

Dr. ADNAN YOUNIS

Institute of Horticultural Sciences, University of Agriculture, Faisalabad.

+92-308-7330000, e-mail: adnanyounis@uaf.edu.pk; adnanyounis1976@yahoo.com

ORCID # 0000-0002-6464-162X, Scopus Author ID: 59222988900, Researcher ID: J-6669-2013



Academic History

- Post-doctoral fellow, Kyungpook National University, Daegu, Korea. 2012-2016.
- Post-doctoral fellow, Department of Horticultural Science, University of Minnesota, St. Paul, USA. 2008-2009.
- Ph.D. (Horticulture), University of Agriculture, Faisalabad. 2002-2006.
- M.Sc. (Hons.) Horticulture, University of Agriculture, Faisalabad. 1999-2001.
- B.Sc. (Hons.) Agriculture, University of Agriculture, Faisalabad. 1995-1999.

Professional Positions

Period	Position	Institute/Department
2024-todate	Professor	Institute of Horticultural Sciences, University of Agriculture, Faisalabad
2019-2024	Associate Professor	Institute of Horticultural Sciences, University of Agriculture, Faisalabad
2016-2019	Assistant Professor	Institute of Horticultural Sciences, University of Agriculture, Faisalabad
2013-2016	Research Scientist	Department of Horticulture Sciences, Kyungpook National University, Daegu, Korea
2009-2013	Assistant Professor	Institute of Horticultural Sciences, University of Agriculture, Faisalabad
2006-2008	Assistant Professor	Institute of Horticultural Sciences, University of Agriculture, Faisalabad
2008-2009	Research Scientist	Department of Horticultural Science, University of Minnesota, St Paul, USA
2003-2006	Lecturer	Institute of Horticultural Sciences, University of Agriculture, Faisalabad
2002-2003	Lecturer (contract)	Department of Horticulture, University of Agriculture, Faisalabad
2001- 2002	Research Officer	Department of Horticulture, University of Agriculture, Faisalabad

International Experiences

- Visiting Research Professor, Kyungpook National University, Daegu, Korea, 2012-2016.
- Research Presenter, Bologna, **Italy**, 9-13 June 2009.
- Visiting Research Scientist, Department of Horticultural Sciences, University of Minnesota, **USA**, 2008-2009.
- Research Presenter, Bangkok, **Thailand**, December 3-6, 2007.
- Trainee, Yangling, Xi'an, **China**, November 20 to December 3, 2006.
- Research Presenter, Seoul, **Korea**, August 13-19, 2006.

Volunteering Experience

- Coordinated the Kitchen/Landscape Expo, showcasing innovative horticulture and landscape design practices.
- Urban Sustainability Initiatives

- Contributed to the development of Urban Green Infrastructure projects, enhancing ecological benefits in urban environments.
- Supported Urban Biodiversity conservation efforts, promoting diverse plant and animal species in urban areas.
- Participated in Urban Plantation initiatives, planting and maintaining urban forests and green spaces.
- Engaged in Climate Change mitigation and adaptation projects, addressing global warming and environmental resilience.

Professional Societies/Associations

- International Society for Horticultural Science, (ISHS).
- Association of Floriculture Professionals, (OFA) USA.
- The Korean Society for Floricultural Science
- Pakistan Botanical Society (PBS)
- Agri-Tourism Pakistan
- Korean Society for Horticultural Science
- Pakistan Society of Horticulture Science

Research

Post Doctorate

- ISSR's (Inter-simple sequence repeats) in *Lilium longiflorum* 'Nellie White', Inter Specific Hybrid Lilies and Gladiolus
- Transformation and regeneration in Gladiolus, Epilobium and Guara.
- Cytogenetic Analysis in *Lilium*

PhD

Phyto-Chemical analysis and potential for exploitation of heterosis of essential oil of *Rosa* species

M.Sc. (Hons.)

Establishment of Green Spaces: Sumundri Road Faisalabad Case Study

B.Sc. (Hons.)

Evaluation of Different Species of Marigold for Landscape

Research Project Grants

Title	Amount	Funding Agency
Spring and winter flower exhibition/demonstration for transfer of technology at UAF	0.511 million	Endowment Fund, UAF.
Towards a Market Oriented Curriculum in Floriculture	107,160€	PUM, Netherland
Technology transfer of value Addition in Floriculture to Farmers	3.195 million	Endowment Fund, UAF.
Production of Quality Ornamental Plants in Different Growing Substrates	0.5 million	Higher Education Commission
Essential oil extraction of nontraditional high value crops through supercritical fluid extraction technology	4.29 million	Higher Education Commission
Targeting Actions to Improve the Ornamental Plant Production System for Strengthening Floriculture Industry	2.754 million	Endowment Fund, UAF.

Research Publications (Recent 5 years)

1. Shehzad, M., [A. Younis](#), K. Mehmood, A. T. Alfagham, S. Alamri, A. Rais, and S. Khan. 2025. Physiological and Biochemical Responses of Plants to Rooftop and Ground-level Conditions in Urban Green

- Spaces. *HortScience*, 60(1), 93-99. Retrieved Dec 23, 2024, from <https://doi.org/10.21273/HORTSCI18234-24> **(Impact Factor: 1.874)**
2. Muhammad Ahsan, **A. Younis**, Aftab Jamal, Mohammed O. Alshaharni, Uthman Balgith Algotpishi, Abeer Al-Andal, Mateen Sajid, Muhammad Naeem, Jawad Ahmad Khan, Emanuele Radicetti, Mohammad Valipour, Gulzar Akhtar 2025. Melatonin induces drought stress tolerance by regulating the physiological mechanisms, antioxidant enzymes, and leaf structural modifications in *Rosa centifolia* L. *Heliyon*, 11(1) e41236, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2024.e41236>. **(Impact Factor: 3.4)**
 3. Ahsan, M. E. Radicetti, R. Mancinelli, H. M. Ali, **A. Younis**, M. Sajid, A. Manan, S. Ali, M. Valipour, H. Zulfiqar. 2025 Alleviation of cadmium stress and improved growth performance of periwinkle (*Catharanthus roseus* L.) by foliar application of zinc oxide nanoparticles, *South African Journal of Botany*, Volume 176, 2025, Pages 129-140, ISSN 0254-6299, <https://doi.org/10.1016/j.sajb.2024.10.057>. **(Impact Factor: 2.5)**
 4. Ahsan, M., **A. Younis**, Raheel, M. *et al.* Morpho-Physiological and Enzymatic Responses of *Zinnia (Zinnia elegans* L.) to Different Metal Hoarded Wastewaters. *J Soil Sci Plant Nutr* (2024). <https://doi.org/10.1007/s42729-024-01717-w> **(Impact Factor: 3.9)**
 5. Khan, M. M., **A. Younis**, M. T. Akram, M. M. Ijaz, and M. Al-Sadi, Abdullah. 2024. Feeding the cities: Urban agriculture for food security and sustainability of urban areas *Cabi Reviews*, 19:1, 2024.0053, <https://doi.org/10.1079/cabireviews.2024.005> ISSN: 1749-8848 **(Impact Factor: 1.23)**
 6. Nadeem, F., M.A., Hanif, N. Al Masoud, **A. Younis**. 2024. Efficient nanostructured materials to reduce nutrient leaching to overcome environmental contaminants. *Sci Rep* 14, 4772 (2024). <https://doi.org/10.1038/s41598-024-54049-1> **(Impact Factor: 3.8)**
 7. M. M. Ijaz, **A. Younis**, M. A. Hanif, and A. Akram. 2024. Nano-stimulants modulated morpho-physiological and anatomical attributes of lemongrass (*Cymbopogon citratus* (DC.) Stapf). *Soil Environ.* 43(2): DOI:10.25252/SE/2024/253408 Online ISSN: 2075-1141 Print ISSN: 2074-9546
 8. Ahsan Akram, M. N. Tahir, **A. Younis**, S. Ashraf, T. Saeed, M. H. Almas, Z. Mustafa and N. A. Khan. 2024. Impact of organic acids on floral longevity of *Gladiolus grandiflorus* cv. red fortune and white prosperity. *J Agric. Res.*, 2024, Vol. 62(2):81-87, DOI: <https://doi.org/10.58475/2024.62.2.2110>, ISSN: 2076-7897.
 9. Shehzad, M., **A. Younis**, M. Asif, M. Hameed. 2023. Prospects of green roof technology as a sustainable solution to urban pollution index. *Journal of Agriculture and Food Research*. 14,100751, ISSN 2666-1543, <https://doi.org/10.1016/j.jafr.2023.100751>. **(Impact Factor: 3.8)**
 10. Shafique, M.U., **A. Younis**, M. Asif, M. Hameed. 2023. Impact of time scale on plantation pattern: an approach to access tree diversity changes in urban parks. *Pak. J. Agri. Sci.*, Vol. 60(3), xxx-xxx; 2023 ISSN (Print) 0552-9034, ISSN (Online) 2076-0906 DOI:10.21162/PAKJAS/23.35 **(Impact Factor: 0.7)**
 11. Ahsan, M., **A. Younis**, and H. Gul (2023). Assessing synergistic effect of mulching, micronutrients and plastic tunnel on growing period and morphological characteristics of tuberose (*Polianthes tuberosa*) cv. Single. *Journal of Horticultural Science & Technology*, 6(3), 36–40. <https://doi.org/10.46653/jhst23063036>
 12. Qurat Ul Ain Rahat, M. Hameed, S. Fatima, M. S. A. Ahmad, M. Ashraf, F. Ahmad, S. Khalil, M. Munir, S. M. R. Shah, I. Ahmad & **A. Younis** (2022) Structural determinants of phytoremediation capacity in saltmarsh halophyte *Diplachne fusca* (L.) P. Beauv. ex Roem. & Schult. subsp. *fusca*, *International Journal of Phytoremediation*, DOI: [10.1080/15226514.2022.2098251](https://doi.org/10.1080/15226514.2022.2098251) (Impact Factor: **4.003**)
 13. Farooq, M. F, M. Qasim, A. Farooq, **A. Younis**, S. J. Butt. Et al. 2022. Impact of urban greenspaces on the health of people subjected to different ailments. *Pakistan Journal of Agricultural Sciences*, 2022, Vol 59, Issue 2, p213 10.21162/PAKJAS/22.914.
 14. Ahsan Akram, M. A. Asghar, **A. Younis**, A. F. Akbar, M. Talha, A. Farooq, G. Akhtar, M. Shafiqe and M. Z. Mushtaq. 2022. Foliar application of salicylic acid and its impact on pre- and post-harvest attributes of *Antirrhinum majus* L. *Journal of Pure and Applied Agriculture* 7(2): 1-11 ISSN 2617-8672, 2617-8680.
 15. Zulfiqar, F., C. Jianjun, **A. Younis**, Z. Abideen, M. Naveed, H.W. Koyro, H. M. Kadambot. 2021. Biochar, compost, and biochar–compost blend applications modulate growth, photosynthesis, osmolytes, and

- antioxidant system of medicinal plant *Alpinia zerumbet*. *Frontiers in Plant Science*. 12:1751, <https://doi.org/10.3389/fpls.2021.707061>
16. Ahsan, M., **A. Younis**, M. Nafees, A. Tufail, Q. Shakeel, M. Raheel, F. Nawaz, M. J. Jaskani, M. Amin, M. Sajid, G. Akhtar, A. Bukhsh, U. H. Siddiqua, M. A. Raza, T. Schwinghamer, H. Zulfiqar. 2021. Marginal quality water arbitrated essential oil contents in metal hoarded flower petals of scented roses. *Ecotoxicology and Environmental Safety*, 226, 112853, <https://doi.org/10.1016/j.ecoenv.2021.112853>. ISSN 0147-6513.
 17. Yasin, M., **A. Younis**, T. Javed, A. Akram, M. Ahsan, R. Shabbir, M. Ali, A. Tahir, E. M. E. B, M. S. Sheteiwy, R. H. Sammour, C. Hano, F. A. Alhumaydhi, and M. A. El-Esawi. 2021. River tea tree oil: composition, antimicrobial and antioxidant activities, and potential applications in agriculture" *Plants* 10, no. 10: 2105. <https://doi.org/10.3390/plants10102105>.
 18. Zulfiqar, F., J. Chen, P. M. Finnegan, M. Nafees, **A. Younis**, N. Shaukat, N. Latif, Z. Abideen, A. Zaid, A. Raza, Z. S. S. Siddiqui, and K. B. Hamed 2021. Foliar application of trehalose or 5-aminolevulinic acid improves photosynthesis and biomass production in drought stressed *Alpinia zerumbet*" *Agriculture*.10: 908. <https://doi.org/10.3390/agriculture11100908>
 19. Zulfiqar, F., X. Wei, N. Shaukat, J. Chen, A. Raza, **A. Younis**, M. Nafees, Z. Abideen, A. Zaid, N. Latif, M. Naveed, and K. H.M. Siddique 2021. "Effects of biochar and biochar–compost mix on growth, performance and physiological responses of potted *Alpinia zerumbet*" *Sustainability* 13:20: 11226. <https://doi.org/10.3390/su132011226>.
 20. Zulfiqar, F. J. Chen, P. M. Finnegan, **A. Younis**, M. Nafees, W. Zorrig, and K. B. Hamed. 2021. Application of trehalose and salicylic acid mitigates drought stress in sweet basil and improves plant growth. *Plants* 2021, 10, 1078. <https://doi.org/10.3390/plants10061078>
 21. Choi Y. H., F. Ramzan, Y. J. Hwang, **A. Younis**, C. K. Kim, K. B. Lim. 2021. Using cytogenetic analysis to identify the genetic diversity in *Lilium hansonii* (Liliaceae), an endemic species of Ulleung Island, Korea. *Horticulture, Environment, and Biotechnology* <https://doi.org/10.1007/s13580-021-00350-1>
 22. Ramzan, F. H. T. Kim, **A. Younis**, Y. Ramzan, and K.b. Lim. 2021. Genetic assessment of the effects of self-fertilization in a *Lilium* L. hybrid using molecular cytogenetic methods (FISH and ISSR), *Saudi Journal of Biological Sciences*, <https://doi.org/10.1016/j.sjbs.2020.12.019>
 23. Yasin, M., **A. Younis**, F. Ramzan, T. Javed, R. Shabbir, H. A. Noushahi, Mi. Skalicky, P. Ondrisik, M. Brestic, S. Hassan and A.E.L. Sabagh. 2021. Extraction of Essential Oil from River Tea Tree (*Melaleuca bracteata* F. Muell.): Antioxidant and Antimicrobial Properties. *Sustainability* 2021, 13(9), 4827; <https://doi.org/10.3390/su13094827>
 24. Shafique, M., **A. Younis**, M. Asif, A. Akram, T. Naseem, U. Tariq, M. Ahsan, N. Khan, & M. Nadeem. 2021. Post-harvest impact of packaging material and storage duration on cut *Narcissus tazetta*. *Acta Scientiarum Polonorum, Hortorum Cultus*, 20(4), 145-154. <https://doi.org/10.24326/asphc.2021.3.9>. X 1644-0692
 25. Altaf K., **Adnan Younis**, Yasir Ramzan and Fahad Ramzan. 2021. Effect of composition of agricultural wastes and biochar as a growing media on the growth of potted Stock (*Matthiola incana*) and Geranium (*Pelargonium* spp), *Journal of Plant Nutrition*, DOI: [10.1080/01904167.2020.1862205](https://doi.org/10.1080/01904167.2020.1862205)
 26. Zulfiqar, F., J. Chen, P.M. Finnegan, M. Nafees, **A. Younis**, N. Shaukat, N. Latif, Z. Abideen, A. Zaid, A. Raza, Z. S. Siddiqui, K. B. Hamed, K. 2021. Foliar application of trehalose or 5-aminolevulinic acid improves photosynthesis and biomass production in drought stressed *Alpinia zerumbet*. *Agriculture* 2021, 11, 908.