






AMANY ABEED

Professor, Botany and Microbiology department, Faculty of Science, Assiut University






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Researcher Links

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| ORCID ID |  | HTTPS://orcid.org/0000-0002-3030-4342 |
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| WOS ID |  | HTTPS://www.webofscience.com/wos/author/record/AAH-2221-2020 |
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| Total Publications | International Publications | Scopus | | Web of Science | |
|--------------------|----------------------------|---------|--------------------|----------------|--------------------|
| | | H index | Total Publications | H index | Total Publications |
| 80 | 65 | 25 | 66 | 24 | 70 |

Education

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|--------|---|--|
| Ph. D. |  | MAY 2014 Ph. D. (Plant Ecology), Faculty of Science, Assiut University |
| M. Sc. |  | MAY 2010 M. Sc. (Plant Physiology), Faculty of Science, Assiut University |
| B. Sc. |  | JUNE 2004 B. Sc. (Botany), Faculty of Science, Assiut University |

Positions

| | | | |
|---------------------|---|---------------|---------------------------------------|
| Professor | ○ | APRIL 2026 | Faculty of Science, Assiut University |
| Associate Professor | ○ | APRIL 2021 | Faculty of Science, Assiut University |
| Lecturer | ○ | JUNE 2014 | Faculty of Science, Assiut University |
| Lecturer Assistant | ○ | JUNE 2010 | Faculty of Science, Assiut University |
| Instructor | ○ | NOVEMBER 2004 | Faculty of Science, Assiut University |

Memberships

- Egyptian Botanical Society

Projects & Research Grants

- A member of the research team of “Biological production of hydrogen fuel and environment” Project No. 972 from STDF in Assiut University, Egypt. 2008 -2010

Training

- 1- Research and Work Ethics in Assiut University, Faculty and Leadership Development Center (FLDC)
- 2- Publishing of Research in International Journals in Assiut University, Faculty and Leadership Development Center (FLDC)
- 3- Management of Time and Work Stresses Designing of Electronic Courses in Assiut University, Faculty and Leadership Development Center (FLDC)
- 4- Preparation and Publication of Scientific Research in Assiut University, Faculty and Leadership Development Center (FLDC)
- 5- Communication Skills in Assiut University, Faculty and Leadership Development Center (FLDC)
- 6- Workshop entitled “Gene cloning (Recombinant DNA technology)” The molecular biology research unit, Assiut University, Assiut. 19-21/4/2016
- 7- Workshop entitled “Recent advanced techniques for general analysis and green technology, Drug research center.16/10/2019
- 8- Workshop entitled “Biodiversity of aquatic fungi” Assiut university Mycological center (AUMC). 12-16/11/2017
- 9- An introductory in “International plant genetics and genomics symposium IPGG”. Faculty of Agriculture, Assiut University.14-15/10/2019.
- 10-11th International Conference for Development and Environment in the Arab World “Sustainable Development and Confronting Environmental & Climate Changes..... Challenges and Solutions“ 20-22 February 2022 - Assiut University, Assiut

- 11-Trainig course entitled "PlantTissue Culture:Theoritical Basis and Practical Applications". Central Lab., Faculty of Agriculture, Assiut University. 26-27 March 2022.
- 12-CABI Online-platformwebinar "How to write professional review reports". Organized in collebration with the Egyptian knowledge bank. Wednesday, December 14, 2022
- 13-CABI Online-platformwebinar "How to write professional response to reviewers". Organized in collebration with the Egyptian knowledge bank. Wednesday, December 21, 2022
- 14-Workshop entitled "Grants and Research Projects Workshop". Technology Innovation Commercialization Office (TICO - Assiut University). Academy of Scientific Research and Technology (ASRT). Ministry of High Education. 5th October 2022.
- 15-Scientific webinar entitled:Building personality psychologically, culturally and socially" IFAD - Scholars and Academics Platform licensed with (200186783) certify. 13 May,
- 16-Scientific webinar entitled "Methods of publishing in indexed journals: Scopus database". IFAD - Scholars and Academics Platform licensed with (200186783) certify. 16 May, 2023
- 17-Scientific webinar entitled:Towards effective educational leadership. IFAD - Scholars and Academics Platform licensed with (200186783) certify. 25 May, 2023
- 18-Scientific webinar entitled:Conflict Management in Workplace. IFAD - Scholars and Academics Platform licensed with (200186783) certify. 27 May, 2023
- 19-Scientific webinar entitled "Milestones in the path of scientific research". IFAD - Scholars and Academics Platform licensed with (200186783) certify. 28 May, 2023
- 20-workshop entitled "Research Books Classifications and Methods". IFAD - Scholars and Academics Platform licensed with (200186783) certify. 31 May, 2023
- 21-Scientific webinar entitled: The role of educational institutions in the education of the individual and society" IFAD - Scholars and Academics Platform licensed with (200186783) certify. 2 June, 2023
- 22-Scientific webinar entitled "Writing research and documenting references according to the method and standards of APA Seventh Edition - Practical workshop". IFAD - Scholars and Academics Platform licensed with (200186783) certify. 16 July, 2023
- 23-Scientific dialogue entitled:"Artificial intelligence: How will the future of scientific research be"? IFAD - Scholars and Academics Platform licensed with (200186783) certify. 23 July, 2023.
- 24-1st International Forum and Exhibition for Sustainable Agriculture (IFESA). 22 November 2023 , Riyadh" The effect of gibberellic acid on wheat growth and nutrient uptake under combined stress of cerium, zinc and titanium dioxide nanoparticles"
- 25-10th International Conference of Plant science and Microbiology (10th ICBM). Sunday, 26 November 2023. Sohag New University, Sohag, Egypt
- 26- The Eighth International Conference of Egyptian Society for Environmental Science (ESES); Scientific Research Sustainable Development Conference, 24th-25th 2024. Suez Canal University, Ismailia, Egypt.
- 27-Training course entitled "Introduction to R For statistical computing", Computer Unit, Fucalty of Agriculture. 31st Jan-6th Feb 2024.
- 28-12th International Conference for Development and Environment in the Arab World "Sustainable Development and Confronting Environmental & Climate Changes..... Challenges and Solutions" 25-27 February 2024 - Assiut University, Assiut
- 29-Scientific webinar entitled "An invitation to explore the flora of Yemen". The Scientific Forum on Taxonomy and Genetics on 06/11/2023.

- 30-Scientific webinar entitled “Connecting people and planet: Exploring Digital Innovation in wildlife Conversation for World Wildlife Day 2024”. The Second Virtual International Environmental Symposium for Community Awareness on World Wildlife Day 2024. Princess Nourah bint Abdulrahman University, Saudi Arabia on 3rd March 2024.
- 31-The 8th conference for young scientists in basic and applied sciences. 27-28 October 2024. Faculty of science - Assiut University
- 32-The 19th International Environmental Sciences Conference at Faculty of Science, Zagazig University On Basic Sciences and their Application for Environmental Protection and Sustainable Development. 18 th December 2024. Faculty of science - Zagazig University
- 33-the 2nd International Conference of Biological Sciences, “Innovative Solutions in Biology for a Sustainable Future” on 17 - 18th February 2025. Faculty of science - Assiut University
- 34-**Administrative Training Certificate - Preparation of Female Leadership Cadres Arab Group for Studies**, in cooperation with the *National Council for Training and Education* and the *Information and Decision Support Center (IDSC), Cabinet of Ministers - Egypt*
Duration: 20 training hours
Date: January 3-5, 2025
- 35-Fundamentals of IT, Assiut University, Faculty and Leadership Development Center (FLDC)
- 36-Mobile Applications, Assiut University, Faculty and Leadership Development Center (FLDC)
- 37-Microsoft Word, Assiut University, Faculty and Leadership Development Center (FLDC)
- 38-Quality of Scientific Research, Assiut University, Faculty and Leadership Development Center (FLDC)
- 39- Preparing a Research Proposal for a Competitive Project, Assiut University, Faculty and Leadership Development Center (FLDC)
- 40-Statistical Analysis in Scientific Research, Assiut University, Faculty and Leadership Development Center (FLDC)
- 41- Developing Faculty Members’ Skills Center, Assiut University, Faculty and Leadership Development Center (FLDC)
- 42-Passing Training Programs (Capacity Building), Assiut University, Faculty and Leadership Development Center (FLDC)
- 43- Quality Culture in Institutions, Assiut University, Faculty and Leadership Development Center (FLDC)
- 44- How to Activate E-Learning Courses, Assiut University, Faculty and Leadership Development Center (FLDC)
- 45-Web, Assiut University, Faculty and Leadership Development Center (FLDC)

Honors and Awards:

- Recognized among the world's top 2% most-cited scientists, Stanford University global ranking (2025), doi: 10.17632/btchxktzyw.8
- Selected as a grantee within the framework of Erasmus+ KA171 Staff teaching Mobility (Kastamonu University, Turkey 2025)

Research Articles Published from M. Sc. Thesis

1- Morsy, F. M., Hamid, A., & Abdel-Basset, R. (2010). ENRICHMENT OF HETEROCYST FREQUENCY IN A NEW ISOLATE OF NOSTOC SP SAG 2306 BY 2, 4 DICHLOROPHENOXYACETIC ACID AND ITS SUBSEQUENT IMPACT ON MODULATING PHOTOSYNTHESIS/RESPIRATION RATIO AND HYDROGENASES ACTIVITIES. Egyptian Journal of Phycology, 11(Second International Conference on Phycology, Limnology and Aquatic Sciences (February 14-15, 2010)), 27-48. <https://doi.org/10.21608/egyjs.2010.114884>

Research Articles Published from Ph. D. Thesis

- 1- El-Sharkawi, H.M.; Abdel-Hameed, A.H. and Gameh, M. (2013): Adjustment of internal water balance in two soybean cultivars to reduced soil water potential. Ass. Univ. Bull. Environ. Res. 16:71-91.
- 2- El-Sharkawi, H.M.; Abdel-Hameed, A.H. and Gameh, M. (2013): The role of some metabolites in osmotic adjustment to reduced matric and osmotic water potential in two soybean cultivars. Ass. Univ. Bull. Environ. Res. 16:93-111.

Research Articles Published After Ph. D. Thesis

- 1- Abeed, Amany HA, Mamdouh Alsayed Eissa, and Dalia A. Abdel-Wahab. "Effect of Exogenously Applied Jasmonic Acid and Kinetin on Drought Tolerance of Wheat Cultivars Based on Morpho-Physiological Evaluation." *Journal of Soil Science and Plant Nutrition* (2020): 1-14. <https://doi.org/10.1007/s42729-020-00348-1>
- 2- Abeed, A. H., and M. F. Dawood. "Comparative impact of different iso-osmotic solutions on osmotic adjustment in *Gossypium barbadense*." *Global Nest J* 22, no. 1 (2020): 75-84. <https://doi.org/10.30955/gnj.003106>
- 3- Abeed, A. H., Mahdy, R. E., Alshehri, D., Hammami, I., Eissa, M. A., Abdel Latef, A. A., & Mahmoud, G. A. (2022). Induction of resilience strategies against biochemical deteriorations prompted by severe cadmium stress in sunflower plant when *Trichoderma* and bacterial inoculation were used as biofertilizers. *Frontiers in Plant Science*. <https://doi.org/10.3389/fpls.2022.1004173>
- 4- Abeed, A.H.A., Salama, F.M. (2022). Attenuating Effect of an Extract of Cd-Hyperaccumulator *Solanum nigrum* on the Growth and Physio-chemical Changes of *Datura innoxia* Under Cd Stress. *J Soil Sci Plant Nutr.* (22). <https://doi.org/10.1007/s42729-022-00966-x>
- 5- Abeed, A.H.A., Ali, M., Eissa, M.A. et al. Impact of sewage water irrigation on *Datura innoxia* grown in sandy loam soil. *BMC Plant Biol* 22, 559 (2022). <https://doi.org/10.1186/s12870-022-03935-9>
- 6- Abeed, A.H.A., Tammam, S.A. & El-Mahdy, M.T. Hydrogen peroxide pretreatment assisted phytoremediation of sodium dodecyl sulfate by *Juncus acutus* L. *BMC Plant Biol* 22, 591 (2022). <https://doi.org/10.1186/s12870-022-03984-0>
- 7- Abeed AHA, Ali M, Ali EF, Majrashi A, Eissa MA. Induction of *Catharanthus roseus* Secondary Metabolites When *Calotropis procera* Was Used as Bio-Stimulant. *Plants*. 2021; 10(8):1623. <https://doi.org/10.3390/plants10081623>
- 8- Abeed, A. H., Saleem, M. H., Asghar, M. A., Mumtaz, S., Ameer, A., Ali, B., ... & Soudy, F. A. (2023). Ameliorative Effects of Exogenous Potassium Nitrate on Antioxidant Defense System and Mineral Nutrient Uptake in Radish (*Raphanus sativus* L.) under Salinity Stress. *ACS Omega*. <https://doi.org/10.1021/acsomega.3c01039>
- 9- Abeed, A. H., AL-Huqail, A. A., Albalawi, S., Alghamdi, S. A., Ali, B., Alghanem, S. M., ... & El-Mahdy, M. T. (2023). Calcium nanoparticles mitigate severe salt stress in *Solanum lycopersicon* by instigating the antioxidant defense system and renovating the protein profile. *South African Journal of Botany*, 161, 36-52. <https://doi.org/10.1016/j.sajb.2023.08.005>
- 10- Abeed, A. H. A., El-Mahdy, M. T., Abdel Hameed, F. A. Z. H., Abdel-Fatah, B. E., & Mahmoud, G. A.-E. (2025). Biological gibberellin instigated phytoremediation of diclofenac by *Atriplex lentiformis*. *Plant physiology and biochemistry*.

- 11- A beed, A. H. A., Alghanem, S. M. S., Al-Robai, S. A., Massoud, O. N., Amro, A. M., Mahmoud, A. M., Elkelish, A., Alotaibi, M. O., & Hassan, M. O. (2025). Amending soil with *Sonchus oleraceus* residue enhances soil microbial function and nutritive composition of cowpea (*Vigna unguiculata*) seeds. *Land Degradation & Development*. 1-19. <https://doi.org/10.1002/ldr.70349>.
- 12- A beed, A. H. A., Alshehri, D., Melebari, D. M., Quronfulah, A. S., Abdelaal, M., Alghamdi, A. I., Al Hawas, G. H., Alshuyeh, H. A., Peijnenburg, W., & Osman, H. E. S. (2026). Role of silver nanoparticles and *Bacillus cereus* in modulating growth, photosynthetic activity, and antioxidant responses in sorghum under cobalt stress. *Ecotoxicology and Environmental Safety*. Accepted
- 13- Eissa, Mamdouh A., and Amany HA Abeed. "Growth and biochemical changes in quail bush (*Atriplex lentiformis* (Torr.) S. Wats) under Cd stress." *Environmental Science and Pollution Research* 26.1 (2019): 628-635.
- 14- Dawood, Mona FA, and Amany HA Abeed. "Spermine-priming restrained water relations and biochemical deteriorations prompted by water deficit on two soybean cultivars." *Heliyon* 6.5 (2020): e04038.
- 15- Yousef, Naiema, Asmaa Mawad, and Amany Abeed. "Enhancement the cellulase activity induced by endophytic bacteria using calcium nanoparticles." *Current microbiology* 76.3 (2019): 346-354.
- 16- Dawood, M. F., Abeed, A. H., & Aldaby, E. E. (2019). Titanium dioxide nanoparticles model growth kinetic traits of some wheat cultivars under different water regimes. *Plant Physiology Reports*, 24(1), 129-140.
- 17- El-Mahdy, M. T., Ali, M., Pisam, W. M., & Abeed, A. H. (2024). Physiological and Molecular Analysis of Pitaya (*Hylocereus polyrhizus*) Reveal Up-regulation of Secondary Metabolites, Nitric oxide, Antioxidant Defense System, and Expression of Responsive Genes under Low-temperature Stress by the pre-treatment of Hydrogen Peroxide. *Plant Physiology and Biochemistry*, 108840. <https://doi.org/10.1016/j.plaphy.2024.108840>
- 18- Eissa, M. A., Rekaby, S. A., Dawood, M. F., & Abeed, A. H. (2025). Antioxidants acceleration for crop plant leaf physiological features for stress mitigation. In *Role of Antioxidants in Mitigating Plant Stress* (pp. 167-193). Academic Press. <https://doi.org/10.1016/B978-0-443-26799-4.00004-9>
- 19- Hamed, H.A., El-Mahdy, M.T. & Abeed, A.H.A. Melatonin upregulates photosynthesis, carbohydrate and nitrogen metabolism, and antioxidant system under aluminum stress: a sustainable path to higher strawberry yield and quality. *Physiol Mol Biol Plants* (2025). <https://doi.org/10.1007/s12298-025-01655-6>

- 20- Hamed, H. A., Abeed, A. H., Geioushy, R. A., Fouad, O. A., & El-Mahdy, M. T. (2024). Innovative Auxin-Micronutrient Based Nanocomposites (IAA-Fe₂O₃NPs and IAA-Mn₂O₃NPs) Shield Strawberry Plants from Lead Toxicity. *Plant Physiology and Biochemistry*, 109429. <http://dx.doi.org/10.1016/j.plaphy.2024.109429>
- 21- Hamed, H. A., Mahmoud, G. A., Abeed, A. H. (2024). Unraveling Growth and Metabolic Dynamics in Drought-Stressed Spinach Plants: Exploring the Contribution of Biological Gibberellin. *Scientia Horticulturae*. 340, 113924. <https://doi.org/10.1016/j.scienta.2024.113924>
- 22- Ding, Z., Ali, E.F., Almaroai, Y.A. et al. Effect of Potassium Solubilizing Bacteria and Humic Acid on Faba Bean (*Vicia faba* L.) Plants Grown on Sandy Loam Soils. *J Soil Sci Plant Nutr* 21, 791-800 (2021). <https://doi.org/10.1007/s42729-020-00401-z>
- 23- Salama FM, AL-Huqail AA, Ali M, Abeed AHA. Cd Phytoextraction Potential in Halophyte *Salicornia fruticosa*: Salinity Impact. *Plants*. 2022; 11(19):2556. <https://doi.org/10.3390/plants11192556>
- 24- Mahdy RE, Althagafi ZMA, Al-Zahrani RM, Aloufi HHK, Alsalmi RA, Abeed AHA, Mahdy EE, Tammam SA. Comparison of Desired-Genetic-Gain Selection Indices in Late Generations as an Insight on Superior-Family Formation in Bread Wheat (*Triticum aestivum* L.). *Agronomy*. 2022; 12(8):1738. <https://doi.org/10.3390/agronomy12081738>
- 25- Fawzy Mahmoud Salama, Monier Mohamed Abd El-Ghani, Suzan Abd El-Monem, Sayed, Amany Hamid Abdel Hameed Abeed, Alaa Ahmed Kotp and Dalia, Ahmed Mohamed Abd El-Wahab (2021). In vitro anticancer and antioxidant potency of leaves extract of *Ochradenus baccatus* Delile. *BIOSCIENCE RESEARCH*, 18(1): 77-89. [https://www.isisn.org/BR18\(1\)2021/77-89-18\(1\)2021BR20-475.pdf](https://www.isisn.org/BR18(1)2021/77-89-18(1)2021BR20-475.pdf)
- 26- Li J, Chang Y, AL-Huqail AA, Ding Z, Al-Harbi MS, Ali EF, Abeed AHA, Rekaby SA, Eissa MA, Ghoneim AM, Tammam SA. Effect of Manure and Compost on the Phytostabilization Potential of Heavy Metals by the Halophytic Plant Wavy-Leaved Saltbush. *Plants*. 2021; 10(10):2176. <https://doi.org/10.3390/plants10102176>
- 27- Al-Huqail, A. A., Eissa, M. A., Ghoneim, A. M., Alsalmi, R. A., Al Thagafi, Z. M., Abeed, A. H., & Tammam, S. A. (2023). Phytoremediation of dinitrophenol from wastewater by *atriplex lentiformis*: effect of salicylic acid. *International Journal of Phytoremediation*, 1-9. <https://doi.org/10.1080/15226514.2023.2175779>
- 28- Alshegaihi, R. M., Mfarrej, M. F. B., Saleem, M. H., Parveen, A., Ahmad, K. S., Ali, B., ... & Soudy, F. A. (2023). Effective citric acid and EDTA treatments in cadmium stress tolerance in pepper (*Capsicum annuum* L.) seedlings by regulating specific gene expression. *South African Journal of Botany*, 159, 367-380. <https://doi.org/10.1016/j.sajb.2023.06.024>
- 29- Al-Huqail, A. A., Alshehri, D., Nawaz, R., Irshad, M. A., Iftikhar, A., Hussaini, K. M., ... & Abeed, A. H. (2023). The effect of gibberellic acid on wheat growth, and nutrient uptake under combined stress of cerium, zinc and titanium dioxide nanoparticles. *Chemosphere*, 139199.

- 30- Ahmed, T., Masood, H. A., Noman, M., AL-Huqail, A. A., Alghanem, S. M., Khan, M. M., ... & Li, B. (2023). Biogenic silicon nanoparticles mitigate cadmium (Cd) toxicity in rapeseed (*Brassica napus* L.) by modulating the cellular oxidative stress metabolism and reducing Cd translocation. *Journal of Hazardous Materials*, 132070. <https://doi.org/10.1016/j.jhazmat.2023.132070>
- 31- Jalil, S., Alghanem, S. M., Al-Huqail, A. A., Nazir, M. M., Zulfiqar, F., Ahmed, T., ... & Jin, X. (2023). Zinc oxide nanoparticles mitigated the arsenic induced oxidative stress through modulation of physio-biochemical aspects and nutritional ions homeostasis in rice (*Oryza sativa* L.). *Chemosphere*. <https://doi.org/10.1016/j.chemosphere.2023.139566>
- 32- AL-Huqail, A. A., Rizwan, A., Zia-ur-Rehman, M., Al-Haithloul, H. A. S., Alghanem, S. M. S., Usman, M., ... & Abeed, A. A. (2023). Effect of exogenous application of biogenic silicon sources on growth, yield, and ionic homeostasis of maize (*Zea mays* L.) crops cultivated in alkaline soil. *Chemosphere*, 140019. <https://doi.org/10.1016/j.chemosphere.2023.140019>
- 33- Masood, N., Irshad, M. A., Nawaz, R., Abbas, T., Abdel-Maksoud, M. A., AlQahtani, W. H., ... & Abeed, A. H. (2023). Green synthesis, characterization and adsorption of chromium and cadmium from wastewater using cerium oxide nanoparticles; reaction kinetics study. *Journal of Molecular Structure*, 136563. <https://doi.org/10.1016/j.molstruc.2023.136563>
- 34- Al-Huqail, A. A., Alghanem, S. M. S., Abbas, Z. K., Al Aboud, N. M., Masood, N., Irshad, M. A., ... & Darwish, D. B. E. (2023). Evaluation of nanoceria on cadmium uptake in *Triticum aestivum* (L.) and its implications for dietary health risk. *Chemosphere*, 140115. <https://doi.org/10.1016/j.chemosphere.2023.140115>
- 35- Raza, S., Zia-ur-Rehman, M., Alghamdi, S. A., Alghanem, S. M. S., Usman, M., Ahmed, R., ... & Al-Haithloul, H. A. S. (2023). Effects of zinc-enriched amino acids on rice plants (*Oryza sativa* L.) for adaptation in saline-sodic soil conditions: Growth, nutrient uptake and biofortification of zinc. *South African Journal of Botany*, 162, 370-380. <https://doi.org/10.1016/j.sajb.2023.09.011>
- 36- Hussein, A. S., Abeed, A. H., Usman, A. R., & Abou-Zaid, E. A. (2023). Conventional vs. nano-micronutrients as foliar fertilization for enhancing the quality and nutritional status of pomegranate fruits. *Journal of the Saudi Society of Agricultural Sciences*. <https://doi.org/10.1016/j.jssas.2023.09.008>
- 37- Irshad, .A., Sattar, S., AL-Huqail, A.A. et al. Green synthesis and characterization of silver and copper nanoparticles and their use as an effective adsorbent for chromium removal and recovery from wastewater. *Environ Sci Pollut Res* (2023). <https://doi.org/10.1007/s11356-023-30141-3>
- 38- Ali, A., Alghanem, S. M. S., Al-Haithloul, H. A. S., Muzammil, S., Adrees, M., Irfan, E.,

- ... & Abeed, A. H. (2023). Co-application of copper nanoparticles and metal tolerant *Bacillus* sp. for improving growth of spinach plants in chromium contaminated soil. *Chemosphere*, 345, 140495. <https://doi.org/10.1016/j.chemosphere.2023.140495>
- 39- Alwutayd, K. M., Alghanem, S. M. S., Alwutayd, R., Alghamdi, S. A., Alabdallah, N. M., Al-Qthanin, R. N., ... & Abeed, A. H. (2023). Mitigating chromium toxicity in rice (*Oryza sativa* L.) via ABA and 6-BAP: Unveiling synergistic benefits on morphophysiological traits and ASA-GSH cycle. *Science of The Total Environment*, 168208. <https://doi.org/10.1016/j.scitotenv.2023.168208>
- 40- Haifa Abdulaziz Sakit Alhaithloul, Baber Ali, Suliman Mohammed Suliman Alghanem, Faisal Zulfiqar, Sami Asir Al-Robai, Sezai Ercisli, Jean Wan Hong Yong, Anam Moosa, Effa Irfan, Qasim Ali, Muhammad Atif Irshad, Amany H.A. Abeed (2023). Effect of green-synthesized copper oxide nanoparticles on growth, physiology, nutrient uptake, and cadmium accumulation in *Triticum aestivum* (L.). *Ecotoxicology and Environmental Safety*, 268, 115701. <https://doi.org/10.1016/j.ecoenv.2023.115701>
- 41- Mahmoud, G. A. E., Abeed, A. H., Mostafa, H. H., & Abdel Monsef, O. (2023). Responses of Pea (*Pisum sativum* L.) to Single and Consortium Bio-Fertilizers in Clay and Newly Reclaimed Soils. *Plants*, 12(23), 3931. <https://doi.org/10.3390/plants12233931>
- 42- Alhaithloul, H. A. S., Ali, B., Alghanem, S. M. S., Zulfiqar, F., Al-Robai, S. A., Ercisli, S., ... & Abeed, A. H. (2023). Effect of green-synthesized copper oxide nanoparticles on growth, physiology, nutrient uptake, and cadmium accumulation in *Triticum aestivum* (L.). *Ecotoxicology and Environmental Safety*, 268, 115701. <https://doi.org/10.1016/j.ecoenv.2023.115701>
- 43- Abbas, F., Faried, H.N., Akhtar, G. et al. Cucumber grafting on indigenous cucurbit landraces confers salt tolerance and improves fruit yield by enhancing morpho-physio-biochemical and ionic attributes. *Sci Rep* 13, 21697 (2023). <https://doi.org/10.1038/s41598-023-48947-z>
- 44- AL-Huqail, A.A., Alghanem, S.M.S., Alhaithloul, H.A.S. et al. Combined exposure of PVC-microplastic and mercury chloride (HgCl₂) in sorghum (*Pennisetum glaucum* L.) when its seeds are primed titanium dioxide nanoparticles (TiO₂-NPs). *Environ Sci Pollut Res* (2024). <https://doi.org/10.1007/s11356-023-31733-9>
- 45- Shaheen, T., Rehman, A., Abeed, A. H., Waqas, M., Aslam, A., Azeem, F., ... & Nahid, N. Identification and expression analysis of SBP-Box-like (SPL) gene family disclose their contribution to abiotic stress and flower budding in Pigeon pea (*Cajanus cajan* L. Millsp). *Functional Plant Biology* 51, FP23237 <https://doi.org/10.1071/FP23237>
- 46- Sana et al. (2024). Assessment of Antioxidant Activities of Flaxseed (*Linum Usitatisimum* L.) and Fennel seeds (*Foeniculum Vulgare* Mill.) Extracts. *Polish Journal of Environmental Studies*. 10.15244/pjoes/175789. <http://doi.org/10.15244/pjoes/175789>

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