Rôger Oliveira e Silva, José Fernando Bibiano Melo, Mathilde Buffière, Hoa Bui, Sékhou Cissé
EFFECTS OF GRADED LEVELS OF CITRUS EXTRACTS IN FEED ON GROWTH, BLOOD PARAMETERS AND SURVIVAL OF NILE TILAPIA *Oreochromis niloticus* BEFORE AND AFTER A CHALLENGE WITH *Aeromonas hydrophila*
- 16:20 Christian Ayisi Larbi**, Nasif Dawda Nurudeen, Akwasi Ampofo-Yeboah
EFFECTS OF *Eucalyptus globulus* LEAF EXTRACT ON GROWTH PERFORMANCE, FEED UTILIZATION AND BLOOD BIOCHEMISTRY OF NILE TILAPIA *Oreochromis niloticus*
- 16:40 Saleh Al-Quraishy**, Gokhlesh Kumar, Abdel-Azeem Abdel-Baki, Mohamed Dkhil, Mansour El-Matbouli, Mona Saleh
WOUND-HEALING BIOMARKER SIGNATURES IN COMMON CARP SKIN MUCUS IN RESPONSE TO *Ichthyophthirius multifiliis*
- 17:00 Margarida Correia**, Ian Goulding
WHY IS FISH WELFARE IMPORTANT FOR AFRICAN AQUACULTURE?
- 17:20 Stephen Gyamfi**, Regina Esi Edziyie, Kwasi Adu Obirikorang, Daniel Adjei-Boateng, Peter Vilhelm Skov
EFFECT OF AMMONIA ON CARDIOVASCULAR RESPONSE, VENTILATION FREQUENCY AND OXYGEN CONSUMPTION OF MALE ADULT NILE TILAPIA (*Oreochromis niloticus*)

SOCIOECONOMICS

Sunday, March 27 13:40 - 15:40 Small Theatre

Chair: Karen Veverica

Sponsor:



- 13:40 Karen Veverica, Charles Ngugi, Rachael Gachui**
ON-FARM TRIALS IN CENTRAL/EASTERN KENYA TO EVALUATE OPTIONS WHEN EXTRUDED FISH FEEDS ARE EXPENSIVE
- 14:00 Mirriam Wainaina, Nyabeta Jared, Mirera David, Ollando Jackline**
NEEDS ASSESSMENT STUDY FOR GIANT FRESH WATER PRAWN FARMING IN KILIFI COUNTY KENYA
- 14:20 Bernadette Fregene, Bolarin Omonona**
AQUACULTURE VALUE CHAIN ASSESSMENT IN OYO STATE, NIGERIA
- 14:40 Chika F. Ikeogu, Sandra C. Enendu**
SUSTAINABLE LIVELIHOOD OF WOMEN IN FISHERIES VALUE CHAIN IN AKPAKA ONITSHA NORTH LOCAL GOVERNMENT AREA ANAMBRA STATE NIGERIA
- 15:00 Hilde Toonen, Hilde Toonen, Furqan Asif, Simon Bush**
INTRODUCING THE AQUACULTURE GOVERNANCE INDICATORS (AGIs)

NUTRITION PHYSIOLOGY

Sunday, March 27 13:40 - 15:40 Lecture Hall

Chair: Ghalwash Huda

- 13:40 Festus Adeosun, Georgina Fiyifoluwa Leramo, Mavis Titilayo Oghenebrorhie, Olamide Modinot Adeosun**
FEEDING HABITS AND DIGESTIVE ENZYMES IN THE GUT OF *Chrysichthys nigrodigitatus* IN OYAN DAM, ABEOKUTA, OGUN STATE, NIGERIA
- 14:00 Huda Ghalwash, Abdallah Salah, Asmaa El-Nokrashy, Ahmed Abozeid, Viola Zaki, Radi Mohamed**
DIETARY SUPPLEMENTATION WITH *BACILLUS SPECIES* IMPROVES GROWTH, INTESTINAL HISTOMORPHOLOGY, INNATE IMMUNITY, ANTIOXIDATIVE STATUS, AND EXPRESSION OF GROWTH AND APPETITE-REGULATING GENES OF NILE TILAPIA FINGERLINGS

CIRCULARITY IN AFRICAN AQUACULTURE

Sunday, March 27 13:40 - 17:40 Delegate's hall

Chair: Melle Leenstra



- 13:40 Johan Verreth**
CIRCULARITY IN AQUACULTURE AND ITS PERSPECTIVES FOR AFRICA
- 14:20 Marc Verdegem, Johan Schrama, Kazi Kabir**
THE NUTRITIOUS POND CONCEPT
- 15:00 Kees van Dongen, Hans Boon**
OPPORTUNITY STUDY ON CIRCULAR PROTEINS FOR AQUAFEED IN EGYPT
- 15:40 BREAK**
- 16:00 Andries Kamstra, Hans Boon**
DUTCH AQUACULTURE EXPERTS – EXPERTISE IN SUSTAINABLE AQUACULTURE AND RECIRCULATION TECHNOLOGY
- 16:40 Frans Aartsen**
CASE STUDIES “INTENSIVE RAS TILAPIA FARMING”: A TACTICAL APPROACH FOR INTENSIFYING AQUACULTURE IN AFRICA

FINANCING AND INVESTMENT: UNLOCKING THE POTENTIAL OF AFRICAN AQUACULTURE

Sunday, March 27 13:40 - 17:40 Room C

Chair: Bernice Mclean

Sponsor: AquaSpark

- 13:40 Welcome**
- 13:45 Keynote** – Flavio Corsin, Director of Partnerships – AquaSpark
- 14:00 Presentations**
- i. WAS African Chapter: Blessing Mapfumo
 - II. African Union (either AUDA-NEPAD or AU-IBAR)
 - III. Governments:
 - South Africa,
 - Malawi,
 - Seychelles
 - iv. Regional Economic Communities:
 - SADC (Motseki Hlatshwayo on Aquaculture Value Chain development),

- IGAD (Eshete Dejen)
- v. Investment partners:
 - Aqua-Spark (Joel Ssemukaaya): Equity investments and the Africa Fund
Joel Mugwisa Ssemukaaya
INVESTING IN SUSTAINABLE AQUACULTURE IN AFRICA
- vi. Development Finance Institutions (talking also about debt investing):
 - AfDB (Ahmed Khan),
 - World Bank: Harrison
Harrison Charo-Karisa, Lovin Kobusingye, Randall Brummett
FINANCING SUSTAINABLE SMALL AND MEDIUM SCALE AQUACULTURE
GROWTH IN AFRICA
- vii. Research Community:
 - Worldfish
- viii. Producers:
 - Kati Farm
 - Recommend to have videos from different farms, rather than presentations.
- ix. Feed manufacturer (as the biggest contributor to working capital and needing investment):
 - AllerAqua
- x. EU representative
- xi. Philanthropy:
 - Rockefeller Foundation

16:00 Roundtable Discussion Session

SOCIOECONOMICS, GENDER

Sunday, March 27 16:00 - 17:40 Small Theatre

Chair: Sofela Sofolabi

Sponsor:



- 16:00 **Mexford Mulumpwa**
A CALL FOR WOMEN INCLUSIVENESS IN FISH VALUE CHAIN IN MALAWI
- 16:20 **Naga Murali Chalamalasetti**, Rajiv Banerjee, Akshay Kumar Singh
A SUCCESSFUL AQUACULTURE MODEL WITH SOCIAL RESPONSIBILITY IN AFRICA
- 16:40 **Siyانبola Omitoyin**, Esama Preye
GENDER ANALYSIS OF FISHERFOLKS IN THE COASTAL COMMUNITIES OF DELTA AND BAYELSA STATES, NIGERIA
- 17:00 **Siyانبola Omitoyin**, Sunday Ime
GENDER ANALYSIS OF FISHERS ALONG ASEJIRE LAKE

ENVIRONMENTAL WATER QUALITY

Sunday, March 27 16:00 - 17:40 Lecture Hall

Chair: Khalid Salie

- 16:00 Khalid Salie**, Samantha Joao
A STRATEGIC ASSESSMENT OF GEOTHERMAL WATERS FOR AQUACULTURE IN THE WESTERN CAPE, SOUTH AFRICA
- 16:20 Julius Maremwa**
INITIATIVES IN WIND ENERGY FOR WELL WATER EXTRACTION IN KENYAN RIPARIAN LANDS
- 16:40 Amel El Asely**, Adel Shaheen, Adel Saied, Soaad Mahmoud
THE CORRELATION BETWEEN WATER QUALITY PARAMETERS AND CYANOBACTERIA LOAD IN NILE TILAPIA *Oreochromis niloticus* POND AND ITS IMPACT ON FISH HEALTH
- 17:00 Mohamed Bakr**, Wasseem Emam, Mohamed Abdel-Rahim, Radi Mohamed
EFFECT OF POND MODIFICATION ON GROWTH PERFORMANCE, WATER QUALITY, HEMATO-BIOCHEMICAL PROFILE, IMMUNE-OXIDATIVE STATUS OF NILE TILAPIA
- 17:20 Mahmoud Hafezieh**
DRIED SEAWEED (*Sargassum illicifolium*) AS AN ADSORBENT FOR PHOSPHOROUS REMOVAL FROM AQUEOUS SOLUTION REMOVAL

WAS AFRICAN CHAPTER SESSION (ALL AQUACULTURE AFRICA EVENT)

Sunday, March 27 17:40 - 19:40 Small Theatre

Chair: Sherif Sadek

This is a special session open to all WAS AC members, partners and African aquaculture actors/ community attending AFRAQ21. Out-of-Africa delegates interested in African aquaculture are also invited to attend. It will be an opportunity for WAS AC to present its report for the year, strategic vision and a summary of upcoming activities (including announcing upcoming events eg: WAS2025-Uganda; AFRAQ22-Zambia; AASA-South Africa; WAS West Africa-Nigeria, etc). The session will also act as a promotional platform to showcase some of our work activities during the year and encourage participants to join WAS. It will be an opportunity to introduce AC Board members to the African aquaculture community. Through short speeches or presentations, our key partners such as AUDA-NEPAD, Aller Aqua, Aquaculture Africa Magazine, etc. will have the opportunity to connect with the African aquaculture audience. A short panel discussion session will enable WAS AC to engage with the audience thus enabling them to give input in the development of a Chapter which they desire, and also to understand some of the challenges faced by the African regions, where WAS, within its mandate and work programme, can contribute to addressing these challenges.

African Chapter Members Business Meeting.

MONDAY, March 28

WAVMA SESSION

Monday, March 28 13:40 - 17:20 Lecture Hall

Chair:

ANAF

Monday, March 28 13:40 - 17:20 Small Theatre

Chair:

SOCIOECONOMICS, GENDER - CONTINUED

Monday, March 28 09:00 - 10:20 Small Theatre

Chair: Ghulam Kibria

Sponsor:



- 09:00 David Peter Mina Baya**
IMPACT OF COVID-19 ON FISHERIES AND AQUACULTURE IN SOUTH SUDAN
- 09:20 Netsayi Noris Mudege, Catherine M. Mwema, Dorothy Chisusu**
THE DETERMINANTS OF INCOME FROM FISH FOR MEN AND WOMEN FISH FARMERS IN THE SOUTHERN PROVINCE OF MALAWI
- 09:40 Olalekan Adekola, Margaret Gatonye, Paul Orina**
EVALUATING AQUACULTURE FARMERS RESPONSE TO CLIMATE CHANGE AND SUSTAINABLE PRACTICES IN KENYA

ENVIRONMENTAL MANAGEMENT

Monday, March 28 09:00 - 10:20 Lecture Hall
Chair: Amit Savaia

- 09:00 Amit Savaya**, Sharon Moscovitz, Eliahu D. Aflalo, Hanoch Glassner, Amir Sagi
BIOCONTROL OF DISEASE-CAUSING SNAILS USING MONO-SEX PRAWNS
- 09:20 Sharon Moscovitz**, Roussel Moise Wokam Njomgang, Hanoch Glassner, Eliahu D. Aflalo, Amir Sagi, Ofer Ovadia
PINPOINTING POTENTIAL BIOCONTROL PATCHES IN FRESHWATER SYSTEMS: REGIONAL MODELING OF PARASITES AND PARASITE-CARRYING SNAILS
- 09:40 Shahid Mahboob Rana**, Zubair Ahmed, Muhammad Farooq, Promy Virik, Norah A Al-Mulhm, Almohannad A.A. Baabbad
ASSESSMENT OF HEAVY METALS POLLUTION IN SEAWATER AND SEDIMENTS IN THE ARABIAN GULF, NEAR DAMMAM, SAUDI ARABIA
- 10:00 Hiam Elabd**, Hong Yao, Adel Shaheen, Amany Abbass, Han-Ping Wang
DIFFERENT REARING ENVIRONMENTAL TEMPERATURES MODULATES GROWTH, ANTIOXIDATIVE, IMMUNE AND GENE EXPRESSION RESPONSES IN BLUEGILL SUNFISH *Lepomis macrochirus*

FRESH/BRACKISH AQUACULTURE

Monday, March 28 09:00 - 12:00 Room C
Chair: Awad Mohamed

- 09:00 Akeem Dauda**, Zainab Bashir, Joseph Ikpe
INFLUENCE OF WATER CHANGING FREQUENCY ON GROWTH PERFORMANCE AND NUTRIENT UTILISATION OF TROPICAL FISH SPECIES
- 09:20 Md. Amimul Ehshan**, Md. Akbor Hossain, Md. Enaet Hossain, Shams M. Galib
FIRST COMMERCIAL TRIAL OF IN-POND RACEWAY SYSTEM AQUACULTURE TECHNOLOGY IN BANGLADESH WITH *Labeo rohita*
- 09:40 Rose Komugisha Basiita**, Trong Q. Trinh, Masausto Sakala, Patience Chungu, Tom Malambo, Buumba Hampuwo, Alexander Shula Kefi, John A.H. Benzie
PERFORMANCE EVALUATION OF TILAPIA SPECIES: THE CASE OF *Oreochromis niloticus* AND *Oreochromis andersonii* IN ZAMBIA
- 10:00 Rameshwar V. Bhosle**
CULTURE POTENTIALITY OF GIFT TILAPIA BY UTILIZING LOW SALINE WATERS IN INDIA
- 10:20 BREAK**
- 10:40 Olamide Adeosun**, Dominic. Olaniyi Odulate, Festus Idowu Adeosun, Oluwatoyin Bukunmi Onireti, Victoria Olajumoke Soyoye
PHENOTYPIC CHARACTERIZATION AND NATURAL DIET OF *Chrysichthys nigrodigitatus* IN EPE LAGOON, LAGOS STATE, SOUTHWEST, NIGERIA
- 11:00 Mohamed Awad**, Malik Khalafalla, Riad Khalil, Radi Mohamed
EFFECT OF FERMENTED FEED ON THE GROWTH PERFORMANCE, HEALTH CONDITION AND IMMUNE RESPONSE OF WHITELEG SHRIMP *L. vannamei*
11:20 Joao G. Ferreira¹⁺, Rui Gomes Ferreira¹, Anton Immink², Lucy Kimani³, Christopher Aura⁴, Chrisphine Nyamweya⁴, Vincent Ogembo⁵, Rita M. Sequeira¹, Marta Tirano¹
INTEGRATED CARRYING CAPACITY MODELLING FOR FINFISH CULTURE IN LAKE VICTORIA

ECOLOGY, BIODIVERSITY, MORPHOLOGY

Monday, March 28 09:00 - 10:20 Delegate's Hall

Chair: Jere Arthertone

- 09:00** **Abubakar Usman**, Kiran Dube, S. P. Shukla, Pramod Salaskar, P. B. Sawant, D. A. Nakhawa
REMOTE SENSING OF CHLOROPHYLL-A AND TSM AS A MEASURE OF PRODUCTIVITY USING SENTINEL-2A IN POWAI LAKE FOR AQUACULTURE
- 09:20** **Arthertone Jere**, Wilson W.L. Jere, Austin Mtethiwa, Daud Kassam
BREEDING PATTERN OF *Oreochromis niloticus* (LINNAEUS, 1758) (PISCES: CICHLIDAE) VERSUS NATIVE CONGENERIC SPECIES *Oreochromis macrochir* (BOULINGER, 1912) IN THE UPPER KABOMPO RIVER, NORTHWEST OF ZAMBIA
- 09:40** **Oluayo Bello-Olusoji**, Damilola Ayinla
ECOLOGY ASPECTS OF WEST AFRICAN FRESHWATER CRAB *S. africanus* IN THREE SELECTED FRESHWATERS IN AKURE METROPOLIS (NIGERIA)
- 10:00** **Peter Britz**, Andrew D Witte
ABALONE RANCHING IN SOUTH AFRICA RESTORES A WILD *Haliotis midae* POPULATION TO SUSTAINABLE HARVEST
- 10:20** **Akeem Dauda**, Nafisa Abdurrasheed
DIFFERENT CARBON SOURCES AFFECT THE MORPHOLOGY AND PLANKTONIC COMPOSITION OF BIOFLOCS

AQUATIC ANIMAL HEALTH - CONTINUED

Monday, March 28 09:00 - 12:00 Multiple Purpose Room

Chairs: Nelly Isyagi , Gaafar Al khateib Y.

Sponsor:



- 09:00** **Christian Ayisi Larbi**, Elliot Haruna Alhassan, Abubakar Abdul Mutalib
EFFECTS OF PROBIOTICS *Bacillus subtilis* 200 ON GROWTH, FEED UTILIZATION AND PROXIMATE COMPOSITION OF AFRICAN CATFISH *Clarias gariepinus*
- 09:20** **Alkhateib Y. Gaafar**, Yasmeen Elbarbary, Abdelgayed Younes, Asmaa Galal-Khallaf, Khaled Mohammed-Geba
Bacillus clausii: A NEW EFFICACIOUS IMMUNE-STIMULANT, GROWTH PROMOTANT, AND ANTIOXIDATIVE PROBIOTIC FOR THE WHITE-LEG SHRIMP *Litopenaeus vannamei* CULTURE
- 09:40** **Amany Abbass**, Mohamed Abdel Gayed, Hiam Elabd, Mohamed Tageldin
DIETARY INCORPORATION OF ZADO® *Ruminococcus flavefaciens* PROBIOTIC ENHANCES HEMATOLOGY, IMMUNE, SERUM PROTEINS, AND GROWTH RESPONSES OF NILE TILAPIA *Oreochromis niloticus*
- 10:00** **Radi Mohamed**, Mahmoud Eltholth, Foad Farrag, Marwa Abd El-Kader, Ahmad Hamza, Fatma Abouelenien
EFFECTIVENESS AND COST-BENEFIT OF IN WATER PROBIOTICS IN TILAPIA FARMING: ON FARM TRIAL

10:20 BREAK

10:40 Ajangale Nelly Isyagi, Irene Naigaga, Mugimba Kizito, David Kahwa, Sophia Nagadya, Susan Nakayiza
INTERVENTIONS TO REDUCE DRIVERS OF BACTERIAL FISH DISEASES IN AQUACULTURE PRODUCTION SYSTEMS THROUGH MULTI-STAKEHOLDER COLLABORATION

11:00 Saraya Tavornpanich, Alain Le Breton, Nadia Chérif, Anna Toffan, Valentina Panzarin, Francesco Pascoli, Snježana Zrncic, Panos Varvarigos, Bernardo Basurco, Hosam Saleh, Mona Dverdal Jansen, Edgar Brun
RISK ASSESSMENT OF VIRAL ENCEPHALOPATHY AND RETINOPATHY INTRODUCTION AND SPREAD IN MEDITERRANEAN SEABASS FARMS

11:20 Rodolfo E. del Rio-Rodriguez, Amelia I. Paredes-Trujillo, Jaime Navarro-Flores, Monica I. Gomez-Solano, Mariana de J. Huchin-Cortes
PATHOGENS AND DISEASE EXPERIENCES IN THE AQUACULTURE OF THE YUCATAN PENINSULA, MEXICO

11:40 Sitokozile Sibanda, Gift Matope Professor, Davies Pfukenyi Professor, Bernard Hango'mbe Professor
AN EPIDEMIOLOGICAL STUDY OF EPIZOOTIC ULCERATIVE SYNDROME (EUS) IN FIN- FISH ON LAKE KARIBA AND INLAND WATER BODIES IN ZIMBABWE

CATFISH FEEDING

Monday, March 28 10:40 - 12:00 Lecture Hall

Chair: Hanno Slawski

Sponsor:



- 10:40 Hanno Slawski**
FIT FOR GROWTH: FEED FOR INTENSIVE FARMING OF AFRICAN CATFISH *Clarias gariepinus*
- 11:00 Oluyemi Gbadamosi**, Precious Amarachi Jacobson, Bernadine Wunmi Obe
EFFECTS OF DIETARY SELENIUM NANO PARTICLES ON THE GROWTH PERFORMANCE OF AFRICAN CATFISH *Clarias gariepinus*
- 11:20 Ayodeji Adeoye**, Femi Fawole, Yemi Akegbejo-Samsons, Yunus Raheem
DIETARY EFFECTS OF EXOGENOUS PHYTASE ON AFRICAN CATFISH *Clarias gariepinus* FED FISHMEAL-FREE DIET
- 11:40 Johnpaul C. Ikwemesi**, Emmanuel K. Ajani, Benjamin O. Emikpe, Anthony A. Nlewadim
SURVIVAL AND SOME PRO AND ANTIOXIDANTS ACTIVITIES OF *Clarias gariepinus* FRY FED STRAINS OF *Lactobacillus fermentum* SUPPLEMENTED DIET CHALLENGED WITH *Aeromonas hydrophila*
- 12:00 Ayokanmi A. Dada**, Israel O. Oke, Abiola Adebayo
EVALUATION OF LEMON GRASS *Cymbopogon citratus* AS PHYTO-ADDITIVE IN THE DIET OF AFRICAN CATFISH *Clarias gariepinus* FINGERLINGS

AQUACULTURE DEVELOPMENT - CONTINUED

Monday, March 28 10:40 - 12:00 Small Theatre

Chair: Salah Mesalhy Aly

- 10:40 Daroomalingum Mauree**, Pierre Phillippe Blanc
REVIEW OF AQUACULTURE, GOVERNANCE AND DEVELOPMENT OF SMALL-SCALE AQUACULTURE IN THE IORA REGION
- 11:00 Mosunmola Lydia Adeleke**, Precious Sam-Aluko
SOCIO-ECONOMIC STRUCTURES OF FISH FARMERS AND GEOSPATIAL MAPPING OF SOME SELECTED FISH FARMS IN AKURE NORTH LOCAL GOVERNMENT AREA, ONDO STATE, NIGERIA
- 11:20 Edith Gondwe**, Abigail Bennett, Emma Rice, Park Muhonda
SETTING SMALL SCALE FISHERIES IN FOOD AND NUTRITION SECURITY THEMES: ASSESSING CURRENT TRENDS IN SUB SAHARAN AFRICA
- 11:40 Christopher Mulanda Aura**
A GIS-BASED APPROACH TO DELINEATING THE AREAS OF A LAKE THAT ARE SUITABLE FOR CAGE FISH CULTURE

ECOLOGY

Monday, March 28 10:40 - 12:00 Delegate's Hall

Chair: Lionel Dabbadie

- 10:40 Hlulani A. Hlungwani**, Joseph Sara, Sean Marr, Olaf Weyl
THE ECOLOGY AND BIOLOGY OF *Oreochromis mossambicus* TO INFORM INLAND FISHERIES DEVELOPMENT IN LAKE FLAG BOSHIELO, SOUTH AFRICA
- 11:00 Fertin Lucas**, Slembrouck Jacques, Avarre Jean-Christophe
AGROECOLOGY FOR SUSTAINABLE AQUACULTURE IN A CONTEXT OF GLOBAL CHANGES - ASACHA GDRI SUD (2021 - 2025)
- 11:20 Delphine Lethimonnier**, Barbara Bentz, Joël Niamien, Thimoté Niamien, Cécé Moïse Théa, Daouda Bambara, Mohamed Bob Diaby, Sidiki Keita, Olivier Mikolasek, Marc Oswald
INTEGRATED AQUACULTURE IN WEST AFRICA: AN ECOLOGICAL INTENSIFICATION LED BY FAMILY FARMERS IN A MARKET-ORIENTED STRATEGY
- 11:40 Jean-Michel Mortillaro**, Lionel Dabbadie, Andoniaina E. Raminoharisoa, Anaïs Paradis, Philippe Martel, Rija Andriamarolaza, Modestine Raliniaina, Olivier Mikolasek, Joel Aubin
TROPIC FUNCTIONING OF INTEGRATED RICE-FISH FARMING IN MADAGASCAR: INSIGHTS FROM STABLE ISOTOPES (d13C & d15N)
- 12:00 Nasser Kasozi**, Horst Kaiser, Brendan Wilhelmi
EFFECT OF *Bacillus* SPECIES ON LETTUCE GROWTH AND ROOT ASSOCIATED BACTERIAL COMMUNITY IN A SMALL-SCALE AQUAPONIC SYSTEM

FAO EGYPTIAN BIOSECURITY SPECIAL SESSION

Monday, March 28 13:40 - 17:20 Multiple Purpose Room
Chairs: Ahmed Almazrouai, Mortada Hussein

- **Biosecurity on the Farm level**
Dr. Souad Sabry Abd El-Hamid Salama
Senior Researcher, Quality Inspector, Quality Manger & Internal Auditor
Fish Diseases Research Department
- **The usage of veterinary drugs in Aquaculture in Egypt: Practice and Legal issues**
Dr. Abdel-Fattah Mohammed Aly
Head of pharmacology Dept. Veterinary college
Suez Canal University
- **Contribution towards biosecurity establishment of Egyptian marine aquaculture:
I. Zone surveillance of marine streptococcosis in Dibah triangle, Damietta
Governorate, Lower Egypt**
Ahmed M. A. Osman
Assistant Researcher, Animal Health Research Institute (AHRI) & Manager of Port Said Marine Fish
Hatchery
- **Biosecurity application, follow-up and control in aquaculture projects - Saudi Arabia Case**
Hesham Abdulla Baabbad
Technical Director, Saudi Aquaculture Society

WAVMA

Monday, March 28 13:40 - 17:20 Lecture Hall

ANAF

Monday, March 28 13:40 - 17:20 Small Theatre

NOTES