

Dr. REHANA KOUSAR

Email: dr.rehanakousar@gmail.com

ACADEMIC QUALIFICATION

- **Doctor of Philosophy - 2019 (Botany)**
CGPA: 3.89/4.00
PMAS Arid Agriculture University, Rawalpindi, Pakistan.
Research project: "Salicylic and Abscisic Acid Induced Physiological and Biochemical Changes in Selected Wheat Cultivars under Heat Stress".
- **Master of Philosophy – 2010 (Botany)**
CGPA: 3.81/4.00
PMAS Arid Agriculture University, Rawalpindi, Pakistan.
Research project: "Antimicrobial Activity of *Fagonia indica* from Thal Desert, Punjab, Pakistan".
- **Master of Science – 2008 (Botany)**
CGPA: 3.84/4.00
PMAS Arid Agriculture University, Rawalpindi, Pakistan.
Research report: "Taxonomic Study of Family Convolvulaceae based on Leaf Epidermal Anatomy".
- **Bachelor of Science – 2005 (Zoology, Botany, Chemistry)**
Marks: 60 %
University of The Punjab, Lahore.
- **Higher Secondary School Certificate – 2003 (Pre-Medical)**
Marks: 72.63 % Grade: A
Federal Board of Intermediate and Secondary Education, Islamabad, Pakistan
- **Secondary School Certificate – 2000 (Science)**
Marks: 73.76 % Grade: A
Federal Board of Intermediate and Secondary Education, Islamabad, Pakistan

PROFESSIONAL QUALIFICATION

- **Master of Education – 2014 (Science Education)**
Marks: 68 %
Allama Iqbal Open University, Islamabad, Pakistan
- **Bachelor of Education – 2008 (Teacher Education)**
Marks: 70%
Allama Iqbal Open University, Islamabad, Pakistan

ACADEMIC EXPERIENCE

- Working as an Assistant Professor at the Department of Botany, University of Swat.
Sep 2023- Continued
- Worked as Scientific Officer at Plant Physiology Program, Crop Science Institute, National Agriculture Research Center (NARC), Islamabad.
May 2023-Sep 2023

- Worked as IPFP Fellow/ Assistant Professor at the Department of Botany, Rawalpindi Women university Rawalpindi. **July 2020-Oct 2021**
- Worked as Visiting Assistant Professor at Department of Biological Sciences, International Islamic University, Islamabad. **Feb 2020-June 2020**
- Worked as Visiting Faculty at Department of Archeology, Taxila Institute of Asian civilization, Quaid-I-Azam University Islamabad. **Sep 2019- Jan 2020**
- Worked as Visiting Faculty at Department of Agriculture, PMAS Arid Agriculture University, Rawalpindi, Pakistan. **Feb 2019-Jul 2019**
- Worked as Science Teacher/Lecturer on an honorary basis at Islamabad Model College for Girls, NHC Islamabad. **Feb 2010-Feb 2011**

RESEARCH EXPERIENCE

- Research fellow at Protein Chemistry Group, Copenhagen Biocentre, Department of Biology, University of Copenhagen, Denmark. **Dec 2016- June 2017**
- Researcher at Plant Physiology Program, Crop Science Institute, National Agriculture Research Center, Islamabad. **Mar 2014- Mar 2017**

SCHOLARSHIPS & AWARDS

- Secured higher education commission (HEC) talent farming Scholarship during BSc.
- Granted Vice Chancellor talent scholarship during M. Phil and M. Sc.
- Secured HEC Indigenous Scholarship, 2015.
- Awarded International research support award under IRSIP HEC Pakistan to University of Copenhagen, Denmark.

PUBLICATIONS

1. Oranab S., Ghaffar A., Ahmad A., Pasha M.F.K., Munir B., Arif S., Ishaq S., Mahfooz S.H., **Kousar R.**, Zakia S., and Ahmad H.M., (2023). Genome-wide analysis of cyclic nucleotide-gated ion channels (CNGCS) of *Arabidopsis Thaliana* under abiotic stresses. SABRAO Journal of Breeding and Genetics, 55(1): 38-49.
2. Rehman M.U., Ali N., Jamal M., **Kousar R.**, Ishaq M., Awan A.A., Hussain I., Sherkheli M.A., & Haq, R.U. (2021). Comparison of acute and chronic effects of *Bacopa monnieri*, *Ginkgo biloba*, and *Lavandula angustifolia* and their mixture on learning and memory in mice. *Phytotherapy Research*. 35:2703–2710.
3. Kamran M., **Kousar R.**, Ullah S., Khan S., Umer M.F., Rashid H.U., Khan Z., Khattak M.I. K., & Rehman M.U. (2020). Taxonomic Distribution of Medicinal Plants for Alzheimer's Disease: A Cue to Novel Drugs. *International Journal of Alzheimer's Disease*, 2020: 1-15.
4. Ahmed W., Qureshi R., Munazir M., Rahim B.Z., Munir M., **Kousar R.**, Maqsood M., Abbas Q., Qaseem M.F., Khan A.M, Iqbal M., Bhatti M.I. (2019). Diversity and distribution of flora in Murree Kotli Sattian-Kahuta National Park, Pakistan. *Applied Ecology and Environmental Research*, 17(4):9621-9650.
5. **Kousar R.**, Qureshi R., Jalal-Ud-Din, Munir M., & Shabbir G. (2018). Salicylic acid mediated heat stress tolerance in selected bread wheat genotypes of Pakistan. *Pakistan Journal of Botany*, 50:2141–2146.
6. Qaseem M.F., Qureshi R., Muqaddasi Q.H., Shaheen H., **Kousar R.**, & Röder M.S. (2018). Genome-wide association mapping in bread wheat subjected to independent and

- combined high temperature and drought stress. *PloS ONE*, 13(6), 1-22.
7. Anwar T., Qureshi, R., Munazir M., Rahim B., Qureshi H., **Kousar R.**, Maqsood M., Abbas Q., Bhatti M., Panni M.K. (2018). Allelopathic potential of *Pinus roxburghii* needles against selected weeds of wheat crop. *Applied Ecology and Environmental Research*, 17(2):1717- 1739.
 8. **Kousar R.**, & Qureshi R. (2013). Antimicrobial activity of *Fagonia indica* from Thall desert, Punjab. *International Journal of Phytomedicine*, 5(1): 113-118.

ACCEPTED MANUSCRIPT:

Rauf, A., Khan, S, Rehman, M., Zafar, M., Khan, I., Kousar R., Muhammad, K., Haq I., Khan, M.I., Almasoud, N., and Alomar, T., (2023). In vitro and in vivo antioxidant therapeutic evaluation of *Dodonaea viscosa*. *Frontiers in Chemistry*, Manuscript ID: 1268949.

POSTER PRESENTATION

Kousar, R., Qureshi R., Bibi A., Raana S., Nasreen G., and Mirza S.N. Leaf epidermal anatomy of *Convolvulaceae* from Potohar region, Pakistan. 2nd International Conference of Plant Scientists & 11th National Meeting of Plant Scientists organized by Pakistan Botanical Society, at GC University, Lahore during 20th to 22nd April 2011. P 220.

RESEARCH INTERESTS AND SKILLS

- Working knowledge of RNA Isolation, DNA extraction, qRT-PCR, PCR, western blotting, GEL electrophoresis. Microbiological and Biochemical lab techniques.
- Plant physiology, Climate change and its effect on plant growth and development. Plant Biotechnology, Plant Molecular Genetics, Plant Genetic Engineering, Plant Breeding.
- Good skills of Computer programs such as MS Word, MS excel MS PowerPoint, and Internet accessories.
- First Aid and basic medical skills.

REFERENCES

Prof. Dr. Rahmatullah Qureshi, Chairman Department of Botany, PMAS-Arid Agriculture University Rawalpindi Pakistan. Email: rahmatullahq@uaar.edu.com

Dr. Sabahat Haqqani, Assistant Professor, Department of Psychology, Capital University of Science and Technology, Islamabad. Email: sabahat.haqqani@hotmail.com