

Dr DR Bhardwaj

Professor & Head

Specialization: Silviculture and Agroforestry

Contact: +91 1792 252370 (O)

Cell: 9418158775; 8219327754

E-mail: bhardwajdruhf@yaspuniversity.ac.in; bhardwajdr_uhf@rediffmail.com



On-going Research Projects

- Development of superior clones of Bamboo in HP, Department of Agriculture, Himachal Pradesh (Principal Investigator)
- Establishment of high-density bamboo plantation, Department of Agriculture, Himachal Pradesh (Principal Investigator)
- Evaluating the performance of seaweed extract, protein hydrolysates, biochemical and botanical extract in crop growth funded by CAFRI, Jhansi (Principal Investigator)

Important Research Publications

- **Bhardwaj, DR**, Salve, A., Kumar, J. *et al.* 2023. Biomass production and carbon storage potential of agroforestry land use systems in high hills of north-western Himalaya: an approach towards natural based climatic solution. *Biomass Conversion and Biorefinery* (2023). <https://doi.org/10.1007/s13399-023-03952-0>.
- Sharma P, **Bhardwaj DR**, Singh MK, Nigam R, Pala NA, Kumar A, Verma K, Kumar D and Thakur P. 2022. Geospatial technology in agroforestry: status, prospects, and constraints. *Environment Science and Pollution Research* <https://doi.org/10.1007/s11356-022-20305-y>.
- Navale MR, **Bhardwaj DR**, Bishist R, Thakur CL, Sharma S, Sharma P, Kumar D, Probo M. 2022. Seasonal variations in the nutritive value of fifteen multipurpose fodder tree species: A case study of north-western Himalayan mid-hills. *PloS One* **25**:17(10):e0276689. <https://doi.org/10.1371/journal.pone.0276689>.
- Kumar D, Thakur CL, **Bhardwaj DR**, Sharma N, Sharma P and Sankhyani N. 2022. Biodiversity conservation and carbon storage of *Acacia catechu* Willd. dominated northern tropical dry deciduous forest ecosystem in north-western Himalaya: Implications of different forest management regimes. *Frontier in Environment Science* <https://doi.org/10.3389/fenvs.2022.981608>
- Kumar D, **Bhardwaj DR**, Sharma P, Sankhyani N, Al-Ansari N, Linh NT. 2022. Population Dynamics of *Juniperus macropoda* Bosc forest ecosystem in relation to soil physico-chemical characteristics in the cold desert of North-Western Himalaya. *Forests* **13**(10):1624. <https://doi.org/10.3390/f13101624>
- **Bhardwaj DR**, Kumar A, Pala NA, Sharma P, Kumar D, Kumar A and Zahoor S. 2022. Carbon density and C-sequestration by tree plantation ecosystems in mid-hill of NW-Himalayas: Implications for climate change mitigation. *Land Degradation and Development* <https://doi.org/10.1002/ldr.4307>
- **Bhardwaj DR**, Tahiry H, Sharma P, Pala NA, Kumar D and Kumar A. 2021. Influence of Aspect and Elevational Gradient on Vegetation Pattern, Tree Characteristics and Ecosystem Carbon Density in North-western Himalayas. *Land* **10**(11):1109. <https://doi.org/10.3390/land10111109>.

- Garima, **Bhardwaj DR**, Thakur CL, Kaushal R, Sharma P, Kumar D and Kumari Y. 2021. Bamboo-based agroforestry system effects on soil fertility: Ginger performance in the bamboo subcanopy in the Himalayas (India). *Agronomy Journal* **113**(3):2832-2845. <https://doi.org/10.1002/agj2.20684>.
- **Bhardwaj DR**, Banday M, Pala NA and Rajput BS. 2016. Variation of biomass and carbon pool with NDVI and altitude in sub-tropical forests of north-western Himalaya. *Environment Monitoring and Assessment* **188**(11):635. <https://doi.org/10.1007/s10661-016-5626-3>.
- Rajput BS, **Bhardwaj DR** and Pala NA. 2015. Carbon dioxide mitigation potential and carbon density of different land use systems along an altitudinal gradient in north-western Himalayas. *Agroforestry Systems* **89**(3):525-36. <https://doi.org/10.1007/s10457-015-9788-8>
- **Bhardwaj DR** and VK Mishra. 2005. Vegetative propagation of sub-Himalayan Elm: effects of chemical treatment, collection time, type of donor and position of shoot on adventitious root formation in stem cuttings. *New Forests* **29**(2): 105-116.

Awards & Recognitions

- Attended **International training** in Lakehead University, Canada w.e.f. March 11-25, 2023 under institutional development programme (IDP) ICAR NAHEP.
- **Review editor** in Frontiers in Forests and Global Change and Frontiers in Terrestrial Microbiology since 2022.
- Member of the V.P. Mohan committee constituted by the **Hon'ble supreme court of India** for guidance and monitoring of **Silvicultural Green Felling** in the state of Himachal Pradesh from 2018-2021.
- **Nominated member** of the State Level Bamboo Development Agency (SLBDA) since 2020.
- **Gold Medal**, Indian Society of Agroforestry, Jhansi, 2019
- **Second prize** for the poster presentation entitled "Impact of climate change on mountain farming systems of north-western Himalaya" in National symposium held at NRCAF, Jhansi, December, 15-17, 2008.
- **First prize** for the poster presentation entitled "Effect of smog on climate change and vulnerability of agroforestry tree species in the subtropical and temperate parts of the Indian Subcontinent" In the National Symposium held at NRCAF, Jhansi, December, 16-18, 2006.