



**In the name of God**

## **Curriculum Vitae**

**Ghotbe Ravandi Blvd**  
**Department of Biotechnology**  
**University of Kashan, Kashan, Iran**  
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**Seyed Ali Hosseini Tafreshi**

### **EDUCATION**

#### ■ University of Isfahan

##### **Ph.D. in Plant Physiology, 2011**

Dissertation: "Study of Virus Induced Gene Silencing (VIGS) in *Nicotiana benthamiana* in order to silencing of *pds* gene in *Taxus baccata* L. and its effects on Taxol production and some physiological parameters"

##### **M.SC., Plant Physiology, 2004**

Dissertation: "The study of  $\beta$ -carotene production by different strains of *Dunaliella salin* in open ponds"

#### ■ University of Tehran

##### **B.SC. in Plant Science, 2001**

### **AWARDS**

- The top national technologist, 12th National Festival for Glorification of Technologists and Researchers, Iran, 2012.
- The successful activist in incubator center of university of Kashan for establishment of plant tissue culture Lab in commercial scale, 2012.
- The top (highest scored) student in plant physiology PhD course.
- The top candidate in PhD entrance exam for studying plant physiology in university of Isfahan.
- The best-talent and distinguished PhD student in university of Isfahan.

## **TEACHING EXPERIENCE**

- University of Kashan, Kashan, Iran.

**Lecturer, 2011–2014**

Taught the course “**Plant Physiology**” Designed course structure and requirements.

**Lecturer, 2011–2014**

Taught the course “**Plant Physiology Lab**” Designed course structure and requirements and set the Lab.

**Lecturer, 2011–2013**

Taught the course “**Botany**” Designed course structure and requirements.

**Lecturer, 2011–2014**

Taught the course “**Botany Lab**” Designed course structure and requirements and set the Lab.

**Lecturer, 2011–2014**

Taught the course “**Plant Biotechnology**” Designed course structure and requirements.

**Lecturer, 2011–2014**

Taught the course “**Biotechnology Lab**” Designed course structure and requirements and set the Lab

**Lecturer, 2011–2014**

Taught the course “**English for Biology Student**” Designed course structure and requirements.

## **RESEARCH INTERESTS AND EXPERIENCE**

- Methods in Plant Molecular Biology

Gene silencing using VIGS (Virus induced gene silencing) and miRNA

Stress Physiology

PCR, Race-PCR, Real time PCR

Gene cloning

Extraction of Nucleic acids from recalcitrant plants

- Methods in Phytochemistry

Extraction of Plant secondary metabolites

Detection of metabolites using TLC and HPLC

- Methods in isolation and culturing

Isolation of microbial and microalgal species

Microalgae culturing in laboratory and pilot scale

Plant tissue culture of ornamental and non-ornamental plants

Removing of Seed dormancy and rooting of cutting

Hydroponic culture

Cultivation of medicinal plants in large scale

## PUBLICATION

- Eftekhariyan Ghamsari, M. R., Karimi, F., Mousavi Gargari, S. L., **Hosseini Tafreshi, S. A.** and Salami, S. A. (Printed online in July 2014) Assessing the tobacco-rattle-virus-based vectors system as an efficient gene silencing technique in *Datura stramonium* (Solanaceae). *Virus Genes*. DOI 10.1007/s11262-014-1104-6
- **Hosseini Tafreshi, S.A.**, Shariati, M, Mofid, M. R, Khayam Nekoi, M, and Esmaili, A. (2012) Heterologous virus-induced gene silencing as a promising approach in plant functional genomics. *Molecular Biology Reports* 39(3), 2169-78.
- **Hosseini Tafreshi, S. A.**, Shariati, M., Mofid, M. R. and Khayyam Nekouei, S. M. (2011) Rapid germination and development of *Taxus baccata* L. by *in vitro* culturing of the embryos followed by hydroponic growth of the seedlings. *In Vitro Cell Dev Biol –Plant*. (2011) 47:561–568.
- Abbasi Kejani, A., Mofid, M. R., Abolfazli, K. and **Hosseini Tafreshi, S. A.** (2010) Encapsulated activated charcoal as a potent agent for improving taxane synthesis and recovery from cultures. *Biotechnology and Applied Biochemistry* 56, 71–76.
- Jaberolansar, N., Hayati, J., Rajabi Memari, H., **Hosseini Tafreshi, S. A.** and Nabati Ahmadi, D. (2010) Tomato and Tobacco Phytoene Desaturase Gene Silencing by Virus-Induced Gene Silencing (VIGS) Technique. *Iranian Journal of Virology* 4(1): 7-11.
- Abbasi Kejani, A., **Hosseini Tafreshi, S. A.**, Khayyam Nekouei, S. M. and Mofid, M. R. (2010) Efficient isolation of high quality nucleic acids from different tissues of *Taxus baccata* L. *Molecular Biology Reports* 37:797–800.
- **Hosseini Tafreshi, A** and Shariati, M (2009) *Dunaliella* Biotechnology: Application and methods. *Journal of Applied Microbiology* 107(1), 14-35.
- Haghghatian, M., Mofid, M. R., Nekouei, M. K., Yaghmaei and **Tafreshi, A. H.** 2008. Isomalt production by cloning, purifying and expressing of the MDH gene from *Pseudomonas fluorescens* DSM 50106 in different strains of *E.coli*. *Pakistan Journal of Biological Sciences* 11(16), 2001-2006. (ISI)
- **Hosseini Tafreshi, A** and Shariati, M (2006) Pilot culture of three strains of *Dunaliella salina* for  $\beta$ -carotene production in open ponds in the center region of Iran. *World Journal of Microbiology and Biotechnology* 22(9), 1003-1006.
- Sarmad J. Shariati. M, and **Hosseini Tafreshi A.** (2006) Preliminary assessment of  $\beta$ -carotene accumulation in four strains of *Dunaliella salina* cultivated under the different salinities and low light intensity. *Pakistan Journal of Biological Sciences* 9(8), 1492-1496.

## PRESENTATIONS AND ABSTRACTS

- R.S. Ejtahed, T. Radjabian, **S.A. Hosseini Tafreshi** and A. Kamrani (2012) Determination of Rosmarinic Acid In Leaves of Some Iranian *Salvia* Species by A Rapid Spectrophotometric Method. National Congress On Medicinal Plants, kish island, Iran.
- Roghayehsadat Ejtahed, Tayebah Radjabian, **Sayed Ali Hosseini Tafreshi**, Asghar Kamrani. 2012. Determination of Rosmarinic Acid in Some Iranian *Salvia* Species by HPLC method. 17<sup>th</sup> National & 5<sup>th</sup> International Iranian biology conference. Kerman. Iran.
- **Hossein Tafreshi, S.A.**, Shariati, M, Mofid, M. R (2011) Heterologous virus-induced gene silencing as an efficient method for characterizing the function of plant genes. 2th congress on plant physiology, Yazd, Iran.
- Eftekhariyan Ghamsari, M. R., Karimi, F., Mousavi Gargari, S. L. and **Hosseini Tafreshi, S. A.** 2011. Silencing of *pds* gene in *Atropa belladonna* using heterologous VIGS. 7 the biotechnology congress of Islamic Republic of Iran, Tehran.
- Eftekhariyan Ghamsari, M. R., Karimi, F., Mousavi Gargari, S. L., **Hosseini Tafreshi, S. A.** and Darvish Alipour Astaneh, A. 2011. Silencing of *pds* gene in herbs using heterogene of *Arabidopsis* using VIGS. Congress on medicinal plants, Mazandaran, Iran.
- Jaberolansar, N., Hayati, J., Rajabi Memari, H. and **Hosseini Tafreshi, A.** 2010. Gene silencing by Virus-induced gene silencing (VIGS) technique. 11th Genetic Congress, Tehran, Iran. Poster presentation.
- Jaberolansar, N., Hayati, J., Rajabi Memari, H. and **Hosseini Tafreshi, A.** 2010. Using tomato PDS gene sequence for tobacco PDS gene silencing by virus-induced gene silencing (VIGS) technique. 19th Plant Pathology Congress, Tehran, Iran. Oral presentation.
- **Seied Ali Hosseini Tafreshi** and Mansour Shariati (2007) Outdoor culture of different strains of *Dunaliella salina* alga in the climatic conditions of Iran. 1th congress on Microalgal Biotechnology, Tabriz, Iran.

## RESEARCH PROJECTS

- **Hosseini Tafreshi A.** 2014. Optimization of plant tissue culture of some ornamental plants fanatically supported by Kashan municipality.
- Shariati. M, and **Hosseini Tafreshi A.** 2010. B-carotene and *Dunaliella* powder production in pilot scale fanatically supported by university of Isfahan and Incubator of University of Kashan.

## GENES AT NCBI

- **Hosseini Tafreshi, S.A.**, Shariati, M. and Mofid, M.R. Cloning of a new phytoene desaturase (PDS) from gymnosperm, *Taxus baccata* (English yew. ACCESSION N. GU568337.

- **Hosseini Tafreshi,S.A.**, Mofid,M.R. and Shariati,M.Isolation and cloning of Phenylalanine Ammonia Lyase Gene from *Taxus baccata* (English yew). ACCESSION N. GU568338.
- Ejtahed,R.S., Radjabian,T. and **Hosseini Tafreshi,S.A.** Isolation and cloning of Phenylalanine Ammonia Lyase Gene from *Salvia virgata*. ACCESSION N. KC182572
- Ejtahed,R.S., Radjabian,T. and **Hosseini Tafreshi,S.A.** Isolation and cloning of Phenylalanine Ammonia Lyase Gene from *Salvia officinalis*. ACCESSION N. KC182570
- Ejtahed,R.S., Radjabian,T. and **Hosseini Tafreshi,S.A.** Isolation and cloning of Phenylalanine Ammonia Lyase Gene from *Salvia hypoleuca* ACCESSION N .KC182571

## REFERENCES

- **Prof. Mansour Shariati**  
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University of Isfahan, Isfahan, Iran  
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- **Dr. Mohammad Reza Mofid**  
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