

CURRICULUM VITAE



Dr. Kusum

B.Sc., B.Ed., M.Sc., HPTET, HPSET & PhD

CURRICULUM VITAE

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|----------------------------|---|--|
| Name of the Candidate | : | Dr. Kusum |
| Designation | : | Assistant Professor (Botany) |
| Teaching Experience | : | 17 Years (UG & PG Classes) |
| Father's Name | : | Sh. Shanti Swaroop Shashtri |
| Mother's Name | : | Smt. Sulekha Sharma |
| Date of birth | : | June 01, 1985 |
| Nationality | : | Indian |
| Religion | : | Hindu |
| Gender | : | Female |
| Marital Status | : | Married |
| Spouse's Name | : | Mr. Subhash Chand |
| Language Known | : | English & Hindi |
| Address for Correspondence | : | Department of Botany, St. Bede's College, Shimla-171002, (H.P)-India |
| Address for Permanent | : | VPO- Palog, Teh-Arki, Distt.-Solan-173208, (H.P)-India |
| Contact No | : | +917876013046, + 919418821305 |
| E – Mail | : | drkusum568@gmail.com , kusumstar85@gmail.com |
| Orcid id | : | https://orcid.org/0009-0007-8802-5542 |

ACADEMIC AND PROFESSIONAL QUALIFICATIONS

| Examination | Year of Passing | Board/University | (%) | Division |
|---------------------------------|-----------------|-----------------------------------|-----------------------------------|----------|
| Matric (10 th) | 2000 | HPSEB Dharmsala (H.P) | 67.14 | Ist |
| High School (12 th) | 2002 | HPSEB Dharmsala (H.P) | 68.60 | Ist |
| B.Sc. | 2005 | HP University, Shimla (H.P) | 64.65 | Ist |
| B.Ed. | 2006 | HP University, Shimla (H.P) | 64.91 | Ist |
| M.Sc. | 2008 | HP University, Shimla (H.P) | 70.87 | Ist |
| TET (HP) | 2012 | HPSSSB, Hamirpur, (H.P) | 64.67 | Ist |
| SET (HP) | 2017 | HPPSC, Shimla, (H.P) | | |
| PhD | 2014 | Shoolini University, Solan, (H.P) | Awarded (As per UGC reg. 2009) | |

TEACHING EXPERIENCE (17 Years)

1. Sciences & Business Management (SILB), Solan, (H.P), July 1st 2008 to July 30th 2018.
2. Working as Assistant Professor in Department of Botany, St. Bede's College, Shimla, (H.P), August 1st 2018 to till present.

RESEARCH SPECIALIZATION AND FIELD EXPERIENCE

Specialization: Plant Biodiversity and Ecology

A. Plant Biodiversity

1. Collection, identification, distribution pattern and ecology of plants specially orchids of the North-Western Himalaya (Himachal Pradesh).
2. Collection and identification of some ethno-botanical plants of some Districts of Himachal Pradesh.

3. Plant identifications and Herbarium Technique (BSD, DD, PAN) consultation for general studies and to compare different collected species to authenticate their exact taxonomic identity.

B. Applied Botany:

1. Biochemical analysis (Isoenzyme analysis, molecular characterization of species).

RESEARCH TRAININGS / FDP PROGRAMS

1. **Attended** One week National workshop cum Seminar on Advances in Electron Microscopy and allied fields at Shoolini University, Solan, (H.P), September 23rd -29th, 2011.
2. Attended, Faculty Development Program (online) St. Bede's College, Shimla on “Design and Development of MOOCs” organized by St. Bede’s College, Shimla from January 1st-5th, 2022.
3. Attended, FDP on “Revamping Emotional and Professional Paradigms for an Inclusive Approach to Holistic Education” organized by Department of Commerce and Management under the aegis of IQAC, St. Bede’s College, Shimla, from March 3rd - 7th, 2022.
4. Attended, Five Day Faculty Development Program on “Academic Writing and Research Methodology”, organized by St. Bede’s College, Shimla from December 26th-30th, 2023.
5. Attended, Six Day Faculty Development Program on “Enhancing quality assurance in Higher Education: Insights into NEP 2020”, organized by St. Bede’s College, Shimla from December 16th-21st, 2024.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

(Associations/Organizations/Book Chapters/Research Journals)

1. Life Member of Him Science Congress Association (HSCA), Solan, (H.P), INDIA.
2. Life Member of International Organization for Academic and Scientific Development (IOASD). Membership ID: LMIOASD-87/2023.
3. Associate Editor in Chief, International Book Chapter “Interdisciplinary Studies of Literature”, Shimla, (H.P)-INDIA, ISBN-978-93-5917-392-4.

4. Editor in Chief, International Book Chapter “Interdisciplinary Studies in Humanities and Sciences”, Shimla, (H.P)-INDIA, ISBN: 978-93-5996-533-8.
5. Associate Editor, ‘Journal of Research: The Bede Athenaeum, St. Bede’s College, Shimla, (H.P), INDIA.
[Indian Journals - Journal of Research The Bede Athenaeum](#)
6. Member of Reviewer, Journal of Plant Sciences (JPS), (Science PF Publishing Group), ISSN- 2331-0731, USA.
<http://www.sciencepublishinggroup.com/journal/jps>
7. Member of Editorial Board, African Journal of Biological Sciences, ISSN-2263-2187, AFRICA.
[African Journal of Biological Sciences](#)
8. Assistant Editor, International Journal of Botany Studies, ISSN-2455-541X, INDIA.
9. Member of Editorial Board, Edwin Group of Research Journals, USA.

RESEARCH PUBLICATIONS

(Published in different indexing: Scopus/Peer Reviewed/ Refereed/Web of Science)

1. Verma, J., P. Jaglan, K. Thakur, **Kusum**, L. K. Attri, and S. P. Vij. 2010. *Habenaria aitchisonii* Reichb. f. and *H. pubescens* Lindl. (Orchidaceae): New additions to flora of Himachal Pradesh. *Journal of The Orchid Society of India*, **24**: 53-56. ISSN 0971-5371.
2. Verma, J., K. Thakur, and **Kusum**. 2012. Ethnobotanically important plants of Mandi and Solan districts of Himachal Pradesh, Northwest Himalaya. *Plant Archives*, **12** (1): 185-190. ISSN 0972-5210.
3. Verma, J., **Kusum**, K. Thakur, J. K. Sembi and, S. P. Vij. 2012. Studies on seed morphometry of seven Himalayan orchids exhibiting varied life modes. *Acta Botanica Gallica*. **159** (4): 443-449. ISSN 1253-8078.
4. **Kusum**, K. Thakur and, J. Verma. 2013. Study on distribution, habitat characteristics and seed morphometry of a medicinal orchid, *Eulophia herbacea* Lindl. in Himachal Pradesh. *Vegetos*, **26** (2): 121-126. ISSN 0970-4078.

5. Verma, J., **Kusum**, K. Thakur, and S. P. Vij. 2014. Lesser known orchids of Himachal Pradesh: I - Genus *Zeuxine* Lindley. *Pleione*, **8** (1): 1-8. ISSN: 0973-9467.
6. Verma, J., **Kusum**, K. Thakur, J. K. Sembi and, S. P. Vij. 2014. Study on seed morphometry of some threatened Western Himalayan orchids. *Turkish Journal of Botany*, **38**: 234-251. ISSN 1300-008X.
7. Verma, J., **Kusum** and, J. K. Sembi. 2014. Study on distribution and habitat ecology of rare Lady Slipper orchid (*Cypripedium cordigerum* D. Don) in Himachal Pradesh. *Vegetos*, **27** (2): 382-388. ISSN 0970-4078.
8. Singh, V., R. C. Gupta, **K. Sharma**, V. Sharma, M. Sharma and K. Kaur. 2018. Male meiotic studies in 29 species of Lamiaceae from Sirmaur district HP. *Cytologia*, **83**: 235-243. ISSN 0011-4545.
9. Verma, J., K. Thakur, **Kusum**, J. K. Sembi and P. Pathak. 2018. Leaf micro morphology of some *Habenaria* Willd. Sensu lato (Orchidaceae) species from western Himalaya *J. Orchid Society of India*, **32**: 103-112. ISSN 0971-5371.
10. Bharti, H., **Kusum** and J. Verma. 2021. Wild Edible Fruits and Vegetables of Himachal Pradesh. *The Bede Athenaeum*. **12**: 53-66. 0976- 0598.
11. Verma, J., K. Thakur, J. K. Sembi, Kusum and P. Pathak. 2021. On occurrence of a leafless *Cymbidium* in Western Himalaya. *J. Orchid Society of India*, **35**: 91-95, ISSN 0971-5371.
12. **Kusum**, J. Verma and J. K. Sembi. 2022. Isoenzyme studies in a polymorphic orchid species, *Satyrium nepalense* D. Don. *J. Medicinal Plants Studies*, **10(1)**: 215-221, ISSN 2320-3862.
13. Verma, J., K. Thakur, J.K. Sembi, **Kusum**, and P. Pathak. 2023. Lesser known orchids of Himachal Pradesh (Northwest Himalayas): iii - Genus *Hemipilia* Lindl. *J. Orchid Soc. India*, **37**: 65-73, ISSN 0971-5371 2.
14. Priya and **Kusum** 2025. A Study on Medicinal Plants of Talwara Block, District Hoshiarpur, Pubjab, India, *Elixir Applied Botany*, **188**:57361-57369, ISSN 2269-712X.

CHAPTERS

1. Kanchan, M., J. Verma, S. K. Bhatti, K. Thakur, **Kusum**, A. Sagar and J. K. Sembi. 2022. Orchids and mycorrhizal endophytes: A hand in glove relationship. In: Endophyte Biology: Recent Findings from Kashmir Himalayas. Z. A. Wani (ed.). CRC Press, Taylor & Francis Group. ISBN-9781774638323.
2. **Kusum**, 2023. “Mineral Nutrition in Plants”, International Book Chapter: Interdisciplinary Studies of Literature. Kusumita Publishers, Navbahar, Shimla (H.P)-INDIA, p.p: 1-8. ISBN-978-93-5917-392-4.
3. **Kusum**, 2023. “Herbarium”, International Book Chapter: Interdisciplinary Studies in Humanities and Sciences, Kusumita Publishers, Navbahar, Shimla (H.P)-INDIA, p.p: 66-72, ISBN-978-93-5996-533-8.
4. **Kusum**, 2024. “Biodiversity”, International Book Chapter: Interdisciplinary Studies of Literature. Tulip Publications, Navbahar, Shimla (H.P)-INDIA, p.p: 29-35. ISBN-978-93-5917-392-4.
5. **Kusum**, 2025. “Pesticides And Biopesticides or Biocontrol Agents” Advancement in life, health and agriculture science volume-II, Chyren Publication, Palwal Haryana, INDIA. p.p: 75-80. ISBN-978-93-49076-39-6.

PATENTS

Indian patent on “Digital Herbarium Storage Cabinet”, published by Intellectual Property, Government of India, CBR No: 206333, 25/03/2025. (Status: Granted)

CONSULTANCY SERVICE

As a subject Expert in live program “मंजिल” on the topic ‘Study in Botany and Scope for Youth’ at DD Himachal, Shimla, (H.P) on 13th November, 2023.

PAPER PRESENTATION IN CONFERENCES AND SEMINARS

1. Verma, Jagdeep and **Kusum**. 2011, On the distribution of three medicinal orchids in Himachal Pradesh. In: Souvenir-cum-Abstract Book of National Conference on Orchids in India: Diversity, Characterization and Community Livelihood. NASI, Allahabad, p.p. 94.
2. **Kusum**, K. Thakur, and Jagdeep Verma. 2013. Study on population structure and habitat characteristics of *Goodyera biflora* (Lindl.) Hook. f.: a threatened jewel

- orchid. In: Abstract Book of 1st Annual National Conference on Science: Emerging Scenario and Future challenges. HSCA, Solan, p.p. 53.
3. **Kusum** and Jagdeep. On occurrence of a leafless Cymbidium in Western Himalaya. In 8th International e-Conference on Progress of Science and Technology during Pandemic. (PSTDP- 2021) September 11-12, 2021 organized by HSCA. HP, India, p.p. 90.
 4. **Kusum** and Jagdeep. On occurrence of an endangered Therapeutic Orchid (*Satyrium Nepalese* D. Don) in Himachal Pradesh. In a National Conference on Novel Progression in science and Technology 2022 on November 28-29, 2022 organized by St. Bede's College, Shimla. HP, India.

CONFERENCES, SEMINARS AND POSTERS (Attended/Organised)

1. National Conference on "Orchids: Science and Society and Orchid Show", organized by Bangalore University, Bangalore, April 10th-12th 2008.
2. National Conference on Medicinal Orchids: Sustainable use and benefit sharing for rural and tribal communities. Punjab University, Chandigarh. Mar. 29-30, 2011.
3. National workshop cum Seminar on Advances in Electron Microscopy and allied fields. Shoolini University, Sloan September 23rd-29th, 2011.
4. National Conference on Orchids in India: Diversity, Characterization and Community Livelihood. NASI, Allahabad. Dec. 21st-23rd, 2011.
5. Poster presentation in "19th Punjab Science Congress, organized by SUS group of institutions, Mohali, (P.B), February 7th-9th 2016.
6. One Day National Seminar on "Celebrating Indian Science from Past to Future" in collaboration with Indian Science Association (ISCA), Shimla, September 13th, 2018.
7. One Day Regional Workshop on "Forestry Research, Sustainable Forest Management and Livelihood" organized by HFRI, Shimla and sponsored by NABARD, Shimla on March 17th, 2021.
8. National Conference on Novel Progression in science and Technology 2022 on November 28-29, 2022 organized by St. Bede's College, Shimla. HP, India.

9. Seminar on “Building Excellence in life and career through work ethics and culture”, organized by St. Bede’s College, Shimla, (H.P), November 18th, 2024.
10. Webinar on “CMAI-IHRO Cyber barrio mission: A pathway towards employability”, organized by St. Bede’s College, Shimla, (H.P), November 22nd, 2024.

RESEARCH PROJECTS (As Supervisor)

- Shoolini Institute of Life Sciences and Business Management, Solan, (H.P), M.Sc. Botany Minor Projects: 30
- St. Bede’s College, Shimla, M.Sc. Botany Minor Projects: 20

BOOKS PUBLICATION

One Book is currently in under publication process, aligned with the “Indian Knowledge System” (IKS): Research Methodology in Sciences and Humanities.

PRACTICAL EXAMINERS & EVALUATORS

- Appointed as Internal Examiner’s, HPU, Shimla, (H.P) from 2014 (UG & PG Courses) to till present.
- Appointed as Evaluator, HPU, Shimla, (H.P) from 2018 (UG & PG Courses) to till present.

AWARDS AND HONORS

- Conferred, “**Noble Indian Best Teacher Award**” in recognition of the consistent superior performance in ‘Plant Ecology and Biodiversity’ by International Multidisciplinary Research Foundation (IMRF), Vijaywada, India, 26/01/2024.
- Conferred, **Dr. Sarvepalli Radhakrishnan National Educationist Award**, for excellent contribution in the field of Education by Welred Foundation, Niti Aayog, India, 28/09/2024.

CO-CURRICULAR ACTIVITIES (SKILLS)

1. Appointed as resource person in the Special Camp (from Dec. 23-29, 2017)
Organized by NSS unit of Govt. College Rajgarh, Distt. Sirmaur, Himachal Pradesh. Shared views on Topic 'Environmental Pollution: causes and consequences on Dec. 25, 2017.
2. Organized many events like: Conferences, Seminars, Webinars, Workshops and extension activities as Coordinator, Secretary and Convener.
3. Conducting extensive field surveys for plant exploration, taxonomical and ecological studies.

Date: 04/09/2025

(Dr. Kusum)