



Name: Nattabi Juliet Kigongo

PhD in Aquaculture, Post graduate Diploma (Sustainable Aquaculture), MSc. Environmental Science and Technology, Certificate in Limnology, BSc. (Zoology, Psychology).

Lecturer

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She is involved in teaching of various courses on both the Zoology and Fisheries and Aquaculture programs and Msc Fisheries and Aquatic Science and B.Sc. Biotechnology program hosted by the Department of Botany, CONAS and B.Sc. External program hosted by CEES, The Department of Open & Distance Learning in the following subjects

1. BFA 1101 Introduction of fisheries science
2. ZOO 2106 Structure and function of vertebrates
3. ZOO 2108 Reproduction and developmental biology
4. ZOO 3108 Comparative animal histology
5. BFA 2102 Aquaculture systems
6. ZFA 7205 Aquaculture production & management
7. BFA 3207 Fish breeding and applied endocrinology
8. BFA 3209 Captive management of fresh water fishes
9. ZOO 3208 Comparative animal physiology
10. ZOX 4106 Hydrobiology
11. ZOX 3206 Fish biology and aquaculture
12. ZOX3108 Reproductive and development biology
13. ENR 2103 Vertebrate resources
14. BBT1205 Animal growth and development
15. BBT 1201 Basic animal physiology

Research Interests:

Nattabi Juliet Kigongo is an Aquatic Scientist with vast knowledge in the following areas in Limnology and wetland ecosystem management and environmental aspects as regards to water. She also has recently been engaged in Aquaculture (Farming of Fish) including indoor culture including Recirculation Aquaculture Systems (RAS), Tanks, fish hatchery management as well as outdoor culture systems including cage and pond culture. This vast experience has been attained through financial support from various international governments as Juliet is a beneficiary of the Austrian government scholarships through the Austrian Academy of Science on the limnology course in partnership with the Netherlands government through the

Netherland fellowship program (NFP) where she attained a Master of Environmental Science and Technology, <http://www.wau.boku.ac.at/ihg/arbeitsgruppen/ipgl-international-training-programmes-in-limnology/ipgl-master-theses/>, she is also pioneer United Nations University Fisheries Training Programme (UNU_FTP) Fellow on the sustainable aquaculture program of 2007 based in Iceland <http://www.unuftp.is/en/fellows/view/60>. She is also a Commonwealth scholar as she was supported by the Commonwealth scholarship 2010-2014.

My current research interest is fish feed nutrition for cultured fish vs. conservation of the aquatic ecosystems with special emphasis on the commercially exploited larval fish species whose requirements for proteins is high and the source of protein is usually from capture fish species whose stock is currently dwindling in Lake Victoria and in the global perspective as well fisheries have stabilized as is basis for my ongoing studies on larval African catfish. As part of her PhD Juliet has attained experience in the molecular biology techniques including DNA RNA extraction and quantification, PCR, qPCR analysis, Microarray analysis of transcript expression. Studies of larval fish digestive physiology at the molecular level will improve our capability to wean off larval catfish to micro diets early and also to help to provide an off-the-shelf diet leading to increased seed production, improved consistency in hatchery production and lower costs of production.

Research Activities:

- Was involved in a project Utilization of zooplankton culture as live food for hatchery-based Catfish seed production: A case study of *Branchionus* rotifers funded by the school of graduate studies Makerere University under Norad Competitive Research Proposals under the theme: Food, Nutrition and Value addition 2008-2009
- Was involved execution of a project titled "Clean water access and facilities in selected districts in Uganda a case of Mbale and Rakai districts (2004-2005) funded by i@mak with assistance from Carnegie corporation USA.

Outreach activities

- Carried out Interpretation services of English to Luganda for Ugandan in the UK diaspora from Uganda at the NHS, UK border Agency and Police in Glasgow/Edinburgh area from 2010 -2014.
- Carried out a one day Career development awareness for the STEM subjects in two secondary schools namely Kings college Budo on 2nd May 2018 and Namugoona Parents Senior Secondary School on 4th June 2018 as a personal initiative based on an observation of dwindling numbers in the College Natural Sciences especially my department over the last 10 years.

Publications

- Nattabi K. J;** Bron J. E, J. Ireland, and J. Taggart (Manuscript in preparation). Cloning and expression analysis of four digestive enzymes from (*Clarias gariepinus* Burchell 1822) during early development: Deciphering gastrointestinal functionality
- Nattabi K.J.;** Taggart J.; Bron J ..E, and J. Ireland (Manuscript in preparation). Gene expression of four named digestive enzymes during the larval development of North African catfish (*Clarias gariepinus*, Burchell 1822)
- Nattabi. K.J;** Taggart J.; Bron J.E, J. Taggart and J. Ireland (Manuscript in preparation). Microarray analysis of transcript expression during early larval development of African catfish, *Clarias gariepinus*
- Semyalo R., **Nattabi K.J** and P., Larsson (2009) Diel Vertical Migration of zooplankton in a eutrophic bay of Lake Victoria Primary Research Paper *Hydrobiologia* DOI 10.1007/s10750-009-9931-5 published by Springer Science
- Nattabi K.J.** (2008). Optimal Protein ratio for the growth of Farmed Arctic charr *Salvelinus alpinus* (www.unu-ftp.is).
- Akoll P., Mwanja W., **Nattabi K.J.**, Agoe C., Okoche J. and Isabirye D. Technical Guide on parasites of cultured tilapia and catfish in central Uganda (In prep.).
- Akoll P., Mwanja W., **Nattabi K.J.**, Agoe C., Okoche J. and Isabirye D. Survey of parasites of cultured tilapia and catfish in central Uganda (In prep.).
- Akoll P., **Nattabi K.J.**, Agoe C., Lumala B., Marialetizia F. and Gustinelli A. Endo-helminths of catfish from Lake Wamala (In prep.).
- Muyodi J. F. and **Nattabi K.J.** (2004). Aquaculture, Can integration of aquaculture and agro-farming meet the increasing demand for fisheries products? Environ-conserve, Africa.vol 12.
- Nattabi K.J.** (2002). Diurnal and vertical distribution patterns of *Rastrineobola argentea* in the offshore area of Murchison Bay Lake Victoria Uganda MSc. Thesis EST-02-22 IHE – Delft, The Netherlands.