

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

(Avicenna, 980-1037)



PERSONAL INFORMATION:

Full Name: M. Mehdi Sharifani:

Nationality: Iranian

Academic Level: Associate Prof.

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EDUCATION:

Msc.Tarbiat Modares University (TMU), 1989. Horticulture Science.

Ph.D. 1999, University of Adelaide, Adelaide, South Australia, Horticulture Science.

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

RESEARCH INTEREST:

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

2-Genome annotation for different species in Rosacea

3-Evolution of gene splicing mechanisms, alternate splices variants

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

5-Function genomic of fruit trees

6- Modifier genes

7- Senescence Gene tagging of fruits trees.

8-Statistic analysis of traits in nut, pome and stone crops

9-Crisper-Cas9

10- Role of Regulatory RNA on function of modifier genes

11-postharvest life of fruits and senescence issue

12-Parthenocarpy in fruits

13. Stress physiology and biotechnology in fruit trees

14-Transposons function in fruit trees

PUBLICATION:

1-Farhadi, H., Sharifani, M. M, Hokmabadi, H. (2022). The Effect of free and controlled pollination on fruit and pistachio seed characteristics of Ahmad Aghaei cultivar. *Plant Production*.45(3): 299-309.Doi: 10.22055/PPD.2021.34075.1927 (In Persian, English abstract).

2-Azizi, FR, Sharifani, M.M, Alizadeh, M, Vazifehshenas, MR. Atashi, S.(2022). Investigation of diversity in physico-chemical properties and morphological traits of wild and cultivated accessions of Iranian pomegranate. *Pomology Research Journal*. 7(2). [10.30466/rip.2021.53557.1178](https://doi.org/10.30466/rip.2021.53557.1178)(In Persian, English abstract).

3-Salehi Sardoei, A, Sharifani,M., Khoshhal Sarmast, M. and Ghasemnejhad, M. (2023). Comparison of physiological and biochemical responses of Thomson oranges and Lisbon lemons to cold stress. *Journal of Plant Research* .36(4) (In Persian, English abstract).

4-Farhadi, H., Sharifani, M. M., Alizadeh, M., Hokmabadi, H. Alineyaeifard, S. (2021). Evaluation of the activity of antioxidant enzymes and the amount of hydrogen peroxide in obtained using hybrid seedlings rootstock from intraspecific and interspecific crosses (*P. vera* × *P. integerrima*) under drought stress. *Journal of plant production*. 28(3):33-59. (In Persian, English abstract).

5-Mahmoudi, S., Sharifani, M.M., Yamchi, A. and Alizadeh, M. (2021). Geographical regions and genetic variation of *SAD2* gene affect olive oil quality of 'Mari' and 'Shengeh' cultivars. *Acta Horti*. 1315, 575-580, DOI: 10.17660/ActaHortic.2021.1315.84, <https://doi.org/10.17660/ActaHortic.2021.1315.84>

6-Babaei, L, Sharifani, M. M. Darvishzadeh, R., Abbaspour, N., and M. Henareh, M. (2021). Impact of drought stress on photosynthetic response of some pear species. *International Journal of Horticultural Science and Technology*. 8(4): 353-369

7-Farhadi, H., Sharifani, M. M. (2020). The Effects of Artificial Pollination of Integerrima Pollen on Some Quantitative and Qualitative Characteristics of Pistachio Nuts CV. Fandoghi (*Pistachio vera* L.) in Khorasan Province. *Journal of Horticultural Sciences*, 34 (3): 439-450. (In Persian, English abstract)

8-Farhadi, H., Sharifani, M. M., Alizadeh, M., Hokmabadi, H., Aliniaiefard, S. (2020). Evaluation of some vegetative and physiological traits of domestic pistachio seedlings in controlled crosses with integerrima pollen grains in order to access drought tolerant genotypes. *Journal of Horticultural Sciences*, 34 (2): 303-319. (In Persian, English abstract)

9-Farhadi, H., Sharifani, M. M., Alizadeh, M., Hokmabadi, H., Aliniaiefard, S. (2020). Investigating the effect of different Drought levels on the concentration of low-Consumption and High-Consumption Mineral Elements of Pistachio Rootstocks and Interstitial Hybrids of Pistachio (*Pistacia vera* L.). *Journal of Pistachio Science and Technology*, 5 (9): 46-69. (In Persian, English abstract)

10-Rahmani, B., Sharifani, M., Navabpour, S. and Varasteh, F. (2020). Cherry senescence – a response to application of ABA and partial sequence alignment of α -mannosidase gene. *Acta Hort.* 1275, 391-398. DOI: 10.17660/ActaHortic.2020.1275.54

11--Sharifani, M. M., Farhadi, H., Alizadeh, M., Hokmabadi, H., Aliniaiefard, S. (2021). Evaluation of chlorophyll fluorescence changes and the amount of biomass of the rootstocks and interspecific hybrids of the genus pistachios (*P. vera* × *P. integerrima*) in order to achieve drought tolerant rootstocks. *Journal of Fruit Tree Research*. 5(2); 157-173. (In Persian, English abstract)

12- Safarzadeh, Z., Sharifani, M., Shakeri, A., Hemmati, K., Dinary, M. (2020). Discrimination of two early and late ripening cherry cultivars, using chemical indices and gel permeation chromatography (GPC). *Acta Hort.* 1275, 69-74.

13- **Jabari, M., Sharifani, M., Yamchi, A.** (2019). Relationship of color indices with some chemical characteristic in red and white apple cultivars. *Plant production*, 42(3):359-372. (In Persian, English abstract)

14- **Sharifani, M., Jabari, M., Darzi Ramnadi, H.** (2020). Genetic differences and heritability using morphological and phytochemical traits of some Iranian apples. *Journal of plant production research*. 27(3): 131-147

15-**Shariafni, M.M., T. Kimura and Nishtani, C. and T. Yamamoto.** (2018). Genetic diversity of pear (*Pyrus spp*) germplasm, assessed by simple sequence repeat (SSR) and morphological traits. *Journal of Horticultural Science and Technology*. 4 (2):145-155

16-**Khazzaf Moghaddam, F; M.M. Sharifani; M. Alizadeh and A. Shakeri.** (2018). The effect of harvest time and storage period on some qualitative characteristics of fruit and check correlation this characteristic with calcium and potassium content of fruit texture in Abbot and Hayward kiwifruit cultivars. *Journal of plant production research* 25 (10): 1-12 (In Persian, English abstract).

17-**Asheri, M., M. Sharifani** and G. Kiani (2017). An examination into the effects of frozen storage of olive fruit extracted olive oils. *Advances in Horticultural Sciences*. 31 (3); 191-198

18--**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)

19-**Jangali Baygi, M., M. Alizadeh F. Ghaderifar , M. Sharifani.** (2015). Dormancy removal in pistachio nut: Influences of Hydrogen Cyanamid (Dormex®) as compared to ordinary seed chemical pre-treatments. *Adv. Hort. Sci.* 29 (3)

20- 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 Scientifi cus*.80 (3): 173-179.

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

22- Ghasemi, Y. S Beaickejad, 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

23-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

24-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

25-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

26-Keramatlou, I., M. Sharifani, H. Sabouri, M. Alizadeh and B. Kamkar. (2015). A simple linear model for estimation of leaf area in Persian walnut (*Juglan regia* L.). *Scientia Horticulturae*.184: 36-39.

27-Nasrabad, M., E. Seifi S. Ramezanzpour, M. Sharifani. (2015). Identification of the self-incompatibility alleles in some Iranian apple cultivars (*Malus domestica*) using pcr.

Journal of plant productions, Agronomy, Horticulture and Breeding. 38(2); 111-120
(In Persian, English abstract).

28-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.

29-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.

30- 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.* 52 (4). 1936-1947. (IF:2.2)

31-Shamloo, M. M. Sharifani, A.D. Gramakhani and E. Seifie. (2013). Alternation of Flavonoid compounds in Valencia orange (*Citrus sinensis*) as a function of storage peel and edible covers. **Minerva Biotec.** 25 (3).191-197.

32-Farhadi, M., M. Tigabu, A.G. Arian, M. Sharifani, 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.

33-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.

34-Sharifani, M., V. Akbarpour, S. Samadi, and A. Sabourooh. (2010). Physical and chemical characteristics of Thomson Navel orange fruits on four rootstocks in north of Iran. **American-Eurasian J. Agric & Environ. Sci.** 8(2):156-160.

35-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.

36-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.

37-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.

38-Alikhani, M., M. Sharifani and S.J. Mousavizadeh and M. Azizi. (2009). 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

39-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.

40-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 Horti*.800:355-364.

41-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

42-Mashayekhi, K., M. Sharifani, M. Shamsavand 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.

43-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. (In Persian, English abstract)

44-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.

45-Farhadi, M., M. Sharifani, H. Heydari 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. (In Persian, English abstract)

46-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. (In Persian, English abstract)

47-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 Hortic*: 682:701-707.

48-Saito, T., C. Fang, S. Shin, H.S. Hwang, and M. Sharifani (2005). Status of the pear industry in Asia. *Acta Hortic*. 671: 57-63.

49-Sharifani, M. and J.F. Jackson. (2004). Nectar analysis, pollen production and anthocyanin measurement revealed distinct variation in pears. *Acta Horticulturae* 636

50-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. (In Persian, English abstract)

51-Sharifani, M.M. and J.F. Jackson. (2002). Estimation of gene flow by pollen in a part of Packham Triumph Pear orchard. *Acta Hortic.*561:53-59.

52-Sharifani, M.M. and J.F. Jackson. (2002). Influence of caging on pollination and fruit set of two Pear cultivars. *Acta Hortic.*561:235-241.

53-Sharifani, M.M. and J.F. Jackson. (2002). Gene flow by pollen to Lemon Bergamot pear cultivar using isozyme markers. *Acta Horticulturae* 596:153-160.

54-Sharifani, M.M. and J.F. Jackson. (2002). Characterization of pear species and cultivars using isozyme polymorphism. *Acta Hortic.* 587: 269-278.

55-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.

56-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.

57-Sharifani, M.M. and J.F. Jackson. (1999). Characterization of pear species and cultivars using RAPD primers. *Acta Hortic.* 538:499-504.

58-Sharifani, M.M. and J.F. Jackson.(1996). Isozyme inheritance in controlled crosses with Packham Triumph pear. *Acta Hortic.*437:169-174.

Published 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

4- Mehdi sharifani, Jaleh Asghari, Amir Dareai and Hamid Kalati. Gorgan. (2016). Methodology Analysis of plant Tissues and Food. Isfahan University of Technology. IUT Jehad Publisher.

ACADEMIC TEACHING EXPERIENCE:

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 includes: Heritability rules, Heterosis, Principle of selection. Linkage calculation and genetic distance, Hardy Weinberg rule. Different alleles in Genetic.

B-Postgraduate level:

6-Advanced Post-harvest Physiology. (2006-2022) 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).

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-Principle of Plant Biotechnology (2014-2022). Reference book: Gene cloning and DNA analysis, by T.A. Brown and related books and papers.

10-Physiology of flowering. (2014-2022). Reference book; Plant physiology by Taiz and Zeiger and related books and papers.

11-Plant Biotechnology. (2015-2023). Reference book: Cloning by T.A Brown

12 Plant-Genetic engineering (2017-2023).

Reference books: Gene Cloning, by T.A. Brown

13-Teaching as guest lecturer at Washington State University for 1st semester 2008-2009

1-Advanced Plant physiology, 2- Temperate Pomology.

14- Principles of fruit and vegetable breeding (2010-2023).

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)

AWARDS:

Scholarship award for PhD at Adelaide University by MSRT

Best lecturer at the faculty. 2013

LANGUAGES:

English (professional)

Arabic (semi-professional)

French and Spanish (Elementary)