

Curriculum vitae



01. Personal Information

01.1.	Name, Designation	Dr. V. Shyam kumar Associate Professor
01.2.	Address for correspondence	Department of Biotechnology and Microbiology Karnatak University, Dharwad-580 003 India.
01.3.	Contact Number	(O): 0091-836-221 5356 (R): 0091-836-277 0366 Mobile:0091-988 032 2743
	Email	vootlashyam@gmail.com & vootlashyam@kud.ac.in
01.4.	Date of Birth	12 th April 1972
01.5.	Languages Known	English, Hindi, Urdu, Telugu, Kannada, Chinese,(Fluent) German and Korean (Basic)

02. Academic Qualification

Sl.No.	Name of the degree	University	Year of award	Remarks
02.1.	Post Doctoral Fellowship	Seoul National University, Seoul South Korea.	2008	BOYSCAST Fellowship
02.2.	Doctor of Science (D.Sc) in (Seribiotechnology)	Zhejiang University, Hangzhou P.R.China	2004	Awarded Chinese Government Scholarship
02.3.	Post Graduate (M.Sc) in Sericulture	Karnatak University, Dharwad, India.	1996	Distinction
02.4.	Bachelor of Science (B.Sc) Botany, Zoology, Sericulture	Karnatak University, Dharwad, India.	1994	Distinction

03. Teaching Experience

Sl.No.	Designation	University/ Institute	Period
03.1.	Lecturer	Kittel Science College, Dharwad,	1996 to 1997
03.2.	Assistant Professor	Karnatak University, Dharwad	Since August 1997

04. Professional recognition Awards, Fellowships received

Sl.No.	Award / fellowships	Year
04.1.	CHINESE GOVERNMENT SCHOLARSHIP: Awarded Chinese Government Scholarship to pursue Ph.D in China By Ministry of Human Resource Development, Government of India and Chinese Scholarship Council, China.	2001 to 2004
04.2.	INDIAN NATIONAL SCIENCE ACADEMY (INSA) FELLOWSHIP: Nominated by Indian National Science Academy(INSA), under the Exchange of Scientists Program to undergo training and develop Bilateral ties for Research at Chinese Academy of Sciences, Shanghai.	2007
04.3.	BOYSCAST FELLOWSHIP : By Department of Science and Technology, Government of India: Fellowship for Post Doctoral Research at Lab of Biopolymer and Tissue Engineering, Seoul National University, South Korea.	2008
04.4	COMMONWEALTH ACADEMIC FELLOWSHIP: Awarded by Common wealth Association of Universities United Kingdom. For post doctoral research at Queen Mary University of London.	2013

05. Research Experience

During my Doctoral studies I have characterized a single stranded RNA virus, which causes severe crop losses in Silkworm Bombyx mori, during the study I have gained experience in molecular techniques and other histopathological techniques pertaining to the virus study.

I also have experience in Baculovirus expression system using silkworm as a Bioreactor for production of Therapeutic proteins. I am well versed with the following biotechnological techniques, Centrifugation techniques for virus studies (Sucrose density gradient and Cesium Chloride density gradient) Production of Polyclonal antibodies, Monoclonal antibodies, Fluorescent antibody technique, PCR technique (expert in RT-PCR), Gene sequencing, Recombinant DNA technology, Plaque Assays, Western blot technique, Construction of mutant viruses, SDS and Agarose Gel Electrophoresis, ELISA.

Recently we have also undertaken investigations on antimicrobial proteins of silkworm *Bombyx mori*, as the immune system in insects is unique for not having the ability to produce antibodies, but still their immune system is so effective that Insects are found in all environments of the world which can be attributed to their ability to withstand and survive all odds of nature. This research is funded by University grants Commission.

During my Post Doctoral Research at Seoul National University, South Korea, I have worked on Silk Biomaterials and preparation of self assembled Nanoparticles from *Antheraea mylitta* Tasar silk sericin protein by diafiltration method, where in we successfully prepared the nanoparticles, which can be useful in cosmetic and drug delivery applications.

As an outcome of my research presently I have been granted Major Research Project by Department of Science and Technology under the Indo Korean collaborative research program where in we have proposed to prepare Microparticles and Microspheres using Silk protein for targeted drug delivery.

06. Research Interests

Baculovirus expression system
Molecular Biology of Nuclear Polyhedrosis virus(NPV)
Characterization of inducible antibacterial proteins
Insect Proteomics & Molecular Biology
Synthesis and Characterization of sericin nano particles
Fusarium induced mycotoxins
Biomedical application of silk protein
Silk Biomaterials and Tissue Engineering
SiRNA in insects
Insect immunity
Bio-pesticides

07. Research Projects

Sl. No	Title of The R&D project	Grant Size	Duration	Funding Agency	Remarks (Status)
1.	Large Scale Biotechnological production of human erythropoietin (EPO) protein in silkworm Bombyx mori using a baculovirus	15 lakhs	2007-2010 (3years)	Department of Biotechnology Govt. of India (Under Rapid Grant Scheme for Young Investigators (RGYI))	Completed
2.	Identification and Biochemical Characterization of Antibacterial proteins from silkworm Bombyx mori by using 2-Dimensional Electrophoresis.	9.75 lakhs	2009-2012 (3years)	University Grants Commission, Govt. of India	Completed
3.	Application of Tasar and Muga Silk Sericin as material for Drug Delivery.	3.90 lakhs	2009-2012 (3years)	Department of Science and Technology, Govt. of India (Indo Korean collaborative project) In Collaboration with Prof.Ki Hoon Lee, Dept. of Material Sciences, Seoul National University, South Korea.	Completed
4.	Conjugation of wild silk proteins with polymer brushes for biomedical applications	19.84 lakhs	2013-2015	Department of Science and Technology, Govt. of India and United Kingdom India Education and Research Initiative (UKIERI) In the field of Advanced Materials including Nanotechnology. In collaboration with Dr.Julien Gautrot, School of Engineering and Materials Science, Queen Mary University of London.	Recently Sanctioned
5.	Wild silk proteins as novel biopolymers for biomedical applications	12 Lakhs	2013-2015	Science and Engineering Research Board (SERB), New Delhi.	Recently Sanctioned

08. Books Published

Sl.No.	National/ International	Title	Publisher	ISBN Number
07.1.	International	ssRNA of silkworm Bombyx Mori	VDM Verlag publisher Germany	978-3-639-23854-9
07.2.	National	Applications of Biotechnology in sericulture	Stadium Press (India) Pvt. Ltd.	978-93-800-12-48-3

09. Plenary Lectures/Keynote addresses

Sl. No.	Plenary Lectures/Keynote addresses	Year
01.	Invited Speaker at 53 rd Korean Sericultural Society meeting, and delivered special lecture as invited speaker	2008
02.	Delivered Special Lecture at Kyungpook National University, South Korea	2010

10. Reviewer for Journals

Sl.No.	Name of the Journal
01.	Applied Microbiology & Biotechnology (SCI)
02.	Current Science (SCI)
03.	Journal of Zhejiang University SCIENCE (EI)
04.	Journal of Medical plant research
05.	Food analytical methods (SCI)
06.	Journal of Electron microscopy (SCI)
07.	International Journal of Industrial Entomology

11. NCBI Sequences submitted

Histopathological study and RNA-dependent RNA polymerase (RdRp) sequence analysis; Strain: Zhejiang 01 / China

EMBL EF 422866.1

http://www.ncbi.nlm.nih.gov/nuccore/EF_422866

12. Membership of Professional Bodies

Sl. No.	Society/Association
1.	Member of Society for Invertebrate Pathology (SIP)
2.	Member of Black Caspian Seas and Central Asia Silk Association (BACSA).

13. Publications

1. J.M. Sateesh Babu, M. Sevukarajan, K. Thamizhvanan, B. Naveenkumar, B. Sreekanth Reddy, U. Vivekananda, V. Shyamkumar. Evaluation of physiochemical and antitubercular activity of co-crystal of isoniazid with methyl paraben. International Journal of Innovative drug discovery. 2013. 3(1): 10-27.
2. Mallikarjuna Gadwala, Neetha N. Kari, Narayan Moger and Shyam Kumar V.* Effective solubilization procedure for analysis of silkworm haemolymph proteins by two-dimensional gel electrophoresis. Applied Biochemistry and Biotechnology. 2013. 169: 1459-1466. DOI 10.1007/s12010-012-0067-0
3. Haesung Y, Hanjin O, Moo KK, Hyo WK, Jeong YL, In CU, Shyam kumar V* and Ki Hoon Lee. Extraction conditions of *Antheraea mylitta* sericin with high yields and maximum molecular weight degradation. International Journal of Biological Macromolecules. 2013. 52: 53-65.
4. Shyam kumar Vootla, Xing Meng Lu, Neetha kari, Mallikarjun Gadwala and Quieng. Rapid detection of infectious Flacherie virus of *Bombyx mori* using RT & Nested PCR from Silkworm. Journal of Insect Science. 2013. 13 (120): 1-9.
5. Mallikarjuna Gadwala, Neetha. N. Kari and Shyam kumar V. Protein precipitation strategies for Two dimensional electrophoretic analysis of silkworm (*B.Mori*) haemolymph proteins. Global Journal of Applied Agricultural Research. 2012. 2(1): 39-43.
6. Joy Harris Hoskeri¹, Krishna Venkatarangaiah*, Santhosh Kondajji Hanumanthappa, Shyam Kumar Vootla, Mallikarjuna Gadwala. CNS depressant activity of extracts from *Flaveria trinervia* Spring C. Mohr. Phytopharmacology. 2011. 1(4): 100-107.

7. M. K. Suparna, G. Mallikarjun, S. S. Ingalhalli, V. shyam kumar and A. A. Hooli. Role of antibacterial proteins in different silkworm Strains against flacherie. The Bioscan. 2011. 6(3): 365-369.
8. Yanwen Wang, V. Shyam Kumar, Neetha Kari and Mallikarjun Gadwala. Optimization of the conditions for RAPD analysis of Enterococci isolated from Silkworm Bombyx mori. Current biotica. 2009. 3(2): 127-134.
9. Yanwen Wang, Shyam kumar, Zhimei Mu, Jisheng Li, Neetha Kari. Relationship between Rainfall and Epidemic of fungal disease in silkworm Bombyx mori. Karnatak University Journal of Science, 2007. 45-46.
10. Fan Zhang, Xingmeng Lu, Vootla Shyam Kumar, Hongjie Zhua Hongsong Chen, Zhengxian Chen, Jian Hong. Effects of a novel anti-exospore monoclonal antibody on microsporidial Nosema bombycis germination and reproduction in vitro. Parasitology. 2007. 134 (11): 1551-1558.
11. WANG Dun, YAN Xing-cheng, Shyam Kumar, GUO Zhong-jian, ZHANG Chuan-xi, AN Shi-heng. Bacterial expression and cellular localization of Helicoverpa armigera nucleopolyhedrovirus Orf33 in infected host cells. Acta Microbiologica Sinica, 2006. 46(1): 60-62.
12. Shi-Heng An, Jin-Yan Shang, Yan-He Liu, V Shyam Kumar, Zhong-Jian Guo, Dun Wang, Zhang-Nv Yang and Chuan-Xi Zhang. Characterization of a unique gene ORF135 from Helicoverpa armigera single nucleocapsid nucleopolyhedrovirus. Virus Genes. 2006. 32: 21-26.
13. Shi-Heng, Xing Li-Ping, V. Shyam Kumar and Zhang Chuan-Xi. Analysis of a late gene, orf101 from Helicoverpa armigera single nucleocapsid nucleopolyhedrovirus. Insect Science. 2005. 12: 335-340.
14. Zhong-Jian Guo, Shi-Heng An, Dun Wang, Yan-He Liu, V. Shyam Kumar and Chuan-Xi Zhang Characterization of Ha29, a Specific Gene for Helicoverpa armigera Single-nucleocapsid Nucleopolyhedrovirus. Journal of Biochemistry and Molecular Biology. 2005. 38(3): 354-359.
15. WANG Yanwen, LU Xingmeng, MU Zhimei, V Shyam Kumar. RAPD Analysis of the Enterococci Isolated from the Silkworm, Bombyx mori. Acta Sericologica Sinica. 2005. 31. 51-63.
16. F. Wang, C.X. Zhang, V. Shyam Kumar, and X.-F.Wu Influences of chitinase gene deletion from BmNPV on the cell lysis and host liquefaction. Archives of Virology. 2004. 150: 981-990.
17. Xiaofeng Wu, Cuiping Cao, V. Shyam Kumar, Weizheng Cui. An Innovative technique for inoculating recombinant baculoviruse into the Silkworm Bombyx mori using lipofectin. Research in Microbiology. 2004. 155:462-466.