

ALIA BATOOL

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BASIC INFORMATION

PUBLICATIONS

- ✓ Mushtaq, R., Shafiq, M., Batool, A., Din, M. I., & Sami, A. (2024). Investigate the impact of zinc oxide nanoparticles under lead toxicity on chilli (*capsicum annum* L). Bulletin of Biological and Allied Sciences Research, 2024(1), 90-90.
- ✓ Sami, A., Haider, M. Z., Bhatti, M. H. T., Batool, A., Shahid, M. A., & Shafiq, M. (2024). Delivery Systems for Plant Genome Editing Technology. In Plant Molecular Breeding in Genomics Era: Applications (pp. 315-349). Cham: Springer Nature Switzerland.
- ✓ Shoukat, S., Ahmad, F., Abbas, M. T., Hassan, M., Batool, A., Afzal, H., Haris, M., & Ishtiaq, R. (2024). Investigating the Effects of Azadirachta Indica Leaf Extract on Drought Tolerance and Productivity of Mung Bean. African Journal of Biological Science, 6(15), 5880-10. [https://doi: 10.48047/AFJBS.6.15.2024.5879-5898](https://doi.org/10.48047/AFJBS.6.15.2024.5879-5898)
- ✓ Amjad, M., Wang, Y., Han, S. et al. Genome wide identification of phenylalanine ammonia-lyase (PAL) gene family in *Cucumis sativus* (cucumber) against abiotic stress. BMC Genom Data 25, 76 (2024). <https://doi.org/10.1186/s12863-024-01259-1>
- ✓ Umair, A., Manzoor, M., Saleem, M. S., Akram, S., Javaid, A., Batool, A., ... & Haider, M. Z. EFFECT OF DIFFERENT DOSES OF PHOSPHORUS AND POTASH ON THE GROWTH AND YIELD OF MAIZE.
- ✓ Rehman, A., Manzoor, M., Javaid, A., Batool, A., Chattha, M. B., Anees, M., ... & Haider, M. Z. 2024. Comparative Efficacy Of Four Insecticides To Control Brinjal (*Solanum Melongena* L.) Shoot and Fruit Borer. 21(4), 519-525.
- ✓ Ishfaq, Qandeel, et al. "Genome Wide Identification of the NPR1 Gene Family in Plant Defense Mechanisms against Biotic Stress in Chili (*Capsicum annum* L.)." Frontiers in Microbiology 15: 1437553.
- ✓ Sakhawat, Azra, et al. "Natural compound targeting BDNF V66M variant: insights from in silico docking and molecular analysis." Amb Express 13.1 (2023): 134.

EXPERIENCE

- ✓ Permanent faculty member of Department of Plant Breeding and Genetics, University of the Punjab 2022 to present.
- ✓ Visiting lecturer in Department of Plant Breeding and Genetics, University of the Punjab from 2020 to 2022.

CERTIFICATES

- ✓ Hands-on Training on Patent Claims Drafting (18 Dec, 2024), organized by ORIC University of the Punjab, Lahore Pakistan.
- ✓ Sharjah International conference in Biotechnology (SICBiotech), October 29-31, 2024, at university of Sharjah. (Oral Presentation).
- ✓ Training Workshop on Smart Agriculture Transformations
- ✓ Certificate of Participation in the International Poultry Expo-2023
- ✓ Certificate of Appreciation for Farmer's Facilitation Camp-2023
- ✓ Certificate of Participation for Olive Nurseries SOPs and Good Agronomic Practices
- ✓ Certificate for One Day Workshop on Winter Vegetables
- ✓ Certificate for One Day Workshop on Spring Flowers
- ✓ Certificate of Appreciation for International Conference on Strategies for Sustainable Agriculture and Forestry in the Face of Climate Change
- ✓ Certificate of Participation in the Training Program of Outcomes Based Education
- ✓ Certificate of Participation Kazakhstan-Pakistan-Turkiye; Youth Forum on Biotechnology
- ✓ Certificate of Participation in Fifth International Conference Emerging Trends in Bioinformatics & Biosciences (ICETBB-2023)

RESEARCH
INTEREST

- ✓ Performed field surveys and sample collection for disease incidence and disease severity.
- ✓ Conducted laboratory, greenhouse, and field experiments.
- ✓ Acquired training and practically performed DNA & RNA extraction.
- ✓ Experienced in PCR and gel electrophoresis.
- ✓ Experienced in the formation of Nano particles cucumber and chili.
- ✓ Qualitative traits of rice and characterization.
- ✓ Genome wide Analysis
- ✓ Accomplished expertise in writing and formatting research grants and manuscripts.

SEARCH
PROJECTS

- ✓ Assessing the efficacy of green-synthesized silica nanoparticles of alleviating drought stress in *capsicum annum*.
- ✓ Determination of Transgenic flow of Herbicide and Cotton Leaf Curl Virus (CLCuV) Resistance in Cotton (*Gossypium hirsutum* L.)

STUDENTS
SUPERVISION

- ✓ M.Sc. Thesis Guided: 4 students
- ✓ B.Sc. : 6 students

COMMUNITY
SERVICES

Members of Different managerial committees at University Level, Student Advisor in Department of Plant Breeding and Genetics.