



#### PERSONAL INFORMATION:

**Full Name:** Mostafa Khoshhal Sarmast

**Nationality:** IRAN

**Academic Level:** Associate Professor

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#### EDUCATION:

- Ph.D. in Ornamental Plants, Shiraz University, Shiraz, Iran. (2010-2015)
- M.Sc. in Horticultural Science, Ornamental Plants, Shiraz University, Shiraz, Iran. (2007-2010)
- B.Sc. in Horticultural Science, Azad University of Rasht/ Iran (2002-2007)

#### RESEARCH INTEREST:

- Molecular Physiology of Ornamental Plants
- Plant Tissue Culture and Biotechnology
- Floriculture
- Horticultural Science

#### PUBLICATION:

**Sarmast, M.K., Salehi, H.** 2021. Sub-lethal concentrations of silver nanoparticles mediate a phytostimulatory response in tobacco via the suppression of ethylene biosynthetic genes and the ethylene signaling pathway. *In Vitro Cell. Dev.Biol.-Plant* (2021). <https://doi.org/10.1007/s11627-021-10193-1>. IF: 2.25

Ghorbanzadeh, A., Ghasemnezhad, A., **Sarmast, M.K.**, Ebrahimi. S.N. 2021. An analysis of variations in morphological characteristics, essential oil content, and genetic sequencing among and within major Iranian Juniper (*Juniperus* spp.) populations. *Phytochemistry*. <https://doi.org/10.1016/j.phytochem.2021.112737> IF: 4

Rezaei Ghaleh, Z, **Sarmast, M.K.** Atashi S. 2020. 6-Benzylaminopurine (6-BA) ameliorates drought stress response in tall fescue via the influencing of biochemicals and

strigolactone-signaling genes. Plant Physiol Biochem.  
<https://doi.org/10.1016/j.plaphy.2020.08.009> IF: 4.2

**Sarmast M.K. 2018.** Transient expression-based CRISPR/Cas9 system for manipulation of tall fescue SGR gene. Journal of Plant production (DOI: 10.22069/jopp.2019.13945.2252 35-43)

**Sarmast M.K.** 2017. In vitro establishment of conifers by mature shoots. J. Forestry Research. 29:565-574. IF: 2.1 (Review paper)

**Sarmast MK.** 2017. In silico functional analysis of FLC and FT-genes responsible for postponing and accelerating the onset of flowering. J Proteomics and Bioinformatics. 10: 267-276. doi: 10.4172/jpb.1000451. ISI

**Sarmast MK.** 2016. Genetic transformation and somaclonal variation in conifers- a review. Plant Biotechnology Report. 10:309-325 DOI: 10.1007/s11816-016-0416-5. IF:2.3 Springer. (Review paper)

**Sarmast MK.** 2016. In Vitro Regenerated Plants Response to Seismomorphogenic Stimuli. Electronic Journal of Biology, Vol.12(4): 422-425

**Sarmast MK., Salehi, H.** 2016. Silver Nanoparticles: An Influential Element in Plant Nanobiotechnology. **Molecular Biotechnology.** 1-9. DOI 10.1007/s12033-016-9943-0. IF:2.2 Springer. (Review paper)

**Sarmast MK., Salehi, H., Niazi A.,** 2015. Biochemical differences underlie varying drought tolerance in four *Festuca arundinacea* Schreb. genotypes subjected to short water scarcity. **Acta Physiol Plant.** 37:192- IF: 2- Springer

Wang C, **Sarmast MK,** Jiang J., Dehesh K. 2015. The Transcriptional Regulator BBX19 Promotes Hypocotyl Growth by Facilitating COP1-Mediated EARLY FLOWERING3 Degradation in Arabidopsis. **Plant Cell.** 27(4):1128-39. IF: 10.8- American Society of Plant Biologists.

**Sarmast MK., Niazi A., Salehi H, Abolimoghadam A.** 2015. Silver nanoparticles affect ACS expression in *Tecomella undulata* in vitro culture. **Plant Cell Tiss. Org. Cult.** 121:227–236 IF: 2.5- Springer.

Wang C, Guthrie C., **Sarmast MK**, Dehesh K. 2014. BBX19 Interacts with CONSTANS to Repress FLOWERING LOCUS T Transcription, Defining a Flowering Time Checkpoint in Arabidopsis. **Plant Cell** 26: 3589–3602. **IF: 10.8- American Society of Plant Biologists.**

**Sarmast M.K**, H. Salehi, M. Khosh-Khui. 2014. Seismomorphogenesis: A novel approach to acclimatization of tissue culture regenerated plants, **3Biotech**. 4:599–604. **Springer**

**Sarmast, M.K.**, H. Salehi, A. Ramzani, A. A. Abolimoghadam, A. Niazi and M. Khosh-Khui. 2012. RAPD fingerprint to appraise the genetic fidelity of in vitro propagated *Araucaria excelsa* R. Br. var. *glauca* plantlets. **Mol. Biotech**. 50:181-188. **IF: 1.87- Springer**

**Sarmast M.K**, H. Salehi, M. Khosh-Khui. 2012. *In vitro* rooting of *Araucaria excelsa* R. Br. using *Agrobacterium rhizogenes*. **J. Cent. Eur. Agri**. 13:123-130. **IF: 0.22**

**Sarmast M.K**, H. Salehi, M. Khosh-Khui. 2012. Micropropagation of *Araucaria excelsa* R. Br. var. *glauca* Carrière from orthotropic stem explants. *Physiol Mol Biol Plants*. **18(3):265–271- IF: 0.33- Springer**

**Sarmast M.K**, H. Salehi, M. Khosh-Khui. 2011. Nano silver treatment is effective in reducing bacterial contamination of *Araucaria excelsa* R. Br. var. *glauca* explants. **Acta Biol. Hung.**62: 477-484. **IF: 0.74**

**Sarmast, M.K.**, H. Salehi and M. Khosh-Khui. 2009. Using Plagiotropic Shoot explants in Tissue Culture of *Araucaria excelsa* R. Br. var. *glauca*, **Adv. Envi. Biol**. 3: 191-194. **IF: 0.2**

**Sarmast, M.K.**, H. Salehi and M. Salehi. 2009. The potential of different parts of *Sansevieria trifasciata* L. leaf for meristemoids production. **Aust. J. Bas. Appl. Sci**. 3: 2506-2509.

Aghdaei M., Salehi H., **Sarmast M.K**. 2012. Effects of silver nanoparticles on *Tecomella undulata* (Roxb.) Seem. micropropagation. **Adv. Hort. Sci**. 26: 21-24. **IF: 0.22**

## ACADEMIC TEACHING EXPERIENCE:

### **M.Sc. course**

Horticultural Science, Plant cell, and Tissue culture, Floriculture, *Gorgan University of Agricultural Sciences and Natural Resources*

### **B.Sc. course**

Physiology and Breeding of Ornamental Plants, Plant biotechnology, *Gorgan University of Agricultural Sciences and Natural Resources*

Genetic Engineering, Bioinformatics, *Gorgan University of Agricultural Sciences and Natural Resources*

## PROFESSIONAL BACKGROUND

2013 **Sabbatical leave**, University of California, Davis, USA

2014 Assistant Specialist /Department of Plant Biology/University of California, Davis, USA.

2017-**Sabbatical leave**/Department of Horticultural Science/Nanjing Agricultural University, China.

**LANGUAGES:** English

Gorgan University of Agricultural  
Sciences & Natural Resources