Marzieh Shamshiri Sorkhabadi

Curriculum Vitae

Marzieh Shamshiri,
Ph.D. Student of Virology
Department of Plant Pathology
Faculty of Agriculture,
Tarbiat Modares University, Tehran, Iran.

Date of Birth: 16- July-1992

Department of Plant Pathology Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran.; P.O.Box: 14115-336, Tehran, I. R. Iran
m.shamshiri.1992@gmail.com
+98 9162491949
+34604379579
live:c14522ed96cffb95

EDUCATION

Dec, 2022-Sep, 2023

- **Visiting research scholar at MBG-CSIC**

Biotechnology of woody species

Supervisor: Dr. M. Concepcion Sanchez Fernandez (conchi@mbg.csic.es)

Sep, 2018-Dec, 2022

- **Ph.D Student of Virology**

Department of Plant Pathology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran.

GPA: 17.96 (on scale of 20).

Thesis Title: The effect of important plant viruses on the morphological, physiological and phytochemical characteristics of saffron (*Crocus sativus* L.) and parsley (*Petroselinum crispum*)

Supervisor: Prof. Masoud Shamsbakhsh (shamsbakhsh@gmail.com)

Sep, 2014-Jan, 2017

- **Master of Science (MSc) in Plant Pathology**

Department of Plant Pathology, Faculty of Agriculture, Shahid Bahonar University of Kerman, Kerman, Iran

GPA: 17.45 (on scale of 20).

Thesis Title: "Genome Characterization and Demonstration of Infectivity of *Tomato leaf curl Oman virus* Isolated from Ground cherry (*Physalis divaricata L.*)**".**

Supervisor: Prof. Jahangir Heydarnejad (jheydarnejad@yahoo.com)

2010-2014

- **Bachelor of Science (BSc) in Plant Protection Engineering**

University of Science And Culture

GPA: 17.18 (on scale of 20).

Marzieh Shamshiri Sorkhabadi

Curriculum Vitae

TRAINING, QUALIFICATIONS AND SKILLS:

Molecular Biology, Cell Biology, Tissue Culture and Chromatography techniques

- Sequencing using the minION nanopore, with the aim of discovering new plant viruses
- Total RNA isolation, DNA isolation, Plasmid isolation
- Plant virus purification
- The construction of infectious clone for plant viruses
- Cloning of gene
- Polymerase chain reaction (PCR), Reverse-transcriptase Polymerase chain reaction (RT-PCR)
- Quantitative – PCR, Gene expression
- Bacterial Transformation, Bacterial Culture
- Tissue culture, Organogenesis, Somatic embryogenesis
- Thermotherapy, Cryopreservation, Meristem culturing
- Gas Chromatography (GC), Gas chromatography–mass spectrometry (GC-MS)
- Methanol, ethanol and ultrasonic extraction
- Essential oil extraction using Clevenger

PUBLICATION (PAPERS):

- **Shamshiri M,** Heydarnejad J, Kamali M, Pouramini N, Massumi H (2019). Identification of wild hosts of tomato yellow leaf curl virus in South-Eastern Iran. Archives of Phytopathology and Plant Protection. doi.org/10.1080/03235408.2019.1682231.
- Heydarnejad j, Kamali M, Hassanvand V, Massumi H, **Shamshiri M,** Varsani A (2017). Turnip leaf curl disease associated with two begomoviruses in south-eastern Iran. Tropical plant pathology. DOI 10.1007/s40858-017-0196-7.

ORAL AND POSTER PRESENTATIONS:

2023 Virus resistance gene transfer from tolerant walnut genotypes to virus-susceptible superior commercial walnut cultivars. International First Copy Tree Conference on "Innovative Woody Plant Cloning" (Copytree -CA21157). Santiago de Compostela, SPAIN

2019 Construction and demonstration of the infectivity of the infectious clone of *Tomato yellow leaf curl virus* isolated from *Physalis divaricata* and identification of wild hosts of the virus in south-eastern Iran1st Iranian plant pathology congress, College of Agriculture and Natural Resources, University of

Tehran, Karaj, IRAN

2016 Isolation of a begomovirus with the recombinant genome from *Physalis divaricata* in Jiroft. Proceedings of 22nd Iranian Plant Protection Congress, College of Agriculture and Natural Resources, University of Tehran, Karaj, IRAN

2016 Detection of *Turnip curly top virus* from datura in Fars province. Proceedings of 22nd Iranian Plant Protection Congress, College of Agriculture and Natural Resources, University of Tehran, Karaj, IRAN

2016 Isolation of a new turncurtovirus from leafhoppers vector in Kerman province. Proceedings of 22nd Iranian Plant Protection Congress, College of Agriculture and Natural Resources, University of Tehran, Karaj, IRAN

AWARDS, AND HONORS:

2017 Selected student as the top researcher in the field of plant pathology in the year, Kerman, Iran

2022 Accepted in the virology team, University of Nebraska-Lincoln (America)

COMPUTER SKILLS:

- **Microsoft Office (Word, Power point, Excel):** Excellent
- **Statistical software** (SAS): good
- **Bioinformatic tools:** Primer Designing, MEGA7.0, Phylogenetic Analysis (focusing on virus evolution), Bayes, Figtree, Open Lab - agilent technologies, Xcalibur, Mendeley: good

RESEARCH INTERESTS:

- Medicinal Plants, Trees (nuts)
- Virus Free Plants
- Biotic and Abiotic Stress
- Virus-Host Interactions
- microRNA
- Virus Diseases, Bacterial Diseases
- Molecular Virology, Molecular Biology, Gene Expression
- Plant Breeding, Plant Genetics, Agricultural Biotechnology
- Plant Physiology, Morphology, Phytochemistry

- Plant Tissue Culture, Micropropagation
- Modeling and Optimizing Culture Medium Mineral Composition for in vitro Propagation

LANGUAGE:

- **Mother Tongue:** Persian
- **Scientific Language:** English (fair)
  GPA: 64 (on scale of 100 of MSRT (Ministry of Culture, and Higher Education) test).

work experience:

- **Internship in plant pathology clinic**: Two months
- **The technical officer of the plant pathology clinic located in the Quarantine-Customs Department of Sarkhas county (Razavi Khorasan province)**: One year