Dr. Ranjini M.S.
Scientist-C
Silkworm Bivoltine Breeding Laboratory
Central Sericultural Research & Training Institute
Central Silk Board
Ministry of Textiles, Govt. of India
Srirampura, Manandavadi Road,
Mysore-570008, Karnataka (India)
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Academic Qualification

- M.Sc. in Zoology- 2003, Distinction, University of Mysore, Karnataka
- Ph.D. in Genetics, 2012, University of Mysore, Karnataka
- Qualified in Karnataka State Level Lectureship Eligibility Test (KSET) 2014

Work experience

- Teaching experience -03 years; Guidance to M.Sc., Students Dissertation: 04
- Worked as Scientist-B at CMERTI, Lahdoigarh, CSB from 12.11.2015 to 31.05.2017 and at CSRTI, Mysuru from 01.06.2017 to 31.06.2019
- Working as Scientist-C from 01.07.2019 to till date

Area of Interest

- Insect Breeding and Genetics
- Stress Responses in Silkworm
- Molecular Biology

Research Experience at CSB

- **Projects Handled**
  Worked as Principal Investigator-01; Worked as Co-Investigator-03
  On-going Projects: Working as PI in one pilot project and Co-I in two projects.

Awards/Honours/Fellowship

- JRF followed by SRF awarded from 2006 to 2010 by DST
- **Young Scientist Award with Gold Medal** at National conference organized by PES College Bangalore, Karnataka, 2007.
- **Best Oral presentation Award** at Sixth *Drosophila* Meeting organized by DOS in Zoology, University of Mysore, Karnataka, 2010.
- **Best poster presentation Award** at National conference on Seri-Biomics organized by DOS in Sericulture Science, UOM, Mysuru, Karnataka, 2018.
- **Best individual participation Award** and **Best group Award (represented as group leader)** in the foundation training programme for Scientists-B, organised by C.O. CSB, Bangalore.
- **Prizes** received in **extempore speech**es, debates, Elocution competitions etc.,

Publications

- **Total : 27**--National: **04;** International: **05**, **Impact factor ranging from 0.942-2.61**; NCBI GENBANK DATABASE: **18**
- Madhusudhan K.N., Moorthy S.M., **Ranjini M.S.,** Hukkeri S.M., Sivaprasad V. (2018) A review on biomedical application of chitin and chitosan. International Journal of Pharmaceutics & Drug analysis. 6(8): 557-562.
- Yoirentomba Meetei Sinam, Arunita Chatterjee, **Mysore S. Ranjini**, Adarsh Poojari, Aarthi Nagarajan, Nallur B. Ramachandra, Upendra Nongthomba (2016). A newly evolved *Drosophila Cytorace-9* shows trade-off between longevity and immune response. *Infection, Genetics and Evolution.* 44: 1-7. **Impact factor-2.61**
- **Ranjini M. S.** and Ramachandra N. B. (2013) Rapid evolution of a few members of *nasuta-albomicans* complex of *Drosophila*: study on two candidate genes, sod1 and rpd3. *Journal of Molecular Evolution.* 76(5): 311-23. **Impact factor-1.792**
- **Ranjini M. S.** Ravikumar Hosamani, Muralidhara and Ramachandra N.B. (2011). Differential susceptibility of a few members of the *nasuta-albomicans* complex of *Drosophila* to paraquat-induced lethality and oxidative stress. *Genome.* 54: 829-835. **Impact factor-1.892**
- **Ranjini M. S.** and Ramachandra N. B. (2011) Differential response to hormesis by laboratory evolved short-lived and long-lived cytoraces of *nasuta-albomicans* complex of *Drosophila. Italian Journal of Zoology.* 78(1): 70-81. **Impact factor-0.942**
- **Ranjini M. S.** and Ramachandra N. B. (2009) Evolution of short-lived and long-lived races of *Drosophila* in the environs of laboratory. *Indian Journal of Gerontology.* 23 (4): 381-398.
- **Ranjini M. S.**, Amruthavalli C. and Ramachandra N. B. (2009) Molecular perspective of *Sod1* in *Drosophila nasuta nasuta*. *Proceedings of National conference of Information Technology and its Applications.* 97-105.
- Ramachandra N. B. and **Ranjini M. S.** (2009) Experiments to Demonstrate Change in Allelic Frequency by Genetic Drift. *Resonance – Journal of Science Education.* 1110-1118.
- **Ranjini M. S.** and Ramachandra N. B. (2007) Recombination influences longevity in karyotypically similar hybrid races of *nasuta-albomicans* complex of *Drosophila*. *Proc.Natl.Symp.RTIBS*. 90-96.
- **18 publications : Gene Sequences Published in National Centre for Biotechnology Information (NCBI) GENBANK DATABASE**

Popular Articles:

- Ranjini M.S. (2019) Silkworm as a model organism to study human diseases. Resham Kiran. 8:5-7.
- Ranjini M.S. (2019) Kushali. Resham Kiran. 8:11.

Paper presentations

- **Ranjini M.S.,** Kusuma L., Madhusudan K.N., Moorthy S.M.., Kishor Kumar C.M., R.S.Teotia., (2019) Bombyx mori as a glorious Lepidopteran model organism; Emphasis on stress response genes. National conference on Challenges and Innovative approaches in agriculture and allied sciences research. Biscon. Salem, T.N. 26-29 July 2019. Pg No. 124.
- **Ranjini M.S.,** Kusuma L., Madhusudan K.N., Moorthy S.M.., Kishor Kumar C.M., Sivaprasad V (2019). Differential susceptibility of bivoltine silkworm breeds to paraquat induced stress. APSERI, 2-4 March 2019, BM P-21, Pg. No.101.
- **Ranjini M. S.**, Sivaprasad V, Sangannavar PA, Gogoi D.K., Kumar R., D. Goswami (2018) Hormesis induced effective improvement of rearing crops in Muga silkworm**.** National conference on "Seri-

Biomics: Challenges, Innovations and Solutions" organized by Department of Studies in Sericulture Science, UoM, Mysuru from 15th to 17th February 2018. Abstract Published Pg. No. 173. (**Won best poster presentation award**)

- **Ranjini M. S.**, Sangannavar P.A., D. K. Gogoi, Rajesh Kumar, D. Goswami (2017) Hormetic effect on *Antheraea assamensis* ; A preliminary study in Kotia crop. National Seminar on "Economic insects of NE India: Thrust in recent advances in Vanya Silks" held at Kokrajhar BTC, Assam from 21st to 23rd February 2017 Pg. No. 35. (**Oral presentation)**
- Sangannavar P.A., **Ranjini M.S.**, Ranjana Das, Goswami D (2017) Physico-chemical diversity of soil: A potential factor influencing production and productivity of Som leaf in Muga silkworm rearing areas. Pg. No.33.
- **Ranjini M.S.** and N. B. Ramachandra An evolutionary fate of life expectancy in two cytoraces of *nasuta-albomicans* complex of *Drosophila* (**Poster presentation)** in conference organized by KSTA and JSS college Ooty Road, Mysore on 21st and 22nd February 2014.
- **Ranjini M. S.** and N. B. Ramachandra. Evolutionary dynamics of cytorace 15 and 16 of *nasuta albomicans* complex of *Drosophila* (**Oral presentation and won Best Oral Presentation Award)** at Sixth *Drosophila* Meeting held on 19th and 20th November 2010, Unit on Evolution and Genetics, Department of Studies in Zoology, Manasagangotri, Mysore, Karnataka.
- **Ranjini M. S.** and N. B. Ramachandra. Influence of mild stresses on the lifespan of short-lived and long-lived races of *nasuta-albomicans* complex of *Drosophila* **(Oral presentation)** in conference Recent Trends in Animal physiology, organized by Department of Studies in Zoology, Manasagangotri, Mysore, Karnataka on 29th and 30th October 2009.
- **Ranjini M. S.**, C. Amruthavalli and N. B. Ramachandra. Molecular perspective of *Sod1* in *Drosophila nasuta nasuta* (**Oral presentation)** in conference Information Technology and its Applications, organized by Centre for Information Science and Technology, Karnataka on 21st and 22nd November 2009.
- **Ranjini M. S.** and Nallur B. Ramachandra. Secret of long life embedded within dietary restriction; A case study in the members of *nasuta-albomicans* complex of *Drosophila* (**Oral presentation)** at Fifth *Drosophila* Meeting held on 28th and 29th March 2008, Unit on Evolution and Genetics, Department of Studies in Zoology, Manasagangotri, Mysore, Karnataka.
- **Ranjini M. S.** and Nallur B. Ramachandra. A journey of long life driven by conserved regulation of longevity genes in *Drosophila* homology with humans (**Poster presentation)** at XXXIII Annual conference of the ISHG and International symposium on Genetics Revisited: the Genomics and Proteomics advantage held on 11-13th February 2008, Department of Human Genetics, Andhra University, Visakhapatnam.
- **Ranjini M. S.** and Nallur B. Ramachandra. Recombination influences longevity in karyotypically similar hybrid races of *nasuta-albomicans* complex of *Drosophila* (**Oral presentation and won Young Scientist Award)** in conference Recent Trends in Bioscience on August 2007 organised by PES college Bangalore, Karnataka.

Trainings

- Attended – 05; Imparted more than 50 trainings under structured programmes: To sericulturists, DOS officials, B.SC., M.Sc., students, Assistant Professors from SKAUST (J&K) etc.,

Memberships

- Life member of Indian Gerontological Association
- Life member of Indian Science Congress Association
- Old student alumni member of University of Mysore

Other Activities

- **Compering** and active involvement in Institution programmes like: Krishimela, Establishment Day, International Womens' day, Swachatta Pakhwada, Ambedkar Jayanthi, Environment day, Vigilance week etc., Worked as Rapporteur and Co-chairman in National seminars.