

Curriculum Vitae

AKHILESH SINGH RAGHUBANSHI

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Current Designation: Professor

Date of Birth: 12 July, 1963

Marital Status: Married

Nationality: Indian

Education:

1990	Ph.D. (Botany/Forest Ecology), Banaras Hindu University, India
1986	M.Sc. (Botany), Banaras Hindu University, India 70.1%, First Div
1984	B.Sc. (Honours.) Botany, Banaras Hindu University, India 68.9%, First Div

Professional Experience

26/02/2011- 26/02/2016	Director, Institute of Environment & Sustainable Development, Banaras Hindu University, India
26/02/2011- 13/08/2014	Dean & Head, Faculty/Department of Environment & Sustainable Development, Banaras Hindu University, India
26/02/2011-	Professor, Institute of Environment & Sustainable Development, Banaras Hindu University, India
24/09/2009- 05/04/2013	Group Leader, Conservation Biology, Interdisciplinary School of Life Sciences, Faculty of Science, Banaras Hindu University, India
27/10/2005- 26/02/2011	Professor, Department of Botany, Banaras Hindu University, India
26/12/2004- 26/09/2005	Reader (eq. Associate Professor), Department of Botany, Banaras Hindu University, India
14/02/1997- 26/12/2004	Lecturer (eq. Assistant Professor), Department of Botany, Banaras Hindu University, India
04/01/1993- 13/02/1997	Assistant Regional Director, Indira Gandhi National Open University, India

Honours and Awards

2015	Fellow, National Academy of Sciences, India
2003	Post-Doctoral Research Fellowship of the Max Planck Institute for Terrestrial Microbiology, Germany (one year)
1999	INSA visiting fellowship to Germany (3 months)
1994	Young Scientist Medal, Indian National Science Academy, New Delhi
1993	Young Associateship Award, Indian Academy of Sciences, Bangalore
1990	Post-Doctoral Research Associateship, Council of Scientific and Industrial Research (CSIR) and University Grants Commission (UGC), Government of India
1986	Junior Research Fellowship through National Eligibility Test (NET), University Grants Commission, Government of India
1977	National Scholarship, Government of India

Professional Skills

Experience in Research Methodologies

Knowledge of statistical and vegetation analysis methodologies using tools like R, Knowledge of handling of analytical equipment such as CHN Elemental Analyser, Ion Analyser, Gas Chromatograph, Atomic Absorption Spectrophotometer, HPLC, etc.

Experience in general soil microbiological techniques and bacterial community analysis using modern molecular methods such as PCR, TRFLP, DDGE, etc.

Computational Skills

Knowledge of Windows and Mac OSX based general application software; statistical software such as R, SPSS; Vegetation analysis software such as Vegan and PC-ORD; DNA sequence alignment and phylogeny software; satellite image analysis software such as ENVI, GRASS for remote sensing and GIS applications.

Teaching Approach

Development of course curriculum that stresses application of computational and statistical tools in ecology and environmental sciences. Broadly based education by giving equal weight to analytical reasoning and field exposure. Using active learning and in-class discussions to encourage students to be creative and think critically.

Research Interests

Integrative Ecology for understanding of structure, functioning and sustainable management of tropical terrestrial ecosystems; Focus on understanding plant diversity and distributions, nutrient dynamics, greenhouse gas emissions and restoration of degraded ecosystems; Urban ecology and metabolism.

Research Grant Support

1. Ministry of Environment and Forests, Govt. of India: 'Ecological analysis of plant diversity in Central Highlands' (as Co-investigator).
2. Indian Space Research Organization-Geosphere Biosphere Programme (ISRO-GBP): 'Community diversity assessment of Vindhya using remote sensing and GIS' (as Co-investigator).
3. Department of Science & Technology, Govt. of India: 'Ecology of habitat fragmentation induced plant species invasion in landscapes of Vindhyan highlands'.
4. U.P. Council of Science and Technology: 'Seed germination and seedling growth of selected plants in context of global climate change'.
5. Indian Space Research Organization-Space Application Centre (ISRO-SAC): 'Carbon cycle assessment for terrestrial biosphere of India'.
6. Wageningen University, The Netherlands International Collaborative Project: 'Global experiment on savanna tree seedlings (GEST)'.
7. Indian Space Research Organization-Space Application Centre (ISRO-SAC): 'Energy and mass exchange in vegetation system'.
8. Ministry of Environment and Forests, Govt. of India: 'Plant functional traits analysis of dry tropical forest ecosystems'.
9. Ministry of Foreign Affairs, Japan project through SEEDS-Asia: 'Participatory Community Based Risk Disaster Reduction Approaches in Varanasi'.

Research Supervision

Ph.D. Awarded

1. Mr. Rahul Bhadauriya (2016) Determinants of tree seedling growth in dry tropical environment.
2. Dr. Pratap Srivastava (2016) Carbon flux and carbon fraction dynamics in an age series of agroecosystem soils in Vindhyan Highlands.
3. Dr. Sacchidanand Tripathi (2013) Response of selected dry tropical forest tree species in relation to resource variability.
4. Dr. Smriti Singh (2012) Impact of fly ash amendment in soil on some genetical and biochemical attributes of selected cultivars.
5. Dr. Manoj Kumar (2011) Carbon dynamics in selected ecosystems of tropical environment.

6. Dr. Prajjwal Dubey (2010) Analysis of herbaceous plant functional traits of dry deciduous forest in Vindhyan Highlands.
 7. Dr. Priyanka Srivastava (2010) Aboveground-belowground interactions in a tropical dry deciduous grassland.
 8. Dr. Ravi Chaturvedi (2010) Plant functional traits in dry deciduous forests of India.
 9. Dr. Poornima Rajjada (2009) Effect of invasive plants on soil processes.
 10. Dr. Gyan Prakash Sharma (2006) Habitat fragmentation induced species invasion in Vindhyan Highlands.
 11. Dr. Anuradha Mantri (2003) Impact of certain environmental stressors on selected soil microbiological parameters.
 12. Dr. Anshuman Tripath (2003) Community diversity assessment in Vindhyan.
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Current Ph.D. Supervision

1. Mr. Rishikesh Singh: "Environmental impact analysis of traditional and emergent agronomic practices in the middle Indo-Gangetic Plains".
2. Mr. Ravindra Pratap Singh: "Sustainable construction and green building norms".
3. Ms. Sweta Upadhyay: "Assessment of soil carbon efflux from different landuse classes of Varanasi city".
4. Mr. Pramit Verma: "Urban ecology and sustainability of an Indian heritage city-Varanasi"

Membership in National Committees

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| 2016- | Member, General Body, Council of Science & Technology, Department of Science & Technology, Government of Uttar Pradesh, India |
| 2012-
2015 | Member, Programme Advisory Committee (PAC), National Council for Science & Technology Communication (NCSTC), Department of Science & Technology, Govt. of India. |
| 2012- | Member, Expert Committee on UGC Special Assistance Programmes (SAP) in the subject area Energy, Environment and Natural Resources, University Grants Commission, Govt. of India. |
| 2012- | Member, Project Review and Supervisory Group on Environmental Science for NMEICT mission, Ministry of Human Resource Development |
| 2009-
2012 | Member, National Committee of IGBP-WCRP-SCOPE (International Geosphere-Biosphere Programme- World Climate Research Programme- Scientific Committee on the Problems of Environment). |

1999- Member, Thematic Working Group on Natural Terrestrial Ecosystems,
2000 National Biodiversity Strategy and Action Plan, Ministry of Environment
& Forests, Govt. of India.

Other Professional Assignments

- Chief Editor, Tropical Ecology (2016-)
- Executive Editor, Tropical Ecology (2008-2015)
- Associate Editor, International Journal of Plant and Environment (2015-)
- Member, Executive Committee, International Society for Tropical Ecology (2008-2014)
- Joint Secretary, International Society for Tropical Ecology (2015-)
- Member, Board of Studies: Department of Botany, Kanpur University; Department of Forestry, Biodiversity and Environmental Science, Mizoram University; Department of Botany, Indira Gandhi National Tribal University, Madhya Pradesh; Department of Environmental Science, BBR Ambedkar University, Lucknow, Maharaja Ganga Singh University, Bikaner, Rajasthan
- Member, University Grants Commission- Special Assistance Programme (UGC-SAP) Advisory Committee for Jawaharlal Nehru University, New Delhi
- Member, Ad hoc Peer Committees for Assessment of Universities, National Assessment and Accreditation Council, India

Current University Assignments

2009- Convener, Technical Cell, Vice-Chancellor's Office, Banaras Hindu University

2013- Chairman, Plantation and Beautification Committee, Banaras Hindu University

2013- Chairman, Committee for Automation of Central Registry and other Units, Banaras Hindu University

2013- Member, Internal Quality Assurance Cell, Banaras Hindu University

2015- Chairman, Committee for the University Campus Master Plan, Banaras Hindu University

Symposia/Conferences/Invited Lectures

2016 Chief Rapporteur and member local organizing committee, Global Summit on Quality Higher Education, organized by National Assessment and Accreditation Council, India and Asia Pacific Quality Network (APQN), Bengaluru, 16-17 September, 2016.

- 2016 Invited lecture, National workshop on mitigating impact of climate change on Indian agriculture organized by Department of Civil Engineering, Indian Institute of Technology-BHU (23 July)
- 2016 Invited lecture, World Environment Day celebrations and Summer School for children organized by the National Academy of Sciences, India (NASI), Allahabad (5 June)
- 2016 Chief Guest, Workshop on scope of rainwater harvesting and groundwater recharging, Department of Civil Engineering, Indian Institute of Technology-BHU, Varanasi (29 March).
- 2015 Invited lecture, International Symposium of Global Collaboration on Education, Research and Business in Environmental Studies & International Workshop for Implementation of Global Collaboration on Education, Research and Business in Environmental Studies organized by Kyoto University, Japan (11-14 December)
- 2015 Guest of Honour Lecture, World Environment Day Celebrations and Summer School for Children organized by the National Academy of Sciences, India (NASI), Allahabad (5 June).
- 2015 Resource Person in 2nd Consultation Meeting on DPR Preparation of Forestry Interventions of the Ganga at CSFER, Allahabad (11-12 May).
- 2015 Invited Talk on 'Climate change and sustainable urban development: issues and challenges before India' in the DST-SERB supported national conference on Climate Change: Impacts, adaptations, mitigation scenario and future challenges in Indian perspective, organized by DD Upadhyaya College, University of Delhi (2-3 March).
- 2015 9th GSS Leading Expert Seminar Lecture on 'Challenges in the urbanization process of Varanasi, the oldest Indian city' in Inter-Graduate Program for Sustainable Development and Survivable Societies, Kyoto University, Japan (27 January).
- 2014 Key Note address on 'Forestry and mining: Sustainable development options' in the National Stakeholders Meet on Forestry and Mining: Forest Mining Interface in Service of Nation at Forest Research Institute, Dehradun, India (28 November).
- 2014 Resource Person in National Workshop on Ecosystem Services of River Ganga, New Delhi, National Institute of Ecology, New Delhi (15-16 July).
- 2014 Chief Guest lecture in World Environment Day Celebrations of Varanasi Local Centre of Institution of Engineers, India (5 June).
- 2014 Invited lecture on 'Issues and challenges for the sustainable management of dry tropical forests of India' in the National Conference on Environmental Technology and Sustainable Development: Challenges and Remedies at BBA University, Lucknow (21-23 February).
- 2013 Session Chairman and invited lecture on 'Sustainable agriculture-Issues, challenges and emerging technologies' in the National Seminar on Green

- Technologies for Sustainable Environmental Management, Doon University, Dehradun (22–23 March).
- 2013 Co-Chairman, Valedictory Session and invited lecture in the National Seminar on Enhancing Water Productivity in Agriculture, Institute of Agricultural Sciences, Banaras Hindu University (9 March).
- 2012 Invited lecture on 'Ecoliteracy and sustainable development' in the National Conference on Reorienting Geography Education and Training for Sustainable Development in India, Department of Geography, Banaras Hindu University (31 October).
- 2012 Invited lecture on 'Determinants of biodiversity loss' in the National Seminar on Environmental Issues and Challenges: Need for Action, J.P. University, Chapra, Bihar (28–29 September).
- 2012 Participant in the discussion forum on "Brainstorming Session on Higher Education in India: Issues, Challenges and Expectations" Faculty of Management Studies, Banaras Hindu University (8 September).
- 2011 Invited lecture on 'Diversity disturbance relationship in dry tropical forests' in the Symposium on "Sustainable Management of Biodiversity" as part of 81th Annual Session of the National Academy of Sciences, India at Trivandrum (24–25 November).
- 2011 Sustainable Mountain Development Summit, 2011, Central Himalayan Environment Association, Nainital (21–22 May)- Participant.
- 2010 Invited lecture on 'Carbon pools and fluxes in the tropical terrestrial ecosystems' in the National Symposium on Climate Change- Research, Awareness and Capacity Building, as part of 80th Annual Session of the National Academy of Sciences, India, Jaipur (2–4 December).
- 2010 Workshop on Sustainable Campus Design and Development of Higher Education, Jawaharlal Nehru University (9 November)- Participant.
- 2010 Invited lecture in the Interdisciplinary Dialogue on 'Biodiversity Conservation- from Rio to Nagoya', Faculty of Law, BHU (31 August).
- 2010 International Workshop on Environment and Environmental Ethics, UNESCO and Department of Philosophy and Religion, Banaras Hindu University (6 August)- Chairman, Inaugural Session and speech.
- 2010 Indo-US Summit on Higher Education, Indo-American Society, Mumbai (30 July to 1 August)- Participant.
- 2010 International Symposium on Phycological Research, Department of Botany, Banaras Hindu University (25–27 February)- Participant.
- 2009 Brainstorming meeting on Invasive Species, organised by Ministry of Environment and Forests at Panjab University, Chandigarh (22–23 May)- Participant.

- 2009 Session Chair and paper presentation in the International Conference on Plant Invasion & Forest Ecology: Concerns & Solutions' at Panjab University, Chandigarh (16-18 March).
- 2009 DST sponsored Workshop on 'Forest Ecosystem Responses to Climate Change in Western Himalaya', GB Pant Institute of Himalayan Environment & Development, Almora, (26 March)- Participant.
- 2009 International Conference on Invasive Plants in the Tropics: Ecology, Management and Livelihoods', Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore (4-6 January)- Lecture on 'Lantana invasion and its impact on ecosystems'.
- 2008 3rd Sustainability Summit- Asia 2008, Partnerships for Action: Competitiveness Redefined, CII-ITC Centre of Excellence for Sustainable Development (11-12 December)- Participant.
- 2008 International Workshop on Global Experiment on Savanna Tree seedlings (GEST), South African Wildlife College and Manyeleti Game Reserve, Near Kruger National Park, South Africa (11-15 July)- Lecture on 'Indian Savanna: Structure, Functioning & Management'.
- 2008 International Geosphere-Biosphere Programme (IGBP) Congress' at Cape Town, South Africa (05-09 May)- Participant and representative of Indian IGBP Committee.
- 2008 International Workshop on Climate Change & its Impact on Flora in the South Asia Region, South Asia Cooperative Environment Programme & National Botanical Research Institute, Lucknow, India (09-12 March)- Session Co-Chair and invited lecture on 'Modelling plant response to climate change: opportunities and research needs'.
- 2007 National Conference on Wetlands- Science, Society, Delhi University Botanical Society at Indian National Science Academy, New Delhi (11-14 December)- Session Chair.
- 2007 Tropical Ecology Congress 2007: International Symposium on Biodiversity Conservation in the Tropics: Issues, Concerns and Strategies, Wildlife Institute of India, Dehra Dun (2-5 December)- Lecture on 'Status of plant diversity in dry deciduous forests of Vindhyan highland'.
- 2007 Science Communication Summer School, National Academy of Sciences, Allahabad (June). Resource person, lecture on the topic 'Carbon balance of Earth'.
- 2007 Institute of Environmental Sciences, Kurukshetra University, Haryana, (June)- Invited lecture at the on the topic 'Global climate change: Emerging scenarios'.
- 2007 National Seminar on 'Plant Genome Biodiversity: Conservation & Management' at Department of Botany, BHU (16-17 February)- Participant.

- 2006 Indo-US Workshop on Invasive Plants in Indian Protected Areas, Indo-US Science & Technology Forum at Corbett National Park, Uttarakhand (13-17 November)- Lecture on 'Invasion ecology of *Lantana camara*'.
- 2006 Workshop celebrating Wildlife Conservation Week, U.P. State Forest Department, Saranath, Varanasi. (September)- Invited talk on 'Wildlife in India: status, threats and management'.
- 2006 National Seminar on Nitrogen in Environment, Industry & Agriculture, Society for Conservation of Nature at Indian National Science Academy, New Delhi (16-17 March)- Invited lecture on 'N cycling in dry tropical ecosystems'.
- 2006 National Conference on Biodiversity Related International Conventions: Role of Indian Scientific Community. Delhi University Botanical Society, Indian National Science Academy, New Delhi (8-10 March)- Invited Lecture on 'Biodiversity and ecosystem function'.
- 2004 Ministry of Environment & Forests Workshop on 'Invasive Alien Species and Biodiversity in India', Department of Botany, Banaras Hindu University (18-20 August)- Lecture on 'Impact of *Parthenium hysterophorus* invasion in agroecosystems of Indo-Gangetic Plains'.
- 2003 International Symposium on 'Structure and Function of Soil Microbiota', Philipps-Universitat and Max Planck Institute for Terrestrial Microbiology, Marburg, Germany (18-20 September)- Session Chair on 'Microbial Diversity and Functioning'.
- 1999 National Seminar on 'Ecology in India: Retrospect and Prospects' Department of Botany, Banaras Hindu University (12-13 March)- Organizing Secretary.
- 1995 National Seminar on Changing Scenario in Plant Sciences, Banaras Hindu University (13-15 October)- Participant.
- 1992 Indo-British Symposium on Climate Change, New Delhi (15-17 January)- Participant.
- 1991 Asian workshop on International Geosphere Biosphere Programme organized by the National Physical Laboratory, New Delhi (11-15 February)- Participant.
- 1989 'Inter-Disciplinary National Seminar on Rapid Population Growth: Response Patterns with Particular Reference to India' organized by the Department of Geography, Banaras Hindu University, Varanasi (24-26 April)- Participant.
- 1987 IX International Symposium on Tropical Ecology, International Society for Tropical Ecology, Banaras Hindu University (11-16 December)- Participant.
- 1987 International Conference on Rehabilitation of Disturbed Ecosystems: A Global Issue, Varanasi, India (11-16 December)- Participant.

Publications of A.S. Raghubanshi, Banaras Hindu University

Research Publications	65
Scientific Reviews	21
Books, monographs, etc.	02
Book Chapters	13
Articles in Seminars, etc.	04
General Articles	05
Total	110

Research Publications

1. Singh, J. S., A. S. Raghubanshi, R. S. Singh, and S. C. Srivastava. 1989. Microbial biomass acts as a source of plant nutrients in dry tropical forest and savanna. *Nature* **338**:499-500.
2. Raghubanshi, A. S., S. C. Srivastava, R. S. Singh, and J. S. Singh. 1990. Nutrient release in leaf litter. *Nature* **346**:227-227.
3. Raghubanshi, A. S. 1991. Dynamics of soil biomass-C, N, and P in a dry tropical forest in India. *Biology and Fertility of Soils* **12**:55-59.
4. Singh, R. S., A. S. Raghubanshi, and J. S. Singh. 1991. Nitrogen-mineralization in dry tropical savanna - Effects of burning and grazing. *Soil Biology and Biochemistry* **23**:269-273.
5. Singh, R. S., S. C. Srivastava, A. S. Raghubanshi, J. S. Singh, and S. P. Singh. 1991. Microbial C, N and P in dry tropical savanna - Effects of burning and grazing. *Journal of Applied Ecology* **28**:869-878.
6. Raghubanshi, A. S. 1992. Effect of topography on selected soil properties and nitrogen mineralization in a dry tropical forest. *Soil Biology and Biochemistry* **24**:145-150.
7. Raghubanshi, A. S. 1994. Effect of bamboo harvest on dynamics of nutrient pools, N-mineralization, and microbial biomass in soil. *Biology and Fertility of Soils* **18**:137-142.
8. Singh, J. S., S. Singh, A. S. Raghubanshi, S. Singh, and A. K. Kashyap. 1996. Methane flux from rice/wheat agroecosystem as affected by crop phenology, fertilization and water level. *Plant and Soil* **183**:323-327.
9. Singh, J. S., S. Singh, A. S. Raghubanshi, S. Singh, A. K. Kashyap, and V. S. Reddy. 1997. Effect of soil nitrogen, carbon and moisture on methane uptake by dry tropical forest soils. *Plant and Soil* **196**:115-121.
10. Singh, J. S., A. S. Raghubanshi, V. S. Reddy, S. Singh, and A. K. Kashyap. 1998. Methane flux from irrigated paddy and dryland rice fields, and from seasonally dry tropical forest and savanna soils of India. *Soil Biology and Biochemistry* **30**:135-139.

11. Singh, H., S. K. Singh, A. N. Singh, and A. S. Raghubanshi. 1999. Impact of plant residue quality on the size of the microbial biomass pool and net N-mineralization. *Tropical Ecology* **40**:313-318.
12. Lal, C. B., C. Annapurna, A. S. Raghubanshi, and J. S. Singh. 2001. Effect of leaf habit and soil type on nutrient resorption and conservation in woody species of a dry tropical environment. *Canadian Journal of Botany-Revue Canadienne De Botanique* **79**:1066-1075.
13. Lal, C. B., C. Annapurna, A. S. Raghubanshi, and J. S. Singh. 2001. Foliar demand and resource economy of nutrients in dry tropical forest species. *Journal of Vegetation Science* **12**:5-14.
14. Horz, H.-P., A. S. Raghubanshi, J. Heyer, C. Kammann, R. Conrad, and P. F. Dunfield. 2002. Activity and community structure of methane-oxidising bacteria in a wet meadow soil. *FEMS microbiology ecology* **41**:247-257.
15. Singh, A. K., A. S. Raghubanshi, and J. S. Singh. 2002. Medical ethnobotany of the tribals of Sonaghati of Sonbhadra district, Uttar Pradesh, India. *Journal of Ethnopharmacology* **81**:31-41.
16. Sagar, R., A. S. Raghubanshi, and J. S. Singh. 2003. Tree species composition, dispersion and diversity along a disturbance gradient in a dry tropical forest region of India. *Forest Ecology and Management* **186**:61-71.
17. Sagar, R., A. S. Raghubanshi, and J. S. Singh. 2003. Asymptotic models of species-area curve for measuring diversity of dry tropical forest tree species. *Current Science* **84**:1555-1560.
18. Singh, H., and A. S. Raghubanshi. 2003. Effect of variable quality residue on a tropical dryland rice soil. *Journal of Sustainable Agriculture* **22**:3-17.
19. Singh, A. N., A. S. Raghubanshi, and J. S. Singh. 2004. Comparative performance and restoration potential of two *Albizia* species planted on mine spoil in a dry tropical region, India. *Ecological Engineering* **22**:123-140.
20. Singh, A. N., A. S. Raghubanshi, and J. S. Singh. 2004. Impact of native tree plantations on mine spoil in a dry tropical environment. *Forest Ecology and Management* **187**:49-60.
21. Singh, A. N., A. S. Raghubanshi, and J. S. Singh. 2004. Survival and growth pattern of three tropical forest plantations raised on coal-mine spoils of central India. *Indian Forester* **130**:376-384.
22. Jha, C. S., L. Goparaju, A. Tripathi, B. Gharai, A. S. Raghubanshi, and J. S. Singh. 2005. Forest fragmentation and its impact on species diversity: an analysis using remote sensing and GIS. *Biodiversity and Conservation* **14**:1681-1698.
23. Sharma, G. P., and A. S. Raghubanshi. 2006. Tree population structure, regeneration and expected future composition at different levels of *Lantana camara* L. invasion in the Vindhyan tropical dry deciduous forest of India. *Lyonia* **11**:27-39.

24. Sharma, G. P., and A. S. Raghubanshi. 2007. Effect of *Lantana camara* L. cover on local depletion of tree population in the Vindhyan tropical dry deciduous forest of India. *Applied Ecology and Environmental Research* **5**:109-121.
25. Singh, A., and A. S. Raghubanshi. 2007. Rice: *Echinochloa colonum* interaction in a high CO₂ environment under dryland and irrigated conditions. *Proceedings of the National Academy of Sciences India Section B-Biological Sciences* **77**:139-158.
26. Singh, A., P. Raizada, and A. S. Raghubanshi. 2007. Effect of water stress on seedling growth of four tropical dry deciduous tree species under an elevated CO₂ regime. *Current Science* **93**:618-620.
27. Raizada, P., G. P. Sharma, and A. S. Raghubanshi. 2008. Ingress of lantana in dry tropical forest fragments: Edge and shade effects. *Current Science* **94**:180-182.
28. Sagar, R., A. S. Raghubanshi, and J. S. Singh. 2008. Comparison of community composition and species diversity of understory and overstorey tree species in a dry tropical forest of northern India. *Journal of Environmental Management* **88**:1037-1046.
29. Singh, A., G. P. Sharma, and A. S. Raghubanshi. 2008. Dynamics of the functional groups in the weed flora of dryland and irrigated agroecosystems in the Gangetic plains of India. *Weed Biology and Management* **8**:250-259.
30. Raizada, P., A. Singh, and A. S. Raghubanshi. 2009. Comparative response of seedlings of selected native dry tropical and alien invasive species to CO₂ enrichment. *Journal of Plant Ecology* **2**:69-75.
31. Sharma, G. P., and A. S. Raghubanshi. 2009. Plastic responses to different habitat type contribute to *Hyptis suaveolens* Poit. invasiveness in the dry deciduous forest of India. *Ambio* **38**:342-344.
32. Sharma, G. P., and A. S. Raghubanshi. 2009. Plant invasions along roads: a case study from central highlands, India. *Environmental Monitoring and Assessment* **157**:191-198.
33. Sharma, G. P., and A. S. Raghubanshi. 2009. Lantana invasion alters soil nitrogen pools and processes in the tropical dry deciduous forest of India. *Applied Soil Ecology* **42**:134-140.
34. Sharma, G. P., P. Raizada, and A. S. Raghubanshi. 2009. *Hyptis suaveolens*: An emerging invader of Vindhyan plateau, India. *Weed Biology and Management* **9**:185-191.
35. Chaturvedi, R. K., A. S. Raghubanshi, and J. S. Singh. 2010. Non-destructive estimation of tree biomass by using wood specific gravity in the estimator. *National Academy Science Letters-India* **33**:133-138.
36. Kumar, M., N. Mukherjee, G. P. Sharma, and A. S. Raghubanshi. 2010. Land use patterns and urbanization in the holy city of Varanasi, India: a scenario. *Environmental Monitoring and Assessment* **167**:417-422.

37. Kumar, M., R. P. Singh, S. Panigrahy, and A. S. Raghubanshi. 2010. Assessment of agro-ecosystem carbon stock in a part of middle Gangetic Plains, India. *Crop Improvement* **37**:189-190.
38. Raizada, P., and A. S. Raghubanshi. 2010. Seed germination behaviour of *Lantana camara* in response to smoke. *Tropical Ecology* **51**:347-352.
39. Sharma, G. P., M. Kumar, and A. S. Raghubanshi. 2010. Urbanization and road-use determines *Calotropis procera* distribution in the eastern Indo-Gangetic plain, India. *Ambio* **39**:194-197.
40. Chaturvedi, R. K., A. S. Raghubanshi, and J. S. Singh. 2011. Carbon density and accumulation in woody species of tropical dry forest in India. *Forest Ecology and Management* **262**:1576-1588.
41. Chaturvedi, R. K., A. S. Raghubanshi, and J. S. Singh. 2011. Leaf attributes and tree growth in a tropical dry forest. *Journal of Vegetation Science* **22**:917-931.
42. Chaturvedi, R. K., A. S. Raghubanshi, and J. S. Singh. 2011. Effect of small-scale variations in environmental factors on the distribution of woody species in tropical deciduous forests of Vindhyan Highlands, India. *Journal of Botany* DOI: 10.1155/2011/297097
43. Dubey, P., A. S. Raghubanshi, and J. S. Singh. 2011. Temporal variability of herbaceous vegetation diversity in rainy season in a tropical dry deciduous forest. *Proceedings of the National Academy of Sciences India Section B-Biological Sciences* **81**:396-403.
44. Dubey, P., A. S. Raghubanshi, and J. S. Singh. 2011. Intra-seasonal variation and relationship among leaf traits of different forest herbs in a dry tropical environment. *Current Science* **100**:69-76.
45. Sharma, G. P., and A. S. Raghubanshi. 2011. *Lantana camara* L. invasion and impact on herb layer diversity and soil properties in a dry deciduous forest of India. *Applied Ecology and Environmental Research* **9**:253-264.
46. Singh, H., P. Pathak, M. Kumar, and A. S. Raghubanshi. 2011. Carbon sequestration potential of Indo-Gangetic agroecosystem soils. *Tropical Ecology* **52**:223-228.
47. Singh, V., H. Singh, G. P. Sharma, and A. S. Raghubanshi. 2011. Eco-physiological performance of two invasive weed congeners (*Ageratum conyzoides* L. and *Ageratum houstonianum* Mill.) in the Indo-Gangetic plains of India. *Environmental Monitoring and Assessment* **178**:415-422.
48. Chaturvedi, R. K., A. S. Raghubanshi, and J. S. Singh. 2012. Biomass estimation of dry tropical woody species at juvenile stage. *Scientific World Journal*:1-5. DOI: 10.1100/2012/790219
49. Chaturvedi, R. K., A. S. Raghubanshi, and J. S. Singh. 2012. Effect of grazing and harvesting on diversity, recruitment and carbon accumulation of juvenile trees in tropical dry forests. *Forest Ecology and Management* **284**:152-162.

50. Chaturvedi, R. K., and A. S. Raghubanshi. 2013. Aboveground biomass estimation of small diameter woody species of tropical dry forest. *New Forests* **44**:509-519.
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52. Singh, V., H. Singh, and A. S. Raghubanshi. 2013. Competitive interactions of wheat with *Phalaris minor* or *Rumex dentatus*: A replacement series study. *International Journal of Pest Management* **59**:245-258.
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