

## BIODATA

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<b>Qualification</b>	Ph.D.		
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<b>ResearchGate Profile</b>	<a href="https://www.researchgate.net/profile/Rajagopal_Rangeshwaran">https://www.researchgate.net/profile/Rajagopal_Rangeshwaran</a>		
<b>Awards</b>	Societal Innovation Award 2015	National Research Development Corporation (NRDC), New Delhi	2017
	Fellow of Society for Biocontrol Advancement	Society for Biocontrol Advancement	2014
	BS Bhummanavar award for “Innovative Research in Biological Control”	Society for Biocontrol Advancement	2014
	Elected as Chief Editor by Society for Biocontrol Advancement for Journal of Biological Control	Society for Biocontrol Advancement	2017
<b>PUBLICATIONS (NUMBERS ONLY)</b>	i. Books: 5                      ii. Research Papers, Reports: 56 iii. General articles: 2      iv. Bulletins: 6                  v. Popular articles: 12		
<b>Best 10 Research Papers</b>	<ol style="list-style-type: none"> <li>1. Omprakash Navik, R. S. Ramya, Richa Varshney, S. K. Jalali, T. M. Shivalingaswamy, R. Rangeshwaran, Y. Lalitha, Jagadeesh Patil and Chandish R. Ballal. 2019. Integrating biocontrol agents with farmer’s practice: impact on diamondback moth, <i>Plutella xylostella</i> (Linnaeus) (Lepidoptera: Plutellidae) and cabbage yield. <i>Egyptian Journal of Biological Pest Control</i> 29: 25.</li> <li>2. Rangeshwaran, R., Velavan, V., Frenita. D. L., Surabhi Kumari, Shylesha, A. N., Mohan, M., Satendra Kumar and Sivakumar, G. 2016. Cloning, expression and bioassay of Vip3A protein from an indigenous <i>Bacillus thuringiensis</i> isolate, <i>Journal of Pure and Applied Microbiology</i>, Vol. 10(2). 1533-1539.</li> <li>3. Vinay, J. U., M. K. Naik., R. Rangeshwaran., G. Chennappa., Sohail S. Shaikh. And R. Z. Sayyed. 2016. Detection of antimicrobial traits in fluorescent pseudomonads and molecular characterization of an antibiotic pyoluteorin. <i>3 Biotech</i>, 6:227.</li> <li>4. Arvind Kumar Yadav., Mahesh S. Yandigeri., Shachi Vardhan., Sivakumar G., Rangeshwaran R and C. P. M. Tripathi. 2014.</li> </ol>		

	<p><i>Streptomyces</i> sp. S160: a potential antagonist against chickpea charcoal root rot caused by <i>Macrophomina phaseolina</i> (Tassi) Goid. <i>Annals of Microbiology</i>, 64:1113–1122. (NAAS 7.41).</p> <ol style="list-style-type: none"> <li>5. Rangeshwaran, R., Ashwitha, K., Sivakumar, G. and Jalali, S. K. 2013. Analysis of Proteins Expressed by an Abiotic Stress Tolerant <i>Pseudomonas putida</i> (NBAll-RPF9) Isolate Under Saline and High Temperature Conditions, <i>Current Microbiology</i>, 67: 659-667.</li> <li>6. Prasad, R. D., Rangeshwaran, R., Hegde, S. V. Anuroop, C.P. 2002. Effect of soil and seed application of <i>Trichoderma harzianum</i> on pigeonpea wilt caused by <i>Fusarium udum</i> under field conditions. <i>Crop-Protection</i>, 21: 293-297. (NAAS 7.92)</li> <li>7. B. Ramanujam, Krishna Japur, B. Poornesha, A.N. Shylesha and R. Rangeshwaran 2017. Field evaluation of endophytic entomopathogenic fungi against maize stem borer, <i>Chilo partellus</i> (Crambidae: Lepidoptera). <i>Indian Journal of Agricultural Sciences</i> 87 (8): 1099–1103. NAAS rating: 6.22.</li> <li>8. Sivakumar. G., Rangeshwaran, R., S Sriram, S. and P Raveendran, P. 2014. <i>Bacillus megaterium</i> strain NBAll 63: A potential biocontrol agent for the management of bacterial wilt of tomato caused by <i>Ralstonia solanacearum</i>. <i>Indian Journal of Agricultural Sciences</i> 84 (10): 1288–92. NAAS 6.0).</li> <li>9. Rangeshwaran, R. and Prasad, R. D. 2000. Biological control of Sclerotium rot of sunflower. <i>Indian Phytopathology</i> 53: 444-449.</li> <li>10. Ashwitha, K., Rangeshwaran, R and Sivakumar, G. 2018. Molecular mechanisms adopted by abiotic stress tolerant <i>Pseudomonas fluorescens</i> (NBAll-PFDWD) in response to <i>in vitro</i> osmotic stress. <i>Journal of Biological Control</i> 32: 52-61. (NAAS 5.34)</li> </ol>
<p><b>PROFESSIONAL EXPERIENCE</b></p>	<p>Served as scientific assistant at IISc, Bengaluru and worked on DNA electron microscopy for two and half years. Subsequently joined ICAR in 1993 and presently serving for 25 years as scientist in microbiology. Significant achievements include identification of fifty <i>Pseudomonas</i> isolates tolerant to high temperature (45), high salinity (1.5M NaCl) and moisture stress. Molecular mechanisms involved in conferring stress tolerance were identified under the world bank funded NAIP project. A technology from the project was awarded the Societal Innovation Award by Ministry of Science and Technology. In mandated institute project around 4000 indigenous <i>Bacillus thuringiensis</i> isolates were isolated and 400 isolates showing toxicity to insect pests have been characterized. Three commercial technologies emerged out of this work. In two ICAR sponsored projects <i>Trichoderma</i> isolates for <i>Phytophthora</i> control were characterized and methodologies were developed for management of sac brood disease in honey bees. Presently working on efficient formulation technologies of insect pathogens.</p>