

Publication list for Biology Department Faculty Members for 2019-2021

(2021)

1. Noora T. Gipreel, Farag A. El-Essawy and **Mohamed A. Akela** Isolation, Purification and Elucidation of Stigmasterol and β -Sitosterol Glucosides from the Stems of *Solenostemma argel* Grown in Sudan and their Application as Insecticides. *Ind. J. Pure App. Biosci.* DOI: <http://dx.doi.org/10.18782/2582-2845.8686> (2021).
2. **Z.M. Almutairi**, Molecular characterization and expression profiling of NADH-ubiquinone reductase complex 1 MLRQ Subunit in *Pennisetum glaucum*. *Journal of Plant Biochemistry and Biotechnology.* (2021)
3. **Z.M. Almutairi**, Molecular identification and phylogenetics of local pearl millet cultivars using internal-transcribed spacers of nuclear ribosomal DNA. *Plant Genetic Resources Characterization & Utilisation.* 19(4): 339- 346. (2021)
4. M.F. Seleiman . K.F. Almutairi . M. Alotaibi . A. Shami . **B.A. Alhammad** and M.L. Battaglia, Nano-Fertilization as an Emerging Fertilization Technique: Why Can Modern Agriculture Benefit from Its Use. *Plants*, 10: 2. (2021).
5. R.S. Taha . M.F. Seleiman . **B.A. Alhammad** . J. Alkahtani . M.S. Alwahibi and A.H. A. Mahdi Activated Yeast Extract Enhances Growth, Anatomical Structure, and Productivity of *Lupinus termis* L. Plants under Actual Salinity Conditions . *Agronomy*, 11: 47. (2021).
6. A.M. Abdulmajeeda, G.S. H. Alnusairib, M.H. Alharbi, **A. Almushhin**, Md. Mahadi Hasand and M.H. Solimane, "Alleviation of copper phytotoxicity by acetylsalicylic acid and nitric oxide application in mung bean involves the up-regulation of antioxidants, osmolytes and glyoxalase system" *Journal of Plant Interactions*, TJPI1922771 (2021).
7. **P. Alam**, Functional annotations of ESTs of *Stevia rebaudiana* involved in abiotic stress signaling through computational approach. *Saudi J. Biol. Sci.* (2021). doi.org/10.1016/j.sjbs.2021.02.005.
8. **P. Alam, et al.**, 24-Epibrassinolide (Ebr) Reduces Oxidative Stress Damage Induced By Cadmium Toxicity By Restricting Cd Uptake And Modulating Some Key Antioxidant Enzymes In Maize Plants. *Pak. J. Bot.*, 53(1): 59-66, (2021).
9. **P. Alam**, *In silico* Identification of cis-regulatory elements and their functional annotations from assembled ESTs of *Artemisia annua* L. involved in abiotic stress signaling: *Rom Biotechnol Lett*, 26(2): 2384-2395, (2021).
10. Singh P, Arif Y, Siddiqui H, Sami F, Zaidi R, Azam A, **P. Alam**, Hayat S., Nanoparticles enhances the salinity toxicity tolerance in *Linum usitatissimum* L. by modulating the antioxidative enzymes, photosynthetic efficiency, redox status and cellular damage. *Ecotoxicol Environ Saf.*, 15;213:112020, (2021). doi: 10.1016/j.ecoenv.2021.112020.
11. Sami, F., Siddiqui, H., **P. Alam**, et al., Nitric Oxide Mitigates the Salt-Induced Oxidative Damage in Mustard by UpRegulating the Activity of Various Enzymes. *J Plant Growth Regul.*, (2021). <https://doi.org/10.1007/s00344-021-10331-4>.
12. M. Yusuf, A.S. Almehrzzi, A.N. Alnajjar, **P. Alam**, Elsayed N, Khalil R, Hayat S., Glucose modulates copper induced changes in photosynthesis, ion uptake, antioxidants and proline in *Cucumis sativus* plants, *Carbohydr Res.* (2021). doi: 10.1016/j.carres.2021.108271.

13. V. Tomar, A. Faraz, M. Yusuf, **P. Alam**, et al., 24-epibrassinolide in association with iron enhances the photosynthetic efficiency and upregulates the antioxidant system of the *Brassica juncea*. *Acta Physiol Plant* **43**, 33, (2021). <https://doi.org/10.1007/s11738-021-03204-6>.
14. S.F., Siddiqui, H., **P. Alam**, et al., Glucose-induced response on photosynthetic efficiency, ROS homeostasis, and antioxidative defense system in maintaining carbohydrate and ion metabolism in Indian mustard (*Brassica juncea L.*) under salt-mediated oxidative stress. *Protoplasma*, (2021). <https://doi.org/10.1007/s00709-020-01600-2>.
15. M.R.K, Ahmad A, Vyawahare A, **P. Alam**, Khan TH, Khan R., Biological effects of formation of protein corona onto nanoparticles. *Int J Biol Macromol*, (2021). doi: 10.1016/j.ijbiomac.2021.01.152.
16. A.P, Alyemeni MN, Wijaya L, Ahanger MA, Ashraf M, **P. Alam**, Paray BA, Rinklebe J., Nitric oxide donor, sodium nitroprusside, mitigates mercury toxicity in different cultivars of soybean. *J Hazard Mater*. (2021). doi: 0.1016/j.jhazmat.2020.124852.
17. Z.M., Husain, F.M., Qais, F.A., **Alam, P.**, Ahmad, I., Albalawi, T., et al., Bio-fabrication of titanium oxide nanoparticles from *Ochradenus arabicus* to obliterate biofilms of drug-resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa* isolated from diabetic foot infections. *Appl. Nanosci.* (2021).
18. P.K., Husain, F.M., Qais, F.A., Khan, A., Razak, S., Afsar, T., **Alam, P.** et al., Microwave-Assisted Rapid Green Synthesis of Gold Nanoparticles Using Seed Extract of *Trachyspermum ammi*: ROS Mediated Biofilm Inhibition and Anticancer Activity. *Biomolecules*, 11, 197. (2021). doi.org/10.3390/biom11020197.
19. D. Sun, C. Sun, G. Qiu, L. Yao, J. Yu, H. Al Sberi, M.S. Fouda, M. S. Othman, **M.S. Lokman**, R.B. Kassab, A.E. Abdel Moneim, "Allicin mitigates hepatic injury following cyclophosphamide administration via activation of Nrf2/ARE pathways and through inhibition of inflammatory and apoptotic machinery" *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-021-13392-w> (2021).
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21. El-Safa, M.M.A.; Gad, M.; Eid, E.M.; **Alnemari, A.M.**; Almarshadi, M.H.; Alshammari, A.S.; Moghanm, F.S.; Saleh, A.H. Environmental Risk Assessment of Petroleum Activities in Surface Sediments, Suez Gulf, Egypt. *J. Mar. Sci. Eng*, 9, 473, (2021).
22. **ZM Almutairi**, "Molecular Characterization and Expression Analysis of Ribosomal L18/L5e gene in *Pennisetum glaucum* (L.) R. Br." *Saudi Journal of Biological Sciences*, 28(6): 3585-3593 (2021).
23. Sami R., Khojah E., Helal M., Elhakem A., Benajiba N., Al-Mushhin A.M., Alkaltham M.S., Salamatullah A.M., Vivek K., Fouda N. (2021) Effects of Coating by Chitosan, TiO₂ Nanoparticles, and Sodium Tripolyphosphate as Crosslinker on Stored Cucumber Fruits. *Journal of Biobased Materials and Bioenergy*, 15, 1–8.
24. Sami R., Khojah E., Mansour A.M., Al-Mushhin A.M., Elhakem A., El-Sherif D.M., Alkaltham M.S., Salamatullah A.M. (2021). Nutritional Values, Microbial Population, and Bioactive Components of Pomegranate (*Punica Granatum L.*) Peel Extracts. *International Journal of Pharmacology*, 17: 208-216.

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27. Khojah E., Sami R., Helal M., Elhakem A., Benajiba N., Alharbi M., Alkaltham M.S. (2021). Effect of Coatings using Titanium Dioxide Nanoparticles and Chitosan Films on Oxidation during Storage on White Button Mushroom, *Crystals*, 11, 603.
28. Sami R., Elhakem A., Alharbi M., Almatrafi M., Benajiba N., Mohamed T.A, Fikry M., Helal M. (2021). In-Vitro Evaluation of the Antioxidant and Anti-Inflammatory Activity of Volatile Compounds and Minerals in Five Different Onion Varieties. *Separations*, 8, 57.
29. Sami R., Khojah E., Elhakem A., Benajiba N., Helal M., Alhuthal N., Alzahrani S.A., Alharbi M., Chavali M. (2021). Performance Study of Nano/SiO₂ Films and the Antimicrobial Application on Cantaloupe Fruit Shelf-Life. *Applied Sciences*, 11, 3879.
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33. Sami R., Elhakem A., Alharbi M., Benajiba N., Almatrafi M., Helal M. (2021). Nutritional values of onion bulbs with some essential structural parameters for packaging process. *Applied Sciences*. 11, 2317.
34. Sami R., Elhakem A., Alharbi M., Benajiba N., Almatrafi M., Helal M. (2021). Effect of Nano Silicon Dioxide Coating Films on the Quality Characteristics of Fresh-Cut Cantaloupe. *Membranes* 2021, 11, 140.
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36. Li Y., Sami R., Jia F., Nie X., Xu J., Elhakem A H., Almatrafi M., Benajiba N., Helal M. (2021). Shelf-Life, Quality, Safety Evaluations of Blueberry Fruits Coated with Chitosan Nano-Material Films. *Scientific Reports*, 11,55.
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44. **A. S. Al-Meshal**," Effect of Thermal Treatment of Chamomile (*Marticaria chamomella*) Extract on the Growth Inhibition of Some Pathogenic Fungi", *Journal of Pure and Applied Microbiology*,14(4): 2683-2689, (2020).
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