



Dr. Naveed Ahmad

- **Nationality:** Pakistani
- **Date of Birth:** April 5, 1987
- **Contact No :** +92-333-941233
- **WhatsApp:** 03339241233
- **Email address:** naveedahmad@aup.edu.pk, naveedhorticons@gail.com
- **LinkendIn:** www.linkedin.com/in/dr-naveed-ahmad-334071159
- <https://orcid.org/0000-0003-1337-0599>
- **Address:** House No. 141, Street No. 04, Sector F-10, Phase 06, Hayatabad Peshawar, Pakistan 25000



Profile

I possess a remarkable academic background in Plant Science and have accumulated extensive experience of over 11 Years in teaching, research, out-reach and academic-administrative roles. My expertise spans a wide spectrum of subjects within Agriculture (Horticulture) and Plant Science, including Fruit Science (Pomology), Vegetable Science (Olericulture), Ornamental Horticulture, Landscape Design, Plant Propagation, Plant Tissue Culture, Plant Growth Regulators, Soil Science, Nursery Management, Plant Nutrition, Pest Management, Hydroponics and Aquaponics etc. Furthermore, I excel in research methods and experimental designs with project writing, research conduct, data collection, analysis and interpretation. My proficiency extends to the art of paper writing and publication, reflecting my commitment to advancing knowledge in the field. My diverse skills, developed through years of dedicated work, make me well-suited to contribute to any field related to agriculture and plant science.



Education

November, 2017 Peshawar, Pakistan	Doctor of Philosophy (PhD) in Agriculture (Horticulture) The University of Agriculture Peshawar Cumulative Grade Point Average (CGPA): 3.68/4.0
March, 2012 Peshawar, Pakistan	Master of Science (M.Sc) Honours in Agriculture (Horticulture) The University of Agriculture Peshawar Cumulative Grade Point Average (CGPA): 3.66/4.00
December, 2009 Peshawar, Pakistan	Bachelor of Science (B.Sc) Honours in Agriculture (Horticulture) The University of Agriculture Peshawar Cumulative Grade Point Average (CGPA): 3.60/4.00
June, 2005 Mardan, Pakistan	Higher Secondary School Certificate (HSSC)/(F.Sc) Pre-Engineering Government Post Graduate College Mardan Marks Obtained: 787/1100 (A Grade)
April 2003 Mohmand Agency, Pakistan	Secondary School Certificate (SSC)/Matriculation Science Group Government High School Subhan Khawar Mohmand Agency Marks Obtained: 622/850 (A Grade)



Work Experience

Duration

04-03-2022 - Till Present

Experience

02 Years and 11 Months

Duration

01-02-2013 to 03-03-2022

Experience

09 Years and 01 Month

Jobs Description

Assistant Professor (BPS-19)

Department of Horticulture (AMK), The University of Agriculture Peshawar, Pakistan

Lecturer (BPS-18)

Department of Horticulture, The University of Agriculture Peshawar, Pakistan

Teaching, Research Activities, Out Reach Services, Field Days, Trainings, Seminars Arrangement etc.

- Deliver dynamic and comprehensive lectures, labs, and fieldwork in subject area to undergraduate and graduate students.
- Provide academic advising and career guidance to both undergraduate and graduate students, assisting them in achieving their educational goals.
- Develop and revise course materials, including syllabus, assignments, and assessments, to align with current industry trends and research findings.
- Mentor and advise students on their academic and research pursuits, guiding them in project development and research methodologies.
- Actively engage in interdisciplinary research collaborations with colleagues from various departments, contributing to cross-disciplinary projects.
- Author and co-author research articles, conference papers, resulting in high valued publications in peer-reviewed journals and presentations at conferences.
- Participate in departmental and university committees, contributing to curriculum development, accreditation, program assessment and other administrative activities.

Responsibilities



Additional Responsibilities

Work Experience: 01

Duration

10-07-2013 - Till Present

Experience

11 Years and 07 Months

Responsibilities

Farm Manager

Horticulture Research Farm, The University of Agriculture Peshawar, Pakistan

- Manage commercial and experimental fruit orchards, along with agronomic crops and diverse vegetables for student demonstrations and research.
- Conduct regular inspections and oversee the entire life cycle of crops, ensuring efficient planting, cultivation, harvesting, and storage.
- Address crop nutrition, diseases, and challenges while managing crop protection programs and providing insights into planting and cultural practices.
- Create comprehensive reports on time, equipment, costs, and production, and manage budgets for optimal farm performance.

Work Experience: 02

Duration
01-02-2019 to 31-05-2023
Experience
04 Years and 04 Months

Research Associate
Department of Horticulture/Plant Protection, The University of Agriculture Peshawar Pakistan

- Conduct research on sustainable agricultural practices, focusing on Integrated Pest Management (IPM) and Integrated Nutrient Management (INM).
- Analyze data related to soil health, pest populations, and crop yields to inform sustainable practices.
- Develop and test innovative solutions to enhance agricultural sustainability.
- Collaborate with farmers, agronomists, and policymakers to promote sustainable practices.
- Evaluate the impact of sustainable practices on productivity and ecosystem health.
- Engage in advocacy efforts to promote sustainable agriculture policies.

Responsibilities

Work Experience: 03

Duration
16-05-2014 - Till Present
Experience
10 Years and 08 Months

Hostel Warden
Unit B Hostels, The University of Agriculture Peshawar Pakistan

- Ensure resident well-being and safety, fostering an inclusive, supportive environment.
- Enforce rules, address conflicts, and maintain discipline among residents.
- Oversaw security, collaborated with authorities, and supervised cleanliness/maintenance.
- Develop crisis plans, responded to emergencies, and organize community events.
- Provide counseling, mentorship, and support for academic and personal guidance.
- Maintained records and manage budget resources efficiently.

Responsibilities



Research Areas

Plant Tissue Culture

Extensive experience in developing efficient micropropagation protocols for the mass propagation of elite genotypes of horticultural crops, including fruit trees and ornamental and medicinal plants. Proficient in aseptic techniques, media optimization, and acclimatization of in vitro-derived plantlets.

Fruit Production

Knowledgeable in cultivar evaluation, orchard management practices, and post-harvest handling techniques for various fruit crops. Conducted research on the influence of rootstocks, pruning methods, and irrigation regimes on fruit quality and yield.

Plant Physiology

Knowledgeable in understanding the fundamental processes underlying plant growth and development, including photosynthesis, respiration, water relations, and stress responses. Conducted research on the physiological mechanisms underlying plant

Ornamental Horticulture

adaptation to abiotic stresses, such as drought, salinity, and temperature extremes. Proficient in developing sustainable production systems for high-value ornamental plants, including the use of soilless media and hydroponic techniques. Studied the effects of light, temperature, and nutrient management on the growth and flowering of ornamental crops.

Landscape Design and Maintenance

Skilled in designing aesthetically pleasing and sustainable landscapes that enhance biodiversity and environmental quality. Experienced in plant selection, layout planning, and maintenance practices to ensure the health and longevity of landscape installations. Conducted research on the impact of landscape design on ecosystem services and urban greening.

Mineral Nutrition of Crops

Proficient in diagnosing nutrient deficiencies, conducting soil and tissue analyses, and formulating balanced fertilization programs for maximizing crop productivity and quality. Studied the interactions between nutrients and their effects on plant growth and development.



General Skills

Teaching, Research, Academic Administration, Sustainable Agriculture, vegetation Restoration, Plant Tissue Culture, Integrated Pest Management, Integrated Nutrients Management, Arid zone Horticulture, Plant Propagation and their management, Landscaping and Maintenance Lawn, Indoor and Out Door Plants, Data Analysis and Interpretation, Grant Writing and Fundraising, Scientific Writing and Publications, Project Management



Laboratory Skills

- Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)
- Liquid Chromatography Mass Spectrometry (LC-MS)
- High-Performance Liquid Chromatography (HPLC)
- Gas Chromatography Mass Spectrometry (GC-MS):
- Atomic Absorption Spectroscopy (AAS)
- UV-Visible Spectrophotometer
- Flame Photometer
- Automatic Kjeldahl Digestion Unit
- Laminar Flow Unit and Autoclave etc.



Computer Skills

- Microsoft Office
- Realtime Landscaping Architect
- Statistix 8.1 software
- Origin Lab 8.1 software
- Python
- Figma

1. Ullah, I., **N. Ahmad**, N. Ahmad, Misbahullah. M. Zamin, M. Irshad, A. Alam, I. Aziz, K. Ullah and M. Adnan Khan. 2026. Climate-Induced Variability in Secondary Metabolites of *Indigofera heterantha*: Implications for Conservation and Sustainable Mountain Agriculture. *The Journal Advances of Nutrition Science and Technology*. 6(3-4): 64-69, 2026.
2. **Ahmad, N.**, N. Ahmad, M. Sajid, K. Rauf, M. Iqbal, M. Numan, I. Ullah, A. Khan, W.H. Al-Qahtani, M.A. Abdel-Maksoud, H. AbdElgawad, B. Iqbal and A. Jalal. 2025. Potential role of inoculum size in biomass accumulation and antioxidant secondary metabolites production in adventitious root cultures of *Stevia rebaudiana*. *Plant Biosystems*. 159(1): DOI: 10.1080/11263504.2025.2460459. **(Impact Factor = 1.6)**.
3. Ullah, I., M. Sajid, **N. Ahmad**, J. Rehman, K. U. Rahman, W. Bilal, M. Ali, M. Ilyas and Farooq. 2025. Influence of Fruit Thinning Intensity on Yield and Fruit Quality of Apple Cultivars. *Journal Advances of Nutrition Science and Technology*. 5(3-4): 93-100.
4. Mukhtar, S., **N. Ahmad**, N. Ahmad, M. Sajid, I. Ullah, N. Samad, M. Numan, Z. Iqbal, H. Fazal, M. Ali, and H. Sher. 2025. Large scale production of in vitro plantlets of *Stevia rebaudiana* (Bertoni) using low-cost gelling agents as alternative to commonly used agar. *Asia-Pacific Journal of Science and Technology*: 30(03).
5. Ali, M., A.M. Khattak, **N. Ahmad**, K. Rauf, I. Ullah, S. Ali, A. Khan, M.A. Rauf, K.U. Rahman, J. Rahman, W. Bilal, M. Ilyas and Farooq. 2024. Optimizing Phytohormone Combinations in Murashige and Skoog Media for Enhanced Micropropagation of *Ajuga bracteosa*. *Journal Advances of Nutrition Science and Technology*. 4(3-4):85-90. DOI:10.15228/ANST. 2024.v04.i03-4. p10.
6. Khan, A., N. Ahmad, H. Fazal, M. Ali, F. Akbar, I. Khan, M. Tayyab, M. N. Uddin, **N. Ahmad**, M. A. Abdel-Maksoud, I. Saleh, N. Zomot, H. AbdElgawad, K. Rauf, B. Iqbal, M. C. M. T. Filho and A. Jalal. 2024. Biogenic synthesis of silver nanoparticles using *Rubus fruticosus* extract and its antibacterial efficacy against *Erwinia carotovora* and *Ralstonia solanacearum* phytopathogenesis. DOI: <https://doi.org/10.1039/D3RA06723H>. *The Royal Society of Chemistry (RSC) Advances*, 14: 5754–5763. **(Impact Factor = 4.6)**.
7. Khan, M., A. M. Khattak, S. Ahmad, S. A. Khalil, **N. Ahmad**, S. A. A. Shah, S. Ali, Y. S. Moon and A. F. Alrefaei. 2024. Polyethylene glycol-stimulated drought stress enhanced the biosynthesis of steviol glycosides in *Stevia rebaudiana*. DOI: [http://dx.doi.org/10.30848/PJB2024-5\(3\)](http://dx.doi.org/10.30848/PJB2024-5(3)). *Pakistan Journal of Botany*. 56(5). **(Impact Factor = 1.2)**.
8. Ullah, I., M. Sajid, N. Ahmad, **N. Ahmad**, K. Rauf, R. Khalil, B. Iqbal, M. Ali, M.C.M.T. Filho, M.K. Okla, H. Abd Elgawad, A. Khan and A. Jalal. 2023. Melatonin-induced development of adventitious roots, biosynthesis of secondary cell products and greener synthesis of silver nanoparticles for biological activities using *Indigofera heterantha*. *South African Journal of Botany*. *South African Journal of Botany* 162:920 - 934. **(Impact Factor = 3.1)**.
9. Bano, A. S., A. M. Khattak, A. Basit, M. Alam, S. T. Shah, **N. Ahmad**, S. A. Q. Gilani, I. Ullah, S. Anwar, H. I. Mohamed. 2022. Callus Induction, Proliferation, Enhanced Secondary Metabolites Production and Antioxidants Activity of *Salvia moorcroftiana* L. as Influenced by Combinations of Auxin, Cytokinin and Melatonin. *Brazilian Archives of Biology and Technology*. 65: e22210200. **(Impact Factor = 1.180)**.
10. **Ahmad, N.**, A. Rab, M. Sajid, N. Ahmad, H. Fazal, M. Ali and U. Egertsdotter. 2021. Sucrose-dependent production of biomass and low-caloric steviol glycosides in adventitious root cultures of *Stevia rebaudiana* (Bert.). *Industrial Crops & Products* 164: 113382. **(Impact Factor = 6.449)**.
11. Ahmad, A., H. Ali, H. Khan, A Begam, S. Khan, S. S. Ali, **N. Ahmad**, H. Fazal, M. Ali, C. Hano, N. Ahmad and B. H. Abbasi. 2020. Effect of gibberellic acid on production of biomass, polyphenolics and steviol glycosides in adventitious root cultures of *Stevia rebaudiana* (Bert.). *Plants (MDPI)*. (9); 420. doi:10.3390/plants9040420. **(Impact Factor = 4.658)**.
12. Rukh, G., N. Ahmad, A. Rab, **N. Ahmad**, H. Fazal, I. Ullah, S. Mukhtar and N. Samad. 2019. Photo-dependent somatic embryogenesis from non-embryogenic calli and its polyphenolics content in high-valued medicinal plant of *Ajuga bracteosa*. *Journal of Photochemistry and Photobiology B-Biology*. 190: 59–65. **(Impact Factor = 6.252)**.
13. Idrees, M., B. Sania, B. Hafsa, S. Kumari, H. Khan, H. Fazal, I. Ahmad, F. Akbar, **N. Ahmad**, S. Ali, N. Ahmad. 2018. Spectral lights trigger biomass accumulation and production of antioxidant secondary metabolites in adventitious root cultures of *Stevia rebaudiana* (Bert.). *CR Biologies*; 341(6):334-342. (Impact Factor = 2.357).

14. **Ahmad, N.**, A. Rab, N. Ahmad and H. Fazal. 2018. Differential pH-Induced biosynthesis of steviol glycosides and biochemical parameters in submerge root cultures of *Stevia rebaudiana* (Bert.). Sugar Tech. 20(6):734–744. <https://doi.org/10.1007/s12355-018-0589>. **(Impact Factor = 1.872)**
15. Rab, A., M. Sajid, **N. Ahmad**, K. Nawab and S.G. Ali. 2017. Foliar calcium application ameliorates salinity-induced changes of tomato crop grown in saline conditions. Sarhad J. Agri. 33(4): 540-548.
16. Rab, A., M. Sajid, S.T. Shah and **N. Ahmad**. 2017. Foliar application of salicylic acid retains quality of apricot fruit during storage and marketing. Sci. Int. (Lahore). 29(6): 1245-1251.
17. Rab, A., J. Rahman, M. Sajid, **N. Ahmad**, M. Ahmad, K. Nawab and K. Ali. 2016. Influence of harvesting dates on fruit quality and storage performance of sweet orange (blood red) fruit. J. Animal Plant Sci. 26(6): 1659-1665. **(Impact Factor = 0.570)**.
18. **Ahmad, N.**, A. Rab and N. Ahmad. 2016. Light-induced biochemical variations in secondary metabolite production and antioxidant activity in callus cultures of *Stevia rebaudiana* (Bert). J. Photochem. Photobiol. B: Biol. J. Photochem. Photobiol. B: Biol. 154: 51-56. **(Impact Factor = 6.252)**
19. Khalil, S.A., N. Kamal, M. Sajid, **N. Ahmad**, R. Zamir, N. Ahmad and S. Ali. 2016. Synergism of polyamines and plant growth regulators enhanced morphogenesis, stevioside content, and production of commercially important natural antioxidants in *Stevia rebaudiana* Bert. In Vitro Cell.Dev.Biol.-Plant: 52:174–184. DOI 10.1007/s11627-016-9749-6. **(Impact Factor = 2.347)**
20. Sajid, M., O. Ullah, M.A. Khan, A. Rab, A. Khan, F. Wahid, S. T. Shah and **N. Ahmad**. 2016. Phytohormones influence the micro propagation of *Stevia rebaudiana* Bertoni through callogenesis. Advan. Food Sci. 38(4): 139-146. **(Impact Factor = 0.36)**.
21. Jamil, E., S. Zeb, Q. S. Ali, **N. Ahmad**, M. Sajid, S. Siddique and M. S. Saleem. 2016. Effect of seed soaking on seed germination and growth of bitter gourd cultivars. Pure Appl. Biol. 5(1): 31-36.
22. Bilal, W., M. Sajid, K.U. Rehman, **N. Ahmad**, A.A. Awan, B. Hussain, Z. Bacha, F.U. Rehman, A. Naeem, Q.S. Ali and F. Bibi. 2015. Physical and chemical attributes of various cultivars of Plum fruit. Pure Appl. Biol., 4(3): 353-361.
23. Ali, Q.S., S. Zeb, E. Jamil, **N. Ahmad**, M. Sajid, S. Siddique, N. Jan and M. Shahid. 2015. Effect of various levels of nitrogen, phosphorus and potash on the yield of French Bean. Pure Appl. Biol. 4(3): 318-322.
24. Qasim, M., F. Jan, F. Nouroz, S.H. Shah, Rozina, N. Ahmad and Z. Ali. 2015. Ethno Medicinal Study of Swabi, Pakistan. Eur. Acad. Res. 3(7).
25. Jan, I., M. Sajid, A. Rab, A. Iqbal, O. Khan and Y. Jamal, **N. Ahmad**, A. Ali, M. Shakoor and S.T. Shah. 2015. Effect of various concentrations of indole butyric acid (IBA) on olive cuttings. Mitt Eilungen Klosterneuburg. 65: 49-55. **(Impact Factor = 0.571)**.
26. Azeem, K., **N. Ahmad**, S. T. Shah, F. Khan, Y. Arafat, F. Naz and I. Azeem. 2014. Physiological indices, biomass and economic yield of maize influenced by humic acid and nitrogen levels. Ame. J. Experiment. Agric. Russian Agric. Sci. 41 (2): 115–119.
27. Sajjad, A., F. Wahid, M. Sajid, I. Hussain, S. Ahmed, **N. Ahmad** and N. Ahmed. 2014. Propagation of Olive Cultivars through Air Layerage. J. Agric. Vet. Sci. 7(2): 121-125.
28. Sajid, M., A. Rab, N. Amin, A. Khan, A. Mateen, **N. Ahmad**, F. Wahid and Amanatullah. 2013. Effect of Diammonium Phosphate (DAP) on flowers and bulb production of Tulip's cultivars. Pure Appl Bio., 2 (2): 48-52.
29. Mehmood, N., G. Ayub, I. Ullah, **N. Ahmad**, M. Noor, A. M. Khan, S. Ahmad and Farzana. 2012. Response of tomato (*Lycopersicon esculentum* Mill.) cultivars to nitrogen levels. Pure Appl. Bio. 1(3): 63-67.
30. Khan. I., A. U. Jan, F. Gul. K. Ali, G. Ali, S. Ahmad and **N. Ahmad**. 2011. Weeds as a major constraint in wheat production in district Peshawar. Pak. J. Weed Sci. Res. 17(4):381-386.
31. Ali. K., F. Munsif, Z. Hussain, I. Khan, **N. Ahmad**, N. Khan and M. Shahid. 2011. Effect of different weed control methods on weeds and maize grain yield. Pak. J. Weed Sci. 17(4):313-321.



Students Supervised

- **PhD:** Currently supervising 2 Ph.D students as a major supervisor
- **M.Sc (Hons):** Supervised 15 students as a major and Co Supervisor
- **B.Sc (Hons):** Supervised more than 50 students



Workshop/Training Organized

1. Organized 2 days workshop on the “Enhancement of Tunnel Farming Technology by Using Drip Irrigation System for the Production of Off-Season Vegetables” at the University of Agriculture Peshawar Pakistan on dated 17th and 18th January, 2024.
2. Organized one day workshop on the “Influence of Climate Change on Crop Production” at the University of Agriculture Peshawar Pakistan on dated 12-12, 2023.
3. Organized a field day on “Peach Seed sowing at New Developmental Farm, Horticulture Section” at the University of Agriculture Peshawar on dated 05-12, 2023.
4. Organized two days International Conference on “Strategies for Ensuring Food Security in the Changing Climate” at the University of Agriculture Peshawar Pakistan in collaboration with FAO, Pakistan Science Foundation and Pakistan Society of Scientific Research on dated 23-24, October 2019.
5. Organized three days training on “Improved Agricultural Practices for Potato Farmers” w.e.f. 21 to 23rd March 2014 at The University of Agriculture Peshawar with collaboration of FATA Secretariat under FATA Secretariat Programme, WANA-SWA.



Training/Workshops/Seminars/Attended

1. Participated in a three days national conference on "Agricultural problems and food security in the changing climate" in the University of Agriculture Peshawar held on November 14 to November 17, 2018.
2. Participated/Speaker in One day workshop on "Introduction to plant tissue culture" October 18, 2018, in The University of Agriculture Peshawar.
3. Participated in "International Horticulture Conference, Pakistan 2018" held on April 25-27, 2018.
4. Participated in the National Workshop on "Data Presentation and Interpretation for Effective Publication" at AWKUM in 2017.
5. Participated in Training Workshop on "Hostel Management" held on 20th to 24th April 2015 Under HEC.
6. Participated in Seminar on "Scientific Writing and Publication in Journals" held on 14th May 2014. Organized by Climate Change Center, The University of Agriculture Peshawar-Pakistan.
7. Participation in One Day "Peshawar Youth Conference 2014", organized by Youth Center Peshawar, Government of Khyber Pukhtunkhwa.
8. Two weeks training programme attended/participated on “Real time Landscaping Architect Software 2013 Version” held on April 30 to May 14, 2014, at departmental studio, Department of Horticulture, The University of Agriculture Peshawar, Pakistan.
9. Participated in the training on “Data Analysis Techniques for Crop, Animal and Social Sciences” held on February 6, 2014, at The University of Agriculture Peshawar, Pakistan.
10. Participated in “Awareness Raising Session on Legal Rights and Responsibilities under Aitebar” held on January 23, 2014, with collaboration of SRSP.
11. Participation and Presentation at 3rd international weed science conference held on April 18-20, 2011, at

Department of Weed Science, The University of Agriculture Peshawar Pakistan.

12. Participated in the international symposium on “Institutional Linkages for Agriculture Development in Pakistan” December 2011.
13. Three days workshop attended on “Non-Timber Forest Products” in Directorate of Non-Timber Forest Products Khyber Pakhtunkhwa Forest Department held on July 14 to 16, 2010.
14. One week training course attended on “Medicinal Plants and Herbal Medicine” at PCSIR Peshawar held on February 08th to 12th 2010.



Other Academic Social Activities and Memberships

1. **Organization/Society** Society for Horticulture Development, Department of Horticulture, The University of Agriculture Peshawar, Pakistan
Designation/Affiliation Organizer Male and Exhibition Incharge
2. **Organization/Society** Pakistan Society for Horticultural Sciences, Department of Horticulture, Pir Mehar Ali Shah Agriculture University Rawalpindi
Designation/Affiliation Member (Lifetime)
3. **Organization/Society** Pakistan Society, Abdul Wali Khan University Mardan
Designation/Affiliation Member (Lifetime)



References

Available upon request.