



Bio-Data

Name: Susheel Verma

Designation: Associate Professor, School of Biosciences and Biotechnology, BGSB University, Rajouri

Date of Birth: 09.04.1971

Email: eremurus@rediffmail.com

Qualification: M Sc (Botany) Ph. D

Academic Record: Through out first class (Matriculation and onwards)

4th position in the order of merit in M.Sc.

Specialization in M.Sc.: Cytogenetics

Area of specialization: Conservation Biology, Cytology, Plant Biotechnology, Molecular Genetics and Reproductive Biology

Teaching and Research Experience Excluding Ph. D: 21 years

Publications: 58

- **Papers:** 28
- **Research Journals:** 22; **Book Chapters:** 4
- **Conference proceedings:** 1; **Popular Articles:** 1
- **Abstracts:** 30

Conferences/ Seminars / workshops attended: 28

International: 06; **National:** 16; **Regional:** 6

Awards and Honors

1. Qualified **National Eligibility Test** jointly conducted by CSIR-UGC in 1999
2. Awarded Dr. R. S. Rao Award in Conservation Botany by Indian Association for Angiosperm Taxonomy in 1999.
3. Awarded **Young Scientist Award** and **Dr. M. S. Swaminathan Certificate of Merit**, Indian Botanical Society in 2002.

4. Awarded **Fast Track Fellowship** of **Department of Science and Technology**, Govt. of India to carry out research independently in 2006.

Fellowships

a. International

- Nominated by the Ministry of Human Resource Development, Govt. of India for Chinese Govt Fellowship for one year, 2003 – 2004.

b. National

Senior Research Fellowship of Council of Scientific and Industrial Research (CSIR), Govt. of India in 1999 (1999-2002)

- Research Associateship of CSIR in 2002 (2002-2005)
- Senior Research Associate (Pool Officer) of CSIR in 2005 (2005 – 2009)

M.Phil/Ph. D guided and produced:

- M. Phil guided: 2
- Ph. D awarded: 2
- Ph. D being guided: 1

Research Projects

A. Ongoing

1. Preventing extinction and improving conservation status of threatened plants through application of biotechnological tools funded by Department of Biotechnology (DBT), Ministry of Science and Technology, Govt. of India, New Delhi (Rs. 48.00 Lakhs)
2. Socio economic upliftment of rural women belonging to SC/ST communities through adoption of eco-friendly technologies in Dhanore region, Rajouri District of Jammu and Kashmir State funded by Department of Biotechnology (DBT), Ministry of Science and Technology, Govt. of India, New Delhi (Rs. 45.66 Lakhs)

B. Completed

1. Studies on Reproductive Biology and genetic diversity of *Rauwolfia serpentina*, *Tinospora cordifolia* and *Asparagus racemosus* funded by Department of Science and Technology (DST), Govt. of India (Rs. 9.30 lakhs).

3. **Studies on reproductive biology of *Picrorhiza kurrooa* Royle ex Benth., *P.scrophulariiflora* Pennell, *Valeriana wallichii* DC. and *Ferula jaeschkeana* Vatke** funded by Department of Biotechnology (DBT), Ministry of Science and Technology, Govt. of India, New Delhi (Rs. 52.44 Lakhs)
4. **Improvement of Infrastructural Facilities in Pir Panjal Biodiversity Park for *ex situ* conservation of endangered and endemic plant species and development of the Botanic Garden of the University as Lead Garden, Phase-I** funded by Ministry of Environment and Forests, Govt. of India (Rs. 58.58 Lakhs).
5. **Assessment, mapping and prioritization of economically important and over exploited plants in a part of the proposed cold Desert Biosphere Reserve for Conservation** funded by Ministry of Environment and Forests, Govt. of India (Rs. 18.65 Lakhs).
6. **All India coordinated All India Coordinated Research Project on Reproductive Biology of Four rare, Endangered and threatened (RET) tree species namely: *Acer caesium* Wall; *Buxus wallichiana* Baill.; *Saraca asoca*(Rox)Willd.; *Woodfordia fruticosa*(L)Kurz of Jammu province of J&K state** funded by Ministry of Environment and Forests, Govt. of India (Rs. 36.9Lakhs) (In collaboration with Department of Botany, University of Jammu)

Membership of Scientific Societies

- Society for Conservation Biology
- International Society for Sexual Plant Reproduction, Netherlands
- International Association of Angiosperm Taxonomy, Vienna
- International Organization of Plant Biosystematists, Prague
- The Society of Plant Reproductive Biologists, Agra
- International Society of Plant Morphologists, Delhi, India
- Indian Botanical Society (Life member)
- Indian Science Congress Association

Institutional Activities:

- Member of various committees including DRC, DPC, Advisory Committee constituted for running DBT funded M. Sc. Biotechnology Programme, Board of Research studies in Botany and Biotechnology.
- Involved in conduct of examinations in the Department and member of the flying Squads during semester examinations of other P.G and U.G programs in the BGSB University.
- Involved in organization of important Day celebrations, Conferences, Seminars, workshops and invited lectures in the Department.

List of Publications (All other details are mentioned in PBAS proforma)

A. (Papers)

1. Verma, S. (2016). Genetic diversity assessment of *Phaseolus vulgaris* L. in two Himalayan regions of India". **Proceedings of National Academy of Sciences India section B** DOI: 10.1007/s40011-016-0742-y (with Dar, F. A and Rehman, R. U).
2. Verma, S. (2016). Male function for ensuring pollination and reproductive Success in *Berberis Lycium* Royle: A novel mechanism. **Journal of Biosciences**. 41(1):21-25. DOI 10.1007/s12038-015-9581-x. (with Supriya Sharma).
3. Verma, S. (2016). New additions to the lichen flora of Jammu and Kashmir state (India). **Tropical Plant Research**.3(1): 151-161. (with Bhat, M. and Upreti, D. K).
4. Verma, S. (2014). Assessment of air quality of Rajouri town, Jammu and Kashmir using lichen transplant technique. **Science and Technology Journal**. 2(1): 15 – 19. (with Bhat, M. and Upreti, D. K).
5. Verma, S. (2014). Lichens for sustainable development. **International Journal of Environmental Research and Development** 4: 325 – 328 (With Bhat, M and Upreti, D. K).
6. Verma, S. (2014). Genetic diversity in *Valeriana wallichii* DC., a medicinally important threatened species as assessed by Random Amplified Polymorphic DNA in two Himalayan states of India. **Proceedings of National Academy of Sciences**. 84:579-585. DOI 10.1007/s40011-013-0242-2 (with Sharma, P, Sharma, A and Karihaloo, J. L).
7. Verma, S. (2013). Genomic DNA extraction from *Ferula jaeschkeana* Vatke (Apiaceae) optimized for Random Amplified Polymorphic DNA Polymerase Chain Reaction (RAPD-PCR) analysis. **Proceedings of National Academy of Sciences**. 83: 341-345. DOI 10.1007/s40011-012-0142-x (with Sharma, P and Sharma, A).

8. Verma, S. (2011). Polymorphism in pollen mothers cells of *Valeriana wallichii* DC. (Valerianaceae). **Nucleus**, 54: 141-145 (with Sharma, A and Sharma, P).
9. Verma, S. (2011). Styler movement in *Valeriana wallichii* DC.-a contrivance for reproductive assurance and species survival. **Current Science** 100(8) : 1143-1144 (with Sharma, A and Sharma, P).
10. Verma, S. (2011). *Reinwardtia indica* Dumort.- first flowering report of the season. **The International Journal of Plant Reproductive Biology** 3(1) : 78
11. Verma, S. (2010). and Genetic Systems in chillies II. Meiotic System of three cultivars of *Capsicum annuum* L. **Caryologia**, 63(1): 3-10. (with Chibber, N and Sharma, N)
12. Verma, S. (2009). Diversity and economic importance of agroforestry species in Dhanore region of Rajouri District, Jammu & Kashmir, **Indian J. Forestry**, 32(3): 401-405.(with Pant, S.)
13. Verma, S. (2009). Stigma behavior in *Incarvillea emodi* (Bignoniaceae). **Journal of Plant Reproductive Biology**, 1(1): 27-32. (with Magotra, R., Sharma, N., and Koul, A. K)
14. Verma, S., (2008). Pollinator induced anther dehiscence in *Incarvillea emodi* (Bignoniaceae). **Current Science**, 94: 1372-1374. (with Kaul, V., Magotra, R. and Koul, A. K)
15. Verma, S. (2008). Ethnobotanical Notes on Tree Species of Pir Panjal Biodiversity Park of Baba Ghulam Shah Badshah University, Rajouri, J&K, India, **Ethnobotanical Leaflets** 12: 400-408. (with Pant, S)
16. Verma, S., (2007). Genetic diversity in *Eremostachys superba* Royle ex Benth. (Lamiaceae), an endangered Himalayan species, as assessed by RAPD markers. **Genetic Resources and Crop Evolution** 54: 221-229. (with Karihaloo, J. I., Tiwari, S. K., Magotra, R. and Koul, A. K)
17. Verma, S. (2007). Genetic System of Chillies 1. Breeding and Meiotic system of Var. KL.1. **Cytologia** 72(1): 17-21. (with Chibber, N. and Sharma, N)
18. Verma, S., (2004). Styler movement avoids self and promotes cross-pollination in *Eremurus himalaicus*. **Current Science** 87: 872-873. (with Magotra, R. and Koul, A. K)

19. **Verma, S. (2003).** Restoration of *Eremostachys superba* Royle ex Benth.- a critically endangered species. **Current Science** **84**: 1307–8. (with Magotra, R. and Koul, A. K)
20. **Verma, S. (2002).** In vitro multiplication of *Eremurus persicus* Boiss. (Liliaceae)—an endangered species. **Phytomorphology** **52**: 1–7. (with Magotra, R. and Koul, A. K)
21. **Verma, S. (1997).** Is *Eremostachys superba* Royle ex Benth. really at the verge of extinction? **Current Science** **73**: 313–314. (with Koul, A. K. and Magotra, R)
22. **Verma, S. (1997).** On the Brink. **Amruth**: 7 (with Koul, A. K., and Magotra, R)

Book Chapters

1. **Verma, S. (2015).** Lichens: indicators of climate change 118-119. Energy research and environmental management: An innovative Approach. **Krishi Sanskriti Publications, New Delhi** ((with Bhat, M. and Upreti, D. K).
2. **Verma, S (2005).** Autonomous endosperm development in angiosperms. In: Plant Reproductive and Molecular Biology (eds. S. N. Chaturvedi and K. P. Singh), Festschrift in honour of Prof. S. V. S Chauhan, pp 30-37, **Aavishkar Publishers, Distributors, Jaipur, India.** (with Koul, V. and Koul A. K)
3. **Verma, S. (2004).** Relevance of data on reproductive biology for conservation of threatened plants. Plant Diversity in India (Eds. J. S. Dargan & T. A. Sarma), pp 147–158, **Bishen Pal – Mahender Pal Singh, Dehradun.** (Koul, A. K. and Magotra, R)
4. **Verma, S. (2000).** Dual danger to plant biodiversity in India. Environmental Protection (eds. A. K. Thukral and G. S. Virk), pp 107–114, **Scientific Publishers, Jodhpur, India.** (with Koul, A. K. Magotra, R.).

Conference Proceedings:

1. **Verma, S. (2001).** Insect induced anther dehiscence, pollination and maximization of maternal rewards. Tropical Ecosystems: structure, diversity and human welfare(eds. K. N. Ganeshaiah, R. Uma Shaanker and K. S. Bawa), pp 211–213, **Oxford and IBH, New Delhi.** (with Magotra, R. and Koul, A. K)

Popular Article:

1. **Verma, S. (1997).**Tara village in Jammu District provides hope to save *Eremostachys superba* from extinction. **Haryali** (April–Sept.): 18–19. (with Koul, A. K., Magotra, R).

**Sd/
(Susheel Verma)**