



CURRICULUM VITAE

Mohammed Yakubu

DIYAWARE

(B.Tech., M.Tech., PhD, PGDE, *Mfs*)

**DEPARTMENT OF FISHERIES
FACULTY OF AGRICULTURE
UNIVERSITY OF PMB 1069, MAIDUGURI,
NIGERIA**

CURRICULUM VITAE

1.0 BIODATA

NAME: Mohammed Yakubu **DIYAWARE** (B. Tech., M. Tech., PhD *Mfs*)
Date of Birth: 30th December 1968
Place of Birth: Ngoshe
Local Government: Gwoza
State of Origin: Borno
Nationality: Nigerian
Country of Residence: Nigeria
Current Rank: Associate Professor (Reader)
Number of Publications: 27
Corresponding Address: Department of Fisheries, Faculty of Agriculture, University of Maiduguri, P.M.B. 1069, Maiduguri, Borno State Nigeria.
Email: mydiyaware@gmail.com, mydiyaware@unimaid.edu.ng,
Tel.: Nos.: +234(0) 8034822858, +234(0) 8022516926
Residential Address: No. NH 79, University of Maiduguri Senior Staff Quarters, Maiduguri, Nigeria.
Professional Membership: (a) Fisheries Society of Nigeria (PM 382)
(b) Genetic Society of Nigeria
(c) Organic Agricultural Society of Nigeria.
(d) World Aquaculture Society (ID. 20140480).
Marital status: Married with five children (Amina, A'isha, Abdullahi, Yaqub and Amma-A'isha).
Spouse: Hauwa ABDULLAH
Registry Department, Student Affairs Division, University of Maiduguri, Nigeria.
Email: abdullahihauwa194@gmail.com
+234 (0)9026897247, +234 (0)8038814087,

2.0 INSTITUTIONS ATTENDED WITH DATES

(a) Modibbo Adama University of Technology (Formally Federal University of Technology), Yola, PhD. (Aquaculture and Fisheries Management): 2006-2012

Title of Thesis:

Studies on the Inter-generic hybridization between *Clarias anguillaris* and *Heterobranchus bidorsalis* Through Male ablation in the Northeast Nigeria. Department of Biological Sciences, Modibbo Adama University of Technology, Yola (2012), p150.

(b) M. Tech., Aquaculture and Fisheries Management (Fish Breeding): 2006.

Thesis Title:

Studies on the effect of Carp and Clarias and Pituitary Extracts on Induced Spawning of the African catfish, *Clarias gariepinus* in the arid zone of Nigeria. Department of Biological Science, Federal University of Technology, Yola, Nigeria (2006), p68.

(c) B. Tech (Animal Sci., Fisheries, and Range Management), 1997.

Project Title:

Food and Feeding habits of the African catfish (*Clarias gariepinus*) and the Nile Tilapia (*Oreochromis niloticus*) in Lake Geriyo, Adamawa State, Nigeria, Department of Animal Science, Fisheries and Range Management F. U.T. Yola (1997), p38.

3.0 ACADEMIC QUALIFICATIONS OBTAINED WITH DATES

- (a) Ph.D. Aquaculture and Fisheries Management Fish Genetics and Breeding: 2012
- (b) M. Tech., Aquaculture and Fisheries Management (Fish Breeding): 2006
- (c) B. Tech (Animal Sci., Fisheries, and Range Management): 1997

5.0 MAJOR AREA OF SPECIALIZATION: Fish Genetics and Breeding

6.0 OTHER AREAS OF RESEARCH INTEREST: Fish Nutrition
Integrated Fish Farming

7.0 OTHER QUALIFICATIONS WITH DATES

(a) Postgraduate Diploma Education (PGDE): 2013 (KICOE, Maiduguri)

Project Title: Attitudes of Secondary school students toward fisheries Education in Borno State. Kashim Ibrahim College of Education, Maiduguri, Nigeria

(b) Graduate Diploma Computer Application: 1999 (Maiduguri)

(c) Ordinary National Diploma Fisheries: 1988 (Baga,)

Project Title: Brackish water fish pond Construction in Onne, Rivers State, Nigeria. Federal Freshwater Fisheries School, Baga, Maiduguri, Nigeria: 1988.

(d) West African School Cert/General Certificate of Education: 1984 (Gwoza)

(e) Ngoshe 'A' Primary school: 1979 (Ngoshe)

8.0 OVERVIEW OF SPECIALIZATION AND EXPERIENCE

- a) Development of fish strains that is adaptable to the arid condition
- (a) Production of all male tilapia using naturally occurring androgens
- (b) Development of fish starter diet using locally available feed ingredients
- (c) Development of fish feed using locally available fish feed ingredients

9.0 APPOINTMENTS WITH DATES AT UNIVERSITY LEVEL

- (a) Head of Department, Fisheries and Aquaculture Federal University Duste April 2017- Date
- (b) Postgraduate Coordinator, Dept. of Fisheries UMAID 01/11/17 – to Date
- (c) Head of Department, Fisheries, Uni. of Maiduguri, Nigeria: 01/10/14 – 01/10/16
- (d) Member of Senate, Uni. of Maiduguri, Nigeria: 01/10/14 – 01/10/16
- (e) Deputy Editor-In-Chief, Nigerian Journal of Fisheries and Aquaculture: June, 2013 – Date

- (f) Ag. Head of Department, Fisheries, Uni. of Maiduguri, Nigeria: 01/10/12 – 01/08/14
- (g) Overseer, Department Fisheries, University of Maiduguri: 10/05/10– 30/09/12
- (h) Associate Editor, Journal of Arid Agriculture: 2009 – Date
- (i) Member Admission Screening Committee, Faculty of Agriculture: 2010 – 2012
- (j) SIWES Coordinator, Department of Fisheries University of Maiduguri:2006 – 2012

10.0 APPOINTMENTS OUT SIDE UNIVERSITY WITH DATES

- (a) National Secretary, Fisheries Society of Nigeria Nov. 2016
- (b) Chairman Constitution Review Committee, FISON: Sept. 2016
- (c) Member Constitution Review committee, FISON: May, 2016
- (d) External Examiner, Federal College of Freshwater Fisheries Tech., Baga: 2014- Date
- (e) Member, National Sub-Technical Committee on Naming and Registration of Fish Strains in Nigeria, NACGRAB, Ibadan: 2013 – Date

11.0 INFORMATION TECHNOLOGY SKILLS

- (a) Web Design
- (b) Statistix, Versions 8 -14 software
- (c) Statistical Package for Social Science Students (SPSS Versions 12 – 16).
- (d) PAleontological Statistics (PAST) Version 3.02
- (e) PhYlip gel analysis Software 4.0
- (f) Microsoft office (Word, excel, publisher etc)
- (g) CorelDraw Version 10 to 16

12.0 PARTICIPATION IN FUNDED PROJECTS

- (a) Focal Point Officer, Lake Chad Fisheries Managt. LCBC/PRODABELT: 2014 – Date
- (b) Nigerian Counterpart (Fisheries), Chinese South-South Cooperation/ NSPFS/FAO: 2003-2007
- (c) State Facilitator, Aquaculture National Programme for Food Security/FAO: 2003 – 2007

13.0 WORKSHOP/TRAININGS ATTENDED WITH CERTIFICATED AND DATES

- (a) Introductory to Molecular Techniques:
Inqaba biotech in collaboration with ITTA Ibadan: 2015
- (b) Ecosystem Approach to Fisheries Management, FAO/LCBC Chad N'djamena:2014
- (c) Fraud Prevention and Forensic Auditing: FGN- ITF Bauchi, Nigeria: 2013
- (d) Quality Assurance and Service Delivery in Nig'n Universities, UNIMAID: 2013
- (e) Molecular Biology and Biotech Research Skills: World Bank (Step-B)
MAUTECH, Biotechnology centre, Yola, Nigeria: 2012
- (f) South-South cooperation workshop on Improved Fish Processing Technology
and value added fish products, FAO/NSPFC/SSC project, Jos Nigeria: 2004
- (g) Community based participatory Agric. Extension service in the NSPFS,
ARTMTI, Ilorin Nigeria: 2004
- (i) Integrated Fish Farming; Asian Pacific Regional Research and Training
Centre for Integrated Fish Farming (TCDC), Wuxi, Jiangsu province, China: 2003
- (j) Induced breeding workshop, FAO/FDF, Dadin Kowa, Nigeria: 2002
- (k) Fish Feed Formulation and Induce breeding, FAO/FDF, Nigeria: 2001
- (i) Strengthening Fish Quality Assurance (HACCP), FAO/ FDF, Maid., Nigeria: 2000
- (l) Senior Level Aquaculture Management Training, Federal College of

14.0 WORKING EXPERIENCE AT UNIVERSITY LEVEL

- | | |
|---|------------------------------|
| (a) Reader (Associate Professor) Department of Fisheries: | 1 st October 2015 |
| (b) Senior Lecturer, Department of Fisheries: | 1 st October 2012 |
| (c) Lecturer I, Department of Fisheries: | 1 st October 2009 |
| (d) Lecturer II, Department of Fisheries: | 1 st October 2007 |
| (e) Assistant Lecturer, Department of Fisheries | 3 rd October 2006 |
| (f) Associate Lecturer, Department of Fisheries | April 2006 |

14.1 Courses Taught at Postgraduate level

- (a) FIS 805 Fish Nutrition and Feed production (Shared course)
- (b) FIS 813: Fish Hatchery Management
- (c) FIS 819: Advance Fisheries Management and Control
- (d) FIS 804: Design, Construction and Management Culture Facilities
- (e) FIS 806: Fish Genetics and Breeding
- (f) BIO 954: Aquaculture in the Sahel Savannah (Dept. of Biological Sciences, UNIMAID)

14.2 Courses Taught at Undergraduate level

- (a) AGR 204: Introduction to Fisheries and Wildlife
- (b) FIS 309: Aquaculture
- (c) GST 331: Fish Production and Processing Skill (CEED, UNIMAID)
- (d) FIS 311: Fish Pond Construction and Management
- (e) FIS 312: Fish Adaptation and Physiology (F. U. Duste)
- (f) FIS 314: Fish Farming Techniques and Hatchery Management
- (g) MVPH 402: Fisheries and Wild life (Faculty of Veterinary Medicine)
- (h) FIS 504: Advanced Fish Nutrition
- (i) FIS 511: Fish Farm Engineering

14.3 Postgraduate Students Supervised

- (a) Sa'adu Bala SULEIMAN (2016). Genetic Characterization of Wild and Cultured Populations of African Catfish (*Clarias gariepinus*, Burchell, 1822) from Bauchi and Maiduguri, Nigeria Using Microsatellite Markers. *MSc. Dissertation*, Department of Fisheries, University of Maiduguri, p117.
- b) Zana Barde MOHAMMED (2016). Effects of Ram, Buck and Camel testicle of Masculinization control in The Nile Tilapia (*Oreochromis niloticus* (Linnaeus, 1758), *MSc. Dissertation* Department of Fisheries, University of Maiduguri. p80.
- c) Wanas Lalai NDIRMBITA (2016). Replacing of Soybean Meal with *Faldabia albida* (Chevalier 1834) Seed Meal in the diet of *Clarias gariepinus*, Burchell, 1822) *MSc. Dissertation*, Department of Fisheries University of Maiduguri. p85.
- d) Yunusa Ibrahim ADOKE, (2017). Effects of Replacing Soybean meal with Sickle Pod (*Casia tora*) in the Diet of *Oreochromis niloticus* *MSc. Dissertation*, Department of Fisheries, p56.

14.4 Postgraduate Students Supervision currently on going

- (a) Zakaria DAUDA (Co-Supervisor): PhD. Entomology, Department of Crop Protection, University of Maiduguri
Date Started: 2014.

Proposed Topic: Genetic Diversity of *Sytophlus* Species in the Northern Borno, Nigeria
Progress: On the field

(b) Yagana AHMED, MSc, Fisheries and Aquaculture, Department of Fisheries, University of Maiduguri

Date Started: (2015)

Proposed Topic: Effect of Terminalia stem meal on reproductive indices of the African catfish *Clarias gariepinus*, Burchell, 1822).

Progress: On preliminary studies

(c) Mohammed ALIYU, MSc, Fisheries and Aquaculture, Department of Fisheries, University of Fisheries.

Date Started: (2015)

Progress: On proposal stage

14.5 Undergraduate Students Supervised

1. Sani ABDULLAHI (2001). The effect of brine concentration on the quality of dried Fish (*Heterotis niloticus*). *HND Project*. Department of Agric. Technology Ramat Polytechnic Maiduguri. p33.
2. Mohammed HASSAN (2008). Effect of different stocking densities on growth and survival of *Clarias gariepinus* fingerlings in net hapa. *B. Fisheries Project*. University of Maiduguri, p 44.
3. Umaru Buba WAKIL, (2008). Evaluation of different commercial feeds on growth and survival of African catfish (*Clarias gariepinus*) fingerlings. *B. Fisheries Project* University of Maiduguri, p44.
4. Ubang Jeremiah AKANG, (2010). Effect of different levels of alpha-tocopherol acetate on growth and fat composition *Clarias gariepinus* Fingerlings. *B. Fisheries Project*. University of Maiduguri, p47.
5. Bunmi Elizabeth AJALA (2010). Comparative studies on haematological profiles of Wild and cultured Clarrids in North east Nigeria, *B. Fisheries Project*. University of Maiduguri, p34.
6. Yunusa IBRAHIM (2010). Fish noodle production using different carbohydrate Sources. *B. Fisheries Project* Department of Fisheries, University of Maiduguri, p25.
7. Mahmud Tasiu MOHAMMED (2010). Comparative studies of performance of solar tend and traditional sun drying in semi-arid zone of Nigeria, *B. Fisheries Project*. University of Maiduguri, p37.
8. Theresa Chizobam ONWUKA (2010). Growth performance of *Clarias gariepinus* fingerlings fed five different commercial feeds found in Maiduguri, *B. Fisheries Project*. University of Maiduguri, p30.
9. Adeshina IBRAHIM (2010). Effects of different smoking periods on nutritional value of African bonny tongue fish (*Heterotis niloticus*), *B. Fisheries Project*. University of Maiduguri University of Maiduguri, p45.
10. Joy CHUKWU (2011). Production of all male tilapia using *Carica papaya* (papaw) seed *B. Fisheries Project*, Department of Fisheries, University of Maiduguri (2011), p43.
11. Abdurahman Mohammed DADDILE (2011). Inducement of sterility in hybrid African catfish (*Clarias gariepinus x Heterobranchus bidorsallis*). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p32.

12. Amina Ahmed GIWA (2011). Blood parameter of cultured African Catfish *C. gariepinus*. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p34.
13. Bridget OKEKE (2011). Effect of *Garcinia kola* on milt quality of African catfish *Clarias gariepinus*. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p25.
14. Maryam Garba IBRAHIM (2012). Effect clove seed extract and powder on keeping qualities of smoked tilapia. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri (2012), p28.
15. Buzi EZELEIL (2012). Preliminary studies on the effect fish pond water on growth performance of onion (*Allium sativum*). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p28.
16. Judith LEKWOT (2012). Some aspect of the biology of *Bricynus nurse* from Lake Alau Nigeria. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p27.
17. Hadisa Isa YAKUBU (2012). Production of Fish sauce from *Heterotis niloticus*. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p34.
18. Bukar Ibrahim MOHAMMED (2012). Effects of Sesame (*Sesamum indicus*) leaf on growth and survival of *Oreochromis niloticus* Fingerlings (Linnaeus, 1758). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p34.
19. Abdullahi ADAMU (2012). Evaluation of pawpaw (*Carica papaya*) leaf meal based diet on growth and survival of African catfish *Clarias gariepinus* (Burchell, 1822) fingerlings. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri.
20. Mohammed Zanna WUROMA (2013). Microbial Examination of smoked fish collected from two markets in Maiduguri. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri. p18.
21. Blessing Ngozi ONAH (2013). Studies on the Hematological parameters of some Cichlids caught from Lake Alau Maiduguri, Nigeria. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p30.
22. Purda JOHN (2013). Studies on the Sex Rration, Gonadosomatic Index and Fecundity of Culture *Clarias gariepinus* (Burchell, 1822). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p12.
23. Wanas Lalai NDIMBITA (2013). Sex reversal in Nite Tilapia *Oreochromis niloticus* (Linnaeus, 1758) Ram and Goat testes. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p 24.
24. Yagana AHMED (2013). Effects of different levels of Okro (*Abelmoschus esculentus* L. Moench) extract on floatability and Stability of pelleted fish feed. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p 17.
25. Godiya Udiga IBRAHIM (2013). Design, fabrication and evaluation of manual Soybean Toaster. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p21.
26. Abubakar Muhmmad WAZIRI (2013). Embryological Development of the African Catfish *Clarias gariepinus* (Burchell, 1822) in the Semi-arid zone of Nigeria. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p24.
27. Iyaussa Regina WACHAP (2013). Effect of nutmeg (*Monodora myristica*) powder on the control of *Demestes maculatus* larvae on smoked fish (*Clarias gareipius*) *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, 19.
28. Sanusi KABIR (2013). Studies on the blood indices and genotype of *Oreochromis niloticus* (Linnaeus, 1758). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p24.

29. Ibrahim Lawan DALORIMA (2013). Interspecific Hybridization between *Clarias gariepinus* and *Clarias anguillaris* in the semi-arid zone of Nigeria. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p18.
30. Hussaini MAHMOOD (2013). The effects of feeding graded level of Mucuna Beans (*Mucuna pruriens*) in the diet of *Clarias gariepinus fibgerlins*. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p19.
31. Alex MOMOH (2014). Effect of clove Seed Extract (*Sygzium aromatic*) as Anaesthesia on *Clarias gariepinus fingerlings*. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p23.
32. Tinaphine Chinyere NNOLI (2014). Effect of Graded Levels of *Moring oleifera* Leaf Meal on Growth and Survival of *Oreochromis niloticus* (Linneaus, 1758). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p31.
33. Ahmed Sarki ABUBAKAR (2014). The use of Clove seed extract as anaesthesia on Tilapia *Oreochromis niloticus* (Linneaus, 1758). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p21.
34. Asia HARUNA (2014). Control of Reproduction in Nile Tilapia (*Oreochromis niloticus* Lineansis 1758) Using Ram Testes. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri
35. Hellandendu Shillama JACOB (2014). Effect of Goat (*Capra hicus aeganus*) Testes on sex ration of Nile Tilapia (*Oreochromis niloticus* Lineansis) *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, 20
36. Azimazi Isa SULEIMAN (2014). Control of Reproduction in Nile Tilapia (*Oreochromis niloticus* Lineansis) Using bull (*Bos indicus*) Testes. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri. p19.
37. Raymond Elisha NYAKO (2015). Intergeneric Hybridization between *Clarias gariepinus* and *Heterobranchus longifilis* in Semi-arid zone of Nigeria. *Oreochromis niloticus* (Linneaus, 1758). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p21.
38. Al-Amin Maina ZUBAIRU (2016). Haemoglobin Polymorpshim in Nile Tilapia *Oreochromis niloticus* (Linneaus, 1758). And Red belly Tilapi (*Tilapia zilli*, Gervas 1848) *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p26.
39. Abubakar Bilal AHMED (2016). Haemoglobin Polymorphism in Wild (Lake Alau) And Cultured, *Clarias gariepinus* (Burchell, 1822) in Maiduguri. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p 27.
40. Aliyu HABIBU (2016). Morphological Variation of the Wild strains of the *Oreochromis niloticus* (Linneaus, 1758) caught from Lake Alau Borno State and Komadugu-Yobe River Basin, Yobe State. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri, p 24.
41. Felix EZE (2016). Effects of Wonderful kola on sex reversal of the Nile Tilapia *Oreochromis niloticus*. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri. p34.
42. Hamza IBRAHIM (2017). Effects of Graded Levels of *Fairdhabia albida* Leave Meal on Growth and Reproductive Indices of the Nile Tilapia (*Oreochromis niloticus* Linnaeus 1758). *B. Fisheries Project*. Department of Fisheries, University of Maiduguri.p50.
43. Ibrahim Umar MUHAMMED (2017). The Effect of Replacing Fishmeal with Goat (*Capra hircus aegarus*). Testes Meal on the Growth Performance of Nile Tilapia (*Oreochromis niloticus*, LINNAEUS 1758). *B. Fisheries Project*. Department of Fisheries, University of

- Maiduguri. p33.
44. Garba MBIDIFFU (2017). Condition Factor and Length-Weight Relationship of *Clarias gariepinus* (BURCHELL, 1822) Culture in Concrete Fish Ponds. *B. Fisheries Project*. Department of Fisheries, University of Maiduguri. p35.

15.0 WORKING EXPERIENCE OUT SIDE UNIVERSITY

- (a) Part-Time Lecturer Institute of Mangt., and Engineering Studies, Maiduguri: 2002–2006.
- (b) Asst. Director Adaptive Research (Fisheries), Borno state ADP, Maiduguri: 2002– 2003.
- (c) Part-Time Lecturer (Fisheries) Ramat Polytechnic Maiduguri: 2000– 2002.
- (d) Zonal Research Coord. Zone III, Kukawa, Borno state ADP, Maiduguri, 1998– 2002.
- (e) Subject matter Specialist (SMS) Fisheries, Borno state ADP, Maiduguri: 1992 – 1996.
- (f) Officer In-charge Fishing operation, M.A.N.R., Maiduguri: 1991– 1992.
- (g) Asst. Fisheries Supt. M.A.N.R., Maiduguri: 1991 1993
- (h) Asst. Fisheries Supt. M.A.N.R., Maiduguri: 1989-1990

16.0 COMMUNITY SERVICES

- (a) Service Provider, Fisheries and Aquaculture IFAD: 2006 to Date
- (b) Training of Fisher folks on Co-Fisheries Management in Lake Chad Basin: 2006
- (c) Development of local feed to fish farmer for NSPF/SSC farmer 2007 to date
- (d) Training fish farmers on fish pond construction and management 2006 to Date
- (e) Monthly Technical Review meeting in Fisheries and Aquaculture: Bauchi ADP. 2007- 2010
- (f) Service Provider, Aquaculture Fisheries II, Borno State: BOSADP/NFP: 2010 – Date
- (g) Training of small scale fish farmers on Fish Breeding: 2011 to Date

17.0 LIST PUBLICATIONS

17.1 Journal Publications

1. **Diyaware, M. Y.**, Haruna A.B. and Sule, O. D. (2007). Determination of dry carp pituitary extracts dosage for inducing *Clarias gariepinus* (Burchell, 1822) in the arid zone of Nigeria. *PAT*, 3(1):93-103.
2. **Diyaware, M. Y.**, Haruna A.B. and Sule, O.D. (2007). Determination of latency time using dry pituitary extract for *Clarias gariepinus* in the arid zone of Nigeria. *PAT*, 3(1):104 -111
3. Sule, O.D., Bello, M.M., and **Diyaware, M.Y.** (2007). Polyculture and fish yield in Rice-cum fish culture systems in Dadin Kowa Gombe, Nigeria. *Animal Research International*. 4(3):737-740.
4. **Diyaware, M. Y.**, Sule, O.D., and Abubakar, K.A. (2007). Integrated fish farming (IFF) system: As an alternative for sustainable fish production in Nigeria. *Nigerian Journal of Tropical Agriculture*, 9: 168-182.
5. **Diyaware, M. Y.** Modu, B. M. and Yakubu, U. P. (2009). Effect of different dietary protein levels on growth performance and feed utilization of hybrid catfish (*Heterobranchus bidorsalis* x *Clarias anguillaris*) fry in Northeast Nigeria. *African Journal of Biotechnology*, 8(16):3954-3957.
6. **M.Y. Diyaware**, Haruna, A.B. and K.A. Abubakar (2010). Growth and survival of hybrid fingerlings of *Clarias anguillaris* and *Heterobranchus bidorsalis* in North East Nigeria. *Journal of Arid Agriculture*, 19:24-30.

7. **Diyaware, M. Y.**, Haruna A.B. and Abubakar, K.A. (2010). Determination of testes regeneration period in African catfish (*Clarias anguillaris*) after milt (semen) collection through ablation. *Current Research journal of Biological Science*, 2(6):375-377.
8. **Diyaware, M. Y.**, Akang, U. J., Tagogo, T.A. and Bankole, N.O. (2011). Effect of different levels of alpha-tocopherol acetate on growth and fat composition *Clarias gariepinus* fingerlings. *International Journal for forestry and Environment*, 3(2):60-69.
9. **Diyaware, M.Y.**, Haruna, A.B. and Abubakar, K.A. (2012). Serum protein characterisation of intergeneric hybrids of *Clarias anguillaris* x *Heterobranchus bidorsalis* from semi-arid zone of Nigeria. *Journal. Microbiology and Biotechnology Research*, 2(1):70-77
Available on: <http://scholarsresearchlibrary.com/archive.html>
10. **Diyaware, M.Y.**, Kwaji, P.J. and Tagogo, T.A. (2012). Effects of *Garcinia kola* (Bitter cola) on milt quality of African catfish (*Clarias gariepinus*, Burchell 1822) *Journal of Agriculture and Environment*, 8(2):43-49.
11. Chukwu, J., **Diyaware, M. Y.** and Ude, E. F. (2012). Evaluation of Pawpaw (*Carica papaya*) seed for controlling reproduction in the Nile Tilapia (*Oreochromis niloticus*). *Journal of the Science of Agriculture, Food Technology, and Environment (JSAFE)*, 12(1):1-8.
12. **Diyaware, M.Y.**, A.B. Haruna and K.A. Abubakar (2013). Some Haematological parameters of Intergeneric Hybrid of African catfish (*Clarias anguillaris* x *Heterobranchus bidorsalis*) and their pure lines in North East Nigeria. *Journal of Fisheries and Aquatic Science*, 8(1):33-42.
Available on: <http://scialert.net/abstract/?doi=jfas.2012.33.42>
13. Gwary, M. M., Yekini, I. B. and **Diyaware, M.Y.** (2014) Value Chain Analysis of Fish Caught in Lake Alau, Borno State, Nigeria. *Nigerian Journal of Fisheries and Aquaculture*, 2(1): 15 – 23.
14. Biu, A.A., **Diyaware, M.Y.**, Yakaka, W. and Rita D.J. (2014). Incidence of Parasites of *Clarias gariepinus* (Burchell, 1822) Caught from Lake Alau, Maiduguri, Borno State, Nigeria. *Nigerian Journal of Fisheries and Aquaculture*, 2(1):74 – 80
15. Peter, K.J. and **Diyaware, M.Y.** (2014). The length- Weight Relationship, Condition Factor and Fecundity of *Clarias anguillaris* in Luhu Reservoir, Michika Local Government Area, Adamawa State, Nigeria. *Nigerian Journal of Fisheries and Aquaculture*, 2(2):1-5
16. Biu, A.A., **Diyaware, M.Y.**, Yakaka, W. and Joseph, E. (2014). Survey of Parasites Infesting the Nile Tilapia (*Oreochromis niloticus* Linnaeus, 1758) from Lake Alau, Maiduguri, Nigeria, *Nigerian Journal of Fisheries and Aquaculture*, 2(2):6-15.
17. L.U. Onyia, **M.Y. Diyaware**, K.G. Micheal, M. Musa and I.J. Ochokwu (2015). Comparison of Haematological Indices, Blood Group and Genotypes of *Clarias gariepinus* (Burchell, 1822) and *Clarias anguillaris* (Linnaeus, 1758). *Journal of Fisheries and Aquatic Science*, 10(5):392-399
<http://scialert.net/onlinefirst.php?issn=1816-4927>
18. **Diyaware, M.Y.**, Bokko, B.P. and Suleiman, S.B. (2015). Anaesthetic Effect of Clove Seed Extract on *Clarias gariepinus* (Burchell, 1822) Broodstock. *International Journal of Fisheries and Aquatic Sciences*, 4(2):30-34.
19. Onyia, L.U. and Ochokwu, I.J., **Diyaware, M.Y.** and Micheal, K.G. (2015). Effects of *Azanza garckeana* on Egg quality of African catfish *Clarias gariepinus* Burchell, 1822) Broodstock. *International Journal of Fisheries and Aquatic Sciences*, 4(2):35-39.
20. A. A. Akinwande, M. O. Awodiran and **M. Y. Diyaware** (2017). Selection Response and Heritability Estimate for Growth in the Giant African Catfish (*Heterobranchus bidorsalis*,

Geofroy Saint-Hilaire, 1809). *Trakia Journal of Science*, 15(1):60-66 www.uni-sz.bg, doi:10.15547/tjs.2017.01.010.

21. **A. A. Akinwande¹, M. O. Awodiran and M. Y. Diyaware** (2017). Selection Response and Heritability Estimate for Growth in the Giant African Catfish *Heterobranchus bidorsalis* Geoffroy Saint-Hilaire, 1809). *Trakia Journal of Sciences*, Vol. 15, No1, pp 60-66.

17.2 Conference Proceedings

22. **Diyaware, M.Y.**, Haruna A.B. and Abubakar, K.A. and Olufeagba, S.O. (2009). Embryogenesis of hybrid African catfish. *Proceedings of 33rd Annual conference of the Genetic society of Nigeria*, 27-30 September 2009, Ilorin, Nigeria.
23. **M.Y. Diyaware**, N.O. Bankole, F.C. Okoye and A.A. Madu (2010). Utilization of organic wastes for aquaculture: A review. *Proceeding of the 6th Annual conference of Organic Agriculture*, 22nd to 25th November 2010, Maiduguri.
24. Nyako, R. E. **Diyaware, M. Y.** and Suleiman, S. B. (2015). Hybridization between *Clarias gariepinus* (Burchell, 1822) and *Heterobranchus longifilis* (Valenciennes, 1840) in the semi-arid zone of Nigeria. *Proceedings of the 39 Annual conference of the genetic Society of Nigeria, 27th – 31st October, 2015 at A.T.B.U.Bauchi Nigeria*), 266-271
25. Onyia, L. U., Ochukwu, I. J. and **M. Y. Diyaware** (2015). Effects of *Azanza garckeana* palp meal on milt quality and hatchability on male *Clarias gariepinus* (Burchell, 1822) broodstock for fingerling production. *Proceedings of 39th Annual conference of the Genetic society of Nigeria, 27-31st September 2015, at ATBU, Bauchi, Nigeria* 248-251.
26. Onyia L.U., **Diyaware, M.Y.** Etab, S.O. and Ochukwu, I. J. (2015). Effects of different Natural extenders on sperm count, motility and fertility of *Clarias gariepinus* (Burchell, 1822) for enhancement of fingerling production. *Proceedings of 39th Annual conference of the Genetic society of Nigeria, 27-31st September 2015, at ATBU, Bauchi, Nigeria*, 252-254.
27. Z. B. Mohammed, **M. Y. Diyaware**, A. O. Raji and M. Aliyu (2016). Evaluation of Camel Testes for Masculinisation of Nile Tilapia (*Oreochromis niloticus* Linnaeus, 1758). *Proceedings of 31st Annual General Conference of the Fisheries Society of Nigeria (FISON) held on 30th October- 4th November 2016*. (In Press).

17.3 Seminar/Paper Presented

1. **Diyaware, M.Y.**, Ayansanyo, T.O. Aremu D. Iwanegbe, A.T. and Akpaniteaku, R.C. (2003). Status of Fisheries and Aquaculture in Nigeria. A paper presented at opening ceremony of the 2003 TCDC training on integrated fish farming at Asian Pacific Regional Research and Training Centre for Integrated Fish Farming, Wuxi, Jiangshu province, P.R.China. 14.
2. **Diyaware, M.Y.**, Benxing, Y., Mshelia, B.Y., Jun, J. Yu, J.Y. (2004). Integrated rice-cum fish farming in demonstration Kulolori, Maiduguri, Borno state, South-South cooperation final project report presented to NSPFS/SSC team at Borno state A.D.P.8p.
3. **Diyaware, M.Y.**, Benxing, Y., Mshelia, B.Y., Jun, J. Yu, J.Y. (2004). Integrated vegetable fish farming demonstration, Alau Lawanti, South-South cooperation final project report presented to NSPFS/SSC team at Borno state A.D.P.12p.
4. **Diyaware, M.Y.** (2006). Co-Fisheries Management for Lake Chad fishermen. *A paper presented at 2 Days workshop, Dabban Masara, Borno State Nigeria* 6p.

5. **Diyaware, M.Y.** (2007). Simple techniques for Fish fingerling production and Management. *A paper presented during training workshop conducted for Bauchi State A.D.P. 3rd to 7th December 2007. Maiduguri.*
6. **Diyaware, M.Y.** (2008). Fish feed formulation and production using locally available feed ingredients. *Paper presented at the Monthly technical review meeting of Gombe State Agricultural Development programme, 17th January 2008.*
7. **Diyaware, M.Y.** (2009). Fish fry and fingerling production and management. *A paper presented at Quarterly review meeting of Gombe State A.D.P, 5th-6th Gombe, January 2009.*
8. **Diyaware, M.Y.** (2012). Aquatic Flora and Flora of Lake Chad: Nigerian Section. Environmental impact assessment for the exploration of oil in the Lake Chad Basin Area. 196P.

18.0 RESEARCHES

18.1 On-going:

1. Genetic Diversity of Clariids fish from the North-East Nigeria.
2. Sex reversal in the Nile Tilapia using natural hormones.
3. Development of floating feed using locally available vegetables as binder/encapsulation.
4. Selective breeding of *Clarias gariepinus* from Lake Chad and Alau Maiduguri, Nigeria.
5. Haemoglobin polymorphism in wild and Cultured Fish species in the North east Nigeria (completed, sent for publication)

19.0 HOBBIES

Fishing, Sports (Badminton and Table Tennis), Travelling

20.0 REFEREES

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