CURRICULUM VITAE

NAME: DR. SUBHASH CHANDRA TIWARI

OCCUPATION/ AFFILIATION

- Associate Professor and Head, Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas, Vishwavidyalaya (A Central University), Bilaspur-495 009, Chhattisgarh, India.
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  E-mail: sct_in@yahoo.com
- Nature of Work – Teaching, Research and Development

ADDRESS

- Permanent - C/O Shri B.P.Tiwari, Village-Kundra, P.O. Dakhalipur, District-Auraiya, U.P., Pin-206244, India
- Present – D-263, Rama Green City, Phase II, Khamtarai Road, Bilaspur-495006, Chhattisgarh, India

PERSONAL HISTORY

- Born on September 01.9.1961 at Kundra, Auraiya, UP, India
- Citizenship - Indian by birth; Category - Unreserved
- Sex - Male; Marital status - Married

ACADEMIC QUALIFICATIONS

- **B. Sc.** from Kanpur University, Kanpur with 1st division (1980)
- **M. Sc.** (Botany) from Kanpur University, Kanpur with 1st division (1983)
- **M. Phil.** Course work from North-Eastern Hill University, Shillong with 1st division (1986)
- **Ph. D.** in Botany (Plant-Microbe-Interactions) from North-Eastern Hill University, Shillong (1988)

RESEARCH EXPERIENCE

- Total 34 years

ADMINISTRATIVE EXPERIENCE

At North Eastern Regional Institute of Science & Technology, Nirjuli, Itanagar, Arunachal Pradesh, India

- As faculty representative in Library Advisory Committee
- As warden Boy's hostel
- As in-charge Guest House
- Councilor, Training & Placement Cell

At Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, India

- Member, Academic Council, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Head, Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Chairman, Board of Studies, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Chairman, DRC, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Member, CMCC, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Member, Central Store Purchase Committee, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Nodal Officer, National Water Award, 2019, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Coordinator, Equal Opportunity Cell, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India
- Coordinator, Refresher Course, UGC, HRDC, Guru Ghasidas, Vishwavidyalaya, Bilaspur, Chhattisgarh, India

TEACHING EXPERIENCE

- 26 years
- February 01, 1991 to September 05, 1993 as a Post-Doctoral Fellow (Research Associate–UGC & CSIR) in the Department of Botany, North-Eastern Hill University, Shillong (Taught practical classes of Microbiology, Microbial Ecology, Mycology & Plant Pathology of M.Sc. Botany)
- September 06, 1993 to January 23, 1996 as a Pool Officer (CSIR) in the Department of Forestry, North Eastern Regional Institute of Science & Technology, Nirjuli (Itanagar),

Arunachal Pradesh (Taught classes of Botany, Life Science, Microbiology, Plant Pathology, Plant Physiology, Biotechnology, Soil Science, Soil Fertility and Silviculture)

- January 24, 1996 till January 01, 2000 as a Lecturer and from January 1, 2000 to November 29, 2005 as Senior Lecturer in the Department of Forestry, North-Eastern Regional Institute of Science & Technology, Nirjuli (Itanagar), Arunachal Pradesh. (Taught classes of Botany, Life Science, Microbiology, Plant Pathology, Biotechnology, Soil Science and Soil Fertility during different semesters). Also taught Environmental Biotechnology course to M. Tech. students of Environmental Science & Engineering for one semester (August-December, 1996)
- Since November 30, 2005 as a Reader/Associate Professor in Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh (Teaching courses on Soil Science, Carbon forestry, Forest soil and watershed management, Forest Management, Forest Resources Utilization, Production and Financial management of Nursery and Plantation forestry to M.Sc. Forestry & B.Sc. Forestry students)

AREAS OF SPECIALIZATION

- Soil Science, Ethnoforestry & Value addition of Forest products (Natural dyes)

SPONSORED RESEARCH AND DEVELOPMENTAL ACTIVITIES

- **Completed** a CSIR Scheme entitled *"Assessment and monitoring of soil degradation in humid tropics of Arunachal Pradesh using biological and biochemical techniques"* in the year 1999. Fund received **RS. 5,00,000.**
- **Completed** a Grant-in Aid proposal received from Indian Council of Forestry Research and Education (ICFRE), Dehra Dun in the year 2000 for strengthening the research and teaching facilities in Forestry. Fund received **RS. 10, 98,000.**
- **Completed a DST Project as Principal Investigator** on *"Evaluation and selection of efficient strains of Frankia for* Seabuckthorn *(Hippophae* spp.) *growing in eastern Himalayas* in the year 2004. Fund received **RS. 17, 06,800**.

- **Completed a DST project as Coordinator of Indo-Polish Programme** of cooperation in Science & Technology on "Wastewater flooding and its consequences on microbial communities and their activities in rhizosphere of trees" in the year 2004. Fund received **RS. 3,00,000**.
- **Completed ICAR (NBPGR) project as a Co-Investigator** on setting up a Bamboo Arboretum in the year 2003. Fund received **Rs. 5, 65,000**.

- **Completed** sponsored research project entitled, "Genomic and Proteomic studies of *Aspergillus oryzae* and *Aspergillus flavus* exhibiting microbial lipase enzyme production". A project funded by MHRD, New Delhi. Fund received **RS11, 00,000.**

- **Completed a DBT project** entitled, "Documentation, study and restoration of traditional dyes of Arunachal Pradesh and elucidating the structures of the colorants", Fund received **RS. 23, 41, 200.** (Co-Investidator, Dr. Padma Wankar, IIT, Kanpur).
- **ICAR project** entitled "Development of Bio-diversity inventories of underutilized indigenous food crops at Arunachal Pradesh, North Eastern India", Fund received **RS. 9, 51,500. This project was not taken up by me because of change of my job from Itanagar to Bilaspur.**

DOCTORAL THESIS SUPERVISED

Studies on microbial communities and their activities in degraded and undegraded forest soils of Arunachal Pradesh, Mr. S. Suresh Kumar Singh (Jointly with Dr. M.S. Dkhar) North Eastern Hill University, Shillong, 2003.

Isolation, identification and characterization of *Frankia* strains associated with seabuckthorn (*Hippophae* sp.)- Mr. Hridip Kumar Sarma (Jointly with Dr. A.K. Mishra), Rajiv Gandhi University, Itanagar, Arunachal Pradesh, 2005.

Eco-biological studies of seabuckthorn symbiosis- Mr. Bipin Kumar Sharma (Jointly with Dr. A.K. Shukla), Rajiv Gandhi University, Itanagar, Arunachal Pradesh, 2007.

Natural dye yielding plant resources and indigenous knowledge systems of dye preparation associated with the ethnic tribes of Arunachal Pradesh- Mr. Debojit Mhanta (Jointly with Dr. A.K. Das), Rajiv Gandhi University, Itanagar, Arunachal Pradesh, 2009.

Lichens as indicators of forest status in Achanakmar-Amarkantak Biosphere Reserve, Guru Ghasidas Vishwavidyalaya, Bilaspur, 2008, Arvind Prajapati

Extraction pattern of non-timber forest products and its effect on regeneration of important Tree species in Achanakmar-Amarkantak Biosphere, Guru Ghasidas Vishwavidyalaya, Bilaspur, 2008, Shabbir Ahmad Bhatt

Study of Soil Organic Carbon Stocks under different land use land cover in Bilaspur District of Achanakmar Amarkantak Biosphere reserve, Guru Ghasidas Vishwavidyalaya, Bilaspur, 2016, Sheikh Iqbal, Chattisgarh

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED

- International (Abroad 03)
- National (India 16)

- 3rd International Conference on Root Ecology and its Practical Application held at University of Bodenkultur, Vienna, Austria during September 2-6, 1991.
- National Workshop on Experience Sharing among NGOs/VAs held at North Eastern Hill University, Shillong during 21-27 February, 1994.
- Entrepreneurial Orientation Programme organized at Noth Eastern Regional Institute of Science & Technology, Nirjuli, Itanagar, and Arunachal Pradesh during January 28-29, 1996.
- IUFRO Symposium on Innovations in Forest Tree Seed Science and Nursery Technology held at Pt. Ravishankar Shukla University, Raipur during November 22-25, 1997.
- National symposium on Microbes in Plant Improvement and Environmental Protection held at University of Delhi, Delhi during December 23-24, 1997.
- National workshop of G B. Pant Institute of Himalayan Environment & Development on Perspective for Planning and Development in North East India (Identifying R & D Priorities) held at NERIST, Nirjuli (Itanagar) during April 27-29, 1998.
- National seminar on Role of Microbes in Environmental protection and Rural Development held at Botany Department, North-Eastern Hill University, Shillong during October 23-25, 1998.
- National conference on Mycorrhiza held at Institute of Microbiology and Biotechnology, Brakatulla University, Bhopal during March 5-7, 1999.
- National workshop on Arunachal Pradesh: Environmental Planning & Sustainable Development-Opportunities and Challenges held at Itanagar during December 16-19, 1999.
- International Workshop on Seabuckthorn, India International Centre, New Delhi during February 18-21, 2001.
- Tropical Soil Biology and Fertility Programme (TSBF) Workshop, JNU, New Delhi during February 21-23, 2001.
- International Conference on New Horizons in Biotechnology, RRL CSIR, Trivandrum during April 18-21, 2001.
- International Conference on Sustainable Agriculture, Water Resources development & Earth Care Policies, Bhoovigyan Vikas Foundation, New Delhi, Dec. 18-20, 2002.
- National Workshop on Biodiversity Research Challenges, Strategies and Future Prospects held at Arunachal University, Itanagar, and Arunachal Pradesh during November 26-27, 2003.
- National seminar on Recent Advances in Forest Sciences, Guru Ghasidas University,Bilaspur, Chhattisgarh, India, January 30-31, 2006.

- National seminar on medicinal, aromatic and spices plants perspective and potential, TCB College of Agriculture, Indira Gandhi Krishi Vishwavidyalaya, Bilapur, Chhattisgarh, December 18-19, 2006.
- 18th Common wealth Forestry Conference, Edinburgh, UK, June 26-July 02, 2010
- International Symposium and exhibition on natural dyes (ISEND, 2011, Europe) held at La Rochelle, France, April 25-30, 2011
- National Conference on Climate Smart Agriculture, College of PG studies, Central Agricultural University, Barapani, Shillong, 2018

CONFERENCES/SEMINARS ORGANIZED AS CO-CONVENER

- National seminar on Recent Advances in Forest Sciences, Guru Ghasidas University, Bilaspur, Chhattisgarh, India, January 30-31, 2006.
- National seminar on Forest and Forestry Techniques, Guru Ghasidas University, Bilaspur, Chhattisgarh, India, March 23-24, 2007.
- National seminar on Forest and Environment in India, Guru Ghasidas University, Bilaspur, Chhattisgarh, India, February 18-19, 2008.

VISITS ABROAD

- Visited University of Bodekultur, Vienna, Austria from September 2-6, 1991 to attend the 3rd ISRR conference on "*Root Ecology and its Practical Application".*
- Visited Institute of Agrophysics, Lublin, Poland during June1- August 31, 2000 under the scientific collaborative programme of Indian National Science Academy, New Delhi and Polish Academy of Science, Warsaw. A numbers of institutions namely; Catholic University, Technical University and UMCS, Lublin were also visited during this visit.
- Visited Institute of Agrophysics, Lublin, Poland during June 9- August 8, 2003 under the framework of Indo-Polish Cooperation in Science & Technology to investigate the effects of wastewater flooding on microbial activities.
- Visited Institute of Botany, Jagiellnian University, Cracow during INSA visit to Poland.
- Visited Forest Research Institute, Department of Forest and Phytopathology, Warsaw during INSA and PAS, visit to Poland.
- Visited Napier University and Edinburgh University, Edinburgh, UK during 18th Commonwealth Forestry Conference, 2010

FELLOWSHIPS

- Selected for Indo-polish Programme of Cooperation in science & Technology to visit Institute of Agrophysics, Lublin, Poland during June 9-August 8, 2003.
- Nominated for INSA Exchange Programme to visit Poland during June 1-August 31, 2000.
- SERC Fellowship (1996-97) of the Department of Science and Technology (DST) to work on microbial symbiosis.
- Pool Officer of the Council of Scientific & Industrial Research (CSIR), New Delhi form September 06, 1993 to January 23, 1996.
- Research Associate of the Council for Scientific & Industrial Research (CSIR), New Delhi from February 1, 1991 to September 05, 1993.
- Senior Research Fellow of the Council of Scientific & Industrial Research (CSIR), New Delhi from March 01, 1987 to January 31, 1991.
- Junior Research Fellow of the Council of Scientific & Industrial Research (CSIR), New Delhi from April 25, 1985 to February 27, 1987.

EMPLOYMENT

- Lecturer (Assistant Professor) in Forestry at North-Eastern Regional Institute of Science & Technology (NERIST), Nirjuli (Itanagar), Arunachal Pradesh w.e.f. Jan. 24, 1996 to Jan. 24, 2000 in the pay scale of Rs.8000-275-13,500/-
- Senior Lecturer in Forestry at North-Eastern Regional Institute of Science & Technology (NERIST), Nirjuli (Itanagar), Arunachal Pradesh since Jan. 01, 2000 in the pay scale of RS 10,000-325-15,200/-; Basic pay: RS11,950/=
- Reader/Associate Professor in Forestry, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, since November 30, 2005

MEMBERSHIPS

- International Society for Conservation of Natural Resources, Varanasi, India (Life Member)
- Biotech Research Society of India (Life Member)
- International Society of Root Research, Vienna, Austria (Active Member)
- Indian Society of Soil Science, New Delhi, India (Life Member)
- Society of Tropical Forestry Scientists, Jabalpur, India (Active Member)
- Indian Society for Tree Scientists, Solan, India (Life Member)
- Indian Society of Soil Biology & Ecology, Bangalore, India (Life Member)
- Indian Academy of Sciences, Bangalore, India (Active Member)
- Global Science Publications, Karad, India (Active Member)
- International Society for Tropical Ecology, Vanarasi, India (Active Member)
- Mycorrhiza Network, New Delhi, India (Active Member)

- Society for Environmental Communications, New Delhi, India (Active Member)
- Sikkim Science Society, Gangtok, Sikkim, India (Active Member)
- Enviro Media, Karad, India (Active Member)

PROFESSIONAL RECOGNITION

- Fellow of International Society for Conservation Natural Resources (FNRS), Varanasi.
- Fellow of Biotech Research Society (FBRS) of India
- Recognized as TSBF Scientist under Tropical Soil Biology & Fertility Programme of UNESCO for South Asian Regional Network countries

REFEREE/ REVIEWER OF INTERNATIONAL AND NATIONAL JOURNALS

- Reviewer of Current Science Journal, Bangalore, India
- Reviewer of Indian Journal of Indigenous Knowledge System, New Delhi, India
- Reviewer of International Journal of Soil Science and Environmental Management
- Reviewer of International Journal of Plant Sciences

LIST OF PUBLICATIONS

(Dr. S.C. Tiwari)

BOOKS PUBLISHED

Natural Resources' Conservation and Management for Mountain Development, Editors **S.C. Tiwari** and P.P.Dabral, International Book Distributors and Publishers, Dehra Dun, 2000, 604 pp.

Microbial Diversity: Status and Potential Applications, Editors **S.C. Tiwari** and G.D.Sharma, Scientific Book Centre and Publishers, Guwahati, 2002, 235 pp.

Ethnoforestry: The Future of Indian Forestry, Editor **S.C.Tiwari**, Bishen Singh and mahendra Pal Singh Publisher, Dehra Dun, 2010, 524pp.

TECHNICAL REPORTS

Assessment and monitoring of soil degradation in humid tropics of Arunachal Pradesh using biological and biochemical techniques- Submitted to CSIR, New Delhi

Evaluation and selection of efficient strains of Frankia for Seabuckthorn (*Hippophae* spp.) growing in eastern Himalayas-Submitted to DST, New Delhi.

Genomic and proteomic studies of *Aspergillus oryzae* and *Aspergillus flavus* exihibiting microbial lipase enzyme production-Submitted to MHRD, New Delhi.

Documentation, study and restoration of traditional dyes of Arunachal Pradesh and elucidating the structures of the colorants-Submitted to DBT, New Delhi.

RESEARCH PAPERS IN REFERRED NATIONAL AND INTERNATIONAL JOURNALS

Tiwari S.C. and Iqbal Sheikh, 2016. Soil organic carbon pool under different land uses in Achanakmar Amarkantak Biosphere Reserve of Chhattisgarh, India, *Current Science* ,Vol. 110 , No. 5, 10 .March pp 771- 773.

Iqbal Sheikh and **Tiwari S.C.** 2016 Chemical Properties of Soils in Relation to Different Forest Vegetation Covers of Achanakmar Chhattisgarh, India *Indian Journal of Ecology (2016) 43 (Special Issue-2): 829-831*

Tiwari S.C. and Prajapati Arvind 2015. Lichen as Indicator of forest health status in Achanakamr Amarkantak Biosphere reserve. *International Journal of Research studies in Bioscience.* Vol 3, Issue 4 , April 2015, pp 70-79 .

Tiwari. S.C.and Iqbal Sheikh 2015., Sequestration of Soil Organic Carbon under different natural forest Vegetation Covers in Achanakmar, Chhattisgarh. *International Journal of Science and Research.*, Vol, 2 No 2 pp -57-62.

Iqbal Sheikh and **Tiwari. S.C.** 2015., Altitudinal variation of Soil Organic Carbon stock in Achanakmar., *International journal of Current Research.* Vol, 7 Issue, 05, pp, 15885-15890.

Iqbal Sheikh and **Tiwari. S.C.** 2015., Sequestration of Soil-Organic Carbon Pool under Different Land Uses in Bilaspur district of Achanakmar, Chhattisgarh., *International journal of Science and Research.* Vol, 4, Issue 7 pp 1920 -1924.

Prajapati Arvind and **Tiwari S.C.** 2013., Diversity and Distribution of Epiphytic lichens in Achanakmar Tiger Reserve, Chhattisgarh , *Indian Forester*, Vol. 139 Issue 6 pp 538-542.

Tiwari S.C.,and Tungam Angu 2013., Effect of Nitrogen and Carbon Sources and Lipase Production by ASPERGILLUS Strains., *National Journal of Life Science.,* Vol. 10 (2) 235-238.

Tiwari S.C. 2013., Metagenomics : A review on Molecular Approach for Exploring Microbial Diversity. *Life Science Bulletin*, Vol. 10(2), 275-278

Tiwari S.C.and Prajapati Arvind 2012., Enumeration of Lichen species on some native and Introduced species in Amarkantak forest., *Indian Journal of Tropical Biodiversity* ., 20(1) pp 71-76 .,

Bhat Shabir Ahmad and **Tiwari S.C.** 2012., Regeneration status of Important Tree Species In Achanakmar Amarkantak Biosphere Reserve due to Extraction of Selected non Timber Forest Products., *Indian forester* ., 138 (6)., 535-540.,

Bhat Shabir Ahmad and **Tiwari Subhash Chandra** 2011., Indigenous knowledge of community of Achanakmar Amarkantak Biosphere Reserve in Utilization, Conservation and sustainability of NTFP in Chhattisgarh (India). *Indian Forester*. Vol. 137 No. 11 1313-1320.

Tiwari S.C.and Bhat Shabir Ahmad .,2011, NWFP Certification: Challenging Face in Forestry., *Journal of Non Timber Forest Products.,* Vol. 18 (1) PP 1-8

Tiwari S.C., Supong Sashi and Lalit Acharya, 2010. Agrobiodiversity potential of Nagaland state, North-Eastern India. *Indian Journal of Traditional Knowledge*, 9(2):350-354.

Padma S.Vankar, Rakhi Shankar, Shalini Dixit, Debajit Mahanta and **Tiwari, S.C**.2009 Chemical characterisation of extract derived from Daphne papyracea and sonicator dyeing of cotton, silk and wool with the extract. *Pigment and Resin Technology* (U.K.):38(3):181-187.

B.K.Sharma, H.K.Sarma, A.K.Shukla and **Tiwari, S.C., 2009**. Impact on seabuckthorn stands on rhizosperic and soil microbial population. *Indian Journal of Forestry*, 32(2):263-268.

Padma S Vankar, Rakhi Shanker, Debajit Mahanta and **S.C.Tiwari**, 2008. Ecofriendly sonicator dyeing of cotton with *Rubia cordifolia* Linn. using biomordant. *Dyes and Pigments* (U.K.): 76:207-212.

Padma S.Vankar, Rakhi Shankar, Shalini Dixit, Debajit Mahanta and **Tiwari, S.C**.2008. Sonicator dyeing of cotton with the leaves extract of *Acer pectinatum* Wallich. *Pigment and Resin Technology* (U.K.): 37 (5):308-313.

Padma S.Vankar, Rakhi Shankar, Shalini Dixit, Debajit Mahanta and **Tiwari, S.C**.2008 Sonicator dyeing of modified cotton, wool and silk with *Mahonia nepalensis* DC and identification of colorant in Mahonia. *Industrial Crops and Products* (U.K.): 27(3): 371-379.

Padma S.Vankar, Rakhi Shankar, Debajit Mahanta and **Tiwari, S.C**.2008.Sonicator dyeing of natural polymers with *Symplocos spicata* by metal chelation. *Fibres and Polymers* (Korea): 9(2): 121-127.

Padma S.Vankar, Rakhi Shankar, Shalini Dixit, Debajit Mahanta and **Tiwari, S.C**.2008 Sonicator dyeing of cotton with the leaves extract *Beilschmiedia fagifolia*. *Colourage* (India): Vol LV No.11, 82-86.

Tiwari S.C. and Ajay Bharat 2008. Natural dye yielding plants and indigenous knowledge of dye prepration in Achanakmar-Amarkantak Biosphere Reserve, Central India. *Natural Product Radiance* (India): 7(1): 82-87.

Tiwari, S.C., Pasztelan, M., Brzezinska, M. and Stepniewska, Z., 2008. Variation in phosphatase enzyme activitiy in a Eutric Histosol irrigated with pre-treated wastewater and normal tap water. *Journal of the Indian Society of Soil Science,* 56(2): 233-235.

Tiwari, S.C., Sharma, B.K., Sarma ,H.K., Singh, N.D. 2008. Influence of organic manure and NPK fertilizers on growth performance of cowpea (*Vigna chinensis*) under green house conditions. *Life science Bulletin* (India): 5(2):215-218.

Tiwari, S.C., and Mubashir Dewani, 2008. Studies on ecological degradation of Dal lake. *Eco-Chronicle* (India): 3(1):15-20.

Padma S.Vankar, Debajit Mahanta and **Tiwari, S.C**.2007. Characterization of colorants from leaves of *Bischofia javanica*. *International Dyer* (U.K.): April, 2007:31-37.

Tiwari S.C. and Debajit Mahanta 2007 Ethnological observations on fermented food products of certain tribes of Arunachal Pradesh. *Indian Journal of Traditional Knowledge* (India): 6(1):106-110.

Bipin Kumar Sharma, Hridip K. Sarma and **Tiwari S.C.,** 2007. Variation in some Physico-chemical properties of soil under natural stands of Seabuckthorn in Sikkim. *Journal of Indian Society of Soil Science* (India): 55(2):215-217.

Brzezinska, M., **Tiwari, S.C**., Stepniewska, Z., Nosalewicz, M., Bennicelli, R.P. and Samborska, A. 2006. Variation of enzyme activities, CO_2 evolution and redox potential in an Eutric Histosol irrigated with wastewater and tap water. *Biology & Fertility of Soils* (Germany): 43:131-135.

Tiwari S.C., B.K.Sharma, D.Lyngdoh and H.Larchhuakmawia**,** 2005. Studies on soil properties under three different ages of tea (*Thea assamica*) plantations in Assam, North Eastern India. *Journal Indian Society of Soil Science* (India): 53 (2): 260-264.

Hridip Kumar Sarma, Bipin Kumar Sharma, Satya Shaila Singh, **S.C.Tiwari** and Arun Kumar Mishra,. 2006. Polymorphic distribution and phenotypic diversity of *Frankia* strains in nodule lobes of actinorhizal plant (*Hippophae salicifolia* D.Don). *Current Science* (India): 90(11):1516-1521.

Hridip Kumar Sarma, Bipinn Kumar Sharma and **Tiwari, S.C.** 2005. Truncated hemoglobins.: A single structural motif with versatile functions in bacteria, plants and unicellular eukaryotes. Symbiosis (Israel) 39: 151-158.

Victoria Huidrom, D.N.Kaul and **Tiwari, S.C.,** 2005. Studies on soil properties under tea clones in Assam, North Eastern India. *Journal of Hill research* (India): 18(1):40-42.

Debajit Mahanta and **Tiwari, S.C.,** 2004. Natural dye yielding plants and indigenous knowledge on dye preparation in Arunachal Pradesh, North Eastern India. *Current Science*: (India) 88 (9):1474-1480.

Singh, S.S. and **Tiwari, S.C.** 2003. Species abundance and diversity of vesicular-arbuscular mycorrhizal fungi (VAM) in disturbed and undisturbed humid tropical soils of Arunachal Pradesh, North East India. *Tropical Ecology* (India): 44 (2): 205-213.

Sharma, Hridip Kumar, Bipin Kumar Sarma and **Tiwari, S.C.,** 2003. A novel calcimycine antibiotic from Gram-positive actinomycete *Frankia* microsymbiont. *Current Science* (India): 85 (10): 1401-1403.

Singh, S.S., **S.C.Tiwari**, M.S. Dkhar and R.R. Mishra 2002. Soil degradation affects microbial biomass carbon and dehydrogenase activity in humid tropical hilly forest soils.

Asian Journal of Microbiology, Biotechnology and Environmental Sciences (India) 4(1): 143-148.

Singh, N.D., S.S. Singh and **Tiwari, S.C**. 2002. Effect of physico-chemical treatments on the germination efficiency of seabuckthorn (Hippophae salcifolia D.Don) under laboratory conditions. *Environmental Biology and Conservation* (India): 7: 21-24.

Tiwari, S.C. and **Singh**, S.S. 2001. Modern techniques in microbial diversity research. *Arunachal University Research Journal* (India) 4 (1): 27-34.

Tiwari, S.C. Das, J.K., L. Bebija and S.S. Singh 2001. *Phoebe goalparensis* (Bonsum)*:*A potential species for soil amelioration. *Arunachal Forest News* (India): 17(1 & 2):1-7.

Singh,E .N., Angila, N, Singh, S.S. and **Tiwari, S.C.** 2001. Influence of *Tectona grandis* and *Duabanga grandiflora* plantations on soil properties in humid tropics of Arunachal Pradesh, North Eastern India. *Indian Journal of Forestry* (India): 24(2): 135-142.

Singh, S.S. and **Tiwari, S.C.** 2001. Evaluation of soil degradation using physico-chemical, biochemical and biological parameters in humid tropics of Arunachal Pradesh. *Annals of Forestry* (India): 9(2): 287-292.

Tiwari, S.C. 2001. Vesicular-arbuscular mycorrhizal association of tree species in humid tropical forests of Arunachal Pradesh. *Ecology Environment and Conservation* (India) 7(1): 21-23.

Swu, O. B. and **Tiwari, S.C.** 2000. Mushroom: A promising crop for nutritional security and employment generation for indigenous people of Nagaland. *Journal of North Eastern Council* (India): 20(3): 37-48.

Singh, S.S. and **Tiwari, S.C.** 2000. Modified wet sieving and decanting technique for rapid assessment of VAM fungi. *Mycorrhiza News* (India): 12(4):12-13.

Tiwari, S.C. and G.D. Sharma. 1998. Altitudinal variation in dehydrogenase and urease activity and microbial population in soils of Eastern Himalayan highlands. *Journal of Hill Research* (India): 11(1): 22-25.

Tiwari, S.C. 1998. Influence of *Casuarina equisetifolia*'s plantation on soil properties raised in Arunachal Pradesh. *Mycorrhiza News* (India*)* 10 (2): 13-14.

Tiwari, S.C. 1996. Distribution of dehydrogenase, urease and phosphatase enzymes in sandy loam soil profile. *Journal of Hill Research* (India) 9(2): 321-324.

Tiwari, S.C. 1996 Effect of organic manure and NPK fertilization on enzyme activities and microbial population in an oxisol. *Journal of Hill research* (India*)* 9(2): 334-340.

Tiwari, S.C.1996. Relationship between enzyme activities, microbial population and soil respiration in some Indian soil. *Journal of Soil Biology and Ecology* (Bangalore) 16(1):

Tiwari, S.C., and R.R.Mishra 1995. Seasonal variation in dehydrogenase and urease activity in hilly soils under grassland and forests. *Journal of Indian Society of Soil Science* (India) 43 (4): 689-690.

Tiwari, S.C. and R.R. Mishra 1995. Effects of *Boletus edulis, Laccaria laccata, Pisolithus tinctorius* and *Rhizopogon luteolus* on the growth performance of *Pinus kesiya* Royle ex. Gordon in north-east India. *Indian Journal of Forestry* (India) 18 (4): 293-300.

Tiwari,S.C. and R.R. Mishra 1995. Earthworm density, biomass and production of casts in pineapple orchard soil. *Pedobiologia* (Germany) 39(5): 434-441.

Tiwari, S.C. and R.R.Mishra 1995. Nodulation status of *Alnus nepalensis* seedlings in pure stands. *Journal of Tree Sciences* (India*)* 14(2): 49-54.

Tiwari,S.C. , B. K.Tiwari and R.R.Mishra 1994. Succession of microfungi associated with decomposing litters of pineapple (*Ananas comosus* L.) *Pedobiologia* (Germany) 38:85-92.

Tiwari, S.C. 1994.Prospects of pineapple (*Ananas comosus* L.) cultivation in Meghalaya. *Indian Biologist* (India) XXVI (1): 19-24.

Tiwari, S.C. and R.R. Mishra 1994. Seasonal variation in the microfungal communities of pineapple (Ananas comosus L.) plantation soil. *Journal soil Biology and Ecology* (India) 14(1):17-24.

Tiwari, S.C.and R.R. Mishra 1993. Fungal abundance and diversity in earthworm casts and uningested soil. *Biology and Fertility of Soils* (Germany) 16:131-134.

Tiwari,S.C. 1993. Effect of organic manure and NPK fertilization on earthworm activity in an oxisol. *Biology and Fertility of Soils* (Germany) 16:293-295.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1992. Relationship between seasonal population abundance of earthworm and abiotic factors in pineapple plantations. *Proceedings of Indian National Academy of Science* (India). 62(B) II: 223-226.

Tiwari, S.C., B.K.Tiwari and R.R.Mishra 1992. Variation in some physico-chemical characteristics of pineapple orchard soils of north-east India. *Journal Indian Society of Soil Science* (India) 40:204-208.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1991. Seasonal variation of microfungal population in pineapple (*Ananas comosus* L) orchard soil. *Acta Botanica Indica* (India) 19: 55-61.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1990. Microfungal species associated with the gut content and casts of *Drawida assamensis* Gates. *Proceeding of Indian Academy of Science* (India) 100(5): 376-379.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1989. Microbial population, enzyme activities and Nitrogen-phosphorous-potassium enrichment in earthworm casts and in surrounding soil of a pineapple plantations. *Biology and Fertility of Soils* (Germany). 8: 178-182.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1989. Microbial decomposition of pineapple (*Ananas comosus* L.) Litters. *Acta Oecologica/Oecologia Plantarum* (France) 19(3): 329-339.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1989. Microbial community, enzyme activity and CO_2 evolution in pineapple orchard soil. *Tropical Ecology* (India) 30(2): 265-273.

Tiwari,S.C., B.K.Tiwari and R.R. Mishra 1988. Enzyme activities in soils: Effect of leaching, ignition, fumigation and autoclaving. *Soil Biology and Biochemistry* (U.K.) 20: 583-585.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1988. Phosphatase activity and microbial population in pineapple (*Ananas comosus* L.) orchard soils. *Journal of Soil Biology and Ecology* (India). 8(2): 83-89.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1987. The influence of moisture regimes on the population and activity of microorganisms. *Plant and Soil* (The Netherlands).101: 133-136.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1987. Temporal and depth-wise variations in dehydrogenase and urease activities and bacterial population in pineapple plantation Soils. *Proceeding of Indian National Science Academy* (India) 53B: 173-176.

Tiwari, S.C., B.K.Tiwari and R.R. Mishra 1986. Temporal and depth-wise variation in CO_2 evolution and microbial population in pineapple plantation soils. *Journal of Soil Biology and Ecology* (India) 6(2): 67-76.

BOOK CHAPTERS/ PAPERS IN SEMINAR/CONFERENCES PROCEEDINGS

Sheikh Iqbal and Tiwari SC 2018, Role of forest in carbon sequestration and sustainable development. In Forest, climate change and biodiversity, Kalyan publisher, India, pp 184-196

Debajit Mahanta and **Tiwari S.C.** 2010. Indigenous people and their knowledge system: An ethnological study on Apatanis in Arunachal Pradersh, India. In Sustainable Development, (Editor R.N.Pati), USA .

Debajit Mahanta and **Tiwari, S.C**. 2010. Natural dyes: Present and future. In Ethnoforestry (Editor S.C. Tiwari), Bishen Singh and Mahendra Pal Singh Publishers, Dehra Dun (India): 263-291.

Ajay Bharat and **Tiwari, S.C.** 2009. In Non wood forestry products of Chhattisgarh: Present and future scope for commercial exploitation. In Ethnoforestry (Editor S.C. Tiwari), Bishen Singh and Mahendra Pal Singh Publishers, Dehra Dun (India): 397-436.

Bipin Kumar Sharma, Hridip Kumar Sarma, A. K. Shukla and **Tiwari S. C.** 2009. Seabuckthorn community structure, *Frankia* diversity and nitrogen fixation in the zones of North Sikkim. In Seabuckthorn: The golden bush (Editor S.K. Dwivedi, T. Parimelazhagan, S.B.Singh and Z.Ahmed), Satish Serial Publishing House, Delhi:225-256 pp.

Tiwari, S.C., Debajit Mahanta and Padma S. Vankar, 2007. Indigenous knowledge and modern technology of natural dye preparation. In Concepts in forestry research (Editor N.P.Todaria, B.P.Chouhan and D.S.Chouhan), International Book Distributors and Publishers, Dehra Dun, 361-378.

Tiwari, S.C. and S.S.Singh, 2003. Impacts on vesicular-arbuscular mycorrhizal (VAM) fungi diversity associated with degradation of soils in humid tropical forests. In: New Horizons in Biotechnology (Editors S. Roussos, C.R. Soccol and C.Augur), Kluwer Academic Publishers (The Netherlands), pp 437-444.

Tiwari, S.C., Prabal Sen and Hridip Kumar Sarma, 2002. Diversity of *Frankia*-actinomycetes among non-leguminous plants. In Book on Microbial Diversity: Status and Potential Applications, Editors S.C.Tiwari and G.D.Sharma, Scientific Book Centre, Guwahati, pp, 36-53

Tiwari, S.C. 2001. Changes in soil properties following forest degradation in North Eastern India. In: Soil Biodiversity, Ecological processes and Landscape Management (Editors P. S.Ramakrishnan, K.G.Saxena, M.J. Swift, K.S.Rao, R.K.Maikhuri), Oxford & IBH Publishing Co., Pvt. Ltd., New Delhi, pp 77-86.

Das, J.K., Bebija, L., Singh, S.S. and **Tiwari, S.C.** 2000. Potential forest tree species for amelioration of soil properties in humid tropics. In Natural Resources, Conservation and Management for Mountain Development (Editors S.C. Tiwari and P.P. Dabral), International Book Distributors and Publishers, Dehra Dun, 371-381 pp.

Tiwari, S.C.1999. Impact of soil texture coupled with different loads of nodule inoculum on growth performance and nodulation of *Casuarina equisetifolia* seedlings. In: IUFRO proceedings on seed and nursery technology of forest trees. Editors G.W. Edwards and S.C.Naithani, New Age Intrenational (P) Ltd., New Delhi, 251-254.

Tiwari, S.C. and Singh, S.S. 1998. Influence of *Glomus mosseae* and *Frankia* on two specis in forest nursery. In: *Recent Trends of Microbial Ecology* (Eds. Bharat Rai and M.S. Dkhar), The Computer Composers, Allahabad, 326-334 pp.

Tiwari, S.C. 1995. Environmental pollution. In: *Reading materials on Foundation Course Environment Education* (Edited by Ajay Rastogi, WWF, India), of Arunachal University, Itanagar. pp 41-50.

Tiwari, S.C. 1995. *Alnus nepalensis* D.Don biomass production and growth response to inoculation with *Frankia* and vesicular arbuscular mycorrhizae. In: Proceedings 3rd National Conference on Mycorrhizae: Biofertilizers for the future. Pp-184-188, TERI, New Delhi.

Tiwari,S.C. and R.R.Mishra 1992. Seasonal variation of root nodule biomass and nitrogenase activity of *Alnus nepalensis* D.Don plantation stands in the East Khasi Hills of North Eastern India. In: Proceedings 3rd International Society of Root Research Symposium on Root Ecology and its Practical Application. L.Kutschera, E.Hubl, E.Lichtenegger, H. Persson. M.Sabotik (Editors) pp-539-542, Verein fur Wruzelforschug, A-9020, Klagenfurt, Austria.

POPULAR ARTICLES

Tiwari, S.C. and Singh, S.S. 1998. Microbial diversity and its importance. *Employment News*, dated Jan. 10-16, 1998.

Tiwari, S.C.1997. Adequate nitrogen supply- vital for efficient forest growth. *Arunachal Times*, dated Feb.8, 1997.

Tiwari, S.C. 1995. Alder -a multiple use tree for the eastern Himalayas. *Arunachal Times*, dated Sept. 22 & 23, 1995.

Tiwari, S.C. 1995. Mycorrhizae Bio-fertilizers for the future. Arunachal Times, dated Oct. 23 & 24, 1995.

Tiwari, S.C. 1995. Mycorrhiza in Forestry and Agriculture. *Arunachal Times*,dated Nov. 12 & 13, 1995.

Research papers with citations:

Research paper	**Cited in**				**Cited by**
	Name of Journal	**Year**	**Vol.**	**Page No.**	**Author name**
TIWARI SC 1987	Soil Biol Biochem	1992	24	761	Jha DK
PROC IND NAT	Biol Fertl Soils	1989	07	359	Tiwari MB
SCI ACAD 53:173					
TIWARI SC 1987	Thermochim Acta	1995	249	161	Barros N
PL SOIL 101:133	Soil Biol Biochem	1991	23	299	Groffman PM
	Rev Ecol Biol Sol	1989	26	249	Shukla AK
	Biol Fert Soils	1989	07	359	Tiwari MB
TIWARI SC 1988	Soil Biol Biochem	1995	27	1377	Akoi K
SOIL BIOL BIOCHEM	Folia Microbiol Prague	1994	39	245	Rejsek K
20: 583	Soil Biol Biochem	1992	24	1173	Lahdesmaki P
	Soil Biol Biochem	1992	24	29	Gaynor JD
	Soil Biol Biochem	1991	23	367	Lensi R
TIWARI SC 1989	Soil Biol Biochem	1996	28	1045	Rida Amma
BIOL FERT SOILS	Biol Fert Soils	1996	22	367	Bolan NS
8: 178					
	Appl Environ Microbiol	1995	61	1816	Herman RP
	Pl Soil	1995	170	209	Brown GG
	Soil Sci Soc Amer J	1995	59	816	Zhang QL
	Rev Ecol Terre Vie	1995	50	141	Mohammed AM
	Appl Environ Microbiol	1994	60	1160	Herman RP
	Biol Fert Soils	1994	17	154	Basker A

	Soil Biol Biochem	1994	26	1233	Parkin TB
	Siol Biol Biochem	1993	25	1673	Basker A
	Biol Fert Soils	1993	16	131	Tiwari SC
	Soil Biol Biochem	1992	24	1577	Altemulier HJ
	Biol Fert Soils	1992	14	300	Basker A
TIWARI SC 1990	Pl Soil	1995	170	209	Brown GG
PROC IND ACAD SCI 100:376	Biol Fert Soils	1993	16	131	Tiwari SC
TIWARI SC 1992	Pedobiologia	1995	39	434	Tiwari SC
PROC IND NAT ACAD SCI 62: 223					
TIWARI SC 1993	Soil Biol Biochem	1996	28	555	Meharg AA
BIOL FERT SOILS	Soil Biol Biochem	1995	27	1573	Devliegher W
16:131	Pl Soil	1995	170	209	Brown GG
	Soil Sci Soc Amer J	1995	59	816	Zhang QL
	Rev Ecol Terre Vie	1995	50	141	Mohammed AM
	Recherche	1994	25	260	Rida Amma

CITATION ANALYSIS OF RESEARCH PAPERS OF DR.S.C. TIWARI

Total No. of papers analysed	=	23
Cited papers	=	07
Total citations	=	34
Average citations	=	1.48
Papers with >=10 citations	=	01
Maximum citation received by a paper	=	14

Details of Citation of Papers of Dr.S.C.Tiwari

1. Title: Chemical characterisation of extract derived from Daphne papyraceae and sonicator dyeing of cotton, silk and wool with the extract
Author(s): Vankar PS, Shanker R, Dixit S, et al.
Source: **PIGMENT & RESIN TECHNOLOGY** Volume: **38** Issue: **3** Pages: **181-187** Published: **2009**
Times Cited: **0**
Full Text

2. Title: Sonicator dyeing of cotton with the leaves extract Acer pectinatum Wallich
Author(s): Vankar PS, Shanker R, Dixit S, et al.
Source: **PIGMENT & RESIN TECHNOLOGY** Volume: **37** Issue: **5** Pages: **308-313** Published: **2008**
Times Cited: **0**
Full Text

3. Title: Sonicator dyeing of natural polymers with Symplocos spicata by metal chelation
Author(s): Vankar PS, Shanker R, Dixit S, et al.
Source: **FIBERS AND POLYMERS** Volume: **9** Issue: **2** Pages: **121-127** Published: **APR 2008**
Times Cited: **0**
Full Text

4. Title: Sonicator dyeing of modified cotton, wool and silk with Mahonia napaulensis DC. and identification of the colorant in Mahonia
Author(s): Vankar PS, Shanker R, Dixit S, et al.
Source: **INDUSTRIAL CROPS AND PRODUCTS** Volume: **27** Issue: **3** Pages: **371-379** Published: **MAY 2008**
Times Cited: **0**
Full Text

5. Title: Ethnological observations on fermented food products of certain tribes of Arunachal Pradesh
Author(s): Tiwari SC, Mahanta D
Source: **INDIAN JOURNAL OF TRADITIONAL KNOWLEDGE** Volume: **6** Issue: **1** Pages: **106-110** Published: **JAN 2007**
Times Cited: **0**

6. Title: Ecofriendly sonicator dyeing of cotton with Rubia cordifolia Linn. using biomordant
Author(s): Vankar PS, Shanker R, Mahanta D, et al.
Source: **DYES AND PIGMENTS** Volume: **76** Issue: **1** Pages: **207-212** Published: **2008**
Times Cited: **3**
Full Text

7. Title: Variation of enzyme activities, CO2 evolution and redox potential in an Eutric Histosol irrigated with wastewater and tap water
Author(s): Brzezinska M, Tiwari SC, Stepniewska Z, et al.
Source: **BIOLOGY AND FERTILITY OF SOILS** Volume: **43** Issue: **1** Pages: **131-135** Published: **OCT 2006**
Times Cited: **2**
Full Text

8. Title: Polymorphic distribution and phenotypic diversity of Frankia strains in nodule lobes of Hippophae salicifolia D. Don
Author(s): Sarma HK, Sharma BK, Singh SS, et al.
Source: **CURRENT SCIENCE** Volume: **90** Issue: **11** Pages: **1516-1521** Published: **JUN 10 2006**
Times Cited: **1**

9. Title: Natural dye-yielding plants and indigenous knowledge on dye preparation in Arunachal Pradesh, northeast India
Author(s): Mahanta D, Tiwari SC
Source: **CURRENT SCIENCE** Volume: **88** Issue: **9** Pages: **1474-1480** Published: **MAY 10 2005**
Times Cited: **5**

10. Title: EARTHWORM DENSITY, BIOMASS AND PRODUCTION OF CAST IN PINEAPPLE ORCHARD SOIL
Author(s): TIWARI SC, MISHRA RR
Source: **PEDOBIOLOGIA** Volume: **39** Issue: **5** Pages: **434-441** Published: **OCT 1995**
Times Cited: **0**

11. Title: SUCCESSION OF MICROFUNGI ASSOCIATED WITH THE DECOMPOSING LITTERS OF PINEAPPLE (ANANAS-COMOSUS)
Author(s): TIWARI SC, TIWARI BK, MISHRA RR
Source: **PEDOBIOLOGIA** Volume: **38** Issue: **2** Pages: **185-192** Published: **MAR 1994**
Times Cited: **7**

12. Title: EFFECTS OF ORGANIC MANURE AND NPK FERTILIZATION ON EARTHWORM ACTIVITY IN AN OXISOL
Author(s): TIWARI SC
Source: **BIOLOGY AND FERTILITY OF SOILS** Volume: **16** Issue: **4** Pages: **293-295** Published: **OCT 1993**
Times Cited: **4**
Full Text

13. Title: FUNGAL ABUNDANCE AND DIVERSITY IN EARTHWORM CASTS AND IN UNINGESTED SOIL
Author(s): TIWARI SC, MISHRA RR
Source: **BIOLOGY AND FERTILITY OF SOILS** Volume: **16** Issue: **2** Pages: **131-134** Published: **JUL 1993**
Times Cited: **32**
Full Text

14. Title: MICROFUNGAL SPECIES ASSOCIATED WITH THE GUT CONTENT AND CASTS OF DRAWIDA-ASSAMENSIS GATES
Author(s): TIWARI SC, TIWARI BK, MISHRA RR
Source: **PROCEEDINGS OF THE INDIAN ACADEMY OF SCIENCES-PLANT SCIENCES** Volume: **100** Issue: **6** Pages: **379-382** Published: **DEC 1990**
Times Cited: **7**

15. Title: MICROBIAL DECOMPOSITION OF PINEAPPLE (ANANAS-COMOSUS L) LITTERS
Author(s): TIWARI SC, TIWARI BK, MISHRA RR
Source: **ACTA OECOLOGICA-OECOLOGIA PLANTARUM** Volume: **10** Issue: **3** Pages: **329-339** Published: **1989**
Times Cited: **2**

16. Title: MICROBIAL-POPULATIONS, ENZYME-ACTIVITIES AND NITROGEN-PHOSPHORUS POTASSIUM ENRICHMENT IN EARTHWORM CASTS AND IN THE SURROUNDING SOIL OF A PINEAPPLE PLANTATION
Author(s): TIWARI SC, TIWARI BK, MISHRA RR
Source: **BIOLOGY AND FERTILITY OF SOILS** Volume: **8** Issue: **2** Pages: **178-182** Published: **1989**
Times Cited: **47**

17. Title: ENZYME-ACTIVITIES IN SOILS - EFFECTS OF LEACHING, IGNITION, AUTOCLAVING AND FUMIGATION
Author(s): TIWARI SC, TIWARI BK, MISHRA RR
Source: **SOIL BIOLOGY & BIOCHEMISTRY** Volume: **20** Issue: **4** Pages: **583-585** Published: **1988**
Times Cited: **10**
Full Text

18. Title: THE INFLUENCE OF MOISTURE REGIMES ON THE POPULATION AND ACTIVITY OF SOIL-MICROORGANISMS
Author(s): TIWARI SC, TIWARI BK, MISHRA RR
Source: **PLANT AND SOIL** Volume: **101** Issue: **1** Pages: **133-136** Published: **1987**
Times Cited: **6**
Full Text

LIST OF JOURNALS COVERED

Soil Biology & Biochemistry (UK), Plant & Soil (The Netherlands), Biology & Fertility of Soils (Germany), Pedobiologia (Germany), Acta Oecologia (France), Symbiosis (Israel), European Journal of Soil Biology (France), Dyes and Pigments (UK); International Dyer, Colourage, Industrial Crops and Products, Fibres & Polymers, Pigment & Resin Technology, Current Science (India), Indian J. of Forestry, Indian Forester, Annals of Forestry (India), Tree Science (India), J. Indian Society of Soil Science, Tropical Ecology (India), Soil Biology & Ecology (India), Proc. Indian National Science Academy, Indian Academy of Science, Proc. National Academy of Science (India), Acta Botanica Indica (India), Indian Biologist (India), J. of Hill Research (India), Mycorrhiza News (India), Ecology, Environment and Conservation Journal (India), Asian J. Microbiology, Biotechnology & Environmental Sciences, International J. Environmental Biology & Conservation (India), Indian Journal of Traditional Knowledge, Natural Product Radiance (India)

LIST OF JOURNALS COVERED WITH IMPACT FACTOR

Soil Biology & Biochemistry (UK),
Plant & Soil (The Netherlands),
Biology & Fertility of Soils (Germany),
Pedobiologia (Germany),
Acta Oecologia (France),
Symbiosis (Israel),
European Journal of Soil Biology (France),

Dyes and Pigments (Korea);

International Dyer,

Colourage,

Industrial Crops and Products,

Fibres & Polymers,

Pigment & Resin Technology,

Current Science (India)

List of Journals covered without Impact Factor

Indian J. of Forestry, Annals of Forestry (India), Tree Science (India), J. Indian Society of Soil Science, Tropical Ecology (India), Soil Biology & Ecology (India), Proc. Indian National Science Academy, Indian Academy of Science, Proc. National Academy of Science (India), Acta Botanica Indica (India), Indian Biologist (India), J. of Hill Research (India), Mycorrhiza News (India), Ecology, Environment and Conservation Journal (India), Asian J. Microbiology, Biotechnology & Environmental Sciences, International J. Environmental Biology & Conservation (India), Indian Journal of Traditional Knowledge, Indian Journal of Biotechnology, Indian J. of Horticulture.

RESEARCH CONTRIBUTION OF DR.S.C. TIWARI

Dr. Tiwari has investigated different aspects of microbial ecology, i.e., physico-chemical, biological and biochemical properties of forest and agricultural soils, biodegradation of organic residues and growth performance of forest tree species in forest nursery using mycorrhizal and actinorhizal bioinoculants during his doctoral and post-doctoral tenure. Salient findings of his research are:

- Viable cells account for most of the dehydrogenase and urease soil enzymes while extracellular enzymes absorbed on clay-humic colloids are responsible for a major part of the phosphatase soil enzyme.
- Moisture content of soil plays a significant role in the regulation of enzymatic activities and microbial diversity in soil.
- Leaf litter of pineapple decomposed more rapidly than that of roots.The time required for 95% of leaf and root litters to decompose were 1911 and 2576 days respectively.
- The continued maintenance of pineapple plantation over a period of 10 years has little or no adverse effect on the physico-chemical characteristics of soils. This suggests that the practice of pineapple cultivation is ecologically sustainable.

After submission of Ph. D. thesis in 1988, Dr. Tiwari was awarded Senior Research Fellowship and subsequently Research Associateship and Pool officership to extend his research in the area of forest nursery technology development using microbial inoculums (Mycorrhizae and Actinorhiza). Salient findings are:

- The growth performance of *Alnus* and C*asuarina* seedlings can be enhanced by inocualting the seedlings with mycorrhizae and *Frankia* in combination in forest nursery.
- The placement of these bioinoculants as close to the root system fastens the growth of seedlings in forest nursery.

In January 1996, he was selected as Lecturer in the Department of Forestry, NERIST, Nirjuli (Itanagar). Immediately after joining NERIST he has been sanctioned a research scheme to assess and monitor the rate of soil degradation in Arunachal Pradesh. Currently he is conducting various experiments to find out the rate of soil degradation in humid tropical regions of Arunachal Pradesh using biological and biochemical techniques. Based on the results of this study a model will be developed for the assessment of degree of soil degradation.During his stay at GGV, Bilaspur Dr. Tiwari and his team has investigated livelihood patterns of forest dwellers residing in core and buffer zone of Biosphere Reserve, Lichen diversity in Biosphere Reserve and effect of land use land cover change on carbon sequestration potential of Biosphere soils.

Later, Dr. Tiwari was awarded SERC fellowship for the year 1996-97 by DST, New Delhi to work on molecular biology of mycorrhizal and *Frankia* strains. In the year 2000, 2003 he has been nominated for the bilateral exchange programme of Scientists of INSA, New Delhi to visit-Institute of Agrophysics, Lublin, Poland. He has collaborated with scientists in IAPN especially studies pertaining to the influence of wastewater flooding on microbial community composition and their activities in an organic soil.

At present his attention is on value addition of forest products (natural dyes), use of natural dyes for clean energy production (photo voltaic cells), and textile dying and also to determine the carbon sequestration and carbon storage potentials of Chhattisgarh State’s Forests and their soils.