# CURRICULUM VITAE

## DR. S. V. KRISHNAMURTHY

[Commonwealth Fellow 2003; Fulbright Fellow 2009]
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### PERSONAL INFORMATION

Born on August 16th 1966, Male, Indian, Married and living in Shimoga with wife and son.

### **EDUCATION**

### Post-Doctoral Research:

1. *Topic* "Habitat variability and population dynamics of Great Crested Newts *Triturus cristatus* with special references to aquatic-terrestrial (wetland) zones", *Institution*: The Durrell Institute of Conservation and Ecology [DICE], Univ. of Kent

*Institution*: The Durrell Institute of Conservation and Ecology [DICE], Univ. of Kent at Canterbury, Kent, UK.

*Research supervisor*: **Dr. Richard A. Griffiths**. Univ. Kent at Canterbury, UK. *Tenure*: February 1, 2003 – July 30, 2003. [**COMMONWELATH FELLOWSHIP**]

2. *Topic* "Combined Effects of Nitrate and Organophosphate Pesticide on Growth, Development and Gonadal Histology of Anuran Amphibians"

Institution: Denison University, Ohio, USA.

*Research collaborator*: **Dr. Geoffrey R. Smith**. Department of Biology, Denison University, Ohio, USA.

Tenure: March 1, 2009 – May 31, 2009. [FULBRIGHT FELLOWSHIP]

## Doctoral Degree (Ph.D)

Ph. D in Zoology, Bangalore University, Bangalore, India.

Guide: Prof. S. Ravichandra Reddy, Bangalore University, India.

*Topic*: "Ecological investigations on the invertebrate drift and benthos of the River Tunga, Sringeri". *Date received*: April 24, 1995

Research Studentship — Bombay Natural History Society, Bombay, India.

Assignment: "Survey & Natural History Observation on the Amphibian Fauna around Sringeri". *Tenure*: 2 Years, completed in 1991.

*Master of Science* (M.Sc.) in Zoology, University of Mysore, Mysore, India. 67.84%, I Class and I Rank, Gold Medalist. *Date received*: July 29, 1989

Bachelor of Science (B.Sc.), Sri J.C.B.M. College, Sringeri (Univ. Mysore). 70.22%, I Class. *Date received*: June 25, 1987.

### **TEACHING POSITIONS (Teaching & Communication Language: ENGLISH)**

Professor:	Dept. of Environmental Science, Kuvempu University- teaching Population & Community ecology, Ecotoxicology, global Environmental Changes & Natural Hazards and Biostatistics to Masters Degree students of Environmental Science, Guiding M. Phil. & Ph.D. students, Tenure: Since July 2008
Associate Professor:	Dept. of Environmental Science, Kuvempu University- taught Population & Community ecology, Ecotoxicology, global Environmental Changes & Natural Hazards and Biostatistics to Masters Degree students of Environmental Science, Guiding M. Phil. & Ph.D. students, Tenure: July 2000 to July 2008
Assistant Professor:	Dept. of P.G. Studies and Research in Environmental Science, Kuvempu University, Jnanasahyadri,- taught Ecology, Ecotoxicology & Biostatistics to Masters Degree Students of Environmental Science, Tenure: Aug. 1996-July 2000
Lecturer:	Dept. of Applied Zoology, Kuvempu University -taught Aquaculture, Ecology, Dairy and Poultry to Masters Degree Students of Applied Zoology. Tenure: Jan. 1995-Aug.1996
Lecturer:	Sri J.C.B.M. College, Sringeri,- taught Non-chordata, Chordata, Embryology and Ecology to Bachelors of Science students. Tenure: July 1992-Oct. 1993
Teacher:	Central School, Kudremukh, taught biology - 'CBSE' syllabus for X+II students. Tenure: Sept. 1989-Feb.1990

#### **ADMINISTRATIVE POSITIONS**

- 1. **Director**: Planning, Monitoring and Evaluation Board (PMEB) of Kuvempu University. Period: August 2011 to March 2015
- 2. **Director**: School of Earth and Environmental Science, Kuvempu University, Period: March 2010-February 2013
- 3. **Member:** Academic Council- Kuvempu University, September 2011 -November 2015
- 4. **Member**: Faculty of Science and Technology, Since 2008 till date
- 5. Member: School Board of Studies (SESD)- Central University of Gujarath
- 6. **Chairman**:
  - Head of the Dept. of P.G Studies & Research in Environmental Science, Kuvempu University. Period: Jan. 2004 Jan 2006; March 2008 to March 2010, Aug 2016.....
  - Board of Studies in Environmental Science (PG-BOS)- Kuvempu University, Period: Since Jan. 2009- Aug 2014.
  - Board of Studies in Environmental Studies (UG-BOS)- Kuvempu University, Period: Since Jan. 2009- Aug 2014.
  - o Board of Examiners in Environmental Science (PG-BOE) Kuvempu University, Period: Jan. 2009 to Jan 2011. And from 2015 –Feb 2016.
- 7. **Member Secretary:** Institutional Animal Ethic Committee (IAEC) of Kuvempu University, Period: Since Dec. 2010

- 8. **Deputy Director:** Planning, Monitoring and Evaluation Board (PMEB). Kuvempu University, Period: June 2008 November 2010
- 9. **Co-ordinator**: Refresher Course in Environmental Science. Conducted a refresher course for 40 College Teachers, Period: Dec 2-22, 2004
- 10. **Member**: Co-ordination committee SET (State Level Eligibility Test for Lectureship-Govt. of Karnataka) Supervised the confidential work related to examination (question paper setting, conduction of examination, valuation and declaration of the result) in 14 subjects.Period: Mar 2005-June2006
- 11. **Member**: Academic Regulation committee of CBCS-Kuvempu University. Setting up the norms, modality and regulation of choice based credit system for Master degree courses of Kuvempu University, 2004.

# ACCOMPLISHMENT AS A TEACHER (apart from teaching, guiding and student supervision)

- 1. Instrumental in formulation of Academic Regulations of Choice Based Credit System (CBCS) of Teaching at Masters Level of Kuvempu University.
- 2. Played a key role in implementing CBCS in Environmental Science, 2003.
- 3. Conducted a UGC sponsored 21 days refresher course in Environmental Science to college Teachers. 2004
- 4. Completed four five research projects (1999-2012).
- 5. Lead a key role in framing, upgrading and implementing the revised syllabus periodically.
- 6. Contributed to regulation framing for M.Sc., M.Phil and Ph.D degrees of Kuvempu University

### OTHER SERVICES PROVIDED TO THE STUDENTS

- 1. Remedial coaching classes to master's degree students are being conducted since 1998.
- 2. Adapted innovative practices regarding- field oriented practical classes to Master's Degree students of Environmental sciences.
- 3. Developed "Student -Group discussion" on environmental issues as a curriculum of study for the students.

### AREAS OF RESEARCH INTERESTS

### **Amphibians**

- 1. Habitat ecology and Ecotoxicology of amphibians.
- 2. Metapopulation dynamics of anuran amphibians in fragmented habitats.

### **RESEARCH PROJECTS (Completed=05)**

1. "Survey and Natural History Observations on the Amphibian Fauna in and around Sringeri". Sponsored by BOMBAY NATURAL HISTORY SOCIETY, BOMBAY. Amount: Rs.25,000/- Duration: 1 Year Status: Successfully completed. Outcome: 2 publications in reputed Journals and Firsthand information on the Natural History of the amphibians around Sringeri.

- 2. "Comparative Studies on Amphibian Diversity and Habitat Ecology in Various Types of Forests and Agriculture Fields of Malnad Regions of Western Ghats in Karnataka". Sponsored by DEPT. OF SCIENCE AND TECHNOLOGY, GOVT. OF INDIA, Amount: Rs.7,50,000-00. Duration: 3 years. Status: Completed July 2002. Outcome: 1) Assessment of amphibian diversity at Three localities of Western Ghats Information on 50 Species of anurans (Occurrence, habitat and Population), 2) Habitat characterization of selected species of anurans, 3) 12 Publications in international Journals and 4) Description of a new frog species.
- 3. "Studies on the effects of a few Organophosphorus insecticides on the fauna of amphibians to understand their decline in Western Ghats" Sponsored by UNIVERSITY GRANTS COMMISSION, NEW DELHI, INDIA. Cost: Rs. 4 Lakhs, duration 3 Years, Status: Completed 2005 (as Co-Investigator with Prof. V. Vasudev, Dept. of Applied Zoology). Outcome: 4 research papers analyzing impact of pesticides at biochemical & population level.
- 4. "Identifying agents of amphibian decline in the central Western Ghats: the impact of nitrate fertilizer on reproductive success". Sponsored by THE DECLINING AMPHIBIAN POPULATION TASK FORCE, (IUCN/SSC), UNITED KINGDOM. Cost: \$ 2,300=00, duration: 2 years, Status: Completed in 2006. Outcome: Two research paper explaining on the impact of nitrate on tadpoles.
- 5. "Combined effects of Nitrate and Malathion (organophosphate pesticide) on growth and development of anuran amphibians in Western Ghats" Sponsored by UNIVERSITY GRANTS COMMISSION, NEW DELHI, INDIA. Cost: Rs. 9.498 Lakhs, duration 3 Years, Status: Completed in Jun. 2012. Outcome: 3 research papers in International Journals.

### **RESEARCH TECHNIQUES**

- 1. Toxicity Bioassay of synthetic fertilizers and pesticides on amphibians Acute and chronic toxicity tests, effect on growth and development, food consumption, morphological abnormalities among anuran amphibians.
- 2. Assessment of diversity, distribution and ecological techniques for the study of habitat ecology of amphibians; Field oriented research techniques, metapopulation dynamics and ecotoxicoilogical techniques

**IMPORTANT INVITED TALKS** (in the past five years) (Apart from those talks delivered in refresher courses in colleges and universities)

- 1. Agro-chemical contaminations and status of amphibians- 16<sup>th</sup> July 2015, SESD-Central University of Gujarath.
- 2. Environmental Contamination and Status of Amphibian population- Inaugural lecture-Animal Science's Expo, IDSG College, Chikmagaluru, 27<sup>th</sup> March 2015.

- 3. Air and Water Pollution in India. Invited Lecture National Symposium Advances in Environmental Sciences, Central University of Gujarath, Gandhinagar. 27<sup>th</sup> Feb. 2015.
- 4. Role of Biodiversity in Sustainable development: Invited Lecture, Academic Staff College, University of Mysore, Mysore. 25<sup>th</sup> December 2011. Participants: Teaching faculty of colleges and Universities of India.
- 5. Environmental Contaminations and Amphibian Population Decline: Invited Lecture, Academic Staff College, Goa University, Goa. 19<sup>th</sup> March 2011. Participants: Teaching faculty of colleges of south India.
- 6. Pesticide and Chemical Fertilizers in agro-ecosystem: Influence on amphibian populations-Invited Lecture in National Seminar on Zoology, Life Process & Nanotechnology— 8<sup>th</sup> to 10<sup>th</sup> February 2010. Participants: Teaching and Research faculty from different parts of the country.
- 7. Amphibian diversity, distribution and Population decline in Western Ghats, India: Ronnenburg Foundation Invited Lecture Series, USA 16<sup>th</sup> April 2009, Location: Department Biology, Ohio, USA. Participants: Teaching and Research faculty, Students of Denison University.
- 8. Amphibian species diversity; distribution and pattern of population decline in Western Ghats —Invited Lecture, Acharya Nagarjuna Univ. 2<sup>nd</sup> Dec. 2006. Participants: Biology/Environmental Science teaching faculty of the University.

## **RESEARCH PUBLICATIONS (Total=91 Publications)**

51 Research Paper, 8 Book/Proceeding articles, 27 Research Abstracts and 5 Reports. = **91** 

# **List of Publications** (\* important publications) *Research papers*

- 51. Gurushankara, H.P, **S. V. Krishnamurthy** and V. Vasudev, 2016. Effect of Methyl Parathion on survival and Development of Tadpoles of Indian Cricket frog *Fejervarya limnocharis*. <u>J. Trop. Life. Science</u>, 6(1): 41-46.
- \*50. Ganapati Hegde and **S. V. Krishnamurthy**, 2014. Health Status of Common Frog *Fejervarya limnocharis* (Anura: Ranidae) in Rice-Paddy Agroecosystems of Western Ghats, India. American-Eurasian J. Agric. & Environ. Sci., 14 (12): 1492-1497
- \*49. Ganapati Hegde and **S. V. Krishnamurthy**, 2014. Analysis of health status of the frog *Fejervarya limnocharis* (Anura: Ranidae) living in rice paddy fields of Western Ghats, using

- body condition factor and AChE content. <u>Ecotoxicology & Environmental Contamination</u> 9(1): 69-76.
- 48. Ganapati H, Mahesh, M, Sushma, S.G, Vinodbabu, N, Vijayakumar, N.S and S.V. Krishnamurthy. 2014. Influence of combinations of pesticides and fertilizers on aquatic productivity. <u>Journal of Environmental Protection</u> 5: 434-440.
- \*47. Nataraj, M.B. and **S. V. Krishnamurthy**. 2014. Exposure of tadpoles of *Fejervarya limnocharis* (Anura: Ranidae) to combinations of carbaryl and cypermethrin. <u>Toxicological and Environmental Chemistry</u>. 95 (8): 1408–1415.
- Abraham Verghese, C. B. Soumya, S. Shivashankar, S. Manivannan, and **S. V. Krishnamurthy** 2012. Phenolics as chemical barriers to female fruit fly, *Bactrocera dorsalis* (Hendel) in mango. Current Science.103 (5): 563-566
- \*45. Gurushankra, H.P. **S. V. Krishnamurthy** and V. Vasudev. 2012. Changes in sialic acid content of jelly coat in pesticide-exposed frog eggs and their influence on fertilization. <u>Advances in Experimental Medicine and Biology</u> 749: 329-336.
- 44. **Krishmurthy, S. V** and J. Keshavayya, 2012. Combined effects of Malathion and nitrate on survivability of tadpoles of Indian Cricket Frog, *Fejervarya limnocharis*. 6th SETAC World Congress, May 2012, Berlin, pp 76-79.
- \*43. Nataraj, M.B and **S. V. Krishnamurthy**. 2012. Effects of combinations of Malathion and cypermethrin on survivability and time of metamorphosis of tadpoles of Indian cricket frog (*Fejervarya limnocharis*). Environmental Science and Health Part B. 47: 67-73.
- \*42. **Krishnamurthy, S.V** and G. R. Smith. 2011. Combined effects of Malathion and nitrate on early growth, abnormalities, and mortality of free feeding tadpoles of Wood frog *Rana sylvatica*. Ecotoxicology 20:1361-1367.
- \*41. Smith, G. R., **S. V. Krishnamurthy**, A.C. Burger and L.B. Mills, 2011. Differential effects of Malathion and Nitrate exposure on American Toad and Wood Frog Tadpoles. <u>Archives of Environmental Contamination and Toxicology</u> 60:327–335.
- \*40. **Krishnamurthy, S.V** and G. R. Smith. 2010. Growth, abnormalities, and mortality of free feeding tadpoles of American Toad *Bufo americanus* exposed to combination of Malathion and nitrate. <u>Environmental Toxicology and Chemistry</u> 29 (12):2777- 2782.
- Satarkar V. R, **S. V. Krishnamurthy**, J. R. Faleiro, and A. Verghese. 2009. Spatial distribution of major Bactrocera fruit flies attracted to methyl eugenol in different ecological zones of Goa, India. International Journal of Tropical Insect Science. 29 (4): 195–201

- \*38. Girish, K. G and **S. V. Krishnamurthy**. 2009. Distribution of tadpoles of large wrinkled frog *Nyctibatrachus major* in central Western Ghats: influence of habitat variable. <u>Acta Herpetologica</u> 4(2):153-160.
- 37. Satarkar V. R, J. R. Faleiro, **S. V. Krishnamurthy**, R. Ramesh and A. Verghese. 2009. A Review on the behaviour of *Bactrocera* fruit flies. <u>Current Biotica</u> 3(2):264-277.
- 36. Satarkar V. R, J. R. Faleiro, **S. V. Krishnamurthy** and A. Verghese. 2009. Activity of *Batrocera cucurbitae* (Coquillett) and *Batrocera tau* (Walker) at different elevations within the midland zone of Goa. Pest Management in Horticultural Ecosystems 15(1):80-82.
- 35. **Krishnamurthy, S.V.,** Meenakumari, D., H. P. Gurushankara and V. Vasudev, 2008. Nitrate induced morphological anomalies in the tadpoles of *Nyctibatrachus major* and *Fejervarya limnocharis* (Anura: Ranidae). <u>Turkish Journal of Zoology</u>. 32: 239- 244.
- \*34. **Krishnamurthy, S.V**. and A. H. Manjunatha Reddy, 2008. An estimate of local population of *Nyctibatrachus aliciae* at two habitat gradient of forest in Western Ghats. <u>Acta Herpetologica</u> 3(1): 51-55.
- \*33. Patel, A.M., P.A. Kulkarni, K.G. Girish, H.P. Gurushankara and **S.V. Krishnamurthy**, 2008. *Fejervarya limnocharis* Morphology. <u>Herpetological Review</u>. 39 (1): 77.
- 32. Vasudev, V., **S.V. Krishnamurthy** and H. P. Gurushankara, 2008. Organophosphate Pesticidesa major threat to anuran populations in an agro ecosystems of Western Ghats, India. <u>Froglog</u> 83: 8-9.
- \*31. Gurushankara,H.P., D. Meenakumari, **S.V. Krishnamurthy,** V. Vasudev, 2007. Impact of Malathion stress on lipid metabolism in *Limnonectus limnocharis*. Pesticide Biochemistry and Physiology (Published online, 6th Sept. 2006). 88(1): 50- 56.
- \*30. Gurushankara,H.P., **S.V. Krishnamurthy** and V. Vasudev, 2007. Effect of Malathion on survival, growth and food consumption of Indian cricket frog (*Limnonectus limnocharis*) tadpoles. <u>Archives of Environmental Contamination and Toxicology</u> 52: 251-256.
- \*29. Gurushankara, H.P., **S. V. Krishnamurthy** and V. Vasudev, 2007. Morphological abnormalities in natural populations of common frogs inhabiting agro-ecosystems of central Western Ghats. Applied Herpetology 4: 39-45.
- \*28. **Krishnamurthy.S.V**, Meenakumari, D., H P Gurushankara, and R A Griffiths, 2006. Effects of nitrate on feeding and resting of tadpoles of *Nyctibatrachus major* (Anura: Ranidae), Australasian Journal of Ecotoxicology 12:123-127.

- 27. Satarkar, V. R., **S.V. Krishnamurthy**., J. R. Faleiro., A Verghese and J. M. Stonehouse, 2006. An assessment of methyl eugenol dispensers and fruit fly species complex in orchard agroecosystems of Goa, India. <u>Pest Management in Horticulture Ecosystem</u> 12(2): 161-163.
- \*26. **Krishnamurthy, S.V.** and S.A.Hussain, 2004. Distribution of amphibian species in Kudremukh National Park (Western Ghats, India) in relation to mining and related habitat changes. <u>The Herpetological Journal</u> 14:129-135.
- \*25. **Krishnamurthy, S.V**, 2003. Amphibian assemblages in undisturbed and disturbed areas of Kudremukh National Park, central Western Ghats, India. <u>Environmental Conservation</u> 30(3): 274-282.
- 24. Gururaja, K.V., A.H. Manjunatha Reddy, J. Keshavayya and **S.V. Krishnamurthy**, 2003. Habitat occupancy and factors influencing the restricted distribution of *Nyctibatrachus major* (Boulenger) in Central Western Ghats, India. <u>Russian Journal of Herpetology</u> 10(2): 87-92.
- 23. Gurushankara, H. P., V. Vasudev and **S.V. Krishnamurthy**, 2003. Estimation of acute toxicity of Malathion insecticides on tadpoles and adults of *Rana (Limnonectus) limnocharis*. <u>Indian Journal of Comparative Animal Physiology</u> 21: 48-54.
- \*22. **Krishnamurthy, S.V**., K. V. Gururaja and A.H. Manjunatha Reddy 2002. Direct development in *Philautus glandulosus* (Rhacophoridae: Anura). <u>Herpetological Natural History</u> 9(1): 97-102.
- 21. Manjunatha Reddy, A.H., K.V. Gururaja, **S.V. Krishnamurthy**. 2002. Habitat features of an endemic anuran *Micrixalus saxicola* Jerdon, 1853 (Amphibia: Ranidae) in central Western Ghats, India. Amphibia- Reptilia 23(3): 370-374.
- 20. Nisha, B and **S.V. Krishnamurtrhy** 2002. Effect of monocrotophos (organophosphorus pesticide) on growth and oxygen uptake in a freshwater fish *Cirrhina mrigal*. <u>Kuvempu</u> University Science Journal 2(1): 67-73.
- 19. Nazneen, K., K. V. Gururaja, A.H. Manjunatha Reddy and **S.V. Krishnamurthy**, 2001. Birds of Kuvempu University Campus, Shimoga District, Karnataka. <u>Zoo's Print Journal</u> 16(8): 557-560.
- \*18. **Krishnamurthy, S.V.,** A.H. Manjunatha Reddy and K.V. Gururaja 2001. A new species of frog in the Genus *Nyctibatrachus* (Anura:Ranidae) from the Western Ghats of India. <u>Current Science</u>, 80(7): 887-891.
- 17. Ravichandran, M.S., and **S.V. Krishnamurthy**, 2001. On the distribution of *Ichthyophis bombayensis* Taylor, 1960 in central Western Ghats. <u>Journal of the Bombay Natural History Society</u>, 98(1): 121-123.

- 16. **Krishnamurthy, S.V**., K.V. Gururaja and A.H. Manjunatha Reddy, 2001. *Nyctibatrachus major* (Boulenger) Feeding Habits. <u>Herpetological Review</u>, 32(3): 182.
- 15. Manjunatha Reddy, A.H., K.V. Gururaja., M.S. Ravichandran and S.V. Krishnamurthy. 2001. Range extension of *Ansonia ornata* (Gunther, 1875) and *Limnonectus brachitarsus* (Gunther, 1875). <u>Hamadryad</u>, 26(2): 358 359.
- \*14. **Krishnamurthy, S.V**. and S.A. Hussain, 2000. Amphibian fauna of Kudremukh National Park, Western Ghats, India. <u>Journal of the Bombay Natural History Society</u>, 97(3): 436-439.
- 13. **Krishnamurthy, S.V**. and Katre Shakunthala, 1999. Sexual dimorphism in *Rana curtipes* (Jerdon). Zoo's Print Journal. XIV (5): 21-22.
- \*12. **Krishnamurthy, S.V**and S. Ravichandra Reddy, 1997. Diel periodicity in the plankton drift and benthos in an unregulated tropical river, India. <u>Journal of Tropical Freshwater Biology</u> 6:1-16.
- 11. **Krishnamurthy, S.V**. and Katre Shakunthala, 1997. *Rana curtipes* (Bicolored Frog): Reproduction. <u>Herpetological Review</u>, 28(4): 200-201.
- 10. **Krishnamurthy, S.V.,** 1997. Growth pattern of free feeding larvae of *Nyctibatrachus major* (Boulenger). <u>Herpeton</u>. 7:11-13.
- 9. **Krishnamurthy, S.V**., 1997. *Nyctibatrachus major* (Boulenger) in malnad region of Western Ghats. <u>Froglog</u> (UK) 20:2.
- \*8. **Krishnamurthy, S.V.,** and S. Ravichandra Reddy, 1996. Seasonal fluctuations and periodicity in the insect larval drift in a tropical river Tunga, Western Ghats. India. <u>International Journal of Ecology and Environmental Science</u>, 22: 263-273.
- 7. **Krishnamurthy, S.V.** and Katre Shakunthala, 1996. Notes on features of habitat, morphology and morphometry of *Rana aurantiaca* (Boulenger) (Ranidae:Anura) from Sringeri, Western Ghats, India. <u>Proceedings of the Indian National Science Academy</u>, B 62(5): 277-280.
- \*6. **Krishnamurthy, S.V.** and S. Ravichandra Reddy, 1996. Phytoplankton diversity in the drift of a tropical river, Tunga. Western Ghats. India. <u>Proceedings of the Indian National Science Academy</u>, B 62(2): 105-110.
- 5. **Krishnamurthy, S.V.**, 1996. A report on fish diversity and their stomach content analysis of the river Tunga. Western Ghats. Quart. <u>International Journal of Ecology and Environmental Science</u>, 2:45-49.

- 4. **Krishnamurthy, S.V.,** 1996. Habitat features of amphibians in Sringeri, Western Ghats. <u>ZOOS'</u> PRINT.XI (8): 2-6.
- 3. **Krishnamurthy, S.V.,** 1996. Future of some anurans in Malnad of Western Ghats. <u>ZOOS' PRINT</u>. XI (5):9-11.
- 2. **Krishnamurthy, S.V,** and Katre Shakuntala, 1993. Amphibian fauna of Sringeri taluk (Chickmagalur District: Karnataka). <u>Journal of the Indian Institute of Science</u>, 73: 443-452.
- 1. **Krishnamurthy, S.V.**, Katre Shakuntala and S. Ravichandra Reddy, 1992. Structure of the femoral gland and habitat features of an endemic anuran *Nyctibatrachus major* (Boulenger). Journal of the Indian Institute of Science, 72:385-393.

### Research paper published in Proceedings/Books

- 8. **Krishnamurthy,S.V.** 2015. Air and Water Pollution in India. Proceedings of the National Symposium Advances in Environmental Sciences, Central University of Gujarath, Gandhinagar, India. Pp 9-13.
- 7. Gurushankara, H. P., D. Meena Kumari, S. V. Krishnamurthy and V. Vasudev, 2006. Impact of Methyl parathion stress on lipid metabolism in Indian cricket frog *Limnonectus limnocharis* of Western Ghats. In: Proceedings of International Conference on Environment, Penang, Malaysia, Pp 516-526.
- 6. Gurushankara, H. P., V. Vasudev and **S. V. Krishnamurthy**, 2004. Preliminary studies on the toxicity of Malathion on *Rana* (*Limnonectus*) *limnocharis*. In: Contributions to Biosciences, Pp 180-188 [Eds: Pandey, B. N and P. S. Murthy], Zoological Society of India.
- 5. Gurushankara, H. P., V. Vasudev and **S. V. Krishnamurthy**, 2004. A new technique to evaluate toxicity of methyl parathion on *Rana* (*Limnonectus*) *limnocharis*. In: New Horizon of Animal Sciences. Pub: Zoological Society of India & Magadh University. Pp: 235-243.
- 4. **Krishnamurthy, S.V**. and J. Keshavayya, 2004.Influence of habitat characters on anuran amphibian assemblages and distribution in Kuvempu Bioreserve, Western Ghats, India. In: Contributions to Biosciences, Pp 387-398 [Eds: Pandey, B. N and P. S. Murthy], Zoological Society of India.
- 3. **Krishnamurthy**, **S.V**, 2003. Amphibian diversity and consequences of habitat dissimilation on their distribution in central Western Ghats of Karnataka. SERC Research Highlight-June 2003. Department of Science & Technology, Govt. of India, Pp 9-38.

- 2. **Krishnamurthy**, **S.V**. 1999. Amphibian diversity in a few selected environs of Western Ghats. In: Biodiversity of Western Ghats complex of Karnataka- Resource potential and Sustainable utilization, Pp 107-118. [Eds: Hussain,S.A and K.P. Achar], Biodiversity Initiative Trust, Mangalore.
- 1. Hussain, S.A., **S.V. Krishnamurthy**, M.R. Rao, & M. B. Nataraj. 1999. An overview of some aspects of the Biodiversity of Kudremukh National Park, Karnataka. In: Biodiversity of Western Ghats complex of Karnataka- Resource potential and Sustainable utilization. Pp 181-228. [Eds: Hussain,S.A and K.P. Achar], Biodiversity Initiative Trust, Mangalore.

### **Research Abstracts**

- 27. **S. V. Krishnamurthy** 2015. Air and Water Pollution in India. Proceedings of the National Symposium "Advances in Environmental Sciences" Central University of Gujarath. 9-13.
- 26. Krishna Kulkarni, Shreyas, R., Chethan Kumar, M.V, and **S. V.Krishnamurthy** 2015. A study on the effect of agrochemical contamination on frogs using retinol present in the liver. Proceedings of 11th Kannada Science Conference. Pp. 137.
- 25. Ganapati Hegde and **S. V. Krishnamurthy**. 2013. Agrochemical contamination correlates anuran diversity and health status in the rice paddy fields of Western Ghats. Proceedings of 3<sup>rd</sup> National Conference on Environment and Biodiversity of India. Pp 74.
- 24. **S. V. Krishnamurthy** and J. Keshavayya, 2012. Combined effects of Malathion and nitrate on survivability of tadpoles of Indian Cricket Frog *Fejervarya limnocharis*. ETO6A-2 SETAC International Conference, Berlin
- 23. Vivek Gunuga, **S. V. Krishnamurthy** and J. Keshavayya, 2010. Influence of Malathion and nitrate on metamorphosis of tadpoles of *Haplobatrachus tigerinus* in laboratory condition. National Seminar on "Zoology, Life Process & Nanotechnology"-Seminar Abstracts, pp 118.
- 22. Girish, K. G and **S. V. Krishnamurthy**, 2010. Habitat use and requirement of Large Wrinkled Frog *Nyctibatrachus major* in Central Western Ghats. National Seminar on "Zoology, Life Process & Nanotechnology"-Seminar Abstracts, pp 101.
- 21. Girish, K.G and **S.V. Krishnamurthy** 2008. Habitat and conservation of large wrinkled frogs in Western Ghats. Proceedings of the 4<sup>th</sup> Kannada Science Conference, Pp86.
- 20. Girish, K.G and **S.V. Krishnamurthy** 2008. Distribution of tadpoles of large wrinkled frog *Nyctibatrachus major* in Central Western Ghats: Influence of habitat variables. National Conference on Animal Ethics and Welfare, 28-30 March 2008. Conference Abstract, pp 68.

- 19. Vasudev, V., H. P. Gurushankara and **S. V. Krishnamurthy** 2007. Amphibians as a model to study the oxidative stress induced by agricultural pesticides. International Conference on "Emerging Trends in Free radical and Antioxidant Research" Jan 8<sup>th</sup> -11<sup>th</sup> 2007, Conference Abstract, pp78.
- 18. **Krishnamurthy,S.V.** 2006. Amphibian species diversity, distribution and population decline. National Seminar on Recent Advances in Zoology, 2<sup>nd</sup> Dec 2006, Proceedings pp 3-4.
- 17. Gurushankara, H.P., Meena Kumari, D., V. Vasudev and **S. V. Krishnamurthy**, 2006. Impact of malathion on lipid metabolism in Indian Cricket Frog, *Limnonectus limnocharis*. 15th National Annual Conference on Zoology. Goa, 21-23<sup>rd</sup> Feb 2006. Conference Abstract, pp 8.
- 16.Ravichandra Reddy, S and S.V. Krishnamurthy 2004. Multiple determinants of aquatic invertebrates of the river Tunga, Western Ghats, India. 7th INTECOL International Wetlands Conference, Utrecht. Conference Abstracts, pp 254.
- 15.**Krishnamurthy, S.V**. and J. Keshavayya, 2003. Influence of Habitat Characters on Anuran Amphibian Assemblages and Distribution in Kuvempu Bioreserve, Western Ghats, India. 14th National Annual Conference on Zoology, Kanyakumari, 21-23<sup>rd</sup> Dec. 2003.
- 14.Gurushankara, H.P., V. Vasudev and **S.V. Krishnamurthy,** 2003. A new technique to evaluate toxicity of methyl parathion on *Rana (Limnonectus) limnocharis*. 14th National Annual Conference on Zoology, Kanyakumari, 21-23<sup>rd</sup> Dec. 2003.
- 13. Gurushankara, H.P., V.Vasudev and **S.V. Krishnamurthy**, 2003. Preliminary studies on the sensitivity of *Rana* (*Limnonectus*) *keralensis* to Malathion. National Conference on recent trends in Aquatic Biology. Nagarjuna University, Nagarjunanagar. 29 31, January 2003.
- 12.Gurushankara, H.P., V.Vasudev and **S.V. Krishnamurthy**, 2003. Estimation of acute toxicity of Malathion insecticide on tadpoles and adults of *Rana (Limnonectus) limnocharis*. 20th annual conference of Indian society for Comparative Animal Physiology, Sri. Venkateswara University, Tirupati. 26 28, February 2003.
- 11. **Krishnamurthy, S.V**. and K.V. Gururaja, 2003. Anuran assemblages in transitional zones of fragmented habitats in Western Ghats, India. Poster presented in 90<sup>th</sup> Session of Indian Science Congress, Bangalore.
- 10. **Krishnamurthy**, **S.V.**, and A. H. Manjunatha Reddy, 2003. Habitat features of an endemic anuran *Nyctibatrachus aliceae* and its distribution in relation to microhabitats. Poster presented in 90<sup>th</sup> Session of Indian Science Congress, Bangalore

- 9. Gurushankara, H.P., V. Vasudev and **S.V. Krishnamurthy**, 2002. Preliminary studies on the toxicity of Malathion on *Rana* (*Limnonectus*) *limnocharis*. National Conference on Zoology Vision for 21st Century, Bangalore University Bangalore. 29 31, December 2002.
- 8. **Krishnamurthy, S.V** and S. Ravichandra Reddy, 2002. Diel periodicity in the drift of aquatic insects in an unregulated tropical river. National Symposium on Limnology in India. Chennai, Programme and Abstracts; pp 18-19.
- 7. **Krishnamurthy, S.V**, K.V. Gururaja and A. H. Manjunatha Reddy, 2000. Comparative studies on anuran diversity in various types of habitats of central Western Ghats, Indian Science Congress, New Delhi.
- 6. **Krishnamurthy, S.V**. and S. Ravichandra Reddy, 1999. Diversity and population dynamics of benthic macro invertebrates in the River Tunga, Western Ghats. Proceedings of International Conference on Tropical Aquatic Ecosystems, Nainital, India.
- 5. **Krishnamurthy. S.V.,** 1997. Amphibian diversity in a few selected localities of Western Ghats. Proceedings of 43rd Wildlife week celebration and seminars on Biodiversity of Western Ghats, Karkala, Karnataka, India.
- 4. **Krishnamurthy. S.V.,** 1996. Habitat features of amphibians in the environs of Sringeri, Western Ghats. Proceedings of International conference on Biology and Conservation of the South Asian Amphibians and Reptiles, Kendy., Sri Lanka.
- 3. **Krishnamurthy, S.V**. and S. Ravichandra Reddy, 1992. Diel Periodicity in the invertebrate drift and benthos in an upland river. Proceedings of National Symposium on "Modern Trends in Freshwater Biology Research" Bhagalpur, India.
- 2. Ravichandra Reddy. S., Katre Shakuntala, **S.V. Krishnamurthy** and K.R. Gundappa, 1991. Fish diversity and seasonal variations in the drift organism in a tropical river. Proceedings of the International symposium on environmental variations of Riverine Fishes: Management implications. University of Lodz. Poland.
- 1. **Krishnamurthy, S.V**, 1991. Ecology of drift and Benthic organisms in the Tunga river. Souvenir of National Workshop "Perspective of Aquatic Entomology". Madras, India.

### **Research Report**

6. **Krishnamurthy, S. V**. and J. Keshavayya, 2013. Combined effects of nitrate and malathion (Organophosphate pesticide) on growth and development of anuran amphibians of Western Ghats. No. F-34-65/2008(SR). Final Report submitted to UGC, New Delhi. Pp 36.

- 5. **Krishnamurthy, S. V.** 2006. Identifying the agents of amphibian decline in the central Western Ghats: the impact of nitrate fertilizer on reproductive success. Final Report. Declining Amphibian Population Task Force, UK (IUCN/SSC-UK), pp 21.
- 4. Vasudev, V and **Krishnamurthy, S.V**. 2005. Studies on the Effects of a few organophosphorus insecticides on the fauna of amphibians to understand their decline in central Western Ghats. Final Report, No: F. 3-65/2001(SR-II), University Grants Commission, New Delhi. PP 54.
- 3. **Krishnamurthy, S.V**, and J. Keshavayya, 2002. Comparative studies on amphibian diversity and habitat ecology in various types of forest and agriculture fields of malnad region of Western Ghats in Karnataka. Final Report, SP/SO/C-39/97, Department of Science and Technology, SERC Division, Government of India, PP iv + 101.
- 2. **Krishnamurthy, S.V,** 1998. Amphibians of India. Report on Conservation Assessment and Management Plan. BCPP. PP.102. (one of the contributor and compiler of the data sheets)
- 1. **Krishnamurthy, S.V**, 1992. Survey and Natural History Observations on the Amphibian Fauna around Sringeri, Bombay Natural History Society, Bombay, PP.18.

#### CONFERENCES / WORKSHOPS ATTENDED

- 29. National Symposium –Advances in Environmental Sciences, 27<sup>th</sup> Feb 2015. Central University of Gujarath, Gandhi Nagar, Gujarath.
- 28. CPCSEA Nominees Training Programme 7th July to 11th July 2014. National Institute of Animal Welfare (Ministry of Environment, Forest & Climate Change, Govt. of India). Ballabhgarh, Hariyana.
- 27. Workshop on "Choice Based Credit System in Institution of Higher Education in India" October 28-30, 2013. National University of Educational Planning and Administration (NUEPA), New Delhi.
- 26. 3<sup>rd</sup> International conference on Environment and Biodiversity of India 6th Oct. 2013. Pune, Organized by NECEER
- 25. Emotional Intelligence Workshop, US Consulate General-Chennai, March 2, 2012
- 24. UK-India partnership Development Programme. British Council, New Delhi. June 26-27, 2012.
- 23. Globalization: challenges and opportunities for the development of Science and Technology –A Conference of Karnataka Science & Technology Academy and University of Mysore, Feb 15-16, 2011.

- 22. National Seminar on Zoology, Life Process & Nanotechnology, Goa University, 8th to 10th February 2010
- 21. National Conference on Animal Ethics and Welfare, Annamalai University, Tamilnadu, India. 28-30 March 2008
- 20. National workshop on recent trends in Zoology, TJPS College, Acharya Nagarjuna Univ. [2nd Dec. 2006]
- 19. Workshop on "Developing Self Instructional Material (SIM)" Kuvempu University [18th Sept-20th Sept 2006].
- 18. National workshop on "Development of Self-Learning materials for distance and online learning". Indira Gandhi national Open University, Delhi [28th Aug-2nd Sept 2006].
- 17. 16th midyear meeting of Indian Academy of Science, Bangalore [7th 9th July 2005]
- 16. Workshop on "Intellectual Property Rights", Kuvempu University [29-30th January, 2005].
- 15. 7th INTECOL International Wetland Conference, 2004 at Utrecht, the Netherlands, [25th to 30th July 2004].
- 14. National seminar on patents, the Patent Cooperation Treaty (PCT) and the commercialization of inventions for academic institutions" Bangalore, [March 25th and 26th 2004]. Organized by the world intellectual property organization (WIPO), Ministry of Human Resource Development (MHRD), Govt. of India and National Law School of India University (NLSIU)
- 13. "National seminar on Intellectual Property Rights", Davanagere [14-15 March, 2004].
- 12. "National Annual Conference on Zoology", Kanyakumari, [21-23rd Dec. 2003].
- 11. Research priorities in Tropical Rainforests in India" National workshop, Organized by Ministry of Env. & Forest, Govt. of India, SACON and Wildlife Institute of India [27- 28 February 2001]
- 10. "Karnataka Biodiversity Information System" Organized by Dept. of Forest, Environment & Ecology, Government of Karnataka, Bangalore [28th and 29th November 2000].
- 9. "Current Status of Biodiversity of Dakshina Kannada and Udupi district", University level Seminar, Karkala, Sponsored by Univ. of Mangalore and Kudremukh Wildlife Division, Presented a research paper entitled "Amphibians of Western Ghats: An ecological approach" [3rd October 1999].

- 8. "Hands on training workshop in amphibian field technique, identification and taxonomy". Organized by Zoo outreach organization, Sponsered by DAPTF / SSC, Dallas Zoo and Columbus Zoo, at Subramanya, Mangalore District (14th 18th December 1998).
- 7. "Status and prospective of wildlife management in Western Ghats with special reference to Malnad region". One day seminar Kuvempu University (10th November 1997).
- 6. "Western Ghats Biodiversity Conference" Karkala, Organized by Biodiversity Initiative Trust, (4-5th October 1997).
- 5. "Conservation Assessment Management Plan for Indian Amphibians" Biodiversity conservation Prioritisation Project, IUCN / SSC, WWF, CBSG, DAPTF, Bhubaneswar (22-26th April 1997).
- 4. University workshop "Self employment opportunities to Biologists", Kuvempu University, Shimoga (26th April to 5th May 1995).
- 3. Training programme on writing a scientific paper PID-CSIR, New Delhi (14-18th Feb '94).
- 2. Indo-US consultant meeting on "Recent development in the control of Biodeterioration", Bangalore (12-16th July 1992).
- 1. National workshop 'Perspectives of aquatic entomology', Madras (15-27th April 1991).

**COUNTRIES VISITED ON ACADEMIC ASSIGNMENTS:** USA, United Kingdom, Germany, The Netherlands....

### RESEARCH GUIDING (Successfully completed: 10 Ph.D)

### A. Ph. D (Completed)

- 1. Use of agrochemicals and their influence on population structure of anuran amphibians in agro-ecosystem of Western Ghats (Gnanapati Hegde 2015).
- 2. Individual and Interactive Effects of few Pesticides on Anuran Metamorphosis (Mr. M.B. Nataraj 2014).
- 3. Population ecology of *Nyctibatrachus major* (Boulenger) in Central Western Ghats of India. (Mr. K.G. Girish, 2011)
- 4. Field ecology and population dynamics of major fruit flies *Bactrocera* Sp. (Diptera: Tephritidae) in the Western Ghats region of Goa (Ms. Vidya R. S. 2009).
- 5. Cytogenetical and Biochemical Effects of Organophosphate Pesticides Malathion and Parathion on *Rana (Limnonectus) Limnocharis* (Mr. H.P. Gurushankara, 2007)

- 6. Nitrate tolerance among anuran amphibians of central Western Ghats (Smt. D. Meena Kumari, 2007)
- 7. Role of changes in habitat qualities on ecological status of endemic anurans *Micrixalus* saxicola and *Nyctibatrachus aliceae* (Mr. A.H. Manjunatha Reddy 2004)
- 8. Effect of habitat fragmentation on distribution and ecology of anuran amphibians in some parts of central Western Ghats (Mr. K.V. Gururaja, 2003).

### **Under Co-guideship**

- 1. Ecological modelling, biodiversity studies, geographical mapping of mango hopper (Hemiptera: Cicadellidae) population in mango ecosystem of South India (Ms. Devi Tungam, S. 2015).
- 2. Plant-Insect interaction in selected hosts of fruit fly (Batraocera dorsalis) with respect to fruit maturity, biochemical, visual and environmental cues with special reference to selected mango varieties (Ms. Soumya C. B. 2015).

### B. Ph.D (Ongoing)

- a) Agrochemical Usage and their Persistence in Soils of Coffee Estates (Hariyappa, 2015)
- b) Effect of Agrochemical Stressor on Growth, Development, and Behavior of Tadpoles (Krishna Kulkarni, 2016)
- c) Analyses of diversity and density of frog as tool to assess environmental contamination in selected aquatic habitats of Western Ghats (Rakesh R, 2016).

### C. M.Phil Programmes (Successfully completed = 2)

- a) Impact of ecotourism on ecological status of three wildlife sanctuaries of Karnataka (Mr. Nanda Gopal, P. 2010)
- b) Responses of free feeding larva of Nyctibatrachus major to the changes in habitat parameter under laboratory condition. (Mr. Mahesha, 2002).
- D. **M. Sc. Research Projects:** More than 35 student projects Important short-term student projects (M.Sc.,) on amphibians were completed under my guidance-
- 1. Estimation of residual mercury in brain and muscle tissue of *Rana cyanophlyctis*, 1997.
- 2. Effect of mercury intoxication on blood, liver and lung tissue of Rana cyanophlyctis, 1997.
- 3. Response of *Rana limnocharis* population to the changes in water & soil factor in a temporary pond near Kuvempu University, 1998.
- 4. Habitat ecology of *Nyctibatrachus major* (Anura: Ranidae), 1999.
- 5. Preliminary studies on Amphibian species diversity in Kuvempu Bio- reserve, 2000.
- 6. Amphibian species assemblage in agriculture-terrestrial habitats, 2000.
- 7. Application of Numerical taxonomy in amphibian species identification, 2001.

- 8. Amphibian species assemblage of aquatic habitats in central Western Ghats, 2001.
- 9. Diversity and amphibian assemblages in wetlands around Kuvempu University Campus, 2002.
- 10. Diversity and assemblages of amphibians in coffee plantations, 2002.
- 11. Analysis of morphometric parameters of some anuran amphibians, 2002
- 12. Response of *Limnonectus limnocharis* population to the changes in water pH, 2003.
- 13. Response of *Limnonectus limnocharis* population to the soil types, 2004.
- 14. Influence of vegetation on the distribution of semiaquatic anurans in stagnant water bodies of Western Ghats, 2005.
- 15. Effect of malathion on the growth of tadpoles of *Rana curtipes* and *Nyctivatrachus major*, 2006.
- 16. Morphological abnormalities among the frogs of *Fejervarya limnocharis* in paddy fields. 2007.
- 17. Impact of Malathion on the biodiversity and productivity of plankton in aquatic mesocosm (2008).
- 18. Influence of a few organophosphate pesticides on diversity and productivity of plankton in aquatic mesocosm (2009)
- 19. Effect of Malathion on Plankton Productivity of Aquatic Mesocosm (2010)
- 20. Effect of fertilizers and pesticides on aquatic organisms in an agro-ecosystem (2011)
- 21. Effect of malathion on growth and development of common frog (2012).
- 22. Effect of Distillery Effluent on the Common Rice Paddy Field Frog- *Fejevarya limnocharis* (Anura: Ranidae) (2013).
- 23. Health status and toxicity evaluation of frogs in agriculture fields and surrounding wetlands (2015)
- 24. Effect of Nitrate on growth and development of fish (2016)
- 25. Effect of Nitrate on feeding and general behavior of fish (2016)

### OTHER PROFESSIONAL ACTIVITES

Refereeing: Referee of manuscripts for the Journals—

- a. Biological Letters (Royal Society, UK)
- b. Journal of Zoology (Royal Society, UK)
- c. Journal of Tropical Ecology (Cambridge University Press, UK)
- d. African Journal of Ecology (Blackwell Science, USA)
- e. Environmental Forensics (Taylor & Francis, USA)
- f. American Midland Naturalist (University of Notre Dame, USA)
- g. Amphibia-Reptilia (Brill Academic, The Netherlands)
- h. Environmental Toxicology and Chemistry (SETAC Press, USA)
- i. African Journal of Biotechnology (Academic Journals, USA)
- j. Journal of Herpetology (Society for the Study of Amphibians & Reptiles, USA)

- k. Turkish Journal of Zoology (The Scientific and Technological Research Council of Turkey)
- 1. Ecotoxicology and Environmental Safety (Elsevier Publication)
- m. Biotropica (Wiley-Blackwell Publications)
- n. Ecotoxicology (Springer)

**Editing: Associated Managing Editor**-The Herpetological Journal, British Herpetological Society, UK, 2003-04

### MEMBERSHIP AND ACTIVITIES IN PROFESSIONAL ASSOCIATIONS

- 1. Member- Association of Environmental Engineers and Science Professors (AEESP)
- 2. Member- International Herpetological Committee of World Congress of Herpetology, United Kingdom (2012-2016).
- 3. Member SETAC-Europe (Society for Environmental Toxicology and Chemistry)
- 4. Member of INTECOL, Netherlands (International Association of Ecologist),
- 5. Member; Declining Amphibian Populations Task Force–South Asia (DAPTF–SA)
- 6. Life member Zoo Outreach Organization, Coimbatore.
- 7. Member- British Herpetological Society, United Kingdom
- 8. Member- Academic Board of Central University- Gujarath
- 9. Member, Board of Studies in Environmental Science –Karnataka State Open University, Mysore, Bangalore, Tumkur & Kuvempu Universities
- 10. Member, Board of Examiners- Kuvempu, Karnatak, Mysore, Tumkur and Bangalore Universities and Kerala Central University
- 11. Member of the Committee for Formulation of Academic Regulations, Kuvempu University.
- 12. Member, US State Alumni.
- 13. Member, British Council Scholar Alumni.
- 14. Member of the Committee /Nominee- CPCSEA (Govt. of India).
- 15. Served as Member of various Panel/Committee (UGC, UPSC) with assignments of confidential work.

### HONORS, AWARDS AND FELLOWSHIPS

- 7. Fulbright Fellowship, 2009.
- 6. Commonwealth Fellowship 2002 03.
- 5. Cash Prize in M.Sc. Zoology (University of Mysore) 1989.
- 4. Gold medalist and First rank holder- M.Sc. Zoology (Univ. of Mysore) 1989.
- 3. Subject Scholar Zoology (University of Mysore) 1987-88.
- 2. National Cadet Corps (NCC) Examinations 'B' Certificate, 1986.
- 1. Attended the Regular Army Attachment Camp. MLIRC, Belgaum, 1985.