# UNIVERSITY OF IBADAN CURRICULUM VITAE 2023 PROMOTION EXERCISE

I.	<ul> <li>(a) <u>Name (Underline Surname):</u></li> <li>(b) <u>Date of Birth:</u></li> <li>(c) <u>Department:</u></li> <li>(d) <u>Faculty:</u></li> </ul>	Oyediran Olusegun <u>Oyebola</u> 15 June, 1970 Aquaculture and Fisheries Management Renewable Natural Resources				
Π	<ul> <li>(a) First Academic Appointment:</li> <li>(b) Present Post (with date):</li> <li>(c) Date of Last Promotion:</li> <li>(d) Date Last Considered (in cases where promotion was not through):</li> </ul>	Assistant Lecturer(07 March, 2013)Senior Lecturer(01 October, 2020)Senior Lecturer(01 October, 2020)Not applicable				
III	University Education (with dates)					
	University of Ibadan, Ibadan University of Ibadan, Ibadan University of Ibadan, Ibadan	(1992 - 1998) (2000 - 2001) (2010 - 2014)				
IV	Academic Qualifications (with dates and granting bodies)					
	<ul><li>B.Sc. Fisheries Management</li><li>M.Sc. Fisheries Management</li><li>Ph.D. Fisheries Management</li></ul>	(1998, University of Ibadan, Nigeria) (2001, University of Ibadan, Nigeria) (2014, University of Ibadan, Nigeria)				
V	Professional Qualifications and Diplomas (with dates)					
	National Diploma (General Agriculture), Federal College of Agriculture, Akure (1991)					
VI	<ul> <li><u>Scholarships, Fellowships and Prizes (with dates) in respect of Undergraduate and Postgraduate work only</u></li> <li>Publication Award, Postgraduate School, University of Ibadan, Ibadan (2014)</li> </ul>					
VII	II Honours, Distinctions and Membership of Learned Societies					
	(1) Grantee, Early Career Award, Association of Commonwealth Universities, United Kingdom, 2014.					
	<ul> <li>(2) Grantee, Institution Based Research Grant, Tertiary Education Trust Fund (TETFUND), Nigeria, 2015.</li> </ul>					
	<ul> <li>(3) Grantee, CIRCLE (Climate Impact Research Capacity Leadership Enhancement) Visiting Fellowship Award (CVF- Post Doctoral Category), African Academy of Science, and Association of Commonwealth Universities through DFID, U.K., 2016.</li> </ul>					

- Research Fellow, Department of Zoology, Entomology and Fisheries Sciences, Makerere University, Uganda (01 January, 2017 – 30 December, 2017)
- (5) Grantee, CIRCLE Research Uptake Grant, African Academy of Science, and Association of Commonwealth Universities through DFID, U.K., 2018.
- (6) Grantee, Commonwealth Science Conference Follow-on Grant on Genetic Diversity of croaker fish (*Psuedotolithus* species) in the Gulf of Guinea. The Royal Society, United Kingdom, 2021.
- (7) Fellow, Commonwealth Futures Climate Resilience Research Cohort, Food System Research to Action (R2A) Group to COP 27. Joint British Council and the Association of Commonwealth Universities, United Kingdom, 2021.
- (8) UI Lead/PI, EU-Europa HORIZON-CL6-2022-FARM2FORK-01 Integrated and Circular Technologies for Sustainable city region FOOD systems in Africa. (INCiTiS-FOOD). European Commission, Brussels, 2022.
- (9) Member, Standing Committee on Research, Linkage and Collaborations, Association of Nigeria Fisheries Scientists (ANIFS), 2018.
- (10) Vice President, Society for Climate Action in Nigeria, 2023.
- (11) Member, Fisheries Society of Nigeria (FISON)
- (12) Member, Biotechnology Society of Nigeria (BSN)
- (13) Member, International Association for Genetics in Aquaculture (IAGA)
- (14) Member, World Aquaculture Society (WAS)
- (15) Member, Fish Habitat Network (FHN)
- (16) Member, Nature Conservancy
- (17) Global Outreach Contributing Member, American Society for Microbiology (ASM)

# VIII Details of Teaching / Work Experience

- (a) Teaching Assistant, General Studies Programme, University of Ibadan, (28 Oct. 2003 22 September, 2005)
- (b) Assistant Lecturer, Fisheries Unit, Department of Animal Production, College of Agricultural Sciences, Olabisi Onabanjo University. Ago-Iwoye, Ogun State, Nigeria (4 May, 2010 – March 6, 2013)
- (c) Assistant Lecturer, Department of Aquaculture and Fisheries Management, University of Ibadan (07 March, 2013 22 September, 2014)
- (d) Lecturer II, Department of Aquaculture and Fisheries Management, University of Ibadan (23 September, 2014 30 September, 2017)
- (e) Lecturer I, Department of Aquaculture and Fisheries Management, University of Ibadan (01 October, 2017- 30 September, 2020)
- (f) Senior Lecturer, Department of Aquaculture and Fisheries Management, University of Ibadan (01 October, 2020 to date)

Courses Taught

(i) Undergraduate Courses

	Units	Singly/Jointly
AFM 211 Introduction to West African Fish and Fisheries	3	J
AFM 315: Ichthyology	2	J
AFM 325: Introduction to Fish Genetics and Breeding	2	J
AFM 329: Fish Nutrition	2	J
AFM 422: Fisheries Recreational Planning and Interpretation	3	J
AFM 425: Fish Nutrition and Fish Food Techniques	3	J
AFM 430: Analytical Techniques in Fisheries and Aquaculture	3	J
AFM 519: Nigerian Feeds and Feeding Stuffs	2	J
AFM 510: Ornamental Fisheries and Aquaria Design	2	J
(ii) <u>Postgraduate Courses</u>		
(ii) <u>Postgraduate Courses</u>	Units	Singly/Jointly
<ul><li>(ii) <u>Postgraduate Courses</u></li><li>AFM 714: Fisheries Development and Policy Formulation</li></ul>	Units 2	Singly/Jointly J
	_	Singly/Jointly J J
AFM 714: Fisheries Development and Policy Formulation	2	Singly/Jointly J J J
AFM 714: Fisheries Development and Policy Formulation AFM 715: Advanced Topics in Aquaculture	2 3	Singly/Jointly J J J J
AFM 714: Fisheries Development and Policy Formulation AFM 715: Advanced Topics in Aquaculture AFM 726: Aquaculture Biotechnology and Genetics	2 3 2	Singly/Jointly J J J J J
AFM 714: Fisheries Development and Policy Formulation AFM 715: Advanced Topics in Aquaculture AFM 726: Aquaculture Biotechnology and Genetics AEM 715: Aquatic Environmental Biotechnology and Genetics	2 3 2	Singly/Jointly J J J J J
AFM 714: Fisheries Development and Policy Formulation AFM 715: Advanced Topics in Aquaculture AFM 726: Aquaculture Biotechnology and Genetics AEM 715: Aquatic Environmental Biotechnology and Genetics ICM 724: Global Climate Change and the Marine	2 3 2 3	Singly/Jointly J J J J J
AFM 714: Fisheries Development and Policy Formulation AFM 715: Advanced Topics in Aquaculture AFM 726: Aquaculture Biotechnology and Genetics AEM 715: Aquatic Environmental Biotechnology and Genetics ICM 724: Global Climate Change and the Marine And Coastal Environment	2 3 2 3	Singly/Jointly J J J J J J

#### J= Jointly

#### Students' Project Supervision

	Completed	In Progress
B.Sc.	29	Nil
M.Sc.	11	3
M.Phil.	1	1
Ph.D.	Nil	5

Participation in University Administration

- (a) Member, Faculty Committee on Training, Seminars and Workshops, Faculty of Agriculture and Forestry (2015 / 2016; 2016 / 2017 session)
- (b) Representative of Congregation at the Senate of the University of Ibadan (2016 till date)
- (c) Chair, Faculty Committee on Training, Seminars and Workshops, Faculty of Renewable Natural Resources (2018 to date)
- (d) Representative of the Faculty of Renewable Natural Resources on the Board of Institute of African Studies (2018 to date)
- (e) Member, Staff Linkages and Development Committee, Department of Aquaculture and Fisheries Management (2018/ 2019 session)
- (f) Coordinator, Distance Learning Programme, Department of Aquaculture and Fisheries Management (2018/ 2019 session)

- (g) Chair, Laboratory Maintenance Committee, Department of Aquaculture and Fisheries Management (2018/ 2019 session)
- (h) Member, Local Organising Committee, Workshop for the Deans and Heads of Department in Faculties of Agriculture in Nigeria, Hosted by the Faculties of Agriculture and Renewable Natural Resources, University of Ibadan (24 – 29 November, 2019)
- (i) Assistant Warden, Ransome Kuti Hall, University of Ibadan (2018 to 2021)
- (j) Warden, Sultan Bello Hall, University of Ibadan (2021 till date)

### IX <u>Research</u>

# (a) Completed Research

- (i) Genetic Diversity and Food Relevance of Freshwater Prawn Populations in Asejire Lake, Nigeria.
- (ii) Impact of Climate Change on Genetic Structure of Tilapia, Oreochromis niloticus Population in Fish Cage Installed and Fish Cage free Lakes in South Western Nigeria
- (iii) Assessment of Intra-specific pectoral spine crossbred of *Clarias gariepinus* for Improved Economic Traits (Growth Rate, Survival, and Disease Resistance) for Accelerated Fish Production in Nigeria
- (iv) Genomic sequencing of Farmed *Clarias gariepinus* and *Oreochromis niloticus* in Southwestern Nigeria and Benin Republic for Monitoring, Control and Marker Assisted Improvement.
- (v) Assessment of Pathogenic Microorganism Resistant Strains in Farmed African Catfish, *Clarias gariepinus*
- (b) <u>In progress</u>
  - (i) Genetic Diversity, Sea Water Quality Changes and Adaptive distribution of the Declining Croaker (*Psuedotolithus* sp.) fishery in West African Coasts.

This study was initiated to understand the dimensions of genetic structure and sea water changes in climate change scenario to the vulnerability of the declining croaker species population in the Gulf of Guinea. Currently, the trend of mortality in the species have been investigated through a reconnaissance survey at the coast of the Gulf of Guinea at Nigeria, Cameroon and Republic of Benin. Preliminary genetic analysis including morphometric and genetic sequencing of the *P. senegalensis* and *P. typus* of the croaker family in Lagos lagoon and other Nigeria locations is ongoing. The study is expected to continue till 2027.

(ii) Integrated and Circular Technologies for Sustainable city region FOOD systems in Africa (INCiTiS-FOOD)

The project aimed to provide sustainable food from fish, vegetables, and insect in circularity of production to enhance nutrition in African Cities, minimizing wastes and using limited land area. Currently, food system analysis has been carried out. The project is concluding the preparatory stage of creating the "Living Laboratory" where innovations and models for sustainable circular food production system will be formulated and investigated for performance, and subsequently disseminated to stakeholders. The project will be completed by 2027.

- (c) Project, Dissertation and Thesis
- Oyebola O. O. (1997). Epizootiology of Some Fish Farms in Oluyole Local Government, Oyo State. B.Sc. Project, Department of Wildlife and Fisheries Management, University of Ibadan, Nigeria, 65p
- (ii) Oyebola O. O. (2001). Comparative Study of Genetically Improved (Triploid) *Clarias gariepinus* (Burchell 1822) Produced by Cold Shock at Two Different Temperatures. M.Sc. Project, Department of Wildlife and Fisheries Management, University of Ibadan, Nigeria, 85p
- Oyebola, O. O. (2014). Assessment of Genetic Structure of *Clarias gariepinus*, Burchell, 1822 Population in Asejire Lake, Ph.D. Thesis, University of Ibadan, Nigeria, 292p

### X <u>Publications</u>

- (a) Books already published: Nil
- (b) Chapters in Books already published
- Osho, E. F., Adetola Jenyo-Oni, A. and Oyebola, O. O. (2013). Waste Processing and Management under Integration of Fish, Pig and Rice Production, In: Omitoyin, B.O., Ajani, E.K. and Akinwole, A.O. (Eds.), *Integrated Fish Farming: Fish, Rice and Pig.* Ibadan: Walecrown Ventures 62 – 68pp. ISBN: 978 – 978 – 31064 – 6 – 1. (Nigeria) (Contribution: 30%)
- 2) Oyebola, O. O., Efitre, J., Falaye, A. E., Dada, T. M. and Idowu, F. C. (2018). Agriculture in the Face of Climate-Mediated Flooding in Tropical Africa: Technical Innovation of Fish Farmers in Southwestern Nigeria. In Leal Filho W. (Eds) *Handbook* of Climate Change Resilience. Switzerland: Springer Cham. 1-19pp. ISBN 978-3-319-71025-9. (Switzerland) (Contribution: 50%)
- 3) Oyebola, O. O. and Olatunde, O. M. (2019). Climate Change Adaptation Through Aquaculture: Ecological Considerations and Regulatory Requirements for Tropical Africa. In: Bamutaze, Y., Kyamanywa, S., Singh, B., Nabanoga, G., Lal, R. (Eds.). Agriculture and Ecosystem Resilience in Sub Saharan Africa. Switzerland: Springer Cham 435-472pp. ISBN 978-3-030-12973-6. (Switzerland) (Contribution: 80%)
- (c) Articles that have already appeared in Refereed Conference Proceedings
- 4) Olapade, O. A., Oyebola, O. O. and Sanwo, S. K. (2011). Effects of Different Cooking Methods on the Proximate Composition of Frozen Mackerel (*Scomber scombrus*). In Aduku, A. O., Oluwagbemi, T., Aribido, S. O., Daikwo, S. I., and Saliu, O. J. (Eds.). *Research and Value-Addition: Key to Transformation of the Nigerian Livestock Industry*: Proceedings of the 16<sup>th</sup> Annual Conference of the Animal Science Association of Nigeria (ASAN), 12-15 September, 2011, Kogi: K. S. U, Anyigba. 115-117. (Nigeria) (Contribution: 40%)
- 5) Oyebola, O. O. (2015). Genetic Structure of *Clarias gariepinus* in Nigeria: Implications for Hatchery Management and Human Nutrition. In. Lelei, K. E., Abdullah, A. Y., Akegbejo-Samsons, Y., Balogun, J. K., Adeyemo, A. O., Ugwumba, A. A., Falaye, E. A. Bichi. A. H., Agbabiaka, L. A., and 26 others (Eds.). *Fisheries Sub-sector in the Declining Oil-based Economy: Paradigm Shift for Economic Diversification and Employment Generation*: Proceedings of the 30<sup>th</sup> Annual Conference of the Fisheries Society of Nigeria (FISON), 22 - 27 November, 2015, Delta, DELSU, Asaba. 331 – 332. (Nigeria) (Contribution: 100%)
- \*(6) Bello, M. M., Oyebola, O. O. and Lawal, T. H. (2019). Proximate Composition and Microbial Analysis of Common Marine Fishes Consumed in Maiduguri Metropolis, Borno State, Nigeria. Proceedings of the Academic Conference on 21<sup>st</sup> Century

Challenges and Opportunities; 19<sup>th</sup> – 20<sup>th</sup> December, 2019. University of Maiduguri, Unimaid, Maiduguri, Borno State Nigeria. Pp123-136. (Nigeria) (Contribution: 40%)

- \*(7) Kelepilly, M., Oyebola, O. O., Dembele, S. and Kane, A. (2021). Hematological and Biochemical Blood Profile of African catfish *Clarias gariepinus* Brooders Anaesthetized with Aqueous solution of Clove Bud Powder. In Diarra, S.T., Maiga, H., Sidibe A., et al., Edited Proceedings of the 12<sup>th</sup> edition of the Malian Society for Applied Sciences (Douzieme Symposium Malien sur les Sciences Appliquees MSAS 2021. *Theme: COVID-19: Impacts and challenges for economic and social development in Mali and Africa*. Bamako, 01 - 06 August, 2021. Pp. 180-186. (Mali) (Contribution: 40%)
- \*(8) Oyebola O. O. Adebayo, T. I. and Adebayo J. O. (2021). Genetic Linkage of the *Psuedomonas aeruginosa* Tolerant and Vulnerable Specimens of *Clarias gariepinus*. In Aladele S. E., Okere A. U., Ajiboye T. O. and Alamu, O. Edited Proceedings of the 3<sup>rd</sup> National Summit and Conference on Genetic Resources Conservation and Utilization. *Theme: Promoting sustainable conservation and utilization of genetic resources for food security in Nigeria*, held at the Professor E.A. Adebowale Training Hall, IAR&T, Ibadan, Nigeria March 23-24 2021; 241-249. (Nigeria) (Contribution: 70%)
- (d) Patents and Copyrights: Nil.
- (e) Articles that have already appeared in learned journals
- (9) Ajani, E. K. and Oyebola, O. O. (2010). Growth Performance of Blue Mussel (*Mytilus edulis*) in Ofiki River, Oyo State. *African Journal of Livestock Extension*, Vol.8: 40–46. (Nigeria) (Contribution: 30%)
- (10) Ajani, E. K., Oyebola, O. O. and Setufe, S. B. (2010). Effects of Crowding Stress of Growth Performance and Carcass Quality of Juvenile African Catfish (*Clarias gariepinus*) Fed Varying Crude Protein Levels. *African Journal of Livestock Extension*, Vol. 8: 67 - 71. (Nigeria) (Contribution: 30%)
- (11) Omitoyin, B. O., Ajani, E. K. and Oyebola, O. O. (2011). Cold Shocking at 5<sup>o</sup>C and 7<sup>o</sup>C in Triploid Production: Effects on Embryonic Development, Hatchability and Fry Performance in *Clarias gariepinus*. *African Journal of Livestock Extension*, Vol. 9: 13 18. (Nigeria) (Contribution: 30%)
- (12) Oyebola, O. O., Omitoyin, B. O., Salako, A. E., Ajani, E. K. and Awodiran, M. O. (2013). Genetic and Biochemical Differentiation of Pectoral Spine Variants in *Clarias gariepinus*. *International Journal of Modern Biological Research*, Vol. 1: 8 14 (Now in Volume 10). (Nigeria) (Contribution: 50%)

- (13) Oyebola, O. O., Omitoyin, B. O., Salako, A. E., Ajani, E. K. and Awodiran, M. O. (2013). Genetic Differentiation and Inheritance of Randomly Amplified Polymorphic DNA (RAPD) Markers in Pectoral Spine Phenotypic Sub-groups of *Clarias gariepinus*. *African Journal of Biotechnology*. Vol. 12, No. 37: 5567 5576. (Kenya) (Contribution: 50%)
- (14) Somaiah, K., Satish, P. V. V., Sunita, K., Nagaraju, B. and Oyebola, O. O. (2014). Toxic Impact of Phenthoate on Protein and Glycogen Levels in Certain Tissues of Indian Major Carp Labeo rohita (Hamilton). IOSR Journal of Environmental Science, Toxicology and Food Technology. Vol. 8, No. 9: 65 – 73. (U.S.A) (Contribution: 25%)
- (15) Awodiran, M. O., Majolagbe, F. A., Komolafe, O. O., Adewumi, A. A., Oyebola, O. O. and Oyewole, R. O. (2014). Cytogenetic Study and Serum Protein Characterization of *Clarias gariepinus* (BURCHELL, 1822) and *Heterobranchus bidorsalis* (Geoffroy Saint-Hillaire, 1809) in South Western Nigeria. *International Journal of Biological and Chemical Science*, Vol. 8, No. 6: 2377 2386 (Cameroon) (Contribution: 15%)
- (16) Ajani, E. K., Setufe, S. B. and Oyebola, O. O. (2015). Effect of Stocking Density on Hematological Functions of Juvenile African Catfish (*Clarias gariepinus*) Fed Varying Crude Protein Levels. *African Journal of Food Science*. Vol. 9, No. 2: 65- 69 (Kenya) (Contribution: 30%)
- (17) Oyebola, O. O. and Ogunfowora, O. O. (2015). Challenges to Effective Fishing and Preferred Fishing Gear in a Hydrodynamic Fresh-water System. *Continental Journal of Biological Sciences*, Vol. 8, No. 1: 24 – 33. (Nigeria) (Contribution: 70%)
- (18) Oyebola, O. O. (2015). Phenotypic Variability Revealed Discriminate Pectoral Spine Variants in Small Population of *Clarias gariepinus* (Burchell, 1822) of Hydrodynamic Environment. *Nature and Science:* Vol. 13, No. 3: 96 – 108. (Nigeria) (Contribution: 100%)
- (19) **Oyebola, O. O**, Adelani, S. A. and Oyedokun, J. O. (2015). Population Structure and Phenotypic Variability of Cichlids in Asejire Lake, Nigeria. *Nigerian Journal of Fisheries*, Vol. 12, No. 2; 889-894. (Nigeria) (Contribution: 70%)
- (20) Oyebola, O. O., Kajopaye, A. K. and Awodiran, M. O. (2015). Genetic and Biochemical Basis of Growth Variation in Bred *Clarias gariepinus* (Burchell 1822). *Academic Research Journal of Agricultural Science and Research*, Vol. 3, No.6:111 20. (Now in Volume 8). (Nigeria) (Contribution: 70%)
- (21) **Oyebola, O. O.** and Awodiran, M. O. (2015). Effect of spawning methods on fertilization, hatchability and fry size variation in *Clarias gariepinus*. *Ife Journal of Science*, Vol 17 No. 2: 305-311. (Nigeria) (Contribution: 80%)
- (22) **Oyebola, O.** (2016). Nutritional quality of wastes emanating from processing of genotypes of freshwater Prawn, *Macrobrachium vollenhovenii*. *Cogent Food & Agriculture*, Vol., 2 No. 1: 1-13 (Now in Volume 9, No.1). (Spain) (Contribution: 100%)

- (23) Osho, E. F., Ajani, E. K., Omitoyin, B. O, Oyebola, O. O., Setufe, S. B., Kareem, O. K. and Akintunde, M.A. (2016). Effect of stocking density and age at stocking on Growth and survival of *Heterobranchus bidorsalis* larvae. *Tropical Animal Production Invest*igations Vol. 19, No. 1: 20-26. (Nigeria) (Contribution: 20%)
- (24) Oyebola, O. O., Adekunle, O. M. and Setufe, S. B. (2017). Growth Rate and Disease Resistance of Inbreds and Novel Intra-specific Crossbreds Larva of *Clarias gariepinus* (Burchell,1822) in Response to *Pseudomonas aeruginosa* Challenge. *Journal of Experimental Agriculture International* Vol. 16, No. 6: 1-11. (U.S.A.) (Contribution: 60%)
- (25) Oyebola, O. O., Jacob, J. M., Omorodion, B. A., Akinsola, Y. Y. and Akinade, S., (2017). Molecular marker (allozyme) assisted selection of latent production traits and fingerprints of novel strains of fish (*Clarias gariepinus*) and shellfish (*Macrobrachium vollenhovenii*), Aquaculture Vol. 472, Supplement 1:66-70. (U.S.A) (Contribution: 50%)
- (26) Oyebola, O. O., Adeshina, B. O. and Bello, M. M. (2017). Proximate Quality of Smoke dried *Parachanna obscura* (African Snake head) Obtained from Fresh and Brackish Water Environments in South Western Nigeria. *Journal of Arid Agriculture*, Special Issue 40<sup>th</sup> Anniversary of the Faculty of Agriculture, University of Maiduguri, 2017: 90 - 94. (Nigeria) (Contribution: 70%)
- (27) Oyebola, O. O, Adelaja, A. S. and Adelani, A. S. (2018). Proximate and Amino Acid Profiles of Chelipede Variants of Freshwater Prawn (*Macrobrachium vollenhovenii*) in Southwestern Nigeria. *Tropical Animal Production Invest*igations Vol. 21, No. 1: 61-72 (Nigeria) (Contribution: 70%)
- (28) Oyebola, O. O. and Fada, P. O. (2020). Climate Change: A Potential Risk to Cage Culture and Genetic Structure of Native Fisheries in Fish Cage Installed Inland Lakes. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use.* Vol. 25 No. 3: 283-291. (Australia) (Contribution: 80%)
- \*(29) Omitoyin, B. O., Yusuf, O. Y., Ajani, E. K. and Oyebola, O. O. (2020). Allozymatic Characteristics of Farm Raised and Wild Broodstocks of *Clarias gariepinus* Semen. *Dutse. Journal of Agriculture and Food Security* (DUJAFS) Vol. 7, No. 2; 154-165. (Nigeria) (Contribution: 30%)
- \*(30) Uruku, M. N., Adikwu, I. A., Oyebola, O. O. and Akombo, P. M. (2021). Genetic Diagnosis on strains of the African Catfish, *Clarias gariepinus* (Burchell 1822) in River Benue and a Tributary in North East Nigeria. *International Journal of Fisheries and Aquatic Studies* Vol. 9, No. 3: 91-97. (India) (Contribution: 30%)
- \*(31) Uruku, M. N., Adikwu, I. A., **Oyebola, O. O**. and Uchendu, T. E. (2021). Phenotypic Diversity of *Clarias gariepinus* (Burchell, 1822) from Benue River and a Tributary in

North East Nigeria. *Magna Scientia Advanced Biology and Pharmacy* Vol. 2, No. 1; 009 018. Now in Volume 9. (India) (Contribution: 30%)

- \*(32) Oyebola, O. O, Olaoluwa, O. O., Kelepilly, M., Dembele, S, Satyal, P. and Uchendu, T. E. (2021). Chemical Profile and Surgical Anaesthesia Dosage of Dried Bud of Clove Plant (*Eugenia Caryophylata*) in Brooders of African Catfish (*Clarias gariepinus*). *African Journal of Biomedical Research* Vol. 24, No. 1; 141- 149. (Nigeria) (Contribution: 40%)
- \*(33) Oyebola, O. O., Efitre, J., Musinguzi, L. and Falaye, A. E (2021). Potential adaptation Strategies for climate change impact among flood-prone fish farmers in climate hotspot Uganda. *Environment Development and Sustainability* Vol. 23:12761–12790. (Belgium) (Contribution: 60%)
- \*(34) Oyebola, O. O., Omitoyin, S. B., Hounhoedo, A. O. O. and Agadjihouèdé, H. (2022). Length-Weight Relationship and Condition Factor Revealed Possibility of Mix Strains in *Clarias gariepinus* Population of Oueme Valley, Benin Republic (West Africa). *Total Environment Research Themes TOTERT* Vol. 3-4: 100009; 1-12. Now in Volume 8. (Spain) (Contribution: 60%)
- \*(35) Oyebola O. O., Adelaja, A. S. and Adelani, A. S. (2022). In Vitro Digestibility and Food Grade of Fleshy Tissues from Chelipede Variants of Freshwater Prawn, *Macrobrachium vollenhovenii* (HERKLOTS, 1857). *Tropical Animal Production Investigation* Vo., 25, No. 1: 27-37. (Nigeria) (Contribution: 70%)
- (f) Books, Chapters in Books and Articles already accepted for publication: Nil
- (g) Technical Reports and Monographs:
  - (36) Jenyo-Oni, A. and Oyebola, O. O. (2013). Sustainable Waste utilization Under Integration of Fish with Poultry and Rice. In Omitoyin, B.O., Ajani, E.K. and Nwanna, L.C. (Eds). *Training Manual on Sustainable Integrated Pond Based Aquaculture with Rice and Poultry Production: Economic, Social and Environmental Assessment*, Ibadan: Walecrown Ventures. 125 131pp. ISBN 978-2170-34-0. (Nigeria) (Contribution: 40%)

\*Publications which have appeared/been accepted since last promotion or appointment

Dr. Oy	ediran	Olusegun	n Oyebola	

Name

Signature

- XI <u>Major Conferences/Workshops Attended with Papers Read (in the last 5 years)</u>
  - International Conference on Aquatic Resources and Aquaculture for Sustainable Development 2019, Hawassa University, Hawassa, Ethiopia. 10 – 12 January, 2019.
     Paper read:

Chemical Profile and Surgical Anesthesia Dosage of Dried Bud of Clove Plant (Eugenia caryophylata) in Brooders of African Catfish (Clarias gariepinus)

 Workshop on Approaches to Genetic Improvement of Fish in Africa. Roslin Institute, University of Edinburgh, Edinburgh, United Kingdom. 12 – 16 August, 2019.
 Paper read:

*Genetic improvement programme in Nigeria: Focus on Clarias gariepinus and Oreochromis niloticus* 

 Commonwealth Science Conference 2021," Science for a resilient future" organized by the Royal Society, Grand Challenge research fund and the African Academy of Science, held virtually on the 22 - 26 February 2021.

# Paper Read:

Role of aquaculture in climate change adaptation in ocean states of Africa

4) Genetic Resources Summit, and conference 2021, "Promoting Sustainable Conservation and Utilization of Genetic Resources for Food Security in Nigeria" organized by the National Centre for Genetic Resources and Biotechnology (NACGRAB) Nigeria, held at Prof E.A Adebowale Hall, IAR&T, Moor Plantation, Ibadan, Nigeria, 23 - 24 March, 2021. Paper Read:

> *Genetic Linkage of the Pseudomonas aeruginosa Tolerant and Vulnerable Specimens in Clarias gariepinus*

5) International Conference & Exposition of the Africa Chapter of the World Aquaculture Society (Aquaculture Africa 2021), held in Alexandria, Egypt, 25 – 28 March, 2022. Paper Read:

Prevalence, Pathogenicity and Genotypes of Aeromonas Species in the Gut of African Catfish, Clarias gariepinus (Burchell, 1822) at Post Aeromonas hydrophila Challenge Period

Dr. Oyediran Olusegun Oyebola

Name

Signature

### XII Ten Best Publications that Reflect the Totality of my Contributions to Scholarship

- Awodiran, M. O., Majolagbe, F. A., Komolafe, O. O., Adewumi, A.A., Oyebola, O. O. and Oyewole, R. O. (2014). Cytogenetic Study and Serum Protein Characterization of *Clarias gariepinus* (BURCHELL, 1822) and *Heterobranchus bidorsalis* (Geoffroy Saint-Hillaire, 1809) in South Western Nigeria. *International Journal of Biological and Chemical Science*, Vol. 8, No. 6: 2377 2386.
- 2) **Oyebola, O. O.** and Awodiran, M. O. (2015). Effect of spawning methods on fertilization, hatchability and fry size variation in *Clarias gariepinus*. *Ife Journal of Science*, Vol 17 No. 2: 305-311
- Oyebola, O. O., Omitoyin, B. O., Salako, A. E., Ajani, E. K. and Awodiran, M. O. (2013). Genetic and Biochemical Differentiation of Pectoral Spine Variants in *Clarias gariepinus*. *International Journal of Modern Biological Research*, Vol. 1: 8 14 (Now in Volume 7)
- Oyebola, O. O. (2015). Phenotypic Variability Revealed Discriminate Pectoral Spine Variants in Small Population of *Clarias gariepinus* (Burchell, 1822) of Hydrodynamic Environment. *Nature and Science*: Vol. 13, No. 3: 96 – 108
- 5) Oyebola, O. O., Jacob, J. M., Omorodion, B. A., Akinsola, Y. Y., and Akinade, S., (2017). Molecular marker (allozyme) assisted selection of latent production traits and fingerprints of novel strains of fish (*Clarias gariepinus*) and shellfish (*Macrobrachium vollenhovenii*), *Aquaculture* Vol. 472, Supplement 1:66-70
- 6) **Oyebola, O. O**. (2016). Nutritional quality of wastes emanating from processing of genotypes of freshwater Prawn, *Macrobrachium vollenhovenii*. *Cogent Food & Agriculture*, Vol., 2 No. 1: 1-13 (Now in Volume 6)
- 7) Oyebola, O. O., Adekunle, O. M. and Setufe, S. B. (2017). Growth Rate and Disease Resistance of Inbreds and Novel Intra-specific Crossbreds Larva of *Clarias gariepinus* (Burchell, 1822) in Response to *Pseudomonas aeruginosa* Challenge. *Journal of Experimental Agriculture International* Vol. 16, No. 6: 1-11
- 8) Oyebola, O. O. and Fada, P. O. (2020) Climate Change: A Potential Risk to Cage Culture and Genetic Structure of Native Fisheries in Fish Cage Installed Inland Lakes. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use* Vol. 25 (3): 283-291
- 9) Oyebola, O. O. and Olatunde, O. M. (2019). Climate Change Adaptation Through Aquaculture: Ecological Considerations and Regulatory Requirements for Tropical Africa. In: Bamutaze, Y., Kyamanywa, S., Singh, B., Nabanoga, G., Lal, R. (Eds.). Agriculture and Ecosystem Resilience in Sub Saharan Africa. Switzerland: Springer Cham 435-472pp. ISBN 978-3-030-1297
- 10) Oyebola, O. O.; Omitoyin, S. B., Hounhoedo, A. O. O., and Agadjihouèdé, H. (2022). Length-Weight Relationship and Condition Factor Revealed Possibility of Mix Strains in *Clarias gariepinus* Population of Oueme Valley, Benin Republic (West Africa). *Total Environment Research Themes TOTERT* 3-4 (2022): 100009; 1-12pp.

Dr. Oyediran Olusegun Oyebola

Name

Signature

#### **Research Focus**

My research focused on application of genetics and biotechnology tools in aquaculture development and aquatic environment's resource identification, resilience, management and Conservation for improved production and Utilization for food security. I utilized fisheries phylogenetics, Fish-breeding Technology, Nutri-genomic, Climate Change Resilience Strategies to bridge some existing knowledge gaps and enrich gene bank with genome datasets in fisheries and aquaculture. My study on freshwater prawn Macrobrachium vollenhovenii population in Asejire Lake and in Ogun River Nigeria revealed chelae variants having unique allozyme markers for their delineation in selection. The variants were different in proximate and amino acids profiles, in-vitro digestibility and food grades. In addition, wastes from processing of the variants also varied in nutritional quality. Barcode gene sequence of the variants was submitted at gene bank. Supply of high-quality fish seed ranked high among the challenges of aquaculture. Knowledge on genetic structure/variants/strains of commercially cultured species such catfish and Tilapia can help to generate robust base population and highlight possible source of bottlenecks in production units. Genetic structure of the farmed Clarias gariepinus in Nigeria showed bottleneck with implications on hatchery management. Cytogenetic characterization of *Clarias gariepinus* and Heterobranchus bidorsalis were undertaken in South Western Nigeria. A phenotypic variability study discovered discriminate pectoral spine variants in small population of C. gariepinus in hydrodynamic Asejire Lake environment with implications on divergence of low-cost allozyme / biochemical (SDS PAGE) and Randomly Amplified Polymorphic DNA (RAPD) Markers in congruence with some latent production traits. Inbred and crossbreds of the variants diverged in growth rate and responses to bacteria (*Pseudomonas aeruginosa*) challenge. Barcode gene DNA sequence of the tolerant and vulnerable specimens was submitted to NCBI as their phylogenetic relationship showed single nucleotide polymorphism markers for delineation. I discovered mass mixing of egg from multiple brooders without cognizance of within species subgrouping contributes to frequency of "shooters" in early life of C. gariepinus in hatcheries, as shooters showed distinct markers. I investigated and reported genetic admixture in farmed C. gariepinus in relation to invasion of foreign *Clarias* gene in Benin Republic, in climate impact on cage-culture of Tilapia in Nigeria, highlighting the need for ecological considerations to protect native genotypes in aquaculture in climate change scenarios.

Dr. Oyediran Olusegun Oyebola

Name

Signature