List of research publications

1. Esvaran VG, Ponnuvel S, Jagadish A., Savithri, HS, Subramanya, HS, Ponnuvel KM. Cloning, Expression and Characterization of Spore Wall Protein 5 (SWP5) of Indian Isolate NIK-1S of Nosema bombycis. The Protein Journal, 2022, 41(6), 596-612.

2. Naik KS, Ismail S, Pradeep A R, Mishra RK. Molecular Characterization of the Functional Genes Associated with Silk Assembly, Transport, and Protection in the Silk Glands of Popular Multivoltine Breeds of Silkworm Bombyx mori. L. Applied Biochemistry and Biotechnology, 2022 1-24.

3. Raghavendar G, Gupta T, Ramesha A, Sivaprasad V, Ponnuvel KM. A real-time qPCR method for early detection of Bombyx mori Bidensovirus (BmBDV) infection in silkworm. Animal Gene. 2022 Jul 14:200132.

4. Ponnuvel KM, de Miranda JR, Terenius O, Li W, Ito K, Khajje D, Shamitha G, Jagadish A, Dubey H, Mishra RK. Genetic characterisation of an Iflavirus associated with a vomiting disease in the Indian Tropical tasar silkworm, *Antheraea mylitta*. Virus Res. 2022 Jan 30:198703.

5. Makwana P, Dubey H, Pradeep ANR, Sivaprasad V, Ponnuvel KM, & Mishra RK (2021). Dipteran endoparasitoid infestation actively suppressed host defense components in hemocytes of silkworm *Bombyx mori* for successful parasitism. Animal Gene, 22, 200118.

6. Gupta T, Raghavendar G, Terenius O, Ito K., Mishra RK, & Ponnuvel KM (2022). An investigation into the effects of infection and ORF expression patterns of the Indian bidensovirus isolate (BmBDV) infecting the silkworm *Bombyx mori*. Virus Disease, 1-8.

7. Jagadish A, Dubey H, Kamatchi I, Pradeep AR, Subrahmanyam G, Mishra RK, Ponnuvel KM (2021). Transcriptome analysis of *Nosema assamensis* infecting muga silkworms (*Antheraea assamensis*) reveals insights into candidate pathogenicity related genes and molecular pathways required for pathogenesis. Annals of Parasitology, 67: 671-682.

8. Jagadish A, Khajje D, Tony M, Nilsson A, de Miranda JR, Terenius O, Dubey H, Mishra RK, Ponnuvel KM (2021). Development and optimization of a TaqMan assay for Nosema bombycis, causative agent of pébrine disease in Bombyx mori silkworm, based on the β-

tubulin gene. Journal of Microbiological Methods 186, 106238. https://doi.org/10.1016/j.mimet.2021.106238

9. Kalita M, Chutia M, Jha DK, & Subrahmanyam G (2022). Mechanistic understanding of Gordonia sp. in biodesulfurization of organosulfur compounds. Current Microbiology, 79(3), 1-15

10. Goswami J, Gogoi DK, Rasid N, Handique BK, Subrahmanyam G, Bora PP, & Raju PLN (2021). Development of a Muga disease early warning system–a mobile-based service for seri farmers. Current Science, 121(10), 1328-1334.

11. Ito K, Ponnuvel KM, Kadono-Okuda K (2021) Host Response against Virus Infection in an Insect Bidensovirus Infection Effect on Silkworm (Bombyx mori). Antioxidants (Basel, Switzerland), 10(4).

12. Shambhavi H. Prabhuling, Pooja Makwana, A.R. Pradeep, K. Vijayan and R. K. Mishra (2021) Release of mediator enzyme β-hexosaminidase and modulated gene expression accompany hemocyte degranulation in response to parasitism in the silkworm *Bombyx mori*. Biochemical Genetics. 59(4)997-1017.

13. Esvaran V, Jagadish A, Terenius O, Suraporn S, Mishra RK, Ponnuvel KM (2020) Targeting essential genes of Nosema for the diagnosis of pebrine disease in silkworms. Annals of Parasitology, 66(3):303-310.

14. Hassan W, Nath BS, Ponnuvel KM, Mishra RK, Pradeep AR (2020) Evolutionary Diversity in the Intracellular Microsporidian Parasite Nosema sp. Infecting Wild Silkworm Revealed by IGS Nucleotide Sequence Diversity. Journal of Molecular Evolution, 88(4):345-360.

15. Ramesha, A, Himanshu Dubey, K. Vijayan, Kangayam M. Ponnuvel, Rakesh K. Mishra, K. Suresh. (2020). Genome wide characterization revealed MnMLO2 and MnMLO6A as candidate genes involved in powdery mildew susceptibility in mulberry. Molecular Biology Reports. 2889-2900 doi: 10.1007/s11033-020-05395-6 PMID: 32239465

16. Sahar Ismail, Tulsi Naik, KS, Rajam, MV et al. (2020). Targeting genes involved in nucleopolyhedrovirus DNA multiplication through RNA interference technology to induce resistance against the virus in silkworms. Molecular Biology Reports 47, 5333–5342 doi: 10.1007/s11033-020-05615-z;

17. Ramesha, A*, Himanshu Dubey, K. Vijayan, Kangayam M. Ponnuvel, Rakesh K. Mishra, K. Suresh. (2020). Genome wide characterization revealed MnMLO2 and MnMLO6A as candidate genes involved in powdery mildew susceptibility in mulberry Molecular Biology Reports. 2889-2900 doi: 10.1007/s11033-020-05395-6 PMID: 32239465 *Corresponding author

18. Sahar Ismail, Tulsi Naik KS*, Ponnuvel KM, Rajam MV, Mishra RK (2020) BmNPV late expression factor (lef-1) a potent target for inducing virus resistance against Grasserie infected *Bombyx mori* by RNA interference technology. Biotechnology and Biological Sciences, CRC press Taylor & Francis Group, ISBN-978-0-367-43161-7 London https://doi.org/10.1201/9781003001614; * Corresponding author

19. Hassan W, Nath BS, Ponnuvel KM, Mishra RK, Pradeep ANR*. (2020) Evolutionary diversity in the intracellular microsporidian parasite *Nosema* sp. infecting wild silkworm revealed by IGS nucleotide sequence diversity. Journal of Molecular Evolution 88(4):34 360. doi:10.1007/s00239-020-09936-2. Epub 2020 Mar 12. PMID: 32166385. * Corresponding author

20. Dyna Susan Thomas, Meenakshi Varma, Chitra Manoharan, Guru Prasad Rao, Kunjupillai Vijayan, Rakesh Kumar Mishra, Ravikumar Gopalapillai*, Deepak Kumar Sinha (2020). Molecular characterization and functional analysis of the vitellogenin receptor from eri silkworm, *Samia ricini*. Comparative Biochemistry and Physiology, Part B (Elsevier) 242 110417 (https://doi.org/10.1016/j.cbpb.2020.110417). * Corresponding author.

21. Shambhavi HP, P. Makwana, B. Surendranath, K.M. Ponnuvel, R.K. Mishra and A.R. Pradeep (2020) Phagocytic events, associated lipid peroxidation and peroxidase activity in hemocytes of silkworm Bombyx mori induced by microsporidian infection. Caryologia 73(1): 93-106. doi: 10.13128/caryologia-112. * Corresponding author

22. Dyna Susan Thomas, Chitra Manoharan, Sandhya Rasalkar, Rakesh Kumar Mishra and Ravikumar Gopalapillai* (2020). Recombinant sericin-cecropin B fusion protein aids in the proliferation and cryopreservation of human dermal fibroblast

cells. Bioscience Biotechnology Research Communication 13: 146-150. * Corresponding author

23. Vijaya Gowri Esvaran, Anupama Jagadish, Olle Terenius, Siripuk Suraporn, Rakesh K Mishra and Kangayam Ponnuvel* (2020) Targeting essential genes of *Nosema* for the diagnosis of pebrine disease in silkworms. Annals of Parasitology 66: 303-310; * corresponding author

24. Sahar I, Tulsi Naik KS*, Rajam MV, Ponnuvel KM and Mishra RK (2019) Targeting immediate early gene (IE1) for inducing virus resistance against Grasserie disease caused by BmNPV by RNA interference technology. Sericologia 59: 39-44. * Corresponding author

25. Aravind S, Sahar Ismail, Hariraj G, Tulsi Naik KS*, Pradeep AR, Mishra RK , Subhash. V. Naik. (2019). Comparative analysis of post cocoon characters associated with filament length between multivoltine races and multi x bivoltine cross breeds of the silkworm *Bombyx mori* L. Innovative Farming, 4(3): 123-128; * Corresponding author

26. Dyna Susan Thomas, Chitra Manoharan, Ashok K. Kasukurthi, Gourab Roy, Kunjupillai Vijayan, Ravikumar Gopalapillai* and Mandan Kalidas (2019). Correlation between vitellogenenin receptor gene expression and fecundity in silkworm, *Bombyx mori*. Sericologia 59: 82-87. * Corresponding author

27. Shambhavi Prabhuling Hungund, A. R. Pradeep*, Pooja Makwana, Chandrashekhar Sagar & Rakesh K. Mishra (2019): Cellular defence and innate immunity in the larval ovarian disc and differentiated ovariole of the silkworm Bombyx mori induced by microsporidian infection, Invertebrate Reproduction & Development, DOI: 10.1080/07924259.2019.1669727 * Corresponding author.

28. Shambhavi, P.H., M. Pooja, A.R. Pradeep* and R.K. Mishra. 2019. Immune suppression being the cause for establishment of *Nosema bombycis* parasitism in the silkworm *Bombyx mori*. Innovative Farming, 4: 155-161. *Corresponding author.

29. Vijaya Gowri Esvaran , Aarthi Mohanasundaram , Shruthi Mahadeva , Tania Gupta , Kangayam M Ponnuvel* (2019) Development and comparison of real-time and conventional PCR

tools targeting β-tubulin gene for detection of *Nosema* infection in silkworms. Journal of Parasitic Diseases 43(1):31-38; * corresponding author

30. Subrahmanyam, G*, Esvaran, V.G., Ponnuvel, K.M., Hassan W, Chutia M and R. Das (2019) Isolation and molecular identification of microsporidian pathogen causing nosemosis in muga silkworm, *Antheraea assamensis* Helfer (Lepidoptera: Saturniidae). Indian Journal of Microbiology 59: 525–529.* Corresponding author

31. Pawan Shukla1, Ramesha A. Reddy1, Kangayam M. Ponnuvel, Gulab Khan Rohela, Aftab A. Shabnam, Shailendra Singh Chauhan, Mrinal K Ghosh, Rakesh Kumar Mishra (2019) Selection of suitable reference genes for quantitative real-time PCR gene expression analysis in Mulberry (*Morus alba* L.) under different abiotic stresses. Mol Biol Rep. https://doi.org/10.1007/s11033-019-04631-y. (Impact factor: 1.889) 1Co-First authors

32. Tania Gupta1, Ramesha A. Reddy1*, Rakesh K. Mishra, Manthira Moorthy, Vankadara Sivaprasad, and Kangayam M. Ponnuvel (2019) Functional marker assisted improvement of productive mulberry silkworm breeds conferring resistance to Bombyx mori Bidensovirus (BmBDV). Agri Gene 11: 100079 (Elsevier Journal) 1Co-First authors, *Corresponding author

33. Pawan Shukla1*, Ramesha A. Reddy1, Kangayam M. Ponnuvel, Gulab Khan Rohela, Aftab Ahmad Shabnam, S. S. Chauhan, Mrinal Kanti Ghosh, Rakesh Kumar Mishra (2018) Comparative analysis of gene expression profiles among contrasting mulberry varieties under cold stress condition. J. Exp. Biol. Agric. Sci. Vo.6(6):p 973-982. 1Co-First authors

34. Vijayagowri Esvaran, Tania Gupta, A.R. Narasimha Nayaka, Vankadara Sivaprasad, Kangayam M. Ponnuvel. Molecular characterization of *Nosema bombycis* methionine aminopeptidase 2 (MetAP2) gene and evaluation of anti-microsporidian activity of Fumagilin-B in silkworm Bombyx mori. 3 Biotech (2018) 8:386 (Impact factor: 1.479).

35. Vijayagowri Esvaran, Tania Gupta, A Mohanasundaram, Kangayam M. Ponnuvel. Development of isothermal amplification assay for detection of *Nosema bombycis* infection in silkworm *Bombyx mori* targeting polar tube protein1 gene. Invertebrate Survival Journal (2018) 15:352-361 (Impact factor: 0.806)

36. Vijayagowri Esvaran, Aarthi Mohanasundaram, Shruthi Mahadeva, Tania Gupta, Kangayam M. Ponnuvel. Development and comparision of real-time and conventional PCR tools targeting β-tubulin gene for detection of *Nosema* infection in silkworms. Journal of Parasitic Disease (2018)-Accepted (Impact factor: 0.66)

37. G. Ravikumar, D. S. Thomas, M. Chitra, K. Vijayan and R. K. Mishra. Development of a Sensitive Real-Time PCR Assay For the Detection of Microsporidia In Silkworms. 2018. Sericologia 58(2): 122-124.

38. Gupta T, Ito K, Kadono-Okuda K, Murthy GN, Vijayagowri E, Ponnuvel KM. Characterization and genome comparison of Indian isolate of bidensovirus infecting silkworm *Bombyx mori*. Archives of Virology (2018), 163:125-134. (Impact factor 2.11)

39. Tulsi Naik K, S., Ponnuvel K, M., & Awasthi A,K., (2017) "Transkingdom RNA interference approach to improve resistance against grasserie disease in *Bombyx mori*. L A review" Sericologia 57(1), 1-9.

40. Pooja M, Pradeep AR, Hungund SP, Sagar C, Ponnuvel KM, Awasthi AK and Trivedy K (2017) Oxidative stress and cytotoxicity elicited lipid peroxidation in hemocytes of *Bombyx mori* larva infested with dipteran parasitoid, *Exorista bombycis*. Acta Parasitologica, 2017, 62(4), 000–000; ISSN 1230-2821. DOI: 10.1515/ap-2017-00.

41. Pooja M, Pradeep AR, Hungund SP, Ponnuvel KM, and Trivedy K. (2017) The dipteran parasitoid *Exorista Bombycis* induces pro- and anti-oxidatiive reactions in the silkworm *Bombyx mori*: Enzymatic and genetic analysis. Archives of Insect Biochemistry & Physiology (2017) Feb; 94(2). doi: 10.1002/arch.21373. Epub 2017 Jan 17.

42. Pradeep ANR, Asea A, Kaur P (2016) Nucleolin Transports Hsp72 to the Plasma Membrane Preparatory to its Release into the Microenvironment. Journal of Cell Science & Therapy 7: 254. doi: 10.4172/2157-7013.1000254.

43. Rajni Bala, Ulfath Saba, Meenakshi Varma, Dyna Susan Thomas, Deepak Kumar Sinha, Guruprasad Rao, KanikaTrivedy, Vijayan

Kunjupillai and Ravikumar Gopalapillai (2016). Cloning and Functional Characterization of a Vertebrate Low-Density Lipoprotein Receptor Homolog from Eri Silkmoth, *Samia ricini*. Journal of Molecular Biochemistry 5: 87-94.

44. Dyna Susan Thomas, Chitra Manoharan, Kanika Trivedy, Kunjupillai Vijayan, Ravikumar Gopalapillai (2016) Lipophorin and its Immunological Properties of Eri Silkmoth, *Samia ricini*. Sericologia 56: 74-83.

45. 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.

46. 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.

47. 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.

48. 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.

49. Bhuvaneswari 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.

50. Bhuvaneswari 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):324-33.

51. 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.

52. 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.

53. 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.

54. 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.

55. 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.

56. 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.

57. Chandrakanth N, S.M. Moorthy, K.M.Ponnuvel and V.Sivaprasad (2015) Identification of microsatellite markers linked to thermotolearnace in silkworm by bulk segregant analysis and IN SILCO mapping. Genetika 47(3) 1063-1078.

58. Chandrakanth N, S. M. Moorthy, Kariayappa, 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.

59. 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.

60. 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.

61. 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

62. Dyna Susan Thomas, Chitra Manoharan, Kanika Trivedy, Kunjupillai Vijayan, Ravikumar Gopalapillai (2016) Lipophorin and its Immunological Properties of Eri Silkmoth, Samia ricini. Sericologia.

63. Ravikumar Gopalapillai, Vardhana K. Vasantkumar, 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

64. 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.

65. 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.

66. 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).

67. 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

68. Ravikumar G and Vijayaprakash NB (2013). Lipophorin Receptor of Insects. Resonance 18: 748-755.

69. 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

70. 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

71. 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.

72. 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.

73. 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 HSPAIA –. Heat Shock Proteins 6: 115-124.

74. 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.

75. 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.

76. 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.

77. 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.

78. Arun Kumar K.P., A. K. Sahu, A. R. Mohanty, A. K. Awasthi, A.R.Pradeep, S. Raje Urs and J. Nagaraju (2012) Genetic diversity and population structure of Indian golden silkmoth (*Antheraea assama*) PLoS ONE 7,(8)43716, doi:10.1317/journal.pone.0043716.)

79. Sasibhushan,S, Ponnuvel, KM and Vijayaprakash, NB (2012) Diapause specific gene expression inthe eggs of multivoltine silkworm *Bombyx mori* identified by suppressive subtractive hybridization. Comparative Physiology and Biochemistry Part B 161: 371-379.

80. Ravikumar G, K.V. Vardhana and H.K.Basavaraja (2011). Characterization of lipophorin receptor mediating the binding of high density lipophorin in silkworm *Bombyx mori*. Journal of Insect Science (USA), 2: 150-158.

81. Ponnuvel K.M., Geetha N. Murthy, P.R. Koundinya*, A K. Awasthi, C.G.P. Rao, N.B.Vijayaprakash and C.K.Kamble** (2011). Report on identification of densovirus-2 (dnv-2) in flacherie diseased silkworm of *Bombyx mori*. Indian Silk 2(5): 4-6.

82. 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.

83. Pradeep, AR, Anuradha HJ, Singh KC, Awasthi A K, Vikas Kumar, Rao CGP and Vijayaprakash NB (2011). Genetic analysis of

scattered populations of the India eri silkworm, *Samia Cynthia ricini* Donavan: Differentiation of sub-populations. Genetics and Molecular Biology 34 (3): 502-510.

84. Ravikumar G, Raje Urs S, Vijayaprakash NB, Rao CGP and Vardhana KV (2011). Development of a multiplex polymerase chain reaction for the simultaneous detection of microsporidians, nucleopolyhedrovirus and densovirus affecting silkworms. Journal of Invertebrate Pathology 107(3): 193-197.

85. 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.

86. 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

87. Ponnuvel K. M., Murthy G.N., Awasthi, A. K., Rao C.G.P. and Vijayaprakash N.B. (2010). Differential gene expression during early embryonic development in diapause and non-diapause eggs of multivoltine silkworm *Bombyx mori* Indian Journal of Experimental Biology 48 (11).

88. 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

89. Kar, P.P.Srivastava, A.K.Awasthi and S.Raje Urs 2008. Genetic variability and association of ISSR markers with some biochemical traits in mulberry (Morus spp.) genetic resources available in India. Tree Genetics & Genomes 4:75-83.

90. Awasthi A.K., P.K. Kar, P. P. Srivastava, Nidhi Rawat, K. Vijayan, A. R. Pradeep and S. Raje Urs 2008. Molecular evaluation of bivoltine, polyvoltine and mutant silkworm (*Bombyx mori* L.) with RAPD, ISSR and RFLP-STS markers. Indian Journal of Biotechnology 7:188-194.

91. Awasthi A.K., A. R. Pradeep, P. P. Srivastava, K. Vijayan, Vineet Kumar and S. Raje Urs 2008. PCR detection of densonucleosis

virus isolates in silkworm (*Bombyx mori*) from India and its nucleotide variability. Indian Journal of Biotechnology 7:56-60.

92. Pradeep A.R., Anuradha H.J. and S.Raje Urs (2007). Molecular markers for biomass traits: Association, Intercalation and Genetic divergence in silkworm, *Bombyx mori*. Biomarker Insights 2: 197-217.

93. Pradeep A.R., S.N. Chatterjee, B. Saratchandra and S. Raje Urs 2005. Allelic variants of a juvenile hormone responsive gene, which connote genetic differentiation in strains of the silkworm *Bombyx mori*. Journal of Genetics and Breeding 59 (3-4): 213-223.

94. Nageswara Rao S, B. Surendra Nath, G. Bhuvaneswari and S. Raje Urs 2007. Genetic diversity and phylogenetic relationships among microsporidia infecting the silkworm, *Bombyx mori*, using random amplification of polymorphic DNA: Morphological and ultrastructural characterization. Journal of Invertebrate Pathology 96(3): 193-276.

95. Srivastava P.P, P.K. Kar, A.K. Awasthi and S. Raje Urs 2007. Molecular approach for identification of markers associated with thermal stress in polyvoltine silkworm *Bombyx mori*. Genetika 43(8): 1038-1045.

96. Venkateswarlu M, S. Raje Urs, B. Surendra Nath, H. E. Shashidhar, M. Maheswaran, T. M. Veeraiah and M. G. Sabitha 2006. A first genetic linkage map of mulberry (*Morus* spp.) using RAPD, ISSR, and SSR markers and pseudotestcross mapping strategy. Tree Genetics and Genomes 3:15-24.

97. Vijayan K, Anuradha HJ, Nair CV, Pradeep AR, Awasthi AK, Saratchandra B, Rahman SAS, Singh KC, Chakraborti R, Urs SR 2006. Genetic diversity and differentiation among different populations of Indian Eri silkworm, *Samia cynthia ricini* revealed by ISSR markers. Journal of Insect Science 6:30.

98. Vijayan K, P.P. Srivastava, C.V. Nair, A.K. Awasthi, A. Tikader, B. Sreenivasa and S. Raje Urs 2006. Molecular characterization and identification of markers associated with yield traits in mulberry using ISSR markers. Plant Breeding 125:298-301.

99. Vijayan K, A.Tikader, P.K.Kar, P.P.Srivastava, A.K.Awasthi, K., Thangavelu and B. Saratchandra 2006. Assessment of genetic

relationships between wild and cultivated mulberry (Morus) species using PCR based markers. Genetic Resources and Crop Evolution 53: 873-882.

100. Nagaraja G.M., G Mahesh, V Satish, M Madhu, M Muthulakshmi and J Nagaraju 2005. Genetic mapping of Z chromosome and identification of W chromosome-specific markers in the silkworm, *Bombyx mori*. Heredity 95: 148–157. doi:10.1038/sj.hdy.6800700.

101. Kar, P.K.; Vijayan, K.; Mohandas, T.P.; Nair, C.V.; Saratchandra, B.; Thangavelu, K. 2005. Genetic Variability and Genetic Structure of Wild and Semi-domestic Populations of Tasar Silkworm (*Antheraea mylitta*) Ecorace Daba as Revealed through ISSR Markers. Genetica 125 [2-3]: 173-183.

102. Pradeep A.R., Chatterjee, S.N., Nair, C.V. 2005. Genetic differentiation induced by selection in an inbred population of the silkworm *Bombyx mori*, revealed by RAPD and ISSR marker systems. Journal of Applied Genetics 46 [3]: 291-298.

103. Rao SN, Muthulakshmi M, Kanginakudru S, Nagaraju J 2004. Phylogenetic relationships of three new microsporidian isolates from the silkworm, *Bombyx mori*. Journal of Invertebrate Pathology 86:87-95.

104. Arvind K Awasthi1, GM Nagaraja1, GV Naik, Sriramana Kanginakudru, K Thangavelu and Javaregowda Nagaraju 2004. Genetic diversity and relationships in mulberry (genus *Morus*) as revealed by RAPD and ISSR marker assays. BMC Genetics 5:1 doi:10.1186/1471-2156-5-1.

105. Chatterjee S.N.; Vijayan K.; Roy G.C.; Nair C.V. 2004. ISSR Profiling of Genetic Variability in the Ecotypes of *Antheraea mylitta* Drury, the Tropical Tasar Silkworm. Russian Journal of Genetics 40 [2]: 152-159.

106. Vijayan, K., Awasthi, A. K., Srivastava, P. P. and Saratchandra, B. 2004. Genetic analysis of Indian mulberry varieties through molecular markers. Hereditas 141: 8–14. doi: 10.1111/j.1601-5223.2004.01813.x

107. Chatterjee S.N., T P Mohandas 2003 Identification of ISSR markers associated with productivity traits in silkworm, *Bombyx mori* L. Genome.46(3):438-47

108. Nagaraju J, K Damodar Reddy, G M Nagaraja and B N Sethuraman 2001. Comparison of multilocus RFLPs and PCR-based marker systems for genetic analysis of the silkworm, *Bombyx mori* Heredity 86: 588–597; doi:10.1046/j.1365-2540.2001.00861.x

109. Reddy KD, Abraham EG, Nagaraju J 1999. Genetic characterization of the silkworm, *Bombyx mori* by inter-simple sequence repeat (ISSR) - anchored PCR. Heredity 83: 681-687.

110. Reddy KD, Abraham EG, Nagaraju J. 1999. Microsatellites in the silkworm, *Bombyx mori*: abundance, polymorphism and strain characterization. Genome. 42(6):1057-65.

111. Nagaraju JG, Singh L. 1997. Assessment of genetic diversity by DNA profiling and its significance in silkworm, *Bombyx mori*. Electrophoresis 18(9):1676-81.

112. Nagaraju J 1996. Sex Determination and Sex-Limited traits in the silkworm, *Bombyx mori* and their applications in sericulture. Indian Journal of Sericulture 35:83-89.

113. Nagaraju J, Sharma A, Sethuraman BN, Rao GV, Singh L 1995. DNA fingerprinting in silkworm *Bombyx mori* using banded krait minor satellite DNA derived probe. Electrophoresis 16:1639-1642

114. Nagaraju J, Abraham EG 1995. Purification and characterisation of amylase in tasar silkworm, *Antheraea mylitta*. Comparative Biochemistry and Physiology B. 110B: 201-209.

115. Abraham EG, Nagaraju J, Salunke D, Gupta H, Datta RK 1995. Purification and partial characterization of an antibacterial protein from silkworm, *Bombyx mori*. J Invert. Pathol. 65(1):17-24.

116. Javaregowda Nagaraju and Tumuluri Pavan Kumar 1995. Effects of selection on cocoon filament length in divergently selected lines of the silkworm *Bombyx mori* Journal of Sericultural Science of Japan 64[2] 103-109.

117. Ganachari M. Nagaraja and Dr. Javaregowda Nagaraju 1995 Genome fingerprinting of the silkworm, *Bombyx mori*, using random arbitrary primers Electrophoresis 16(1): 1633–1638.