

FACULTY MEMBER ACADEMIC PROFILE

1. **Full name of the faculty member:** Dr. Jawahar Abraham T
2. **Designation:** Professor
3. **Specialisation:** Microbiology and Aquatic Animal Health
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5. Academic qualifications:

College/ university from which the degree was obtained	Abbreviation of the degree
Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu	Ph.D. (Microbiology)
College of Fisheries, University of Agricultural Sciences, Mangalore, Karnataka	M.F.Sc. in Industrial Fishery Technology
Fisheries College, Tamil Nadu Agriculture University, Tuticorin, Tamil Nadu	B.F.Sc

6. Positions held/ holding or Work Experience:

Institution	Post Held	Period of employment		Year	Month	Day
		From	To			
WBUAFS, Kolkata	Professor (Microbiology)	05.02.'06	Present*	11	6	25
WBUAFS, Kolkata	Reader (Microbiology)	05.02.'98	04.02.'06	8	0	0
FCRI, TANUVAS, Tuticorin	Asst. Professor (Microbiology)	05.02.'90	04.02.'98	8	0	0
KVK, TNAU/ TANUVAS, Kattuakkam	Asst. Professor (Fisheries)	29.07.'88	04.02.'90	1	6	7
			Total*	29	1	2

* As on 30.6.2017.

7. Membership of Learned Societies:

Society	Position
i. Society of Fishery Technologists, Cochin	Life member
ii. Inland Fisheries Society of India, CIFRI, Kolkata	Life Member
iii. West Bengal Science Forum, Kolkata	Life Member
iv. Network of Fish Pathologists, Lucknow	Member
v. Association of Microbiologists of India, New Delhi	Life Member
vi. Professional Fisheries Graduates Forum, Mumbai	Life Member
vii. Zoological Society of India, Bodh Gaya	Life Member
viii. Marine Sciences for Society, France	Member

8. **Patents: Patent submitted: 1175/KOL/2015** "Detection kit for *Aeromonas hydrophila* infection in fish" and met 19 Nov 2015 Published

9. Invited lectures delivered:

SL No.	Title of Lecture / Academic Session	Title of Conference / Seminar	Organized by
1	Immune effector and endocrine regulatory activities of <i>Pangasius pangasius</i> (Hamilton, 1822) as affected by <i>Edwardsiella tarda</i> challenge and temperature	International Satellite Symposium on Fish Immunology	ICAR-Central Inland Fisheries Research Institute, Barrackpore 9-11 June 2017.
2	Diseases in freshwater aquaculture with special reference to West Bengal, India	National Seminar on Fisheries and Aquaculture: Livelihood Security, Sustainability and Conservation	College of Fisheries, CAU, Lembuchera, Tripura 21-22 January 2016
3	Molecular characterization of <i>Argulus bengalensis</i> and <i>Argulus siamensis</i> infecting the aquacultured carps in West Bengal, India	International Conference on Aquatic Resources and Sustainable Management	Central Calcutta Science and Culture Organization for Youth and University of Calcutta, Kolkata 17-19 February, 2016
4	Status of shrimp farming and diseases in West Bengal – Challenges in sustainable development and strategies for health management	National Conference on Aquatic Animal Health and Management-2012 (NCAAHM-2012)	Faculty of Marine Sciences, Annamalai University, Parangipettai, Tamil Nadu 14-15 Sep. 2012
5	Climate change and pathogenicity of microorganisms	National Training on Microbial Risk Assessment in Fresh and Processed Aquafoods	Fisheries College and Research Institute, Tuticorin, Tamil Nadu March 2015
6	Fisheries Mandates of the Central Plan - Thrust areas of Fisheries research of the ICAR - Upcoming Programmes and Mandates	Research cum Extension Seminar	Fisheries College and Research Institute, Tuticorin, Tamil Nadu 13.9.13
7	Application of biosecurity in fisheries and aquaculture production systems	National Training on Biosecurity in Animal Health coupled with infectious and xenobiotic residues and mitigation.	Faculty of Veterinary and Animal Sciences, West Bengal University of Animal and Fishery Sciences, Kolkata December 2011

10. Awards:

2016	Best Teacher Award – 2016 of the West Bengal University of Animal and Fishery Sciences, Kolkata
2016	Best Teacher Award – 2016 (above 45 years category) of the Faculty of Fishery Sciences, West Bengal University of Animal and Fishery Sciences, Kolkata
2016	Best Parent Award – 2016 of the West Bengal University of Animal and Fishery Sciences, Kolkata
2015	Best Research Paper Award for a research article published in Aquaculture Times
2012	Dr. C.M. Singh Best Research Paper Award for a research article published in IAVMI Journal, 2010
2010	Best Research Paper Award in 'Fishery Science Section' of 17 th West Bengal State Science and Technology Congress
2010	National Science Day Award in recognition of contribution in the field of Scientific R & D in Fisheries by The Science Association of Bengal, Kolkata
2008	Best Poster Paper Award, International Seminar held at TANUVAS, Chennai
2003 – 2011	Best Teacher Award: 2003-2011, Certificate of Appreciation by the Professional Fisheries

	Graduates Forum, Mumbai, India
1997	Eureka Forbes Award for Best Scientific Research Paper
1995	Eureka Forbes Award for Best Scientific Research Paper
1993	Best Scientific Research Paper Award
1993	Best Poster Paper Award
1990	Young Scientist Award by AFSIB, College of Fisheries, Mangalore
1990	Senior Research Fellowship Award by ICAR, New Delhi
1986	Junior Research Fellowship Award by ICAR, New Delhi

11. Conference/ seminar attended:

Sl No.	Title of Conference / Seminar	Organized by
1	All India Congress of Zoology, International Symposium on Culture based fisheries in inland open waters	ICAR-Central Inland Fisheries Research Institute, Barrackpore
2	International Satellite Symposium on Fish immunology	ICAR-Central Inland Fisheries Research Institute, Barrackpore
3	International Symposium on Aquatic Animal Health and Epidemiology for Sustainable Asian Aquaculture	ICAR-National Bureau of Fish Genetic Resources, Lucknow
4	National Seminar on Priorities in Fisheries and Aquaculture (PFA 2017)	ICAR-Central Inland Fisheries Research Institute, Barrackpore and College of Fisheries, Odisha
5	Rusa Funded International level Seminar on Recent Trends in Microbiology	Department of Microbiology, Ramakrishna Mission Vidyamandira, Belur Math, Howrah
6	National Seminar on Enhancement of Livelihood Security through Sustainable Development of Livestock and Fishery Sector	West Bengal University of Animal and Fishery Sciences, Belgachia, Kolkata
7	1 st Regional Science and Technology Congress – 2016	Department of Science and Technology, Government of West Bengal
8	International Conference on Aquatic Resources and Sustainable Management	Central Calcutta Science and Culture Organization for Youth and University of Calcutta, Kolkata
9	National Seminar on Fisheries and Aquaculture: Livelihood Security, Sustainability and Conservation	College of Fisheries, Central Agricultural University, Lembuchera, Tripura
10	2 nd Asian Congress of Parasitology and 9 th Asian Conference on Ciliate Biology	Department of Zoology, University of Kalyani, Kalyani
11	10 th Indian Fisheries and Aquaculture Forum and 5 th Global Symposium in Aquaculture and Fisheries	National Bureau of Fish Genetic Resources, ICAR, Lucknow
12	International Conference on Host Pathogen Interactions (ICHPI-2014)	National Institute of Animal Biotechnology, Hyderabad
13	National Conference on Challenges in Biodiversity Conservation and Resource Management	Department of Zoology, University of Kalyani
14	24 th All India Congress of Zoology and National Seminar on Biodiversity and its Management for Food, Livelihood and Environmental Security	Kalyani University, Kalyani
15	National Conference on Aquatic Animal Health and Management-2012 (NCAAHM-2012)	Faculty of Marine Sciences, Annamalai University, Parangipettai, Tamil Nadu
16	National workshop on Research advances in fish vaccines and prophylactics (RAFVC 2011)	Fisheries College and Research Institute, TANUVAS, Tuticorin
17	Seminar on Emerging Researches in Biotechnology: Vision for 21 st Century	Indian Institute of Chemical Engineers, Kolkata
18	17 th West Bengal State Science and Technology Congress	W.B. University of Animal and Fishery Sciences campus, Belgachia, Kolkata
19	35 th Annual Meeting the Indian Immunology Society	Institute of Life sciences (ILS), Bhubaneswar
20	All India Seminar on Recent trends in processing and marketing of fishery and horticulture products	The Institution of Engineers (India) West Bengal State Center, Kolkata
21	31 st Meeting of Indian Immunology Society	Institute of Life Sciences (DBT), Bhubaneswar

22	Eight Indian Fisheries Forum	ICAR-CIFRI, Kolkata
23	International Conference on Emerging Infectious Diseases of Animals and Biotechnological Applications	Madras Veterinary College, TANUVAS, Chennai,
24	National Workshop on Sustain Aqua 2007	Agriculture and Food Engineering Department, IIT, Kharagpur
25	National Seminar on Prospects of Ornamental Fish Breeding and Culture in Eastern and North-Eastern India	ICAR-CIFE, Kolkata
26	National Workshop on Professional Fisheries Education in India	College of Fisheries, Mangalore
27	National Seminar on Marine Diversity as a Source of Food and Medicine	S.D. Marine Research Institute, Tuticorin
28	National Conference on Aquaculture and Steps to Maintain High Production	WBUAFS, Calcutta
29	National. Symposium on Finfish and Shellfish Farming: Environment Impact, Disease and Control	University of Calcutta, Calcutta

12. Other notable activities:

Completed research projects

- ✓ **Principal Investigator**, Indian Council of Agricultural Research, New Delhi funded scheme, *Use of probiotics in freshwater aquaculture*, Rs. 12.726 lakh, 2001-2004
- ✓ **Principal Investigator**, National Agricultural Technology Project, ICAR, New Delhi funded scheme *Shrimp and fish health management* Rs. 22.0 lakh, 1999-05.
- ✓ **Co-Investigator**, Indian Council of Agricultural Research, New Delhi funded scheme, *Application of Probiotics in Aquaculture Nutrition*, 2003-2006
- ✓ **Co-Investigator**, Department of Science and Technology, Government of West Bengal funded scheme, *Determination of threatened status and cytological characteristics of fish species in Nadia and Howrah districts, West Bengal*, Rs. 3.9 lakh 2001-2003
- ✓ **Co-Investigator**, Department of Food Processing Industries, Government of India funded scheme, *Value addition of underutilized marine fishes of West Bengal*, Rs. 33.41 lakh, 2001-2004
- ✓ **Co-Investigator**, ICAR, New Delhi funded scheme, *Elucidation of food safety issues related to fish-borne parasites of zoonotic potential in aquaculture produce* Rs. 8.34 lakh, 2002-2005
- ✓ **Co-Investigator**, Department of Science and Technology, Government of West Bengal funded scheme on *Development of simple diagnostic kit for motile aeromonads in freshwater fish*, Rs. 2.95 lakh, 2005-2006
- ✓ **Investigator in-charge**, ICAR New Delhi funded Scheme on '*Design and development of responsible trawl for pomfret fishery along the northeast coast of India*'. Rs.15.67 Lakhs, 2004-2007
- ✓ **Co-Investigator**, *Characterization of immune effector cells in Indian major and minor carps*: DBT, GOI, Rs. 12.00 lakhs, 2008 - 2011
- ✓ **Co-Investigator**, ICAR New Delhi funded Scheme on "*Fish seed production*". Rs. 25.00 lakhs, 2006 - 2011
- ✓ **Principal Investigator**, Niche Area of Excellence programme on "*Surveillance of diseases of aquacultured finfish and shellfish in West Bengal and development of disease management strategies*", ICAR, New Delhi, Rs. 488.9 lakhs; 23.3.12-31.3.2016

On-going research projects

- ✓ **Principal Investigator**, *All India Network Project on Fish Health* in collaboration with ICAR- Central Institute of Brackishwater Aquaculture, Chennai, Rs. 58.50 lakhs
- ✓ **Co-Investigator**, NFDB funded Project on "*National Surveillance Programme on Aquatic Animal Diseases*" in collaboration with National Bureau of Fish Genetic Resources, ICAR, Lucknow, Rs. 76.43 lakhs

13. Publications:

Papers published in Journals

- 1 **Abraham, T.J.**, Sarker, S., Dash, D., Patra, A. and Adikesavalu, H. 2017. *Chryseobacterium* sp. PLI₂ and *Aeromonas hydrophila* co-infection in pacu, *Piaractus brachypomus* (Cuvier, 1817) fries cultured in West Bengal, India. *Aquaculture*, **473**: 223-227. <http://dx.doi.org/10.1016/j.aquaculture.2017.02.016>
- 2 Julinta, R.B., **Abraham, T.J.**, Roy, A., Singha, J., Dash, G., Nagesh, T.S. and Patil, P.K., 2017. Histopathology and wound healing in oxytetracycline treated *Oreochromis niloticus* (L.) against *Aeromonas hydrophila* intramuscular challenge. *Journal of Aquaculture Research and Development*, 8: 4 DOI: 10.4172/2155-9546.1000488
- 3 David, M., **Abraham, T.J.**, Nagesh, T.S. and Adikesavalu, H., 2017. Immunomodulatory effect of Guavarine®, aqueous guava leaf extract, on ornamental koi carp *Cyprinus carpio* var. *koi* L. 1758. *Journal of Applied Aquaculture* (Accepted).
- 4 **Abraham T.J.**, Hoque F., Das A., and Nagesh T.S., 2017. Effect of culture conditions on the levels of serum insulin-like growth factor-1 in Indian major carps, *International Journal of Aquaculture*, 7(10): 71-78
- 5 Julinta, R.B., Roy, A., Singha, A., **Abraham, T.J.**, and Patil, P.K. 2017. Evaluation of efficacy of oxytetracycline oral and bath therapies in Nile tilapia, *Oreochromis niloticus* against *Aeromonas hydrophila* infection. *International Journal of Current Microbiology and Applied Sciences*, 6(7): 62-76. DOI: <https://doi.org/10.20546/ijcmas.2017.607.008>
- 6 Sarker, S., **Abraham, T.J.**, Banerjee, S., Adikesavalu, H., Patra, A., 2017. Characterization, virulence and pathology of *Flavobacterium* sp. KG3 associated with gill rot in carp, *Catla catla* (Ham.). *Aquaculture*, **468**: 579–584. <http://dx.doi.org/10.1016/j.aquaculture.2016.11.024>
- 7 Banerjee, S., Patra, A., Mondal, A., Adikesavalu, A., Ramudu, K.R., Dash, G., Joardar, S.N. and **Abraham, T.J.** 2017. Molecular characterization of *Myxobolus catmrigalae* (Myxosporea: Myxobolidae) infecting the gill lamellae of carp *Cirrhinus mrigala* (Hamilton). *Journal of Parasitic Diseases*, 41(1):62–70. DOI 10.1007/s12639-016-0750-0
- 8 Ahmad, T., Sanyal, K.B., Mukherjee, D., **Abraham, T.J.** and Dash, G., 2017. Detection of white spot virus (WSV) in *Litopenaeus vannamei* from shrimp aquaculture farms in East Midnapore district, West Bengal (India). *International Journal of Fisheries and Aquatic Studies* 2017; 5(2): 201-205.
- 9 Chakravarty, S., Ritu-Ranjan and **Abraham, T.J.** 2017. Anti-*Edwardsiella tarda* activity of aqueous garlic *Allium sativum* (L.) extract in vitro. *Ecology, Environment and Conservation* (Accepted).
- 10 Renganathan, R., Dora, K.C., Sarker, S., Supratim, C., **Abraham T.J.** and Harresh, A.H.M., 2017. Preventing quality deterioration in shrimps. *Aqua International*, January 2017: 58-60.
- 11 **Abraham, T.J.** 2016. Transferable chloramphenicol resistance determinant in luminous *Vibrio harveyi* from penaeid shrimp *Penaeus monodon* larvae. *Journal of Fisheries*, **4**(3): 428-430. DOI: 10.17017/jfish.v4i3.2016.164
- 12 **Abraham, T.J.**, Mondal, S. and Babu, C.H.S. 2016. Effect of dietary supplementation of commercial aquaculture probiotic consortia and fish gut antagonistic bacteria on the growth and disease resistance of ornamental fish *Carassius auratus* and *Xiphophorus helleri*. *Indian Journal of Animal Health*, **55**(2): 129-136
- 13 Adikesavalu, H., Paul, P., Joardar, S.N. and **Abraham, T.J.** 2016. Polypeptide profiling of pangas catfish (*Pangasius pangasius*) serum globulin protein fraction and development of anti-pangas serum globulin-HRPO immunoconjugate for rapid detection of bacterial infection. *Journal of Aquaculture Research and Development*, **7**(11): 458. DOI: 10.4172/2155-9546.1000458
- 14 Patra, A., Sarker, S., Banerjee, S., Adikesavalu, H., Biswas, D. and **Abraham, T.J.** 2016. Rapid detection of *Flavobacterium columnare* infection in fish by species-specific polymerase chain reaction. *Journal of Aquaculture Research and Development*, **7**: 445. doi: 10.4172/2155-9546.1000445
- 15 Sahoo, P.K., Swaminathan, T.R., **Abraham, T.J.**, Kumar, R., Pattanayaka, S., Mohapatra, A., Ratha, S.S., Patra, A., Adikesavalu, H., Sood, N., Pradhan, P.K., Das, B.K., Jayasankar, P. and Jena, J.K. 2016. Detection of goldfish haematopoietic necrosis herpes virus (Cyprinid herpesvirus-2) with multi-drug resistant *Aeromonas hydrophila* infection in goldfish: First evidence of any viral disease outbreak in ornamental freshwater aquaculture farms in India. *Acta Tropica* **161**: 8–17.
- 16 Adikesavalu, H., Paul, P., Priyadarsani, L., Banerjee, S., Joardar, S.N. and **Abraham, T.J.** 2016. *Edwardsiella tarda* induces dynamic changes in immune effector activities and endocrine network of *Pangasius pangasius* (Hamilton, 1822). *Aquaculture*, **462**: 24–29.

- 17 **Abraham, T.J.**, Paul, P., Adikesavalu, H., Patra, A. and Banerjee, S., 2016. *Stenotrophomonas maltophilia* as an opportunistic pathogen in cultured African catfish, *Clarias gariepinus* (Burchell, 1822). *Aquaculture*, **450**: 168–172.
- 18 **Abraham, T.J.** and Adikesavalu, H. 2016. Association of *Stenotrophomonas maltophilia* in African catfish, *Clarias gariepinus* (Burchell, 1822) fry mortalities with dropsy. *International Journal of Aquaculture*, **6**(13): 1-5
- 19 **Abraham, T.J.** and Adikesavalu, H. 2016. Association of *Stenotrophomonas maltophilia* in African catfish, *Clarias gariepinus* (Burchell, 1822) fry mortalities with dropsy. *Shuisheng Shengwu Yanjiu*, **5**, 1-5. (In Chinese).
- 20 Devi, T. B., **Abraham, T.J.** and Kamilya, D. 2016. Susceptibility and pathological consequences of catla, *Catla catla* (Hamilton) experimentally infected with *Edwardsiella tarda*. *Archives of Polish Fisheries* **24**: 209-217. DOI 10.1515/aopf-2016-0018
- 21 Kumar, P. Adikesavalu, H. and **Abraham, T.J.**, 2016. Prevalence of *Edwardsiella tarda* in commercially important finfish and shellfish of Bihar and West Bengal, India. *Journal of Coastal Life Medicine*, **4**(1): 30-35. doi: 10.12980/jclm.4.2016apjtd-2014-0184.
- 22 Rani, S, Nagesh, T.S., Dash, G. and **Abraham, T.J.** 2016. Haematological response of *Labeo rohita* (Hamilton) fingerlings exposed to low salinities. *Indian Journal of Fisheries*, **63**(2): 127-131.
- 23 Patra, A., Mondal, A., Banerjee, S., Adikesavalu, H., Joardar, S.N. and **Abraham, T.J.**, 2016. Molecular characterization of *Argulus bengalensis* and *Argulus siamensis* (Crustacea: Argulidae) infecting the cultured carps in West Bengal, India using 18S rRNA gene sequences. *Molecular Biology Research Communications*, **5**(3): 147-157.
- 24 Sarker, S., Patra, A., Adikesavalu, A. and **Abraham, T.J.**, 2016. Flavobacteriosis in cultured freshwater ornamental telescopic eye goldfish *Carassius auratus*. *International Journal of Current Microbiology and Applied Sciences*, **5**(4): 39-46.
- 25 Priyadarsani, L. and **Abraham, T.J.**, 2016. Water and sediment quality characteristics of medium saline traditional shrimp culture system (*bheri*). *Journal of Fisheries* **4**(1): 309-318. DOI: dx.doi.org/10.17017/jfish.v4i1.2016.81.
- 26 Joardar, S.N., **Abraham, T.J.** and Mandal, N. 2015 Indian major carp *Cirrhinus mrigala* (Hamilton, 1822) inoculated with live *Aeromonas hydrophila* shows dynamic changes in specific immune-cellular activities. *Journal of Immunology and Immunopathology*, **17**(1): 25-30.
- 27 Paul, P., Adikesavalu, H., Banerjee, S., and **Abraham, T.J.** 2015. Antibiotic resistant motile aeromonads induced septicemia in Philippine catfish *Clarias batrachus* (L) fingerlings. *Croatian Journal of Fisheries*, **73**(4): 170-175. <http://dx.doi.org/10.14798/73.4.844>
- 28 **Abraham, T.J.**, Mallick, P.K., Adikesavalu, H., Banerjee, S. 2015. Pathology of *Edwardsiella tarda* infection in African catfish *Clarias gariepinus* (Burchell 1822) fingerlings. *Archives of Polish Fisheries*, **23**: 141-148. DOI 10.1515/aopf-2015-0016
- 29 Mukherjee, I. and **Abraham, T.J.** 2015. Diseases and therapeutics of cultured ornamental fish in selected districts of West Bengal. *Aquaculture Times*, **1**(2): 15-20.
- 30 Banerjee, S., Dash, G. and **Abraham, T.J.** 2015. Histopathology of gill myxosporean infection in cultured Indian major and minor carps, West Bengal, India. *Journal of Applied Ichthyology*, **31**(6): 1137-1141; DOI: 10.1111/jai.12917
- 31 **Abraham, T.J.** and Ritu, R., 2015. Effects of dietary supplementation of garlic (*Allium sativum*) extract on the resistance of *Clarias gariepinus* against *Edwardsiella tarda* infection. *Iranian Journal of Fisheries Sciences*, **14**(3): 719-733.
- 32 Chitra-Pakhira, Nagesh, T.S., **Abraham, T.J.**, Dash, G. and Behera, S. 2015. Stress responses in rohu, *Labeo rohita* transported at different densities. *Aquaculture Reports*, **2**: 39-45.
- 33 **Abraham, T.J.**, Ghosh, S. and Sasmal, D., 2015. Assessment of nitrogen and sulphur cycle bacteria and shrimp production in ponds treated with biological products. *Journal of Coastal Life Medicine*, **3**(6): 466-470.
- 34 Banerjee, S., Patra, A., Adikesavalu, H., Mondal, A. and **Abraham, T.J.**, 2015. The phylogenetic position of *Myxobolus carnaticus* (Myxozoa, Myxosporea, Bivalvulida) infecting gill lamellae of *Cirrhinus mrigala* (Hamilton, 1822) based on 18S rRNA sequence analysis. *Molecular Biology Research Communications*, **4**(3): 125-132.
- 35 Banerjee, S., Patra, A., Adikesavalu, H., Joardar, S.N. and **Abraham, T.J.**, 2015. Molecular and phylogenetic characterization of *Thelohanellus qadrii* (Myxozoa, Myxosporea: Bivalvulida) infecting the secondary gill epithelium of Indian major carp *Catla catla* (Hamilton, 1822). *Molecular Biology Research Communications*, **4**(2): 83-91.

- 36 Adikesavalu, H., Patra, A., Banerjee, S., Sarkar, A. and **Abraham, T.J.**, 2015. Phenotypic and molecular characterization and pathology of *Flectobacillus roseus* causing flectobacillosis in captive held carp *Labeo rohita* (Ham.) fingerlings. *Aquaculture*, **439**: 60-65. doi:10.1016/j.aquaculture.2014.12.036
- 37 Bharathkumar, G. and **Abraham, T.J.**, 2015. Oxytetracycline resistance bacteria in *Clarias gariepinus* and *Clarias batrachus* larvae and the environment. *Journal of Fisheries*, **3**(1): 217-220. DOI: dx.doi.org/10.1707/jfish.v3i1.2015.48.
- 38 **Abraham, T.J.**, Banerjee, S., Patra, A., Sarkar, A., Adikesavalu, H. and Dash, G., 2015. Molecular phylogeny of *Myxobolus orissae* (Myxosporea: Myxobolidae) infecting the gill lamellae of mrigal carp *Cirrhinus mrigala* (Actinopterygii: Cyprinidae). *Molecular Biology Research Communications*, **4**(1): 15-24.
- 39 **Abraham, T.J.** and Banerjee, S., 2015. Gill myxoboliasis in Indian carps. *Aqua Star*, May 2015: 48 and 51.
- 40 Adikesavalu, H., Kumar, P., **Abraham, T.J.**, and Uma, A., 2015. Minimal bactericidal concentration of sanitizers against *Edwardsiella tarda* strains isolated from African catfish *Clarias gariepinus*. *Journal of Marine Biosciences*, **1**(1): 5-10.
- 41 Alam, Sk. S., Joardar, S.N., Panigrahi, A.K., **Abraham, T.J.**, Mukherjee, S. and Mukherjee, A., 2014. Immunobiochemical characteristics of purified native leptin protein from Indian major carp, rohu (*Labeo rohita* Ham.). *Open Journal of Immunology*, **4**: 139-147. <http://dx.doi.org/10.4236/oji.2014.44016>
- 42 Joardar, S.N., **Abraham, T.J.** and Mandal, N. 2014. Indian minor carp *Labeo bata* (Ham.) elicits more cellular immune effector activities than India major carp *Labeo rohita* (Ham.) and *Catla catla* (Ham.). *Indian Journal of Animal Health*, **53**(1): 9-14.
- 43 Rajesh, S.C., Banerjee, S., Patra, A., Dash, G. and **Abraham, T.J.** 2014. Molecular characterization of *Myxobolus cuttacki* (Myxozoa, Myxosporea, Bivalvulida) infecting gill lamellae of minor carp *Labeo bata* (Ham.). *Molecular Biology Research Communications*, **3**(4): 231-239.
- 44 Mondal, A., Banerjee, S., Patra, A., Adikesavalu, H., Ramudu K.R., Dash, G., Joardar, S.N. and **Abraham, T.J.** 2014. Molecular and morphometric characterization of *Thelohanellus caudatus* (Myxosporea: Myxobolidae) infecting the caudal fin of *Labeo rohita* (Hamilton). *Protistology*, **8**(2): 41-52.
- 45 Ezung, R. and **Abraham, T.J.** 2014. Assessment of bacterial contamination and antibiotic resistance patterns among *Escherichia coli* in finfishes of Kolkata, India. *Fishery Technology*, **51**: 199-206.
- 46 Dash, G., Sharma, B.B., Rajesh, S.C. and **Abraham, T.J.** 2014. Parasitic study of *Labeo bata* (Hamilton, 1822) in selected districts of West Bengal, India. *International Journal of Advanced Biotechnology and Research*, **5**(3): 313-324.
- 47 **Abraham, T. J.** 2014. Effect of polyculture of shrimp with fish on luminous bacterial growth in grow-out pond water and sediment. *Journal of Coastal Life Medicine*, **2**(6): 451-454.
- 48 Adikesavalu, A., Patra, A., Mondal, A. Banerjee, S. and **Abraham, T.J.** 2014. Association of *Aeromonas salmonicida* subsp. *achromogenes* in the haemorrhagic blister of cultured carp *Cyprinus carpio* in West Bengal, India. *Asian Pacific Journal of Tropical Disease*, **4** (Suppl 1): S500 – S504.
- 49 **Abraham, T. J.** and Sasmal, D. 2014. Multiple antibiotic resistance in planktonic luminous bacteria of Indian penaeid shrimp farms. *Journal of Scientific Research*, **6**(1): 153-159.
- 50 Bharadwaj, A., **Abraham, T.J** and Joardar, S. N. 2013. Immune effector activities in challenged rohu, *Labeo rohita* after vaccinating with *Aeromonas* bacterin. *Aquaculture*, **392-395**: 16-22.
- 51 Priyadarsani, L. and **Abraham, T. J.** 2013. Ecology of antibiotic resistant vibrios in traditional shrimp farming system (*bhery*) of West Bengal, India. *Journal of Coastal Life Medicine*, **1**(4): 267-274.
- 52 Bharathkumar, G. and **Abraham, T. J.** 2013. Prevalence of transferable oxytetracycline resistance factors in *Aeromonas hydrophila* in fish hatcheries. *Fishery Technology*, **50**: 324-330.
- 53 Ramudu, K. R., Dash, G. and **Abraham, T. J.** 2013. Parasitic study of *Cirrhinus mrigala* (Hamilton, 1822) in selected districts of West Bengal, India. *International Journal of Advanced Biotechnology and Research*, **4**(4): 419-436.
- 54 Ezung, R. and **Abraham, T. J.** 2013. Sensory and microbial quality of retail finfish with emphasis on antibiotic-resistant bacteria. *Journal of Aquatic Food Product Technology*, **22**(5): 474-486.
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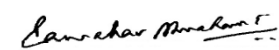
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3	Fish diseases and their management (Bengali) (2015)	T. J. Abraham and others
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5	Training manual on Advances in fish and shrimp health management (English) (2016)	G. Dash, T. J. Abraham, Mukherjee, D and Sanyal, K.B.
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