

# M. Mehdi Sharifani, Ph.D

## Curriculum vitae

Since all things have causes, The knowledge of anything is not acquired or complete unless it is known by its causes.

(Avicenna, 980-1037)



**mmsharif2@gmail.com**

Horticulture Department

Present; Associate Prof (1386), Gorgan University of Agricultural Sciences and Natural Resources

Faculty of Plant Production, Horticulture Department.

Baseij SQ, Gorgan, Iran 49138-15739

---

### **Education**

**Msc.**

**Tarbiat Modaress University, 1989. Horticulture Science.**

**Ph.D.**

**1998, University of Adelaide, Adelaide, Australia**

**Horticultural Science.**

**Thesis subject: Gene flow by pollen in pear using molecular markers.**

### **Selected Publications:**

**1-Kermatlou, I., M. Sharifani and H. Sabouri (2016).** Evaluation of Genetic diversity in some walnut (*Juglans regia* L.) genotypes using morphological markers. **Journal of crop production processing.** 6 (20): 13-23 (In Persian, English abstract)

**2- Asheri, M., M. Sharifani, A.Yamchi and M.H. Mazinani. (2015).** Influence of Olive Cultivar on Oil Attributes in the Arid Region of Qom, Iran. **Agriculturae Conspectus Scientifici** 80(3): 173-179.

**3-Kermatlou, I., M. Sharifani and H. Sabouri. (2015).** Evaluation of non-linear regression models in fruit analysis of Persian walnut. **Journal of Horticultural Science.** 29 (3): 451-459. (In Persian)

- 4- Ghasemi, Y. S Beacknejad, F. Sohrevardi, M. Sharifani, E. Amiri and G.A Nematzadeh (2015).** Adventitious Shoot and Root Regeneration of Wild Strawberry (*F. viridis* Duch.) by Means of Tissue Culture Medium Optimization. **Biological forum.** 7(2):436-441
- 5-Nabifarkhani, N., M. Sharifani, A. Shakeri and E. Gnaji Moghadam. (2015).** Effect of nano-composite and Thyme oil (*Tymus Vulgaris* L) coating on fruit quality of sweet cherry (Takdaneh Cv) during storage period. **Food Science and Nutrition.** .3(4): 349-354
- 6-Sadeghiani, -E. Seifi, A. Dadar, M. Alizadeh and M. Sharifani. (2015).** The impact of vegetable oil spray on berry thinning and quality in grapevine cv. 'Keshmeshi'. **Ecology, Environment and Conservation.** 20 (2);739-743
- 7-Nabifarkhani, N., M. Sharifani, A. Shakeri and E. Gnaji Moghadam. (2015)** Alternation of primary metabolite and quality attributes of sweet cherry affected by natural edible coating. **Minerva biotechnologia.**27:55-61
- 8-Keramatlou, I., M. Sharifani, H. Sabouri, M. Alizadeh and B. Kamkar. (2015).** A simple linear model for estimation of leaf are in Persian walnut (*Juglan regia* L.). **Scientia Horticulturae.**184: 36-39.
- 9-Saei, H., M. Sharifani, A. Dehghani and V. Akbarpour. (2014).** Description of biomechanical forces and physiological parameters of fruit cracking in Pomegranate. **Scientia Horticulturae.** 178: 224-230.
- 10-Imani, M. and M. Sharifani. (2014).** Salicylic acid and methyl Jasmonate improve the quality attributes of Iranian table grape (*Vitis vinifera*, CV. Shahani). **Annals of Horticulture.** 6(2): 205-214.
- 11- Shamloo, M., M. Sharifani, A.D. Gramakhani and E. Seifie. (2014).** Alternation of secondary metabolites and quality attributes in Valencia Orange fruit (*Citrus sinensis*), as influenced storage period and edible covers. **Journal of Food Science and Technology.** **Journal of Food Science and Technology.**52 (4).1936-1947. (IF:2.2)
- 12-Shamloo, M. M. Sharifani, A.D. Gramakhani and E. Seifie. (2013).** Alternation of Falvonoid compounds in Valenica orange (*Citrus sinensis*) as a function of storage peel and edible covers. **Minerva Biotec.** 25 (3).191-197.
- 13-Farhadi, M., M. Tigabu, A.G. Arian, M. Sharifani, and A. Danshvar, P.C. Oden. (2013).** Pre-Sowing treatment for breaking dormancy in *Acer velutium* Bois seed lots. **Journal of Forestry Research.**. 24(2): 273-278.
- 14-Madah, A., M. Sharifani, K. Hemmati, H. Sadeghipour, and E. Fataei. (2012).** Effect of cold temperature and duration on carbohydrate spectrum changes in three genotypes of *Lilium leddbourri*'s bulb. **Caspian Journal of applied science research** 1 (8):1-5.

- 15-Sharifani, M., V. Akbarpour, S. Samadi, and A. Sabourooh. (2010).** Physical and chemical characteristics of Thomson Nvel orange fruits on four rootstocks in north of Iran. **American-Eursian J. Agric & Environ. Sci.** 8(2):156-160.
- 16-Akbarpour, V., K. Hemmati, M. Sharifani and Z. Bashiri sadr. (2010).** Multivariate analysis of physical and chemical characteristics in some pomegranate (*Punica granatum*) cultivars of Iran. **Journal of Food, Agriculture and Environment.** 8 (1):244-248.
- 17-Akbarpour, V., K. Hemmati, M. Sharifani. (2010).** Physical and chemical properties of pomegranate (*Punica granatum*) fruit in maturation stage. **American-Eurasian. J. Agric & Environ. Sci.** 6(4):411-416.
- 18-Alikhani, M., M. Sharifani, K. Hemmati, S.J. Mousavizadeh and M. Azizi (2010).** The effect of some natural compound in shelf life and quality of pear fruit. **Journal of Agricultural Sciences and Natural Resources.**16 (3). 158-171.
- 19-Alikhani, M., M. Sharifani and S.J. Mousavizadeh. (2009).** Alikhani, M., M. Sharifani, S. Mousavizadeh, and M. Azizi.The antioxidative activity of some essential oils in reducing peroxidase activity and enzymatic browning in some vegetables. **Journal of Agricultural Sciences and natural resources.** 16:203–207
- 20-Alikhani, M., M. Sharifani, M. Azizi, S.J. Musavizadeh and M. Rahimi. (2009).** Increasing shelf life and maintaining quality of strawberry with application of mucilage edible coating and plant essential oil. **Journal of Agricultural Sciences and natural resources.**16 (4).1-9.
- 21-Sharifani, M., E. Erfani, A. Bagherian, C. Nishtani, T. Kimura V, Erfani, and, T. Yamamoto (2008).** Mutation in chloroplast DNA revealed relations and discriminations in genus *Pyrus*. **Acta Horticulturae.**800:355-364.
- 22-Ghasemi, M., K. Hemmati, M. Sharifani. (2009).** Effects of NAA and certain treatments on sprout control and growth of certain nursery trees. **Journal of Agricultural Sciences and natural resources.** 16(4): 93-107
- 23- Mashayekhi, K., M. Sharifani, M. Shahsavand and H.Kalati. (2008).** Induction of somatic embryogenesis in absence of exogenous application of auxin in cucumber (*Cucumis sativus*). **International Journal of plant production.** 2(2):1-4.
- 24-Farhadi, M., H. Heydari, M. Sharifani, and A. Kohrokhi. (2007).** Influence of cutting time of stem and medium on rooting of maple (*Acer velutinum*). **Journal of Natural Resources of Tehran University.** 60 (2):505-515.
- 25-Sharifani, M., E. Seifie and M. Wirthenson. (2006).** Ovule dimensions and its relation with fruit and seed size in pear. **Journal of Science and Technology. Scientific Research Journal of Ardebil University.** 5 (1, 2): 1-8.
- 26-Farhadi, M., M. Sharifani, H. Heydary and A. Kohrokhi. (2006).** Effects of seed covering structure and period of stratification on seed germination of *Acer Velutinum*. **Journal of Agricultural Sciences and Natural Resources.** 13 (3).44-49.

- 27-Gharibzadeh. R., M. Sahrifani, A. khalighi and M. H. Pahalavani (2007).** Selection of the best pollinizer for olive (*olea europeae*). Koroneiki cultivar in Golestan province. **Journal of Food and Agricultural Sciences.** 21(2):23-30.
- 28-Sharifani, M., M. Parizadeh and K. Mashayekhi (2005).** The effects of pre-storage treatments on post harvest quality of cut Anemone (*Anemon coronaria*) Flowers. **Acta Horticulturae:** 682:701-707.
- 29-Saito, T., C. Fang, S. Shin, H.S. Hwang, and M. Sharifani (2005).** Status of the pear industry in Asia. **Acta Horticulturae.** 671: 57-63.
- 30-Sharifani, M. and J.F. Jackson. (2004).** Nectar analysis, pollen production and anthocyanin measurement revealed distinct variation in pears. **Acta Horticulturae** 636
- 31-Zarei, H., M. Sharifani , S.E. Razavi and Y. Maghsoudlosu. (2003).** Evaluation of chemical and physical treatments on storage life of Thompson orange fruit. **Journal of Agricultural Sciences and Natural Resources .**12(1)37-45.
- 32-Sharifani, M.M. and J.F. Jackson. (2002).** Estimation of gene flow by pollen in a part of Pack ham Triumph Pear orchard. **Acta Horticulturae.**561:53-59.
- 33-Sharifani, M.M. and J.F. Jackson. (2002).** Influence of caging on pollination and fruit set of two Pear cultivars. **Acta Horticulturae.**561:235-241.
- 34-Sharifani, M.M. and J.F. Jackson. (2002).** Gene flow by pollen to Lemon Bergomot pear cultivar using isozyme markers. **Acta Horticulturae** 596:153-160.
- 35-Sharifani, M.M. and J.F. Jackson. (2002).** Characterization of pear species and cultivars using isozyme polymorphism. **Acta Horticulturae.** 587: 269-278.
- 36-Sharifani, M .M. (2001).** Influence of pollen source and seed number on characteristics of pear fruit. **Journal of Agricultural Sciences and Natural Resources.** 8(3): 45-53.
- 37-Sharifani, M.M. and J.F. Jackson. (2000).** Study of pollen surface morphology of pear species and cultivars using SEM and image analysis. **Journal of Agricultural Sciences and Natural Resources.** 7(4): 45-52.
- 38-Sharifani, M.M. and J.F. Jackson. (1999).** Characterization of pear species and cultivars using RAPD primers. **Acta Horticulturae.** 538:499-504.
- 39-Sharifani, M.M. and J.F. Jackson.(1996).** Isozyme inheritance in controlled crosses with Packham Triumph pear. **Acta Horticulturae.**437:169-174.

## **Books or Book chapter**

1. **M. Sharifani and K. Hemmati (2007)** (Translation to Persian). “Tea” By Denis Bonheure. Publisher: Aeij, Tehran, Iran. 135 pages. (In Persian). Text Book.

2. **M. Sharifani and E. Eslamian (2010)**. “Tropical fruit Trees”. Publisher: Abiej, Tehran, Iran. 313 pages. (In Persian).Text book.

3. **Fallahi, F., B. Fallahi, M. Sharifani and A. Ebrahimi. (2005)**. Basic in Physiology of water and mineral uptake in fruit tress. (Book chapter) In Tree fruit nutrition. Good Fruit Grower, USA

### **Book under process of publication:**

4- **Mehdi sharifani, Jaleh Asghari, Amir Dareai and Hamid Kalati. Gorgan. (2016). The basis of food and crop analysis..**Under process of publication

### **Experiences of leadership in Research**

- Referee for Journal of Agricultural Sciences and Natural Resources.
- Referee for IV International Symposium of Almond and Pistachio. .
- Member of Editorial Board for International Journal of plant production.
- Referee for the American Journal of Plant Science and Biotechnology.
- Referee for Journal Scientia Horticulturae.

Editor in board for Journal of plant production.

### **Performed Research projects**

- 1- **Sharifani, M. M. and Abbasi, N. (2006)**. Identification of Iranian pear germplasm using botanical traits.
- 2- **Mashayekhi, K. and Sharifani, M. (2006)**. Somatic embryogenesis in cucumber.
- 3-**Sharifani, M. M and A. Aylar. (2005)**. Study on diversity of wild pomegranate (*Punica granatum*) using botanical traits in Golestan province, north of Iran.
- 4- **Sharifani, M. M and Mashayekhi, K (2004)**.Physical and chemical analysis of 10 tomato fruit cultivars grows in Gorgan are..
- 5- **Sharifani, M. M, T. Kimura, and T. Yamamoto. (2003)**. Study of mutations for chloroplast DNA of genus *Pyrus*.
- 6-**Sharifani, M. M and H. Ghotbi. (2002)**. Evaluation of fruit characters of nonsymmetrical and symmetrical shape, Shah Miveh pear cultivar.
- 7- **Sharifani, M. M. and M. Wirthenson. (2000)**. Ovule dimensions and its relation with fruit in pear species and cultivars.

8- **Sharifani, M. M., Salahi, F.** (1999). Study of heritability for vegetative traits for six native Persians lettuce cultivars.

## **Teaching Experiences:**

### **A-Undergraduate level**

**1-Plant Propagation (Sexual Aspect).** Reference Book: Book of Plant Propagation (Principles and Practices) by Hartman and Kester..(1999-2010) and relevant Journals.

**2-Temperate Pomology (1999-2015).** Reference Books: 1- “Fruit culture its Science and Art” by K. Ryugo; 2- “Temperate Zone Homology” by M.N. Westwood. This topic is shared with two other colleagues.

**3-Post harvest Physiology of Fruits and Vegetables. (1999-2015)** Reference Books: 1- “Storage, processing and quality attributes of fruits and vegetables” by D. K. Salunkhe, H.R. Bolin and N.R. Reddy; 2-“An Introduction to the Physiology and Handling of Fruit and Vegetables” by Wills, Lee, Graham.

**4-Tropical Fruit Trees.** (1999-2014) Reference Books: 1- “Tropical Fruits” by H.Y. Naknason and R.E. Paul, 2- “Tropical Fruits” by J.A .Samson. Fruit tress of tropical regions: by Mehdi Sharifani and Saeid Eslamian, 2008. Aeij Publisher. Tehran

**5-Principle of breeding for Horticultural crops. (2008-2015-).** One third is under my teaching. The topic include: Heritability rules, Heterosis, Principle of selection. Linkage calculation and genetic distance, Hardy Weinberg rule. Different alleles in Genetic.

**6-Plant Biotechnology.** (2005).

### **B-Postgraduate level:**

**6-Advanced Post harvest physiology. (2006-2015)** Reference Book: “Fruit quality and its biological bases” by M. Knee and many relevant papers. Teaching language: English

**7-Plant responses to environmental stresses (2006-2008).** References: Related Books and relevant papers

**8- Plant Hormones and chemical regulators: (2009 to 2015).**

#### **Reference books:**

Plant physiology. by; Taziz and Ziger

Plant Hormones by P.J. Davies

Plant Hormones (2008) : Action and Application by; R. Ranja, S. P. Purohit and V. Prasad (2003) and relevant papers.

**9- Principles of fruit and vegetable breeding (2010-2015).**

**10- Principles of plant biotechnology, for PhD course(2015). One third of the subject's content is under my teaching.**

**11-Teaching as guest lecturer at Washington State University for 1<sup>st</sup> semester 2008-2009**

**1-Advanced Plant physiology, 2- Temperate Pomology.**

### **Postdoctoral experiences**

1- JSPS scholarship from; February 1st to March 30th 2004. Institute of National fruit research, Tsukuba Science city, Japan. Study on CP-DNA of different pear species and cultivars.

2- One year sabbatical at Washington State University, USA. Study of allelic pattern of genes involved with ripening in pear and further lab works to learn or assist different project on molecular works. (2008-2009)

### **My further research interests:**

1-Transcriptum analysis in respect with commercial trait among fruit tree species

2-Genome annotation for different species in Rosacea

3-Evultion of gene splicing mechanisms, alternate splices variants

4-EST and SNP marker making for finding valuable genotypes.

5-Functuion genomic of fruit trees

6- Modifier genes

7- Senescence Gene tagging of fruits trees.

8-Statistic analysis of traits in nut crops

9-Crisper-Cas9

10- Role of Regulatory RNA on function of modifier genes

### **Technical Skills:**

-Isozyme

-Cloning

-Different PCR programs

-Biochemical and chemical analysis of plants

-Electron microscopy (pollen study)

-ELISA

-C-DNA making

-Western Blot

-RFLP

Plant and fruit analysis

SAS software

## **Field Experiences**

- Orchard design and establishment
- Greenhouse management.
- Nursery management.

## **Awards and certifications:**

- 1-JSPS scholarship, at National Institute of fruit Research. Thukuba, Japan, 2004.
- 2-Sabbatical study at Genome lab, Horticulture Department, Washington state University. USA. (2008-2009).
- 3- Distinct lecturer in 2013, at the faculty of Plant production, Gorgan University of Agricultural Sciences and Natural resources.