**Mohammad Sayari (PhD student. Microbiology., 2014)**

**CONTACT INFORMATION**

Name: Mohammad Sayari

Address: Lab Omega, 6th floor, Department of Genetics, University of Pretoria, Pretoria, South Africa.

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**PERSONAL DATA**

Date of birth: April, 1, 1986

Place of birth: Shiraz-Iran

Nationality: Iranian

Language: Persian, English.

**EDUCATION**

**PhD student in Microbiology (From January, 2014)**

Department of Microbiology and Plant Pathology, University of Pretoria, Pretoria, South Africa.

Thesis title: “Genome wide survey of secondary metabolite gene clusters in different members of the family Ceratocystidaceae**, 2014-present"**

Supervisor:**Prof.Brenda Wingfield**

Co-supervisor:**Prof.Emma Steenkamp**

**M.S in Plant Pathology (March, 2012)**

Sari Agricultural Sciences and Natural Resources University, Department of plant protection, Sari, Iran.

Dissertation title: “Molecular analysis of some rice lines cultivated in north of Iran in response to *Rhizoctonia solani* causing rice sheath blight**, 2010-2012"**

Supervisor: **Dr. Valiollah Babaeizad**

Co-supervisors: **Prof. Heshmat Rahimian**

**Dr.mohammad Ali Tajick ghanbari**

**(GPA=3.6 out of 4); Ranked 2st in class of 11 students**

**B.S. in Plant protection (July 2009)**

Sari Agricultural Sciences and Natural Resources University, Department of plant protection, Sari, Iran.

**(GPA=15.86/20); Ranked 7st in class of 44 students**

**RESEARCH EXPERIENCE**

* Agrobacterium mediated gene transformation
* Genomic Comparison
* Gene analyzing
* Plant Microbe Interactions
* Familiar with **Q-RT-PCR**.
* Experience with **High Performance Liquid Chromatography** (**HPLC**) and **Gas Chromatography** (**GC**).
* Being familiar with **PCR-RFLP**
* DNA and RNA extraction
* Molecular detection and quantification of pathogens
* Microbiology Insect diversity
* Citrus Red Mite- interactions
* Genetic diversity of some fungal genius including **Rhizoctonia**, **Fusarium** and **Hyphodermella**
* Primer design
* Enzyme assays
* Protein extraction
* Mono and two-dimensional electrophoresis
* Expertise in Computer Programming (**NTSYS, SMURF, CLUSTALX, CLC, GENSTAT, MEGA, Excel, CLUSTALW, Chromas and MEGA5**).

**PROJECTS**

* Currently I’m busy with development of a proper transformation system for Ceratocystis species. First part of this project done at the University of Laval, Quebec, Canada.
* Fungal comparison genomics with high reference on *Ceratocystistidaceae* secondary metabolite gene clusters under supervision of Prof.Brenda Wingfield and Emma Steenkamp.
* I worked on a part of a huge national project entitle: **citrus** **Induce resistance** at Genetics and Agricultural Biotechnology Institute of Tabarestan (GABIT), Sari, Iran.
* I also worked on a project at Genetic & Agricultural Biotechnology Institute of Tabarestan (GABIT) Entitle: The evaluation of some genes expression involving in resistance of Chrysomphalus Dictiospermy against some commercial pesticide using in citrus orchard of Northern part of Iran, in collaboration with Dr Mohammad Reza Damavandian.
* Recently I invited to work in a very interesting project entitle: Generation and Molecular analysis of transgenic rice in response to biotic and abiotic stress.

**ISI JOURNAL ARTICLES**

1. Rahimlou S, Babaeizad V, Bose T and **Sayari M**. 2016. Determination of lignin-modifying enzymes (LMEs) in *Hyphodermella* species using biochemical and molecular techniques. Mycologia Iranica. 3(1): 57 – 63.
2. Sayari M., Babaeizad V., Tajick Ghanbari M.A and Rahimian H. (2016) Resistance of Two Rice Cultivars to the Sheath Blight Agent Rhizoctonia solani AG1-1A. *Journal of Agricultural Biotechnology*.
3. Rahimlou S, [Bose T](http://www.fabinet.up.ac.za/index.php/people-profile?profile=1100), Babaeizad V, [**Sayari M**](http://www.fabinet.up.ac.za/index.php/people-profile?profile=1125), Tajick MA. (2015) **Molecular data confirm the mitosporic state of *Hyphodermella rosae* (Phanerochaetaceae) as the pathogen of rosaceous fruits in northern Iran**. *Sydowia* **67**(1):189-196.
4. Wingfield BD, Barnes I, De Beer ZW, De Vos L, Doong TA, Kanzi AM, Naidoo K, Nguyen DHT, Santana QC, Sayari M, Seifert KA, Steenkamp ET, Trollip C, Van der Merwe N, Van der Nest MA, Wilken PM and Wingfield MJ. (2015) [*Draft genome sequences of Ceratocystis eucalypticola, Chrysoporthe cubensis, C. deuterocubensis, Davidsoniella virescens, Fusarium temperatum, Graphilbum fragrans, Penicillium nordicum,* and *Thielaviopsis musarum*](https://www.researchgate.net/publication/285582039_Draft_genome_sequences_of_Ceratocystis_eucalypticola_Chrysoporthe_cubensis_C_deuterocubensis_Davidsoniella_virescens_Fusarium_temperatum_Graphilbum_fragrans_Penicillium_nordicum_and_Thielaviopsis_musa?ev=prf_high). *IMA fungus* 6(2): 493-506.
5. Rahimlou S, Babaeizad V and **Sayari M**. (2014**)** First report of fruit spot of pomegranate caused by *Colletotrichum gloeosporioides* in Iran**.** *Journal of Plant Pathology* 96(3): 603-611.
6. **Sayari M**., Babaeizad V., Tajick Ghanbari M.A and Rahimian H. 2014. Expression of the pathogenesis related proteins, NH-1, PAL, and lipoxygenase in the iranian Tarom and Khazar rice cultivars, in reaction to *Rhizoctonia solani*– the causal agent of rice sheath blight. Journal of Plant Protection Research. Vol. 54, No. 1 (2014). DOI: 10.2478/jppr-2014-0006
7. **Sayari M**., Babaeizad V and Fathi J. (2013) FIRST REPORT OF *PILIDIUM CONCAVUM* AS THE CAUSATIVE AGENT OF TAN-BROWN ROT ON *PRUNUS DOMESTICA* FRUITS. Journal of Plant Pathology. 95 (2), 447-452
8. **Sayari, M**., Babaeizad, V., Tajick Ghanbari, M.A, Rahimian, H., Borhani, B., Nasiri Taleshi, S.J and Mehrabioon Mohammadi, M. (2012) First report on dry fruit rots disease of plum caused by Hyphodermella rosae in Iran. APS net. http: //dx.doi.org/10.1094/PDIS-10-11-0825.
9. Babaeizad Valiollah, **Sayari M**, Rahimian Heshmat. (2012) Occurrences of a new fruit rot of peach caused by *Hyphodermella* *rosae* in northern Iran. *New Disease Reports* (2012) 26, 1. [http://dx.doi.org/10.5197/j.2044-0588.2012.026.001].

**Selections of National and International CONFERENCE ARTICLES**

1- Behzad Borhani, Heshmatolah Rahimian, Valiolah Babaeizad, Esfandiar Zohour and **Mohammad Sayari**. 2012. A twig and branch canker disease of stone fruit trees incited by *Cryptococcus magnus*. The International Congress on Yeasts. Madison, Wisconsin, USA. (Poster presentation).

2- **Sayari, M**, Babaeizad, V, Tajick Ghanbari, M.A and Rahimian, H. 2012. Morphological and molecular characterization of *Hyphodermella rosae* the causal agent of dry fruit rot on plum and peach in Iran.11th European Conference on Fungal Genetics, Marburg, Germany. (Poster presentation).

3- **Sayari, M**, Babaeizad, V, Tajick Ghanbari, M.A and Rahimian, H. 2012. Phenylalanine Ammonia Lyase and Pathogenesis related genes involved in sheath blight disease resistance in Tarom, Iranian rice cultivar. 11th European Conference on Fungal Genetics, Marburg, Germany. (Poster presentation).

4- **Sayari, M**, Babaeizad, V, Tajick Ghanbari, M.A and Rahimian, H. 2012. Identification of the Rhizoctonia solani AG-4 the causal agent of safflower stem canker based on morphological and genetic characteristics. 11th European Conference on Fungal Genetics, Marburg, Germany. (Poster presentation).

5- **Sayari, M**, Babaeizad, V, Tajick Ghanbari, M.A and Rahimian, H. 2012. Morphological and molecular characterization of Rhizoctonia solani AG2-1 the causal agent of canola stem canker in Iran. 11th European Conference on Fungal Genetics, Marburg, Germany. (Poster presentation).

6- Borhani B, Rahimian H, Babaeizad, V and **Sayari M**. 2012. Cryptococcus adeliensis the causative agent of stem canker of stone fruit trees. 11th European Conference on Fungal Genetics, Marburg, Germany. (Poster presentation).

7- Moosavi Hosein, Barbarized Valiollah and **Sayari Mohammad** and Mehrabioon Mohammadi Marzieh. 2012. Occurence of velvetleaf stems canker caused by *Phomopsis longicolla* in Iran. 20th Iranian Plant Protection Congress, Shiraz University (Lecture presentation).

8- Babaeizad Valiollah and **Sayari Mohammad**. 2012. The morphological and molecular characterization of the causal agent of althea stem’s canker in Iran. 20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

9- Bavand Sourena, **Sayari Mohammad** , Babaeizad Valiollah and Tazick Zahra. 2012. Morphomolecular Identification of the causal agent of Bracken vascular wilt in Iran. 20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

10- Babaeizad Valiollah , **Sayari Mohammad** and Hajian Yasaman. 2012. First report of salvia stem canker caused by *Rhizoctonia solani* in Iran.20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

11- Khalili Ghobad, Babaeizad Valiollah , **Sayari Mohammad** and Hashemi Sareh. 2012. First report of Dovaston yew dye back caused by *Phomopsis theicola.* 20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

12- Nasiri Taleshi Seyyed Jafar, Alian Seyyed Amin, **Sayari Mohammad**, Safari Arabi Zahra and Mahdian Safar Ali. 2012. The first report of *Sclerotium rolfsii*, causative agent of strawberry stem rot in Iran. 20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

13- Borhani Behzad, **Sayari Mohammad**, Babaeizad Valiollah and Hashemi Sareh. 2012. First report of plum’s fruit lesion caused by *Alternaria alternate* in Iran. 20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

14- **Sayari Mohammad**, Babaeizad Valiollah, Rahimian Heshmatollah and Tajick Ghnabari Mohammad Ali. 2012. The analysis of the role of Defensis and Thionin in intraction of some rice cultivars and *Rhizoctonia solani* . 20th Iranian Plant Protection Congress, Shiraz University (Poster presentation).

15- **Sayari Mohammad** and Babaeizad Valiollah. 2012. Molecular comparison of isolates of *Rhizoctonia solani* AG*-*2-1 the causal agent of canola stem canker using ITS-RFLP. The 12th Iranian Genetics Congress.

16- Babaeizad Valiollah and **Sayari Mohammad**.2012. Involvement of Lipoxigenase and several pathogenesis- Related genes in rice Tarom cultivar against sheath blight causal agent, *Rhizoctonia solan*i. The 12th Iranian Genetics Congress.

17- Babaeizad Valiollah and **Sayari Mohammad**. 2012. Genetically comparison between the isolates of *Rhizoctonia solani* AG-4, the causal agent of safflower stem canker in Iran using ITS-RFLP. The 12th Iranian Genetics Congress.

18**- Sayari M.,** BabaeizadV., Tajick Ghanbari M.A and Rahimian H. 2011. The role of PAL and Pathogenesis related protein-3 in resistance of Tarom and Khazar, Iranian rice cultivars in response to rice sheath blight. National conference on sustainable agriculture, Islamic Azad University, Varamin, Iran. (Poster presentation)

19- **Sayari M**., Babaeizad V., Tajick Ghanbari M.A and Rahimian H. 2011. The role of NH1 and Pathogenesis related protein-10 in resistance of Tarom and Khazar, Iranian rice cultivars in response to rice sheath blight. National conference on sustainable agriculture, Islamic Azad University, Varamin, Iran. (Poster presentation).

**TEACHING EXPERIENCE**

Bacteriology (Lab assistant, third year BSc students), University of Pretoria, South Africa, 2017.

Bacteriology (Lab assistant, third year BSc students), University of Pretoria, South Africa, 2016.

Microbiology (Lab assistant, third year BSc students) University of Pretoria, South Africa, 2015.

Microbiology (Lab assistant, third year BSc students) University of Pretoria, South Africa, 2014.

Plant disease (second year BSc students), Sari Agricultural University, Sari, Iran, 2012.

Fruit trees diseases (second year BSC students), Sari Agricultural University, Sari, Iran, 2013

Plant microbe interaction (MSc students), Sari Agricultural University, Sari, Iran, 2013

**PROFESSIONAL MEMBERSHIPS**

Iranian Phytopathological Society

**Iranian Genetics Society**

**Agricultural and Natural Resources Engineering Organization**

**COMPUTER SKILLS**

* Familiar with general soft wares like Office Word, Excel, Power point, etc
* Being familiar with biological soft wares such as MEGA, CLUSTAL, SEQBOOT, NTSYS, CLUSTALX, GENSTATE, SMURF and etc.

**REFERENCES**

**1-Prof.Brenda Wingfield:** Prof in Genetics. Department of Genetics, University of Pretoria, Pretoria, South Africa. Email: **brenda.wingfield@up.ac.za .**

**2-Prof.Emma Steenkamp:** Prof in Plant Pathology. Department of Microbiology and Plant Pathology, University of Pretoria, Pretoria, South Africa. Email: **emma.steenkamp@up.ac.za .**

**3**- **Valiollah Babaeizad:** Assistant Prof in plant pathology. Department of Plant Protection, Sari Agricultural Sciences and Natural Resources University, Mazandaran, Sari, Iran. Email: [**babaeizad@yahoo.com**](mailto:babaeizad@yahoo.com) **. Tell: +989113538933, FAX: +98151382563.**

**4- Heshmat Rahimian:** Prof in phytopathology. Department of Plant Protection, Sari Agricultural Sciences and Natural Resources University, Mazandaran, Sari, Iran. Email: [**Rahimian.h@gmail.com**](mailto:Rahimian.h@gmail.com)**. Tell: +989387491800, FAX: +98151382563.**