




# Bharathiar University

State University | "A<sup>++</sup>" Grade by NAAC | 46<sup>th</sup> Rank in MoE-NIRF  
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

<b>Dr T MURALISANKAR</b> Assistant Professor Department of Zoology Bharathiar University Coimbatore, 641046 Tamil Nadu <b>E-mail:</b> tsmuralisankar@buc.edu.in <b>Phone:</b> 8148651534 <b>Office Number:</b> 0422-2428610	
<b>Research Area</b> <ul style="list-style-type: none"><li>• Aquaculture &amp; Aquaculture Nutrition</li><li>• Aquatic Ecology</li><li>• Stress Biology</li></ul>	<b>Courses Teaching</b> <ul style="list-style-type: none"><li>• Animal Phylogeny and Evolution</li><li>• Biostatistics</li><li>• Marine Biology</li><li>• Research Methodology</li><li>• Limnology</li><li>• Nanobiotechnology and Applications</li><li>• Marine Bioresources</li><li>• Fish Processing Technology</li></ul>
<b>Research Experience:</b> 11	<b>Teaching Experience:</b> 9
<b>Research Credentials</b> (as on August 2025 – Source: Google scholar) H-index: 29                      Citations: 3015                      i10-index: 55	
<b>Publications</b> International Journals: 60                      Books/Chapters: 5                      National Journals: 17	
<b>Career</b> <b>Other Institutes</b> <b>1. Designation : Post Doctoral Fellow</b> Institution Name : Bharathidasan University, Tiruchirappalli Period : April 2016 - November 2016	
<b>Education</b> <b>Ph. D.</b> Subject : Zoology Institution : Bharathiar University, Coimbatore Affiliated University : Bharathiar University, Coimbatore Year of Award : November 2014 <b>M. Phil.</b> Subject : Zoology Institution : Bharathiar University, Coimbatore Affiliated University : Bharathiar University, Coimbatore Year of Award : January 2011 <b>M. Sc.</b> Subject : Zoology Institution : Chikkanna Govt. Arts College, Tiruppur Affiliated University : Bharathiar University, Coimbatore Year of Award : April 2009	



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Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

**Dr T MURALISANKAR , Assistant Professor , Department of Zoology**

## Diploma

Subject : Applied Sciences  
Institution : Chikkanna Govt. Arts College, Tiruppur  
Affiliated University : Bharathiar University, Coimbatore  
Year of Award : April 2009

## B.Ed

Subject : Zoology  
Institution : The Kavary College of Education, Mechery  
Affiliated University : Periyar University, Salem  
Year of Award : April 2007

## B. Sc.

Subject : Zoology  
Institution : Govt. Arts College, Dharmapuri  
Affiliated University : Periyar University, Salem  
Year of Award : April 2006

## Projects

### National Level

Ongoing - 3    completed - 3

## Research Guidance

### Completed

Ph.D. - 3    M.Phil. - 3    PG - 37

### On Going

Ph.D. - 1

## Institutional Responsibilities

### Member of Board of Studies (Zoology)

Period : Dec 2016 - Aug 2025

Nature of Responsibility :

## Programs organized

1. National Conference on Biology and Medicine ( 2019-02-08 - 2019-02-07 )
2. UGC-HRDC-Refresher course in Zoology ( 2022-09-07 - 2022-09-20 )

## Publications

### International Journals - 60

#### 60. Microplastics Contamination in Water and Sediments: Seasonal and Spatial Distributions from the Urban

##### Wetlands of Coimbatore, Tamilnadu, India

Water, Air, & Soil Pollution, 236 (8), 475 (May 2025)

K Anandhan, T Muralisankar, A Yogeshwaran, SH Thangal, KS Janani

#### 59. Effect of CO2 driven seawater acidification on survival, growth, amino acid and fatty acid levels in the edible shrimp *Litopenaeus vannamei*

Regional Studies in Marine Science, 82, 104021 (February 2025)

Thirunavukkarasu Muralisankar, Said Hamid Thangal, Perumal Santhanam, Ayyasamy Gowthami, Kannan Mohan, Balu Alagar Venmathi Maran

#### 58. Marine microalgae-Mediated biodegradation of polystyrene microplastics: Insights from enzymatic and molecular docking studies

Chemosphere, 370, 144024 (February 2025)

Ayyasamy Gowthami, Mohammed Syed Marjuk, Perumal Santhanam, Ramasamy Thirumurugan, Thirunavukkarasu Muralisankar, Pachiappan Perumal



## 57. Incidence of microplastics in Indian anchovy *Stolephorus indicus* from Tuticorin, Southeast coast of India

Marine Pollution Bulletin, 202, 116406 (May 2024)

Velusamy Gayathri, Raj Pavithra, Said Hamid Thangal, Selvam Ganapathy, Packiaraj Gurusaravanan, Perumal Santhanam, Subramanian Radhakrishnan, Thirunavukkarasu Muralisankar

## 56. Biological and physiological responses of marine crabs to ocean acidification: A review

Environmental Research, 248, 118238 (May 2024)

Said Hamid Thangal, Thirunavukkarasu Muralisankar, Kannan Mohan, Perumal Santhanam, Balu Alagar Venmathi Maran

## 55. Microplastics Contamination in the Edible Fish Mozambique Tilapia (*Oreochromis mossambicus*) from the Selvampathy Wetland of Coimbatore, Tamil Nadu, India

Bulletin of Environmental Contamination and Toxicology, 112, (1), 7 (December 2023)

Krishnan Anandhan, Said Hamid Thangal, Arumugam Yogeshwaran, Saravanan Kaaran, Thipramalai Thangappan Ajith Kumar, Thirunavukkarasu Muralisankar

## 54. The impact of ocean acidification and cadmium toxicity in the marine crab *Scylla serrata*: Biological indices and oxidative stress responses

Chemosphere 345, 140447 (December 2023)

Said Hamid Thangal, Ramamoorthy Nandhini Priya, Chandrasekaran Vasuki, Velusamy Gayathri, Krishnan Anandhan, Arumugam Yogeshwaran, Thirunavukkarasu Muralisankar, Mathan Ramesh, Rajendran Rajaram, Perumal Santhanam, Balu Alagar Venmathi Maran

## 53. Evaluation of haemolymph phenoloxidase activity from the grub of *Zophobas morio* as a predictor of immune response

533NAABS NANAABDC NAJournal of Comparative Physiology BJournal of Comparative Physiology B, 193 (5), 495-507 (October 2023)

Ramanathan Nivetha, Balashanmuga Nehru Marieshwari, Ayikkara Peroor Mahi Dev, Mani Meenakumari, Thirunavukkarasu Muralisankar, Sundaram Janarthanan

## 52. Influence of *Borassus flabellifer* Endocarps Hydrolysate on Fungal Biomass and Fatty Acids Production by the Marine Fungus *Aspergillus* sp.

Applied Biochemistry and Biotechnology, 196, 923–948 (June 2023)

Nancy Mary Thomas, Vinoth Sathasivam, Muralisankar Thirunavukkarasu, Arun Muthukrishnan, Saradhadevi Muthukrishnan, Vasanthkumar Rajkumar, Gayathri Velusamy & Gurusaravanan Packiaraj

## 51. Occurrence of microplastics in the gastrointestinal tracts of edible fishes from South Indian Rivers

Bulletin of Environmental Contamination and Toxicology, 109,6, 1023-1028 (December 2022)

Krishnan Anandhan, Kamalanathan Tharini, Said Hamid Thangal, Arumugam Yogeshwaran, Thirunavukkarasu Muralisankar

## 50. Effect of CO<sub>2</sub> driven ocean acidification on the mud crab *Scylla serrata* instars

Environmental Pollution, 312, 119995 (June 2022)

Said Hamid Thangal, Thirunavukkarasu Muralisankar, Krishnan Anandhan, Velusamy Gayathri, Arumugam Yogeshwaran

## 49. The potential role of medicinal mushrooms as prebiotics in aquaculture: A review

Reviews in Aquaculture, 14 (3), 1300-1332 (June 2022)

Kannan Mohan, Durairaj Karthick Rajan, Thirunavukkarasu Muralisankar, Abirami Ramu Ganesan, Kasi Marimuthu, Palanivel Sathishkumar

## 48. Use of black soldier fly (*Hermetia illucens* L.) larvae meal in aquafeeds for a sustainable aquaculture industry: A review of past and future needs

Aquaculture, 553, 738095 (May 2022)

Kannan Mohan, Durairaj Karthick Rajan, Thirunavukkarasu Muralisankar, Abirami Ramu Ganesan, Palanivel Sathishkumar, Nagarajan Revathi

## 47. A study on structural comparisons of $\beta$ -chitin extracted from marine crustacean shell waste

Carbohydrate Polymer Technologies and Applications, 2, 100037 (December 2021)

K Mohan, T Muralisankar, R Jayakumar, C Rajeevgandhi

## 46. Growth performance, digestive enzymes and antioxidants activities in the shrimp *Litopenaeus vannamei* fed with *Amphiroa fragillissima* crude polysaccharides encapsulated *Artemia* nauplii

Aquaculture 545, 737263 (December 2021)

C Muttharasi, V Gayathri, T Muralisankar, K Mohan, V Uthayakumar, S Radhakrishnan, P Kumar, M Palanisamy



#### **45. Effects of acidified seawater on biological and physiological responses of *Artemia franciscana***

Marine Pollution Bulletin, 169, 112476 (August 2021)

Said Hamid Thangal, Muthusamy Nivetha, Chandrasekaran Muttharasi, Krishnan Anandhan, Thirunavukkarasu Muralisankar

#### **44. Synthesis and characterization of palladium nanoparticles by chemical and green methods: A comparative study on hepatic toxicity using zebrafish as an animal model**

Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology, 244, 108979 (June 2021)

Pottanthara Ashokan Anila, Balasubramaniam Keerthiga, Mathan Ramesh, Thirunavukkarasu Muralisankar

#### **43. Phytochemical profiling and antioxidant capacity of *Kappaphycus alvarezii* (Doty) Doty collected from seaweed farming sites of tropical coastal environment**

Aquaculture Research, 52 (7), 3438-3448 (January 2021)

Rajendran Rajaram, Thirunavukkarasu Muralisankar, Bilal Ahamad Paray, Mohammad K Al?Sadoon

#### **42. Growth, biochemical, antioxidants, metabolic enzymes and hemocytes population of the shrimp *Litopenaeus vannamei* exposed to acidified seawater**

Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology, 239,108843 (January 2021)

T Muralisankar, P Kalaivani, SH Thangal, P Santhanam

#### **41. Bioaccumulation of metals in mangroves and salt marshes collected from Tuticorin coast of Gulf of Mannar marine biosphere reserve, Southeastern India**

Marine Pollution Bulletin 160, 111599 (November 2020)

R Rajaram, A Ganeshkumar, T Muralisankar, P Sivaperumal

#### **40. Recent insights into the extraction, characterization, and bioactivities of chitin and chitosan from insects**

Trends in food science & technology, 105, 17-42 (November 2020)

Kannan Mohan, Abirami Ramu Ganesan, Thirunavukkarasu Muralisankar, Rajarajeswaran Jayakumar, Palanivel Sathishkumar, Venkatachalam Uthayakumar, Ramachandran Chandrasekar, Nagarajan Revathi

#### **39. Assessment of heavy metals pollution in Noyyal and Chinnar rivers, western Ghats of Tamil Nadu, India with reference to crabs (*Gecarcinucidae*)—A baseline study**

Bulletin of Environmental Contamination and Toxicology 105, (4), 538-545 (October 2020)

V Gayathri, T Muralisankar, R Rajaram, M Muniasamy, P Santhanam

#### **38. Bioaccumulation of heavy metals, antioxidants, and metabolic enzymes in the crab *Scylla serrata* from different regions of Tuticorin, Southeast Coast of India**

Marine Pollution Bulletin, 158, 111443 (September 2020)

A Yogeshwaran, K Gayathiri, T Muralisankar, V Gayathri, J Irene Monica, R Rajaram, K Marimuthu, P Saravana Bhavan

#### **37. Trends in the extraction, purification, characterisation and biological activities of polysaccharides from tropical and sub-tropical fruits—A comprehensive review**

Carbohydrate Polymers, 238, 116185 (June 2020)

Kannan Mohan, Thirunavukkarasu Muralisankar, Venkatachalam Uthayakumar, Ramachandran Chandrasekar, Nagarajan Revathi, Abirami Ramu Ganesan, Kalamani Velmurugan, Palanivel Sathishkumar, Rajarajeswaran Jayakumar, Palaniappan Seedevi

#### **36. Influence of wild mixed zooplankton on growth and muscle biochemical composition of the freshwater prawn *Macrobrachium rosenbergii* post larvae**

Narasimman Manickam, Periyakali Saravana Bhavan, Perumal Santhanam, Thirunavukkarasu Muralisankar (May 2020)

Aquaculture 522, 735110

#### **35. Phytoplankton biodiversity in the two perennial lakes of Coimbatore, Tamil Nadu, India**

Acta Ecologica Sinica, 40, (1), 81-89 (February 2020)

Narasimman Manickam, Periyakali Saravana Bhavan, Perumal Santhanam, Thirunavukkarasu Muralisankar, Sundarraj Dinesh Kumar, Srinivasan Balakrishnan, Selvaraj Ananth, Ayyanar Shenbaga Devi

#### **34. Genotoxic effects of tobacco use in residents of hilly areas and foot hills of Western Ghats, Southern India**

Scientific Reports, 9 (1), 14898 (October 2019)

R Chandrasekar, K Murugan, T Muralisankar, V Uthayakumar, R Jayakumar, K Mohan, C Vasugi, R Mathivanan, S Mekala, A Jagateesh, K Suresh



### **33. Dietary Ganoderma lucidum polysaccharides to enhance the growth, immune response and disease resistance of freshwater prawn Macrobrachium rosenbergii**

Aquaculture Reports, 14, 100203 (July 2019)  
K Mohan, T Muralisankar, V Uthayakumar, R Chandirasekar, D Karthick Rajan

### **32. Extraction and characterization of chitin from sea snail Conus inscriptus (Reeve, 1843)**

International journal of biological macromolecules, 126, 555-560 (April 2019)  
Kannan Mohan, Samuthirapandian Ravichandran, Thirunavukkarasu Muralisankar, Venkatachalam Uthayakumar, Ramachandran Chandirasekar, Chinnaiyan Rajeevgandhi, Durairaj Karthick Rajan, Palaniappan Seedeve

### **31. Application of marine-derived polysaccharides as immunostimulants in aquaculture: A review of current knowledge and further perspectives**

Fish & shellfish immunology, 86, 1177-1193 (March 2019)  
Kannan Mohan, Samuthirapandian Ravichandran, Thirunavukkarasu Muralisankar, Venkatachalam Uthayakumar, Ramachandran Chandirasekar, Palaniappan Seedeve, Ramu Ganesan Abirami, Durairaj Karthick Rajan

### **30. Potential uses of fungal polysaccharides as immunostimulants in fish and shrimp aquaculture: a review**

Aquaculture, 500, 250-263 (February 2019)  
Kannan Mohan, Samuthirapandian Ravichandran, Thirunavukkarasu Muralisankar, Venkatachalam Uthayakumar, Ramachandran Chandirasekar, Palaniappan Seedeve, Durairaj Karthick Rajan

### **29. Influence of two different dietary zinc sources in freshwater prawn Macrobrachium rosenbergii post larvae**

Journal of Oceanology and Limnology, 37 (1), 290-299 (January 2019)  
Muralisankar Thirunavukkarasu, Saravana Bhavan Periyakali, Radhakrishnan Subramanian, Santhanam Perumal

### **28. Dietary Supplement of Medicinal Herbal Leaf Powder on Growth Performance, Digestive Enzymes**

#### **Activities, Energy Utilization and Vitamin Levels of the Freshwater Prawn Macrobrachium rosenbergii**

Proceedings of the Zoological Society, 71 (3), 265-271 (September 2018)  
T Muralisankar, P Saravana Bhavan, S Radhakrishnan, P Santhanam

### **27. Impact of seasonal changes in zooplankton biodiversity in Ukkadam Lake, Coimbatore, Tamil Nadu, India, and potential future implications of climate change**

The Journal of Basic and Applied Zoology, 79 (1), 15 (February 2018)  
Narasimman Manickam, Periyakali Saravana Bhavan, Perumal Santhanam, Rajagopal Bhuvaneswari, Thirunavukkarasu Muralisankar, Veeran Srinivasan, Annamalai Asaikkutti, Gopalan Rajkumar, Rajendaran Udayasuriyan, Madhayan Karthik

### **26. Anti-cancer effect of the polysaccharide extract from the Ganoderma lucidum against HeLa cell lines**

Bangladesh Journal of Pharmacology, 12 (1), 56-57 (March 2017)  
K Mohan, AM Padmanaban, V Uthayakumar, R Chandrasekhar, T Muralisankar, E Chithra

### **25. Effect of dietary Ganoderma lucidum polysaccharides on biological and physiological responses of the giant freshwater prawn Macrobrachium rosenbergii**

Aquaculture, 464, 42-49 (November 2016)  
K Mohan, AM Padmanaban, V Uthayakumar, R Chandirasekar, T Muralisankar, P Santhanam

### **24. Dietary Supplementation of Magnesium Oxide (MgO) Nanoparticles for Better Survival and Growth of the Freshwater Prawn Macrobrachium rosenbergii Post-larvae**

Biological trace element research, 177 (1), 196-208 (October 2016)  
Veeran Srinivasan, Periyakali Saravana Bhavan, Gopalan Rajkumar, Thangavelu Satgurunathan, Thirunavukkarasu Muralisankar

### **23. Cytotoxic activities of Ganoderma lucidum ethanol extract against HepG2 cell line**

Bangladesh Journal of Pharmacology, 11 (3), 632-633 (June 2016)  
Kannan Mohan, Muthusamy Padmanaban, Venkatachalam Uthayakumar, Ramachandran Chandrasekar, Thirunavukkarasu Muralisankar

### **22. Effects of Probiotics on Survival, Growth and Digestive Enzymes Activities in Freshwater Prawn Macrobrachium rosenbergii (De Man 1879)**

Proceedings of the Zoological Society 69 (1), 52-60 (June 2016)  
C Seenivasan, S Radhakrishnan, T Muralisankar, P Saravana Bhavan



**21. Impact of fishmeal replacement with *Arthrospira platensis* on growth performance, body composition and digestive enzyme activities of the freshwater prawn, *Macrobrachium rosenbergii***

Aquaculture reports 3, 35-44 (May 2016)  
S Radhakrishnan, Ibrahim EH Belal, C Seenivasan, T Muralisankar, P Saravana Bhavan

**20. Growth performance, muscle biochemical constituents, amino acid and fatty acid compositions of the giant freshwater prawn, *Macrobrachium rosenbergii*, fed with herb-incorporated diet**

Aquaculture Nutrition, 23 (4), 766-776 (April 2016)  
T Muralisankar, P Saravana Bhavan, S Radhakrishnan, P Santhanam, R Jayakumar

**19. The effect of copper nanoparticles supplementation on freshwater prawn *Macrobrachium rosenbergii* post larvae**

Journal of Trace Elements in Medicine and Biology, 34, 39-49 (March 2016)  
Thirunavukkarasu Muralisankar, Periyakali Saravana Bhavan, Subramanian Radhakrishnan, Chandirasekar Seenivasan, Veeran Srinivasan

**18. The effect of copper nanoparticles supplementation on freshwater prawn *Macrobrachium rosenbergii* post larvae Authors T Muralisankar**

Journal of Trace Elements in Medicine and Biology, 34, 39-49 (March 2016)  
Thirunavukkarasu Muralisankar , Periyakali Saravana Bhavan, Subramanian Radhakrishnan , Chandirasekar Seenivasan , Veeran Srinivasan

**17. Effects of dietary zinc on the growth, digestive enzyme activities, muscle biochemical compositions, and antioxidant status of the giant freshwater prawn *Macrobrachium rosenbergii***

Aquaculture, 448, 98-104 (November 2015)  
T Muralisankar, P Saravana Bhavan, S Radhakrishnan, C Seenivasan, V Srinivasan, P Santhanam

**16. Dietary supplementation of probiotics product (ViBact\*) on the survival, growth, biochemical constituents and gut microflora of the giant freshwater prawn *Macrobrachium rosenbergii* post-larvae.**

Asian Journal of Biochemical and Pharmaceutical Research, 5, 67-88 (September 2015)  
L Jayanthi, PS Bhavan, V Srinivasan, T Muralisankar, N Manickam

**15. Influence of Probiotics on Survival, Growth, Biochemical Changes and Energy Utilization Performance of *Macrobrachium rosenbergii* Post-larvae**

Proceedings of the Zoological Society 68 (1), 74-83 (June 2015)  
C Seenivasan, S Radhakrishnan, R Shanthi, T Muralisankar, P Saravana Bhavan

**14. Probiotics product (LactoBacil® plus) on improvement of survival, growth, digestive enzymes activity, nutritional status and gut microflora of the prawn *Macrobrachium rosenbergii***

International Journal of Current Research, 7, 11440-11453 (June 2015)  
L Jayanthi, PS Bhavan, V Srinivasan, T Muralisankar, N Manickam

**13. Effect of dietary replacement of fishmeal with *Chlorella vulgaris* on growth performance, energy utilization and digestive enzymes in *Macrobrachium rosenbergii* postlarvae**

International journal of Fisheries and Aquaculture 7 (5), 62-70 (May 2015)  
S Radhakrishnan, C Seenivasan, T Muralisankar

**12. Biodiversity of freshwater zooplankton and physico-chemical parameters of Barur Lake, Krishnagiri District, Tamil Nadu, India**

Malaya Journal of Biosciences 2015, 2(1):1-12 (May 2015)  
N Manickam, P Saravana Bhavan, P Santhanam, T Muralisankar, V Srinivasan, K Vijayadevan, R Bhuvaneshwari

**11. In-vitro antibacterial activity of Zinc and nanoparticles against Gram-negative bacteria *Aeromonas hydrophila***

Malaya Journal of Biosciences, 1, 196-200 (January 2015)  
Thirunavukkarasu Muralisankar, Periyakali Saravana Bhavan, Selvaraj Gandimathy, Subramanian Radhakrishnan, Chandirasekar Seenivasan, Palani Aarumugam



## **10. Dietary supplementation of zinc nanoparticles and its influence on biology, physiology and immune responses of the freshwater prawn, *Macrobrachium rosenbergii***

Biological trace element research, 160 (1), 56-66 (July 2014)  
Thirunavukkarasu Muralisankar, Periyakali Saravana Bhavan, Subramanian Radhakrishnan, Chandrasekar Seenivasan, Narasimman Manickam, Veeran Srinivasan

## **9. Effects of dietary supplementation of fish and vegetable oils on the growth performance and muscle compositions of the freshwater prawn *Macrobrachium rosenbergii***

The Journal of Basic & Applied Zoology, 67 (2), 34-39 (March 2014)  
T Muralisankar, P Saravana Bhavan, S Radhakrishnan, C Seenivasan, N Manickam, R Shanthi

## **8. Effect of *Lactobacillus sporogenes* on survival, growth, biochemical constituents and energy utilization of freshwater prawn *Macrobrachium rosenbergii* post larvae**

The Journal of Basic & Applied Zoology, 67 (2), 19-24 (March 2014)  
C Seenivasan, S Radhakrishnan, R Shanthi, T Muralisankar, P Saravana Bhavan

## **7. Replacement of fishmeal with *Spirulina platensis*, *Chlorella vulgaris* and *Azolla pinnata* on non-enzymatic and enzymatic antioxidant activities of *Macrobrachium rosenbergii***

The Journal of Basic & Applied Zoology, 67 (2), 25-33 (March 2014)  
S Radhakrishnan, P Saravana Bhavan, C Seenivasan, R Shanthi, T Muralisankar

## **6. Growth, biochemical constituents and energy utilization of freshwater prawn *Macrobrachium***

The Journal of Basic & Applied Zoology, 67, 19-24 (February 2014)  
C Seenivasan, S Radhakrishnan, R Shanthi, T Muralisankar, P Saravana Bhavan

## **5. Chicken waste meal as an alternative for fishmeal for better survival and growth of the freshwater prawn *Macrobrachium rosenbergii* post larvae**

Research Journal of Biotechnology 8 (2), 61-66 (February 2013)  
T Muralisankar, PS Bhavan

## **4. Effect of fruits wastes (Apple, Grape and Orange) incorporations on the growth of the freshwater prawn *Macrobrachium rosenbergii***

Asian Journal of Science and Technology, 4, 10, 075-081 (January 2013)  
PS Bhavan, V Kirubhanandhini, T Muralisankar, N Manickam, V Srinivasan

## **3. Efficacy of Probiotics on Survival, Growth, Biochemical Changes and Energy Utilization Performance of *Macrobrachium rosenbergii* (De Man 1879) Post-larvae**

Journal of Scientific Research, 4, (3), 729-740 (August 2012)  
C Seenivasan, S Radhakrishnan, T Muralisankar, P Saravana Bhavan

## **2. *Bacillus subtilis* on survival, growth, biochemical constituents and energy utilization of the freshwater prawn *Macrobrachium rosenbergii* post larvae**

Egyptian Journal of Aquatic Research 38 (3), 195-203 (August 2012)  
C Seenivasan, S Radhakrishnan, T Muralisankar, P Saravana Bhavan

## **1. Effects of Probiotics on survival, growth and biochemical characteristics of freshwater prawn *Macrobrachium rosenbergii* Post Larvae**

Turkish Journal of Fisheries and Aquatic Sciences, 12, (2) (April 2012)  
C Seenivasan, P Saravana Bhavan, S Radhakrishnan, T Muralisankar

## **Books/Chapters - 5**

### **5. Algae materials: an alternative feed ingredients for the sustainable aquaculture**

Algae Materials, 435-449 (January 2023)  
P Santhanam, T Muralisankar, K Nanthini Devi, N Krishnaveni, M Divya, A Gowthami, J Roopavathy, P Perumal

### **4. Potential role of dietary minerals in fish and crustaceans**

Aquaculture Science and Engineering, 431-461 (July 2022)  
T Muralisankar, K Mohan, V Udhayakumar, B Balamuralikrishnan



### 3. Culture of Different Live Fish Food Organisms

Fish Nutrition And Its Relevance To Human Health, 333-365 (November 2020)

P Santhanam, S Ananth, S Dinesh Kumar, P Raju, M Kaviyarasan, M Divya, N Krishnaveni, S Balakrishnan, N Manickam, T Veeramani, T Muralisankar, P Perumal

### 2. Methodologies for the Bioenrichment of Plankton

Basic and Applied Zooplankton Biology, 315-328 (July 2018)

N Manickam, P Santhanam, S Balakrishnan, T Muralisankar, T Veeramani, A Shenbaga Devi, P Saravana Bhavan

### 1. Replacement of Fishmeal with *Arthrospira (Spirulina) platensis* and Its Use in Freshwater Prawn

#### Macrobrachium rosenbergii Production

Basic and Applied Phytoplankton Biology, 77-108 (July 2018)

T Muralisankar, P Santhanam, S Radhakrishnan, N Manickam, P Saravana Bhavan

### National Journals - 17

#### 17. Performance of Probiotic Bacterium, *Enterococcus gallinarum* Enriched *Artemia franciscana* Nauplii on

#### Survival, Growth and Basic Biochemical Constituents of the Prawn *Macrobrachium rosenbergii* Post Larvae

Scholars Academic Journal of Biosciences (February 2020)

Jain IB, Saravana Bhavan P\*, Kalpana R, Manjula T, Dharani C, Muralisankar T, Veerapandi A, Karthik M

#### 16. Dietary Supplementation of *Lactobacillus fermentum* for Improving the Survival, Growth and Nutritional

#### Profiles of the Prawn *Macrobrachium rosenbergii*, and 16S rDNA based Identification of its Establishment

Scholars Rep, 3 (3), 38-62 (January 2018)

M Karthik, P Saravana Bhavan, V Seenivasan, A Asaikkutti, T Muralisankar, R Mahendran

#### 15. Phytochemical Characterization of *Eichhornia crassipes* and *Sargassum cristaefolium*, and Their Effects

#### on the Growth of the Prawn *Macrobrachium rosenbergii*

Scholars Academic Journal of Biosciences (SAJB) (January 2018)

Manjula T, Saravana Bhavan P\*, Rajkumar G, Muralisankar T, Udayasuriyan R, Kalpana R

#### 14. Nutritional profile of *Spirulina platensis*, *Chlorella vulgaris* and *Azolla pinnata* to novel protein source for

#### aquaculture feed formulation

Austin Journal of Aquaculture and Marine Biology, 2 (1), 1-8 (March 2017)

S Radhakrishnan, PS Bhavan, C Seenivasan, T Muralisankar

#### 13. Effects of dietary iron oxide nanoparticles on the growth performance, biochemical constituents and

#### physiological stress responses of the giant freshwater prawn *Macrobrachium rosenbergii* post-larvae

International Journal of Fisheries and Aquatic Studies 2016; 4(2): 170-182 (February 2016)

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### enzymes and contents of total protein, vitamins and minerals in the freshwater prawn *Macrobrachium*

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## 5. Comparison of nutritional quality of sunflower oil and cod liver oil enriched with *Artemia nauplii* for

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## 4. Effect of *saccharomyces cerevisiae* on survival, growth, biochemical constituents and energy utilization in

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## 2. Growth promoting potential of garlic, ginger, turmeric and fenugreek on the freshwater prawn

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## 1. Influence of combined probiotics *Lactobacillus sporogenes* and *Bacillus subtilis* on survival, growth,

### biochemical changes and energy utilization performance of *Macrobrachium rosenbergii* (De Man 1879) post

### larvae

Journal of Ecobiotechnology, 4(1): 29-34 (January 2012)  
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## Projects

### Ongoing - 3

1. Evaluation Of Microplastics Contamination In Edible Fishes from the Urban Wetlands of Coimbatore, Tamil Nadu and its Exposure to Human: The Way Forward towards the Health Risk Assessment using The Zebrafish model and Bio-Mitigation Strategy Others 22,10,250.00 (December 2024 - December 2027)
2. Developing Low Cost Artificial Feeds Using Fishery By-Products for the Nursery Maintenance of the Fish Lates *calcarifer* and crab *Scylla serrata* DST – SERB 18,30,000.00 (October 2022 - October 2025)
3. Production of deep sea crustaceans derived natural astaxanthin and validation of its antihyperglycemic properties using zebrafish model Others 45,86,080.00 (February 2025 - February 2027)

### Completed - 3

1. Effects of CO<sub>2</sub> driven acidification on biological and Physiological responses of the shrimp *Litopenaeus vannamei* UGC-MRP 10,00,000.00 (December 2017 - December 2019)
2. Assessment Of The Effects Of Co<sub>2</sub> Driven Seawater Acidification On Natural Fish Food Organism *Artemia* *Fransiscana*- A Climate Change Perspective RUSA 2.0 - BEICH 6,00,000.00 (December 2019 - June 2020)



# Bharathiar University

State University | "A++" Grade by NAAC | 46<sup>th</sup> Rank in MoE-NIRF  
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

**Dr T MURALISANKAR , Assistant Professor , Department of Zoology**

3. Assessment of Radiation( $^{232}\text{Th}$ ,  $^{210}\text{Po}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{40}\text{K}$ , and  $^{88}\text{Y}$ ) Risk of Seafood from the South east Coast of Tamil Nadu, India Others 7,500.00 (November 2023 - April 2024)