

## BIODATA OF PROFESSOR J. S. SINGH

- 1. Full Name:** JAMUNA SHARAN SINGH  
**2. Designation:** Professor Emeritus  
**3. Date of Birth:** December 26, 1941  
**4. Place of Birth:** Allahabad, U. P.  
**5. Present Address:** Department of Botany, Banaras Hindu University  
Varanasi 221005, INDIA  
Fax: 0542-2368174; Tel. 0542-2368399 (Off.);  
2369093 (Res.); 09335178355 (Mobile)  
E-mail: [singh\\_js1@yahoo.com](mailto:singh_js1@yahoo.com);  
[singh.js1@gmail.com](mailto:singh.js1@gmail.com)  
[jssingh@bhu.ac.in](mailto:jssingh@bhu.ac.in)



### 6. Academic Qualification:

B.Sc., University of Allahabad, 1957.  
M.Sc., University of Allahabad, 1959.  
Ph.D., Banaras Hindu University, 1967.

### 7. Academic Distinction:

Topped Allahabad University twice:

- (a) in B.Sc. in Zoology and was awarded Dr. Ram Saran Dass Memorial Silver Medal for the same (1957);  
(b) in M.Sc. in Botany (1959).

### 8. Awards:

Shanti Swarup Bhatnagar Prize 1980, CSIR  
Pitamber Pant National Environment Fellowship 1984, MOEn  
Pranavanand Saraswati Award 1985, UGC  
Dr. Birbal Sahni Gold Medal 1999, IBS  
Prof. S.B. Saksena Memorial Medal, 1999, INSA  
Honour of Distinction 2003, Soc. Protect. Env. & Sust Dev.  
Vidwad Bhushan 2005, Akhil Bhartiya Vidwat Parishad,  
Life time Achievement Award 2005, AWA  
Biodiversity Lecture Award, 2009, NASI  
Bishambher Nath Chopra Lecture, 2010, INSA

### 9. Fellowship and Membership of Science Academies/Societies:

- Fellow, Third World Academy of Sciences
- Fellow, Indian National Science Academy
- Fellow, Indian Academy of Sciences
- Fellow, National Academy of Sciences, India
- Fellow, International Society for Tropical Ecology
- Fellow, National Institute of Ecology, India
- Fellow, Indian Range Management Society

- Fellow, Central Himalayan Environment Association.
- Member, The Ecological Society of America
- Member, International Association for Vegetation Science
- Member, Society for Scientific Values
- Member, Current Science Association
- Member, Indian Science Congress Association
- Member, Indian Botanical Society

#### **10. Editorial Responsibilities:**

- Member, Board of Editors, Journal of Bombay Natural History Society (1993-).
- Member, Board of Editors, Ecologia Montana (Czechoslovakia) (1991-)
- Member, Board of Editors, Journal of Vegetation Science (Sweden) (1990-2002).
- Member, Board of Editors, Applied Vegetation Science (Sweden) (1998-2002).
- Member, Advisory Board, Himalayan Journal of Environment and Zoology (1990-).
- Member, Board of Editors, Proceedings of the Indian Academy of Sciences (Plant Sciences), (1986-1991).
- Member, Board of Editors, Proceedings of the Indian National Science Academy (1986-1990).
- Member, Board of Editors, Proceedings of the National Academy of Sciences, India (1997-2000).
- Chief Editor, Tropical Ecology (1984-1990).
- Member, Board of Editors, Reclamation and Revegetation Research (Elsevier) (1984-87).
- Member, Advisory Board, Journal of Plant Biology (1999-).
- Editor, The Palaeobotanist (2000-).

#### **11. Membership of Professional International Committees:**

- Secretary, International Society for Tropical Ecology (2002-)
- Member, Executive Council, International Association for Vegetation Science, Sweden (2002-2005).
- Member, Board of Governors, International Centre for Integrated Mountain Development (2002-2006).
- Member, Board of Directors, International Centre for Integrated Mountain Development Trust (2002-2006).
- Member, Programme Advisory Committee, International Centre for Integrated Mountain Development (2002-2006).
- Member, Interdisciplinary Committee of the World Cultural Council, Mexico (2000-).
- Member, Special Committee for International Geosphere-Biosphere Programme, ICSU (1987-1990).
- Member, Advisory Board of Ecological Society for SAARC Countries (1992-).
- Member, Indian National Executive Committee for the International Society for Tropical Ecology (1976-1990).
- Member, Grassland Biome Working Group for International Biological Programme, PT Section of India (1967-71).
- Convener of the Committee formed for drafting the Constitution of the International Society for Tropical Ecology (1964).

## **12. Membership of Advisory Committees for National Institutes:**

- Chairman, Governing Body, Birbal Institute of Palaeobotany, Lucknow (2003-2006)
- Member, Governing Body, Birbal Sahni Institute of Palaeobotany, Lucknow (2000-2003)
- Chairman, Research Advisory Council, Birbal Sahni Institute of Palaeobotany (2000-2003)
- Member, Research Council, National Botanical Research Institute, Lucknow (1999-2000).
- Member, Research Advisory Council, Birbal Sahni Institute of Palaeobotany, Lucknow (1997-2000).
- Chairman, Science Advisory Committee, G.B. Pant Institute of Himalayan Environment & Development, Almora (1996-2002).
- Member, Indian Council of Forestry Research & Education Society, Dehra Dun (1997-1999).
- Member, Scientific Advisory Committee, G.B. Pant Institute of Himalayan Environment and Development (Ministry of Environment and Forests) (1991-93).
- Member, Governing Body, G.B. Pant Institute of Himalayan Environment and Development (Ministry of Environment and Forests) (1995-1997, 2006-)
- Member, Research Advisory Committee, Wildlife Institute of India (1992-1995).
- Member, Advisory Committee to implement the UGC's Special Assistance Programme, Botany Department, NEHU, Shillong (1993-).
- Member, Academic Council, Central Institute of Fisheries Education, Bombay (1991-92).
- Member, Academic Council, University of Allahabad (1998-).
- Member, Governing Body, Birbal Sahni Institute of Palaeobotany (INSA representative) (1989-1991).
- Member, Technical Advisory Committee for Biological Sciences Division, Indian Statistical Institute, Calcutta (1989-1991)
- Joint Secretary, National Institute of Ecology (1983-87).
- President, National Institute of Ecology (1997-1999).

## **13. Membership of National Committees of Academies and Societies:**

- President of the Section of Environmental Sciences, The Indian Science Congress Association (2003-2004).
- Chairman, Joint National Committee of IGBP, WCRP and SCOPE (2004-).
- Chairman, Indian National Committee for SCOPE (1994-1997).
- Member, Council, Indian National Science Academy (1989-91).
- Member, National Committee for the Geosphere-Biosphere Programme, Indian National Science Academy (1987-1991).
- Secretary-Member, Indian National Committee for SCOPE, Indian National Science Academy (1988-1990).
- Member, Sectional Committee (Plant Sciences), Indian National Science Academy (1986-1988).
- Member, Sectional Committee (Animal/Plant Sciences), Indian Academy of Sciences (1986-1988).
- Member, Indian National Committee for SCOPE, Indian National Science Academy (1982-85).

- Member, Nomenclature Committee, Indian Science Congress Association (1985-86).
- Secretary, International Society for Tropical Ecology (1995-2000; 2001-).
- President, Ecotransformation - Centre for Environment and Rural Upliftment (1996-1997).
- Joint Secretary, Central Himalayan Environment Association (1983-85).
- Member, Steering Committee for Organizing Ecology Symposium During 57th Session of the Indian Science Congress Association held at Kharagpur (1970).
- Member, Publication Committee for Indian Science Congress Association held at Kharagpur (1968).

#### **14. Membership of Government Committees:**

- Member, National Forest Commission, Ministry of Environment & Forests, New Delhi(2003-2005).
- Member, Forest Advisory Committee, Gov. Of India (2007-)
- Chairman, Research Committee, Wetlands, MoEF (2004-)
- Member, National Wetlands Development Board, MoEF (2004-)
- Member, Task Force on Forests and Environment, Planning Commission, New Delhi (2004).
- Member, Expert Group on Botany and Ecology, UGC (2004-)
- Member, Ecosystem Study Committee, MoEF (2003-)
- Chairman, Programme Advisory Committee on Plant Sciences, Ministry of Science and Technology, New Delhi (2001-2004).
- Member, Science and Engineering Research Council, Ministry of Science & Technology, New Delhi (2001-2004).
- Member, Plant Sciences Research Committee, CSIR, New Delhi (2001-2004).
- Member, Expert Group on Landuse and Forestry, Ministry of Environment and Forests, New Delhi (1999-2000).
- Member, Expert Group on Greenhouse Gas Emission Inventories, Scenarios and national Communications, Ministry of Environment and Forests, New Delhi (1999-).
- Coordinator, Thematic Working Group on Natural Terrestrial Ecosystems, Ministry of Environment and Forests, New Delhi (2000-).
- Member, Standing Committee on Biodiversity Conservation, Madhya Pradesh Biodiversity Board, M.P.
- Member, Task Force on Sal Borer Attack in M.P. Forests, Ministry of Environment & Forests, New Delhi (1998-1999).
- Chairman, Programme Advisory Committee on Plant Sciences, Ministry of Science and Technology, New Delhi (1998-2001).
- Member, Programme Advisory Committee for Botanical and Zoological Survey of India, Ministry of Environment & Forests, New Delhi (1997-1999).
- Member, Advisory Committee, Council of Science & Technology, U.P. (1997-).
- Member, Programme Advisory Committee on Animal Behaviour, Ecology and Evolution, Ministry of Science and Technology, New Delhi (1991-97).
- Member, Task Force on Environmental Biotechnology, Department of Biotechnology, New Delhi (1990-93).

- Member, Task Force on Environment and Conservation Biotechnology, Department of Biotechnology, New Delhi (1993-96).
- Member, Plant, Agriculture and Forestry Research Committee, CSIR, New Delhi (1989-92).
- Chairman, Expert Working Group for Integrated Action Oriented Ecodevelopment Research Programme in Himalayan Region, Ministry of Environment and Forests, New Delhi (1988-1991).
- Member, Planning Team for Upper Gangetic Plains, Planning Commission (1988-89).
- Member, Steering Group of Planning Commission on Environment, Forests and Wastelands Development for formulation of Eighth Five Year Plan (1988-89).
- Member, Working Group for the formulation of Ninth Five Year Plan for the Department of Biotechnology, Planning Commission, New Delhi (1996-).
- Member, Steering Committee on Environment, Forests & Wildlife and Wastelands Development for the formulation of Ninth Five Year Plan, Planning Commission, New Delhi (1996-).
- Member, Task Force on Biodiversity, Planning Commission, New Delhi (1996-1997).
- Member, Study Group on Fuel and Fodder, Planning Commission, Govt. of India (1987-88).
- Member, Working Group for Coordinated Ecodevelopment Project in the Himalayan Region, Ministry of Environment and Forests, New Delhi (1984-88).
- Member, Working Group on Management of Renewable Resources, Science Advisory Council to the Prime Minister (1984-87).
- Member, Working Group to Study the Impact of the Hydroelectric Projects on the Ecology of the Himalayan Region, Govt. of India, Planning Commission, New Delhi (1984-86).
- Member, Expert Committee for Finalizing Areas for Environmental Mapping, Ministry of Environment and Forests (1985-86).
- Member, MAB Committee, Ministry of Environment and Forests (1984-87).
- Member, Committee on Environmental Sciences, University Grants Commission (1985-86).
- Member, Science Advisory Committee to the Cabinet on Forestry Research, Department of Science and Technology (1985-86).

### **15. Special Lectures:**

- Singh, J. S. 2006. Forests in the Anthropocene: Challenges to the forestry sector. Keynote address. World Forestry Day.
- Singh, J. S. 2005. Ecology and green cities. Key note address World Environment Day, 5 June 2005, Ministry of Environment & Forests, New Delhi
- Singh, J.S.2005.Environment Crisis. Key note address 28 June 2005. Course for college students. National Academy of Sciences & Dep. Of Botany, Allahabad university.
- Singh, J.S. 2005.Water in the Anthropocene. Inaugural address, 26 October 2005. National Symposium on Sustainable Water Management, Allahabad University.

- Singh, J.S.2006. Ecological challenges in the Anthropocene Era. Key note address, 16 Feb 2006. National symposium on Environment management in 21<sup>st</sup> Century: issues and challenges, Banaras Hindu University.
- Singh, J.S. 2006. Forest in the Anthropocene Era: Challenges to forestry sector. Key note address, 21 March 2006, World Forestry Day, Ministry of Environment and Forests, New Delhi.
- Singh, J.S. 2006.Global climate change and its impact, 24 March 2006. Academy Staff College, Banaras Hindu University.
- Singh, J.S. 2004. Sustainable development of the Indian Himalayan region:Linking ecological and economic concerns. Pandit Govind Ballabh Pant Memorial Lecture: X. 10th September 2004. G B Pant Institute of Himalayan Environment and Development, Kosi Katarmal, India.
- Singh, J, S. 2004. Sustainable Management of Biodiversity, International Centre for Mountain Research and Development, Kathmandu, Nepal, 6th December 2004
- 12th Silver Jubilee Lecture of National Botanical Research Institute on November 6, 1992.
- Lead lecture on Biodiversity and Ecosystem Function, at INSA-IUBS Symposium on Biodiversity- Genes to Ecosystems: Towards sustainable development. INSA Jubilee Meetings, January 11, 1995, New Delhi
- Lead lecture on Vegetation analysis and production estimation techniques, on August 18, 1995 at IBRAD, RNKW College, Midnapore
- Inaugural Address on Ecology of bryophytes, on December 14, 1995 at National Botanical Research Institute, Lucknow
- Plenary lecture on Burgeoning environmental problems and environmental management on March 8, 1996 at the Department of Environmental Sciences, Guru Jambheshwar University, Hisar
- Concept paper on Biodiversity studies in ecosystem perspective on August 16, 1996 at the department of Biotechnology, New Delhi
- 26<sup>th</sup> Birbal Sahni Memorial Lecture on November 14, 1996 on Causes and Consequences of Global Climatic Change, at the Birbal Sahni Institute of Palaeobotany, Lucknow
- Lead lecture on Information needs for bioprospecting and ecosystem management, at NRSA, Hyderabad on September 25, 1997.
- Keynote Address “Sustainable Development: An Ecological View Point” at the National Workshop on Perspectives for Planning and Development in North East India on 27<sup>th</sup> April 1998 at the G.B.Pant Institute of Himalayan Environment & Development, Itanagar.
- Delivered lecture on “Biodiversity and its Characterization” at Indian Institute of Remote Sensing, Deharadun, on 28<sup>th</sup> May 1999.
- Platinum Jubilee Lecture on “Climate Change: Causes and Consequences” at University of Allahabad on 9 July 1999.
- Delivered Dr. Birbal Shahni Gold Medal Lecture “Global Warming: Causes and Consequences” at the 22<sup>nd</sup> All India Botanical Conference of Indian Botanical Society & National Symposium on Recent Advances in Plant Sciences, at University of Mumbai, Mumbai on 23 October 1999.
- Delivered Special Lecture: “Forests of Himalaya with Particular Reference to Man and Forest Interactions in Central Himalaya” at the International Symposium on Multifaceted

Aspects of Tree Ring Analysis at Birbal Sahni Institute of Palaeobotany, Lucknow, from 14-15 November, 1999.

- Prof. S. B. Saksena Medal Lecture on “Seasonally Dry Tropical Forest: Fresh Perspectives” at the National Botanical Research Institute, Lucknow on 20 December, 1999.
- Delivered lecture on “Paradigms of field research on biodiversity in relation to Vindhyan hills” at National Remote Sensing Agency, Hyderabad on 28<sup>th</sup> June 2000.
- Lead lecture on “Paradigms in Biodiversity” at the Golden Jubilee Symposium on Biotechnological Innovations in Conservation and Analysis of Plant Diversity, University of Delhi, Delhi on 7 February 2001.
- Dr. Ashok Juwarkar Memorial Lecture at National Environmental Engineering Research Institute, Nagpur on 12 July 2002.
- Ecology and the environment: Issues and vision for India. Presidential Address, Environmental Science Section, Indian Science Congress Association, Jan 4 2004, Chandigarhi
- Biodiversity Conservation, Inugural Address, National Symposium on Biodiversity and Sustainable Development, Kurukshetra University, 7 Jan 2004
- Biodiversity: Past, Present and Future, Prof D D Pant Memorial Lecture, Allahabad University, 10 March 2004.
- Sustainable Development of the Indian Himalayan Region: Linking Ecological and Economic Concerns, X Pandit Govind Ballabh Pant Memorial Lecture, G B Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora, 10 September 2004.
- Ecology and green cities, World Environment Lecture, 5 June 2005, Ministry of Environment and Forests, New Delhi.

## **16. Positions held:**

<b>Date</b>	<b>Designation</b>	<b>Institution/Organization</b>
1968-1975	Lecturer	Kurukshetra University
1971-1974	Visiting Scientist (on lien from Kurukshetra Univ.)	Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, Colorado, U.S. A
1975-1976	Reader in Ecology	School of Planning and Architecture, New Delhi
1976-1984	Reader	Kumaun University, Nainital
1981-1982	Visiting Scientist	Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, Colorado, U.S.A
1984-2003	Professor, (Head of the Department, 1991-93; Coordinator, Centre of Advanced Study In Botany, 1997-2003)	Banaras Hindu University, Varanasi
1993-94	Visiting Professor (On lien from Banaras Hindu University)	Department of Rangeland Ecosystem Science, Colorado State University, Colorado, U. S. A
2004-Contd.	Emeritus Professor	Banaras Hindu University
2004-2006	Emeritus Scientist	Botanical Survey of India, Central Circle, Allahabad
2007-2009.	INSA Senior Scientist	Banaras Hindu University
2009-2013	NASI Senior Scientist	Banaras Hindu University
2014-contd.	Honorary Scientist, INSA, NASI	Banaras Hindu University

### **17. Research Guidance:**

1. Number of candidates completed Ph.D.: 43
2. Research Schemes Directed in the Past:
  - i. Primary Productivity in the Grassland Ecosystem at Kurukshetra, CSIR, New Delhi.
  - ii. Carbon-14 Cycling in Vegetation-Soil Components of a Short Grass Prairie Ecosystem, US/IBP Grassland Biome.
  - iii. Comparative Biomass Structure, Productivity and Nutrient Cycling in Mixed Oak and Conifer Forest Ecosystems, UGC, New Delhi.

- iv. Integrated Study of Natural Resources and Environment of Parts of Kumaun Himalaya through Remote Sensing, Indian Space Research Organization.
- v. An Integrated Ecological Study of Eastern Kumaun Himalaya with Emphasis on Natural Resources, Department of Science and Technology.
- vi. Recovery of Damaged Forest Ecosystems in Kumaun Himalaya, Ministry of Environment and Forests, New Delhi.
- vii. Comparative Analysis of Productivity and Nutrient Cycling in Tropical Mixed Deciduous Forest and Bamboo Savanna, UGC, New Delhi.
- viii. Environmental Degradation of Obra-Renukoot-Singrauli Area and its Impact on Natural and Derived Ecosystems, Ministry of Environment and Forests, New Delhi.
- ix. Production of Certain Biogenic Gases, Organic Matter Dynamics and Nitrogen Mineralization in Major Habitats of Dry Tropical Environment.
- x. An Integrated Ecological Study on Revegetation of Mine Spoil, Ministry of Coal, Govt. of India, New Delhi.
- xi. Bacterial and Cyanobacterial Investigations for the Control of Environmental Pollution and Related Physiological Studies, Department of Biotechnology, New Delhi.
- xii. Ecological Analysis of Plant Diversity in Central Highlands, Ministry of Environment and Forests, New Delhi.
- xiii. Seed germination and seedling growth of selected plants in context of global climate change, Council of Science and Technology, U.P.

3. Recent Research Scheme: Pattern of Species Distribution and Diversity in Dry Tropical Forest in relation to Disturbance, C S I R, New Delhi.

4. Current research scheme: Structure Diversity and Functioning of Dry Tropical Forest. INSA and NASI

**18. Number of Publications:**

Total	:405	
<b>Citation analysis from</b>		
<b>Google Scholar:</b> as of 18 June 2019	<b>All</b>	<b>since 2014</b>
Citations	18257	5461
h-index	69	39
i10-index	254	136

**Research Interests:** Himalayan and Dry Tropical Ecosystems

**19. Symposia/Conference Attended:**

- Discussion leader for the Grassland session of the IBP Seminar held at Varanasi in June 1970.
- Participated in and chaired a session of IBP meetings at Warsaw, Poland in 1973.
- Participated in and chaired a Working Group Meeting of IBP, India (Varanasi) in 1974.
- Participated in and organised author-editor discussion meeting for IBP synthesis at U.S.A. and Canada in 1976.
- Participated and chaired a session at CNPS Workshop of University of Georgia, April 1986.
- Participated in several international and national Seminars/ meetings in U.S.A. (Fort Collins, Tempe, Denver, Washington, Syracuse), Canada (Saskatchewan, Calgary), Australia (Brisbane, Canberra), USSR (Moscow), Sweden (Stockholm), Germany (Berlin), France (Paris), and India (Delhi, Varanasi, Kharagpur, Ujjain, Ahmedabad, Allahabad, Jhansi).
- Attended Conference on “Alpine Experience: An Approach for other Mountain Regions” at Berchtesgaden, Germany, Jun-July 2002.

## **20. Seminars Organised:**

- Convener, National Seminar "Ecology: Current Problems and Future Perspectives", Department of Botany, Banaras Hindu University, March 10-12, 1995.
- Convener, Brainstorming Session on "Soil Microenvironment and Lake Ecosystem", Department of Biotechnology, Ministry of Science and Technology, Govt. of India, New Delhi, Department of Botany, B.H.U., October 9-10, 1992.
- Convener, Working Group meeting of National IGBP committee, INSA, New Delhi, Department of Botany, B.H.U., February 12-13, 1990.
- Convener, Symposium II. Primary Productivity and Carrying Capacity of Rangeland Ecosystems, 3rd International Rangeland Congress, November 7-11, 1988.
- Co-Chairman, International Conference on Rehabilitation of Disturbed Ecosystems: A Global Issue, December 11-16, 1987.
- Organising Secretary, IX International Symposium on Tropical Ecology, December 11-16, 1987.
- Member, Programme Planning Committee, IV International Congress of Ecology, Syracuse, N.Y., 1986.
- Convener, Symposium on net primary productivity and herbage dynamics in grasslands during the International Conference on Biometeorology, New Delhi, December 26-30, 1983.
- Local Secretary for organising the Convention of Plant Biochemist and Physiologists at Naini Tal, June 10-12, 1981.
- Convener, Seminar on Science and Rural Development in Mountains, sponsored by DST and UGC at Naini Tal, November 3-5, 1978.

## **21. Biographical References:**

- *Who's Who in India*, 1986. Business Press (Pvt.) Ltd., Bombay.
- *Who's Who in the World*, 9th Edition, Marquis Who's Who, Wilmette, Illinois.
- *Reference Asia: Asia's Who's Who of Men & Women of Achievement*, 1989, Rifacimento International, 1369 Kashmere Gate, Delhi.

- *Reference India*, 1992, Rifacimento International, 1369 Kashmere Gate, Delhi.
- *India Who's Who*, 1990-91, INFA Publications, New Delhi.
- *Who's Who in International Affairs*, Europa Publications Limited, London, England.
- *Bhatnagar Laureates (1958-1991)*, 1992. Council of Scientific and Industrial Research, New Delhi.
- *Indian Expertise in the Environmental Science: A Directory*, 1992. World Wide Fund for Nature - India, Ministry of Environment and Forests, Government of India.

