

Curriculum vitae

Personal Information

Name: Akram

Family Name: Ghaffari

Place of Birth: Karaj-Iran **Sex:** Female

Mailing address: Agricultural Biotechnology Research Institute of Iran,
Seed and plant Improvement Institute Campus,
Mahdasht Road, 31535-1897, Karaj-Iran.
Tel: +98 26 32709652 & 32703536 & 32705484
Fax: +98 26 32704539

E-mail: aghaffari@abrii.ac.ir , ghaffari16@yahoo.com

Educational Background

Institute	Degree	Field of Study
Urmieh University	B.Sc.	Agronomy& Plant Breeding
Karaj Azad University	M.Sc.	Plant Breeding

Working Experience

Year	Company/Institute	Position
2003-2017	Agricultural Biotechnology Research Institute	Research Associate
2010-2017	Agricultural Biotechnology Research Institute	Head of Molecular Physiology Lab

Publications

-Mortaza Aghbashlo, Meisam Tabatabaei, Soleiman Hosseinpour, Seyed Sina Hosseini, **Akram Ghaffari**, Zahra Khounani, Pouya Mohammadi. 2016. Development and evaluation of a novel low power, high frequency piezoelectric-based ultrasonic reactor for intensifying the transesterification reaction. *Biofuel Research Journal* 12, 528-535. DOI: 10.18331/BRJ2016.3.4.7

- Ahmad Farhad Talebi, Seyed Mohammad Mehdi Dastgheib, Hassan Tirandaz, **Akram Ghafari**, Ebrahim Alaie, Meisam Tabatabaei. 2016. Enhanced algal-based treatment of petroleum produced water and biodiesel production. *RSC Adv.* 6, 47001-47009. DOI: 10.1039/C6RA06579A .

- Seyed Ahmad Mousavi, Farhad Movahedi Pouya, Mohammad Reza Ghaffari, Mehdi Mirzaei, **Akram Ghaffari**, Mehdi Alikhani, Mohammad Ghareyazie, Setsuko Komatsu, Paul A. Haynes, Ghasem Hosseini Salekdeh. 2016. PlantPREs: A database for plant proteome response to stress. *Journal of Proteomics.* 143, 69–72, [doi:10.1016/j.jprot.2016.03.009](https://doi.org/10.1016/j.jprot.2016.03.009)

- S. Morteza Raeisi, Meisam Tabatabaei, Bita Ayati, **Akram Ghafari**, Sohrab Haghighi Mood. 2016. A Novel Combined Pretreatment Method for Rice Straw Using Optimized EMIM[Ac] and Mild NaOH. Waste and Biomass Valorization 7(1), 97-107. DOI: 10.1007/s12649-015-9437-5.
 - R. Jaber, M.M.A. Shirazi, J. Toufaily , A.T. Hamieh, A. Noureddin, H. Ghanavati, **A. Ghaffari**, A. Zenouzi, A. Karout, A.F. Ismail, M. Tabatabaei. 2015. Biodiesel wash-water reuse using microfiltration: toward zero-discharge strategy for cleaner and economized biodiesel production. Biofuel Research Journal 5 (2015) 148-151. DOI: [10.18331/BRJ2015.2.1.3](https://doi.org/10.18331/BRJ2015.2.1.3)
 - **Akram Ghaffari**, Javad Gharechahi, Babak Nakhoda, Ghasem Hosseini Salekdeh. 2014. Physiology and proteome responses of two contrasting rice mutants and their wild type parent under salt stress conditions at the vegetative stage. Journal of Plant Physiology. 171(1), 31-44. <http://dx.doi.org/10.1016/j.jplph.2013.07.014>
- Mohammad Saeid Pazirandeh, Tahereh Hasanloo, Vahid Niknam, Maryam Shahbazi, Hassan Ebrahimzadeh Mabood, **Akram Ghaffari**. 2013. Effects of drought and methyl jasmonate on antioxidant activities of selected barley genotypes. Journal of Agrobiology 30 (2), 71-82 . DOI: 10.2478/agro-2013-0007
- **Akram Ghaffari** , Tahereh Hasanloo and Mojtaba Khayam Nekouei. 2013. Micropropagation of Tuna (*Opuntia ficus – indica*) and Effect of Medium Composition on Proliferation and Rooting. International Journal of Biosciences. 3(11), 129-139. <http://dx.doi.org/10.12692/ijb/3.11.129-139>
 - Tahereh Hasanloo, Mohammad Fathi, **Akram Ghaffari**, Foad Moradi. METHYL JASMONATE EFFECTS ON TRIGONELLIN CONTENT OF FENUGREEK.. 4th National Congress on Medicinal Plants. Tehran- Iran .12, 13 May 2015.
 - **Akram Ghaffari**, Tahereh Hasanloo and Mehran Enayati Shariatpanahi. Physiological responses of five cultivars and one double haploid line of canola (*Brassica napus*) in water deficit stress. Interdrought 4 conferences. Crown Perth, Australia, 2-6 September 2013.
 - **Akram Ghaffari**, Tahereh Hasanloo, Ghasem Hosseini Salekdeh and Mehran Enayati Shariatpanah. The effect of water deficit stress on some physiological characteristics in six canola (*Brassica napus*) cultivars and line. The 1st Plant Stress (Abiotic Stress) Congress, University of Isfahan, 29-30 October 2012.
 - **Akram Ghaffari** ,Tahereh Hasanloo and Mojtaba Khayam Nekouei. Evaluation of physiological Characters in Tuna (*Opuntia ficus – indica*) Propagated by Tissue Culture. 7th National Biotechnology Conference. Tehran, 11-13 September 2011.
 - **Akram Ghaffari** ,Tahereh Hasanloo and Mojtaba Khayam Nekouei. Micropropagation of Tuna (*Opuntia ficus – indica*) and Plant Establishment in Soil.16th National and 4th International Conference of Biology. University of Ferdowsi Mashhad,13-14 September 2010.
 - **Akram Ghaffari**, Javad Gharechahi,Babak Nakhoda, Manouchehr Khodarahmi, Ghasem Hosseini-Salekdeh. Proteome Analysis of Two Contrasting Rice Mutants and Wild Type Parent under Control and Salt Stress Conditions at the Vegetative Stage. Human Proteome World Congress. Sydney, 19-23 September 2010.
 - Babak Nakhoda, **Akram Ghaffari**, Javad Gharechahi, Harkamal Walia, Xinping Cui, Tim Close, Hei Leung, Ghasem Hosseini-Salekdeh, Abdelbagi M. Ismail. Transcriptom and proteome analyses of wild type IR64 and two mutantswith contrasting responses to salt stress under control and stress conditionsduring vegetative stage.3rd Iranian Proteomics Congress.Pasteur Institute. 26-27 May 2010.

Patent

-Mojtaba Khayam Nekouei, Tahereh Hasanloo and **Akram Ghaffari**. Protocole of In vitro propagation of *Opuntia ficus indica*. 2010. Iran Patent.No.64579.

Professional Experience

Working on biological and agricultural research projects including:

- ❖ Proteomics
- ❖ Physiology
- ❖ Ion chromatography
- ❖ Analytical HPLC
- ❖ GC-MS Spectrometry
- ❖ Bioinformatics
- ❖ Transcriptomics
- ❖ Environmental (abiotic) Stresses mainly drought and salinity
- ❖ Electrophoresis Techniques
- ❖ Tissue Culture Techniques
- ❖ Antioxidative enzyme assay in plants

Research Articles

- ❖ Proteomic analysis of two contrasting rice mutant lines and their wild type parent under salinity stress at the vegetative stage (my MSc thesis)
- ❖ Establishment of plant proteome database
- ❖ Physiological responses of five cultivars and one double haploid line of canola (*Brassica napus*) in water deficit stress
- ❖ Study of *Brassica napus* transcriptome in root in response to drought stress.
- ❖ Evaluation of the effects of drought and jasmonate on growth and physiological parameters of selected barley genotypes
- ❖ Effect of environment and genetics on some biochemical and physiological traits of sugar beet seed
- ❖ Metabolite profiling of jujube that were collected from several regions of Iran
- ❖ Metabolite profiling of fenugreek that were collected from several regions of Iran
- ❖ Micropropagation of Tuna (*Opuntia ficus – indica*) and Plant Establishment in Soil and Evaluation of physiological Characters.

Workshops

Course Content	Period	Coordinator
Targeted metabolite profiling: theoretical and practical course	2016	Agricultural Biotechnology Research Institute of Iran
Instrumental analysis	2016	PASTEUR Institute, Tehran
LC-MS principles and applications	2015	PASTEUR Institute, Tehran
Rice Breeding	2013	Rice Research Institute
ISO 17025	2010	Organization of Pharmaceutical Plants
Proteomics	2009	Iranian Proteomics Society
Pharmaceutical Plants	2009	Organization of Pharmaceutical Plants
Crop Improvement Under Drought, an Integrated approach	2009	Agricultural Biotechnology Research Institute of Iran
Good Laboratory Practice (GLP)	2007	Agricultural Biotechnology Research Institute of Iran

Professional membership

- ◀ Iranian Proteomics Society
- ◀ Iranian society of plant physiology

2005-Continue
2010- Continue

Language proficiency:

- ◀ - English: Very good
- ◀ - French: Good