# CURRICULUM VITAE

#### Dr. Jay Prakash Verma

Assistant Professor Institute of Environment and Sustainable Development Banaras Hindu University Varanasi-221005, Uttar Pradesh, India Mobile No-9452762725 Email I.D. verma\_bhu@yahoo.co.in jayprakashbhu@gmail.com jpv.iesd@bhu.ac.in Date of Birth: 09/07/1983



## Current engagement

- Working as Assistant professor in Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi, Date of joining: 26 February, 2011 to continue.
- Working as Student Advisor of Institute of Environment and Sustainable Development Banaras Hindu University, Varanasi since July, 2012 to continue.
- Placement coordinator In-charge of Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi since July, 2011 to continue.
- Academic Council Member of BHU

## My Research area

My research area is Soil Microbiology, Biofertilizer, Bio pesticide, PGPR, PGPF, Sustainable Agriculture, Environmental Biotechnology and Microbiology, Plant-Soil-Microbe Interaction, Soil Fertility and Soil Health Management, Pesticide Degrading Microbes, and Cellulose Degrading Microbes for Bioethanol Production from cellulosic material.

## **Current research**

## M.Phil. degree awarded

- 1. Anubhuti Gupta in 2012-2013, on topic " sustainable bioethenol production from cellulosic material" in Institute of Environmment and Sustainable Development.
- 2. Vikrant Kumar, 2013-2014, on topic "Isolation and Characterization of Plant Growth Promoting Rhizobacteria from Rhizosphere soil samples"

# Registered in Ph.D. student under my supervision

- 1. Durgesh Kumar Jaiswal, research topic is "Development of efficient microbial consortia for pesticide degradation and plant growth promotion of agricultural crops" March, 2012
- 2. Anubhuti Gupta, her research topic is "Sustainable bioenergy production from cellulosic materials" October, 2013

# Educational qualification:

- (a) Ph.D: Ph.D. (2010) Department of Botany (Centre of Advance Study), Faculty of Science, Banaras Hindu University, Varanasi.
  Thesis Title: "Studies on new bioformulation of plant growth promoting rhizobacteria to develop a novel biofertilizer for chickpea (*Cicer arietinum* L.)"
- (b) **Post Graduation** (2006): M.Sc. in Biotechnology, Second (56.52%), Thapar Institute of Engineering and Technology (Thapar University), Patiala, Punjab, India.

**Thesis Title:** Identification and characterization of cellular locus of enzyme in *Pseudomonas putida* involve in limonin biotransformation.

- (c) **Graduation** (2003): B.Sc. (Hons) Botany, First (62.25%), Department of Botany (Centre of Advance Study), Faculty of Science, Banaras Hindu University, Varanasi.
- (d) **Intermediate** (2000): Science (Biology), First (64.57%), Gram Vikas Inter College Kutahan Jaunpur, U.P. Board, Allahabad.
- (e) **High School** (1998): Science, First (65.47%), Gram Vikas Inter College Kutahan Jaunpur, U.P. Board, Allahabad.

## Additional Qualification:

- (a) GATE: Graduate Aptitude Test in Engineering, Life science, February, 2006, Score: 253.
- (b) CSIR -NET: National Eligibility Test, Life Science, June, 2007, under Lectureship,

## Academic/ Research Activities

## A. Teaching (2011-2012)

- (a) Taught Environmental Studies to 5 Batches of B.Sc. First Semester students
- (b)Taught Environmental Studies to BA (Performing Arts) 6<sup>th</sup> Semester Students
- (c)Taught Environmental Studies to BAMS (Institute of Medical Science, Department of Ayurveda) 6<sup>th</sup> Semester Students.

## **B. Teaching 2012-continue**

- (a) Taught Integrated MPhil-Ph.D. and Ph.D. courses:
  - First Semester: Environmental Issues and policies, Science Communication,

Environmental Monitoring and Instrumentations

Second Semester: Sustainable Agriculture, Soil Conservation and Management,

Environmental Microbiology, Environmental Biotechnology

Name of the Department of the University running the Research Projects	Title of the Project	Name of Principal Investigator/ Co- Investigator	Name of Sanctioning Agency	Fund (Indian Rupees)
Institute of Environment and Sustainable Development, BHU	Enhancing rhizodegradation hexachlorocyclohexane by suitable agronomic packages	Co-Investigator (Dr. J.P. Verma)	UGC, New Delhi	9,86000.00 (2012 to 2015 )
Institute of Environment and Sustainable Development, BHU	Microbial control of soil respiration and its response to global warming	Co-Investigator (Dr. J.P. Verma)	CSIR, New Delhi	30,00000.00 (2013 to 2016 )
Institute of Environment and Sustainable Development, BHU	Impact and Vulnerability of Agriculture in Different Agro-Climatic Regions of Uttar Pradesh to Climate Variability and Changes: a	Co-Investigator (Dr. J.P. Verma)	DST, New Delhi	31,55600.00 (2013 to 2016)

# C. Research project

	Pilot Study using Simulation Models			
Institute of Environment and Sustainable Development, BHU	Studies of agriculturally important microorganism to develop effective microbial consortium for degradation of pesticide and insecticide in soil to enhance sustainable agriculture	Principal Investigator (Dr. Jay Prakash Verma)	SERB, New Delhi	12,00000.00 (2013 to 2015 )

**D.** Involvement in Institute of Environment and Sustainable Development activities Syllabus/Curriculum framing, Book purchasing, Instrument purchasing Research & Development

#### E. Seminar Organized/ Volunteered/Member of organizing committee

- (a) "Sixth National Teacher's Science Congress" of NTSC, DST, Govt of India, Organized by Banaras Hindu University Varanasi, November 8-11, 2011.
- (b)Member of organizing committee Orientation Workshop on "National Aquatic Animal-Ganges River Dolphin" organized by Institute of Environment & Sustainable Development (IESD), Banaras Hindu University, Varanasi & CEE, Lucknow, July 28-30, 2011 and sponserd by Ministry of Environment and Forest, Government of India.
- (c)Member of organizing committee National Workshop on "Role of Higher Education in Disaster Management – Issues and Challenges" organized by Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi, April 29-30, 2011 and sponsored by National Disaster Management Authority, Ministry of Home Affairs, New Delhi.
- (d)Member of organizing committee National Seminar on "Environmental Concerns and Sustainable Development: Issues and Challenges for India, Institute of Environment & Sustainable Development, BHU, Varanasi, 2-4 March, 2012.
- (e)Review Meeting on FASAL-2012, Institute of Environment & Sustainable Development, BHU, Varanasi, 1-2 March, 2012.
- (f) Co-organizing Secretary in SAARC Consultation workshop on "Implementation of Thimphu Statement on Climate Change: Integration of Climate Change Adaptaion and Disaster Risk Reduction" in IESD, 29-31 August, 2013.
- (g) Member of organizing committee in National workshop on "Sustainable water resource management in era of climate" organized by IESD, BHU, 10-11January, 2014

## F. <u>Training:</u>

- (a) "Techniques in Biological Research" in NBRI (National Botanical Research Institute), Lucknow since 01.06.2005 to 15.07.2005.
- (b) "Microbial Community Analysis through Metagenomics" in NBAIM (National Bureau of Agriculturally Important Microorganism), Mau since 03.02.2007 to 07.02.2007.

- (c) Participate in the 5<sup>th</sup> refresher course in Environmental Studies at August 14 to September 03, 2012 by UGC sponsored refresher course in UGC Academic Staff College, Banaras Hindu University, Varanasi
- (d) Online course on "Climate Change and Disaster Risk" conducted by Global Facility for Disaster Reduction and Recovery and National Institute of Disaster Management, New Delhi since 17<sup>th</sup> September to 12<sup>th</sup> October, 2012.
- (e) Training workshop on "Green and Sustainable Technology" in The Retreat, TERI Gram, Gurgaon, Haryana, since February 26 to March 2, 2013.
- (f) Participate in the 65<sup>th</sup> Orientation course at October 19 to November 15, 2013 by UGC sponsored refresher course in UGC Academic Staff College, Banaras Hindu University, Varanasi.
- (g) Training Workshop on "Application of Crop Weather Simulation Models and Decision Support System in Yield Forecasting" organized by IESD, 25-30 June, 2012.

## G. National Symposia and Seminar:

- (a) Diversity and Functionality of Plants and Microbes" in Department of Botany, University of North Bengal, Shiliguri, Darjeeling since 24.01.2008 to 25.01.2008.
- (b) "Environmental threat to human health in 21<sup>st</sup> century" in Department of Botany, Mahila Mahavidyalaya, Banaras Hindu University, Varanasi since 16.01.2009 to 17.1.2009.
- (c) "Soil management for achieving food security and nutritional safety under normal and intensified agro-ecosystems" in XXXXIII Annual Convention of Indian Society of Agricultural Chemists and National Conference in Department of Soil Science and Agricultural Chemistry, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi-221005, Uttar Pradesh, India since Nov. 01-02, 2010.
- (d) "Plant Physiology and Molecular Approaches for Crop Improvement under Changing Environment" National Conference in Department of Plant Physiology, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi-221005, Uttar Pradesh, India since, November 25-27, 2010.
- (e) National Symposium on "Emerging Trends in Plant Sciences" held at Department of Botany, Faculty of Science, Banaras Hindu University, Varanasi during 3-4 March 2011.
- (f) National workshop on "Role of higher education in disaster management in India: issues and challenges" organized by Institute of Environment and Sustainable Development, BHU, Varanasi, 29<sup>th</sup> -30<sup>th</sup> April, 2011.
- (g) Participation of National Seminar on "Agricultural Education, Research and Extension: Problems, Solution and Prospects" organized by Krishi Vigyan Kendra, Institute of Agricultural Sciences, BHU, Rajiv Ghandhi South Campus, Mirzapur, 11 April, 2012.

## H. International symposia and Seminar:

(a) 3<sup>rd</sup> international BHU Alumni Meet & International seminar "Education in the 21<sup>st</sup> Century and Mahamana's Vision" Banaras Hindu University, Varanasi since 06.01.2007 to 07.01.2007.

- (b) **International conference on** "Role of biomolecules in food security and health improvement" Department of Biochemistry, Faculty of Science, Banaras Hindu University, Varanasi since February, 17-20, 2010.
- (c) **International Conference** of Managing Sustainable Development of Rural Economy and Agri Business (ICONBHU11) held at Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi since 21-23 January, 2011.
- (d) IV International Conference on Environmental, Industrial and Applied Microbiology (BIOMICROWORLD2011) held at Formatex Research Center, 2011/Palacio de Congresos, Torremolinos Congress Center, Málaga, Spain, 14-16, September, 2011.

# I. <u>Membership obtained in professional bodies</u>

(a) Member in Indian Society of Soil Science, New Delhi

(b)Life member of Indian Meteorological Survey of India, New Delhi.

## J. Professional recognition, awards, fellowships received:

- (a) **Full Travel grant support from DST for attending** the "IV International Conference on Environmental, Industrial and Applied Microbiology" held at Formatex Research Center, 2011/Palacio de Congresos, Torremolinos Congress Center, Málaga, Spain, 14-16 September, 2011.
- (b) **Partial travel grant support from HRD-CSIR for attending the** 2012 International Conference on Life Science and Engineering -ICLSE's held on October 27-28, 2012, Hong Kong, China. (Not Availed).
- (c)**Partial travel grant support from CICS** (Centre for International Co-operation in Science) for attending the 2014 Spring International Conference on Agriculture and Food Technology held on April 16 to 18, 2014, Shanghai, China (Not availed).

# K. Other information

- (a) <u>Technical Editors:</u> Biotechnology, Journal of applied Sciences, International Journal of soil Science, Asian Journal of Biological Sciences and Bacteriology Journal
- (b) <u>Member of Editorial Board:</u> Agriculture for sustainable Development published by Social and Farmers Welfare Society
- (c) <u>Reviewer:</u> Ecological Engineering, Applied Soil Ecology, Geoderma, Review in Environmental Science and Bio/Technology, International Journal of Recycling of Organic Waste in Agriculture, Canadian Journal of Plant Pathology; Archives of Agronomy and Soil Science, Turkish Journal of Agriculture and Forestry, Plant Physiology and Biochemistry, Interdisciplinary Sciences: Computational Life Sciences, Journal of Agricultural Engineering and Biotechnology (JAEB), African Journal of Microbiology Research, African Journal of Agricultural Research, Chemical speciation and Bioavailability, Mycobiology

# L. <u>Research contribution and scientific achievement</u>

(a) **Project SRF: August 01, 2006 to March 31, 2009,** Department of Soil Sciences and Agricultural Chemistry, Institute of Agricultural Sciences, BHU, Varanasi. **Project title:** "Studies on the new bioformulations of PGPR to develop new

biofertilizers of Multiple Use in Crop Production" funded by National Centre of Organic Farming, Ministry of Government of India, Ghaziabad

- (b) Project JRF: September 01, 2009 to February 25 2011. Department of Soil Sciences and Agricultural Chemistry, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi. Project title: "Development of genetically modified psychrophilic phosphate solubilizer as PGPR to nourish vegetable crops in cold region of Himalayas" fundedby DRDO, LSRB, New Delhi.
- (c) **57 bacterial** strains identified as PGPR and submitted in NCBI-GenBank from rhizosphere soils of India which is given:

28 Bacterial Strains Identified by 16S ribosomal RNA Gene, Partial Sequencing and submitted in NCBI (National Center for Biotechnology Information) Genbank (2009-10). Author name: Yadav, J., Verma, J.P., and Tiwari, K.N.

S.No.	Bacterial Name	Strain	Accession Number
1.	Pseudomonas fluorescens	BHUPSB06	GU124814
2.	Bacillus boroniphilus	BHUPSB19	GU124815
3.	Rhizobium sp.	BHURC01	GU124816
4.	Enterobacter sp.	BHUPSB07	GU124817
5.	Bacillus subtilis	BHUPSB13	GU124818
6.	Mesorhizobium sp.	BHURC02	GU124819
7.	<i>Klebsiella</i> sp.	BHUPSB08	GU124820
8.	Bacillus megaterium	BHUPSB14	GU124821
9.	Pseudomonas aeruginosa	BHUPSB01	GU124822
10.	Bordetella petrii	BHUPSB09	GU124823
11.	Mycobacterium sp.	BHUMY01	GU124824
12.	Mesorhizobium sp.	BHURC03	GU124825
13.	Pseudomonas aeruginosa	BHUPSB02	GU124826
14.	Pseudomonas aeruginosa	BHUPSB10	GU124827
15.	Microbacterium sp.	BHUMC01	GU124828
16.	Rhizobium leguminosarum	BHURC04	GU124829
17.	Burkholderia cepacia	BHUPSB03	GU124830
18.	Acinetobacter calcoaceticus	BHUPSB11	GU124831
19.	Enterobacter sp.	BHUPSB18	GU124832
20.	Paenibacillus polymyxa	BHUPSB17	GU124833
21.	Pseudomonas putida	BHUPSB04	GU124834
22.	Arthrobacter globiformis	BHUPSB20	GU124835
23.	Acinetobacter calcoaceticus	BHUPSB05	GU124836
24.	Agrobacterium tumefaciens	BHUJJK01	GU124837
25.	Paenibacillus polymyxa	BHUPSB16	GU124838
26.	Burkholderia cepacia	BHUPSB15	GU124839
27.	Serratia marcescens	BHUPSB12	GU646773
28.	Mesorhizobium sp.	BHURC05	GU646774

Title: Isolation and characterization of plant growth promoting rhizobacteria from rhizospheric soils of India

11 Bacterial Strains Identified by 16S ribosomal RNA Gene, Partial Sequencing and and submitted in NCBI (National Center for Biotechnology Information) Genbank (2010). Author name: Yadav, J., Verma, J.P. and Kush, L.

Title: Isolation and characterization of cold tolerant bacteria from Leh and Ladakh rhizospheric soils of India

S.No. 1 to 6, Cold tolerant from Leh and Ladakh and 7 to 11 isolates of eastern Utter Pradesh rhizospheric region.

S.No.	Bacterial name	Strain	Accession No.
1.	Pseudomonas trivialis	JY01	HM134248
2.	Pseudomonas sp.	JY02	HM134249
3.	Pseudomonas sp.	JY03	HM134247
4.	Pseudomonas sp.	JY04	HM134250
5.	Pseudomonas trivialis	JY05	HM134251
6.	Pseudomonas sp.	JY06	HM134252
7.	Agrobacterium sp.	JY07	HM134253
8.	Agrobacterium sp.	JY08	HM134254
9.	<i>Vogesella</i> sp.	JY09	HM134255
10.	Chrysobacterium sp.	JY10	HM134256
11.	Pseudomonas sp.	JY11	HM134257

18 Bacterial Strains Identified by 16S ribosomal RNA Gene, Partial Sequencing and Deposited in NCBI Genebank (2010). Author name: Yadav, J., Lavakush and Verma, J.P. Title: Isolation and characterization of cold tolerant bacteria from Leh and Ladakh

S.No.	Bacterial name	Strain	Accession No.
1.	Pseudomonas putida	BHUJY13	HQ236531
2.	Pseudomonas aeruginosa	BHUJY12	HQ236532
3.	Pseudomonas putida.	BHUJY14	HQ236533
4.	Pseudomonas putida	BHUJY15	HQ236534
5.	Pseudomonas aeruginosa	BHUJY16	HQ236535
6.	Pseudomonas sp.	BHUJY17	HQ236536
7.	Pseudomonas aeruginosa	BHUJY18	HQ236537
8.	Pseudomonas sp.	BHUJY19	HQ236538
9.	Pseudomonas aeruginosa	BHUJY20	HQ236539
10.	Pseudomonas monteilii	BHUJY21	HQ236540
11.	Pseudomonas aeruginosa	BHUJY22	HQ236541
12.	Pseudomonas putida	BHUJY23	HQ236542
13.	Pseudomonas aeruginosa	BHUJY24	HQ236543
14.	Pseudomonas aeruginosa	BHUJY25	HQ236544
15.	Pseudomonas aeruginosa	BHUJY26	HQ236545
16.	Pseudomonas plecoglossicida	BHUJY27	HQ236546
17.	Pseudomonas plecoglossicida	BHUJY28	HQ236547
18.	Pseudomonas fluorescence	BHUJY29	HQ236548

rhizospheric soils of India

#### M. LIST OF PUBLICATION

#### **Total publication:**

Total	= 58
7. Abstract in conference published	=27
6. Conference proceeding article	=01
2. Book Chapter Published	=03
2. International	=22
1. National	=05

#### **Total Impact Factor: 29.168**

#### List of Publications

- 1. Yadav, J. and **Verma, J.P.** 2009. Response of wheat to PGPR and organic manures in cereal and legume based cropping sequences under nascent stage of organic farming. Annals of Plant and Soil Research, 11 (2): 122-125.
- 2. Verma, J.P., Yadav, J. and Tiwari, K.N. 2009. Effect of *Mesorhizobium* and plant growth promoting rhizobacteria on nodulation and yields of chickpea. Biological forum-An International Journal, 1(2): 11-14.
- 3. Verma, J.P., Yadav, J. and Tiwari, K.N. 2010. Stimulation of nodulation and plant growth of chickpea by *Pseudomonas aeruginosa and Rhizobium leguminosarum*. Biozone, 2: 319-323.
- 4. Yadav J., Prasad S. and **Verma J.P.** 2010. Effect of *Rhizobium* and PGPR combination on nodulation, plant growth, yield and nutrient uptake by mungbean (*Vigna radiata* L.). Environment and Ecology Journal, 28 (4A):2568-2571.
- 5. Yadav, J., Verma, J.P. and Tiwari, K.N. 2010. Effect of Plant growth promoting rhizobacteria on seed germination and plant growth of chick pea (*Cicer arientum L.*) under *in vitro* condition. Biological Forum-An International Journal, **2**(2): 15-18.
- 6. Verma, J.P., Yadav, J. and Tiwari, K.N. 2010. Application of *Rhizobium* sp. BHURC01 and plant growth promoting rhizobactria on nodulation, plant biomass and yields of chickpea (*Cicer arietinum* L.). International Journal of Agricultural Research, 5 (3): 148-156.
- 7. Yadav, J., Verma, J.P., Yadav, S.K. and Tiwari, K.N. 2011. Effect of Salt Concentration and pH on Soil Inhabiting Fungus *Penicillium citrinum* Thom. for Solubilization of Tricalcium Phosphate. Microbiology Journal, 1: 25-32.
- 8. Yadav, J., Verma, J.P., Rajak, V.K. and Tiwari, K.N. 2011. Selection of effective indigenous Rhizobium strains for seed inoculation of chickpea (*Cicer arietinum* L.) production. Bacteriology Journal 1 (1): 24-30.
- 9. Pandeya, K., Tiwari, K.N., Singh, J., **Verma, J.P.** and Dubey, S.D. 2010. In vitro propagation of *Clitoria ternatea* L. A rare medicinal plant. Journal of Medicinal Plants Research, 4 (6): 1-5.
- Verma, J.P., Singh, S., Ghosh, M. and Srivastava, P.K. 2010. Identification and characterization of cellular locus of limonin biotransforming enzyme in *Pseudomonas putida*. International Journal of Food Science and Technology, 45:319–326. (Impact factor: 1.354)

- 11. Yadav, J., Verma, J.P. and Tiwari, K.N. 2011. Solubilization of tricalcium phosphate by fungus *Aspergillus niger* at different carbon source and salinity. Trends in Applied Sciences Research, 6 (6):606-613.
- 12. Yadav, J., **Verma, J.P.** and Tiwari, K.N. 2011. Plant growth promoting activities of fungi and their effect on chickpea plant growth. Asian Journal of Biological Sciences, 4 (3): 291-299.
- 13. Verma, J.P., Singh, V. and Yadav, J. 2011. Effect of copper sulphate on seed germination, plant growth and peroxidase activity of Mung bean (*Vigna radiata*). International Journal of Botany, 7(2): 200-204.
- 14. Verma, J.P., Yadav, J. and Tiwari, K.N. 2012. Enhancement of nodulation and yield of chickpea (*Cicer arietinum* L.) by co-inoculation of indigenous *Mesorhizobium* spp. and plant growth promoting rhizobacteria at eastern Uttar Pradesh. Communication in Soil and Plant Analysis, 43: 605-621.(Impact factor 0.453)
- 15. Verma, J.P., Yadav, J., Tiwari, K.N., Lavakush and Singh, V. 2010. Impact of plant growth promoting rhizobacteria on crop Production. International Journal of Agricultural Research, 5 (11): 954-983. ISSN 1816-4897.
- 16. Lavakush, Yadav, J. and **Verma, J.P.** 2012. Isolation and characterization of effective plant growth promoting rhizobacteria from rice rhizosphere of Indian soil. Asian Journal of Biological Sciences, 5: 294-303.
- 17. Verma, J.P. and Yadav J. (2012). Evaluation of plant growth promoting rhizobacteria and their effect on plant growth and grain yield of chickpea (*Cicer arietinum* L.) under sustainable agriculture production. International Journal of Research in Engineering, IT and Social Sciences, 2(9):51-57.
- Verma, J.P., Yadav J., Tiwari, K.N., Kumar, A. (2013).Effect of indigenous *Mesorhizobium* spp. and plant growth promoting rhizobacteria on yields and nutrients uptake of chickpea (*Cicer arietinum* L.) under sustainable agriculture. Ecological Engineering 51, 282–286. (Impact Factor 3.041)
- 19. Abhilash, P.C., Dubey, R.K., Tripathi, V., Srivastava, P., Verma, J.P., Singh H.B. (2013) Adaptive soil management-correspondence article. Current Science, 104 (10), 1275-1276 (Impact Factor 0.965).
- 20. Abhilash, P.C., Dubey, R.K., Tripathi, V., Srivastava, P., Verma, J.P., Singh H.B. (2013) Remediation and management of POPs-contaminated soils in a warming climate: challenges and perspectives. Environmental Science and Pollution Research, 20 (8) 5879-5885. DOI 10.1007/s11356-013-1808-5 (Impact Factor 2.757).
- Lavakus, Yadav, J., Verma, J.P., Jaiswal, D.K., Kumar, A. (2014). Evaluation of PGPR and different concentration of phosphorus level on plant growth, yield and nutrient content of rice (*Oryza sativa*). Ecological Engineering, 62C, 123-128. DOI information: 10.1016/j.ecoleng.2013.10.013 (Impact Factor: 3.041).
- Meena, V., Maurya, B.R., Verma, J.P. (2014). Does a rhizospheric microorganism enhance K+ availability in agricultural soils?. Microbiological Research 169, 337–347 (Impact Factor: 1.939)
- 23. Verma, J.P., Yadav J., Tiwari, K.N., Jaiswal, D.K. (2014). Evaluation of plant growth promoting activities of microbial strains and their effect on growth and yield of chickpea (*Cicer arietinum* L.) in India. Soil Biology & Biochemistry, 70 (2014) 33-37. (Impact factor:4.441).

- 24. Verma, J.P., Jaiswal, D.K., Sagar, R. (2014). Pesticide Relevance and their Microbial Degradation: a-state-of-art. Reviews in Environmental Science and Bio/Technology ,13:429-466. (DOI: 10.1007/s11157-014-9341-7) (Impact factor: 2.263).
- 25. Verma, J.P., Yadav J. (2014). Implication of microbial consortium on biomass and grain yield of chickpea under sustainable agriculture. Environmental Engineering and Management Journal (Accepted on dated 7 July, 2014) (**Impact factor: 1.258**).
- 26. Yadav, J. and Verma, J.P. (2014). Effect of seed inoculation with indigenous *Rhizobium* and plant growth promoting rhizobacteria on nutrients uptake and yields of chickpea (*Cicer arietinum* L.). European Journal of Soil Biology 63, 70-77 (**Impact Factor: 2.146**).
- 27. Gupta, A. and **Verma, J.P.** (2014). Sustainable bio-ethanol production from agro-residues: a review. Renewable & Sustainable Energy Reviews, 41, 550-567. (**Impact Factor: 5.510**).

## **Book Chapter: 03**

- 1. K.N. Tiwari, Verma, J.P. and Singh, J. 2012. Water Intoxication by Cyanobacteria. In: Microbial Toxins and Toxigenic Microbes (Eds. Pandey VD and Singh SK). Studium Press (India) LLC, New Delhi, pp. 369-394.
- 2. Verma, J.P. and Verma, R. 2012. Organic fertilizers and their impact on agricultural production system. In: Organic Fertilizers: Types, Production and Environmental Impact (Eds. Singh, R.P.). Nova Publishers, NY, USA, pp. 217-232.
- 3. Verma, J.P., Yadav, J., Tiwari, K.N. 2011. Use of plant growth promoting rhizobacteria as biofertilizers. In: Biodiversity and Sustainable Development (Eds. Tiwari KN and Lata S), Prasanna Prakashan, Bhopal, p. 37-58.

#### **Conference proceeding-01**

1. Yadav, J. and Verma, J.P., (2010). Plant-Probiotics: Recent Advances and Future Prospect. Presented in XXXXIII Annual Convention of Indian Society of Agricultural Chemists & National Conference on "Soil management for achieving food security and nutritional safety under normal and intensified agro-ecosystems" Nov. 01-02, pp 59-68.

#### Abstract Published National and International Conference, Seminar and Workshops -18

- 1. Yadav, J., Verma, J.P. and Singh, Y.V. 2007. Response of wheat to PGPR levels and source of organic manures in rice and legume based cropping sequences during first year of organic forming. Presented in National Seminar and 72<sup>nd</sup> annual convention of Indian society of soil science held on 2-5 Nov, 2007 at BAU, Kante Ranchi.
- 2. Yadav, J., Verma, J.P., Rajak, V.K. and Yadav, A.K. 2008. Selection of competent indigenus rhizobium strain for effective Nitrogen fixation in chickpea (*Cicer arietinum* L.). Presented in National Symposium on "Diversity and Functionality of Plants and Microbes" January 24-25, 2008 at Department of Botany, University of North Bengal, Darjaling.
- 3. Yadav, J., Gupta, V., Verma, J.P. and Singh, Y.V. 2008. Common bean (*Phaseolus vulgaris* L.) genotype and *Rhizobium phaseoli* strain specificity to establish symbiotic N-fixation in inceptisole of Varanasi, U.P., Poster presentation in 73<sup>rd</sup> annual convention of Indian society

of Soil Science held on November 27-30, 2008 at University of Agricultural Sciences, Bangalore.

- 4. Yadav, J. And Verma, J.P. 2009. Selection of effective *rhizobium* strain and combination of plant growth promoting rhizomicrobes for organic farming of mungbean presented in National Seminar on Developments in Soil Science and 74d Annual Convention of Indian Soc. Of Soil Science, 2009, Organised by IARI, New Delhi, held on 22-25 Dec. 2009.
- 5. Singh, S., Verma, J.P., Ghosh, M. and Srivastava, P.K. 2010. Identification and characterization of cellular locus of limonin biotransforming enzyme in *Pseudomonas putida*. Poster presentation of International conference ICBFH-2010.
- 6. Yadav, J., Lavakush and Verma, J.P. 2010. Isolation of PGPR of multiple use from rhizosphere of paddy in eastern Uttar Pradesh. Presented in XXXXIII Annual Convention of Indian Society of Agricultural Chemists & National Conference on "Soil management for achieving food security and nutritional safety under normal and intensified agroecosystems" Nov. 01-02, p-137.
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