**Dr. Allah Ditta**

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**Specialization:** Soil & Environmental Microbiology

**Research interests**

Bioremediation of heavy metals contaminated soils using bacteria, Soil fertility especially phosphorus nutrition of leguminous crops through Biofertilizers, Carbon sequestration and biofuel production using Algae, Nanotechnology for better nutrition and sustainable production of crop plants, behavior of microbes to Nanoparticles

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**Research publications**

* **Total publications 170**
	+ **As first/corresponding author 96\***
	+ **Co-author 74**
* **Conference proceedings 29**
* **Total impact factor 474.628 (November 26, 2024)**

**Books Edited**

1. Ditta A, S Mehmood, M Imtiaz, MS Tu. 2024. Bio-organic Amendments for Heavy Metal Remediation: Water, Soil and Plant Approaches and Technologies (Plant Biology, sustainability and climate change) 1st Edition (ISBN 9780443216107). Elsevier Inc., with offices at 50 Hampshire St., 5th Floor, Cambridge, MA 02139, USA. <https://shop.elsevier.com/books/bio-organic-amendments-for-heavy-metal-remediation/ditta/978-0-443-21610-7>
2. Ditta A, S Mehmood, A Husen. 2024. Symbiotic Association of Microorganisms with Medicinal and Herbal Plants. 1st Edition ISBN 9781032358772 Taylor & Francis Group, Boca Raton, Florida 33487, USA <https://www.hatchards.co.uk/book/symbiotic-association-of-microorganisms-with-medicinal-and-herbal-plants/allah-ditta/9781032358772>
3. Faheem M, A Ditta, J Du. 2024. Nanomaterials in Industrial Chemistry (ISBN 9781032369525). 1st edition. CRC Press, Taylor & Francis Group, Boca Raton, Florida 33487, U.S.A. <https://www.routledge.com/Nanomaterials-in-Industrial-Chemistry/Faheem-Ditta-Du/p/book/9781032369525>

**Book chapters**

1. Muhammad, M., Begum, S., Ditta, A., Liu, YH., Li, L., Li, WJ. (2024). Metabolites Treasure from Endophytes: Advances, Applications and Technological Challenges. In: Parray, J.A. (eds) Progress in Soil Microbiome Research. Progress in Soil Science. Springer, Cham. pp. 171-206. <https://doi.org/10.1007/978-3-031-71487-0_8>
2. Poozesh V, A Ditta. 2024. Symbiotic association of microbes with medicinal and herbal plants. In: Symbiotic Association of Microorganisms with Medicinal and Herbal Plants. Ditta A, S Mehmood, A Husen (Eds). Taylor & Francis Group, Boca Raton, Florida 33487, USA. <https://doi.org/10.1201/9781032358796-1>
3. Naeem N, W Sarfraz, N Khalid, ZF Rizvi, A Nazir, U Ejaz, N Amjad, L Safdar, R Amanat, S Akhtar, A Ditta. 2024. Factors Affecting the Remediation of Wastewater Worldwide through Eco-technologies. In: Bio-organic Amendments for Heavy Metal Remediation: Water, Soil and Plant Approaches and Technologies (Plant Biology, sustainability and climate change). Ditta A, S Mehmood, M Imtiaz, MS Tu (Eds). Elsevier, USA. pp. 21-31. <https://doi.org/10.1016/B978-0-443-21610-7.00022-7>
4. Sarfraz W, M Farid, N Khalid, H Sheeren, R Zarnab, A Nazir, N Naeem, F Jabeen, A Goraya, A Naseer, A Ditta. 2024. Bioremediation of metal(loid) contaminated soils using organic amendments. In: Bio-organic Amendments for Heavy Metal Remediation: Water, Soil and Plant Approaches and Technologies (Plant Biology, sustainability and climate change). Ditta A, S Mehmood, M Imtiaz, MS Tu (Eds). Elsevier, USA. pp. 641-658. <https://doi.org/10.1016/B978-0-443-21610-7.00023-9>
5. Aslam, M Naveed, S Aslam, E Amjad, A Amjad, A Ditta. 2024. Remediation approaches for heavy metals contaminated soils. In: Bio-organic Amendments for Heavy Metal Remediation: Water, Soil and Plant Approaches and Technologies (Plant Biology, sustainability and climate change). Ditta A, S Mehmood, M Imtiaz, MS Tu (Eds). Elsevier, USA. pp. 459-477. <https://doi.org/10.1016/B978-0-443-21610-7.00029-X>
6. Sarfraz W, N Khalid, N Naeem, A Latif, ZF Rizvi, A Jahangir, A Shehbaz, M Amanat, F Shabbir, U Ejaz, A Ditta. 2024. Toxicity and bioremediation of heavy metals contaminated tannery wastewater. In: Bio-organic Amendments for Heavy Metal Remediation: Water, Soil and Plant Approaches and Technologies (Plant Biology, sustainability and climate change). Ditta A, S Mehmood, M Imtiaz, MS Tu (Eds). Elsevier, USA. pp. 257-269. <https://doi.org/10.1016/B978-0-443-21610-7.00013-6>
7. Sarfraz W, N Naeem, M Farid, N Khalid, SA Gillani, SZ Zainab, M Basharat, S Safa, U Ejaz, A Ditta. 2024. Factors affecting the remediation of soil through ecotechnologies. In: Bio-organic Amendments for Heavy Metal Remediation: Water, Soil and Plant Approaches and Technologies (Plant Biology, sustainability and climate change). Ditta A, S Mehmood, M Imtiaz, MS Tu (Eds). Elsevier, USA. pp. 629-639. <https://doi.org/10.1016/B978-0-443-21610-7.00013-6>
8. Khan MA, W Sarfraz, A Ditta\*. 2024. Applications of nano-based fertilizers, pesticides, and biosensors in sustainable agriculture and food security. In: Molecular Impacts of Nanoparticles on Plants and Algae Nanomaterial-Plant Interactions (ISBN 978-0-323-95721-2). H Tombuloglu, G Tombuloglu, E Al-Suhaimi, A Baykal, KR Hakeem. Academic Press, Elsevier. pp. 277-303. <https://doi.org/10.1016/B978-0-323-95721-2.00004-X>
9. Ali M, HMR Javeed, M Tariq, AA Khan, R Qamar, F Nawaz, N Masood, A Ditta, T Abbas, MSI Zamir, AE Sabagh, M Shahzad, R Naeem & M Mubeen. 2023. Use of Biochar for Biological Carbon Sequestration. In: Jatoi, W.N., Mubeen, M., Hashmi, M.Z., Ali, S., Fahad, S., Mahmood, K. (eds) Climate Change Impacts on Agriculture. Springer, Cham. pp. 393-411 <https://doi.org/10.1007/978-3-031-26692-8_23>
10. Sarfraz W, M Farid, N Khalid, A Ditta, U Ejaz, ZF Rizvi, N Raza, S Ali. 2023. Ecophysiological Responses of Tropical Plants to Varying Resources Availability In: S Tripathi, R Bhadouria, P Srivastava, R Singh, RS Devi (Eds). Ecophysiology of Tropical Plants: Recent Trends and Future Perspectives. Taylor & Francis Group, LLC, USA. <https://doi.org/10.1201/9781003335054-11>
11. Ditta\*, A., N. Ullah. 2023. Perspectives of using plant growth-promoting rhizobacteria under salinity stress for sustainable crop production. In: Mansour Ghorbanpour and Muhammad Adnan Shahid (Eds). Plant Stress Mitigators: Types, Techniques and Functions (ISBN 978-0-323-89871-3). Woodhead Publishing Ltd. Elsevier UK pp. 231-247. [https://doi.org/10.​1016/​B978-0-323-89871-3.​00024-0](https://doi.org/10.%E2%80%8B1016/%E2%80%8BB978-0-323-89871-3.%E2%80%8B00024-0)
12. Ditta\* A., N. Ullah. 2022. An update on nanotechnology and sustainable agriculture. In: Waqar Ahmed and Ehsan Nourafkan. Science and Applications of Nanoparticles (ISBN 978-9-814-26734-2). Jenny Stanford Publishing Pte. Ltd. Singapore pp. 159-197. <https://www.jennystanford.com/9789814267342/science-and-applications-of-nanoparticles/>
13. Ditta\* A, N Ullah, X Li, G S Soomro, M Imtiaz, S Mehmood, A U Jan, M S Rizwan, M Rizwan, I Ahmad. 2022. Heavy metal pollution and medicinal plants: damage detection, repair, acclimation, and adaptation responses. In: Azamal Husen (Ed). Environmental Pollution and Medicine Plants: Impacts and Adaptation Responses (ISBN 978-1-003-17886-6). CRC Press Boca Raton, FL. pp. 145-164. <http://dx.doi.org/10.1201/9781003178866-8>
14. Ditta\* A., N. Ullah, M. Imtiaz, X. Li, A. U. Jan, S. Mehmood, M. S. Rizwan, M. Rizwan. 2022. Zn biofortification in crops through Zn-solubilizing plant growth promoting rhizobacteria. In: Mahmood Q. (Ed.). Sustainable Plant Nutrition under Contaminated Environments (ISBN 978-3-030-91498-1). Springer Nature Switzerland AG. pp. 115-133. <https://doi.org/10.1007/978-3-030-91499-8_7>
15. Shah A. M. U. H., A. Ditta\*, A Parveen, S Thind, AG Ebadi. 2022. Transcription Factors That Scavenge Reactive Oxygen Species in Rhizobacteria. In: Mahmood Q. (Ed.). Sustainable Plant Nutrition under Contaminated Environments (ISBN 978-3-030-91498-1). Springer Nature Switzerland AG. pp. 235-256. <https://doi.org/10.1007/978-3-030-91499-8_12>.
16. Ahmad H.T., A. Hussain, A. Aimen, M. U. Jamshaid, A. Ditta\*, H. N. Asghar, Z. A. Zahir. 2022. Improving resilience against drought stress among crop plants through inoculation of plant growth-promoting rhizobacteria. *In*: Azamal Husen and Mohammad Jawaid (Eds.). Harsh Environment and Plant Resilience: Molecular and Functional Aspects (ISBN 978-3-030-65912-7). Springer Cham. pp. 387-408. <https://doi.org/10.1007/978-3-030-65912-7_16>.
17. Ditta\*, A., S. Mehmood, M. Imtiaz, M. S. Rizwan, I. Islam. 2020. Soil fertility and nutrient management with the help of nanotechnology. *In*: Azamal Husen and Mohammad Jawaid (Eds.). Nanomaterials for Agriculture and Forestry Applications (ISBN 978-0-12-817852-2), Woodhead Publishing Ltd. Elsevier UK (Invited Book Chapter). pp. 273-288. <https://doi.org/10.1016/B978-0-12-817852-2.00011-1>.
18. Ahmad I., M. Tahir, U. Daraz, A. Ditta, M.B. Hussain and Z.U.H. Khan. 2020. Responses and tolerance of cereal crops to metals and metalloids toxicity. In: Mirza Hassanuzzaman (Ed.). Agronomic Crops (ISBN 978-981-15-0025-1). Springer, Singapore. pp. 235-264. <https://doi.org/10.1007/978-981-15-0025-1_14>
19. Ditta\*, A. 2019. Role of Nanoclay Polymers in Agriculture: Applications and perspectives. *In*: Surender K. Sharma (Ed.). Nanohybrids in environmental and biomedical applications (ISBN 978-1-351-25684-1), Taylor and Francis (CRC Press), USA. pp. 323-334. <https://www.taylorfrancis.com/books/9781351256841/chapters/10.1201/9781351256841-14>
20. Ditta\*, A. 2018. Physiological and phenological responses of crop plants under heat stress. *In*: Akula Ramakrishna, Sarvajeet Singh Gill (Eds.). Metabolic adaptations in plants during abiotic stress (ISBN 978-1-138-05638-1), Taylor and Francis, Boca Raton: CRC Press USA. pp. 55-63. [https://www.taylorfrancis.com/books/e/9781351676830/chapters/10.1201%2Fb22206-5](https://www.taylorfrancis.com/books/e/9781351676830/chapters/10.1201/b22206-5)
21. Ditta\*, A., A. Khalid. 2016. Bio-organo-phos: A sustainable approach for managing phosphorus deficiency in agricultural soils. *In*: M. Larramendy, and S. Soloneski (Eds.). Organic Fertilizers - From Basic Concepts to Applied Outcomes (ISBN 978-953-51-4701-5). InTech, Croatia. pp. 109-136. <http://dx.doi.org/10.5772/62473>. (Invited Book Chapter).
22. Ditta\*, A., M. Arshad and M. Ibrahim. 2015. Nanoparticles in Sustainable Agricultural Crop Production: Applications and Perspectives. *In*: M.H. Siddiqui, M.H. Al-Whaibi, F. Mohammad (Eds.), Nanotechnology and Plant Sciences - Nanoparticles and Their Impact on Plants (ISBN 978-3-319-14502-0). Springer, Switzerland. pp. 55-75. <https://dx.doi.org/10.1007/978-3-319-14502-0_4>. (Invited Book Chapter).
23. Ditta\*, A. 2013. Salt Tolerance in Cereals: Molecular Mechanisms and Applications. *In*: G.R. Rout and A.B. Das (eds.), Molecular Stress Physiology of Plants (ISBN 978-81-322-0807-5). Springer, India. pp. 133-154. <https://dx.doi.org/10.1007/978-81-322-0807-5_5>. (Invited Book Chapter)

**Review articles**

1. Murtaza G, Z Ahmed, M Usman, R Iqbal, F Zulfiqar, A Tariq, A Ditta\*. 2024. Physicochemical properties and performance of non-woody derived biochars for the sustainable removal of aquatic pollutants: A systematic review. Chemosphere 359, 142368. <https://doi.org/10.1016/j.chemosphere.2024.142368> (Impact Factor = 8.1)
2. Khan M.N., Ditta A.\*, Sharif A., Farooqi Z.H., Rehman N., Ahmed E., Din M.I., Tariq M., Iqbal R., Basuliman O.A., Ali I., Bawazeer S. 2024. Production of nanocellulose from lignocellulosic biomass and its potential applications: A review. Global NEST Journal 26(4), 05604. <https://doi.org/10.30955/gnj.005604> (Impact Factor = 1.0)
3. Murtaza G, Z Ahmed, M Valipour, I Ali, M Usman, R Iqbal, U Zulfiqar, M Rizwan, S Mahmood, A Ullah, M Arslan, MHU Rehman, A Ditta\*, A Tariq. 2024. Recent trends and economic significance of modified/functionalized biochars for remediation of environmental pollutants. Scientific Reports 14, 217. <https://doi.org/10.1038/s41598-023-50623-1> (Impact factor = 3.8)
4. Gul M, RS Khan, ZU Islam, S Khan, A Shumaila, S Umar, S Khan, Brekhna, M Zahoor, A Ditta. 2024. Nanoparticles in plant resistance against bacterial pathogens: current status and future prospects. Molecular Biology Reports 51, 92. <https://doi.org/10.1007/s11033-023-08914-3> (Impact Factor = 2.6)
5. Ullah S, Q Liu, S Wang, AU Jan, HMA Sharif, A Ditta, G Wang, H Cheng. 2023. Sources, impacts, factors affecting Cr uptake in plants, and mechanisms behind phytoremediation of Cr-contaminated soils. Science of the Total Environment 899, 165726. <https://doi.org/10.1016/j.scitotenv.2023.165726> (Impact Factor = 8.2)
6. Mehmood S, W Ahmed, JM Alatalo, M Mahmood, RMA Asghar, M Imtiaz, N Ullah, W-D Li, A Ditta\*. 2023. A systematic review on the bioremediation of metal contaminated soils using biochar and slag: Current status and future outlook. Environmental Monitoring & Assessment 195:961 <https://doi.org/10.1007/s10661-023-11561-7> (Impact Factor = 2.9).
7. Daraz U, Y Li, I Ahmad, R Iqbal, A Ditta\*. 2023. Remediation technologies for acid mine drainage: Recent trends and future perspectives. Chemosphere 311, 137089. <https://doi.org/10.1016/j.chemosphere.2022.137089> (Impact Factor = 8.1)
8. Farooqi ZUR, I Ahmad, A Ditta\*, P Ilic, M Amin, AB Naveed, A Gulzar. 2022. Types, sources, socioeconomic impacts, and control strategies of environmental noise: A Review. Environmental Science and Pollution Research 29, 81087–81111 <https://dx.doi.org/10.1007/s11356-022-23328-7>. (ESCI)
9. Usman, M., Khan, W.R., Yousaf, N., Akram, S., Murtaza, G., Ditta\*, A., Rosli, Z., Nawaz, M.R., Nazre, M. 2022. Exploring the Phytochemicals and Anti-Cancer Potential of the Members of Fabaceae Family: A Comprehensive Review. Molecules 27(12), 3863; <https://doi.org/10.3390/molecules27123863> (Impact Factor = 4.2)
10. Usman M, G. Murtaza, A. Ditta\*. 2021. Nutritional, medicinal, and cosmetic value of bioactive compounds in button mushroom (*Agaricus bisporus*): A review. Applied Sciences. 11(13): 5943. <https://doi.org/10.3390/app11135943> (Impact Factor = 2.5)
11. Murtaza G, A Ditta\*, N Ullah, M Usman, Z Ahmed. 2021. Biochar for the management of nutrient impoverished and metal contaminated soils: Preparation, applications, and prospects. Journal of Soil Science and Plant Nutrition 21:2191–2213. <https://doi.org/10.1007/s42729-021-00514-z> (Impact Factor = 3.4)
12. Mehmood S., X. Wang, W. Ahmed, M. Imtiaz, A. Ditta, M. Rizwan, S. Irshad, S. Bashir, Q. Saeed, A. Mustafa, W. Li. 2021. Removal mechanisms of slag against potentially toxic elements in soil and plants for sustainable agriculture development: A critical review. Sustainability 13(9): 5255. <https://doi.org/10.3390/su13095255> (Impact Factor = 3.3)
13. Ullah N, A Ditta\*, M Imtiaz, X Li, AU Jan, S Mehmood, MS Rizwan, M Rizwan. 2021. Appraisal for organic amendments and plant growth-promoting rhizobacteria to enhance crop productivity under drought stress: A review. Journal of Agronomy and Crop Science 207(5): 783-802. <https://doi.org/10.1111/jac.12502> (Impact Factor = 3.7)
14. Irshad S., Z. Xie, S. Mehmood, A. Nawaz, A. Ditta\*, Q. Mahmood. 2021. Insights into conventional and recent technologies for arsenic bioremediation: A systematic review. Environmental Science and Pollution Research 28(15): 18870–18892. <https://doi.org/10.1007/s11356-021-12487-8>. (ESCI)
15. Murtaza G., Z. Ahmed, M. Usman, W. Tariq, Z. Ullah, M. Shareef, H. Iqbal, M. Waqas, A. Tariq, Y. Wu, Z. Zhang, A. Ditta. 2021. Biochar induced modifications in soil properties and its impacts on crop growth and production. Journal of Plant Nutrition 44(11): 1677-1691 <https://doi.org/10.1080/01904167.2021.1871746> (Impact Factor = 1.6)
16. Muhammad J., S. Khan, J.Q. Su, A.E. Hesham, A. Ditta, J. Nawab. 2020. Antibiotics in poultry manure and their health issues: A systematic review. Journal of Soils and Sediments. 20: 486–497. <https://doi.org/10.1007/s11368-019-02360-0> (Impact Factor = 2.8)
17. Murtaza G., Z. Ahmed, M. Usman, A. Areeb, A. Ditta, Z. Ullah, F. Mahmood. 2020. Impacts on biochar aging mechanism by eco-environmental factors. Proceedings of the International Academy of Ecology and Environmental Sciences, 10(3): 97-104.
18. Sarfraz R., A. Hussain, A. Sabir, I.B. Fekih, A. Ditta, S. Xing. 2019. Role of Biochar and plant growth-promoting rhizobacteria to enhance soil carbon sequestration– a review. Environmental Monitoring and Assessment. 191: 251 <https://doi.org/10.1007/s10661-019-7400-9> (Impact Factor = 2.9).
19. Ali A., Bilal, K. Ahmad, A. Ditta\*. 2018. How to Sustain Agricultural Land for Safe Food Production? Acta Scientific Agriculture2(10): 131-133
20. Bibi R., Z. Ahmad, M. Imran, S. Hussain, A. Ditta, S. Mahmood, A. Khalid. 2017. Algal Bioethanol Production Technology: A Trend towards Sustainable Development. Renewable and Sustainable Energy Reviews. 71: 976-985. <http://dx.doi.org/10.1016/j.rser.2016.12.126> (Impact Factor = 16.3)
21. Ditta\*, A., M. Arshad. 2016. Applications and perspectives of using nanomaterials for sustainable plant nutrition. Nanotechnology Reviews. 2(5): 209-229. <https://doi.org/10.1515/ntrev-2015-0060> (Impact Factor = 6.1).
22. Ditta\*, A. 2012. How helpful is nanotechnology in agriculture? Advances in Natural Science: Nano science and Nanotechnology. 3, 033002. <http://dx.doi.org/10.1088/2043-6262/3/3/033002> (Impact Factor = 1.7)

**Research articles Published/Accepted**

1. Nasir G, F Batool, S Iqbal, J Akbar, S Noreen, KS Munawar, T Iqbal, A Ditta\*. 2024. Biosynthesis of lead oxide nanoparticles using mulberry leaf extract for adsorptive removal of diazine black dye. Biomass Conversion and Biorefinery <https://doi.org/10.1007/s13399-024-06208-7> (Impact Factor = 3.5).
2. Solangi F, UA Solangi, NA Buledi, GM Laghari, A Bukero, N Rais, R Iqbal, A Ditta\*, J Alkahtani, MK Okla. 2025. Exploring the influence of different water-treatment durations on the initial growth stage of different maize varieties. Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/193381> (Impact Factor = 1.4)
3. Ahmed R, M Raheel, L Ali, W Ashraf, MN Aslam, M Faisal, M Anwer, MT Ikram, T Afzal, R Iqbal, A Ditta\*, Atta-Ur-Rehman, H Rizwana, I Abid. 2025. First report of leaf spot of Conocarpus lancifolius caused by *Alternaria burnsii*. Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/192105> (Impact Factor = 1.4)
4. Murtaza G, M Valipour, M Usman, A Ditta\*, M Rizwan, AMS Elshamly, R Iqbal, A Iftikhar, I Ahmed, MI Akram, AA Al-Ghamdi, MS Elshikh, W Tariq, A Munir. 2025. Ecological and health risk assessment of cadmium contamination in groundwater samples collected from the arid climatic region. Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/188185> (Impact Factor = 1.4)
5. Naz T, NU Ain, MM Iqbal, MA Mubeen, A Ditta\*, R Iqbal, MS Alwahibi, MS Elshikh. 2025. Exploring the potential of silicon and salicylic acid in the alleviation of water deficit stress in quinoa (*Chenopodium quinoa*). Polish Journal of Environmental Studies 34, 1-13. <https://doi.org/10.15244/pjoes/188184> (Impact Factor = 1.4)
6. Hasnain M, Q Nazir, A Dar, A Hussain, S Mahmood, I Saleem, HT Ahmad, SSH Shah, MA Ali, M Naveed, R Iqbal, AE-ZMA Mustafa, MS Elshikh, A Ditta\*. 2025. Improving maize physiological attributes by regulating urease activity and zinc availability in rhizosphere through bioactivated zinc-coated urea (Engro Zabardast Urea). Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/188186> (Impact Factor = 1.4)
7. Akram MI, W Akram, AA Rana, R Iqbal, A Ditta\*, ZM Sarwar, R Ayub, MA Farah. 2025. Comparative efficacy of temephos and pyriproxyfen on *Aedes aegypti*, *Aedes albopictus*, and *Culex quinquefasciatus* collected from different ecological zones of Punjab, Pakistan. Polish Journal of Environmental Studies 34(), x-x, <https://doi.org/10.15244/pjoes/190583> (Impact Factor = 1.4)
8. Saleem A, MAS Raza, IH Khan, MA Tahir, R Iqbal, MU Aslam, W Harsonowati, TM Dawoud, KM Alarjani, A Ditta\*. 2025. Enhancing wheat growth: Impact of PGPR co-inoculation with Azospirillum lipoferum and Agrobacterium fabrum. Polish Journal of Environmental Studies 34(), x-x, <https://doi.org/10.15244/pjoes/190584> (Impact Factor = 1.4)
9. Saeed HS, M Munir, S Samra, A Farooq, H Mahmood, I Ahmad, MI Akram, R Iqbal, MF Elsadek, SM Almutairi, A Ditta\*, U Daraz. 2025. Screening of biosurfactants producing fungi from infected Citrus sinensis (L.). Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/190588> (Impact Factor = 1.4)
10. Ahmad M, M Munir, S Samra, Z Ali, S Safdar, R Iqbal, H Mahmood, I Ahmad, MI Akram, A Ditta\*, MA Ali, MF Elsadek, U Daraz. 2025. Role of native trees in mitigation of fine particulate matter (PM2.5) to improve air quality. Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/190586> (Impact Factor = 1.4)
11. Kumbhar AN, M Qasim, M Rizwan, AR Rajper, SA Channa, W Changhai, I Ahmed, I Ali, SM Eldin, R Iqbal, MS Elshikh, H Rizwana, A Ditta\*. 2025. Supplementation of kelp waste extract with different nitrogen sources as a promising technique to enhance growth and lipid accumulation in Chlorella sorokiniana. Polish Journal of Environmental Studies <https://doi.org/10.15244/pjoes/190596> (Impact Factor = 1.4)
12. Akhtar MS, S Fiaz, S Aslam, S Chung, A Ditta\*, MA Irshad, AM Al-Mohaimeed, R Iqbal, WA Al-onazi, M Rizwan, Y Nakashima. 2024. Green synthesis of magnetite iron oxide nanoparticles using *Azadirachta indica* leaf extract loaded on reduced graphene oxide and degradation of methylene blue. Scientific Reports 14, 18172. <https://doi.org/10.1038/s41598-024-69184-y> (Accepted Impact factor = 3.8)
13. Zulfiqar S, MM Aslam, A Ditta, AE-ZMA Mustafa, MS Elshikh, M Uzair, S Aghayeva, P Zhao, R Iqbal. 2024. Evaluation of genetic diversity and population structure of the Chinese chestnut (Castanea mollissima) by using NR-SSR markers. Genetic Resources and Crop Evolution (Accepted Impact Factor 1.6)
14. Saleem A., Raza M.A.S., Khan I.H., Tahir M.A., Iqbal R., Aslam M.U., Ejaz Z., Ditta A.\*, AlMunqedhi B.M., Al Farraj D.A. 2024. Amelioration of drought stress in wheat by using plant growth-promoting rhizobacteria and biogas slurry. Global NEST Journal <https://doi.org/10.55555/gnj.05890> (Impact Factor = 1.0)
15. Dirbas J, R Ijaz, MA Iqbal, MS Islam, I Al-Ashkar, A Ditta, NMK Melad, AE Sabagh. 2024. Exploitation of heterotic effects in F1 hybrids for promoting earliness, yield components, and fiber quality of upland cotton (Gossypium hirsutum L.) genotypes. Pakistan Journal of Botany, 56(6): [http://dx.doi.org/10.30848/PJB2024-6(18)](http://dx.doi.org/10.30848/PJB2024-6%2818%29) (Impact Factor = 0.9)
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