Curriculum vitae

PERSONAL INFORMATION

Name	**Abdulaziz Abdulrahman Al-Askar**	**Address**	Department of Botany & Microbiology department , College of Science, King Saud University, P.O.Box 2460, Riyadg-11451,Saudi Arabia (KSA) Mobile: 00966503461390 Email: aalaskara@ksu.edu.sa
Nationality	**Saudi**		
Position	**Professor**		

ACADEMIC RECORDS

Degree	Year	University	College	Specialty
Doctor of Philosophy in Apiculture (PH.D)	1992	University of Wales, UK	College of Science	Microbiology
Bachelor of Science in Agriculture	1982	King Saud University, Saudi Arabia	College of Agriculture and Food Science	Plant Protection

Academic Positions

- - Researcher assistant (1984-1986), College of food and Agricultural Science – King Saud University, KSA.
- - Researcher (1986-1991), College of food and Agricultural Science – King Saud Univ., KSA.
- - Assistant Professor (1992), King Saud University, KSA.
- - Associate Professor (2012), King Saud University, KSA.
- - Professor (2017), King Saud University, KSA.
- -As member of the Advisory Committee for the Academic year 1445 H. in the Biology Program of the Princess Nourah Bint Abdulrahman University.

Supervised and Coordinated the honorary research work for participants in the Azar Research Camp of the Central- • 2024 ,27 Research Laboratory at the University for Female Students from May 19 to June

Administrative positions:

- - Head of the Community Service and Continuing Education Center at the Teachers College since 1417 - 1420 AH
- -Vice Dean of the Teachers College for Student Affairs since 10/15/1422 - 1424 AH
- -Head of the Science Department at the Teachers College at King Saud University since 3/21/1432 AH - 3/20/1434 AH.
- -Deputy Director of the Science, Technology and Innovation Unit since 1432 – 1442.
- -Deputy Director of the Research, Development and Innovation Unit since 1442 – 1446.

Attraction of funds and research collaboration

- -**2009-2010** (PI) Biological Control of Common Bean Fusarium Root Rot Disease Using Arbuscular Mycorrhizal Fungi. Research Center grants, King Saud Univ., KSA (SR 40,000).
- -**2010-2011** (PI) Microbiological and Biochemical Studies for Production of Anti- Fungal BioCompound(s) From Actinomycetes against Some Phytopathogenic Fungi. Sabic Scientific Research Grants (SR 45,000).
- - **2011-2012** (PI) Detection of seed-borne mycoflora in alfalfa plant and control of the most prevalent pathogenic fungi. Research Center Grants, King Saud Univ., KSA (SR 50,000).
- -**Pending 2012** (PI) Production of antifungal bioagent(s) using Streptomyces spp. to control tomato seedborne pathogenic fungi in Saudi Arabia. The Long-Term Comperhensive National Plan for Science, Technology, and Innovation General Secretariat (SR 1,700,000)

• -**Pending 2014 (PI)** Establishment of the First Culture Collection Bank for Seed-Borne Pathogenic Fungi in The Kingdom of Saudi Arabia. The Long-Term Comperhensive National Plan for Science, Technology, and Innovation General Secretariat (SR 1,850,000)

• -**Pending 2021 (PI) A marketable product from the bioconversion of plant proteinaceous residuals into amino acids as inducers of systemic resistance against phytopathogenic 2-17-04-001-0043 (SR 369.800)**

• -**Pending 2023 (PI) As a first step towards industrial production: An environmentally friendly formulation of Bacillus bacteria for the biocontrol of culture-borne pathogenic fungi IFKSUDR_F121 (SR 374.000)**

• -**Pending 2023 (PI) An Innovative Approach to Biosynthesis and Formulation of Indole-3-Acetic Acid from Mixed Plant Biomass Residues Using Artificial Intelligence and Endophytic Fung 12830-ksu-2023-KSU-B-3-1-SE (SR 1599000).**

• -**Pending 2023 (CoPI) Exploring Endophytic Microbiomes in Saudi Arabian Coffee Beans: Isolation, Characterization, and Application in Sustainable development with the Aid of Artificial Intelligence 14350-ksu-2023-KSU-B-3-1-SE (SR1.600.000)**

PATENTS

• -Patent from King Abdulaziz City for Science and Technology, NO. 4253 Date: 15/8/2015 "A novel strain of Streptomyces with potential anti-microbial activity against pathogenic fungi and bacteria "

• -Patent from US Patent Application No. [33115.22U] Date: 20/06/2023 "An actively biological marketable formulation of endophytic trichoderma spp. for combat fungal pathogens and promote plant growth".

BOOKS AUTHORED

• -Al-Araidh, A.A. Al-Askar and A.S. Ayash. 2000. Bases of General Botany, Safeer Press, Riyadh. A. Al-Araidh and A.A. Al-Askar. 2005. Bases of General Biology, Al-Homaidi Press, Riyadh.

PUBLICATIONS

1- **Abdulaziz A. Al-Askar**, Younes M. Rashad. 2010. Efficacy Of Some Plant Extracts Against Rhizoctonia Solani On Pea. Journal Of Plant Protection Research, Vol. 50 (3), 239-243.
2- **A.A. Al-Askar**1, Y.M. Rashad. 2010. Arbuscular Mycorrhizal Fungi: A Biocontrol Agent against Common Bean Fusarium Root Rot Disease. Plant Pathology Journal, Vol. 9 (1), 31-38.
3- **Al-Askar, A. A**., Abdul Khair, W. M. and Rashad, Y. M. 2011. In vitro antifungal activity of Streptomyces spororaveus RDS28 against some phytopathogenic fungi. African Journal of Agricultural Research, Vol. 6(12), 2835-2842.
4- **Abdul Aziz A. Al-Askar**. 2012 In Vitro Antifungal Activity Of Three Saudi Plant Extracts Against Some Phytopathogenic Fungi. Journal Of Plant Protection Research, Vol. 52 (4). 458-462.
5- **Abdul-Aziz A.A. Al-Askar**, Khalid M. Ghoneem, and Younes M. Rashad. 2012. Seed-borne mycoflora of alfalfa (Medicago sativa L (. in the Riyadh Region of Saudi Arabia ,Ann. Microbiol, Vol. 62 : 273–281.
6- **Al-Askar A.A**.1, Hafez EE2, Kabeil SA3, Meghad A4. 2013. Bioproduction of silver-nano particles by Fusarium oxysporum and their antimicrobial activity against some plant pathogenic bacteria and fungi. Life Science Journal, 10 (3). 2470-2475.
7- **Al-Askar, A.A**.1, Ghoneem, K.M2 and Rashad, Y.M1. 2013. Management of some seed-borne pathogens attacking alfalfa plants in Saudi Arabia. African Journal of Microbiology Research, 7 (14). 1197-1206.
8- **Al-Askar A. A**., Rashad Y. M. and Abdulkhair W. M. 2013. Antagonistic activity of an endemic isolate of Streptomyces tendae RDS16 against phytopathogenic fungi. African Journal of Microbiology Research, Vol. 7(6). 509-516.
9- **Abdulaziz A. Al-Askar**1, Waleed M. Abdulkhair2, Younes M. Rashad3, Elsayed E. Hafez3, Khalid M. Ghoneem4 and Zakaria A. Baka5. 2014. Streptomyces griseorubens E44G: A Potent Antagonist Isolated from Soil in Saudi Arabia. JOURNAL OF PURE AND APPLIED MICROBIOLOGY, Vol. 8(1): 221-230.
10- **A.A. Al-Askar**, Y.M. Rashad, and K.M. Ghoneem4. 2014. Pathological Evaluation and Quantification of Some Seed-Borne Fungi of Wheat. JOURNAL OF PURE AND APPLIED MICROBIOLOGY, Vol. 8(1): 303- 320.
11- Abd El-Badea saleh Ezzat, Khalid Ghoneem, Wesam I.A. Saber, **Abdulaziz A Al-Askar**, Control of Wilt, Stalk and Tuber Rots Diseases Using Arbuscular mycorrhizal fungi, Trichoderma Species and Hydroquinone Enhances Yield Quality and Storability of Jerusalem Artichoke (Helianthus tuberosus L.)(2014). Egyptian journal of pest control, Vol. 25: 11-22.
12- **A.A. AL-Askar**. 2014. Endophytic Streptomyces olivaceiscleroticus Endo-1: Biocontrol Agent and Growth Promoter of Wheat. JOURNAL OF PURE AND APPLIED MICROBIOLOGY, Vol. 8(1): 307-317.
13- **A.A. Al-Askar**1, W.M. Abdulkhair2 and Y.M. Rashad2. 2014. Production, Purification and Optimization of Protease by Fusarium solani under Solid State Fermentation and Isolation of Protease Inhibitor Protein from Rumex vesicarius L. Journal Of Pure And Applied Microbiology, Vol. 8 (1): 239-250.
14- **Abdulaziz A. Al-Askar**,Khalid M. Ghoneem,Younes M. Rashad, Waleed M. Abdulkhair, Elsayed E. Hafez,3 Yasser M. Shabana5 and Zakaria A. Baka.(2014). Occurrence and distribution of tomato seed-borne mycoflora in Saudi Arabia and its correlation with the climatic variables. Microbial Biotechnology, Vol. 7: 556-569.
15- **Abdul Aziz A. Al-Askar**1, Khalid M. Ghoneem2, Abd El-Badea S. Ezzat3 and Wesam I.A. Saber4. 2014. Improving Growth and Productivity as well as Controlling Sclerotium rolfsii in Jerusalem Artichoke using Biotic and Abiotic Agents. JOURNAL OF PURE AND APPLIED MICROBIOLOGY, Vol. 8(1): 279-291.

16- **Al-Askar AA**, Ghoneem KM, Rashad YM, Abdulkhair WM, Hafez EE, Shabana YM, Baka ZA.(2014). Occurrence and distribution of tomato seed-borne mycoflora in Saudi Arabia and its correlation with the climatic variables. Microb Biotechnol. Nov;7(6):556-69. doi: 10.1111/1751-7915.12137. Epub 2014 Jun 25.
17- **A.A. Al-Askar**1, Y.M. Rashad2 and W.M. Abdulkhair2. 2014. Evaluation of the Antimicrobial Potential of Selected Medicinal Plant Extracts Against Some Plant and Human Pathogens. JOURNAL OF PURE AND APPLIED MICROBIOLOGY, Vol. 8 (1): 159-168.
18- **Abdulaziz Abdulrahman Al-Askara**, Younes Mohamed Rashadb, Elsayed Elsayed Hafezc, Waleed Mohamed Abdulkhaird, Zakaria Awad Bakae & Khalid Mohamed Ghoneemf. 2015. Characterization of alkaline protease produced by Streptomyces griseorubens E44G and its possibility for controlling Rhizoctonia root rot disease of corn. Biotechnology & Biotechnological Equipment, Vol. 29 (3): 457-462.
19- Wesam I. A. Saber,1 Khalid M. Ghoneem, **Abdulaziz A. Al-Askar**, Younes M. Rashad, Abeer A. Ali6 and Ehsan M. Rashad1. 2015. Chitinase Production By Bacillus Subtilis Atcc 11774 And Its Effect On Biocontrol Of Rhizoctonia Diseases Of Potato. Acta Biologica Hungarica, Vol. 66 (4): 436-448.
20- Ghoneem,K. M.; W. I. A. Saber; I. A. M. Youssef; M. R. Mohamed and **A.A. Al-Askar**. 2015. Postulation and Efficiency of Leaf Rust Resistance Genes of Wheat and Biological Control of Virulence Formulae of Puccinia triticinaRaces. Egyptian Journal of Biological Pest Control, Vol. 25: 23-31.
21- **Abdulaziz A. Al-Askar** & Zakaria A. Baka & Younes M. Rashad & Khalid M. Ghoneem & Waleed M. Abdulkhair & Elsayed E. Hafez & Yasser M. Shabana. 2015. Evaluation of Streptomyces griseorubens E44G for the biocontrol of Fusarium oxysporum f. sp. lycopersici: ultrastructural and cytochemical investigations. Annals of Microbiology.
22- Saber WI, Ghoneem KM, **Al-Askar AA**, Rashad YM, Ali AA, Rashad EM.(2015). Chitinase production by Bacillus subtilis ATCC 11774 and its effect on biocontrol of Rhizoctonia diseases of potato. Acta Biol Hung. 2015 Dec;66(4):436-48. doi: 10.1556/018.66.2015.4.8.
23- Ezzat, A.S., K.M. Ghoneem, W.I.A. Saber and **A.A. Al-Askar**, 2015. Control of wilt, stalk and tuber rots diseases using arbuscular mycorrhizal fungi, Trichoderma species and hydroquinone enhances yield quality and storability of Jerusalem artichoke (Helianthus tuberosus L.). Egypt. J. Biol. Pest Control, 25: 11-22.

24- **Abdulaziz A Al-Askar.(**2016). Bioactive Compounds Produced by Trichoderma harzianum 1-SSR for controlling Fusariumverticillioides (Sacc.) Nirenberg and Growth Promotion of Sorghum vulgare . Egyptian Journal of Pest Control 26(2):379-386.
25- **Al-Askar, A. A**.; A. S. Ezzat2; K. M. Ghoneem3 and W. I. A. Saber.(2016). Trichoderma harzianum WKY5 and its Gibberellic Acid Control of Rhizoctonia solani, Improve Sprouting, Growth and Productivity of Potato . Egyptian Journal of Biological Pest Control, 26(4), 2016, 787-796
26- Ghoneem, K.M., W.I.A. Saber, A.A. El-Awady, Y.M. Rashad and **A.A. Al-Askar**, (2016). Clove essential oil for controlling white mold disease, sprout suppressor and quality maintainer for preservation of Jerusalem artichoke tubers. Egypt. J. Biol. Pest Control, 26: 601-
27- Ghoneem, K.M., W.I. Saber, A.A. El-Awady, Y.M. Rashad and **A.A. Al-Askar**.(2016). Alternative preservation method against Sclerotium tuber rot of Jerusalem artichoke using natural essential oils. Phytoparasitica, 44: 341-352.
28- **Al-Askar, A.A**., A.S. Ezzat, K.M. Ghoneem and W.I.A. Saber, 2016. Trichoderma harzianum WKY5 and its gibberellic acid control of Rhizoctonia solani, improve sprouting, growth and productivity of potato. Egypt. J. Biol. Pest Control, 26: 787-796.
29- Younes M. Rashad, **Abdulaziz A. Al-Askar**, Khalid M. Ghoneem&Wesam I. A. Saber& Elsayed E. Hafez.(2017). Chitinolytic Streptomyces griseorubens E44G enhances the biocontrol efficacy against Fusarium wilt disease of tomato . Phytoparasitica (2017) 45:227–237.
30- Wesam I. A. Saber,Khalid M. Ghoneem,Younes M. Rashad &**Abdulaziz A. Al-Askar**.(2017). Trichoderma Harzianum WKY1: an indole acetic acid producer for growth improvement and anthracnose disease control in sorghum . Biocontrol Scince and Technology, Pages 654-676
31- **Abdulaziz Abdulrahman Al-Askar,** 2WesamEldin Ismail Ali Saber, 3Khalid Mohamed Ghoneem and 4YounesMohamed Rashad (2018). Oxalic Acid as the Main Molecule Produced by Trichoderma asperellum MG323528 Fermented on Corn Stover Based Medium. Biotechnology(Faisalabad) 17(2):95-103
32- Mostafa AA, **Al-Askar AA**, Almaary KS, Dawoud TM, Sholkamy EN, Bakri MM. (2018). Antimicrobial activity of some plant extracts against bacterial strains causing food poisoning diseases. Saudi J Biol Sci. 2018 Feb;25(2):361-366.
33- Khatun D, Hossain MY, Nawer F, Mostafa AA, **Al-Askar AA**.(2019). Reproduction of Eutropiichthys vacha (Schilbeidae) in the Ganges River (NW Bangladesh) with special reference to potential influence of climate variability. Environ Sci Pollut Res Int. Apr;26(11):10800-10815. doi: 10.1007/s11356-019-04523-5. Epub 2019 Feb 18.
34- Mostafa AA, Elshikh MS, **Al-Askar AA**, Hadibarata T, Yuniarto A, Syafiuddin A.(2019). Decolorization and biotransformation pathway of textile dye by Cylindrocephalum aurelium. Bioprocess Biosyst Eng. 2019 Sep;42(9):1483-1494. doi: 10.1007/s00449-019-02144-3.
35- Ahmed Abdelkhalek, **Abdulaziz A. Al-Askar** & Said i. Behiry (2020). Bacillus licheniformis strain POT1 mediated polyphenol biosynthetic pathways genes activation and systemic resistance in potato plants against Alfalfa mosaic virus. Scientific Reports volume 10,
36- Ahmed Abdelkhalek1, Said I. Behiry and **Abdulaziz A. Al-Askar** (2020). Bacillus velezensis PEA1 Inhibits Fusarium oxysporum Growth and Induces Systemic Resistance to Cucumber Mosaic Virus. Agronomy 10(9):1312.
37- Ashraf Abdel-Fattah Mostafa a,b,⇑ , **Abdulaziz Abdulrahman Al-Askar** a , Mohamed Taha Yassin.2022. Anti-saprolegnia potency of some plant extracts against Saprolegnia diclina, the causative agent of saprolengiasis. Saudi Journal of Biological Sciences 27 (2020) 1482–1487
38- Ahmed Abdelkhalek 1,* and **Abdulaziz A. Al-Askar** 2.2022. Green Synthesized ZnO Nanoparticles Mediated by Mentha Spicata Extract Induce Plant Systemic Resistance against Tobacco Mosaic Virus. Appl. Sci. 2020, 10, 5054; doi:10.3390/app10155054
39- AhmedAbdelkhalek1*, **AbdulazizA.Al-Askar**2 & Said I. Behiry3.2020. Bacillus licheniformis strain POT1 mediated polyphenol biosynthetic pathways genes activation and systemic resistance in potato plants againstAlfalfa mosaic virus. Scientific Reports | (2020) 10:16120| https://doi.org/10.1038/s41598-020-72676-2.
40- Ahmed Abdelkhaleka,⁎⁎, **Abdulaziz Abdulrahman Al-Askar**b , Elsayed Hafeza..2020. Differential induction and suppression of the potato innate immune system in response to Alfalfa mosaic virus infection. Physiological and Molecular Plant Pathology 0885-5765/ © 2020 Elsevier Ltd. All rights reserved
41- Ahmed Abdelkhalek 1,* , Said I. Behiry 2 and **Abdulaziz A. Al-Askar** 3,.2020. Bacillus velezensis PEA1 Inhibits Fusarium oxysporum Growth and Induces Systemic Resistance to Cucumber Mosaic Virus. Agronomy 2020, 10, 1312; doi:10.3390/agronomy10091312
42- Alabduljabbar H, Alyousef R, Gul W, Shah SRA, Khan A, Khan R, **Alaskar A**.(2020). Effect of Alumina Nano-Particles on Physical and Mechanical Properties of Medium Density Fiberboard. Materials (Basel). Sep 22;13(18):4207. doi: 10.3390/ma13184207.
43- Alabduljabbar H, Huseien GF, Sam ARM, Alyouef R, Algaifi HA, **Alaskar A**.(2020). Engineering Properties of Waste Sawdust-Based Lightweight Alkali-Activated Concrete: Experimental Assessment and Numerical Prediction. Materials (Basel). 2020 Dec 2;13(23):5490.
44- Mohamed Taha Yassin, **Abdulaziz Abdulrahman Al-Askar**, Ashraf Abdel-Fattah Mostafa ,Mohamed A. El-Sheikh (2020). Bioactivity of Syzygium aromaticum(L.) Merr. & L.M.Perry extracts as potential antimicrobial and anticancer agents. Journal of King Saud University - Science 32:3273–3278

45- Mohamed Taha Yassin, Ashraf A. Mostafa, **Abdulaziz A. Al-Askar**. (2020). Phytochemical composition, anti-Candida and anti-cancer activity of different Mentha longifolia (Wild Mint) extracts in vitro. Journal of King Saud University - Science 32(3).
46- Ahmed Abdelkhalek and **Abdulaziz A. Al-Askar**. (2020). Green Synthesized ZnO Nanoparticles Mediated by Mentha Spicata Extract Induce Plant Systemic Resistance against Tobacco Mosaic Virus. Applied Sciences 10(15):5054
47- Mostafa AA, **Al-Askar AA**, Taha Yassin M. (2020). Anti-saprolegnia potency of some plant extracts against Saprolegnia diclina, the causative agent of saprolengiasis
Saudi J Biol Sci. 2020 Jun;27(6):1482-1487. doi: 10.1016/j.sjbs.2020.04.008. Epub 2020 Apr 13.
48- Mohamed Yassin, Ashraf A. Mostafa, **A. Al-Askar**.(2020). Anticandidal efficiency of Cinnamomum zeylanicum extracts against vulvovaginal candidiasis. Current Science 118(5):796-801.
49- Mohamed Yassin, Ashraf A. Mostafa, **A. Al-Askar**.((2020). Anticandidal and anti-carcinogenic activities of Mentha longifolia (Wild Mint) extracts in vitro. Journal of King Saud University – Science. Volume 32, Issue 3, April 2020, Pages 2046-2052
50- Mohamed T. Yassin, Ashraf A. Mostafa, **Abdulaziz A. Al-Askar** and Rashad Bdeer (2020). In vitro antifungal resistance profile of Candida strains isolated from Saudi women suffering from vulvovaginitis. European Journal of Medical Research 25(1).
51- Yassin MT, Mostafa AA, **Al-Askar AA**.(2020). In vitro anticandidal potency of Syzygium aromaticum (clove) extracts against vaginal candidiasis. In vitro anticandidal potency of Syzygium aromaticum (clove) extracts against vaginal candidiasis.BMC Complement Med Ther. 2020 Jan 30;20(1):25. doi: 10.1186/s12906-020-2818-8.
52- Abdelkhalek A, **Al-Askar AA**, Behiry SI.(2020). Bacillus licheniformis strain POT1 mediated polyphenol biosynthetic pathways genes activation and systemic resistance in potato plants against Alfalfa mosaic virus. Sci Rep. 2020 Sep 30;10(1):16120.
53- **Al-Askar AA**, Saber WIA, Ghoneem KM, Hafez EE, Ibrahim AA.(2021). Crude Citric Acid of Trichoderma asperellum: Tomato Growth Promotor and Suppressor of Fusarium oxysporum f. sp. Lycopersici. Plants (Basel). 2021 Jan 24;10(2):222.
54- Ahmed A. Heflish , Ahmed Abdelkhalek , **Abdulaziz A. Al-Askar** , and Said I. Behiry (2021).Protective and Curative Effects of Trichoderma asperelloides Ta41 on Tomato Root Rot Caused by Rhizoctonia solani Rs33. Agronomy2021,11, 1162
55- **Al-Askar AA**, Rashad EM, Ghoneem KM, Mostafa AA, Al-Otibi FO, Saber WIA(2021). Discovering Penicillium polinicum with High-Lytic Capacity on Helianthus tuberosus Tubers: Oil-Based Preservation for Mold Management. Plants (Basel). 2021 Feb 23;10(2):413.
56- Ahmed Abdelkhalek 1,* , **Abdulaziz A. Al-Askar** 2,*, Maha M. Alsubaie 2 and Said I. Behiry 3.2021. First Report of Protective Activity of Paronychia argentea Extract against Tobacco Mosaic Virus Infection. Plants 2021, 10, 2435. https://doi.org/10.3390/plants10112435
57- Mohamed Taha Yassin, Ashraf Abdel-Fattah Mostafa, **Abdulaziz A. Al-Askar**, Shaban R.M. Sayed, Ahmed Mostafa Rady (2021). Antagonistic activity of Trichoderma harzianum and Trichoderma viride strains against some fusarial pathogens causing stalk rot disease of maize, in vitro . Journal of King Saud University - Science 33(3):101363.
58- **Abdulaziz A. Al-Askar**1 *, Ehsan M. Rashad2 , Zeiad Moussa3 , Khalid M. Ghoneem2 , Ashraf A. Mostafa1 , Fatimah O. Al-Otibi1 , Amr Abker Arishi4 and WesamEldin I. A. Saber3. 2022. A Novel Endophytic Trichoderma longibrachiatum WKA55 With Biologically Active Metabolites for Promoting Germination and Reducing Mycotoxinogenic Fungi of Peanut. Frontiers in Microbiology, March 2022 | Volume 13 | Article 772417
59- Ahmed Abdelkhalek 1,* , **Abdulaziz A. Al-Askar** 2,*, Amr A. Arishi 3 and Said I. Behiry.2022. Trichoderma hamatum Strain Th23 Promotes Tomato Growth and Induces Systemic Resistance against Tobacco Mosaic Virus . Fungi 2022, 8, 228. https://doi.org/10.3390/jof8030228
60- Hamada El-Gendi 1 , **Abdulaziz A. Al-Askar** 2 , Lóránt Király 3 , Marwa A. Samy 4 , Hassan Moawad 5 and Ahmed Abdelkhalek.2022. Foliar Applications of Bacillus subtilis HA1 Culture Filtrate Enhance Tomato Growth and Induce Systemic Resistance against Tobacco mosaic virus Infection. Horticulturae 2022, 8, 301. https://doi.org/10.3390/horticulturae8040301
61- Hamada El-Gendi 1 , **Abdulaziz A. Al-Askar** 2 , Lóránt Király 3 , Marwa A. Samy 4 , Hassan Moawad 5 and Ahmed Abdelkhalek.2022. Foliar Applications of Bacillus subtilis HA1 Culture Filtrate Enhance Tomato Growth and Induce Systemic Resistance against Tobacco mosaic virus Infection. Horticulturae 2022, 8, 301. https://doi.org/10.3390/horticulturae8040301
62- Mohamed Kamal El-kazzaz 1 , Kamal Elsayed Ghoneim 1 , Mohamed Khaled Mohamed Agha 2 , Asmaa Helmy 2 , Said I. Behiry 3 , Ahmed Abdelkhalek 4,* , Muhammad Hamzah Saleem 5 , **Abdulaziz A. Al-Askar** 6 , Amr A. Arishi 7 and Mohsen Mohamed Elsharkawy.2022. Suppression of Pepper Root Rot and Wilt Diseases Caused by Rhizoctonia solani and Fusarium oxysporum. Life 2022, 12, 587. https://doi.org/10.3390/life12040587
63- Walid F. A. Mosa1 , Marwa I. Mackled2 , Nader R. Abdelsalam3 *, Said I. Behiry3 , **Abdulaziz A. Al-Askar**4 , Adriana Basile5 , Ahmed Abdelkhalek6 , Mohsen M. Elsharkawy7 and Mohamed Z. M. Salem.2022. Impact of Silver Nanoparticles on Lemon Growth Performance: Insecticidal and Antifungal Activities of Essential Oils From Peels and Leaves. Frontiers in Plant Science | www.frontiersin.org 1 May 2022 | Volume 13 | Article 898846
64- Ahmed Abdelkhalek1*, Hamada El-Gendi2 , **Abdulaziz A. Al-Askar**3 , Viviana Maresca4 , Hassan Moawad5 , Mohsen M. Elsharkawy6 , Hosny A. Younes7 and Said I. Behiry7.2022. Enhancing systemic resistance in faba bean (Vicia faba L.) to Bean yellow mosaic virus via soil application and foliar spray of nitrogen-fixing Rhizobium leguminosarum bv. viciae strain 33504-Alex1. Frontiers in Plant Science TYPE Original Research PUBLISHED 02 August 2022 DOI 10.3389/fpls.2022.933498
65- Said I. Behiry1 *, **Abdulaziz A. Al-Askar**2 , Seham A. Soliman3 , Fatimah O. Alotibi4 , Adriana Basile5 , Ahmed Abdelkhalek2 , Mohsen Mohamed Elsharkawy6 , Mohamed Z. M. Salem7 , Elsayed E. Hafez2 and Ahmed A. Heflish1.2022. Plantago lagopus extract as a green fungicide induces systemic resistance against Rhizoctonia root rot disease in tomato plants. Frontiers in Plant Science TYPE Original Research PUBLISHED 08 August 2022 DOI 10.3389/fpls.2022.966929
66- Mohamed S. Attia 1 , Amer M. Abdelaziz 1,* , **Abdulaziz A. Al-Askar** 2,*, Amr A. Arishi 3 , Ahmed M. Abdelhakim 1 and Amr H. Hashem 1.2022. Plant Growth-Promoting Fungi as Biocontrol Tool against Fusarium Wilt Disease of Tomato Plant. Fungi 2022, 8, 775. https://doi.org/10.3390/jof8080775
67- Ehsan M. Rashad 1 , Dalia M. Shaheen 1 , **Abdulaziz A. Al-Askar** 2,*, Khalid M. Ghoneem 1 , Amr Abker Arishi 3 , El Sayed A. Hassan 4 and WesamEldin I. A. Saber.2022. Seed Endophytic Achromobacter sp. F23KW as a Promising Growth Promoter and Biocontrol of Rhizoctonia Root Rot of Fenugreek. Molecules 2022, 27, 5546. https://doi.org/10.3390/molecules27175546
68- Aly Derbalah 1 , Asmaa Mohamed Shebl 2 , Samah Fawzy Elgobashy 2 , Abdelmonim Ali Ahmad 3 , Noha Eldesoky Ramadan 2 , Said I. Behiry 4 , Ahmed Abdelkhalek 5 , Muhammad Hamzah Saleem 6 , **Abdulaziz A. Al-Askar** 7 , Muhammad Kamran 8 and Mohsen Mohamed Elsharkawy.2022. Resistance Induction and Direct Antifungal Activity of Some Monoterpenes against Rhizoctonia solani, the Causal of Root Rot in Common Bean. Life 2022, 12, 1040. https://doi.org/10.3390/life12071040
69- Mohsen Mohamed Elsharkawy 1,*, **Abdulaziz A. Al-Askar** 2, Ahmed Abdelkhalek 3, Said I. Behiry 4, Muhammad Kamran 5 and Mostafa Ali.2022. Suppression of Pepper mild mottle virus (PMMoV) by Modified Whey Proteins. Life 2022, 12, 1165. https://doi.org/10.3390/life12081165
70- Ahmed Abdelkhalek 1,* , **Abdulaziz A. Al-Askar** 2 , Toufic Elbeaino 3 , Hassan Moawad 4 and Hamada El-Gendi 5,.2022. Protective and Curative Activities of Paenibacillus polymyxa against Zucchini yellow mosaic virus Infestation in Squash Plants. Biology 2022, 11, 1150. https://doi.org/10.3390/biology11081150
71- Ebrahim Saied 1,* , Salem S. Salem 1 , **Abdulaziz A. Al-Askar** 2,*, Fathy M. Elkady 3 , Amr A. Arishi 4 and Amr H. Hashem.2022. Mycosynthesis of Hematite (α-Fe2O3) Nanoparticles Using Aspergillus niger and Their Antimicrobial and Photocatalytic Activities . Bioengineering 2022, 9 , 397 . https://doi.org/10.3390/bioengineering9080397

72- Ahmed Abdelkhalek 1,* , Dalia G. Aseel 1 , Lóránt Király 2 , András Künstler 2 , Hassan Moawad 3 and **Abdulaziz A. Al-Askar** 4.2022. Induction of Systemic Resistance to Tobacco mosaic virus in Tomato through Foliar Application of Bacillus amyloliquefaciens Strain TBorg1 Culture Filtrate. Viruses 2022, 14, 1830. https://doi.org/10.3390/v14081830

73- Said M. Kamel 1 , Samah F. Elgobashy 1 , Reda I. Omara 1 , Aly S. Derbalah 2 , Mahmoud Abdelfatah 3 , Abdelhamed El-Shaer 3 , **Abdulaziz A. Al-Askar** 4 , Ahmed Abdelkhalek 5 , Kamel A. Abd-Elsalam 1 , Tarek Essa 1 , Muhammad Kamran 6 and Mohsen Mohamed Elsharkawy.2022. Antifungal Activity of Copper Oxide Nanoparticles against Root Rot Disease in Cucumber. J. Fungi 2022, 8, 911. https://doi.org/10.3390/jof8090911

74- Salem S. Salem 1 , Amr H. Hashem 1,* , Al-Aliaa M. Sallam 2 , Ahmed S. Doghish 3,4,* , **Abdulaziz A. Al-Askar** 5 , Amr A. Arishi 6 and Amr M. Shehabeldine 1.2022. Synthesis of Silver Nanocomposite Based on Carboxymethyl Cellulose: Antibacterial, Antifungal and Anticancer Activities. Polymers 2022, 14, 3352. https://doi.org/10.3390/polym14163352

75- Salem S. Salem 1,* , Mona Shaban E. M. Badawy 2 , **Abdulaziz A. Al-Askar** 3,*, Amr Abker Arishi 4 , Fathy M. Elkady 5 and Amr H. Hashem.2022. Green Biosynthesis of Selenium Nanoparticles Using Orange Peel Waste: Characterization, Antibacterial and Antibiofilm Activities against Multidrug-Resistant Bacteria. Life 2022, 12, 893. https://doi.org/10.3390/life12060893

76- Said I. Behiry 1,*, Seham A. Soliman 2, Al-Naji A. Al-Mansori 3, **Abdulaziz A. Al-Askar** 4, Amr A. Arishi 5, Mohsen Mohamed Elsharkawy 6, Ahmed Abdelkhalek 2,* and Ahmed A. Heflish 1.2022. Chorisia speciosa Extract Induces Systemic Resistance against Tomato Root Rot Disease Caused by Rhizoctonia solani. Agronomy 2022, 12, 2309. https://doi.org/10.3390/agronomy12102309

77- Fathy M. Elkady 1,*, **Abdulaziz A. Al-Askar** 2 , Ahmed Abdel Tawab 3 , Mohammad M. Alkherkhisy 3 , Amr A. Arishi 2,4 and Amr H. Hashem 5.2022. Comparative Genotypic Analysis of RAPD and RFLP Markers for Molecular Variation Detection of Methicillin-Resistant Staphylococcus aureus Clinical Isolates. Medicina 2022, 58, 1245. https://doi.org/10.3390/medicina58091245

78- Mohsen Mohamed Elsharkawy1*, **Abdulaziz A. Al-Askar**2 , Said I. Behiry3 , Ahmed Abdelkhalek4 , Muhammad Hamzah Saleem5 , Muhammad Kamran6 and Aly Derbalah7.2022. Mohsen Mohamed Elsharkawy1*, Abdulaziz A. Al-Askar2 , Said I. Behiry3 , Ahmed Abdelkhalek4 , Muhammad Hamzah Saleem5 , Muhammad Kamran6 and Aly Derbalah7. Frontiers in Plant ScienceTYPE Original Research PUBLISHED 20 September 2022 DOI 10.3389/fpls.2022.982414

79- Mohamed Taha Yassin * , Ashraf Abdel-Fattah Mostafa, **Abdulaziz Abdulrahman Al-Askar** and Fatimah O. Al-Otibi.2022. Facile Green Synthesis of Zinc Oxide Nanoparticles with Potential Synergistic Activity with Common Antifungal Agents against Multidrug-Resistant Candidal Strains. Crystals 2022, 12, 774. https://doi.org/10.3390/cryst12060774

80- Mohamed Taha Yassin * , Ashraf Abdel-Fattah Mostafa, **Abdulaziz Abdulrahman Al-Askar** and Fatimah O. Al-Otibi.2022. Synergistic Antifungal Efficiency of Biogenic Silver Nanoparticles with Itraconazole against Multidrug-Resistant Candidal Strains. Crystals 2022, 12, 816. https://doi.org/10.3390/cryst12060816

81- Zeiad Moussa 1 , Ehsan M. Rashad 2 , Elsherbiny A. Elsherbiny 3 , **Abdulaziz A. Al-Askar** 4,*, Amr Abker Arishi 5 , Fatimah O. Al-Otibi 4 and WesamEldin I. A. Saber 1,.2022. New Strategy for Inducing Resistance against Bacterial Wilt Disease Using an Avirulent Strain of Ralstonia solanacearum. Microorganisms 2022, 10, 1814. https://doi.org/10.3390/microorganisms10091814

82- Emad H. El-Bilawy 1 , Al-Naji A. Al-Mansori 2 , Fatimah O. Alotibi 3 , **Abdulaziz A. Al-Askar** 3 , Amr A. Arishi 4 , Islam I. Teiba 5 , Abd El-Naser Sabry 6 , Mohsen Mohamed Elsharkawy 7 , Ahmed A. Heflish 8 , Said I. Behiry 8 and Ahmed Abdelkhalek 9.2022. Antiviral and Antifungal of Ulva fasciata Extract: HPLC Analysis of Polyphenolic Compounds. Sustainability 2022, 14, 12799. https://doi.org/10.3390/su141912799.

83- Khalid S. Almaary 1 , Mohamed Taha Yassin 1,* , Abdallah M. Elgorban 1 , Fatimah O. Al-Otibi 1 , **Abdulaziz A. Al-Askar** 1 and Khalid Maniah 1 Synergistic Antibacterial Proficiency of Green Bioformulated Zinc Oxide Nanoparticles with Potential Fosfomycin Synergism against Nosocomial Bacterial Pathogens 2023, 11, 645 doi.org/10.3390.

84- WesamEldin I. A. Saber 1,* , **Abdulaziz A. Al-Askar** 2,* and Khalid M. Ghoneem 3Exclusive Biosynthesis of Pullulan Using Taguchi's Approach and Decision Tree Learning Algorithm by a Novel Endophytic Aureobasidium pullulans Strains 2023, 15, 1419.

85- Ashraf Abdel-Fattah Mostafa, Mohamed Taha Yassin, **Abdulaziz Abdulrahman Al–Askar**, Fatimah O. Al-Otibi Phytochemical analysis, antiproliferative and antifungal activities of different Syzygium aromaticum solvent extracts January 2023, 102362

86- Amr H Hashem; Amer M Abdelaziz; Mahmoud M Hassanin; **Abdulaziz A. Al-Askar**; Hamada AbdElgawad;Mohamed S Attia, Potential Impacts of Clove Essential Oil Nanoemulsion as Bio Fungicides against Neoscytalidium Blight Disease of Carum carvi L. *Agronomy* ,10 April 2023.

87- Saied, E (Saied, Ebrahim) ; Mekky, AE (Mekky, Alsayed E.) ; **Al-Askar, AA (Al-Askar, Abdulaziz A.)** ; Hagag, AF (Hagag, Abdelrahman F.) ; Elbana, AA (El-bana, Abdullah A.) ; Ashraf, M (Ashraf, Mohamed) ; Walid, A (Walid, Abdelrahman) ; Nour, T (Nour, Taha) ; Fawzi, MM (Fawzi, Mahmoud M.) ; Arishi, AA (Arishi, Amr A.), Aspergillus terreus-Mediated Selenium Nanoparticles and Their Antimicrobial and Photocatalytic Activities, : MDPI,2023

88- Rubina Munir a,*, Sumera Zaib b, Imtiaz Khan c,*, Zirwa tul Islam a, Rosa M. Gomila d, Christopher John McAdam e, Colleen Hui Shiuan Yeow f, Jonathan M. White f, Tuncer H¨okelek g, **Abdulaziz A. Al-Askar** h, Eslam B. Elkaeed i, Antonio Frontera, Molecular Structure,2023

89- Sumera Zaib a , Aliya Ibrar b , ∗, Imtiaz Khan c , ∗, Nehal Rana a , Rosa M. Gomila d , Christopher John McAdam e , **Abdulaziz A. Al-Askar** f , Eslam B. Elkaeed g , Antonio Frontera, Insight into structural topology and supramolecular assembly of tetrahydrocarbazole-carbonitrile: On the importance of noncovalent interactions and urease inhibitory profile, Molecular Structure,2023.

90- Esraa Hamdy 1 , **Abdulaziz A. Al-Askar** 2 , Hamada El-Gendi 3 , Wael M. Khamis 4 , Said I. Behiry 5 , Franco Valentini 6 , Kamel A. Abd-Elsalam 7,* and Ahmed Abdelkhalek 1. Zinc Oxide Nanoparticles Biosynthesized by Eriobotrya japonica Leaf Extract: Characterization, Insecticidal and Antibacterial Properties 2023, 12, 2826. https://doi.org/10.3390/plants12152826.

91- Dalia G. Aseel 1,*, Seham A. Soliman 1 , **Abdulaziz A. Al-Askar** 2 , Amr Elkelish 3 , Toufic Elbeaino 4 and Ahmed Abdelkhalek 1. Trichoderma viride Isolate Tvd44 Enhances Potato Growth and Stimulates the Defense System against Potato Virus Y 2023, 9, 716. https://doi.org/10.3390/horticulturae9060716.

92- Wael A. Fathy 1,2,* , Hamada AbdElgawad 1,3 , Amr H. Hashem 4,* , Ehab Essawy 5 , Eman Tawfik 6 , **Abdulaziz A. Al-Askar** 7 , Mohamed S. Abdelhameed 1 , Ola Hammouda 1 and Khaled N. M. Elsayed 1. Exploring Exogenous Indole-3-acetic Acid's Effect on the Growth and Biochemical Profiles of Synechocystis sp. PAK13 and Chlorella variabilis. s 2023, 28, 5501. https://doi.org/10.3390/molecules28145501.

93- Esraa Hamdy 1 , **Abdulaziz A. Al-Askar** 2 , Hamada El-Gendi 3 , Wael M. Khamis 4 , Said I. Behiry 5 , Franco Valentini 6 , Kamel A. Abd-Elsalam 7,* and Ahmed Abdelkhalek 1,. Zinc Oxide Nanoparticles Biosynthesized by Eriobotrya japonicaLeaf Extract: Characterization, Insecticidal and Antibacterial Properties. 2023, 12, 2826. https://doi.org/10.3390/plants12152826.

94- Wael A. Fathy 1,2,* , Hamada AbdElgawad 1,3 , Amr H. Hashem 4,* , Ehab Essawy 5 , Eman Tawfik 6 , **Abdulaziz A. Al-Askar** 7 , Mohamed S. Abdelhameed 1 , Ola Hammouda 1 and Khaled N. M. Elsayed 1. Exploring Exogenous Indole-3-acetic Acid's Effect on the Growth and Biochemical Profiles of Synechocystis sp. PAK13 and Chlorella variabiliss. 2023, 28, 5501. https://doi.org/10.3390/molecules28145501.

95- **Abdulaziz A. Al-Askar** 1 , Amr H. Hashem 2,* , Nadeem I. Elhussieny 3,4 and Ebrahim Saied 2,*. Green Biosynthesis of Zinc Oxide Nanoparticles Using Pluchea indica Leaf Extract: Antimicrobial and Photocatalytic Activities. 2023, 28, 4679. https://doi.org/10.3390/molecules28124679.

96- Dina Elkobrosy 1 , **Abdulaziz A. Al-Askar** 2 , Hamada El-Gendi 3 , Yiming Su 4 , Rokaia Nabil 5 , Ahmed Abdelkhalek 1,* and Said Behiry 5,. Nematocidal and Bactericidal Activities of Green Synthesized Silver Nanoparticles Mediated by Ficus sycomorus Leaf Extract. 2023, 13, 1083. https://doi.org/10.3390/life13051083.

97- Sherien Sobhy 1 , **Abdulaziz A. Al-Askar** 2 , Elsayed K. Bakhiet 3 , Mohsen M. Elsharkawy 4 , Amr A. Arishi 5 , Said I. Behiry 6,* and Ahmed Abdelkhalek 1, Phytochemical Characterization and Antifungal Efficacy of Camphor (Cinnamomum camphora L.) Extract against Phytopathogenic Fungi. s 2023, 10, 189. https://doi.org/10.3390/separations10030189.

98- Ahmed A. Heflish 1 , Said I. Behiry 1,* , **Abdulaziz A. Al-Askar** 2 , Yiming Su 3 , Ahmed Abdelkhalek 4,* and Mohamed K. Gaber. Rhaphiolepis indica Fruit Extracts for Control Fusarium solani and Rhizoctonia solani, the Causal Agents of Bean Root Rot. 2023, 10, 369. https://doi.org/10.3390/separations10070369.

99- Amr H. Hashem, *a **Abdulaziz A. Al-Askar**,b Mohammad Reza Saeb,c Kamel A. AbdElsalam,d Ahmad S. El-Hawarya and Mohamed S. Hasanin . Sustainable biosynthesized bimetallic ZnO@SeO nanoparticles from pomegranate peel extracts: antibacterial, antifungal and anticancer activities. v., 2023, 13, 22918–22927.

100- Ebrahim Saied a , Ahmed S. Hussein b,⇑ , **Abdulaziz A. Al-Askar** c , Nadeem I. Elhussieny d,e , Amr H. Hashem a,. Therapeutic effect of biosynthesized silver nanoparticles on hypothyroidism induced in albino rats.2023 10.1016/j.ejbt.2023.06.001 0717-3458 .

101- Amr M. Shehabeldine1 · **Abdulaziz A. Al-Askar**2 · Hamada AbdElgawad3 · Fatouh. A. Hagras1 · Amr. A. Ramadan1 · Mohamed R. Kamel1 · Mohamed. A. Ahmed1 · Kareem. H. Atia1 · Amr H. Hashem1. Wound Dressing Scafold with High Anti-bioflm Performance Based on Ciprofoxacin-Loaded Chitosan-Hydrolyzed Starch Nanocomposite: In Vitro and In Vivo Study. 4 July 2023.

102- Amr H. Hashem 1 , **Abdulaziz A. Al-Askar** 2 , Józef Haponiuk 3 , Kamel A. Abd-Elsalam 4 and Mohamed S. Hasanin 5,*. Biosynthesis, Characterization, and Antifungal Activity of Novel Trimetallic Copper Oxide–Selenium–Zinc Oxide Nanoparticles against Some Mucorales Fungi. 2023, 11, 1380. https://doi.org/10.3390/microorganisms11061380.

103- Rubina Munir a,* , Sumera Zaib b , Imtiaz Khan c,* , Zirwa tul Islam a , Rosa M. Gomila d , Christopher John McAdam e , Colleen Hui Shiuan Yeow f , Jonathan M. White f , Tuncer Hokelek ¨ g , **Abdulaziz A. Al-Askar** h , Eslam B. Elkaeed i , Antonio Frontera d,* Complex interplay of hydrogen bonding, halogen bonding and π-interactions in methyl 2-(7-chloro-1H-pyrazolo[3,4-b]quinolin-1-yl) acetate: Synthesis, X-ray crystallography, energetic features and anti-urease efficacy. 10.1016/j.molstruc.2023.135625 Received 11 March 2023.

104- Seham A. Soliman 1 , **Abdulaziz A. Al-Askar** 2 , Sherien Sobhy 1 , Marwa A. Samy 1 , Esraa Hamdy 1 , Omaima A. Sharaf 3 , Yiming Su 4 , Said I. Behiry 5,* and Ahmed Abdelkhalek 1, Differences in Pathogenesis-Related Protein Expression and Polyphenolic Compound Accumulation Reveal Insights into Tomato–Pythium aphanidermatum Interaction. 2023, 15, 6551. https://doi.org/10.3390/su15086551.

105- Amer M. Abdelaziz 1,* , Deiaa A. El-Wakil 2 , Amr H. Hashem 1,* , **Abdulaziz A. Al-Askar** 3 , Hamada AbdElgawad 4 and Mohamed S. Attia 1. Efficient Role of Endophytic Aspergillus terreus in Biocontrol of Rhizoctonia solani Causing Damping-off Disease of Phaseolus vulgaris and Vicia faba. s 2023, 11, 1487.

106- Gaber Attia Abo-Zaid 1,*, Ahmed Salah Abdullah 1 , Nadia Abdel-Mohsen Soliman 1 , Ebaa Ebrahim El-Sharouny 2 , **Abdulaziz A. Al-Askar** 3 , Yiming Su 4 , Ahmed Abdelkhalek 5,* and Soraya Abdel-Fattah Sabry 2. Evaluation of Bio-Friendly Formulations from Siderophore-Producing Fluorescent Pseudomonas as Biocontrol Agents for the Management of Soil-Borne Fungi, Fusarium oxysporum and Rhizoctonia solani. e 2023, 13, 1418.

107- Helmy A. Aamer, **Abdulaziz A. Al-Askar**, Mahmoud A. Gaber, Rania El-Tanbouly, Ahmed Abdelkhalek*, Said Behiry*, Mohsen M. Elsharkawy, Przemysław Łukasz Kowalczewski, Sarah El-Messeiry. Extraction, phytochemical characterization, and antifungal activity of Salvia rosmarinus extract. 2023; 21: 20230124.

108- Wael M. Khamis 1 , Ahmed A. Heflish 2 , Sarah El-Messeiry 3 , Said I. Behiry 2,* , **Abdulaziz A. Al-Askar** 4 , Yiming Su 5 , Ahmed Abdelkhalek 6,* and Mohamed K. Gaber 7. Swietenia mahagoni Leaves Extract: Antifungal, Insecticidal, and Phytochemical Analysis. 2023, 10, 301.

109- Mohamed S. Hasanin a,⇑ , Amr H. Hashem b,⇑ , **Abdulaziz A. Al-Askar** c , Józef Haponiuk d , Ebrahim Saied b. A novel nanocomposite based on mycosynthesized bimetallic zinc-copperoxide nanoparticles, nanocellulose and chitosan: Characterization, antimicrobial and photocatalytic activities. (2023) 45–55.

110- **Abdulaziz A. Al-Askar** 1 , Shimaa Bashir 2 , Abdallah E. Mohamed 3 , Omaima A. Sharaf 4 , Rokaia Nabil 5 , Yiming Su 6 , Ahmed Abdelkhalek 2,* and Said I. Behiry 5,. Antimicrobial Efficacy and HPLC Analysis of Polyphenolic Compounds in a Whole-Plant Extract of Eryngium campestre. 2023, 10, 362.

111- Amr M. Shehabeldine 1,* , Ahmed S. Doghish 2,3,* , Walaa A. El-Dakroury 4 , Mahmoud M. H. Hassanin 5 , **Abdulaziz A. Al-Askar** 6 , Hamada AbdElgawad 7 and Amr H. Hashem 1,. Antimicrobial, Antibiofilm, and Anticancer Activities of Syzygium aromaticum Essential Oil Nanoemulsion. 2023, 28, 5812.

112- **Abdulaziz A. Al-Askar** 1 , Dalia G. Aseel 2 , Hamada El-Gendi 3 , Sherien Sobhy 2 , Marwa A. Samy 2 , Esraa Hamdy 2 , Sarah El-Messeiry 4 , Said I. Behiry 5 , Toufic Elbeaino 6,* and Ahmed Abdelkhalek 2. Antiviral Activity of Biosynthesized Silver Nanoparticles from Pomegranate (Punica granatum L.) Peel Extract against Tobacco Mosaic Virus. 2023, 12, 2103.

113- Mohamed S. ATTIA1 *, Mohamed H. SHARAF1 , Amr H. HASHEM1 , Amira Y. MAHFOUZ2 ,Ghadir E. DAIGHAM2 , **Abdulaziz A. AL-ASKAR**3 , Hamada ABDELGAWAD4 , Mahmoud S. OMAR1 , Ali E. THABET1 , Mahmoud M. ABDALMOHSEN1 , Yousef R. ELADLY1 , Amer M. ABDELAZIZ1. Application ofRhizopus microsporus Rhizopus microsporus andAspergillus oryzae Aspergillus oryzae to enhance the defense the defensecapacity of eggplant seedlings capacity of eggplant seedlings capacity of eggplant seedlings against Meloidogyne incognita Meloidogyne incognita. 2023. Received in revised form: 06 Aug 2023. Accepted: 21 Sep 2023. Published online: 25 Sep 2023.

114- Amr H. Hashem 1,* , **Abdulaziz A. Al-Askar** 2 , Hamada Abd Elgawad 3 and Amer M. Abdelaziz 1. Bacterial Endophytes from Moringa oleifera Leaves as a Promising Source for Bioactive Compounds. s 2023, 10, 395. https://doi.org/10.3390/separations10070395.

115- Khalid M. Ghoneem 1 , Deiaa A. El-Wakil 1 , Mohamed I. M. Ahmed 1 , Hisham M. Kamel 1 , Ehsan M. Rashad 1 , **Abdulaziz A. Al-Askar** 2,*, Elsherbiny A. Elsherbiny 3 and Amira A. Ibrahim 4,. Biodiversity of Rhizoctonia solani in Phaseolus vulgaris Seeds in East Delta of Egypt. 2023, 13, 1317. https://doi.org/10.3390/agronomy13051317.

116- Asmaa Ramadan 1, Mohamed O. Abdel-Monem 1, Noha K. El-Dougdoug 1, Alsayed E. Mekky 2,Shymaa A. Elaskary 3, **Abdulaziz A. Al-Askar** 4, Shimaa A Metwally 5 , Ahmed F. El-Sayed 6,7 ,Gehad AbdElgayed 8, Ebrahim Saied 2 and Mohamed Khedr 2,* 2,*Fully Characterized Effective Bacteriophages Specific against Antibiotic-Resistant Enterococcus faecalis, the Causative Agent of Dental Abscess.2024,60,501.https://doi.org/10.3390/medicina60030501.

117- Alsayed E. Mekky 1,*, Ahmed E. M. Abdelaziz 2 , Fady Sayed Youssef 3, Shymaa A. Elaskary 4, Aly A. Shoun 5,Eman A. Alwaleed 6, Mahmoud Ali Gaber 1, **Abdulaziz A. Al-Askar** 7, Alhadary M. Alsamman 1, Abdullah Yousef 8 ,Gehad AbdElgayed 9, Reda A. Suef 1 , Mohamed A Selim 1 , Ebrahim Saied 1 and Mohamed Khedr 1.Unravelling the Antimicrobial, Antibiofilm, Suppressing Fibronectin Binding Protein A (fnba) and cna Virulence Genes,Anti-Inflammatory and Antioxidant Potential of Biosynthesized Solanum lycopersicum Silver Nanoparticles.2024,60(3),515.https://doi.org/10.3390/medicina60030515.

118- Karrar A. Hamzah, **Abdulaziz Al-Askar**, Przemysław Kowalczewski, Ahmed Abdelkhalek*, Haitham H. Emaish, Said Behiry* .A comparative study of the antifungal efficacy and phytochemical composition of date palm leaflet extracts.2024,22,44. https://doi.org/10.1515/chem-2024-0044.

119- Yara Yassin1 · Dalia Aseel1 · Abdallah Khalil2 · Ahmed Abdel-Megeed3 · **Abdulaziz Al-Askar**4 · Toufic Elbeaino5 ·Hassan Moawad6. Said Behiry7 · Ahmed Abdelkhalek1. Foliar Application of Rhizobium leguminosarum bv. viciae Strain 33504-Borg201 Promotes Faba Bean Growth and Enhances Systemic Resistance Against Bean Yellow Mosaic Virus Infection.2024,81,6. https://doi.org/10.1007/s00284-024-03733-6.

120- Heba Fathy Abd-Elkhalek, Ali A. Badawy, **Abdulaziz A. Al-Askar**, Hamada Abd Elgawad, Amr Hosny Hashem, and Salem Salah Salem*.Biosynthesis and characterization of selenium and silver nanoparticles using Trichoderma viride filtrate and their impact on Culex pipiens.2024.13.0025.https://doi.org/10.1515/gps-2024-0025.

121- Heba Y. EL-BANNA1, **Abdulaziz A. ALASKAR**2*,Dragana Z. JAKOVLJEVIĆ3, Khaled ABDELAAL4*, Samia A. HAROUN5, Lina M. ABU-ZIADA5,Mohamed A. ABBAS5, Rasha M.E. GAMEL5. Essential oil constituents and secondary metabolites of Mentha viridis under tissue culture technique using violet visible light emitting diodes (LEDs).2024.52.13684. https://doi.org/10.15835/nbha52213684.

122- Ahmed Abdelkhalek1,*, Eman A. Abdelwahab2, Saad F. Elalem2, **Abdulaziz A. Al-Askar**3, Przemysław Ł. Kowalczewski4, Said Behiry5,*. Phytochemical composition and antifungal effectiveness of Phoenix dactylifera L. rachis extracts.2024.26.0037. https://doi.org/10.2478/pjct-2024-0037.

123- Noha M. Eldadamony a, Abeer A. Ghoniem b, **Abdulaziz A. Al-Askar** c, Attia A. Attia d, Mohammed S. El-Hersh b, Khaled M. Elattar e,*, Haifa Alrdahi f, WesamEldin I.A. Saber b,**. Optimization of pullulan production by Aureobasidium pullulans using semi-solid-state fermentation and artificial neural networks: Characterization and antibacterial activity of pullulan impregnated with Ag-TiO2 nanocomposite.2024.269.132109. https://doi.org/10.1016/j.ijbiomac.2024.132109.

124- Khaled M Elattar 1, Abeer A Ghoniem 2, **Abdulaziz A Al-Askar** 3, Usama Bhgat El-Gazzar 4, Mohammed S El-Hersh 2, Elsherbiny A Elsherbiny 5, Noha M Eldadamony 6, WesamEldin I A Saber 2. Melanin Synthesized by the Endophytic Aureobasidium pullulans AKW: A Multifaceted Biomolecule with Antioxidant, Wound Healing, and Selective Anti-Cancer Activity.2024.24.1333. https://doi.org/10.2174/0115680266300091240730111333.

125- Ahmed ABDELKHALEK1*, Moustafa ELSHAER2, **Abdulaziz AL-ASKAR**3, Przemysław KOWALCZEWSKI4, Said BEHIRY5. Antimicrobial activities and metabolites profiling of Heliotropium bacciferum Forssk. methanolic extract.2024.52.13602. https://doi.org/10.15835/nbha52313602.

126- Eman Jassim Mohammed 1, Ahmed E M Abdelaziz 2, Alsayed E Mekky 3, Nashaat N Mahmoud 3, Mohamed Sharaf 4 5, Mahmoud M Al-Habibi 6, Nehal M Khairy 7 8, **Abdulaziz A Al-Askar** 9, Fady Sayed Youssef 10, Mahmoud Ali Gaber 3, Ebrahim Saied 3, Gehad AbdElgayed 11, Shimaa A Metwally 12, Aly A Shoun 13. Biomedical Promise of Aspergillus Flavus-Biosynthesized Selenium Nanoparticles: A Green Synthesis Approach to Antiviral, Anticancer, Anti-Biofilm, and Antibacterial Applications.2024. 17.915. https://doi.org/10.3390/ph17070915.

127- Fathy M. Elkady1 Bahaa M. Badr2,3 Amr H. Hashem4 * Mohammed S. Abdulrahman1 Amer M. Abdelaziz4 **Abdulaziz A. Al-Askar**5 Gehad AbdElgayed6 Hany R. Hashem7*.Unveiling the Launaea nudicaulis (L.) Hook medicinal bioactivities: phytochemical analysis, antibacterial, antibiofilm, and anticancer activities.2024.15. 1454623. https://doi.org/10.3389/fmicb.2024.1454623.

128- Isabela Martins Bueno Gato 1, Carlos Eduardo da Silva Oliveira 2, Arshad Jalal 1, Vitória de Almeida Moreira 1, Amr H. Hashem 3, Bruno Horschut de Lima 1, Gabriel da Silva Leite 1, **Abdulaziz A. Al-Askar** 4, Leandro Alves Freitas 1, Hamada AbdElgawad 5, Selton Vinicius Domingos Ferreira 1, Leticia de Jesus Santana 1, Andréa de Castro Bastos 1, Fernando Shintate Galindo 6, Tiago Zoz 7 and Marcelo Carvalho Minhoto Teixeira Filho 1*.Nitrogen uptake, grain yield, and oil concentration of dwarf castor beans under nitrogen rates and inoculation of rhizobacteria in grasses–legumes rotation.2024.15. 1451514. https://doi.org/10.3389/fmicb.2024.1451514.

129- Mohamed K. Y. Soliman , Amr H. Hashem , **Abdulaziz A. Al-Askar** , Gehad AbdElgayed and Salem S. Salem. Green synthesis of silver nanoparticles from Bauhinia variegata and their biological applications.2024.13.0099. https://doi.org/10.1515/gps-2024-0099.

130- Fathy M. Elkady 1 , Bahaa M. Badr 2,3, Abdel-Aty E. Alfeky 1 , Mohammed S. Abdulrahman 1 , Amr H. Hashem 4,* , **Abdulaziz A. Al-Askar** 5 , Gehad AbdElgayed 6 and Hany R. Hashem 7,* Genetic Insights on Meropenem Resistance Concerning Klebsiella pneumoniae Clinical Isolates.2024, *14*(11), 1408; https://doi.org/10.3390/life14111408.

131- Mansour A.E. Bashar1, Abdelaaty Hamed2, Mohamed A. M. El-Tabakh1, Amr H. Hashem3*, Ahmed A. Zaki4, **Abdulaziz A.Al-Askar**5, Eman S.Abou-Amra6, Mohamed E. El-Beeh7, Ahmed B. M. Mehany8, Mohamed Shaaban9*, Amer M.Abdelaziz3, Khaled A. Shaaban10 & Ahmed I. Hasaballah11. Anticancer, antimicrobial, insecticidal and molecular docking of sarcotrocheliol and cholesterol from the marine soft coral Sarcophyton Trocheliophoru.2024Nov14;14(1):28028.doi: 10.1038/s41598-024-75446-6.

132- Khaled Abdelaal1*, **Abdulaziz Alaskar2*** and Yaser Hafez3.Effect of arbuscular mycorrhizal fungi on physiological, bio-chemical and yield characters of wheat plants (Triticum aestivumL.) under drought stress conditions. (2024) 24:1119 https://doi.org/10.1186/s12870-024-05824-9.

133- Helmy A. Aamer, **Abdulaziz A. Al-Askar**, Rania El-Tanbouly, Eman A. Abdelwahab, Przemysław Ł. Kowalczewski, Sarah El-Messeiry, Ahmed Abdelkhalek*, Said Behiry Phytochemical analysis of Bienertia sinuspersici extract and its antioxidant and antimicrobial activities.2024. https://doi.org/10.1515/opag-2022-0399.

134- Said Behiry , Eman A. Abdelwahab , **Abdulaziz A. Al-Askar** , Przemysław Kowalczewski and Ahmed Abdelkhalek..HPLC and GC–MS analyses of phytochemical compounds in Haloxylon salicornicum extract: Antibacterial and antifungal activity assessment of phytopathogens.2024. https://doi.org/10.1515/chem-2024-0115.

135- Wael Khamis, **Abdulaziz Al-Askar**, Przemysław Kowalczewski, Ahmed Abdelkhalek*, Said Behiry* Phytochemical composition and insecticidal activity of Acokanthera oblongifolia (Hochst.) Benth & Hook.f. ex B.D.Jacks. extract on life span and biological aspects of Spodoptera littoralis (Biosd.).2024. https://doi.org/10.1515/opag-2022-0394.

136- Helmy A. Aamer, Saad F. Elalem, **Abdulaziz A. Al-Askar**, Omaima A. Sharaf, Mahmoud A. Gaber, Przemysław Kowalczewski, Said Behiry, Ahmed Abdelkhalek. Antioxidant and antimicrobial activities of Salsola imbricata methanolic extract and its phytochemical characterization.2024 https://doi.org/10.1515/biol-2022-1011.

137- Yara Yassin , Dalia Aseel, Abdallah Khalil, Ahmed Abdel-Megeed , **Abdulaziz Al-Askar**, Toufc Elbeaino, Hassan Moawad, Said Behiry, Ahmed Abdelkhalek. Foliar Application of Rhizobium leguminosarum bv. viciae Strain 33504-Borg201 Promotes Faba Bean Growth and Enhances Systemic Resistance Against Bean Yellow Mosaic Virus Infection.2024. https://doi.org/10.1007/s00284-024-03733-6.

138- Mohamed Elnouby, Marwa Nabil, **Abdulaziz A. Al-Askar**, Przemysław Kowalczewski, Said Behiry and Ahmed Abdelkhalek.Copper oxide–ferric oxide nanocomposite: Synthesis, characterization, and antibacterial and antifungal properties.2024. DOI: https://doi.org/10.2478/msp-2024-0035.

139- **Abdulaziz A. Al-Askara**,*, Fatimah O. Al-Otibia , Gaber A. Abo-Zaidb , Ahmed Abdelkhalek. Diisooctyl phthalate, the major secondary metabolite of Bacillus subtilis, could be a potent antifungal agent against Rhizoctonia solani: GC-MS and in silico molecular docking investigations.2024. DOI: 10.21608/ejchem.2024.329947.10666.

140- **Abdulaziz A. Al-Askara**,*, Fatimah O. Al-Otibia , Gaber A. Abo-Zaidb , Ahmed Abdelkhalek. Gas chromatography-mass spectrometry comparative analysis of secondary metabolites produced by some Bacillus spp. as biocontrol agents against phytopathogenic fungi.2024. DOI: 10.21608/ejchem.2024.325178.10556.

141- **Abdulaziz Al-Askar*** 1; Fatimah O. Al-Otibi1; Gaber A. Abo-Zaid2; Ahmed Abdelkhalek. Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl), as the primary secondary metabolite of Bacillus spp., could be an effective antifungal agent against the soil-borne fungus, Sclerotium bataticola.2024. DOI: 10.21608/ejchem.2024.325664.10571.

142- Mohamed S.Attia1, Deiaa A. El-Wakil 2, Amr H. Hashem 1*, **Abdulaziz A.Al-Askar**3, HamadaAbdElgawad4, Rawan SaifAlotaibi5, Saad. A.Abdel-Kader6 & Amer M.Abdelaziz. Investigating the activity of Bacillus subtilis and Trichoderma harzianum to mitigate Fusarium wilt disease of diverse cultivars of Vicia faba.2025. DOI: 10.1038/s41598-025-99381-2.

143- **Abdulaziz A. Al-Askar**, Fatimah O. Al-Otibi, Mohamed T. Yassin, Gaber A. Abo-Zaid, Ahmed Abdelkhalek. Batch fermentation and GC-MS analysis of biocontrol agent, Bacillus amyloliquefaciens strain KSAS6 and its impact on soilborne fungus, Sclerotium bataticola.2025.
DOI: http://dx.doi.org/10.62940/als.v12i1.3583.

144- **Abdulaziz Al-Askara**,*, Fatimah Al-Otibia, Gaber A. Abo-Zaidb, Ahmed Abdelkhalek. Optimizing the batch fermentation process (agitation and aeration) of the biocontrol agent, Bacillus velezensis strain KSAM1, and its influence on soilborne fungus, Macrophomina phaseolina.2025. doi:10.25259/JKSUS_117_2024.

145- Mahmoud M. Refaey a,* , Farid Menaa b , Ayman Y. El-Khateeb c , **Abdulaziz A. Al-Askar** d , WesamEldin I.A. Saber e,** , Samar A. Zalma. Biofunctional ice cream from novely prepared oat milk for enhancing nutritional profile and supporting Lactobacillus acidophilus during frozen storage.2025. https://doi.org/10.1016/j.fbio.2025.106684.

146- Ehsan M. Rashad ·Mona S. Mahmoud ·Dalia M. K. Shaheen ·Mohamed I. M. Ahmed ·Khalid M. Ghoneem ·**Abdulaziz A. Al-Askar** · Farid Menaa · WesamEldin I. A. Saber. A novel bioformulation derived from seedborne endophytic Serratia proteamaculans enhances performance and disease resistance in peanuts.2025. https://doi.org/10.1007/s10658-025-03034-z.

147- Dalia Gamil Aseel 1 *, Omar M. Ibrahim2 , Toufic Elbeaino3 , **Abdulaziz A. Al-Askar** 4 * and Ahmed Abdelkhalek. Impacts of arbuscular mycorrhizal and Trichoderma viride on enhancing physicochemical properties and triggering defense mechanisms of tomato plants challenged with potato virus Y.2025. https://doi.org/10.3389/fpls.2025.1650871.

148- Ahmed Abdelkhalek1,2*, Karrar A. Hamzah3 , Toufic Elbeaino4 , Said I. Behiry 5 , Hassan Moawad6 and **Abdulaziz A. Al-Askar**. Rhizobium sophorae strain 33504-Borg2 as a biocontrol agent to mitigate the impacts of cucumber mosaic virus infection in faba bean.2025. https://doi.org/10.3389/fpls.2025.1661085.

149- Maha S. Elsayed a, Asaad F. Hassan b, Noha M. Eldadamony c, Ezzeldin G. Gadalla a, **Abdulaziz A. Al-Askar** d, Yosra A. Helmy e, WesamEldin I.A. Saber. Adsorptive removal of malachite green using date palm-derived activated carbon-filled mycelial biomass of *Trichoderma asperellum*.2025 https://doi.org/10.1016/j.matchemphys.2025.131358.

150- Khaled M. Elattar a, Noha M. Eldadamony b, Farid Menaa c, **Abdulaziz A. Al-Askar** d, WesamEldin I.A. Saber.Green synthesis and characterization of optimized Ag/SiO2 nanocomposite: A multifunctional nanomaterial with superior antibacterial and antioxidant properties.2025. https://doi.org/10.1016/j.matchemphys.2025.131375.

151- Dalia Gamil Aseel1*, Omar M. Ibrahim2, Toufic Elbeaino3**, Abdulaziz A. Al-Askar**4* and Ahmed Abdelkhalek, Impacts of arbuscular mycorrhizal and *Trichoderma viride* on enhancing physicochemical properties and triggering defense mechanisms of tomato plants challenged with potato virus Y.2025. https://doi.org/10.3389/fpls.2025.1650871.

152- Ahmed Abdelkhalek1,2*, Karrar A. Hamzah3, Toufic Elbeaino4, Said I. Behiry5, Hassan Moawad6 and **Abdulaziz A. Al-Askar**, Rhizobium sophorae strain 33504-Borg2 as a biocontrol agent to mitigate the impacts of cucumber mosaic virus infection in faba bean.2025. doi: 10.3389/fpls.2025.1661085.

153- **Abdulaziz A. Al-Askar**1*, Karrar A. Hamzah2, Dalia G. Aseel3, Ali H. El-Far4, Mohamed M. Abdelhamid5, Said Behiry5, Toufic Elbeaino6 & Ahmed Abdelkhalek, Rosemary essential oil: chemical composition, antiviral, cytotoxicity, and in silico molecular docking analysis against tobacco mosaic virus.2025. https://doi.org/10.1038/s41598-025-24071-y.

154- Seham M. A. El-Gamal1. Ehsan M. Rashad2· WesamEldin I. A. Saber3 · **Abdulaziz A. Al-Askar**4 · Yosra A. Helmy5 .Khalid M. Ghoneem2 · Amira A. Ibrahim, Thyme and cumin eones: a safe and effective strategy for controlling Alternaria radicina in coriander, enhancing growth, and reducing cytotoxicity.2025. https://doi.org/10.1007/s12298-025-01650-x.

155- Bassant Philip1, Asia R. Eid2, Shokry R. Bayoumi3, Ahmed Heflish1, Osama O. Atallah4, Eman A. Abdelwahab5, Monika Michalecka6, Said I. Behiry1*, Ahmed Abdelkhalek7,6* and **Abdulaziz A.Al-Askar**, Synergistic curative effects of Trichoderma hamatum and Rumex dentatus against Alternaria alternata, the causal agent of tomato leaf spot disease.2025. https://doi.org/10.3389/fpls.2025.1700051.

156- Maha S. Elsayed a,* , Asaad F. Hassan **Abdulaziz A. Al-Askar** d,** b , Noha M. Eldadamony , Yosra A. Helmy e c , Ezzeldin G. Gadalla , WesamEldin I.A. Saber, Adsorptive removal of malachite green using date palm-derived activated carbon-filled mycelial biomass of Trichoderma asperellum.2025.https://doi.org/10.1016/j.matchemphys.2025.131358.

157- Khaled M. Elattar a, Noha M. Eldadamony b, Farid Menaa c, **Abdulaziz A. Al-Askar** d, WesamEldin I.A. Saber ,Green synthesis and characterization of optimized Ag/SiO2 nanocomposite: A multifunctional nanomaterial with superior antibacterial and antioxidant properties.2025. https://doi.org/10.1016/j.matchemphys.2025.131375.