

## Division of Crop Research

### Personal Details



Dr. Saurabh Kumar  
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### Research Interest

Metagenomics, Plant-Microbe Interactions, Bacterial proteomics

### Research Highlights

### Memberships / Fellowships

- i. Life membership of Association of Microbiologists of India
- ii. Life membership of Society of Biological Chemists
- iii. CSIR-Senior Research Fellow award 2017
- iv. Graduate Aptitude Test in Engineering (GATE)-2016 (Life sciences)
- v. CSIR- Junior Research Fellow award 2014 (Life Sciences)
- vi. Teaching and Research assistantship award at G.B.P.U.A.&T. Pantnagar

### Technology Developed

### Publication Details

1. **Kumar, S.**, Suyal, D. C., Yadav, A., Shouche, Y., & Goel, R. (2020). Psychrophilic *Pseudomonas helmanticensis* proteome under simulated cold stress. *Cell Stress and Chaperones*, 1-8.
2. **Kumar, S.**, Suyal, D. C., Yadav, A., Shouche, Y., & Goel, R. (2019). Microbial diversity and soil physiochemical characteristic of higher altitude. *PLoS one*, 14(3), e0213844.
3. Suyal, D. C., Joshi, D., **Kumar, S.**, Soni, R., & Goel, R. (2019). Differential protein profiling of soil diazotroph *Rhodococcus qingshengii* S10107 towards low-temperature and nitrogen deficiency. *Scientific reports*, 9(1), 1-9.
4. Joshi, D., Chandra, R., Suyal, D. C., **Kumar, S.** & Goel, R. (2019). Impacts of bioinoculants *Pseudomonas jessenii* MP1 and *Rhodococcus qingshengii* S10107 on chickpea (*Cicer arietinum* L.) yield and soil nitrogen status. *Pedosphere*, 29(3), 388-399.
5. Debbarma, P., Zaidi, M. G. H., **Kumar, S.**, Raghuwanshi, S., Yadav, A., Shouche, Y., & Goel, R. (2018). Selection of potential bacterial strains to develop bacterial consortia for the remediation of e-waste and its in situ implications. *Waste Management*, 79, 526-536.
6. **Kumar, S.**, Suyal, D. C., Bhoriyal, M., & Goel, R. (2018). Plant growth promoting potential of psychrotolerant *Dyadobacter* sp. for pulses and finger millet and impact of inoculation on soil chemical properties and diazotrophic abundance. *Journal of Plant Nutrition*, 41(8), 1035-1046.

7. Suyal, D. C., **Kumar, S.**, Joshi, D., Soni, R., & Goel, R. (2018). Quantitative proteomics of psychrotrophic diazotroph in response to nitrogen deficiency and cold stress. *Journal of proteomics*, 187, 235-242.
8. Suyal, D. C., **Kumar, S.**, Yadav, A., Shouche, Y., & Goel, R. (2017). Cold stress and nitrogen deficiency affected protein expression of psychrotrophic *Dyadobacter psychrophilus* B2 and *Pseudomonas jessenii* MP1. *Frontiers in microbiology*, 8, 430.

**Google scholar:** <https://scholar.google.com/citations?user=vBCfZMsAAAAJ&hl=en>

**Research gate:** [https://www.researchgate.net/profile/Saurabh\\_Kumar68](https://www.researchgate.net/profile/Saurabh_Kumar68)

### **Book Chapter**

1. Joshi D., **Kumar S.**, Suyal D.C., Goel R. (2017). The Microbiome of the Himalayan Ecosystem. In: Kalia V., Shouche Y., Purohit H., Rahi P. (eds) Mining of Microbial Wealth and MetaGenomics. Springer, Singapore. Pp 101-116.