

CURRICULUM VITAE

MOHAMMAD FAISAL

PhD (AMU), Former Postdoctoral Fellow (CIB, Madrid, Spain), FLS & FSES



PERSONAL DETAILS

Professor of Plant Biotechnology

Department of Botany & Microbiology, College of Science, King Saud University

Riyadh-11451, Saudia Arabia ✉: mofaisal@ksu.edu.sa; faisalm15@yahoo.com

☎ +966 (011) 4675877; 📞 +966-556691485



<https://faculty.ksu.edu.sa/en/mofaisal>



<https://orcid.org/0000-0002-8176-1527>



https://researchgate.net/profile/Mohammad_Faisal5



<http://www.webofscience.com/wos/author/record/P-4672-2014>



https://scholar.google.com/citations?user=g29_88MAAAAJ&hl=en

RESEARCH INTERESTS/BRIEF PROFILE: Plant Biotechnology

I am working as a **Professor** in Botany & Microbiology Department, King Saud University, Saudi Arabia. I have earned global recognition by being listed among the **Top 2% of Scientists Worldwide by Stanford University and Elsevier**. I received Ph.D. degree in Botany with special emphasis in Plant Tissue Culture and Biotechnology from the Aligarh Muslim University, India. I was a Postdoctoral Fellow at the **Biological Research Centre (CIB-CSIC), Madrid, Spain, under the Program of Ministry Science & Innovation, Spain** and at the Botany Department of AMU, India under the **DST Fast-track scheme for Young Scientist by the DST, Govt. of India**. I also spent time as a **Visiting-Fellow at the Kangwon National University, South Korea**, to learn some advanced techniques in in vitro culture and genetic engineering.

My research integrates **Plant Biotechnology** and **Environmental Ecology** to develop in vitro regeneration-based biotechnological systems and nanotechnology-enabled strategies that enhance plant resilience, improve productivity, and promote environmental sustainability. I focus on tissue culture-driven **regeneration, conservation, and micropropagation of endangered and medicinally valuable plants** using advanced TC systems such as **organogenesis, somatic embryogenesis, and synthetic seed technology**, optimizing responses through **growth regulators, PEG, and nanoparticle-mediated signaling**. I also assess the **effects of engineered nanoparticles and heavy metal toxicity and accumulation** on plant physiology, metabolism, and ecological health. My work focuses on their influence on **photosynthetic performance, antioxidant metabolism, nutrient homeostasis, and stress signaling**, along with **bioaccumulation, trophic transfer, and food chain risks under wastewater irrigation**. By integrating **tissue culture, nanotechnology, and ecophysiology**, my research contributes to **crop resilience, biodiversity conservation, and environmental sustainability**.

I've published over **180 research articles** in globally esteemed, peer-reviewed journals, **accumulating nearly 7748 citations for my works with an h-index of 45**. I hold memberships of several academic bodies/societies including International Association of Plant Biotechnology, USA. I serve in editorial boards of several peer-reviewed journals in the area of plant biology including Plant Cell, Tissue & Organ Culture of the Springer Nature and Plant Biotechnology Reports, Elsevier Sciences. I **actively participate in disseminating knowledge in my research area**. In addition to peer reviewed journal publications, I have edited 07 books published by the **Springer Nature** in the area of plant tissue culture and related biotechnologies. Recently, my team and I achieved success in translating two books titled "**Plant Biotechnology and Genetics: Principles, Techniques, and Applications**" and "**Environmental Sustainability: Role of Green technologies**" into Arabic, officially published by the KSU Press.

I have been honored with multiple awards in recognition of my accomplishments and contributions, including **Research Excellence Award-2025** by the AFTEFS, **Excellence of Research Award-2023** by the ISAHRD, **Outstanding Scientist Award-2021** by VDGOD Professional Association, **SESR Fellow** and **Plant Biotechnologist Award-2017** by the Society of Scientific and Educational Research (SESR), and **Scientist of the Year Award-2015** by the National Environmental Science Academy. I was recently elected as the **Fellow of the Linnean Society of London, UK**. Currently, I serve as an International Panel Expert of the **Czech Academy of Sciences (CAS), Czech Republic** and external faculty assessor in several Universities.

EDUCATION

BSc (Hons)	(1997)	AMU, Aligarh, India	Botany
MSc	(2000)	AMU, Aligarh, India	Botany (Plant Tissue Culture & Biotechnology)
MPhil	(2002)	AMU, Aligarh India	Botany (Plant Tissue Culture & Biotechnology)
PhD	(2006)	AMU, Aligarh India	Botany (Plant Tissue Culture & Biotechnology)
Postdoc	(2007-09)	AMU, Aligarh India	Plant Tissue Culture & Biotechnology
Postdoc	(2010-11)	CIB, Madrid, Spain	Plant Cell Biotechnology

PhD thesis title: *Tissue Culture and Plant Regeneration Studies in Tylophora indica & Rauvolfia tetraphylla*

RESEARCH ACTIVITIES/APPOINTMENTS: 16 Years of experiences after PhD

Position	Institutes/University	Dates
Professor	Department of Botany & Microbiology, College of Science, King Saud University (KSU), Saudi Arabia.	21 Aug 2023 – Current
Associate Professor	Department of Botany & Microbiology, College of Science, King Saud University (KSU), Saudi Arabia.	29 Nov 2017 – 20 Aug 2023
Assistant Professor	Department of Botany & Microbiology, College of Science, KSU, Saudi Arabia	30 Sept 2011 – 28 Nov 2017
Post-Doctoral Fellow	Centro de Investigaciones Biológicas, CSIC, Madrid, Spain.	01 July 2010 – 31 July 2011
Young Scientist (Post-Doctoral Fellow)	Department of Botany, Aligarh Muslim University (AMU), Aligarh, India.	01 Aug 2007 – 31 Aug 2009
Senior Research Fellow	Department of Botany, AMU, Aligarh India.	01 June 2004 – 31 May 2007
Project Fellow	Department of Botany, AMU, Aligarh India.	12 July 2011 – 31 May 2004

PARTICIPATION IN RESEARCH PROJECTS:

Projects Titles & Funding Agency	Position	Time span
➤ Effect of Plant Cover Conservation on Carbon Sequestration in Different Habitat of Saudi Arabia, NCVC, Saudi Arabia	Co-Investigator	2025-2026
➤ DNA Fingerprinting and Genetic Relatedness in Arabian Oryx (<i>Oryx leucoryx</i>), NCW, Saudi Arabia	Co-Investigator	2023-2025
➤ Environmental Biotechnology - Research Group Project (RG-175), Deanship of Scientific Research, King Saud University (KSU)	Principal Investigator	2020-2021
➤ Environmental Biotechnology - Research Group Project (RG-175), Deanship of Scientific Research, KSU	Principal Investigator	2018-2019
➤ Environmental Biotechnology - Research Group Project (RGP-VPP-175), Deanship of Scientific Research, KSU	Principal Investigator	2016-2018
➤ Genetic transformation in elite cultivars of tomato for developing disease resistance. NPST, Saudi Arabia	Principal Investigator	2015-2017
➤ Development of protocols for in vitro multiplication and germplasm preservation of <i>Ruta chalepensis</i> . KACST, Saudi Arabia	Principal Investigator	2015-2016
➤ Environmental Biotechnology - Research Group Project (RGP-VPP-175), Deanship of Scientific Research, KSU	Co-Investigator	2013-2014
➤ Molecular analysis of genetic diversity and <i>in vitro</i> approaches for conservation medicinal plants. DST, India	Principal Investigator	2007-2009

HONOURS, AWARDS AND FELLOWSHIPS:

- **Research Excellence Award (2025)** by the AFTEFS in **National Conference on Scientific Innovations in Agriculture, Humanities and Allied Sciences for Better Public Health and Environment**. 19-20 September 2025, Madhav University, India,
- **Excellence of Research Award (2023)** by the ISAHRD in International Conference “**Innovative Approaches in Agriculture, Horticulture & Allied Sciences**” 29-31 March 2023, SGT University, Chandigarh, India.
- **Fellow (2021), the Linnean Society of London**, London UK
- **Outstanding Scientist Award (2021)** in the International Scientist Awards on Engineering, Science and Medicine, by the **VDGOOD Professional Association**.
- **Appointed-International Evaluator/Panel Expert (2020)** by the Czech Academy of Sciences (CAS), Prague, Czech Republic.
- **Member of the Board of the Examination** to adjudicate the thesis for the award of Degree of Doctor of Philosophy, **Chennai University**, Chennai, India.
- **Fellow, Society for Educational & Scientific Research (SESR)**, India.
- **Plant Biotechnologist Award (2017)** by the **Society for Educational & Scientific Research (SESR)**, India.
- **Best Poster Award**, International Conference on Current Trends in Biosciences (CTBio-2017).
- **Scientist of the Year Award-2015**, National Environmental Science Academy (NESA), New Delhi, India.
- **Post-Doctoral Fellowship (2010-2011), Spanish Ministry of Science and Innovation** to work at the Centro de Investigaciones Biológicas (CIB), CSIC, Madrid, Spain.
- **Visiting Scientist**, 15 Oct. 2008-15 Dec. 2008, **Kangwon National University, Chuncheon, 200-701, South Korea**.
- **Awarded National Scholarship (2008)** by the Govt. of Slovak Republic to learn the Advanced Techniques of Plant Proteomics at the Institute of Genetics and Biotechnology
- **Junior Scientist of the Year Award-2007** in the field of Plant Biotechnology by the National Environmental Science Academy (NESA), New Delhi, India.
- **Senior Research Fellowship (2004-07)** by the Council of Scientific and Industrial Research (CSIR), Govt. of India, New Delhi.
- **Best Paper Award (2003)** MAAS, India.

PROFESSIONAL TRAININGS:

- **Molecular Docking** Workshop January 13, 2024, NextGen Life Sciences Pvt. Ltd., Delhi, India.
- Visited Madrid Spain for training on **Cell & Molecular Biology Techniques**, 17-26 January 2017 at Centro de Investigaciones Biológicas, Biological Research Centre (CIB), CSIC, Madrid, Spain.
- **Cell & Molecular Biology Techniques**, 12-19 November 2013, Centro de Investigaciones Biológicas, **Biological Research Centre (CIB), CSIC, Madrid, Spain**
- **CIMAP Winter School – 2006 (CWS-2006): Recent Techniques in Structural and Functional Genomics**, 15-24 December 2006 at Central Institute of Medicinal & Aromatic Plants, Lucknow, India.
- Short-term training course in **Plant Tissue Culture: Technique to Technology**, 07-18 January 2002 at Tata Energy Research Institute (TERI), New Delhi, India.

PhD THESIS SUPERVISION:

1. Ecological Characteristics and In Vitro Regeneration in *Artemisia monosperma* – A Sand Dune Stabilizing Plant **(2023)**.
2. In vitro regeneration, morphogenesis and assessment of genetic stability using molecular markers and flow cytometry of *Ruta graveolens* **(2021)**.

3. Comparative *de novo* transcriptome analysis of *Ruta graveolens* L. plants to identify genes involved in biosynthesis of flavonoids (2020).

EDITORIAL ACTIVITIES/REVIEWER IN REFEREED JOURNALS:

- Editor : Biotechnology Reports, Elsevier Science.
- Associate Editor: Ornamental Plant Research (OPR)
- Associate Editor: Plant Cell, Tissue & Organ Culture, Springer Nature.
- Associate Editor: Journal of Horticultural Science and Biotechnology, Taylor & Francis.
- Academic Editor: Evidence-Based Complementary and Alternative Medicine.
- Editorial Board : Biotechnology and Biotechnological Equipment, Taylor & Francis.
- Editorial Board : Clinical Complementary Medicine and Pharmacology, Elsevier Science
- Editorial Board : Industrial Crops and Products, Elsevier Science.
- Editorial Board: : Austin Journal of Plant Biology, Austin Publications LLC, USA.
- Review Editor : Plant Science – Functional Plant Ecology
- Review Editor : Plant Science – Plant Metabolism and Chemodiversity for Frontiers
- Review Editor : Plant Science – Toxicogenomics for Frontiers in Genetics and Toxicology
- Reviewer : Plant Cell, Tissue & Organ Culture (PCTOC), Springer Science.
- Reviewer : Biotechnology & Biotechnological Equipment, Taylor & Francis.
- Reviewer : Industrial Crops and Products, Elsevier Science.
- Reviewer : Biologia Plantarum, Springer Science.
- Reviewer : Plant Biotechnology Reports, Springer Science.
- Reviewer : Applied Biochemistry & Biotechnology, Springer Science.
- Reviewer : Annals of Applied Biology, Blackwell Publishing, UK.

MEMBERSHIPS IN PROFESSIONAL BODIES:

- Fellow, the Linnean Society of London, London UK
- Fellow, Society for Educational & Scientific Research, India.
- Member, International Association of Plant Biotechnology (IAPB).
- Member, Society for *In Vitro* Biology, USA.
- Member, Indian Botanical Society.
- Member, National Environmental Science Academy, India.

MEMBERSHIPS IN COMMITTEES/OTHER ACTIVITIES:

- Member of **International Evaluator/Panel Expert** (2020), the Czech Academy of Sciences (CAS), Prague, Czech Republic.
- Member of the **Committee of Graduate Students Admission**, Botany & Microbiology Department, King Saud University (2020-Current).
- Member of the **Committee for Academic Accreditation** (BOTANY Program) for PhD and Master Courses, Botany & Microbiology Department, King Saud University (2018-Current).
- Member of the **Committee for Academic Accreditation** (BOTANY Program) for Graduate Courses, Botany & Microbiology Department, King Saud University (2018-Current).
- Member of the **Board of the Examination** to adjudicate the thesis for the award of Degree of Doctor of Philosophy, Chennai University, Chennai, India (2020-21).
- Member of the **Board of the Examination** to adjudicate the thesis for the award of Degree of Doctor of Philosophy, Aligarh Muslim University, Aligarh, India (2019-Current).

SOCIAL/COMMUNITY SERVICES:

- Organized a workshop “Tomato Workshop: Disease and Management (2019) in local tomato’s farm house at Dulum, Riyadh to interact with students, researcher and local tomato growers.
- Supervised student to participate in Science Olympiad (2014) for a project entitled “Effect of mobile radiation on wheat”.
- Lectured and interacted with local people on conservation of medicinal plants through tissue culture at Shada Mountain (Jabal), Saudi Arabia (2014).
- Workshop and interaction with the school children for awareness and conservation of mangroves at Farsan Island, Saudi Arabia (2016).
- Developed methods/protocols for conservation of some rare/endangered plants and published in international journals.
- Working on phytotoxicity of some xenobiotics and the results achieved can be adopted by the environmental protection agencies to safeguard ecological and human health.

PUBLICATIONS:

- Papers published in refereed Journals : **182**
- Books edited : **07**
- Books translated : **02**
- Conferences/symposia attended : **40**

MAJOR MEDIA OF RESEARCH PUBLICATIONS:

Name of Journal	Publisher	Impact Factor
1. The Plant Cell	ASPB, USA	13.10
2. Journal of Hazardous Materials	Elsevier Science	12.20
3. Int. J. Biol. Macromolecules	Elsevier Science	8.05
4. Biological Research	Biomed Central	7.63
5. Journal of Environmental Sciences	Elsevier Science	6.79
6. Industrial Crops & Products	Elsevier Science	6.44
7. Journal of Biomolecular Structure Dynamics	Taylor & Francis	5.23
8. Molecules	MDPI	4.92
9. Journal of Plant Growth Regulation	Springer Nature	4.64
10. Plants	MDPI	4.50
11. Saudi Journal of Biological Sciences	Elsevier Science	4.40
12. Environmental Toxicology and Chemistry	Wiley	4.21
13. Frontiers in Plant Science	Frontiers Media	4.10
14. Agronomy	MDPI	3.70
15. Silicon	Springer Nature	3.40
16. South African Journal of Botany	Elsevier Science	3.10
17. Applied Biochemistry and Biotechnology	Springer Nature	3.09
18. Plant Cell, Tissue & Organ Culture (PCTOC)	Springer Nature	3.00
19. BioNanoSci	Springer Nature	3.00
20. Horticulturae	MDPI	2.92
21. Horticulture, Environment, and Biotechnology	Springer Nature	2.13
22. Agroforestry System	Springer Nature	2.41
23. Physiological and Molecular Plant Pathology	Elsevier Science	2.74
24. Acta Physiologiae Plantarum	Springer Nature	2.73

25. Plant Biotechnology Reports	Springer Nature	2.49
26. Annals of Applied Biology	Blackwell Publishing	2.76
27. In Vitro Cell. Dev. Biol. Plant	Springer Nature	2.34
28. Journal of Horticultural Science & Biotechnology	Taylor & Francis	1.91
29. Biotechnology Biotechnological Equipment	Taylor & Francis	1.76
30. J. Plant Biochemistry and Biotechnology	Springer Nature	1.52
31. Biologia Plantarum	Springer Nature	1.12

PUBLICATIONS IN ISI/REFEREED JOURNALS: 177

1. **Faisal, M.,** Ozcinar A.B., Faizan M., Sultan H., Habib, Y., Alatar, A.A., and Pathirana, R. (2025) Recuperative potential of nano-biochar to alleviate arsenic toxicity in soybean (*Glycine max*): modulation of uptake, morphological and biochemical properties. **Environmental Sci.: Nano**, 2025, DOI <https://doi.org/10.1039/D5EN00227C>
2. Malik, I.S., Khan, Z.I., Ahmad, K. Nameed M., Akhtar, S., Ashfaq, A., **Faisal M.**, Alatar A.A., et al. (2025) Food chain risk assessment of cadmium accumulation and the relationships among diversely irrigated pasture-reared ruminants. **Scientific Reports** 15, 34868 (2025). <https://doi.org/10.1038/s41598-025-13628-6>
3. Manokari, M., **Faisal, M.**, Alatar, A.A. *et al.* (2025) Polyethylene glycol (PEG) improved macro- and micro-morphological traits of in vitro shoots of *Hedyotis biflora* (L.) Lam. **Acta Physiol Plant** 47, 83 (2025). <https://doi.org/10.1007/s11738-025-03827-z>
4. Manokari M, Prajapati SR, Patel RM, Jani MD, **Faisal M**, Singh RK, Alatar AA, Shekhawat MS (2025) In vitro regeneration for ex situ conservation of *Ochradenus lakhpatensis* R.M. Patel & Prajapati (Resedaceae) - an endangered shrub of Gujarat, India. **Plant Cell Tiss Organ Cult** 162, 84 (2025). <https://doi.org/10.1007/s11240-025-03208-x>
5. Akhtar, S., Muneeb, A., Khan, Z.I. Saba I., Ahmad K., **Faisal M.**, Alatar A.A., et al. (2025) Long term urban wastewater irrigation drives zinc bioaccumulation and health risks in contaminated vegetables. **Scientific Reports** 15, 21290 (2025). <https://doi.org/10.1038/s41598-025-06026-5>
6. Melliti, M., Hamdi, A., Horchani, M., dos Santos, E.d.J.B., Ben Jannet, H., Faisal, M., Alatar, A.A., Iriti, M., de Oliveirae, M.S. and Edziri, H. (2025) Multifaceted Study of *Medicago marina* Essential Oil: Chemical Composition, Antidiabetic, and Phytotoxic Insights via In Vitro and In Silico Approaches. **Chem. Biodiversity** e01574. <https://doi.org/10.1002/cbdv.202501574>
7. **Faisal, M.**, Bilmez Ozcinar, A., Karadeniz, E. et al. (2025) Supplementation of silicon oxide nanoparticles mitigates the damaging effects of arsenic stress on photosynthesis, antioxidant mechanism and nitrogen metabolism in *Brassica juncea*. **Scientific Reports** 15, 21476 (2025). <https://doi.org/10.1038/s41598-025-04553-9>
8. M., M., Jogam, P., **Faisal, M.**, Alatar AA, Shekhawat MS (2025) Meta-Topolin-induced organogenesis in *Sphagneticola trilobata* (L.) Pruski via fascicular cambium activation and transverse thin cell layers. In Vitro Cell. Dev. Biol. - Plant <https://doi.org/10.1007/s11627-025-10559-9>
9. Bouomrine S., Melliti M., Harzallah-Skhiri F., Jannet H.B., **Faisal M.**, Alatar A.A., Flamini G. & Edziri H (2025) Identification of Secondary Metabolites from *Origanum majorana* L. (Lamiaceae) Essential Oil Cultivated in Island of Djerba; Antibiofilm, Anticoagulant and Phytotoxic Properties. *Chemistry Africa* (2025). <https://doi.org/10.1007/s42250-025-01336-7>
10. Manokari M, **Faisal, M.**, Alatar AA, Shekhawat MS (2025) Strigolactone (GR24) mediated in vitro flowering, seed production, and regeneration of plants in *Hedyotis biflora* (L.) Lam. *Journal of Horticultural Science and Biotechnology*, 1–9. <https://doi.org/10.1080/14620316.2025.2513699>

11. Manokari M, Faisal, M., Alatar AA, Shekhawat MS (2025) *In vitro* regeneration and micro-morpho-anatomical characterization of leaves towards epiphytic adaptation in *Aechmea bracteata* (Sw.) Griseb. In Vitro Cell. Dev. Biol. - Plant **61**, 258–267. <https://doi.org/10.1007/s11627-024-10478-1>
12. Munir M., Ahmad K., Khan Z.I., Akhtar S., Nadeem M., Ashfaq A, **Faisal M.**, Alatar A.A., Nazir H.M., Malik I.S. (2025) Trophic transfer of arsenic in the food chain from selected crops grown in long-term wastewater contaminated soil. **Agricultural Water Management** 309: 2025, 109345. <https://doi.org/10.1016/j.agwat.2025.109345>
13. Mani, M., **Faisal, M.**, Alatar, A.A., & Shekhawat M.S. (2025) Unveiling the stimulatory effect of silicon nanoparticles on the direct regeneration and micro-structural developments in *Cadaba trifoliata* (Roxb.) Wight & Arn. **Environmental Science Nano** **12**, 292-301; <https://doi.org/10.1039/D4EN00640B>
14. Cokuraj M, Manokari M, Faisal, M., Alatar AA, Shekhawat MS (2025) Synergistic effects of growth regulators and silicon nanoparticles on enhancing morpho-structural stability in *Vitex agnus-castus* L. plantlets. **South African Journal of Botany** 2025;177: 50-509. <https://doi.org/10.1016/j.sajb.2024.12.024>
15. Dogan Y., **Faisal M.**, Faizan M & Alatar AA (2024) Seed Priming with Zinc Oxide Nanoparticles and/or Calcium Ion: Alleviation Potential for Salt Toxicity in Tomato (*Solanum lycopersicum*) through Modulation of Physiochemical Attributes and Antioxidant Enzyme Activity. **Russ. J. Plant Physiol.** 71: 223. <https://doi.org/10.1134/S102144372460867X>
16. Manokari M., **Faisal M.**, Alatar A.A. & Shekhawat M.S. (2024) Optimization of in vitro regeneration of *Ferocactus peninsulæ* (Barrel Cactus) through transverse thin cell layer (tTCL) culture: a strategy for large-scale propagation. **Plant Cell Tiss. Organ Cult.** 159, 48 (2024). <https://doi.org/10.1007/s11240-024-02910-6>
17. Khan T.A., Ahmad Aqeel, Saeed T, Yusuf M., **Faisal M.**, & Alatar A.A. (2024) Investigating the influence of selenium and epibrassinolide on antioxidant activity, proline accumulation, and protein expression profiles in wheat plants experiencing heat and drought stress. **Frontier in Plant Science.** 15-2024, <https://doi.org/10.3389/fpls.2024.1441483>
18. Manokari M., **Faisal M.**, Alatar A.A. Shekhawat M.S. (2024) Direct Organogenesis in *Ferocactus peninsulæ* through Areole Activation Using Meta-Topolin. **Haseltonia** 31(1), 89-98, (18 October 2024). <https://doi.org/10.2985/026.031.0110>
19. **Faisal M.**, Faizan M., Soysal S. & Alatar A.A. (2024) Synergistic application of melatonin and silicon oxide nanoparticles modulates reactive oxygen species generation and the antioxidant defense system: A strategy for cadmium tolerance in rice. **Frontier in Plant Science.** 15-2024, <https://doi.org/10.3389/fpls.2024.1484600>
20. Mani, M., **Faisal, M.**, Alatar, A.A., & Shekhawat M.S (2024) Activation of areole meristem using cytokinins and in vitro propagation of *Selenicereus undatus* (Haw.) D.R.Hunt (White-fleshed Dragon Fruit). **Bradleya** 42: 76–85.
21. Mani, M., **Faisal, M.**, Alatar, A.A., & Shekhawat M.S. (2024) Microencapsulation of betacyanins accumulated calli, short-term cold storage, and retrieval of callus in *Selenicereus undatus* (Haw.) D.R. Hunt. **South African Journal of Botany** 173 (2024) 279-283.
22. Mani M., **Faisal M.**, Alatar A. A., & Shekhawat M. S. (2024). Silicon nanoparticle(s) induced morpho-anatomical traits and improved micropropagation of white fleshed dragon fruit [*Selenicereus undatus*(Haworth)]. **Phosphorus, Sulfur, and Silicon and the Related Elements** 199 (7–9): 598–606. <https://doi.org/10.1080/10426507.2024.2408774>
23. Manokari M., **Faisal M.**, Alatar A.A. Shekhawat M.S. (2024) In vitro Regeneration and Structural and Physiological Modifications in the Foliages of *Cadaba trifoliata* (Roxb.) Wight & Arn.: An Endemic Tree of the Family Capparaceae. **Russ. J. Plant Physiol.** 71, 122 (2024). <https://doi.org/10.1134/S1021443724606293>

24. Manokari, M., Badhepuri, M.K., **Faisal, M.** & Shekhawat M.S (2024) Micro-structural responses of *Pisonia grandis* R. Br. (Nyctaginaceae) to growth regulators for in vitro regeneration: a study on an avenue tree in urban landscapes. **Trees** (2024). <https://doi.org/10.1007/s00468-024-02563-0>
25. Mani, M., **Faisal, M.**, Alatar, A.A., & Shekhawat M.S. (2024) *In vitro* propagation and assessment of the impact of nano silicon on growth and structural developments in *Neomarica longifolia* (Link & Otto) Sprague (Yellow Iris). **South African Journal of Botany** 171 (2024) 147-155.
26. Mani, M., **Faisal, M.**, Alatar, A.A., Singh R.K. & Shekhawat M.S. (2024) Nano-silicon stabilized biometric and foliar micro-morpho-anatomical traits during in vitro propagation of *Cyperus rotundus* L. – A model C4 ecotype. *Industrial Crops and Products*. 218, 15 October 2024, 118852.
27. Alatar, A.A., Qahtan, A.A. & **Faisal, M.** (2024) Eco-friendly synthesis of silver nanoparticles: unraveling their influence on callus proliferation, secondary metabolite production, and antioxidant activities in *Ruta chalepensis* L. **Plant Cell Tiss Organ Cult** 157, 55 (2024). <https://doi.org/10.1007/s11240-024-02778-6>
28. **Faisal M.**, Faizan M. & Alatar, A.A. (2024) Metallic allies in drought resilience: Unveiling the influence of silver and zinc oxide nanoparticles on enhancing tomato (*Solanum lycopersicum*) resistance through oxidative stress regulation. **Plant Physiology and Biochemistry**. V 212, July 2024, 108722.
29. Rajput, B.S., Manokari, M., Solanki, N.J., Sandhya D., **Faisal M.**, Alatar A.A. & Shekhawat M.S. (2024) Silver nanoparticle-induced in vitro flowering in *Dendrocalamus strictus* (Roxb.) nees and genetic fidelity assessment of regenerants using molecular markers. **Molecular Biology Report** 51, 501 (2024). <https://doi.org/10.1007/s11033-024-09472-y>
30. Mani, M., **Faisal, M.**, Alatar, A.A., Joshi N., & Shekhawat M.S (2024) Silver nitrate mediated improvement in micropropagation and amelioration of micro-morpho-anatomical structures in *Oxystelma esculentum* (L.f.) Sm. **In Vitro Cell. Dev. Biol. - Plant** 60: 238–247. <https://doi.org/10.1007/s11627-024-10417-0>
31. Ahmad S., Alshammari Q.T., Rafi Z., Rehman S., Khan M.Y., **Faisal M.** & Alatar A.A. (2024) Generation of Autoantibodies in Metal-catalyzed Oxidatively Damaged DNA in Various Cancer Subjects. **Curr Med Chem**. 31(5):640-648.
32. Manokari M., Faisal M., Alatar A.A. Dolezal K. & Shekhawat M.S. (2024) Strigolactone analogue GR24 mediated somatic embryogenesis from leaf tissues of *Santalum album* L. **In Vitro Cell. Dev. Biol. -Plant** 60: 39–49. <https://doi.org/10.1007/s11627-023-10395-9>
33. Manokari M., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. (2024) Micro-morpho-anatomical changes in leaf structure of plantlets during in vitro propagation (micropropagation) of *Gardenia jasminoides* J. Ellis **Vegetos** 37, 107–116. <https://doi.org/10.1007/s42535-023-00577-6>.
34. Manokari M., **Faisal, M.** Alatar A.A., Barboni D. & Shekhawat M.S. (2024) Silicon Nanoparticles on the Enhanced Micropropagation of *Hemidesmus indicus* (L.) R. Br. ex Schult. **Silicon** 16: 775–782.
35. Ochatt, S., Abdollahi, M.R., Akin, M., Bello Bello J.J., Eimert K., **Faisal M.**, & Nhut D.T. (2023) Application of nanoparticles in plant tissue cultures: minuscule size but huge effects. **Plant Cell Tiss Organ Cult** 155, 323–326 (2023).
36. Qahtan, A.A., Alatar, A.A. & Faisal, M. (2023) In vitro regeneration, phytochemical profiling and antioxidant activity in *Ruta chalepensis* plants established from alginate encapsulated synthetic seeds. **South African Journal of Botany** 161: 575-585.
37. Saquib Q., Schwaiger S., Alilou M., Ahmed S., Siddiqui M.A., Ahmad J., **Faisal M.**, Abdel-Salam E.M., Wahab R., Al-Rehaily A.J., et al. (2023) Marine Natural Compound (Neviotin A) Displays

Anticancer Efficacy by Triggering Transcriptomic Alterations and Cell Death in MCF-7 Cells. **Molecules** 28(17):6289.

38. Manokari M., M., Dey, A., **Faisal, M.** Alatar A.A., Singh R.K. & Shekhawat M.S. (2023) In vitro Tuberization using Silicon Nanoparticles and short-term cold Storage of mini-tubers of *Dioscorea pentaphylla* L. **BioNanoSci.** 13: 2151-2158. <https://doi.org/10.1007/s12668-023-01185-z>
39. Raj M.C., Manokari M., Dey A. **Faisal M.**, Alatar A.A., Singh R.K. & Shekhawat M.S. (2023) Improvements in morphometric and structural traits of *Vitex trifolia* L. to exogenous application of nano-silicon in vitro. **South African Journal of Botany** 160: 613-621.
40. Rajput, D.S., Rathore, T.S., Ansari, S.A., **Faisal M.**, Alatar A., Abdel-Salam E.M., Shahzad A. (2023) Biochemical changes in embryogenic and non-embryogenic callus of *Bambusa nutans* Wall. during somatic embryogenesis. **Plant Cell Tiss Organ Cult.** <https://doi.org/10.1007/s11240-023-02559-7>
41. Hatshan M.R., Saquib Q., Siddiqui M.A., **Faisal M.**, Ahmad J., Al-Khedhairy A.A., Shaik M.R., Khan M., Wahab R., De Matteis V., et al. (2023) Effectiveness of Nonfunctionalized Graphene Oxide Nanolayers as Nanomedicine against Colon, Cervical, and Breast Cancer Cells. **International Journal of Molecular Sciences** 24(11): 9141.
42. Manokari, M., Dey, A., **Faisal, M.** Alatar A.A., Singh R.K., Shekhawat M.S. (2023) Silicon Nanoparticles (SiNPs) Positively Affect Morpho-Structural Differentiation in Micropropagated Plantlets of *Santalum album* L. **Silicon.** <https://doi.org/10.1007/s12633-023-02558-5>
43. Manokari M., Raj M.C., Dey A. **Faisal M.**, Alatar A.A., Singh R.K., Arumugam N. Shekhawat M.S. (2023) Development of stress tolerance in micropropagated plantlets of *Dioscorea pentaphylla* L. using seismic stress. **Plant Cell Tiss Organ Cult** 154: 507–517.
44. Alatar, A.A., Qahtan, A.A., Abdel-Salam, E.M., **Faisal, M.**, El-Sheikh, M.A. (2023) Development of an Efficient and Rapid Micropropagation Protocol for In Vitro Multiplication of *Maerua crassifolia* Forssk. **Forests** 14: 1160.
45. Manokari M., Raj M.C., Dey A. **Faisal M.**, Alatar A.A., Joshee N., Shekhawat M.S. (2023) Improvements in Morpho-Anatomical Traits of Adventitious Roots of *Hedyotis biflora* (L.) Lam. using Silicon Nanoparticles. **Silicon** <https://doi.org/10.1007/s12633-023-02484-6>.
46. Manokari M., Jayaprakash K., Raj M.C., Dey A. **Faisal M.**, Alatar A.A., Joshee N., Shekhawat M.S. (2023) In vitro micro-morphometric growth modulations induced by N6 cytokinins (Meta-Topolin and 6-benzylaminopurine) in *Ceropegia juncea* Roxb. - A rare medicinal climber. **South African Journal of Botany** 157: 656-666.
47. Manokari M., Raj M.C., Dey A. **Faisal M.**, Alatar A.A., Singh R.K., Shekhawat M.S. (2023) Silicon Nanoparticles Moderated Morphometric Deficiencies by Improving Micro-Morpho-Structural Traits in *Thunbergia erecta* (Benth.) T. Anderson. **Silicon** 15: 5415–5427.
48. Manokari M., Raj M.C., Dey A. **Faisal M.**, Alatar A.A., Joshee N., Shekhawat M.S. (2023) Silver nanoparticles improved morphogenesis, biochemical profile and micro-morphology of *Gaillardia pulchella* Foug cv. 'Torch Yellow'. **Plant Cell Tissue & Organ Culture** (2023). <https://doi.org/10.1007/s11240-023-02502-w>
49. Manokari M., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Joshee N., Shekhawat M.S. (2023) Structural alterations of *Cymbopogon citratus* (DC.) Stapf leaves and roots caused by silicon nanoparticles during *in vitro* propagation. **Industrial Crops & Products** 197: 116648.
50. **Faisal M.**, Faizan M., Tonny S.H., Rajput V.D., Minkina T., Alatar A.A., Pathirana R. (2023) Strigolactone-Mediated Mitigation of Negative Effects of Salinity Stress in *Solanum lycopersicum* through Reducing the Oxidative Damage. **Sustainability** 2023, 15, 5805.
51. Badhepuri M.K., M., Manokari M., Cokulraj M., Jogam P., Dey A., **Faisal M.**, Alatar A.A., Joshi N., Singisala N.R., Shekhawat M.S. (2023) Meta-Topolin enhanced direct shoot organogenesis

and regeneration from leaf explants of *Coleus forskohlii* (Willd.) Briq. **Industrial Crops and Products** 197: 116584.

52. Cokulraj M., Manokari M., Arumugam N., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M.S. (2023) Silicon Nanoparticles Mediated In vitro Flowering and Study of Pollen Viability in *Vitex negundo* L. **Silicon**. 15: 4861–4871
53. Manokari M., Badhepuri M.K., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Alok A., Jogam P., Shekhawat M.S. (2023) Seismic stress-mediated improvements in morphometry, foliar anatomy and biochemistry of in vitro grown plants of *Gardenia jasminoides* Ellis. **The Journal of Horticultural Science and Biotechnology** 98: 622-634.
54. **Faisal, M.**, Qahtan, A.A., Alatar, A.A. (2023) Thidiazuron Induced In Vitro Plant Regeneration, Phenolic Contents, Antioxidant Potential, GC-MS Profiles and Nuclear Genome Stability of *Plectranthus amboinicus* (Lour.) Spreng. **Horticulturae** 9: 277.
55. Jayaprakash, K., Manokari M., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Joshi N., Shekhawat M. S. (2023) Improved organogenesis and micro-structural traits in micropropagated plantlets of *Caralluma umbellata* Haw. in response to Meta-Topolin. **Plant Cell, Tissue and Organ Culture (PCTOC)** 153: 105–118.
56. Faraz, A., Faizan, M., D. Rajput, V., Minkina, T., Hayat, S., **Faisal, M.**; Alatar, A.A., Abdel-Salam, E.M. (2023) CuO Nanoparticle-Mediated Seed Priming Improves Physio-Biochemical and Enzymatic Activities of *Brassica juncea*. **Plants** 12: 803.
57. Manokari M., Cokulraj M., Badhepuri M.K., Dey A., **Faisal M.**, Alatar A.A., Singh R.K., Shekhawat M. S. (2023) Microstructural and histochemical modifications in leaves at successive stages of in vitro development of the terrestrial orchid *Spathoglottis plicata* Blume. **Horticulture, Environment, and Biotechnology** 64: 497–510
58. Manokari M., Cokulraj M., **Faisal M.**, Alatar A.A., Alok A., Dey A., Shekhawat M. S. (2023) Polyethylene-glycol modulated foliar anatomical and histochemical traits in *Coccoloba uvifera* (L.) L.: A salt and drought tolerant tree species. **South African Journal of Botany** 153: 28-36
59. Manokari M., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. (2023) Micro-morpho-anatomical transitions at various stages of in vitro development of *Crinum malabaricum* L. and Yadav: A critically endangered medicinal plant. **Plant Biology** 25: 142-151.
60. **Faisal, M.**, Seob, P.K., Kang, K.W., Sivanesan, I. (2022) In Vitro Propagation of *Cremastra appendiculata* var. *variabilis* by Asymbiotic Seed Germination. **Horticulturae** 8: 926.
61. Qahtan A.A.; **Faisal, M.**, Alatar A.A., Abdel-Salam E.M. (2022) Callus-Mediated High-Frequency Plant Regeneration, Phytochemical Profiling, Antioxidant Activity and Genetic Stability in *Ruta chalepensis* L. **Plants** 2022, 11, 1614.
62. Manokari M., Badhepuri M.K., Cokulraj M., Rajput B.S., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. (2022) High-throughput in vitro propagation and evaluation of foliar micro-morpho-anatomical stability in *Musa acuminata* cv. 'Grand Nain' using 6-benzoyladenine (BOA) in the nutrient medium. **Scientia Horticulturae** 304, 111334.
63. **Faisal M.**, Alatar A.A. (2022) Establishment of an Efficient In Vitro Propagation Method for a Sustainable Supply of *Plectranthus amboinicus* (Lour.) and Genetic Homogeneity Using Flow Cytometry and SPAR Markers. **Horticulturae** 8: 693.
64. Ahmad S., Al-Shaghdali K., Rehman S., Khan M.Y., Rafi Z., **Faisal M.**, Alatar A.A., Tahir I.K., Khan S., Ahmmad S., Shahab U. (2022) Nonenzymatic Glycosylation of Isolated Human Immunoglobulin-G by D-Ribose. **Cell Biochemistry and Functions** 40: 526-534.
65. Ahmad, N.; **Faisal, M.**, Ahmad, A., Alatar, A.A., Qahtan, A.A., Alok, A. (2022) Thidiazuron Induced In Vitro Clonal Propagation of *Lagerstroemia speciosa* (L.) Pers.—An Important Avenue Tree. **Horticulturae** 8: 359.

66. Manokari M., Priyadharshini S., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. **(2022)** Exogenous implications of silver nitrate on direct and indirect somatic embryogenesis and germination of cold stored synseeds of *Vanilla planifolia* Jacks. ex Andrews. **South African Journal of Botany** 150: 129-138.
67. Manokari M., Priyadharshini S., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. **(2022)** Amelioration of Morpho-structural and Physiological Disorders in Micropropagation of *Aloe vera* L. by Use of an Aromatic Cytokinin 6-(3-Hydroxybenzylamino) Purine. **Journal of Plant Growth Regulation** <https://doi.org/10.1007/s00344-022-10672-8>.
68. Ahmad, N., Fatima, N., **Faisal, M.**, Alatar, A.A., Pathirana, R. **(2022)** Photosynthetic Parameters and Oxidative Stress during Acclimation of Crepe-Myrtle (*Lagerstroemia speciosa* (L.) Pers.) in a *meta*-Topolin-Based Micropropagation System and Genetic Fidelity of Regenerated Plants. **Plants** 11: 1163.
69. Manokari M., Priyadharshini S., Cokulraj M., Jayaprakash K., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. **(2022)** Polyethylene glycol mediated improved shoot proliferation, foliar morpho-anatomy, and rooting of micropropagated shoots of *Spathoglottis plicata* Blume. **South African Journal of Botany** 146: 897-904.
70. Manokari M., Priyadharshini S., Cokulraj M., Dey A., **Faisal M.**, Alatar A.A., Alok A., Shekhawat M. S. **(2022)** Assessment of cell wall histochemistry of velamentous epiphytic roots in adaptive response of micropropagated plantlets of *Vanda tessellata* (Roxb.) Hook. ex G. Don. **Plant Cell, Tissue and Organ Culture (PCTOC)** 149:685–696.
71. Manokari M., Badhepuric M.K., Cokulraj M., Sandhyad D., Deye A., Kumar V, **Faisal M.**, Alatar A.A., Singh, R.K., Shekhawat M. S. **(2022)** Validation of meta Topolin in organogenesis, improved morpho-physio- chemical responses, and clonal fidelity analysis in *Dioscorea pentaphylla* L. - an underutilized yam species. **South African Journal of Botany** 145: 284-292.
72. Ahmad, A.; Ahmad, N., Anis, M., Faisal, M., Alatar, A.A., Abdel-Salam, E.M., Meena, R.P., Sivanesan, I. **(2022)** Biotechnological Advances in Pharmacognosy and In Vitro Manipulation of *Pterocarpus marsupium* Roxb. **Plants** 11: 247.
73. Qahtan A.A. **Faisal M.**, Alatar A.A., and Abdel-Salam E.M. **(2021)** High-frequency Plant Regeneration, Genetic Uniformity, and Flow Cytometric Analysis of *Regenerants in Ruta chalepensis* L. **Plants** **2021**, **10**, 2820. <https://doi.org/10.3390/plants10122820>
74. Al-Guwaiz S.M., Alatar A.A., El-Sheikh M.A., Al-Gehni G.A., **Faisal M.**, Qahtan A.A. and Abdel-Salam E.M. **(2021)** Role of Mangrove Rehabilitation and Protection Plans on Carbon Storage in Yanbu Industrial City, Saudi Arabia: A Case Study. **Sustainability** **2021**, **13**(23), 13149; <https://doi.org/10.3390/su132313149>
75. Upadhyay A., Shahzad A., Ahmad Z., **Faisal M.**, and Alatar A.A. **(2021)** High Frequency Direct Organogenesis, Genetic Homogeneity, 2 Chemical Characterization and Leaf Ultra-Structural Study of 3 Regenerants in *Diplocyclos palmatus* (L.) C. Jeffrey. **Agronomy** **11**(11), 2164; <https://doi.org/10.3390/agronomy11112164>
76. Rahman S., Song J., **Faisal M.**, Qahtan A.A., Alatar A.A., Akhter F., Ahmad S. and Hu Bo **(2021)** The Neoepitopes on Methylglyoxal- (MG-) Glycated Fibrinogen Generate Autoimmune Response: Its Role in Diabetes, Atherosclerosis, and Diabetic Atherosclerosis Subjects, *Oxidative Medicine and Cellular Longevity*, vol. 2021, Article ID 6621568, 17 pages, 2021. <https://doi.org/10.1155/2021/6621568>.
77. Husain A., Farooqui A., Khanam A., Sharma S., Mahfooz S, Shamim A., Akhter F., Alatar A.A., **Faisal M.** and Ahmad S. **(2021)** Physicochemical characterization of C-phycocyanin from *Plectonema* sp. and elucidation of its bioactive potential through in silico approach. *Cell and Molecular Biology* **67**(4): 67-81. DOI: 10.14715/cmb/2021.67.4.8.

78. Faizan M., Sehar S., Rajput V.D., Faraz A., Afzal S., Minkina T., Sushkova S., Adil M.F., Yu F., Alatar A.A., Akhter F. and **Faisal M. (2021)** Modulation of Cellular Redox Status and Antioxidant Defense System after Synergistic Application of Zinc Oxide Nanoparticles and Salicylic Acid in Rice (*Oryza sativa*) Plant under Arsenic Stress. **Plants** 10(11), 2254; <https://doi.org/10.3390/plants10112254>.
79. **Faisal M.**, Abdel-Salam E.M., and Alatar A.A. **(2021)** Artificial microRNA-based RNA interference and specific gene silencing for developing insect resistance in *Solanum lycopersicum*. **Agronomy**. 11(1): 136; <https://doi.org/10.3390/agronomy11010136>
80. Ahmad A., Ahmad N., Anis M., Alatar Abdel-Salam E.M., **Faisal M.**, **(2021)** Molecular Fingerprinting for Detecting Genetic Relationships among different Accessions of *Pterocarpus marsupium*. **Intl. J. Agric. Biol.** 25(3): 683-691.
81. Ahmad S., Khan M.S., Alouffi S., Khan S., Khan M. **Faisal M.**, and Shahab U **(2021)** Gold Nanoparticle-Bioconjugated Aminoguanidine Inhibits Glycation Reaction: An in vivo study in a diabetic animal model," **BioMed Research International**, vol. 2021, Article ID 5591851.
82. Rahman S., Alouffi S., **Faisal M.**, Qahtan A.A., Alatar A.A. and Ahmad S. **(2021)** Methylglyoxal mediated glycation leads to neo-epitopes generation in fibrinogen: Role in the induction of adaptive immune response. **Int. J. Biological Macromolecules** 175: 535-543.
83. Abdel-Salam E.M., **Faisal M.**, Alatar A.A. and Qahtan A.A., **(2021)** Genome-wide transcriptome variation landscape in *Ruta chalepensis* organs revealed potential genes responsible for rutin biosynthesis. **Journal of Biotechnology** 325(10): 43-56.
84. Nabi R., Alvi S.S., Shah A., Chaturvedi C.P., **Faisal M.**, Alatar A.A., Ahmad S. and Khan M.S. **(2021)** Ezetimibe attenuates experimental diabetes and renal pathologies via targeting the advanced glycation, oxidative stress and AGE-RAGE signalling in rats. **Archives of Physiology and Biochemistry** <https://doi.org/10.1080/13813455.2021.1874996>.
85. Qahtan A.A., Abdel-Salam E.M., Alatar A.A., El-Sheikh M.A., Gaafar Z.A. and **Faisal M. (2021)** Genetic Diversity and Structure Analysis of a Worldwide Collection of *Vicia faba* L. Genotypes using ISSR Markers. **Intl. J. Agric. Biol.** 25(3): 683-691.
86. **Faisal M.**, Abdel-Salam E.M., Alatar A.A. and Qahtan A.A. **(2021)** Induction of somatic embryogenesis in *Brassica juncea* L. and analysis of regenerants using ISSR-PCR and flow cytometer. **Saudi Journal of Biological Sciences** 28(1): 1147-1153.
87. Khan H., Waseem M., **Faisal M.**, Alatar A.A. Qahtan A.A., and Ahmad S. **(2021)** Inhibitory effect of multimodal nanoassemblies against glycative and oxidative stress in cancer and glycation animal models. *BioMed Research International*, vol. 2021, Article ID 8892156, 17 p.
88. Ahmad A., Ahmad N., Anis M., Alatar A.A., Qahtan A.A., **Faisal M.**, **(2021)** Gibberellic acid and thidiazuron promote micropropagation of an endangered woody tree (*Pterocarpus marsupium* Roxb.) using in vitro seedlings. **Plant Cell Tissue & Organ Culture** 144: 449-462.
89. Abdel-Salam E.M., Alatar A.A. Qahtan A.A., and **Faisal M. (2020)** De novo Comprehensive Transcriptome Assembly and Analysis from different Organs of *Ruta chalepensis* Revealed Genes Involved in Rutin Biosynthesis. **Intl. J. Agric. Biol.** 24: 1795-1805.
90. Nabi R., Alvi S.S., Shah S.M., Ahmad S., **Faisal M.**, Alatar A.A. and Khan M.S. **(2020)** A biochemical & biophysical study on in-vitro anti-glycating potential of iridin against d-Ribose modified BSA. **Archives of Biochemistry and Biophysics** 686: 108373.
91. Sharma N., **Faisal M.**, Alatar A.A., Khan M.K.A., Ahmad S. and Salman A. **(2020)** Design, SAR, and metabolism study of Cruciferae family compound (Spirobrassinin) and its analogs for antiangiogenic potential targeting Hsp90. **Current Proteomics** DOI: 10.2174/1570164617999200731000719.
92. Tang R., **Faisal M.**, Alatar A.A., Alsaleh A.N., Saeed M. and Ahmad S. **(2020)** Glycation of heme-protein, "myoglobin" by 3-deoxyglucosone: Implications in immunogenicity. **Journal of King Saud University – Science** 32: 2598-2602.

93. **Faisal M.**, Alatar A.A., Abdel-Salam E.M. and Qahtan A.A. (2020) Effects of 4-CPPU on in vitro multiplication and sustainable generation of *Hibiscus rosa-sinensis* L. 'White Butterfly'. **Saudi Journal of Biological Sciences** 27: 412-416.
94. Khan I., **Faisal M.**, Mehfooz S., Alatar A.A., and Ansari I.A. (2020) Andrographolide Induces Apoptosis and Cell Cycle Arrest through Inhibition of Aberrant Hedgehog Signaling Pathway in Colon Cancer Cells. **Nutrition and Cancer** DOI: <https://doi.org/10.1080/01635581.2020.1828942>.
95. Rahman S., **Faisal M.**, Alatar A.A. and Ahmad S. (2020) Physico-chemical Changes Induced in the Serum Proteins Immunoglobulin G and Fibrinogen Mediated by Methylglyoxal. **Current Protein & Peptide Science** 21: 916-923.
96. Saquib Q., Ahmed S., Ahmad M.S., Al-Rehaily A.J., Siddiqui M.A., **Faisal M.**, Ahmad J., Alsaleh A.N., Alatar A.A., Al-Khedhairi, A.A. (2020) Anticancer efficacies of persicogenin and homoeriodictyol isolated from *Rhus retinorrhoea*. **Process Biochemistry** 95: 186-196.
97. Abdel-Salam E.M., **Faisal M.**, Alatar A.A., Saquib Q. and Alwathnani H.A. (2020) Comparative Analysis between Wild and Cultivated Cucumbers Reveals Transcriptional Changes during Domestication Process. **Plants** 9(1): 63.
98. Cherian T., Ali K., Saquib Q., **Faisal M.**, Wahab R. and Musarrat J. (2020) *Cymbopogon citratus* Functionalized Green Synthesis of CuO-Nanoparticles: Novel Prospects as Antibacterial and Antibiofilm Agents. **Biomolecules** 10(2): 169.
99. Khan H., Alouffi S., Alatar A.A. Qahtan A.A., **Faisal M.**, and Ahmad S. (2020) Glycoxidative profile of cancer patient serum: A clinical result to associate glycation to cancer. **Glycobiology** 30: 152-158.
100. Saquib Q., Xia P., Siddiqui M.A., Zhang J., Xei Y., **Faisal M.**, Ansari S.M., Alwathnani H.A., Alatar A.A., Al-Khedhairi A.A. and Zhang X. (2020) High-throughput transcriptomics: An insight on the pathways affected in HepG2 cells exposed to nickel oxide nanoparticles. **Chemosphere** 244: 125488.
101. Al-Shehri M.A., El-Sheikh M.A., Al-Farhan A.H., Arif I.A., Rajakrishnan R., Alatar A.A., **Faisal M.**, Basahi R.A., Al-Abb G.A. (2020) Ecology of endangered *Prunus korshinskyi* Hand. - Mazz. in Jabal Al-Lauz, Saudi Arabia: Plant associations, size structure, and nutritional screening. **Saudi Journal of Biological Sciences** 27: 147-156.]
102. Ali, K., Cherian, T., Fatima S., Saquib, Q., **Faisal M.**, Alatar A.A., Musarrat J. and Al-Khedhairi A.A. (2020) Role of Solvent System in Green Synthesis of Nanoparticles. In: Green Synthesis of Nano Particles: Applications and Prospects. (Eds.) Saquib Q. **Faisal M.** Khedhairi A.A. & Alatar A.A., Springer Nature, pp. 53-74.
103. Ali, K., Cherian, T., Fatima S., Saquib, Q., **Faisal M.**, Alatar A.A., Musarrat J. and Al-Khedhairi A.A. (2020) Surface Engineering Techniques Associated with Stability, Biocompatibility, and Toxicity of Nanoparticles (Eds.) Saquib Q. **Faisal M.** Khedhairi A.A. & Alatar A.A., Springer Nature, pp. 75-101.
104. **Faisal M.**, Abdel-Salam E.M., Alatar A.A., Saquib Q., Alwathnani H.A. and Tomas Canto (2019) Genetic Transformation and siRNA-Mediated Gene Silencing for Aphid Resistance in Tomato. **Agronomy** 9(12): 893.
105. Siddiqui Z., **Faisal M.**, Alatar A.A. and Ahmad S. (2019) Prevalence of auto-antibodies against D-ribose-glycated-hemoglobin in diabetes mellitus. **Glycobiology** 29: 409–418.
106. Li J.W., Zhang X.C., Wang M.R., Bi W.L., **Faisal M.**, Teixeira da Silva, J.A., Volk G.M. and Wang Q.C. (2019) Development, progress and future prospects in cryobiotechnology of *Lilium* spp. **Plant Methods** 15: 125-137.
107. Okla M.K., Alamri S.A., Alatar A.A., Hegazy A.K., Al-Ghamdi A.A. Ajarem J.S., **Faisal M.**, Abdel-Salam E.M., Ali H.M., Salem M.Z.M., and Abdel-Maksoud M.A. (2019) Antioxidant, Hypoglycemic, and Neurobehavioral Effects of a Leaf Extract of *Avicennia marina* on

Autoimmune Diabetic Mice. **Evidence-Based Complementary and Alternative Medicine**. 2019, Article ID 1263260, <https://doi.org/10.1155/2019/1263260>. IF=1.98.

108. Köster P., Wallrad L., Edel K.H., **Faisal M.**, Alatar A.A. & Kudla J. (2019) The battle of two ions: Ca²⁺ signaling against Na⁺ stress. **Plant Biology**. 21 Suppl. 1:39-48.
109. Wahab R., Khan F., Gupta A., Wiggers H., Saquib Q., **Faisal M.** and Ansari S.M. (2019) Microwave plasma-assisted silicon nanoparticles: Cytotoxic, molecular, and numerical responses against cancer cells. **RSC Advances** 9 :13336-13347.
110. Siddiqui Z., **Faisal M.**, Alatar A.A., Ahmad S. (2019) Glycation of hemoglobin leads to the immunogenicity as a result of neopeptide generation. **International Journal of Biological Macromolecules**. 123-427-235.
111. Qahtan A.A., Abdel-Salam E.M., Alatar A.A., Wang Q.C., and **Faisal M.** (2019) An Introduction to Synthetic Seeds: Production, Techniques, and Applications. In: **Synthetic Seeds: Germplasm Regeneration, Preservation and Prospects (Eds.)** Faisal M. and Alatar A.A. Springer Nature, pp. 1-20.
112. Guerriero G., Berni R., Muñoz-Sanchez J. A., Apone F., Abdel-Salam E.M., Qahtan A.A., Alatar A.A., Cantini C., Cai G., Hausman J.F., Siddiqui K.S., Hernández-Sotomayor S.M.T., **Faisal M.** (2018) Production of Plant Secondary Metabolites: Examples, Tips and Suggestions for Biotechnologists. **Genes** 9(6) 309-331.
113. **Faisal M.**, Alatar A.A., El-Sheikh M.A., Abdel-Salam E.M. Qahtan A.A. (2018) Thidiazuron induced in vitro morphogenesis for sustainable supply of genetically true quality plantlets of Brahmi. **Industrial Crops & Products** 118: 173–179.
114. Khan Mi, Ahmad N. Anis M, Alatar AA, **Faisal M.** (2018) In vitro conservation strategies for the Indian willow (*Salix tetrasperma* Roxb.), a vulnerable tree species via propagation through synthetic seeds. **Biocatalysis and Agricultural Biotechnology** 16: 17-21.
115. Sahab U., **Faisal M.**, Alatar A.A., Ahmad S. (2018) Impact of wedelolactone in the anti-glycation and anti-diabetic activity in experimental diabetic animals. **IUBMB Life** 70:547-552.
116. **Faisal M.**, Ahmad N., Anis M., Alatar A.A., Qahtan A.A. (2018) Auxin-cytokinin synergism *in vitro* for producing genetically stable plants of *Ruta graveolens* using shoot tip meristems. **Saudi Journal of Biological Sciences**. 25: 273-277.
117. Alouffi S., **Faisal M.**, Alatar A.A., Ahmad S. (2018) Oxidative Modification of LDL by Various Physicochemical Techniques: Its Probable Role in Diabetes Coupled with CVDs. **BioMed Research International**. 2018, Article ID 7390612, 7 pages.
118. Ali K., Abul Qais F., Dwivedi S., Abdel-Salam E.M., Ansari S.M., Saquib Q., **Faisal M.**, Al-Khedhairi A.A., Al-Shaeri M., Musarrat J. (2018) Titanium dioxide nanoparticles preferentially bind in subdomains IB, IIA of HSA and minor groove of DNA. **Journal of Biomolecular Structure Dynamics**. 10:1-13.
119. Ansari S.M., Saquib Q., Attia S.M., Abdel-Salam E.M., Alwathnani H.A., **Faisal M.**, Alatar A.A., Al-Khedhairi A.A. & Musarrat J. (2018) Pendimethalin induces oxidative stress, DNA damage, and mitochondrial dysfunction to trigger apoptosis in human lymphocytes and rat bone-marrow cells. **Histochemistry and Cell Biology** 149: 127-141.
120. Eslam M. Abdel-Salam, Ahmad A. Qahtan, **Mohammad Faisal**, Quaizer Saquib, Abdulrahman A. Alatar and Abdulaziz A. Al-Khedhairi (2018) Phytotoxic Assessment of Nickel Oxide (NiO) Nanoparticles in Radish. In: **Phytotoxicity of Nanoparticles** (Eds.) **Faisal M.**, Saquib Q., Alatar A.A., & Khedhairi A.A. Springer Nature, pp. 269-284.
121. Ahmad N., **Faisal M.**, Hussain S.A. and Anis M. (2018) Regulation of Morphogenesis and Improvement in Shoot Multiplication in Vitex Species Using Thidiazuron. In: **Thidiazuron: From Urea Derivative to Plant Growth Regulator** (Eds.) Ahmad N and **Faisal M.**, Springer Nature, pp. 343-350.
122. Saquib Q. Siddiqui M.A., Ahmad J., Ansari S.M., **Faisal M.**, Wahab R., Al-Khedhairi A.A. and Musarrat J. (2018) Nickel Oxide Nanoparticles Induced Transcriptomic Alterations in HEPG2

- Cells. In: **Cellular and Molecular Toxicology of Nanoparticles** (Eds.) Saquib Q. **Faisal M.** Khedhairi A.A. & Alatar A.A., Springer Nature, pp. 429-438.
123. Hussain S.A., Ahmad N., Anis M., Alatar A.A. and **Faisal M.**, (2018) Role of Thidiazuron in Modulation of Shoot Multiplication Rate in Micropropagation of *Rauvolfia* Species. In: **Thidiazuron: From Urea Derivative to Plant Growth Regulator** (Eds.) Ahmad N and **Faisal M.**, Springer Nature, pp. 429-438.
 124. Gil K.E., Kim W.Y., Lee H.J., **Faisal M.**, Saquib Q., Alatar A.A., Park, C.M. (2017) ZEITLUPE contributes to a thermoresponsive protein quality control system in *Arabidopsis*. **Plant Cell** 29(11): 2882-2894.
 125. Javed S.B., Alatar A.A., Anis M. and **Faisal M.** (2017) Synthetic seeds production and germination studies, for short term storage and long-distance transport of *Erythrina variegata* L.: A multipurpose tree legume. **Industrial Crops and Products** 105: 41-46.
 126. Saquib Q., Attia S.M., Ansari S.M., Al-Salim A., **Faisal M.**, Alatar A.A., Musarrat J., Zhang X., Al-Khedhairi A.A. (2017) p53, MAPKAPK-2 and caspases regulate nickel oxide nanoparticles induce cell death and cytogenetic anomalies in rats. **Int. J. Biol. Macromolecules**. 105: 228-237.
 127. Alatar A.A., **Faisal M.**, Abdel-Salam E.M., Canto T., Saquib Q., Javed S.B., El-Sheikh M.A., Al-Khedhairi A.A. (2017) Efficient and reproducible *in vitro* regeneration of *Solanum lycopersicum* and assessment genetic uniformity using flow cytometry and SPAR methods. **Saudi Journal of Biological Sciences** 24: 1430-1436.
 128. Javed S.B. Alatar A.A., Basahi R., Anis M. and **Faisal M.** (2017) Copper induced suppression of systemic microbial contamination in *Erythrina variegata* L. during in vitro culture L.: Combating endogenous infection. **Plant Cell, Tissue & Organ Culture**. 28: 249-258.
 129. Alatar A.A., Ahmad N., Javed S.B., Abdel-Salam E.M. and **Faisal M.** (2017) Two-way germination system of encapsulated clonal propagules of *Vitex trifolia* L.: an important medicinal plant. **Journal of Horticultural Science & Biotechnology**. 92: 175-182.
 130. Ahmed M.R., Anis M., Alatar A.A., **Faisal M.** (2017) *In vitro* clonal propagation and evaluation of genetic fidelity using RAPD and ISSR marker in micropropagated plants of *Cassia alata* L.: a potential medicinal plant. **Agroforestry System**. 91: 637-647.
 131. **Faisal M.**, Saquib Q., Alatar A.A., Al-Khedhairi A.A., Ahmed M., Ansari S.M., Alwathnani H.A., Dwivedi S., Musarrat J. & Praveen S. (2016) Cobalt oxide nanoparticles aggravate DNA damage and cell death in eggplant via mitochondrial swelling and NO signaling pathway. **Biological Research** 49(20): 1-13.
 132. Saquib Q., **Faisal M.**, Alatar A.A., Al-Khedhairi A.A., Ahmed M., Ansari S.M., Alwathnani H.A., Okla M.K., Dwivedi S., Musarrat J., Praveen S., Khan S.T., Wahab R. Siddiqui M.A. and Ahmad J. (2016) Genotoxicity of ferric oxide nanoparticles in *Raphanus sativus*: Deciphering the role of signaling factors, oxidative stress and cell death. **Journal of Environmental Sciences**. 47: 49-62.
 133. Shahid A., Ahmad N., Anis M., Alatar A.A. & **Faisal M.** (2016) Morphogenic responses of *Rauvolfia tetraphylla* L. cultures to Cu, Zn and Cd ions. **Rendiconti Lincei. Scienze Fisiche e Naturali** 27: 369-374.
 134. Saquib Q., Siddiqui M.A., Ahmeda J., Al-Salima A., Ansari S.M., **Faisal M.**, Al-Khedhairi A.A., Musarrat J. Alwathnani H.A., Alatar A.A. & Al-Arifi S.A. (2016) Hazards of low dose flame-retardants (BDE-47 and BDE-32): Influence on transcriptome regulation and cell death in human liver cells. **Journal of Hazardous Materials** 308: 37-49.
 135. Alatar A.A., **Faisal M.**, Hegazy A.K., Alwathnani H.A. & Okla M.K. (2015). Clonal in vitro multiplication of grey mangrove and assessment of genetic fidelity using single primer amplification reaction (SPAR) methods. **Biotechnology Biotechnological Equipment** 29: 1069-1074.

136. Elhag M., Hegazy A.K., Alatar A.A., Faisal M., El-Bana M., Bahrawi J.A., Al-Ghamdi A.A.M. **(2015)** Population demography and global sensitivity analysis of *Avicennia marina* on the eastern and western coasts of Saudi Arabia. **KOEDOE** 57: 1-9.
137. Garg V., Permar V., Parkhi V., Mani E., Alatar A.A., **Faisal M.** & Praveen S. **(2015)**. Differentiating tomato leaf curl viruses possessing mono/bi partite genomes using replicase gene-based PCR assay: implications for developing virus specific resistance. **J. Plant Biochem. Biotechnol.** 24:461-465.
138. Ahmad N., Alatar A.A., **Faisal M.**, Khan M.I., Fatima N., Anis M. and Hegazy A.K. **(2015)** Effect of copper and zinc on the in vitro regeneration of *Rauvolfia serpentina*. **Biologia Plantarum** 59: 11-17.
139. Kaur H., Yadav C.B., Alatar A.A., **Faisal M.**, Jyothsna P., Malathi, V.G. and Praveen S. **(2015)** Gene expression changes in tomato during symptom development in response to leaf curl virus infection. **J. Plant Biochem. Biotechnol.** 3: 347-354. DOI 10.1007/s13562-014-0280-8).
140. Hegazy A.K., **Faisal M.**, Alatar A.A., Kabeil H.F. and Enam M.H. **(2015)** Induced mutagenesis and genotoxicity by accumulated radionuclides in some edible plants cultivated in black sand soil detected by RAPD - DNA profiles and proteomics. **Fresenius Environmental Bulletin** 24(1): 343-354.
141. **Faisal M.**, Abdulrahman A. Alatar & Ahmad K. Hegazy **(2014)**. Thidiazuron induced in vitro multiplication of *Mentha arvensis* and evaluation of genetic stability by flow cytometry and molecular markers. **Industrial Crops & Products** 60: 100-106.
142. Permar V., Singh A., Pandey V. Alatar A.A., **Faisal M.**, Jain R.K., and Praveen S. **(2014)** Tospo viral infection instigates necrosis and premature senescence by micro RNA controlled programmed cell death in *Vigna unguiculata*. **Physiol. & Molecular Plant Pathology** 88: 77-84.
143. Hegazy A.K., Kabeil H.F., Al-Rowaily S.L., **Faisal M.**, Zayed K. and Doma E. **(2014)** Temporal genetic and spatial pattern variations within and among *Anastatica hierochuntica* populations. **Rendiconti Lincei-Scienze Fisiche e Naturali** 25: 155-166.
144. Siddiqui M.H., Al-Whaibi M.H., **Faisal M.** and Al Sahli A.A. **(2014)** Nano-silicon dioxide mitigates the adverse effects of salt stress on *Cucurbita pepo* L. **Environmental Toxicology and Chemistry** 33: 2429-2437.
145. Hegazy A.K. Alatar A.A. Thomas J., **Faisal M.**, Alfarhan A.H. and Krzywinski K. **(2014)** Compatibility and complementarity of indigenous and scientific knowledge of wild plants in the highlands of southwest Saudi Arabia. **Journal of Forestry Research** 25: 437-444.
146. **Faisal M.**, Saquib Q., Alatar A.A., Al-Khedhairi A.A., Hegazy, A.K., Musarrat, J. **(2013)** Phytotoxic hazards of NiO-nanoparticles in tomato: A study on mechanism of cell death. **Journal of Hazardous Materials** 250-51: 318-332.
147. Ahmad N., Khan M.I., Ahmed S., Javed, S.B., **Faisal M.**, Anis M., Khan S., Umair S.M. **(2013)**. Change in total phenolic content and antibacterial activity in regenerants of *Vitex negundo*. **Acta Physiologia Plantarum** 35: 791-800.
148. **Faisal M.**, Alatar A. and Hegazy A.K. **(2013)** Molecular and biochemical characterization in *Rauvolfia tetraphylla* plantlets grown from synthetic seeds following in vitro cold storage. **Applied Biochemistry and Biotechnology** 169: 408-417.
149. Kabeil H.F., Hegazy A.K. **Faisal M.** and Doma EA **(2013)** Genetic variations within and among populations of *Anastatica heirochuntica* at microscale geographic range. **Applied Ecology and Environmental Research** 11: 343-354.
150. A.K. Hegazy, S.L. Al-Rowaily, **M. Faisal**, A.A. Alatar, M.I. El-Bana, A.M. Assaeed **(2013)** Nutritive value and antioxidant activity of some edible wild fruits in the Middle East. **Journal of Medicinal Plants Research** 7: 938-946.

151. A.K. Hegazy, S.L. Al-Rowaily, H.F. Kabil, **M. Faisal**, M.H. Emam (2013) Variations of Plant Macronutrients and Secondary Metabolites Content in Response to Radionuclides Accumulation. **Journal of Bioremediation & Biodegradation** 4: 185-195.
152. Manzer H. Siddiqui, Mohamed H. Al-Whaibi, Ahmed M. Sakran, Hayssam M. Ali, Mohammed O. Basalah, **M. Faisal**, A. Alatar, Abdullah A. Al-Amri (2013) Calcium-induced Amelioration of Boron Toxicity in Radish. **Journal of Plant Growth Regulation** 32: 61-71.
153. Ahmad N., **Faisal M.** and Anis M. (2013) Role of PGR on in vitro shoot propagation in *Cyamopsis tetragonoloba* L. (Taub.): a drought tolerant grain legume. **Rendiconti Lincei-Scienze Fisiche e Naturali** 24: 7-12.
154. **Faisal M.**, Alatar A., Ahmad N., Anis M. and Hegazy A.K. (2012) An efficient and reproducible method for *in vitro* clonal multiplication of *Rauvolfia tetraphylla* L. and evaluation of genetic stability using DNA-based markers. **Applied Biochemistry and Biotechnology** 168: 1739-1752.
155. N. Ahmad, **M. Faisal**, N. Fatima and M. Anis (2012) Encapsulation of microcuttings for propagation and short-term preservation in *Ruta graveolens* L.: a plant with high medicinal value. **Acta Physiologiae Plantarum** 34: 2303-2310.
156. **M. Faisal**, A. Alatar, N. Ahmad, and M. Anis (2012) Assessment of genetic fidelity in *Rauvolfia serpentina* plantlets grown from synthetic (encapsulated) seeds following in vitro storage at 4 °C. **Molecules**. 17: 5050-5061.
157. Alatar A.A., **Faisal M.**, Hegazy AK and Alwathnani H. A. (2012) High frequency shoot regeneration and plant establishment of *Rauvolfia serpentina*-an endangered medicinal plant. **Journal of Medicinal Plants Research** 6: 3324-3329.
158. Shahzad A., **Faisal M.**, Ahmad N., Anis M., Alatar A.A. and Hend A.A. (2012) An efficient system for *in vitro* multiplication of *Ocimum basilicum* through node culture. **African Journal of Biotechnology** 11: 6055-6059.
159. Pilar S. Testillano, **Mohammad Faisal**, Héctor Rodríguez-Sanz, José Antonio Manzanera y M^a Carmen Risueño (2011) Pollen and somatic embryogenesis in *Quercus suber*: searching for common markers and features in two in vitro embryo developmental pathways. **SECIVT Novena Reunion, Spain**, April 27-29, 2011, p.65.
160. **Faisal M** and Anis M (2010) Changes in photosynthetic activity, pigment composition, electrolyte leakage, lipid peroxidation, and antioxidant enzymes during ex vitro establishment of micropropagated *Rauvolfia tetraphylla* plantlets. **Plant Cell, Tissue & Organ Culture** 99: 125-132.
161. Ahmad N., **Faisal M.**, and Anis M (2010) In vitro callus induction and plant regeneration from leaf explants of *Ruta graveolens* L. **South African Journal of Botany** 99: 125-132.
162. **Faisal M** and Anis M (2009) Effect of light irradiations on photosynthetic machinery and antioxidative enzymes during *ex vitro* acclimatization of *Tylophora indica* plantlets. **Journal of Plant Interactions** 5: 21-27.
163. Khan H, **Faisal M** and Anis M (2008) Plant regeneration via somatic embryogenesis in *Solanum molnigena* L. **Phytomorphology** 4: 153-157 *ISPM, India*.
164. **Faisal M**, Shahzad A and Anis M (2008) Somatic embryogenesis and plant regeneration from nodal explants in *Psoralea corylifolia* L. **International Journal of Plant Developmental Biology** 2: 111-113.
165. Anis M. Hussain MK, **Faisal M**, Shahzad A, Ahmad N, Siddique I & Khan H (2008). In vitro approaches for plant regeneration and conservation of some potential medicinal plants. In: **Pant Tissue Culture & Molecular Marker** (Eds.) Kumar A, Shekhawat NS & Sopory SK, I.K. International, Pvt. Ltd.- New Delhi-14, 407-419.
166. **Faisal M**, Ahmad N and Anis M (2007) An efficient micropropagation system for *Tylophora indica*: an endangered, medicinally important plant. **Plant Biotechnology Reports** 1: 155-161.

167. Shahzad A, **Faisal M** and Anis M (2007) Micropropagation through excised root culture of *Clitoria ternatea* L., and comparison between *in vitro* regenerated plants and seedlings. **Annals of Applied Biology** 150: 341-349.
168. **Faisal M** and Anis M (2007) Regeneration of plants from alginate-encapsulated shoots of *Tylophora indica* – an endangered medicinal plant. **Journal of Horticultural Science & Biotechnology** 82: 351-354.
169. **Faisal M**, Siddique I and Anis M (2006) *In vitro* rapid regeneration of plantlets from nodal explants of *Mucuna pruriens* L. (DC.) – a valuable medicinal plant. **Annals of Applied Biology** 148: 1-6.
170. **Faisal M** and Anis M (2006) Thidiazuron induced high frequency axillary shoot multiplication in *Psoralea corylifolia*. **Biologia Plantarum** 50: 437-440.
171. **Faisal M**, Siddique I and Anis M (2006) An efficient plant regeneration system for *Mucuna pruriens* L. (DC.) using cotyledonary node explants. **In Vitro Cell. Dev. Biol. Plant** 42: 59-64.
172. **Faisal M**, Ahmad N and Anis M (2005) Shoot multiplication in *Rauvolfia tetraphylla* L. using thidiazuron. **Plant Cell, Tissue & Organ Culture** 80: 187-190.
173. **Faisal M**, Singh S and Anis M (2005) *In vitro* regeneration and plant establishment of *Tylophora indica* (Burm. f.) Merrill: petiole callus culture. **In Vitro Cell. Dev. Biol. Plant**. 41: 511-515.
174. Anis M and **Faisal M** (2005) *In vitro* regeneration and mass multiplication of *Psoralea corylifolia* – an endangered medicinal plant. **Indian Journal of Biotechnology** 4: 216-264.
175. **Faisal M** and Anis M (2005) *In vitro* regeneration and mass propagation of *Ruta graveolens* L. **HortScience** 40: 1478-1480.
176. **Faisal M** and Anis M (2005) An efficient *in vitro* method for mass propagation of *Tylophora indica*. **Biologia Plantarum** 49: 257-260.
177. **Faisal M** and Anis M (2004) *In vitro* mass propagation and conservation of some endangered medicinal plants. In: D'Souza L., Anuradha M., Nivas S., Hegde S. & Rajendra K (Eds.) **Biotechnology for a Better Future, SAC Publications, India**, pp 82 - 91.
178. **Faisal M** and Anis M (2003) Rapid mass propagation of *Tylophora indica* Merrill via leaf callus culture. **Plant Cell, Tissue & Organ Culture** 75: 125-129.
179. Anis M, **Faisal M** and Singh SK (2003) Micropropagation of mulberry (*Morus alba* L.) through *in vitro* culture of shoot tip and nodal explants. **Plant Tissue Culture & Biotechnology** 13: 47-51. *PTCA, Bangladesh*.
180. **Faisal M** and Anis M (2002) Rapid *in vitro* propagation of *Rauvolfia tetraphylla* L. - an endangered medicinal plant. **Physiology & Molecular Biology of Plants** 8: 295-299. *India*.
181. Shahzad A, **Faisal M**, Husain MK and Siddiqui SA (2001) Micropropagation in *Hibiscus mutabilis* L. - an ornamental plant. **Bionotes** 3: 69. *India*.
182. Shahzad A, Husain MK, **Faisal M**, and Siddiqui SA (2001) Nodular callus formation and production of flower buds in vitro from shoot tip culture of *Helianthus annuus*. **Bionotes** 3: 61. *India*.

BOOKS PUBLISHED

1. Abdel-Salam E.M., Alatar A.A. & **Faisal M.**, (2022) Plant Biotechnology and Genetics: Principles, Techniques, and Applications. Published by the **King Saud University, Press**.
2. **Faisal M.**, Saquib Q., Alatar A.A. & Khedhairi A.A. (2020) Cellular and Molecular Toxicology of Heavy Metals. **Springer Nature**.
3. Saquib Q. **Faisal M.** Khedhairi A.A. & Alatar A.A. (2020) Green Synthesis of Nanoparticles: Applications and Prospects. **Springer Nature**.
4. **Faisal M.**, & Alatar A.A. (2019) Synthetic Seed: Germplasm Regeneration, Preservation & Prospects. **Springer Nature**.
5. Abdel-Salam E.M., Alatar A.A. & **Faisal M.**, (2019) Environmental Sustainability: Role of Green technology. Published by the **King Saud University, Press**.

6. **Faisal M., Saquib Q., Alatar A.A., Khedhairi A.A. (2018)** Phytotoxicity of Nanoparticles. **Springer Nature.**
7. Ahmad N. and **Faisal M. (2018)** Thidiazuron: From Urea to Plant Growth Regulators. **Springer Nature.**
8. Saquib Q. **Faisal M.** Khedhairi A.A. & Alatar A.A. **(2018)** Cellular and Molecular Toxicology of Nanoparticles. **Springer Nature.**
9. **Faisal M., Anis M. and Alatar A.A. (2012)** Plant Tissue Culture: An Effective Tool of Biotechnology for Conservation of Medicinal Plants. Lambert Academic Publisher.

WORKSHOP/CONFERENCES/SYMPOSIA PRESENTATION/ATTENDED

1. **Molecular Docking** Workshop **13 January 2024**, NextGen Life Sciences Pvt. Ltd., Delhi, India.
2. Webinar on **"Women Science and Society"** **08 January 2024**, organized online by Bioingene Kolkata, India.
3. Webinar on **"The Potential of Genome Editing for Sustainable Agriculture"** **23 May 2024**, organized online by Bioingene Kolkata, India.
4. Online module **"How has the pandemic impacted public scrutiny and confidence in research"** **20 January 2023**, Elsevier Researcher Academy.
5. Webinar on **"Electrification and Sustainable Energy Systems to Improve Agriculture and Rural Areas"** **18 January 2023**, MDPI.
6. Webinar on **"Use of Genetics and Genomics to Improve the Productivity and Profitability of Smallholder Livestock Farmers"** **12 October 2022**, MDPI.
7. International Webinar on **"Root of the Second Green Revolution"** **11 October 2022**, Organized by Bioingene Kolkata, India.
8. Research Square Webinar **"Research Integrity: How Preprinting Can Enhance Trust in Research"** **22 September 2022**, Research Square.
9. **"Author workshop for early researcher"** **20 September 2022**, King Saud University, Saudi Arabia.
10. Workshop on **"Nanostructures for Biomedical Application"** **09 February 2022**, Organized by Nano Kain, King Saud University, Saudi Arabia.
11. International Webinar on **"Grass Pea (Lathyrus sativus): Re-domesticating a hardy orphan legume for the 21st century"** **29 January 2022**, Organized by Bioingene Kolkata, India.
12. Workshop on **"Cell Culture & Molecular Toxicology Techniques"** **19-21 December 2021**, Department of Zoology, King Saud University, Saudi Arabia.
13. International Webinar on **"Climate Smart Agriculture from Multi-Omics Perspective"** **17 September 2021**, Organized by Bioingene Kolkata, India.
14. International Webinar Series on Plant Tissue Culture: Current Trends and Future Perspectives **17-19 June 2021**, Organized by Department of Biotechnology, GSFC University, India.
15. International Webinar on **"Enhancing yield in rice employing a systematic marker-assisted gene pyramiding"** **19 May 2021**, Organized by Bioingene Kolkata, India.
16. International Webinar on **"Genome editing for improvement of abiotic stress tolerance of rice"** **April 06, 2021**, Organized by Bioingene Kolkata, India.
17. Conference on **"Scientific Publishing in the International Journals (Practical Applications)"**, via zoom on 23 January 2021, by Academics & Researchers Platforms (IFAD), Egypt.
18. International Webinar on **"Breeding for efficient root system for water and nutrient uptake in crops"** Organized by PLANTGENOMIA through virtual mode on 21st February 2021. Organized by Bioingene Kolkata, India.
19. International Webinar on **"Widening the Genetic base of Legumes through Pre-breeding"** Feb 15, **2021**, Organized by Bioingene Kolkata, India.

20. International Webinar on **“Pan Genomes in Plants: Beyond a single reference genome” Feb. 01, 2021**, Organized by Bioingene Kolkata, India.
21. International Webinar on **Production of Androgenic Haploids and Doubled Haploids in Banana** January 15, **2021**, Organized by Bioingene Kolkata, India.
22. Webinar on **Plant microRNA Research** October 27, **2020**, Aligarh Muslim University, Aligarh, India.
23. Webinar on **Skill Development, tie up with Industry** August 26, **2020**, Ghandi Faiz-e-Aam College, Shahjahanpur, India.
24. Webinar on **Food Security, Safety and Sustainability** June 08, **2020**, Ghandi Faiz-e-Aam College, Shahjahanpur, India.
25. **12th Congress on the International Plant Molecular Biology** August 5-10, **2018**. Montpellier, France -Efficient in vitro regeneration and agrobacterium mediated-genetic transformation in tomato.
26. International Conference on **Current Trends in Biosciences (CTBio-2017)** August 21-23, 2017. Kerala, India - In vitro multiplication and germplasm conservation of *Ruta chalepensis* and assessment of genetic stability using molecular markers.
27. International Conference on **Current Trends in Biosciences (CTBio-2017)** August 21-23, 2017. Kerala, India - Genetic transformation and siRNA mediated aphid resistance in tomato plants.
28. **National Conference on “Monitoring and Management of Drinking Water Quality (MMDWQ)** was held at the Uttarakhand State Council for Science and Technology, Dehradun, Uttarakhand, December 21-23, 2015.
29. **National Symposium on Impact of Plant Tissue Culture on Advances in Plant Biology and XXXIII PTCA (I) Annual Meeting** St. Xavier’s College, Ahmedabad (India). 19-21 January, p. 183. - In vitro regeneration and change in total phenolics and antimicrobial activity in *Vitex negundo*.
30. **SECIVT Novena Reunion, Canary Island, Spain**, April 27-29, 2011, p.65. - Pollen and somatic embryogenesis in *Quercus suber*: searching for common markers and features in two in vitro embryo developmental pathways.
31. **5th International Crop Science Congress & Exhibition. International Convention Centre, Jeju, Korea**, April 13-18, 2008, p.127-128. - Photosynthetic activity, malondialdehyde content and antioxidant enzymes in leaves during ex-vitro establishment of micropropagated *Rauvolfia tetraphylla* plantlets.
32. **National Symposium on Plant Biotechnology**. FRI, Dehradun, Oct., 12-14, 2006. p. 95. - Photosynthetic pigments and antioxidant enzymes in leaves during *ex vitro* establishment of micropropagated *Tylophora indica* plantlets.
33. **Journal of Society for In Vitro Biology**. 41 A 47. SIVB, USA. - Thidiazuron Induced High Frequency Shoot Induction and Plant Regeneration in *Psoralea corylifolia* - an Endangered Medicinal Plant.
34. **National Conference on Medicinal Plants: Resources Applications and Conservation in India**. Jadavpur University, Kolkata, Feb. 11-12, p. 10. - Biotechnological intervention for conservation of biodiversity of some rare and endangered medicinal plants.
35. **IUFRO International Conference on Multipurpose trees in the Tropics: Assessment, Growth and Management**. Arid Forest Research Institute (ICFRE) Jodhpur, Nov. 22-25, p. 282. - Somatic embryogenesis and regeneration of plantlets form nodal explants of *Santalum album* L.
36. **National Symposium on Plant Biology and Biodiversity in Changing Environment**. Hamdard University, New Delhi. Dec. 29-31, p. 40. - *In vitro* propagation of *Psoralea corylifolia* L.

37. **National Symposium on Plant Biodiversity: Role in Sustainable Development** and 25th Annual Meeting of PTCA(I), University of Rajasthan, Jaipur, Feb.17-19, p. 90. - Tissue Culture Studies in *Tylophora indica* (Burm.f.) Merrill.
38. **Indian Botanical Conference, MJP Rohilkhnad University, Bareilly**, Oct. 27-29, 2002. - In vitro propagation of a medicinal plants. XXV.
39. **International Symposium on Plant Biodiversity: Conservation and Evaluation. Bose Institute, Kolkata**, Dec. 17-20, 2002. - Conservation of some rare and endangered medicinal plants adopting biotechnological approaches.
40. XXIV **Indian Botanical Conference, Hyderabad**, Nov. 19-21, 2001 - *In vitro* induction of multiple shoots from nodal segment explants of *Rauvolfia tetraphylla* L.-an endangered medicinal plant.