

List of Research Publications

1. Lekha, G., Gupta, T., Vijyagowri, E., Awasthi, A.K., Ponnuel, K. M. (2015) Genome-wide identification, characterization of sugar transporter genes in the silkworm *Bombyx mori* and role in *Bombyx mori* Nuclear Polyhedrovirus (BmNPV) infection. **Gene** 579: 162-171
2. Lekha G., Gupta T, Awasthi A.K, Murthy, G.N., Trivedy K. and Ponnuvel K.M. (2015) Genome wide microarray based expression profiles associated with BmNPV resistance and susceptibility in Indian silkworm races of *Bombyx mori*. **Genomics** 106: 393–403.
3. Pradeep A.R, Anitha J, Panda A, Pooja, M., Awasthi A.K., Geetha N.M., Ponnuvel KM and Trivedy K (2015). Phylogeny of host response proteins activated in silkworm *Bombyx mori* in response to infestation by Dipteran endoparasitoid revealed functional divergence and temporal molecular adaptive evolution. **J Clin Cell Immunol** 6:5
4. Gupta T., Kadono-Okudo K., Ito K., Trivedy K. and Ponnuvel K.M. (2015). Densovirus infection in silkworm *Bombyx mori* and genes associated with disease resistance. **Invertebrate Survival Journal** 12: 118-128.
5. Bhuvanewari G. and Surendra Nath B. (2015). Molecular characterization and phylogenetic relationships among microsporidia cross infecting silkworm *Bombyx mori* isolated from seven Lepidopteran pests of mulberry gardens based on small subunit rRNA (SSU-rRNA) gene sequence analysis. **Clon. Transgen.** 4:1
6. Bhuvanewari G. and Surendra Nath B. (2015). Molecular characterization and phylogenetic relationships of seven microsporidian isolates from different Lepidopteran pests cross infecting silkworm *Bombyx mori* based on Intergenic spacer sequence analysis. **Journal of Entomology and Zoology Studies** 3(2):324-330
7. Wazid Hassan and Surendra Nath B. (2015). Genetic characterization of microsporidians infection Indian non-mulberry silkworms (*Antheraea assamensis* and *Samia Cynthia ricini*) by using PCR based ISSR and RAPD marker assay. **Int. J. Indust. Entomol.** 30 (1): 6-16
8. Ponnuvel K. M., Sasibhushan S., Geetha N. Murthy and Rao C.G.P. (2015). Diapause-Related Gene Expression in Eggs of Multivoltine *Bombyx mori* L.

- Silkworm Races. Chapter in *New Horizons in Insect Science: Towards Sustainable Pest Management*, A. K. Chakravarthy (ed.), pp 187-198.
9. Hassan W, Nath BS. (2015). Genetic characterization of microsporidia infecting Indian tasar silkworm, *Antheraea mylitta* by using morphology and inter simple sequence repeat-PCR (ISSR-PCR). **Folia parasitologica** 62: 034
 10. Lekha G, T. Gupta, K.Trivedy and KM Ponnuvel (2015). Paralogous gene conversion, allelic divergence of attacin genes and its expression profile in response to *BmNPV* infection in silkworm *B.mori*. **Invertebrate Survival J.** 12: 214-224
 11. Rati Sudha, Geetha N. Murthy, Arvind K. Awasthi, Kangayam M. Ponnuvel (2015). Attacin gene sequence variations in different ecoraces of tasar silkworm *Antheraea mylitta* **Bioinformation** 11(10): 481-483
 12. Chandrakanth N, K.M.Ponnuvel, S.M.Moorthy, S. Sasibhushan and V.Sivaprasad (2015) analysis of trasncript of heat shock protein genes in silkworm, *Bombyx mori* (Lepidoptera: Bombycidae). **Eur J Entomol** 112 (4) 676-687.
 13. Chandrakanth N, , S. M. Moorthy, K. M.Ponnuvel and V.Sivaprasad (2015) Identification of microsatellite markers linked to thermotolerance in silkworm by bulk segregant analysis and *IN SILCO* mapping. **Genetika** 47(3) 1063-1078.
 14. Chandrakanth N, S. M. Moorthy, Kariyappa, K. M.Ponnuvel and V.Sivaprasad (2015) Reeling performance of F2 and backcross populations under high temperature conditions. **Journal of Entomology and Zoological Studies.** 3(6) 219-222.
 15. Wazid Hassan and B.Surendra Nath (2014). Genetic diversity and phylogenetic relationships among microsporidian isolates from the Indian tasar silkworm *Antheraea mylitta*, as revealed by RAPD fingerprinting technique. **Intl. J. Indus. Ento.** 29(2): 169-178
 16. Lekha G, Vijaya Gowri E, Sasibhushan S, Sivaprasad V, Ponnuvel KM (2014). Differential level of host gene expression associated with nucleopolyhedrovirus infection in silkworm races of *Bombyx mori*. **Intl. J. Indus. Ento.** 29(2): 145-152
 17. Anitha J, Pradeep AR, Sivaprasad V. [2014]. Upregulation of Atg5 and AIF gene expression in synchronization with programmed cellular death events in integumental epithelium of *Bombyx mori* induced by a dipteran parasitoid infection. **Bull. Entomol Res. (Cambridge)** 23:1-7. Impact factor: 1.895
 18. Ravikumar Gopalapillai, Vardhana K. Vasankumar, Rajni Bala, Venkateswarlu Modala, Guruprasad Rao and Vikas Kumar (2014). Yeast two-hybrid screen reveals

- novel protein interactions of the cytoplasmic tail of lipophorin receptor in silkworm brain. **J. Mol. Recog.** 27:190-196. Impact factor: 3.01
19. Jayaram A, Pradeep AN, Awasthi AK, Murthy GN, Ponnuvel KM, Sasibhushan S, Rao GC. (2014). Coregulation of host-response genes in integument: switchover of gene expression correlation pattern and impaired immune responses induced by dipteran parasite infection in the silkworm, *Bombyx mori*. **J Appl Genet.** 55(2): 209-21.
 20. Kadono-Okuda K, K. Ito, Geetha N. Murthy, V. Sivaprasad and K. M. Ponnuvel (2014). Molecular mechanism of Densovirus resistance in silkworm *Bombyx mori*. **Sericologia** 54: 1-10.
 21. Geetha N. Murthy, Kangayam M. Ponnuvel, A.K. Awasthi, C.G.P. Rao, B.K. Chandrasekhar Sagar (2014). The Indian isolate of Densovirus-2 – Impact of infection and mechanism of resistance in *Bombyx mori* L. **Journal of Invertebrate Pathology** 115 (2014) 48– 50
 22. Sirigineedi S., Vijayagowri E., Murthy G.N., Rao G., Ponnuvel K.M. (2013). Molecular characterization of DnaJ 5 homologs in silkworm *Bombyx mori* and its expression during egg diapause **Insect Sci.** doi: 10.1111/1744-7917.12048. Impact factor – 1.786
 23. Ravikumar G and Vijayaprakash NB (2013). Lipophorin Receptor of Insects. **Resonance** 18: 748-755.
 24. Sasibhushan S, Ponnuvel K M and Vijayaprakash N B (2013) Changes in diapause related gene expression pattern during early embryonic development in HCl-treated eggs of bivoltine silkworm *Bombyx mori* (Lepidoptera:Bombycidae). **Brazilian Archives of Biology and Technology** 56: 1-10. Impact factor – 0.443
 25. Sasibhushan Sirigineedi, Geetha N Murthy, Guruprasada Rao and Kangayam M Ponnuvel (2013). Paralytic Peptide Binding Protein (PP-BP) Gene Expression during Egg Diapause and Its Multi-Gene Organization in the Silkworm *Bombyx mori*. **International Journal of Industrial Entomology** 26(1), 31-40
 26. Pradeep ANR, Jayaram Anitha, Arvind K. Awasthi, Mohd. A. Babu, Murthy N. Geetha, Hariharan K. Arun, Sagar Chandrashekhar, Guruprasad C. Rao, Nanjappa B. Vijayaprakash (2013). Activation of autophagic programmed cell death and innate immune gene expression reveals immuno-competence of integumental epithelium in

- Bombyx mori infected by a dipteran parasitoid. **Cell and Tissue Research** 352 (2): 371-385.
27. M.Venkateswarlu, G.Ravikumar, N.B.Vijayaprakash, C.G.P.Rao, C.K.Kamble and A.Tikader (2012). Molecular phylogeny of Morus species differentiation based on chloroplast matK sequences. **Indian Journal of Sericulture** 51: 16-19.
28. Kaur P., AR Pradeep and Alexzander Asea (2012). Chapter 8: Cellular trafficking of cell stress proteins in health and disease - Nucleolin: A novel intracellular transporter of HSPA1A –. **Heat Shock Proteins** 6: 115-124.
29. Surendranath B, SK Gupta and AK Bajpai (2012). Molecular characterization and phylogenetic relationships among microsporidian isolates infecting silkworm, Bombyx mori using small subunit rRNA (SSU-rRNA) gene sequence analysis. **Acta Parasitologica** 57(4): 342-353.
30. Vijayan K., Srivastava P.P., Raju P. J., Saratchandra, B. (2012) Breeding for higher productivity in mulberry. **Czech Journal of Genetics and Plant Breeding** 48(4): 147-156.
31. Ponnuvel K M, K Nithya, S Sasibhushan and Awasthi AK (2012). In vitro antiviral activity of an alkaline trypsin from the digestive juice of Bombyx mori larvae against nucleopolyhedro virus. **Archives of Insect Biochemistry and Physiology** 81 (2): 90-104
32. Devi K.I., Ponnuvel K.M., Singh L.S., Singh K.C. and Dutta K. (2012). Genetic diversity among Indian Oak tasar silkworm, Antheraea proylei J. revealed by ISSR markers. **International Journal of Industrial Entomology** 24 (1): 57-61
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34. Sasibhushan,S, Ponnuvel, KM and Vijayaprakash, NB (2012) Diapause specific gene expression in the eggs of multivoltine silkworm Bombyx mori identified by suppressive subtractive hybridization. **Comparative Physiology and Biochemistry Part B** 161: 371-379.
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37. Pradeep, AR, Awasthi AK, Singh KC, Anuradha HJ, Rao CGP and Vijayaprakash NB (2011), Genetic evaluation of eri silkworm *Samia cynthia ricini*: Loci specific to high and low altitude regimes and quantitative attributes. **Journal of Applied Genetics** 52:345-353.
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40. Ponnuvel K. M., Natarajan S., Sirigineedi S., Murthy G.N. and Vijayaprakash, N. B. (2010). Molecular evolution of the cecropin multigene family in silkworm *Bombyx mori*. **Bioinformation** 5(3): 97-103
41. Ponnuvel K. M., Geetha N.Murthy, Awasthi, A. K., Rao, C.G.P. and Vijayaprakash N.B. and Kamble C.K. (2010). Screening of *Bombyx mori* Silkworm Races for Detection of Densonucleosis Virus-2 Resistance Genes (Nsd-2). **Sericologia** 51(2): 145-156
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43. Pradeep, A. R., A. K. Awasthi, Raje Urs, S. 2008. Association of A/T rich microstellite with response to artificial selection and differentiation of larval development duration in silkworm *Bombyx mori*. **Molecules and Cells** 26: 1
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