



Dr. Mukesh Kumar Meghvansi, MSc, PhD, MBA

NABL Empanelled Assessor for ISO/IEC17025:2017

Scientist 'E', DRDS

Bioprocess Technology Division,
Defence Research & Development Establishment
(DRDE), Defence R & D Organisation
(Ministry of Defence, Govt. of
India), Gwalior, Madhya
Pradesh, INDIA

<https://loop.frontiersin.org/people/963874/bio>

AREA OF RESEARCH EXPERTISE/INTEREST

- Anaerobic biodigestion of human waste
- Biomass Management through Vermicomposting and microbial degradation
- Detection and bio-management of foliar fungal phytopathogens
- Legume-Rhizobium Technology.
- AM fungal ecology and diversity.
- Cytotoxicity evaluation of various xenobiotics in plant model

Professional Links: <https://loop.frontiersin.org/people/963874/bio>

GoogleScholar: <https://scholar.google.com/citations?user=X6zhHDkAAAAJ&hl=en>

ResearchGate: <https://www.researchgate.net/profile/Mukesh-Meghvansi>

RESEARCH PROJECTS HANDLED/RUNNING

1. Project title: Effective Decomposition of Organic Waste with emphasis on kitchen waste using Microbial Consortium and Vermicomposting. Sponsoring agency: DRDO (DRL-RD-P-2009/Task-30) Duration: Mar 2009 to Jan 2010. In collaboration with Dr. Rajni Singh, Amity University Uttar Pradesh. Project cost. Rs 5.00 Lakh.
2. Project title: Exploring the role of Piriformospora indica as bio-weedicide and value addition to Naga Chilli of North East India. Sponsoring agency: DRDO (DRL-RD-P-2009/Task-31). Duration: Mar 2009 to Feb 2011. In collaboration with Professor Dr. Ajit Varma, Amity University Uttar Pradesh. Project cost. Rs 6.49 Lakh.
3. Project title: Characterization of technofunctional and biofunctional properties of Napin protein hydrolysates of rapeseed meal. Sponsoring agency: DRDO (project No. DRLT-P1-2013/Task-62) Duration: 2 years (w.e.f. 26 Nov 2013) In collaboration with Prof. Charu Lata Mahanta Tezpur University, Tezpur. Project cost. Rs 5.00 Lakh.
4. Project title: Augmentation of Biodigester technology with respect to performance and sustainability. Sponsoring agency: DRDO (project No. TD/16-17/DRDE-002) Duration: 4 years (w.e.f. 30 Mar 2017). Contributing as team member. Project cost. Rs 450.00 Lakh.
5. Project title: Development of High Performance Biodigester for Human Waste Treatment. Sponsoring agency: DRDO (project No. TD/20-21/DRD-210) Duration: 4 years (w.e.f. 23 Dec 2021). Contributing as team member. Project cost. Rs 458.00 Lakh.

MEMBERSHIP OF SCIENTIFIC BODIES/ SOCIETIES

1. Life Member of Biotech Research Society India (BRSI; LM2407).
2. Life Member of Scientist Unique Researcher's Yare Association, Jhansi (U. P.).
3. Life Member of Indian Botanical Society.
4. Life Member of Assam Science Society.

INDIAN PATENTS FILED (IPR)

1. Meghvansi MK, Khan MH, Gupta R, Veer V (2014) Oligonucleotide primer sequences for cercosporin toxin biosynthesis (CTB) genes and method of detection of Cercospora species. Patent applied to Indian Patent Office vide Application number: 2991/DEL/2014. Published in Indian Patent Journal, Issue No 17/2016 dated 22/04/2016.
2. Meghvansi MK, Gupta R, Veer V (2016) Oligonucleotide primer sequences for cercosporin toxin biosynthesis (CTB) genes and method of quantifying CTB suppression level of gene expression in vitro CTB gene expression in presence of a organic liquid medium. Application number 201611029399 dated 29 Aug 2016. Published in Indian Patent Journal, Issue No 09/2018 dated 02/03/2018.

ESIGN REGISTRATION (IPR)

1. Meghvansi MK, Gupta R, Veer V (2015) Vermireactor system for converting organic waste biomass into fertilizer using earthworms. Status: Registered (Design No. 286052 dated 12 Aug 2016) Controller General of Patents, Designs & Trademarks, Govt of India.

RESEARCH/TRAINING EXPERIENCE

(Total ~18 years)

- Details of involvement in research project as JUNIOR RESEARCH FELLOW
NAME OF RESEARCH PROJECT: INCO-DEV Research Project (Contract No. ICA4-CT-2001-10057)
SPONSORING AGENCY: European Commission, Brussels
PROJECT TITLE: Soybean BNF and mycorrhization for improved production in South Asia
BRIEF OVERVIEW of research work done as JRF in the Project (contribution as team member): In this project, we recovered around 60 rhizobial strains and more than 20 different arbuscular mycorrhizal fungi from various soybean cultivating regions of India. Phenotypic characterization of these two important microorganisms was carried out so as to study their diversity. Symbiotic effectiveness of these microorganisms was evaluated by conducting pot experiments and multilocal field trials. We got success in recovering some rhizobial strains efficient enough to significantly improve the productivity of soybean.

These strains are deposited at National Bureau of Agriculturally Important Microorganisms (ICAR), Kausumor (UP).

- Obtained Ph. D. on “Isolation, Identification and Effectiveness of Rhizobial strains and Arbuscular Mycorrhizal (AM) fungi of soybean cultivars grown in Bundi and Udaipur, Rajasthan” under supervision of Professor Dr. S. K. Mahna at Dept. of Botany, Maharshi Dayanand Saraswati University, Ajmer (Rajasthan).
- Undergone DRDO- orientation course of at Institute of Technology Management, Mussoorie (UK) during 02-20 Feb 2009.
- Attended a course on “Biostatistics for Life Sciences” under continuing Education Programme (CEP) of DRDO held at Defence Research Laboratory, Tezpur (Assam) during 09-13 November, 2009.
- Attended a course on “Communication, presentation and report writing skills” at XLRI, Jamshedpur 30 Sep-4 Oct 2013.
- Recognized as Ph. D. Co-guide, Amity University Uttar Pradesh, India.

Research Mentored

- Supervised/supervising following dissertations (MSc/MPhil/MTech/PhD):

S. No.	Name of student	Thesis title	Degree	Year of submission
1.	Mr. Mansoor Ahmad Rather, Bundelkhand University, Jhansi (UP)	Status of arbuscular mycorrhizal fungal (AMF) occurrence, distribution and spore diversity in relation with physico-chemical edaphic factors of certain wheat growing fields of Jhansi	M. Sc. (Botany)	2005-06
2.	Mr. Devendra Kumar Maurya, Bundelkhand University, Jhansi (UP)	Studies on arbuscular mycorrhizal (AM) fungal wasteland ecosystem of Pichhore, Jhansi	M. Sc. (Botany)	2005-06
3.	Mr. Mohd. Younis Bhat, Bundelkhand University, Jhansi (UP)	Preliminary assessment of antimicrobial activity of plant extracts on phytopathogenic <i>Xanthomonas campestris</i> and <i>Aspergillus niger</i>	M. Sc. (Botany)	2006-07
4.	Mr. Muzafar Ahmad, Bundelkhand University, Jhansi (UP)	Study of botanicals for their antimicrobial potential against certain phytopathogenic microorganisms	M. Sc. (Botany)	2007-08
5.	Mr. Vipin Panwar (Roll no.	Temporal variation in arbuscular mycorrhizal fungi and physico-	M. Phil. (Botany)	2007-08

	MPB\07\715), Bundelkhand University, Jhansi (UP)	chemical edaphic factors of wheat fields of Jhansi		
6.	Mr. Ravi Shekhar (R No 20110923) Mangalayatan University, Aligarh, UP	Development of PCR-DGGE based molecular markers to distinguish Cercospora species	M.Tech. (Biotech)	2013
7.	Ms. Priyanka Chaudhary (R No 20110679) Mangalayatan University, Aligarh, UP	Comparative evaluation of conventional and Real-Time PCR techniques for detection of Cercospora sp. using CTB and CRG genes based molecular markers	M.Tech. (Biotech)	2013
8.	Ms. Yogita Musalgaonkar (KRG Post Graduate College Gwalior, MP)	Effect of potassium permanganate treatment on chemical attributes and faecal coliforms of Railway Biodigester effluent	M. Sc. (Biotech)	2016
9.	Ms. Archana Sharma (KRG Post Graduate College Gwalior, MP)	Comparative study on reversible methane inhibition in an anaerobic fermenter as induced by Tetrafluorohydroquinone, Sodium-2-bromoethanesulfonate and Ethyl-2-butynoate	M. Sc. (Biotech)	2017
10.	Ms. Supriya Sharma (KRG Post Graduate College Gwalior, MP)	Evaluating anti-methanogenic potential of some chemicals during anaerobic biodegradation of organic waste	M. Sc. (Biotech)	2017
11.	Ms. Meenakshi Mehra, CSIR-SRF, Bharathiar University Coimbatore	Investigation on Process Efficiency of Anaerobic Biodigester employing Microbial Enrichment	Ph.D. (Biol. Sc.)	ongoing

TEACHING EXPERIENCE

- Assisted in M. Sc. (Botany) teaching programme at Deptt. of Botany, Maharshi Dayanand Saraswati University, Ajmer (Rajasthan) for three academic sessions (2002-03, 2003-04 and 2004-05).
- Served as Lecturer (SFS), Department of Botany, Bundelkhand University, Jhansi (Uttar Pradesh) for the period of 18 March 2005 to 16 July 2008 in the pay scale of Rs. 8000-13500.

PARTICIPATION IN CONFERENCE/ WORKSHOP/ SYMPOSIA

1. 25th All India Botanical Conference of Indian Botanical Society and National Symposium on Biosciences: Advances, Impact & relevance held at MJP Rohilkhand University, Bareilly, (U. P.) during 27-29 Oct. 2002.
2. Patent Awareness Workshop held at Maharshi Dayanand Saraswati University, Ajmer (Rajasthan) on 27th March, 2003.
3. International Symposium on Microbial diversity: Opportunities, Challenges & Relevance in New millennium, held at Rani Durgavati University Jabalpur (Madhya Pradesh) during 19th – 21st Nov. 2004.
4. National conference on Management of Land Resources & Land-use towards sustainable development, held at Institute of Environment & Development studies, Bundelkhand University, Jhansi (UP) during 18th – 19th Oct. 2005.
5. Knowledge exchange programme in Life Science education and research (Kepler-2006) held at J. C. Bose Institute of Life Science, Bundelkhand University, Jhansi during 28th – 29th Jan. 2006.
6. Quiz on immunology 'IMMUNO QUEST 2007' held at Institute of Biomedical Sciences, Bundelkhand University, Jhansi on 9 May, 2007.
7. Symposium on 'Recent trends in diagnosis and prevention of AIDS' held at Bundelkhand University, Jhansi on 01 December, 2007.
8. Workshop on 'Nanotechnology ka uday: Vaigyanik awam takniki drastikon' (sponsored by Commission for Scientific and Technical Terminology, Ministry of HRD, Govt. of India) held at Bundelkhand University, Jhansi during 14-15 March, 2008.
9. Workshop on 'Renewable Energy Resources Assessment: Present Status and Future Strategy' held at Department of Energy, Tezpur University, Tezpur (Assam) on 16 October, 2008.
10. Regional Seminar on 'Intellectual property and Innovation management in knowledge era' organized by National Research Development Corporation, Govt. of India, New Delhi and supported by DRDO at Hotel Luit, Tezpur (Assam) during 23-24 October, 2008.
11. Represented DRL, Tezpur at BHARAT NIRMAN: Joint Media Campaign of Ministry of Information & Broadcasting, Govt. of India and 5 Mountain Division, Tenga held at Seppa, East Kameng District (Arunachal Pradesh) during 19-21 November, 2008.
12. National Conference on Electron Microscopy & Allied Fields held at Bundelkhand University, Jhansi during 17-19 January, 2009.
13. National seminar on "Exploitation, Utilization and Strategy Action Plan for

- Sustainable Management of Plant Resources” to be held at Department of Botany, Gauhati University, Guwahati during 27-28 February, 2009.
14. 346th Intensive Hindi Workshop (Gahan Hindi Karyashaala) at Central Hindi Training Institute (Department of Rajbhasha, Min of Home affairs, Govt of India), New Delhi during 03-07 May 2010.
 15. International conference on “Microorganisms in Environmental Management and Biotechnology” held during 01-03 Jul, 2011 at Department of Biotechnology & Bioinformatics Centre, Barkatullah University, Bhopal, Madhya Pradesh, INDIA
 16. International congress on “Microbes for human health and environment” held during 29 Sep-01 Oct 2014 at Amity Institute of Microbial Technology, Amity University, Noida, Delhi NCR, INDIA.
 17. National conference on “Recent advances in biodegradation of human wastes” held at Defence Research Laboratory, DRDO, Tezpur (Assam) during 16-17 Dec 2014.
 18. National Workshop on ‘Biodefence and Biosecurity’ held at Defence Research and Development Establishment, Gwalior, Madhya Pradesh during 19-20 May 2016.
 19. National Conference on ‘Recent trends in transdisciplinary research for socioeconomic development of India’ held Bundelkhand University, Jhansi during 29-30 Dec 2020.

TRADEMARK GRANTED (IPR)

1. Trademark registered on ‘WORMI POWER’ (a liquid organic fertilizer/plant growth promoter) at office of the Registrar of Trade Marks, Govt of India. Application number: 2826675 dated 14 Oct 2014. Certificate No. 1663923 dated 02 Oct 2017, Notified in Journal No : 1818

PUBLICATIONS

Journal articles

1. Meghvansi MK, Prasad K, Mahna SK. 2005. Identification of pH tolerant Bradyrhizobium japonicum strains and their symbiotic effectiveness in soybean (*Glycine max* (L.) Merr.) in low nutrient soil. *African Journal of Biotechnology* 4 (7): 663-666. (Journal included in [SCI expanded list-2007](#)). DOI: [10.5897/AJB2005.000-3120](https://doi.org/10.5897/AJB2005.000-3120)
2. Prasad K, Meghvansi MK. 2005. Interaction between indigenous *Glomus fasciculatum* and *Rhizobium* and their stimulatory effect on growth, nutrient status and nodulation of *Acacia nilotica* (L.) Del. *Flora and Fauna* 11(1): 51-56.
3. Prasad K, Meghvansi MK, Harwani D, Mahna SK, Werner D. 2005. Synergistic effects of Arbuscular Mycorrhizal fungi in soybean (*Glycine max* L. Merrill). *Anusandhan* 1 (1): 13-19.
4. Prasad K, Meghvansi MK, Harwani D, Mahna SK, Werner D. 2006. Distribution of arbuscular mycorrhizal fungi in Soybean (*Glycine max* (L.) Merrill) rhizosphere. *Mycorrhiza News* 17 (4): 14-17.
5. Harwani D, Meghvansi MK, Prasad K, Mahna SK, Werner D. 2006. Stimulatory effect of modified 20E media on the redifferentiation potential of soybean root nodule bacteroids. *Current Science* 90 (11): 1474-1475. [Impact Factor (2007): 0.800; NAAS rating (2007): 7.8]

6. Siddiqui S, Meghvansi MK, Zia-ul Hasan. 2007. Cytogenetic changes induced by Sodium Azide (NaN₃) on *Trigonella foenum- graecum* seeds. *South African Journal of Botany* 73(4): 632-635. (Elsevier, AMSTERDAM), **Impact Factor (2008): 1.113**; **NAAS rating(2007): 7.7**. DOI: 10.1016/j.sajb.2007.06.005
7. Siddiqui S, Meghvansi MK, Jabee F. 2007. Effect of UV-B radiation on vegetative growth and seed weight of soybean (*Glycine max* L Merrill). *Progressive Agriculture* 7(1/2): 42-45. [**NAAS rating 2.0**]
8. Meghvansi MK, Mahna SK. 2007. Study on migration of *Bradyrhizobium* from soybean fields. *Flora and Fauna* 13 (1): 11-14.
9. Siddiqui S, Khan SS, Meghvansi MK, Aali NS. 2008. Effect of herbicide (maleic hydrazide) on seed germination and radicle length of *Trigonella foenum- graecum*. *Indian Journal of Applied and Pure Biology* 23 (1): 103-106.
10. Meghvansi MK, Prasad K, Harwani D, Mahna SK. 2008. Response of soybean cultivars toward inoculation with three arbuscular mycorrhizal fungi and *Bradyrhizobium japonicum* in the alluvial soil. *European Journal of Soil Biology* 44: 316-323. [Elsevier, AMSTERDAM], **Impact Factor (2009): 1.247**; **NAAS rating (2007): 7.9**. DOI: <https://doi.org/10.1016/j.ejsobi.2008.03.003>
11. Siddiqui S, Meghvansi MK, Wani MA, Jabee F. 2009. Evaluating cadmium toxicity in the root meristem of *Pisum sativum* L. *Acta Physiologiae Plantarum* 31(3): 531-536. [Springer; DOI: 10.1007/s11738-008-0262-3), **Impact Factor 1.232 (2008)**; **NAAS rating (2007):7.6**. **Index Copernicus Value (ICV): 12.34**
12. Siddiqui S, Khan SS, Meghvansi MK, Bhardwaj S. 2009. Allelopathic affect of aqueous extract of *Acacia nilotica* on seed germination and redicle length of *Triticum aestivum* var. Lok-1. *Indian Journal of Applied and Pure Biology* 24 (1): 217-220.
13. Ali SF, Rawat LS, Meghvansi MK, Mahna SK. 2009. Selection of stress-tolerant rhizobial isolates of wild legumes growing in dry regions of Rajasthan, India. *ARNP Journal of Agricultural and Biological Science* 4 (1): 13-18. [ISSN 1990-6145; Full paper available at http://www.arnpjournals.com/jabs/research_papers/rp_2009/jabs_0109_105.pdf].
14. Meghvansi MK, Mahna SK. 2009. Evaluating the symbiotic potential of *Glomus intraradices* and *Bradyrhizobium japonicum* in vertisol with two soybean cultivars. *American-Eurasian Journal of Agronomy* 2 (1): 21-25. [ISSN 1995-896X; Full paper available at [http://www.idosi.org/aeja/2\(1\)09/5.pdf](http://www.idosi.org/aeja/2(1)09/5.pdf)].
15. Siddiqui S, Yadav R, Yadav K, Wani FA, Meghvansi MK, Sharma S, Jabeen F. 2009. Allelopathic potentialities of different concentration of aqueous leaf extracts of some arable trees on germination and radicle growth of *Cicer arietinum* Var. – C-235. *Global Journal of Molecular Sciences* 4 (2): 91-95. [ISSN 1990-9241; (Full paper available at [http://www.idosi.org/gjms/gjms4\(2\)/8.pdf](http://www.idosi.org/gjms/gjms4(2)/8.pdf)].
16. Siddiqui S, Meghvansi MK, Yadav K, Yadav R, Wani FA, Ahmad A. 2009. Efficacy of aqueous extracts of five arable trees on the seed germination of *Pisum sativum* L. Var-VRP-6 and KPM-522. *Botany Research International* 2 (1): 30-35. [ISSN 1995-8951; (Full paper available at [http://www.idosi.org/bri/2\(1\)09/6.pdf](http://www.idosi.org/bri/2(1)09/6.pdf)].
17. Siddiqui S, Yadav R, Wani FA, Yadav K, Meghvansi MK, Sharma S, Jabeen F. 2009. Phytotoxic effects of some agro-forestry trees on germination and radicle growth of *Cicer arietinum* Var.-Pusa-256. *Global Journal of Environmental Research* 3 (2): 87-91. [ISSN: 1990-925X; (Full paper available at [http://www.idosi.org/gjer/gjer3\(2\)09/4.pdf](http://www.idosi.org/gjer/gjer3(2)09/4.pdf)].
18. Siddiqui S, Bhardwaj S, Khan SS, Meghvansi MK. 2009. Allelopathic effect of different concentration of water extract of *Prosopis juliflora* leaf on seed germination and radicle length of wheat (*Triticum aestivum* Var-Lok-1). *American-Eurasian Journal of Scientific Research* 4 (2): 81-84. [Full paper available at [http://www.idosi.org/aejsr/4\(2\)09/6.pdf](http://www.idosi.org/aejsr/4(2)09/6.pdf)].

19. Kumar V, Gogoi BJ, Meghvansi M K, Singh L, Srivastava RB, Deca DC. 2009. Determining the antioxidant activity of certain medicinal plants of sonitpur (Assam), India using DPPH assay. *Journal of Phytology* 1 (1): 49-56. [Full paper available at <http://journal-phytology.com/article/view/682/573>].
20. Meghvansi MK, Prasad K. 2009. Legume Rhizobia Technology: Aspects and prospects. *Amrawati University Research Journal* 4(1): 1-13.
21. Siddiqui S, Alamari S, Meghvansi MK, Khan SS, Rather AA, Verma A. 2010. Evaluating the toxic effects of *Ficus infectoria* Roxb. and *Emblica officinalis* Gaertn. leaf extracts on cell division and chromosomal morphology of *Cicer arietinum* L. *Journal of Ecobiotechnology* 2/1: 49-52. [Full paper available at <http://journal-ecobiotechnology.com/article/view/1656/1027>].
22. Meghvansi MK, Prasad K, Mahna SK. 2010. Symbiotic potential, competitiveness and compatibility of indigenous Bradyrhizobium japonicum isolates to three soybean genotypes of two distinct agro-climatic regions of Rajasthan, India. *Saudi Journal of Biological Sciences* 17: 303-310 (Elsevier, AMSTERDAM), DOI: 10.1016/j.sjbs.2010.06.002.
23. Meghvansi MK, Siddiqui S, Gupta VK, Vairale M, Gogoi HK, Singh L. 2010. Naga chilli: A potential source of capsaicinoids with broad-spectrum ethnopharmacological applications. *Journal of Ethnopharmacology* 132 (1): 1-14 (Elsevier, AMSTERDAM) DOI: 10.1016/j.jep.2010.08.034; **Impact Factor (2010): 2.466; 5-year Impact factor: 3.216; NAAS rating(2007): 8.4**
24. Ali SF, Rawat LS, Meghvansi MK, Mahna SK. 2010. Screening of rhizobial isolates of *Leucaena leucocephala* Lam. for their mimosine degradation ability. *Journal of Phytology* 2 (7): 01-06.
25. Ali SF, Rawat LS, Meghvansi MK, Mahna SK. 2010. Determination of the host range of tree and herb rhizobia for their alternative legumes. *Journal of Phytology* 2 (7): 101-106.
26. Khan MH, Meghvansi MK, Panwar V, Gogoi HK, Singh L. 2010. Arbuscular mycorrhizal fungi-induced signalling in plant defence against phytopathogens. *Journal of Phytology* 2 (7): 53-69.
27. Panwar V, Meghvansi MK, Siddiqui S. 2011. Short-term temporal variation in sporulation dynamics of arbuscular mycorrhizal (AM) fungi and physico-chemical edaphic properties of wheat rhizosphere. *Saudi Journal of Biological Sciences* 18: 247–254 (Elsevier, AMSTERDAM). DOI: <https://doi.org/10.1016/j.sjbs.2010.12.012> **Included in Top25 hottest articles of ScienceDirect.**
28. Prasad K, Meghvansi MK, Khan AA. 2011. Incidence of arbuscular mycorrhizal fungi (AMF) in tree species in arid zones of Ajmer region of Rajasthan. *Mycorhiza News* 22 (4): 12-15.
29. Sarkar P, Meghvansi M, Singh R. 2011. Microbial Consortium: A New Approach in Effective Degradation of Organic Kitchen Wastes. *International Journal of Environmental Science and Development* 2 (3):170-174. Journal ISSN: 2010-0264. DOI:[10.7763/IJESD.2011.V2.118](https://doi.org/10.7763/IJESD.2011.V2.118)
30. Siddiqui S, Meghvansi MK, Khan SS. 2012. Glyphosate, alachor and maleic hydrazide have genotoxic effect on *Trigonella foenum-greacum* L. *Bulletin of Environmental Contamination and Toxicology* 88 (5): 659-665. **Impact Factor (2011): 1.018; NAAS rating(2012): 7.5. DOI: <https://doi.org/10.1007/s00128-012-0570-6>**
31. Meghvansi MK, Md. Haneef Khan, Gupta R, Gogoi HK and Singh L. 2012. Vegetative and yield attributes of okra and naga chilli as affected by foliar sprays of vermimash on acidic soil. *Journal of Crop Improvement* 26 (4): 520-531. **Taylor & Francis. Index Copernicus Value (ICV): 5.74. DOI:<https://doi.org/10.1080/15427528.2012.657293>**

32. Sheikh M, Malik A, Meghavansi MK, Mahmood I. 2012. Studies on some plant extracts for their antimicrobial potential against certain pathogenic microorganisms. *American Journal of Plant Sciences* 3(2): 209-213. DOI: [10.4236/ajps.2012.32025](https://doi.org/10.4236/ajps.2012.32025)
33. Meghvansi MK, Khan Md H, Gupta R, Veer V. 2013. Identification of new species of *Cercospora* causing leaf spot disease in *Capsicum assamicum* in northeastern India. *Research in Microbiology* 164: 894-902. Elsevier; **Impact Factor (2013): 2.889**; **5-year Impact factor: 2.943**; **NAAS rating(2012): 7.7**
34. Khan Md H, Meghvansi MK, Gupta R, Veer V, Singh L, Kalita MC. 2014. Foliar spray with vermiwash modifies the arbuscular mycorrhizal dependency and nutrient stoichiometry of bhut jolokia (*Capsicum assamicum*). *PLoS One* 9 (30): e92318. DOI: 10.1371/journal.pone.0092318. **Impact Factor (2013): 3.730**; **5-year Impact factor: 4.24**.
35. Khan Md H, Meghvansi MK, Gupta R, Veer V. 2015. Elemental stoichiometry indicates predominant influence of potassium and phosphorus limitation on arbuscular mycorrhizal symbiosis in acidic soil at high altitude. *Journal of Plant Physiology* 189: 105-112; **5-year Impact factor: 3.037**. DOI: <https://doi.org/10.1016/j.jplph.2015.10.005>
36. Meghvansi MK, Khan MH, Gupta R, Chaudhary KK, Siddiqui S, Veer V. 2015. Vermibiotechnology: Relevance, Challenges and Future Prospects for India. *South Asian Journal of Experimental Biology* 5 (6): 222-228.
37. Chatterjee S, Sharma S, Prasad R, Datta S, Dubey D, Meghvansi MK, Vairale M, Veer V. 2015. Cellulase Enzyme based Biodegradation of Cellulosic Materials: An Overview. *South Asian Journal of Experimental Biology* 5(6):271-282.
38. Meghvansi MK, Khan MH, Gupta R, Chaudhary KK, Veer V. 2016. Comparative evaluation of epigeic earthworm species suggests better nutrient mineralization efficiency of vegetable market solid waste by *Eisenia fetida*. *South Asian Journal of Experimental Biology* 6(6):234-240.
39. Chaudhary KK, Kumar G, Varshney A, Meghvansi MK, Ali SF, Karthik K, Dhama K, Siddiqui S. 2018. Ethnopharmacological and Phytopharmaceutical Evaluation of *Prosopis cineraria*: An overview and future prospects. *Current Drug Metabolism* 19 (3): 192-214; **5-yr impact factor 3.22**. DOI: [10.2174/1389200218666171031125439](https://doi.org/10.2174/1389200218666171031125439)
40. Verma P, Vasudevan V, Kashyap BK, Samsudeen TI, Meghvansi MK, Kamboj DV, Singh L. 2018. Direct lysis glass milk method of genomic DNA extraction reveals greater Archaeal diversity in anaerobic biodigester slurry as assessed through denaturing gradient gel electrophoresis. *Journal of Experimental Biology and Agricultural st Publication 1 *Sciences* 6(2): 315 – 323. DOI: 10.18006/2018.6(2).315.323
41. Datta S, Das B, Gopalakrishnan R. Muaka V, Meghvansi MK, Vairale MG, Rahman S, Dwivedi S, Veer V. 2021. Detection of ‘ancestral’ western lineage of Citrus tristeza virus virulent genotype in declining Arunachal Wakro orange. *Tropical Plant Pathology*. DOI: <https://doi.org/10.1007/s40858-021-00438-0>. 5-yr Impact factor: 1.675.
42. Kumar P, Meghvansi MK, Kamboj DV. 2021. Phenotypic characterization and whole genome analysis of a novel bacteriophage HCF1 infecting *Citrobacter amalonaticus* and *C. freundii*. *Frontiers in Microbiology*. DOI: 10.3389/fmicb.2021.644013. Impact factor: 5.640.
43. Kumar P, Meghvansi MK, Kamboj DV. 2021. Isolation, phenotypic characterization and comparative genomic analysis of 2019SD1, a polyvalent enterobacteria phage. *Scientific Reports* 11, 22197 (2021). <https://doi.org/10.1038/s41598-021-01419-8>. 5-year impact factor: 5.133.

44. Yadav, B.L., Meghvansi, M.K., Meena, K. et al. Discovery of a new species of Adder's tongue fern from India with comparative analysis of morphological and molecular attributes. *Scientific Reports* 11, 24396 (2021). <https://doi.org/10.1038/s41598-021-03231-w>. 5-year impact factor: 5.133.

NUCLEOTIDE SEQUENCES DEPOSITED TO NCBI

Sl No	Accession Number	Definition
1.	KC351743	<i>Cercospora</i> sp. strain CS2012 18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence
2.	KC355807	<i>Cercospora</i> sp. strain CS2012 histone H3 gene, partial cds
3.	KC355808	<i>Cercospora</i> sp. strain CS2012 actin gene, partial cds
4.	KC513745	<i>Cercospora</i> sp. strain CS2012 calmodulin gene, partial cds
5.	KC513746	<i>Cercospora</i> sp. strain CS2012 translation elongation factor-1 alpha gene, partial cds
6.	MN715150	Citrobacter phage NS1, complete genome
7.	MN545971	Citrobacter virus HCF1, complete genome
8.	MN218775	Escherichia virus ECG4, complete genome
9.	MN164484	Escherichia virus ECH1, complete genome
10.	MN518894	Escherichia virus LS2, complete genome
11.	MN518893	Escherichia virus LS3, complete genome
12.	MT360680	Klebsiella virus 2019KP1, complete genome
13.	MT500539	Salmonella virus STSR3, complete genome
14.	MT360681	Shigella virus 2019SD1, complete genome
15.	MT360682	Vibrio phage Vc1_PKu-2020, complete genome
16.	MN387789	<i>Klebsiella pneumoniae</i> strain MO2 16S ribosomal RNA gene, partial sequence
17.	KY882476	Citrus tristeza virus isolate C18 3' UTR
18.	KY882475	Citrus tristeza virus isolate C16 3' UTR
19.	KY882474	Citrus tristeza virus isolate C15 3' UTR
20.	KY882473	Citrus tristeza virus isolate C14 3' UTR
21.	KY882472	Citrus tristeza virus isolate C13 3' UTR
22.	KY882471	Citrus tristeza virus isolate C9 3' UTR

23.	KY882470	Citrus tristeza virus isolate C7 3' UTR
24.	KY882469	Citrus tristeza virus isolate C6 3' UTR
25.	KY882468	Citrus tristeza virus isolate C5 3' UTR
26.	KY882467	Citrus tristeza virus isolate C4 3' UTR
27.	KY882466	Citrus tristeza virus isolate C3 3' UTR
28.	KY882465	Citrus tristeza virus isolate C2 3' UTR
29.	KY882464	Citrus tristeza virus isolate C1 3' UTR
30.	KY882463	Citrus tristeza virus isolate S28 major coat protein (p25) gene, complete cds
31.	KY882462	Citrus tristeza virus isolate S24 major coat protein (p25) gene, complete cds
32.	KY882461	Citrus tristeza virus isolate S21 major coat protein (p25) gene, complete cds
33.	KY882460	Citrus tristeza virus isolate S9 ORF1a and RNA-dependent RNA polymerase (ORF1b) genes, partial cds
34.	KY882459	Citrus tristeza virus isolate S5 ORF1a and RNA-dependent RNA polymerase (ORF1b) genes, partial cds
35.	MW081146	Ophioglossum trilokinathii voucher MUCR:00036 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene
36.	MW081147	Ophioglossum trilokinathii voucher MUCR:00036 PsbA (psbA) gene
37.	MW081148	Ophioglossum trilokinathii voucher MUCR:00036 cpntains tRNA-Leu (trnL) gene

Full Length Papers published in Books/Proceedings

1. Mahna SK, Prasad K, Vedi S, Meghvansi MK. 2003. Isolations, authentication and efficiency of indigenous Bradyrhizobial strains of Rajasthan. In Singh, V. P. (ed.). Biosciences: Advances, Impact and Relevance. Department of Plant Science, M.J.P. Rohilkhand University, Bareilly (U.P.), India. pp 33-37.
2. Mahna SK, Prasad K, Meghvansi MK, Harwani D. 2004. Efficiency of Bradyrhizobia in different soybean cultivars in pots filled in with rhizospheric soils of soybean/ non legume cultivated land. In Hartmann, A., Schmid, M., Wenzel, W. and Hinsinger, Ph. (eds.). Rhizosphere 2004-Perespectives and Challenges-a Tribute to Lorenz Hiltner, Munich, Germany. 286p.
3. Mahna SK, Meghvansi MK, Prasad K, Harwani D, Werner D. 2006. Screening of Efficient Bradyrhizobium japonicum strains for the Improvement of Soybean Production. In Bhagyanarayana G, Bhadraiah B, Kunwar IK (eds.). Emerging Trends in Mycology, Plant Pathology and Microbial Biotechnology. B. S. Publications, Hyderabad, India. pp. 267-277.
4. Meghvansi MK, Chaudhary KK, Prasad K. 2007. Arbuscular Mycorrhizal Symbiosis: An Overview of Research and Extension needs. In Tiwari M, Sati SC (eds.). The

- Mycorrhizae: Diversity, Ecology and Applications. Daya Publishing House, New Delhi, pp. 87-101.
5. Meghvansi MK, Singh L, Srivastava RB and Varma A. 2011. Assessing the role of earthworms in biocontrol of soilborne plant fungal diseases. In Karaca A (Ed.) *Biology of Earthworms (Soil Biology Series vol 24)*, Springer-Verlag Berlin Heidelberg. pp.173-189. ISBN: 978-3-642-14635-0. DOI: https://doi.org/10.1007/978-3-642-14636-7_11
 6. Sarkar P, Saxena R, Meghvansi MK, Singh R. 2010. Effective Degradation of Organic Waste with emphasis on kitchen waste using Microbial Consortium. Proceedings of 2010 International Conference on Biotechnology and Food Science (ICBFS 2010) Bangalore, India, 9-10 February, 2010, pp. xxx-xxx. ISBN 978-1-84626-xxx-x (Accepted).
 7. Meghvansi MK. 2011. Contribution of Earthworm Bioturbation to Soil Suppressiveness. DRDO Science Spectrum, DESIDOC, DRDO, New Delhi, pp. 167-172.
 8. Varma A, Sherameti I, Tripathi S, Prasad R, Das A, Sharma M, Bakshi M, Johnson JM, Bhardwaj S, Arora M, Rastogi K, Agrawal A, Kharkwal AC, Talukdar S, Bagde US, Bisaria VS, Upadhyaya CP, Won PS, Chen Y, Ma J, Lou B, Adya A, Zhong L, Meghvansi MK, Gosal SK, Srivastava RB, Johri AK, Cruz C, Oelmüller R. 2012. The Symbiotic Fungus *Piriformospora indica*: Review. In *Fungal Associations*, 2nd Ed, The Mycota IX, B. Hock (Ed.) Springer Verlag, ISBN 978-3-642-30825-3. pp. 239-254. DOI: 10.1007/978-3-642-30826-0_13
 9. Meghvansi MK, Prasad K, Mahna SK. 2012. Investigations on Bradyrhizoabial diversity of Rajasthan: A case study of screening stress tolerant strains for improving soybean productivity. In Proceedings of National conference on Biodiversity depletion: Causes, Consequences and Solutions. Meena KL (Ed). Scientific Publishers (India), Jodhpur, ISBN: 978-81-7233-843-5. pp. 67-81.
 10. Khan MH, Meghvansi MK, Gupta R, Chaudhary KK, Prasad K, Siddiqui S, Veer V, Varma A. 2015. Combining application of vermiwash and arbuscular mycorrhizal fungi for effective plant disease suppression. In Meghvansi MK, Varma A (Eds) *Organic amendments and soil suppressiveness (Soil Biology Series volume 46)*, Springer International Publishing Switzerland. pp. 479-493. ISBN 978-3-319-23074-0. DOI: 10.1007/978-3-319-23075-7_23
 11. Siddiqui S, Alamri S, Alrumman S, Meghvansi MK, Chaudhary KK, Kilany M, Prasad K. 2015. Role of soil amendment with micronutrients in suppression of certain soil-borne plant fungal diseases: A Review. In Meghvansi MK, Varma A (Eds) *Organic amendments and soil suppressiveness (Soil Biology Series volume 46)*, Springer International Publishing Switzerland. pp. 363-380. ISBN 978-3-319-23074-0. DOI: 10.1007/978-3-319-23075-7_17
 12. Khan MH, Meghvansi MK, Prasad K, Siddiqui S, Varma A. 2017. Arbuscular Mycorrhizal Symbiosis and Nutrient Resource Limitation: Predicting the Linkages and Effectiveness of Partnership. In Varma A et al. (Eds). *Mycorrhiza - Nutrient Uptake, Biocontrol, Ecorestoration*, Springer International Publishing AG. pp. 115-130. DOI: https://doi.org/10.1007/978-3-319-68867-1_6.
 13. Meghvansi MK, Kumar P, Vasudevan V, Tomar A, Kamboj DV, Singh L. 2018. Biodigester technology for effective and ecofriendly decomposition of nightsoil. In Varjani SJ, et al. (eds.), *Waste Bioremediation, Energy, Environment and Sustainability*, Springer Nature, Singapore. pp. 353-372. DOI: https://doi.org/10.1007/978-981-10-7413-4_19

14. Meghvansi MK, Chaudhary KK, Khan MH, Siddiqui S, and Varma A. 2020. Molecular Tools and Techniques for Understanding the Microbial Community Dynamics of Vermicomposting. In Meghvansi MK, Varma A (Eds) *Biology of Composts (Soil Biology Series volume 58)*, Springer Nature Switzerland. pp. 363-380. ISBN 978-3-030-39172-0. pp. 127-151. DOI: https://doi.org/10.1007/978-3-030-39173-7_7

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1. Meghvansi MK, Gogoi HK, Singh L. 2012. Fodder resources of northeast India and their preservation. DESIDOC (DRDO), New Delhi
2. Meghvansi MK, Kamboj DV. 2018. Quality testing of Anaerobic Microbial Inoculum and effluent of DRDO-Biodigester: A Laboratory Manual. Defence R & D Establishment, Gwalior

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1. Meghvansi MK, Khan MH, Veer V. 2013. *Biology of cercospora leaf spot disease*. Createspace Independent Publishing Inc (A subsidiary of Amazon publishing group). Charleston, USA. ISBN:978-14-8263-061-9.
2. Meghvansi MK, Veer V. 2014. *Vermibiotechnology for solid waste management*. Kashi Block Industry (Press), Tezpur. ISBN: 978-93-5196-657-9
3. Meghvansi MK, Varma A (Eds). 2015. *Organic Amendments and Soil Suppressiveness*. Soil Biology volume 46. Springer International Publishing Switzerland, ISBN: 978-3-319-23074-0; DOI: 10.1007/978-3-319-23075-7
4. Chatterjee, S, Meghvansi MK, Veer V (Eds.). 2015. *Recent Advances in Biodegradation, Sanitation, and Bioremediation*. Conference proceedings as journal special issue. South Asian Journal of Experimental Biology volume 5, issue 6, 2015.
5. Kamboj DV, Singh L, Chauhan RS, Meghvansi MK. 2020. *Biodigester: A New Horizon for Sanitation Technology*. New Delhi Publishers, New Delhi, India. ISBN: 978-93-88879-35-4.
6. Meghvansi MK, Varma A (Eds). 2020. *Biology of Composts*. Soil Biology volume 46. Springer International Publishing Switzerland, ISBN: 978-3-030-39172-0; DOI: 10.1007/978-3-030-39173-7.

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1. Mahna SK, Prasad K, VEDI S, Meghvansi MK. 2003. Isolations, authentication and efficiency of indigenous Bradyrhizobial strains of Rajasthan. 25th All India Botanical Conference and National Symposium, MJP Rohilkhand University, Bareilly, (U. P.) October 2002.
2. Mahna SK, Prasad K, Meghvansi MK, Harwani, D. 2004. Efficiency of Bradyrhizobia in different soybean cultivars in pots filled in with rhizospheric soils of soybean/non legume cultivated land. [International Congress](#) "Rhizosphere 2004- Perspectives and Challenges-a Tribute to Lorenz Hiltner" held at Munich (Germany) 12-17 September 2004.
3. Harwani D, Meghvansi MK, Prasad K, Mahna, SK. 2004. Stimulatory effect of three carbon sources on redifferentiation potential of soybean nodulating bacteria. [International Symposium](#) on "Microbial Diversity: Challenges, Opportunities & Relevance in new Millenium" held at R. D. University, Jabalpur during 19th – 21st November, 2004.
4. Meghvansi MK, Prasad K. 2004. Symbiotic effectiveness of pH tolerant Bradyrhizobium japonicum strains in soybean [Glycine max (L.) Merr.] in low

- nutrient soil. National Conference on “Emerging Trends in Mycology, Plant Pathology and Microbial Biotechnology” at Department of Botany, Osmania University, Hyderabad-500007 (A.P.) during 29-31 December 2004.
5. Meghvansi MK, Prasad K. 2005. Role of mycorrhizal symbiosis in sustainable development and improvement of productivity. Regional Symposium on Microbial Biotechnology held at Gujarat University, Ahemdabad (Gujarat) during 22-23 January, 2005.
 6. Meghvansi MK, Siddiqui S, Chaudhary KK. 2005. Potential of microbes in environmental clean-up strategy. National conference on Management of Land Resources & Land-use towards sustainable development, held at Institute of Environment & Development studies, Bundelkhand University, Jhansi during 18th – 19th October 2005.
 7. Siddiqui S, Chaudhary KK, Meghvansi MK. 2005. Phytoremediation: An alternative approach for the restoration of heavy metal polluted sites. National conference on Management of Land Resources & Land-use towards sustainable development, held at Institute of Environment & Development studies, Bundelkhand University, Jhansi (UP) during 18th – 19th October 2005.
 8. Meghvansi MK, Prasad K, Mahna SK. 2007. In vitro physiological temperature tolerance study of bradyrhizobial strains of soybean (*Glycine max* L Merrill). Proc. National Symposium on “Plant Pathogens: Exploitation and Management” held at R. D. University, Jabalpur (M. P.) during 16th – 18st January, 2007.
 9. Siddiqui S, Meghvansi MK, Ahmad M. 2007. Effect of cadmium on seed germination, plant growth, yield and cytogenetic characters of *Pisum sativum* L. [International Congress](#) on Environmental Research held at Govt Geetanjali PG College, Bhopal (MP) during 28-30 December, 2007.
 10. Meghvansi MK. 2008. Arbuscular Mycorrhizal (AM) Fungi and their role in sustainable agricultural development. Knowledge exchange programme in Life Science education and research (KEPLER-2008) held at J. C. Bose Institute of Life Science, Bundelkhand University, Jhansi during 26th – 27th February 2008.
 11. Meghvansi M K, Mahna SK. 2008. Differential response of three soybean genotypes towards inoculation with indigenous Bradyrhizobium japonicum isolates of two distinct agro-climatic regions of Rajasthan, India in “XXXI Annual Conference of Indian Botanical Society and International Symposium on Plant Biology and Environment: Challenging Scenerio” held at University of Allahabad, Allahabad (UP) during 17-19 December, 2008. p. 58.
 12. Chatterjee S, Meghvansi MK, Chattopadhyay B, Das TK, Srivastava RB, Mukhopadhyay SK. 2009. Microscopic Studies on Fish Liver Collected from Wastewater-fed Fishponds of a Ramsar site in India. National Conference on Electron Microscopy & Allied Fields held at Bundelkhand University, Jhansi during 17-19 January, 2009. pp. 183-184.
 13. Meghvansi MK, Bhat MY, Gogoi HK, Srivastava RB. 2009. Preliminary assessment of antimicrobial activity of certain plant extracts on *Xanthomonas campestris* and *Aspergillus niger*. National seminar on “Exploitation, Utilization and Strategy Action Plan for Sustainable Management of Plant Resources” held at Department of Botany, Gauhati University, Guwahati during 27-28 February, 2009. p. 26.
 14. Meghvansi MK, Siddiqui S, Gogoi HK, Singh L. 2009. Effect of cadmium stress on root meristem of *Pisum sativum* L. National Conference on frontiers of Plant Physiology toward sustainable agriculture, Assam Agriculture University, Jorhat, 5-7 November, 2009. p. 189.
 15. Meghvansi MK, Prasad K, Mahna SK. 2011. Sodium chloride chloride tolerance of Bradyrhizobium japonicum in broth culture. [International conference](#) on “Microorganisms in Environmental Management and Biotechnology” scheduled to be held during 01-03 Jul, 2011 at Department of Biotechnology & Bioinformatics

- Centre, Barkatullah University, Bhopal, Madhya Pradesh. p.38.
16. Panwar V, Meghvansi MK, Siddiqui S, Gogoi H K, Singh L. 2011. Short-term temporal variation in sporulation dynamics of arbuscular mycorrhizal (AM) fungi and physico-chemical edaphic properties of wheat rhizosphere. [International conference](#) on “Microorganisms in Environmental Management and Biotechnology”, 01-03 Jul, 2011 at Department of Biotechnology & Bioinformatics Centre, Barkatullah University, Bhopal, Madhya Pradesh. p.39.
 17. Khan MH, Meghvansi MK, Gupta R, Gogoi HK, Singh L, Veer V. 2012. Relative performance of three epigeic earthworms species for vegetable waste degradation. National Conference on recent developments in health, hygiene and environment, Defence Research laboratory Tezpur, 6-8 November 2012. p. 5.
 18. Khan MH, Meghvansi MK, Gupta R, Kalita MC, Gogoi HK. and Veer V. 2012. Arbuscular mycorrhizal fungal community analysis in arable soil of different agro-climatic zones of Assam (India) using denatured gradient gel electrophoresis (DGGE) fingerprinting technique. International Conference on Mycorrhiza (ICOM7), TERI, New Delhi, 6-11 Jan 2013. p. 143.
 19. Khan MH, Meghvansi MK, Gupta R, Gogoi HK, Singh L, Veer V. 2012. Application of vermiwash enhances growth of naga chilli and okra in acidic soil. 3rd Annual International Conference on Advances in Biotechnology (Biotech 2013), GSTF, Singapore, 18 - 19 March 2013. (Accepted)
 20. Meghvansi MK, Khan MH, Gupta R, Veer V. 2014. Elemental stoichiometric relations indicate predominant influence of the potassium along with phosphorus resource limitation on arbuscular mycorrhizal symbiosis in acidic soil at high altitude: A case study with four Capsicum genotypes. International congress on “Microbes for human health and environment” held during 29 Sep-01 Oct 2014 at Amity Institute of Microbial Technology, Amity University, Noida, Delhi NCR, INDIA. p. 85.
 21. Meghvansi MK. 2014. Vermibiotechnology for sustainable development. National conference on “Recent advances in biodegradation of human wastes” held at Defence Research Laboratory, Tezpur during 16-17 Dec 2014. p. 51.
 22. Khan MH, Gupta R, Meghvansi MK, Veer V. 2014. Earthworms contribute more phosphorus than nitrogen and potassium during accelerated mineralization of four different organic wastes. National conference on “Recent advances in biodegradation of human wastes” held at Defence Research Laboratory, Tezpur during 16-17 Dec 2014. p. 52.
 23. Gupta R, Khan MH, Meghvansi MK, Veer V. 2014. Vegetable waste degradation potential of three earthworm species. National conference on “Recent advances in biodegradation of human wastes” held at Defence Research Laboratory, Tezpur during 16-17 Dec 2014. p. 75.
 24. Kumar P, Meghvansi MK, Pandey P, Kamboj DV. Isolation and characterization of coliphages from sewage water and their role in effluent sanitization. National Conference on ‘Bioremediation: Solution to world environmental clean up’ held at Vijayaraje Institute of Scienc and Management, Gwalior during 25-26 Nov 2017. p.26.

General articles

1. Meghvansi MK. 2009. Thos kachra samasya nahi sansadhan he. Purveiya 6: 32-33 (Hindi magazine of Defence Research Laboratory, Tezpur, Assam)
2. Meghvansi MK. 2009. Zee chahe he (Hindi Ghazal). Purveiya 6: 19 (Hindi magazine of Defence Research Laboratory, Tezpur, Assam)
3. Meghvansi, MK. 2009. Manaa he (Hindi Ghazal). Purveiya 6: 20 (Hindi magazine of

- Defence Research Laboratory, Tezpur, Assam)
4. Meghvansi, MK. 2010. Prayogshala Apshist Nunikaran (Laboratory waste minimization). Purveiya 7: 1-2 (Hindi magazine of Defence Research Laboratory, Tezpur, Assam).
 5. Meghvansi, MK. 2011. Motapa gatane mesevan mirch ki upyogita (Utility of chilli consumption in weight reducing). Purveiya 8: 28-29 (Hindi magazine of Defence Research Laboratory, Tezpur, Assam).
 6. Meghvansi, MK. 2011. Kahar (Hindi Ghazal). Purveiya 8: 44. (Hindi magazine of Defence Research Laboratory, Tezpur, Assam).
 7. Meghvansi, MK. 2011. Vermicomposting taknik ka Swarojgaar Shrijan Mein Mahatva (Importance of vermicomposting technique in self-employment generation). Purveiya 9: 7-8 (Hindi magazine of Defence Research Laboratory, Tezpur, Assam).
 8. Meghvansi, MK. 2013. Cercospora: Ek Chunotipurn Padap Rogjanak Kavak (Cercospora: A challenging phytopathogenic fungus). Purveiya 10: 50-51. (Hindi magazine of Defence Research Laboratory, Tezpur, Assam).

Impact/Rating of publications	
Total impact factor as per ISI list (Thomson Reuters)	0.800+1.113+1.247+1.232+3.216+1.018+2.943+4.24+3.037 = 18.846
Index Copernicus Value (ICV)	12.34
Rating by National Academy of Agricultural Sciences (NAAS), New Delhi- list 2007	7.8+7.7+2.0+7.9+7.6+8.4+7.5+7.7 = 56.4

Popular lectures delivered

1. Solid Waste Management. July 2009. Defence Research Laboratory, Tezpur
2. Vermicomposting. Lecture delivered at 5 Mtn Div, Tenga and at 190 Bde, Tawang 7 & 9 Dec 2011
3. Ramayan se Paryojana Prabandhan Ka Adhigam (Learning project management from Ramayana). Lecture delivered on 10 Jan 2011 in Rajbhasha Workshop, Defence Research Laboratory, Tezpur, Assam, India
4. Contribution of Earthworm Bioturbation to soil suppressiveness. 28 Feb 2011, Oration on National Science Day, Defence Research Laboratory, Tezpur, Assam, India.
5. Research and review Paper writing. Online lecture delivered in April 2020 for Bundelkhand University, Jhansi, Uttar Pradesh, India.
6. DRDO Biodigester technology and its role in socioeconomic development of India. Invited lecture delivered during National Conference on Recent Trends in Transdisciplinary research for socioeconomic development of India. 30 Dec 2020 at Bundelkhand University, Jhansi, UP (Online mode; Zoom ID: 84470542754).
7. Webinar delivered on Biotoilets and Biodigesters on 28 Oct 2021 at Mohanlal Sukhadia University, Udaipur (through google meet: meet.google.com/vwa-znso-xcg)

TECHNO-MANAGERIAL/ADMINISTRATIVE EXPERIENCE

- Worked as Member, Stores Purchase Committee (SPC), DRL (DRDO) Tezpur for the year 2011
- Worked as Stores Officer, DRL (DRDO) Tezpur from Jan 2012 to Aug 2013
- Worked as Accounts Officer, DRL (DRDO) Tezpur from Sep 2013 to May 2014
- Presiding Officer, Annual Stock Taking Board, DRL (DRDO) Tezpur for the year 2013-14
- Coordinator, Half yearly audits (Apr-Sep 2013 and Oct 2013 -Mar 2014), DRL (DRDO) Tezpur
- Worked as Head, Finance, DRL (DRDO) Tezpur w.e.f. May 2014 to Feb 2015
- Currently working as Member, Welfare Committee, DRL (DRDO) Tezpur w.e.f. May 2014
- Worked as Officer-in-Charge, DRL detachment, Salari, Arunachal Pradesh w.e.f. May 2012 to Sep 2014
- Worked as the Treasurer, 7th Conference of Medical Arthropodology held in Dec 2013 at DRL Tezpur (Total expenditure `6.12 Lakh~)
- Worked as the Joint Organising Secretary, National Conference on Biodegradation of Human Wastes held in Dec 2014 at DRL (DRDO) Tezpur. (Total expenditure `6.50 Lakh~)
- Worked as Head, Material Management Group, DRL (DRDO) Tezpur w.e.f. Mar 2015 to Jan 2016 (a key functionary in DRDO procurement management system)
- Member, Biodigester Task Force, DRDE/DRDO.
- Member (QR Manager), Laboratory Q&R Steering Committee, Defence R&D Establishment (DRDE/DRDO) Gwalior w.e.f. 12 Apr 2021.

WORKING KNOWLEDGE OF ADVANCED TECHNIQUES/TOOLS RELATED TO

- Isolation and maintenance of pure culture of agriculturally important microbes.
- PCR, SDS-PAGE, DGGE.
- Elemental analysis (CHNS), Gas chromatography, Automated chemistry Analysis (Segmented Flow and Flow Injection) in respect of TKN/NO₃/NO₂/Phosphorus in wastewater samples as USEPA Methods.
- Wastewater Analysis as per APHA/Indian Standards.
- Oxford Nanopore sequencing

Summary: Bio-data of Dr MK Meghvansi, MSc, NET (JRF), PhD, MBA

- Born in Bhilwara (Rajasthan) on 4 October 1980, Dr. Mukesh Kumar Meghvansi did his M Sc (Botany) and Ph D (Botany) from Maharshi Dayanand Saraswati University Ajmer (Rajasthan) and MBA (Project Management) from Sikkim Manipal University, Gangtok.
- Passed the prestigious CSIR-NET examination for five times.
- Served as Lecturer of Botany at Bundelkhand University, Jhansi (UP) from March 2005 to July 2008 and joined DRDO subsequently in July 2008.
- 18 years of research experience and 60 publications (40 journal articles, 14 book chapters, 1 technical bulletin and 6 books) to his credit.
- Having credit of Filing TWO patents, ONE Design and ONE Trademark with Controller General of Patents, Designs & Trademarks, Govt of India.
- Attended as many as 15 conferences and presented research papers.
- Life member of Indian Botanical Society, Assam Science Society, Scientist Unique Researcher's Yare Association, Jhansi (U. P.) and, annual member of several other scientific societies.
- The reviewer/editorial board member of several international journals.
- Research area include Anaerobic biodigestion of human waste, Agro-biodefence, Solid waste management (vermicomposting and anaerobic biodegradation), and Biofertilizer technology (legume-rhizobia-AMF-symbiosis).
- Currently working as Scientist 'E' (Group A-Technical Gazetted/7th CPC pay level 13, Grade pay Rs 8700/-, Basic pay Rs 1, 30,600/-) at Bioprocess Technology Division, Defence R&D Establishment (DRDO/Min of Defence, Govt of India), Gwalior, Madhya Pradesh.