

Curriculum Vitae



SURENDRA KUMAR GOND, Ph.D.

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Academic Qualifications:

Degree	Institution	Year
B.Sc.	Banaras Hindu University	2002
M.Sc.	Banaras Hindu University	2004
Ph.D.	Banaras Hindu University	2011

Previous Employment:

Position	Institution	Year
Assistant Professor	Visva Bharati, Santiniketan, WB	2012-2016
Assistant Scientific Officer	Rubber Research Institute of India, Kottayam, Kerala	2011-2012

Awards and achievements:

- Raman Post Doc Fellow (Visiting scientist) at Rutgers, The State University of New Jersey, USA for 2013-2014,

- Presented paper at the 5th ASM Conference on Beneficial Microbes held on September 27-30, 2014, in Washington, DC, USA,
- CSIR NET-JRF- 2004, nominated for SPM fellowship,
- GATE-2005,
- Extended-SRF-2010

Research areas:

My research focuses on plant-microbe interactions. The microbes survive within and around plants have a particular role for growth and development of plants. The endophytic microbes which reside inside healthy plants improve plants health against pests and assist them to survive under stress conditions. Plant growth promoting microbes have enormous capabilities to be applied at commercial level for atmospheric nitrogen fixations, secretion of siderophores and antipest compounds and plant hormones. I am interested in finding the pathways involved in induction of stress tolerance of plants by microorganisms at physiological and molecular levels. Another aspect of my research is bioprospection of endophytic microbes for bioactive compounds.

Research Projects:

S. No.	Name of Project	Funding agency	Duration
1	Characterization of Bioactive compounds from Endophytic microbes associated with medicinal plants used by tribal community of Achanakmar wild life sanctuary, Bilaspur, C.G.	DST-SERB, New Delhi	2017-2019
2	Bioprospecting of endophytic fungi from <i>Rauvolfiaserpentina</i> for reserpine and antimicrobials from West Bengal, India	UGC, New Delhi	2013-2014

List of Publications:

- Kumar J., Sharma V.K., Singh D.K., Mishra A., **Gond S.K.**, Verma S.K., Kumar A., Kharwar R.N.(2016) Epigenetic activation of antibacterial property of an endophytic *Streptomyces coelicolor* strain AZRA 37 and identification of the induced protein using MALDI TOF MS/MS. *PLoS ONE* 11(2): e0147876
- Kumar A., **Gond S.K.**, Mishra A., Sharma V.K., Verma S.K., Singh D.K., Kumar J. and Kharwar R.N. (2015) Salicylic Acid and its Role in Systemic Resistance Induced by *Pseudomonas fluorescens* Early Blight Disease of Tomato. *Vegetos* 28 (3): 12-19.
- **Gond S.K.**, Bergena M.S., Torresa M.S., White J.F., Kharwar R.N. (2015) Effect of bacterial endophyte on expression of defense genes in Indian popcorn against *Fusarium moniliforme*. *Symbiosis* 66:133-140.
- **Gond S.K.**, Bergena M.S., Torresa M.S., Helsel Z., White J.F. (2015) Induction of salt tolerance and up-regulation of aquaporin genes in tropical corn by rhizobacterium *Pantoea agglomerans*. *Letters in Applied Microbiology* 60, 392-399.
- **Gond S.K.**, Bergena M.S., Torresa M.S., White J.F. (2015) Endophytic *Bacillus* spp. produce antifungal lipopeptides and induce host defence gene expression in maize. *Microbiological Research* 17, 79–87.
- **Gond S.K.**, Kharwar R.N., White J.F. (2014) Will fungi be the new source of the blockbuster drug taxol? *Fungal Biology Reviews* 28, 77-84.
- **Gond S.K.**, Mishra A., Sharma V.K., Verma S.K. and Kharwar R.N. (2013) Isolation and characterization of antibacterial naphthalene derivative from *Phoma herbarum*, an endophytic fungus of *Aegle marmelos*. *Current Science* 105: 167-169.
- Verma S.K. , **Gond S.K.**, Mishra A., Sharma V.K., Kumar J, Singh D.K., Kumar A., Goutam J., and Kharwar R.N. (2013) Impact of environmental variables on the isolation, diversity and antibacterial activity of endophytic fungal communities from *Madhuca indica* Gmel. at different locations in India. *Annals of Microbiology* DOI 10.1007/s13213-013-0707-9

- Kumar A., **Gond S.K.**, Mishra A., Sharma V.K., Verma S.K. and Kharwar R.N. (2013) Role of different variables on site-specific isolation and distribution patterns of soil Mycoflora from Varanasi. *Vegetos* 26 (1): 88-95.
- Mishra A., **Gond S.K.**, Kumar A., Sharma V.K., Verma S.K., Kharwar R.N. and Sieber T.N. (2012) Season and tissue type affect fungal endophyte communities of the Indian medicinal plant *Tinosporacordifolia* more strongly than geographic location. *Microbial Ecology* 64: 3288-398.
- **Gond, S.K.**, Mishra, A., Sharma, V.K., Verma, S.K., Kumar, J., Kumar, A. and Kharwar, R.N. (2012). Diversity and antimicrobial activity of endophytic fungi isolated from *Nyctanthesarbor-tristis* L., a well known medicinal plant of India. *Mycoscience*. 53:113–121.
- Kharwar, R.N., Verma, S.K., Mishra, A., **Gond, S.K.**, Sharma, V.K., Afreen, T. and Kumar, A. (2011) Assessment of diversity, distribution and antibacterial activity of endophytic fungi isolated from a medicinal plant *Adenocalymmaalliaceum* Miers. *Symbiosis* 55:39–46.
- Kharwar, R.N., Mishra, A., **Gond, S.K.**, Stierle, A. and Stierle, D. (2011) Anticancer compounds derived from fungal endophytes: their importance and future challenges. *Natural Product Reports* 28:1208–1228.
- Verma, V.C., **Gond, S.K.**, Kumar, A., Kharwar, R.N., Boulanger, L., and Strobel, G.A. (2011) Endophytic fungal flora from roots and fruits of an Indian neem plant *Azadirachta indica* A. Juss., and impact of culture media on their isolation. *Indian Journal of Microbiology*. 51: 469-476.
- Kharwar, R.N., **Gond, S.K.**, Kumar, A., and Mishra, A., (2010) A comparative study of endophytic and epiphytic fungal association with leaf of *Eucalyptus citriodora* Hook., and their antimicrobial activity. *World Journal of Microbiology and Biotechnology* 26:1941–1948.
- Verma, V.C., **Gond, S.K.**, Kumar, A., Mishra, A., Kharwar, R.N., and Gange, A.C. (2009) Endophytic Actinomycetes from *Azadirachta indica* A. Juss.: Isolation, Diversity, and Anti-microbial Activity. *Microbial Ecology* 57:749–756.
- Kumar A., Verma V.C., **Gond S.K.**, Kumar V., and Kharwar R.N. (2009) Bio-control potential of *Cladosporium* sp. (MCPL - 461), against a noxious weed *Parthenium hysterophorus* L. *Journal of Environmental Biology* 30(2); 307-312.

- Kharwar, R.N., Verma, V.C., Kumar, A., **Gond, S.K.**, Harper, J.K., Hess, W.M., Ma, C., Ren, Y., Strobel, G.A. (2009) Javanicin, an Antibacterial Naphthaquinone from an Endophytic Fungus of Neem, *Chloridium* sp. *Current Microbiology* 58:233-238.
- Verma, V.C., **Gond, S. K.**, Mishra, A., Kumar, A., Kharwar, R.N. (2008) Selection of natural strains of fungal endophytes from *Azadirachta indica* A. Juss, with antimicrobial activity against dermatophytes. *Current Bioactive Compounds* 4:36-40.
- **Gond, S.K.**, Verma, V.C., Kumar, A., Kumar, V., Kharwar, R.N. (2007) Study of endophytic fungal community from different parts of *Aegle marmelos* Correeae (Rutaceae) from Varanasi (India). *World Journal of Microbiology and Biotechnology* 23(10); 1371-1375.
- Verma, V.C., **Gond, S.K.**, Kumar, A., Kharwar, R.N., and Strobel, G.A. (2007) The endophytic mycoflora of bark, leaf, and stem tissues of *Azadirachta indica* A. Juss (neem) from Varanasi (India). *Microbial Ecology* 54; 119-125.

Book Chapters:

- **S.K. Gond**, V.C. Verma, A. Mishra, A. Kumar and R. N. Kharwar (2010) Role of Fungal Endophytes in Plant Protection. In, *Management of Fungal Plant Pathogens*. Ed. Arun Arya and Analia Edith Perello, pp 183-197.
- A. Mishra, **S.K. Gond**, A. Kumar, V.K. Sharma, S.K. Verma and R.N. Kharwar (2011) Sourcing of endophytes: A beneficial transaction of biodiversity, bioactive natural products, plant protection and nanotechnology. In *Microorganisms in Sustainable Agriculture and Biotechnology*. Ed. T. Satyanarayana, pp 581-612.
- R.N. Kharwar, Ashish Mishra, Vijay K. Sharma, **S.K. Gond**, S.K. Verma, A. Kumar, Jitendra Kumar, D.K. Singh and J. Goutam (2014) Diversity and Biopotential of Endophytic Fungal Flora Isolated from Eight Medicinal Plants of Uttar Pradesh, India. In *Microbial Diversity and Biotechnology in Food Security*. Ed. R.N. Kharwar, R.S. Upadhyay, N.K. Dubey, Richa Raghuwanshi, pp 23-40.