

BRIEF CV

Jay Shankar Singh *PhD*

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CURRENT RESEARCH INTEREST: Natural Resource Management and Restoration Ecology

AWARD & RECOGNITION:

Research recognition award for publishing paper in high impact factor reputed international journal conferred by Hon'ble Governor of Uttar Pradesh on June 09, 2014.

POSITIONS HELD

SNo	Positions held	Dates	University
1.	PDF (RA, CSIR)	04/06/2003– 03/06/2008	Dept. Botany, BHU
2.	PDF (SRA, POOLS' SCIENTIST, CSIR)	09/07/2008–02/06/2011	Environ. Sci., BBAU
3.	Assistant Professor	02/06/2011 – to-date	Environ. Microbiol., BBAU

PROJECTS HANDLED

SNo	Project title	Funding Agency	Status	Nature of project
1.	Population dynamics of methanotrophs in dry tropical deciduous forest and savanna.	CSIR	Completed	Major
2.	Combined effect of biofertilizers and pesticides on methanotrophs population dynamics in paddy fields	CSIR	Completed	Major
3.	PCR mediated detection of methane-oxidizing bacterial diversity from dry tropical forest soils	UGC	Completed	Major

LIST OF PhD STUDENTS SUPERVISED

SNo	Thesis title	Award year
1.	Impact of biochar and CSR-BIO application on methanotrophs, microbial biomass and paddy yields in saline soil	2018
2.	Assessment of cyanobacterial diversity in paddy fields and their capability to degrade pesticides	2019
3.	Impact of land use changes on methanotrophic bacterial abundance and soil microbial biomass	2019
4.	Effect of plant growth promoting rhizobacteria (PGPR) and farmyard manure (FYM) amendment on growth parameters and antioxidants level in paddy (<i>Oryza sativa</i> L.) crop under soil salinity	2019
5.	Soil methanotrophs composition and microbial biomass levels from lindane contaminated sites	2019

EDITORIAL BOARD OF REFERRED JOURNALS

1. PLoS ONE (Associate editor)
2. AGRIVITA (Editor)
3. The Open Journal of Agriculture (Member)
4. Microbiology Research (Member)
5. Acta Scientifica (Member)
6. Climate Change and Environmental Sustainability (Editor)
7. International Journal of Contemporary Microbiology (Scientific Committee)

LIST OF BOOKS

1. Microbes and Environmental Management (Studium Press LLC, USA, 2017).
2. Agro-environmental Sustainability (Vol I: Managing Crop Health) (Springer, 2017).
3. Agro-environmental Sustainability (Vol II: Managing Environ. Pollution) (Springer, 2017).
4. Microbial Biotechnology in Agro-Environmental Sustainability (Elsevier, 2019).
5. Microbes in Soil, Crop and Environmental Sustainability (Elsevier, 2019).
6. Microbial Services in Restoration Ecology (Elsevier, 2020)

INVITED LECTURES/KEYNOTE SPEAKERS DURING LAST 4 YEARS

1. **Agriculture Crop Residues in Management of Soil Fertility & Agriculturally Beneficial Microbes.** 2nd International Conference on Recent Advances in Ari. Environ & Appl. Sci. for Global Development (RAAEASGD-2019). Dr Yashwant Singh Parmar University of Horticulture & Forestry, Solan, HP, 27-30 September 2019.
2. **Methane (CH₄) as a potent green house gas: Its sources and sinks.** Global Conference on the Control of Green House Gases at the Source by Physical and Chemical Technology. BBAU 22-24 April 2019.
3. **Microorganisms: Key Ecological Engineers in Agriculture and Environmental Sustainability.** 59th Annual Conference of AMI. University of Hyderabad 9-12 December 2018.
4. **Beneficial microbial services in management of agro-environmental problems.** 6th International Conference on Plants and Environmental Pollution. NBRI, CSIR, Lucknow, 27-30 November 2018.
5. **Microbial Services in Sustainability of Agriculture and Environment.** International Conference on Emerging Issues in Agricultural, Environmental and Applied Sciences for Sustainable Development, SHUATS, Allahabad, 27-29 November 2018.
6. **Microbes Services in Agro-Environmental Sustainability. Biodiversity our Cultural Heritage.** RDU Jabalpur, MP 27-28 February 2018.
7. **Microbes in Agro-Environmental Sustainability.** 1st North Indian Science Congress (NISC). BBAU, 10-11 January 2018.
8. **Use of Fly ash in Agriculture: Beneficial or Risky.** National Symposium on IPRs in Agricultural Research. BBAU, August 30-31, 2017.
9. **Microbes in sustainable energy and environmental development.** International Conference on Renewable Energy for Sustainable Environment: Challenges and Remedies. Deptt Energy Management, Shri Mata Vaishno Devi University, Katra, J&K, March 20-21, 2017.
10. **Fly Ash: A beneficial option in mitigation of stress agriculture and CH₄ emissions.** 4th Lucknow Science congress (LUSCON-2017), BBAU, March 3-4, 2017.
11. **Bio-fertilizer: A key driver in sustainable agriculture production and degraded land restoration.** National Conference on Managing Soil Resource for Environmental Sustainability: Challenges & Perspectives (MSRES-2016) 9-10 December, 2016, IESD, Banaras Hindu University, Varanasi.
12. **Fly ash in Agriculture: Beneficial or Risky?** National Seminal on Safe Utilization of Fly Ash in Agriculture on 31 August 2016 Organized by IISS, ICAR, Bhopal and NTPC, Noida.
13. **Microbes as a Valuable Source of Sustainable Energy and Environment.** "Energy and environment: Threats and Remedies" on May 5-6, 2016, RIT, Gwalior, MP.
14. **Exploitation of Bio-agents in Environmental Sustainability.** International conference on the theme "Changing Paradigm of Management Practices for Sustainable Development" on 5th and 6th March 2016, BBAU, Lucknow.
15. **Role of Food Microbiology Services in Providing Safe and Healthy Foods.** National Conference on Food Safety and Consumer Awareness. Organized by Innovation Centre for Food Processing & Food Technology on February 21-22, 2016 University of Lucknow.
16. **Bio-fertilizer technology in mitigation of green house gases and global warming.** National Conference (Biokumbh-2016) Recent Trends & Advances in Biotechnology during February 20-21, 2016, NASI, Allahabad.
17. **Bio-fertilizer application in management of paddy agriculture and methane emission.** National Symposium on "Impact of climate change on plant-microbe interactions and its implications". Department of Botany, BHU, December 18-19, 2015.
18. **Use of bio-fertilizers in methane mitigation, eco-restoration and environmental management.** National Conference on "Climate Change and Sustainable Development: Emerging Issues and Mitigation Strategies (CCSD-2015)" November 23-24, 2015.
19. **Use of bio-fertilizers in Methane mitigation, eco-restoration and environmental management.** 3rd Lucknow Science Congress (LUSCON-2015) & National Conference on Science for Society an Interdisciplinary Approach. 31st October-2nd November, 2015, BB Ambedkar University, Lucknow.

LIST OF PUBLICATIONS IN REPUTED JOURNALS DURING 2010-2019

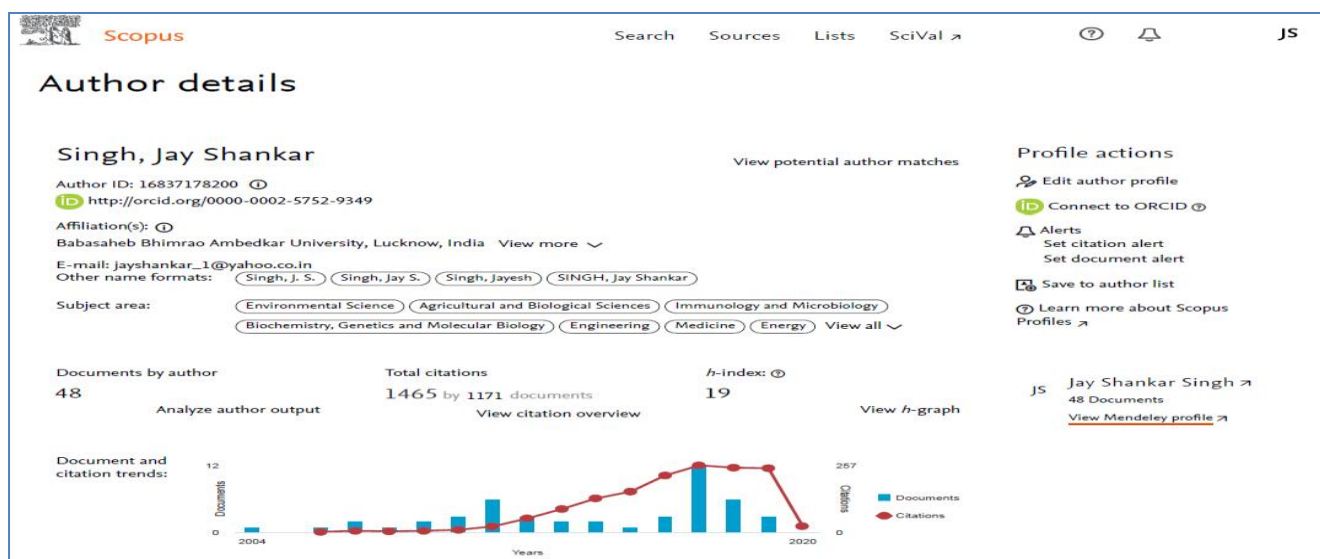
1. Ranjan Singh, A.K. Upadhyay, Dig Vijay Singh, **Jay Shankar Singh**, D.P. Singh (2019). Photosynthetic performance, nutrient status and lipid yield of microalgae *Chlorella vulgaris* and *Chlorococcum humicola* under UV-B exposure. *Current Research in Biotechnology*, 1:65-77.
2. **Jay Shankar Singh**, Arun Kumar, Mani Singh (2019). Cyanobacteria: A sustainable and commercial bio-resource in production of bio-fertilizer and bio-fuel from waste waters. *Environmental and Sustainability Indicators* 3-4, 100008.
3. S.R. Vimal, V.K. Patel and **Jay Shankar Singh** (2019). Plant growth promoting *Curtobacterium albidum* strain SRV4: An agriculturally important microbe to alleviate salinity stress in paddy plants. *Ecological Indicators* 105, 553-562. (IF=4.490).
4. MK Singh, PK. Rai, A Rai, Surendra Singh, **Jay Shankar Singh** (2019). Poly- β -hydroxybutyrate production by the cyanobacterium *Bharadwaja* under varying environmental conditions. *Biomolecules* 9(5), 1-10. (IF=4.694).
5. S. Tiwari, C. Singh, S. Boudh, PK. Rai, VK Gupta, **Jay Shankar Singh** (2019). Land use change: A key ecological disturbance declines soil microbial biomass in dry tropical uplands. *Journal of Environmental Management* 243, 1-10 (IF=4.865).
6. S. Tiwari, C. Singh, S. Boudh, PK. Rai, VK Gupta, **Jay Shankar Singh** (2018). The effect of rice husk biochar on soil nutrient status, microbial biomass and paddy productivity of nutrient poor agriculture soils. *Catena* 171, 485-493. (IF=3.851).
7. **Jay Shankar Singh** and VK Gupta (2018) Soil microbial biomass: A key soil driver in management of ecosystem functioning. *Science of the Total Environment* 634, 497-500 (IF=5.589).
8. Arun Kumar, Sumit Kaushal, Shubhini A. Saraf, **Jay Shankar Singh** (2018). Microbial bio-fuels: a solution to carbon emissions and energy crisis. *Frontiers in Bioscience* 1(23), 1789-1802. (IF=2.349).
9. Pankaj Tiwari and **Jay Shankar Singh*** (2017). A plant growth promoting rhizospheric *Pseudomonas aeruginosa* strain inhibits seed germination in *Triticum aestivum* (L) and *Zea mays* (L). *Microbiology Research* 8, 1-7.
10. S.R. Vimal, **Jay Shankar Singh**, N.K. Arora. Surendra Singh (2017). Soil-plant-microbe interactions in stressed agriculture management: A review. *Pedosphere* 27, 177-192. (IF=3.184).
11. **Jay Shankar Singh**, Sumit Kaushal, Arun Kumar, Shobhit R Vimal, VK Gupta (2016). Book Review: Microbial Inoculants in Sustainable Agricultural Productivity- Vol. II: Functional Application. *Frontiers in Microbiology* 7:2015, 1-2. (IF=4.165).
12. **Jay Shankar Singh**, PC Abhilash and VK Gupta (2016). Agriculturally important microbes in sustainable food production. *Trends in Biotechnology* 34(10): 773-775. (IF=13.747).
13. Reema Kumari, **Jay Shankar Singh** and DP Singh (2016). Biogenic synthesis and spatial distribution of silver nanoparticles in the legume mungbean plant (*Vigna radiata* L.). *Plant Physiology & Biochemistry* 110: 158-166 (IF=3.404).
14. **Jay Shankar Singh** and VK Gupta (2016) Degraded land restoration in reinstating CH₄ sink. *Frontiers in Microbiology* 7: 1-5. (IF=4.165).
15. **Jay Shankar Singh**, Arun Kumar, AN Rai, DP Singh (2016). Cyanobacteria: A precious bio-resource in agriculture, ecosystem and environmental sustainability. *Frontiers in Microbiology* 7: 1-19. (IF=4.165).
16. **Jay Shankar Singh** and PJ Strong (2016). Biologically derived fertilizer: A multifaceted bio-tool in methane mitigation. *Ecotoxicology & Environmental Safety* 124, 267-276 (IF=4.527).
17. **Jay Shankar Singh** (2015). Plant-microbe interactions: A viable tool for agricultural sustainability *Applied Soil Ecology* 92:45-46. (IF=2.644).
18. **Jay Shankar Singh** (2015). Microbes: The chief ecological engineers in reinstating equilibrium in degraded ecosystems. *Agriculture Ecosystems & Environment* 203: 80-82. (IF=3.954).
19. **Jay Shankar Singh** and Vimal Chandra Pandey (2013). Fly ash application in nutrient poor agriculture soils: Impact on methanotrophs population dynamics and paddy yields. *Ecotoxicology and Environmental Safety* (IF=4.527).
20. Vimal Chandra Pandey, **Jay Shankar Singh**, Rana P. Singh, Bajrang Singh (2012). *Jatropha curcas*: A potential biofuel plant for sustainable environmental development. *Renewable & Sustainable Energy Reviews* 16: 2870-2883 (IF=10.556).
21. Sudhir Kumar Upadhyay, **Jay Shankar Singh**, Anil Kumar Saxena, Devendra Pratap Singh (2012). Impact of PGPR inoculation on growth and antioxidant status of wheat under saline conditions. *Plant Biology* 14: 605-611 (IF= 2.516).
22. Vimal Chandra Pandey, **Jay Shankar Singh**, Rana P. Singh, Nandita Singh, M. Yunus (2011). Arsenic hazards in coal fly ash and its fate in Indian scenario. *Resources, Conservation & Recycling* 55: 819-835 (IF: 7.044).
23. **Jay Shankar Singh**, P.C. Abhilash, H.B. Singh, Rana P. Singh, D.P. Singh (2011). Genetically engineered bacteria: an emerging tool for environmental remediation and future research perspectives. *Gene* 480 (1-2): 1-9. (IF: 2.415).
24. **Jay Shankar Singh***, Vimal Chandra Pandey, D.P. Singh (2011). Efficient soil microorganisms: A new dimension for sustainable agriculture and environmental development. *Agriculture Ecosystem & Environment* 140 (3-4): 339-353. (IF: 3.954).
25. **Jay Shankar Singh***, Vimal Chandra Pandey and D.P. Singh (2011). Coal fly ash and farmyard manure amendments in dry-land paddy agriculture field: Effect on N-dynamics and paddy productivity. *Applied Soil Ecology* 47: 133-140 (IF: 2.122).

26. **Jay Shankar Singh***, Vimal Chandra Pandey, D.P. Singh and Rana P. Singh (2010). Influence of pyrite and farmyard manure on population dynamics of soil methanotroph and rice yield in saline rain-fed paddy field. *Agriculture Ecosystem & Environment* 139: 74-79. (IF: 3.954).

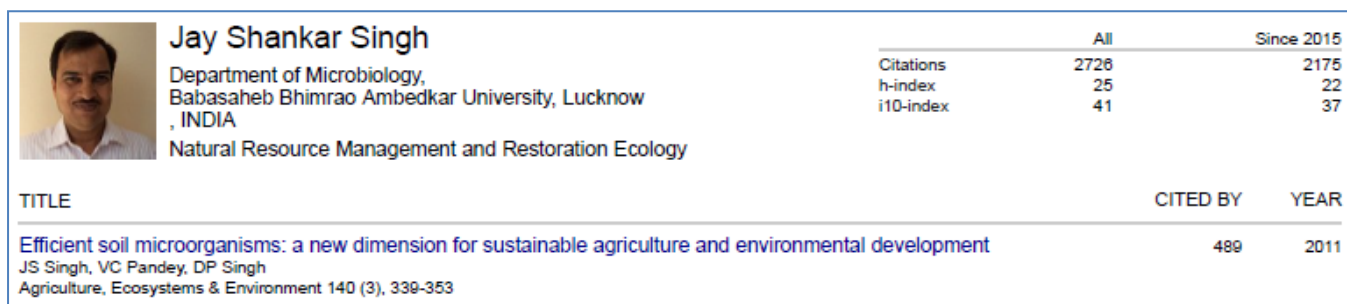
LIST OF SOME SIGNIFICANT RESEARCH PUBLICATIONS DURING 2015-2019

SNo.	Journals name	Year	Impact Factor
1.	Biomolecules	2019	4.694
2.	Journal of Environmental Management (Elsevier)	2019	4.865
3.	Ecological Indicators (Elsevier)	2019	4.490
4.	Catena (Elsevier)	2018	3.851
5.	Science of the Total Environment (Elsevier)	2018	5.589
6.	Frontiers in Bioscience	2018	2.349
7.	Pedosphere (Elsevier)	2017	3.188
8.	Trends in Biotechnology (Cell Press)	2016	13.747
9.	Frontiers in Microbiology (03 Articles)	2016	4.076
10.	Plant Physiology and Biochemistry (Elsevier)	2016	3.404
11.	Ecotoxicology & Environmental Safety (Elsevier)	2016	4.527
12.	Agriculture Ecosystem & Environment (Elsevier)	2015	3.954

SCOPUS CITATIONS ON 03/01/2020



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