

# Samira Kahak

## **Personal Information**

Date of Birth: 15 June, 1986

Marital Status: Married

## **Contact Information**

Phone: ---

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## **Recent Positions**

- Researcher, Department of Genetic Engineering and Biosafety, Agricultural Biotechnology Research Institute of Iran (ABRII) (2021-Now)
- Member of Board Directors of Biosafety Society of Iran (2015- Now)
- Vice-president of Biosafety Society of Iran (2021- Now)
- Head of Secretary of Biosafety Working Group of Department of Environment (2017- 2021)
- Technical Assistant of Building National Capacity to Implement the National Biosafety Framework of Islamic Republic of Iran and the Cartagena Protocol on Biosafety (2017- 2021)
- Secretary of Iran Cartagena Protocol on Biosafety National Focal Point Consultative Committee (2014-2023)
- Secretary of Working Group of Digital Sequence Information on Genetic Resources (2021-2023)
- Member of Iran Convention on Biological Diversity National Focal Point Consultative Committee (2019- 2021)
- Biosafety Clearing House National Authorized User (2016- 2023)
- CHM- Biosafety Clearing House National Authorized User (2019- 2023)

## **Memberships**

- Research Committee of Research Center for Food Hygiene and Safety of Shahid Sadoghi University of Medical Science
- Biosafety Society of Iran
- Biotechnology Society of Iran
- Iranian Genetic Society
- Iranian Agronomy and Plant Breeding Society

## **Education**

- Sept 2014- 2022      *Ph.D student in Plant Breeding, Department of Plant Breeding, Guilan University, Rasht, Guilan, Iran.*  
**GPA: 18.47 out of 20**
- Sept 2008- 2011      *M.Sc. in Plant Breeding, Department of Biotechnology and Plant Breeding, Zanzan University, Zanzan, Iran.*  
**GPA: 18.53 out of 20**
- Sept 2004- 2008      *B.Sc. in Plant Breeding, Department of Biotechnology and Plant Breeding, Zanzan University, Zanzan, Iran.*  
**GPA: 17.47 out of 20**
- Sept 2003- 2004      *Pre-University in National Science, Shahid Sadoghi Pre-University Highschool, Karaj, Iran.*  
**GPA: 18.99 out of 20**
- Sept 2000- 2003      *Diploma in National Science, Fatemiye Highschool, Karaj, Iran.*  
**GPA: 18.34 out of 20**

## **Research Experience**

### **(M.Sc. Thesis)**

- Sept 2009- 2011      *Tissue Culture and Gene Transformation Lab, Agricultural Biotechnology Research Institute of Iran (ABRII), Karaj, Iran.*  
**Molecular Analysis of Transgenic Oilseed Rapeseed with BnFUL and bar genes.**  
**Grade: (A<sup>+</sup>) 19.38 out of 20**

### **(Ph.D. Thesis)**

- Sept 2016-2022      *Genetic Engineering and Biosafety Division, Agricultural Biotechnology Research Institute of Iran (ABRII), Karaj, Iran.*  
**Providing fast and multiplex GM maize detection and identification technology taking into account international laws and frameworks in the field of biodiversity and biosafety.**

## **Honors and Awards**

- Exceptional PhD Thesis A+ (19.80 out of 20)
- Exceptional Master Thesis A+ (19.38 out of 20)
- Nominated as Talented Bachelor Student at Zanzan University
- Ranked Third among the B.Sc. Graduates of 2004-2008 (among 20 graduates)
- Ranked Fourth among the M.Sc. Graduates of 2008-2009 (among 12 graduates)
- Ranked First among the Ph.D. Students

### **Activities/negotiations attended (international)**

- 8<sup>th</sup> Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (BS-COP MOP-8) – Party– Cancun, Mexico, 4-17 December 2016
- Forum on Detection Laboratories
- Forum on Post2020-Parties-Cartagena Protocol Implementation Plan
- Forum on Programme of Work on Article 23
- Forum on Risk Assessment and Risk Management - Party
- Forum on Socio-Economic Considerations-2019-Party
- Forum on Synthetic Biology – Party
- 23<sup>rd</sup> National Biosafety Project Coordinators Meeting – Shiraz, Iran, 7-11 October 2017
- 1<sup>st</sup> extraordinary Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety, online, 16-19 November 2020
- Subsidiary Body on Scientific, Technical and Technological Advice of CBD, 24<sup>th</sup> meeting-Part I, online, 3 May- 9 June 2021
- Subsidiary Body on Implementation of CBD, 3<sup>rd</sup> meeting-Part I, 16 May to 13 June 2021
- Open-Ended Working Group on the Post-2020 Global Biodiversity Framework, third meeting, online, 23 August- 3 September, 2021.
- 10<sup>th</sup> Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (BS-COP MOP-10-part I) – Party– Kunming, China, 11-15 October 2021

### **Workshops attended (international)**

- Biosafety Clearing House Training Workshop, Cancun, Mexico, 11 December 2016
- Risk analysis for the release of GMOs into the environment, Trieste, Italy, 22-26 May 2017.
- 5<sup>th</sup> UNEP-KBCH Asian Regional BCH Workshop, Daejeon, The Republic of Korea, 31<sup>th</sup> October- 3<sup>th</sup> November 2017
- Genetic Engineering and Genome Editing Workshop, Karaj, Iran, 8-10 April 2017
- Workshop on “Methods for Detection of Genetically Modified Organisms”, Tehran, Iran (online), 11 August 2021
- Workshop on “Principles and Methods of Risk Assessment of GMOs”, Tehran, Iran (online), 16 August 2021
- Workshop on “Plant Genome Editing: Methodologies and Regulatory Concerns”, Tehran, Iran (online), 9 September 2021

## **Research Skills**

### ***Expertise:***

- RNA and DNA isolation, purification and quantification techniques
- PCR, RT-PCR and Gel Electrophoresis
- Dot and Southern Blotting
- real time-PCR
- Histological Assays
- Plant Tissue Culture
- Bacteria Culture

### ***Instruments:***

- Bio-Rad PCR
- Bio-Rad real time-PCR
- Gel Documentation System
- Nanodrop
- Microscopy
- Microtome

### ***Computer Skills:***

- SPSS software
- MSTATC software
- Editseq software
- Vector NTI software
- Microsoft Office software
- Website Management

## Books

- Jafar Zolala and **Samira Kahak**  
*GM Crops Technology in Iran (Answers to Ten Fundamental Questions)*  
ISBN: 978-600-136-504-1, 2019.
- **Samira Kahak** and Behzad Ghareyazie  
*International and National Laws and Regulations on Biosafety and Living Modified Organisms.*  
ISBN: 978-600-7802-17-5, 2021.
- **Samira Kahak**  
*Biodiversity in the Context of Laws and Regulations*  
ISBN: 978-600-7802-31-1, 2023.

## Articles

- 1) **Samira Kahak**, Ali Mohammad Shakib, Jalal Saba, Siamak Asadi and Mana Ahmadraji;  
*Study of overexpression of the BnFUL gene in transgenic oilseed rape.*  
Genetic Engineering and Biosafety Journal, Vol. 1, Number 2, fall 2012 and winter 2013.
- 2) **Samira Kahak** and Ali Mohammad Shakib  
*Application of genetic engineering in resistance to pod shattering in oilseed rape.*  
Journal of Biosafety, Vol. 6, Number 1, 2013.
- 3) Motahareh Mohsenpour, **Samira Kahak** and Behzad Ghareyazie  
*Genetic Engineering and Food Security.*  
Strategic Research Journal of Agricultural Sciences and Natural Resources 3(2): 196-208, 2018.
- 4) **Samira Kahak**, Behzad Ghareyazie, Habibollah Samizadeh and Motahhreh Mohsenpour  
*Evaluation of Biosafety Aspects of Cisgenesis and Intragenesis in Comparison with Transgenesis*  
Genetic Engineering and Biosafety Journal, Vol. 10, Number 1, 2021.
- 5) **Samira Kahak**, Behzad Ghareyazie, Habibollah Samizadeh, Motahhreh Mohsenpour, Elahe Motamed and Nasrin Soltaninejad  
*Providing a Fast and Multiple Method for Detection and Identification of Transgenic Maize Events*  
Modern Genetics Journal, 2021, Volume 16, Issue 4: 341-348.
- 6) **Samira Kahak**, Ali Mohammad Shakib, Jalal Saba, Siamak Asadi and Mana Ahmadraji;  
*Study of overexpression of the BnFUL gene in transgenic oilseed rape.*  
3<sup>rd</sup> National Biosafety Conference, Tehran, Iran, 13-15, June 2011.
- 7) **Samira Kahak**, Ali Mohammad Shakib, Jalal Saba, Siamak Asadi and Mana Ahmadraji;  
*Molecular analysis of the transgenic oilseed rape containing BnFUL gene.*  
7<sup>th</sup> National Biotechnology Conference, Tehran, Iran, 12-14, September, 2011.

- 8) **Samira Kahak**, Ali Mohammad Shakib, Jalal Saba, Siamak Asadi and Mana Ahmadraji;  
*Review on genes controlling seed shattering in oilseed rape.*  
2<sup>nd</sup> Conference of Biology Reserchers, Tehran, Iran, 5-7, March, 2011.
- 9) **Samira Kahak**, Behzad Ghareyazie, Habibollah Samizadeh, Motahhareh Mohsenpour  
*Decision Making and Approval System for Importation of Transgenic Agricultural Commodities in Iran*, 3<sup>rd</sup> International & 11<sup>th</sup> National Biotechnology Congress of Islamic Republic of Iran, 1-3, September, 2019
- 10) **Samira Kahak** and Behzad Ghareyazie  
*Biosafety Aspects of Cisgenesis, Intragenesis and Transgenesis*  
4<sup>th</sup> International and 12<sup>th</sup> National Biotechnology Congress of Islamic Republic of Iran, Tehran, Iran, 22-24, August, 2021