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Education

Degree	Graduated in	Major	University
BSc	2006	Biology	University of Guilan, Iran
MSc	2009	Plant Physiology	Urmia University, Iran
Ph.D	2015	Plant Physiology	Ferdowsi University of Mashhad, Iran

Employment Information

position	Faculty/Department	University	City/Country
Assistant Professor	Faculty of Science, Department of Biology	University of Birjand	Birjand, Iran

Publications

I. Articles

1. Mousavi Kouhi SM, Khara J, Heydari R. (2009). Effects of salicylic acid on photosynthetic pigment content in *Ocimum basilicum* L. under UV-C radiation stress. Fredowi University International Journal of Biological Sciences, 1(1): 57-60.
2. Mousavi Kouhi SM, Lahouti M, Ganjeali A, Entezari MH. (2014). Comparative phytotoxicity of ZnO nanoparticles, ZnO microparticles, and Zn²⁺ on rapeseed (*Brassica napus* L.): investigating a wide range of concentrations. *Toxicological and Environmental Chemistry*, 96 (6): 861-868.
3. Mousavi Kouhi SM, Lahouti M, Ganjeali A, Entezari MH. (2015). Long-term exposure of rapeseed (*Brassica napus* L.) to ZnO nanoparticles: anatomical and ultrastructural responses. *Environmental Science and Pollution Research*, 22(14): 10733-43.
4. Mousavi Kouhi SM, Lahouti M, Ganjeali A, Entezari MH. (2015). Comparative effects of ZnO nanoparticles, ZnO bulk particles, and Zn²⁺ on Brassica napus after long-term exposure: Changes in growth, biochemical compounds, antioxidant enzyme activities, and Zn bioaccumulation. *Water, Air, and Soil Pollution*, 15 (226): 364-375.
5. Mousavi Kouhi SM, Lahouti M, Ganjeali A, Entezari MH. (2015). Anatomical and ultrastructural responses of Brassica napus after long-term exposure to excess zinc. *Turkish Journal of Biology*, 40(3), 652-660.
6. Mousavi Kouhi, S. M., & Lahouti, M. (2018). Application of ZnO nanoparticles for inducing callus in tissue culture of rapeseed. *International Journal of Nanoscience and Nanotechnology*, 14(2), 133-141.
7. Rasti Sani, M., Ganjeali, A., Lahouti, M., & Mousavi Kouhi, S. M. (2018). Morphological and physiological responses of two common bean cultivars to drought stress. *Journal of Plant Process and Function*, 6(22), 37-46.

8. Beykkhormizi, A., Sarghein, S. H., Sarafraz Ardakani, M. R., Moshtaghoun, S. M., & Mousavi Kouhi, S. M. (2018). Alleviation of salinity stress by vermicompost extract: a comparative study on five fennel landraces. *Communications in soil science and plant analysis*, 49(17), 2123-2130.
9. KHOSRAVI, Mohammad Sadegh, Reza HEIDARI, Rashid JAMEI, Seyed Mousa MOUSAVI KOUHI, and Maryam MOUDI. (2018). Comparative growth and physiological responses of tetraploid and hexaploid species of wheat to flooding stress. *Acta agriculturae Slovenica* 111, no. 2: 285-292.
10. Mousavi Kouhi, S. M., Sarafraz Ardakani, M. R., & Beykkhormizi, A. (2019). Irrigation of *Helianthus annuus* with Pb-polluted water: Improvement of phytoremediation using vermicompost. *Journal of Plant Process and Function*, 8(31), 77-83.
11. BeykKhormizi, A., Hosseini Sarghein, S., Sarafraz Ardakani, M. R., Moshtaghoun, S. M., & Mousavi Kouhi, S. M. (2019). Interaction of Saline Water and Vermicompost on Growth and Absorption of Some Mineral Nutrients in Four Landraces of Fennel, *Foeniculum vulgare*. *Journal of Water Research in Agriculture*, 33(1), 39-52.
12. Mousavi Kouhi S M, Moudi M, Soltani Moghadam E, Sarchahi moghadam H. (2019). The investigating of sodium accumulation in some halophytic species of Zygophyllaceae, Polygonaceae, Asteraceae and Amaranthaceae, 6 (1): 96-105.
13. Ghorbani, M., Ramazani, S. H. R., Fallahi, H. R., & Mousavi Koohi, S. M. (2019). Effect of Drought Stress and Bio-fertilizer on Yield and Yield Components of Guar *Cyamopsis tetragonoloba* (L.) Taub. *Journal of Medicinal plants and By-product*, 8(1), 13-19.
14. Mousavi Kouhi, S. M., & Erfanian, M. (2020). Predicting the present and future distribution of medusahead and barbed goatgrass in Iran. *Ecopersia*, 8(1), 41-46.
15. Mousavi Kouhi, S. M., & Moudi, M. (2020). Assessment of phytoremediation potential of native plant species naturally growing in a heavy metal-polluted saline-sodic soil. *Environmental Science and Pollution Research*, 27(9), 10027-10038.

16. Sagharyan, M., Ganjeali, A., Cheniany, M., & Mousavi Kouhi, S. M. (2020). Optimization of callus induction with enhancing production of phenolic compounds production and antioxidants activity in callus cultures of *Nepeta binaloudensis* Jamzad (Lamiaceae). Iranian Journal of Biotechnology, 18(4), 47-55.
17. Taghvazadeh Yazdi ME, Darroudi M, Amiri MS, Hosseini HA, Nourbakhsh F, Mashreghi M, Farjadi M, Mousavi Kouhi SM, Mousavi SH. (2020). Anticancer, antimicrobial, and dye degradation activity of biosynthesised silver nanoparticle using Artemisia kopetdaghensis. Micro & Nano Letters, 15(14), 1046-1050.
18. Ganjeali, A., Mousavi Kouhi, S. M., Beyk Khormizi, A., & Hossaini, S. V. (2020). Effect of seed priming on germination and morphophysiological traits of Rice transplants (*Oryza sativa* L.cv. Hashemi) under different moisture regimes. Iranian Journal of Seed Sciences and Research, 7(4), 433-445.
19. Mousavi Kouhi, S. M., Lahouti, M., & Ganjeali, A. (2020). Effect of ZnO Nanoparticles application on mineral absorption in rapeseed. Journal of Plant Research (Iranian Journal of Biology), 33(2), 485-495.
20. BeykKhormizi, A., Hosseini Sarghein, S., Sarafraz Ardakani, M. R., Moshtaghoun, S. M., & Mousavi Kouhi, S. M. (2020). Effect of Vermicompost on Membrane Lipid Peroxidation and some Morphophysiological Characteristics of Fennel (*Foeniculum vulgare* Mill.) Landraces under Salt Stress. , 12(2), 115-129.
21. Moudi, M., Mousavi kouhi, S. M., Ghollasi mood, S., & Ayoobi, A. (2021). DNA barcoding of *Ziziphus jujuba* Mill. in Iran using chloroplast genes (rbcL and matK). Journal of Plant Production Research, 28(2), 115-130.
22. Mousavi-Kouhi, S. M., Beyk-Khormizi, A., Amiri, M. S., Mashreghi, M., & Yazdi, M. E. T. (2021). Silver-zinc oxide nanocomposite: From synthesis to antimicrobial and anticancer properties. Ceramics International, 47(15), 21490-21497.
23. Mollaei, H., Karimi, F., Ghorbany, M., Hosseinzadeh, M. S., Moudi, M., & Mousavi-Kouhi, S. M. (2021). Investigating Cytotoxic Effect and Molecular Mechanisms of Quinoa

Seed Extract Against Human Lung Cancer Cell Line. Jentashapir Journal of Cellular and Molecular Biology, 12(4).

24. Sagharyan, M., Ganjeali, A., Cheniany, M., & Mousavi-Kouhi, S. M. (2021). Studies on Seed Germination, Plant Regeneration, and Soil Acclimatization of *Nepeta binaloudensis* Jamzad (Lamiaceae). Iranian Journal of Science and Technology, Transactions A: Science, 45(6), 1915-1924.
25. Mollaei, H., Mousavi-Kouhi, S. M., Moudi, M., Hosseinzadeh, M. S., & Ghorbany, M. (2022). Evaluation of Anticancer Effects and Molecular Mechanisms of Pomegranate Peel Extract in the Mouse Cellular Model (4T1) of Breast Cancer. Gene, Cell and Tissue, 9(3): e117831.
26. Beyk-Khormizi, A., Hosseini Sarghein, S., Sarafraz-Ardakani, M. R., Moshtaghoun, S. M., Mousavi-Kouhi, S. M., & Ganjeali, A. (2022). Ameliorating effect of vermicompost on *Foeniculum vulgare* under saline condition. Journal of Plant Nutrition, 1-15.
27. Mollaei H, Moudi M, Ghorbany M, Mousavi-Kouhi S.M, Hosseinzadeh M.S. (2022). Anti-cancer effects and molecular mechanisms of sour tea (*Hibiscus sabdariffa*) in the human cellular model (A549) of lung cancer. J Birjand Univ Med Sci.; 29(1): 12-20.
28. Mousavi-Kouhi, S. M., Ghorbani, M., & Hammami, H. (2022). Up-Regulated Gene Sets of *Arabidopsis Thaliana* in Response to Nanoparticles: An In Silico Approach Based on the Microarray Data. International Journal of Nanoscience and Nanotechnology, 18(3), 209-217.
29. Mousavi-Kouhi, S. M., Beyk-Khormizi, A., Mohammadzadeh, V., Ashna, M., Es-haghi, A., Mashreghi, M., ... & Taghavizadeh Yazdi, M. E. (2022). Biological synthesis and characterization of gold nanoparticles using *Verbascum speciosum* Schrad. and cytotoxicity properties toward HepG2 cancer cell line. Research on Chemical Intermediates, 48(1), 167-178.
30. Mousavi-Kouhi, S. M., Beyk-Khormizi, A., Amiri, M. S., Mashreghi, M., Hashemzadeh, A., Mohammadzadeh, V., ... & Taghavizadeh Yazdi, M. E. (2023). Plant gel-mediated

- synthesis of gold-coated nanoceria using ferula gummosa: Characterization and estimation of its cellular toxicity toward breast cancer cell lines. *Journal of Functional Biomaterials*, 14(7), 332.
31. Beyk-Khormizi, A., Sarafraz-Ardakani, M. R., Hosseini Sarghein, S., Moshtaghioun, S. M., Mousavi-Kouhi, S. M., & Taghavizadeh Yazdi, M. E. (2023). Effect of Organic Fertilizer on the Growth and Physiological Parameters of a Traditional Medicinal Plant under Salinity Stress Conditions. *Horticulturae*, 9(6), 701.
 32. Ashna, N., Ganjeali, A., & Mousavi-Kouhi, S. M. (2023). Allelopathic effects of apricot (*Prunus armeniaca L.*) root on some crops and weeds. *Plant Process and Function* 2023; 11 (52) : 5

II. Books

1. Mousavi kouhi, S. M., Gholamian A. (2012). Textbook of Plant metabolism (compilation, doctoral exam). Modarresan Sharif Publication, Tehran. (In Persian).
2. Mousavi kouhi, S. M., Ghaempanah S. (2012). Textbook of Plant anatomy. Modarresan Sharif Publication, Tehran. (In Persian).
3. Taiz L, Zeiger E. (2013). Plant Physiology. (Lahouti M, Bishekhalai R, Mousavi Kouhi SM, Ghaempanah S, Trans.). Vazhegan Kherad, Mahshad. (In Persian).
4. Mousavi kouhi, S. M. (2022). Unighersity (Novel). Name Mehr, Tehran. (In Persian).

III. Research Project

1. Mousavi Kouhi, S. M., Moudi, M. (2017). Investigation of heavy metals accumulation in plants grown in the region of the effluent entry of Qaleh-Zari mine in South Khorasan. University of Birjand.

2. Mousavi Kouhi, S. M., Sarafraz Ardakani, M. R., BeykKhormizi, A. (2018). Effect of vermicompost on improving phytoremediation of lead contaminated soil by sunflower. University of Birjand.
3. Ghorbany, M., Ramazani, S. H. R., Fallahi, H. R., Mousavi Kouhi, S. M. (2018). Effect of drought stress, mychorrizal and rhizobium bio-fertilizers on yield and yield components of guar. University of Birjand.
4. Mollaei, H., Moudi, M., Ghorbany, M., Mousavi Kouhi, S. M., Hosseinzadeh, M. S. (2020). Evaluation of anti-cancer effects and molecular mechanisms of pomegranate peel extract in mouse cellular model (4T1) of breast cancer. University of Birjand.
5. Moudi, M., Mousavi Kouhi, S. M., Ghollasi, Sh., Ayubi A. (2021). DNA Barcoding among different ecotypes of genus *Ziziphus jujuba* Mill. in South Khorasan based on choloroplast DNA(matK, rbcL). University of Birjand.
6. Mollaei, H., Moudi, M., Ghorbany, M., Mousavi Kouhi, S. M., Hosseinzadeh, M. S. (2021). Evaluation of anti-cancer effects and molecular mechanisms of sour tea (Sabdariffa Hibiscus) in human cellular model (A549) of lung cancer. University of Birjand.