

Curriculum Vitae

Dr. S. K. Dwivedi

Professor

Department of Environmental Science
B.B. Ambedkar University (A Central University)
Rae Bareli Road, Lucknow- 226025, India

Name: Dr. Shiv Kumar Dwivedi

Father's Name: Prof. R. S. Dwivedi

Present designation and Address: **Professor**
Deptt. of Environmental Science
B.B.A.U. (A Central University)
Rae Bareli Road,
Lucknow -226 025, India

Contact Number: 09415581824 (Mob.)

Email Id: skdwivedibbau@yahoo.co.in

University Education

Exam Passed	Year	Division	Subjects offered	Institution
B.Sc.	1982	I st (65.7%)	Botany, Zoology, Chemistry	Gorakhpur University
M.Sc.	1984	I st (65.0%)	Botany*	Gorakhpur University
Ph.D.	1989	-----	Botany**	Banaras Hindu University

*Secured 74.0% marks in theory papers of Plant Pathology

**Ph.D. thesis title: "Soil Fungal Communities of Guava orchards with emphasis on the Wilt Disease Syndrome".

Field of Specialization: Environmental Microbiology and Microbial Ecology

Research work Done: Microbial Diversity in soil ecosystem with reference to climate change; Physico-chemical properties of soil and its correlation with disease severity and fungal diversity in crop field soil of some economic crops (Fruit, vegetables, cereals and pulses); Histopathological studies of affected parts of important crop plants, using SEM; FTIR analysis of secondary metabolites secreted by fungal antagonists; Litter decomposition of grassland ecosystem with emphasis on fungal succession and antibiosis; Phytoremediation; Enzyme (Cellulase, PG, PME) activities in some pathogenic fusaria; Integrated management of phytopathogens using chemicals, botanicals, fungal antagonists and soil pasteurization technique, etc. for management of the soil fusaria causing diseases in guava, linseed, tomato, brinjal, arhar crops; Important fungal antagonists have also been studied as biocontrol means against the *Macrophomina phaseolina* and *Fusarium* spp., in particular; Role of lichens in biomonitoring of atmospheric pollutants and heavy metal accumulation on historical monuments; PGPR in crop improvement; fungicidal property of medicinal plants, etc.

Research and Teaching Experience

Research Experience: 29 years

Post-doctoral Research Experience: Eight (8) yrs including Senior Research Fellow, Research Associateship & Pool Officership

Teaching Experience: 18 years,

3½ years: Taught B.Sc. (Hons.)
Women's College (Botany students), B.H.U.,
Varanasi.
Currently **teaching Post Graduate** students at
B.B.A. University, Lucknow **since 1997**

Fellowships/Awards

- **Awarded Senior Research Fellowship of:**
 - ✓ **ICAR**, New Delhi (24.04.1986 – 23.04.1989)
 - ✓ **CSIR**, New Delhi (24.04.1989 – 06.12.1991)
- **Awarded Research Associateship of:**
 - ✓ **UGC**, New Delhi (07.12.1991 – 31.01.1992)
 - ✓ **CSIR**, New Delhi (01.02.1992 – 31.01.1997)
- **Awarded Senior Research Associateship (Pool Officership) of the CSIR, New Delhi:** (01.05.1997 – 11.12.1997)
- Awarded **Young Scientist Award** by the Society for Eco-Sustainable Development in the field of **Environmental Microbiology** in the year 2002-03.
- Awarded **Shiksha Rattan Award** by India International Friendship Society, New Delhi in the year 2010.

Honours/Recognition/Responsibilities/Other Activities

- Member, **Board of Post Graduate Studies (BPGS)**, Dept. of Environmental Science, BB Ambedkar University, Lucknow.
- Member, **Departmental Research Committee (DRC)**, Dept. of Environmental Science, BB Ambedkar University, Lucknow.
- Member, **School Board** (Environmental Science), B.B.A. University, Lucknow
- Member, **Research Degree Committee of the University (RDCU)**, of the Dept. of Environmental Science, B.B. Ambedkar University, Lucknow.
- Member, **Academic Council**, B.B. Ambedkar University, Lucknow.
- Serving as **Technical Advisor** of the Purvanchal Environmental Association.
- Ex-member of the **Editorial Advisory Board** of the Arunachal University Research Journal.
- Ex-member, **Proctorial Board**, B.B. Ambedkar University, Lucknow.
- Ex-Member, **Examination committee**, BB Ambedkar University, Lucknow.
- Ex Member, **Board of Management**, B.B. Ambedkar University, Lucknow.
- Ex founder **Co-ordinator**, Deptt. of Applied Chemistry, B.B. Ambedkar University, Lucknow
- Officiating as **Head of the Department** regular HoD is on leave.

Experience of Examination Work

Graduate, Postgraduate and Ph.D. thesis of different Indian Universities.(D.D.U., Gorakhpur Univ., V.B.S., Purvanchal Univ., R.M.L. Avadh Univ., C.C.S. Univ., Meerut, Rajarshi Tandon Open Univ. , Gurkul Kangri Univ., B.B. Ambedkar Univ., Rohil Khand Univ., Allahabad Central Univ., Jiwaji Univ., CSJM University, Kanpur, S.S. University, Varanasi, M.G. Kashi Vidyapeeth, Varanasi); Paper setter of all India Competitive Examination for various courses.

Workshop/Orientation Course/ Refresher course Attended

- Attended **National Workshop** on Biostatistics and Biometry at the Banaras Hindu University, Varanasi, India.
- Participated and attended short-term course on Personal Computer at the Banaras Hindu University, Varanasi, India.
- Attended and successfully completed **Orientation Course** from Lucknow University (September 1998).
- Attended and successfully completed **Refresher course** in Botany from Lucknow University in March 2004 with Grade “A”.
- SAARC Workshop on Biodiversity Conservation, Sept. 21-22, 2010, BHU.
- Workshop on Mainstreaming climate change adaptation and disaster risk reduction, March 7, 2014, BBAU, Lucknow.

Publications: (Please see Annexure I)

- a) Total no. of Publications: Papers Published/ in press/ accepted in International / National Journals/ Proceeding of Conference(s)/ Book chapters: **97**
- b) Communicated: **05**
- c) Abstracts published: **114**
- d) Books: **02**

Details of Books Published:

- a) **Environmental Microbiology and Biotechnology**
(in co-editorship with D.P. Singh) New Age International Publishers, New Delhi (2004) pp 239. (ISSN-81-224-1510-5)
- b) **Biodiversity and Environmental Biotechnology**
(in co-editorship with P. Dwivedi and M.C. Kalita) Scientific Publishers, Jodhpur (2007). pp. 563 (ISBN: 81-7233-467-2)

Research Supervision Experience (For details please see Annexure II, III)

Experience of supervising Ph.D. and M.Sc. students:

- a) at **Doctoral Level-** (11) Annexure -II
 - (i) Ph.D. awarded: **09**
 - (ii) Thesis submitted: **00**
 - (iii) Pursuing at present: **02**
 - (iv)
- b) at **M.Sc. Level -** (63) Annexure -III

Membership of Learned Scientific Societies

- (1) Life Member, Indian Science Congress Association
- (2) Life Member, Indian Phytopathological Society
- (3) Life Member, Indian Botanical Society
- (4) International Society for Tropical Ecology
- (5) Purvanchal Environmental Association
- (6) Society for Advancement of Horticulture

Fellowship of Scientific Societies

- (1) Indian Botanical Society (*F.B.S.*) (1993)
- (2) Indian Phytopathological Society (*F.P.S.I.*) (1996)
- (3) International Society for Tropical Ecology (*F.T.E.*) (1999)
- (4) Purvanchal Environmental Association (*F.P.E.A.*) (1994)

Citation of Research work includes

- ‘Biological Plant Protection - recent development’. Proc. 78th Ind. Sci. Congr. Pt III, Presidential Address (Botany), 1991, p.7.
- ‘Biopesticidal Plant Protection for Sustainable Crop Productivity’. Proc. 80th Ind.Sci.Congr. Pt III, Presidential Address (Botany), 1993, p.21.
- ‘Ecopathological studies on *Fusarium oxysporum* f.sp. *ciceri* causing wilt of chickpea’. Ph.D. thesis (Botany), Banaras Hindu University, 1990, pp 158.
- ‘A Textbook of Biotechnology’. R. C. Dubey, S. Chand and Company Ltd., New Delhi, 1993, pp 290.
- ‘Fungal deterioration of cultural property of Varanasi’. Ph.D. thesis (Applied Chemistry, Institute of Technology), Banaras Hindu University, 1993, pp 136.
- ‘Soil microflora associated with the root region of eggplant (*Solanum melongena* L.) with emphasis on root diseases and their control’. Ph.D. thesis (Botany), Banaras Hindu University, 1993, pp 231
- ‘Studies on post-harvest fungal deterioration of clusterbean with reference to its control by some higher plant products’. Ph.D. thesis (Botany), Banaras Hindu University, 1992, pp. 140.
- In: *Advances in diseases of fruit crops in India* (ed. S.J. Singh), Kalyani Publishers, New Delhi, 1996, pp 492.
- Perspective of Microbial Interactions (Presidential address). *J. Ind. Bot. Soc.*, 76, 1-12, 1997.
- Soil solarization and the survival of two fungal pathogens of sugarcane and the composition of the soil fungal community. *Soil Biology & Biochemistry*, 30 (13), 1849-1852, 1998.
- In: *Arunachal University Research Journal*, 3(1), 1-5, 2000.

- Increasing soil temperature to reduce sclerotial viability of *Sclerotium cepivorum* in New Zealand soils. *Soil Biology & Biochemistry*, 33(2), 137-143, 2001.
- The fly ash influenced the heavy metal status of the soil and the seeds of sunflower –A case study. *J. Environ.Biol.*25 (1), 59-63, 2004.
- Important diseases of Guava in India with special reference to wilt. Souvenir of 1st International guava Symposium. p.75-90, 2005
- Diseases of fruits and vegetables Vol II (ed.S.A.M.H.Naqvi) Kluwer Academic Publishers Netherlands p. 81-119 (2004).
- The symptoms and cause of guava wilt in South Africa. *J. Phytopathology*. 145; 37-41(1997).
- *J. Mycol. Pl. Pathol.* (2006), 36(3):365-372.
- *Acta Horticulture* (2007):p. 507-523.
- *Indian Phytopath.* (2000), 53(4):423-427, etc.

Annexure I

Publications of Prof. S. K. Dwivedi

International Refereed Publications

1. **Dwivedi S.K.**, Mishra R.C. and Dwivedi R.S. (1988). Incidence of wilt disease of guava (*Psidium guajava* L.) in Varanasi, India. *Int. J. Trop. Pl. Diseases*. 6: 213-216. (ISSN:0254-0126)
2. **Dwivedi S.K.** (1991). Population dynamics of microfungi including pathogenic forms in the beds of completely healthy partially wilted and completely wilted guava trees grown on a line. *Int. J. Trop. Pl. Diseases*. 9: 95-109. (ISSN:0254-0126)
3. **Dwivedi S.K.** (1991). Effect of some heavy metals on growth of *Fusarium oxysporum* f. sp. *psidii* causing guava wilt disease. *International J. Trop. Pl. Diseases*. 9: 127-130 (ISSN: 0254-0126)
4. **Dwivedi S.K.** (1991). Effect of staled growth products of some soil fungi on a wilt pathogen of guava (*Psidium guajava* L.) *Annals of Applied Botany*. 118: 42-43. (ISSN: 0003-4746).
5. **Dwivedi S.K.** (1993). Soil solarization adversely affects some fungal pathogens causing wilt disease of guava (*Psidium guajava* L.). *Soil Biology and Biochemistry*. 25 (11): 1635-1636.
6. **Dwivedi S.K.** and Dwivedi, R.S. (1994). Population dynamics of guava (*Psidium guajava* L.) wilt pathogens in pesticides treated soil. *Int. J. Trop. Pl. Diseases*. 12 (2): 187-195.
7. **Dwivedi S.K.** and Dwivedi Padmanabh (1999). Wilt disease of guava: a national problem. *J. Applied Hort.* 1 (2): 151-154.
8. Srivastava S., Garg A., Ayyagari A., Nyati K.K., Dhole T.N. and **Dwivedi S.K.** (2006) Nucleotide polymorphism associated with ethambutol resistance in clinical isolates of *Mycobacterium tuberculosis*. *Current Microbiology* 53:401-405.

9. Bajpai R., **Dwivedi S.K.** and Upreti D.K. (2008). Observation on lichens growing over some monuments of Dhar and Mandav Area of Madhya Pradesh, India. *Flora and Fauna*.14 (2):253-258. (ISSN: 0971-6920)
10. Srivastava S., Ayyagari A., Dhole TN., Nyati K.K. and **Dwivedi S .K.** (2008). Emb nucleotide polymorphisms and the role of emb B306 mutations in *Mycobacterium tuberculosis* resistance to ethambutol. *International J Medical Microbiology* (IJMM).Online published (DOI: 10.1016/j.ijmm.2008.07.00)
11. Bajpai R., **Dwivedi, S.K.** and Upreti D.K. (2009). Arsenic accumulation in lichens of monuments of Dhar District, Madhya Pradesh, *Environmental Monitoring Assessment* (Netherland)- Online Published (DOI 10.1007/s 10661-008-0641-7 ;159: 437-442.
12. Bajpai R., Upreti D.K, **Dwivedi S.K.** and Nayaka S. (2009). Lichen as quantitative biomonitors of atmospheric heavy metals deposition in Central India. *J. Atmos. Chemistry*, **63**:235-246.
13. Bajpai R., Upreti D.K. and **Dwivedi S.K.** (2010). Passive monitoring of atmospheric heavy metals in a historical city of central India by *Lepraria lobificans* Nyl. *Environmental Monitoring and Assessment* (Netherlands) (MS.No. : EMAS3843) (Online Published) DOI:10,1007/s10661-009-1016-4.
14. Shukla Ankita and **Dwivedi, S.K.** (2011). Implication of solarization against soil-borne fusaria in leguminous crop fields in kalli paschim village in Lucknow, India: A Tropical country. (with Ankita Shukla). *International Journal of Environmental Sciences* (ISSN 0976-4402). **2** (2): 1083-1092.
15. Shukla Ankita and **Dwivedi, S.K.** (2012). Bioefficacy of plant extracts against *Fusarium* species causing wilt in pulses (with Ankita Shukla). *IOSR Journal of Engineering* (IOSRJEN) **2** (1): 136-144 (ISSN: 2250-3021).
16. **Dwivedi, S.K.** and Dwivedi Neetu (2012). *In vitro* Bioefficacy of some selected fungal antagonists against guava wilt pathogen. *IOSR Journal of Engineering* **2** (5): 1217-1223 (ISSN: 2250-3021).
17. **Dwivedi, S.K.** and Dwivedi Neetu (2012). Antifungal activity of some plant extracts against guava wilt pathogen (with Dwivedi, Neetu.). *International Journal of Environmental Sciences*. **3** (1): 412-420 (ISSN: 0976-4402).
18. **Dwivedi, S.K.** and Enespa (2012) Effectiveness of extract of some medicinal plants against soil-borne fusaria causing diseases on *Lycopersicon esculantum* and *Solanum melongena* plants. *International Journal of Pharma and Biosciences*. **3**(4): (B) 1171-1180 (ISSN 0975-6299).
19. Enespa and **Dwivedi S.K.** (2013). Effect on growth parameters of brinjal (*Solanum melongena* L.) after exposure of cement dust. *International Journal of Pharma and Bio Sciences*–(4(1): (B) 755-759. (ISSN: 0975-6299).
20. **Dwivedi, S.K.** and Enespa (2013). *In vitro* efficacy of some fungal antagonists against *Fusarium solani* and *Fusarium oxysporum* f.sp. *lycopersici* causing brinjal and tomato wilt. *International J. of Biological and Pharmaceutical Research*. (IJBPR) (ISSN: 0976-3651) **4**(1): 46-52. (I.F.- 1.34).
21. Shukla Ankita and **Dwivedi, S.K.** (2013). Antifungal approach of phenolic compounds against *Fusarium udum* and *Fusarium oxysporum* f. sp. *ciceri*. *African J of Agril. Res*. **8**(7): 596-600 (ISSN: 1991-637X). (I.F. 0.26)

22. Enespa and **Dwivedi S.K.** (2013). Effect of cement dust on growth parameters of tomato (*Lycopersicon esculentum* L.). *International J. Bio-resource and Stress Management*. **4**(1):064-067. (NAAS rating 4.46)
23. **Dwived S.K.** and Enespa (2013). Studies on fusarial wilt pathogen of two vegetable crop fields with emphasis on physico-chemical properties. *International Journal of Agronomy and Plant Production*. **4**(9):2130-2137. (ISSN: 2051-1914). (**I.F.** 0.55)
24. **Dwivedi S.K.** and Sangeeta (2013). Fungal succession in composite soil on staled agar disc at different staling periods. *G- Journal of Environmental Science and Technology*. **1**(2): 37-42. (ISSN: 2322: 0228).
25. **Dwivedi S.K.** and Ram Gopal (2013). Microbial population in rhizospheric and non- rhizospheric soils of Soybean crop. *G- Journal of Environmental Science and Technology*. **1**(2): 47-50. (ISSN: 2322: 0228).
26. **Dwivedi S.K.** and Ram Gopal (2013). Effect of Plant Growth Promoting Rhizobacteria and P₂O₅ on Soybean (*Glycine max* L.) crop. *International Journal of Biological & Pharmaceutical Research (IJBPR)*. **4**(12): 1270-1276. (ISSN: 0976-3651) (**I.F.**- 1.34).
27. **Dwivedi S.K.** and Sangeeta (2014). Evaluation of Antagonistic Potentiality of some Natural Plant Extracts against *Fusarium oxysporum* f.sp. *lini*. *International Journal of Pharma and Bio Sciences (IJPBS)*. **5**(1): (B)765-772. (ISSN: 0975-6299) (**I.F.**- 0.69).
28. **Dwivedi S.K.** and Ram Gopal (2014). Screening of microfungi from Soybean (*Glycine max* L.) seeds. *International Journal of Pharma and Bio Sciences (IJPBS)*. **5**(1):(B)877-881. (ISSN: 0975-6299) (**I.F.**- 0.69).
29. **Dwivedi S.K.** and Sangeeta (2014). Effect of fungal staling growth substances of precolonized microfungi on colonization of some potential microfungi of composite soil inocula. *International Journal of Scientific and Research Publications*. **4**(2): 1-12. (ISSN: 2250-3153) (**I.F.**- 1.3).
30. Enespa and **Dwivedi S.K.** (2014). Effectiveness of some Antagonistic fungi and botanicals against *Fusarium solani* and *Fusarium oxysporum* f.sp. *lycopersici* infecting brinjal and tomato plants. *Asian Journal of Plant Pathology (USA)* DOI:10.3923/AJPPAJ.2014. p. 1-8 (ISSN: 18191541) (H Index: 3)
31. **Dwivedi S.K.** and Agrahari D.K. (2014). Studies on soil fungi of wheat crop field with reference to antibiosis. *International J. Biological and Pharmaceutical Research (IJBPR)*. **5**(2): 186-190. (ISSN: 2229-7480) (I.F. 1.34)
32. Agrahari D.K. and **Dwivedi S.K.** (2014). *In vitro* and *in vivo* evaluation of some pesticides against *Fusarium solani*. *International J Multidisciplinary Educational Research*. Vol 3: **2**(3): 164-172. (ISSN: 2277-7881) (I.F. 2.735)
33. Srivastava J., **Dwivedi S.K.** and Kamthan K.P. (2014). Management of chickpea wilt: A Review. *Flora and Fauna* (NAAS Rating: 2.02) **20**(1):11-14. ISSN: 0971-6920.
34. **Dwivedi S.K.** and Enespa (2015). *In vitro* cellulose activity of two wilt causing soil fusaria (*Fusarium solani* and *Fusarium lycopersici*) and efficacy of some pesticides against the said fusaria. *Journal of Applied Horticulture*. **17**(1):58-65. (ISSN: 0972-1045).
35. **Dwivedi S.K.**, Sangeeta and Ram Gopal (2015). Role of mycorrhizae as Biofertilizer and Bioprotectants. *International Journal of Pharma and Biosciences*. **6**(2): (B) 1014-1026. (ISSN: 0975-6299) (IF- 5.121)

36. Dwivedi Neetu and **Dwivedi S.K.** (2015). Histopathological observation in guava root during wilting caused by *Fusarium* species: A SEM study. *International Journal of Fruit Science*. (Communicated) (Minor revision) (**Taylor and Francis** ISSN: 1553-8362 (Print), 1553-8361 (Online)). (**H Index 8**)
37. **Dwivedi S.K.** and Enespa (2014). *Tinospora cordifolia* with reference to biological and microbial properties. *Journal of Pharmaceutical Investigation (Springer)*. (Communicated). ISSN: 2093-5552 (print version); 2093-6214 (electronic version)
38. **Dwivedi S.K.** and Dwivedi Neetu (2014). Potential of microbial antagonists as biocontrol agents against *Fusarium* wilt of guava (*Psidium guajava*). *Crop Protection (Springer)* (Communicated) I.F. 1.66 (ISSN: 0261-2194).
39. Dwivedi Neetu and **Dwivedi S.K.** (2014). Soil solarization: An ecofriendly technique to eradicate soil fusaria causing wilt disease in guava (*Psidium guajava*). *Archives of Phytopathology and Plant Protection*. (Communicated) (**Taylor and Francis** ISSN: 0323-5408). (**H Index 10**)

National (Refereed) Publications

1. **Dwivedi S.K.**, Mishra R.C. and Dwivedi R.S. (1988). Incidence of wilt disease of guava (*Psidium guajava* L.) in Varanasi, India. *Int. J. Trop. Plant Diseases*. 6: 213-216. (ISSN: 0254-0126).
2. Singh R.K. and **Dwivedi S.K.** (1987). Mycology and antibiotic industries. *Prajna*, B.H.U. 33 (1): 43-46.
3. Singh R.K., Shukla R.P., **Dwivedi S.K.** and Dwivedi R.S. (1989). Disease severity of barley in relation to soil composition. *Nat. Acad. Sci. Letters*, India.12 (7): 245-246.
4. **Dwivedi S.K.**, Dwivedi R.S. and Tewari V.P. (1990). Studies on pathogenic fungi inciting guava wilt in Varanasi. *Indian Phytopath.* 43 (1): 116-117.
5. **Dwivedi S.K.** (1990). Studies on guava wilt in relation to soil composition. *Nat. Acad. Sci. Letters*, India (1990), 13 (5): 161-162.
6. **Dwivedi S.K.** (1990). Guava wilt incited by *Macrophomina phaseolina*. *Nat. Acad. Sci. Letters*, India. 13 (8): 302-303.
7. **Dwivedi S.K.**, Ambasht, R.S. and Dwivedi, R.S. (1990). Studies on seasonal variations in the population dynamics of soil fungi in wilted guava orchards. *J. Sci. Res.* 40 (1 & 2): 21-24.
8. **Dwivedi S.K.** (1990). Antifungal activity of some phenolic compounds on *Fusarium oxysporum* f. sp. *psidii* causing wilt disease of guava. *Hindustan Antibiotics Bulletin*. 32 (1 & 2): 33-35. (ISSN: 0018-1935)
9. **Dwivedi S.K.** (1990). Efficacy of some antibiotics on *Fusarium oxysporum* f. sp. *psidii* causing wilt disease of guava. *Hindustan Antibiotics Bulletin*. 32 (3 & 4) : 88-90. (ISSN: 0018-1935)
10. **Dwivedi S.K.** (1991). Studies on population dynamics of *Fusarium oxysporum* f. sp. *lycopersici* in solar heated soil. *Nat. Acad. Sci. Letters*, India. 14 (6): 235-237.
11. **Dwivedi S.K.** (1991). Effect of solar heating of soil on the dynamics of soil mycoflora. *J. Mycopath. Res.* 29 (1): 93-96.

12. **Dwivedi S.K.** (1991). *In vitro* studies on the effect of some pesticides on *Fusarium oxysporum* f. sp. *psidii* causing of guava. *J. Indian Bot. Soc.* 70: 283-285.
13. **Dwivedi S.K.** (1992). Effect of culture filtrates of some soil microbes on pathogens inciting wilt disease of guava (*Psidium guajava* L.) under *in vitro* conditions. *Nat. Acad. Sci. Letters, India.* 15 (2): 33-35.
14. **Dwivedi S.K.** (1993). *In vitro* studies on some soil microbes towards biological control of guava wilt pathogens. *Acta Botanica Indica.* 21: 137-139. (ISSN:0379-508X)
15. **Dwivedi S.K.**, Ambasht R.S. and Dwivedi R.S. (1993). Toxicity of some antagonistic fungi on pathogenic fungi of two economic crops. *Nat. Acad. Sci. Letters.* 16 (7 & 8): 209-210.
16. **Dwivedi S.K.** (1993). Fungitoxicity of *Foeniculum vulgare* seed oil against a guava wilt pathogen. *Nat. Acad. Sci. Letters.* 16 (7 & 8): 207-208.
17. **Dwivedi S.K.**, Ambasht R.S. and Dwivedi R.S. (1994). Studies on wilt disease incidence in guava plantation in Varanasi and adjacent districts. *J. Mycopath. Res.* 32 (1): 7-11.
18. Dwivedi Suresh K. and **Dwivedi S.K.** (1994). Evaluation of some antibiotics on *Fusarium equiseti* causing damping-off in guar (*Cyamopsis tetragonoloba* L. (Taub.)) seedlings. *Hindustan Antibiotics Bulletin.* 35 (3 & 4): 216-218. (ISSN: 0018-1935)
19. **Dwivedi S.K.** (1995). Effect of fungicides on wilt of guava seedlings. *Nat. Acad. Sci. Letters.* 18 (7 & 8): 129-130.
20. **Dwivedi S.K.**, Dwivedi R.S. and Ambasht R.S. (1995). Effect of some fungicides on population dynamics of fusarial wilt pathogens of two economic crops. *J. Mycopath. Res.* 33 (1): 49-52.
21. Sahu Vinay and **Dwivedi S.K.** (1999). Effect of fly ash on seed germination, plant growth and chlorophyll content of two crops of economic importance. *Acta Bot. Indica.* 27: 145-149. (ISSN:0379-508X)
22. Chaturvedi, Himanshu and **Dwivedi, S.K.** (2000). Effect of tannery effluent on soil mycoflora and seed germination of two leguminous crops. *Acta Bot. Indica.* 28: 99-100. (ISSN:0379-508X)
23. **Dwivedi, S.K.** (2000). Effect of some fungicides against *Macrophomina phaseolina* inciting guava wilt. *Arunachal University Research Journal.* 3 (2): 1-4.
24. Gupta Bhupesh and **Dwivedi, S.K.** (2002). Impact of air pollution on air mycoflora in Lucknow city. *J. Ind. Bot. Soc.* 82.
25. Bajpai R., Upreti D.K. and **Dwivedi S.K.** (2008) Diversity and distribution of Lichens on some major monuments of Madhya Pradesh, India. *Geophytology*.37: 23-29.
26. Srivastava S., Ayyagari A., Krishnani N., Dhole TN., Nyati K.K. and **Dwivedi S .K.** (2008) Progression of chronic pulmonary tuberculosis in mice intravenously infected with ethambutol resistant *Mycobacterium tuberculosis*. *Indian J. Medical Microbiology* 26 (4): 342-34.
27. Bajpai R., Upreti D.K. and **Dwivedi S.K.** (2010). Calcium and magnesium accumulation in lichens growing over monuments of central India. *Indian J. of Environmental Sciences* 14(1):1-6.
28. **Dwivedi S.K.** and Enespa (2014). Evaluation of heavy metals toxicity against soil-borne fusarial pathogens causing wilt in vegetables crops. *J Mycopath. Res* 52(1): 69-73. (ISSN: 0971-3719)

29. **Dwivedi S.K.**, Gupta Namita and Upreti D.K. (2015). Lichen Diversity with reference to climate change studies in India. J. of climate change and Environmental sustainability (Communicated) (Print ISSN: 2320-6411, Online ISSN: 2320-642X)

Book Chapters

1. Dwivedi, R.S., Dubey, R.C. and **Dwivedi, S.K.** Biology of the rhizosphere with reference to microbial interactions. I S C A symposium, 1987. In: *Plant Microbe Interaction* (ed. K.S. Bilgrami) pp. 217-238. Narendra Publishing House, New Delhi.
2. **Dwivedi, S.K.** and Dwivedi, R.S. Guava wilt in India. In: *Botanical Researchers in India* (eds. N.C. Aery and B.L. Chaudhary) pp. 503-507 (1990). Himanshu Publications, Udaipur.
3. **Dwivedi, S.K.**, Ambasht, R.S. and Dwivedi, R.S. Population dynamics of soil fungi in wilted guava orchards. ISCA symposium, 1989. In: *Economic Plant and Microbes* (ed. R.P. Purkayastha). Today and tomorrow's Printers and Publishers, New Delhi (1990), pp. 227-230.
4. **Dwivedi, S.K.** and Dwivedi, R.S. Guava (*Psidium guajava* L.) disease syndrome and its managements. In: *Crop epidemics, microbes and ecosystem conservation* (eds. G.P. Agarwal and S.K. Hasija). Narendra Publishing House, Delhi (1994), pp. 235.
5. **Dwivedi, S.K.** and Dwivedi, R.S. Production and activities of Pectin methyl esterase and protease enzymes *in vitro* by *Fusarium solani* causing guava wilt. In: *Glimpses in Plant Sciences* (ed. K.R. Aneja), pp. 67-70 (1997) (ISBN: 9788175562769)
6. **Dwivedi, S.K.** and Dwivedi, Padmanabh. Mycorrhizae in ecosystems: an ecofriendly approach for improved plant growth. In: *Biotechnology of microbes and sustainable utilization* (ed. R.C. Rajak), Scientific Publishers, Jodhpur (2002), pp. 24-32. (ISBN: 10:8172333145).
7. Padmanabh Dwivedi and **Dwivedi, S.K.** Biopesticidal management of plant diseases In: *Microbial diversity: Status and Potential Applications* (eds. S.C. Tiwari and G.D. Sharma), Scientific Book Publishers, Guwahati (2002), pp. 220-235. (ISBN: 10:8128700006)
8. **Dwivedi, S.K.** and Dwivedi, Padmanabh. Biotechnological application of microbes for improved plant productivity. In: *Advances in Microbiology* (ed. P.C. Trivedi), Scientific Publisher, Jodhpur, India (2003), pp. 273-280. (ISBN: 81-7233-332-3)
9. Singh, D.P. and **Dwivedi S.K.** Environmental perspectives of Microbiology and Biotechnology: An overview .In: *Environmental Microbiology and Biotechnology* (ISBN – 81-224-1510-5) (eds D.P. Singh and S.K. Dwivedi) New Age International (P) Publishers, New Delhi (2004) pp.239.
10. Dwivedi, Padmanabh and **Dwivedi, S.K.** (2004) Nitrogen fixation and Biofertilizers. In: *Environmental Microbiology and Biotechnology* (ISBN – 81-224-1510-5) (eds. D.P. Singh and S.K. Dwivedi). New Age International (P) Publishers, New Delhi .p.126-14.
11. **Dwivedi, S.K.** and Dwivedi, Padmanabh. (2004) Microbial Interactions and Biocides. In: *Environmental Microbiology and Biotechnology* (ISBN – 81-224-1510-5) (eds. D.P. Singh and S.K. Dwivedi) New Age International (P) Publishers, New Delhi .p.204-217.
12. **Dwivedi S.K.** and Dwivedi R.D. (2007) Biopesticides: Role in management of phytopathogenic microbes. In: *Biodiversity and Environmental Biotechnology* (ISBN: 81-7233-467-2) (eds- P. Dwivedi, S.K. Dwivedi and M.C. Kalita).Scientific Publishers, Jodhpur (pp.355-369).
13. Shukla A., **Dwivedi S.K.**, and Agrahari D. K. (2008). Role of microbes in Bioremediation Technology. *Bioremediation of Pollutants* (eds. R.C. Dubey and D.K. Maheshwari) I.K.International Publisher, New Delhi (ISBN: 978-93-81141-05-2). p 97-111.

14. Bajpai Rajesh, Upreti, D.K, Nayaka S and **Dwivedi S. K.** (2008). Lichen biodeterioration studies in India: an overview. *Bioremediation of Pollutants* (eds. R.C. Dubey and D.K. Maheshwari) I.K.International Publisher, New Delhi (ISBN: 978-93-81141-05-2). p 63-73.
15. **Dwivedi S.K.**, Shukla A.(2009) Antagonistic behavior of VAM against soil-borne fungi. In: *Advances in Microbiology* (ed) P.C.Trivedi-p.79-91; Pointer Publishers, Jaipur.pp246. (ISBN: 978-81-7132-615-0)
16. **Dwivedi S.K.** and Sangeeta (2012). Fungal Diversity in Leguminous crop field soil. In: Modern Trends in microbial Biodiversity in natural Ecosystem. (eds. Asha Sinha, B.K. Sharma and Mnisha Srivastava). Biotech Publishers, New Delhi p 117-133. (ISBN: 978-81-7622-259-4)
17. **Dwivedi S.K.** and Dwivedi Neetu (2012). Environmental factors and their Impact on fungal diversity in some crop field soil. In: *Modern Trends in microbial Biodiversity in natural Ecosystem.* (eds. Asha Sinha, B.K. Sharma and Manisha Srivastava). Biotech Publishers, New Delhi p 145-172. (ISBN 978-81-7622-259-4).
18. Shukla Ankita, **Dwivedi S. K.** and Agrahri D.K. (2012). Role of microbes in Bioremediation Technology In: *Bioremediation of Pollutants* (eds. D.K. Maheswari and R. C. Dubey). (P.97-111). I.K. International Publishers, New Delhi. (ISBN: 978-93-81141-05-2).
19. Bajpai Rajesh, Upreti D.K., Nayak S. and Dwivedi S.K. (2012). Lichen Biodeterioration Studies in India: An Overview In: *Bioremediation of Pollutants* (eds. D.K. Maheswari and R. C. Dubey). (p 63-73). I.K. International Publishers, New Delhi. (ISBN: 978-93-81141-05-2).
20. **Dwivedi S. K.** and Sangeeta (2014). Role of antagonistic microbes in management of phytopathogenic fungi of some important crops. In *Microbial Diversity and Biotechnology in food Security.* eds. R.N. Kharwar et al. (**Springer**) (P. 273-292) (ISBN: 978-81-322-1800-5)
21. Dwivedi S.K. and Ram Gopal (2014). Sustainable agriculture and plant growth promoting Rhizobacteria. In *Microbial Diversity and Biotechnology in food Security.* eds. R.N. Kharwar et al. (with Ram Gopal)- (**Springer**) (P. 327-341) (ISBN: 978-81-322-1800-5)
22. **Dwivedi S. K.**, Sangeeta and Ram Gopal (2014). Biofertilizers in sustainable Development of agricultural crops. - In: *Organic Farming and Management of Biotic Stresses* (eds. S.K.Biswas & Samir Pal. Biotech Books, New Delhi. p.160-169. (ISBN: 978-81-7622-306-5)
23. **Dwivedi S. K.** and Ram Gopal (2014). Role of plant growth promoting Rhizobacteria in crop improvement. In: *Biofertilizers for Sustainable Agriculture* (ed. Sampat Nehra) Aavishkar Publishers, Distributers, Jaipur. p.1-41 (ISBN: 978-81-7910-452-1).
24. **Dwivedi S. K.** and Dwivedi Neetu (2014). Pathogenic fusaria of some crop field soil and their management In: *Plant Disease Management and Microbes* (ed. Sampat Nehra) Aavishaar Publishers, Distributers, Jaipur p. 56-81. (ISBN: 978-817910-456-9) p. 56-81.
25. **Dwivedi S.K.** and Sangeeta (2014). Antagonestic microfungi in management of phytopathogens In: *Plant Disease Management and Microbes* (ed. Sampat Nehra) Aavishkar Publishers, Distributers, Jaipur p. 1-43. (ISBN: 978-81-7910-456-9) p. 1.42.
26. **Dwivedi S.K.** and Sangeeta (2014). Impact of Chemicals in Soil Environment. In: *Biofertilizers for ustainable Agriculture* (ed. Sampat Nehra) Aavishkar Publishers, Distributers, Jaipur. p.190-208 (ISBN: 978-81-7910-452-1)
27. **Dwivedi S.K.**, Sangeeta and Chandra Shipra (2014). Mycoremediation with reference to Heavy Metals. In: *Applied Microbiology* (ed. Sampat Nehra) Pointer Publishers, Jaipur. p. 101-117. (ISBN: 978-81-7132-767-6).
28. **Dwivedi S.K.**, Sangeeta and Ram Gopal (2014). Plant Diversity with reference to Environmental Factors In: *Biodiversity in India: Assessment, Scope and Conservation* (ed. Sampat Nehra, Raj

Kumar Gothwal and Purnendu Ghosh). Lambert Academic Publishing, Germany. p. 105-116. (ISBN: 978-3-659-50550-8).

29. **Dwivedi S.K.**, Sangeeta and Ram Gopal (2015). Biofuel: as sustainable energy source. (Accepted).

Chapters in Proceedings of Conferences

1. Jaiswal, H. and **Dwivedi, S.K.** Impact of pesticides on the environment at global level. Proc. National Conference on Rehabilitation Strategies for Degraded Environment (1996) pp. 25-28.
2. Dwivedi, Padmanabh and **Dwivedi, S.K.** Atmospheric Pollution. In: Proc. Nat. Sem. Environ. Water Management (1999), pp. 23-30.
3. Pandey, N.C. and **Dwivedi, S.K.** Studies on microbial population of a pond ecosystem of Lucknow. In: Proc. Nat. Conf. Strat. for Better Environment in 21st Century (1999), pp. 150-153
4. **Dwivedi, S.K.** Studies on sustainability of guava (*Psidium guajava* L.) plant vigour through essential oils of some medicinal plants. In: Proc. Nat. Sem. on Physiol Paradigm for fostering agro- and Biotech and augmenting environmental productivity in Millennium 2000 (ed. R.S. Dwivedi), pp 18-19.
5. Shukla A., **Dwivedi S.K** (2010) Bioprocessing of organic biodegradable wastes: Technology use to mitigate soil-borne fusaria. Proc. National conference on Bioprospecting: Access for sustainable development p55-59.

Books Published

1. Environmental Microbiology and Biotechnology

(in co-editorship with D.P. Singh) New Age International Publishers, New Delhi (2004) pp. 239 (ISBN-81-224-1510-5)

2. Biodiversity and Environmental Biotechnology

(in co- editorship with P. Dwivedi and M.C. Kalita) Scientific Publishers, Jodhpur (2007) pp. 563 (ISBN: 81-7233-467-2)

Ph.D. Scholars who have worked/ working under my Supervision

S.No.	Name	Year of Award	Research Topic
1	Dr. R. D. Dwivedi	2008	Soil microfungi of a grassland ecosystem with emphasis on Soil Fungistasis and litter Decomposition.
2	Dr. Shashikant	2008	<i>In vitro</i> and <i>in vivo</i> study of the host responses induced by ethambutol resistant <i>Mycobacterium tuberculosis</i> .
3	Dr. Rajesh Bajpai	2009	Studies on Lichens of some monuments of Madhya Pradesh with reference to Biodeterioration and biomonitoring.
4	Dr. D.K Agrahari	2011	Factors affecting the dynamics of fungal population in a cropland ecosystem.
5	Dr. A. Shukla	2011	Soil-borne Fusaria of some leguminous crop field and their management.
6	Dr. Neetu Dwivedi	2014	Studies on fungal diversity in Guava field soil with reference to pathogenesis and its management
7	Dr. Ram Gopal	2015	Studies on PGPR with reference to nutrient acquisition, antifungal activity and plant growth promotion in soybean crop.
8	Dr. Enespa	2015	Studies on integrated management of soil Fusaria causing diseases on vegetable crops.
9	Dr. Sangeeta	2015	Antagonistic potentiality of some phialide bearing microfungi as biopesticides against some soil-borne fusaria.
10	Miss. Jyoti Srivastava	Continuing	Studies on the Integrated Management of Chickpea wilt caused by <i>Fusarium oxysporum</i> f. sp. <i>ciceri</i> .
11	Miss Namita Gupta	Continuing	Studies on lichens with reference to biomonitoring in and around some selected thermal power plants of Uttar Pradesh, India

**List of M.Sc. (F) students who have worked under my supervision for their
Dissertation work**

SL. No.	Year	Name of student	Topic of Research Work
1.	1999	Mr.Himanshu Chaturvedi	Studies on soil micro-flora and seed germination as influenced by tannery effluents
2.	1999	Mr.Akhilesh Chandra Maurya	Microbial population of decomposing litter of grassland ecosystem
3.	1999	Mr. Vinay Sahu	Effect of fly ash on the population dynamics of soil microorganisms and on standing crop
4.	1999	Mr.N.C.Pande	Studies on microbial population of a pond ecosystem
5.	2000	Mr. Bhupesh Gupta	Air mycoflora of Lucknow city at some polluted sites
6.	2000	Mr. Shuaib Ahmad	Studies on soil microflora of University Campus
7.	2000	Mr. Ramesh Singh	Microbial population of decomposing letter of <i>Eicchornia crassipes</i>
8.	2000	Mr. Neeraj Rawat	Studies on mycoflora of oil polluted soil
9.	2001	Mr.Dheerendra Kumar	Acid Rain: An Overview
10.	2001	Mr. R.D. Dwivedi	Population dynamics of microfungi of a cropland ecosystem
11.	2001	Mr.Amarendra Bahadur Srivastava	Potential use of VAM as biocontrol agent and biofertilizer for <i>Geranium</i> plant
12.	2002	Mr. Rajesh Bajpai	Pollution monitoring with the help of Lichen transplant technique in some residential sites of Lucknow
13.	2002	Km. Hemlata Bharati	Molecular assessment of genetic diversity between hybrid and species of <i>Papaver</i> genus through PCR technology
14.	2002	Mr. S. K. Kaushal	Influence of some microbes on the growth and oil yield of <i>Geranium</i> plant grown with different organic amendments
15.	2002	Mr. Jai P. Yadav	Effect of extract of some medicinal plants against a soil microbe - <i>Aspergillus niger</i>
16.	2002	Km.Anamika Srivastava	Toxicity of some homeo drugs against <i>Aspergillus flavus</i>
17.	2003	Km. Savita Singh	Screening and identification of aquatic plants suitable for phytoremediation of toxic metals
18.	2003	Mr. A. K. Rai	Toxicity of some natural pesticides against some soil microfungi
19.	2003	Km. Pratibha Solanki	Studies on soil fungal communities of two crop fields of economic importance
20.	2003	Km. Namrata Tripathi	Assessment of xenoestrogenic potential of endosulfan in immature female mice.
21.	2004	Mr. Shashikant	Isolation and genotyping of <i>Helicobacter pylori</i> from dental plaque: an extra-gastric reservoir
22.	2004	Mr.Abhinav Pandey	Assessment of bioremediation potential of chromate resistant bacteria isolated from tannery sludge.
23.	2004	Mr. D.D. Pandey	Validation of Comet assay in human lymphocytes using N-ethyl-N-Nitrosourea (ENU).
24.	2004	Mr. Sanjeev Kumar	Role of Mycorrhizae in nutrient transport ,plant health

			and soil organic amendments
25.	2004	Km. Anupa Ulhayan	Potentiality of antagonistic microbes against <i>Sclerotium rolfsii</i> sacc.
26.	2005	Km. Sumita Mishra	Toxicity studies on extracts of some medicinal plants against pathogenic microbes at different concentration in <i>in vitro</i> condition.
27.	2005	Mr. Rajeev K Mishra	Studies on rhizospheric fungi of Arhar crop and toxicity of essential oil of some medicinal plants against <i>Fusarium udum</i> .
28.	2005	Mr. Satish K Rawat	Culture filtrate toxicity of some fungal antagonists against <i>Fusarium solani</i> causing Damping-off in Egg plant.
29.	2006	Km. Nadia Khan	Toxicological studies on extract of some medicinal plants against <i>Fusarium solani</i> causing Damping -off in egg plant.
30.	2006	Km. Talvinder Kaur	Evaluation of toxicity of some medicinal plants against <i>Fusarium solani</i>
31.	2006	Mr. Abhishek Singh	Integrated management of <i>Fusarium solani</i> isolated from the rhizosphere of brinjal plant
32.	2007	Km. Anju Biruly	Studies on soil fungal communities of a fruit crop field.
33.	2007	Mr. Sameer Chandra	Evaluation of toxicity of some Medicinal plants against <i>Fusarium coeruleum</i>
34.	2008	Mr. Anand Gupta	Management of fresh water crowned river turtle <i>Hardella bthurjii</i> in national Chambal Sanctuary (Chambal river)
35.	2009	Mr. Vinod Kumar	Studies on toxicity of <i>Blatta orientalis</i> and <i>Thuja</i> against <i>Fusarium solani</i>
36.	2009	Km. Farah	Application of microbes in bioremediation technology
37.	2009	Km. Rachna Singh	Toxicity of extracts of two medicinal plants against fruit deteriorating fungi
38.	2009	Mr. Manoj Kumar	Studies on interaction between <i>Pseudomonas</i> and some soil-borne pathogenic fungi
39.	2009	Km. Uma Singh	Mycorrhizae in soil environment and their role in crop production and management of pathogenic fungi
40.	2010	Mr. Shaqib Rashid Fareedi	Effect of PSM on rhizospheric soil of chickpea.
41.	2010	Km. Saumya Singh	Effect of PGPR on nitrogen fixation biocontrol and crop yield with reference to soybean.
42.	2010	Mr. Rakesh Kumar Gupta	Liquid biofertilizer
43.	2010	Km. Deepika Kumari	Effect of PSM and siderophore production with reference to PGPR in garden pea.
44.	2010	Mr. Atteq Ahmad	Studies on effect on some heavy metal and pesticides on microbial growth.
45.	2010	Mr. Desh Ratna Dwivedi	Role of microbes in soil fertility.
46.	2010	Km. Smita Khattri	Effect of PSM on plant growth of soybean with reference to PGPR.
47.	2011	Km. Shobha Singh	Alcoholic beverage Production by anaerobic fermentation of different types of fruit juices using <i>Sacchromyces</i> sp.

48.	2011	Mr. Mahesh Kumar	Effectiveness of some microfung against <i>Fusarium oxysprum</i> f.sp. <i>lycopersici</i>
49.	2011	Km. Usha K.Verma	Effect of some heavy metals on seed germination of urd & soybean crops
50.	2012	Km. Reeta Verma	Study of aero microfungi of roadside trees of polluted and non polluted areas.
51.	2012	Mr. Amar Nath	Studies on Control of Some Phyllospheric mycoflora from polluted sites in Lucknow city.
52.	2012	Km. Ankita Tiwari	Effectiveness of essential oil of some medicinal plants against <i>Escherichia coli</i> and <i>Fusarium solani</i>
53.	2013	Km. Shipra Chandra	Soil-Borne Microfungi: Tool as Mycoremediation of heavy metals
54.	2013	Mr. Ambuj Mishra	Analysis of Cu, Cd and Fe Accumulation strength of <i>Pongamia pinnata</i> , A commercial plant on contaminated soil
55.	2013	Km. Rashmi Raghav	Biological control of <i>Fusarium udum</i> causing disease on <i>Cajanus cajan</i>
56.	2013	Km. Upma Yadav	Bioefficacy of essential oil and plant extracts of some medical plants against <i>Fusarium</i> spp.
57.	2014	Km. Deeksha Trivedi	Rhizospheric studies on <i>Linum usitatissimum</i> L. (linseed) crop field with reference to antibiosis
58.	2014	Km. Shashi	Analysis of heavy metals from tannery effluent, Unnao
59.	2014	Km. Jahnavi Trivedi	Efficacy of Homeopathic drugs (mother tincture) against <i>Aspergillus</i> spp.
60.	2014	Km. Bhavana Singh	Antifungal potential of <i>Trachyspermum ammi</i> essential oil against some soil-borne fungi
61.	2014	Km. Asha Rawat	Antifungal activity of <i>Trigonella foenum - graecum</i> essential oil and ethanolic extract against some soil-borne fungi
62.	2015	Km. Nivedita Gautam	Assessment of Biosorption of heavy metals-Copper, Cadmium and Mercury in the aquatic plants- <i>Trapa natans</i> and <i>Pistia stratiotes</i>
63.	2015	Mr. Raj Kumar Gautam	Efficacy of some selected homeo drugs (<i>Blatta orientalis</i> , <i>Thuja occidentalis</i> and <i>Dulcamara</i>) against <i>Aspergillus niger</i>