








Designation and Affiliation	DR. DHARAM C. ATTRI Assistant Professor Department of Environment, Sustainability and Climate Change Islamic University of Science & Technology (IUST), Kashmir 1-University Avenue, Awantipora, Pulwama, Pin Code-192122, GPO (Srinagar) Post Box No. 89, Jammu & Kashmir, India	
E-mail & Contact Numbers (Google Scholar, ResearchGate & ORCID)	 dharam@iust.ac.in ; dcattri13@gmail.com  + 91- 9897042233  https://scholar.google.co.in/citations?hl=en&user=7bBaA1QAAAAJ  https://www.researchgate.net/profile/Dharam_Attri  https://orcid.org/0000-0001-5732-1081  https://www.linkedin.com/in/dharam-c-attri-43445319a/	
Employment Details: ⇒ Assistant Professor: Department of Environment, Sustainability & Climate Change, IUST (24.06.2024-Continue) ⇒ Guest faculty: Department of Botany, Central University of Jammu (11.04.2022 to 31.05.2024). ⇒ Consultant: UNDP-SECURE Himalaya Project GWLS&NP, Uttarakhand (01.10.2021 to 31.03.2022). ⇒ Research Associate: G.B. Pant National Institute of Himalayan Environment (NIHE), Uttarakhand (17.06.2019 to 31.03.2021). ⇒ Lecturer (AA): School Education Department (10+2), Govt. of Jammu & Kashmir (Sept. 2010 to Feb. 2013). Education Details: ⇒ Ph.D. (2019): Plant Physiology, High Altitude Plant Physiology Research Centre (HAPPRC), HNBGU, Uttarakhand, India ⇒ M.Phil. (2014): Environmental Plant Biology, High Altitude Plant Physiology Research Centre (HAPPRC), HNBGU, Uttarakhand ⇒ Master of Science (2010): Botany (Specialization: Biodiversity and Conservation), HNBGU, Uttarakhand, India ⇒ Bachelor of Science (2008): Medical, Govt. Degree College (Boys), Udhampur, University of Jammu, J&K, India		
Area of specialization Plant Physiology; Environmental Plant Biology, Biodiversity Conservation; Medicinal & Aromatic Plants (MAP) Propagation.		
Subjects taught at UG/PG level: Applied Ecology; Conservation Biology; Environmental Biology; Applied Pteridology & Gymnospermology; Mushroom Cultivation; Economic Botany; Ethnobotany.		
Key Achievements:		
Research Projects: ⇒ Consultancy project: 01 ⇒ Research projects involved: 02 ⇒ MPCDAs: 01 ⇒ Cultivation Practices (MAPs): 10 species ⇒ Harvesting protocols (MAP): 10 species ⇒ ABS Model in MAPs: 04 species	Research Publications: ⇒ Research Papers Published: 24 ⇒ Book Chapters Published: 07 ⇒ Research Papers Accepted for Publication: 0 ⇒ Book Chapters Accepted for Publication: 04 ⇒ Research Papers communicated: 04	
Awards & Recognitions: ⇒ Young Scientist Award: 01 ⇒ Organizing Secretary National Seminar (OBT-2024): 01 ⇒ Organizing Secretary National Conferences (PARPS-2022 & PEMAP-2023): 02 ⇒ Convener of the Workshop (EAWM-2022): 01	Books: ⇒ Environment Conservation (Edited Book) ⇒ Stress Biology of Medicinal & Aromatic Plants: Current Advances in Research (Under review): Edited Book	
Research Guidance: ⇒ Integrated B.Sc. (Hons.) and M.Sc. Botany (Sem-X): 05 ⇒ Integrated B.Sc. (Hons.) and M.Sc. Botany (Sem-VI): 05	Proceeding/ Popular Articles: Conference Proceedings: 01; Popular Articles: 01	
	Scientific Meets Attended: HIMYRF (GBPNIHE), RYIM (KU) & KSVS (SKUAST-K)	
Professional Trainings: ⇒ Faculty Induction programme (24 days): 01 ⇒ Orientation Course (21 days): 01 ⇒ Refresher Course (14 days): 01 ⇒ Faculty Development Programme (08 days): 02 ⇒ Short Term Course (07 days): 01	Conferences/Seminars/Workshops/Webinars: ⇒ Conferences & Seminars: 11 ⇒ Workshops: 11 ⇒ Webinars: 10	
Reviewer of Journals: Journal of Applied Research on Medicinal and Aromatic Plants (JARMAP), Elsevier; Molecular Biology Reports; Scientific Reports & National Academy of Science Letters-India, Frontiers in Plant Sciences.	Membership of Professional Societies: 02 ⇒ Lifetime Member of Society for Plant Research, India (Membership No. SPR-LM2-26). ⇒ Lifetime Member of Medicinal and Aromatic Plants Association of India (MAPAI), Membership No. 603.	
Designed & Developed Course Curriculum: 04		

Degree	Supervisor	Duration	Title of thesis
PhD	Prof. M.C. Nautiyal	2014-2019	Standardization of Appropriate Planting Density, Nutrition and Water Requirement for Cultivation of <i>Picrorhiza kurrooa</i> Royle Ex Benth.
MPhil	Prof. M.C. Nautiyal	2013-2014	Morphological and Biochemical Variation between Broad and Narrow Leaf Variants of <i>Picrorhiza kurrooa</i> Royle Ex Benth. Under Natural and Cultivated Conditions

DETAILS OF EMPLOYMENT

Details of Employment	Name of Organization	From	To	Nature of Work
Current Employment (Assistant Professor)	Department of Environment Sustainability & Climate Change, Islamic University of Science & Technology, Awantipora, Pulwama, J&K, INDIA	24.06.2024	Continue	Teaching & Research
Guest Faculty	Department of Botany, Central University of Jammu, Rahya-Suchani (Bagla), Distrct-Samba, (J&K), INDIA	11.04.2022	31.05.2024	Teaching & Research
Consultant	Govind Wildlife Sanctuary & National Park, Purola, Uttarkhand, INDIA	01.10.2021	31.03.2022	Research
Research Associate	G.B. Pant National Institute of Himalayan Environment (NIHE), Kosi-Katarmal, Almora, Uttarakhand, INDIA	17.06.2019	31.03.2021	Research
Lecturer (AA)	School Education Department, Govt. of Jammu & Kashmir, INDIA	September 2010	February 2013	Teaching

WORK EXPERIENCE

UNDP-SECURE Himalaya Project	<p>Securing Livelihoods, Conservation, Sustainable Use and Restoration of High Range Himalayan Ecosystems" at Govind Wildlife Sanctuary & National Park, Purola (Uttarkashi), Uttarakhand, India.</p> <p>Key achievements</p> <ul style="list-style-type: none"> ⇒ Biodiversity Management Committees (BMCs) were sensitized & strengthens. ⇒ Endangered MAP species nursery was established at village Gangar (GWLS&NP). ⇒ Youths of the landscape were felicitated about Para-Taxonomy, Ecotourism, Human Wildlife Conflicition, bird watching, Solid waste and its management. ⇒ Facilitated in the establishment of Farmers Producer Organization (FPO) in the landscape.
UNDP-SECURE Himalaya Project	<p>Assessment of Medicinal and Aromatic Plants species including their collection, usage, demand, markets, price trends and life cycle, focusing on landscapes in Jammu & Kashmir and Uttarakhand under UNDP-SECURE Himalaya sponsored project.</p> <p>Key achievements</p> <ul style="list-style-type: none"> ⇒ Existing knowledge on MAPs among the communities were documented. ⇒ MAPs in trade, their market demand & price trends at National, State and Landscape level were documented. ⇒ Valuable end products prepared from ten MAP species by pharmaceutical companies were enlisted. ⇒ Wild status of selected MAP species from the project landscapes were assessed. ⇒ Sustainable harvesting protocols as well as best cultivation practices for selected MAP species were prepared. ⇒ Medicinal Plants Conservation and Development areas (MPCDAs) were identified & their implementation strategies were prepared. ⇒ Access and Benefit Sharing (ABS) model in four (04) Medicinal & Aromatic Plant (MAP) species in the project landscape were facilitated.

RESPONSIBILITIES (IUST)

Coordinator	Biodiversity and Aromatic Park, Islamic University of Science and Technology (IUST), Kashmir (30-12-2024 to Continue).
Member, Equal Opportunity Cell (EOC)	Equal Opportunity Cell (EOC), Islamic University of Science and Technology (IUST), Kashmir (08-10-2024 to Continue).
Departmental Nodal Officer (DNO), DIQA	Directorate of Internal Quality Assurance (DIQA), Department of Environment, Sustainability and Climate Change (DESCC), Islamic University of Science and Technology (IUST), Kashmir (22-07-2024 to Continue).

Member, Departmental Research Committee (DRC)	Department of Environment, Sustainability and Climate Change (DESCC), Islamic University of Science and Technology (IUST), Kashmir (19-07-2024 to Continue).
Member, Board of Studies (BoS)	Department of Environment, Sustainability and Climate Change (DESCC), Islamic University of Science and Technology (IUST), Kashmir (16-07-2024 to Continue).

RECOGNITIONS/AWARDS

Organizing Secretary (2025)	One day seminar on Conservation, Cultivation, Processing and Entrepreneurship Development in Medicinal Plants, Organized by Department of Environment, Sustainability and Climate Change, IUST in collaboration with RCFC NR-II, NMPB, Ministry of AYUSH, Govt. of India, SKUAST-Kashmir (11 th March, 2025), Jammu & Kashmir, INDIA.
Organizing Secretary (OBT-2024)	National Seminar on Opportunities for Botanical Tourism in Jammu and Kashmir, UT (OBT-2024) organized Department of Botany, Central University of Jammu (15 th March, 2024), Jammu & Kashmir, INDIA.
Organizing Secretary (PEMAP-2023)	National Conference on Academia-Industry Interface for Promoting Entrepreneurship in Medicinal and Aromatic Plants (PEMAP-2023) organized by Department of Botany, Central University of Jammu (24 th -25 th August, 2023), Jammu & Kashmir, INDIA.
Organizing Secretary (PARPS-2022)	National Conference on 'Promoting Applied Research in Plant Sciences (PARPS-2022), organized by Department of Botany, Central University of Jammu (09 th -10 th November, 2022), Jammu & Kashmir, INDIA.
Convener (EAWM-2022)	One day Workshop on "Environmental Awareness and Waste Management" jointly organized by GWLS&NP and BLJ Govt. P.G. College (08 th March, 2022) Purola Uttarakashi (Uttarakhand) INDIA.
Young Scientist Award	National Medicinal Plant Board (NMPB) sponsored National Conference on 'Recent Advances in Ayurvedic Herbal Medicine from Source to Manufacturing', organized by Faculty of Biomedical Sciences, Uttarakhand Ayurvedic University held at CSIR-IIP, Dehradun (15-16 September 2017), Uttarakhand, INDIA.
Reviewer (National & International Journals)	Journal of Applied Research on Medicinal and Aromatic Plants (JARMAP), Elsevier; Molecular Biology Reports, Scientific Reports., National Academy of Science Letters-INDIA

ORIENTAION/TRAININIGS/REFRESHER COURSE

Faculty Development Programme (08 days)	Successfully completed Eight (08) Days Online Faculty Development Programme (FDP) on NEP 2020 Orientation and Sensitization Programme on Holistic and Multidisciplinary Education, organized by UGC-MMTTC- National Institute of Educational Planning and Administration (NIEPA), New Delhi, India (Dated:19 th -29 th Nov., 2024).
Faculty Induction Programme (24 days)	Successfully completed Gurudakishtha (Faculty Induction Programme) organized by UGC-MMTTC-Central University of Jammu, Jammu & Kashmir, India (Dated: 23 rd Sept. to 22 nd Oct., 2024).
Faculty Development Programme (08 days)	Successfully completed Eight (08) Days Online Faculty Development Programme on NEP 2020 Orientation and Sensitization Programme on Holistic and Multidisciplinary Education, organized by UGC-MMTTC-Central University of Jammu, Jammu & Kashmir, India (Dated:11 th -19 th Dec., 2023).
Refresher Course (14 days)	Successfully completed Two-Week (14 days) Online Faculty Development Programme in Chemistry & Allied Sciences FDPCAS-2023 (Refresher Course), organized by the Department of Chemistry and Chemical Sciences, Central University of Jammu, Jammu & Kashmir, India (Dated: 26 th Oct. to 08 th Nov., 2023).
Orientation Course (21 days)	Successfully completed Twenty-one days (21 days) Entrepreneurship Orientation Program on Medicinal and Aromatic Plants III (EOMAP-III)" organized by Medi-Hub, Technology Business Incubator (TBI), ICAR-DMAPR, Anand (Gujarat), India (Dated: 19 th July-8 th August, 2021).
Short Term Course (07 days)	Successfully completed one-week (07days) short term course on "ECO-technology For Sustainable Development (ESTD-2013)" organized by G.B. Pant Engineering College Pauri Garhwal, Uttarakhand, India. (Dated: 21 st -25 th Oct., 2013).

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- ⇒ Life time Member of Society for Plant Research, India (Membership No. SPR-LM2-26).
- ⇒ Life time Member of Medicinal and Aromatic Plants Association of India (MAPAI) Membership No.603.

SCIENTIFIC MEETS ATTENDED

- ⇒ Participated in two days "Kashmir Science Vision Summit-2024" JK as Model of Viksit Bharat @ 2047 at SKUAST-K from 23-24

August, 2024.

- ⇒ Participated and presented poster in "Regional Young Investigators Meeting" (RYIM) on the theme Igniting Curiosity and training Young Minds of J&K for Sustainable Future organized by India Bioscience and University of Kashmir, Srinagar (J&K) from 19-21 September, 2023.
- ⇒ Participated in three days Himalayan Young Researchers Forum Meet-II at G.B. Pant National Institute of Himalayan Environment Kosi-Katarmal, Almora (Uttarakhand) from 15-17 September, 2015.

RESEARCH PUBLICATIONS

- ⇒ Eshita Sharma., Manju Tewari., Priyanka Sati., Isha Sharma., **Dharam Chand Attri.**, Supriyanka Rana., Afaf Ahmed Aldahish., Daniela Calina., Praveen Dhyani., Javad Sharifi-Rad and William C. Cho (2024). Serving up health: How phytochemicals transform food into medicine in the battle against cancer. Food Frontiers. ISSN:2643-8429 (online), ISSN:2643-8429 (Print). DOI: [10.1002/fft2.439](https://doi.org/10.1002/fft2.439). (IF: 7.4).
- ⇒ **Dharam Chand Attri.**, Praveen Dhyani, Vijay Laxmi Trivedi., Eshita Sharma., Manshuk Ibrayeva., Arvind Jantwal., Priyanka Sati., Daniela Calina and Javad Sharifi-Rad (2024). Current Evidence on Molecular Mechanisms of Andrographolide in Cancer. Current Medicinal Chemistry, ISSN: 1875-533X. <https://doi.org/10.2174/0109298673295496240530100728>. (IF: 3.5).
- ⇒ **Dharam Chand Attri.**, Amit Bahukhandi., Vijay Laxmi Trivedi., R.S. Chauhan., M.C. Nautiyal., & B.P. Nautiyal (2024). Variation in the Essential Oil Composition in Leaves (Fresh & Dried) of *Cinnamomum tamala* (Indian Bay Leaf) Cultivated in Western Himalaya. National Academy of Science Letters, ISSN: 2250-1754, <https://doi.org/10.1007/s40009-024-01416-1>. (IF: 1.2).
- ⇒ Priyanka Sati, Praveen Dhyani, Eshita Sharma, **Dharam Chand Attri**, Arvind Jantwal, Rajni Devi, Daniela Calina, Javad Sharifi-Rad (2024). Gut Microbiota Targeted Approach by Natural Products in Diabetes Management: an overview. Current Nutrition Reports. ISSN: 2161-3311, <https://doi.org/10.1007/s13668-024-00523-1> (IF: 5.537).
- ⇒ Priyanka Sati., Eshita Sharma., Praveen Dhyani., **Dharam Chand Attri.**, Rohit Rana & Sharifi-Rad, J., (2024). Paclitaxel and its semisynthetic derivatives: Comprehensive insights into chemical structure, mechanism of action and anticancer properties. European Journal of Medical Research. ISSN: 2047-783X, <https://doi.org/10.1186/s40001-024-01657-2> (IF: 4.2).
- ⇒ Amit Bahukhandi., **Dharam Chand Attri** & Indra D. Bhatt (2023). Assessment of Antioxidant Properties of *Elaeagnus latifolia* L.: An Important Wild Edible Fruit Species of Western Himalaya. National Academy Science Letters, 46(1), p.1-5. ISSN: 2250-1754, <https://doi.org/10.1007/s40009-022-01182-y> (IF: 1.2).
- ⇒ Vijay Laxmi Trivedi, Prabhkar Semwal., Sudeep Chandra., M.C. Nautiyal., **Dharam Chand Attri** & Yashavi Singh (2023). Impact of silver nitrate on the survival and regeneration potential of explants of *Hippophae salicifolia* (Seabuckthorn) D. Don. Materials Today: Proceedings. 73, p.1-8 ISSN: 2214-7853. <http://dx.doi.org/10.1016/j.matpr.2022.08.111>. (Cite Score: 4.9).
- ⇒ Praveen Dhyani., Priyanka Sati., Eshita Sharma., **Dharam Chand Attri.**, Amit Bahukhandi., Tynbekov, B., Szopa, A., Shharif-Rad, J., Calina, D., Suleria-Hafiz, A.R. and Cho, W.C., (2022). Sesquiterpenoid lactones as potential anti-cancer agents: an update on molecular mechanisms and recent studies. Cancer Cell International 22, p.1-18. ISSN: 1475-2867 <http://dx.doi.org/10.1186/s12935-022-02721-9> (IF: 6.436).
- ⇒ Eshita Sharma., **Dharam Chand Attri.**, Priyanka Sati., Praveen Dhyani., Szopa, A., Sharifi-Rad, J., Hano, C., Calina, D. and Cho, W.C., (2022). Recent updates on anticancer mechanisms of polyphenols. Frontiers in Cell and Developmental Biology, 10, p.1004910 ISSN: 2296-634X <http://dx.doi.org/10.3389/fcell.2022.1005910>. (IF: 6.684).
- ⇒ Praveen Dhyani., P., Quispe, C., Eshita Sharma., Amit Bahukhandi, Prayinka Sati., **Dharam Chand Attri.**, Szopa, A., Sharifi-Rad, J., Docea, A.O., Mardare, I. and Calina, D. (2022). Anticancer potential of alkaloids: a key emphasis to colchicine, vinblastine, vincristine, vindesine, vinorelbine and vincamine. Cancer Cell International, 22(1), pp.1-20. ISSN: 1475-2867; DOI: <http://dx.doi.org/10.1186/s12935-022-02624-9> (IF: 6.436).
- ⇒ Vijay Laxmi Trivedi., **Dharam Chand Attri.**, Amit Bahukhandi & M.C. Nautiyal (2022). Seabuckthorn (*Hippophae salicifolia*) Leaves, a Good Source of Natural Antioxidant Compounds. National Academy Science Letters, 45(2), pp.195-198. ISSN: 0369-8211, DOI: <https://doi.org/10.1007/s40009-021-01095-2>. (IF 1.2).
- ⇒ **Dharam Chand Attri.**, M.C. Nautiyal., V.K. Bisht., B.P. Nautiyal., Amit Bahukhandi., Vijay Laxmi Trivedi & Jyoti Sati (2021). HPTLC Fingerprinting of Cultivated *Picrorhiza kurroa* Accessions in Uttarakhand, Western Himalaya. Proceedings of the National Academy of Sciences, India Section B: Biological Sciences, 91(4), pp.821-828. ISSN: 0369-8211; DOI: <https://doi.org/10.1007/s40011-021-01286-3>. (IF: 0.946).
- ⇒ Amit Bahukhandi., Indra D. Bhatt., Kuldeep Joshi & **Dharam Chand Attri** (2021). Importance of *Cinnamomum tamala* for restoration of degraded land, West Himalaya. ENVIS Bulletin Himalayan Ecology, Vol 29. ISSN: 2277-9000 (Print); ISSN: 2455-6823. (IF: Nil).
- ⇒ Vijay Laxmi Trivedi., M.C. Nautiyal., Jyoti Sati & **Dharam Chand Attri** (2020). Antioxidant enzyme activities in male and female plants of *Hippophae salicifolia* D. Don in different pheno-phases. Acta Physiologiae Plantarum, 42(4), pp.1-11. ISSN: 0137-5881 DOI: <https://doi.org/10.1007/s11738-020-03049-511>. (IF: 2.354).
- ⇒ Vijay Laxmi Trivedi., M.C. Nautiyal., Jyoti Sati & **Dharam Chand Attri** (2020). In vitro propagation of male and female *Hippophae salicifolia* D. Don. In Vitro Cellular & Developmental Biology-Plant, 56(1), pp.98-110. ISSN: 1054-5476; DOI:

<https://doi.org/10.1007/s11627-019-10020-8>. (IF: 2.252).

- ⇒ Vijay Laxmi Trivedi., **Dharam Chand Attri.**, Jyoti Sati & M.C. Nautiyal (2020). Phenological variations of primary biochemicals in male and female plants of *Hippophae salicifolia* D. Don. Journal of Plant Biochemistry and Biotechnology, 29(2), pp.225-235. ISSN: 0971-7811; DOI: <https://doi.org/10.1007/s13562-019-00527-x>. (IF: 1.1)
- ⇒ **Dharam Chand Attri.**, M.C. Nautiyal., Vijay Laxmi Trivedi & Jyoti Sati (2018). Effect of Chilling Treatment and Different Growth Media on Seed Germination and Seedling Growth Performance of *Picrorhiza kurrooa*: An Endangered Medicinal Herb. Journal of Non-Timber Forest Products, 25(1), pp.57-62. ISSN: 0971-9415; DOI: <https://doi.org/10.54207/bsmps2000-2018-LU4UF8>. (NAAS Score: 4.07).
- ⇒ Vijay Laxmi Trivedi., Jyoti Sati., **Dharam Chand Attri** & M.C. Nautiyal (2017). Antioxidant Potential of Herbal Tea from *Rhododendron anthopogon* D. Don and *Hippophae salicifolia* D. Don. Journal of Non-Timber Forest Products, 24(3), pp.131-135. ISSN: 0971-9415; DOI: <https://doi.org/10.54207/bsmps2000-2017-SL3OR7>. (NAAS Score: 4.07).
- ⇒ Jyoti Sati., Vijay Laxmi Trivedi., **Dharam Chand Attri** & M.C. Nautiyal (2017). Evaluation of Antioxidant Activity of Rhizome Extract of *Paris polyphylla* Smith. Journal of Non-Timber Forest Products, 24(3), pp.147-151. ISSN: 0971-9415; <https://doi.org/10.54207/bsmps2000-2017-5F5711>. (NAAS Score: 4.07).
- ⇒ M.C. Nautiyal and **Dharam Chand** (2017). Conservation and sustainable Utilization of High Altitude Medicinal Plants in Indian Himalayan Region. Science and Technology Journal, Vol. 4 Issue: 1 ISSN: 2321-3388, DOI: <http://dx.doi.org/10.22232/stj.2016.04.01.02>. (IF: Nil).
- ⇒ **Dharam Chand Attri.**, Vijay Laxmi Trivedi., Jyoti Sati & M.C. Nautiyal (2016). Status of Priority based Subsidized MAP Species for Cultivation and Conservation in Chamoli District, Uttarakhand Himalaya. Journal of Non-Timber Forest Products, 23(4), pp.181-189. ISSN: 0971-9415; <https://doi.org/10.54207/bsmps2000-2016-315L7L>. (NAAS Score: 4.07).
- ⇒ Manish Panwar., Vijay Laxmi Trivedi., **Dharam Chand Attri** & M.C. Nautiyal (2016). Antimicrobial Potential of Acetone and Methanol extracts of *Rhus parviflora* Roxb. Indian Journal of Forestry, 39(3), pp. 225-230. ISSN: 0971-9431; <https://doi.org/10.54207/bsmps1000-2016-JJW3PS>. (NAAS Score: 4.88).
- ⇒ **Dharam Chand.**, Jyoti Sati, Vijay Laxmi & M.C. Nautiyal (2016). Effects of Anthropogenic Activities in High Altitude Areas of Garhwal Himalaya: An overview. ESSENCE-International Journal for Environmental Rehabilitation and Conservation, ISSN: 0975-6272, 7(1):78 – 87. (IF: Nil).
- ⇒ **Dharam Chand.**, Zubair A. Malik & M.C. Nautiyal (2016). Conservation of *Picrorhiza kurrooa* through cultivation in Garhwal Himalaya: a review. International Journal of Herbal Medicine, ISSN: 2321-2187, 4(1), pp.64-69. (RJIF: 5.20).

PUBLICATIONS ACCEPTED FOR PUBLICATION/ COMMUNICATED/UNDER PREPARATION

- ⇒ **Dharam Chand Attri.**, Priyanka Sati., Eshita Sharma., Praveen Dhyani (2024). Anticancer Properties of Deoxyshikonin (Communicated).
- ⇒ Praveen Dhyani, Priyanka Sati, Eshita Sharma, **Dharam Chand Attri**, Daniela Calina, Javad Sharifi-Rad, Brian Furman (2024). Anticancer Properties of Phloridzen (Under review).
- ⇒ Vijay Laxmi Trivedi; **Dharam Chand Attri**; Jyoti Sati; Pallavi Sati; M. C. Nautiyal; Prabhkar Semwal (2024). Morphological and physiological variations in male and female leaves of *Hippophae salicifolia* D. Don" *Theoretical and Experimental Plant Physiology* (Communicated).
- ⇒ Vijay Laxmi Trivedi, Priyanka Sati, Praveen Dhyani, Eshita Sharma, **Dharam Chand Attri**, Daniela Calina, Javad Sharifi-Rad, Brian Furman (2024). Anticancer Properties of Parthenolide (Communicated).

BOOK CHAPTERS PUBLISHED:

- ⇒ Amit Bahukhandi., **Dharam Chand Attri.**, Tanuja Mehra & Indra D. Bhatt (2023). *Fragaria* spp. (*Fragaria indica*, *Fragaria nubicola*). In Himalayan Fruits and Berries (pp. 183-196). Academic Press. <https://doi.org/10.1016/B978-0-323-85591-4.00011-8>.
- ⇒ **Dharam Chand Attri.**, Deepika Tripathi., Vijay Laxmi Trivedi., B.S. Bhau & M.C. Nautiyal (2023). Phytochemistry and Bioactive potential of *Citrullus colocynthis* (L.) Schrad. In edited book entitled 'Phytochemical Composition and Pharmacy of Medicinal Plants, Volume 1, published by Apple Academic Press (AAP) Co-published with CRC Press, a Tailor & Francis Group, New York. ISBN: 9781003390497.
- ⇒ Vijay Laxmi Trivedi., **Dharam Chand Attri** & M.C. Nautiyal (2023). Phytochemistry and Bioactive potential of *Piper beetle* L., in edited book entitled 'Phytochemical Composition and Pharmacy of Medicinal Plants, Volume 1, published by Apple Academic Press (AAP) Co-published with CRC Press, a Tailor & Francis Group, New York. ISBN: 9781003390497.
- ⇒ Deepika Tripathi & **Dharam Chand Attri** (2023). Bioactive compounds and pharmacological efficacy of *Thymus vulgaris* L.: A traditional folk medicinal plant. In edited book entitled 'Bioactivities and Pharmacology of Medicinal Plants, Published by Apple Academic Press (AAP) Co-published with CRC Press, a Tailor & Francis Group, New York. ISBN: 978-1-77491-293-5. <http://dx.doi.org/10.1201/9781003346142-23>.

- ⇒ Vijay Laxmi Trivedi., **Dharam Chand Attri.**, & M.C. Nautiyal (2021). Microenvironments, Microhabitats, Microreserves: Rooms of Hope for Conservation in Climate Change Persistence. 'In Environment Conservation' Bharti Publications, New Delhi, ISBN: 978-81-949793-9-5.
- ⇒ **Dharam Chand.**, Vijay Laxmi Trivedi., Jyoti Sati & M.C. Nautiyal (2018). "Policies & Schemes of Medicinal Plants Farming: An Innovative Effort towards Livelihood Security in Indian Himalayan Region" edited book entitled 'Dynamics of Socio-Economic Development' Bharti Publications, New Delhi, ISBN: 978-93-86608-31-4.
- ⇒ Vijay Laxmi Trivedi., **Dharam Chand.**, Jyoti Sati., & M.C. Nautiyal (2018). "Hippophae salicifolia (Seabuckthorn): Source of Economic Development in Higher Himalayan Region" edited book entitled 'Dynamics of Socio-Economic Development' Bharti Publications, New Delhi, ISBN: 978-93-86608-31-4.

BOOK CHAPTERS ACCEPTED FOR PUBLICATION:

- ⇒ **Dharam Chand Attri.**, Vijay Laxmi Trivedi., Pallavi Sati and M.C. Nautiyal (2024). Wild Edible Plants of the North Western Indian Himalaya: Exploring the Culinary Heritage and Nutritional Potential. In edited book entitled 'Himalayan Biodiversity' Vol I published by Apple Academic Press (AAP) Co-published with CRC Press, a Taylor & Francis Group.
- ⇒ Pallavi Sati, Vijay Laxmi Trivedi, **Dharam Chand Attri** and M.C. Nautiyal (2024). Biological Interventions and Propagation Strategies of Endangered Medicinal Plants of the Indian Himalaya: Conservation & Sustainable Utilization. In edited book entitled 'Plant Tissue Culture Technology: An Innovative Tool for the Propagation, Management, and Conservation of Himalayan Biodiversity' published by Apple Academic Press (AAP) Co-published with CRC Press, a Taylor & Francis Group.
- ⇒ Vijay Laxmi Trivedi, **Dharam Chand Attri** and M.C. Nautiyal (2024). Non-native and Native Invasive species in Alpine Himalaya: A major threat to Alpine Meadows. In edited book entitled 'Himalayan Biodiversity' Vol I published by Apple Academic Press (AAP) Co-published with CRC Press, a Taylor & Francis Group.
- ⇒ Akanksha Bisht, Vijay Laxmi Trivedi, **Dharam Chand Attri** and M.C. Nautiyal (2024). Phytochemical and Pharmacological Profile of *Bergenia ciliata* (Haw.) Stern. In edited book entitled 'Himalayan Biodiversity' Vol I published by Apple Academic Press (AAP) Co-published with CRC Press, a Taylor & Francis Group.

BOOKS/ POPULAR ARTICLES/ CONFERENCE PROCEEDINGS:

Edited Books:

- ⇒ **Dharam Chand Attri** & Sushma Devi (2021). Environment Conservation, Bharti Publications, New Delhi, pp-1-232. ISBN: 978-81-949793-9-5.

Popular Articles:

- ⇒ **Dharam C. Attri.**, Amit Bhaukhandi & Indra D. Bhatt (2020). Promotion of Medicinal and Aromatic Plants (MAPs) cultivation: An opportunity for economic growth of rural communities in COVID-19 pandemic. Edited E-Newsletter, Vol. II.

Conference Proceedings:

- ⇒ Zubair A. Malik., **Dharam Chand** & A.B. Bhatt (2014). Community Composition and Tree Population Structure along a Disturbance Gradient in a protected area and its adjoining areas in Garhwal Himalaya, India. Excel India Publishers pp-297-312. ISBN: 978-93-83842-76-6.

PAPERS PRESENTED IN CONFERENCES/SYMPOSIA /SEMINARS

- ⇒ Dharam Chand & M.C. Nautiyal (7-9 March, 2018). "Effect of Integrated Nutrients on Active Constituents of Picrorhiza kurrooa: An Endangered Alpine Herb," in Uttarakhand State Science and Technology Congress organized by UCOST, Dehradun, Uttarakhand, India.
- ⇒ Dharam Chand., M.C. Nautiyal & B.P. Nautiyal (15-16 September, 2017). "Impact of Different Irrigation Regimes on Growth, Yield and Active Constituents of Picrorhiza kurrooa under cultivated conditions at Mid-altitudes", NMPB Sponsored National Conference on Recent Advances in Ayurvedic Herbal Medicine-From Source to Manufacturing, organized by Faculty of Biomedical Sciences, Uttarakhand Ayurvedic University, Dehradun, at CSIR-IIP, Dehradun, Uttarakhand, India.
- ⇒ Dharam Chand., Jyoti Sati., Vijaylaxmi Trivedi & M.C. Nautiyal (08-09 September, 2017). "Prioritization of Medicinal Plants Cultivation for Economic Development in Himalayan Region" two days National Conference, ESDR-1, organized by TBS, Bharderwah Campus, University of Jammu, Jammu & Kashmir, India.
- ⇒ Dharam Chand., M.C. Nautiyal & B.P. Nautiyal (2-4 March, 2017). "Effect of Integrated Nutrient Management on Growth and Yield of *Picrorhiza kurrooa* Royle ex Benth". Uttarakhand State Science and Technology Congress organized by UCOST, Dehradun, Uttarakhand, India.
- ⇒ Dharam Chand., Jyoti Sati., Vijay Laxmi Trivedi & M.C. Nautiyal (29 Sept.- 01 Oct., 2016). "Diversity of High-Altitude MAPs: Strategies and Challenges in its Conservation in Uttarakhand Himalaya", National Seminar on Crop Diversity and Entrepreneurship in Himalayan Environment" Organized by Department of Botany RCU Government Post Graduate College, Uttarkashi, Uttarakhand, India.

- ⇒ Dharam Chand and M.C. Nautiyal (06-07 February, 2016). "Possibilities of Productivity Enhancement of MAPs through Micro-irrigation in Hilly Regions of Uttarakhand", National Conference on Agro-technology, Commerce and Sustainable Use of Medicinal Plants. Jointly organized by High Altitude Plant Physiology Research Centre (HAPPRC), HNB. Garhwal University Srinagar Garhwal and SMP, New Delhi, India.
- ⇒ Dharam Chand., Jyoti Sati., Vijay Laxmi Trivedi & M.C. Nautiyal (29-30 January, 2016). "Uncontrolled Anthropogenic Activities in High Altitude Areas of Garhwal Himalaya", in International Conference on Advances in Science, Engineering & Technology (ICASET-2016), organized by International Journal of Advanced Research and Innovation & International Council for Man and Nature (MANU), January, 29-30.
- ⇒ Dharam Chand., Vijay Laxmi Trivedi., Jyoti Sati & M.C. Nautiyal (28-30 October, 2015). "Opportunities and Challenges in Cultivation of Alpine Medicinal Plants for Livelihood Security in Garhwal Himalaya", 4th Jammu and Kashmir Agricultural Science Congress on Technological innovations, Opportunities and Challenges for Sustainable Rainfed Agriculture for Food and Livelihood Security. Organized by Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, Chatha, (J&K), India.
- ⇒ Dharam Chand., Zubair A. Malik & Vijay Laxmi Trivedi (28-29 November, 2014). "Medicinal Plants and Traditional Knowledge: A Boon to Survive from Natural Disaster", in National Seminar on Challenges of Livelihood Restoration in Disaster-hit Regions of Uttarakhand, organized by Department of Geography, HNB. Garhwal University, Uttarakhand, India.
- ⇒ Dharam Chand., Zubair A. Malik & M.C. Nautiyal (13-14 October, 2014). "Cultivation and Conservation of *Picrorhiza kurrooa* for sustainable development in Garhwal Himalaya", International Conference on Change in Cryosphere its Impact on Ecosystem Services and Rural livelihoods: Understanding Local Adaptation in the Himalayan Region, organized by Department of Earth Sciences Institute of Mountain Environment Bhaderwah Campus, University of Jammu, Jammu & Kashmir, India.
- ⇒ Dharam Chand and M.C. Nautiyal (21-23 March, 2014). "Morphological Variations between Broad and Narrow Leaf Variants of *Picrorhiza kurrooa* Royle ex Benth, under Natural and Cultivated Conditions", National Conference on Environmental Constraints, Conservation and Resource Development of Medicinal Plants for Health and Societal Benefits. Jointly organized by School of Environmental Sciences and Natural Resources Doon University, Dehradun and SMP, New Delhi at Dehradun, Uttarakhand, India.

WORKSHOPS ATTENDED

- ⇒ Participated in "Capacity Building cum Sensitization Workshop on Voluntary Certification scheme for Medicinal Plant Produce" organized by Quality Council of India (QCI) at G.B. Pant National Institute (NIHE), Kosi-Katarmal, Almora (22 August, 2019).
- ⇒ Participated in World Environment Day on theme "Beat Air Pollution" organized by Internal Quality Insurance Cell (IQAC) in collaboration with Department of Rural Technology, HNB Garhwal University Srinagar Garhwal (5 June, 2019).
- ⇒ Participated in Workshop on "Laboratory Safety Protocols" organized by Biosafety Committee (IBSC) & Department of Zoology & Biotechnology HNB Garhwal University, Srinagar Garhwal (24 April, 2018).
- ⇒ Participated in National Workshop "Remote Sensing and Geographical Information System" organized by Uttarakhand Space Application Centre (USAC), Department of Science & Technology, Govt. of Uttarakhand H.N.B. Garhwal University, Srinagar Garhwal (24 December, 2018).
- ⇒ Participated in National Workshop "Popularization of Remote Sensing Based Maps and Geospatial Information" jointly organized by Indian Society of Remote Sensing (ISRS) and ISRO at HNB. Garhwal University, Srinagar Garhwal (11 August, 2017).
- ⇒ Participated in "Himalayan Young Researchers Meet-II" organized by G.B. Pant Institute of Himalayan Environment & Development (GBPIHED), and Indian Himalayas Climate Adaptation Programme (IHCAP), Swiss Agency for Development & Cooperation (15-17 September, 2015).
- ⇒ Participated in National Workshop on "Analysis of Official Statistics Using SPSS" organized by Department of Statistics, HNB. Garhwal University Srinagar Garhwal (18-20 February, 2015).
- ⇒ Participated in National Workshop on "Applied Statistical Methods and Data Analysis with SPSS 22" (ASMDA-2014) IN COLLABORATION WITH SPSS SOUTH ASIA organized by Department of Business Administration, HNB. Garhwal University, Srinagar Garhwal (31 July-01 August, 2014).
- ⇒ Participated in "Advance Training Programme on SPSS (ATP ON SPSS)" organized by Department of Statistics, HNB. Garhwal University, Srinagar Garhwal (30-31 January, 2014).
- ⇒ Participated in one-week National Training Workshop on "Applied Statistical Methods (ASM) in Research" organized by Department of Forestry & Natural Resources, HNB. Garhwal University, Srinagar Garhwal (9-15 December, 2013).
- ⇒ Participated in one-week short term course on "ECO-technology For Sustainable Development (ESTD-2013)" organized by G.B. Pant Engineering College, Pauri Garhwal, Uttarakhand (21-25 October, 2013).

WEBINARS ATTENDED

- ⇒ Participated in participated in National Webinar on "Emerging Trends in Plant Physiology" on June 28, 2021 under the aegis of World Bank-ICAR Funded National Agricultural Higher Education Project (NAHEP) organized by Department of Plant Physiology, Sri Karan Narendra Agriculture University, Jobner, Rajasthan, India.
- ⇒ Participated in National webinar entitled "Role of e-NAM and FPOs in Improving Farmers' Income" on 5th June, 2021 under the

aegis of World Bank-ICAR funded National Agricultural Higher Education Project (NAHEP) organized by Sri Karan Narendra Agriculture University, Jobner, Rajasthan, India

- ⇒ Participated in National Webinar on “Indian Constitution & Environmental Protection (NW-ICEP)” organized by Centre for Environmental Assessment & Climate Change, G.B. Pant National Institute of Himalayan Environment (NIHE), Almora, Uttarakhand, India held on June 05, 2021.
- ⇒ Participated in International Webinar on “Conservation Importance of Lesser-Known Ecosystem” Facilitated by Dr. T. Murugavel, Founder, Environment Monitoring and Action Initiating (EMAI), India, Organized by Conservation Foundation, India held on December 18, 2020.
- ⇒ Participated in Webinar on “International Mountain Day 2020”, Organized by Uttarakhand Science Education and Research Centre, Dehradun, held on December 11, 2020.
- ⇒ Participated in International Webinar on “Here Be Dragons! Planning for Land Cover and Climate Change Threats to plants” Facilitated by Dr. Debbie Jewitt, Ecosystem ecologist, Ezemvalo KZN Wildlife, University of Witwatersrand, South Africa, Organized by Conservation Foundation, India held on December 06, 2020.
- ⇒ Participated in Webinar on “Skill and Entrepreneurship Development Opportunities for Youth of J&K”, Organized by Department of Bio resources, University of Kashmir in collaboration with Skill Development Department, Govt. of Jammu and Kashmir & JKEDI, held on November 15, 2020.
- ⇒ Participated in International Webinar on “Marine Biodiversity of India: The Known and Unknown” Facilitated by Dr. A. Bijukumar, Professor and HOD, Dept. of Aquatic Biology and Fisheries, University of Kerala, India, Organized by Conservation Foundation, India held on November 15, 2020.
- ⇒ Participated in International Webinar on “Applications of Remote Sensing in Forest Resource Management and Conservation” Facilitated by Dr. C. Sudhakar Reddy, Head, Forest Biodiversity and Ecology Division, NRSC, ISRO, India, Organized by Conservation Foundation, India held on November 08, 2020.
- ⇒ Participated in Regional Webinar on “Promoting Medicinal and Aromatic Plants for Sustainable Development under Post COVID-19 scenario in the Western Himalaya” Organized by G.B. Pant National Institute of Himalayan Environment (NIHE), Almora, Prof. Y.P.S. Pangety Research Foundation, Nainital and Dept. of Botany Kumaun University, Nainital, on August 28, 2020.

SKILLS /PROFICIENCY/COMPUTER EXPERIENCE

Instrumentation Skills	<ul style="list-style-type: none"> ⇒ Spectrophotometer ⇒ Centrifugation ⇒ Infra-Red Gas Analyzer (IRGA) ⇒ Soil Plant Analysis Development (SPAD) Chlorophyll meter ⇒ Plant Efficiency Analyzer (PEA) Fluorescence meter ⇒ High Performance Liquid Chromatography (HPLC) ⇒ High Performance Thin Layer Chromatography (HPTLC)
Technical Proficiency	<ul style="list-style-type: none"> ⇒ MAPs Nursery development. ⇒ Sacred Groves and People Biodiversity Register (PBR). ⇒ Cost benefit analysis of Medicinal & Aromatic Plants (MAPs). ⇒ Medicinal Plants Conservation & Development Areas (MPCDAs). ⇒ High Conservation Value Areas (HCVs). ⇒ Access and Benefit Sharing (ABS) in Medicinal & Aromatic Plants (MAPs).
Field Proficiency	<ul style="list-style-type: none"> ⇒ Vast experience of trekking and staying in Alpine Meadows of Western Himalaya. ⇒ Expertise in field survey and sensitization of Himalayan/mountain communities about the promotion of MAPs conservation through advanced cultivation techniques.
Computer Experience	<ul style="list-style-type: none"> ⇒ Experience with MS word ⇒ MS Excel ⇒ Power point ⇒ Window '16' ⇒ Handling of SPSS, PAST, OriginPro and winCats

RESEACRH INTERESTS & SPECIALIZATION

Area of Interest	<ul style="list-style-type: none"> ⇒ Agrotechniques of high-altitude MAPs ⇒ Plant Secondary Metabolites ⇒ Nutritional Composition analysis of wild & Cultivated Plants ⇒ Plant Ecology and Ethnobotany
Area of specialization	<ul style="list-style-type: none"> ⇒ Plant Physiology ⇒ Environmental Plant Biology ⇒ Biodiversity Conservation ⇒ Medicinal & Aromatic Plants (MAP) Propagation

TEACHING ASSIGNMENTS AT UG/PG LEVEL

⇒ Applied Mycology and Microbiology ⇒ Mushroom Cultivation ⇒ Economic Botany ⇒ Applied Pteridology & Gymnospermology ⇒ Plant Physiology and Biochemistry	⇒ Principle Techniques in Plant Sciences ⇒ Applied Ecology ⇒ Conservation Biology ⇒ Environmental Biology ⇒ Ethnobotany
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BACHELORS/MASTERS STUDENTS (DISSERTATIONS) GUIDED

S. No.	Student Name	Dissertation Title	Reg. Number	Status
Session 2022-23				
1.	Mr. Mohd Aslam	Effect of Industrial Pollutants on Nearby Crops	1640118	Awarded
2.	Mr. Subom Kumar	Effect of Dust Emitted by Stone Crushing Activity on Crops in Adjoining Fields.	3040118	-do-
3.	Mr. Avin Eldho Sunny	Effect of Drought Stress in Plants: A Comprehensive Review.	240120	-do-
4.	Mr. Ajaz Ahmed	Ethno-Medicinal Plants used by Local Communities of Tehsil Mendhar (Poonch), Jammu & Kashmir.	540120	-do-
5.	Mr. Aniket Sharma	Impact of Climate Change on Plant Growth, Yield and Secondary Metabolites: A Comprehensive Review.	1240120	-do-
6.	Mr. Harshdev Singh	Plant Diversity Assessment of Their Conservation Reserve (Kathua), Jammu & Kashmir.	1940120	-do-
Session-2023-24				
7.	Ms. Rifat Jan	Elemental analysis of <i>Ziziphus mauritiana</i> Lam. (Ber) Collected from Village Rahya-Suchani, District Samba, J&K by using different digestion methods.	1940119	Awarded
8.	Ms. Vaishali Sharma	Differential elemental profiling of <i>Tinospora cardifolia</i> (Wild.) Hook.f. & Thomson employing different digestion methods coupled with atomic absorption spectrometry.	3140119	-do-
9.	Ms. Vishali Devi	Ethno-Medicinal Plants used by Local Communities of District Samba, Jammu & Kashmir.	3440119	-do-
10.	Ms. Jaanvi Balgotra	Role of Bio-stimulants on growth and production of bioactive compounds in Medicinal and Aromatic Plants.	2040121	-do-

DESIGN OF CURRICULLA & COURSE DEVELOPEMNT

Title of the content	Role	Course Credits	Release Date
1. Biodiversity and Its Conservation	Designed & Developed Course Curriculum	2	-
2. Understanding Biodiversity	Designed & Developed Course Curriculum	2	29.10.2024
3. Introduction to Himalayan Bioresources	Designed & Developed Course Curriculum	2	-
4. Role of Plants in Indian Traditional System of Knowledge	Designed & Developed Course Curriculum	2	05.08.2023

ACADEMIC REFERENCES

1. Professor (Dr) M.C. Nautiyal

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3. Professor (Dr.) B.P. Nautiyal

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Veer Chandra Singh Garhwali Uttarakhand University of Horticulture & Forestry (VCSUUHF)
Bharsar, Pauri Garhwal-246123, Uttarakhand, INDIA.

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4. Dr. Indra D. Bhatt

Scientist-G & Head

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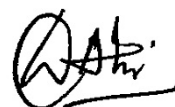
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DECLARATION

I hereby declare that the information furnished above is true to the best of my knowledge. I take full liability for the correctness of the information.

Date: 15/03/2025

IUST, Kashmir



(Dharam C. Attri)