

1. Name : Dr. M. C. John Milton



2. Mailing Address (Indicate Telephone, Fax, E-mail, etc.)

Room. No. JS 05, PG & Research Department of Advanced Zoology and Biotechnology, Loyola College (Autonomous), Nungambakkam, Chennai 600 034.

Ph : 044 – 28175662 Ext 368 Res : 044-22331056

Fax : 044 – 28175566

Mobile : 09840762382

drjohnmilton@gmail.com

drmcjohnmilton@yahoo.com

3. Date of Birth and Gender : 10.07.1973, Male

4. Educational Qualifications (Starting from Graduation onwards):

S.No.	Degree	University	Year	Subjects
1.	B. Sc	Madras	1993	Zoology
2.	M. Sc	Madras	1995	Zoology
3.	M. Phil	Madras	1996	Zoology
4.	Ph. D	Madras	2000	Zoology
5.	D.C.A	Madras	1995	Zoology

5. Details of professional training and research experience, specifying period.

1. Five years of Research Experience in the field of Aquatic Entomology and Pest control 1996-2000.
2. Research Associate in the Ministry of Environment and Forests, Govt. of India sponsored All India Coordinated Project on “Survey and Inventorization of Marine Biodiversity on East Coast of India”, conducted by Marine Biological Station,

Zoological Survey of India, Chennai 600 028 under the headship of Dr. K. Venkataraman, Deputy Director, Zoological Survey of India (2001-03).

3. Conducted inventorization survey of Marine faunal resources along the east coast of India for three years (2001-03).
4. PADI licensed Open water SCUBA Diver, 2003

6. Details of employment (past & present).

1. Research Associate in the Ministry of Environment and Forests, Govt. of India sponsored All India Coordinated Project on “Survey and Inventorization of Marine Biodiversity on East Coast of India”, conducted by Marine Biological Station, Zoological Survey of India, Chennai 600 028 (2001-03)
2. Lecturer in Zoology (Management), PG & Research Department of Advanced Zoology and Biotechnology, Loyola College, Chennai 600 034 from 16th June, 2003 to 18th September, 2006.
3. Lecturer in Zoology (Govt. Aided), PG & Research Department of Advanced Zoology and Biotechnology, Loyola College, Chennai 600 034 since 19th September, 2006 (till date).

7. Ph.Ds guided

1. Rajkumar, J. S. I 2011. Ecological risk assessment of Ennore creek to develop safety limits for Cu, Cd, Pb and Zn with *Mugil cephalus* (Linn.), *Perna viridis* (Linn.) and *Penaeus monodon* (Fabr.). University of Madras.
2. Utiralingam, M 2012. Molecular Genetic Analysis of RAF1 in Health and Diseases. University of Madras.
3. Azhaguraj, R 2013. Studies on animal associates, trace metal content and biopotentials of the marine alga *Chaetomorpha aerea* (Dillwyn) Kutzing.
4. Justin Zenith Kumar, G 2013. Assessment of persistent organochlorine pesticides in and around Pallikaranai swamp, Chennai, Tamil Nadu, India.

8. No. of M. Phil guided : 12

9. Publications

(i) Books

1. Venkataraman. K., M.C. John Milton and K.P. Raghuram, 2003. Hand Book on Sharks of Indian waters: Diversity, Fishery status, Trade and Conservation. *Zool. Sur. India*. pp 113.
2. Venkataraman. K and M.C. John Milton, 2003. Hand Book on Marine Turtles of India : Resources, Exploitation and conservation, *Zoological Survey of India*, 86 pp.

(ii) Chapters in Books

1. Nithyanandan. M., A. Gokul., B. Ashok kumar, M.C. John Milton, C. Suresh kumar, K. P. Raghuram and K. Venkataraman, 2003. Collection and Preservation of Marine Invertebrates. *Training Mannual on Marine Faunal Diversity of India*, Marine Biological Station, Zoological Survey of India. pp. 35-69.
2. John Milton, M.C, 2003. Marine Turtles of India. *Training Manual on Marine Faunal Diversity of India*, Marine Biological Station, Zoological Survey of India. Pp. 361-381.
3. John Milton, M.C and K. Venkataraman, 2006. Marine Turtle Resources of India [in] Biodiversity : Life to our mother earth (ed.) S. John William, Loyola College, 126 – 134.
4. Venkataraman, K., M. C. John Milton and J. J. Arockia Rita, 2008. Anthropogenic threats to marine biodiversity of India with special reference to marine turtles of Gulf of Mannar Biosphere Reserve. (in) Biodiversity Conservation in Gulf of Mannar Biosphere Reserve (ed) Dr. S. Kannaiyan and Dr. K. Venkataraman, National Biodiversity Authority (NBA), Chennai. 324-338.

(iii) Training Manuals produced

1. Training manual of GIS and Marine Biodiversity, 2008
2. Training Manual on Modern Approaches to Research Methodology, Electronic Research tools, e-content and Biotechnological tools for Biodiversity Conservation, 2009
3. Perspectives of Animal taxonomy and systematics, 2011

4. Training Manual on Methods and Protocols for Practical Biotechnology, 2011.
5. Training Manual on Bioinformatics and Computational Biology, 2012.
6. Training Manual on Molecular Dynamics Simulations, Cheminformatics and Drug Designing, 2013.
7. Training Manual on Databases, Tools and Techniques for *in silico* Drug Designing, 2014

(iv) Papers

1. **John Milton, M.C.** 1999. Role of fixative on the egg capsule of the aquatic belostomatid bug, *Diplonychus indicus* venk. & Rao (Hemiptera : Belostomatidae). J.Ent. Res., 23 (1) : 35-40.
2. **John Milton, M.C.** . and P. Venkatesan , 1999. Impact of sex, food and reproductive activity on the protine composition of different tissues of the water bug, *Diplonychus indicus* Venk. & Rao (Hemiptera : Belostomatidae). J. Ent. Res., 23 (2) : 121-126.
3. **John Milton, M.C.** and P .Venkatesan , 2002. Tolerance limit of nontarget organism, *Diplonychus rusticus* exposed to mosquito larvicide and adulticide. J. Ent. Res., 26 (3) : 207-214.
4. **John Milton M.C.** and P. Venkatesan, 2004. Effect of pesticides on the characterization of protein pattern in the tissues of the water bug *Diplonychus rusticus* (fabr.) (Hemiptera : Belostomatidae). J. Ecophysiol 791-2) : 11-16.
5. **John Milton M.C.** 2005. Quantitative variations in the biochemical properties of the eggs of the mosquito control agent *Diplonychus rusticus* (Fabr.) (Hemiptera : Belostomatidae) exposed to mosquito larvicide and adulticide. J. Adv. Zool 26(2) : 76-82.
6. **John Milton M.C.** 2005. Mosquito larvicide and adulticide induced quantitative variations in the biochemical properties of the haemolymph of the mosquito control agent *Diplonychus rusticus* (Fabr.) (Hemiptera : Belostomatidae). J. Eco. Physiol 8(1-2) : 65-71.
7. **John Milton M.C.** 2006. Toxicological effects of mosquito larvicide and adulticide on the haemodynamics of the bioagent *Diplonychus rusticus* (Fabr.) (Hemiptera : Belotomatidae). J. Ent. Res 30(2): 141-146.

8. **John Milton M.C.** 2006. Mosquito larvicide and adulticide induced histological aberrations in the tissues of the bioagent *Diplonychus rusticus* (Fabr.) (Hemiptera : Belostomatidae). *J. Natcon* 18(1): 113-120.
9. Arockia Rita J.J and **M.C. John Milton**, 2006. Effect of carbamate pesticide Lannate (Methomyl) on the biochemical components of the freshwater cichlid *Oreochromis mossambicus* (Peters). *Ind. J. Environ. Ecoplan* 12(2) : 329-334.
10. **John Milton M.C.** 2006. Effect of mosquito pesticides on the physico chemical characteristics of freshwater pond of Koyambedu near Chennai. *J. Ecobiol* 21(2) : 187-193.
11. **John Milton M.C.** 2006. Larvicidal efficacy of the leaves of *Azadirachta indica* and *Datura metel* against *Culex quinquefasciatus* J. *Adv. Zool.* 27(2) : 101-105.
12. Arockia Rita J.J and **M.C. John Milton**, 2006. Effect of carbamate pesticide Lannate (Methomyl) on some catabolic enzymes of the freshwater cichlid *Oreochromis mossambicus* (Peters). *Poll. Res.* 25(93) : 655-658.
13. Arockia Rita J.J and **M.C. John Milton**, 2006. Carbamate pesticide Lannate (Methomyl) induced histological aberrations of fresh water cichlid *Oreochromis mossambicus* (Peters). *J. Curr. Sci* 9(2): 743 : 752.
14. Arockia Rita J.J and **M.C. John Milton**, 2006. Quantitative variations in the hydrolyzing enzymes of *Oreochromis mossambicus* (Peters) exposed to Lannate (Methomyl) – a carbamate pesticide. *J. Eco. Env. Conser* 12(3) : 525-528.
15. Arockia Rita J.J and **M.C. John Milton**, 2006. Carbamate pesticide Methomyl (Lannate) induced chromosomal aberrations and micronucleus test on the freshwater cichlid *Oreochromis mossambicus* (Peters). *Ekologia* 5(1-2) : 45-51.
16. **John Milton, M. C.** 2007. Larvicidal efficacy of the leaves of *Psidium guajava* and *Calotropis gigantea* against *Culex quinquefasciatus*. *J. Ecobiol.*, 17(3): 217-226.
17. Arockia Rita J.J and **M.C. John Milton**, 2007. Tolerance limit of the freshwater cichlid *Oreochromis mossambicus* exposed to carbamate pesticide lannate (Methomyl). *J. Ecobiol.* 21 (3) : 283-288.

18. **John Milton, M. C.** 2007. Effect of mosquito pesticides on the physicochemical characteristics of freshwater pond of Koyembedu near Chennai. *J. Ecobiol* 21(2) : 187-193.
19. Arockia Rita J.J and **M.C. John Milton**, 2007. Carbamate pesticide Methomyl (Lannate) induced changes in the protein characterization of the freshwater cichlid *Oreochromis mossambicus* (Peters). *Asian. J. Microbiol. Biotech and Env. Sci.* 4 (1) : 49-52.
20. Arockia Rita J.J and **M.C. John Milton**, 2007. Tolerance limit of the freshwater cichlid *Oreochromis mossambicus* exposed to carbamate pesticide Lannate (Methomyl). *J. Ecobiol.* 21(3) : 283-288.
21. Venkataraman, K., **M. C. John Milton** and K. P. Raghuram, 2007. Stranding of a sperm whale *Physeter macrocephalus* (Linnaeus 1758) on the Chennai coast. *J. Bombay Nat. Hist. Soc.*, 104 (1): 83-84.
22. Arul Baskar, **M. C. John Milton** and Dunston P. Ambrose, 2010. Fat body protein profile of life stages of *Rhynocoris marginatus* (Fabricius) (Heteropter : Reduviidae). *Entomon* 35 (1) : 47-50.
23. Mary Josephine Rani , **John Milton M. C**, Uthiralingam M and Azhaguraj, 2011. Quantitative variation of protein in the tissues of a fresh water fish *Clarias batrachus* exposed to mercury and chromium. *International Journal of Current Research.* 33 (3) : 230-236.
24. Mary Josephine Rani , **John Milton M. C**, Uthiralingam M and Azhaguraj, 2011. Bioaccumulation of mercury and chromium in a freshwater fish *Clarias batrachus*. *International Journal of Current Research and Review.*, 3 (5) : 64-72.
25. Mary Josephine Rani , **John Milton M. C**, Uthiralingam M and Azhaguraj, 2011. Acute toxicity of mercury and chromium to *Clarias batrachus* (Linn.). *Bioresearch Bulletin.*, 5 : 368-372.
26. Rajkumar, J.S.I, **John Milton, M.C** and Ambrose, T. 2011. Seasonal variation of water quality parameters in Ennore estuary with respect to industrial and domestic sewage. *International Journal of Current Research*, 3(3): 209-218.

27. Rajkumar, J.S.I, **John Milton, M.C** and Ambrose, T. 2011. Distribution of heavy metal concentrations in surface waters from Ennore estuary, Tamil Nadu, India. *International Journal of Current Research*, 3(3): 237-244.
28. Rajkumar, J.S.I, **John Milton, M.C** and Ambrose, T. 2011. Geochemical and statistical approach for the evaluation of heavy metal pollution in the surface sediments of Ennore estuary, Tamilnadu, India. *International Journal of Current Research*, 3(3): 219-229.
29. Rajkumar, J.S.I, **John Milton, M.C** and Ambrose, T. 2011. Acute toxicity of water borne Cd, Cu, Pb and Zn to *Mugil cephalus* fingerlings. *International Journal of Chemical Sciences*, 9(2): 477-480.
30. Rajkumar, J.S.I, **John Milton, M.C** and Ambrose, T. 2011. Toxicity of cadmium, copper, lead and zinc to the juveniles of *Perna viridis*. *International Journal of Chemical Sciences*, 9(2): 553-556.
31. Rajkumar, J.S.I, **John Milton, M.C** and Ambrose, T. 2011. Growth effects of *Mugil cephalus* exposed to the sublethal effects of cadmium. *International Journal of Chemical Sciences*, 9(2): 615-619.
32. Rajkumar, J.S.I and **John Milton, M.C**. 2011. Biochemical markers of oxidative stress in *Mugil cephalus* exposed to cadmium, copper, lead and zinc. *International Journal of Pharma and Biosciences* 2 (3) : 41-49.
33. Rajkumar, J.S.I and **John Milton, M.C**. 2011. Biochemical changes induced by cadmium, copper, lead and zinc exposure to *Perna viridis* under longterm toxicity test. *International Journal of Pharma and Biosciences* 2 (3) : 50-59.
34. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Toxic effects and bioaccumulation of cadmium, copper, lead and zinc in post larval stages of *Penaeus monodon*. *International Journal of Development Research*, 1(2): 001-005.
35. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Effects of cadmium, copper, lead and zinc on biomarker responses in post larval stages of *Penaeus monodon*. *International Journal of Development Research*, 1(2): 006-011.
36. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Bioaccumulation of

- some heavy metals Cd, Cu, Pb and Zn in *Mugil cephalus*, *Perna viridis* and *Penaeus monodon*. *International Journal of Development Research*, 1(2): 012-017.
37. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Chronic toxicity of cadmium, copper, lead and zinc to *Mugil cephalus*, *Perna viridis* and *Penaeus monodon*. *Asian Journal of Science and Technology*. 2(4): 005-008.
38. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Levels of heavy metals (Cd, Cu, Pb and Zn) in *Perna viridis* and *Mugil cephalus* exposed under static renewal. *Asian Journal of Science and Technology*, 2(4): 001-004.
39. Rajkumar, J. S. I, John Milton, M. C and Arockia Rita, J.J. 2011. Lipid peroxidation and reduced glutathione as a biomarker in common clam, *Meriterix meriterix* to short term chronic copper exposure. *Asian Journal of Science and Technology*. 2(4): 009-012.
40. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Assessment of heavy metals (Cd, Cu, Pb and Zn) in *Mugil cephalus*, *Penaeus indicus* and *Meriterix meriterix* of the Ennore creek, Tamil nadu, India. *International Journal of Recent Scientific Research*. 2(5): 126-131.
41. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Analysis of inhibition concentration (IC) of cadmium, copper, lead and zinc in *Mugil cephalus*, *Perna viridis* and *Penaeus monodon* under short term chronic toxicity tests. *International Journal of Recent Scientific Research*. 2(5): 139-142.
42. Rajkumar, J. S. I, **John Milton, M. C** and Arockia Rita, J.J. 2011. Long term effects of cadmium, copper, lead and zinc exposure on the growth of juvenile green mussel (*Perna viridis*). *International Journal of Recent Scientific Research*. 2 (5): 132-135.
43. Azhaguraj R., **M.C. John Milton** , J. Ganesh, G. Justin Zenith kumar, M.Ramakrishnan and Stalin Antony. 2012. Predication of Biological Activity Spectra for Secondary Metabolites from Marine Macroalgae *Caulerpa* Spp (Chlorophyta -Caulerpals). *International Research Journal of Pharmacy* ; 3 (5) 320-323.
44. Tamil Selvan. C., S. Velavan and **M. C. John Milton, 2014**. Antioxidant and anti cancer activity of *Asparagus racemosus* on MCF-7 cell line. *International Journal for Pharmaceutical Research scholars*, 3(1-3): 315-320.

45. Tamil Selvan. C., S. Velavan and **M. C. John Milton**, 2014. Antioxidant activity of *Rosa centrifolia* flowers. International Journal for research in Plant Science. 4(3):68-71.

(v) Papers presented in Symposia

1. Training cum workshop on “Marine Faunal Diversity of India” held at Marine Biological Station, Zoological Survey of India, Chennai 600 028 from 22nd January to 26th January, 2003 sponsored by Ministry of Environment and Forests, Government of India.
2. Training cum workshop on “Marine Faunal Diversity of India” held at Marine Biological Station, Zoological Survey of India, Chennai 600 028 from 11th February to 15th February, 2003 sponsored by Ministry of Environment and Forests, Government of India.
3. **John Milton, M.C** and K. Venkataraman, 2006. Marine Turtle Resources of India [in] Biodiversity : Life to our mother Earth (ed.) S. John William, Loyola College, 126 – 134.
4. Venkataraman, K., **M. C. John Milton** and J. J. Arockia Rita, 2007. Anthropogenic threats to marine biodiversity of India with special reference to marine turtles of Gulf of Mannar Biosphere Reserve. International workshop on “Gulf of Mannar Biosphere reserve : An Ecological Model for Biodiversity Conservation Livelihood and sustainability” 20th to 21st September, 2007. National Biodiversity Authority (NBA), Chennai. 324-338.
5. R. Azhaguraj, J.Ganesh and **M.C. John Milton**. Ecological interactions between Red Seaweed *Hypnea musiformis* (Wulfen) Lamour, (Rhodophyceae – Hypneaceae) and its phytal fauna in Pulicat lake. Paper was presented on National Seminar on “Cyclonic changes and its impact on Marine Biodiversity” held at V.H.N.S.N. College, Virudhunagar – 626 001 held on 9th and 10th February 2012.
6. R. Azhaguraj, J.Ganesh and **M.C. John Milton**. Diversity and Distribution of Epifauna associated with the alga *Hypnea musiformis* (Wulfen) Lamour, (Rhodophyceae – Hypneaceae) in Pulicat Estuary. Presented a poster in the National Conference on “Recent Advances in Algal Biotechnology NCRAAB – 2012” held at the Centre for

Advanced Studies in Botany, University of Madras, Maraimalai Campus, Guindy, Chennai – 600 025 on 16th & 17th February 2012.

7. R. Azhaguraj, J. Ganesh and **M.C. John Milton**. Diversity and Distribution of Phytal Fauna associated with the alga *Chaetomorpha aerea* (Dillwyn) Kutzing, (Chlorophyceae - Cladophoraceae) in Pulicat Estuary. Presented poster in the National Conference on “Recent Advances in Algal Biotechnology NCRAAB – 2012” held at the Centre for Advanced Studies in Botany, University of Madras, Maraimalai Campus, Guindy, Chennai – 600 025 on 16th & 17th February 2012.
8. Azhaguraj R., **M.C. John Milton**, J. Ganesh. Studies on animal associates and phytal faunal diversity of the marine macroalgae *Chaetomorpha aerea* (Dillwyn) Kutzing in Pulicat Estuary. Paper presented in National Conference on “Relevance of Conservation and Sustainable Utilization of Bioresources held at Department of Zoology, Auxilium College, (Autonomous), Vellore-632 006, during 13&14 December, 2012.
9. Ganesh J., **M.C. John Milton** R. Azhaguraj. Species composition of phytal fauna in the seagrass *Syringodium isoetifolium* (Cymodoceaceae) in Kattumavadi, Palk Pay, India. Paper presented in National Conference on “Relevance of Conservation and Sustainable Utilization of Bioresources held at Department of Zoology, Auxilium College, (Autonomous), Vellore-632 006, during 13&14 December, 2012. (**Best paper presentation award**)

10. Training programmes Organised

1. National Level Training cum Workshop on “GIS and Marine Biodiversity” from 26th to 29th February, 2008 (4 days).
2. National Level Training cum Workshop on “Modern Approaches to Research Methodology, electronic Research Tools, e-content and Biotechnological Tools for Biodiversity Conservation” from 10th to 13th March, 2009 (4 days).
3. National Level Training cum Workshop on “Recent Trends in Animal Taxonomy and Systematics” from 23rd February to 26th February, 2011 (4 days).

4. DBT Sponsored Short Term Training Programme on “Methods and Protocols for Practical Biotechnology” from 14th March to 3rd April, 2011 (21 days).
5. National Level Instructional Workshop on “Bioinformatics and Computational Biology” from 21st to 25th February, 2012 (5 Days).
6. National Workshop on “Molecular Dynamics Simulations, Cheminformatics and Drug Designing” from 8th to 12th January, 2013 (5 days).
7. National Workshop on “Databases, Tools and Techniques for *in silico* Drug designing” from 17th to 21st February, 2014 (5 days).

11. Training programmes attended

1. Training cum workshop on “Marine Faunal Diversity of India” held at Marine Biological Station, Zoological Survey of India, Chennai 600 028 from 22nd January to 26th January, 2003 sponsored by Ministry of Environment and Forests, Government of India.
2. Training cum workshop on “Marine Faunal Diversity of India” held at Marine Biological Station, Zoological Survey of India, Chennai 600 028 from 11th February to 15th February, 2003 sponsored by Ministry of Environment and Forests, Government of India.
3. Training on “Survey and Monitoring, Pilot Monitoring and Coral Taxonomy” under India – Australia Training and Capacity Building Project held at Andaman Islands from 19th April to 25th May, 2003.
4. Training on “PADI Open Water SCUBA Diving” under India – Australia Training and Capacity Building Project held at Andaman Islands from 19th April to 25th May, 2003.
5. Life skills Development Programme on “Psychological Personality” organized by Department of Counseling and Guidance, Madras School of Social Work and Indian Academy of Applied Psychology on 09th April, 2005.
6. A three day workshop on applications of SPSS for data analysis. Everonn Learning Academy, 15-17, July, 2008.
7. “PCR Workshop” on 10th December, 2009 at Eppendorf Training Centre, Eppendorf India, Chennai.

8. Advanced Training in DNA Finger Printing on 18th December, 2009, Helini Biomolecules, Chennai.
9. National workshop on “Development of an alternative laboratory curriculum in Zoology to replace dissections and experiments with humane techniques” 25-26, November, 2011, Department of Zoology, Stella Maris College and Mahatma Gandhi Doerenkamp Centre, Bharathidasan University, Trichy.
10. Workshop on “Quantification of Biomolecules” on 8th December, 2011 at Eppendorf Training Centre, Eppendorf India, Chennai.
11. Workshop on “Recent Advances in Proteomics” on 21st December, 2011 at National Institute of Ocean Technology, Chennai.

12. Professional recognition, awards, fellowships received:

1. Fellowship for Ph. D, Department of Higher Education, Government of Tamil Nadu in 1999.
2. Fr. Yedanappalli Research Award, Loyola College for maximum number of research publications in 2003.
3. Fr. Yedanappalli Research Award, Loyola College for maximum number of research publications in 2012.

13. Research Projects Completed

1. Biodiversity Assessment of Loyola Campus, UGC Minor, 2007-08.
2. Persistent Organochlorine contamination of Pallikaranai swamp, Chennai, Tamil Nadu, India and its implications on Biodiversity, UGC Major, 2011-2013.

14. Orientation/Refresher Course Attended

1. Orientation Course (Information Technology) Batch - LXIX, UGC Academic Staff College, University of Madras, 01.03.2005 to 28.03.2005.
2. Refresher Course in Environmental Science (Interdisciplinary) Batch – XIII, UGC Academic Staff College, University of Madras, 06.09.2011 to 26.09.2011.