



Huma Gul

Date of birth: 20/04/1999 | **Place of birth:** Swabi, Pakistan | **Nationality:** Pakistani |

Gender: Female | **Phone number:** (+92) 3409015594 (Work) | **Email address:**

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• ABOUT ME

- To Peruse advanced studies in Plant Sciences under the Scholarship program, with a focus on fungal ecology, plant stress physiology, and microbial ecology research. Dedicated to contributing to global scientific knowledge and promoting eco-friendly solutions for human health.

• WORK EXPERIENCE

 **HUMA GUL** – SWABI, PAKISTAN

Department Department of Botany, University of Swabi, Khyber Pukhtunkhwa, Pakistan |

Website <https://www.uoswabi.edu.pk/>

JUNIOR RESEARCHER – 2017 – 2021

- **Leadership:** Lead a team of 5 members.
- Developed quantitative theory of hierarchical structure in ecological systems.
- **Analyzed** how ecological communities reflect environmental heterogeneity at different scales.
- Proficient in the use of Microsoft Office range of software including GIS and tablet technology.
- **Communication:** Strong relationship building skills and ability to collaborate effectively with internal and external teams.
- **Presentation Skills:** Strong presentation skills and ability to provide technical support to team members.
- Ability to work extended hours during peak seasons.

 **HUMA GUL** – ISLAMABAD, PAKISTAN

Department Department of Plant Sciences | **Email** humagul@bs.qau.edu.pk | **Website** <https://qau.edu.pk/>

RESEARCH INTERN – 2022 – 2024

- **Teamwork:** Collaborated with a team of 10 members.
- Conducted experiments to check the relationship of diversity of fungi along with its associated vegetation.
- **Conducted** experiment to check impact of edaphic factors on the diversity and production of mushroom species.
- **Hands-on training** on the use of various modern instruments and Software like GIS and Spectrometer.
- Practical experience of understanding the Plant-Environment interactions through field work.
- Have **written** and **presented work** reports.

BOTANY LECTURER – 2024 – CURRENT

- Working as a Lecturer at the Department of Botany, Women University of Swabi, Khyber Pukhtunkhwa, Pakistan
- I am a Botany teacher with one year of experience teaching University level students.
- I teach plant ecology and main areas of botany like vegetation dynamics, physiology, mycology, and modern botany.
- I create easy-to-understand lessons, tests, and academic support to help students learn concepts and solve problems better.
- I have guided students in science exhibitions, encouraging creativity, practical learning, and teamwork.
- I aim to make botany simple, interesting, and enjoyable for all students.

● **EDUCATION AND TRAINING**

2022 – 2024 Islamabad, Pakistan

MASTER OF PHILOSOPHY Quaid-i-Azam University, Islamabad, Pakistan

Short Description: This study aimed to explore and identify the diversity of mushrooms along with its associated flora from District Swabi, Khyber Pukhtunkhwa, Pakistan.

Major Subjects

- Plant Ecology
- Vegetation Dynamics
- Plant Microbe Interaction
- Plant stress physiology
- Mycosymbiosis
- Phytogeography
- Biodiversity and Conservation
- Medicinal Plants

Website <https://qau.edu.pk/> | **Field of study** Plant Sciences | **Final grade** 3.9 CGPA | **Level in EQF** EQF level 1 |

Thesis Ecological distribution and assessment of mushroom species in the District Swabi, Khyber Pakhtunkhwa, Pakistan

2017 – 2021 Swabi, Pakistan

BACHELOR OF SCIENCE University of Swabi, Khyber Pakhtunkhwa

Short Description: The primary aim of the present work is to study the ecological knowledge and perception of changes in morels abundance by mushroom collectors in Northern areas of Pakistan.

Major Subjects

- Ecology
- Mycology
- Cell Biology
- Genetics
- Molecular Biology

Website <https://uoswabi.edu.pk/> | **Field of study** Botany | **Final grade** 3.58 CGPA | **Level in EQF** EQF level 1 |

Thesis Ecological Knowledge and perception of changes in morels abundance by mushroom (Morchella) collectors in northern areas of Pakistan; a biodiversity hotspot

2024 – CURRENT Peshawar, Pakistan

BACHELOR OF EDUCATION Sarhad University of Science and Information Technology, Peshawar, Pakistan

Title: B.E.D (Bachelors of Education): 1.5 Years from Sarhad University, Peshawar, Pakistan. 2024-continue.

- Major Subjects
 - Human Development and Learning.
 - Curriculum and Development.
 - Teaching Methods.
 - Evaluation and Assessments
 - Education Psychology.

Field of study B.E.D

SKILLS

R-PROGRAMMING | GIS Mapping | PCORD | CANOCO | CIPRES Portal | MEGA X | Bioedit | PAST | Origin Pro | Biorender | NCBI BLAST | Molecular characterization | Photoscape | Microscopy | Adobe Illustrator | Adobe Photoshop | DNA Extraction | Peximeter

Microsoft

Microsoft word | Microsoft Movie Maker | Microsoft Excel | Microsoft Office | Data Analysis

LANGUAGE SKILLS

Mother tongue(s): PUSHTO

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ABSTRACTS

2024

BOOK ABSTRACTS

- S A Zeb, S M Khan, M Saba, M Faiz, A Abdullah, Z Ahmad, H Badshah, H Gul, F Manan (2024) *Pinus Wallichiana* as Home for Macrofungi; A case study from Moist Temperate Region of Murree Forest Division (Published on November, 2024) (3rd International Conference) REVAMPED SCIENTIFIC OUTLOOK OF 21 CENTURY (RSO 21st Century).

PUBLICATIONS

PUBLICATIONS

- Gul, H., Khan, S. M., Zeb, S. A., Maula, F., & Bibi, N (2024). A review on mysterious poisonous mushrooms of Pakistan, unveiling their implications and threats. *Mycopath*, 22(1): 57-72.
- Gul, H., Khan, S. M., Saba, M., Maula, F., & Bibi, N. (2025). Taxonomic and Phylogenetic Evidence Reveal a New Record Species of the Genus *Cyclocybe* (Strophariaceae) from Pakistan. *Biology Bulletin Reviews*, 1-6.
- Gul, H., Rahman, A. U., Khan, A. H., Habib, F., Chasman, B., Anwar, I., & Batool, D. E. K. (2025). ECOLOGICAL KNOWLEDGE AND PERCEPTION OF CHANGES IN MORELS ABUNDANCE HOTSPOT. *Voyage Journal of Scientific Research and Exploration*, 2(1), 50-71.
- Gul, H., Bibi, N., & Din, Z. U. (2025). Ethnobotanical Study of Medicinal Plants Used as Herbal Teas and Drinks: Folk Medicine of the District Swabi, Khyber Pakhtunkhwa, Pakistan. *Biology Bulletin Reviews*, 1-26.
- Gul, H., I. Anwar, K.U. Ibrar, A. Hussain and M. Fazal. 2025. Ethnobotanical study of indigenous medicinal plants of district Swabi, Khyber Pakhtunkhwa, Pakistan. *Pakistan Journal of Weed Science Research*, 31(2): 90-103.

- **Gul, H.**, A.H. Khan, N. Bibi, R. Komal and S. Ahmad. 2025. Floristic diversity and life form spectrum of vegetation in Swabi District, Khyber Pakhtunkhwa, Pakistan. *Pakistan Journal of Weed Science Research*, 31(2): 104-116.
- Ali, F., Rahman, A. U., Maula, F., & **Gul, H.** (2025). MULTIVARIATE ANALYSIS OF MORELS HABITAT DIVERSITY ALONG WITH ASSOCIATED VEGETATION DYNAMICS IN DISTRICT SWAT, KHYBER PAKHTUNKHWA, PAKISTAN. *Voyage Journal of Scientific Research and Exploration*, 2(1), 35-49.
- Akram, W., Saba, M., Inayat, A., Ilyas, M., Maula, F., Asif, M., Ullah, I., **Gul, H.**, Bibi, N., Khan, S. (2025). Addition to the Mycobiota of Pakistan. *Agrocybe retigera* and *Chroogomphus mediterraneus* with Morphological Characterization and ITS Barcodes. *Biology Bulletin Reviews*, 1-12.
- Sadia, H., Malik, K., Qureshi, R., Mehmood, K., Khan, K., Hassan, A., Ahmad, S., Shah, H., **Gul, H.**, Alkahtani, J. and Almunqedhi, B.M., 2025. Pollen morphology of Cucurbitaceae using microscopic techniques for accurate taxa identification. *Genetic Resources and Crop Evolution*, pp.1-24.
- Sameen, A., Sadia, H., Sultana, T., Khan, K., Malik, K., Shah, H., Ullah, A., Din, Z.U., **Gul, H.**, Abdullah, M. and Ahmad, S., 2025. Ethnobotanical study of medicinal plants used for treatment of Diabetes in Southern Punjab, Pakistan. *Ethnobotany Research and Applications*, 30, pp.1-10.
- Ullah, A., Ahmad, M., Mukhtar, N., Ahmad, S., Shah, H., Durrani, F., **Gul, H.**, Bibi, N., and Aljowaie, R.M., 2025. Palynological research and taxonomic implications of selected bee forage plants using microscopic techniques for accurate taxa identifications. *Genetic Resources and Crop Evolution*, pp. 1-18.
- Ahmad, S., Ahmad, M., Ullah, A., Shah, H., **Gul, H.**, Abdullah, M., Gillani, S.W., Manzoor, M. and Shahzad, A., 2024. Paleopalynofloras of the Eocene in South Asia. *Tropical Natural History*, 24, pp. 239-245.
- Komal, R., & **Gul, H.** (2025). Antibacterial activities of chickpea (*Cicer arietinum* L.) leaves used to enhance the growth of ladyfinger (*Abelmoschus esculentus* L.) plant. *Voyage Journal of Scientific Research and Exploration*, 2(1):177-190.
- Ullah I, Malka Saba, **Huma Gul**, Fazli Maula, Nasira Bibi, Kashif Hussain (2025). First Report of *Pseudolaccaria pachyphylla* from Pakistan Based on Morphological and Molecular Phylogenetic Studies (**Accepted**) (*Biology Bulletin Reviews* on July 19, 2025).
- Ullah I, Malka Saba, **H Gul**, and F Habib (2025). Morphological and molecular evidence reveal a new record species of the genus *Panaeolus* (Bolbitiaceae) from Pakistan. (**Under Review**) (*Pakistan Journal of Weed Science Research* on July 1, 2025).
- Huzaif Khan, Haris khalid, **Huma Gul**, Fazli Maula (2025), Isolation and Identification of Aerial Fungal Spores for Biochemical Studies from the University of Swabi, Khyber Pakhtunkhwa, Pakistan (**Under Review**) (*Voyage Journal of Scientific Research and Exploration* on Oct 25, 2025).

• CHAPTERS

2025 – CURRENT

BOOK CHAPTERS

- **Huma Gul**, Nasira Bibi, Zohaib U Din, Murad Muhammad, Fazli Maula, Muhammad Asif, Waseem Abbas, Iqram Ahmad, (2025). Soil Microbe Interaction and Nutrient Cycling (*Book Title; Nutrient Dynamics and Plant Nutrition in Agroecosystems*) Publisher CRC Press; Tayler and Francis Group, USA.
- **Huma Gul**, Fazli Maula, Rida Batool, Muhammad Asif, Nasira Bibi, Murad Muhammad (2025). Phytoremediation and pollution control (*Aquatic Plants-Innovations in Ecofriendly Solutions and Biotechnological Advances*) Publisher Springer.
- **Huma Gul**, Nasira Bibi, Fazli Maula, Muhammad Asif (2025). Landscape Ecology: Principles for Forest Restoration (*FOREST ECOLOGY AND AVIAN DIVERSITY: THE SCIENCE AND PRACTICE OF CONSERVATION AND RESTORATION*) (Publisher Wiley Book Series Call for Chapter Book).
- Muhammad Asif, Fazli Maula, **Huma Gul**, Malka Saba (2025). Organic Manure and Compost Use in Soil Fertility (*Book Title; Nutrient Dynamics and Plant Nutrition in Agroecosystems*) Publisher CRC Press; Tayler and Francis Group, USA.
- Zohaib U Din, **Huma Gul**, Waseem Abbas, S Khaskheli, F Solangi, Abdullah (2025). Measures for Intensifying Native Arbuscular Mycorrhiza Fungi Below Ground for Soil Health and Conservation (*"Innovations, Technologies, and Economic Models for Sustainable Agriculture"*) Publisher: Springer Nature (Final publication of Book: 2025).
- Zohaib U Din, Shuja ul Mulk Khan, Waseem Abbas, Qurat ul Ain, Shahab Ali, M Ali, S Khaskheli, F Solangi, **Huma Gul** (2025). Climate change and Vulnerability of the *Biodiversity* (Springer International

Book Series Call for Chapter Book) ("*Social Ecological Crisis of Development: Community Resilience and Sustainable Solutions*").

- Rida Batool, **Huma Gul** (2025). Emerging Technologies and Methodologies (*FOREST ECOLOGY AND AVIAN DIVERSITY: THE SCIENCE AND PRACTICE OF CONSERVATION AND RESTORATION*) (Publisher Wiley Book Series Call for Chapter Book).

● CONFERENCES AND SEMINARS

Webinars

- **International Symposium on Plant Life of South Asia** – Department of Botany, University of Karachi, Pakistan. 24/02/2020 – 27/02/2020.
- **Fourth International Conference on Biosciences (ICBS-2021)** – Department of Plant Sciences, Quaid-i-Azam University Islamabad, Pakistan. 15/06/2021 – 16/06/2021.
- Certificate of Participation "**1st INTERNATIONAL CONFERENCE ON RECENT APPROCHES IN PLANT SCIENCES**" (RAPS-2022), held on 30-31 March, 2022 Organized by Department of Botany, University of Education, Lahore, Pakistan.
- 3rd International Conference on **REVAMPED SCIENTIFIC OUTLOOK OF 21 CENTURY (RSO 21st Century)**, 2024.
- **Detection and characterization of Antimicrobial resistance in Agricultural, Food and Biosystems** held on 11 April, 2024, Biosensor, President of MDPI, Dr. Shu-KunLin.
- Certificate of Participation "**Journal of Clinical Medicine Webinars | NSCLC Treatment from the Early Stage to the Locally Advanced Disease in the New Era of Drugs**" held on 30 September 2024, President of MDPI, Dr Shu-Kun-Lin.
- Certificate of participation in **MDPI Webinar (The Science Behind the Prize: 2024 Noble Physics Roundtable 8, October, 2024)** by Chef Executive Officer (Professor Stefan Tochev).
- **Hydrodynamics in open channel flows and in pressurized Pipe Systems: Fundamentals and application** held on 29 March 2024 Organized by President of MDPI Dr. Shu-kun-lin.
- Certificate of participation in **MDPI Webinar (World Habitat Day 7, October, 2024)** by Chef Executive Officer MDPI (Professor Stefan Tochev).
- Certificate of Participation "**Reframing Strategies for a low- Carbon Future in Agricultural Systems**" held on 04 October, 2024 Organized by Stefan Tochev Chief Executive Officer, Journal of Agronomy.
- Certificate of participation in **World Architecture Day 2025: Architecture Design for Strength MDPI Webinar** (6, October, 2025) by Chef Executive Officer (Professor Stefan Tochev).
- Certificate of participation in **MDPI Webinar International Geodiversity Day Webinar** (6, October, 2025) by Chef Executive Officer (Professor Stefan Tochev).
- Certificate of participation in **MDPI Webinar (MDPI Webinar | The Science Behind the Prize: 2025 Nobel Physiology or Medicine Roundtable** (6, October, 2025) by Chef Executive Officer (Professor Stefan Tochev).
- Certificate of participation in **Children webinar/East Meets West: Current Research on Motivation in School Age Youth** 28 February, 2025 by Chef Executive Officer MDPI Professor Stefan Tochev.
- Certificate of participation in **MDPI World Wildlife Day Webinar** 3 March, 2025 by Chef Executive Officer MDPI (Professor Stefan Tochev).

● CERTIFICATIONS

Certificates of Participation

- **Plant Tissue Culture Techniques** – Institute of Biotechnology and Genetic Engineering, University of Agriculture, Peshawar, Pakistan 25/02/2019 – 26/02/2019.
- **Climate Change and Mitigation Strategies** – District Youth Affairs, Swabi, Pakistan. 05/01/2019 – 06/01/2019.
- One-day session on "**Digital Marketing**" organized by district youth office Swabi, Pakistan. July 15, 2019.
- **World Soil Day One-day seminar** – BS Block department of Plant Sciences Quaid-i- Azam University Islamabad, Pakistan. 05/12/2021 – 05/12/2021.
- Certificate of Participation in **poster competition in (Soil Conservation Day)** held at Plant Department, Quaid-i-Azam University Islamabad 2023.

- CRISPR Cas9 GENOME MODIFICATION TECHNOLOGY held on March 06, 2023, jointly organized by College of Veterinary Sciences and Animal Husbandry and ORIC Abdul Wali Khan University Mardan.
- Certificate of participation **“Endophytic fungi for sustainable agriculture Current and future challenges”** held on 21 March, 2023 Organized by Department of Botany, University of Swabi Khyber Pakhtunkhwa Pakistan.
- Awareness sessions entitled **“Poisonous Plants and Mushrooms”** at various Conservatories at Quaid-i-Azam University, Islamabad, Pakistan, 2023.
- Certificate of participation **“Exploring New Frontiers in Biological Research with R Programming Language”** on 26-27 February, 2024. Organized by Department of Botany Abdul Wali Khan University Mardan.
- Certificate of Participation: **For Attending 2- Day Hands-on Training (Data Analysis Tools & Scientific Writing Skills)** October 1-2-2024, Organized by Department of Botany, Abdul Wali Khan, University, Mardan, Pakistan in collaboration with Office of Research, Innovation, and Commercialization, Awkum (ORIC).
- **International live webinar on Cytogenetics to functional genomics: A Journey with Prof. P.K. Gupta** held on 6 April 2024 organized by Dr. Shuvobrata Majumder Bioengine.com.
- Certificate of Excellence Reviewer is **Awarded to Huma Gul in recognition of their contribution to manuscript** in 2024 by **(SPRINGER NATURE)** in the journal of Genetic Resources and Crop Evolution.
- Certificate of Participation Celebration of **(World Soil Day on Caring for soil: Measure, Monitor and Manage)** organized by Department of Plant Sciences, Quaid-i-Azam University Islamabad, Directorate of ORIC, Directorate of GYM and Plant Ecology and Conservation Laboratory, 5, December, 2024.
- Certificate of Participation in the webinar on **SPR Fellow Award Lecture series, 2025**, Organized by the society for plant research (SPR) on 30 May, 2025.
- Certificate of Acceptance for the Manuscript entitled **(Ethnobotanical study of medicinal plants of District Swabi, Khyber Pukhtunkhwa, Pakistan)** from the editor of Pakistan Journal of Weed Science Research 2025.
- Certificate of Excellence in Reviewing **“International Journal of Advances in Nephrology Research”** in recognition of an outstanding Contribution to the quality of the journal by Dr. M. B. Mondal Chief Managing Editor, 2025.
- Certificate of Excellence in Reviewing **“International Journal of Advances in Biology and Biotechnology 4-3-2025”** in recognition of an outstanding Contribution to the quality of the journal by Dr. M. B. Mondal Chief Managing Editor, 2025.

• HONOURS AND AWARDS

Achievements

- BS “Silver Medal” for standing 2nd position in the session 2017-21 at Department of Botany, University of Swabi.
- Certificates of standing 1st in BS semester 1th & 6th from Department of Botany, University of Swabi.
- Merit Based Fellowship: M. Phil from Quaid-i-Azam University Islamabad, Pakistan (2022-2024).
- University Merit Scholarship, University of Swabi Khyber Pukhtunkhwa, Pakistan, 2017-2021.
- Higher Education Commission (HEC) Merit based Ahsaas Scholarship, 2017-2021.
- Prime Minister Laptop Award in Bachelor, 2017.

• NETWORKS AND MEMBERSHIPS

Societies Memberships

- International society for Gastronomic and food sciences Italy, 2023-2025.
- Slow food association and organization Italy, 2022-2025.
- Green Youth Club Member of Quaid-i-Azam, University, Islamabad, Pakistan, 2022-2024.
- AID International, Pakistan Climate Department Member, 2022-2024.
- IUBS Secretariat member, 2022-Current.
- Bio-in-gene Global Family, 2022-Current.
- ANSI National Accreditation Board, 2022-Current.
- Society for plant Research, 2022-Current.

• VOLUNTEERING

Social work services

- Volunteer in a (World Tree Plantation Day), held by Plant Ecology and Conservation Laboratory, at the department of Plant Sciences, Quaid-i-Azam University, Islamabad, Pakistan, 2022-2025.
- Volunteer in a (World Soil Day), held by Plant Ecology and Conservation Laboratory, at the department of Plant Sciences, Quaid-i-Azam University, Islamabad, Pakistan, 2022-2025.
- Volunteer Al-Khidmat Foundation Khyber Pakhtunkhwa, Swabi (Pakistan), 2022-2024.
- Disaster Management, Education, Health, Orphanages. Service, 2020-2025.
- Community development social worker Shewa Educated Social Workers, 2020-2025.
- Rising of funds for "COVID-19 affected vulnerable Communities". 2019-2023.

• PEER REVIEWER ROLE

CURRENT

REVIEWER IN INTERNATIONAL JOURNALS

- Journal of Scientific Research and Reports
- Genetic Resources and Crop Evolution
- Pakistan Journal of Botany
- Journal of Ethnobotany Research and Application
- Journal of Biology Bulletin Review
- Journal of Ethnopharmacology
- Journal of Biology Bulletin Review
- Pakistan Journal of Weed Science Research
- International Journal of Plants and Soil Science
- Journal of Experimental Agriculture International
- VEGETOS; An international journal of plant research & biotechnology
- Asian Journal of Food Research and Nutrition
- Asian Research Journal of Agriculture
- Asian Journal of Research in Agriculture and Forestry
- The Open Public Health Journal

• RECOMMENDATIONS

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