

Dr. PRIYANKA PARIHAR

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DOB: 15/06/1997

Language: English, Hindi

ACADEMIC RECORDS

YEAR	QUALIFICATION	BOARD/COLLEGE	PERCENTAGE/CGPA
2026	Ph.D. (Major: Genetics and Plant Breeding; Minor: Molecular Biology and Genetic Engineering)	G.B.P.A.U&T, Pantnagar	8.424 OGPA
2019	M.Sc. (Genetics and Plant Breeding)	G.B.P.A.U&T, Pantnagar	8.078 OGPA
2016	Graduation	Kumaun University	70.4%
2013	Intermediate	CBSE	84.6%
2011	High School	CBSE	10.00 CGPA

NATIONAL LEVEL EXAM

ARS Net 2025 (Genetics and Plant Breeding)

CSIR UGC NET-JRF 2022 (upgraded to CSIR-SRF)

GATE 2019

UGC NET-2019

Ph.D. THESIS TITLE

Genetic and Morpho-Physiological Dissection of Terminal Heat Stress Tolerance in Doubled Haploid Wheat Using Multi-Environment Trials and GBS-Based QTL Mapping

(under the guidance of Dr. Jai Prakash Jaiswal, Head & Prof, Genetics and Plant Breeding, G.B.P.U.A&T)

MASTER'S THESIS TITLE

Genetic variability, Early selection and Molecular Characterization of Eucalyptus

(under the guidance of Dr. Salil K Tewari, Prof, Genetics and Plant Breeding, G.B.P.U.A&T)

WORK EXPERIENCE

- Current: Assistant Professor (Contract), Genetics and Plant Breeding at College of Hill Agriculture, V.C.S.G Uttarakhand University of Horticulture and Forestry, Bharsar, Uttarakhand (Present Employment).
- Part time Graduate Research Assistant in project entitled "AICRP on Agroforestry"
- Freelance for Ed-tech companies as subject matter specialist.

AWARDS

- Received **Best Poster Presentation Award** for delivering Poster titled “Evaluating Indigenous collection of bread wheat for their potential use in developing climate resilient varieties.” at 13th National Seed Conference (28-30 Nov, 2024) organized by IRRI South Asian Regional Center, Varanasi.
- Received **Best Oral Presentation Award** for presentation titled, “Genetic diversity analysis of DH wheat lines for yield and heat tolerance related traits” at National Symposium on Integrating Traditional and Modern Plant Breeding Techniques for food security (20-22 Dec, 2024) organized by Plant Breeding and Genetics Society, G.B.P.U.A&T, Pantnagar.
- Awarded “**Excellence in STEM**” by Vesuvius, India for research work titled “QTL mapping for heat stress tolerance in bread wheat”.
- **Young Plant Breeder Award-2026** at 15th International Conference on “Agriculture, Horticulture and Forestry: innovations for climate resilient.

PUBLICATIONS

- **Parihar, P.**, Jaiswal, J. P., Verma, A. K., & Kumar, A. (2025). Sucrose synthase dynamics and its potential role in heat stress tolerance in cereals. *Frontiers in Plant Science*, 16, 1652076. <https://doi.org/10.3389/fpls.2025.1652076>
- **Parihar, P.**, Jaiswal, J. P., Tiwari, M., Phakaliyal, V., Kala, N. & Verma, A. K. Sucrose synthase activity and its association with phenological and yield-related traits under heat stress in wheat. *Int. J. Adv. Biochem. Res.* 2025;9(12S):1791-1796. DOI: 10.33545/26174693.2025.v9.i12Sv.6839
- **Parihar, P.**, Tewari, S. K., Pant, U., Lohani, P. & Kumar., A (2025). Molecular characterization of selected Eucalyptus clones. *Indian Journal of Agroforestry*, 27(3). <https://epubs.icar.org.in/index.php/IJA/article/view/164170>
- **Parihar P**, Jaiswal JP, Singh T. Multi environment diversity analysis for yield and heat-responsive traits in wheat. *International Journal of Advanced Biochemistry Research*. 2026; SP-10(10):1078-1082. doi: <https://www.doi.org/10.33545/26174693.2026.v10.i10Sm.10426>
- Kumar Amit, J. P. Jaiswal, Himanshu Chaudhary, Banoth Vinesh, Shubham Kumawat, **Priyanka Parihar**, and Babita Bhatt. "Deciphering Genetic Diversity in Advanced Wheat Lines (*Triticum aestivum* L.) for Yield and Other Yield Contributing Traits Across the Locations." *Int. J. Plant Soil Sci* 36, no. 3 (2024): 427-440.
- Vinesh Banoth, Jai P. Jaiswal, Amit Kumar, Himanshu Chaudhary, Shubham Kumawat, **Priyanka Parihar**, and Sanjay Kumar. "Molecular Validation of Markers Linked to Rust Resistance (leaf and yellow) and Grain Quality Genes in a UP 2338-derived BIL Population of Bread Wheat." (2024).
- Verma Shivangi, M. K. Karnwal, Garima Aggarwal, and **Priyanka Parihar**. "Analysis of Genetic Variability, Trait Relationships, and Yield Determinants in Soybean." *International Journal of Plant & Soil Science* 36, no. 11 (2024): 412-419.
- Bhatt, B., Jeena, A. S., Aggarwal, G., Edhigalla, P., **Parihar, P.**, Chaudhary, D., & Flores, R. A. (2025). Empowering Sugarcane Breeding with New Technologies. In *Revolutionizing Sugarcane Molecular Breeding and Biotechnological Approaches: Current Status and Future Strategies* (pp. 25-66). Singapore: Springer Nature Singapore.
- Kumawat, S., **Parihar, P.**, Singh, A., Rana, A., Dadarwal, B.K. (2026). Exploring Diversity: An Overview of Millet Varieties. In: Jatav, H.S., Rajput, V.D., Minkina, T. (eds) *Millet for Global Health and Sustainability*. Reference Series in Phytochemistry. Springer, Cham. https://doi.org/10.1007/978-3-031-91605-2_1-1

- Kumar, P., **Parihar, P.**, & Chauhan, A. (2026). *Practical manual on basics of plant breeding*. College of Hill Agriculture, V.C.S.G. Uttarakhand University of Horticulture and Forestry. ISBN: 978-81-688349-2-7
- Kumar, P., Chauhan, A., & **Parihar, P.** (2026). *Practical manual on crop improvement (Kharif crops)*. College of Hill Agriculture, V.C.S.G. Uttarakhand University of Horticulture and Forestry. ISBN: 978-81-688349-3-4

ACADEMIC PARTICIPATION

- Poster presentation in 5th Biotechnology Conclave on Harnessing Biotechnology for a Sustainable Bio-E³ future, organized by Uttarakhand council for Biotechnology on 19th to 21st Nov, 2025
- Attended online training program on “Advanced Bioinformatics tools and techniques for Genomic Data Analysis” under DBT funded NNP project during 18th- 27th November 2025 at ICAR-IASRI, Delhi
- Attended 10 days workshop on “Sequencing based technologies (SBG) Library construction and data analysis” organized jointly by Washington State University, USA and Punjab Agriculture University, Ludhiana, from 17-25 Nov, 2024.
- Attended DST-SERB-sponsored High-End workshop on “Advanced Genomics and Phenomics Tools for Augmenting Crop Nutritional Security in Hill Agriculture” from June 12-22, 2024 at ICAR-VPKAS, Almora.
- Attended a workshop on "Cloning in E coli and Agrobacterium for RNAi and CRISPR in wheat" held at PAU, Ludhiana from 1-9 February 2024.
- Participated in 5 days training Program on “Advanced Genetics and Plant Breeding Data Analysis Workshop”, conducted by Agriculture University, Jodhpur from 30th Oct to 3rd Nov, 2023
- Participated in 5 days training Program on “Data driven Agriculture: Statistical training using R”, conducted by Agriculture University, Jodhpur from 23 – 27 May, 2023.
- Presented poster entitled “Leveraging Omics Technology for Advancing Crop Protection Strategies” at National Symposium on Crop Health Management organized by ICAR-VPKAS, from 29-30 September, 2023.
- Participated in International conference on Global Food Security.

TECHNICAL SKILLS

- Laboratory experience in Molecular biology and biotechnology.
- Proficiency in data analysis using R Software.
- Bioinformatics work
- Proficiency in making crosses in field crops (wheat and mustard) and breeding procedures.
- Proficiency in handling various computing software such as Windows, MS Office (MS Word, MS Excel, Power Point) etc.

EXTRACURRICULAR ACTIVITIES

- Anchoring in “Quality Seed Production Conference” conducted in G.B.P.U.A &T, Pantnagar.
- Anchoring in National Symposium conducted in G.B.P.U.A &T, Pantnagar on 22-22 Dec, 2024
- Gold medal in State Taekwondo Championship.
- Runner up in Pantnagar inter-hostel volleyball tournament.
- Stood Second in Essay writing competition in Gandhi Utsav organised in Pantnagar.