Research Projects in Botany and Their Importance

The Department of Botany actively undertakes research projects that contribute to biodiversity conservation, sustainable resource utilization, livelihood enhancement, nutraceutical development, and environmental sustainability. These projects provide valuable opportunities for faculty and students to engage in interdisciplinary research and address regional as well as national priorities.

Major Research Grants and Projects

Faculty as PI/CO-PI	Project Details
Dr. Maneesha Singh (CO-PI)	Project accepted on "Development of Sustainable textile from Himalayan Nettle" funded by Ministry of Textile, Government of India in 2026 of 60 lakhs
Dr. Maneesha Singh (PI)	Ongoing Project Funded by UCB sanction order no. UCB/R&D project/2024/552 dated 27th March, 2024 on Assessment of Genetic Diversity, conservation and utilization of *Origanum vulgare* L under agroforestry system as livelihood for farmers in Uttarakhand, India during 2024.
Dr. Maneesha Singh (PI)	Ongoing Project under Seed money, 2025-26 on "Study on identification, characterization and conservation of diverse millets landraces for yield and nutraceutical related attributes" sanction letter SGRRU/R&D/SM/2025/18 on 29th March, 2025
Dr. Maneesha Singh (PI)	One Project completed under Seed money, 2023-24 on Nutraceutical Potential and value added products of Kodo and Barnyard Millets from Uttarakhand, India SGRRU/DR(11)2023/SM02, 27th March, 2023
Dr. Kanchan Bhardwaj (PI)	Ongoing Project under Seed money, 2025-26 on "Nutritional Evaluation of Seeds Flour based cookies from *Pinus roxburghii* of Uttarakhand "

Importance of These Research Projects

These research initiatives play a significant role in advancing botanical sciences and promoting sustainable development. The projects focus on the conservation of valuable plant genetic resources, documentation of indigenous biodiversity, and development of eco-friendly products from locally available plant species. Research on Himalayan nettle contributes to sustainable textile production and rural entrepreneurship, while studies on *Origanum vulgare* support conservation strategies and livelihood enhancement through agroforestry practices.

The millet-based projects address food and nutritional security by identifying nutrient-rich landraces and exploring their nutraceutical potential. Such studies contribute to the preservation of traditional crop diversity and encourage the utilization of climate-resilient crops. Research on *Pinus roxburghii* seed products explores novel nutritional resources and value-added food products from underutilized forest species.

Overall, these projects strengthen scientific research, foster innovation, provide hands-on training to students, generate publications and patents, and contribute to the sustainable management of plant resources for societal benefit.