

CURRICULUM VITAE



Name: Fathurrahman bin Lananan
IC number: 870831-13-5387
Date of birth: 31 August 1987
Marital status: Married
Nationality: Malaysian
Permanent address: No. 16, Lot 8234, Taman Demak Indah, 93050 Kuching, Sarawak.
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Writing level:

1. Bahasa Melayu : Excellent
2. English : Excellent

Speaking level:

1. Bahasa Melayu : Excellent
2. English : Excellent

Computer proficiency: Office processing (Word, Excel, PowerPoint, OriginLab, Minitab), Reference manager (Endnote, Mendeley), Computer Added Design (Autodesk AutoCAD, Autodesk 123D).

Educational qualifications:

- Current (Undergoing) Ph.D. in Environmental Technology
(Aquaculture System and Technology)
Universiti Malaysia Terengganu
- 2009 – 2010 Master in Aquaculture (Phytoplankton) CGPA 3.86
Universiti Malaysia Terengganu
- 2006 – 2009 Bachelor of Science with Honours (Resource Biotechnology) CGPA 3.45
Universiti Malaysia Sarawak
- 2005 – 2006 Matriculation (Life Science) CGPA 2.82
Kolej Matrikulasi Labuan
- 2000 – 2004 Secondary school (Science)
Kolej Datu Patinggi Abang Haji Abdillah, Kuching

Training / Experience:

- Bintawa Fish Research Centre, 93744 Kuching, Sarawak
Completed industrial training in Virology Laboratory for 2 months, 2010
"Rapid detection of White Spot Syndrome Virus, Taura Syndrome Virus, Yellow Head Virus and IHHNV using polymerase chain reaction technique on shrimp farms in Kuching District"
- Marine Fish Production and Research Centre Tanjong Demong, 22200 Kuala Terengganu, Terengganu
Completed industrial training in Marine Hatchery for 1 month, 2009
"Marine fish nursery in Cheap Efficient Nursery Tank System (CENTS)"
- Zoology Department, Sarawak State Museum and Turtle Board, 93566 Kuching, Sarawak
Completed industrial training in Zoology Laboratory and Pulau Talang-Talang Turtle Research and Conservation Centre for 3 months, 2008
"Taxidermy and specimen management"
"Turtle sanctuary sustainability management"

2015

Ph.D Research Project (Thesis Correction)

Project title: Integrated aquaculture incorporating Sea Bass, *Lates calcarifer* and wastewater phytoremediation utilizing microalgae, *Chlorella* sp.

Supervisor: Prof. Ir. Dr. Ahmad bin Jusoh (main), Prof. Dr. Nora'aini Ali, Dr. Nor Azman Kasan and Dr. Helena Khatoon.

- Maintenance of freshwater and marine finfish such as sea bass, grouper, tilapia and African catfish.
- Development and design of flow-through and recirculating aquaculture system incorporating fish tanks & raceways, aerobic & anaerobic bio-filters, sand filter, ozonator disinfection system, head tank, sump tank, sedimentation tank and hydroponic growth bed (constructed wetland).
- Development of novel aquaculture wastewater utilizing microalgae acting as bio-remediator and passive biodiesel precursor generation.

2010

M.Sc. Research Project

Project title: Effects of flashing light in cultivation of marine microalgae, *Chlorella* sp. utilizing airlift bioreactor

Supervisor: Prof. Ir. Dr. Ahmad bin Jusoh

- Isolation, selection, purification, cultivation and maintenance of several genera of marine phytoplankton from South China Sea.
- Maintenance and cultivation of freshwater and marine zooplankton such as copepods, artemia, rotifer and moina.
- Hydraulic dynamics determination of microalgae photobioreactor such as light exposure period, liquid circulation time and controlled aeration flow rate.

2009

B.Sc. Research Project

Project title: Utilization of Mieki as an alternative to yeast extract in ethanol fermentation

Supervisor: Prof. Dr. Kopli bin Bujang

- Ethanol fermentation utilizing yeast and yeast strains CSI (Japan) from commercial glucose and starch.
- Recovery of sago waste through controlled hydrolysis and saccharification utilizing enzyme-mediation process.

Publications:

- Nasir, N. M., Bakar, N. S. A., **Lananan, F.**, Hamid, S. H. A., Lam, S. S., & Jusoh, A. (2015). Treatment of African catfish, *Clarias gariepinus* wastewater utilizing phytoremediation of microalgae, *Chlorella* sp. with *Aspergillus niger* bio-harvesting. *Bioresource technology* (IN PRESS).
IF 2014: 5.039 (Q1)
- Bakar, N. S. A., Nasir, N. M., **Lananan, F.**, Hamid, S. H. A., Lam, S. S., & Jusoh, A. (2015). Optimization of C/N ratios for nutrient removal in aquaculture system culturing African catfish, (*Clarias gariepinus*) utilizing Bioflocs Technology. *International Biodeterioration & Biodegradation* (IN PRESS).
IF 2014: 2.235 (Q1)
- **Lananan, F.**, Hamid, S. H. A., Din, W. N. S., Khatoon, H., Jusoh, A., & Endut, A. (2014). Symbiotic bioremediation of aquaculture wastewater in reducing ammonia and phosphorus utilizing Effective Microorganism (EM-1) and microalgae (*Chlorella* sp.). *International Biodeterioration & Biodegradation*, 95, 127-134.
IF 2014: 2.235 (Q2)
- Hamid, S. H. A., **Lananan, F.**, Din, W. N. S., Lam, S. S., Khatoon, H., Endut, A., & Jusoh, A. (2014). Harvesting microalgae, *Chlorella* sp. by bio-flocculation of *Moringa oleifera* seed derivatives from aquaculture wastewater phytoremediation. *International Biodeterioration & Biodegradation*, 95, 270-275.
IF 2014: 2.235 (Q2)
- Khatoon, H., Rahman, N. A., Banerjee, S., Harun, N., Suleiman, S. S., Zakaria, N. H., **Lananan, F.**, Hamid, S.H.A. & Endut, A. (2014). Effects of different salinities and pH on the growth and proximate composition of *Nannochloropsis* sp. and *Tetraselmis* sp. isolated from South China Sea cultured under control and natural condition. *International Biodeterioration & Biodegradation*, 95, 11-18.
IF 2014: 2.235 (Q2)
- **Lananan, F.**, Jusoh, A., Lam, S. S., & Endut, A. (2013). Effect of Conway Medium and f/2 Medium on the growth of six genera of South China Sea marine microalgae. *Bioresource technology*, 141, 75-82.
IF 2013: 4.75 (Q1)
- **L. Fathurrahman**, A.H. Siti Hajar, D. Wan Nur Sakinah, Z. Nurhazwani, J. Ahmad. (2013). Flashing Light as Growth Stimulant in Cultivation of Green Microalgae, *Chlorella* sp. utilizing Airlift Photobioreactor. *Pakistan Journal of Biological Sciences* 16: 1517 - 1523.
IF 2013: 0.233 (Q3)
- J. Ahmad, **L. Fathurrahman**, A.H. Siti Hajar, (2013). Batch Phytoremediation of Aquaculture Wastewater of Silver Barramundi (*Lates calcarifer*) Utilizing Green

Microalgae, *Chlorella* sp.. *Journal of Fisheries and Aquatic Sciences* 8: 516 - 525.

IF 2013: 0.26 (Q3)

Research Conferences:

- **CESE 2014, Johor Bahru, Malaysia (12 - 16 October 2014).** Optimization of C/N Ratios for African Catfish, *Clarias gariepinus* Wastewater Treatment utilizing Bioflocs Technology.
- **CESE 2014, Johor Bahru, Malaysia (12 - 16 October 2014).** Flocculation of Microalgae Biomass Harvesting utilizing *Saccharomyces cerevisiae* and *Aspergillus niger*.
- **CESE 2014, Johor Bahru, Malaysia (12 - 16 October 2014).** Optimization of C/N Ratios for African Catfish, *Clarias gariepinus* Wastewater Treatment utilizing Bioflocs Technology.
- **CESE 2013, Daegu, Korea (29 October - 2 November 2013).** Harvesting Microalgae, *Chlorella* sp. by Bio-flocculation of *Moringa oleifera* Seed Derivatives from Aquaculture Wastewater Phytoremediation.
- **CESE 2013, Daegu, Korea (29 October - 2 November 2013).** Effects of different salinities and pH on the growth and proximate composition of *Nannochloropsis* sp. and *Tetraselmis* sp. Isolated from South China Sea cultured under control and natural condition.
- **UMTAS 2013, Kuala Terengganu, Malaysia (8 - 10 October 2013).** Zeta Potential Study of *Moringa oleifera* Seed Derivatives for Microalgae Biomass Bio-flocculation.
- **CESE 2011, Tainan City, Taiwan (25 - 30 September 2011).** Effects of Flashing Light in Cultivation of Marine Microalgae, *Chlorella* sp. utilizing Airlift Bioreactor.
- **CESE 2011, Tainan City, Taiwan (25 - 30 September 2011).** Batch Phytoremediation of Aquaculture Wastewater of Silver Barramundi, *Lates calcarifer*, utilizing Green Microalgae, *Chlorella* sp.
- **UMTAS 2011, Kuala Terengganu, Malaysia (11 - 13 July 2011).** Nutrient Removal from Aquaculture Wastewater of Silver Barramundi, *Lates calcarifer*, using Phytoremediation of Microalgae, *Chlorella* sp.

Award:

- **Silver Medal at 26th International Invention & Innovation Exhibition (21-23 May 2015), Kuala Lumpur Convention Centre, Malaysia.** In-situ Microalgae Harvesting Module (iMB). Azizah Endut, Engku Fadzli Hassan Syed Abdullah, Addy Putra MD Zulkifli, Siti Hajar Abdul Hamid, Fathurrahman Lananan, Hafizan Juahir

- **Gold Medal at Minggu Penyelidikan dan Pertandingan Inovasi 2015 (14-16 April 2015), Universiti Sultan Zainal Abidin, Malaysia.** In-situ Microalgae Harvesting Module (iMB). In-situ Microalgae Harvesting Module (iMB). Azizah Endut, Engku Fadzli Hassan Syed Abdullah, Addy Putra MD Zulkifli, Siti Hajar Abdul Hamid, Fathurrahman Lananan
- **Bronze Medal at Inovasi@UMT 2014 (7-10 June 2014), Universiti Malaysia Terengganu, Malaysia.** Aquaculture phytoremediation utilizing *Chlorella* sp. and biomass harvesting using *Ankistrodesmus* sp.. Fathurrahman Lananan, Siti Hajar Abdul Hamid, Ahmad Jusoh.

Research Talk & Workshop:

- **“CWA Workshop @ AKUATROP”** by Fathurrahman Lananan on 6 March 2014 organized by Institute of Tropical Aquaculture, Universiti Malaysia Terengganu.
- **“Univariate Statistics Workshop”** by Fathurrahman Lananan on 26 February 2014 organized by Institute of Tropical Aquaculture, Universiti Malaysia Terengganu.
- **“Crucial Writing Aids: Citation Manager, Graphing & Statistics”** by Fathurrahman Lananan on 18 April 2013 organized by Department of Fishery and Aquaculture, Faculty of Agrotechnology and Food Science, Universiti Malaysia Terengganu.
- **“Crucial Writing Aids Talk”** by Fathurrahman Lananan on 21 December 2012 at Multimedia Theatre, Department of Resource Biotechnology, Faculty of Resource Science and Technology, Universiti Malaysia Sarawak.
- **“Crucial Scientific Writing Aids: Citation Manager, Graphing and Statistical Analysis Software”** by Fathurrahman Lananan on 19 December 2012 at Seminar Room, Pusat Pengajian Pra Universiti (PPPU), Universiti Malaysia Sarawak.
- **“Citation Manager, Graphing and Statistical analysis Talk”** by Fathurrahman Lananan on 22 November 2012 at GIS Laboratory, Department of Marine Biology, Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.
- **“Lecture on Crucial Scientific Writing Aids: Citation Manager, Graphing & Statistical Analysis Software by Mr. Fathurrahman Lananan”** on 21 October 2012 organized by Institute of Tropical Aquaculture, Universiti Malaysia Terengganu.

Referee:

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