**Siamak Shirani Bidabadi (Ph.D.)**

**Assistant Teaching Professor of Horticulture, College of Integrated Science and Arts, Arizona State University, Mesa, AZ 85212, USA. Cell Phone: +1(517)5079876**

**sbidabad@asu.edu, siamakshirani.upm@gmail.com**

**Website: https://search.asu.edu/profile/4906530**

**https://orcid.org/0000-0003-0852-0329**

**https://scholar.google.com/citations?user=fMyN1-AAAAAJ**

## • PERSONAL STATEMENT

An assistant professor of horticulture and plant biotechnology with a solid research background and teaching experience (2 years' experience as postdoctoral research on grapes and viticulture at Michigan State University). I am interested in developing a career which combines teaching and research, while maintaining my interest in public engagement with Horticultural Plant physiology, medicinal plants, sustainable agriculture (organic horticulture and plant - microbe interaction) and phytoremediation. A confident presenter at conferences and teacher in classrooms, able to explain complex information to audiences of all levels.

## • EDUCATION

**• University Putra Malaysia (2008-2011)**

*Ph.D. degree*

Field of Study: Plant Biotechnology and Horticulture

Research titled '*In vitro* mutagenesis and somaclonal variation in banana to increase drought tolerance'. Supervisors: Professor Maziah Mahmood, Institute of Tropical Agriculture, ITA, University Putra Malaysia, 43400 Serdang, Selangor DE, Malaysia.

**• Department of Horticulture, Michigan State University, East Lansing, MI 48824, USA. (June 2021- June 2023) (Full time). Postdoctoral researcher** on Viticulture and Enology.

Canopy management strategies to improve grape specialized color metabolites synthesis and fruit quality.

***Teaching Experience at Arizona State University***

Courses Taught:

BIO 181 - General Biology I

Taught multiple sections with varying enrollment sizes, ranging from small groups to large classes of up to 250 students.

ABS 225 - Soils

Provided comprehensive instruction on soil science fundamentals, with a focus on practical applications.

Integrated classroom lectures with interactive lab sessions.

ABS 226 - Soils Laboratory

Supervised and guided students through hands-on experiments and lab activities related to soil properties and analysis.

ABS 460 - Organic Gardening

Conducted a course on organic gardening practices, emphasizing sustainable techniques and eco-friendly gardening.

Managed full-capacity classes, ensuring active participation and practical learning experiences.

ABS 360 - Southwest Home Gardening

Delivered content focused on gardening in arid environments, tailored to the unique climate of the Southwestern United States.

Engaged a diverse student body with class sizes ranging from small to large enrollments.

ABS 200 - Build Your Professional Self

Facilitated a professional development course designed to help students build essential career skills.

Managed multiple sections, adapting course content to the needs of students with various professional goals.

ABS 100 - Discovering the Professions

Guided students through the exploration of different career paths, helping them identify and pursue their professional interests.

Encouraged interactive discussions and peer engagement through well-structured class activities.

ABS 368 - Plant Propagation

Instructed students on the principles and techniques of plant propagation, combining theoretical knowledge with practical lab experiences.

ABS 260 - Sustainable Horticulture

Taught a course on sustainable horticultural practices, with a lab component that allowed students to apply learned concepts in real-world scenarios.

**ABS 394 – Floriculture: Sustainable Production and Design**

Developed and taught a specialized upper-division course focused on sustainable floriculture production systems and floral design principles. Integrated sustainability, production practices, and design concepts through lectures and applied learning activities.

- **PUBLICATIONS**
  - **Book chapter**

**1-** Penna S, **Shirani Bidabadi S,** Jain SM (2023) https://doi.org/10.1007/978-981-16-9720-3_1

**2-** **Shirani Bidabadi S,** Abdel Latef AAH (2022) https://doi.org/10.1007/978-981-19-5121-3_14

**3-** **Shirani Bidabadi S,** Abdel Latef AAH (2022). https://doi.org/10.1007/978-981-19-5121-3_11

**4-** **Shirani Bidabadi S,** Sharifi P, Abdel Latef AAH (2021) https://doi.org/10.1201/9781003022879

  - **Articles**

1. Akbari Arezoo, Barzegar Taher, Rabiei Vali, Nicola Silvana, **Shirani Bidabadi Siamak** (2025). Enhancing fruit quality of cold-stressed physalis peruviana during late-season through spraying with phenylalanine, cysteine, and selenium. BMC Plant Biology 25: 1408. https://doi.org/10.1186/s12870-025-07467-w
2. Mohammadi Meisam, Eghlima Ghasem, Aghamir Fateme, Nezamdoost Delaram, Bagnazari Majid, **Shirani Bidabadi Siamak** (2024). https://doi.org/10.1016/j.indcrop.2024.120089
3. Khandani Yaser, Sarikhani Hasan, Gholami Mansour, Chehregani Rad Abdlkarim, Shirani Bidabadi Siamak (2024) https://doi.org/10.1071/fp24059
4. Mohammad Mehralian, Siamak Shirani Bidabadi, Mahnaz Azad, Samad Nejad Ebrahimi, Mohammad Hossein Mirjalili (2023) https://doi.org/10.1016/j.indcrop.2023.117321
5. **Siamak Shirani Bidabadi**, Paolo Sabbatini*, Josh VanderWeide (2023) https://doi.org/10.1016/j.scienta.2023.111847
6. Parisa Sharifi, Reza Amirnia, **Siamak Shirani Bidabadi*** (2022) https://doi:10.1007/s10343-021-00617-8
7. Yin Yin Mon, **Siamak Shirani Bidabadi**, Kyaw Swar Oo, Si-Jun Zheng* (2021) https://doi.org/10.1016/j.pmpp.2021.101733

8. **Siamak Shirani Bidabadi,** Parisa Sharifi, Mohan Jain* (2021) doi:10.21926/obm.genet.2103137
9. Parisa Sharifi, Reza Amirnia, Mehran Torkian, **Siamak Shirani Bidabadi*** (2021) https://doi.org/10.1007/s42729-021-00554-5 (**Q1**)
10. Parisa Sharifi, **Siamak Shirani Bidabadi**, Abbu Zaid, Arafat Abdel Hamed Abdel Latef * (2021) https://authors.elsevier.com/sd/article/S0147-6513(21)00162-7 (**Q1**)
11. Alirezaei Z, Afazel M, **Shirani Bidabadi S*** (2020) https://doi.org/10.4236/jbm.2020.811019
12. Sharifi P, **Shirani Bidabadi S** (2020) https://doi.org/10.1007/s42452-020-03843-3
13. **Shirani Bidabadi S**, Jain SM* (2020) https://doi.org/10.3390/plants9060702 (**Q1**)
14. **Shirani Bidabadi S*,** Sharifi P (2020) https://doi.org/10.1007/s00344-020-10157-6 (**Q1**)
15. **Shirani Bidabadi S,** VanderWeide J, Sabbatini P* (2020) **https://doi.org/10.1038/s41598-020-63986-6 (Q1- Nature)**
16. Sharifi P*, **Shirani Bidabadi S** (2020) **https://doi.org/10.1016/j.indcrop.2020.112460 (Q1)**
17. **Shirani Bidabadi S*** (2020) https://doi.org/10.1080/15226514.2020.1759507 (**Q2**)
18. **Shirani Bidabadi S***, Mehralian M (2020) https://doi.org/10.1007/s10343-020-00499-2 (**Q2**)
19. **Shirani Bidabadi S***, Mehralian M (2019) https://doi.org/10.1007/s10343-019-00478-2 (**Q2**)
20. **Shirani Bidabadi S***, Sabbatini P (2019) https://doi.org/10.1080/15538362.2019.1652133 (**Q3**)
21. **Shirani Bidabadi S***, Sabbatini P (2019) https://doi.org/10.1016/j.hpj.2019.07.003 (**Q1**)
22. **Shirani Bidabadi S**, Zheng SJ (2018) https://doi.org/10.1016/j.hpj.2018.08.001 (**Q1**)
23. **Shirani Bidabadi S***, Abolghasemi R, Zheng SJ (2018) Grafting of watermelon (*Citrullus lanatus* cv. Mahbubi) onto different squash rootstocks as a means to minimize cadmium toxicity. ***International Journal of Phytoremediation***. 20(7): 730-738.(Q2)
24. Dehghanipoodeh S, Ghobadi C, Baninasab B, Gheysari M, **Shirani Bidabadi S** (2018) https://doi.org/10.1016/j.hpj.2018.09.004 (**Q1**)
25. **Shirani Bidabadi S*** (2018) Waste management using vermicompost derived liquids in sustainable horticulture. ***Trends in Horticulture***. doi: 10.24294/th..v1i2.175.

26. **Shirani Bidabadi S***, Masoumian M (2018) Arbuscular mycorrhizal symbiosis improves growth and antioxidative response of *Stevia rebaudiana* (Bert.) under salt stress. ***Trends in Horticulture.*** doi:10.24294/th.v1i2.549
27. **Shirani Bidabadi S***, Afazel M, Sabbatini P (2017) https://doi.org/10.1016/j.hpj.2017.11.002 (**Q1**)
28. **Shirani Bidabadi S***, Dehghanipoodeh S, Wright GC (2017) DOI 10.1007/s40093-017-0173-7 (**Q2**)
29. **Shirani Bidabadi S***, Afazel M, Dehghani Poodeh S (2016) DOI: 10.1007/s40093-016-0135-5 (**Q2**)
30. Dehghani Poodeh S, Ghobadi C, Baninasab B, Gheysari M and **Shirani Bidabadi S (**2015) DOI: 10.1080/01904167.2015.1086789 (**Q2**)
31. Rezai R, Orojloo M, **Shirani Bidabadi S**, Soleimanzadeh M (2013) Possible role of methyl Jasmonate in protection to NaCl – Induced salt stress in pepper cv. Green Hashemi. ***International Journal of Agriculture and Crop Sciences***, 6(17): 1235 – 1238.
32. **Shirani Bidabadi S**, Ashrafi N, Haghighi M, Boroomand A, Jafari M (2013) The possibility of applying effluent in tomato soilless culture. ***International Journal of Agriculture and Crop Sciences***, 5(23): 2858 – 2862.
33. **Shirani Bidabadi S**, Mehri H, Ghobadi C, , Baninasab B, Afazel M, Boroomand A (2013) Morphological, physiological and antioxidant responses of some Iranian grapevine cultivars to methyl jasmonate application. ***Journal of Crop Science and Biotechnology***, 16(4): 277 – 283. (**Q3**)
34. Shahgholi M, Naderi D, Etemadi N, Eghbalsaid S, **Shirani Bidabadi S (**2013) Salycylic acid and trinexapac – ethyl afecet on chlorophyll content and shoot properties of *Lolium perenne* cv. Speedy Green. ***International Journal of Agriculture and Crop Sciences***, 6(16): 1123 – 1126.
35. Maziah M, **Shirani Bidabadi S***, Ghobadi C, Gray DJ. 2012. Effect of methyl jasmonate treatments on alleviation of polyethylene glycol -mediated water stress in banana (*Musa acuminata* cv. 'Berangan', AAA) shoot tip cultures. ***Plant Growth Regulation***, 68: 161 – 169. (**Q1**)
36. **Shirani Bidabadi S**, Sariah M, Zakaria W, Subramaniam S, Maziah M (2012) *In vitro* selection and characterization of water stress tolerant lines among ethyl

methanesulphonate (EMS) induced variants of banana (*Musa* spp., with AAA genome). ***Australian Journal of Crop Science***, 6(3): 567 – 575. (**Q3**)

37. **Shirani Bidabadi S**, Sariah M, Zakaria W, Subramaniam S, Maziah M (2012) Induced mutations for enhancing variability of banana (*Musa* spp.) shoot tip cultures using ethyl methanesulphonate (EMS). ***Australian Journal of Crop Science***, 6(3): 391 – 401.(**Q3**)
38. **Shirani Bidabadi S**, Maziah M, Baninasab B, Ghobadi C (2012) Influence of salicylic acid on morphological and physiological responses of banana (*Musa acuminata* cv. 'Berangan', AAA) shoot tips to in vitro water stress induced by polyethylene glycol. ***Plant Omics***, 5(1): 33 – 39 (**Q3**)
39. **Shirani Bidabadi S**, Maziah M, Sariah M, Zakaria W, Ghobadi S (2011) Evaluation of *in vitro* water stress tolerance among EMS – induced variants of banana (*Musa* spp., AAA), using morphological, physiological and molecular traits. ***Journal of Crop Science and Biotechnology***, 14(4): 255 – 263. (Q3)
40. **Shirani S**, Sariah M, Zakaria W, Maziah M (2010) https://doi.org/10.3844/ajabssp.2010.128.134 (**Q4**)
41. **Shirani Bidabadi S**, Sariah M, Zakaria W, Maziah M (2010) Study of genetic and phenotypic variability among somaclones induced by BAP and TDZ in micropropagated shoot tips of banana (*Musa* spp.) cultivars using RAPD markers. ***Journal of Agricultural Science***, 2(3): 49 – 60. (**Q2**)
42. **Shirani S**, Mahdavi F, Maziah M (2009) Morphological abnormality among regenerated shoots of banana and plantain (*Musa* spp.) after *in vitro* multiplication with TDZ and BAP from excised shoot tips. ***African Journal of Biotechnology***, 8(21):5755 – 5761.
43. Ghazvini R, **Shirani S (**2002) Study of the effects of somatic embryogenesis of unfertilized ovules from Mexican Lime (*Citrus aurantifolia* L) on different media. ***Journal of Science. and Technology of Agriculture and Natural Resources***, 6(2): 44 –