Bio-data

Name	:	Dr. Himmat Singh
Designation	:	Scientist E
Qualifications	:	M.Sc. Entomology (1995), Ph. D, Zoology (1999)
Research Experience	:	23 years,
Area of Interest	:	Entomology, Surveillance of diseases, Insecticide Resistance, Molecular Biology, Vector biology, Ecology Bio ethics, RS & GIS Technology of Vector borne diseases like Malaria Dengue and Japanese Encephalitis & diagnosis through molecular biology tools like PCR, RT-PCR& HIA
Publications	:	60 Research Publications
Trainings Acquired	:	Entomology, Surveillance of diseases, Insecticide Resistance, GLP, Molecular Biology, Vector biology, Ecology Bio ethics, RS & GIS Technology,
Projects	:	34 on Malaria, Dengue, Ecology, Entomology, Molecular Biology, Insecticide resistance, Community based studies Molecular biology, GIS/RS, Implementation based etc.
Fellowships	:	3 International 2 National
Awards	:	Medical Entomology, SOMA, 2019
Patents/Innovation	:	Applied for 1 patent on Cellulose bases ovitrap substrate to ICMR (2014) Innovative "*Tanka lid*" for mosquito proofing in western Rajasthan
Recognized Guide From	:	Academy of Scientific and Innovative Research (AcSIR), Gaziabad, UP Kumanu University, Nainital, Uttrakhand Magdh University, Bihar Guru Gobind Singh Indraprastha University, Delhi Jai Narain Vyas University, Jodhpur

Details of Project undertaken

S. No.	Project and Duration	Funding Agencies R& D projects (ICMR/DST/DBT etc) and Amount	Level of Participation		
			PI	Co-PI	Others
	Development of slow-releasing insecticidal Paint formulation and their efficacy against mosquito vectors	ICMR (6069463/-)	PI		
	Studies on bionomics of *An. culicifacies* in relation to transmission of malaria and its control/elimination in western Rajasthan	ICMR-MERA-INDIA (INR 81,50678)	PI		
	Climate influence on mosquito demographics , Dengue and Chikungunya in the metropolitan cities located in different climate regions of India: a multi-centric study"	ICMR Task Force		Co-PI	
	Transmission of Malaria during Pilgrimage Walks in Western Rajasthan (Ongoing)	ICMR-MERA-INDIA (71,58440/-)	PI		
	Screening of erythrocyte stage secretary proteins for detection of malaria parasite	ICMR-40 Lakh Approx	PI		
	Pilot scale bio-ecological studies on Aedes aegypti population in Delhi towards developing an alternate dengue/ chikungunya control strategy (2018-2019)	ICMR (INR 40,44,000/-)	PI		
	Vector Surveillance of Zika/JE in selected high risk areas of India a coordinated project by VCRC, funded by ICMR.(2017-2019)	ICMR (INR 27,96,000/-)	PI		
	Vector Surveillance of Zika/JE in selected high risk areas of India a coordinated project by VCRC, funded by ICMR,(2016-2017)	ICMR (INR 26,00,000/-)	PI		
	Feasibility of replacing modified lid of the	ICMR (INR 5,00,000/-)	PI		

	"Tankas" (underground tanks) to reduce vector density and malaria in western Rajasthan: An intervention Study 2017-2018				
	Health Impact Assessment of Narmada Basin Dams and Resettlement & Rehabilitation Colonies in MP: Phase III (2016-2021)	Narmda Valley Development Authority NVDA (6,61,27,000/-	PI		
	Studies on Health Impact Assessment of Sardar Sarovar Project (SSP) in Command Areas of Rajasthan (2014-2016)	Narmda Valley Development Authority NVDA (77,18,000/-		Co-PI	
	Training on Advance Techniques in surveillance and control of Vector borne diseases. Funded By DHR	DHR (INR 40,44,000/-)		Co-PI	
	Impact of Irrigation change on prevalence of Malaria in arid and non arid parts of Rajasthan.	DST Climate Change & Health Network, (INR 30,00,000/-)		Co-PI	
	Mapping of mosquitoes breeding habitats and locations of vertebrate host in North & South parts of Rajasthan State prone to emergence of Japanese encephalitis virus using space Technology (RS & GIS) (2013-2015)	Vector Science Forum, ICMR (INR 45,00,000/-)		Co-PI	
	Surveillance of pyrethroid resistance in important malaria vectors of western Rajasthan and studies on genetic and biochemical mechanisms of pyrethroid resistance in *An. stephensi*	Vector Science Forum, ICMR (INR 26,00,000/-)		Co-PI	
	Development of Molecular markers for the identification of Biological forms of *Anopheles stephensi* prevalent in arid areas of Rajasthan.	MOEF (INR 30,00,000/-)		Co-PI	
	Development of Molecular and genetic marker of vector competence of mosquitoes species for dengue virus. (2005 -2008)	DST (INR 18,00,000/-)		Co-PI	
	Study on Dengue and Dengue Hemorrhagic Fever in Rajasthan, India". (2003-2005)	TDR/WHO (INR 75,00,000/-)		Co-PI	
	Identification and classification of larval breeding habitat for determining adult population estimates as warning tools for the future malaria epidemics in the Thar Desert using RS and GIS.	WHO (INR 40,00,000/-)		Co-PI	
	Development and demonstration of a surveillance design for control of dengue vectors in Jodhpur, using GIS" –2005 as Co-investigator	WHO (INR 19,00,000/-)		Co-PI	

List of current publications

1. Preeti Kumari , Swati Sinha , Renuka Gahtori , Afshana Quadir , Supriya Sharma Deepali Savargaonkar , Bina Srivastava, Himmat Singh , Veena Pande , Anupkumar RAnvikar PCR based diagnosis of malaria targeting 18s rRNA and cox gene: Comparative analysis Comparative analysis Korean Journal of parasitology.
2. N. Pradeep Kumar , Ashwani Kumar , D. Panneer , S. Abidha , S. Muthukumaravel , T. Sankari , P.M. Ajithlal , Jessu Mathew ,Suhana Koothradan , R. Paramasivan , M. Muniyaraj , Himmat Singh , Rekha Saxena , P. Vijayachari , I.P. Sunish, A.N. Shriram , Prafulla Dutta, Saurav Jyoti Patgiri, D.R. Bhattacharyya, S.L. Hoti, D. Chattopadhyay , Subarna Roy, Namita Mahapatra, Sanghamitra Pati, Gyan Chand, A.K. Mishra, Pradip Barde, P. Jambulinga. Nation-wide vector surveillance on Zika and Dengue did not indicate transmission of the "American lineage pandemic ZIKA virus" in India International Journal of Infectious Diseases (2021), doi: https://doi.org/10.1016/j.ijid.2021.09.074 (IF 3.62).

3. Himmat Singh, Sanjeev Kumar Gupta, Kumar Vikram, Rekha Saxena, Amit Sharma 2021 The Impact of Improved Lid of Underground Tanks “Tanka” On Breeding of An. stephensi In Western Rajasthan, India Malaria Journal. 2021 DOI: https://doi.org/10.21203/rs.3.rs-388440/v1 (IF 3.9)
4. Dinesh Kumar, Pawan Kumar, Kumar Vikram and Himmat Singh. Fabrication and Characterization of Noble Crystalline Silver Nanoparticles from Pimenta dioica Leave Extract medium and analysis of Chemical constituents for Larvicidal Applications. Saudi Journal of Biological Sciences. 2021 Accepted. (IF 4.22)
5. Sharma, R.S. and Himmat Singh Risk assessment of vector borne diseases in Rohingya refugee’s camps, cox bazaar. Bangladesh, International Journal of Current Research, 2021: 1-13. DOI: https://doi.org/10.24941/ijcr.40966.03.2021 (SJIF 7.99)
6. Raju Ranjha, Himmat Singh, Jitendra Kumar. Dengue outbreak in Bhilai, Chhattisgarh 2018: Entomological investigation and community awareness: Community Awareness and Entomological Investigation of Dengue Outbreak" Indian J Community Health (Accepted).
7. Sanjeev Kumar Gupta, BN Nagpal, Rekha Saxena, Himmat Singh, Kumar Vikram, Nayak A, MS Chalga, Aruna Srivastava, and M.C. Joshi. Mobile App based Pictorial Identification Key for Indian Anophelines". Journal of Vector Borne Diseases; 2021, (Accepted). (IF 1.5)
8. Pawan Kumar, Dinesh Kumar, Kumar Vikram R P S Chauhan & Himmat Singh Mosquito larvicidal potential of Solanum xanthocarpum leaf extract derived silver nanoparticles and its bio-toxicity on non target aquatic organism Journal of Vector Borne Diseases; 2021, (Accepted). (IF 1.5)
9. A Rani, BN Nagpal, H Singh, SS Mehta, A Srivastava, R Saxena Potential role of Anopheles subpictus as a malaria vector in Ghaziabad District, Uttar Pradesh, India. International Journal of Tropical Insect Science 2021; 41 (2), 1107-1117. (IF 0.88).
10. Vikram K, Gupta SK, Nagpal BN, Saxena R, H Singh, NR Tuli, Aruna Srivastava and Neena Valecha. Co-distribution of dengue and chikungunya virus in Aedes mosquitoes of Delhi, India. Journal of Vector Borne Diseases; 2021, (Accepted). (IF 1.5)
11. Majhi J, Singh R, Yadav V, Garg V, Sengupta P, Atul PK, Singh H . Dynamics of dengue outbreaks in gangetic West Bengal: A trend and time series analysis. Journal of Family Medicine and Primary Care. 2020, 9 (11): 5622
12. Dinesh Kumar, Pawan Kumar, Himmat Singh & Veena Agrawal 2020.Biocontrol of mosquito vectors through herbal-derived silver nanoparticles: prospects and challenges *Environmental Science and Pollution Research*. Online on 8th May 2020
13. Naveen Rai Tuli, Nidhi Srivastava, P.R.S. Koranga,R. Kaur Bakshi, H Singh. An integrated approach for control of Aedes breeding in the dump yard of articles confiscated by the Enforcement Department of South Zone of South Delhi Municipal Corporation: a case study. Dengue Bulletin 2020;(41): 39-47
14. Dinesh D.S., Singh H., Topno R.K., Kumar V., Kesari S., Singh S.P, Gupta A.K, Pradhan K, Deb A, Madhukar, V. Das N.R, Mondal R.K., Kumar M., Ranjan A, Das P, Pandeya K. Surveillance of breeding sites of dengue vector following the floods in an urban area of Patna, Bihar, India. Dengue Bulletin 2020;(41): 85-95
15. Kumar, D., Kumar, P., Singh, H. et al. Biocontrol of mosquito vectors through herbal-derived silver nanoparticles: prospects and challenges. Environ Sci Pollut Res 27, 25987–26024 (2020). https://doi.org/10.1007/s11356-020-08444-6
16. Naveen Rai Tuli, Kanika Singh, Prithvi Singh, B. Bisht, H Singh Impact of COVID-19 pandemic on prevention and control of dengue in Delhi, India. Dengue Bulletin 2020;(41): 166-182.
17. Jyoti Kumari Gupta, Deepa Meena, Bharti Malhotra, Ruchi Singh, Kusum Gaur, H Singh, Ravi Prakash Sharma Effect of control measures in terms of change in Entomological Indices during first Zika outbreak in Jaipur (Rajasthan). International Multispecialty Journal of Health 2020, 6:1-7
18. Rani, A, Nagpal, B.N., Singh, H. et al. Potential role of Anopheles subpictus as a malaria vector in Ghaziabad District, Uttar Pradesh, India. Int J Trop Insect Sci (2020). https://doi.org/10.1007/s42690-020-00296-4
19. H Singh, Om P Singh, Nasreen Akhtar, Gunjan Sharma, Nivedita Gupta Neena Valecha 2019 First report on the transmission of Zika virus by Aedes (Stegomyia) aegypti (L.) (Diptera: Culicidae) during the 2018-Zika-outbreak in India. Acta Tropica Volume 199, November 2019, 105114.https://doi.org/10.1016/j.actatropica.2019.105114.

20. Singh H, Gupta SK, Vikram K, Saxena R, Srivastava A and Nagpal B.N. 2019 Sustainable Control of malaria employing Gambusia fishes as biological control in Jalore and Barmer districts of Western Rajasthan. J Vector Borne Dis (Accepted)

21. Vikram K, Gupta SK, Nagpal BN, Saxena R, Singh H, NR Tuli, Aruna Srivastava and Neena Valecha. 2019. Co-distribution of dengue and chikungunya virus in Aedes mosquitoes of Delhi, India Journal of Vectorborne Diseases. (Accepted)

22. Gupta SK, Saxena R, Vikram K, Singh H, Srivastava A, Nagpal BN, Tuli NR, Joshi MC and Neena Valecha. Retrospective spatial statistical analysis of dengue cases in Delhi. Dengue Bulletin (Accepted)

23. Babita Bisht, Roop Kumari, BN Nagpal, Singh H, Sanjeev Kumar Gupta, AK Bansal and NR Tuli 2019. Influence of environmental factors on dengue fever in Delhi International Journal of Mosquito Research 6(2)A :11-18

24. Sogan N, Kapoor N, Singh H, Kala S, Nagpal BN. 2018. Larvicidal activity of *Ricinus communis* extract against mosquitoes. J Vector Borne Dis. 55(4) 284-290.

25. Babita Bisht , Roop Kumari, Singh H, B.N. Nagpal 2018. Study on Association between Entomological indices, Aedes breeding and container types in City Zone of North Municipal Corporation of Delhi for targeted approach towards Prevention and Control of Dengue. Dengue Bulletin (40) 100-113

26. Sanjeev Kumar Gupta, Poonam Saroha,a Kumar Vikram, NR Tuli, Himmat Singh, Rekha Saxena, Aruna Srivastava, BN Nagpal, MC Joshi 2018 A geostatistical study to prioritize dengue-affected areas for implementation of effective control by municipal corporations of Delhi, India Dengue Bulletin, (40) 152-163

27. Babita Bisht, Roop Kumari, BN Nagpal, Himmat Singh, Kumar Vikram, Sanjay Sinha, NR Tuli 2018.Knowledge, attitude and practices for prevention and control of dengue fever among community members in North Delhi Municipal Corporation, Dengue Bulletin (40) 137-152

28. N Mishra, NK Shrivastava, A Nayak, H Singh 2018 Wolbachia: A prospective solution to mosquito borne diseases, International Journal of Mosquito Research 5 (2), 1-8

29. B.N. Nagpal, Sanjeev K Gupta, Arshad Shamim, Kumar Vikram, Anushrita, Himmat Singh, Rekha Saxena, V.P. Singh, Aruna Srivastava, Babita Bisht, N.R. Tuli, R.N. Singh and Neena Valecha. 2017 Identification of key containers of Aedes breeding – A cornerstone to control strategies of dengue in Delhi, India Dengue Bulletin December Issue vol 39: 87-99

30. B. N. Nagpal , Sanjeev Kumar Gupta, Arshad Shamim, Kumar Vikram, Aruna Srivastava, N. R. Tuli, Rekha Saxena, Himmat Singh, V. P. Singh, V. N. Bhagat, N. K. Yadav, Neena Valecha. 2016 Control of Aedes aegypti Breeding: A Novel Intervention for Prevention and Control of Dengue in an Endemic Zone of Delhi, India PLOS One https:// doi.org/10.1371/journal.pone.0166768

31. Alka Rani, Abhishek Gupta, Swati Sinha, Bhupender Nath Nagpal, Himmat Singh, Kumar Vikram, Sanjeev Kumar Gupta, Sucheta Shah Mehta, Aruna Srivastava, Anup Anvikar Rekha Saxena and Neena Valecha 2017 Malaria epidemiology in changing scenario and anopheles vector in Ghaziabad district, Uttar Pradesh, India, International Journal of Mosquito Research Vol 4 (6) 56-64

32. Vikram Kumar, Nagpal B N, Pande V , Srivastava A, Saxena R; Anvikar A, Das A , Singh H, Anushrita . Gupta S K, Tuli N R , Telle O, Yadav N K, Valecha N, Paul R, 2016 An epidemiological study of Dengue in Delhi, India Acta Tropica; 153(01): 21-27

33. Vikram Kumar, B N Nagpal, Veena Pande, Aruna Srivastava, Rekha Saxena Singh H, Anushrita, Sanjeev K Gupta, N R Tuli, N K Yadav, Richard Paul, Olivier Telle, Neena Valecha, 2015. Comparison of Ae. aegypti breeding in localities of different socio-economic groups of Delhi, India. International Journal of Mosquito Research 2 (2), 83-88