

1. Name: Dr. Sudha Devi A R

2. Designation: Associate Professor

3. Date of birth 01-05-1963

4. Address:

Residential Souparnika, Vemom P.O., Mananthavady-670645, Wayanad Dt., Kerala, India

Institutional Department of Zoology, Mary Matha Arts & Science College, Vemom P O, Mananthavady, Kerala-670645, India

Phone Nos. Mobile: +91-9947163686

E-mail: arsudhadevi@gmail.com

5. Qualifications: M Sc, M Phil, Ph D

Name of the course	College/University	Year of passing	Class/% of marks	Remarks
B Sc Zoology	University of Calicut	1983	I Class/79	Botany and Chemistry subsidiaries
M Sc Zoology	University of Calicut	1985	I Class/72.4	Specialization in Entomology
M Phil Zoology	University of Calicut	1987	I Class/72.2	Specialization in Aquaculture
Ph D in Zoology	University of Calicut	1995		Title: "Certain Aspects of Growth and Reproduction in Brachyura"

6. Fellowships/Awards:

- ❖ Selected for the P M Namboothiri Award for the best outgoing student of M Sc Zoology in 1985

- ❖ Selected for the award of Senior Research Fellowship of Council of Scientific & Industrial Research, Govt. of India in 1991.

7. Professional Experience:

Scientist at Silkworm Seed Technology Laboratory, Central Silk Board, Govt. of India, Bangalore (1992-1997).

Research papers published

1. **SUDHA DEVI A R** and RITA G ADIYODI. 1995. The coral-shaped accessory sex gland of the ghost crab, *Ocypode ceratophthalmus*. J. Anim. Morphol. Physiol. (India) (1&2), 69-73.
2. **SUDHA DEVI A R** AND RITA G ADIYODI. 1998. Effect of bilateral eyestalk ablation on the major biochemical components of the vas deferens of *Paratelphusa hydrodromous*. Tropical Freshwater Biology (Nigeria). 7: 63-72.
3. **SUDHA DEVI A R** AND RITA G ADIYODI. 2000. Effect of multiple limb autotomy on oogenesis and somatic growth in the freshwater crab, *Paratelphusa hydrodromous*. Tropical freshwater biology (Nigeria).
4. **SUDHA DEVI A R** AND RITA G ADIYODI. 2001. Ultrastructure of mature spermatozoa in the lumen of the spermatheca and middle vas deferens of *Paratelphusa hydrodromous*. Tropical Freshwater Biology (Nigeria).
5. **SUDHA DEVI A R** AND RITA G ADIYODI. 2006. Testicular responsiveness to bilateral eyestalk ablation and thoracic ganglion implantation on spermatogenesis in the freshwater crab *Paratelphusa hydrodromous*. Uttar Pradesh Journal of Zoology (India). 26(2): 127-133.
6. **SUDHA DEVI A R** AND PRASADAN P K. 2006. Occurrence of insect/bird eating tiger spider, *Poecilotheria regalis* Pocock at Wayanad District, Kerala, India. Insect Environment, 12 (3): 110.
7. **SUDHA DEVI A R** AND PRASADAN P K. 2007. Yellow grub disease in the freshwater guppy, *Poecilia reticulata* (Poecillidae). Journal of Experimental Zoology, India. 10(12): 405-407.
8. **SUDHA DEVI A R** AND RITA G ADIYODI. 2007. Fine structure of the spermatheca of freshwater crab *Paratelphusa hydrodromous* during the pre-breeding and breeding season. Uttar Pradesh Journal of Zoology (India) 27(1): 51-59
9. **SUDHA DEVI A R** AND RITA G ADIYODI. 2008. Pattern of spermathecal secretory activity in the ghost crab *Ocypode ceratophthalmus* (Crustacea: Decapoda). Uttar Pradesh Journal of Zoology. 28.

10. **SUDHA DEVI A R AND SMIJA M K**, 2013. Analysis of dietary value of the soft tissue of the freshwater crab *Travancoriana schirnerae*. Indian Journal Applied Research, 3(7): 45-49.
11. **SUDHA DEVI A R AND SMIJA M K**, 2013. Reproductive biology of the freshwater crab *Travancoriana schirnerae* Bott, 1969 (Brachyura: Gecarcinucidae). Indian Journal of Fisheries, 60(3): 13-21.
12. **SUDHA DEVI A R AND SMIJA M K**, 2014. Seasonal changes in the structure and secretory activity of the androgenic gland of *Travancoriana schirnerae*. Central European Journal of Biology (DOI: 10.2478/s 11535-013-0180-7).
13. **SUDHA DEVI A R AND SMIJA M K**, 2014. Certain aspects of biology of the freshwater crab *Travancoriana schirnerae*. Indian Journal of Fisheries.61(2): 35-39
14. **SUDHA DEVI A R AND SMIJA M K**, 2014. Histologically confirmed intersex in the freshwater crab *Travancoriana schirnerae* (Bott, 1969). International Journal of Fisheries and Aquatic studies, 1(3): 99-104.
15. **SHARMILA JOSEPH F R, LATHA N P, RAVICHANDRAN S, SUDHA DEVI A R and SIVASUBRAMANIAN K**, 2014. Shell disease in the freshwater crab, *Barytelphusa cunicularis*. International Journal of Fisheries and Aquatic studies, 1(3): 105-110.
16. **SUDHA DEVI A R., SMIJA M K AND CHANDRASHEKAR SAGAR B K** 2015. Light and electron microscopic studies on the Y organ of the freshwater crab *Travancorianaschirnerae*. Journal of Microscopy and Ultrastructure. DOI.10.1016/j.jmau.2015.03.004.
17. **SUDHA DEVI A R, SMIJA M K AND LATHA N P**, 2015. Fatty acid composition of the freshwater crab *Travancoriana schirnerae*. Fishery Technology 52: 246-251
18. **SUDHA DEVI A R AND SMIJA M K**, 2015. Size distribution and colour pattern in the freshwater crab *Travancoriana schirnerae*. International Journal of Fisheries and Aquatic Studies, 2(4): 264-268.
19. **SUDHA DEVI A R AND SMIJA M K**, 2015. Growth and moulting pattern in the freshwater crab *Travancoriana schirnerae*. International Journal of Fisheries and Aquatic studies, 3(2): 391-396.
20. **Pati S K and SUDHA DEVI A R.**, 2015. Description of a new genus and new species of freshwater crab (Brachyura: Gecarcinucidae) from the Western Ghats, Kerala, India. Zoological studies 54(1):35. DOI:10.1186/s40555-015-0112-0.
21. **Pati S K and SUDHA DEVI A R.**, 2015. *Spiralothelphusa gibberosa*, a new freshwater crab (Brachyura: Gecarcinucidae) from Thrissur district, Kerala, India. Zootaxa 05/2015; 3963(3):416–424. DOI:10.11646/zootaxa.3963.3.5 ?

22. SMIJA M K AND SUDHA DEVI A R, 2015. Characterization of yolk proteins in the freshwater crab *Travancoriana schirnerae*. Fishery Technology. 52: 13-19.
23. SMIJA M K AND SUDHA DEVI A R, 2016. Seasonal and moult related changes in spermatogenesis of *Travancoriana schirnerae*. Fishery Technology, 53: 1-8.
24. SMIJA M K AND SUDHA DEVI A R, 2016. Oocyte development and female reproductive cycle in the freshwater crab *Travancoriana schirnerae*. Turkish Journal of Fisheries and Aquatic Sciences, 15: 1-2. (doi: 10.4194/1303-2712-v15 3 13).
25. SMIJA M K AND SUDHA DEVI A R, 2016. Histological changes of Y organ in the freshwater crab *Travancoriana schirnerae* during moult cycle and in de-eystalked crabs. Turkish Journal of Fisheries and Aquatic Sciences, 16: 533-544.(doi: 10.4194/1303-2712-v16 3 06).
26. LATHA N P, SUDHA DEVI A R AND CHANDRASHEKAR SAGAR B K, 2016. Ultrastructure of hemocytes of the freshwater crab *Travancoriana schirnerae*. Turkish Journal of Fisheries and Aquatic Sciences
27. LATHA N P AND SUDHA DEVI A R, 2016. Impact of unilateral eyestalk ablation on major biochemical parameters of muscle of the freshwater crab *Travancoriana schirnerae* Bott, 1969 (Decapoda: Gecarcinucidae). Brazilian Journal of Biological Sciences, 3(6): 1-10. (doi.org/10. 21472/bjbs.030602).
28. LATHA N P AND SUDHA DEVI A R, 2016. Impact of eyestalk ablation on androgenic gland activity in the freshwater crab *Travancoriana schirnerae*. Brazilian Journal of Biological Sciences, 3(5): 121-134. (doi.org/10. 21472/bjbs.030511).
29. LATHA NADKANDI PADMANABHAN, SUDHA DEVI A R AND ASWANI AYANATH, 2017. Impact of methoprene on spermatogenesis of the freshwater crab *Travancoriana schirnerae*. International Journal of Fisheries and Aquatic Studies, 5(4): 138-146.
30. LATHA NADKANDI PADMANABHAN, SUDHA DEVI A R AND ASWANI AYANATH, 2017. Impact of methoprene on oogenesis of the freshwater crab *TravancorianaSchirnerae*. Brazilian Journal of Biological Sciences, 4(7): 165-179.
31. SUDHA DEVI A R., SMIJA M K AND CHANDRASHEKAR SAGAR B K, 2017. Effect of Eyestalk ablation on fine structure of mandibular organ in the freshwater crab *Travancorianaschirnerae*. Middle-East Journal of Scientific Research 25 (7): 1394-1406, 2017. DOI: 10. 5829/idosi. mejsr. 2017.1394.1406.
32. SUDHA DEVI A R, SMIJA M K NAVYA GOPAL AND SNEHA DINESHAN, 2018. Effect of unilateral and bilateral eyestalk ablation on mandibular organ activity in the freshwater crab *Travancoriana schirnerae*. International Journal of Fisheries & Aquatic Studies India.

33. NAVYA GOPAL AND SUDHADEVI AR., 2018. Morphology and histology of the Y organ in relation to growth and reproduction in the freshwater crab *B.cunicularis*. Acad Res Internatl, 9(3): 19-34
34. NAVYAGOPALAND SUDHA DEVI A R, 2018. Morphology and Histology of Mandibular Organ in Relation to Growth and Reproduction in *Barytelphusa cunicularis*. Internatl J Oceans and Oceanography, 12(2): 93-109.

Books published

1. Accessory sex gland of the ghost crab *Ocypode ceratophthalmus*
Author: Dr Sudha Devi A R
ISBN: 978-1-73039-735-6
Publisher: SARA BOOK PUBLICATION, Ahmedabad, India
2. Aspects of biology of the freshwater crab *Travancoriana schirnerae*
Author: Dr Sudha Devi A R
ISBN: 978-620-2-01226-3
Publisher: LAMBERT Academic Publishing, Germany

Research Projects

Completed:

1. **Title:** Studies on the spider fauna of Wayanad Wild Life Sanctuary (Minor).
Funding Agency: UGC
Order No: MRP(S)-359/2005(X Plan) KLKA020/UGC-SWRO, dated 3.3.2005
Amount: Rs. 1,00,000
Total duration: 2 years (2005-2007)
Principal investigator: Dr Sudha Devi A R
2. **Title:** Analysis of Dietary value of the soft tissues of the freshwater crab *Travancoriana schirnerae*.
Funding Agency: UGC
Order No: MRP(S)-623/09-10/KLKA020/UGC-SWRO KLKA020, dated 30.11.2009
Amount: Rs. 1,00,000
Total duration: 2 years (March 2010-March 2012)
Principal Investigator: Dr Sudha Devi A R
3. **Title:** Role of eyestalk hormones in the regulation of growth and reproduction in the freshwater crab *Travancoriana schirnerae*
Order No.MRP(S)/13-14/KLKA020/UGC-SWRO dtd. 15-02-2014
Amount:1,95,000
Funding Agency: UGC
Total duration: 2 years
Principal Investigator: Dr Sudha Devi A R
Duration : June 2014 – June 2016

- 4. Title:** Biology and Reproductive Physiology of the freshwater crab *Travancoriana schirnerae*
Funding Agency: KSCSTE
Order No: 036/SRSLS/2007/CSTE, dated 27.2.2009
Amount: Rs. 8,75,477
Total duration: 3 years (June 2009-June 2012)
Principal Investigator: Dr Sudha Devi A R
Co-investigator: Prof (Dr) Rita G Adiyodi, Retd Professor , Department of Zoology, Calicut University

Ongoing project:

- 1. Title:** Role of ecdysteroids and methyl farnesoate on growth and reproduction in the freshwater crab *Travancoriana schirnerae*
Funding Agency: KSCSTE
Order No:115/2016/KSCSTE DTD dtd. 03-05-2016
Amount:16,99,400
Total duration: 3 years
Principal Investigator: Dr. Sudha Devi A R
Duration : 2016 –2019

Research Guidance

PhD Degree awarded: 2

1. Smija M K
Title: Growth and reproduction in the freshwater crab *Travancoriana scirnerae*
Awarded: 2015
2. Latha N P
Title: Certain aspects of physiology of Brachyura
Awarded: 2017

Number of scholars pursuing Ph D: 4

Ms Navya Gopal-DST Inspire fellow
Ms Sneha Dineshan- UGC, JRF
Ms Sujila P S- UGC, JRF
Ms Aswani Ayanath-KSCSTE Project Fellow

Papers presented

- Presented a research paper in the Crustacean Society Summer Meeting and the 10th Collquium Crustacea Decapoda Mediterranea held in **Athens, Greece** from 3rd June to 7th June 2012.
- Participated and presented a paper on Effect of eyestalk ablation on fine structure of mandibular organ in the freshwater crab *Travancoriana schirnerae* at The Crustacean Conference held at **National University of Singapore** from 11-13 July 2016.

Lectures delivered:

1. Delivered a lecture on Genetic Engineering at Hill Blooms Higher Secondary School Mananthavady on 15th October 2004.
2. Delivered a lecture on Diversity of Spider fauna of Wayanad and the importance of their conservation in the Regional Seminar on Bioconservation and Sustainable Development (BIOSUD – 08) on 4th March 2008.
3. Delivered a lecture on Genetics for the Plus two students of Sacred Heart HSS, Dwaraka, Wayanad on 24-11-2011.
4. Delivered a Lecture on Research Project Funding for PhD Coursework students at the Department of Zoology, Kannur University, Mananthavady Campus in May 2015.
5. Delivered a Lecture on Histotechniques in the PhD Coursework programme in May 2016.

Membership in Academic bodies

Member Syndicate, Kannur University (2006-10)
 Convenor, KU Syndicate Standing Committee on Course, Research, Library & Publication (2006-08)
 Member, Academic Reforms Committee, KU (2006-09)
 Member, Editorial Board, Kannur University News (2006-09)
 Member, Editorial Board, Annual Report, KU (2006-09)
 Member, Subcommittee, Choice Based Credit Semester System UG (2008-10)
 Member, Distance Education Council, KU (2008-10)
 Member, Selection Committee for the appointment of faculty in various Teaching Departments of the University
 Member, Inspection Commission constituted for the recognition of Res Guides and Res Centres of KU
 Convenor, KU Syndicate Standing Committee on Affiliation of Courses & Staff of Affiliated Colleges (2008-09)
 Member, KU Syndicate Standing Committee on Examination & Discipline (2006-08)
 Member Senate, Kannur University (2008-10)
 Member Academic Council, Kannur University (2009-10)
 Member Editorial Board-Journal of Experimental Zoology India (2007-11)
 Member, Carcinological Society of Japan (2010).
 Member, Asian Fisheries Society (2010-11)
 Member, Society for Reproductive Biology and Comparative Endocrinology (2010-till date)
 Member, The Crustacean Society, USA (2010-16)
 Member, International Society of Zoological Sciences, China (2011-till date)
 Member, Society of Fisheries Technologists (2014 onwards)
 Resource Person SCERT 2004-05

College Level:

Co-ordinator, Committee for Promotion of Research
 Member, Committee for infrastructure Development
 Member, Committee for new admission
 Member, Library Committee

Executive Member, College Co-operative Society
Member, Time table and classroom arrangement committee
Member, College Council

Training programmes attended

- Attended a training programme on Computer Application in Statistics and Project management conducted by the Indian Institute of Management from 12-4-1993 to 1-5-1993.
- Attended a UGC sponsored training programme on Statistics for Biologists held at the Department of Animal Sciences, School of Biological Sciences, Madurai Kamaraj University from 30-1-1989 to 5-2-1989
- Completed a training on Gene isolation and characterization conducted at College of Horticulture, Kerala Agricultural University from 4-05-09 to 16-05-09.
- Participated in a UGC sponsored short term course for Research Guides at Academic Staff College, University of Kerala from 23-3-09 to 28-09-09.
- Attended a training programme on techniques in molecular biology at Seribiotech Research Laboratory, Central Silk Board, Bangalore from 21-12-10 to 31-12-10
- Participated in the International training workshop on Taxonomy of Brachyura organized by Department of Aquatic Biology & Fisheries, University of Kerala in January 2013.
- Participated in the State Level Training Programme on Water Quality held at CCDE, Trivandrum on 23-01-2013.
- Attended a ten day International Training course on Frontier in Animal Ecology and Conservation Biology held at the Institute of Zoology, Chinese Academy of Sciences, Beijing from 21 November to 1 December 2014.
- Participated in the International training workshop on Taxonomy of Crustacea organized by Department of Aquatic Biology & Fisheries, University of Kerala from 20-23 September 2016.

Conference/Seminar Organized

- Organized a seminar on Solid Waste Management as a part of the National Environment Awareness Campaign 2005-06
- Organized a UGC sponsored National Conference on Techniques in Biology at the Biological Techniques Department, Mary Matha Arts & Science College, Mananthavady from 20-8-09 to 21-8-09
- In association with MSSRF Kalpetta, organized a Curtain Raiser Programme at our College as a prelude to the 29th Kerala Science Congress on 13-1-2017

Refresher/Orientation Course attended:

- Orientation Course (30-10 to 26-11-2002) at ASC, University of Calicut
- Refresher Course in Environmental Science at ASC, University of Kerala (15-06-2007 to 05-07-2007)
- Refresher Course in Lifescience at ASC, University of Kerala (26-12-2007 to 15-01-2008).

Sessions chaired:

- Chaired one session in an International Seminar on Recent Trends in Stem Cell Research at Aditya Kiran College of Applied Sciences, Payyannur, Kannur on 5th & 6th August 2008.
- Chaired a session in the National Workshop on Writing and Publication organized by IQAC and Faculty of Sciences, Kannur University held at the Kannur University Campus, Mananthavady from 16-17 Feb 2018.
- Chaired a session in the National Workshop on Applications of Statistical Methods in Bioscience Research organized by the Department of Zoology, Kannur University, Mananthavady Campus held from 6-7 April, 2018.

Seminar/ Conference/workshop attended:

- Participated in a National Seminar on Science and Technology in Ancient India organized by Thirupathi Deemed University at University of Calicut on 06-11-2002.
- Attended the National Seminar cum Workshop on Aquacultural Biotechnology on 5-7 January, 2005 at S.N. College, Kannur
- Participated a Seminar on Grading at Undergraduate level Sponsored by Higher Education Kerala, on 8th August, 2008.
- Participated in a National Seminar on Challenges of Environmental Pollution on 12th December, 2008.
- Attended a UGC sponsored National Seminar on Recent Trends in Parasitology organized by Department of Zoology, Sree Narayana College, Kannur on 12-9-08.
- Participated in a UGC sponsored short term course for Research Guides at Academic Staff College, University of Kerala from 23-3-09 to 28-09-09.
- Attended a National Conference on Recent Trends in Animal Physiology held at the Department of Studies in Zoology, University of Mysore from 29-30th October 2009.
- Participated in the Regional Workshop on Informatics (28-30 October 2010).
- Participated in an International Seminar on Biodiversity conservation held at Mary Matha Arts & Science College on 22-10-2012
- Participated in the National Level Workshop on Statistics on 20-22 March 2014 held in our College
- Participated the 33rd annual meeting of the society for reproductive biology and comparative endocrinology and the ‘International Conference on Bioactive Chemicals for Reproduction and Human Health’ organized by the Life Science Department, Davangere University from 26-28 February 2015.
- Attended a National Workshop on the Identification of the fauna of Western Ghats organized by Western Ghat Regional Centre, Zoological Survey of India on 8th February, 2016.
- Participated in a “National Level workshop on DNA Bar-coding: Hands on Practice” organized by Paul Hebert Centre for DNA bar-coding and Biodiversity studies, Dr. Baba Saheb Ambedkar Marathwada University, Aurangabad, and Maharashtra in collaboration with Government College, Ooty from 30-31 March 2016.

- Participated the Science Academies' Lecture workshop on Recent Trends in Comparative Reproductive Endocrinology held from 24-25 February 2017 at Postgraduate Department of Biotechnology, Chinmaya Arts & Science College, Kannur.
- Organized (jointly with MSSRF, Kalpettaa) a Curtain Raiser Programme as a prelude to the 29th Kerala Science Congress at our College on 13-1-2017
- Participated in the Faculty Development Programme by ICT Academy, Kerala on 24-25 March 2017
- Attended the National Workshop on Ethics and Welfare Concerns in Research at KVASU Pookode on 15th September 2017

Co-curricular activities:

- Co-ordinated the activities of Women Cell for the period 2004-06.
- As a member, co-ordinated the activities of Career Guidance Cell 2001-2004
- Co-ordinated the activities of Science club, Nature Club, Eco Club and Save Green club 1999-2010
- Co-ordinated the activities of Bhoomithra Sena Club 2010-2018
- Internal Mentor for Walk with Scholar programme 2015-17

Extension and dissemination activities

In the capacity of Convenor, KU Syndicate Standing Committee on Course Research, took a pivotal role in

- Constituting UG and PG Boards of Studies of Kannur University (2006-10)
- Revising the guidelines of Ph D registration (2006-10)
- Revising guidelines for recognition of Res Centres & Res Guides of KU (2006-10)
- Launching new PG programmes: M Sc Applied Zoology & M A Rural & Tribal Sociology at the Mananthavady Campus of KU
- Implementation of choice based credit semester system at UG level in colleges affiliated to KU

In the capacity of Convenor, KU Syndicate Standing Committee on Affiliation of Courses & Staff of Affiliated Colleges, took a pivotal role in

- affiliation of new Colleges under KU
- affiliation of new courses in aided/govt/self financing colleges under KU
- approval of appointment/placement of teachers in aided/government colleges affiliated to KU

College Level

- Prepared Campus Biodiversity Register, sponsored by the Kerala State Biodiversity Board) in 2009-10
- Carried out Panamaram Wetland Survey, sponsored by the Kerala State Biodiversity Board in 2009-10

- Conducted a Certificate Course on Herbal Medicine and Primary Health under the scheme 'Developing and implementing local specific curricula' from 10-06-2011 to 10-12-2011 (UGC/SWRO N. RC 113/09-10 KLKA 020 dtd. 23-10-2009).
- Carried out water quality analyses of samples of students and staff, sponsored by Communication and Capacity Development Unit, Department of Water Resource, Govt of Kerala in 2013